Volume 9

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	δ $\mu_{\alpha*}$	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
93201	18 59 02.65	+33 07 02.0	6.98		H	284.761 048 78	+33.117 233 37		5.33	8.50	−7.29	0.43	0.49	0.64	0.50	0.58	− 4	+ 2	+ 3	+11	+16	−27	+18	+12	+22	−12		0	−1.03
93202	18 59 05.48	−15 51 36.1	8.02		H	284.772 828 44	−15.860 014 05		5.08	6.77	3.51	0.82	0.55	0.96	0.91	0.64	+ 8	−31	−14	− 3	+ 1	+33	+ 7	− 7	− 2	+ 7		0	2.05
93203	18 59 05.73	+13 37 21.2	5.27		H	284.773 870 15	+13.622 548 53		20.99	19.49	−124.92	0.64	0.48	0.69	0.76	0.59	− 4	− 3	−20	−18	+19	+17	+21	−14	+22	+12		0	0.56
93204	18 59 05.75	+43 43 15.5	6.86		H	284.773 968 09	+43.720 983 35		4.38	2.26	14.50	0.46	0.48	0.54	0.49	0.59	+ 6	− 2	− 9	+ 9	+ 2	+ 7	+ 4	− 3	+ 3	+19		0	−1.53
93205	H 18 59 05.93	+18 10 05.4	9.18		H	284.774 703 36	+18.168 180 06	A	7.06	−20.64	−32.41	1.85	2.18	2.55	1.95	2.26	+10	+ 0	−10	+24	−16	+27	−19	+20	+ 0	+20		1	0.11
93206	18 59 07.33	−48 16 23.8	11.13		G	284.780 522 02	−48.273 265 31		72.07	154.68	−494.09	2.32	1.66	2.52	2.91	1.99	+28	−16	− 9	−27	− 5	+ 0	− 5	−49	− 7	+27		0	−0.80
93207	18 59 07.47	−28 35 33.6	8.66		G	284.781 130 11	−28.592 667 67		9.25	−32.32	−5.15	1.19	0.65	1.22	1.45	0.83	− 3	−25	− 7	+15	− 8	−10	−20	−37	+ 5	−26		2	−0.58
93208	18 59 07.74	−08 58 13.7	7.59		H	284.782 244 45	−08.970 472 48		12.33	58.61	−32.64	0.78	0.53	0.95	0.79	0.58	+ 6	−33	−23	− 8	+ 3	+26	+ 6	−20	+11	− 1		0	−0.72
93209	18 59 10.97	−39 32 04.7	6.49		H	284.795 693 12	−39.534 635 73		6.71	−3.83	−31.53	0.77	0.43	0.85	0.87	0.54	− 2	−44	+ 9	+ 8	+ 2	+ 7	+ 5	−36	−15	− 6		0	0.34
93210	18 59 12.29	+39 13 02.4	6.43	1	H	284.801 217 16	+39.217 324 10		3.97	−0.16	−1.17	0.45	0.48	0.56	0.47	0.57	− 8	− 9	− 3	+ 9	+ 3	−14	+ 4	− 4	+ 5	+ 4		3	−0.72
93211	18 59 12.34	+15 07 47.5	7.36		H	284.801 433 55	+15.129 869 47		1.19	2.90	−7.12	0.74	0.58	0.90	0.94	0.69	+ 3	− 8	−20	+14	+11	+24	+14	−12	+33	+19		0	−0.77
93212	18 59 12.74	−06 50 31.4	7.52		G	284.803 092 15	−06.842 054 42		2.81	0.32	−10.26	0.90	0.61	1.01	1.15	0.89	+ 1	−10	− 9	+15	+ 9	+28	+16	+ 5	− 9	+ 4		2	2.65
93213	H 18 59 13.15	−21 13 50.3	8.55		H	284.804 804 71	−21.230 642 49	A	1.44	−1.52	−6.51	3.38	3.14	1.64	2.92	1.75	−51	+15	−20	−21	+15	+ 7	+24	−37	+ 8	−38		1	−0.87
93214	18 59 14.80	+31 40 53.3	7.45	1	H	284.811 681 24	+31.681 466 97		3.81	11.00	19.43	0.51	0.56	0.74	0.64	0.66	+ 6	− 5	+ 5	+17	+14	−12	+12	+16	+26	+ 1		0	−0.65
93215	18 59 15.19	−07 08 00.9	8.97	2	H	284.813 292 99	−07.133 588 86		1.35	0.29	−1.16	1.20	0.78	1.50	1.51	1.15	+18	−39	−30	−12	−16	+39	− 2	−16	− 8	+ 4		0	0.70
93216	18 59 15.83	−08 09 31.8	8.23		H	284.815 964 10	−08.158 820 20		0.95	2.71	−1.48	0.95	0.65	1.12	1.06	0.74	− 1	−28	−22	+ 5	− 2	+26	+ 0	−11	+ 5	−14		0	−0.33
93217	18 59 16.95	−26 52 36.5	10.56		H	284.820 642 93	−26.876 807 24		3.41	1.63	3.98	2.31	1.32	2.26	3.03	1.76	−16	−30	+ 1	+21	−23	− 9	−24	−29	− 5	−26		5	−0.36
93218	18 59 17.34	+10 08 27.6	6.75		H	284.822 252 98	+10.141 011 87		0.84	1.37	−3.10	0.71	0.49	0.83	0.78	0.63	− 4	−31	−10	+ 8	+ 4	+ 7	− 4	− 9	+26	− 8		0	0.25
93219	18 59 18.37	−01 22 03.4	8.47		H	284.826 538 16	−01.367 598 24		1.12	1.05	−3.19	0.87	0.65	1.07	0.94	0.78	+20	−12	−14	−30	− 5	+17	− 1	−32	−16	− 1		0	−1.15
93220	18 59 20.03	−45 41 17.6	8.23		H	284.833 440 23	−45.688 221 92		0.14	−2.71	−19.31	0.87	0.64	1.05	1.09	0.71	+21	−31	−25	+13	− 1	+ 1	−13	−32	+16	− 8		0	−1.04
93221	18 59 21.20	−53 50 12.9	8.72		H	284.838 329 51	−53.836 904 75		0.53	−0.21	−3.24	1.12	0.72	1.25	1.20	0.79	+30	−23	− 1	+43	−23	−17	−17	−22	− 7	+38		0	−1.06
93222	18 59 21.45	+41 38 13.0	7.79	2	H	284.839 364 58	+41.636 953 43		1.21	−3.66	−12.31	0.57	0.58	0.68	0.63	0.68	+ 3	− 3	− 5	+ 6	+13	− 4	+14	− 3	−11	+11		0	−0.24
93223	18 59 21.56	−47 19 47.5	9.89		G	284.839 838 00	−47.329 847 72		5.73	8.61	2.52	1.43	1.09	1.70	1.75	1.21	+41	−38	−36	−15	− 6	− 5	−13	−46	+ 3	+21		0	−0.17
*93224	18 59 23.82	−19 16 45.4	6.52	2	H	284.849 250 51	−19.279 289 04		1.10	1.37	−28.65	0.84	0.49	0.91	0.94	0.69	−10	−29	− 1	+ 0	+ 9	+21	+11	−23	+19	+11		0	0.26
*93225	H 18 59 23.80	−12 50 25.7	5.51	1	H	284.849 177 15	−12.840 462 42	*	6.34	−1.05	−22.44	0.72	0.47	0.80	0.72	0.51	+ 1	−38	+ 3	+ 4	−14	+17	− 9	−29	− 9	+ 3		0	2.01
93226	18 59 24.39	−50 20 34.6	8.54		G	284.851 616 57	−50.342 942 22		10.25	58.29	−26.74	0.94	0.66	1.06	1.29	0.82	+ 7	−18	−10	+21	+ 6	− 2	− 1	−16	− 5	−14		2	2.70
93227	18 59 24.44	−35 54 46.8	8.61	1	G	284.851 839 56	−35.913 006 48		2.56	0.56	−8.65	1.15	0.64	1.18	1.61	0.96	− 8	−36	−10	+ 7	+14	− 4	− 1	−36	+12	−37		0	0.48
93228	18 59 25.05	+46 57 11.9	8.10		H	284.854 369 19	+46.953 292 57		2.66	−11.40	−12.91	0.62	0.61	0.69	0.79	0.75	− 2	− 8	−10	− 3	+11	−16	+ 7	+15	− 9	+12		0	3.07
93229	18 59 25.39	−44 08 17.5	8.59		H	284.855 791 77	−44.138 184 90		12.49	−140.40	12.97	1.08	0.76	1.30	1.31	0.84	+32	−39	−35	+ 5	+19	− 9	+ 3	−34	+13	− 1		0	0.65
93230	18 59 26.21	+17 05 48.7	8.98		G	284.859 189 39	+17.096 848 83		3.39	0.92	0.50	0.84	0.80	1.12	1.01	1.02	+33	−16	−14	+10	−11	+ 7	−10	−16	+15	+42		0	0.80
93231	18 59 26.27	+43 00 47.6	7.54		H	284.859 447 44	+43.013 210 46		5.07	−0.40	2.86	0.48	0.53	0.58	0.49	0.60	+ 3	− 8	− 1	+ 8	+14	− 4	+16	+ 7	−12	+ 7		0	−0.19
93232	18 59 26.66	−10 34 48.9	8.60		H	284.861 095 01	−10.580 246 42		2.62	−23.64	−12.88	1.06	0.75	1.19	1.30	1.01	+12	−19	−16	+12	+ 5	+25	+15	− 7	− 9	+17		5	0.41
*93233	18 59 26.79	−75 23 24.2	6.70		H	284.861 631 32	−75.390 065 41		5.12	28.99	−5.89	0.42	0.49	0.65	0.47	0.51	−15	−14	− 2	+ 9	+ 2	− 6	+ 1	− 9	− 2	−22		0	−0.43
*93234	18 59 26.78	−18 33 59.0	6.37		H	284.861 580 95	−18.566 387 66		3.93	−0.62	−18.62	0.74	0.48	0.85	0.78	0.55	+14	−22	−17	+ 2	+ 1	+26	+ 4	−21	+17	+19		0	1.61
93235	18 59 28.31	−14 05 26.2	9.44		H	284.867 958 77	−14.090 614 44		1.75	3.23	−4.10	1.15	0.75	1.25	1.57	0.98	− 7	−18	−13	+14	+ 3	+15	− 5	−19	+ 0	−36		5	1.40
93236	18 59 28.69	+43 43 59.7	8.11		H	284.869 533 61	+43.733 247 19		5.19	13.10	−35.20	0.58	0.69	0.72	0.65	0.78	+ 9	− 6	−16	+ 8	− 3	+ 8	+ 0	− 9	+ 2	+18		3	−0.10
93237	18 59 28.74	+70 41 50.3	7.89		G	284.869 736 40	+70.697 312 26		4.82	−0.79	−24.47	0.59	0.47	0.56	0.61	0.54	+11	−22	− 2	−36	−14	− 2	−13	+ 1	− 1	+ 7		0	3.15
93238	18 59 29.27	−70 28 06.1	6.49		H	284.871 978 51	−70.468 367 40		9.30	−3.89	−117.69	0.31	0.46	0.66	0.37	0.50	−16	−12	− 8	+15	− 9	− 5	− 9	+ 0	− 5	−24		0	−1.51
93239	18 59 29.55	−23 15 57.3	8.06		H	284.873 127 68	−23.265 906 90		1.89	−4.23	−12.92	1.17	0.75	1.23	1.35	0.89	−17	−10	−23	−26	+16	−21	+12	−41	+ 6	−10		2	2.03
93240	18 59 31.01	+58 36 42.4	8.71		H	284.879 201 16	+58.611 773 11		3.91	−7.10	−3.75	0.68	0.64	0.69	0.71	0.72	+ 8	− 9	+ 5	+21	+10	+ 8	+ 3	+12	+ 1	+ 8	+18		0	−0.13
93241	H 18 59 34.15	+63 00 51.3	8.23		H	284.892 291 31	+63.014 237 68	A	7.48	19.85	−12.25	1.21	1.12	1.11	1.25	1.24	+ 2	−10	+14	−12	+11	− 3	+12	+ 3	+ 3	+ 9		2	1.36
93242	18 59 36.02	−21 49 41.7	7.97		H	284.900 077 20	−21.828 241 05		2.79	7.47	−4.27	1.16	0.71	1.15	1.81	1.06	−18	+15	−14	−31	+12	− 1	+ 6	−50	− 6	−36		0	0.46
93243	18 59 36.44	+19 29 11.3	7.51		H	284.901 831 19	+19.486 464 72		3.04	−1.18	−2.92	0.65	0.61	0.89	0.82	0.74	+17	−21	−24	+27	− 1	+11	− 5	− 4	+33	+16		0	0.47
93244	18 59 37.39	+15 04 06.5	4.02		G	284.905 788 44	+15.068 477 57	+	21.22	−52.68	−73.81	0.70	0.50	0.77	0.86	0.96	+ 3	−21	− 7	+20	+28	− 3	+29	+ 5	+14	− 3		0	0.18
93245	18 59 37.55	−02 50 07.3	7.41		H	284.906 437 96	−02.835 352 67		3.38	−4.57	−10.50	0.78	0.55	0.91	0.81	0.66	+24	−20	−15	−21	+ 5	+ 7	+ 6	−34	+19	+32		0	0.36
93246	18 59 37.95	+18 25 27.3	8.36		H	284.908 126 31	+18.424 254 92		2.46	1.14	−9.50	0.74	0.76	1.09	0.90	0.87	+29	−12	−22	+14	− 6	+21	− 3	− 6	+22	+33		2	−0.61
93247	18 59 38.00	+27 14 15.5	9.00		H	284.908 334 74	+27.237 635 64		2.49	1.76	1.68	0.73	0.84	1.16	0.93	1.19	− 2	−19	−14	+28	− 2	− 1	− 2	+25	− 3	−27		0	0.99
93248	18 59 38.39	+07 59 15.7	10.86		G	284.909 961 98	+07.987 695 68		38.48	364.03	−181.10	1.92	1.60	2.44	2.33	1.78	−14	−18	+26	−17	+ 4	−13	+ 8	−40	−15	−17		0	0.55
93249	18 59 38.51	−16 06 30.5	8.02		H	284.910 467 87	−16.108 483 71		5.05	4.82	−5.91	0.86	0.55	0.98	0.94	0.60	+ 5	−34	−15	− 7	− 1	+26	+ 3	−21	−10	−16		0	−0.78
93250	18 59 41.45	−40 37 21.7	7.72		G	284.922 703 93	−40.622 693 36		4.19	2.76	−11.35	0.75	0.48	0.90	0.90	0.61	+ 3	−28	+11	− 2	+15	+ 8	+15	−40	− 9	+ 3		2	0.59
93251	18 59 42.15	+12 03 46.8	8.62		H	284.925 606 13	+12.063 008 10		3.00	3.24	−3.42	1.10	0.89	1.31	1.20	1.00	− 6	−29	−24	−33	+20	+ 1	+11	−45	+23	−27		0	0.90
93252	18 59 42.59	+16 15 10.3	7.06		H	284.927 460 28	+16.252 873 80		22.36	−102.46	−123.60	0.55	0.48	0.76	0.69	0.59	+32	−16	−10	+45	+ 2	+17	+ 6	+ 0	+28	+46		0	1.13
93253	18 59 42.75	+34 05 42.6	7.52		H	284.928 117 54	+34.095 172 23		1.98	0.06	0.22	0.50	0.56	0.68	0.60	0.65	−13	− 6	− 2	+14	+ 6	−22	+ 6	+23	+ 4	−17		0	−0.24
93254	18 59 43.78	−15 18 45.9	8.75		G	284.932 405 62	−15.312 752 10		2.72	9.31	−1.71	1.10	0.71	1.22	1.23	0.87	− 8	−12	− 8	−20	+12	+12	+13	−33	+13	− 7		2	−0.42
93255	18 59 44.62	−34 28 15.2	8.10		G	284.935 908 63	−34.470 889 38		6.84	40.61	−67.47	1.13	0.69	1.17	1.33	0.88	+23	−31	− 9	+14	−15	− 5	−27	−38	+ 6	− 1		0	−1.75
93256	18 59 45.43	+26 13 49.6	5.26	1	H	284.939 285 75	+26.230 432 04		9.36	85.85	−11.33	0.32	0.42	0.57	0.40	0.56	− 6	− 7	−17	+ 3	+ 7	+ 2	+ 8	+ 8	− 5	−16		2	−0.27
93257	18 59 46.06	−53 56 48.1	9.52		H	284.941 936 36	−53.946 691 19		8.46	20.82	−45.84	1.14	0.86	1.45	1.37	1.10	+41	− 1	+14	+15	−33	+ 1	−26	−36	+ 5	+58		0	1.34
93258	18 59 50.61	−33 56 29.8	8.16		H	284.960 879 96	−33.941 602 00		4.33	−6.90	−20.90	1.16	0.67	1.21	1.34	0.82	+12	−37	−16	+18	− 1	−10	−13	−35	+ 7	−12		2	1.62
93259	18 59 50.96	+11 26 41.5	7.72	2	H	284.962 331 04	+11.444 858 27		3.41	12.52	14.15	0.78	0.64	0.98	0.84	0.75	+ 5	−32	−13	−10	+ 8	+ 8	+ 5	− 3	+16	−15		0	1.82
93260	18 59 51.56	+06 09 26.1	7.23		H	284.964 838 17	+06.157 239 07		5.27	16.32	6.13	0.80	0.64	0.90	0.88	0.71	+23	−14	− 7	−29	−16	− 8	−16	−42	− 3	+28		0	0.86
93261	18 59 51.67	−07 46 42.6	10.19		G	284.965 289 47	−07.778 487 65		8.95	−287.96	−122.21	2.70	1.55	2.24	2.78	1.65	−60	−29	+ 8	+45	−34	+19	−32	+14	+18	−41		0	−0.63
93262	18 59 51.93	−57 58 39.9	7.58		H	284.966 370 67	−57.977 747 22		4.55	8.01	−13.52	0.80	0.63	1.08	0.87	0.78	+27	−28	−10	+16	−31	− 1	−28	−24	+ 2	+41		0	−0.15
93263	18 59 52.82	−60 15 13.7	9.15		H	284.970 101 93	−60.253 813 32		1.59	1.82	−14.14	1.21	0.94	1.39	1.86	1.09	−48	− 4	−28	+35	+ 2	−13	− 1	−18	+10	−46		0	−0.56
93264	18 59 53.81	−24 23 54.5	8.46		G	284.974 197 11	−24.398 458 84		1.48	−1.45	−9.23	1.09	0.62	1.10	1.36	0.78	− 5	−30	− 8	+29	−17	+11	−23	−14	− 8	−32		0	1.62
93265	18 59 55.55	−39 54 49.2	9.18		H	284.981 442 95	−39.913 657 35		2.02	4.18	−0.21	1.27	0.76	1.48	1.52	1.00	+ 4	−39	+ 6	− 1	+ 6	+ 4	+ 7	−43	−12	− 2		0	0.48
93266	18 59 57.26	+43 15 13.0	7.09		H	284.988 602 39	+43.253 622 40		10.32	25.82	41.91	0.45	0.50	0.55	0.46	0.57	− 2	− 4	−10	+ 8	+12	− 5	+12	+15	−10	+ 8		1	−1.10
93267	18 59 57.42	−62 34 44.9	8.34		H	284.989 266 43	−62.579 129 95		0.12	2.55	−2.27	0.78	0.69	1.08	1.04	0.70	− 2	−17	− 8	+24	−13	−22	− 9	−24	+ 4	+ 4		0	−0.59
93268	18 59 57.63	+12 53 21.4	9.14		H	284.990 145 11	+12.889 285 89	B	−1.03	−4.75	−2.59	23.08	17.66	11.08	11.65	8.40	+19	−26	− 7	−12	− 3	−12	−10	−31	+22	+ 6		11	1.00
93269	18 59 57.82	+64 03 14.7	9.17		G	284.990 937 35	+64.054 069 92		14.45	−175.98	−107.59	0.85	0.77	0.82	0.99	0.86	− 3	−31	+13	+36	+14	− 4	+17	+28	−11	+15		0	−0.69
93270	18 59 58.12	+22 48 52.2	6.28	2	H	284.992 164 47	+22.814 491 94		4.31	−16.17	9.52	0.41	0.45	0.67	0.55	0.57	− 5	−11	− 9	+ 0	− 6	+ 3	− 5	−23	+ 7	+ 1		1	0.51
93271	H 18 59 58.29	−71 32 05.0	7.95		H	284.992 863 99	−71.534 729 85	A	5.30	6.95	−26.02	0.60	0.83	1.04	0.63	0.83	−10	−13	+ 9	+15	−16	−12	−16	− 4	− 7	−20		0	−0.52
93272	18 59 58.44	−71 55 57.3	6.80	1	H	284.993 514 69	−71.932 579 74		5.20	19.01	−22.73	0.35	0.46	0.62	0.39	0.49	−19	−12	+ 2	+18	− 5	−10	− 4	− 6	− 7	−19		1	−0.33
93273	18 59 58.76	+12 53 24.1	7.26		G	284.994 826 83	+12.890 034 95	A	−0.34	−2.99	−6.50	2.38	1.67	1.93	2.15	1.54	+22	−22	−14	−20	+ 1	+ 8	− 6	−36	+22	+ 9		11	1.00
93274	18 59 58.93	+04 36 39.1	7.43		H	284.995 560 90	+04.610 855 80		3.40	0.66	−14.99	0.74	0.57	0.87	0.68	0.55	+18	−28	− 7	−27	+ 1	+ 0	− 3	−38	+10	− 5		0	−0.11
93275	18 59 59.01	+26 57 56.4	6.80	1	H	284.995 857 62	+26.965 673 20		4.13	−5.95	−3.60	0.40	0.48	0.67	0.53	0.66	− 8	−15	−18	+ 7	+ 3	− 2	+ 4	+11	− 5	−28		0	−1.24
93276	18 59 59.92	−84 24 05.4	9.22		H	284.999 655 71	−84.401 512 55		11.96	3.89	−56.59	0.77	0.80	0.99	0.94	1.01	−15	−22	+20	+15	− 1	− 9	+ 4	+ 3	−14	−21		1	−1.64
93277	19 00 00.22	−28 03 02.7	7.90		H	285.000 911 49	−28.050 748 55		11.16	28.97	−16.53	1.06	0.60	1.12	1.34	0.74	−10	−22	− 6	+ 6	+ 4	−19	− 8	−41	+ 7	−35		0	0.63
93278	19 00 00.25	−15 03 39.2	10.20		H	285.001 021 73	−15.060 901 33		7.67	−174.11	−178.98	1.87	1.22	1.99	2.20	1.47	+25	−28	−12	+19	− 4	+ 7	−10	− 3	+ 6	− 3		8	1.42
*93279	19 00 00.82	+32 08 43.8	4.94		G	285.003 422 57	+32.145 490 51		2.12	6.13	9.75	0.39	0.42	0.55	0.43	0.51	+ 2	+17	− 1	+15	+12	− 1	+18	− 6	+24	+ 9		1	0.40
*93280	19 00 00.81	−49 27 06.7	8.83		H	285.003 386 07	−49.451 849 88		5.39	−19.32	−19.24	1.19	0.86	1.31	1.58	1.05	+ 7	−18	−13	−30	− 3	+ 1	− 2	−44	− 5	+ 5		0	−0.02
93281	19 00 00.85	−69 56 37.6	8.01		G	285.003 533 66	−69.943 774 02		14.92	−7.26	−193.16	0.40	0.63	0.91	0.46	0.63	−15	−10	− 7	+44	−12	− 5	−18	− 7	− 3	−29		0	−0.17
93282	19 00 01.05	−19 18 12.3	9.01		G	285.004 372 80	−19.303 407 97		5.31	13.16	−6.66	1.16	0.71	1.23	1.34	0.99	− 8	−27	− 4	− 7	+ 4	+11	+ 7	−32	+14	+12		0	0.07
93283	19 00 01.36	−43 20 49.7	7.92		H	285.005 651 23	−43.347 142 78		7.91	−9.40	−6.39	0.93	0.65	1.24	1.29	0.96	+12	− 2	−28	+ 0	+29	− 6	+22	−38	+42	− 6		0	−0.81
93284	19 00 01.36	+75 03 24.7	8.92		H	285.005 662 13	+75.056 852 52		5.74	2.25	26.70	0.67	0.67	0.71	0.70	0.82	+ 6	− 3	+ 4	−12	+ 2	−22	+ 4	−22	+ 0	+ 7		0	2.05
93285	19 00 02.18	−03 17 48.4	9.97		G	285.009 067 43	−03.296 788 81		0.39	−5.98	−8.98	1.50	1.12	1.59	1.66	1.38	+56	+ 1	− 6	−21	−12	+14	− 8	−30	+20	+58		0	0.68
93286	19 00 02.68	+37 45 53.2	10.78		H	285.011 165 70	+37.764 789 41		6.25	44.87	177.56	1.17	1.35	1.63	1.43	1.70	+ 8	+ 4	+ 7	+ 9	+ 6	−33	+ 9	+21	+ 9	+ 9		0	0.40
93287	19 00 03.55	−66 39 12.7	5.98		H	285.014 776 83	−66.653 514 08		7.43	12.33	−42.60	0.36	0.43	0.68	0.35	0.44	+ 5	−13	−25	−41	+ 0	− 2	− 4	−26	+16	+ 8		1	0.99
93288	19 00 04.17	−23 03 46.7	8.78		G	285.017 394 46	−23.062 985 14		3.29	9.22	−129.84	1.28	0.83	1.35	1.40	0.92	− 8	−12	−18	−31	+16	−22	+13	−45	+ 5	− 5		0	0.51
93289	19 00 04.47	−32 15 21.0	7.95		G	285.018 619 50	−32.255 824 75		5.32	−10.11	−30.42	1.09	0.61	1.19	1.30	0.81	+14	−41	−32	+25	+11	−12	−12	−29	+26	−21		0	2.03
93290	19 00 04.63	+08 05 30.4	9.22		H	285.019 303 17	+08.091 772 15		4.70	0.38	−5.67	1.24	0.97	1.54	1.41	1.11	+ 8	−26	− 6	−20	− 8	− 3	−13	−41	+ 5	−15		0	−1.52
93291	19 00 04.75	−51 56 40.2	11.10		G	285.019 803 53	−51.944 511 36		2.73	−3.11	−1.86	1.98	1.55	2.46	2.60	1.77	− 1	−18	−24	− 1	+23	− 6	+12	−33	+15	−22		4	0.88
93292	19 00 05.96	+03 19 05.9	8.63		G	285.024 819 46	+03.318 309 94		2.36	−1.63	−8.77	1.01	0.74	1.18	1.17	0.83	+15	−19	− 3	−19	−14	−13	−16	−43	+10	+14		0	0.43
93293	19 00 08.18	−18 15 10.1	11.75	3	H	285.034 082 97	−18.252 793 89		−5.58	−8.15	−11.65	11.14	7.79	11.74	9.98	6.98	− 7	−10	−33	−40	+14	−15	+10	−51	+16	+ 2		2		
93294	19 00 09.94	+71 30 39.1	8.61		H	285.041 418 41	+71.510 868 52		2.41	−0.03	−9.78	0.67	0.58	0.68	0.66	0.66	− 5	−19	− 3	−22	− 1	− 4	+ 0	+ 9	− 6	− 7		0	0.66
93295	19 00 11.74	−60 12 13.3	6.88		H	285.048 926 01	−60.203 682 82		3.81	−0.42	−9.95	0.71	0.53	0.84	0.98	0.61	−37	−16	−13	+29	+ 7	−14	+ 7	−30	+ 6	−34		0	0.05
93296	19 00 12.18	+60 58

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
93201	7.130	0.004	6.999	0.006		0.126	0.007	T	0.14	0.01	L	7.0250	0.0010	0.010	137		7.01	7.04					1							S
93202	8.239	0.010	8.046	0.012		0.185	0.015	T	0.20	0.02	L	8.0820	0.0015	0.014	77		8.06	8.11					1							S
93203	5.917	0.004	5.324	0.004		0.573	0.009	G	0.56	0.03	C	5.3783	0.0007	0.006	76		5.37	5.39		C	18591+1337	I 1	1 S							S
93204	6.847	0.005	6.853	0.006		−0.001	0.007	T	0.02	0.01	L	6.8691	0.0009	0.009	124		6.86	6.89		C			1							S
93205	9.960	0.029	9.334	0.027	*	0.582	0.035	T	0.65	0.03	L *	9.3012	0.0015	0.019	85	*	9.26	9.34		D	18591+1810	I 1	2 C A	AB	202	0.640	0.011	1.69	0.05	
93206						1.446	0.011	G	2.35	0.02	A	11.1678	0.0055	0.032	73		11.02	11.25					1							G
93207	9.283	0.019	8.686	0.018		0.578	0.015	G	0.65	0.01	H	8.7741	0.0016	0.013	72		8.75	8.80		C			1							
93208	8.122	0.010	7.642	0.009		0.471	0.015	G	0.54	0.02	H	7.6912	0.0013	0.009	80		7.68	7.71		C			1							S
93209	6.456	0.005	6.503	0.006		−0.040	0.007	T	−0.02	0.01	L	6.4894	0.0008	0.006	85		6.48	6.50		C	18592−3932	I 1	1							S
93210	6.205	0.004	6.388	0.004		−0.168	0.007	G	−0.17	0.01	H	6.3695	0.0018	0.014	108		6.35	6.39	1.58	P 1 A			1							S
93211	7.587	0.008	7.394	0.009		0.185	0.011	T	0.20	0.01	L	7.4221	0.0012	0.010	69		7.39	7.44					1							S
93212	7.587	0.008	7.535	0.008		0.070	0.015	G	0.08	0.02	H	7.5384	0.0017	0.012	67		7.52	7.56					1							S
93213	8.760	0.025	8.619	0.030	*	0.136	0.037	T	0.15	0.04	L *	8.5984	0.0018	0.015	67	*	8.58	8.62		D	18592−2114	I 1	2 C A	AC	150	0.326	0.018	2.18	0.14	
93214	7.760	0.007	7.466	0.008		0.282	0.015	G	0.32	0.02	H	7.5208	0.0022	0.016	119		7.50	7.55	0.11	P 1 A			1							S
93215	9.143	0.019	8.989	0.023		0.153	0.015	G	0.17	0.01	H	9.0237	0.0037	0.035	59		8.99	9.09		U 2			1							
93216	10.214	0.040	8.375	0.016		1.530	0.034	T	1.57	0.07	L	8.3587	0.0016	0.017	74		8.34	8.39		C			1							
93217											T	10.6939	0.0039	0.034	79		10.62	10.75		C			1 S							G
93218	7.004	0.006	6.777	0.007		0.211	0.009	T	0.23	0.01	L	6.8139	0.0015	0.008	65		6.80	6.83		C			1							S
93219	9.115	0.014	8.527	0.013		0.549	0.017	T	0.62	0.02	L	8.5859	0.0024	0.017	100		8.55	8.61					1							
93220	10.023	0.029	8.414	0.014		1.348	0.025	T	1.31	0.03	L	8.3808	0.0018	0.012	77		8.36	8.41					1							
93221	10.000	0.023	8.816	0.015		1.015	0.021	T	0.99	0.02	L	8.8820	0.0020	0.019	105		8.85	8.93		C			1							
93222	9.859	0.020	8.013	0.009		1.567	0.018	T	2.35	0.04	O	7.8327	0.0030	0.034	125		7.78	7.88		U 2			1 S							
93223	10.341	0.035	9.932	0.038		0.404	0.020	G	0.47	0.02	H	10.0153	0.0032	0.027	80		9.97	10.06		C			1							G
93224	8.635	0.013	6.771	0.006		1.582	0.012	T	2.68	0.02	O	6.5026	0.0035	0.028	71		6.47	6.54		U 2			1 S							S
93225	5.467	0.003	5.512	0.003	*	−0.038	0.003	T	−0.02	0.00	L *	5.5051	0.0010	0.009	79	*	5.50	5.52		M	18594−1250	I 1	2 C S A	AB	344	0.100	0.005	0.66	0.34	S
93226	9.209	0.016	8.554	0.014		0.569	0.015	G	0.64	0.01	H	8.6484	0.0018	0.019	87		8.62	8.68		C			1							
93227	8.964	0.017	8.617	0.018		0.318	0.015	G	0.37	0.02	H	8.6830	0.0021	0.016	73		8.66	8.72		M			1							
93228	9.428	0.021	8.239	0.014		1.018	0.020	T	0.99	0.02	L	8.2665	0.0013	0.012	109		8.25	8.29					1							
93229	9.218	0.016	8.650	0.015		0.517	0.015	G	0.59	0.02	H	8.7069	0.0014	0.019	92		8.68	8.75		C			1							
93230	9.068	0.015	9.027	0.019		0.082	0.033	G	0.09	0.04	H	9.0242	0.0024	0.020	96		8.99	9.06		C			1							
93231	7.460	0.007	7.528	0.010		−0.060	0.015	G	−0.04	0.01	H	7.5303	0.0013	0.011	115		7.51	7.55					1							S
93232	10.192	0.043	8.744	0.022		1.221	0.038	T	1.18	0.04	L	8.7646	0.0017	0.016	73		8.74	8.79		C			1							
93233	8.370	0.008	6.847	0.004		1.280	0.007	T	1.24	0.01	L	6.8599	0.0010	0.011	162		6.84	6.88					1							S
93234	7.604	0.009	6.487	0.006		0.962	0.008	T	0.95	0.01	L	6.5310	0.0010	0.007	72		6.52	6.54		C			1							S
93235	9.638	0.025	9.498	0.032		0.135	0.038	T	0.15	0.04	L	9.4922	0.0024	0.021	80		9.45	9.53		C			1							
93236	9.586	0.017	8.207	0.010		1.167	0.015	T	1.13	0.01	L	8.2784	0.0013	0.012	116		8.26	8.30			18595+4344	I 1	1							
93237	9.061	0.013	7.990	0.009		0.920	0.015	G	0.92	0.01	H	8.0462	0.0014	0.011	120		8.03	8.07		C			1							
93238	6.821	0.003	6.520	0.003		0.305	0.001	G	0.35	0.00	H	6.5630	0.0007	0.009	274		6.55	6.58		C			1							S
93239	9.896	0.026	8.232	0.013		1.391	0.023	T	1.36	0.03	L	8.2009	0.0019	0.016	77		8.18	8.23					1							
93240	8.970	0.012	8.759	0.014		0.202	0.017	T	0.22	0.02	L	8.7752	0.0018	0.016	102		8.75	8.81		C			1							
93241	8.586	0.011	8.275	0.012	A	0.200	0.495	G	0.32	0.04	L *	8.3025	0.0016	0.013	97	*	8.27	8.32		D	18596+6301	I 1	2 C B	AB	46	3.751	0.045	3.54	0.18	S
93242	9.760	0.032	8.120	0.016		1.372	0.028	T	1.34	0.03	L	8.1227	0.0020	0.013	61		8.10	8.14		C	18596−2150	I 1	1 S							
93243	7.479	0.006	7.494	0.009		−0.010	0.015	G	0.01	0.01	H	7.5104	0.0011	0.010	100		7.49	7.53					1							S
93244	5.392	0.004	4.138	0.003		1.082	0.005	G	1.00	0.03	C	4.1840	0.0010	0.006	60		4.17	4.19			18596+1503	I 1	1 O							S
93245	7.553	0.007	7.426	0.007		0.145	0.015	G	0.16	0.01	H	7.4587	0.0015	0.011	94		7.44	7.48					1							S
93246	8.531	0.013	8.370	0.015		0.155	0.019	T	0.17	0.02	L	8.4137	0.0017	0.016	87		8.38	8.45					1							S
93247	9.071	0.011	8.998	0.014		0.072	0.017	T	0.08	0.02	L	9.0274	0.0020	0.022	161		8.99	9.07					1							S
93248						1.365	0.020	G	1.60	0.04	I	10.9440	0.0050	0.033	64		10.89	10.99					1							G
93249	9.344	0.019	8.121	0.012		1.045	0.018	T	1.02	0.01	L	8.1882	0.0014	0.011	78		8.17	8.20		C			1							
93250	7.697	0.007	7.707	0.010		−0.025	0.002	G	0.00	0.00	H	7.7251	0.0012	0.011	106		7.71	7.75					1							S
93251	10.283	0.036	8.774	0.018		1.269	0.032	T	1.23	0.03	L	8.7807	0.0020	0.018	63		8.76	8.81					1							
93252	7.622	0.006	7.126	0.005		0.508	0.004	G	0.58	0.00	H	7.1740	0.0010	0.009	139		7.16	7.19		C			1							S
93253	7.850	0.008	7.557	0.008		0.320	0.001	G	0.37	0.00	H	7.5983	0.0011	0.011	117		7.58	7.62		C			1							S
93254	9.358	0.018	8.851	0.018		0.491	0.005	G	0.56	0.01	H	8.8784	0.0016	0.014	63		8.86	8.91		C			1							
93255	9.315	0.019	8.188	0.013		0.960	0.015	G	0.95	0.01	H	8.2567	0.0013	0.013	71		8.24	8.28		D			1							
93256	6.856	0.003	5.399	0.002		1.228	0.003	T	1.19	0.00	L	5.4230	0.0006	0.007	196		5.41	5.43		M			1							S
93257	10.215	0.027	9.596	0.024		0.573	0.027	T	0.65	0.03	L	9.6403	0.0021	0.021	102		9.61	9.68					1							
93258	9.690	0.024	8.317	0.014		1.162	0.022	T	1.12	0.02	L	8.3315	0.0026	0.013	74		8.31	8.36		C			1							
93259	8.230	0.012	7.762	0.010		0.463	0.004	G	0.53	0.00	H	7.8202	0.0057	0.036	73		7.78	7.87	0.16	P 1 A			1							S
93260	8.408	0.009	7.331	0.006		0.932	0.008	T	0.93	0.01	L	7.3891	0.0013	0.010	74		7.37	7.41		C			1							S
93261	11.282	0.088	10.332	0.062		0.799	0.004	G	0.84	0.00	H	10.3471	0.0064	0.030	67		10.29	10.39					1 G							G
93262	8.873	0.014	7.699	0.009		1.007	0.013	T	0.98	0.01	L	7.7452	0.0013	0.013	80		7.72	7.77		C			1							S
93263	11.065	0.053	9.237	0.018		1.521	0.044	T	1.56	0.07	L	9.2733	0.0021	0.023	111		9.23	9.31					1							
93264	8.500	0.013	8.479	0.017		0.028	0.015	G	0.04	0.01	H	8.4848	0.0024	0.016	67		8.46	8.51		C			1							
93265	10.391	0.038	9.286	0.025		0.953	0.035	T	0.94	0.03	L	9.3476	0.0023	0.018	76		9.31	9.37		C			1							
93266	7.436	0.006	7.120	0.007		0.300	0.009	T	0.34	0.01	L	7.1664	0.0009	0.010	119		7.15	7.18		C			1							S
93267	8.454	0.010	8.361	0.012		0.084	0.014	T	0.10	0.01	L	8.3758	0.0018	0.018	89		8.35	8.42					1							
93268	9.302	0.022	9.179	0.027	B	0.119	0.033	T	0.13	0.03	L	9.3183	0.0620			B				D	19000+1253	I 2	1 C I A							
93269	10.031	0.029	9.204	0.023		0.690	0.020	G	0.75	0.02	H	9.3182	0.0017	0.017	100		9.28	9.35		D			1							
93270	8.497	0.010	6.524	0.005		1.672	0.009	T	2.63	0.02	O	6.2729	0.0028	0.034	149		6.21	6.32		U 2			1 S							S
93271	8.028	0.006	7.972	0.007	*	0.051	0.008	T	0.06	0.01	L *	7.9777	0.0013	0.016	218	*	7.95	8.01			19000−7132	H 1	2 C A	AB	238	0.822	0.016	3.27	0.05	S
93272	6.747	0.003	6.793	0.003		−0.037	0.004	T	−0.01	0.00	L	6.7926	0.0014	0.016	214		6.77	6.82	0.57	P 1 A			1							S
93273	9.485	0.022	7.426	0.009	A	1.633	0.015	G	2.48	0.13	O	7.3791	0.0154	0.062	63	A	7.31	7.47		D	19000+1253	I 2	1 C P A							S
93274	7.524	0.006	7.439	0.008		0.083	0.009	T	0.10	0.01	L	7.4624	0.0011	0.008	79		7.45	7.48		C			1							
93275	6.702	0.004	6.780	0.004		−0.066	0.005	T	−0.04	0.01	L	6.7812	0.0014	0.014	179		6.76	6.80	1.20	P 1 A			1							S
93276	9.889	0.019	9.275	0.017		0.569	0.019	T	0.64	0.02	L	9.3443	0.0028	0.025	118		9.30	9.38					1							
93277	8.171	0.009	7.921	0.011		0.210	0.002	G	0.23	0.00	H	7.9675	0.0020	0.012	78		7.95	7.99		C			1							S
93278	11.053	0.073	10.288	0.065		0.814	0.015	G	0.85	0.01	H	10.3421	0.0049	0.029	60		10.29	10.39					1							G
93279	6.855	0.004	5.108	0.002		1.465	0.006	G	1.32	0.03	G	5.1078	0.0006	0.006	130		5.10	5.12					1							S
93280	10.440	0.039	8.994	0.020		1.219	0.034	T	1.18	0.03	L	8.9971	0.0026	0.018	78		8.97	9.03		C			1							
93281	8.959	0.007	8.092	0.005		0.751	0.002	G	0.79	0.00	H	8.1584	0.0012	0.016	294		8.13	8.18					1							S
93282	9.565	0.023	9.136	0.024		0.458	0.002	G	0.53	0.00	H	9.1390	0.0021	0.017	74		9.11	9.17		C			1							
93283	9.261	0.016	8.037	0.011		1.046	0.015	T	1.02	0.01	L	8.0843	0.0013	0.012	87		8.06	8.12		C			1							
93284	9.412	0.016	8.953	0.016		0.433	0.021	T	0.50	0.02	L	9.0095	0.0011	0.011	91		8.99	9.03		D			1							
93285	10.631	0.042	10.201	0.050		0.610	0.020	G	0.68	0.02	H	10.1364	0.0022	0.021	94		10.09	10.19		C			1							G
93286	11.681	0.100	10.892	0.080		0.716	0.099	T	0.77	0.08	L	10.9276	0.0040	0.036	123		10.86	11.01		C			1							G
93287	7.240	0.004	6.091	0.002		0.977	0.000	G	0.96	0.00	H	6.1466	0.0005	0.008	238		6.14	6.16					1							S
93288	9.673	0.021	8.862	0.018		0.728	0.014	G	0.78	0.01	H	8.9361	0.0026	0.018	81		8.91	8.96					1							
93289	8.484	0.011	8.019	0.010		0.475	0.015	G	0.55	0.02	H	8.0522	0.0015	0.012	81		8.03	8.08					1							S
93290	9.540	0.022	9.196	0.024		0.326	0.030	T	0.38	0.04	L	9.3012	0.0035	0.025	67		9.26	9.33					1							
93291						1.030	0.020	G	1.00	0.02	H	11.2884	0.0070	0.057	83		11.21	11.39					1							G
93292	8.943	0.014	8.665	0.015		0.412	0.005	G	0.48	0.01	H	8.7202	0.0017	0.015	83		8.69	8.75		C			1							
93293						1.500	0.510	G	1.53	0.76	R	11.8739	0.1737	0.971	65		10.79	12.99	100.63	P 1 A			1 X S							D
93294	8.715	0.010	8.630	0.013		0.083	0.015	T	0.10	0.02	L	8.6483	0.0017	0.017	110		8.62	8.68		C			1							
93295	7.635	0.006	6.964	0.006		0.646	0.004	G	0.71	0.00	H	7.0141	0.0010	0.011	114		7.00	7.04					1							S
93296	9.699	0.020	8.569	0.013		0.972	0.019	T	0.96	0.01	L	8.6094	0.0018	0.015	101		8.58	8.63					1							
93297	9.046	0.013	8.412	0.011		0.589	0.015	T	0.66	0.01	L	8.4759	0.0019	0.016	98		8.45	8.50		C			1							
93298	8.796	0.015	8.725	0.020	A	0.100	0.020	G	0.06	0.02	L	8.7289	0.0075	0.018	68	A	8.70	8.76		C	19002−0824	H 1	2 C A	AB	105	10.842	0.024	2.69	0.09	
93299	5.156	0.003	5.353	0.003		−0.182	0.003	G	−0.19	0.00	H	5.3273	0.0009	0.007	93		5.32	5.34					1							S
93300	9.252	0.016	7.996	0.010		1.071	0.015	T	1.04	0.01	L	8.0414	0.0015	0.015	76		8.01	8.06					1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
93301	19 00 14.95	+29 07 34.9	8.75	H	285.062 295 50	+29.126 359 14	2.16	0.28	0.95	0.58	0.73	0.94	0.71	1.00	– 5	– 4	– 3	+ 5	+ 7	+18	+ 8	+ 9	+ 7	+ 1	1	−1.18
93302	19 00 15.80	+15 20 49.5	8.87	H	285.065 841 46	+15.347 088 11	1.00	4.29	−2.86	0.98	0.73	1.08	1.07	0.87	+ 6	−17	+ 4	+ 3	+19	+23	+19	– 8	+17	+28	0	−0.27
93303	19 00 15.94	−26 10 58.5	8.15	H	285.066 396 82	−26.182 913 67	3.65	9.67	−24.98	1.21	0.62	1.13	1.39	0.75	−29	−38	– 2	+22	+ 1	+ 6	– 5	−16	+ 0	−46	0	−0.27
93304	19 00 16.18	−63 00 11.4	8.82	H	285.067 430 34	−63.003 174 00	4.13	−20.46	−41.57	0.97	0.78	1.20	1.42	0.91	– 8	– 5	−10	+ 0	−19	−14	−16	−12	– 2	+ 3	0	1.32
93305	19 00 17.01	+28 40 33.9	7.93	H	285.070 878 72	+28.676 089 32	3.99	8.39	−4.17	0.59	0.81	0.88	0.73	0.98	– 5	−12	– 3	+ 9	+19	+10	+14	+24	– 7	– 8	0	−0.47
93306	19 00 17.38	+70 43 59.6	8.86	H	285.072 416 47	+70.733 222 51	4.15	0.15	18.77	0.66	0.57	0.66	0.69	0.62	– 4	−21	+ 9	−39	−14	+ 7	−11	+ 8	– 3	−10	2	0.66
93307	19 00 17.73	−49 02 20.0	11.36	G	285.073 863 19	−49.038 886 88	−3.81	−14.33	0.43	2.65	1.84	2.81	3.44	2.32	+ 8	−19	−17	−35	+ 5	– 3	+ 5	−51	+ 3	+ 9	0	−0.60
93308	19 00 17.76	−55 00 56.3	7.14	H	285.073 984 23	−55.015 625 60	4.79	1.69	18.35	0.72	0.55	0.95	0.80	0.64	+23	−30	−10	+27	−28	– 7	−23	−22	+ 3	+34	0	2.16
93309	19 00 19.06	+40 41 02.5	6.53	2 H	285.079 417 83	+40.684 036 80	3.66	1.81	−15.44	0.43	0.50	0.57	0.45	0.63	+ 1	−12	– 3	+ 1	+ 6	−17	+ 9	+15	−19	+ 2	0	0.13
93310	19 00 21.01	+09 25 41.1	9.70	H	285.087 540 35	+09.428 072 56	25.02	247.72	290.71	1.13	1.03	1.48	1.58	1.34	+ 1	– 9	−21	+ 0	+ 9	+10	+ 8	−16	+32	+12	0	−0.31
93311	19 00 22.14	+37 59 44.8	7.82	H	285.092 257 01	+37.995 782 01	3.92	8.97	−4.10	0.55	0.56	0.69	0.60	0.64	– 8	+ 4	+ 0	+ 8	+ 5	−20	+ 6	+18	+10	– 9	0	−0.15
93312	19 00 22.82	+82 40 18.9	8.03	H	285.095 063 83	+82.671 923 58	2.01	0.00	9.18	0.58	0.59	0.64	0.70	0.76	– 4	– 7	– 4	+25	– 7	– 8	– 6	+22	−23	– 7	0	0.39
93313	19 00 23.06	+35 49 12.9	8.32	H	285.096 089 61	+35.820 247 44	4.03	7.10	7.23	0.53	0.57	0.68	0.58	0.70	– 8	+ 6	– 3	+14	+ 9	– 7	+10	+21	+11	– 3	0	−0.04
93314	19 00 24.44	+33 44 30.6	6.80	H	285.101 850 41	+33.741 834 66	1.94	7.06	−3.58	0.46	0.50	0.65	0.56	0.62	– 8	+ 6	– 6	+ 8	+15	−22	+15	+10	+ 7	– 8	0	0.51
93315	19 00 24.78	−24 56 32.2	6.35	G	285.103 244 74	−24.942 271 20	4.03	55.54	41.20	0.88	0.46	0.87	0.97	0.53	−19	−45	+ 3	+23	– 4	+ 8	– 9	−14	– 8	−41	0	0.99
93316	19 00 25.16	+18 00 49.2	9.17	H	285.104 819 46	+18.013 676 26	1.32	2.73	3.12	0.90	0.96	1.37	1.09	1.04	+26	−21	−22	+21	– 7	+25	– 3	– 6	+17	+31	0	0.70
93317	19 00 25.25	−02 27 23.0	9.17	H	285.105 194 54	−02.456 393 01	7.60	13.72	−1.95	1.17	0.84	1.32	1.24	1.04	+29	−12	+ 2	−37	– 8	−11	– 4	−40	– 8	+33	0	−0.65
93318	19 00 25.51	+39 20 15.3	7.91	H	285.106 287 32	+39.337 591 57	7.30	14.25	46.50	0.58	0.65	0.75	0.61	0.82	– 2	– 8	– 4	+16	– 2	−17	– 2	+ 4	– 1	+10	1	−1.37
93319	19 00 25.65	−17 29 03.7	7.75	G	285.106 865 36	−17.484 348 30	11.20	42.64	−7.53	0.84	0.55	1.00	1.01	0.61	+ 7	−22	−22	+12	– 8	+38	– 3	−10	– 1	−10	0	−1.50
93320	19 00 27.21	+45 41 34.0	11.22	G	285.113 361 78	+45.692 780 05	9.51	−92.30	−226.82	1.54	1.87	1.88	2.24	2.31	+16	– 6	−31	−29	– 4	+12	– 2	−31	+ 5	+10	3	1.49
93321	19 00 27.51	+56 31 31.2	8.79	G	285.114 611 29	+56.525 335 34	0.29	−7.12	−11.78	0.68	0.64	0.69	0.78	0.73	+ 5	−13	+ 5	+27	+19	– 2	+22	+11	– 8	+19	0	0.22
93322	19 00 27.93	−41 26 51.0	9.48	H	285.116 370 79	−41.447 489 71	8.21	−31.72	14.60	1.27	0.89	1.58	1.65	1.19	+19	−13	– 7	– 3	+31	– 3	+29	−35	+17	+22	0	−2.09
93323	19 00 28.11	−04 19 30.4	9.03	H	285.117 113 54	−04.325 110 19	3.20	7.52	0.51	1.05	0.73	1.26	1.22	0.99	+34	−22	−16	– 9	+ 3	– 2	+ 2	−21	+ 5	+22	0	−1.01
93324	19 00 29.71	−07 23 08.0	7.70	G	285.123 774 48	−07.385 559 89	12.08	−18.43	−111.38	0.88	0.57	1.05	1.05	0.71	– 8	−22	−18	– 1	– 1	+36	+ 4	−14	– 5	−28	2	0.60
93325	19 00 30.08	−52 22 35.1	12.10	G	285.125 332 48	−52.376 428 99	7.28	48.65	−105.96	3.29	2.41	3.87	4.37	2.93	– 3	−21	−11	−14	+15	+ 5	+11	−41	– 1	−18	4	−0.80
93326	19 00 31.45	+22 15 56.0	9.70	H	285.131 049 24	+22.265 544 86	24.38	−87.85	−163.49	2.50	2.93	4.63	3.18	3.83	– 5	+ 3	– 1	−24	+ 4	– 1	+ 5	−31	+10	+ 1	0		
93327	19 00 31.93	+41 41 03.2	7.72	G	285.133 022 49	+41.684 229 49	11.74	17.63	7.72	0.54	0.59	0.68	0.60	0.68	– 3	−11	−11	+15	+ 9	−11	+10	+14	−18	+ 4	0	0.90
93328	19 00 32.68	−27 38 42.5	8.51	H	285.136 163 75	−27.645 152 35	6.04	2.80	−14.77	1.16	0.70	1.21	1.56	0.87	– 2	−18	+ 5	+18	– 7	−17	−20	−38	+ 0	−31	2	0.28
93329 H	19 00 34.22	+39 50 41.8	7.86	G	285.142 601 54	+39.844 943 51	A 4.21	1.36	0.37	0.86	1.05	0.91	0.85	1.05	+ 5	– 7	+11	+13	+ 1	+ 9	– 2	+ 8	+ 8	+10	1	−0.95
93330 H	19 00 34.37	+12 13 34.3	8.59	H	285.143 228 18	+12.226 181 42	A 5.34	1.00	2.34	1.60	1.25	1.72	1.75	1.34	+ 8	−14	−34	−25	+19	−16	+11	−29	+34	−18	1	−0.22
93331	19 00 34.48	+18 27 48.5	8.00	H	285.143 677 87	+18.463 468 34	3.67	7.77	1.73	0.70	0.70	0.98	0.89	0.83	+ 5	– 8	−26	+ 6	– 6	+22	+ 0	+ 1	+ 0	+ 3	0	2.07
93332	19 00 34.61	+14 40 49.4	8.26	G	285.144 220 97	+14.680 386 54	9.40	10.12	3.66	0.96	0.72	1.03	1.14	0.88	– 5	– 4	−17	−18	+19	+ 8	+21	−21	+17	+17	0	1.09
93333	19 00 34.69	+52 16 20.9	8.86	H	285.144 542 94	+52.272 484 44	8.34	−32.95	48.73	0.71	0.66	0.79	0.73	0.89	+ 0	−25	+ 5	– 4	– 2	+18	– 2	+ 0	– 3	+18	1	0.15
*93334	19 00 35.76	−42 47 27.6	9.49	H	285.149 012 09	−42.790 992 32	6.01	24.66	−17.18	1.46	0.86	1.61	1.98	1.30	+ 0	−29	+11	−10	+26	+14	+28	−37	– 3	+ 6	0	−1.51
*93335 H	19 00 35.72	+39 51 58.6	7.65	G	285.148 850 91	+39.866 267 40	* 4.08	2.48	−0.13	1.45	1.20	0.85	1.16	1.13	−12	−10	+ 2	– 6	– 2	+ 4	−14	+18	– 4	– 1	3	−0.15
93336	19 00 36.07	−19 39 29.7	7.22	H	285.150 276 29	−19.658 251 53	0.65	7.97	−10.43	0.86	0.54	0.92	0.97	0.75	– 5	−23	+ 2	+ 9	+11	+ 9	+14	−16	+18	+15	0	1.30
93337	19 00 36.48	+23 46 58.5	8.41	H	285.152 020 03	+23.782 907 21	5.41	−6.04	−9.19	0.57	0.65	0.93	0.73	0.84	+ 0	−10	−15	– 8	+ 7	+ 7	+ 6	– 2	+17	+ 4	1	−1.53
93338	19 00 38.24	−48 17 03.7	7.12	H	285.159 337 50	−48.284 354 90	5.97	−11.55	−18.68	0.78	0.57	0.88	0.97	0.64	+22	−23	−21	−26	– 1	– 6	– 4	−46	– 1	+10	0	−1.18
93339	19 00 42.62	−26 40 16.7	9.04	H	285.177 603 17	−26.671 313 55	4.40	−29.36	−37.24	1.42	0.76	1.35	1.87	0.98	−27	−25	−10	+16	+ 1	– 5	−11	−32	+ 9	−51	0	−0.21
93340	19 00 43.47	+55 39 29.9	5.51	H	285.181 113 02	+55.658 319 44	6.59	−11.73	−7.36	0.44	0.42	0.46	0.53	0.52	– 1	– 3	+10	+21	+ 5	−12	+ 7	+13	– 1	+ 5	1	0.11
93341	19 00 43.48	+19 04 33.3	10.10	G	285.181 187 39	+19.075 920 21	15.62	−243.86	−558.82	1.30	1.36	1.83	1.62	1.50	+22	−26	−31	+18	+ 0	– 3	– 8	−23	+24	+11	0	0.57
93342	19 00 45.39	−00 27 18.2	7.20	H	285.189 138 20	−00.455 046 31	5.44	21.53	−7.54	0.80	0.58	0.91	1.09	0.83	– 2	−29	−15	−38	+21	+21	+22	−43	+ 6	−15	2	0.62
*93343 H	19 00 45.79	+23 17 43.8	8.37	H	285.190 773 66	+23.295 493 68	A 1.72	−1.54	6.28	1.25	1.43	1.80	1.44	1.60	+ 7	−15	+ 2	+ 1	+ 6	– 5	+ 5	−10	+ 4	+13	1	1.68
*93344	19 00 45.78	−59 28 09.6	8.74	H	285.190 739 42	−59.469 339 80	3.32	11.30	−32.98	0.90	0.65	1.25	1.06	0.77	+ 2	−25	−11	+38	−10	+ 5	+ 1	−18	– 1	+16	0	1.93
93345	19 00 46.60	+00 23 49.9	9.97	H	285.194 182 66	+00.397 186 44	2.87	2.10	−2.21	1.26	0.91	1.56	1.19	0.93	– 4	−39	−11	−25	+13	+17	+17	−29	– 9	−17	0	1.45
93346	19 00 47.16	−41 25 04.3	8.59	H	285.196 485 01	−41.417 874 87	2.66	−7.47	1.67	1.06	0.72	1.26	1.41	0.95	+10	−21	−11	+ 3	+24	−13	+22	−37	+ 3	+ 9	0	−0.24
93347	19 00 48.29	+57 48 46.7	8.07	G	285.201 201 43	+57.812 980 98	5.20	23.76	39.38	0.59	0.55	0.60	0.61	0.62	+ 9	+12	– 1	+18	+ 9	– 1	+11	+16	+10	+18	1	−0.08
93348	19 00 48.58	+27 05 33.4	8.40	H	285.202 420 28	+27.092 608 83	4.29	−5.17	−5.74	0.55	0.67	0.89	0.71	0.94	+ 0	−14	−20	+28	– 6	– 7	– 5	+35	– 1	−26	0	−1.06
93349	19 00 49.41	+14 32 48.8	7.71	2 H	285.205 895 31	+14.546 883 30	1.90	0.74	−6.64	0.79	0.61	0.87	0.96	0.77	– 8	+ 0	−23	−22	+20	+14	+24	−26	+23	+ 7	0	−0.76
93350	19 00 50.17	+42 15 10.4	6.82	H	285.209 032 20	+42.252 883 46	28.60	−11.93	−142.52	0.46	0.50	0.56	0.49	0.57	+ 0	– 9	– 8	+ 8	+ 8	−13	+ 8	+17	−13	+ 6	0	0.96
93351	19 00 50.24	+01 23 00.1	8.24	H	285.209 338 80	+01.383 372 45	4.81	4.11	19.89	0.81	0.60	0.96	0.76	0.58	+ 6	−30	−20	−24	+ 0	+14	+ 0	−31	+ 6	−12	2	1.89
93352	19 00 52.41	−39 04 23.4	7.84	H	285.218 382 41	−39.073 174 18	5.56	−12.96	−28.12	1.01	0.63	1.13	1.74	0.97	−16	+ 1	−20	+ 9	+21	−32	– 1	−41	+26	−55	0	−0.36
93353	19 00 52.60	+16 56 10.4	11.39	H	285.219 152 14	+16.936 229 97	−0.10	−8.69	−156.05	2.54	2.75	3.66	3.07	2.96	+26	– 8	−28	+23	−16	+ 7	−11	−16	+ 9	+33	0	2.72
93354	19 00 55.20	+33 48 07.7	6.04	H	285.229 989 92	+33.802 150 41	8.24	5.64	3.11	0.43	0.46	0.60	0.50	0.53	– 9	+ 6	+ 0	+14	+14	−22	+16	+ 8	+16	– 9	0	−0.56
93355	19 00 55.77	+68 42 58.4	8.82	H	285.232 390 36	+68.716 221 74	2.47	−1.05	−15.51	0.70	0.62	0.69	0.73	0.76	+ 4	−23	– 9	+13	+13	– 6	+12	+17	+ 2	+10	0	−0.47
93356	19 00 56.52	+17 13 07.0	9.39	H	285.235 506 19	+17.218 609 30	8.38	2.00	20.56	1.00	1.03	1.37	1.15	1.16	+30	– 7	−22	+ 5	−13	+17	– 9	– 5	+ 0	+39	0	−1.04
93357	19 00 56.81	+26 27 39.9	8.13	H	285.236 716 75	+26.461 076 18	1.05	4.12	0.42	0.49	0.67	0.88	0.62	0.87	– 1	−11	−21	+19	+ 1	– 6	+ 3	+31	– 4	−19	0	−0.28
93358	19 00 57.39	−66 24 10.4	8.19	H	285.239 137 15	−66.402 882 61	3.89	−2.64	19.41	0.57	0.64	1.10	0.58	0.78	+ 4	– 9	−11	−42	+ 2	+ 5	– 3	−22	+30	+16	1	0.96
93359	19 00 57.79	+46 29 23.8	8.69	2 H	285.240 772 23	+46.489 957 28	1.78	−9.38	−10.98	0.74	0.74	0.87	0.96	0.94	+ 7	−13	−32	– 5	+ 7	−14	– 1	– 2	+14	+13	1	0.38
93360 H	19 00 59.46	+53 11 03.2	9.43	H	285.247 749 50	+53.184 225 27	A 6.79	7.98	29.87	1.78	1.73	1.75	1.95	2.01	+23	−28	+ 0	+ 5	– 2	+ 4	+ 0	– 4	– 3	+31	0	1.07
93361	19 01 00.05	−33 13 54.0	7.29	2 H	285.250 192 45	−33.231 668 33	5.75	27.77	2.37	0.97	0.55	0.99	1.13	0.67	+ 0	−34	−20	+26	+ 3	– 8	– 9	−21	+ 9	−26	0	0.14
93362	19 01 00.07	+09 25 54.8	8.04	H	285.250 303 47	+09.431 883 45	5.23	6.85	−0.19	0.79	0.67	0.99	0.92	0.77	+ 1	−30	−20	+ 0	+ 5	+ 0	– 1	−18	+14	−10	0	1.90
93363	19 01 00.97	+05 27 42.0	10.63	G	285.254 045 64	+05.461 674 88	16.92	98.02	−459.87	1.60	1.25	2.00	1.53	1.30	+18	−21	– 7	−21	– 7	+23	– 6	−28	– 5	+ 4	4	0.69
93364	19 01 01.15	+04 06 26.1	8.98	H	285.254 774 60	+04.107 252 18	8.67	−0.54	4.44	1.05	0.78	1.12	1.13	0.84	+13	– 4	– 9	−57	– 1	−15	– 2	−54	+15	– 2	0	−1.86
93365	19 01 01.31	+20 01 24.9	8.17	H	285.255 461 29	+20.023 579 08	1.57	−1.42	−3.85	0.65	0.70	1.15	0.94	0.96	+34	−22	−21	+25	+ 6	+34	+ 5	+ 8	+34	+34	0	0.70
93366	19 01 01.37	+51 19 51.2	9.19	H	285.255 722 03	+51.330 894 43	0.95	−1.06	−8.49	0.81	0.84	0.91	1.01	1.03	+18	−17	+ 6	+16	– 1	+ 0	+ 3	−10	– 5	+33	1	−0.07
93367	19 01 02.09	+33 32 49.5	8.15	H	285.258 698 06	+33.547 082 94	2.03	2.66	−1.89	0.55	0.59	0.75	0.63	0.70	– 7	– 4	+ 7	+14	+14	−19	+16	+14	+19	−10	0	0.28
*93368	19 01 03.25	−37 03 39.1	6.73	G	285.263 547 36	−37.060 851 42	B 7.45	−5.11	−19.11	16.09	8.92	7.69	16.13	7.90	– 6	−15	−15	+19	+33	– 3	−40	+20	−62	1	−0.23
*93369	19 01 03.15	+30 28 34.2	8.61	2 H	285.263 120 10	+30.476 165 60	2.26	8.49	1.69	0.58	0.70	0.93	0.66	0.86	– 8	−14	– 1	+14	+ 5	−22	+ 2	+12	+20	−16	0	−0.48
93370	19 01 04.09	−70 33 37.0	8.76	H	285.267 060 04	−70.560 282 72	7.43	14.40	−17.98	0.50	0.78	1.12	0.59	0.81	−13	−16	−11	+21	−10	−15	−13	+ 3	+ 4	−25	1	−1.57
93371	19 01 04.30	−37 03 41.4	6.44	G	285.267 922 64	−37.061 504 46	A 12.92	−4.72	−20.88	4.77	2.97	3.91	7.38	3.81	– 8	−16	−24	– 7	+42	−17	+14	−59	+27	−56	1	−0.23
93372	19 01 04.96	−62 51 55.0	6.78	H	285.270 648 35	−62.865 277 46	0.88	10.85	2.12	0.66	0.55	0.85	0.96	0.59	−13	– 6	−14	– 2	– 8	−28	– 9	−26	+10	−15	0	−0.08
93373	19 01 05.30	−66 11 30.3	8.60	H	285.272 070 19	−66.191 740 84	22.09	132.02	−387.16	0.63	0.69	1.18	0.69	0.90	– 1	– 3	−12	−33	+ 5	+ 1	+ 2	−22	+27	+25	1	0.94
93374	19 01 05.43	+19 18 34.6	6.47	H	285.272 624 62	+19.309 612 61	7.14	8.07	−3.19	0.60	0.58	0.83	0.73	0.66	+ 9	−26	−30	+17	– 2	+ 2	– 8	−17	+28	+ 3	0	−0.76
93375	19 01 06.04	−28 42 49.6	8.51	G	285.275 164 83	−28.713 775 83	15.92	3.92	−93.48	1.16	0.69	1.13	1.57	0.91	−35	−18	– 2	– 1	+17	−17	+ 9	−38	+17	−48	0	−0.24
93376	19 01 06.55	+48 02 08.3	7.04	H	285.277 285 47	+48.035 633 65	4.48	0.12	−30.80	0.48	0.44	0.52	0.54	0.52	– 5	– 1	−10	−14	+ 7	−15	+ 3	+12	−11	+10	3	0.05
93377	19 01 06.56	+15 41 01.5	7.85	G	285.277 315 67	+15.683 747 35	25.52	−324.74	−8.39	0.62	0.65	0.99	0.77	0.71	+37	−26	−28	+30	– 7	+22	– 1	– 5	+21	+44	0	−0.05
93378	19 01 06.83	−58 53 29.9	8.50	2 H	285.278 471 03	−58.891 634 27	9.44	8.13	−40.41	1.23	0.70	1.26	1.29	0.73	+ 8	−20	−34	+59	−20	+14	−17	+ 3	– 1	– 1	0	0.52
93379 H	19 01 08.84	+20 09 27.2	7.34	G	285.286 817 02	+20.157 543 17	A 2.25	0.20	−6.66	0.65	0.72	1.07	0.86	0.87	+41	−21	−31	+ 0	−24	+48	−16	– 3	+24	+29	1	−0.41
93380	19 01 08.99	+35 25 11.7	8.44	H	285.287 472 17	+35.419 903 03	2.49	3.02	−7.70	0.61	0.65	0.83	0.74	0.80	−13	+ 6	+ 0	−12	+11	−16	+12	+ 5	+15	−14	0	−0.79
93381	19 01 09.51	−04 26 20.4	6.89	H	285.289 609 28	−04.438 987 13	4.25	−5.82	7.23	0.76	0.53	0.91	0.94	0.76	+26	– 8	– 3	+ 2	+24	+ 4	+27	– 6	+19	+38	0	−0.34
93382	19 01 09.73	+41 24 54.0	8.07	H	285.290 532 25	+41.414 995 20	3.74	−6.43	8.59	0.57	0.58	0.69	0.56	0.68	– 6	−11	– 2	– 9	+ 9	– 5	+11	+ 2	−18	+ 0	0	1.30
93383	19 01 11.43	+02 28 58.3	7.07	G	285.297 610 35	+02.482 854 49	+ 9.55	8.04	−232.22	4.13	1.16	1.17	3.88	2.71	−53	−62	+16	−96	+50	+57	−84	+19	+62	+79	0	1.25
93384	19 01 12.18	−35 58 08.1	8.76	H	285.300 760 39	−35.968 921 74	1.02	−6.47	−25.99	1.30	0.72	1.37	1.92	1.08	– 7	−35	−21	+ 6	+21	– 3	+ 1	– 38	+13	−50	0	−0.59
93385	19 01 13.29	+02 01 59.5	6.92	H	285.305 356 14	+02.033 185 54	6.59	−4.85	13.44	0.77	0.57	0.87	0.76	0.56	−15	– 2	−26	−43	+20	– 7	+19	−41	+12	−26	0	−0.02
93386	19 01 13.54	+27 14 27.7	8.27	H	285.306 411 34	+27.241 036 42	2.42	−0.92	−9.70	0.58	0.64	0.95	0.72	0.90	– 2	−24	−25	+22	+ 0	−10	– 1	+23	+ 0	−30	0	1.30
93387	19 01 13.84	−13 19 18.0	9.05	H	285.307 658 61	−13.321 659 91	5.46	13.49	−5.44	1.03	0.64	1.13	1.07	0.74	+ 1	−30	– 8	+ 7	+ 0	+11	+ 2	−20	+ 1	+ 3	2	1.05
93388	19 01 14.03	+12 59 42.3	9.88	H	285.308 462 55	+12.995 095 37	2.84	2.40	−6.76	1.43	1.11	1.67	1.62	1.37	+27	−26	−26	– 2	−10	+ 2	−20	−24	+18	−10	0	0.00
93389	19 01 14.74	+35 37 25.4	8.74	G	285.311 417 95	+35.623 726 40	6.30	4.01	−18.98	0.63	0.67	0.81	0.68	0.79	– 8	– 4	+ 4	+ 4	+ 4	– 8	– 7	+ 9	+ 8	+ 5	+ 1	0	−1.63
93390	19 01 15.34	−50 10 57.4	7.96	G	285.313 930 01	−50.182 612 36	2.75	−9.77	−6.76	0.81	0.58	0.94	1.08	0.71	+ 0	−19	+ 3	– 9	+12	+ 5	+10	−33	– 4	– 8	0	−1.40
93391	19 01 15.43	−46 30 37.5	9.00	G	285.314 302 99	−46.510 414 90	3.42	−2.70	5.98	1.10	0.77	1.30	1.40	0.97	+29	−38	−22	– 6	+10	−12	+ 1	−46	+ 8	+14	0	−0.56
93392	19 01 16.99	−27 33 02.1	9.28	G	285.320 808 75	−27.550 574 34	4.39	−0.88	−8.94	1.57	0.97	1.64	1.85	1.15	+17	−30	+ 9	+13	−17	−11	−26	−42	– 6	– 6	5	0.72
93393	19 01 17.36	+26 17 29.2	5.69	H	285.322 321 52	+26.291 433 33	4.68	−0.74	−9.10	0.33	0.42	0.58	0.41	0.56	– 5	– 3	−22	+ 3	+ 5	+ 3	+ 7	+ 8	+ 0	−13	0	0.19
93394	19 01 17.42	−38 57 02.2	9.37	H	285.322 589 72	−38.950 607 22	5.30	−16.28	−51.92	1.40	0.88	1.54	2.16	1.28	−15	– 4	−16	+11	+19	−28	+ 5	−36	+26	−40	0	−2.14
93395	19 01 17.75	+21 30 49.9	7.05	H	285.323 961 42	+21.513 868 06	2.19	2.00	−4.66	0.34	0.44	0.77	0.43	0.56	– 7	−14	– 4	−14	−10	+ 6	−11	−32	+17	– 4	0	0.19
93396	19 01 17.98	+28 24 43.2	7.04	1 H	285.324 911 68	+28.412 008 66	1.67	5.34	−0.48	0.42	0.49	0.67	0.55	0.60	– 3	+ 1	+ 3	+15	+ 9	– 2	+ 8	+ 6	– 4	– 8	1	0.37
93397	19 01 19.31	+29 31 08.0	6.82	H	285.330 465 61	+29.518 894 77	6.07	11.38	5.51	0.42	0.46	0.61	0.45	0.55	– 3	– 9	−10	+23	+10	−12	+ 9	+13	+10	– 2	0	2.55
93398	19 01 19.50	−13 41 26.2	9.78	G	285.331 254 57	−13.690 599 13	28.63	−21.20	−31.92	1.34	0.84	1.48	1.44	1.04	– 4	−21	−11	– 2	+11	+21	+15	−17	+14	+15	0	−0.63
93399	19 01 19.73	+00 08 49.2	9.96	3 H	285.332 208 62	+00.147 013 52	0.75	−0.50	−1.06

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
93301	8.716	0.010	8.735	0.012		−0.013	0.014	T	0.01	0.01	L	8.7510	0.0014	0.017	147		8.72	8.78					1								
93302	9.099	0.020	8.922	0.023		0.162	0.029	T	0.18	0.03	L	8.9240	0.0028	0.019	77		8.89	8.96					1								
93303	9.856	0.027	8.312	0.013		1.297	0.024	T	1.26	0.03	L	8.3016	0.0020	0.015	75		8.27	8.33		C			1								
93304	9.388	0.017	8.886	0.016		0.490	0.015	G	0.56	0.02	H	8.9323	0.0024	0.018	84		8.91	8.98					1								
93305	9.084	0.011	8.038	0.008		0.909	0.010	T	0.91	0.01	L	8.0867	0.0017	0.016	151		8.06	8.12					1 G								
93306	9.074	0.014	8.900	0.016		0.167	0.020	T	0.18	0.02	L	8.9208	0.0013	0.014	111		8.90	8.95		C			1								
93307						1.150	0.020	G	1.11	0.02	H	11.4960	0.0075	0.045	74		11.41	11.56					1								G
93308	8.452	0.010	7.256	0.007		1.024	0.010	T	1.00	0.01	L	7.3127	0.0009	0.009	98		7.30	7.33					1								S
93309	8.483	0.012	6.763	0.007		1.463	0.011	T	2.64	0.02	O	6.5203	0.0044	0.034	118		6.48	6.58		U 2 C			1 S								S
93310	10.962	0.059	9.808	0.034		1.002	0.001	G	1.05	0.00	I	9.8413	0.0032	0.023	83		9.79	9.88		C			1								G
93311	8.082	0.009	7.837	0.007		0.233	0.011	T	0.26	0.01	L	7.8849	0.0015	0.013	131		7.86	7.91		C			1								S
93312	8.031	0.009	8.036	0.011		0.022	0.015	G	0.04	0.01	H	8.0500	0.0008	0.012	114		8.02	8.07		D			1								S
93313	8.315	0.009	8.311	0.011		0.008	0.013	T	0.03	0.01	L	8.3275	0.0015	0.013	134		8.30	8.36					1								S
93314	8.236	0.009	6.918	0.005		1.119	0.008	T	1.08	0.01	L	6.9721	0.0010	0.008	111		6.96	6.99		C			1								S
93315	7.985	0.009	6.505	0.005		1.253	0.003	G	1.21	0.00	H	6.5100	0.0010	0.008	68		6.49	6.52		C			1								S
93316	9.480	0.017	9.153	0.019		0.310	0.024	T	0.36	0.03	L	9.2458	0.0025	0.021	94		9.21	9.28		C			1								
93317	9.726	0.021	9.213	0.021		0.514	0.020	G	0.59	0.02	H	9.2832	0.0021	0.017	87		9.25	9.32		C			1								
93318	8.547	0.011	7.983	0.010		0.528	0.013	T	0.60	0.01	L	8.0290	0.0018	0.014	110		8.00	8.05					1								S
93319	8.261	0.012	7.786	0.014		0.436	0.015	G	0.50	0.02	H	7.8483	0.0015	0.008	63		7.83	7.87		C			1								S
93320						0.902	0.020	G	0.95	0.02	I	11.3728	0.0047	0.048	102		11.28	11.45					1 G								G
93321	8.524	0.010	8.721	0.014		−0.200	0.015	G	−0.21	0.02	H	8.7116	0.0018	0.014	102		8.69	8.74		C			1								
93322	10.067	0.024	9.492	0.023		0.540	0.025	T	0.61	0.03	L	9.5960	0.0025	0.018	111		9.57	9.63					1								
93323	9.426	0.017	9.035	0.018		0.370	0.023	T	0.43	0.03	L	9.1181	0.0023	0.017	103		9.09	9.15		C			1								
93324	8.220	0.012	7.727	0.011		0.465	0.015	G	0.54	0.02	H	7.7979	0.0014	0.011	73		7.77	7.82		C			1								S
93325						1.370	0.015	G	1.69	0.02	A	12.2426	0.0083	0.078	77		12.10	12.38					1								G
93326	10.853	0.037	9.790	0.024		0.912	0.035	T	0.96	0.04	L	9.8446	0.0031	0.031	183		9.79	9.91					1 X								G
93327	8.154	0.008	7.740	0.009		0.407	0.003	G	0.47	0.00	H	7.8031	0.0014	0.011	111		7.79	7.83					1								S
93328	8.628	0.013	8.520	0.016		0.105	0.019	T	0.12	0.02	L	8.5472	0.0020	0.013	84		8.53	8.57		C			1								S
93329	7.773	0.008	7.851	0.011	*	−0.060	0.015	G	−0.04	0.01	H *	7.8394	0.0015	0.011	115	*	7.82	7.86		D	19006+3951	M 1	2 C A	AB	200	0.503	0.004		1.61	0.02	S
93330	9.062	0.018	8.754	0.019	A	1.100	0.495	G	0.47	0.10	L *	8.6834	0.0025	0.018	74	*	8.66	8.72		D	19006+1214	I 1	2 C A	AB	359	2.950	0.010		2.30	0.06	S
93331	9.321	0.019	8.129	0.012		1.021	0.018	T	0.99	0.01	L	8.1659	0.0017	0.016	88		8.14	8.20		C			1								
93332	8.776	0.016	8.305	0.016		0.430	0.018	G	0.50	0.02	H	8.3578	0.0020	0.015	72		8.32	8.39					1								
93333	9.444	0.017	8.929	0.016		0.484	0.021	T	0.56	0.02	L	8.9678	0.0017	0.015	96		8.94	8.99		C			1								
93334	10.352	0.034	9.591	0.029		0.679	0.034	T	0.74	0.03	L	9.6304	0.0026	0.019	79		9.59	9.67		C			1								
93335	8.741	0.011	7.752	0.008	*	0.850	0.015	G	0.86	0.01	H *	7.8242	0.0011	0.010	117	*	7.80	7.85		D	19006+3952	H 1	2 C A	AB	134	0.259	0.015		2.10	0.17	S
93336	9.240	0.018	7.387	0.009		1.541	0.016	T	1.60	0.04	L	7.3366	0.0012	0.010	76		7.32	7.35					1								S
93337	8.674	0.008	8.450	0.009		0.214	0.011	T	0.24	0.01	L	8.4804	0.0018	0.019	176		8.45	8.52					1								
93338	8.443	0.012	7.233	0.007		1.035	0.011	T	1.01	0.01	L	7.2877	0.0013	0.009	79		7.27	7.30		C			1								S
93339	10.443	0.039	9.175	0.023		1.080	0.035	T	1.04	0.03	L	9.2023	0.0031	0.019	74		9.18	9.23					1								
93340	6.593	0.004	5.609	0.004		0.862	0.004	T	0.87	0.00	L	5.6684	0.0006	0.005	103		5.66	5.68		C			1								S
93341	10.890	0.060	10.223	0.054		0.703	0.005	G	0.75	0.01	H	10.2421	0.0037	0.031	90		10.20	10.29					1								G
93342	8.262	0.010	7.295	0.008		0.858	0.015	G	0.87	0.01	H	7.3535	0.0012	0.007	91		7.34	7.38			19008−0027	I 1	1 G								S
93343	8.476	0.012	8.262	0.012	*	0.204	0.016	T	0.22	0.02	L *	8.4361	0.0019	0.019	158	*	8.40	8.47		D	19008+2318	I 1	2 C A	AB	275	2.664	0.005		0.89	0.02	S
93344	10.272	0.032	8.894	0.018		1.166	0.029	T	1.13	0.03	L	8.9008	0.0018	0.019	100		8.87	8.93		C			1								
93345	10.834	0.048	10.087	0.040		0.762	0.015	G	0.80	0.01	H	10.1137	0.0035	0.032	96		10.05	10.17					1								G
93346	9.860	0.020	8.712	0.013		0.986	0.019	T	0.97	0.01	L	8.7520	0.0016	0.017	112		8.72	8.79		C			1								
93347	8.552	0.010	8.109	0.010		0.418	0.013	T	0.48	0.01	L	8.1634	0.0016	0.012	112		8.14	8.18		C			1								S
93348	8.477	0.008	8.403	0.010		0.073	0.012	T	0.08	0.01	L	8.4316	0.0015	0.018	168		8.40	8.46		C			1								
93349	7.988	0.016	7.779	0.017		0.391	0.015	G	0.46	0.02	H	7.8013	0.0130	0.126	70		7.66	7.99	8.15	P 1 A			1								S
93350	7.461	0.006	6.883	0.005		0.534	0.007	G	0.61	0.01	H	6.9386	0.0008	0.008	122		6.92	6.95		C			1								S
93351	9.581	0.019	8.363	0.012		1.041	0.018	T	1.01	0.01	L	8.4034	0.0014	0.012	95		8.39	8.42		C			1								
93352	9.207	0.018	7.975	0.011		1.052	0.016	T	1.02	0.01	L	8.0101	0.0015	0.013	78		7.98	8.03		C			1								
93353	12.134	0.165	11.563	0.169		0.534	0.210	T	0.61	0.22	L	11.5089	0.0114	0.077	106		11.34	11.63					1 S								G
93354	7.296	0.006	6.153	0.004		0.983	0.006	T	0.96	0.01	L	6.2091	0.0007	0.006	114		6.20	6.22		C			1								S
93355	8.816	0.011	8.818	0.014		0.003	0.016	T	0.02	0.01	L	8.8337	0.0016	0.014	110		8.81	8.87		C			1								S
93356	9.988	0.025	9.456	0.025		0.499	0.032	T	0.57	0.03	L	9.5041	0.0021	0.030	102		9.46	9.56		C			1								G
93357	8.153	0.007	8.140	0.009		0.017	0.011	T	0.04	0.01	L	8.1432	0.0011	0.014	183		8.12	8.17					1								
93358	9.688	0.015	8.311	0.009		1.165	0.014	T	1.13	0.01	L	8.3552	0.0016	0.020	224		8.32	8.39					1								
93359	10.499	0.044	8.943	0.022		1.328	0.041	T	2.99	0.07	O	8.6087	0.0090	0.075	90		8.49	8.75		U 2			1 S								P
93360	10.078	0.026	9.558	0.025	A	0.700	0.495	G	0.69	0.07	L *	9.5629	0.0030	0.024	111	*	9.51	9.60		C	19010+5311	I 1	2 C C	AB	260	5.207	0.061		3.21	0.21	
93361	7.689	0.010	7.326	0.008		0.348	0.015	G	0.41	0.02	H	7.3770	0.0042	0.022	66		7.34	7.41		U 2			1								S
93362	8.145	0.009	8.053	0.011		0.100	0.015	G	0.11	0.02	H	8.0796	0.0018	0.014	78		8.06	8.10		C			1								
93363						1.076	0.006	G	1.14	0.01	I	10.8057	0.0031	0.027	73		10.76	10.86					1								G
93364	9.637	0.019	9.009	0.017		0.584	0.022	T	0.66	0.02	L	9.1068	0.0016	0.015	80		9.09	9.14					1								
93365	8.150	0.007	8.168	0.009		−0.012	0.010	T	0.01	0.01	L	8.1731	0.0017	0.019	156		8.15	8.20					1								S
93366	10.404	0.034	9.279	0.021		0.969	0.031	T	0.95	0.03	L	9.3414	0.0027	0.022	101		9.31	9.39					1								
93367	8.050	0.007	8.144	0.010		−0.070	0.015	G	−0.05	0.01	H	8.1326	0.0011	0.011	110		8.11	8.15					1								S
93368	6.660	0.006	6.690	0.007	B	0.004	0.016	G	0.02	0.01	H	6.6833	0.0313			B				D	19011−3704	I 2	1 C I B								S
93369	9.992	0.022	8.718	0.013		1.085	0.020	T	1.05	0.02	L	8.7747	0.0017	0.018	149		8.74	8.81		U			1								
93370	9.269	0.010	8.797	0.009		0.457	0.010	T	0.53	0.01	L	8.8618	0.0015	0.021	250		8.82	8.90					1								
93371	6.370	0.008	6.399	0.007	A	0.020	0.010	G	0.04	0.01	H	6.3903	0.0246	0.089	62	A	6.34	6.65		D	19011−3704	I 2	1 C P B								S
93372	8.880	0.019	6.973	0.009		1.583	0.017	T	1.60	0.02	L	6.8990	0.0014	0.011	88		6.88	6.92					1								S
93373	9.445	0.015	8.676	0.013		0.699	0.003	G	0.76	0.00	H	8.7393	0.0014	0.021	193		8.70	8.77					1								
93374	7.908	0.009	6.597	0.005		1.114	0.008	T	1.08	0.01	L	6.6385	0.0010	0.007	91		6.63	6.65		C			1								S
93375	9.163	0.019	8.547	0.017		0.571	0.015	G	0.64	0.01	H	8.6212	0.0020	0.018	77		8.60	8.65		C			1								
93376	8.297	0.009	7.150	0.006		0.986	0.008	T	0.97	0.01	L	7.2008	0.0011	0.009	123		7.19	7.22		C			1								S
93377	8.730	0.010	7.929	0.008		0.705	0.000	G	0.75	0.00	H	7.9927	0.0013	0.011	121		7.97	8.01		C			1								S
93378	9.291	0.018	8.569	0.015		0.649	0.018	T	0.71	0.02	L	8.6379	0.0054	0.033	78		8.59	8.70		U 2			1								
93379	7.402	0.005	7.375	0.005	A	0.060	0.015	G	0.02	0.01	L *	7.3672	0.0009	0.011	187	*	7.35	7.38		D	19011+2009	I 1	2 C C	AB	81	2.067	0.025		3.88	0.10	S
93380	9.638	0.017	8.537	0.012		0.950	0.016	T	0.94	0.01	L	8.6015	0.0014	0.015	123		8.58	8.63					1								
93381	9.111	0.013	7.078	0.006		1.684	0.011	T	1.71	0.01	L	6.9912	0.0013	0.011	104		6.97	7.01					1								S
93382	8.122	0.008	8.067	0.010		0.050	0.015	G	0.06	0.01	H	8.0892	0.0014	0.012	115		8.07	8.11					1								S
93383	8.386	0.009	7.188	0.006		1.035	0.015	G	1.03	0.07	F	7.2287	0.0010	0.009	83		7.21	7.24		C			1 O								S
93384	10.135	0.031	8.888	0.019		1.064	0.028	T	1.03	0.02	L	8.9319	0.0024	0.015	78		8.91	8.95		C			1								
93385	8.163	0.010	7.027	0.006		0.977	0.009	T	0.96	0.01	L	7.0860	0.0013	0.011	91		7.06	7.10					1								S
93386	8.232	0.007	8.263	0.009		−0.024	0.010	T	0.00	0.01	L	8.2703	0.0012	0.016	161		8.24	8.29					1								
93387	9.353	0.020	9.087	0.023		0.265	0.020	G	0.30	0.03	H	9.1201	0.0017	0.015	88		9.09	9.14		C			1								
93388	10.222	0.039	9.850	0.042		0.352	0.053	T	0.41	0.06	L	9.9636	0.0034	0.033	63		9.90	10.01					1								G
93389	9.184	0.013	8.815	0.014		0.412	0.015	G	0.48	0.02	H	8.8442	0.0021	0.021	125		8.81	8.87					1								
93390	9.558	0.022	8.075	0.012		1.250	0.015	G	1.21	0.01	H	8.1174	0.0015	0.011	79		8.09	8.14		C			1								
93391	9.331	0.018	8.995	0.019		0.324	0.015	G	0.38	0.02	H	9.0618	0.0027	0.017	76		9.04	9.09		C			1								
93392	10.215	0.033	9.420	0.027		0.843	0.005	G	0.86	0.00	H	9.4350	0.0020	0.021	72		9.40	9.47			19013−2733	I 1	1 S								
93393	5.574	0.002	5.674	0.002		−0.086	0.002	T	−0.07	0.00	L	5.6680	0.0007	0.008	193		5.65	5.68					1								S
93394	9.888	0.027	9.403	0.027		0.469	0.029	T	0.54	0.03	L	9.4765	0.0030	0.020	75		9.44	9.51		C			1								
93395	7.150	0.003	7.068	0.003		0.074	0.004	T	0.09	0.00	L	7.0828	0.0008	0.010	260		7.07	7.10					1								S
93396	6.910	0.004	7.022	0.004		−0.097	0.005	T	−0.08	0.01	L	7.0126	0.0011	0.012	165		6.99	7.03		M			1								S
93397	6.868	0.003	6.820	0.004		0.049	0.005	T	0.06	0.00	L	6.8391	0.0009	0.008	148		6.82	6.85		C			1								S
93398	11.268	0.086	9.813	0.038		1.050	0.015	G	1.02	0.01	I	9.8619	0.0028	0.020	77		9.82	9.90		C			1								G
93399	11.781	0.116	10.031	0.036		1.459	0.096	T	1.47	0.15	L	10.0926	0.0268	0.227	90		9.63	10.35	7.30	P 1 A			1								G
93400	10.418	0.037	9.874	0.034		0.510	0.045	T	0.58	0.05	L	9.8785	0.0025	0.027	126		9.83	9.93		C			1								G

Number HIP	RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 (ICRS) α deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ,α*	π,α*	π,δ	$\mu_{\alpha*}$,α*	$\mu_{\alpha*}$,δ	$\mu_{\alpha*}$,π	μ_δ,α*	μ_δ,δ	μ_δ,π	μ_δ,$\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
93401	19 01 21.78	+44 23 11.4	7.57	H	285.340 754 41	+44.386 509 35	5.70	−0.37	3.91	0.51	0.60	0.65	0.52	0.74	− 1	+ 5	−33	− 7	+ 4	− 1	+ 2	+ 8	+ 7	+11	0	0.64
*93402	19 01 22.22	+11 56 11.6	8.42	H	285.342 588 78	+11.936 556 15	6.48	14.52	−1.23	1.03	0.81	1.29	1.18	0.92	−14	−20	−34	−24	+34	−17	+19	−38	+40	−31	0	0.88
*93403	19 01 22.22	−63 20 59.1	8.88	H	285.342 564 34	−63.349 751 69	1.52	13.97	−22.45	1.03	0.81	1.31	1.47	0.93	+ 3	−18	− 5	+17	+ 5	−21	+ 2	−21	+ 9	+ 3	0	1.23
93404	19 01 22.55	+20 49 58.3	6.78	H	285.343 958 49	+20.832 855 73	2.15	−0.82	−6.15	0.36	0.42	0.73	0.45	0.59	+ 7	−19	−20	−25	−15	+28	−16	−22	+28	+10	0	0.19
93405	19 01 23.95	−23 13 41.6	7.80	G	285.349 777 77	−23.228 228 65	5.83	10.44	6.67	1.13	0.68	1.17	1.25	0.80	−12	− 7	−15	−35	+11	−21	+ 9	−51	+11	− 7	0	1.77
93406	19 01 24.56	+07 16 46.1	8.91	H	285.352 344 20	+07.279 475 46	8.36	−18.28	−8.24	1.05	0.88	1.33	1.38	0.99	−11	−11	+ 0	−24	+17	−30	+16	−40	+12	+ 5	0	−0.50
93407	19 01 24.66	+26 23 44.0	7.88	H	285.352 740 23	+26.395 563 26	4.86	−17.55	−20.03	0.51	0.67	0.92	0.63	0.92	− 1	−15	−20	+15	+ 2	− 4	+ 4	+24	− 5	−19	0	−1.44
93408	19 01 26.36	+46 56 06.1	5.00	H	285.359 832 10	+46.935 021 75	25.54	13.58	−86.10	0.42	0.40	0.46	0.52	0.49	− 3	− 9	− 7	− 5	+ 4	− 8	+ 2	+ 6	− 1	+17	0	1.49
93409	19 01 26.75	+29 17 14.7	8.49	G	285.361 463 74	+29.287 412 15	A 3.50	2.38	−4.32	1.43	1.58	1.64	1.39	1.67	− 3	−13	−10	+11	+ 3	+ 3	+ 2	+13	+13	+ 0	2	0.34
93410	19 01 27.20	+29 16 57.3	12.08	H	285.363 327 62	+29.282 586 89	B 2.46	1.15	−50.85	86.36	100.93	66.58	50.98	64.29	− 7	−17	− 5	− 1	+ 5	+ 7	+ 4	+ 2	+12	+ 1	2	0.34
93411	19 01 27.31	−06 11 33.3	7.65	1 H	285.363 794 47	−06.192 595 35	2.60	3.53	2.07	0.77	0.50	0.87	0.94	0.79	+31	−18	− 3	+ 3	+26	+14	+31	+ 3	+10	+35	2	1.08
93412	19 01 28.66	−34 22 35.1	8.23	G	285.369 432 54	−34.376 429 51	15.45	9.88	−46.80	1.17	0.65	1.18	1.46	0.95	− 1	−26	−16	+12	− 6	− 5	−16	−36	+18	−16	0	−0.16
93413	19 01 29.95	+32 23 32.4	7.25	1 G	285.374 783 88	+32.392 329 93	2.60	1.91	−2.67	0.44	0.50	0.63	0.52	0.62	+ 7	+13	+ 0	+12	+12	+ 1	+15	+ 6	+22	+12	0	1.87
93414	19 01 30.49	−67 13 18.6	8.36	H	285.377 046 21	−67.221 844 57	2.60	4.08	−7.71	0.54	0.65	0.98	0.49	0.63	+ 6	− 8	−13	−44	−15	+ 3	−16	−29	+12	+ 2	0	1.45
93415	19 01 31.04	−51 38 51.3	8.49	H	285.379 320 95	−51.647 579 43	10.09	0.95	−101.35	0.89	0.70	1.11	1.17	0.81	+ 9	−23	−31	+10	+15	− 9	+ 0	−31	+25	−19	0	1.67
93416 H	19 01 33.23	−78 37 47.0	8.83	H	285.388 445 19	−78.629 724 14	A 3.12	9.19	−4.88	1.16	1.30	1.51	1.32	1.42	+ 3	−20	−18	−11	− 5	+ 2	− 7	−14	+16	+ 3	0	−0.11
93417	19 01 33.50	+02 35 18.5	7.09	H	285.389 568 15	+02.588 467 18	2.82	20.40	23.29	0.81	0.58	0.88	0.83	0.61	+12	−10	− 7	−32	− 2	− 3	− 3	−38	+12	+29	0	0.50
93418	19 01 33.52	−15 16 57.4	6.31	H	285.389 662 44	−15.282 614 38	5.83	−5.29	−1.25	0.77	0.46	0.83	0.92	0.54	−11	−26	−17	+14	− 4	+14	− 9	−16	+ 0	−40	0	0.30
93419	19 01 34.90	+25 01 33.4	6.74	H	285.395 434 18	+25.025 932 27	2.35	−1.09	2.94	0.35	0.48	0.69	0.39	0.63	−12	− 1	−23	+32	+13	+ 1	+14	+ 5	− 4	−29	0	0.01
93420	19 01 35.31	−39 47 12.3	8.60	H	285.397 126 07	−39.786 757 43	3.47	1.70	−6.86	1.22	0.71	1.31	1.65	1.02	− 7	−24	+ 1	+20	+ 6	−14	+ 0	−32	− 4	−22	0	0.49
93421	19 01 35.95	−10 42 14.7	9.38	G	285.399 791 28	−10.704 093 83	2.74	0.33	−6.33	1.18	0.79	1.33	1.49	1.11	+ 3	− 4	− 3	+20	− 4	+22	+ 3	−20	−18	+12	0	−0.28
93422	19 01 35.97	−45 07 24.3	7.38	H	285.399 859 27	−45.123 427 08	5.23	−16.54	−2.16	0.80	0.54	0.96	0.96	0.61	+19	−38	−33	+ 4	+ 2	+10	− 6	−32	+10	−11	0	1.25
93423	19 01 37.74	−22 41 43.3	6.25	H	285.407 242 37	−22.695 366 06	2.14	3.90	0.65	0.87	0.54	0.87	1.26	0.71	−23	− 1	−13	−31	+25	−12	+19	−49	− 7	−40	0	1.37
93424 H	19 01 38.69	−44 06 35.9	8.72	H	285.411 190 64	−44.109 970 42	B 2.51	−10.33	−47.67	3.90	2.86	3.46	3.72	2.08	+37	−36	−43	− 3	+22	−33	−11	−48	+25	−18	2	1.29
93425	19 01 38.93	−36 53 26.3	7.22	H	285.412 203 95	−36.890 642 95	7.35	1.55	−26.65	1.09	0.65	1.15	1.81	0.94	−12	−21	−28	− 8	+51	−20	+23	−55	+30	−59	0	0.00
93426	19 01 39.28	+43 50 45.4	8.60	H	285.413 650 57	+43.845 950 55	2.98	−3.02	−28.31	0.65	0.71	0.80	0.74	0.87	− 1	−11	−28	+16	− 2	− 2	− 1	+ 8	−14	+ 5	0	−0.46
93427	19 01 39.74	+41 29 24.1	7.20	H	285.415 577 50	+41.490 015 30	24.23	−78.28	31.76	0.52	0.51	0.61	0.55	0.61	+ 1	−12	+ 1	+ 5	+11	− 9	+12	+13	− 9	+ 5	0	0.36
93428	19 01 40.26	−22 11 56.4	9.91	G	285.417 749 54	−22.199 011 25	0.10	3.39	−1.04	1.63	1.01	1.67	2.35	1.37	− 9	− 6	−16	−32	+ 9	+ 5	+ 6	−51	−10	−31	2	−1.57
93429	19 01 40.84	−05 44 20.5	4.02	G	285.420 172 36	−05.739 018 32	21.95	−24.15	−39.73	0.72	0.48	0.92	0.82	0.68	+18	−19	−36	−20	+20	+ 1	+20	−27	+34	+19	2	0.35
93430	19 01 41.57	−26 00 20.0	8.02	H	285.423 221 43	−26.005 543 21	4.27	15.81	−11.78	1.05	0.51	1.06	1.06	0.60	−12	−55	− 1	+17	− 6	+ 3	− 9	−23	− 2	−30	0	−1.17
93431	19 01 42.61	−34 01 48.8	9.08	H	285.427 548 67	−34.030 221 35	11.54	68.51	−16.04	1.44	0.85	1.47	2.24	1.31	− 4	−21	+ 7	+17	−10	−19	−24	−35	+ 5	−35	0	−0.47
93432	19 01 42.79	−74 04 54.4	8.82	H	285.428 294 13	−74.081 772 54	16.67	8.99	18.52	0.68	0.85	1.12	0.76	0.96	−17	−11	+17	+11	− 7	−11	− 4	−17	−17	−17	1	−0.10
93433	19 01 42.85	+28 06 59.1	8.32	H	285.428 561 66	+28.116 423 96	3.64	−10.53	−6.60	0.65	0.72	1.01	0.86	0.93	− 3	+ 2	− 9	+20	+10	+ 5	+ 9	+11	+ 8	−13	2	−0.37
93434	19 01 42.95	+03 23 21.0	8.42	H	285.428 970 37	+03.389 178 43	4.38	6.41	0.62	1.02	0.80	1.16	1.07	0.77	+ 5	− 1	+23	−34	− 4	−25	+ 1	−47	−11	+ 6	0	1.50
93435	19 01 45.23	+22 14 09.0	9.83	2 H	285.438 469 62	+22.235 830 48	1.97	4.09	−7.18	0.79	1.00	1.65	1.01	1.32	+ 2	− 5	− 5	− 3	+ 3	+13	− 2	−13	+11	+10	0	0.68
93436 H	19 01 46.60	+28 14 12.7	9.84	H	285.444 159 04	+28.236 858 14	A 6.40	−16.68	−49.84	1.41	1.68	2.05	1.67	1.91	− 3	− 7	+13	+30	+ 1	+ 0	− 2	+23	− 5	−20	2	0.57
93437	19 01 48.37	+33 37 16.5	6.39	H	285.451 537 51	+33.621 259 83	2.94	0.40	−1.00	0.41	0.47	0.58	0.48	0.57	−11	+ 5	+ 2	+19	+10	−21	+12	+14	+15	−16	0	0.51
93438	19 01 48.60	+12 32 27.5	6.83	H	285.452 503 71	+12.540 975 60	A 3.32	2.38	−11.04	0.99	0.77	1.09	1.01	0.80	+22	−23	−25	−13	+ 3	− 3	− 6	−24	+27	−11	4	1.30
93439	19 01 49.10	+77 40 32.9	7.61	H	285.454 600 92	+77.675 792 42	3.67	−7.85	−4.54	0.54	0.54	0.58	0.55	0.53	+ 9	−13	+ 8	+ 6	− 3	− 7	+ 1	−11	−11	+21	3	−0.11
93440 H	19 01 49.12	+34 48 29.9	8.93	H	285.454 686 23	+34.808 315 59	A 1.74	1.04	−2.41	1.02	1.11	1.22	1.21	1.21	−14	− 7	+25	+45	+ 6	− 5	+ 5	+17	+10	−10	1	−0.42
93441	19 01 49.34	−06 22 46.0	8.11	H	285.455 579 54	−06.379 445 49	5.48	25.35	−4.52	0.91	0.62	1.10	1.25	0.88	+ 6	−33	−14	−33	+36	+30	+33	−41	+ 7	−24	0	1.39
*93442	19 01 49.43	+30 01 34.6	9.55	H	285.455 953 01	+30.026 282 17	1.57	3.12	−0.84	0.85	0.86	1.19	1.02	1.06	+ 1	− 2	− 6	+44	+ 7	− 5	+10	+ 0	+28	+ 8	1	1.77
*93443	19 01 49.42	+22 15 51.8	6.44	H	285.455 929 60	+22.264 377 45	7.88	12.57	14.40	0.37	0.44	0.70	0.49	0.55	− 6	−14	− 7	−11	−13	+ 9	−12	−24	+15	− 1	1	1.10
93444	19 01 50.42	−17 21 05.5	8.04	G	285.460 094 94	−17.351 537 46	13.38	−31.95	−34.72	0.90	0.63	1.10	1.21	0.87	+27	−14	− 3	+14	+13	+47	+21	+ 1	+ 9	+44	0	−1.07
93445	19 01 51.11	+16 03 51.0	10.38	G	285.462 950 07	+16.064 178 81	9.72	−146.98	−302.79	1.21	1.11	1.65	1.51	1.35	+45	−27	−22	+45	− 1	+12	+ 0	− 5	+24	+49	0	0.51
93446	19 01 52.66	−32 35 50.1	7.74	H	285.469 411 60	−32.597 236 62	3.92	8.87	23.92	1.11	0.65	1.24	1.28	0.77	+22	−48	−40	+23	+17	−20	−11	−30	+22	−28	0	0.05
93447	19 01 53.16	−37 57 10.3	9.00	H	285.471 486 80	−37.952 868 15	2.89	5.49	−4.51	1.37	0.85	1.54	2.36	1.14	+ 9	−19	−47	+38	+20	−32	−26	−40	+34	−56	0	−0.94
93448 H	19 01 53.17	+19 10 11.5	7.80	H	285.471 559 53	+19.169 864 72	A 12.15	−26.82	21.37	2.40	2.85	2.46	2.67	3.20	+31	−16	−10	+15	− 6	+ 3	−11	− 9	+10	+33	3	0.67
93449	19 01 53.68	−36 57 08.1	11.57	3 H	285.473 647 55	−36.952 240 00	121.75	−34.36	50.57	62.40	37.97	68.24	97.49	52.03	+ 3	−33	−40	−18	+37	−31	+ 2	−64	+32	−56	5	
93450	19 01 54.03	−31 29 02.3	9.31	H	285.475 141 10	−31.483 973 79	4.00	−12.17	4.60	1.45	1.02	1.93	2.20	1.29	+ 0	−11	−54	+ 7	+42	−41	+ 6	−52	+50	−50	0	1.65
93451	19 01 55.75	−06 10 53.9	8.01	H	285.482 271 96	−06.181 643 64	5.09	1.95	0.35	0.85	0.55	1.03	1.08	0.90	+37	−15	− 6	+ 4	+22	+17	+26	+ 1	+17	+39	0	−0.35
93452	19 01 56.68	−15 46 43.8	10.25	G	285.486 170 60	−15.778 838 44	3.24	1.70	−6.98	1.50	0.97	1.72	1.98	1.24	+19	−34	−33	+19	− 1	− 9	−23	−23	+24	−31	0	−0.62
93453	19 01 57.60	+19 07 29.3	6.94	H	285.489 997 47	+19.124 795 17	4.63	73.83	31.89	0.65	0.60	0.87	0.82	0.70	+ 9	−24	−25	+20	− 3	− 1	−10	−15	+27	+ 2	0	2.13
93454	19 01 58.10	−68 08 04.4	8.19	H	285.492 096 43	−68.134 545 43	6.68	2.70	−31.78	0.59	0.62	0.94	0.56	0.67	− 5	−15	−15	−32	−10	+ 2	−13	−18	+24	−11	1	−2.18
93455	19 01 58.82	−56 58 18.3	8.32	H	285.495 098 72	−56.971 738 62	10.20	−41.32	−147.45	1.03	0.73	1.20	1.23	0.99	+32	−38	−12	+35	−26	−14	−37	−38	+22	+25	0	−0.33
93456	19 01 59.50	−22 05 35.7	8.73	H	285.497 931 59	−22.093 242 24	4.08	2.68	−11.53	1.32	0.81	1.30	2.31	1.21	−27	+ 3	−24	−28	+21	− 7	+12	−50	+ 1	−59	2	0.25
93457	19 02 00.87	+23 05 07.0	8.62	H	285.503 641 63	+23.085 284 11	4.71	12.23	1.44	0.62	0.68	1.03	0.85	0.89	+ 3	− 6	− 2	+ 2	− 2	+ 1	− 2	− 3	+10	+10	0	−0.35
93458	19 02 01.74	−40 39 45.9	7.12	H	285.507 229 37	−40.662 755 06	2.24	3.50	−5.26	0.79	0.46	0.92	0.89	0.57	+17	−46	+ 7	+13	− 1	+11	+ 5	−34	−22	+14	0	−2.23
93459	19 02 02.84	+10 45 29.1	8.39	H	285.511 828 64	+10.758 096 12	4.66	2.71	4.74	0.90	0.68	1.11	1.03	0.83	+ 6	−33	−21	+ 1	+ 8	+ 9	+ 2	−17	+20	− 8	0	−0.26
93460	19 02 03.50	+07 14 56.2	8.37	G	285.514 590 45	+07.248 934 52	4.07	4.07	−9.66	1.00	0.69	1.15	1.04	0.79	− 1	−45	−14	− 5	− 6	− 6	− 5	−30	− 2	− 7	0	−0.88
93461 H	19 02 04.88	+14 25 47.5	7.37	H	285.520 351 89	+14.429 855 57	A 2.67	0.94	−2.09	1.12	0.88	1.08	1.27	1.00	− 1	+ 0	−12	− 5	+19	+ 9	+14	− 8	+21	+27	2	0.36
93462	19 02 04.99	+60 07 42.3	6.87	H	285.520 809 59	+60.128 412 73	2.49	5.58	23.38	0.49	0.50	0.52	0.53	0.56	− 3	− 5	+23	+20	+ 3	− 6	+11	−12	− 5	+19	1	0.53
93463	19 02 05.11	−64 53 29.3	8.32	H	285.521 276 78	−64.891 462 56	1.46	−5.02	−2.12	0.71	0.63	0.96	1.04	0.82	−23	− 7	− 3	+ 7	− 6	+ 1	− 2	−13	+ 1	− 5	2	2.66
93464	19 02 06.02	−16 51 19.7	8.03	H	285.525 077 04	−16.855 463 15	5.16	19.33	−0.98	0.92	0.58	1.05	1.07	0.73	+14	−33	− 9	+ 0	+ 6	+29	+ 6	−15	+ 7	+10	0	0.49
93465 H	19 02 06.08	−39 17 24.9	8.50	H	285.525 351 92	−39.290 244 47	A 14.97	−3.95	−61.46	2.60	1.80	2.56	3.65	2.28	+21	+12	−21	− 6	+20	−32	+ 1	−43	+47	−40	1	0.79
93466 H	19 02 07.04	+52 15 40.1	6.35	H	285.529 336 04	+52.261 137 40	A 5.08	−7.47	−32.73	0.64	0.61	0.64	0.67	0.71	+ 1	−28	+ 9	− 3	+14	+30	+15	− 8	+ 6	+24	4	−0.05
93467	19 02 07.78	−32 10 56.9	9.08	H	285.532 425 40	−32.182 482 03	12.58	−25.05	−120.35	1.37	0.84	1.47	2.19	1.20	− 7	−15	−25	+ 5	+28	−27	+ 4	−44	+21	−50	0	0.40
*93468 H	19 02 08.07	+08 45 33.2	9.22	H	285.533 619 57	+08.759 215 28	* 7.07	32.15	−1.63	19.48	6.49	1.79	2.06	1.79	−72	+ 4	− 5	− 2	−21	−24	− 4	−35	+ 3	+31	2	−0.05
*93469	19 02 08.03	+38 34 12.4	10.27	H	285.533 450 29	+38.570 107 35	6.50	4.38	18.32	1.03	1.18	1.34	1.25	1.62	− 7	− 6	+ 2	+12	+ 2	−19	+ 5	+27	− 7	− 9	0	−2.35
93470	19 02 08.50	−41 54 37.7	6.21	H	285.535 403 08	−41.910 479 78	9.25	30.51	−10.21	0.79	0.56	0.94	1.08	0.65	− 8	−18	−36	−25	+54	−25	+37	−55	+27	−33	0	1.21
93471	19 02 09.56	+08 45 11.9	8.47	H	285.539 834 37	+08.753 314 93	0.89	−1.22	−2.98	1.12	1.03	1.38	1.23	1.08	+31	−17	−16	−20	−14	−21	−24	−39	+14	− 9	0	−1.32
93472	19 02 09.65	−35 19 42.7	9.02	2 G	285.540 191 68	−35.328 518 82	−0.27	−7.08	−32.07	1.58	0.84	1.60	1.71	1.05	− 4	−51	−20	+14	−21	+ 8	−27	−26	+16	−21	10	1.73
93473	19 02 10.21	+47 17 14.3	7.47	H	285.542 530 16	+47.287 294 10	4.27	4.51	22.59	0.53	0.50	0.58	0.65	0.62	+ 5	− 8	− 9	− 4	+ 4	− 2	+ 0	+14	− 3	+26	0	−1.53
93474	19 02 10.30	+37 48 43.0	7.94	H	285.542 909 96	+37.811 943 10	4.91	1.93	3.30	0.61	0.61	0.77	0.71	0.76	− 5	+ 8	− 7	+14	+13	−22	+13	+ 9	+ 0	− 5	0	−0.17
93475	19 02 10.57	−76 35 40.8	9.01	H	285.544 029 73	−76.594 665 86	2.24	29.35	−47.14	0.70	0.83	1.10	0.87	0.90	+ 1	−18	+10	+10	+ 8	− 4	+ 3	+ 2	+20	− 5	0	0.56
93476	19 02 12.40	−46 39 11.1	8.98	2 T	285.551 655 06	−46.653 079 16	1.01	−136.48	−114.14	1.11	0.70	1.26	1.38	0.91	+15	−39	−11	− 5	+15	− 9	+ 9	−41	+ 0	+ 1	0	−1.15
93477	19 02 12.89	−32 32 20.7	11.89	H	285.553 720 91	−32.539 087 57	0.72	4.51	− 6.65	5.83	3.50	5.90	8.83	4.99	−16	+ 2	− 5	+10	+15	−27	+ 8	−32	+15	−32	0	2.78
93478	19 02 13.42	−13 15 13.5	7.81	H	285.555 918 68	−13.253 747 18	5.16	0.37	− 8.75	0.82	0.52	0.91	0.90	0.64	+ 7	−31	− 7	+ 8	+ 7	+20	+ 6	− 8	+10	+ 8	2	0.07
93479	19 02 13.85	−28 39 02.2	8.83	H	285.557 697 95	−28.650 611 09	11.86	−14.92	−106.60	1.29	0.75	1.45	1.58	1.00	− 1	−34	−30	+12	+10	−12	− 8	−35	+28	−27	0	0.41
93480	19 02 14.32	−23 41 40.4	8.52	G	285.559 659 76	−23.694 553 49	2.20	0.94	− 0.67	1.13	0.69	1.15	1.23	0.77	−21	+ 0	−16	−30	+23	−13	+22	−47	+10	−20	0	1.59
93481	19 02 14.43	−83 56 23.1	7.50	H	285.560 139 78	−83.939 759 31	4.01	−3.23	−13.26	0.55	0.56	0.68	0.62	0.71	−17	−22	+16	+28	− 1	− 6	+ 2	+ 7	−11	−19	0	0.91
93482	19 02 16.37	+42 59 44.7	7.88	H	285.568 209 49	+42.995 753 79	6.06	−4.82	4.97	0.52	0.60	0.67	0.53	0.71	+ 6	−13	− 5	+14	+10	−15	+13	+23	−27	+12	3	−0.99
93483	19 02 19.35	+39 09 17.7	8.79	H	285.580 619 51	+39.154 921 71	2.64	1.35	− 5.74	0.78	0.75	0.92	0.81	1.07	+ 3	+12	+ 3	+12	+ 9	− 1	+11	+ 8	− 7	+18	0	−1.39
93484	19 02 19.39	+25 23 01.9	10.41	H	285.580 798 97	+25.383 866 21	2.00	0.24	0.60	0.74	1.11	1.56	0.79	1.45	+ 2	− 5	−11	+24	+16	− 4	+21	+28	+ 0	−11	0	−0.39
93485	19 02 19.65	−29 20 30.6	8.30	G	285.581 866 12	−29.341 821 16	6.01	−2.23	−40.61	1.10	0.61	1.16	1.35	0.86	− 2	−29	− 6	+23	− 6	− 1	−12	−25	+ 7	−14	0	0.57
93486	19 02 20.52	−53 30 28.2	8.25	H	285.585 512 53	−53.507 831 66	8.77	10.58	−14.51	0.98	0.68	1.08	1.39	0.88	+ 8	+ 1	+ 4	− 2	+ 6	− 5	+ 3	−27	−11	− 4	0	−0.39
93487	19 02 21.53	+24 11 22.3	8.70	H	285.589 688 73	+24.189 525 28	7.98	51.81	−55.95	0.58	0.76	1.05	0.62	1.04	−10	− 2	−17	+49	+ 9	+ 1	+ 8	+14	− 3	−30	1	0.05
93488	19 02 21.56	+08 22 24.7	6.25	H	285.589 838 10	+08.373 529 14	3.84	9.69	3.96	0.61	0.49	0.72	0.71	0.60	+ 8	−17	−12	−20	− 2	−10	− 9	−38	+ 7	−19	0	2.13
93489	19 02 22.34	−44 08 28.7	8.35	G	285.593 064 63	−44.141 315 11	4.99	23.30	− 8.77	1.03	0.74	1.22	1.49	0.89	− 6	−22	−34	−34	+34	−17	+17	−59	+28	−38	0	0.96
93490 H	19 02 22.66	+69 26 30.3	8.70	H	285.594 418 99	+69.441 745 81	A 12.18	1.96	−22.25	2.18	2.10	1.72	2.12	1.95	+ 3	−16	+ 2	−13	+19	− 3	+13	+ 9	+ 2	+18	3	1.72
93491	19 02 23.02	−30 56 15.3	8.05	H	285.595 924 56	−30.937 591 77	9.09	53.19	− 5.75	1.00	0.59	1.09	1.25	0.79	−12	−17	−20	+14	+ 6	−13	− 5	−30	+25	−29	0	2.18
93492 H	19 02 24.07	−25 41 18.8	8.22	H	285.600 306 33	−25.688 569 09	* 3.96	4.12	6.34	1.08	0.58	1.10	1.14	0.66	−13	−47	− 2	+14	− 1	+ 1	− 6	−28	− 2	−30	0	−1.25
93493	19 02 25.60	−35 08 54.7	8.53	G	285.606 685 13	−35.148 517 76	8.47	−13.43	−31.36	1.16	0.64	1.13	1.39	0.82	−14	−27	+ 0	+25	−12	+ 4	−16	−23	− 4	−27	0	−0.12
93494	19 02 25.74	+09 37 59.0	7.40	H	285.607 265 78	+09.633 055 30	2.60	−1.83	0.98	0.79	0.58	0.94	0.85	0.69	− 3	−36	−17	+ 6	− 4	+ 3	−12	−15	+12	−34	0	1.16
93495	19 02 25.86	−41 16 19.7	8.19	G	285.607 743 72	−41.272 131 71	8.00	72.31	−76.89	0.97	0.61	1.11	1.25	0.87	+15	−38	− 5	+ 8	+ 6	+ 1	+ 8	−30	− 2	+18	0	−1.50
93496	19 02 26.76	−79 12 54.9	7.64	H	285.611 485 56	−79.215 258 75	8.71	−16.93	−19.10	0.55	0.60	0.75	0.63	0.70	− 7	−21	+ 9	+ 3	− 9	+ 4	−11	+12	+10	− 8	0	0.36
93497	19 02 27.11	+36 43 19.7	11.15	H	285.612 953 70	+36.722 143 63	0.73	4.19	− 8.89	1.16	1.17	1.48	1.29	1.50	− 3	−16	− 5	+ 2	+ 6	− 5	+ 6	+10	+ 7	− 7	1	−0.80
93498	19 02 27.69	−24 50 47.0	5.63	H	285.615 378 69	−24.846 395 16	11.81	−22.90	−177.32	0.75	0.41	0.77	0.86	0.48	−13	−34	− 6	+19	−11	+18	−14	−20	− 7	−33	0	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
93401	7.525	0.007	7.555	0.008		−0.023	0.010	T	0.00	0.01	L	7.5734	0.0009	0.011	103		7.56	7.59				1							S
93402	8.568	0.011	8.408	0.013		0.154	0.016	T	0.17	0.02	L	8.4724	0.0026	0.018	73		8.45	8.51				1							
93403	10.092	0.027	8.997	0.018		0.946	0.025	T	0.94	0.02	L	9.0463	0.0021	0.026	94		9.02	9.10				1							
93404	6.776	0.003	6.777	0.003		0.004	0.004	T	0.02	0.00	L	6.7881	0.0007	0.008	250		6.77	6.80				1							S
93405	9.184	0.016	7.927	0.010		1.089	0.020	G	1.05	0.02	H	7.9644	0.0020	0.015	77		7.94	7.99				1							
93406	9.269	0.016	8.916	0.017		0.335	0.022	T	0.39	0.03	L	8.9845	0.0050	0.025	70		8.94	9.03				1							
93407	9.345	0.015	8.000	0.009		1.140	0.014	T	1.10	0.01	L	8.0493	0.0011	0.015	195		8.02	8.07		C		1							
93408	5.246	0.003	5.032	0.003		0.186	0.005	G	0.23	0.03	C	5.0663	0.0004	0.005	105		5.06	5.08			19014+4656	I 1 1							S
93409	8.400	0.018	8.493	0.025	A	0.024	0.015	G	0.04	0.01	H	8.4612	0.0197	0.024	150	A	8.43	8.50		D	19014+2917	I 2	1 C P D						D
93410											T	11.8244	0.3812			B				D	19014+2917	I 2	1 C I D						D
93411	7.801	0.006	7.674	0.007		0.123	0.009	T	0.14	0.01	L	7.6952	0.0014	0.015	137		7.67	7.73		U 2		1							S
93412	8.868	0.017	8.315	0.016		0.526	0.015	G	0.60	0.02	H	8.3379	0.0021	0.016	70		8.32	8.38		C		1							
93413	7.074	0.004	7.219	0.007		−0.136	0.005	G	−0.13	0.01	H	7.2051	0.0010	0.011	127		7.19	7.23		M		1							S
93414	9.862	0.017	8.478	0.010		1.171	0.015	T	1.13	0.01	L	8.5251	0.0013	0.017	229		8.49	8.56				1							
93415	9.344	0.017	8.558	0.014		0.698	0.017	T	0.75	0.01	L	8.6241	0.0021	0.018	97		8.59	8.66		C		1							S
93416	10.303	0.025	8.988	0.014	A	1.100	0.495	G	1.05	0.04	L *	9.0023	0.0019	0.023	141	*	8.97	9.05		C	19016−7838	I 1	2 C A	AB	276	2.853	0.030	3.27	0.17	
93417	9.328	0.016	7.290	0.007		1.700	0.015	G	1.72	0.03	C	7.1932	0.0016	0.012	86		7.17	7.21				1							S
93418	7.566	0.007	6.422	0.007		0.963	0.058	G	0.99	0.02	A	6.4777	0.0011	0.007	71		6.47	6.50				1							S
93419	8.649	0.008	6.896	0.004		1.461	0.007	T	1.47	0.01	L	6.8758	0.0008	0.010	225		6.86	6.90				1							S
93420	9.794	0.026	8.701	0.018		0.944	0.024	T	0.93	0.02	L	8.7572	0.0016	0.014	62		8.73	8.78		C		1							
93421	9.739	0.025	9.474	0.030		0.348	0.020	G	0.41	0.03	H	9.4871	0.0022	0.019	72		9.44	9.51		C		1							
93422	8.728	0.014	7.498	0.009		1.050	0.013	T	1.02	0.01	L	7.5426	0.0019	0.013	77		7.53	7.57		R		1							
93423	8.408	0.013	6.421	0.005		1.647	0.011	T	1.67	0.01	L	6.3575	0.0011	0.008	78		6.35	6.37				1							S
93424	9.096	0.017	8.621	0.015	*	0.460	0.018	T	0.53	0.02	L *	8.8217	0.0027	0.022	79	*	8.78	8.87		R	19016−4407	I 1	2 C D	BA	340	3.091	0.002	0.01	0.01	D
93425	7.432	0.008	7.307	0.009		0.121	0.011	T	0.14	0.01	L	7.2631	0.0015	0.011	70		7.25	7.28			19017−3653	I 1	1 S						S
93426	10.160	0.029	8.713	0.015		1.200	0.015	G	1.16	0.01	J	8.7622	0.0014	0.013	107		8.74	8.79		C		1							
93427	7.881	0.010	7.270	0.007		0.569	0.011	T	0.64	0.01	L	7.3274	0.0009	0.008	109		7.31	7.34		C		1							S
93428	10.276	0.043	9.975	0.051		0.260	0.020	G	0.29	0.03	H	9.9971	0.0027	0.022	70		9.96	10.04				1							G
93429	5.445	0.002	4.144	0.002		1.079	0.038	G	1.08	0.02	A	4.1784	0.0005	0.004	111		4.17	4.19		C		1 S							S
93430	8.308	0.009	8.047	0.010		0.232	0.015	G	0.26	0.02	H	8.0919	0.0016	0.011	91		8.07	8.11				1							S
93431	9.793	0.038	9.161	0.034		0.582	0.038	T	0.65	0.04	L	9.2025	0.0024	0.017	57		9.16	9.23				1							
93432	9.558	0.015	8.882	0.013		0.614	0.015	T	0.68	0.01	L	8.9496	0.0018	0.020	154		8.92	9.00				1							
93433	9.960	0.020	8.482	0.010		1.245	0.018	T	1.20	0.02	L	8.4807	0.0017	0.017	152		8.45	8.51				1							
93434	8.652	0.012	8.424	0.013		0.218	0.017	T	0.24	0.02	L	8.4866	0.0019	0.014	75		8.46	8.52				1							
93435	11.738	0.082	9.915	0.025		1.517	0.068	T	1.55	0.10	L	9.9570	0.0025	0.033	181		9.87	10.02		U		1							G
93436	10.750	0.039	10.100	0.034	A	1.269	0.214	G	0.72	0.14	S *	9.9711	0.0031	0.033	157	*	9.92	10.04		R	19018+2814	H 1	2 C A	AB	191	8.808	0.015	1.98	0.08	G
93437	6.231	0.004	6.366	0.004		−0.117	0.005	T	−0.10	0.01	L	6.3511	0.0007	0.006	116		6.34	6.36		C	19018+3337	I 1	1						S
93438	6.876	0.005	6.821	0.006	A	0.056	0.007	T	0.07	0.01	L	6.8524	0.0052	0.007	70	A	6.83	6.87			19018+1232	I 1	2 C D	AB	91	15.656	0.035	3.49	0.13	S D
93439	9.118	0.012	7.727	0.007		1.176	0.011	T	1.14	0.01	L	7.7720	0.0011	0.012	134		7.75	7.80		C		1							S
93440	9.052	0.013	8.951	0.016	*	0.098	0.020	T	0.11	0.02	L *	8.9663	0.0018	0.018	129	*	8.94	9.00		D	19018+3448	M 1	2 C A	AB	317	0.853	0.021	3.02	0.08	
93441	8.484	0.009	8.149	0.009		0.318	0.012	T	0.37	0.02	L	8.1897	0.0015	0.013	133		8.17	8.21		C		1 G							S
93442	9.877	0.022	9.562	0.025		0.301	0.036	T	0.34	0.05	L	9.6268	0.0022	0.025	135		9.59	9.66				1							G
93443	6.594	0.003	6.468	0.004		0.130	0.001	G	0.14	0.00	H	6.4914	0.0008	0.008	187		6.48	6.50		C		1							S
93444	8.589	0.013	8.132	0.013		0.453	0.018	G	0.52	0.02	H	8.1563	0.0019	0.012	67		8.14	8.17				1							S
93445	11.388	0.063	10.519	0.047		0.655	0.020	G	0.72	0.02	H	10.5151	0.0029	0.026	136		10.47	10.56		C		1							G
93446	9.058	0.017	7.869	0.011		1.018	0.016	T	0.99	0.01	L	7.9093	0.0017	0.010	82		7.89	7.93		C		1							
93447	10.388	0.040	9.137	0.024		1.067	0.036	T	1.03	0.03	L	9.1648	0.0025	0.017	69		9.13	9.19		C		1							
93448	8.563	0.012	7.908	0.011	*	0.608	0.014	T	0.68	0.01	L *	7.9333	0.0018	0.012	84	*	7.91	7.95		D	19019+1910	I 1	2 C A	AB	20	0.612	0.003	0.25	0.01	S
93449											T	11.6111	0.0963	0.633	69		10.63	12.30		U		1 X S							G
93450	10.021	0.036	9.412	0.035		0.566	0.037	T	0.64	0.03	L	9.4314	0.0025	0.019	72		9.40	9.47				1							
93451	9.390	0.016	8.140	0.010		1.066	0.015	T	1.03	0.01	L	8.1761	0.0014	0.013	138		8.16	8.20		C		1							
93452	10.433	0.048	10.207	0.062		0.079	0.004	G	0.09	0.00	H	10.2749	0.0030	0.024	77		10.23	10.33		C		1							G
93453	8.244	0.011	7.057	0.006		1.017	0.010	T	0.99	0.01	L	7.1096	0.0011	0.009	85		7.09	7.12		C	19020+1907	I 1	1 S						S
93454	8.742	0.009	8.231	0.008		0.480	0.011	T	0.55	0.01	L	8.2942	0.0015	0.016	172		8.27	8.32				1							S
93455	9.176	0.015	8.389	0.012		0.698	0.015	T	0.75	0.01	L	8.4574	0.0013	0.014	92		8.43	8.49		C		1 G							S
93456	9.042	0.016	8.772	0.018		0.254	0.025	T	0.29	0.03	L	8.8008	0.0018	0.013	69		8.78	8.82		C		1							
93457	8.728	0.009	8.634	0.010		0.092	0.013	T	0.10	0.01	L	8.6594	0.0015	0.022	170		8.63	8.70		C		1							
93458	7.061	0.006	7.116	0.008		−0.042	0.004	G	−0.02	0.00	H	7.1171	0.0007	0.006	79		7.10	7.13		C		1							S
93459	9.997	0.024	8.558	0.013		1.214	0.021	T	1.17	0.02	L	8.5460	0.0017	0.018	88		8.52	8.58				1							
93460	8.646	0.012	8.434	0.013		0.220	0.015	G	0.24	0.02	H	8.4559	0.0018	0.016	74		8.43	8.49		C		1							
93461	7.598	0.009	7.414	0.010	A	0.100	0.495	G	0.15	0.03	L *	7.4169	0.0016	0.010	79	*	7.40	7.43		D	19021+1426	I 1	2 C A	AB	328	1.190	0.013	2.53	0.07	S
93462	8.940	0.013	7.041	0.006		1.577	0.011	T	1.60	0.01	L	6.9885	0.0015	0.013	104		6.97	7.01				1							S
93463	8.207	0.007	8.292	0.010		−0.073	0.011	T	−0.05	0.01	L	8.3055	0.0014	0.015	128		8.28	8.33				1							S
93464	9.311	0.019	8.144	0.013		1.001	0.018	T	0.98	0.01	L	8.1928	0.0009	0.011	73		8.17	8.21		D		1							
93465	9.322	0.017	8.586	0.015	*	0.660	0.017	T	0.72	0.01	L *	8.6331	0.0021	0.017	72	*	8.61	8.66		D	19021−3917	I 1	2 C A	AB	115	0.578	0.008	1.16	0.02	
93466	7.572	0.008	6.428	0.005	*	0.983	0.007	T	0.96	0.01	L *	6.5104	0.0008	0.007	98	*	6.50	6.52		D	19021+5216	I 1	2 C A	AB	299	5.242	0.015	3.33	0.07	S D
93467	9.751	0.030	9.152	0.027		0.558	0.030	T	0.63	0.03	L	9.2031	0.0014	0.019	75		9.17	9.24		C		1 S							
93468	9.779	0.025	9.260	0.025	*	0.487	0.032	T	0.56	0.03	L *	9.3220	0.0024	0.024	84	*	9.27	9.39		D	19021+0846	I 2	2 C B	AG	15	0.212	0.061	1.33	1.05	
93469	10.826	0.050	10.350	0.051		0.448	0.065	T	0.52	0.07	L	10.3722	0.0046	0.036	113		10.31	10.45				1							G
93470	6.211	0.003	6.211	0.004		0.001	0.004	T	0.02	0.00	L	6.2224	0.0007	0.005	111		6.21	6.23		C		1							S
93471	9.863	0.027	8.597	0.017		1.166	0.218	G	1.00	0.03	L	8.6391	0.0028	0.023	87		8.59	8.68		D	19021+0846	I 2	1						
93472	9.361	0.020	9.067	0.022		0.288	0.015	G	0.33	0.02	H	9.0484	0.0039	0.029	84		8.99	9.09		U		1 S							
93473	7.823	0.008	7.492	0.008		0.314	0.011	T	0.36	0.01	L	7.5430	0.0009	0.011	114		7.53	7.56		C		1							S
93474	9.196	0.013	8.038	0.009		0.994	0.012	T	0.97	0.01	L	8.1031	0.0010	0.013	123		8.08	8.12		C		1							
93475	10.215	0.022	9.134	0.015		0.935	0.020	T	0.93	0.01	L	9.1719	0.0026	0.024	144		9.13	9.20		C		1							
93476	9.189	0.018	9.000	0.021		0.181	0.026	T	0.20	0.03	L	9.0622	0.0424	0.274	78		8.75	9.34	0.32	P 1 A		1							P
93477											T	12.0344	0.0145	0.089	71		11.87	12.15				1 S							D
93478	8.012	0.011	7.828	0.010		0.176	0.014	T	0.19	0.02	L	7.8737	0.0018	0.014	81		7.85	7.90		C		1							S
93479	9.514	0.022	8.898	0.020		0.573	0.015	G	0.65	0.01	H	8.9498	0.0022	0.015	75		8.92	8.98				1							
93480	8.580	0.011	8.553	0.015		0.045	0.015	G	0.06	0.01	H	8.5491	0.0017	0.014	82		8.53	8.57				1							
93481	7.469	0.006	7.493	0.007		−0.017	0.008	T	0.01	0.01	L	7.4995	0.0014	0.012	126		7.48	7.52		C		1							S
93482	7.964	0.009	7.910	0.010		0.055	0.012	T	0.07	0.01	L	7.9073	0.0014	0.011	120		7.88	7.93		C		1							S
93483	10.093	0.027	8.905	0.017		1.018	0.025	T	0.99	0.02	L	8.9559	0.0018	0.020	118		8.91	8.99		C		1							
93484	10.518	0.030	10.477	0.049		0.043	0.053	T	0.06	0.04	L	10.4280	0.0036	0.038	198		10.38	10.49				1 S							G
93485	8.723	0.017	8.318	0.017		0.396	0.015	G	0.46	0.02	H	8.3902	0.0021	0.013	69		8.37	8.41		C		1							
93486	8.905	0.014	8.307	0.013		0.558	0.014	T	0.63	0.01	L	8.3725	0.0020	0.019	74		8.34	8.40				1							S
93487	9.454	0.013	8.776	0.011		0.627	0.014	T	0.69	0.01	L	8.8276	0.0018	0.020	197		8.79	8.86				1							
93488	8.402	0.010	6.475	0.005		1.648	0.006	G	1.23	0.03	D	6.4109	0.0009	0.011	85		6.40	6.43				1							S
93489	8.753	0.013	8.375	0.014		0.331	0.002	G	0.39	0.00	H	8.4552	0.0023	0.014	79		8.43	8.48		C		1							
93490	9.612	0.019	8.994	0.017	*	0.575	0.022	T	0.65	0.02	L *	8.8242	0.0021	0.014	104	*	8.80	8.85		D	19024+6927	I 1	2 C A	AB	311	1.003	0.004	0.05	0.01	
93491	9.194	0.017	8.151	0.012		0.906	0.016	T	0.91	0.01	L	8.2051	0.0013	0.012	81		8.18	8.22		C		1							
93492	9.960	0.025	8.387	0.013	*	1.319	0.022	T	1.28	0.03	L *	8.3777	0.0015	0.014	94	*	8.35	8.40			19024−2541	H 1	2 C S D	AB	190	0.152	0.081	2.69	1.00	D
93493	9.017	0.014	8.553	0.014		0.435	0.015	G	0.50	0.02	H	8.6181	0.0022	0.016	88		8.59	8.65		C		1							
93494	8.892	0.014	7.537	0.009		1.148	0.013	T	1.11	0.01	L	7.5670	0.0014	0.009	77		7.55	7.59		C		1							S
93495	8.899	0.012	8.263	0.011		0.594	0.015	G	0.66	0.01	H	8.3096	0.0015	0.012	97		8.28	8.34		C		1							S
93496	8.195	0.007	7.688	0.008		0.476	0.010	T	0.55	0.01	L	7.7487	0.0012	0.012	138		7.73	7.77				1							S
93497	11.378	0.071	11.131	0.098		0.235	0.114	T	0.26	0.14	L	11.2148	0.0047	0.048	144		11.13	11.29				1 S							G
93498	7.214	0.007	5.770	0.004		1.232	0.006	G	1.12	0.06	F	5.7986	0.0006	0.005	83		5.79	5.81		C		1							S
93499	8.147	0.010	6.970	0.008		1.009	0.010	T	0.98	0.01	L	7.0264	0.0008	0.007	90		7.02	7.04		C		1							S
93500	8.878	0.016	8.229	0.019	*	0.587	0.038	G	0.66	0.04	H *	8.4221	0.0023	0.016	72	*	8.38	8.46		R	19025−2839	I 1	2 C A	AB	54	2.272	0.005	0.43	0.02	S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
93501	19 02 33.19	−16 35 53.0	8.35	H	285.638 305 17	−16.598 066 25		2.04	0.54	−3.36	0.88	0.60	1.04	1.01	0.73	+21	−30	−12	+	3	−	2	+36	+	6	−	8	−	2	+25	0	−0.54
93502	19 02 34.14	−10 43 18.3	6.64	1 H	285.642 257 56	−10.721 744 87		3.50	4.37	−12.99	0.71	0.49	0.81	0.74	0.56	−	1	−18	−	8	−	7	+	7	+14	+10	−31	−	9	−	3	0	−0.18
93503	19 02 34.58	−38 00 07.2	9.02	H	285.644 102 54	−38.002 012 70		8.54	0.51	−107.69	1.46	0.89	1.72	2.47	1.20	+23	−32	−37	+31	+30	−40	−10	−39	+25	−34	5	1.34
93504	19 02 35.45	−08 55 39.3	8.13	H	285.647 722 42	−08.927 589 46		0.67	0.04	−4.24	0.96	0.62	1.10	1.25	0.89	+16	−19	−14	+25	+	2	+34	+11	−	5	−18	+	7	0	1.70
93505	19 02 35.63	+11 14 56.7	10.57	G	285.648 441 48	+11.249 095 26		−1.37	−1.31	−3.96	1.68	1.36	1.88	2.00	1.54	−	1	−	1	−	8	−11	+17	−	3	+17	−32	+14	+	6	0	−0.45
93506 H	19 02 36.72	−29 52 48.4	2.60	G	285.653 014 28	−29.880 114 29	A	36.61	−14.10	3.66	2.52	1.61	1.37	2.62	2.00	+85	+18	+16	−81	−91	−16	−82	−97	−	9	+93	19	0.32
93507	19 02 37.63	−64 55 28.9	7.60	G	285.656 795 61	−64.924 690 89		21.80	−235.54	−285.71	0.82	0.61	1.00	0.89	0.81	−	5	−41	−16	+	7	−12	−	6	−24	−33	+19	−	7	0	1.35
93508	19 02 37.77	−23 34 45.2	9.17	H	285.657 383 80	−23.579 219 93		2.92	1.36	1.01	1.38	0.84	1.48	1.47	0.97	−	6	−17	−21	−25	+16	−	9	+13	−40	+13	−	5	2	0.53
93509	19 02 37.96	+14 34 01.2	6.88	H	285.658 171 80	+14.567 013 86		38.31	165.90	−2.07	2.38	1.77	2.63	2.89	2.17	−	5	−15	−12	−15	+	9	+21	+10	−18	+18	+15	0			
93510	19 02 38.34	+34 34 57.3	7.68	H	285.659 754 16	+34.582 591 79		−0.08	−3.97	−14.40	0.54	0.60	0.75	0.64	0.71	−	9	−	7	+	2	+16	+	2	−22	+	1	+14	+17	−12	0	−1.04
93511	19 02 39.37	+43 07 02.9	7.87	H	285.664 055 53	+43.117 467 09		10.97	47.90	7.30	0.54	0.60	0.66	0.54	0.75	+	7	−	7	−16	+15	+16	−	5	+19	+29	−24	+13	1	−1.89
93512	19 02 40.50	+29 17 33.5	7.77	H	285.668 769 83	+29.292 629 71		3.18	0.46	−9.96	0.49	0.59	0.79	0.56	0.67	−10	−	9	−	1	+16	+	8	−12	+	6	+	0	+21	−	6	0	0.22
93513 H	19 02 40.69	−42 15 59.6	8.25	H	285.669 548 81	−42.266 553 38	A	9.63	36.65	−27.08	3.04	2.01	2.99	3.65	2.05	+56	−27	−28	+	0	+20	−20	+	0	−34	+27	−	7	3	1.19
93514 H	19 02 41.26	+31 23 58.5	7.68	G	285.671 925 37	+31.399 585 07	A	7.27	−8.47	−8.60	0.93	1.05	1.10	0.91	0.99	+	8	−	5	−	4	+37	+	8	−	1	+	7	+29	+19	+10	1	0.27
93515 H	19 02 42.66	−36 05 47.3	7.55	H	285.677 770 70	−36.096 465 48	A	3.29	9.91	−6.52	1.94	1.06	1.76	2.24	1.28	+	0	−21	+	2	+19	+19	+10	+	0	−33	−	2	−32	1	1.12
93516	19 02 42.77	−24 21 52.4	7.66	H	285.678 205 65	−24.364 550 73		1.49	−12.44	−9.26	0.91	0.55	0.96	0.96	0.60	−12	−23	−10	−	9	+13	+	9	+13	−32	+	1	−18	2	−1.53
93517	19 02 42.97	+68 19 30.6	7.10	H	285.679 020 95	+68.325 172 08		4.30	7.45	−0.72	0.54	0.45	0.52	0.61	0.53	+	3	−23	−	2	+11	+	8	+	3	+	7	+	9	+	6	+14	0	0.56
93518	19 02 44.41	−00 42 39.3	8.36	G	285.685 058 33	−00.710 917 95		10.52	−32.53	−129.30	1.08	0.81	1.25	1.11	0.93	+24	−25	+	3	−28	−	5	+	9	−	6	−32	+	7	+35	2	2.67
93519	19 02 46.15	−00 42 41.9	8.80	G	285.692 278 66	−00.711 634 14		14.57	43.63	−1.32	6.53	5.10	7.66	6.90	5.78	+	5	−14	−	5	−35	+	0	+	2	+	2	−41	+	6	+27	0	
93520	19 02 49.28	−07 43 32.7	8.01	H	285.705 314 11	−07.725 756 08		8.09	8.31	−9.00	0.89	0.57	1.14	1.11	0.75	+13	−29	−17	−	3	−	3	+31	−	4	−18	−	8	−28	2	−0.08
93521 H	19 02 49.89	−42 46 05.8	11.19	G	285.707 863 79	−42.768 270 62	A	23.08	94.71	−55.32	4.68	3.29	5.09	5.47	3.53	+23	−22	−16	−29	+12	−	8	+	6	−52	+11	+14	1	1.70
93522	19 02 51.85	+44 55 46.7	10.14	H	285.716 026 61	+44.929 630 86		−1.54	−7.87	−14.20	1.10	1.11	1.30	1.18	1.53	−	8	+	6	−35	−24	+24	−18	+20	−	1	+20	+	7	3	0.78
93523	19 02 52.62	+19 39 39.7	6.11	H	285.719 237 78	+19.661 014 28		2.12	6.31	−1.53	0.50	0.48	0.76	0.63	0.60	+29	−32	−28	+15	−	3	+12	−	8	−	5	+21	+13	0	−1.13
93524 H	19 02 52.64	−54 12 29.5	8.52	H	285.719 326 22	−54.208 180 73	*	10.11	1.70	−59.32	1.76	1.56	1.51	1.58	1.54	+46	+21	+19	−13	−51	−27	−54	−44	−40	+56	1	−1.02
93525	19 02 53.62	+05 20 33.9	7.73	1 H	285.723 400 13	+05.342 747 80		5.93	10.53	−3.20	0.78	0.60	0.92	0.69	0.56	+12	−29	−16	−27	−	1	+	4	−	4	−43	+	4	−	9	0	−0.43
93526	19 02 54.49	−03 41 56.4	5.40	H	285.727 049 60	−03.699 003 63		6.53	11.33	6.98	0.74	0.52	0.83	0.82	0.67	+11	−12	−	1	−15	+15	+	5	+18	−21	+16	+42	0	−0.36
93527	19 02 56.49	+56 36 53.3	7.99	1 H	285.735 379 37	+56.614 792 88		4.60	4.82	28.68	0.60	0.58	0.62	0.71	0.63	+	9	−	3	+22	+27	+17	+	4	+18	+	9	+	0	+21	0	0.19
93528	19 02 56.69	+23 22 15.6	8.97	H	285.736 193 44	+23.371 010 51		12.94	−92.36	−162.39	0.74	0.89	1.30	0.97	1.24	+	1	−	4	−	1	−	5	+	6	+	8	+	6	+	9	+	3	+	9	0	2.32
93529	19 02 57.21	−61 15 57.8	8.61	H	285.738 368 39	−61.266 065 69		2.26	2.04	−0.99	0.81	0.70	1.14	1.21	0.90	−23	−10	−13	+11	+17	−10	+25	−35	+	5	−22	2	0.60
93530 H	19 02 58.06	+51 35 21.7	8.59	H	285.741 909 35	+51.589 351 24	A	9.84	−7.79	32.10	1.95	1.86	1.86	2.06	2.04	+30	−10	+11	−	1	−10	+	7	−	3	−19	−11	+55	2	1.15
93531	19 03 00.27	−27 21 12.6	9.12	H	285.751 142 82	−27.353 492 22		3.70	7.63	2.19	1.46	0.73	1.44	1.74	1.00	−11	−26	−	2	+22	−10	+	7	−24	−32	+	3	−33	0	1.32
93532	19 03 00.65	−40 04 35.3	9.36	G	285.752 710 59	−40.076 485 95		5.40	8.00	−36.00	1.29	0.76	1.42	1.84	1.15	+	4	−26	−	1	+14	+16	−	1	+	9	−37	+	2	−	9	0	−0.86
93533	19 03 01.45	+24 07 00.5	8.12	1 H	285.756 058 33	+24.116 793 81		2.48	0.36	−4.21	0.48	0.61	0.85	0.56	0.84	−11	−	6	−17	+28	+	5	+	3	+	6	+11	+	2	−24	1	−1.43
93534	19 03 01.75	−54 34 28.6	8.41	G	285.757 290 09	−54.574 617 36		8.17	−3.40	−50.26	0.93	0.72	1.21	1.05	0.93	+36	−31	−19	+22	−37	−	5	−32	−29	+	4	+51	0	0.88
93535	19 03 02.91	−62 54 00.3	7.40	H	285.762 130 08	−62.900 079 38		3.29	−31.20	24.47	0.76	0.57	0.94	1.01	0.71	+	0	−21	−15	+20	+	6	−16	+	1	−	9	+16	−	1	0	0.05
93536	19 03 03.13	−14 52 48.9	8.30	H	285.763 048 58	−14.880 250 82		2.33	1.13	−4.47	0.92	0.58	1.02	1.00	0.66	−	1	−26	−19	+	5	+11	+	6	+	5	−19	+18	−12	2	1.38
93537 H	19 03 03.80	−19 14 44.4	5.96	H	285.765 847 73	−19.245 658 29	A	2.20	2.63	−11.42	0.90	0.59	0.88	0.91	0.60	+	4	−16	−	5	−15	+	2	+12	+	5	−31	+	7	+29	1	0.69
93538	19 03 03.94	−45 42 58.7	8.42	H																										
93539	19 03 05.28	−45 42 42.1	7.59	G	285.772 019 97	−45.711 706 37		−9.20	32.47	−14.39	15.17	10.53	16.66	18.19	11.04	+11	−25	−14	−20	+12	−	6	+	7	−52	−	8	−	4	0		
93540	19 03 05.95	−11 02 36.1	8.42	G	285.774 785 23	−11.043 351 77		36.39	−126.86	−236.26	0.98	0.68	1.15	1.04	0.75	+25	−24	−17	−	6	−16	+26	−14	−36	−	3	+12	2	0.48		
93541	19 03 06.47	+59 26 41.6	8.33	H	285.776 939 67	+59.444 891 97		3.06	0.47	3.45	0.56	0.60	0.61	0.58	0.70	+	8	−	4	+	8	+10	+	7	+17	+	5	+26	−	4	+13	0	−0.91
93542	19 03 06.83	−42 05 42.0	4.74	G	285.778 469 22	−42.094 994 43		17.75	55.74	−45.33	0.79	0.54	0.86	1.08	0.65	−27	−	6	−28	−37	+55	−17	+45	−58	+28	−42	0	1.34		
93543	19 03 06.99	−19 06 10.9	6.37	G	285.779 122 98	−19.103 015 93		12.30	12.62	−3.52	0.71	0.45	0.78	0.78	0.54	−	2	−24	−	1	+	6	−	1	+27	+	5	−22	+	5	+17	0	1.30
93544	19 03 08.33	−82 33 12.4	8.97	H	285.784 728 50	−82.553 446 95		4.67	29.37	−24.95	0.71	0.73	0.94	0.80	1.00	−13	−33	+	9	−	8	+	2	+	7	+	5	−	9	−15	−22	0	−1.36
93545	19 03 09.23	−61 06 52.1	8.58	G	285.788 456 22	−61.114 485 01		9.77	2.55	6.47	0.91	0.78	1.25	1.60	0.96	−15	−	5	−29	+	5	+25	−33	+	7	−43	+13	−40	0	0.03		
93546	19 03 10.52	−47 03 03.7	6.86	G	285.793 823 21	−47.051 037 88		15.85	4.42	−118.50	1.11	0.68	0.98	3.07	1.21	−	1	−45	−	7	−38	+	6	+18	+15	−56	−	6	−56	0	2.86
93547	19 03 12.22	−56 59 46.6	7.07	H	285.800 926 25	−56.996 289 44		21.34	8.27	−155.27	0.73	0.55	0.89	0.82	0.61	+19	−23	−	1	+25	−35	−11	−28	−32	−12	+26	0	1.00		
93548	19 03 12.90	−11 11 22.5	7.20	H	285.803 735 19	−11.189 594 43		6.16	−2.84	−24.70	0.74	0.52	0.86	0.79	0.59	+22	−31	−	9	−	7	−15	+26	−15	−31	−	7	+	6	0	2.23
93549	19 03 13.03	+37 21 14.3	8.65	H	285.804 281 59	+37.353 978 66		3.49	−1.64	−8.80	0.67	0.68	0.84	0.75	0.79	−	6	+	7	−17	+15	+19	−22	+17	+20	−	6	−	5	0	0.15
93550	19 03 17.40	−02 32 12.3	9.84	G	285.822 512 51	−02.536 761 84		0.77	−4.61	−2.92	1.35	1.04	1.59	1.56	1.36	+28	−	4	+	3	−23	−	3	−	5	+	0	−24	−14	+28	0	0.75
93551	19 03 17.62	−05 33 32.6	6.91	H	285.823 420 51	−05.559 055 55		4.35	3.01	1.56	0.78	0.52	0.91	0.89	0.74	+	7	−	6	−10	−10	+30	+	6	+32	−	7	+29	+28	0	1.34
93552	19 03 17.69	−38 15 11.5	5.73	1 H	285.823 693 35	−38.253 182 27		15.47	13.31	14.51	0.84	0.54	0.97	1.45	0.77	−	6	−12	−36	+22	+20	−34	−12	−36	+28	−54	0	0.27		
93553	19 03 17.87	+25 49 34.0	6.97	H	285.824 464 74	+25.826 121 45		2.05	−0.74	−2.00	0.36	0.49	0.67	0.39	0.63	−	3	−	5	−18	+19	+10	+	1	+14	+24	−	4	−15	0	0.82
93554	19 03 17.96	−02 47 18.1	7.62	H	285.824 841 00	−02.788 374 21		2.95	−2.26	−5.27	0.87	0.63	1.03	1.01	0.94	+18	−18	−	9	−31	+	0	+	4	+	6	−24	−16	+19	0	−0.02
93555	19 03 19.10	+51 30 50.6	8.88	H	285.829 600 23	+51.514 055 00		5.18	10.42	8.49	0.67	0.69	0.77	0.79	0.80	+14	−	7	+	3	+	4	−	5	+21	−	2	−21	+	2	+29	0	−0.25
93556	19 03 19.17	+48 30 36.0	8.89	H	285.829 865 15	+48.510 006 45		11.13	18.04	−11.21	0.69	0.63	0.71	0.77	0.74	−	5	−15	−	5	−	3	+16	−	4	+14	+16	−	1	+	6	0	1.22
93557	19 03 19.34	+00 34 34.2	6.70	H	285.830 575 95	+00.576 178 89		3.01	−9.01	−11.22	0.67	0.49	0.78	0.65	0.48	−11	−19	−11	−17	+	7	+	6	+	4	−33	+	1	−30	0	−0.61
93558	19 03 19.48	+09 55 02.7	8.73	H	285.831 186 69	+09.917 412 38		5.25	1.14	−19.72	1.00	0.76	1.19	1.16	0.90	−15	−26	+	4	−	1	−	3	+	9	+	0	−28	−11	−14	0	0.15
93559	19 03 21.62	−57 55 26.4	7.20	H	285.840 079 08	−57.923 986 94		3.79	−0.85	−50.47	0.78	0.63	1.04	0.82	0.62	+36	−23	−14	+10	−33	−13	−34	−47	−	6	+31	0	−0.59		
93560	19 03 22.13	−12 42 34.3	7.67	H	285.842 226 22	−12.709 524 79		4.63	1.64	−9.08	0.76	0.50	0.85	0.80	0.54	+	4	−37	−	9	−	6	+	1	+18	+	0	−22	−	3	−18	0	−2.16
93561	19 03 22.95	+23 37 38.4	8.04	H	285.845 607 07	+23.627 346 31		2.68	3.17	−3.78	0.61	0.67	1.01	0.77	0.96	−	4	−15	−	7	−14	−	3	+15	−	3	−	1	+	5	−	4	0	0.59
93562	19 03 24.15	+17 50 40.8	8.60	H	285.850 640 99	+17.844 653 21		2.17	−1.36	−1.95	0.83	0.88	1.15	1.04	1.01	+24	−16	−24	+10	−14	+18	−	9	−14	+	7	+29	0	0.67		
93563	19 03 24.21	+26 03 24.4	10.35	H																										
93564	19 03 25.53	+26 03 10.4	7.84	H	285.856 371 23	+26.052 896 36		4.23	14.12	11.05	0.48	0.64	0.87	0.57	0.83	−	6	−10	−11	+16	+10	−	4	+12	+23	+	0	−24	0	0.61		
93565	19 03 25.62	+05 59 39.7	7.83	H	285.856 759 60	+05.994 362 74		8.25	23.79	7.17	0.77	0.61	0.94	0.82	0.66	+	6	−16	−	4	−14	+	7	−	9	+	1	−32	+12	−20	0	2.00
93566	19 03 26.67	+17 04 03.0	7.61	H	285.861 119 75	+17.067 509 14		23.09	−119.03	−61.40	0.72	0.63	1.00	0.85	0.74	+17	−10	−27	+28	−	2	+28	+	7	−	6	+24	+33	0	1.65		
*93567	19 03 27.39	−59 46 12.8	9.64	H	285.864 111 66	−59.770 213 61		14.60	30.50	11.59	1.01	0.69	1.41	1.29	0.93	−20	−23	+	2	+40	−12	−	4	+	8	−13	−10	+16	0	2.24		
*93568	19 03 27.34	−50 18 59.7	7.19	G	285.863 935 59	−50.316 573 00		4.10	12.05	−26.24	0.77	0.54	0.84	1.01	0.61	−	1	−17	−13	−17	+18	+	0	+14	−39	+	1	−15	0	0.36		
93569	19 03 27.70	+24 45 17.2	10.00	H	285.865 433 71	+24.754 788 33		1.57	6.59	−0.60	0.84	1.14	1.63	0.93	1.68	−13	+	3	−	8	+49	+15	−	5	+12	+	7	+	8	−38	4	1.99	
93570	19 03 27.93	+65 35 12.9	7.22	H	285.866 355 77	+65.586 906 22		4.33	7.38	32.44	0.50	0.49	0.52	0.52	0.57	−	6	−	7	+	1	+	2	+	4	+	7	+	4	+	7	−	2	+	9	0	0.15
93571	19 03 28.77	+62 05 40.3	7.05	H	285.869 858 37	+62.094 523 99		9.11	20.14	−18.71	0.75	0.56	0.62	1.05	0.73	+16	−	6	+	8	−38	+	2	+21	−	1	−	6	+	23	+18	5	0.08	
93572	19 03 29.12	−76 06 54.8	7.75	H	285.871 322 13	−76.115 231 55		7.99	−1.05	−108.42	0.57	0.64	0.84	0.71	0.70	−15	−24	−	2	+11	−10	−	4	−10	+	5	+	3	−25	0	−0.92		
93573	19 03 29.44	+73 22 44.7	7.86	H	285.872 677 42	+73.379 073 95		5.87	5.58	21.12	0.59	0.54	0.60	0.59	0.60	−	7	−15	−	8	−	8	+15	−15	+15	−18	+	9	+13	1	0.06	
93574 H	19 03 29.68	−68 45 19.9	5.89	H	285.873 678 86	−68.755 532 90	*	17.65	−20.83	−4.46	3.51	1.14	0.78	0.48	0.54	+12	+	3	−	2	−	4	+	4	+	0	+	6	−	9	+	5	−28	2	1.17	
93575	19 03 30.55	+17 58 31.1	9.86	H	285.877 272 61	+17.975 313 71		2.82	21.05	1.42	1.26	1.23	1.70	1.57	1.50	+12	−16	−11	+18	−10	+16	−	1	−15	−	5	+27	0	2.86		
93576	19 03 30.81	+07 21 11.0	9.17	G	285.878 381 02	+07.353 062 59		7.60	13.24	8.21	1.13	0.86	1.47	1.41	1.06	−	2	−30	−	9	−18	−	5	−	1	−	7	−25	+	8	−	4	0	−0.28	
93577	19 03 30.94	+50 52 38.0	9.02	H	285.878 920 49	+50.877 208 71		1.35	−6.92	−7.67	0.72	0.68	0.80	0.82	0.74	+10	−15	+12	+20	+15	+	3	+17	+	1	−	3	+	25	3	0.25	
93578 H	19 03 31.83	+08 17 37.7	7.49	G	285.882 609 96	+08.293 802 20	*	5.78	8.56	−13.44	1.50	1.14	1.09	1.11	0.98	+22	−14	−29	−15	+	4	−16	−	3	−27	+17	−	3	1	0.06	
93579	19 03 32.11	−52 59 52.3	9.49	H	285.883 791 75	−52.997 866 25		15.29	15.07	−156.52	1.35	1.04	1.52	1.97	1.46	+	8	+	3	+	8	+	28	−	4	+28	−45	+18	+19	0	3.45	
93580	19 03 32.24	+01 49 08.2	5.82	G	285.884 329 06	+01.818 934 72		18.12	23.71	−68.65	0.66	0.47	0.74	0.56	0.42	−12	−25	−20	−34	+15	−	4	+10	−47	+15	−23	0	0.49		
93581	19 03 33.13	−20 07 42.9	7.77	G	285.888 038 30	−20.128 572 12		1.34	−1.59	−8.76	0.90	0.63	0.97	0.95	0.69	+	7	−18	+12	−13	−15	−	3	−	9	−47	−12	+20	0	−1.40	
93582	19 03 33.28	+10 31 57.5	8.52	H	285.888 681 95	+10.532 648 68		2.24	−1.16	−3.23	0.87	0.67	1.06	1.03	0.81	+	2	−36	−	9	−	3	+	7	+10	+	2	−22	+18	+	7	0	0.23	
93583	19 03 33.52	−29 36 50.4	9.09	H	285.889 659 61	−29.613 995 74		2.45	−1.04	−7.11	1.28	0.71	1.36	1.61	0.99	+	0	−34	+	3	+15	−10	−	4	−21	−37	+	8	−16	0	1.30	
93584 H	19 03 33.56	−72 23 29.8	8.43	G	285.889 846 89	−72.391 603 69	A	9.38	−0.36	−130.64	1.26	1.93	1.44	0.87	1.15	+23	−12	+	5	+20	−	2	−17	+	2	−	1	+	4	−	1	1	0.76	
93585	19 03 34.18	−62 37 40.1	8.33	G	285.892 403 11	−62.627 812 88		8.59	0.57	−98.29	0.78	0.62	1.03	1.03	0.81	−	7	−14	−	5	+	6	−13	−15	−12	−21	+13	+	2	0	−0.25	
93586	19 03 34.32	+17 16 51.1	7.08	H	285.893 010 35	+17.280 862 32		3.78	−20.15	−40.59	0.68	0.59	0.87	0.77	0.67	+16	−25	−24	+19	−	3	+15	+	0	−12	+13	+22	0	1.80		
93587	19 03 34.44	−55 45 55.4	8.92	H	285.893 492 24	−55.765 383 71		5.47	−4.24	34.42	1.07	0.79	1.32	1.25	1.05	+16	−25	−	4	+39	−31	−10	−21	−12	−	8	+39	0	1.89		
93588 H	19 03 34.98	+37 05 00.0	9.71	H	285.895 737 59	+37.083 320 33	*	5.11	−5.11	−5.74	1.21	1.50	1.16	1.13	1.14	+	0	−10	+	4	+	9	+	1	−12	+	1	+11	+12	−	7	0	−1.35	
93589	19 03 35.46	+02 32 44.6	6.91	H	285.897 733 12	+02.545 734 75		7.10	14.71	2.63	0.70	0.51	0.81	0.71	0.52	−	2	−23	−16	−30	+10	−	1	+	8	−39	+	3	−20	0	1.66	
93590	19 03 36.69	−39 27 22.8	8.06	H	285.902 877 31	−39.456 342 20		7.86	23.95	−20.44	0.98	0.66	1.21	1.55	0.96	−	1	−	2	−20	+	4	+22	−30	+	2	−45	+28	−38	0	−0.08	
93591	19 03 37.32	+14 56 24.5	10.67	G	285.905 485 13	+14.940 151 99		0.51	−1.84	−4.32	1.44	1.31	1.92	1.76	1.64	+21	−13	−	2	+	7	−	2	+19	+	1	−15	+19	+45	4	0.94	
93592 H	19 03 37.80	+53 06 59.0	8.92	H	285.907 510 63	+53.116 381 80	*	3.04	−3.74	−16.70	0.74	0.70	0.81	0.78	0.89	+	4	−29	+	0	−21	+	0	+18	−	8	+	0	+17	+27	0	0.74	
93593	19 03 38.55	−34 54 02.7	7.91	H	285.910 643 36	−34.900 750 03		0.83	−4.63	−8.03	1.08	0.64	1.11	1.42	0.79	−	9	−28	−19	+16	+	6	−11	−	9	−31	+11	−41	0	−0.08	
93594	19 03 39.25	+39 54 39.3	8.07	H	285.913 538 07	+39.910 912 29		4.82	11.94	−4.93	0.61	0.58	0.70	0.73	0.70	+	1	−	8	−12	+30	+	4	−	3	+	4	+10	+	9	+	9	0	−1.23	
93595	19 03 39.54	+57 27 25.8	8.42	2 H	285.914 737 64	+57.457 172 59	A	5.63	4.79	3.74	1.84	1.85	1.45	1.72	1.86	+22	+14	+10	+21	+24	+	6	+24	+21	+	2	+21	16	2.08		
93596 H	19 03 39.68	+35 44 35.8	8.02	H	285.915 338 38	+35.743 267 34	A	3.98	−1.78	0.82	1.40	1.38	1.46	1.21	1.35	+	3	+	4	+	6	−	4	+12	+	8	+12	+16	+14	+	7	2	0.76	
93597	19 03 40.29	−43 22 03.7	9.87	H	285.917 873 51	−43.367 685 70		4.63	4.08	−35.80

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
93501	8.521	0.013	8.399	0.015		0.118	0.019	T	0.13	0.02	L	8.3991	0.0017	0.014	81		8.38	8.43		C			1							
93502	6.885	0.005	6.664	0.006		0.205	0.008	T	0.23	0.01	L	6.7078	0.0023	0.014	77		6.68	6.73	1.85	P 1 A			1							S
93503	9.905	0.031	9.084	0.025		0.724	0.030	T	0.78	0.02	L	9.1593	0.0024	0.022	69		9.12	9.19		C	19026−3800	I 1	1 S							
93504	10.236	0.041	8.341	0.016		1.574	0.035	T	1.59	0.04	L	8.2427	0.0021	0.014	69		8.22	8.27		C			1							
93505	11.907	0.151	10.887	0.093		1.040	0.015	G	1.01	0.01	H	10.7514	0.0054	0.040	79		10.69	10.81		C			1							G
93506	2.731	0.002	2.617	0.003	*	0.062	0.015	G	0.06	0.02	A *	2.6212	0.0005	0.004	64	*	2.61	2.63		D	19026−2953	I 1	2 C A	AB	273	0.404	0.008	0.21	0.02	S W
93507	8.322	0.008	7.666	0.007		0.601	0.009	G	0.67	0.01	H	7.7369	0.0012	0.012	134		7.72	7.76					1 G							S
93508	11.133	0.073	9.312	0.025		1.515	0.061	T	1.55	0.09	L	9.2999	0.0023	0.021	76		9.26	9.34					1 S							
93509	7.645	0.006	6.950	0.008		0.629	0.008	T	0.70	0.01	L	7.0140	0.0012	0.009	74		7.00	7.03		C			1 X S							S
93510	9.742	0.018	7.875	0.008		1.552	0.016	T	1.57	0.02	L	7.7961	0.0015	0.017	135		7.77	7.82					1							
93511	8.482	0.011	7.938	0.009		0.510	0.013	T	0.58	0.01	L	7.9837	0.0011	0.012	129		7.96	8.00					1 S							S
93512	8.946	0.010	7.878	0.007		0.925	0.009	T	0.92	0.01	L	7.9281	0.0013	0.015	147		7.90	7.95					1							
93513	8.766	0.016	8.254	0.017	*	0.491	0.017	T	0.56	0.02	L *	8.3579	0.0022	0.015	99	*	8.33	8.39		R	19027−4216	I 1	2 C A	AB	185	2.452	0.006	0.08	0.01	
93514	8.097	0.010	7.674	0.009	*	0.393	0.015	G	0.46	0.02	H *	7.7666	0.0011	0.012	127	*	7.74	7.79		D	19027+3123	I 1	2 C A	AB	267	6.033	0.011	2.19	0.03	S
93515	9.257	0.061	8.985	0.071	B	0.082	0.100	G	0.09	0.11	R *	7.5825	0.0016	0.011	81	*	7.57	7.60		D	19027−3606	I 1	2 C A	AB	246	5.491	0.008	1.33	0.03	S
93516	9.950	0.026	7.905	0.010		1.693	0.022	T	1.72	0.02	L	7.7698	0.0024	0.015	83		7.74	7.79					1							
93517	7.178	0.006	7.108	0.006		0.069	0.008	T	0.08	0.01	L	7.1304	0.0012	0.009	110		7.12	7.15					1							S
93518	9.253	0.023	8.425	0.018		0.738	0.005	G	0.79	0.02	A	8.4872	0.0033	0.039	86		8.37	8.53		D	19028−0043	I 2	1 S							
93519	9.639	0.027	8.877	0.023		0.723	0.003	G	0.77	0.00	R	8.8900	0.0061	0.052	79		8.69	8.94		D	19028−0043	I 2	1 X S							
93520	8.352	0.011	8.032	0.011		0.304	0.015	T	0.35	0.02	L	8.0852	0.0018	0.014	98		8.06	8.11		C			1							S
93521						1.240	0.042	G	1.50	0.02	A *	11.0619	0.0052	0.039	89	*	10.98	11.15		D	19028−4246	I 1	2 C A	AB	77	5.732	0.024	1.32	0.06	G
93522	10.293	0.034	10.102	0.044		0.183	0.052	T	0.20	0.06	L	10.1933	0.0026	0.032	103		10.15	10.26					1							G
93523	7.822	0.006	6.252	0.003		1.317	0.005	T	1.28	0.01	L	6.2702	0.0005	0.006	140		6.26	6.28					1							S
93524	9.236	0.015	8.585	0.013	*	0.596	0.015	T	0.67	0.01	L *	8.6435	0.0019	0.017	104	*	8.61	8.68		D	19029−5412	I 1	2 C A	AB	289	0.210	0.006	0.44	0.13	
93525	8.037	0.008	7.739	0.011		0.283	0.013	T	0.32	0.02	L	7.8063	0.0028	0.016	78		7.78	7.84		U			1							S
93526	5.401	0.003	5.403	0.003		−0.005	0.002	G	0.02	0.00	H	5.4095	0.0006	0.005	95		5.40	5.42		C	19029−0342	I 1	1							S
93527	9.279	0.014	8.118	0.009		0.997	0.013	T	0.98	0.01	L	8.1566	0.0018	0.016	117		8.13	8.19		M			1							
93528	9.889	0.019	9.081	0.015		0.714	0.018	T	0.77	0.01	L	9.1097	0.0019	0.026	161		9.07	9.16		C	19029+2322	I 1	1							
93529	9.903	0.023	8.726	0.015		1.009	0.021	T	0.98	0.02	L	8.7730	0.0017	0.015	92		8.73	8.81					1							
93530	8.968	0.023	8.410	0.023	*	0.522	0.029	T	0.59	0.03	L *	8.7028	0.0019	0.018	88	*	8.67	8.74		R	19030+5135	I 1	2 C A	AB	80	2.027	0.003	0.13	0.01	S
93531	9.409	0.023	9.194	0.027		0.199	0.035	T	0.22	0.04	L	9.1857	0.0029	0.018	66		9.16	9.21		C			1							
93532	9.821	0.026	9.393	0.027		0.425	0.005	G	0.49	0.01	H	9.4604	0.0027	0.016	60		9.43	9.49		C			1							
93533	8.168	0.007	8.124	0.008		0.045	0.010	T	0.06	0.01	L	8.1387	0.0014	0.018	183		8.11	8.17		M			1							
93534	8.919	0.011	8.461	0.011		0.460	0.015	G	0.53	0.02	H	8.5058	0.0020	0.016	113		8.48	8.55		C			1							
93535	8.493	0.010	7.494	0.008		0.873	0.010	T	0.88	0.01	L	7.5616	0.0018	0.016	86		7.53	7.59					1							S
93536	8.368	0.011	8.324	0.013		0.103	0.023	G	0.14	0.02	A	8.3432	0.0014	0.012	72		8.32	8.37		C			1							
93537	7.438	0.010	6.071	0.005	*	1.158	0.009	T	1.12	0.01	L *	6.1248	0.0010	0.006	78	*	6.12	6.14		D	19031−1915	I 1	2 C A	AB	89	7.548	0.019	3.18	0.06	S
93538											T	8.5603	0.0457	0.350	80		7.50	8.92		D	19031−4543	I 2	S							G
93539	7.533	0.021	7.671	0.032		−0.078	0.006	G	−0.06	0.01	H	7.4578	0.0096	0.071	81		7.34	7.54		D	19031−4543	I 2	1 X S							S D
93540	9.644	0.022	8.548	0.016		0.939	0.015	G	0.99	0.02	I	8.5682	0.0023	0.013	74		8.54	8.59		C			1							
93541	8.318	0.008	8.322	0.010		0.001	0.012	T	0.02	0.01	L	8.3375	0.0012	0.010	112		8.32	8.36					1							S
93542	4.711	0.003	4.732	0.002		−0.027	0.006	G	−0.02	0.02	A	4.7352	0.0004	0.004	106		4.73	4.74					1							S
93543	6.936	0.006	6.408	0.005		0.480	0.004	G	0.55	0.00	H	6.4724	0.0009	0.007	80		6.46	6.49		C			1							S
93544	9.473	0.015	9.010	0.015		0.470	0.015	G	0.54	0.02	H	9.0743	0.0021	0.019	134		9.04	9.11		C			1							
93545	9.039	0.013	8.630	0.014		0.420	0.015	G	0.49	0.02	H	8.6563	0.0027	0.019	90		8.62	8.69					1							
93546	8.105	0.007	6.969	0.008		0.960	0.015	G	0.95	0.01	H	7.0222	0.0009	0.008	90		7.00	7.03					1 G							S
93547	8.184	0.009	7.165	0.007		0.888	0.009	T	0.89	0.01	L	7.2237	0.0014	0.011	93		7.21	7.24		C			1							S
93548	7.382	0.007	7.220	0.011		0.156	0.012	T	0.17	0.01	L	7.2521	0.0014	0.010	82		7.23	7.27					1							S
93549	8.701	0.010	8.640	0.012		0.061	0.015	T	0.07	0.01	L	8.6788	0.0021	0.017	129		8.65	8.72					1							
93550	10.864	0.052	10.028	0.041		0.807	0.002	G	0.83	0.00	H	10.0256	0.0038	0.028	83		9.98	10.07					1							G
93551	8.267	0.009	7.027	0.006		1.058	0.008	T	1.02	0.01	L	7.0730	0.0012	0.008	102		7.06	7.09		C			1							S
93552	6.121	0.005	5.760	0.004		0.328	0.006	G	0.38	0.01	H	5.8071	0.0014	0.010	77		5.79	5.82		U 2			1							S P
93553	6.927	0.003	6.963	0.004		−0.028	0.005	T	−0.01	0.01	L	6.9686	0.0007	0.010	202		6.95	6.99					1							S
93554	9.892	0.027	7.836	0.011		1.702	0.023	T	1.73	0.02	L	7.7219	0.0016	0.011	75		7.70	7.75		C			1							
93555	9.211	0.018	8.909	0.019		0.287	0.025	T	0.33	0.03	L	8.9510	0.0014	0.011	95		8.93	8.97		C			1							
93556	9.387	0.019	8.960	0.019		0.403	0.025	T	0.47	0.03	L	8.9815	0.0016	0.016	106		8.95	9.01					1							
93557	8.548	0.011	6.848	0.006		1.420	0.010	T	1.40	0.02	L	6.8346	0.0009	0.008	93		6.82	6.85					1							S
93558	10.887	0.063	8.967	0.021		1.160	0.040	G	1.12	0.04	R	8.8932	0.0036	0.021	71		8.86	8.93					1							
93559	8.547	0.017	7.313	0.011		1.054	0.016	T	1.02	0.01	L	7.3632	0.0013	0.009	84		7.35	7.38		C			1							S
93560	7.820	0.009	7.673	0.011		0.127	0.015	G	0.14	0.01	H	7.7198	0.0015	0.012	93		7.70	7.74		C			1							S
93561	9.292	0.013	8.185	0.009		0.955	0.012	T	0.94	0.01	L	8.2012	0.0016	0.017	153		8.17	8.23					1							S
93562	10.086	0.029	8.758	0.017		1.127	0.026	T	1.09	0.03	L	8.7584	0.0026	0.024	97		8.73	8.80					1							
93563											T	10.4853	0.1062	1.060	172		8.73	11.88		D	19034+2603	I 2	S							G
93564	7.890	0.006	7.831	0.007		0.100	0.140	G	0.04	0.01	L	7.8510	0.0011	0.015	191		7.83	7.88		D	19034+2603	I 2	1							S
93565	8.173	0.010	7.856	0.009		0.301	0.013	T	0.34	0.02	L	7.9065	0.0013	0.010	80		7.89	7.93		C			1							S
93566	8.346	0.010	7.686	0.011		0.612	0.013	T	0.68	0.01	L	7.7360	0.0014	0.011	91		7.72	7.76		C			1							S
93567	10.462	0.029	9.696	0.024		0.682	0.029	T	0.74	0.02	L	9.7773	0.0022	0.021	132		9.74	9.81		C			1							
93568	9.128	0.018	7.347	0.009		1.484	0.016	T	1.49	0.02	A	7.3305	0.0020	0.011	76		7.31	7.35					1							S
93569	10.216	0.020	10.008	0.025		0.199	0.030	T	0.22	0.03	L	10.0603	0.0023	0.034	242		10.00	10.12					1 S							G
93570	8.398	0.010	7.312	0.007		0.939	0.009	T	0.93	0.01	L	7.3781	0.0009	0.008	109		7.36	7.39					1							S
93571	7.829	0.008	7.115	0.008		0.657	0.009	T	0.72	0.01	L	7.1819	0.0015	0.009	90		7.17	7.20					1 G							S
93572	9.188	0.012	7.876	0.008		1.114	0.011	T	1.08	0.01	L	7.9211	0.0019	0.015	146		7.89	7.94					1							
93573	8.196	0.008	7.894	0.008		0.287	0.011	T	0.33	0.01	L	7.9397	0.0011	0.011	114		7.92	7.96		C			1							S
93574	6.556	0.003	5.931	0.003	*	0.553	0.004	G	0.57	0.07	F *	5.9972	0.0006	0.008	177	*	5.99	6.01		D	19035−6845	I 1	2 C A	AB	172	0.117	0.005	0.38	0.21	S
93575	11.614	0.101	10.005	0.038		1.348	0.085	T	1.31	0.10	L	10.0179	0.0043	0.037	94		9.97	10.09					1							G
93576	9.575	0.023	9.194	0.024		0.387	0.015	G	0.45	0.02	H	9.2590	0.0020	0.018	68		9.23	9.30					1							
93577	9.386	0.017	9.016	0.017		0.351	0.022	T	0.41	0.02	L	9.1042	0.0025	0.021	98		9.07	9.15					1							
93578	8.575	0.010	7.581	0.007	*	0.923	0.015	G	0.92	0.01	H *	7.6300	0.0016	0.011	84	*	7.61	7.65		D	19035+0818	H 1	2 C A	AB	175	0.277	0.007	1.40	0.09	S
93579	10.571	0.047	9.522	0.030		0.901	0.044	T	0.90	0.03	L	9.6336	0.0034	0.026	71		9.58	9.69		C			1							
93580	6.051	0.004	5.845	0.004		0.182	0.003	G	0.20	0.00	H	5.8808	0.0006	0.006	100		5.87	5.89		C			1							S
93581	7.770	0.008	7.795	0.009		−0.004	0.004	G	0.02	0.00	H	7.7862	0.0018	0.018	75		7.76	7.82					1							S
93582	8.925	0.013	8.574	0.014		0.380	0.015	G	0.44	0.02	H	8.6112	0.0019	0.015	86		8.59	8.64		C			1							
93583	9.169	0.024	9.080	0.029		0.075	0.020	G	0.09	0.02	H	9.1170	0.0016	0.011	65		9.10	9.15		C			1							
93584	9.081	0.010	8.496	0.009	*	0.553	0.015	G	0.63	0.01	H *	8.5453	0.0015	0.018	190	*	8.51	8.59		D	19036−7224	H 1	2 C A	AB	200	0.381	0.013	2.32	0.09	
93585	8.831	0.013	8.359	0.012		0.446	0.001	G	0.52	0.00	H	8.4228	0.0018	0.014	87		8.40	8.44					1							S
93586	9.005	0.015	7.240	0.008		1.471	0.013	T	1.48	0.02	L	7.2065	0.0015	0.010	86		7.18	7.23					1							S
93587	10.026	0.025	9.048	0.019		0.858	0.023	T	0.87	0.02	L	9.0803	0.0025	0.019	93		9.05	9.12		C			1							
93588	10.341	0.027	9.817	0.027	*	0.492	0.034	T	0.56	0.04	L *	9.8179	0.0020	0.021	134	*	9.77	9.86		D	19036+3705	H 1	2 C A	AB	281	0.226	0.005	0.54	0.12	G
93589	8.291	0.010	7.026	0.006		1.078	0.009	T	1.04	0.01	L	7.0830	0.0008	0.008	97		7.07	7.10		C			1							S
93590	9.219	0.018	8.194	0.013		0.893	0.017	T	0.90	0.01	L	8.2216	0.0021	0.012	75		8.20	8.24		C	19036−3927	I 1	1							
93591	11.201	0.084	10.673	0.085		0.560	0.015	G	0.63	0.01	H	10.8186	0.0051	0.038	84		10.73	10.87					1							G
93592	9.150	0.016	8.898	0.018	*	0.240	0.023	T	0.27	0.03	L *	8.9870	0.0018	0.018	116	*	8.95	9.03			19036+5307	H 1	2 C S C	AB	305	0.117	0.049	1.45	1.37	
93593	9.575	0.019	8.042	0.010		1.288	0.017	T	1.25	0.02	L	8.0619	0.0016	0.015	93		8.03	8.08					1							
93594	8.127	0.007	8.081	0.008		0.047	0.010	T	0.06	0.01	L	8.0947	0.0011	0.013	131		8.07	8.12					1							S
93595	8.478	0.013	8.433	0.016	A	0.041	0.019	T	0.06	0.01	L	8.4407	0.0089	0.073	115	A	8.41	8.69		P 1 A	19037+5727	I 2	1 C P A							
93596	8.197	0.010	7.946	0.012	*	0.239	0.015	T	0.27	0.02	L *	8.0881	0.0013	0.014	143	*	8.06	8.12		D	19037+3545	I 1	2 C A	AB	191	2.461	0.004	0.10	0.01	S
93597	10.431	0.035	9.876	0.035		0.525	0.037	T	0.60	0.04	L	9.9800	0.0028	0.020	81		9.95	10.02		C			1							G
93598	9.437	0.021	9.180	0.023	B	0.200	0.020	G	0.22	0.08	L	9.3585	0.0150			B				D	19037+5727	I 2	1 C I A							
93599	10.369	0.034	8.926	0.018		1.217	0.030	T	1.18	0.03	L	9.0029	0.0025	0.020	88		8.97	9.04		C			1							
93600	10.501	0.056	9.951	0.057	B	0.515	0.072	T	0.59	0.08	L	10.0466	0.0606			B				D	19037+1658	I 2	1 C I B							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			29	30
93601	19 03 42.22	+16 57 58.4	8.51 G		285.925 912 47	+16.966 234 78 A		2.67	−18.63	−73.23	2.58	2.33	2.66	2.80	3.01	+20	− 2	−21	+34	− 7	+27	− 3	+20	− 4	+17		4	0.18
93602	19 03 42.34	−56 18 54.7	8.74 H		285.926 404 80	−56.315 197 09		3.30	−3.65	−5.77	1.00	0.80	1.26	1.20	0.93	+23	− 9	+ 2	+24	−40	− 3	−30	−37	− 9	+39		0	−1.60
93603	19 03 42.47	+21 16 06.1	6.61 1 H		285.926 978 79	+21.268 351 63		8.12	15.04	−0.70	0.36	0.43	0.73	0.45	0.55	− 3	−19	−12	−17	− 8	+18	−10	−27	+28	+ 2		0	1.55
93604	19 03 42.52	+20 15 43.4	8.98 H		285.927 160 86	+20.262 066 39		3.29	−4.18	−6.02	0.65	0.79	1.18	0.91	0.99	+40	−17	− 9	+11	+ 1	+35	− 2	− 6	+22	+34		0	−0.35
93605	19 03 43.76	−22 42 42.8	8.40 2 H		285.932 354 16	−22.711 875 46 *		3.14	−13.69	−28.67	1.68	0.90	1.44	2.03	1.16	−43	+25	−12	−22	+26	+14	+14	−53	−20	−52		0	0.88
93606	19 03 44.97	+05 04 10.5	7.94 H		285.937 381 18	+05.069 584 26		2.65	−0.63	4.59	0.84	0.63	0.95	0.77	0.59	+ 2	−21	− 9	−28	− 5	+ 1	− 5	−44	+ 0	+ 1		0	−1.15
93607	19 03 45.11	+45 36 30.2	9.09 H		285.937 977 32	+45.608 401 64		4.88	23.69	−6.67	0.90	0.88	1.05	1.08	1.12	− 4	−10	−37	+ 1	+10	− 3	+10	−14	+19	+ 5		0	−0.52
93608	19 03 45.31	+13 40 51.7	8.63 H		285.938 780 83	+13.681 036 35		0.90	2.71	0.11	1.11	0.80	1.09	1.16	0.97	+ 2	+ 9	−25	−55	+ 9	+ 0	+16	−42	+20	− 4		0	−0.67
93609	19 03 46.57	+02 29 01.0	8.19 H		285.944 048 46	+02.483 613 58		4.45	0.45	−18.91	0.86	0.61	0.97	0.88	0.65	+10	−18	− 1	−27	+ 7	+ 6	+ 6	−35	+ 0	+ 0		0	1.25
93610	19 03 46.74	+49 37 58.5	7.53 H		285.944 747 01	+49.632 927 64		3.26	6.14	0.49	0.51	0.50	0.56	0.56	0.60	− 7	− 6	− 9	−10	+11	− 9	+13	+15	− 2	−14		3	1.02
93611	19 03 47.50	−40 15 04.4	8.13 H		285.947 918 09	−40.251 228 53		14.90	−124.96	−5.93	1.14	0.64	1.19	1.60	0.99	− 2	−28	− 3	+30	+ 5	+ 2	− 1	−19	− 3	−19		0	−0.36
93612	19 03 48.74	+41 58 27.4	8.14 H		285.953 094 74	+41.974 279 98		3.83	6.11	−4.52	0.54	0.65	0.69	0.57	0.80	− 5	−16	− 9	+ 3	+ 9	− 3	+11	+18	−15	+ 1		0	−0.68
93613	19 03 48.75	+08 05 51.6	8.95 H		285.953 122 96	+08.097 657 36		28.56	250.29	18.77	1.05	0.86	1.32	1.43	1.15	+ 2	−30	−25	+ 3	− 4	− 4	−10	−18	+19	− 1		0	0.56
93614	19 03 50.24	−01 51 17.1	9.10 H		285.959 318 64	−01.854 763 80		3.19	0.66	−2.45	1.17	0.90	1.38	1.37	1.25	+37	+22	+18	−26	− 6	+ 0	− 8	−29	−18	+46		0	2.16
93615 H	19 03 51.17	+26 41 38.1	8.98 G		285.963 207 86	+26.693 922 84 *		6.99	−7.66	−76.82	1.25	1.53	1.46	1.25	1.36	− 4	−17	− 4	+34	− 6	−16	−11	+19	+12	−30		1	0.63
93616	19 03 51.76	−46 32 55.1	7.62 H		285.965 659 29	−46.548 628 69		3.02	2.53	−5.55	0.88	0.60	1.02	1.03	0.71	+34	−42	−25	− 3	+ 0	−12	− 8	−43	+ 3	+16		0	−0.13
93617	19 03 52.75	+17 00 41.8	9.06 H		285.969 789 18	+17.011 609 92		3.07	7.47	4.47	0.97	0.89	1.34	1.11	1.02	+25	−10	−18	+26	+ 4	+30	+10	+ 0	+20	+36		0	0.44
93618	19 03 52.78	−48 51 39.2	9.51 H		285.969 924 60	−48.860 900 59		14.98	82.33	32.19	1.29	0.97	1.45	1.74	1.15	+17	−13	+ 3	−16	− 6	− 8	− 5	−45	−21	+12		0	−0.51
93619	19 03 53.93	+22 52 48.4	10.56 H		285.974 717 63	+22.880 124 29		10.30	−18.10	−205.45	1.47	1.70	2.05	1.78	1.78	+29	−22	−16	−36	−19	+22	− 3	−14	+ 2	− 1		4	1.69
93620	19 03 54.91	+54 23 21.6	7.68 H		285.978 793 71	+54.389 324 04		3.01	−4.75	−17.88	0.55	0.54	0.59	0.60	0.66	+19	+ 8	+19	+ 3	+ 0	−14	+ 6	− 2	+ 8	+33		0	0.83
93621	19 03 55.60	+34 09 04.6	7.31 H		285.981 685 65	+34.151 265 89		0.71	0.46	−7.85	0.46	0.49	0.63	0.55	0.57	− 6	+ 3	+10	+19	+ 6	−11	+ 8	+17	+15	− 8		0	0.07
93622	19 03 55.60	−36 07 40.2	9.21 H		285.981 685 80	−36.127 833 47		12.52	60.69	−43.97	1.50	0.81	1.46	1.80	0.98	− 2	−32	− 2	+28	+ 3	+ 8	− 4	−18	+ 2	−18		0	0.64
93623	19 03 56.85	−20 27 31.4	9.62 G		285.986 884 66	−20.458 732 87		16.45	−227.10	−586.32	1.32	0.84	1.41	1.55	1.03	+ 8	−22	− 3	− 8	−13	+ 5	−13	−42	− 6	+ 2		2	0.32
93624	19 03 57.52	−51 01 05.7	5.93 H		285.989 673 65	−51.018 244 71		11.17	40.42	−147.68	0.60	0.46	0.74	0.79	0.54	+11	−22	−20	+ 5	+19	−11	+ 7	−27	+11	−15		0	1.17
93625 H	19 03 58.43	−38 04 02.0	8.91 G		285.993 474 37	−38.067 223 81 *		9.89	11.74	−30.81	1.45	0.92	1.59	2.76	1.51	−17	− 9	−17	+14	+24	−37	+ 1	−31	+21	−58		0	−0.78
93626	19 03 59.02	−04 19 01.9	10.88 2 H		285.995 931 07	−04.317 182 17		−7.64	0.04	−7.11	2.18	1.55	2.82	2.74	2.33	+30	+ 4	−20	− 9	+ 9	+25	+18	−21	+46	+43		12	2.52
93627	19 03 59.38	−00 47 38.8	8.04 H		285.997 415 54	−00.794 117 81		5.31	7.34	4.77	0.93	0.67	1.08	0.97	0.80	+25	−29	− 9	−17	− 3	+12	− 3	−27	+11	+35		0	−0.97
93628	19 04 00.32	+14 40 16.6	9.06 H		286.001 322 33	+14.671 269 95		0.36	2.23	0.96	1.18	0.98	1.38	1.55	1.26	+11	+ 1	− 2	+ 0	+ 7	+19	+10	−14	+23	+35		0	0.75
93629	19 04 01.00	−57 57 35.9	6.30 H		286.004 166 55	−57.959 972 03		5.77	16.33	4.01	0.69	0.56	0.92	0.72	0.54	+29	−19	−12	+14	−31	−15	−32	−46	− 9	+24		0	0.12
93630	19 04 01.12	+66 25 43.9	8.15 H		286.004 658 36	+66.428 861 45		6.31	13.65	−6.17	0.55	0.54	0.60	0.42	0.61	− 1	−25	+10	−52	+19	+19	+12	+21	+ 4	+18		0	2.70
93631	19 04 01.68	+40 06 58.6	7.66 2 H		286.007 011 05	+40.116 281 42		1.48	−20.87	−25.79	0.54	0.59	0.68	0.62	0.72	+ 3	−18	− 8	+17	+ 3	− 5	+ 2	− 3	+11	+10		0	−1.06
93632	19 04 01.93	+16 27 48.4	6.94 H		286.008 056 40	+16.463 441 37		7.16	−14.30	−54.72	0.56	0.51	0.76	0.68	0.63	+17	− 3	−13	+28	− 6	+22	+ 1	− 3	+10	+35		0	2.23
93633	19 04 02.11	+33 02 15.7	8.06 1 H		286.008 779 46	+33.037 690 84		3.74	4.85	−6.24	0.54	0.66	0.80	0.64	0.78	− 8	+ 2	− 4	+26	+10	−27	+10	+ 0	+23	−14		0	−0.37
93634	19 04 03.35	+30 10 03.8	9.35 H		286.013 974 52	+30.167 721 23		4.37	−3.86	−0.94	0.79	0.94	1.17	0.94	1.19	+ 4	−18	− 8	+40	+ 4	− 9	+ 4	+ 1	+15	+11		0	0.46
93635 H	19 04 04.22	+14 47 01.8	8.28 H		286.017 596 05	+14.783 842 45 A		−11.78	2.42	1.21	9.93	4.75	6.45	8.47	4.71	−35	−29	+ 7	+26	+33	− 8	+53	−40	+17	+18		38	5.38
93636	19 04 04.59	+48 51 59.9	7.69 H		286.019 142 79	+48.866 652 54		3.63	15.19	18.64	0.52	0.52	0.57	0.57	0.62	−10	−20	− 6	− 7	+14	− 5	+13	+14	− 2	− 4		1	0.96
93637 H	19 04 06.10	−63 47 04.8	6.96 G		286.025 429 39	−63.784 661 09 B		4.17	10.99	−12.55	1.86	1.28	1.66	1.77	1.14	+10	− 9	− 5	+18	+10	− 7	+ 9	+ 5	+26	+31		1	0.73
93638	19 04 06.25	−59 44 33.7	7.88 H		286.026 049 67	−59.742 689 76		12.08	75.25	−71.72	0.66	0.45	0.91	0.82	0.55	−20	−19	− 6	+40	−12	+ 1	+ 4	−12	+12	+ 6		2	0.67
93639	19 04 06.57	−28 12 11.3	9.92 G		286.027 357 30	−28.203 150 00		21.73	128.29	27.39	1.64	0.93	1.73	2.03	1.31	+ 0	−37	+ 2	+ 8	−15	− 8	−20	−44	+ 9	− 4		0	0.89
93640	19 04 07.17	+35 47 03.7	8.21 H		286.029 855 46	+35.784 366 12		8.33	−8.62	27.00	0.54	0.65	0.74	0.58	0.77	− 4	+ 6	+ 8	+14	+ 4	−10	+ 4	+32	− 3	− 4		0	−0.02
93641	19 04 07.59	−41 25 41.9	10.11 G		286.031 637 97	−41.428 304 65		2.50	0.87	−12.95	1.65	1.00	1.79	2.12	1.26	+12	−34	− 2	+16	+17	− 1	+14	−27	− 9	+ 2		0	−0.36
93642	19 04 08.31	+15 06 03.2	7.38 H		286.034 622 46	+15.100 879 85		5.37	−12.29	−6.15	0.58	0.60	0.84	0.75	0.74	+37	−13	−10	+22	−14	+14	− 8	−17	+14	+49		0	0.79
93643	19 04 08.37	+02 31 35.0	8.14 1 H		286.034 894 98	+02.526 398 05		2.47	0.81	−7.54	0.81	0.62	1.00	0.85	0.63	+ 6	−22	−32	−21	+ 4	+ 2	+ 0	−34	+17	− 4		0	−0.08
93644	19 04 08.71	−17 45 38.5	8.69 G		286.036 278 23	−17.760 682 63		0.37	0.82	−4.41	0.91	0.60	1.06	1.12	0.81	+ 5	−16	− 2	+ 6	+ 5	+37	+14	−17	− 6	+19		2	−0.89
93645	19 04 09.68	+17 33 21.3	6.93 H		286.040 335 80	+17.555 911 89		21.18	127.29	73.87	0.57	0.56	0.83	0.74	0.67	+ 8	−17	−24	+12	− 5	+23	+ 1	− 4	+14	+22		0	0.60
93646	19 04 10.18	−20 48 03.4	8.61 H		286.042 418 33	−20.800 954 01		1.80	−8.82	−13.97	1.09	0.66	1.15	1.24	0.80	−10	−30	+ 7	+ 2	− 2	− 4	+ 2	−31	−12	− 9		0	0.36
93647	19 04 10.70	+03 19 49.9	6.72 G		286.044 576 58	+03.330 517 05		6.94	19.52	16.83	0.83	0.55	0.86	0.92	0.56	−17	+12	−24	−56	+23	−32	+19	−51	+22	−19		0	1.04
93648	19 04 12.23	+33 19 16.7	7.72 G		286.050 972 87	+33.321 309 53		2.61	4.55	−7.17	0.50	0.58	0.71	0.56	0.69	+ 0	− 5	− 1	+22	+11	−21	+10	+13	+19	− 3		0	−0.41
93649 H	19 04 14.20	−22 53 47.4	6.73 1 H		286.059 156 37	−22.896 506 48 A		4.48	−4.34	−4.50	1.18	0.79	1.06	1.91	0.97	−30	+ 3	− 5	− 5	+21	+ 5	+ 9	−35	+ 0	−70		1	0.93
93650	19 04 14.37	−68 33 09.0	8.98 H		286.059 860 48	−68.552 499 95		2.47	−2.55	0.83	0.78	0.91	1.32	0.75	0.86	+13	−19	−24	−22	− 8	+ 2	−10	−22	+11	+ 6		1	−0.43
93651	19 04 14.48	−14 20 00.7	8.32 G		286.060 339 31	−14.333 523 86		0.39	−1.10	−11.75	0.96	0.58	1.07	0.93	0.65	+10	−39	− 7	− 6	+ 1	+17	+ 0	−24	+ 8	+13		0	1.93
93652	19 04 14.55	−00 31 46.0	8.04 H		286.060 627 28	−00.529 455 93		3.85	−35.34	−42.37	0.89	0.66	1.07	1.20	1.01	+14	−31	−10	−16	+ 6	+20	+ 2	−38	+ 3	− 5		0	−0.34
93653	19 04 14.71	+65 12 19.4	7.90 H		286.061 311 98	+65.205 391 65		5.94	11.95	−17.39	0.57	0.57	0.60	0.57	0.64	− 6	−11	+12	+13	+ 6	− 6	+ 7	+17	− 3	+11		1	1.72
93654	19 04 14.82	+11 29 12.8	9.70 H		286.061 763 95	+11.486 889 27		13.16	−7.93	−179.05	1.63	1.16	1.78	2.13	1.52	−17	−19	−18	−18	+30	−17	+24	−45	+10	−28		0	0.28
93655	19 04 15.35	−35 21 48.8	9.39 H		286.063 959 26	−35.363 568 84		7.93	31.63	0.37	1.43	0.81	1.49	1.65	0.99	+ 5	−41	−17	+20	− 2	− 3	−16	−21	+20	−19		0	−1.53
93656 H	19 04 15.73	+43 52 49.4	6.99 G		286.065 523 32	+43.880 376 16 A		5.28	−0.17	15.20	0.55	0.63	0.62	0.58	0.76	+ 0	− 4	−11	+ 6	+11	− 9	+12	+12	+ 3	− 7		1	−0.49
93657	19 04 16.37	+41 00 11.5	8.38 H		286.068 188 23	+41.003 196 61		17.06	16.25	−8.72	0.58	0.66	0.74	0.60	0.75	+ 1	− 4	− 5	+11	+ 9	−13	+10	− 6	+ 9	+ 5		3	−0.27
93658	19 04 17.17	+34 05 13.1	7.17 H		286.071 540 19	+34.086 978 95		3.37	14.98	17.82	0.52	0.51	0.68	0.62	0.60	− 6	− 3	+ 6	+25	+ 7	−21	+ 8	+11	+13	− 8		0	0.61
93659	19 04 18.33	−20 08 33.3	8.52 H		286.076 361 63	−20.142 581 40		1.12	0.13	−6.99	1.04	0.68	1.11	1.10	0.79	+15	−16	− 1	−17	−17	+ 3	−14	−45	− 4	+21		0	−1.20
93660	19 04 19.99	−51 10 33.5	8.79 G		286.083 275 15	−51.175 965 22		2.85	−1.33	11.55	0.94	0.73	1.20	1.35	0.96	+ 3	−16	−23	+21	− 1	+ 7	−12	−17	+16	−30		0	−1.39
93661 H	19 04 20.25	−21 31 52.9	7.18 G		286.084 374 83	−21.531 360 30 A		18.45	63.91	−40.80	3.88	2.43	3.22	4.13	2.41	+78	− 7	− 4	+ 1	+ 2	− 7	− 6	−15	+19	−31		3	1.12
93662	19 04 21.32	+27 19 14.7	7.12 H		286.088 834 62	+27.320 738 72		5.41	−2.78	−1.89	0.43	0.48	0.68	0.52	0.58	−16	−18	− 7	+18	+ 7	−10	+ 3	− 1	+ 6	−26		1	1.41
93663	19 04 22.74	−48 04 42.6	8.86 H		286.094 752 11	−48.078 507 86		2.66	18.55	−12.06	1.05	0.74	1.18	1.36	0.88	+25	−16	−17	−20	+ 1	−18	− 8	−53	+ 3	+ 8		0	−1.34
93664	19 04 22.74	+12 59 49.3	7.92 H		286.094 754 77	+12.997 016 37		0.37	0.48	−3.11	0.74	0.60	0.86	0.78	0.65	+ 8	−11	−22	−30	+ 4	+14	+ 4	−38	+20	+ 1		0	0.45
93665	19 04 23.78	+38 06 27.1	7.92 H		286.099 072 05	+38.107 536 11		3.31	0.21	21.72	0.56	0.58	0.71	0.62	0.67	− 5	+ 1	− 7	+ 0	+17	−23	+17	+11	+ 1	− 3		0	−1.19
93666 H	19 04 24.15	−05 41 05.4	6.48 2 H		286.100 632 33	−05.684 843 08 *		2.70	6.15	0.07	0.75	0.50	0.93	0.72	0.54	+12	−32	−31	−25	+13	− 5	+ 2	−42	+32	+ 4		0	1.52
93667	19 04 25.06	−31 02 49.3	5.49 H		286.104 396 24	−31.047 032 55		5.97	2.95	−19.17	0.82	0.46	0.88	0.99	0.61	+ 3	−33	−26	+25	+ 6	− 7	− 9	−20	+24	−23		0	0.92
93668	19 04 26.17	−36 07 00.1	8.63 2 H		286.109 038 53	−36.116 683 28		1.33	−4.41	−5.58	1.32	0.73	1.29	1.56	0.85	+ 1	−33	− 8	+28	+ 4	+ 5	− 5	−17	+ 3	−20		0	−1.49
93669	19 04 26.28	+22 39 57.1	8.46 H		286.109 508 09	+22.665 864 64		10.46	−15.65	−144.73	0.61	0.70	1.11	0.89	1.01	−17	− 5	− 8	+15	−20	+ 7	−21	+ 2	+ 0	−24		0	0.94
93670	19 04 30.92	−30 48 54.8	10.14 H		286.128 846 72	−30.815 223 35		−0.41	4.86	4.85	1.88	1.13	1.98	2.10	1.33	+31	−42	−31	+30	− 1	− 9	−23	−22	+20	−11		0	−0.40
93671	19 04 32.32	+17 41 09.1	8.02 H		286.134 668 40	+17.685 852 40		2.58	5.34	−12.15	0.77	0.72	1.02	0.93	0.89	+18	−19	−20	+18	− 2	+19	+ 4	+ 2	+ 1	+24		0	0.21
93672	19 04 32.64	+62 47 35.0	10.33 H		286.135 983 44	+62.793 068 09		1.32	2.03	1.10	1.14	1.23	1.26	1.40	1.59	+ 5	−16	+ 6	− 3	+ 3	− 4	+ 1	− 2	+16	+ 7		0	0.05
93673	19 04 33.01	+45 55 17.9	7.16 H		286.137 553 51	+45.921 627 99		5.72	16.16	15.85	0.54	0.54	0.62	0.69	0.74	+ 4	−17	−12	+ 5	+ 4	− 6	+ 2	+ 8	+ 2	+25		2	0.20
93674	19 04 34.00	+34 45 55.7	9.16 H		286.141 658 73	+34.765 470 84		3.26	6.58	8.93	0.75	0.79	0.99	0.93	0.97	+ 1	− 2	+ 3	+21	+15	−13	+16	+20	+11	− 1		0	−1.16
93675	19 04 35.05	−49 39 21.1	8.83 H		286.146 025 27	−49.655 854 60		3.49	7.81	−36.78	1.04	0.77	1.21	1.35	0.85	− 2	−22	−10	−17	+18	+19	+17	−34	− 4	−14		0	−0.60
93676	19 04 35.86	+21 28 06.3	8.14 H		286.149 399 38	+21.468 413 19		2.47	−13.70	−4.77	0.50	0.65	1.10	0.64	0.83	−11	−13	+ 7	− 2	− 4	+11	− 6	−21	+ 9	−10		2	0.95
93677	19 04 36.64	+22 05 25.4	8.28 H		286.152 674 62	+22.090 395 52		11.62	−6.66	−45.10	0.46	0.57	0.99	0.59	0.81	−21	− 7	− 2	− 2	−12	+11	−14	−14	− 1	−25		1	0.28
93678	19 04 37.61	+23 19 43.8	8.83 H		286.156 701 66	+23.328 838 00 B		4.00	3.70	−5.11	7.93	8.48	5.14	4.73	5.61	− 5	− 3	+ 1	− 6	−15	+ 4	−13	− 4	−12	− 8		5	1.42
93679	19 04 37.68	+43 54 52.3	8.69 H		286.156 986 12	+43.914 538 78		2.61	7.13	13.36	0.58	0.69	0.73	0.64	0.89	−10	+ 1	−18	+ 0	+ 8	− 4	+ 9	+11	−15	− 7		0	1.07
93680	19 04 38.50	+23 19 45.5	7.24 H		286.160 429 90	+23.329 295 31 A		3.59	2.13	−5.37	1.16	1.37	1.59	1.37	1.75	− 4	− 3	+ 8	−11	−12	+ 5	−10	− 9	−12	−10		5	1.42
93681	19 04 39.42	+01 18 22.2	8.57 3 T		286.164 232 17	+01.306 161 55		0.20	0.57	−2.43	0.94	0.71	1.10	0.90	0.73	−12	+ 4	−25	−30	+24	+ 3	+27	−35	+26	− 2		0	−0.49
93682	19 04 39.93	−48 24 13.8	6.66 H		286.166 367 01	−48.403 836 68		6.72	28.86	−27.86	0.74	0.56	0.84	0.98	0.64	+27	−10	− 7	−26	− 9	− 7	−14	−53	− 7	+13		0	−2.24
93683	19 04 40.93	−21 44 28.9	3.76 G		286.170 557 65	−21.741 354 51		23.49	76.26	−58.08	0.74	0.48	0.78	0.82	0.51	− 7	−26	+ 8	− 7	− 8	+ 0	− 6	−45	−20	−18		0	0.78
93684	19 04 41.20	−54 23 00.1	9.60 H		286.171 646 91	−54.383 369 89 A		4.14	6.24	−36.20	2.01	1.61	2.34	2.20	2.01	+38	−39	−20	+ 5	−44	+ 2	−39	−36	+10	+54		2	1.52
93685	19 04 41.48	−31 22 21.2	8.21 H		286.172 831 18	−31.372 555 09		18.89	−5.46	−53.88	1.12	0.67	1.26	1.37	0.86	− 4	−28	−35	+11	+19	−24	+ 0	−32	+23	−34		0	−0.22
93686	19 04 43.03	+25 47 12.4	8.16 G		286.179 284 98	+25.786 781 78		3.44	−1.90	−2.50	0.48	0.61	0.87	0.55	0.83	−10	− 6	− 5	+26	+ 7	− 2	+ 8	+19	+ 2	−21		0	−0.29
93687	19 04 43.38	+38 53 53.6	9.07 H		286.180 758 94	+38.898 220 97		2.06	−7.23	−0.30	0.82	0.77	0.95	0.92	0.99	− 7	+ 2	− 3	+18	+ 8	− 3	+ 8	+24	−12	+ 1		0	0.24
93688	19 04 44.33	−58 10 33.3	8.42 H		286.184 694 86	−58.175 911 63		3.67	17.03	1.98	0.94	0.70	1.22	1.00	0.76	+24	−25	−21	+26	−18	− 3	−19	−24	+ 8	+24		0	−0.16
93689	19 04 44.41	−36 50 40.7	8.13 H		286.185 049 19	−36.844 645 88		5.40	4.48	−28.57	1.16	0.62	1.09	1.60	0.83	− 5	−45	−13	+31	+ 7	− 8	− 7	−14	− 1	−42		0	0.57
93690	19 04 45.11	−07 27 19.8	9.40 G		286.187 974 56	−07.455 499 75		18.35	−58.72	−214.07	1.32	0.77	1.65	1.72	1.24	+53	−43	−19	−21	− 8	+31	− 7	−32	+ 9	+36		0	1.15
93691	19 04 45.85	−25 13 51.7	7.08 H		286.191 053 93	−25.231 034 08		6.44	9.10	−20.57	0.80	0.43	0.83	0.91	0.54	−11	−40	− 1	+ 9	− 6	+16	− 6	−28	− 9	−25		0	−0.73
93692	19 04 46.02	−38 50 14.6	9.11 H		286.191 762 64	−38.837 397 17		1.16	−2.10	7.37	1.24	0.84	1.61	2.01	1.22	+11	− 1	−35	+14	+15	−39	−18	−47	+29	−36		0	2.12
*93693	19 04 46.57	−17 48 05.9	8.37 H		286.194 037 96	−17.801 636 84		4.22	10.76	8.24	0.88	0.53	1.01	1.16	0.79	+ 3	−23	− 1	+14	+ 0	+36	+ 4	+11	+ 1	+12		2	−0.21
*93694	19 04 46.54	+52 45 39.3	7.92 H		286.193 929 60	+52.760 905 43		0.92	5.55	10.56	0.62	0.62	0.67	0.70	0.76	+ 8	−16	− 5	− 8	+ 1	+ 4	+ 1	− 9	+ 5	+26		1	−0.31
93695	19 04 47.47	+11 08 22.4	10.56 H		286.197 802 01	+11.139 551 62		17.35	33.75	−212.95	1.80	1.46	2.16	2.21	1.86	−10	−16	−17	−17	+15	− 6	+11	−32	+12	−27		0	−0.73
93696	19 04 47.93	−18 42 27.2	8.65 2 G		286.199 713 78	−18.707 554 73		1.66	4.89	0.56	0.98	0.60	1.10	1.32	0.78	+ 0	− 1	− 5	+28	− 6	+40	− 4	−19	−12	− 5		2	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
93601	10.275	0.038	8.455	0.016	A	1.142	0.218	G	1.45	0.08	M	8.4229	0.0142	0.030	88	A	8.39	8.49		D	19037+1658	I 2	1 C P B							
93602	10.196	0.027	8.875	0.016		1.122	0.025	T	1.08	0.03	L	8.9102	0.0020	0.015	95		8.88	8.95					1						
93603	6.985	0.003	6.644	0.003		0.323	0.004	T	0.37	0.01	L	6.6937	0.0010	0.012	240		6.67	6.71	0.11	P 1 A			1						S
93604	9.280	0.011	9.003	0.013		0.264	0.016	T	0.30	0.02	L	9.0519	0.0022	0.024	186		9.01	9.09					1						
93605	10.122	0.038	8.556	0.019		1.336	0.035	T	4.32	0.06	O	7.6577	0.0172	0.211	59		7.33	7.91		U 2	19037−2243	I 1	1 V						
93606	9.829	0.020	8.082	0.010		1.457	0.018	T	1.46	0.03	L	8.0756	0.0015	0.013	90		8.06	8.10		C			1						
93607	9.664	0.021	9.133	0.019		0.498	0.025	T	0.57	0.03	L	9.1952	0.0024	0.019	98		9.16	9.23		C			1						
93608	11.100	0.093	8.831	0.024		1.872	0.077	T	1.90	0.08	L	8.7316	0.0019	0.017	75		8.70	8.76		C			1 S						
93609	8.472	0.010	8.196	0.011		0.263	0.014	T	0.30	0.02	L	8.2648	0.0013	0.013	101		8.24	8.29					1						S
93610	7.726	0.010	7.554	0.009		0.165	0.013	T	0.18	0.01	L	7.5843	0.0009	0.011	108		7.56	7.60					1						S
93611	8.968	0.015	8.256	0.013		0.642	0.015	T	0.71	0.01	L	8.2665	0.0021	0.016	63		8.24	8.29		D			1 S						S
93612	8.205	0.008	8.146	0.009		0.059	0.011	T	0.07	0.01	L	8.1688	0.0015	0.014	123		8.15	8.19					1						S
93613	10.259	0.032	9.127	0.021		0.974	0.030	T	0.96	0.02	L	9.1128	0.0022	0.019	88		9.08	9.14		C			1						
93614	9.591	0.020	9.153	0.021		0.440	0.015	G	0.51	0.02	H	9.1969	0.0020	0.017	77		9.17	9.24		C			1						
93615	9.606	0.016	9.044	0.015	*	0.510	0.015	G	0.58	0.02	H *	9.0781	0.0019	0.022	175	*	9.04	9.12		D	19039+2642	I 1	2 C A	BA	257	0.241	0.005	0.57	0.09	
93616	7.601	0.009	7.610	0.010		−0.027	0.001	G	−0.01	0.00	H	7.6160	0.0012	0.011	81		7.59	7.63					1						S
93617	9.241	0.018	9.063	0.022		0.171	0.027	T	0.19	0.03	L	9.1196	0.0025	0.020	89		9.09	9.15					1						
93618	10.370	0.033	9.573	0.027		0.706	0.032	T	0.76	0.03	L	9.6424	0.0029	0.027	85		9.60	9.69		C			1						
93619	11.602	0.071	10.654	0.049		0.836	0.064	T	0.85	0.05	L	10.7145	0.0037	0.043	181		10.63	10.78		R			1 G						G
93620	9.494	0.017	7.822	0.008		1.397	0.015	T	1.37	0.02	L	7.8214	0.0014	0.012	104		7.80	7.84					1						S
93621	7.169	0.006	7.289	0.008		−0.101	0.010	G	−0.08	0.01	H	7.2808	0.0009	0.008	124		7.27	7.30		C	19039+3409	I 1	1						S
93622	9.966	0.038	9.280	0.033		0.622	0.038	T	0.69	0.03	L	9.3429	0.0023	0.016	73		9.31	9.36		C			1						
93623	10.395	0.046	9.646	0.037		0.663	0.017	G	0.72	0.01	H	9.7471	0.0028	0.020	66		9.71	9.78		C			1						G
93624	7.535	0.006	6.068	0.005		1.236	0.006	T	1.19	0.01	L	6.0950	0.0010	0.009	84		6.08	6.11			19040−5101	I 1	1						S
93625	9.731	0.026	9.008	0.022	*	0.660	0.015	G	0.72	0.01	H *	9.0556	0.0031	0.020	75	*	9.00	9.09			19040−3804	I 1	2 C S A	AS	336	0.178	0.006	0.20	0.26	
93626	11.722	0.121	11.160	0.119		0.482	0.002	G	0.55	0.00	H	10.9855	0.0067	0.074	93		10.83	11.08		U 2			1 S						G
93627	9.334	0.017	8.172	0.011		0.997	0.016	T	0.98	0.01	L	8.2065	0.0017	0.013	82		8.18	8.23					1						
93628	10.432	0.040	9.180	0.024		1.068	0.036	T	1.03	0.03	L	9.2187	0.0040	0.025	75		9.18	9.27					1						
93629	7.370	0.007	6.393	0.005		0.857	0.006	T	0.87	0.00	L	6.4609	0.0009	0.007	83		6.45	6.47		C			1						S
93630	8.391	0.010	8.170	0.011		0.211	0.014	T	0.23	0.02	L	8.2133	0.0012	0.014	108		8.18	8.24		C			1						S
93631	9.809	0.018	7.905	0.008		1.640	0.015	G	1.65	0.09	H	7.7757	0.0024	0.027	136		7.73	7.81		U 2			1						
93632	8.635	0.012	7.088	0.007		1.299	0.011	T	1.26	0.01	L	7.0996	0.0016	0.013	91		7.08	7.12					1						S
93633	8.308	0.009	8.086	0.009		0.238	0.015	G	0.27	0.02	H	8.1289	0.0021	0.021	117		8.09	8.17	0.13	P 1 A			1						S
93634	9.345	0.014	9.341	0.019		0.008	0.022	T	0.03	0.02	L	9.3595	0.0021	0.024	134		9.32	9.40		C			1						
93635	8.831	0.019	8.310	0.019	*	0.489	0.024	T	0.56	0.03	L *	8.3769	0.0024	0.018	73	*	8.34	8.42		D	19041+1447	I 1	2 C C	AB	311	6.953	0.020	0.53	0.04	S
93636	7.825	0.007	7.696	0.009		0.125	0.011	T	0.14	0.01	L	7.7371	0.0009	0.009	114		7.72	7.76					1						S
93637	6.506	0.035	6.570	0.036	*	−0.036	0.015	G	−0.01	0.01	H *	6.9578	0.0010	0.009	98	*	6.94	6.97		D	19041−6347	I 1	2 C A	BA	292	1.714	0.003	0.05	0.01	S
93638	8.671	0.009	7.954	0.008		0.645	0.009	T	0.71	0.01	L	8.0172	0.0009	0.011	136		8.00	8.04					1						S
93639	11.123	0.064	10.062	0.043		0.985	0.005	G	1.03	0.01	I	10.0580	0.0032	0.026	77		10.03	10.10					1						G
93640	8.539	0.009	8.227	0.010		0.296	0.013	T	0.34	0.02	L	8.2817	0.0010	0.013	141		8.26	8.31		C			1 G						S
93641	10.581	0.041	10.187	0.046		0.430	0.020	G	0.50	0.02	H	10.2078	0.0030	0.030	81		10.16	10.28		C			1						G
93642	8.763	0.012	7.507	0.008		1.100	0.015	G	1.04	0.03	C	7.5515	0.0012	0.012	113		7.53	7.57		C			1						S
93643	8.379	0.009	8.163	0.011		0.206	0.013	T	0.23	0.01	L	8.2028	0.0024	0.018	95		8.17	8.23		U			1						
93644	8.727	0.013	8.680	0.017		0.040	0.015	G	0.06	0.01	H	8.7098	0.0017	0.015	80		8.69	8.73		C			1						
93645	7.484	0.007	6.979	0.006		0.475	0.008	T	0.55	0.01	L	7.0374	0.0013	0.010	92		7.02	7.05		C			1						S
93646	10.438	0.041	8.784	0.017		1.383	0.035	T	1.36	0.04	L	8.7607	0.0024	0.014	73		8.74	8.79		C			1						
93647	6.904	0.005	6.740	0.006		0.144	0.002	G	0.16	0.03	C	6.7704	0.0009	0.007	88		6.76	6.79		C			1						S
93648	8.143	0.008	7.740	0.008		0.360	0.001	G	0.42	0.00	H	7.8013	0.0014	0.013	129		7.78	7.83					1						S
93649	6.988	0.012	6.766	0.012	*	0.206	0.017	T	0.23	0.02	L *	6.7993	0.0012	0.008	75	*	6.78	6.83		U 2	19042−2254	I 1	2 C A	AB	308	7.985	0.008	2.19	0.03	S
93650	10.241	0.023	9.093	0.015		0.986	0.021	T	0.97	0.02	L	9.1428	0.0024	0.027	161		9.11	9.20					1						
93651	10.560	0.045	8.482	0.015		1.484	0.015	G	1.84	0.02	A	8.4014	0.0021	0.013	78		8.38	8.43		C			1						
93652	9.511	0.019	8.165	0.011		1.141	0.017	T	1.10	0.02	L	8.2072	0.0013	0.012	91		8.18	8.23		C			1 G						
93653	9.285	0.014	8.015	0.009		1.082	0.013	T	1.04	0.01	L	8.0641	0.0014	0.015	120		8.04	8.09					1						
93654	10.576	0.048	9.780	0.039		0.721	0.048	T	0.77	0.03	L	9.8436	0.0027	0.027	67		9.80	9.89		C			1						G
93655	9.944	0.030	9.481	0.031		0.450	0.034	T	0.52	0.04	L	9.4909	0.0033	0.021	87		9.46	9.53					1 S						
93656	7.009	0.006	7.031	0.006	A	−0.022	0.093	G	0.00	0.01	L *	7.0121	0.0007	0.006	115	*	7.00	7.03		D	19043+4353	I 1	2 C A	AB	172	2.035	0.009	3.14	0.04	S
93657	9.165	0.014	8.447	0.012		0.660	0.015	T	0.72	0.01	L	8.5126	0.0016	0.015	119		8.49	8.54					1						
93658	8.840	0.012	7.310	0.006		1.285	0.011	T	1.24	0.01	L	7.3262	0.0009	0.010	122		7.31	7.34		C			1						S
93659	8.496	0.011	8.517	0.015		−0.015	0.017	T	0.01	0.02	L	8.5298	0.0017	0.010	75		8.51	8.55					1						
93660	10.568	0.040	8.989	0.019		1.310	0.015	G	1.27	0.02	H	8.9610	0.0026	0.023	89		8.93	9.01					1						
93661	7.925	0.034	7.354	0.030	*	0.551	0.003	G	0.62	0.00	H *	7.2747	0.0010	0.009	78	*	7.26	7.29		D	19043−2132	I 1	2 C A	AB	199	1.227	0.015	0.25	0.02	S
93662	7.083	0.004	7.119	0.005		−0.028	0.006	T	−0.01	0.01	L	7.1213	0.0009	0.009	163		7.11	7.14		C			1						S
93663	10.464	0.039	8.961	0.020		1.264	0.034	T	1.22	0.04	L	9.0235	0.0014	0.015	91		9.00	9.06					1						
93664	8.242	0.011	7.945	0.012		0.282	0.015	T	0.32	0.02	L	7.9915	0.0018	0.012	76		7.97	8.01					1						S
93665	8.957	0.013	8.034	0.010		0.817	0.012	T	0.84	0.01	L	8.0756	0.0012	0.014	125		8.06	8.10		C			1						S
93666	11.772	0.129	7.196	0.007	*	2.300	0.510	G	2.29	0.52	J *	6.5253	0.0124	0.074	98	*	6.41	6.73		U 2 C	19044−0541	H 1	2 C S B	AB	173	0.167	0.007	0.14	0.17	D
93667	5.529	0.004	5.501	0.003		0.026	0.004	T	0.04	0.00	L	5.5077	0.0007	0.005	90		5.50	5.52		C			1						S
93668	10.938	0.064	8.851	0.020		1.766	0.055	T	2.41	0.10	O	8.6701	0.0046	0.028	70		8.63	8.71		U 2			1						
93669	9.194	0.010	8.535	0.009		0.631	0.015	G	0.70	0.01	H	8.5926	0.0020	0.021	195		8.56	8.63					1						
93670	11.600	0.178	10.289	0.089		0.602	0.107	G	0.67	0.10	R	10.2677	0.0045	0.030	83		10.21	10.30					1 S						G
93671	8.278	0.011	8.048	0.012		0.219	0.015	T	0.24	0.02	L	8.0814	0.0022	0.015	89		8.05	8.11					1						
93672	11.821	0.113	10.383	0.049		1.213	0.097	T	1.17	0.10	L	10.4996	0.0035	0.025	79		10.46	10.54		C	19045+6248	I 1	1 S						G
93673	7.188	0.005	7.164	0.006		0.027	0.007	T	0.04	0.01	L	7.1753	0.0012	0.010	100		7.16	7.19		C			1						S
93674	9.144	0.013	9.141	0.017		0.007	0.020	T	0.03	0.02	L	9.1714	0.0019	0.021	132		9.13	9.21					1						
93675	10.308	0.031	8.951	0.017		1.150	0.028	T	1.11	0.03	L	8.9929	0.0017	0.019	84		8.96	9.03		C			1						
93676	9.870	0.015	8.307	0.008		1.311	0.013	T	1.27	0.01	L	8.2894	0.0013	0.017	219		8.25	8.32					1 S						
93677	8.988	0.008	8.354	0.007		0.589	0.009	T	0.66	0.01	L	8.4114	0.0011	0.016	259		8.38	8.44		C			1						
93678	8.982	0.012	8.838	0.014	B	0.139	0.017	T	0.15	0.02	L	8.9829	0.0266			B				D	19047+2320	I 2	1 C I A						
93679	8.917	0.012	8.719	0.014		0.189	0.017	T	0.21	0.02	L	8.7483	0.0014	0.015	111		8.73	8.77					1						
93680	7.344	0.005	7.243	0.006	A	0.091	0.007	T	0.10	0.01	L	7.2795	0.0060	0.031	169	A	7.24	7.34		D	19047+2320	I 2	1 C P A						S
93681	10.293	0.038	8.721	0.018		1.030	0.020	G	1.24	0.02	A	8.8621	0.0910	0.428	88		8.23	9.29	17.14	P 1 A			1 S						
93682	7.959	0.011	6.771	0.006		1.018	0.010	T	0.99	0.01	L	6.8246	0.0010	0.006	87		6.81	6.84		C			1						S
93683	5.078	0.003	3.879	0.002		1.012	0.008	G	0.98	0.02	A	3.9215	0.0004	0.004	85		3.92	3.93		C	19047−2144	I 1	1						S
93684	10.140	0.028	9.614	0.027	A	0.502	0.029	T	0.57	0.03	L	9.7051	0.0143	0.024	101	A	9.65	9.76			19047−5423	H 1	2 C A	AB	144	16.610	0.023	2.10	0.10	
93685	8.955	0.017	8.269	0.015		0.591	0.015	G	0.66	0.01	H	8.3377	0.0013	0.011	80		8.31	8.37		C			1						
93686	8.188	0.006	8.142	0.008		0.050	0.015	G	0.06	0.01	H	8.1722	0.0011	0.015	208		8.15	8.20					1						
93687	10.236	0.027	9.185	0.018		0.912	0.024	T	0.91	0.02	L	9.2289	0.0020	0.017	103		9.20	9.27		C			1						
93688	10.160	0.027	8.563	0.014		1.338	0.024	T	1.30	0.03	L	8.5754	0.0018	0.015	85		8.56	8.60		C			1						
93689	8.302	0.017	8.160	0.020		0.129	0.024	T	0.14	0.03	L	8.1789	0.0017	0.014	67		8.15	8.20		C			1						
93690	10.642	0.035	9.518	0.021		0.938	0.002	G	0.98	0.00	I	9.5290	0.0014	0.014	121		9.50	9.56					1						S
93691	7.179	0.005	7.084	0.006		0.086	0.007	T	0.10	0.01	L	7.1115	0.0006	0.005	88		7.10	7.12					1						G
93692	10.396	0.041	9.225	0.026		1.004	0.038	T	0.98	0.03	L	9.2807	0.0026	0.018	69		9.24	9.31					1						
93693	8.626	0.014	8.376	0.015		0.180	0.015	G	0.20	0.02	H	8.4289	0.0012	0.012	79		8.41	8.45		C			1						
93694	9.979	0.023	8.102	0.010		1.560	0.020	T	1.58	0.02	L	8.0427	0.0011	0.012	115		8.02	8.07		C			1						
93695											T	10.6783	0.0037	0.035	76		10.61	10.72					1						G
93696	9.118	0.022	8.700	0.023		0.400	0.015	G	0.47	0.02	H	8.7114	0.0045	0.031	76		8.67	8.78		U 2			1						
93697	9.782	0.029	9.597	0.037		0.221	0.020	G	0.24	0.02	H	9.6298	0.0030	0.021	70		9.59	9.66		C			1						G
93698	9.562	0.022	8.465	0.015		0.947	0.020	T	0.94	0.01	L	8.5122	0.0020	0.016	86		8.49	8.54		C			1						
93699	10.155	0.027	8.416	0.012		1.450	0.023	T	1.45	0.04	L	8.4043	0.0019	0.015	93		8.38	8.43					1						
93700	8.125	0.008	8.206	0.010		−0.083	0.015	G	−0.06	0.02	H	8.2114	0.0014	0.014	118		8.19	8.24		C			1						

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	13	mas 14	15	mas 16	mas/yr 17	18	19	20	21	22	23	24	25	26	27	28	% 29	30
93701	19 04 49.40	−50 19 57.1	8.37	H	286.205 831 72	−50.332 517 10	1.53	−1.79	8.69	0.92	0.66	1.01	1.16	0.75	−14	−23	− 5	−22	+34	+15	+29	−41	+ 3	−25	2	−0.03
93702	19 04 49.84	−08 39 04.2	7.25	H	286.207 675 31	−08.651 174 65	7.90	91.87	13.66	0.79	0.48	0.97	1.12	0.80	+19	−28	−12	+16	+ 2	+23	+ 0	−13	−17	−12	0	0.31
93703	19 04 50.64	+44 41 28.7	8.67	H	286.210 999 79	+44.691 302 33	3.17	−14.59	1.13	0.71	0.73	0.85	0.75	0.92	− 1	+ 1	−34	−16	+21	−20	+19	+ 1	− 2	+ 2	0	−0.90
93704	19 04 52.51	+34 55 29.7	9.33	H	286.218 805 94	+34.924 909 88	3.30	1.69	−1.18	0.75	0.81	1.00	0.93	0.99	+ 2	− 5	− 5	+14	+ 6	− 9	+ 7	+28	+ 3	−10	1	−0.67
93705	19 04 52.60	+19 08 39.2	6.57	H	286.219 180 56	+19.144 234 92	2.18	−1.78	19.45	0.58	0.54	0.82	0.83	0.67	+25	−27	−22	+34	− 6	+ 0	−12	− 8	+22	+13	0	−1.19
93706 H	19 04 52.86	+04 32 34.1	8.72	H	286.220 254 57	+04.542 799 59 *	3.12	−0.33	−13.64	0.95	0.67	1.03	0.92	0.68	+ 4	−21	− 1	−24	− 8	− 2	− 6	−37	− 2	+15	0	2.18
93707	19 04 53.10	+08 28 34.7	8.54	H	286.221 231 59	+08.476 295 75	1.09	−3.06	−6.83	0.94	0.81	1.18	1.16	0.98	+10	−17	−25	−11	+ 4	−15	− 5	−23	+25	−14	0	0.40
93708	19 04 53.11	+15 44 09.6	7.00	H	286.221 294 53	+15.735 993 05	4.65	0.25	−1.73	0.57	0.54	0.81	0.76	0.71	+33	−19	−13	+40	− 8	+10	− 4	+ 4	+15	+44	2	−0.03
93709	19 04 54.42	−08 07 20.4	7.43	H	286.226 746 28	−08.122 326 97	5.11	−33.94	−56.09	0.97	0.67	1.08	1.12	0.88	+36	−49	−19	− 2	+23	+10	+19	−24	− 9	+ 5	2	1.40
93710	19 04 54.80	+79 38 48.4	7.91	H	286.228 339 50	+79.646 786 56	4.73	−41.09	−57.45	0.57	0.59	0.63	0.59	0.64	+ 3	− 3	+17	− 9	+ 9	−14	+13	− 9	− 3	+10	0	2.32
93711 H	19 04 54.84	+79 45 16.8	9.72	G	286.228 479 20	+79.754 662 42 A	30.79	−12.63	194.88	2.21	2.10	2.08	2.09	2.11	+ 0	+ 5	+ 5	−14	+ 5	− 6	+ 4	−12	− 6	+ 9	0	1.55
93712	19 04 54.85	+28 11 17.7	7.69	H	286.228 543 74	+28.188 245 37	2.10	1.68	−4.93	0.49	0.55	0.77	0.61	0.64	+ 0	− 9	−17	+18	+12	− 4	+10	+ 2	+ 5	− 5	0	−0.47
93713	19 04 55.17	+53 23 47.8	5.40	G	286.229 873 35	+53.396 603 17	9.34	−4.15	21.02	0.45	0.42	0.47	0.51	0.53	+ 7	−15	+ 3	−19	− 8	+ 4	−10	−17	+ 9	+28	1	0.00
93714	19 04 55.68	+00 13 58.5	8.77	H	286.231 986 43	+00.232 903 08	1.98	−0.08	−13.18	1.02	0.76	1.18	1.05	0.83	+24	−21	− 7	−23	− 5	+12	− 3	−32	− 1	+28	0	−0.18
93715	19 04 55.86	+19 16 08.0	7.27	H	286.232 762 58	+19.268 896 37	0.24	0.75	−6.75	0.58	0.58	0.88	0.71	0.69	+33	−28	−19	+21	− 1	+ 8	− 9	− 9	+23	+18	0	0.76
93716	19 04 56.38	−04 02 26.8	7.00	H	286.234 901 16	−04.040 781 90	5.90	0.24	−37.93	0.83	0.56	0.95	0.94	0.77	+13	− 6	− 5	−12	+17	+12	+20	−13	+25	+36	0	0.94
93717	19 04 57.66	−04 01 52.9	5.40	H	286.240 248 04	−04.031 355 05	10.04	20.76	−26.73	0.67	0.46	0.76	0.76	0.61	+ 8	− 6	−11	−16	+13	+ 6	+16	−19	+25	+36	0	1.77
93718	19 04 57.82	+31 44 39.3	5.63	1 H	286.240 930 53	+31.744 257 46	5.38	75.55	−76.41	0.40	0.47	0.57	0.47	0.55	+ 0	− 3	−20	+ 0	+18	+ 3	+18	+ 1	+11	+ 4	3	0.09
93719	19 04 58.10	−58 18 06.1	8.26	H	286.242 098 56	−58.301 691 89	2.46	−1.58	−12.27	0.90	0.67	1.17	0.90	0.71	+24	−32	−21	+24	−20	− 1	−24	−23	+ 7	+17	0	0.49
93720	19 04 58.27	+30 44 00.4	6.07	1 H	286.242 800 08	+30.733 447 97	4.39	21.82	−21.53	0.42	0.45	0.60	0.47	0.53	− 5	−11	−14	+18	+11	−13	+ 9	− 2	+11	− 5	3	0.67
93721 H	19 04 59.08	+21 14 24.2	8.02	G	286.246 174 27	+21.240 052 64 A	5.77	−24.68	−9.20	1.07	1.24	1.66	1.18	1.48	+37	−13	− 3	−36	−28	+ 9	−32	−36	+ 6	+28	1	1.83
93722	19 04 59.66	−07 08 51.6	10.04	H	286.248 570 24	−07.147 668 29 B	7.93	−1.85	−0.51	18.91	12.14	14.33	15.39	10.88	+45	−18	−10	− 1	+ 5	+ 5	− 3	−24	+11	+17	17	1.98
93723	19 04 59.95	−24 40 01.1	8.15	G	286.249 801 75	−24.666 975 03	7.82	13.44	0.70	0.98	0.58	1.01	0.97	0.61	−19	−29	−19	−12	+11	+ 6	+13	−36	+ 1	−22	0	−0.88
93724	19 05 00.13	−07 08 30.8	8.56	2 G	286.250 526 29	−07.141 887 22 A	1.73	−2.47	−0.44	3.13	2.08	2.89	3.26	2.36	+44	−14	−14	− 6	+ 7	− 1	− 1	−28	+14	+14	17	1.98
93725	19 05 01.78	+31 36 06.8	9.23	H	286.257 414 25	+31.601 887 70	8.47	7.50	7.03	0.73	0.80	1.00	0.84	0.93	+ 6	+ 1	−19	+28	+13	+ 7	+15	+11	+10	+ 6	0	1.63
93726	19 05 03.17	+25 50 17.0	7.58	H	286.263 220 32	+25.838 069 06	4.83	7.46	4.66	0.41	0.51	0.73	0.47	0.64	− 8	− 6	− 7	+27	+12	− 2	+11	+11	+ 8	−17	0	−0.03
93727	19 05 03.37	+57 07 31.9	9.29	2 H	286.264 049 11	+57.125 523 01	2.71	12.58	55.85	0.78	0.83	0.83	0.84	0.84	+19	+ 7	+34	+36	+22	− 1	+24	+19	+ 1	+23	0	0.06
93728	19 05 04.78	−61 30 27.3	7.65	H	286.269 927 55	−61.507 595 76	5.49	2.10	−23.26	0.68	0.63	0.99	0.91	0.77	− 2	−16	−12	+26	− 1	−12	+ 1	−45	− 3	+ 0	3	0.19
93729	19 05 05.26	−43 51 53.5	8.44	H	286.271 909 66	−43.864 860 50	4.01	7.74	−7.34	0.97	0.67	1.18	1.09	0.76	+29	−43	−26	−10	+ 8	+ 3	− 2	−36	+15	+ 7	0	−1.41
93730	19 05 05.80	+40 07 33.2	8.54	2 G	286.274 169 88	+40.125 890 15 A	5.86	4.68	−10.74	0.95	1.04	1.08	1.03	1.15	− 2	−18	−15	+ 5	+ 9	− 1	+ 8	+ 2	+12	+ 1	1	−0.25
93731	19 05 07.37	+23 04 37.9	8.54	G	286.280 719 13	+23.077 195 56	30.16	225.27	247.38	0.66	0.76	1.17	0.85	1.08	− 8	−16	− 9	−14	−17	+14	−14	− 8	−20	−10	1	−1.44
93732	19 05 08.54	+09 38 31.7	6.88	2 H	286.285 601 94	+09.642 138 37	3.49	1.44	−4.17	0.68	0.54	0.83	0.71	0.58	+ 5	−27	+ 1	−21	−15	+ 0	−16	−34	− 1	− 9	2	−0.03
93733	19 05 09.85	+49 55 23.4	6.45	H	286.291 023 90	+49.923 153 19	5.59	−7.37	5.44	0.46	0.44	0.50	0.50	0.49	− 4	−14	− 7	− 4	+15	− 4	+15	+ 2	− 7	− 3	0	1.11
93734	19 05 10.63	−46 29 22.5	8.51	H	286.294 281 65	−46.489 574 19	3.12	22.73	−26.05	1.12	0.78	1.25	1.37	0.88	+39	−29	−27	+ 7	+ 1	− 4	−10	−37	+ 6	+13	0	−0.37
93735	19 05 10.70	−63 21 17.2	8.63	H	286.294 562 95	−63.354 767 49	0.31	−27.28	−4.61	0.90	0.70	1.29	1.25	0.94	+ 4	−15	−28	+26	+ 9	−22	+ 0	− 7	+29	− 2	0	−0.78
93736	19 05 11.43	−26 08 19.9	7.37	H	286.297 636 83	−26.138 869 82	3.17	4.76	−2.60	0.93	0.56	1.01	1.05	0.71	− 6	−35	+25	+ 8	−13	+ 6	−13	−39	− 9	+ 1	0	0.15
93737	19 05 11.73	+10 25 00.6	9.13	H	286.298 863 63	+10.416 827 31	2.52	9.81	−0.37	1.02	0.85	1.25	1.21	0.98	− 6	−19	+ 2	−13	+11	+ 4	+ 8	−28	+ 3	−12	0	−0.64
93738	19 05 12.27	+31 26 21.1	7.72	H	286.301 136 50	+31.439 207 60	1.79	−1.46	−5.24	0.54	0.59	0.77	0.65	0.71	− 7	−17	−10	+19	+13	−10	+12	+ 2	+ 1	− 5	1	1.64
93739	19 05 12.31	−73 46 44.6	7.99	H	286.301 278 84	−73.779 053 28	4.42	−5.63	−14.03	0.49	0.61	0.81	0.56	0.69	−15	− 1	+14	+ 3	− 4	− 3	− 5	−23	−21	−19	0	−1.10
93740	19 05 14.88	−16 52 00.6	7.98	H	286.312 018 89	−16.866 831 23	1.57	−1.07	−1.71	0.81	0.51	0.94	1.00	0.71	+21	−27	−18	+ 7	− 1	+30	+ 4	−15	+10	+22	0	0.40
93741	19 05 17.45	+41 25 18.8	8.94	H	286.322 688 78	+41.421 875 57	1.30	0.07	−1.49	0.69	0.69	0.81	0.75	0.86	+ 5	+ 3	+ 0	− 7	− 4	+ 7	− 5	+ 5	− 3	+ 9	0	−1.04
93742	19 05 18.13	−33 01 04.5	8.66	H	286.325 529 35	−33.017 922 89	0.84	−2.06	−25.63	1.23	0.71	1.31	1.42	0.88	+16	−30	−10	+ 3	+ 2	−18	−11	−43	+12	− 9	0	0.68
93743	19 05 18.58	−01 30 44.0	6.51	H	286.327 403 00	−01.512 226 47	22.31	−15.89	9.47	0.71	0.51	0.80	0.81	0.65	+14	−21	− 4	−14	+ 8	+ 3	+12	−25	+ 5	+38	0	2.38
93744	19 05 20.02	+05 53 37.6	8.94	H	286.333 405 53	+05.893 784 65	6.25	19.25	−1.81	1.08	0.82	1.33	1.22	0.93	− 1	−33	−20	− 7	+12	−14	− 1	−34	+ 8	−43	0	0.91
93745	19 05 20.77	−61 41 25.2	8.29	H	286.336 541 40	−61.690 328 11	18.37	89.21	93.50	0.77	0.67	1.05	0.94	0.94	+ 7	−30	−11	+23	− 2	− 6	+ 3	−40	+ 0	+13	4	−0.11
93746	19 05 20.80	+25 55 14.8	7.18	H	286.336 666 21	+25.920 786 74	16.94	−40.68	−51.84	0.41	0.53	0.76	0.47	0.67	−14	− 2	− 8	+15	+11	− 8	+11	+ 6	+11	−22	0	−0.60
93747	19 05 24.61	+13 51 49.4	2.99	G	286.352 551 80	+13.863 709 83	39.18	−7.04	−95.31	0.65	0.49	0.72	0.60	0.46	+13	−29	−20	−27	+ 3	+20	− 1	−36	+24	+12	0	0.65
93748	19 05 24.83	+36 56 27.0	8.34	H	286.353 450 79	+36.940 841 75	3.07	2.63	−1.36	0.59	0.61	0.76	0.64	0.70	− 6	−14	−16	+ 4	+15	−13	+12	+13	+ 9	− 7	0	0.29
*93749	19 05 25.40	+42 10 39.6	7.23	1 H	286.355 829 69	+42.177 676 50	2.06	4.85	−9.27	0.49	0.57	0.61	0.51	0.72	+ 3	− 5	−12	+ 1	+12	− 3	+15	+29	−15	+ 3	0	1.70
*93750	19 05 25.36	+12 10 31.0	9.76	H	286.355 659 79	+12.175 290 46	1.48	0.62	−3.60	1.44	1.05	1.57	1.73	1.10	+ 7	−23	+ 4	+19	+ 8	− 5	+ 9	−28	+ 6	+18	0	−0.75
93751	19 05 26.39	−06 47 52.1	9.82	2 H	286.359 950 76	−06.797 818 78	1.42	−0.14	−3.34	1.29	0.82	1.60	1.49	1.11	+24	−20	−14	−29	+ 2	+20	+ 6	−31	+ 6	+11	3	0.29
93752	19 05 27.29	−41 44 15.6	8.82	H	286.363 696 21	−41.737 659 42	3.63	0.39	12.31	1.04	0.67	1.21	1.31	0.80	+10	−18	− 2	− 5	+14	+ 7	+ 7	−40	+ 0	− 8	0	0.03
93753	19 05 29.72	+11 16 11.4	7.66	H	286.373 822 26	+11.269 829 45	5.10	−3.66	−10.07	0.85	0.68	1.04	1.03	0.81	−22	− 7	−35	−21	+31	−15	+22	−41	+37	−35	0	−2.10
93754 H	19 05 30.85	+33 52 21.9	8.64	H	286.378 537 77	+33.872 740 96 A	10.68	15.21	−33.49	1.60	2.34	1.98	1.63	2.41	+18	− 7	+ 0	+ 3	+ 2	−21	+ 2	+21	− 6	+23	0	1.42
93755	19 05 31.12	+47 26 57.3	9.88	H	286.379 672 23	+47.449 236 49	1.55	−13.04	−7.22	0.97	0.90	1.03	1.08	1.10	+ 7	−10	+ 8	−20	+ 3	+ 0	− 1	− 2	− 2	+31	3	0.80
93756	19 05 32.41	−70 04 00.5	8.46	H	286.385 025 76	−70.066 803 17	1.57	7.19	−16.31	0.44	0.76	1.09	0.53	0.81	−18	− 9	− 8	+26	− 6	− 8	− 8	− 6	− 1	−25	0	−0.42
93757	19 05 34.33	+11 38 24.9	8.73	G	286.393 046 87	+11.640 249 44	5.35	−0.27	−7.10	1.11	0.78	1.31	1.31	0.90	+ 5	−36	−21	+ 8	+ 5	− 4	− 6	−26	+25	− 7	0	−0.93
93758 H	19 05 36.96	+27 24 26.5	8.20	H	286.403 986 53	+27.407 348 97 A	3.36	2.03	−6.99	2.22	2.15	1.14	0.85	0.94	+31	−10	− 8	+23	+ 8	+ 5	+ 7	+12	+12	− 8	1	−0.59
93759	19 05 37.20	−35 22 16.0	8.02	H	286.405 009 63	−35.371 109 80	0.32	3.03	−1.17	1.18	0.65	1.21	1.42	0.81	+ 7	−36	−19	+25	+12	− 8	− 5	−23	+15	−24	0	0.01
93760	19 05 38.76	−49 23 21.0	8.32	H	286.411 484 96	−49.389 175 39	4.43	4.12	−19.90	0.86	0.65	1.02	1.14	0.74	+16	−17	−16	− 6	+ 8	+16	+ 5	−29	+10	+ 6	0	−0.75
93761	19 05 39.14	−33 47 00.8	7.52	H	286.413 093 94	−33.783 558 20	4.92	1.55	10.10	0.96	0.55	0.97	1.15	0.68	− 9	−26	− 2	+ 7	+ 4	−10	− 2	−34	+ 0	−26	0	0.20
93762 H	19 05 39.17	+27 17 06.8	8.00	H	286.413 205 45	+27.285 214 16 *	6.30	26.36	1.43	0.55	0.67	0.92	0.66	0.78	−14	−19	− 1	+15	+ 8	−11	+ 6	− 1	+ 9	−18	0	1.27
93763	19 05 41.18	−15 39 37.4	5.93	H	286.421 580 90	−15.660 393 43	3.75	0.74	−10.36	0.74	0.46	0.83	0.87	0.64	+ 2	−22	−17	+ 9	− 5	+13	− 3	−26	+16	+16	4	1.67
93764	19 05 42.98	+04 16 42.6	7.34	2 H	286.429 080 02	+04.278 502 50	5.37	3.73	7.79	0.81	0.55	0.87	0.69	0.51	+ 8	−25	+ 2	−34	− 3	− 2	− 4	−40	+ 4	+ 5	0	0.21
93765	19 05 44.46	+19 04 41.0	9.10	H	286.435 260 17	+19.078 069 02	−0.78	−2.22	−7.46	0.90	0.80	1.37	1.24	1.01	+29	−36	−12	+38	+ 5	+ 2	− 6	+ 6	+24	+17	0	0.31
93766	19 05 44.78	+09 46 13.6	7.57	H	286.436 593 56	+09.770 448 18	7.29	−23.75	−20.39	0.82	0.64	0.93	0.90	0.72	+24	−14	+11	−42	−23	− 5	−23	−45	− 1	+14	0	1.59
93767	19 05 44.79	−26 38 31.1	8.71	H	286.436 639 16	−26.641 972 81	13.07	−31.44	−41.79	1.25	0.64	1.35	1.39	0.99	+ 0	−49	+12	+15	− 5	+14	−12	−20	+12	+11	0	−0.94
93768	19 05 46.14	−03 38 22.5	8.54	H	286.442 269 25	−03.639 580 93	2.53	1.17	2.29	1.00	0.66	1.17	1.23	1.04	+10	−14	− 2	−10	+15	+ 8	+19	−11	+ 6	+13	0	0.63
93769	19 05 46.90	−29 04 52.0	7.09	H	286.445 432 75	−29.081 109 23	2.98	−0.65	−6.45	0.92	0.52	0.99	1.12	0.67	− 2	−32	−13	+17	+12	− 9	− 2	−29	+19	−25	0	0.14
93770	19 05 47.13	+29 55 18.1	6.32	1 H	286.446 379 45	+29.921 701 80	2.49	−4.33	−11.40	0.43	0.48	0.65	0.48	0.57	−11	− 8	−15	+28	+ 1	−19	− 4	− 1	+24	−15	0	1.53
93771	19 05 47.59	−46 01 49.7	8.36	H	286.448 281 03	−46.030 462 23	0.98	15.53	−14.59	0.99	0.70	1.12	1.25	0.84	+23	−22	−21	− 6	− 7	+ 2	−10	−42	+ 8	+15	0	1.03
93772 H	19 05 47.70	+06 32 49.2	6.75	H	286.448 748 42	+06.546 995 63 A	16.34	7.39	−75.76	0.93	0.66	1.04	0.94	0.70	+ 4	−26	−15	− 8	+12	−20	+ 0	−26	+30	−18	2	0.92
93773	19 05 48.18	+12 12 27.2	7.44	2 H	286.450 761 19	+12.207 548 68	0.77	17.11	3.07	0.84	0.61	0.94	0.94	0.65	− 1	−29	+ 0	+ 8	+ 7	− 4	+ 5	−32	+ 8	+ 0	0	0.20
93774 H	19 05 48.42	−77 51 14.4	9.22	H	286.451 751 08	−77.853 992 22 A	7.31	1.22	29.35	2.62	2.61	2.70	2.06	2.23	− 7	−15	− 2	+ 9	+ 1	−13	+ 2	− 6	− 4	− 9	2	−0.03
93775	19 05 50.04	+59 17 31.2	7.68	H	286.458 479 86	+59.291 990 44	7.25	−0.82	10.96	0.52	0.53	0.54	0.54	0.59	+14	+ 3	+15	+15	+16	+ 9	+15	+22	+ 0	+23	0	−0.62
93776	19 05 50.76	+29 19 59.5	8.04	H	286.461 485 35	+29.333 190 07	5.86	6.25	−43.87	0.58	0.67	0.94	0.62	0.76	−18	+ 6	−19	+11	+15	−21	+14	− 3	+21	−19	0	−0.38
93777	19 05 52.36	+29 06 48.1	7.59	H	286.468 158 03	+29.113 369 82	2.09	−3.29	−1.87	0.46	0.54	0.74	0.53	0.64	−13	− 4	− 9	+13	+ 8	−15	+ 7	+ 3	+15	−16	0	−1.44
93778	19 05 53.62	+11 12 02.6	8.64	H	286.473 426 72	+11.200 716 80	2.28	−0.45	−3.28	1.10	0.93	1.42	1.47	1.19	− 7	− 4	−32	−16	+24	−12	+18	−35	+33	−17	0	−1.98
*93779	19 05 54.08	+77 10 57.5	9.01	H	286.475 339 26	+77.182 631 55	2.40	−4.13	−44.31	0.71	0.65	0.73	0.74	0.67	+ 8	−16	+15	−17	− 1	− 4	+ 0	− 6	+ 7	+19	0	0.40
*93780	19 05 54.04	−08 54 27.5	8.03	G	286.475 155 40	−08.907 643 50	8.76	−50.99	−105.83	0.88	0.54	1.09	1.21	0.84	+28	−19	+ 0	+12	− 3	+25	−20	−30	−18	−20	0	0.75
93781	19 05 55.80	+60 05 57.8	7.40	H	286.482 499 42	+60.099 397 99	6.68	29.64	22.37	0.54	0.55	0.58	0.59	0.66	− 1	+ 3	+18	+12	+14	+ 3	+15	+18	+17	+14	1	0.48
93782	19 05 55.98	+59 52 44.4	9.26	H	286.483 266 61	+59.878 995 00	4.22	4.49	−4.31	0.76	0.82	0.83	0.83	0.94	+ 0	− 7	+20	+26	+11	+ 6	+11	+16	+12	+20	0	1.22
93783	19 05 56.74	−36 11 46.2	8.50	H	286.486 403 54	−36.196 162 52	6.02	6.62	−24.89	1.24	0.69	1.25	1.45	0.94	+14	−37	−14	+29	+ 1	+ 5	− 5	−12	+13	+ 6	0	0.44
93784 H	19 05 57.82	−63 44 41.1	7.48	H	286.490 924 07	−63.744 742 97 A	3.61	−0.14	−20.19	1.46	1.01	1.17	1.20	0.98	− 9	− 8	−21	+10	+ 5	− 1	+ 8	+ 2	+26	+20	1	0.22
93785	19 05 57.85	−19 28 52.7	8.23	2 T	286.491 052 95	−19.481 293 50	0.85	7.62	0.77	0.90	0.60	1.01	1.02	0.71	+17	−10	− 3	− 2	−21	+19	−19	−42	−18	+14	2	2.67
93786	19 05 58.19	−60 06 33.3	8.90	2 H	286.492 447 12	−60.109 237 16	0.72	−5.46	−3.29	0.92	0.68	1.21	1.15	0.81	−29	−12	+ 2	+41	−14	+ 6	− 1	− 1	+ 1	+ 1	0	−0.94
93787	19 05 59.01	+07 19 22.2	8.82	H	286.495 859 01	+07.322 827 98	4.87	12.44	−0.18	1.10	0.87	1.30	1.30	1.01	+20	−21	− 8	− 5	−17	+ 1	−22	−27	+ 1	− 7	0	−0.43
93788	19 05 59.36	+35 52 50.6	8.06	H	286.497 352 74	+35.880 734 48	5.03	3.26	−4.17	0.51	0.59	0.69	0.52	0.75	+ 1	+12	− 5	+ 5	+ 7	− 9	+ 9	+34	− 5	+ 0	0	−0.01
93789	19 06 02.83	−44 52 57.5	9.01	H	286.511 788 59	−44.882 642 85	8.70	41.97	−97.25	1.08	0.84	1.48	1.53	1.18	− 1	−19	−18	−22	+35	− 5	+21	−53	+33	−18	0	0.03
93790 H	19 06 03.21	−27 21 15.8	10.11	H	286.513 376 71	−27.354 398 35 B	9.43	27.11	6.72	6.54	3.37	5.62	6.67	3.83	−24	−26	+38	+ 4	− 9	− 6	+ 4	−49	−36	−18	4	0.82
93791	19 06 03.35	−55 33 25.3	11.69	G	286.513 978 81	−55.557 019 89	2.38	2.89	−7.34	2.27	1.84	3.02	2.64	2.08	+31	−13	− 2	+30	−23	−14	−16	−18	− 6	+44	4	−0.85
*93792	19 06 03.97	−27 20 37.5	9.79	G	286.516 528 87	−27.343 754 38	0.43	10.25	−1.28	2.35	1.19	2.46	2.94	1.73	− 1	−41	− 3	+ 8	− 2	+ 0	−14	−44	+ 4	−23	0	−1.75
*93793	19 06 03.76	+15 11 42.0	9.73	H	286.515 678 13	+15.195 010 64	−0.29	−1.22	−7.25	0.94	1.01	1.45	1.24	1.27	+49	−13	−12	+30	− 7	+26	− 2	− 4	+23	+59	0	−0.59
93794	19 06 04.30	−57 16 45.7	8.65	H	286.517 916 22	−57.279 374 77	1.89	−6.86	−4.91	1.13	0.88	1.38	1.22	1.00	+37	−19	− 8	+12	−45	− 1	−40	−50	−10	+40	0	−0.92
93795	19 06 04.83	+03 44 22.6	8.47	H	286.520 117 96	+03.739 605 30	4.65	−4.94	−17.35	1.06	0.71	1.12	1.46	1.07	+22	−28	−12	−45	− 9	+15	− 9	−50	+ 7	+18	0	−0.24
93796	19 06 05.40	+03 15 59.1	8.59	G	286.522 481 12	+03.266 406 13	3.94	0.04	−2.90	0.92	0.66	1.06	0.96	0.70	+ 8	−27	−18	−31	+ 5	− 5	+ 2	−32	+ 8	−19	0	−0.23
93797	19 06 06.94	+05 16 48.0	9.58	G	286.528 931 92	+05.280 001 41	33.40	66.08	−184.67	1.89	1.58	1.56	2.48	1.94	+42	−36	−13	−70	−32	+33	−30	−69	+ 0	+28	4	1.13
93798 H	19 06 09.37	+30 26 18.8	8.02	H	286.539 048 50	+30.438 544 72 A	13.26	65.98	−8.24

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
93701	9.620	0.023	8.481	0.015		1.000	0.015	G	0.98	0.01	H	8.5374	0.0021	0.014	82		8.52	8.56		C			1							
93702	8.697	0.012	7.395	0.008		1.107	0.011	T	1.07	0.01	L	7.4215	0.0010	0.008	102		7.40	7.44		C			1							S
93703	10.091	0.029	8.763	0.016		1.127	0.026	T	1.09	0.03	L	8.8349	0.0016	0.013	101		8.81	8.86					1							
93704	9.320	0.014	9.318	0.019		0.007	0.022	T	0.03	0.02	L	9.3444	0.0021	0.023	137		9.31	9.39		C			1							
93705	8.450	0.011	6.737	0.005		1.430	0.010	T	1.42	0.02	L	6.7086	0.0011	0.010	131		6.69	6.73					1							S
93706	9.000	0.015	8.751	0.016	*	0.237	0.021	T	0.26	0.03	L *	8.7870	0.0024	0.017	85	*	8.76	8.81		C	19049+0433	H 1	2 C S B	AB	145	0.142	0.041	2.07	0.89	
93707	8.913	0.013	8.567	0.013		0.350	0.015	G	0.41	0.02	H	8.6201	0.0020	0.019	89		8.60	8.66		C			1							
93708	7.087	0.005	7.011	0.006		0.075	0.007	T	0.09	0.01	L	7.0327	0.0010	0.009	122		7.02	7.05		C			1							S
93709	8.760	0.011	7.559	0.008		1.028	0.011	T	1.00	0.01	L	7.5987	0.0009	0.009	113		7.58	7.62					1 G							S
93710	9.167	0.014	8.013	0.009		0.970	0.015	G	0.95	0.01	H	8.0738	0.0013	0.011	115		8.06	8.10					1 S							
93711	10.975	0.044	9.715	0.025	A	1.102	0.038	G	1.18	0.05	I *	9.7626	0.0025	0.022	110	*	9.73	9.80			19049+7945	H 1	2 C C	AB	280	3.616	0.096	3.43	0.31	
93712	7.852	0.006	7.713	0.007		0.134	0.009	T	0.15	0.01	L	7.7409	0.0010	0.013	169		7.72	7.76		C			1							S
93713	5.387	0.003	5.406	0.003		−0.014	0.001	G	0.01	0.00	H	5.4087	0.0005	0.005	119		5.40	5.42		C			1							S
93714	10.205	0.033	8.901	0.019		1.108	0.030	T	1.07	0.03	L	8.9389	0.0022	0.018	86		8.91	8.98		C			1							
93715	9.348	0.014	7.426	0.006		1.595	0.012	T	1.61	0.01	L	7.3856	0.0012	0.014	148		7.37	7.41					1							S
93716	8.910	0.017	7.128	0.008		1.484	0.015	T	1.50	0.02	L	7.1290	0.0015	0.014	96		7.11	7.15			19050−0402	I 2	1							S
93717	6.847	0.005	5.528	0.003		1.120	0.005	T	1.08	0.01	L	5.5647	0.0009	0.007	97		5.55	5.58		C	19050−0402	I 2	1							S
93718	7.638	0.008	5.801	0.003		1.548	0.003	G	1.68	0.15	K	5.7377	0.0009	0.011	127		5.72	5.75		M			1							S
93719	8.223	0.009	8.246	0.012		−0.016	0.014	T	0.01	0.01	L	8.2624	0.0023	0.019	81		8.24	8.29					1							S
93720	8.119	0.008	6.263	0.003		1.575	0.007	T	1.98	0.02	O	6.1506	0.0017	0.016	148		6.12	6.18		U 2			1							S
93721	9.599	0.014	8.198	0.008	A	1.113	0.218	G	1.17	0.03	L *	8.1880	0.0017	0.019	190	*	8.15	8.22		D	19050+2114	H 1	2 C C	AB	341	4.558	0.034	3.56	0.15	
93722	11.750	0.150	9.931	0.048	B						T	10.0892	0.0369			B				D	19050−0709	I 2	1 C I A							
93723	8.640	0.011	8.197	0.011		0.432	0.015	G	0.50	0.02	H	8.2350	0.0020	0.014	102		8.21	8.26					1							S
93724	8.602	0.012	8.552	0.015	A	0.060	0.015	G	0.07	0.01	H	8.6186	0.0130	0.049	118	A	8.48	8.68	1.84	P 1 A	19050−0709	I 2	1 C P A							P
93725	9.730	0.018	9.296	0.020		0.410	0.025	T	0.48	0.03	L	9.3284	0.0024	0.023	129		9.28	9.38					1							
93726	7.694	0.005	7.583	0.006		0.108	0.007	T	0.12	0.01	L	7.6185	0.0010	0.012	203		7.60	7.64					1							S
93727	9.641	0.020	9.344	0.022		0.282	0.031	T	0.32	0.04	L	9.3602	0.0075	0.059	116		9.29	9.46	0.57	P 1 A			1							P
93728	8.906	0.013	7.773	0.009		0.975	0.012	T	0.96	0.01	L	7.8116	0.0011	0.010	89		7.79	7.83					1							S
93729	8.418	0.011	8.429	0.014		−0.030	0.003	G	−0.01	0.00	H	8.4371	0.0018	0.015	84		8.42	8.46		C			1							
93730	8.735	0.018	8.568	0.021	A	0.163	0.015	G	0.18	0.01	H	8.5899	0.0069	0.026	130	A	8.55	8.65		U	19051+4008	I 1	2 C A	AB	87	13.630	0.014	2.38	0.06	
93731	9.554	0.013	8.608	0.010		0.807	0.003	G	0.85	0.00	H	8.6801	0.0018	0.020	182		8.65	8.71					1							
93732	7.071	0.008	6.899	0.010		0.157	0.012	T	0.17	0.01	L	6.9309	0.0054	0.034	68		6.90	6.99	2.37	P 1 A			1							S
93733	8.204	0.011	6.595	0.005		1.348	0.010	T	1.31	0.01	L	6.5961	0.0010	0.008	101		6.59	6.61			19052+4955	I 1	1							S
93734	9.831	0.025	8.630	0.016		1.028	0.023	T	1.00	0.02	L	8.6771	0.0018	0.017	82		8.65	8.71		C			1							
93735	10.290	0.028	8.783	0.014		1.267	0.025	T	1.23	0.03	L	8.7927	0.0020	0.018	98		8.76	8.83		C			1							
93736	9.411	0.018	7.547	0.008		1.549	0.016	T	1.61	0.04	L	7.4842	0.0013	0.009	76		7.46	7.50					1							S
93737	9.530	0.021	9.159	0.022		0.380	0.015	G	0.44	0.02	H	9.2149	0.0021	0.020	79		9.18	9.25		C			1							
93738	9.009	0.012	7.824	0.008		1.015	0.011	T	0.99	0.01	L	7.8840	0.0011	0.014	137		7.86	7.91					1							S
93739	8.033	0.008	7.990	0.009		0.039	0.011	T	0.05	0.01	L	8.0132	0.0014	0.015	156		7.99	8.04		C			1							S
93740	7.942	0.011	7.977	0.014		−0.027	0.016	T	−0.01	0.02	L	7.9756	0.0011	0.007	80		7.97	7.99					1							S
93741	8.941	0.013	8.900	0.016		0.043	0.019	T	0.06	0.01	L	8.9561	0.0014	0.014	106		8.94	8.99					1							
93742	9.213	0.017	8.712	0.017		0.471	0.022	T	0.54	0.02	L	8.7609	0.0018	0.013	75		8.74	8.78		C			1							
93743	6.935	0.006	6.560	0.006		0.359	0.020	G	0.42	0.02	H	6.5995	0.0009	0.007	82		6.59	6.61		C			1							
93744	9.512	0.017	9.000	0.017		0.481	0.022	T	0.55	0.02	L	9.0448	0.0023	0.016	72		9.01	9.07		C			1							
93745	8.911	0.012	8.345	0.011		0.534	0.012	T	0.61	0.01	L	8.4042	0.0023	0.014	87		8.38	8.44					1							S
93746	8.575	0.008	7.291	0.005		1.093	0.007	T	1.05	0.01	L	7.3455	0.0010	0.013	194		7.32	7.37					1							S
93747	3.024	0.002	2.991	0.003		0.014	0.003	G	−0.01	0.06	G	2.9935	0.0005	0.005	69		2.99	3.01			19055+1352	I 1	1							S
93748	8.337	0.008	8.325	0.010		0.016	0.012	T	0.04	0.01	L	8.3485	0.0020	0.019	124		8.32	8.38					1							
93749	9.358	0.013	7.402	0.006		1.622	0.011	T	1.64	0.01	L	7.3441	0.0018	0.018	137		7.31	7.37		U			1							S
93750	10.192	0.034	9.807	0.040		0.364	0.049	T	0.43	0.05	L	9.8437	0.0040	0.023	78		9.80	9.88					1							G
93751	9.988	0.024	9.848	0.032		0.135	0.037	T	0.15	0.04	L	9.8758	0.0052	0.036	102		9.82	9.97	2.69	P 1 A			1							G
93752	9.300	0.019	8.850	0.019		0.438	0.021	T	0.51	0.02	L	8.9164	0.0020	0.016	89		8.89	8.95		C			1							
93753	7.730	0.011	7.664	0.010		0.066	0.014	T	0.08	0.01	L	7.6872	0.0015	0.011	72		7.67	7.70					1							S
93754	9.428	0.016	8.766	0.014	*	0.614	0.018	T	0.68	0.02	L *	8.7710	0.0013	0.019	116	*	8.74	8.81		D	19055+3352	I 1	2 C A	AB	202	0.557	0.003	0.37	0.02	
93755	11.234	0.069	10.051	0.038		1.014	0.061	T	0.99	0.05	L	10.0480	0.0026	0.027	101		10.00	10.09					1							G
93756	10.375	0.018	8.608	0.008		1.472	0.016	T	1.49	0.02	L	8.5887	0.0012	0.021	299		8.55	8.62					1							
93757	8.910	0.016	8.752	0.019		0.160	0.015	G	0.18	0.01	H	8.7836	0.0021	0.016	71		8.76	8.81		D			1							
93758	8.260	0.007	8.219	0.009	*	0.043	0.010	T	0.06	0.01	L *	8.2257	0.0015	0.017	169	*	8.20	8.26		D	19056+2724	H 1	2 C A	AB	45	0.330	0.013	2.45	0.14	S
93759	9.934	0.026	8.183	0.012		1.460	0.023	T	1.47	0.04	L	8.1567	0.0020	0.013	77		8.13	8.19					1							
93760	8.573	0.011	8.329	0.012		0.228	0.016	T	0.25	0.02	L	8.3872	0.0018	0.019	92		8.36	8.42					1							S
93761	8.977	0.013	7.641	0.008		1.115	0.134	G	1.08	0.02	A	7.6884	0.0013	0.012	92		7.66	7.71		C			1							S
93762	8.435	0.007	8.047	0.008	*	0.367	0.010	T	0.43	0.01	L *	8.0900	0.0012	0.016	176	*	8.06	8.12		D	19057+2717	I 1	2 C S A	AB	173	0.183	0.007	0.53	0.31	S
93763	5.902	0.003	5.930	0.004		−0.015	0.005	G	0.01	0.02	A	5.9404	0.0008	0.007	76		5.93	5.95			19057−1540	I 1	1							S P
93764	7.618	0.009	7.372	0.008		0.234	0.011	T	0.26	0.01	L	7.4035	0.0025	0.027	82		7.36	7.45		U 2			1							S
93765	9.344	0.015	9.129	0.017		0.205	0.021	T	0.23	0.02	L	9.1612	0.0018	0.016	129		9.12	9.20		C			1							
93766	9.054	0.017	7.708	0.010		1.141	0.015	T	1.10	0.02	L	7.7436	0.0016	0.012	67		7.72	7.77		C			1							
93767	9.457	0.018	8.769	0.016		0.623	0.018	T	0.69	0.02	L	8.8453	0.0020	0.016	77		8.82	8.87		C			1							
93768	10.630	0.045	8.740	0.017		1.570	0.038	T	1.59	0.04	L	8.6580	0.0020	0.017	90		8.62	8.69		C			1							
93769	7.080	0.007	7.092	0.007		−0.006	0.009	T	0.01	0.01	L	7.0964	0.0010	0.008	82		7.09	7.11					1							S
93770	8.485	0.009	6.517	0.004		1.668	0.008	T	1.93	0.03	O	6.4132	0.0012	0.012	148		6.39	6.43		U 2			1							S
93771	9.569	0.022	8.486	0.015		0.937	0.020	T	0.93	0.01	L	8.5264	0.0021	0.015	80		8.50	8.56		C			1							
93772	7.329	0.007	6.790	0.006	*	0.505	0.008	T	0.58	0.01	L *	6.8578	0.0012	0.010	70	*	6.85	6.88		D	19058+0633	I 1	2 C A	AB	153	9.494	0.005	1.97	0.02	S
93773	9.972	0.025	7.712	0.009		1.940	0.015	G	1.92	0.01	J	7.5258	0.0060	0.035	74		7.46	7.56		U 2			1 S							
93774	9.953	0.019	9.320	0.017	*	0.583	0.019	T	0.65	0.02	L *	9.3495	0.0026	0.023	154	*	9.29	9.39		D	19058−7751	I 1	2 C A	AB	274	0.485	0.004	0.17	0.02	
93775	7.827	0.007	7.689	0.008		0.133	0.010	T	0.15	0.01	L	7.7259	0.0011	0.011	114		7.71	7.75		C	19058+5918	I 1	1							S
93776	9.170	0.012	8.158	0.009		0.883	0.011	T	0.89	0.01	L	8.2009	0.0014	0.015	151		8.18	8.22		C			1							
93777	7.568	0.005	7.581	0.007		−0.007	0.008	T	0.01	0.01	L	7.5912	0.0009	0.009	157		7.58	7.61		C			1							S
93778	9.159	0.024	8.736	0.024		0.500	0.015	G	0.57	0.02	H	8.7445	0.0023	0.016	68		8.72	8.77		C			1							
93779	10.526	0.039	9.099	0.019		1.205	0.034	T	1.16	0.03	L	9.1791	0.0015	0.015	115		9.15	9.21					1							
93780	8.574	0.010	8.060	0.010		0.483	0.013	T	0.55	0.01	L	8.1259	0.0011	0.012	111		8.11	8.15		C			1							S
93781	8.789	0.012	7.524	0.007		1.078	0.011	T	1.04	0.01	L	7.5700	0.0012	0.009	100		7.55	7.59		C			1							S
93782	10.484	0.034	9.370	0.021		0.960	0.031	T	0.95	0.03	L	9.4181	0.0026	0.022	105		9.39	9.46					1							
93783	9.105	0.018	8.553	0.017		0.517	0.022	T	0.59	0.02	L	8.6130	0.0017	0.012	67		8.59	8.64		C			1							
93784	7.497	0.007	7.493	0.009	*	0.005	0.010	T	0.03	0.01	L *	7.4939	0.0013	0.011	100	*	7.47	7.51		D	19060−6345	I 1	2 C A	AB	282	0.376	0.007	2.02	0.05	S
93785	8.212	0.010	8.221	0.013		0.010	0.000	G	0.03	0.00	H	8.2331	0.0424	0.245	76		8.01	8.60	0.71	P 1 A			1							
93786	11.225	0.064	9.113	0.018		1.786	0.055	T	2.45	0.09	O	8.9257	0.0031	0.032	113		8.88	9.00		U 2			1							
93787	10.653	0.040	8.949	0.017		1.423	0.034	T	1.41	0.05	L	8.9596	0.0019	0.019	82		8.93	8.99		C			1 S							
93788	8.180	0.008	8.044	0.010		0.131	0.012	T	0.15	0.01	L	8.1061	0.0015	0.014	139		8.08	8.13		C	19060+3553	I 1	1							S
93789	9.624	0.019	9.070	0.018		0.524	0.019	T	0.60	0.02	L	9.1261	0.0013	0.015	89		9.10	9.17		C			1							
93790											T *	10.1520	0.0032	0.025	73	*	10.09	10.23		D	19061−2721	I 2	2 C A	BC	191	4.850	0.009	0.45	0.04	G
93791						1.250	0.020	G	1.21	0.02	I	11.8468	0.0061	0.052	101		11.76	11.94					1							D
93792						1.380	0.020	G	1.35	0.02	H	9.9680	0.0049	0.031	71		9.92	10.03		D	19061−2721	I 2	1							G
93793	10.033	0.020	9.770	0.025		0.250	0.030	T	0.28	0.04	L	9.8029	0.0023	0.019	131		9.76	9.84		C			1							G
93794	10.511	0.039	8.809	0.017		1.421	0.034	T	1.41	0.05	L	8.7902	0.0021	0.015	84		8.76	8.82		C			1							
93795	9.818	0.024	8.608	0.016		1.035	0.023	T	1.01	0.02	L	8.6388	0.0016	0.013	81		8.61	8.67		C			1 G							
93796	9.246	0.018	8.686	0.017		0.617	0.019	G	0.69	0.02	H	8.7208	0.0023	0.020	92		8.68	8.76					1							
93797	10.854	0.055	9.676	0.032		0.969	0.020	G	1.02	0.02	I	9.7357	0.0034	0.023	76		9.71	9.77		C			1 G							G
93798	8.903	0.011	8.206	0.009	A	0.700	0.495	G	0.69	0.02	L *	8.1519	0.0017	0.015	145	*	8.13	8.17		D	19062+3026	I 1	2 C A	AB	283	1.257	0.008	1.48	0.03	
93799	8.259	0.011	8.221	0.013		0.035	0.015	T	0.05	0.01	L	8.2235	0.0015	0.012	81		8.20	8.24		C			1							S
93800	9.866	0.024	8.451	0.013		1.195	0.021	T	1.15	0.02	L	8.4840	0.0027	0.020	77		8.45	8.52		C			1							

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Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
93801	19 06 10.76	−09 37 55.9	6.63	H	286.544 818 17	−09.632 185 68	1.44	3.53	−9.64	0.77	0.48	0.91	1.01	0.65	+13	−10	+ 0	+26	− 9	+35	−24	−16	−20	−29	5	3.17
93802	19 06 11.79	+53 47 54.2	9.16	H	286.549 120 00	+53.798 380 28	2.87	4.39	10.00	0.78	0.63	0.74	0.83	0.80	+19	−36	− 5	−37	−12	+10	−21	−18	+20	+38	0	1.10
93803	19 06 12.41	+19 43 27.0	8.97	H	286.551 707 13	+19.724 162 87	0.96	0.48	−7.27	0.75	0.89	1.18	1.01	1.16	+49	− 8	− 3	+22	+ 4	+24	+ 3	+16	+ 5	+33	3	1.43
93804	19 06 12.63	+57 31 29.4	8.68	H	286.552 610 61	+57.524 831 43	1.82	−8.44	−24.69	0.73	0.72	0.76	0.75	0.85	+10	+ 7	+ 6	+15	+11	+ 0	+12	+16	− 2	+10	0	1.02
93805	19 06 14.95	−04 52 56.4	3.43	G	286.562 291 39	−04.882 334 56	26.05	−19.68	−90.37	0.68	0.46	0.81	0.67	0.49	− 4	−23	−27	−30	+14	+ 5	+13	−42	+21	+ 2	7	1.65
93806	19 06 15.21	−45 21 54.1	8.81	H	286.563 377 41	−45.365 028 90	2.39	−0.47	−5.13	1.18	0.78	1.41	1.52	0.99	+ 7	−39	−18	−16	+31	+ 0	+19	−43	+13	−14	0	0.07
93807	19 06 15.78	+34 24 50.2	8.31	H	286.565 759 98	+34.413 944 72	3.67	11.83	5.06	0.57	0.66	0.81	0.70	0.84	− 5	+ 5	+ 5	+ 4	+ 7	−21	+ 9	+17	+12	− 9	0	−1.71
93808	19 06 17.03	+41 24 49.6	6.51	1 H	286.570 977 54	+41.413 786 20	1.60	1.19	−2.42	0.45	0.51	0.56	0.46	0.64	− 3	− 3	−12	− 6	− 2	+ 4	− 3	+19	− 6	+ 2	0	−0.15
93809	19 06 18.19	−11 38 57.0	7.60	2 H	286.575 779 12	−11.649 174 35	5.80	22.39	−34.70	0.78	0.51	0.87	0.84	0.56	− 4	−21	−13	+ 4	+ 2	+21	+ 4	−19	+ 2	− 8	0	1.63
93810	19 06 18.56	−69 49 48.2	8.02	H	286.577 343 35	−69.830 052 28	4.34	6.99	−18.65	0.38	0.58	0.86	0.43	0.58	−14	−10	−12	+41	− 4	− 6	− 7	+ 0	− 1	−21	0	1.46
93811	19 06 19.20	+13 50 30.4	8.69	H	286.579 984 59	+13.841 765 39	3.96	0.63	−4.49	0.95	0.77	1.06	0.97	0.80	+12	−10	−18	−34	+ 0	+ 7	+ 0	−37	+ 6	− 2	2	1.31
93812	19 06 19.24	−27 17 13.4	7.39	H	286.580 177 65	−27.287 069 44	5.93	6.75	−7.74	1.03	0.50	1.05	1.14	0.67	−13	−48	+ 4	+18	− 4	+14	−10	−22	+ 3	−24	0	0.65
93813	19 06 19.59	+32 18 48.7	8.10	H	286.581 606 50	+32.313 521 96	2.82	6.50	7.07	0.56	0.63	0.76	0.65	0.76	− 5	+ 9	− 6	+ 1	+15	−10	+16	−14	+10	− 3	0	0.22
93814	19 06 19.79	+15 51 40.7	7.32	H	286.582 464 60	+15.861 307 69	5.47	15.06	7.58	0.60	0.57	0.83	0.80	0.77	+36	−11	−22	+20	−16	+20	−12	−12	+ 2	+25	0	0.79
93815	19 06 19.92	−52 20 26.3	5.17	1 H	286.583 019 29	−52.340 630 12	19.07	30.63	−115.20	0.86	0.48	0.79	0.84	0.62	−13	−38	+ 0	−13	+ 1	+ 3	− 1	−41	+16	− 2	0	−0.37
93816	19 06 20.90	−57 11 27.7	11.32	H	286.587 103 10	−57.191 025 28	0.80	9.70	−10.53	2.52	2.14	3.16	2.95	2.47	+39	−23	− 7	+ 7	−43	− 2	−34	−43	−10	+47	4	0.59
93817	19 06 21.37	+27 42 49.6	8.95	2 H	286.589 028 99	+27.713 771 32	A 19.80	−85.70	−202.75	1.15	1.31	1.62	1.25	1.40	− 4	− 7	−22	+34	+ 5	− 1	+ 5	+ 8	+ 3	−10	1	0.56
93818	19 06 21.67	+24 39 15.6	8.41	H	286.590 280 21	+24.654 335 02	2.96	−14.48	11.57	0.51	0.72	1.04	0.54	0.94	−15	− 5	+ 0	+36	+15	− 5	+15	− 4	+ 4	−25	3	−2.03
93819	19 06 21.76	−22 36 00.9	8.49	G	286.590 670 44	−22.600 248 28	4.38	41.55	−20.25	1.22	0.70	1.22	1.34	0.81	−27	−21	−17	−27	+30	−13	+23	−49	+18	−36	0	−0.12
93820	19 06 22.25	+08 13 48.6	7.61	3 T	286.592 704 72	+08.230 164 69	* 4.73	5.18	−67.05	0.92	0.82	1.19	1.15	0.99	+23	+ 3	+21	−30	−30	−16	−23	−52	−26	+31	0	3.03
93821	19 06 22.53	−06 04 28.4	9.98	G	286.593 858 73	−06.074 556 07	8.33	−5.64	−21.52	1.33	0.84	1.58	1.44	1.10	+26	−26	−17	−33	− 2	+ 6	− 2	−41	+11	+18	0	−0.45
93822 H	19 06 23.03	+07 09 19.8	6.71	H	286.595 968 42	+07.155 495 20	A 10.33	11.60	43.68	1.36	1.03	1.39	1.36	1.03	+28	−10	−19	−17	− 5	− 5	− 6	−22	+ 6	− 3	11	1.65
93823	19 06 24.04	−34 12 01.1	9.51	H	286.600 146 63	−34.200 296 21	13.64	76.83	−118.07	1.57	0.86	1.68	1.84	1.14	−10	−43	−20	+ 7	+ 3	+10	− 8	−34	+15	−31	0	1.44
93824	19 06 24.99	+08 41 24.9	9.30	H	286.604 108 68	+08.690 249 64	2.89	8.56	0.41	1.12	0.89	1.34	1.41	1.06	−12	−27	− 4	− 3	+ 2	− 5	+ 1	−27	+18	+ 8	0	−1.12
93825 H	19 06 25.04	−37 03 45.9	4.23	G	286.604 331 58	−37.062 757 14	A 55.89	96.93	−279.67	4.56	2.04	1.94	2.44	1.34	+30	−23	− 1	− 7	+ 4	+ 9	+ 3	−32	−22	− 1	26	1.69
93826	19 06 25.39	−09 47 52.2	9.33	H	286.605 804 09	−09.797 822 73	1.01	0.37	−0.53	1.14	0.77	1.42	1.53	1.08	+12	+11	− 3	+ 9	− 9	+34	−12	−27	+ 2	+ 5	0	−0.73
93827	19 06 25.43	−11 53 47.0	7.25	G	286.605 959 85	−11.896 393 81	25.78	−186.88	−415.96	0.70	0.48	0.82	0.74	0.50	+12	−29	−15	− 2	− 3	+27	− 1	−21	+ 4	+ 4	0	0.96
93828	19 06 26.99	+28 43 03.4	9.20	G	286.612 451 37	+28.717 605 93	10.52	−75.65	−89.38	0.78	0.85	1.13	0.95	1.03	− 4	−18	−11	+32	+ 2	−11	− 1	+ 5	+14	− 4	0	−1.19
93829	19 06 27.08	−71 34 55.9	8.83	H	286.612 834 57	−71.582 206 69	0.72	1.83	−10.77	0.59	0.79	1.13	0.67	0.85	−28	−18	+15	+21	−13	−15	+11	+ 4	+ 3	−30	1	1.86
93830	19 06 28.19	+13 57 19.0	9.61	H	286.617 448 75	+13.955 289 42	4.79	−1.08	−6.84	1.37	1.13	1.58	1.35	1.14	+27	−17	−29	−26	−14	+16	−13	−36	+15	+16	0	1.37
93831	19 06 28.26	+37 23 18.0	7.23	H	286.617 749 06	+37.388 344 04	2.35	1.55	13.36	0.50	0.55	0.64	0.55	0.63	−10	+ 3	−21	+ 9	+19	−17	+18	+14	+11	− 7	0	−0.12
93832	19 06 32.29	−23 15 12.3	7.45	H	286.634 525 94	−23.253 411 98	4.05	−11.87	5.22	1.08	0.60	0.86	1.41	0.77	−57	−18	− 7	−39	+48	+ 5	+45	−58	− 2	−69	0	−0.77
93833	19 06 33.60	+06 53 25.6	7.28	H	286.640 005 37	+06.890 456 85	8.15	13.15	−1.48	0.78	0.56	0.95	0.90	0.67	+ 0	−22	−24	+ 6	− 7	+ 1	−19	−18	+ 5	−48	0	0.06
93834	19 06 33.92	−82 29 32.9	8.16	H	286.641 323 90	−82.492 459 92	6.02	−40.82	44.29	0.65	0.67	0.87	0.69	0.89	−12	−35	+ 3	+ 6	− 9	+11	+ 0	+19	−23	−28	1	−0.88
93835	19 06 34.89	−01 20 33.6	9.70	G	286.645 384 51	−01.342 670 44	B 2.02	6.86	−9.08	93.82	70.96	2.45	2.64	2.24	+88	+ 0	+ 0	+ 0	+ 8	+ 0	− 1	+17	+43	16	2.24
93836	19 06 35.11	−01 20 46.0	6.84	G	286.646 310 72	−01.346 110 38	A 2.02	6.86	−9.08	2.83	2.24	2.45	2.64	2.24	+42	+ 1	+ 9	−16	− 6	+ 8	− 5	−22	+17	+43	16	2.24
93837	19 06 35.40	−22 05 08.3	9.68	H	286.647 484 23	−22.085 645 50	−0.03	−10.37	0.68	1.56	0.89	1.64	1.81	1.11	− 4	−28	− 5	+ 6	− 7	− 3	−15	−38	+11	−18	0	0.92
93838	19 06 35.50	−57 06 42.5	8.31	H	286.647 922 34	−57.111 791 84	4.65	9.58	−16.97	1.03	0.86	1.28	1.14	0.89	+26	−19	+ 7	+25	−45	−17	−32	−36	−26	+36	0	0.79
*93839	19 06 35.85	+80 43 47.4	7.36	H	286.649 375 21	+80.729 843 59	4.78	−1.83	13.69	0.54	0.47	0.55	0.67	0.55	− 1	−17	+12	− 6	+ 3	− 4	+ 2	+ 0	− 3	+16	1	0.85
*93840	19 06 35.83	+01 31 20.3	7.60	H	286.649 281 92	+01.522 297 70	2.88	−5.76	14.55	0.80	0.61	0.98	0.79	0.61	+14	−15	− 4	−18	+ 5	+ 4	+ 2	−30	+15	+ 6	0	−1.63
93841	19 06 36.90	+41 30 56.5	8.23	H	286.653 765 11	+41.515 698 32	4.34	−4.27	4.18	0.59	0.60	0.70	0.68	0.79	+ 2	− 6	−20	+ 3	− 2	− 2	− 3	+13	+ 4	+ 4	1	−0.83
93842	19 06 37.64	+07 41 27.4	9.30	H	286.656 814 18	+07.690 947 05	1.27	22.58	−6.82	1.11	0.91	1.36	1.31	1.10	+19	−17	−14	−17	−13	− 4	−16	−27	+ 7	− 1	2	0.88
93843	19 06 37.68	+28 37 42.2	5.53	H	286.657 017 13	+28.628 389 60	24.50	75.83	84.43	0.37	0.41	0.58	0.45	0.49	− 2	−11	−14	+11	+ 9	−12	+ 6	+ 0	+ 9	− 4	0	0.44
93844	19 06 38.11	−51 25 03.2	7.19	2 T	286.658 809 29	−51.417 561 76	1.61	−5.29	0.71	0.73	0.51	0.83	0.89	0.66	− 1	−19	−20	− 7	+19	+15	+21	−37	+22	− 6	0	−0.05
93845	19 06 38.36	+24 15 02.7	5.78	H	286.659 836 99	+24.250 758 12	9.82	58.30	14.37	0.38	0.43	0.62	0.48	0.60	− 6	−11	−14	−10	−11	− 2	−13	− 6	+ 8	−11	1	−0.23
93846	19 06 41.35	+09 08 53.1	8.40	H	286.672 307 97	+09.148 070 41	3.38	−2.53	−8.06	1.01	0.72	1.15	1.11	0.80	−11	−36	− 4	− 8	− 7	+ 3	− 8	−28	+15	+ 5	0	0.28
93847	19 06 43.91	−42 48 52.8	7.01	H	286.682 954 81	−42.814 657 48	7.17	3.45	−52.80	0.88	0.65	1.05	1.24	0.70	+ 1	−14	−40	−35	+41	−32	+21	−59	+28	−29	0	1.16
93848	19 06 44.20	−40 31 06.8	8.97	H	286.684 186 43	−40.518 542 90	0.63	0.01	−31.36	1.35	0.82	1.42	1.94	1.02	+11	−31	− 8	+33	+20	−22	+ 9	−22	− 6	− 9	0	0.07
93849	19 06 44.27	−12 24 12.8	8.94	H	286.684 474 50	−12.403 552 44	2.68	0.65	−4.18	0.87	0.59	1.02	1.02	0.69	+15	−22	−15	−10	+ 3	+23	− 1	−28	+ 9	− 8	0	−0.91
93850	19 06 47.36	+13 32 51.1	8.81	H	286.697 336 52	+13.547 535 46	3.00	−3.10	7.10	1.03	0.86	1.20	1.08	0.94	+ 8	−19	−18	−37	+ 0	+11	+ 0	−44	+11	+ 2	0	2.38
93851	19 06 48.64	+36 07 41.2	7.59	H	286.702 680 10	+36.128 102 92	4.65	−20.03	−13.75	0.49	0.57	0.66	0.53	0.63	− 1	+ 9	+ 9	+ 5	+ 9	− 9	+10	+23	+ 2	+ 2	0	−0.40
93852	19 06 50.21	+33 38 55.7	8.31	G	286.709 219 55	+33.648 797 71	5.81	3.09	−0.09	0.62	0.67	0.83	0.74	0.83	− 4	− 5	+ 1	+35	+ 2	−14	+ 3	+ 9	+ 9	− 2	0	0.94
93853	19 06 51.51	+48 55 32.0	7.23	H	286.714 640 29	+48.925 543 01	2.91	−16.41	−21.36	0.52	0.49	0.57	0.58	0.56	− 3	− 7	−16	−10	+13	+ 1	+13	− 1	− 2	+ 4	1	0.67
93854	19 06 51.86	+18 38 42.5	10.66	H	286.716 066 70	+18.645 150 82	−3.03	−6.08	−6.58	2.26	1.86	2.82	3.02	2.43	+23	−23	+16	+48	+13	+ 6	+14	+ 6	+19	+42	0	−2.50
93855 H	19 06 52.12	−16 13 45.2	6.00	H	286.717 157 88	−16.229 235 84	A 3.65	−1.28	−16.61	1.12	0.66	1.18	1.77	1.02	+11	+ 2	−28	+48	−14	+19	−24	−16	+16	−14	2	0.18
*93856	19 06 52.42	+05 14 29.9	8.28	H	286.718 430 00	+05.241 637 63	5.30	5.14	−3.14	0.86	0.66	0.98	1.01	0.74	− 6	− 1	− 2	−22	− 1	− 8	− 2	−28	− 4	−19	0	0.48
*93857	19 06 52.42	−49 00 07.9	8.40	G	286.718 410 44	−49.002 181 99	4.07	19.76	−42.95	1.01	0.71	1.12	1.32	0.93	+14	−16	− 4	−24	− 2	− 1	− 3	−45	+ 3	+13	4	−0.23
93858	19 06 52.60	−37 48 35.2	6.15	G	286.719 180 34	−37.809 766 97	58.24	−187.66	−366.77	0.92	0.57	0.91	1.61	0.83	−31	−14	−15	−15	+38	−24	+21	−52	+14	−64	0	1.19
93859 H	19 06 53.00	+22 10 21.5	7.24	H	286.720 835 92	+22.172 636 54	A 12.61	−5.35	−76.10	0.60	0.71	0.96	0.59	0.73	−27	−12	+ 8	− 3	−11	+11	−11	−14	−13	−32	1	2.07
93860	19 06 54.81	−50 19 23.0	6.29	H	286.728 395 67	−50.323 067 34	6.27	−3.00	−31.65	0.74	0.54	0.80	0.87	0.64	+ 1	−27	−29	−22	+32	+ 8	+34	−31	+ 8	−19	0	2.12
93861	19 06 54.89	−29 57 12.5	8.75	H	286.728 701 61	−29.953 474 27	0.75	−12.12	9.02	1.39	0.72	1.61	1.59	1.00	+16	−48	−39	+16	+24	−20	− 8	−39	+35	−29	0	0.39
93862	19 06 55.60	−48 17 56.8	5.95	G	286.731 647 13	−48.299 114 62	9.33	12.70	−12.30	0.62	0.44	0.73	0.82	0.52	+ 7	−24	−18	−14	+21	− 8	+10	−39	+13	−19	0	−1.68
93863	19 06 56.12	−74 45 26.6	7.51	H	286.733 823 44	−74.757 391 23	3.92	4.90	−22.43	0.42	0.54	0.68	0.46	0.63	−19	−12	+ 6	− 5	+ 4	− 7	+ 4	− 4	+ 6	−25	0	−1.63
93864	19 06 56.44	−27 40 11.3	3.32	G	286.735 176 29	−27.669 814 16	+ 27.09	−50.79	−250.51	1.57	1.44	1.48	2.42	2.84	−45	− 3	−54	−60	+56	−27	+46	−92	+58	−66	0	0.08
93865	19 06 57.02	−01 44 02.7	7.99	H	286.737 603 27	−01.734 093 48	1.83	−3.93	−9.19	0.85	0.62	0.96	1.00	0.79	+24	− 9	− 1	−18	+ 1	+ 9	+ 2	−21	+14	+41	0	−0.64
93866	19 06 58.29	−22 29 51.3	6.87	H	286.742 880 45	−22.497 594 08	2.81	0.58	−8.98	0.86	0.46	0.85	0.95	0.54	−25	−34	− 6	− 5	+ 9	+13	+ 6	−34	+ 1	−37	0	1.78
93867 H	19 06 58.60	+11 04 16.7	5.07	G	286.744 180 54	+11.071 305 01	A 6.43	−0.27	−31.47	1.63	1.14	0.79	0.73	0.59	−24	+ 1	−16	−19	+16	− 2	+15	−20	+33	−35	1	0.19
93868	19 06 59.14	+26 27 22.5	7.66	H	286.746 412 90	+26.456 245 43	2.25	15.97	26.45	0.49	0.61	0.87	0.59	0.70	−13	−13	+ 0	+23	+17	−14	+12	+ 2	+18	−23	0	−0.26
93869	19 07 00.09	−19 59 05.5	8.77	H	286.750 366 46	−19.984 852 11	A 0.26	3.65	−24.52	3.27	2.12	2.67	3.15	2.19	+ 1	− 9	−25	−26	− 5	+15	+ 1	−43	+ 4	+ 8	0	1.56
93870	19 07 01.13	−19 59 04.7	11.06	H	286.754 709 85	−19.984 651 55	B 3.00	68.57	−37.18	46.10	28.05	14.81	48.77	25.17	− 9	− 3	−25	−15	− 3	+10	+ 3	−33	+ 2	+ 1	0	1.56
93871	19 07 02.23	+07 37 03.8	9.23	G	286.759 298 61	+07.617 722 81	41.19	−322.25	−759.59	1.20	0.93	1.34	1.32	1.02	+26	−16	+ 4	−25	−10	−12	−12	−41	− 7	+ 3	0	1.14
93872	19 07 03.16	−51 55 53.5	8.85	H	286.763 161 34	−51.931 514 35	4.50	3.39	−5.08	1.06	0.85	1.28	1.57	1.26	+34	−11	− 3	− 2	−13	+ 4	−16	−34	+14	+30	4	0.14
93873	19 07 05.86	+20 53 20.0	10.77	2 G	286.774 431 07	+20.888 888 27	115.91	−480.82	−345.60	1.37	1.70	2.47	1.65	2.51	+38	−30	−30	−18	− 3	+10	+ 0	+ 1	+ 7	+31	0	0.40
93874	19 07 06.18	−37 50 11.6	9.47	H	286.775 763 16	−37.836 552 46	6.88	−12.01	−2.92	1.62	1.00	1.68	3.16	1.47	−15	−13	−23	+14	+24	−32	− 5	−38	+20	−62	0	1.03
93875	19 07 06.24	+51 39 27.3	8.23	G	286.776 002 91	+51.657 576 10	7.11	7.20	7.98	0.63	0.61	0.69	0.71	0.72	+ 5	−14	− 2	+ 7	+ 6	+16	+ 6	+ 2	+ 9	+10	0	−0.90
93876 H	19 07 06.36	+72 04 26.3	7.03	H	286.776 495 26	+72.073 964 95	A 4.79	7.72	41.30	1.64	2.25	1.54	1.37	1.95	+ 7	−16	+ 0	−10	+ 3	− 6	+ 3	+ 1	− 3	+ 7	5	2.18
93877	19 07 06.46	−29 09 38.9	8.75	H	286.776 913 40	−29.160 810 39	3.23	−3.89	−14.29	1.27	0.67	1.34	1.51	0.93	+ 3	−38	−21	+23	+ 7	−13	−10	−28	+20	−24	0	−0.23
93878	19 07 06.75	−05 47 49.8	10.04	H	286.778 120 60	−05.797 178 87	4.53	1.56	−4.08	1.44	1.00	1.76	1.87	1.43	+19	−36	−15	−30	+18	+16	+ 8	−54	+13	− 7	2	−0.37
93879	19 07 06.82	+45 16 39.1	9.93	H	286.778 429 24	+45.277 527 41	2.95	−24.36	72.51	0.98	1.05	1.17	1.17	1.42	− 4	− 5	+ 7	+ 2	+ 9	− 9	+10	+15	+11	− 3	6	−0.62
93880	19 07 06.89	+61 18 07.9	8.04	H	286.778 708 88	+61.302 191 73	3.73	−0.09	15.39	0.59	0.57	0.60	0.62	0.72	+ 3	+ 5	+13	+22	+21	− 8	+29	+ 6	+11	+20	0	0.00
*93881	19 07 07.75	+22 34 54.0	9.60	H	286.782 285 91	+22.581 653 86	B 7.70	14.68	29.47	5.68	6.64	6.90	5.24	6.39	−33	− 9	+ 8	+ 4	−17	+19	−18	− 3	−20	−39	15	2.74
*93882	19 07 07.70	−35 36 13.0	9.46	H	286.782 077 35	−35.603 624 14	8.66	−44.48	−26.31	1.58	0.97	1.74	1.95	1.35	+26	−37	−13	+23	+12	−10	− 4	−12	+ 5	+ 5	0	−1.34
93883	19 07 07.77	+17 53 35.0	9.37	H	286.782 381 24	+17.893 046 42	2.66	3.62	−0.18	1.12	1.05	1.45	1.46	1.28	+18	− 4	−20	+27	+ 4	+ 9	+10	−23	+27	+32	0	0.74
93884	19 07 07.89	−41 43 15.6	10.18	G	286.782 866 14	−41.721 010 90	−0.43	−2.85	−43.67	1.39	0.84	1.49	1.91	1.14	− 4	−17	+ 8	+13	+ 7	+11	+ 1	−24	− 6	−20	0	−0.63
93885	19 07 08.01	+22 35 03.5	7.43	H	286.783 365 08	+22.584 298 68	A 9.25	15.58	31.38	0.87	1.01	1.22	1.09	1.28	−36	− 5	+ 7	+ 0	−13	+16	−14	−10	−17	−44	15	2.74
93886	19 07 08.30	−66 49 35.1	8.57	H	286.784 573 08	−66.826 413 54	2.57	5.58	−0.86	0.59	0.69	1.04	0.55	0.69	−12	− 2	−15	−60	+11	− 6	+10	−52	+ 3	−11	1	0.26
93887 H	19 07 08.33	−18 44 17.3	6.28	1 H	286.784 696 18	−18.738 127 80	A 4.50	−2.00	−17.70	0.99	0.71	1.05	1.08	0.75	+12	+18	+ 0	+13	+ 3	+19	− 9	−30	−16	−13	1	0.51
93888	19 07 08.43	−44 13 33.0	7.98	H	286.785 118 79	−44.225 835 61	2.51	2.81	−1.71	0.92	0.63	1.13	1.15	0.79	+ 1	−26	− 7	− 7	+16	+ 6	+ 9	−39	+15	− 8	0	−0.02
*93889	19 07 08.64	−80 33 08.9	8.83	H	286.786 013 86	−80.552 480 53	14.35	−48.76	10.14	0.68	0.82	0.97	0.76	1.07	− 9	− 9	+ 8	+15	−17	−18	−16	+21	− 3	−20	4	0.59
*93890	19 07 08.60	+17 03 55.6	8.34	H	286.785 823 11	+17.065 441 06	5.49	8.30	−13.43	0.75	0.68	0.99	0.86	0.84	+15	−19	−18	+13	+ 2	+21	+ 7	+ 0	+ 4	+19	0	1.42
93891	19 07 08.93	+26 42 47.5	8.48	H	286.787 203 49	+26.713 190 34	4.41	12.39	37.24	0.60	0.69	1.00	0.70	0.78	−18	−18	+ 4	+23	+14	− 8	+ 9	+ 1	+17	−23	0	−0.69
93892	19 07 09.03	+00 38 27.6	6.55	H	286.787 640 73	+00.641 005 50	4.34	−8.34	−11.22	0.88	0.67	0.88	1.39	1.13	−31	− 9	− 4	−58	+42	+14	+42	−66	+ 1	−47	0	−1.07
93893	19 07 09.13	−39 07 57.0	9.06	2 H	286.788 046 19	−39.132 504 37	7.18	−2.21	−9.54	1.54	0.98	1.87	2.53	1.27	+13	+ 0	−43	+35	+28	−28	− 9	−47	+34	−36	0	−0.54
93894	19 07 10.03	+20 57 48.0	9.84	H	286.791 794 78	+20.963 342 87	10.64	−131.29	−180.71	0.94	1.28	1.72	1.22	1.86	+37	−24	−24	− 8	+ 0	+14	+ 4	+17	+ 4	+29	0	0.52
93895	19 07 10.54	−13 39 49.8	8.08	H	286.793 936 02	−13.663 834 81	0.96	1.04	−9.70	0.83	0.52	0.93	1.03	0.69	+ 3	−23	−10	+ 8	− 2	+22	− 2	+14	− 6	+ 4	0	0.05
93896	19 07 11.23	+08 20 56.6	8.84	G	286.796 772 98	+08.349 048 14	1.55	−0.27	−16.49	0.99	0.82	1.25	1.35	0.96	+12	−16	− 8	−13	− 3	−26	− 5	−39	+ 5	+18	0	0.47
93897	19 07 11.36	−47 30 48.2	9.63	G	286.797 323 36	−47.513 397 50	2.17	20.47	22.80	1.36	0.92	1.49	1.75	1.11	+11	−25	− 3	−31	+ 8	− 7	+ 4	−52	− 3	− 5	0	−0.25
93898 H	19 07 12.17	+44 50 30.2	8.34	G	286.800 702 05	+44.841 726 80	A 2.11	0.01	8.24	1.15	1.20	1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
93801	7.980	0.010	6.778	0.007		1.029	0.010	T	1.00	0.01	L	6.7966	0.0009	0.008	77		6.79	6.81		C			1							S
93802	9.432	0.019	9.194	0.022		0.200	0.015	G	0.22	0.02	H	9.2273	0.0015	0.013	105		9.21	9.25					1							
93803	9.120	0.010	8.964	0.012		0.150	0.015	T	0.17	0.01	L	9.0271	0.0020	0.020	182		8.99	9.07					1							
93804	10.041	0.026	8.821	0.017		1.043	0.024	T	1.01	0.02	L	8.8408	0.0032	0.018	91		8.81	8.88					1							
93805	3.330	0.002	3.419	0.002		−0.096	0.005	G	−0.09	0.02	A	3.4026	0.0004	0.003	100		3.40	3.41					1							S
93806	10.548	0.037	8.972	0.018		1.322	0.032	T	1.28	0.04	L	8.9677	0.0019	0.015	82		8.94	9.00		C			1							
93807	8.549	0.010	8.327	0.012		0.212	0.015	T	0.23	0.02	L	8.3717	0.0014	0.014	136		8.35	8.39		C			1							
93808	6.304	0.004	6.475	0.005		−0.147	0.006	T	−0.14	0.01	L	6.4537	0.0024	0.021	105		6.42	6.48	1.69	P 1 A			1							S
93809	7.920	0.010	7.619	0.010		0.286	0.013	T	0.33	0.02	L	7.6699	0.0016	0.013	78		7.65	7.70		P 1 A			1							S
93810	8.140	0.005	8.026	0.005		0.103	0.006	T	0.12	0.01	L	8.0557	0.0010	0.016	278		8.03	8.08					1							S
93811	8.947	0.020	8.742	0.023		0.196	0.029	T	0.21	0.03	L	8.7519	0.0022	0.015	70		8.72	8.78					1							
93812	7.397	0.007	7.389	0.011		0.019	0.004	G	0.04	0.00	H	7.3992	0.0013	0.009	79		7.39	7.41		C			1							S
93813	9.933	0.027	8.273	0.013		1.388	0.024	T	1.36	0.03	L	8.2414	0.0015	0.017	121		8.21	8.27					1							
93814	7.784	0.007	7.342	0.008		0.387	0.008	G	0.45	0.01	H	7.4046	0.0007	0.009	96		7.39	7.42					1 G							S
93815	5.822	0.004	5.235	0.003		0.532	0.005	G	0.60	0.01	H	5.2902	0.0014	0.014	72		5.27	5.31		U 2			1 G							S
93816											T	11.4553	0.0059	0.040	79		11.37	11.54		C			1 S							G
93817	10.140	0.022	9.022	0.014	A	0.955	0.021	T	1.00	0.02	L	9.0912	0.0101	0.042	180	A	9.01	9.14		U 2	19064+2743	M 1	2 C C	AB	69	11.321	0.058	3.71	0.30	P
93818	10.054	0.020	8.530	0.010		1.281	0.018	T	1.24	0.02	L	8.5685	0.0013	0.018	230		8.54	8.60					1							
93819	9.939	0.025	8.632	0.015		1.100	0.015	G	1.06	0.02	H	8.6533	0.0019	0.013	94		8.62	8.68		C			1							
93820	9.069	0.018	7.730	0.011		1.136	0.017	T	1.10	0.02	L	7.5729	0.1837	1.388	84		5.79	8.99	277.00	P 1 B	19063+0814	I 1	1 V							G P
93821	10.677	0.046	10.060	0.045		0.560	0.020	G	0.63	0.02	H	10.1352	0.0024	0.019	103		10.10	10.16		C			1							G
93822	7.112	0.008	6.708	0.007	*	0.382	0.010	T	0.45	0.01	L *	6.7957	0.0009	0.009	75	*	6.78	6.81		D	19064+0709	I 1	2 C A	AB	290	8.061	0.004	0.65	0.01	S
93823	10.270	0.038	9.597	0.034		0.612	0.038	T	0.68	0.03	L	9.6407	0.0039	0.026	82		9.60	9.67					1 G							
93824	9.702	0.021	9.319	0.023		0.363	0.029	T	0.42	0.03	L	9.3933	0.0025	0.017	78		9.36	9.42		C			1							G
93825						0.523	0.010	G	0.59	0.02	A *	4.3123	0.0007	0.004	72	*	4.31	4.32		D	19064−3704	I 1	2 C A	AB	107	1.214	0.007	0.07	0.03	S
93826	9.649	0.024	9.347	0.027		0.287	0.034	T	0.33	0.04	L	9.4100	0.0024	0.017	75		9.38	9.45		C			1 S							
93827	7.933	0.009	7.310	0.008		0.570	0.007	G	0.64	0.01	H	7.3654	0.0009	0.008	83		7.35	7.38		C	19064−1154	I 1	1							S
93828	9.887	0.021	9.261	0.019		0.550	0.015	G	0.62	0.01	H	9.3162	0.0024	0.028	143		9.27	9.37					1							
93829	10.632	0.028	8.978	0.012		1.383	0.024	T	1.36	0.03	L	8.9749	0.0015	0.024	216		8.93	9.02					1							
93830	9.829	0.041	9.645	0.051		0.176	0.061	T	0.19	0.07	L	9.6672	0.0051	0.035	63		9.61	9.71					1							G
93831	8.650	0.010	7.359	0.006		1.098	0.009	T	1.06	0.01	L	7.3991	0.0011	0.011	124		7.38	7.42					1							S
93832	8.900	0.014	7.582	0.008		1.119	0.013	T	1.08	0.01	L	7.6151	0.0009	0.009	90		7.60	7.63		C			1							S
93833	7.499	0.007	7.301	0.008		0.189	0.010	T	0.21	0.01	L	7.3413	0.0015	0.011	72		7.33	7.36		C			1							S
93834	8.847	0.010	8.228	0.009		0.576	0.012	T	0.65	0.01	L	8.2850	0.0015	0.015	136		8.26	8.31		C			1							S
93835	9.869	0.035	9.622	0.042	B	0.225	0.015	G	0.25	0.02	H	9.8521	0.0706			B				D	19066−0121	I 2	1 C F D							D
93836	6.895	0.006	6.833	0.006	A	0.193	0.010	G	0.21	0.01	H	6.8522	0.0049	0.016	85	A	6.83	6.89		D	19066−0121	I 2	1 C P D							S D
93837	11.454	0.112	9.861	0.043		1.335	0.095	T	1.30	0.11	L	9.8346	0.0023	0.021	87		9.80	9.87		C			1							G
93838	8.696	0.012	8.367	0.012		0.312	0.016	T	0.36	0.02	L	8.3836	0.0028	0.018	83		8.35	8.41					1							S
93839	8.527	0.009	7.458	0.006		0.926	0.008	T	0.92	0.01	L	7.5209	0.0008	0.007	110		7.51	7.54		C			1							S
93840	9.728	0.022	7.821	0.010		1.583	0.019	T	1.60	0.02	L	7.7100	0.0017	0.015	88		7.68	7.73		R			1							
93841	8.373	0.009	8.253	0.011		0.116	0.013	T	0.13	0.01	L	8.2787	0.0014	0.012	101		8.26	8.31					1							
93842	9.899	0.025	9.354	0.025		0.511	0.032	T	0.58	0.03	L	9.4095	0.0027	0.021	84		9.38	9.44		C			1							G
93843	5.869	0.003	5.557	0.002		0.296	0.003	T	0.34	0.00	L	5.6001	0.0005	0.006	158		5.59	5.61					1							S
93844	7.810	0.017	7.251	0.011		0.523	0.018	T	0.60	0.02	L	7.3159	0.0115	0.074	89		7.22	7.62	779.00	P 1 C			1 G							
93845	5.920	0.002	5.797	0.003		0.104	0.000	G	0.12	0.00	H	5.8231	0.0005	0.007	155		5.81	5.83					1							S
93846	8.684	0.011	8.429	0.012		0.243	0.015	T	0.27	0.02	L	8.4731	0.0024	0.015	78		8.45	8.50		C			1							
93847	8.229	0.008	7.110	0.005		0.964	0.007	T	0.95	0.01	L	7.1724	0.0009	0.010	116		7.16	7.19		C			1							S
93848	10.614	0.057	9.117	0.028		1.260	0.050	T	1.22	0.05	L	9.1355	0.0032	0.021	76		9.10	9.17		C			1							
93849	9.301	0.019	9.002	0.021		0.284	0.027	T	0.32	0.03	L	9.0085	0.0018	0.012	72		8.99	9.04		C			1							
93850	10.448	0.041	8.962	0.020		1.251	0.036	T	1.21	0.04	L	8.9783	0.0015	0.017	75		8.94	9.02		C			1							
93851	8.968	0.017	7.701	0.011		1.079	0.016	T	1.04	0.01	L	7.7541	0.0012	0.012	143		7.74	7.78		C			1							
93852	8.828	0.011	8.361	0.011		0.465	0.015	G	0.54	0.02	H	8.4145	0.0015	0.019	125		8.39	8.45					1							
93853	9.040	0.013	7.371	0.007		1.395	0.012	T	1.37	0.01	L	7.3782	0.0014	0.011	114		7.36	7.39					1							S
93854	10.762	0.048	10.731	0.075		0.033	0.082	T	0.05	0.06	L	10.6745	0.0055	0.049	101		10.57	10.77					1 S							G
93855	5.938	0.006	5.968	0.006	*	−0.025	0.007	T	0.00	0.01	L *	5.9980	0.0007	0.007	70	*	5.99	6.01		D	19069−1614	I 1	2 C A	AB	0	6.358	0.006	2.54	0.04	S
93856	8.877	0.012	8.341	0.012		0.556	0.003	G	0.63	0.00	H	8.4015	0.0017	0.012	82		8.37	8.42		C			1							
93857	9.927	0.027	8.527	0.015		1.182	0.003	G	1.14	0.00	H	8.5738	0.0016	0.012	83		8.55	8.60					1							
93858	7.032	0.007	6.229	0.005		0.705	0.014	G	0.73	0.02	A	6.2891	0.0009	0.007	81		6.28	6.31		C			1							S
93859	7.668	0.005	7.253	0.005	*	0.415	0.015	G	0.48	0.02	H *	7.3311	0.0009	0.012	235	*	7.32	7.35		D	19069+2211	I 1	2 C A	AB	31	8.070	0.005	2.15	0.02	S
93860	6.208	0.004	6.275	0.005		−0.057	0.006	T	−0.04	0.01	L	6.2780	0.0009	0.007	83		6.27	6.29		C			1 G							S
93861	11.087	0.089	8.943	0.023		1.772	0.073	T	1.80	0.07	L	8.8519	0.0018	0.017	82		8.83	8.88					1							
93862	5.945	0.004	5.956	0.005		−0.017	0.000	G	0.01	0.00	H	5.9599	0.0008	0.005	90		5.95	5.97		C			1							S
93863	7.438	0.005	7.503	0.007		−0.055	0.008	T	−0.03	0.01	L	7.4976	0.0012	0.013	171		7.48	7.52		C			1							S
93864	4.844	0.005	3.448	0.003		1.169	0.044	G	1.15	0.02	A	3.4689	0.0007	0.004	70		3.46	3.48					1 O							S
93865	8.202	0.010	8.029	0.011		0.166	0.014	T	0.18	0.01	L	8.0477	0.0017	0.013	90		8.03	8.08		C			1							
93866	8.194	0.012	6.993	0.007		1.028	0.011	T	1.00	0.01	L	7.0339	0.0007	0.006	100		7.02	7.05		C			1							S
93867	5.003	0.003	5.066	0.003	*	−0.055	0.015	G	−0.03	0.01	H *	5.0603	0.0015	0.008	71	*	5.05	5.07		D	19070+1104	M 1	2 C A	AB	305	0.310	0.004	0.95	0.03	S P
93868	9.373	0.013	7.807	0.007		1.314	0.012	T	1.28	0.01	L	7.8195	0.0013	0.013	177		7.80	7.84					1							
93869	10.151	0.029	8.903	0.017	A	1.064	0.027	T	1.03	0.02	L	8.9429	0.0103	0.030	77	A	8.90	9.00		D	19070−1959	I 2	1 C P A							
93870	12.865	0.498	11.186	0.195	B						T	11.2743	0.0777			B				D	19070−1959	I 2	1 C I A							D
93871	10.584	0.037	9.343	0.022		1.056	0.014	G	1.11	0.02	I	9.3494	0.0029	0.022	81		9.31	9.39		C			1							G
93872	10.611	0.053	8.976	0.023		1.368	0.046	T	1.34	0.06	L	8.9997	0.0021	0.018	75		8.96	9.03					1							
93873						1.570	0.015	G	2.52	0.06	I	10.8099	0.0042	0.045	144		10.71	10.88		U	19072+2053	I 2	1							G
93874	10.282	0.043	9.546	0.036		0.660	0.042	T	0.72	0.04	L	9.6015	0.0031	0.022	72		9.57	9.64		C			1							
93875	8.664	0.011	8.243	0.011		0.403	0.015	G	0.47	0.02	H	8.3143	0.0014	0.013	93		8.29	8.34					1							S
93876	7.871	0.011	7.172	0.008	*	0.644	0.011	T	0.71	0.01	L *	7.1699	0.0008	0.008	124	*	7.15	7.19		D	19071+7204	I 1	2 C A	AB	14	0.730	0.003	0.05	0.01	S
93877	10.163	0.032	8.896	0.019		1.079	0.029	T	1.04	0.02	L	8.9128	0.0016	0.015	88		8.88	8.94					1							
93878	10.427	0.034	10.066	0.039		0.342	0.048	T	0.40	0.07	L	10.1156	0.0028	0.021	101		10.06	10.16		C			1 G							G
93879	10.532	0.044	9.956	0.041		0.538	0.053	T	0.61	0.06	L	10.0437	0.0038	0.028	95		10.00	10.08					1							G
93880	8.390	0.009	8.068	0.010		0.325	0.015	G	0.38	0.02	H	8.1172	0.0020	0.014	99		8.10	8.14					1							S
93881	10.128	0.022	9.515	0.020	B	0.580	0.020	G	0.73	0.09	L	9.7903	0.0155			B				D	19071+2235	I 2	1 C I A							
93882	10.254	0.040	9.508	0.032		0.682	0.041	T	0.74	0.03	L	9.5968	0.0027	0.020	72		9.56	9.63		C			1							
93883	11.453	0.078	9.535	0.026		1.592	0.065	T	1.61	0.07	L	9.4807	0.0025	0.019	88		9.45	9.52		C			1							G
93884	9.911	0.028	10.148	0.048		−0.196	0.003	G	−0.21	0.00	H	10.1213	0.0034	0.021	74		10.08	10.16		C			1							G
93885	7.678	0.004	7.447	0.005	A	0.220	0.006	T	0.24	0.01	L	7.4960	0.0023	0.017	255	A	7.48	7.54		D	19071+2235	I 2	1 C P A							S
93886	9.911	0.014	8.682	0.009		1.050	0.013	T	1.02	0.01	L	8.7345	0.0013	0.019	273		8.70	8.77			19071−6650	I 1	1							
93887	6.224	0.005	6.274	0.006	*	−0.044	0.006	G	−0.02	0.01	H *	6.2717	0.0032	0.017	80	*	6.24	6.29	1.19	P 1 A	19071−1844	H 1	2 C A	AB	104	0.696	0.012	2.81	0.04	S P
93888	9.904	0.023	8.147	0.011		1.465	0.020	T	1.47	0.03	L	8.1104	0.0019	0.015	96		8.08	8.14					1							
93889	9.728	0.019	8.911	0.015		0.721	0.018	T	0.77	0.01	L	8.9718	0.0020	0.020	141		8.94	9.01		C			1							
93890	8.565	0.011	8.357	0.013		0.199	0.016	T	0.22	0.02	L	8.4084	0.0018	0.014	86		8.38	8.43		C			1							
93891	9.902	0.017	8.615	0.011		1.095	0.016	T	1.06	0.02	L	8.6533	0.0014	0.015	177		8.62	8.68		C			1							
93892	6.603	0.004	6.562	0.005		0.043	0.006	T	0.06	0.01	L	6.5724	0.0010	0.008	77		6.56	6.58		C			1 G							S
93893	11.202	0.090	9.375	0.030		1.551	0.078	T	3.26	0.09	O	8.8920	0.0139	0.114	69		8.57	9.10		U 2 C			1 S							
93894	10.650	0.036	9.901	0.029		0.670	0.035	T	0.73	0.03	L	9.9743	0.0032	0.032	154		9.91	10.03					1							G
93895	8.227	0.009	8.116	0.011		0.108	0.013	T	0.12	0.01	L	8.1245	0.0014	0.010	87		8.11	8.15		C			1							
93896	8.953	0.014	8.823	0.017		0.130	0.015	G	0.14	0.01	H	8.8911	0.0024	0.019	83		8.86	8.93		C			1							
93897	10.108	0.033	9.693	0.035		0.500	0.020	G	0.57	0.02	H	9.7541	0.0026	0.021	79		9.71	9.79		C			1							
93898	9.192	0.015	8.442	0.013	*	0.704	0.015	G	0.76	0.01	H *	8.4739	0.0019	0.019	105	*	8.45	8.51		D	19072+4451	I 1	2 C A	AB	188	0.570	0.007	1.99	0.03	S
93899						1.570	0.015	G	2.52	0.06	I	10.8236	0.0048	0.053	144		10.73	10.91		U	19072+2053	I 2	1							G
93900	9.877	0.039	8.172	0.018		1.521	0.020	G	1.56	0.03	H	8.1376	0.0015	0.014	108		8.11	8.16		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
93901	19 07 14.67	−24 31 26.0	7.81	H	286.811 121 03	−24.523 895 08		1.22	−4.10	−3.20	1.02	0.59	1.00	1.12	0.75	−28	−12	−10	−27	+21	−16	+21	−45	+ 6	−19	0	2.55
93902	19 07 14.69	−23 51 57.1	9.56	H	286.811 200 57	−23.865 853 18		4.57	2.41	4.97	1.33	0.77	1.37	2.00	1.09	−24	−21	−24	−11	+22	+ 9	+14	−38	+ 5	−56	2	1.83
93903	19 07 18.13	+36 06 00.6	5.25	2 H	286.825 539 58	+36.100 167 54		3.92	−0.64	−4.28	0.41	0.42	0.52	0.44	0.52	−11	+ 1	− 5	+ 2	+ 3	− 9	+ 3	+ 5	+ 0	− 3	1	−1.32
93904	19 07 18.15	+03 26 34.9	7.43	2 H	286.825 635 13	+03.443 021 75		0.12	−1.60	−2.89	0.78	0.56	0.91	0.74	0.55	+ 8	−33	−12	−28	+ 4	+ 4	+ 0	−36	+14	+ 3	0	0.68
93905 H	19 07 18.39	+24 31 33.0	8.68	H	286.826 641 18	+24.525 833 09	*	4.03	0.35	−1.50	0.59	0.75	1.08	0.64	0.93	− 8	− 2	− 1	+45	+12	− 5	+ 9	− 3	+11	−19	0	0.33
93906	19 07 18.56	−17 14 30.7	7.64	G	286.827 333 09	−17.241 862 13		1.99	−1.38	−5.07	0.85	0.54	0.95	0.92	0.63	+ 2	−28	−11	− 6	+ 8	+16	+10	−25	+ 1	+ 0	0	−0.81
93907	19 07 19.18	+41 03 14.8	7.14	1 H	286.829 909 02	+41.054 113 86		3.20	5.93	−1.84	0.45	0.57	0.60	0.47	0.73	+ 4	− 4	−23	+ 3	+ 2	− 5	+ 1	+29	−16	+ 5	0	0.47
93908	19 07 19.44	+51 22 46.7	8.05	2 H	286.831 019 32	+51.379 639 38		0.79	−2.43	−8.96	0.67	0.59	0.70	0.72	0.66	+ 0	−23	− 1	+ 6	+ 4	+13	+ 6	+ 3	− 7	+ 6	0	−0.33
93909	19 07 19.65	−62 08 50.1	8.02	G	286.831 885 74	−62.147 253 99		9.60	−31.21	18.91	0.81	0.64	0.98	0.97	0.83	−13	−11	−12	+42	−17	+11	−12	− 7	+ 8	− 3	2	0.17
93910	19 07 19.98	+43 18 54.8	7.36	H	286.833 258 41	+43.315 220 88		7.06	5.54	41.04	0.50	0.54	0.60	0.53	0.69	− 3	−10	− 2	+18	+ 8	−15	+11	+26	− 9	+ 3	0	0.74
93911	19 07 20.02	−32 23 58.2	9.75	H	286.833 398 13	−32.399 492 82		7.40	−11.12	−7.91	1.85	1.09	2.12	2.82	1.58	+ 6	− 7	−18	− 4	+ 9	−36	−11	−48	+32	−34	0	0.36
93912	19 07 21.04	−40 36 00.9	9.28	H	286.837 686 18	−40.600 263 32		4.89	9.72	3.08	1.31	0.83	1.40	1.73	0.99	+27	−30	−20	+28	+ 9	−12	− 9	−27	+ 5	− 9	0	1.46
93913	19 07 21.37	+46 05 07.1	7.71	1 H	286.839 033 91	+46.085 294 56		1.21	4.06	13.62	0.57	0.54	0.63	0.68	0.72	+12	−24	− 2	+ 3	+ 4	− 4	+ 1	+20	− 3	+33	0	−0.69
93914	19 07 22.00	+11 36 21.2	8.73	H	286.841 646 82	+11.605 902 56		5.46	12.43	6.94	1.03	0.78	1.23	1.24	0.87	− 7	−24	+ 8	+13	+13	+ 4	+11	−23	+19	+10	0	−0.89
93915	19 07 22.43	−47 31 57.1	7.50	H	286.843 441 11	−47.532 535 56		6.89	6.46	10.33	0.83	0.57	0.92	1.08	0.69	+20	−20	− 3	−23	+ 1	−18	− 3	−51	− 9	+ 5	0	−0.54
93916	19 07 23.84	+20 25 32.4	7.40	H	286.849 334 37	+20.425 678 68		8.84	−36.04	−178.53	0.55	0.69	0.94	0.65	1.05	+41	−20	−17	−15	− 3	+17	+ 1	+ 9	− 2	+38	0	−0.16
93917	19 07 25.50	+32 30 06.0	5.20	H	286.856 231 23	+32.501 660 27		24.64	123.23	32.08	0.40	0.43	0.54	0.46	0.53	− 4	+ 6	−16	+14	+17	−15	+17	− 2	+14	− 4	3	2.74
93918	19 07 26.07	−62 29 06.5	8.80	H	286.858 633 93	−62.485 126 97		4.83	0.77	−25.12	0.86	0.61	1.09	1.10	0.93	− 8	−13	− 8	+ 7	− 1	+ 1	+ 4	−27	+ 8	+ 7	0	0.58
93919	19 07 26.39	−01 07 32.0	7.53	2 H	286.859 963 89	−01.125 565 94		4.60	−2.12	−34.68	0.85	0.58	0.97	0.92	0.75	+ 9	−31	− 7	−22	− 5	+ 7	+ 1	−31	− 2	+38	2	1.67
93920	19 07 26.52	+06 09 45.4	7.11	H	286.860 479 66	+06.162 609 81		8.43	2.51	13.62	0.73	0.52	0.89	0.79	0.58	− 1	−31	−19	−16	+ 2	−10	− 7	−28	+16	−36	0	−1.40
93921	19 07 26.59	+45 55 27.5	8.54	H	286.860 810 61	+45.924 305 82		7.79	−23.33	−56.74	0.68	0.64	0.75	0.78	0.79	+ 7	−20	+ 3	+20	+ 5	−12	+ 7	+21	−11	+26	1	−0.42
93922	19 07 28.22	−55 44 48.4	8.66	H	286.867 602 75	−55.746 775 78		2.31	−0.09	−20.88	0.95	0.79	1.26	1.14	0.91	+29	− 6	+ 7	+21	−38	−13	−25	−40	−17	+48	0	−0.49
93923	19 07 28.37	−30 47 10.1	9.32	H	286.868 225 26	−30.786 142 55		3.56	−9.65	−22.49	1.62	0.80	1.51	2.23	1.17	−12	−39	− 5	+36	− 8	−13	−23	−20	+ 9	−40	4	−0.53
93924	19 07 30.77	+37 07 14.9	9.09	H	286.878 187 54	+37.120 796 84		0.97	2.64	−2.72	0.63	0.72	0.83	0.72	0.88	−13	− 8	−12	− 2	+20	−18	+19	+ 2	+ 6	−18	0	−0.24
93925	19 07 30.84	−28 38 12.4	6.05	H	286.878 505 41	−28.636 781 62		3.56	−0.03	−7.67	0.87	0.46	0.89	1.12	0.64	− 8	−32	− 7	+25	+ 3	− 7	−11	−26	+13	−31	0	−0.46
93926	19 07 32.31	+30 15 15.3	7.78	2 H	286.884 634 23	+30.254 241 79		35.70	111.96	103.03	0.53	0.58	0.78	0.63	0.68	− 9	−12	− 9	+27	+ 9	−10	+ 7	+ 1	+11	−10	0	1.01
93927	19 07 32.37	−52 03 44.7	9.33	H	286.884 865 86	−52.062 423 17		−0.86	−11.10	−11.06	1.32	1.03	1.49	1.77	1.38	+48	−34	−23	+ 8	+ 1	− 5	− 5	−20	+ 6	+35	0	−0.27
93928	19 07 33.18	+18 33 45.2	7.32	H	286.888 259 42	+18.562 569 29		6.83	0.31	−12.00	0.64	0.57	0.87	0.88	0.75	+21	−22	−18	+35	− 2	+ 2	− 6	− 4	+18	+15	2	2.28
93929	19 07 33.81	+34 23 35.1	7.15	H	286.890 888 51	+34.393 092 09		0.85	1.51	1.49	0.50	0.52	0.66	0.59	0.66	− 4	− 4	+ 2	+13	+ 3	−12	+ 3	+ 9	+ 7	−12	0	−2.51
93930	19 07 34.60	−15 09 39.9	9.84	H	286.894 176 77	−15.161 091 72		3.90	−23.94	−12.67	1.53	0.93	1.70	1.72	1.29	+ 5	−18	−16	− 5	+12	+18	+19	−24	+21	+25	0	1.51
93931	19 07 36.78	−31 40 17.9	8.54	2 H	286.903 252 60	−31.671 635 43		3.81	−6.28	4.53	1.20	0.68	1.29	1.40	0.87	+ 4	−18	− 7	+14	− 2	−17	−10	−34	+18	− 9	0	−0.68
93932	19 07 36.94	+04 13 37.1	10.35	G	286.903 920 84	+04.226 970 89		0.51	−3.71	−2.42	1.62	1.17	1.89	1.75	1.31	+10	−13	+ 2	−28	− 3	+ 7	+ 2	−30	− 2	+18	0	0.48
93933	19 07 37.02	+27 56 47.1	8.77	H	286.904 248 91	+27.946 427 80		14.79	39.55	4.71	0.65	0.78	1.05	0.81	0.99	− 1	−11	− 8	+28	+ 4	− 1	+ 3	+16	− 3	−16	0	−1.31
93934	19 07 37.76	−18 43 34.5	9.34	H	286.907 320 46	−18.726 263 46		0.68	7.78	4.51	1.13	0.74	1.34	1.35	0.95	+15	−16	+ 7	− 2	−10	+27	− 7	−35	−23	+13	0	2.09
93935 H	19 07 37.80	−02 49 07.5	8.42	H	286.907 489 24	−02.818 758 16	A	4.99	6.28	−6.57	4.47	5.16	2.31	2.42	1.72	+40	−11	− 5	+ 6	+15	+23	+10	− 2	+27	+48	1	0.00
93936	19 07 37.93	−07 23 57.5	8.52	H	286.908 029 68	−07.399 302 32		−0.93	−0.72	−6.37	1.06	0.70	1.21	1.22	1.01	+23	−20	−20	+ 4	+18	+ 9	+26	− 7	+ 9	+39	0	−0.19
93937	19 07 39.06	+06 59 00.6	7.21	G	286.912 752 14	+06.983 497 27		12.09	32.47	−16.10	0.71	0.54	0.86	0.70	0.53	+ 9	−27	−25	−14	− 1	− 9	−12	−36	+16	−33	0	−0.63
93938	19 07 39.15	−42 55 03.3	9.01	G	286.913 137 07	−42.917 571 68		4.62	−12.95	−16.69	1.19	0.96	1.63	1.59	0.97	+28	−28	−56	−26	+37	−36	+ 3	−60	+35	−14	0	1.49
93939	19 07 39.51	+23 32 13.7	9.70	H	286.914 614 24	+23.537 151 08		1.34	0.26	2.00	0.76	0.91	1.45	0.99	1.25	−10	− 2	− 4	− 4	−12	+ 6	−13	+ 2	− 2	− 3	0	0.01
93940	19 07 39.78	+15 30 32.2	8.24	H	286.915 735 35	+15.508 949 35		7.56	37.88	7.85	0.77	0.68	1.05	0.98	0.78	+26	−29	−28	+47	−11	+ 0	−11	− 2	+12	+23	0	−0.27
93941	19 07 40.53	+42 18 22.2	10.64	G	286.918 884 62	+42.306 164 60		5.54	3.09	−23.52	0.86	1.02	1.11	0.95	1.27	+ 2	−11	−15	− 9	+ 3	− 5	+ 1	+13	− 3	+ 6	1	−0.28
93942 H	19 07 41.14	−04 20 51.0	9.62	H	286.921 414 04	−04.347 494 88	A	3.66	−2.41	−11.02	2.51	1.63	2.69	3.01	2.12	+35	−34	−23	−30	−10	+ 6	−17	−40	+15	+ 4	2	0.88
93943	19 07 41.37	+50 57 02.0	9.70	G	286.922 393 23	+50.950 552 91	A	5.07	6.34	3.94	1.87	1.89	1.58	1.99	1.92	+ 3	− 8	− 1	+19	+ 7	+12	+ 9	+15	− 5	+12	2	1.67
93944	19 07 41.55	−35 57 21.9	9.55	H	286.923 130 34	−35.956 084 79		2.71	−6.69	−15.12	1.59	0.92	1.67	1.74	1.18	+23	−49	−12	+20	− 4	−16	−11	−28	+ 4	+ 8	4	0.76
93945	19 07 42.86	+50 57 15.3	11.60	H	286.928 595 04	+50.954 249 68	C	26.08	6.98	−1.15	37.77	36.97	21.22	26.45	24.65	+ 5	− 7	− 6	+14	+ 4	+13	+ 7	+ 3	− 4	+10	2	1.67
93946	19 07 43.78	+47 02 08.8	7.68	H	286.932 430 39	+47.035 790 67		2.04	9.42	3.80	0.57	0.57	0.65	0.86	0.77	+ 9	−16	+ 4	− 1	+ 3	+ 9	+ 0	+ 6	+ 5	+42	1	0.56
93947	19 07 43.82	−13 02 14.7	8.60	H	286.932 595 55	−13.037 421 36		4.77	−9.75	8.89	1.01	0.66	1.17	1.08	0.77	+18	−34	−11	−19	− 7	+30	− 4	−30	+ 1	+14	0	−0.79
93948	19 07 45.17	+80 45 13.3	7.60	H	286.938 204 71	+80.753 680 79		4.57	11.32	7.94	0.55	0.48	0.56	0.65	0.57	+ 1	−17	+ 9	− 8	+ 5	− 7	+ 4	+ 5	− 4	+18	1	1.39
93949	19 07 45.32	+02 16 13.2	8.72	H	286.938 823 30	+02.270 340 62		3.21	−4.11	−5.05	0.91	0.72	1.14	0.91	0.70	+13	−15	−23	−22	+ 9	− 1	+ 1	−39	+21	−15	2	−3.43
93950 H	19 07 46.32	+01 47 05.9	8.09	H	286.943 011 38	+01.784 980 02	A	4.64	9.48	−4.19	3.18	3.19	1.41	1.48	1.14	+34	+ 0	+ 8	+10	+ 7	+ 7	+12	− 4	+10	+37	1	−0.07
93951	19 07 46.85	+49 29 07.0	7.38	H	286.945 215 39	+49.485 266 26		7.05	−5.30	36.74	0.49	0.46	0.54	0.54	0.51	− 7	−11	−14	−10	+12	−14	+11	− 2	− 7	+ 1	1	−0.81
93952	19 07 47.35	−15 07 19.1	8.67	H	286.947 300 64	−15.121 978 52		1.76	−1.25	−7.44	1.05	0.59	1.21	1.18	0.81	+11	−39	− 5	+ 8	+ 3	+37	+ 5	− 8	+15	+31	0	0.16
93953	19 07 47.42	−68 53 01.2	7.13	H	286.947 574 49	−68.883 673 82		4.79	15.00	−36.53	0.45	0.52	0.78	0.45	0.55	−14	− 4	−10	− 2	+ 3	− 6	+ 2	−22	+ 6	−18	0	−1.28
93954 H	19 07 47.60	+38 55 41.6	7.61	G	286.948 322 56	+38.928 216 47	A	7.76	9.94	2.34	0.98	1.07	1.09	0.96	1.17	−15	+ 8	+10	− 4	+ 7	− 2	+ 9	+15	+ 1	+ 9	3	0.78
93955	19 07 49.12	−32 34 47.8	7.94	H	286.954 686 82	−32.579 938 64		3.82	−16.60	−35.23	1.18	0.71	1.25	1.93	0.94	−25	− 3	−10	− 9	+18	−43	+ 7	−42	+13	−48	0	−1.38
93956	19 07 50.03	+14 40 20.3	8.81	H	286.958 437 68	+14.672 298 95		6.53	−5.17	30.61	0.86	0.92	1.15	0.93	1.02	+58	−12	−13	− 9	−40	+17	−44	−49	+ 7	+51	0	−0.70
93957	19 07 51.63	+19 51 50.6	7.63	H	286.965 122 72	+19.864 062 71		3.38	12.52	19.23	0.54	0.60	0.85	0.71	0.83	+30	−13	−12	+16	+ 0	+20	+ 1	+17	+ 4	+23	0	−0.30
*93958	19 07 53.30	−03 03 02.7	8.71	H	286.972 093 05	−03.050 755 37		5.38	26.11	−7.46	0.96	0.67	1.09	1.02	0.81	+18	−19	−14	−14	+14	+16	+18	−13	+ 7	+28	0	−0.03
*93959 H	19 07 53.20	+72 52 24.1	9.06	H	286.971 685 65	+72.873 364 20	A	7.09	−4.34	94.27	2.06	1.72	1.76	1.98	1.74	+ 7	−16	−10	−10	+ 9	−12	+ 5	−19	+ 6	+ 9	0	1.93
93960 H	19 07 53.72	+29 48 02.5	8.01	H	286.973 826 94	+29.800 681 12	A	2.01	1.38	2.85	1.13	1.32	1.51	1.08	1.30	+ 1	− 9	− 3	+35	+ 1	−21	− 1	+19	+ 8	+ 2	2	0.52
93961	19 07 53.90	−25 50 38.9	12.05	G	286.974 568 41	−25.844 134 13		3.71	24.46	−1.29	3.44	2.05	3.76	4.06	2.73	− 5	−17	+10	+ 2	+ 6	+22	+ 9	−33	−20	− 5	0	−0.50
93962	19 07 54.61	−36 52 37.6	9.02	H	286.977 534 16	−36.877 118 21		0.08	−0.19	−6.17	1.41	0.76	1.35	1.76	0.96	−16	−32	+11	+35	− 6	+ 3	− 9	−16	− 8	−25	0	−0.49
93963	19 07 54.64	−25 42 07.9	7.44	H	286.977 680 87	−25.702 199 02		4.47	29.75	−8.40	0.97	0.54	1.04	1.05	0.72	− 9	−28	− 6	−15	+ 9	+11	+ 8	−39	+11	− 8	0	0.11
93964	19 07 56.14	−32 28 07.0	9.17	H	286.983 916 04	−32.468 613 53		7.94	−41.87	8.95	1.66	1.00	1.95	2.62	1.36	+10	−15	−26	− 4	+13	−44	−15	−52	+28	−39	0	−0.37
93965	19 07 56.47	+72 16 01.5	7.65	H	286.985 310 49	+72.267 076 33		9.30	11.00	−2.29	0.62	0.49	0.58	0.68	0.50	− 2	−26	+ 7	+ 7	+17	− 4	+16	+ 0	− 2	+13	0	0.93
93966	19 07 57.28	+16 51 14.9	6.08	H	286.988 674 63	+16.854 125 07		47.72	65.61	−304.46	0.57	0.52	0.77	0.67	0.60	+ 7	−12	−24	+14	− 6	+21	+ 3	−10	+ 5	+20	0	0.99
93967	19 07 57.98	−15 14 00.8	9.59	G	286.991 580 15	−15.233 562 73		7.89	−147.13	−275.16	1.44	0.87	1.61	1.70	1.26	+ 2	−12	−12	− 9	+ 4	+18	+13	−30	+17	+26	0	0.58
93968	19 07 59.92	+58 08 38.5	7.95	H	286.999 674 25	+58.144 037 17		6.37	−11.39	181.72	0.59	0.60	0.63	0.66	0.73	+ 9	−16	+ 6	+ 2	+ 7	+ 7	+ 7	+27	− 7	+15	0	−0.61
*93969	19 08 00.04	+61 35 53.3	8.48	H	287.000 146 95	+61.598 126 54		2.35	14.73	21.94	0.72	0.69	0.73	0.70	0.88	+13	+12	+18	+ 5	+16	− 3	+21	+11	+ 2	+19	3	0.05
*93970 H	19 08 00.00	−43 16 26.9	9.65	G	286.999 982 73	−43.274 140 13	A	5.94	0.79	−46.86	4.00	2.76	3.92	4.30	3.07	+42	− 8	−19	−30	+ 1	−11	+ 1	−43	+30	+26	1	−1.18
93971	19 08 00.65	+43 58 01.5	7.67	H	287.002 701 23	+43.967 080 56		7.62	22.28	8.27	0.54	0.61	0.64	0.57	0.75	− 8	+ 4	− 1	+ 4	+21	− 5	+25	+ 1	− 1	− 4	3	0.79
93972	19 08 00.96	−07 50 52.0	6.86	H	287.004 016 98	−07.847 783 36		4.58	−15.32	−34.06	0.69	0.46	0.84	0.77	0.58	+12	−18	− 9	−18	+11	+14	+14	−28	− 3	+ 3	2	0.89
93973	19 08 01.76	+26 00 43.4	7.21	H	287.007 342 90	+26.012 054 68		1.99	−2.43	−11.14	0.44	0.55	0.80	0.55	0.67	−20	−11	−18	+12	+21	−25	+13	− 9	+24	−32	0	−0.57
93974	19 08 01.97	+24 43 33.7	6.59	1 H	287.008 209 85	+24.726 030 18		4.16	13.54	2.21	0.33	0.43	0.62	0.34	0.51	−16	− 5	− 7	+29	+12	− 3	+12	−12	+ 6	−22	1	−0.89
93975	19 08 03.49	+21 41 55.5	6.22	H	287.014 560 55	+21.698 744 52		22.83	45.27	75.28	0.42	0.46	0.69	0.51	0.66	+12	−22	−20	−14	−13	+22	−12	+ 0	+11	+ 6	0	−0.65
93976	19 08 04.27	+84 46 42.0	8.59	H	287.017 791 57	+84.778 343 37		1.33	1.24	−12.46	0.67	0.67	0.75	0.81	0.87	+ 3	−29	+13	−12	− 7	+10	− 3	−23	− 8	+23	0	2.35
93977 H	19 08 04.87	+49 04 54.6	8.16	H	287.020 312 14	+49.081 845 36	A	1.97	−22.19	1.31	1.00	1.08	1.06	1.10	1.13	+ 3	− 7	−10	− 3	+10	− 6	+15	−25	− 1	+17	5	−0.23
93978	19 08 04.96	−53 21 04.1	12.90	H	287.020 673 37	−53.351 152 60		13.90	13.84	−4.49	5.64	4.97	6.65	9.16	6.86	+46	+ 3	−18	−40	−28	−32	−37	−72	+12	+36	10	1.70
93979	19 08 05.42	+55 23 52.9	7.95	H	287.022 577 20	+55.398 014 35		5.16	0.16	7.89	0.59	0.57	0.62	0.64	0.68	+ 1	−17	+ 9	+29	+ 4	−15	+ 7	+10	+ 6	+16	3	−0.57
93980	19 08 06.44	+23 58 22.0	9.33	H	287.026 821 29	+23.972 776 68		0.94	2.89	1.69	0.71	0.90	1.34	1.04	1.16	− 4	− 7	− 7	+ 6	− 9	+ 4	− 8	− 9	+ 9	+ 0	0	0.33
93981	19 08 06.87	−32 30 09.9	9.46	H	287.028 644 21	−32.502 738 59		8.83	17.60	−15.01	1.81	1.05	2.04	3.38	1.60	+ 5	−17	−27	+10	+16	−42	−21	−49	+29	−57	0	−0.38
93982	19 08 08.10	−26 50 04.7	7.16	H	287.033 742 37	−26.834 651 67		7.22	3.01	−1.80	0.99	0.47	1.03	1.01	0.62	−11	−52	+ 7	+13	− 3	+13	− 8	−28	+ 4	−11	0	−1.18
93983	19 08 08.34	+44 02 10.9	7.89	H	287.034 746 38	+44.036 357 87		2.33	1.03	−1.43	0.54	0.58	0.64	0.59	0.73	− 3	+10	− 6	+11	+20	− 5	+23	+ 5	+ 1	− 1	3	0.66
93984	19 08 08.49	+21 46 47.0	7.47	H	287.035 380 58	+21.779 712 05		11.20	−16.42	−37.88	0.48	0.55	0.83	0.62	0.81	+ 6	−18	−11	− 5	−14	+21	−14	+ 4	+ 6	− 3	1	0.46
93985	19 08 08.74	+64 22 56.4	8.21	H	287.036 434 60	+64.382 334 60		3.95	5.98	−16.45	0.69	0.60	0.68	0.74	0.72	+ 2	−27	+ 2	+26	+ 8	− 9	+10	+ 4	+ 8	+20	1	0.43
93986	19 08 11.56	+09 34 52.0	7.44	H	287.048 150 76	+09.581 122 21		9.36	19.17	26.76	0.78	0.58	0.90	0.83	0.62	+ 0	−31	−10	−15	− 1	− 6	− 4	−35	+ 9	− 4	0	−0.01
93987	19 08 11.78	+17 37 41.2	11.08	3 H	287.049 065 81	+17.628 106 21	*	0.52	0.82	6.65	2.55	2.75	3.56	3.05	2.92	+29	+18	+ 6	+20	+ 7	+28	+17	−18	+25	+47	4	0.20
93988	19 08 11.83	−73 18 38.4	9.22	H	287.049 311 68	−73.310 668 97		4.20	1.88	−18.23	0.63	0.83	1.13	0.66	0.98	−18	−17	+11	+11	−14	+ 3	−14	+20	− 7	−18	0	−0.94
93989	19 08 13.19	+39 09 17.5	7.32	2 H	287.054 939 86	+39.154 873 16		1.24	1.69	2.95	0.52	0.58	0.67	0.58	0.66	− 5	+ 9	−10	+12	+14	−17	+12	+27	− 4	+ 4	0	1.18
93990	19 08 13.75	+01 17 55.2	7.09	3 T	287.057 292 45	+01.298 663 61		0.41	−0.35	−4.47	0.82	0.57	0.96	0.85	0.65	+ 6	− 6	− 2	−25	+ 1	− 3	+ 2	−37	+10	+12	0	−0.52
93991	19 08 14.39	−05 19 57.8	8.20	H	287.059 948 72	−05.332 717 63		4.87	5.89	−4.64	0.91	0.63	1.11	0.99	0.75	+17	− 7	−25	−10	+ 9	+14	+13	−23	+17	+15	0	0.35
93992 H	19 08 14.42	+12 15 02.1	7.53	H	287.060 097 54	+12.250 592 15	*	1.11	−4.81	1.77	0.80	0.70	0.97	0.82	0.71	+ 5	− 5	−14	−22	+11	+15	+12	−37	+26	+18	0	1.93
93993	19 08 14.56	−24 39 26.5	6.30	H	287.060 661 88	−24.657 347 62		4.85	6.07	−8.86	0.88	0.49	0.81	0.97	0.67	−39	−11	−15	−29	+32	− 9	+33	−47	+15	−35	0	1.92
93994 H	19 08 16.19	+27 05 39.3	7.53	H	287.067 473 98	+27.094 245 99	*	3.49	1.53	−5.22	0.85	0.90	0.88	0.70	0.72	− 7	−16	+ 1	+18	+ 5	+ 9	+ 7	+11	−12	− 5	2	0.56
93995	19 08 16.49	+25 22 29.8	7.47	H	287.068 691 88	+25.374 930 78	+	17.03	12.59	−29.42	1.46	3.08	0.73	0.56	0.82	−61	+14	−10	+10	−33	+ 0	+ 4	−29	+ 4	+24	0	−0.34
93996	19 08 16.70	−19 17 25.0	5.56	1 H	287.069 580 32	−19.290 286 15		2.13	5.27	−1.14	0.70	0.44	0.82	0.85	0.55	− 2	− 4	+15	+18	−13	+32	−19	−39	−43	−21	0	−0.11
93997 H	19 08 17.41	+25 55 25.4	8.60	H	287.072 539 46	+25.923 719 68	A	3.54	2.69	5.56	0.98	1.18	1.57	1.05	1.30	−18	− 2	−23	+37	+10	−21	+ 5	+ 6	+14	−26	1	−0.31
93998	19 08 19.72	−66 24 19.7	8.68	H	287.082 151 47	−66.405 480 06		8.88	−11.24	12.86	0.62	0.71	1.08	0.60	0.76	−13	−13	−15

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
93901	7.943	0.010	7.827	0.013		0.105	0.015	T	0.12	0.02	L	7.8481	0.0014	0.012	82		7.83	7.87		C			1							S
93902	10.081	0.032	9.570	0.033		0.490	0.035	T	0.56	0.04	L	9.6640	0.0018	0.015	84		9.60	9.69		D			1							
93903	5.113	0.003	5.238	0.003		−0.109	0.004	T	−0.09	0.01	L	5.2216	0.0016	0.021	136		5.20	5.27		U 2 C			1							S
93904	7.956	0.009	7.496	0.009		0.519	0.024	G	0.59	0.03	H	7.5388	0.0043	0.028	90		7.50	7.58		U 2			1 S							S
93905	8.814	0.009	8.697	0.011	*	0.113	0.013	T	0.13	0.01	L *	8.7202	0.0016	0.022	208	*	8.69	8.76		D	19073+2432	I 1	2 C S A	AB	252	0.155	0.005	0.45	0.27	
93906	7.600	0.008	7.631	0.009		−0.025	0.002	G	0.00	0.00	H	7.6463	0.0019	0.010	79		7.63	7.66		C			1							S
93907	7.094	0.005	7.125	0.007		−0.024	0.008	T	0.00	0.01	L	7.1375	0.0033	0.026	122		7.10	7.17	4.94	P 1 A			1							S P
93908	10.214	0.027	8.264	0.011		1.618	0.023	T	1.64	0.02	L	8.1647	0.0024	0.018	100		8.12	8.19		U 2			1							
93909	8.538	0.010	8.070	0.010		0.450	0.009	G	0.52	0.01	H	8.1267	0.0015	0.014	91		8.10	8.15					1							S
93910	7.827	0.008	7.413	0.008		0.391	0.010	T	0.46	0.01	L	7.4501	0.0010	0.008	116		7.43	7.46		C			1							S
93911	10.227	0.039	9.799	0.043		0.442	0.020	G	0.51	0.02	H	9.8533	0.0031	0.021	71		9.81	9.89					1							G
93912	10.603	0.063	9.337	0.036		1.079	0.057	T	1.04	0.05	L	9.4476	0.0027	0.020	74		9.40	9.48		C			1							
93913	9.747	0.022	7.865	0.009		1.564	0.019	T	1.58	0.02	L	7.8239	0.0025	0.021	117		7.79	7.85		U 2			1							
93914	9.118	0.018	8.760	0.019		0.339	0.024	T	0.40	0.03	L	8.8085	0.0017	0.014	76		8.78	8.83		C			1							
93915	7.833	0.008	7.529	0.010		0.289	0.012	T	0.33	0.01	L	7.5713	0.0014	0.011	76		7.55	7.59		C			1							S
93916	8.776	0.015	7.532	0.010		1.061	0.014	T	1.03	0.01	L	7.5643	0.0011	0.012	162		7.55	7.58		C			1							S
93917	5.639	0.003	5.263	0.003		0.367	0.004	T	0.43	0.00	L	5.2893	0.0005	0.005	122		5.28	5.30		D	19075+3231	I 1	1 S							S
93918	9.152	0.016	8.812	0.017		0.323	0.022	T	0.37	0.03	L	8.8766	0.0020	0.015	82		8.85	8.90		C			1							
93919	9.723	0.023	7.796	0.010		1.634	0.021	T	2.76	0.03	O	7.4973	0.0029	0.026	92		7.46	7.54		U 2			1 S							
93920	7.272	0.006	7.131	0.007		0.136	0.009	T	0.15	0.01	L	7.1562	0.0011	0.009	83		7.14	7.17		C			1							S
93921	9.149	0.014	8.584	0.013		0.529	0.017	T	0.60	0.02	L	8.6535	0.0015	0.012	109		8.64	8.68					1							
93922	9.994	0.024	8.799	0.015		1.023	0.022	T	1.00	0.02	L	8.8303	0.0015	0.015	100		8.81	8.86					1							
93923	10.063	0.033	9.348	0.028		0.644	0.033	T	0.71	0.03	L	9.4565	0.0027	0.022	83		9.41	9.49					1							
93924	9.079	0.012	9.088	0.016		−0.004	0.018	T	0.02	0.02	L	9.0968	0.0021	0.018	119		9.07	9.13					1							
93925	8.123	0.010	6.221	0.005		1.579	0.009	T	1.60	0.01	L	6.1677	0.0009	0.007	85		6.16	6.18		C			1							S
93926	8.754	0.009	7.883	0.007		0.763	0.009	T	0.80	0.01	L	7.9206	0.0024	0.031	145		7.87	7.98	2.14	P 1 A			1							P
93927	11.499	0.122	9.448	0.031		1.698	0.100	T	1.72	0.10	L	9.4324	0.0039	0.030	76		9.40	9.49					1							
93928	7.551	0.008	7.345	0.008		0.197	0.011	T	0.22	0.01	L	7.3791	0.0012	0.009	105		7.36	7.40		C			1							S
93929	7.563	0.006	7.190	0.006		0.353	0.008	T	0.41	0.01	L	7.2307	0.0009	0.008	125		7.22	7.25		C			1							S
93930	10.468	0.044	9.898	0.042		0.511	0.009	G	0.58	0.01	H	9.9485	0.0027	0.017	70		9.91	9.99		C			1							G
93931	10.700	0.048	8.795	0.018		1.616	0.042	T	2.67	0.05	O	8.5274	0.0044	0.041	90		8.48	8.61		U 2			1							
93932	10.918	0.066	10.369	0.066		0.660	0.015	G	0.72	0.01	H	10.4554	0.0040	0.024	71		10.40	10.50		C			1							D
93933	9.489	0.013	8.839	0.012		0.604	0.015	T	0.67	0.01	L	8.9008	0.0016	0.024	171		8.87	8.95					1							
93934	9.187	0.019	9.327	0.029		−0.039	0.004	G	−0.02	0.00	H	9.3308	0.0029	0.021	77		9.30	9.36					1							
93935	8.845	0.012	8.461	0.013	*	0.364	0.017	T	0.43	0.02	L *	8.5062	0.0015	0.015	106	*	8.49	8.54			19076−0249	H 1	2 C C	AB	314	0.327	0.059	3.47	0.41	
93936	10.786	0.048	8.723	0.016		1.708	0.040	T	1.73	0.04	L	8.6230	0.0022	0.019	103		8.59	8.65					1							
93937	7.517	0.006	7.214	0.008		0.270	0.015	G	0.30	0.02	H	7.2739	0.0015	0.009	86		7.26	7.29					1							S
93938	9.646	0.017	9.054	0.016		0.530	0.015	G	0.60	0.02	H	9.1454	0.0016	0.019	116		9.11	9.18					1							
93939	9.889	0.018	9.729	0.023		0.154	0.027	T	0.17	0.03	L	9.7576	0.0025	0.029	177		9.69	9.81					1							G
93940	8.948	0.013	8.305	0.012		0.597	0.015	T	0.67	0.01	L	8.3722	0.0018	0.014	108		8.35	8.40					1							
93941	10.370	0.032	10.502	0.053		−0.200	0.015	G	−0.21	0.02	H	10.5772	0.0022	0.025	116		10.54	10.63		C			1							G
93942	10.666	0.052	10.004	0.046	A						T *	9.7683	0.0022	0.016	93	*	9.74	9.81		D	19077−0421	I 1	2 C A	AB	337	6.528	0.007	1.33	0.04	G
93943	10.000	0.026	9.729	0.031	A	0.220	0.015	G	0.24	0.02	H	9.7687	0.0313	0.052	108	A	9.67	9.83		D	19077+5057	I 2	1 C P A							
93944	10.051	0.035	9.609	0.036		0.431	0.040	T	0.50	0.04	L	9.6413	0.0022	0.020	75		9.61	9.67		C			1							
93945											T	11.5321	0.1355			C				D	19077+5057	I 2	1 C I A							
93946	9.373	0.017	7.806	0.009		1.315	0.015	T	1.28	0.02	L	7.8304	0.0015	0.013	104		7.81	7.85					1							
93947	10.124	0.030	8.739	0.017		1.172	0.027	T	1.13	0.02	L	8.7639	0.0015	0.014	85		8.74	8.78		C			1							
93948	7.755	0.007	7.605	0.008		0.144	0.010	T	0.16	0.01	L	7.6503	0.0010	0.011	109		7.63	7.66		C			1							S
93949	9.038	0.016	8.705	0.018		0.316	0.023	T	0.36	0.03	L	8.7928	0.0021	0.018	82		8.76	8.81					1							
93950	8.416	0.011	8.125	0.012	*	0.277	0.015	T	0.31	0.02	L *	8.1586	0.0022	0.017	83	*	8.13	8.18		D	19078+0147	H 1	2 C A	AB	37	0.315	0.008	1.38	0.10	S
93951	7.924	0.007	7.430	0.008		0.465	0.010	T	0.54	0.01	L	7.4791	0.0009	0.010	123		7.46	7.50		C			1							S
93952	8.693	0.015	8.707	0.020		0.052	0.006	G	0.06	0.02	A	8.6969	0.0016	0.011	77		8.67	8.72		C			1							
93953	7.273	0.004	7.143	0.005		0.118	0.006	T	0.13	0.01	L	7.1791	0.0011	0.010	165		7.16	7.20					1							S
93954	8.010	0.016	7.780	0.015	A	0.260	0.015	G	0.29	0.02	H *	7.6687	0.0012	0.012	104	*	7.65	7.69		D	19078+3856	I 1	2 C A	AB	125	1.313	0.006	1.28	0.02	S
93955	9.129	0.016	8.055	0.012		0.930	0.015	T	0.92	0.01	L	8.1027	0.0016	0.011	75		8.08	8.12		C			1							S
93956	9.895	0.023	8.923	0.016		0.841	0.022	T	0.86	0.02	L	8.9549	0.0016	0.014	109		8.93	8.98		C			1							
93957	8.201	0.007	7.676	0.007		0.493	0.009	T	0.57	0.01	L	7.7341	0.0010	0.012	172		7.71	7.76					1							S
93958	9.083	0.014	8.744	0.015		0.307	0.020	G	0.35	0.03	H	8.7880	0.0022	0.017	108		8.75	8.81					1							
93959	9.962	0.024	9.278	0.020	*	0.632	0.026	T	0.70	0.02	L *	9.1849	0.0070	0.043	109	*	9.11	9.25		R	19079+7252	I 1	2 C A	AB	74	0.952	0.006	0.91	0.03	
93960	8.028	0.007	7.942	0.009	*	0.084	0.010	T	0.10	0.01	L *	8.0488	0.0016	0.015	158	*	8.02	8.08		D	19079+2948	I 1	2 C A	AB	103	2.393	0.003	0.46	0.01	S
93961						0.960	0.020	G	1.01	0.02	I	12.1893	0.0097	0.086	75		11.99	12.33					1							G
93962	10.167	0.056	9.133	0.037		0.900	0.050	T	0.90	0.04	L	9.1820	0.0023	0.023	75		9.14	9.22		C			1							
93963	8.804	0.012	7.567	0.008		1.056	0.011	T	1.02	0.01	L	7.6053	0.0017	0.010	86		7.59	7.63					1							S
93964	10.312	0.042	9.239	0.027		0.920	0.039	T	0.92	0.03	L	9.3124	0.0028	0.020	75		9.28	9.35		C			1							
93965	7.946	0.009	7.679	0.011		0.254	0.013	T	0.29	0.02	L	7.7223	0.0009	0.010	118		7.71	7.74		C			1							S
93966	6.953	0.006	6.157	0.004		0.705	0.005	T	0.76	0.00	L	6.2161	0.0010	0.008	92		6.21	6.23			19080+1651	I 1	1							S P
93967	10.378	0.042	9.694	0.038		0.607	0.021	G	0.68	0.02	H	9.7418	0.0034	0.024	72		9.70	9.78					1							G
93968	9.236	0.015	8.063	0.010		1.006	0.014	T	0.98	0.01	L	8.1147	0.0010	0.012	101		8.10	8.14		C			1							
93969	9.872	0.024	8.617	0.014		1.070	0.022	T	1.03	0.02	L	8.6501	0.0015	0.014	94		8.62	8.68		C			1							
93970	11.061	0.051	10.264	0.041	A	0.709	0.005	G	0.76	0.00	R *	9.7965	0.0033	0.026	117	*	9.76	9.85		D	19080−4316	I 1	2 C A	AB	25	2.744	0.009	0.09	0.03	
93971	8.325	0.009	7.741	0.009		0.556	0.015	G	0.63	0.01	H	7.7931	0.0010	0.010	121		7.77	7.81		C			1							S
93972	8.231	0.009	6.999	0.005		1.052	0.008	T	1.02	0.01	L	7.0316	0.0012	0.008	112		7.02	7.04		C			1							S
93973	8.772	0.009	7.332	0.005		1.215	0.008	T	1.17	0.01	L	7.3767	0.0012	0.013	190		7.36	7.40					1							S
93974	6.560	0.003	6.591	0.003		−0.024	0.004	T	0.00	0.00	L	6.5958	0.0009	0.010	234		6.58	6.62		M			1							S
93975	6.710	0.004	6.264	0.004		0.434	0.005	T	0.50	0.01	L	6.3216	0.0006	0.007	161		6.31	6.34					1							S
93976	10.859	0.048	8.830	0.016		1.680	0.040	T	1.70	0.04	L	8.6995	0.0022	0.022	108		8.67	8.74					1							
93977	9.827	0.020	8.313	0.011	A	1.300	0.495	G	1.12	0.04	L *	8.3242	0.0015	0.010	123	*	8.30	8.34		D	19081+4905	I 1	2 C A	AB	247	2.969	0.027	3.26	0.13	
93978											T	13.0368	0.0127	0.160	64		12.21	13.42					1 S							G
93979	8.153	0.009	7.965	0.012		0.180	0.014	T	0.20	0.02	L	8.0082	0.0015	0.013	105		7.99	8.03		C			1							S
93980	9.604	0.016	9.373	0.019		0.220	0.023	T	0.24	0.03	L	9.4011	0.0028	0.029	159		9.36	9.45					1							
93981	10.176	0.038	9.510	0.033		0.607	0.038	T	0.68	0.03	L	9.5878	0.0022	0.022	79		9.55	9.62		D			1 S							
93982	8.383	0.013	7.266	0.007		0.991	0.015	G	0.97	0.01	H	7.3218	0.0011	0.008	84		7.31	7.34			19081−2650	I 1	1							S
93983	7.774	0.007	7.865	0.011		−0.078	0.012	T	−0.06	0.01	L	7.8657	0.0013	0.011	122		7.85	7.88					1							S
93984	8.854	0.011	7.578	0.007		1.086	0.010	T	1.05	0.01	L	7.6343	0.0012	0.013	172		7.61	7.66		C			1							
93985	9.568	0.017	8.325	0.011		1.061	0.016	T	1.03	0.01	L	8.3771	0.0012	0.015	111		8.35	8.40					1							
93986	7.905	0.008	7.481	0.008		0.422	0.015	G	0.49	0.02	H	7.5319	0.0012	0.010	92		7.51	7.55		C			1							S
93987						1.890	0.510	G	1.87	0.52	J	11.1717	0.0271	0.683	79		10.64	12.44		U 2 B			1 V							D P
93988	9.430	0.013	9.222	0.016		0.192	0.020	T	0.21	0.02	L	9.2782	0.0019	0.023	171		9.24	9.31					1							
93989	9.263	0.015	7.589	0.008		1.425	0.014	T	3.22	0.03	O	7.1397	0.0091	0.089	108		6.92	7.27		U 2			1 S							S
93990	8.720	0.013	7.234	0.007		1.270	0.020	G	1.37	0.02	A	7.1491	0.1059	0.393	79		6.85	7.76	13.75	P 1 A			1							S
93991	8.641	0.012	8.257	0.012		0.364	0.016	T	0.43	0.02	L	8.2874	0.0021	0.015	100		8.27	8.31		C	19082−0520	I 1	1 S							S
93992	8.780	0.013	7.676	0.009	*	0.952	0.012	T	0.94	0.01	L *	7.6912	0.0012	0.010	76	*	7.67	7.72		D	19082+1215	M 1	2 C S A	AB	185	0.165	0.010	1.24	0.30	S
93993	6.301	0.004	6.290	0.004		0.011	0.005	T	0.03	0.01	L	6.3087	0.0007	0.006	88		6.30	6.32		C			1							S
93994	7.539	0.005	7.541	0.006	*	0.003	0.007	T	0.02	0.01	L *	7.5380	0.0012	0.012	173	*	7.52	7.56		D	19083+2706	I 1	2 C A	AB	84	0.250	0.002	0.01	0.04	S
93995	8.091	0.006	7.533	0.006		0.522	0.008	T	0.59	0.01	L	7.5835	0.0010	0.013	249		7.56	7.61		C			1 O							S
93996	5.460	0.004	5.561	0.005		−0.087	0.006	T	−0.07	0.01	L	5.5387	0.0010	0.012	76		5.52	5.56		U 2			1							S
93997	8.731	0.009	8.663	0.011	A	−0.100	0.495	G	0.06	0.01	L *	8.6234	0.0020	0.023	195	*	8.59	8.67		D	19083+2555	I 1	2 C A	AB	99	1.246	0.011	2.13	0.04	
93998	9.065	0.011	8.718	0.011		0.329	0.015	T	0.38	0.02	L	8.7616	0.0014	0.022	212		8.72	8.80					1							
93999	9.887	0.019	9.302	0.017		0.568	0.015	G	0.64	0.01	H	9.3822	0.0018	0.027	156		9.33	9.42					1							
94000	7.606	0.009	7.329	0.010	*	0.173	0.150	G	0.19	0.15	R *	7.3821	0.0007	0.009	97	–	7.37	7.41		D	19083+5520	I 1	3 C B							S G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
*94001	19 08 20.21	−46 14 37.6	10.12	H	287.084 201 09	−46.243 787 75		6.27	1.83	−115.89	1.44	0.97	1.64	1.79	1.14	+26	−32	−23	−14	+	4	+	3	−	3	−45	+	8	+	7	0	1.40
*94002	19 08 20.04	−86 00 50.9	8.16	H	287.083 481 64	−86.014 147 84		4.55	3.19	6.24	0.56	0.66	0.73	0.60	0.87	−	3	−18	−	8	−	5	−	5	−	1	−	4	+10	3	−0.47
94003	19 08 20.48	+04 15 10.5	10.68	G	287.085 341 89	+04.252 907 75		0.13	0.61	−1.48	1.72	1.34	2.15	1.95	1.66	+11	−	3	−	3	−29	−	6	+19	−	5	−24	−22	+	1	0	1.23
94004	19 08 20.77	−07 26 15.8	7.79	2 T	287.086 545 60	−07.437 736 08		−3.81	−2.70	−4.02	0.85	0.55	1.05	0.98	0.76	+18	−27	−17	−19	+	8	+12	+12	−25	+	1	+	8	0	−0.48
94005	19 08 20.93	−40 29 47.9	4.57	H	287.087 220 77	−40.496 637 60		18.67	48.05	−26.84	0.77	0.49	0.83	1.25	0.66	−14	−	8	−27	+16	+27	−24	+	3	−35	+31	−51		0	0.54
94006	19 08 22.29	+53 37 37.3	8.28	H	287.092 877 69	+53.627 018 47		2.03	10.68	−11.56	0.63	0.56	0.64	0.71	0.67	+12	−19	+	0	−15	−	3	+	8	−	6	−11	+16	+32	0	2.09
94007	19 08 24.17	−49 18 38.5	7.78	H	287.100 688 99	−49.310 696 83		4.81	−31.04	3.94	0.75	0.54	0.88	1.00	0.72	+11	−14	−15	−	8	+13	+	7	+11	−24	+14	+	3	0	0.77
94008	19 08 24.23	−65 09 28.9	9.12	H	287.100 963 03	−65.158 030 21		5.63	20.14	−12.69	0.94	0.79	1.23	1.30	1.07	−26	−14	−	5	+15	−22	−	1	−15	−12	+	3	+	0	0	0.05
94009	19 08 24.46	+13 05 52.8	7.26	G	287.101 929 77	+13.098 000 88		2.86	1.77	−10.57	0.67	0.56	0.78	0.67	0.56	−	3	−13	−13	−29	+	5	+	7	+	6	−42	+12	+	6	0	3.16
*94010	19 08 25.69	+86 56 11.5	9.25	H	287.107 053 80	+86.936 539 74		8.50	−0.46	−6.57	0.72	0.75	0.84	0.82	0.93	−	3	+	5	−15	+10	+	3	−	2	+	4	−11	+15	+	2	0	0.71
*94011	19 08 25.17	+09 08 00.8	8.99	2 H	287.104 885 23	+09.133 553 69		2.64	−1.47	−3.30	0.99	0.77	1.26	1.33	0.98	−	6	−31	−19	−12	−	3	+13	+	1	−20	−	2	−	3	0	−1.10
*94012	19 08 25.58	+60 46 44.4	8.24	H	287.106 566 54	+60.778 987 13		6.24	34.42	−24.85	0.63	0.61	0.63	0.72	0.76	+	4	+	2	+	7	+23	+24	−14	+30	+	5	+	3	+15	0	0.55
94013	19 08 25.88	+52 25 33.1	5.88	2 H	287.107 852 55	+52.425 864 24		14.24	−100.41	−54.95	0.47	0.43	0.49	0.49	0.47	+	5	−11	+	5	−	7	+	7	+	2	+	6	+	4	+	1	+16	3	0.50
94014	19 08 26.22	−12 57 21.8	7.35	H	287.109 254 77	−12.956 064 85		2.84	2.80	−19.54	0.80	0.50	0.93	0.95	0.63	+	0	−23	−15	−	3	+	3	+32	+	8	−17	+	0	−	7	0	−1.10
94015	19 08 27.16	+71 29 42.9	8.59	H	287.113 147 14	+71.495 254 74		4.32	−0.06	−13.74	0.63	0.56	0.64	0.63	0.58	−10	−13	−	2	−31	+	2	−	2	+	0	−	7	+	5	−	7	0	1.25
94016	19 08 29.04	−15 52 43.0	8.42	H	287.120 993 00	−15.878 619 22		1.49	12.03	1.93	0.89	0.56	1.02	0.99	0.73	+	5	−14	−13	−	1	+	5	+15	+	9	−27	+23	+21	0	1.04
94017	19 08 29.67	−11 11 08.0	9.55	H	287.123 622 11	−11.185 560 41		5.57	35.06	3.12	1.07	0.73	1.25	1.17	0.84	−	2	−12	−	1	−10	+	9	+33	+13	−23	−	3	+	7	0	−0.03
94018	19 08 30.11	+52 56 15.7	8.16	H	287.125 461 38	+52.937 688 59		1.48	5.07	−13.83	0.59	0.59	0.64	0.64	0.67	+14	−15	+	0	−	3	−	2	+10	+	4	−	2	+14	+29	1	1.23
94019 H	19 08 31.31	+50 15 23.8	8.21	2 H	287.130 463 35	+50.256 608 70	*	2.25	1.71	4.03	0.65	0.56	0.70	0.76	0.59	−	3	−24	−	4	+	2	+10	−	6	+10	−	2	−	8	+11	0	0.77
94020 H	19 08 31.70	−30 58 21.0	7.75	H	287.132 088 17	−30.972 509 51	A	34.72	42.24	−57.96	1.62	0.92	1.64	2.22	1.16	+13	−11	−	5	+25	+	4	+	5	−16	−40	+12	−17		1	0.56
94021	19 08 32.67	−19 55 29.6	10.68	G	287.136 119 17	−19.924 877 46		−3.10	2.57	−7.57	1.73	1.09	1.90	2.04	1.45	+	0	−10	−	3	−	7	+	7	+17	+	1	−36	−	9	+17	0	−0.35
94022	19 08 33.06	+37 54 57.3	10.75	H	287.137 762 81	+37.915 925 73	B	−29.76	6.01	21.58	40.76	44.87	26.98	28.03	34.26	−	7	−14	−16	−	6	+	4	−	3	+	5	+14	+	0	−	6	1	0.49
94023	19 08 33.36	+50 21 49.8	6.92	H	287.139 008 61	+50.363 842 50		4.84	−3.13	10.51	0.48	0.43	0.51	0.55	0.46	−	1	−21	+	6	+	6	+11	+	4	+10	+	5	−	4	+	7	0	0.92
*94024	19 08 33.73	+37 54 37.0	8.26	H	287.140 533 59	+37.910 269 18	A	4.22	8.69	−24.11	1.64	1.75	1.56	1.57	1.88	−11	−11	−14	+	5	+	2	−	1	+	2	+26	−	5	−	7	1	0.49
*94025	19 08 33.69	−31 05 40.7	8.12	H	287.140 393 96	−31.094 651 97		1.75	15.39	−0.37	1.27	0.66	1.25	1.72	0.86	+	2	−31	−	9	+35	−	5	−	3	−21	−28	−	2	−33	0	0.25
94026	19 08 33.91	−20 59 29.1	8.06	H	287.141 297 16	−20.991 403 99		3.46	−12.28	−47.05	0.93	0.56	0.99	0.89	0.60	−	1	−24	−	5	−14	+	1	+	9	+	5	−40	−	2	+	8	0	1.56
94027	19 08 35.42	+14 26 06.9	6.64	H	287.147 600 48	+14.435 263 33		4.76	−0.97	−17.01	0.52	0.47	0.72	0.56	0.52	+29	−17	−15	+18	−15	+18	−18	−11	+	9	+18	0	−0.15
94028	19 08 35.68	−33 40 18.2	9.45	H	287.148 659 51	−33.671 717 12		6.60	12.74	−26.43	1.52	0.86	1.52	1.94	1.12	−	7	−31	−18	+17	+	5	−14	−	9	−28	+13	−34	2	0.85
94029	19 08 37.29	+10 40 02.6	10.02	G	287.155 361 31	+10.667 389 13		5.46	0.40	−2.97	1.58	1.19	1.81	1.91	1.39	−14	+	2	−20	−37	+21	−23	+16	−46	+25	−28	0	1.10	
94030	19 08 37.70	+24 10 45.5	6.70	2 H	287.157 064 48	+24.179 304 14		0.89	1.00	1.52	0.44	0.49	0.75	0.57	0.61	+	8	−13	−13	−19	−15	+	2	−16	−22	+20	+	9	0	0.63	
94031	19 08 38.04	+38 30 31.8	7.73	H	287.158 504 99	+38.508 840 96		4.49	−9.46	15.28	0.58	0.59	0.71	0.62	0.74	−17	−19	−	5	−11	+	5	−	2	+	2	+22	−	3	−	9	0	−1.25
94032	19 08 39.38	+13 11 20.4	9.33	H	287.164 102 89	+13.188 992 60		2.36	−1.10	−1.37	1.05	0.95	1.29	1.02	0.95	−22	−14	−	4	−39	+19	+21	+19	−37	+12	+	2	0	2.15	
94033	19 08 39.60	−39 57 36.3	7.94	G	287.165 002 74	−39.960 093 50		6.05	18.67	−11.49	1.01	0.62	1.12	1.67	0.83	+	9	−14	−28	+26	+31	−23	−	1	−38	+22	−41	0	−0.59	
94034	19 08 40.22	+16 51 05.6	6.65	H	287.167 598 36	+16.851 559 02		13.80	−30.85	−102.39	0.62	0.54	0.78	0.72	0.62	+	7	−17	−22	+12	−	2	+18	+	7	−12	+	2	+21	0	−0.38	
94035	19 08 41.52	−60 29 29.1	8.75	H	287.172 992 69	−60.491 414 92		3.02	−5.49	−11.45	1.06	0.72	1.26	1.21	0.97	+25	−42	−29	+	4	−22	−	2	−35	−53	+28	+25	0	−1.59	
94036	19 08 42.20	+48 14 23.2	8.42	H	287.175 830 47	+48.239 771 24		3.24	4.93	20.12	0.65	0.62	0.74	0.74	0.74	+	5	+	8	+	1	−11	+	5	−19	+	7	−16	−	4	+25	0	0.50	
94037	19 08 42.79	−45 04 34.3	7.74	H	287.178 294 54	−45.076 191 16		6.55	8.54	7.86	0.91	0.83	1.39	1.33	0.83	+14	−19	−53	−14	+42	−42	+	7	−58	+35	−30	0	0.84	
94038 T	19 08 43.89	−33 47 41.5	9.09	H	287.182 875 94	−33.794 871 84	B	1.19	25.76	−91.26	13.60	7.65	5.87	7.89	5.91	+	6	−38	−	4	+14	+	7	−	5	+	2	−11	+21	+16	11	2.93
94039	19 08 44.08	+34 45 36.7	8.48	H	287.183 662 90	+34.760 199 28	B	6.68	1.10	−3.75	6.86	8.12	3.89	5.40	6.17	−	6	+	2	+18	+10	−	2	−13	+	2	+	8	+	1	−	6	9	1.04
94040	19 08 44.21	−18 57 10.0	6.57	1 H	287.184 190 92	−18.952 791 19		3.37	21.38	1.87	0.78	0.53	0.88	0.86	0.59	+25	−19	−	9	−17	−20	+26	−18	−46	−12	+14		0	1.07	
94041	19 08 44.45	−23 11 24.9	6.66	H	287.185 209 76	−23.190 250 90		10.98	−4.58	−13.95	0.97	0.56	0.82	1.19	0.74	−50	−	6	−19	−38	+45	−10	+42	−54	+18	−56		0	−0.18	
94042 T	19 08 44.81	−33 47 38.6	8.11	G	287.186 712 31	−33.794 045 23	A	8.00	24.72	−93.11	3.85	2.21	3.19	4.71	3.29	+	8	−33	−	6	+10	+	7	−	7	+	2	−18	+23	+16	11	2.93
94043	19 08 45.19	+34 45 37.1	7.04	H	287.188 312 49	+34.760 308 44	A	2.47	3.50	1.36	1.17	1.37	1.23	1.24	1.65	−	3	+	4	+16	+	7	−	3	−13	+	1	+13	+	1	−	6	9	1.04
94044	19 08 45.66	+09 22 03.9	8.26	H	287.190 268 47	+09.367 743 88		3.40	−42.75	19.79	0.91	0.74	1.10	1.05	0.82	+	5	−20	−11	−18	+	0	+	1	−	3	−28	+14	+	1	0	1.25	
94045	19 08 46.87	−25 04 45.6	6.86	H	287.195 283 44	−25.079 324 19		4.81	−3.69	−1.08	0.92	0.51	0.89	1.02	0.67	−30	−	6	−	9	−26	+27	−	9	+29	−46	+11	−25		0	0.08	
94046	19 08 49.18	−33 21 12.7	8.30	H	287.204 919 35	−33.353 522 03		6.32	−4.08	−13.48	1.43	0.82	1.40	2.15	1.17	−24	−36	−24	+27	+	0	−22	−23	−17	+24	−64		7	−1.85	
94047	19 08 49.24	−59 19 56.0	7.79	G	287.205 179 99	−59.332 225 31		5.49	11.23	−29.88	0.74	0.49	0.95	0.96	0.63	−29	−	3	−	3	+58	−17	+16	+	4	+14	+	7	+16		0	0.40	
*94048	19 08 50.03	+30 53 24.0	8.19	H	287.208 477 26	+30.889 995 93		2.34	−4.05	−1.78	0.53	0.66	0.86	0.62	0.76	−	7	−19	−12	+	1	+12	−	7	+	9	−12	+13	−	3	0	0.22	
*94049	19 08 49.97	−17 15 55.5	10.39	2 H	287.208 188 55	−17.265 403 78	A	−2.23	−5.97	−6.13	4.52	2.78	4.49	5.11	3.27	−	3	−16	−	3	−	7	+	5	+	7	+	3	−35	−	2	−12	0	−0.34	
94050	19 08 50.47	−42 25 40.1	7.89	2 H	287.210 298 08	−42.427 811 02		31.48	23.27	−120.54	1.69	1.20	1.97	2.09	1.37	+32	−31	−21	−10	−	2	−17	−14	−50	+	4	+	8	0			
94051	19 08 51.12	−54 02 16.9	8.74	H	287.213 010 24	−54.038 038 48		14.60	2.00	−62.31	1.00	0.76	1.20	1.34	0.85	+	7	−36	−	8	−10	+20	−	4	+14	−49	−16	−13	0	−0.86	
94052	19 08 51.95	+30 18 03.6	6.78	H	287.216 445 40	+30.301 006 28		3.17	6.99	−6.79	0.43	0.49	0.66	0.49	0.57	−	8	−	5	−18	+20	+	9	−13	+	6	−	9	+18	−	9	0	0.45	
94053	19 08 52.24	−02 17 14.1	6.58	H	287.217 667 14	−02.287 237 15		5.62	11.53	19.87	0.71	0.47	0.79	0.79	0.61	+	4	−20	−	2	−15	+17	+21	+18	−14	+17	+31	2	−0.30	
94054	19 08 52.27	−55 43 12.5	6.44	H	287.217 776 49	−55.720 144 36		8.04	58.45	−115.62	0.64	0.54	0.85	0.70	0.54	+32	−11	+	4	+26	−43	−16	−32	−43	−26	+42		0	0.49	
94055	19 08 53.00	+15 42 23.5	8.54	H	287.220 826 61	+15.706 540 08		1.19	−10.00	−8.03	0.81	0.70	1.06	1.06	0.87	+24	−11	−24	+27	−11	+15	−	6	−15	+19	+32		0	0.98	
94056 H	19 08 53.99	+34 03 43.6	9.42	H	287.224 971 94	+34.062 114 85	*	34.37	−79.26	58.54	1.57	1.65	1.30	1.41	1.48	−12	−	3	+	7	−	9	−	9	−22	−	8	−	4	+13	+	0	3	0.09	
94057	19 08 54.38	+18 36 38.8	8.46	G	287.226 568 45	+18.610 775 53		2.88	11.93	35.41	0.71	0.69	1.03	1.13	1.04	+36	−25	−12	+28	−	4	+	0	−	7	+	2	+	8	+27	1	0.67	
94058	19 08 54.65	+28 46 28.5	9.11	H	287.227 727 04	+28.774 585 02		2.60	3.80	−0.78	0.77	0.85	1.18	0.89	1.02	−	4	+	4	−12	+28	+13	+	4	+14	+	0	+14	−	4	0	−0.11	
94059	19 08 56.23	−28 44 27.0	7.98	H	287.234 291 49	−28.740 847 21		7.49	44.67	−79.02	1.17	0.58	1.15	1.64	0.85	−	6	−32	−	6	+34	+	5	−	2	−16	−21	+	7	−44	0	−1.35	
94060	19 08 56.45	−61 42 08.0	8.93	H	287.235 222 33	−61.702 216 55		0.72	4.64	−17.84	0.89	0.85	1.36	1.18	1.36	−10	−17	−22	+22	+13	−11	+15	−24	+20	+	0		2	0.03	
94061	19 08 56.88	−17 32 07.6	8.17	H	287.237 018 57	−17.535 450 02		22.32	56.23	−146.64	0.97	0.62	1.10	1.17	0.74	+12	−14	−18	−	6	+	3	+	2	−	3	−38	+	9	−	5	0	1.10	
94062	19 08 57.08	−18 40 57.7	6.96	H	287.237 827 17	−18.682 681 35		12.00	−6.12	−13.36	0.78	0.50	0.85	0.89	0.58	+12	−22	−	8	−	4	−14	+18	−13	−35	−	8	+	1	0	1.32	
94063	19 08 57.15	−65 32 00.1	7.55	H	287.238 112 75	−65.533 350 98		9.74	2.50	−66.34	0.68	0.53	0.84	0.91	0.68	−12	−	8	+	6	+13	−	8	−	2	−	3	−25	−	9	−	1	2	0.93	
94064	19 08 58.01	+11 17 36.9	6.65	H	287.241 718 32	+11.293 585 11		7.50	−16.30	−18.43	0.72	0.51	0.83	0.77	0.57	−10	−29	−10	−	3	+	2	−	9	−	5	−32	+16	−19	0	0.62	
94065 H	19 08 58.80	−35 02 06.8	9.13	H	287.244 987 82	−35.035 227 34	A	6.37	3.92	10.32	2.33	1.93	1.96	2.73	1.50	+21	+	8	−17	+41	+	4	+13	−	4	−31	+37	+	5	1	0.54	
94066	19 08 58.84	−03 20 28.2	9.55	H	287.245 182 61	−03.341 172 48		1.37	−1.41	−5.53	1.12	0.77	1.28	1.28	0.95	+29	−32	−18	−27	−	7	+18	−	8	−38	+13	+25		0	0.88	
94067	19 08 59.67	+14 46 49.4	6.74	H	287.248 645 13	+14.780 399 36		11.28	22.87	48.31	0.56	0.56	0.79	0.60	0.63	+44	−10	−11	+	9	−30	+	9	−36	−32	+	3	+31		0	0.26	
94068	19 08 59.92	+06 04 24.2	5.23	H	287.249 656 07	+06.073 397 16		22.96	−9.02	−78.34	0.67	0.47	0.79	0.73	0.53	+	0	−23	−17	−21	−	9	−14	−15	−29	+10	−46		0	2.12	
94069	19 09 01.53	−50 53 20.8	9.22	H	287.256 359 58	−50.889 105 98		5.85	14.66	−41.38	1.08	0.77	1.20	1.48	1.02	−23	−19	−13	−27	+41	+	3	+35	−40	+19	−30		0	−1.08	
94070	19 09 01.82	+01 21 09.3	7.56	G	287.257 584 22	+01.352 579 03		6.84	44.89	4.04	0.78	0.60	0.93	0.83	0.64	+13	−13	−	4	−25	+	3	−	2	+	3	−37	+	8	+20	0	0.03	
94071	19 09 01.94	+38 53 59.7	8.36	G	287.258 067 04	+38.899 929 06		10.14	9.01	−29.23	0.61	0.67	0.78	0.70	0.79	−	3	+	1	−	5	−	2	+20	−11	+18	+24	+	3	+	4	1	0.50	
94072	19 09 02.05	−07 01 02.2	7.64	H	287.258 535 83	−07.017 274 90		3.62	−8.14	−25.55	0.88	0.56	1.01	0.91	0.70	+	7	−19	−15	−22	+25	−	4	+26	−26	+18	+18		0	0.34	
*94073	19 09 02.38	+27 38 41.6	8.97	H	287.259 936 97	+27.644 881 60		2.20	2.31	−0.57	0.63	0.79	1.05	0.78	0.95	−	4	−	9	−	2	+28	−	1	+	2	−	2	+21	+	2	−11	0	3.14	
*94074	19 09 02.37	−39 01 08.0	9.33	H	287.259 875 16	−39.018 881 85		5.29	−4.37	−16.93	1.47	0.88	1.54	2.47	1.19	−	7	−12	−14	+20	+32	−31	+	9	−39	+23	−42		0	−0.93	
94075	19 09 03.06	+34 35 57.8	7.97	H	287.262 741 56	+34.599 380 67	B	21.40	64.77	192.41	9.39	10.21	4.95	6.20	7.75	+	3	−	3	+	7	+10	+	0	−11	+	0	−	6	+	0	−	2	17	1.83	
94076	19 09 04.35	+34 35 59.9	6.70	H	287.268 126 82	+34.599 978 48	A	20.42	47.12	194.51	1.39	1.93	1.57	1.53	2.52	+	5	+	0	+	8	+13	+	0	−14	+	1	−	2	−	1	−	1	17	1.83	
94077	19 09 04.48	−32 52 53.8	8.84	H	287.268 648 50	−32.881 612 96		5.81	−2.21	−2.33	1.38	0.81	1.65	2.05	1.31	+	9	−30	−37	−	1	+21	−38	−15	−57	+46	−41		0	−1.51	
94078	19 09 04.55	−27 13 37.3	9.06	G	287.268 959 45	−27.227 039 46		9.30	24.59	−31.17	1.36	0.80	1.52	1.59	1.07	−	9	−41	+32	+	9	−12	−10	−	1	−43	−15	+10		0	−0.16	
94079	19 09 05.72	−09 50 51.6	8.49	H	287.273 827 62	−09.847 663 98		1.51	0.27	−1.60	0.94	0.53	1.15	1.22	0.72	+37	−34	−16	+18	+	4	+25	−18	−19	+	4	−24		0	1.22	
94080	19 09 05.83	+33 14 16.2	8.35	H	287.274 282 94	+33.237 829 10		0.74	−3.28	−9.15	0.58	0.64	0.80	0.65	0.85	+	5	−	5	−14	+32	+	1	−12	−	3	+13	+11	−	2	0	−0.23	
94081	19 09 06.83	+32 16 07.2	8.00	H	287.278 469 69	+32.268 672 72		3.77	−30.29	−8.87	0.57	0.62	0.79	0.65	0.78	−	4	−11	+	1	+15	+14	−17	+14	+11	+15	−	9	0	−1.37	
94082	19 09 07.46	+35 23 53.8	9.30	H	287.281 064 89	+35.398 274 16		0.92	1.75	−4.57	0.67	0.76	0.90	0.76	0.92	+	4	−	3	−	3	+	7	+	3	−	4	+	3	+21	+	0	+	6	0	−1.62	
94083	19 09 09.75	+76 33 38.9	5.11	H	287.290 618 68	+76.560 793 35		36.64	51.63	−119.80	0.50	0.43	0.49	0.62	0.46	+11	−28	+13	−20	−10	+	9	−	9	−21	−	6	+32		1	−0.59	
94084	19 09 10.78	−43 49 01.3	8.51	H	287.294 909 01	−43.817 019 48		3.95	6.55	−5.39	0.98	0.71	1.17	1.22	0.84	+	8	−15	+	5	−27	+14	−	8	+12	−53	−	7	+	4	0	1.07	
94085	19 09 11.91	+25 19 04.2	8.05	H	287.299 607 19	+25.317 830 98		8.59	−24.47	−92.84	0.43	0.62	0.88	0.43	0.71	−13	−	2	−	7	+45	+18	−	4	+19	−	6	+11	−18		0	0.88	
*94086	19 09 13.25	−41 15 51.5	8.05	H	287.305 223 59	−41.264 297 99		4.03	−5.39	−37.13	0.99	0.61	1.04	1.34	0.78	−	5	−22	+	5	+	4	+11	−	6	+	4	−35	−	1	−22	0	0.49	
*94087 H	19 09 13.21	+11 52 03.6	8.23	G	287.305 041 54	+11.867 655 99	A	3.50	5.80	1.78	2.20	1.66	2.06	2.23	1.78	+60	−	6	−	9	−	9	−	4	−	7	−12	−27	+	9	−	1	1	−0.04	
94088	19 09 14.29	+06 17 23.9	8.80	H	287.309 526 21	+06.289 985 97		6.37	22.52	6.72	1.10	0.73	1.34	1.27	0.88	−	1	−36	−21	−	4	−15	+	7	−16	−11	+	4	−30		0	−1.15	
94089	19 09 14.58	−06 03 18.1	9.14	H	287.310 735 72	−06.055 020 91		8.24	2.96	−2.76	1.14	0.75	1.36	1.48	1.21	+35	−35	−28	−	6	+	4	+15	+	4	−21	+31	+59		0	0.67	
94090	19 09 14.84	−10 13 03.9	8.66	G	287.311 818 80	−10.217 746 49		−0.14	3.83	−5.71	0.87	0.51	1.07	1.26	0.76	+29	−23	−	9	+17	+	1	+35	−16	−20	−11	−29		2	0.45	
94091	19 09 15.19	+63 19 00.1	9.43	H	287.313 312 16	+63.316 701 26		1.25	1.37	5.34	0.96	0.89	1.00	1.03	1.09	+	7	−24	+12	−	6	+	8	+18	+	2	+	7	+14	+28	2	2.36	
94092	19 09 15.72	−01 42 42.0	9.59	H	287.315 484 90	−01.711 660 77		−0.52	−3.06	−1.90	1.24	0.84	1.45	1.35	1.06	+11	−31	+	1	−10	+13	+14	+11	−11	+13	+35		0	−0.99	
94093	19 09 15.75	+52 35 27.4	8.40	H	287.315 615 45	+52.590 936 90		4.75	−2.19	20.10	0.64	0.56	0.64	0.73	0.64	+16	−12	+	3	+13	+	8	−	1	+	8	+	6	+	7	+26	1	1.64	
94094	19 09 15.99	+10 33 09.0	8.29	3 T	287.316 624 56	+10.552 502 72		2.45	−1.54	−6.10	1.02	0.75	1.11	1.23	0.82	−	3	−	9

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
94001	10.974	0.064	10.158	0.050		0.721	0.062	T	0.77	0.04	L	10.2618	0.0025	0.022	80		10.22	10.29		C			1							G
94002	8.516	0.009	8.185	0.009		0.319	0.014	T	0.37	0.02	L	8.2354	0.0014	0.015	126		8.21	8.26		C			1							S
94003	11.505	0.099	10.646	0.075		0.830	0.020	G	0.85	0.01	H	10.7724	0.0038	0.033	69		10.71	10.82		C			1							G
94004	9.181	0.015	7.909	0.009		1.083	0.014	T	1.05	0.01	L	7.9143	0.0193	0.145	101		7.77	8.11	6.81	P 1 A			1							S P
94005	5.983	0.003	4.698	0.003		1.070	0.052	G	1.06	0.02	A	4.7339	0.0006	0.005	76		4.73	4.74		C			1							S
94006	8.341	0.009	8.279	0.011		0.040	0.015	G	0.06	0.01	H	8.3001	0.0013	0.012	113		8.28	8.32		C			1							
94007	9.327	0.020	7.916	0.012		1.192	0.018	T	1.15	0.02	L	7.9482	0.0013	0.010	78		7.93	7.97		C			1							
94008	9.795	0.020	9.182	0.019		0.569	0.020	T	0.64	0.02	L	9.2467	0.0016	0.021	129		9.21	9.29		D			1							
94009	7.243	0.007	7.261	0.008		0.010	0.015	G	0.03	0.01	H	7.2636	0.0009	0.009	78		7.25	7.29		C			1							S
94010	9.816	0.021	9.293	0.020		0.491	0.026	T	0.56	0.03	L	9.3602	0.0022	0.021	119		9.32	9.40					1							
94011	9.334	0.016	8.955	0.017		0.359	0.022	T	0.42	0.02	L	9.0747	0.0122	0.063	75		8.95	9.13		U 2 C			1							
94012	9.348	0.014	8.334	0.011		0.885	0.013	T	0.89	0.01	L	8.3944	0.0016	0.013	106		8.37	8.42					1							S
94013	7.291	0.007	6.015	0.004		1.086	0.006	T	1.05	0.01	L	6.0477	0.0037	0.027	112		6.02	6.10		U 2			1							S P
94014	9.172	0.017	7.498	0.008		1.399	0.015	T	1.38	0.02	L	7.4948	0.0015	0.010	83		7.48	7.52		C			1							S
94015	8.728	0.010	8.618	0.012		0.107	0.015	T	0.12	0.02	L	8.6328	0.0014	0.014	118		8.61	8.66					1							
94016	8.528	0.012	8.440	0.015		0.086	0.018	T	0.10	0.02	L	8.4532	0.0011	0.011	87		8.44	8.47		C			1							S
94017	10.255	0.032	9.623	0.029		0.587	0.038	T	0.66	0.04	L	9.6788	0.0033	0.024	87		9.64	9.73					1							G
94018	8.301	0.008	8.181	0.010		0.116	0.012	T	0.13	0.01	L	8.2085	0.0014	0.017	117		8.18	8.24					1							S
94019	9.498	0.018	8.352	0.012	*	0.985	0.017	T	0.97	0.01	L *	8.3722	0.0017	0.027	105	*	8.35	8.42		U 2	19085+5015	H 1	2 C S A	AB	193	0.141	0.017	1.25	0.47	
94020	8.745	0.018	7.842	0.014	*	0.787	0.018	T	0.82	0.01	L *	7.8939	0.0018	0.013	78	*	7.87	7.92		D	19085−3058	I 1	2 C A	AB	212	8.786	0.010	2.17	0.04	
94021	11.109	0.091	10.480	0.077		0.304	0.020	G	0.35	0.03	H	10.7888	0.0037	0.026	80		10.72	10.85		C			1							G
94022	11.726	0.133	10.191	0.047	B	1.289	0.111	T	1.25	0.12	L	10.7892	0.1781			B				D	19085+3755	I 2	1 C I D							D
94023	6.856	0.005	6.912	0.006		−0.046	0.007	T	−0.02	0.01	L	6.9142	0.0008	0.007	109		6.90	6.93		C			1							S
94024	9.602	0.020	8.341	0.013	A	1.075	0.019	T	1.04	0.02	L	8.4236	0.0255	0.027	122	A	8.37	8.46		D	19085+3755	I 2	1 C P D							D
94025	9.627	0.023	8.247	0.013		1.168	0.021	T	1.13	0.02	L	8.2925	0.0020	0.014	83		8.27	8.31		C			1							
94026	9.655	0.024	8.216	0.014		1.214	0.022	T	1.17	0.02	L	8.2228	0.0014	0.013	100		8.19	8.25		C			1							
94027	6.596	0.004	6.635	0.004		−0.031	0.005	T	−0.01	0.01	L	6.6371	0.0006	0.006	101		6.62	6.65		C			1							S
94028	10.056	0.033	9.492	0.031		0.532	0.034	T	0.60	0.04	L	9.5618	0.0035	0.022	82		9.52	9.61					1							
94029	10.833	0.057	10.135	0.048		1.000	0.020	G	0.98	0.02	H	10.1726	0.0041	0.028	74		10.11	10.23					1							G
94030	9.336	0.013	6.946	0.004		1.969	0.011	T	2.00	0.01	L	6.7790	0.0019	0.018	164		6.75	6.81		U 2			1							S
94031	8.105	0.010	7.755	0.010		0.330	0.015	G	0.38	0.02	H	7.8062	0.0017	0.012	113		7.79	7.83			19086+3831	I 1	1							S
94032	9.455	0.022	9.324	0.028		0.126	0.033	T	0.14	0.03	L	9.3747	0.0024	0.019	77		9.34	9.41		C			1							G
94033	7.951	0.010	7.954	0.010		−0.019	0.003	G	0.00	0.00	H	7.9534	0.0012	0.009	82		7.94	7.97		C			1							S
94034	7.203	0.007	6.712	0.006		0.462	0.008	T	0.53	0.01	L	6.7533	0.0013	0.009	84		6.74	6.77		C			1							S
94035	8.767	0.013	8.739	0.017		0.026	0.019	T	0.04	0.01	L	8.7690	0.0023	0.015	80		8.74	8.80		C			1 G							
94036	9.581	0.020	8.507	0.014		0.930	0.019	T	0.92	0.01	L	8.5854	0.0015	0.013	110		8.56	8.61					1							
94037	9.229	0.016	7.880	0.009		1.143	0.014	T	1.11	0.01	L	7.9050	0.0013	0.014	94		7.88	7.93		C			1							
94038	9.739	0.046	9.077	0.038	B	0.614	0.050	T	0.68	0.04	L	9.1909	0.0281			B				D	19087−3348	I 2	1 C I A							
94039	8.504	0.010	8.443	0.012	B	0.061	0.015	T	0.07	0.01	L	8.6354	0.0256			B				D	19088+3446	I 2	1 C I A							
94040	8.648	0.013	6.744	0.006		1.581	0.011	T	1.60	0.01	L	6.6855	0.0014	0.013	86		6.66	6.70		M			1							S
94041	7.821	0.009	6.768	0.005		0.914	0.008	T	0.91	0.01	L	6.8201	0.0014	0.010	97		6.81	6.84			19087−2311	I 1	1							S
94042	8.559	0.015	8.100	0.015	A	0.432	0.015	G	0.50	0.02	H	8.2200	0.0144	0.066	81	A	8.16	8.39		D	19087−3348	I 2	1 C P A							S
94043	6.876	0.004	7.024	0.005	A	−0.127	0.005	T	−0.12	0.01	L	7.0019	0.0082	0.048	130	A	6.96	7.12		D	19088+3446	I 2	1 C P A							S
94044	9.902	0.022	8.399	0.012		1.264	0.020	T	1.22	0.02	L	8.4239	0.0022	0.017	87		8.39	8.45		C			1							
94045	6.855	0.005	6.851	0.006		0.001	0.002	G	0.02	0.00	H	6.8649	0.0009	0.008	94		6.85	6.88		C			1							S
94046	9.590	0.023	8.393	0.015		1.025	0.021	T	1.00	0.02	L	8.4697	0.0018	0.017	72		8.45	8.51					1							
94047	8.072	0.006	7.802	0.008		0.249	0.009	G	0.28	0.01	H	7.8625	0.0012	0.010	123		7.84	7.88					1							S
94048	8.257	0.008	8.180	0.009		0.076	0.011	T	0.09	0.01	L	8.2165	0.0020	0.016	124		8.19	8.24			19088+3053	I 1	1							
94049	12.050	0.208	10.312	0.064	A	0.601	0.150	G	0.67	0.13	R	10.5148	0.0284	0.055	87	A	10.43	10.60		U	19088−1716	H 1	2 C D	AB	244	14.533	0.059	1.96	0.19	G D
94050	8.983	0.015	7.970	0.010		0.862	0.003	G	0.90	0.00	H	8.0290	0.0022	0.022	89		8.00	8.06		U 2			1 X							
94051	9.411	0.019	8.800	0.017		0.567	0.019	T	0.64	0.02	L	8.8659	0.0021	0.017	80		8.83	8.89		C			1							
94052	8.419	0.010	6.911	0.005		1.268	0.009	T	1.23	0.01	L	6.9359	0.0008	0.009	145		6.92	6.95		C			1							S
94053	8.264	0.008	6.745	0.005		1.277	0.007	T	1.24	0.01	L	6.7420	0.0007	0.007	96		6.73	6.75					1							S
94054	7.871	0.007	6.572	0.005		1.101	0.001	G	1.06	0.00	H	6.6092	0.0007	0.007	111		6.60	6.62					1							S
94055	10.642	0.045	8.762	0.017		1.562	0.038	T	1.58	0.04	L	8.6599	0.0027	0.018	87		8.62	8.68					1							
94056	11.131	0.058	9.605	0.024	*	1.238	0.012	G	1.40	0.01	I *	9.5351	0.0023	0.019	110	*	9.50	9.56		D	19089+3404	M 1	2 C A	AS	216	0.222	0.006	0.15	0.14	
94057	8.940	0.012	8.501	0.012		0.445	0.015	G	0.51	0.02	H	8.5523	0.0013	0.016	141		8.53	8.58		C			1							
94058	9.136	0.013	9.052	0.017		0.083	0.020	T	0.10	0.02	L	9.1432	0.0025	0.029	128		9.08	9.20					1							
94059	9.266	0.018	8.114	0.012		0.990	0.017	T	0.97	0.01	L	8.1458	0.0013	0.013	84		8.12	8.16					1							
94060	10.398	0.031	9.024	0.017		1.163	0.028	T	1.12	0.03	L	9.0971	0.0020	0.023	102		9.07	9.15					1							
94061	9.132	0.017	8.268	0.014		0.757	0.017	T	0.80	0.01	L	8.3082	0.0019	0.011	81		8.29	8.34		C			1							
94062	7.383	0.007	6.999	0.006		0.364	0.009	T	0.43	0.01	L	7.0462	0.0011	0.007	82		7.03	7.07		C			1							S
94063	7.994	0.008	7.594	0.008		0.378	0.010	T	0.44	0.01	L	7.6326	0.0012	0.011	108		7.61	7.65		C			1							S
94064	8.143	0.011	6.772	0.007		1.160	0.015	G	1.12	0.01	H	6.8191	0.0012	0.008	76		6.81	6.83		C			1							S
94065	9.648	0.025	9.209	0.025	*	0.428	0.028	T	0.50	0.03	L *	9.2213	0.0017	0.016	71	*	9.19	9.25		D	19090−3502	H 1	2 C B	AB	25	0.557	0.051	3.76	0.33	
94066	10.071	0.024	9.605	0.026		0.475	0.015	G	0.55	0.02	H	9.6589	0.0015	0.015	94		9.63	9.68		C			1							G
94067	8.158	0.008	6.865	0.005		1.100	0.007	T	1.06	0.01	L	6.9109	0.0008	0.007	118		6.90	6.92					1							S
94068	5.644	0.004	5.264	0.003		0.346	0.005	G	0.41	0.01	H	5.3163	0.0006	0.004	73		5.31	5.33		C			1							S
94069	9.769	0.023	9.245	0.022		0.501	0.024	T	0.57	0.03	L	9.3300	0.0025	0.020	84		9.30	9.37		C			1							
94070	8.095	0.010	7.614	0.007		0.476	0.011	G	0.55	0.01	H	7.6637	0.0012	0.010	92		7.64	7.68		C	19090+0121	I 1	1							S
94071	8.868	0.012	8.433	0.011		0.436	0.015	G	0.50	0.02	H	8.4655	0.0013	0.014	118		8.44	8.49		C			1							
94072	8.923	0.012	7.752	0.008		1.004	0.011	T	0.98	0.01	L	7.8105	0.0013	0.010	97		7.79	7.83		C			1							S
94073	9.093	0.013	8.981	0.016		0.109	0.019	T	0.12	0.02	L	9.0088	0.0019	0.023	176		8.97	9.05			19090+2739	I 1	1 S							
94074	9.782	0.031	9.423	0.035		0.349	0.041	T	0.41	0.06	L	9.4121	0.0029	0.019	72		9.38	9.44		C			1							
94075	8.919	0.014	8.055	0.011	B	0.750	0.015	G	0.79	0.01	H	8.2885	0.0358			B				D	19091+3436	I 2	1 C I A							S
94076	7.485	0.007	6.771	0.005	A	0.643	0.007	T	0.71	0.01	L	6.8352	0.0132	0.066	133	A	6.76	6.96		D	19091+3436	I 2	1 C P A							S
94077	10.226	0.037	8.958	0.021		1.080	0.033	T	1.04	0.03	L	9.0063	0.0017	0.014	74		8.99	9.03		C			1							
94078	9.738	0.027	9.134	0.025		0.567	0.020	G	0.64	0.02	H	9.1860	0.0019	0.019	80		9.15	9.22		C			1							
94079	8.676	0.009	8.522	0.011		0.148	0.013	T	0.16	0.01	L	8.5421	0.0013	0.015	128		8.52	8.57		C			1							
94080	8.121	0.008	8.300	0.011		−0.170	0.010	G	−0.18	0.01	H	8.2877	0.0019	0.018	128		8.26	8.31					1							
94081	9.828	0.020	8.163	0.010		1.392	0.018	T	1.37	0.02	L	8.1456	0.0011	0.014	145		8.12	8.17					1							
94082	9.234	0.014	9.275	0.019		−0.033	0.022	T	−0.01	0.02	L	9.2981	0.0028	0.022	133		9.26	9.33					1							
94083	5.488	0.003	5.154	0.003		0.308	0.008	G	0.37	0.03	C	5.1936	0.0006	0.006	109		5.19	5.21					1							S
94084	9.750	0.019	8.618	0.013		0.974	0.018	T	0.96	0.01	L	8.6754	0.0016	0.015	117		8.65	8.70		C			1							
94085	8.682	0.007	8.107	0.007		0.537	0.009	T	0.61	0.01	L	8.1685	0.0013	0.017	261		8.14	8.19					1							
94086	10.152	0.031	8.271	0.013		1.596	0.028	T	2.26	0.07	O	8.1073	0.0031	0.017	85		8.08	8.13					1							
94087	8.588	0.013	8.377	0.015	A	0.220	0.015	G	0.24	0.02	H *	8.3067	0.0015	0.012	75	*	8.29	8.33		D	19092+1152	I 1	2 C A	AB	27	1.196	0.020	1.67	0.04	
94088	9.207	0.020	8.805	0.020		0.380	0.026	T	0.44	0.03	L	8.8901	0.0018	0.016	72		8.87	8.93					1							
94089	9.512	0.019	9.168	0.021		0.326	0.026	T	0.38	0.04	L	9.2174	0.0024	0.016	77		9.19	9.24		C			1							
94090	8.807	0.010	8.699	0.012		0.157	0.006	G	0.17	0.01	H	8.7171	0.0015	0.018	127		8.69	8.74		C			1							
94091	9.929	0.023	9.458	0.023		0.444	0.030	T	0.51	0.03	L	9.5321	0.0024	0.024	95		9.50	9.57		C			1							
94092	10.067	0.026	9.664	0.029		0.381	0.036	T	0.45	0.04	L	9.6788	0.0036	0.023	87		9.64	9.73					1							G
94093	9.020	0.013	8.459	0.012		0.500	0.015	G	0.57	0.02	H	8.5129	0.0008	0.011	116		8.50	8.53		D			1							
94094	9.826	0.026	8.421	0.014		1.187	0.023	T	1.15	0.02	L	8.3450	0.0712	0.320	76		8.03	8.77	6.11	P 1 A			1 S							
94095	10.588	0.033	8.946	0.015		1.374	0.029	T	1.34	0.04	L	8.9396	0.0018	0.018	107		8.91	8.98		C			1							
94096	10.897	0.045	8.940	0.015		1.659	0.039	T	2.26	0.08	O	8.7775	0.0027	0.023	120		8.74	8.81					1							
94097	9.195	0.013	7.724	0.008		1.239	0.012	T	1.20	0.01	L	7.7534	0.0010	0.011	137		7.74	7.78					1							
94098	8.418	0.009	7.368	0.008	*	0.912	0.009	T	0.91	0.01	L *	7.4166	0.0019	0.013	83	*	7.40	7.44			19093+1138	H 1	2 C S D	AB	60	0.149	0.050	1.83	0.74	S D
94099	9.800	0.021	8.604	0.014		1.024	0.020	T	1.00	0.02	L	8.6481	0.0021	0.017	92		8.61	8.68					1							
94100	10.956	0.054	10.082	0.039		0.765	0.051	T	0.80	0.04	L	10.1533	0.0039	0.028	95		10.09	10.19					1							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
94101	19 09 21.73	−34 29 23.0	7.58	H	287.340 526 56	−34.489 735 19		4.93	2.10	−20.65	1.12	0.61	1.13	1.24	0.73	− 3	−42	− 6	+16	+17	− 6	+ 6	−20	+10	−22	2	1.20
94102	19 09 21.95	−67 32 24.9	8.25	H	287.341 440 69	−67.540 259 32		4.40	−15.45	−10.75	0.59	0.66	0.95	0.54	0.65	+ 2	− 2	−10	−47	+ 1	− 3	+ 1	−48	+ 5	− 1	3	2.13
94103	19 09 22.00	+10 14 28.2	7.18	1 H	287.341 683 44	+10.241 158 19		2.90	8.11	3.95	0.83	0.63	0.95	0.95	0.71	−27	+11	−30	−47	+31	−31	+26	−55	+32	−37	0	−0.56
94104	19 09 23.13	+30 33 58.6	6.92	H	287.346 374 92	+30.566 271 80		2.21	−3.22	0.41	0.41	0.50	0.63	0.49	0.56	−13	− 8	−20	+10	+16	−18	+12	−14	+18	−14	1	−0.37
94105	19 09 23.32	+26 21 16.8	8.98	H	287.347 163 24	+26.354 680 15		1.00	1.81	−4.07	0.68	0.89	1.23	0.81	1.09	−21	− 8	−16	+30	+ 3	−16	+ 1	+22	− 7	−29	0	0.35
94106	19 09 23.80	+52 17 57.1	9.65	H	287.349 157 33	+52.299 186 78		2.76	−1.08	1.03	0.83	0.74	0.85	0.87	0.85	+11	−18	+ 0	− 7	+ 3	+ 8	+ 2	− 7	+ 8	+19	0	1.93
94107	19 09 24.28	−13 27 23.7	7.07	H	287.351 173 10	−13.456 574 41		7.37	−11.42	−62.39	1.28	0.84	1.40	1.51	1.17	+ 1	−19	− 9	−15	+ 7	+14	+13	−26	− 2	+15	0	
∗94108	19 09 24.31	−30 38 41.5	8.96	H	287.351 287 81	−30.644 860 88		5.40	−3.34	−19.56	1.42	0.71	1.49	1.62	0.95	+ 8	−47	−16	+17	+ 2	−15	−15	−38	+20	−16	0	0.65
∗94109	19 09 24.37	−58 56 13.2	9.74	H	287.351 549 03	−58.937 004 03		4.69	−17.37	2.43	1.27	0.81	1.58	1.65	1.08	−27	−19	− 2	+52	− 5	−10	+12	+13	+ 6	+19	2	0.71
∗94110	19 09 24.31	−16 53 08.7	8.05	H	287.351 276 74	−16.885 756 94		4.09	−11.94	−20.44	1.03	0.58	1.10	1.10	0.69	− 7	−23	− 4	+15	+ 0	− 3	+ 1	−28	+11	+ 1	0	−1.15
∗94111	19 09 24.35	−44 12 55.4	8.25	H	287.351 448 54	−44.215 384 22		10.42	26.51	−17.25	1.15	0.69	1.39	1.18	0.87	− 2	−50	+ 9	−10	+24	+22	+17	−28	+10	+16	0	3.06
94112	19 09 26.81	+38 42 50.2	8.25	G	287.361 724 53	+38.713 946 34		9.27	28.46	29.29	0.62	0.65	0.79	0.68	0.84	−11	−17	−10	− 3	+11	−12	+11	+14	− 5	− 6	0	−0.32
94113	19 09 27.73	−34 18 03.0	8.46	H	287.365 537 32	−34.300 827 87		4.53	5.17	6.01	1.24	0.66	1.30	1.42	0.88	+ 7	−35	−14	+21	+12	− 4	− 2	−23	+24	−11	0	1.55
94114	19 09 28.28	−37 54 15.3	4.11	H	287.367 826 35	−37.904 239 53		25.15	85.73	−96.65	0.85	0.44	0.83	1.04	0.58	−22	−40	+ 5	+23	− 3	+10	− 4	−21	− 9	−34	0	0.26
94115	19 09 30.84	−22 22 38.8	8.61	H	287.378 515 02	−22.377 447 39		4.28	−11.44	0.70	1.07	0.57	1.10	1.12	0.73	−16	−38	− 3	− 3	+ 9	− 1	+ 4	−35	+11	−19	0	0.46
94116	19 09 32.63	−41 15 16.3	10.06	H	287.385 941 87	−41.254 519 44		4.88	40.58	−1.20	1.49	0.91	1.58	2.04	1.14	+ 4	−24	+ 2	+ 7	+ 6	− 7	− 4	−39	− 3	−22	0	−1.57
94117	19 09 33.11	+29 21 28.9	8.17	G	287.387 953 88	+29.358 036 76		−0.45	−0.43	−3.27	0.52	0.64	0.86	0.64	0.72	−14	− 7	−26	+30	+ 5	−24	− 2	+13	+23	−13	0	1.14
∗94118	19 09 33.94	+20 15 25.7	9.27	H	287.391 413 15	+20.257 140 77		3.37	−10.52	−2.48	0.83	1.09	1.45	0.89	1.47	+31	−13	−20	−21	− 4	+ 4	+ 1	+ 7	−16	+22	0	−1.42
∗94119 H	19 09 33.87	−10 53 22.6	9.80	H	287.391 130 10	−10.889 600 99	A	3.76	9.26	1.44	2.37	1.61	2.48	2.97	1.91	+26	−14	− 9	+ 8	+ 0	+28	− 8	−15	+11	− 8	0	1.83
94120	19 09 34.03	+11 06 54.2	7.29	G	287.391 795 88	+11.115 053 31		9.46	24.86	1.13	0.80	0.57	0.91	0.87	0.63	− 4	−22	−10	−13	+ 0	−15	− 6	−37	+ 9	−20	0	0.01
94121	19 09 34.21	−69 12 42.3	8.82	H	287.392 551 34	−69.211 752 81		7.04	0.00	−2.62	0.58	0.71	1.10	0.60	0.73	− 6	−11	− 7	+31	+ 8	− 5	+ 4	−16	+ 9	−13	0	1.39
94122	19 09 34.70	−23 11 27.5	7.79	H	287.394 601 14	−23.190 961 67		1.25	1.44	−6.80	1.03	0.57	0.96	1.27	0.83	−34	−18	−16	−29	+36	− 1	+35	−47	+13	−41	0	−1.37
94123	19 09 34.99	+43 26 27.5	8.88	H	287.395 781 97	+43.440 982 54		1.78	−0.82	23.71	0.71	0.76	0.85	0.74	0.90	+ 4	− 5	+ 7	+12	+19	−19	+23	+17	− 2	+11	1	−0.08
94124	19 09 36.37	−36 09 53.2	6.54	H	287.401 536 74	−36.164 777 94		3.56	−7.71	−12.45	0.87	0.46	0.88	1.07	0.61	− 2	−40	− 2	+24	− 5	− 1	−12	−28	− 2	−23	0	1.33
94125	19 09 37.56	+58 16 30.7	7.75	H	287.406 512 62	+58.275 181 69		12.65	39.94	75.63	0.57	0.60	0.64	0.68	0.70	+13	− 7	+19	+11	+16	+11	+13	+17	−16	+29	0	−2.11
94126	19 09 37.89	+76 10 57.8	8.23	H	287.407 855 94	+76.182 720 43		16.61	159.81	53.29	0.64	0.60	0.69	0.73	0.69	+ 1	−29	+28	−11	−10	−10	− 3	−18	−15	+33	3	1.64
94127	19 09 39.04	−20 02 27.9	7.91	G	287.412 667 06	−20.041 089 97		3.47	11.04	6.25	0.87	0.53	0.98	1.07	0.69	+ 5	− 9	+10	+ 7	−12	+20	−13	−43	+24	− 2	0	−1.64
94128	19 09 39.09	+69 05 35.1	8.01	H	287.412 874 67	+69.093 087 66		2.94	1.54	−1.79	0.59	0.57	0.60	0.60	0.68	+ 8	−18	− 9	+13	+13	−10	+12	+23	− 3	+17	0	1.00
94129	19 09 39.41	−21 28 07.5	8.17	G	287.414 200 44	−21.468 749 11		17.91	−272.42	−380.80	0.90	0.52	0.97	0.91	0.58	− 8	−27	−10	− 4	+ 3	+17	+ 4	−30	+ 8	− 3	2	0.28
94130	19 09 39.76	−39 49 37.9	6.44	H	287.415 664 07	−39.827 185 05		9.32	−4.88	−21.70	0.90	0.55	0.95	1.54	0.71	− 1	−17	−39	+35	+30	−27	− 9	−35	+29	−56	0	0.32
94131	19 09 42.15	+01 14 06.2	8.83	H	287.425 618 93	+01.235 057 69		11.82	−21.36	−142.15	1.10	0.80	1.25	1.22	0.87	+11	− 5	+ 6	−20	− 3	−11	− 1	−39	+ 6	+19	0	−0.91
94132	19 09 42.28	+58 28 06.2	7.16	H	287.426 154 71	+58.468 389 15		3.68	4.16	−18.29	0.52	0.53	0.56	0.58	0.61	+ 8	− 9	+18	+13	+15	+ 6	+13	+21	−11	+23	0	−1.08
94133	19 09 42.45	+02 28 20.2	8.20	H	287.426 884 83	+02.472 269 03		5.15	18.94	8.22	0.87	0.64	1.08	1.05	0.83	+ 3	−10	− 8	−11	+11	+17	+12	−24	+28	+23	0	−0.93
94134	19 09 42.59	+64 51 32.1	10.32	3 H	287.427 473 33	+64.858 918 59		2.00	11.89	4.84	1.01	0.93	0.97	1.01	1.19	+ 3	−19	− 5	+40	+11	− 6	+15	+23	+ 3	+18	0	−0.77
94135	19 09 42.74	−31 55 15.2	9.52	G	287.428 101 09	−31.920 898 93		−0.12	0.05	0.46	1.34	0.75	1.38	1.62	1.01	+19	−22	−14	+14	− 7	−18	−28	−43	+16	−16	0	0.38
94136	19 09 43.79	−27 06 51.7	6.85	H	287.432 473 51	−27.114 349 32		7.47	−16.17	−27.56	1.04	0.52	1.10	1.08	0.73	− 7	−52	+18	+17	−13	+ 6	− 9	−34	− 2	+12	0	−1.56
94137	19 09 44.74	+37 02 38.6	9.83	H	287.436 427 86	+37.044 046 48		1.60	5.73	5.69	0.79	0.89	1.03	0.96	1.07	−12	+ 4	−26	+15	+ 9	−13	+ 6	+22	− 5	−16	0	0.33
∗94138	19 09 45.67	−34 54 20.4	8.75	H	287.440 310 05	−34.905 662 91		3.90	17.03	7.53	1.30	0.66	1.33	1.67	1.04	+13	−22	− 2	+30	+ 9	− 1	− 4	−25	+24	− 1	2	−1.04
∗94139	19 09 45.65	+05 40 38.1	8.09	H	287.440 207 03	+05.677 250 03		1.44	−3.18	−7.18	0.91	0.65	1.06	1.14	0.81	− 8	−11	− 1	− 9	− 9	−19	−10	−10	+ 5	−37	0	1.54
94140	19 09 45.80	+65 58 42.4	6.26	H	287.440 839 17	+65.978 443 49		10.15	3.95	28.69	0.44	0.43	0.47	0.37	0.52	+ 0	+ 1	+ 0	−32	+20	− 4	+21	+ 8	+ 8	+14	1	0.30
94141	19 09 45.83	−21 01 24.7	2.88	H	287.440 974 04	−21.023 525 34		7.41	−1.17	−36.83	0.68	0.39	0.69	0.68	0.43	−21	−30	− 7	− 7	+ 3	+13	+ 7	−34	− 5	−18	2	−0.88
94142	19 09 46.07	+37 47 39.4	6.83	H	287.441 978 76	+37.794 279 53		8.29	−5.33	−28.07	0.44	0.48	0.56	0.48	0.56	−12	−10	− 9	+18	+ 5	−18	+ 4	+19	− 2	−13	0	−0.90
94143	19 09 46.50	+61 58 36.0	7.60	H	287.443 736 43	+61.976 660 59		1.66	2.52	−4.97	0.68	0.66	0.69	0.78	0.83	+10	+ 1	+21	+10	+22	+ 8	+22	+22	+ 4	+18	2	−0.24
94144	19 09 48.13	−19 48 12.4	6.11	H	287.450 550 90	−19.803 455 73		8.32	24.01	−82.87	0.79	0.47	0.86	1.02	0.60	+ 1	− 7	+ 1	+18	−18	+26	−23	−34	−27	−19	0	−0.75
94145	19 09 49.51	+44 33 26.9	9.00	G	287.456 296 30	+44.557 468 11		5.08	−11.28	−26.57	0.69	0.71	0.81	0.72	0.93	− 1	− 1	− 9	− 5	+13	−17	+16	+28	− 1	− 3	0	−0.54
94146	19 09 49.57	+72 14 36.0	7.55	G	287.456 554 90	+72.243 327 67		6.03	0.45	−8.84	0.57	0.48	0.56	0.63	0.49	− 4	−24	+11	− 4	+17	+ 2	+13	− 2	+ 3	+ 6	0	0.10
94147	19 09 50.06	−48 40 25.4	8.21	H	287.458 570 19	−48.673 734 51		1.36	5.34	−19.34	0.85	0.64	1.08	1.15	0.87	+17	−15	−19	− 3	+20	− 1	+12	−24	+32	+ 2	0	−1.25
94148 H	19 09 50.10	−00 17 12.3	9.15	H	287.458 735 58	−00.286 760 18	A	5.85	16.82	−3.38	2.62	2.11	2.34	2.45	1.73	+ 5	− 4	− 2	−17	+ 7	+ 4	+ 8	−18	+ 3	+14	1	−0.03
94149	19 09 51.59	−00 25 41.2	6.34	H	287.464 970 41	−00.428 098 19		3.73	2.67	−6.34	0.72	0.48	0.78	0.76	0.56	+ 1	−16	− 3	−30	+ 3	+12	+ 6	−36	− 6	+14	2	1.18
94150	19 09 52.62	−68 25 27.6	5.31	H	287.469 259 68	−68.424 344 24		27.13	154.94	−42.59	0.38	0.41	0.63	0.37	0.43	− 9	− 5	−19	−12	+ 3	+ 0	+ 2	−26	+ 1	−16	0	−0.30
94151	19 09 52.70	−48 29 04.6	9.07	G	287.469 563 34	−48.484 607 16		8.76	−39.17	−459.07	1.11	0.87	1.50	1.60	1.29	+ 8	− 5	−32	−17	+23	−17	+13	−44	+43	− 8	0	0.42
94152	19 09 53.60	−16 38 34.1	9.21	H	287.473 322 82	−16.642 807 49		3.53	1.37	6.92	1.18	0.71	1.28	1.47	0.90	+ 5	−14	−15	+17	− 6	+ 9	−12	−29	+14	− 8	0	1.00
94153	19 09 54.17	−44 55 56.4	10.46	G	287.475 698 08	−44.932 341 71		1.07	11.62	−24.19	1.75	1.22	2.11	2.19	1.41	+19	−31	−12	−17	+26	− 5	+13	−44	+ 6	−11	4	−0.01
94154	19 09 54.31	−68 17 58.5	7.53	H	287.476 290 67	−68.299 588 56		28.44	155.02	−41.86	0.55	0.57	0.87	0.53	0.56	+ 4	−17	−26	−28	− 5	+ 4	− 5	−28	+ 4	− 5	0	1.02
94155	19 09 54.75	+14 57 58.5	8.94	H	287.478 136 87	+14.966 263 62		3.70	−2.00	−23.87	0.91	1.03	1.18	0.94	1.10	+67	−13	−10	−20	−50	+ 9	−56	−58	+10	+55	2	0.53
94156	19 09 56.35	+35 39 39.6	6.55	H	287.484 802 35	+35.661 007 79		3.48	−1.88	−2.82	0.40	0.46	0.54	0.44	0.51	−13	+ 8	− 2	− 3	+ 6	− 7	+ 5	− 3	− 1	− 4	0	−1.58
94157	19 09 57.65	−41 53 32.0	5.86	1 H	287.490 224 90	−41.892 229 24		3.99	−0.17	−11.02	0.84	0.44	0.86	0.89	0.52	+ 2	−52	+ 0	+19	−14	+15	− 9	−18	−13	−11	0	0.34
94158	19 09 59.88	−80 23 27.7	9.38	H	287.499 489 35	−80.391 030 21		4.02	−11.96	−4.24	0.76	0.91	1.12	0.82	1.05	−12	+ 6	−15	+ 2	− 4	−31	−10	+ 2	+ 2	−15	0	−0.01
94159 H	19 10 00.99	−40 31 52.9	10.46	H	287.504 133 92	−40.531 361 86	A	1.55	3.61	−6.94	3.86	2.55	4.24	5.57	3.48	+23	+ 0	−22	+20	+ 9	−34	−19	−47	+36	−18	1	−0.29
94160	19 10 01.75	−39 20 26.5	4.10	G	287.507 301 85	−39.340 706 77		6.42	5.89	−36.78	0.82	0.53	0.90	1.41	0.62	+ 0	−18	−39	+27	+36	−33	− 5	−43	+30	−55	0	1.16
94161	19 10 01.89	−49 57 29.0	8.22	G	287.507 864 86	−49.958 069 12		6.53	7.74	−44.75	0.80	0.58	0.94	1.04	0.70	+ 0	−16	−13	− 6	+24	+15	+22	−16	+ 8	−11	0	−0.03
94162	19 10 02.33	+66 06 09.7	8.39	3 H	287.509 716 79	+66.102 694 53	∗	3.13	5.73	31.68	0.78	0.81	0.76	0.88	1.20	+ 4	+ 0	+ 2	−65	+ 8	−13	+ 2	−16	−13	+31	2	0.58
94163	19 10 02.97	−07 16 39.6	7.34	H	287.512 384 80	−07.277 655 16		3.00	−10.65	−66.74	0.82	0.55	0.93	0.83	0.60	− 9	− 6	−16	−36	+21	− 9	+21	−42	+16	+ 0	0	−1.30
94164	19 10 05.14	−00 58 37.2	9.88	H	287.521 419 16	−00.977 006 76		3.33	−26.42	−172.31	1.24	0.91	1.44	1.54	1.15	+14	− 9	− 7	−13	− 2	+19	+ 2	−27	+18	+40	0	−0.66
94165	19 10 06.25	−09 09 20.6	8.12	H	287.526 045 96	−09.155 732 73		2.09	−0.05	7.07	0.80	0.50	0.95	0.89	0.62	+26	−26	− 7	− 8	+10	+14	+ 7	−19	+11	+12	0	3.60
94166	19 10 07.26	−27 55 03.9	9.63	H	287.530 265 24	−27.917 743 21		3.96	−15.02	−39.20	1.64	0.79	1.77	1.78	1.22	− 6	−44	+ 4	+ 5	+ 5	+ 5	− 3	−31	+22	+ 1	0	−0.78
94167	19 10 07.29	+00 55 55.3	7.72	H	287.530 385 97	+00.932 027 10		4.80	−14.95	−9.10	0.85	0.57	0.98	0.87	0.67	+ 2	−15	− 5	−14	+11	+ 8	+15	−29	+16	+27	0	−0.78
94168	19 10 08.27	−71 32 54.8	6.64	H	287.534 452 04	−71.548 550 70		8.03	−1.60	9.21	0.36	0.50	0.69	0.43	0.57	−22	−11	+ 9	+20	−15	−13	−15	+10	+ 3	−30	1	−0.19
94169	19 10 09.86	+02 21 26.7	7.86	2 G	287.541 081 44	+02.357 403 45		2.19	−4.24	−9.22	0.89	0.64	1.02	0.93	0.73	− 7	−19	− 5	−18	+22	+ 2	+21	−28	+13	+ 6	0	−1.05
94170	19 10 10.51	+40 39 01.7	8.82	H	287.543 804 24	+40.650 472 78		3.29	−0.13	−4.37	0.57	0.74	0.76	0.55	0.89	− 8	−12	−13	− 1	+ 2	− 8	+ 2	+40	−19	− 4	0	−2.32
94171	19 10 11.19	−59 32 54.2	8.25	H	287.546 639 33	−59.548 387 26		3.02	2.26	−3.53	0.87	0.60	1.18	1.05	0.77	−18	−16	+ 2	+52	−15	+ 4	+ 1	+ 4	+ 3	+18	0	0.27
94172	19 10 11.42	−49 18 50.5	8.53	H	287.547 593 10	−49.314 030 87		2.47	−13.76	−28.65	0.89	0.64	1.08	1.17	0.83	+ 0	−15	− 8	−12	+24	+ 4	+19	−31	+14	−17	0	0.24
94173 H	19 10 11.90	+16 06 19.4	9.10	H	287.549 582 07	+16.105 399 59	∗	−2.61	−2.75	−4.06	2.59	2.20	1.78	1.41	1.47	+36	− 1	−13	− 3	+ 8	+43	− 5	− 1	+ 2	+53	1	1.05
94174	19 10 11.95	+44 33 35.9	7.33	H	287.549 797 48	+44.559 980 15		9.10	8.29	−1.34	0.55	0.55	0.62	0.52	0.70	− 4	+ 2	−12	− 8	+17	−13	+20	+23	− 1	− 2	0	0.56
94175	19 10 13.07	−54 18 12.3	9.25	H	287.554 440 84	−54.303 412 90		8.50	21.30	4.19	1.19	0.87	1.38	1.48	0.96	+ 4	−31	− 1	− 1	+19	− 2	+14	−49	−20	−12	4	1.29
94176	19 10 15.98	−28 52 17.9	9.44	H	287.566 594 13	−28.871 641 24		8.48	−17.90	2.02	1.75	0.72	1.73	1.88	1.04	− 2	−56	−13	+17	+11	− 6	− 9	−39	+14	−35	0	−0.73
94177	19 10 16.18	+35 35 40.9	7.64	H	287.567 396 52	+35.594 680 73		6.67	9.56	37.42	0.46	0.54	0.64	0.52	0.62	− 7	+ 5	−10	− 6	+ 4	− 8	+ 3	− 5	+ 3	− 2	0	−1.70
94178	19 10 16.45	+62 31 48.5	9.28	H	287.568 556 24	+62.530 131 96		−1.19	−0.48	−5.89	0.96	1.01	1.11	1.25	1.22	+ 9	+ 1	+42	− 9	− 1	−22	+ 9	− 5	− 6	+27	0	−0.42
94179	19 10 21.29	+25 30 14.9	9.29	H	287.588 707 95	+25.504 143 67		0.09	−4.17	−8.16	0.64	0.92	1.24	0.65	1.09	−18	− 2	− 1	+41	+15	+ 5	+17	− 4	− 1	−22	1	−2.28
94180	19 10 24.17	−39 11 11.9	9.04	H	287.600 714 48	−39.186 633 61		4.53	4.22	−3.17	1.46	0.88	1.52	2.32	1.23	−14	−17	−18	+ 8	+36	−32	+19	−40	+28	−39	0	−0.52
94181 H	19 10 26.26	−58 13 26.8	9.79	H	287.609 404 47	−58.224 121 92	A	17.67	6.50	−53.38	2.24	1.61	2.85	2.50	1.97	− 4	−15	− 7	+36	−11	− 9	− 6	+ 2	+ 6	+22	1	−0.08
94182	19 10 26.63	+42 36 04.9	7.51	H	287.610 957 11	+42.601 349 22		3.30	2.22	0.40	0.51	0.58	0.63	0.51	0.74	− 1	+ 0	− 1	+ 8	+10	− 4	+11	+24	+ 2	+ 7	1	0.86
94183	19 10 27.48	+48 26 39.9	7.20	H	287.614 486 29	+48.444 405 71		3.04	7.52	1.51	0.56	0.51	0.59	0.70	0.58	− 1	+ 3	−13	−22	+ 7	− 2	+ 6	−22	+ 5	+17	0	−0.24
94184	19 10 27.58	−30 00 25.1	6.52	H	287.614 927 91	−30.006 959 52		18.19	70.32	−65.50	0.98	0.46	1.01	1.13	0.63	+ 7	−46	−16	+17	+11	−18	−10	−42	+17	−24	0	0.43
94185	19 10 27.95	+68 34 57.6	10.47	H	287.616 451 80	+68.582 669 76		1.81	−2.24	−8.86	8.52	7.85	8.51	9.30	9.42	− 5	−27	+ 9	−27	+ 5	− 3	+ 7	−19	− 9	+14	0	
94186	19 10 30.63	−45 41 32.8	8.97	G	287.627 627 48	−45.692 442 67		12.58	186.06	−94.35	1.25	0.92	1.55	1.75	1.13	+ 6	−21	−35	−34	+32	−18	+16	−56	+27	−18	0	−0.18
94187	19 10 31.56	+22 43 38.2	8.36	H	287.631 491 26	+22.727 282 09		3.96	42.79	7.51	0.54	0.63	1.07	0.68	0.81	−21	− 6	+ 2	− 4	− 6	+ 5	− 7	− 7	+10	−12	0	0.49
94188	19 10 31.62	−55 08 23.0	9.32	H	287.631 766 15	−55.139 712 99		2.48	21.26	−11.01	1.03	0.88	1.36	1.20	0.98	+40	−15	− 4	+17	−36	− 8	−27	−48	−16	+48	0	−0.20
94189	19 10 32.98	+03 27 10.7	8.38	H	287.637 431 88	+03.452 986 05		2.68	−1.87	−16.28	0.95	0.70	1.16	0.93	0.77	− 4	−34	− 8	−16	− 4	+18	− 3	−20	− 3	−19	4	1.13
94190	19 10 33.11	+00 41 22.7	8.59	H	287.637 961 59	+00.689 637 78		5.30	−9.73	−0.61	0.99	0.68	1.13	1.06	0.78	+ 1	−20	− 7	−11	+ 9	+ 5	+12	−27	+13	+28	0	−1.61
94191	19 10 33.39	−78 03 32.1	8.83	H	287.639 145 17	−78.058 909 62		11.14	51.52	−46.66	0.60	0.71	0.89	0.69	0.93	− 6	−22	+ 6	+11	− 2	− 3	− 4	− 9	+ 9	− 3	0	−0.15
94192	19 10 33.96	+42 01 19.9	7.10	H	287.641 492 07	+42.022 186 18		4.93	6.11	2.94	0.50	0.58	0.62	0.50	0.77	− 4	− 8	−11	+ 2	+ 2	+ 6	+ 3	+24	+ 3	− 1	0	−1.71
94193	19 10 34.70	−00 41 44.5	7.81	H	287.644 599 58	−00.695 703 95		4.68	2.28	−16.78	0.91	0.62	1.04	1.05	0.76	+ 6	− 2	−11	−11	+12	+ 7	+17	−26	−10	+25	2	−0.61
94194 H	19 10 36.61	+54 28 35.1	8.67	H	287.652 539 82	+54.476 409 26	∗	5.53	10.18	−25.73	0.79	0.78	0.84	0.87	1.09	+ 7	− 8	+ 7	− 3	− 5	−12	+ 0	−23	−11	+20	0	0.95
94195	19 10 36.79	+28 20 52.4	8.72	H	287.653 285 06	+28.347 890 61		7.63	48.34	44.11	0.64	0.80	1.08	0.76	0.88	−14	− 9	−17	+14	+17	− 3	+14	− 4	+14	−19	0	0.23
94196	19 10 36.86	−43 16 35.7	9.99	2 G	287.653 576 41	−43.276 590 73		−0.29	−2.46	−52.58	4.77	3.47	5.71	6.06	4.14	+25	−23	−10	−23	+ 3	−15	− 3	−54	− 5	+12	0	
94197	19 10 37.57	+22 29 52.5	11.77	2 H	287.656 547 59	+22.497 907 36		−8.27	−16.18	−28.03	3.18	3.81	5.82	4.40	5.25	−17	−23	+ 4	+11	+20

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
94101	9.630	0.019	7.766	0.009		1.549	0.017	T	1.61	0.04	L	7.6927	0.0016	0.012	86		7.67	7.72					1							S
94102	9.444	0.012	8.359	0.008		0.938	0.011	T	0.93	0.01	L	8.4085	0.0013	0.014	199		8.38	8.44		C			1							
94103	9.584	0.019	7.339	0.007		1.853	0.016	T	1.88	0.02	L	7.2728	0.0017	0.013	82		7.25	7.30		M			1							S
94104	6.835	0.004	6.912	0.006		−0.066	0.007	T	−0.04	0.01	L	6.9063	0.0007	0.008	140		6.89	6.92			19094+3034	I 1	1							S
94105	9.110	0.011	8.998	0.013		0.109	0.016	T	0.12	0.02	L	9.0185	0.0019	0.024	175		8.98	9.05					1							
94106	9.858	0.024	9.620	0.026		0.227	0.033	T	0.25	0.04	L	9.7164	0.0025	0.018	109		9.68	9.75		C			1							
94107	8.787	0.012	7.226	0.007		1.310	0.011	T	1.27	0.01	L	7.2203	0.0016	0.009	90		7.20	7.23			19094−1327	I 1	1 X	S						S
94108	10.447	0.039	9.077	0.021		1.160	0.035	T	1.12	0.03	L	9.1254	0.0021	0.017	91		9.10	9.16		C			1							
94109	11.440	0.070	9.849	0.027		1.334	0.059	T	1.30	0.07	L	9.8983	0.0020	0.027	129		9.86	9.93					1							
94110	9.189	0.019	8.170	0.014		0.888	0.018	T	0.89	0.01	L	8.2091	0.0017	0.013	84		8.19	8.23		C			1							S
94111	8.740	0.011	8.306	0.011		0.432	0.015	G	0.50	0.02	H	8.3503	0.0016	0.013	102		8.33	8.38		C			1 G							S
94112	8.868	0.011	8.321	0.011		0.539	0.015	G	0.61	0.02	H	8.3723	0.0018	0.014	117		8.35	8.39		C			1							
94113	10.687	0.042	8.723	0.015		1.629	0.035	T	1.65	0.04	L	8.5706	0.0021	0.016	88		8.54	8.59		C			1	S						
94114	4.183	0.003	4.109	0.002		0.042	0.006	G	0.03	0.02	A	4.1260	0.0004	0.004	66		4.12	4.13		C			1							S
94115	9.992	0.027	8.754	0.016		1.057	0.025	T	1.02	0.02	L	8.7814	0.0015	0.014	104		8.76	8.81		C			1							
94116	11.020	0.060	10.141	0.045		0.769	0.058	T	0.81	0.04	L	10.1974	0.0025	0.019	81		10.15	10.23		C			1							G
94117	8.098	0.007	8.168	0.009		−0.050	0.015	G	−0.03	0.01	H	8.1641	0.0015	0.016	137		8.14	8.20		C			1							
94118	9.821	0.017	9.314	0.017		0.480	0.020	G	0.55	0.02	H	9.3780	0.0022	0.027	145		9.33	9.44					1							
94119	11.491	0.078	10.018	0.036	*	1.241	0.068	T	1.20	0.07	L *	9.9601	0.0036	0.031	114	*	9.91	10.00		D	19096−1053	H 1	2 C	A	AB	323	0.574	0.013	2.16	0.08	G
94120	7.849	0.010	7.319	0.009		0.503	0.015	G	0.58	0.02	H	7.3894	0.0012	0.008	75		7.37	7.41					1							S
94121	9.518	0.014	8.884	0.012		0.584	0.014	T	0.66	0.01	L	8.9508	0.0019	0.022	187		8.91	8.98					1							
94122	7.805	0.010	7.793	0.012		0.033	0.015	G	0.05	0.01	H	7.8091	0.0011	0.009	93		7.79	7.83		C			1							S
94123	10.252	0.028	9.011	0.016		1.059	0.025	T	1.03	0.02	L	9.0491	0.0019	0.019	118		9.02	9.09					1	S						
94124	6.534	0.004	6.539	0.004		0.000	0.005	T	0.02	0.01	L	6.5517	0.0007	0.007	93		6.54	6.56		C			1							S
94125	8.164	0.010	7.781	0.009		0.389	0.001	G	0.45	0.00	H	7.8399	0.0013	0.013	102		7.82	7.87					1							S
94126	8.892	0.013	8.294	0.012		0.566	0.015	G	0.64	0.01	H	8.3507	0.0011	0.011	111		8.33	8.38		C			1							S
94127	8.077	0.011	7.924	0.013		0.132	0.015	G	0.15	0.01	H	7.9670	0.0011	0.009	89		7.95	7.99		C			1							S
94128	9.777	0.018	8.146	0.009		1.365	0.016	T	1.33	0.02	L	8.1557	0.0013	0.015	124		8.13	8.18		C			1							
94129	8.946	0.016	8.256	0.014		0.652	0.015	G	0.72	0.01	H	8.2965	0.0014	0.010	93		8.28	8.31		C	19097−2128	I 1	1							
94130	7.830	0.007	6.560	0.005		1.064	0.004	G	1.03	0.00	H	6.6089	0.0012	0.007	81		6.60	6.62		C			1							S
94131	9.797	0.021	8.932	0.017		0.740	0.015	G	0.79	0.01	H	8.9772	0.0020	0.020	87		8.94	9.01		C			1							
94132	9.143	0.013	7.317	0.006		1.519	0.011	T	1.55	0.02	L	7.2806	0.0015	0.012	107		7.26	7.30					1							S
94133	10.306	0.034	8.384	0.013		1.595	0.029	T	1.61	0.03	L	8.3182	0.0018	0.013	77		8.29	8.34					1							
94134	10.485	0.034	10.151	0.038		0.317	0.048	T	0.37	0.07	L	10.4039	0.0408	0.305	120		9.78	10.76	0.48	P 1 A			1							G
94135	9.367	0.018	9.485	0.027		−0.117	0.002	G	−0.10	0.00	H	9.4924	0.0022	0.018	88		9.46	9.52		C			1							
94136	8.220	0.010	6.968	0.007		1.068	0.010	T	1.03	0.01	L	7.0183	0.0011	0.008	82		7.01	7.03		C			1							S
94137	10.155	0.026	9.879	0.032		0.263	0.039	T	0.30	0.05	L	9.9041	0.0024	0.028	124		9.84	9.95					1							G
94138	10.906	0.063	8.917	0.020		1.685	0.054	T	1.76	0.14	O	8.8413	0.0019	0.017	86		8.81	8.86					1							
94139	8.437	0.014	8.126	0.015		0.295	0.019	T	0.34	0.03	L	8.1685	0.0020	0.013	68		8.15	8.19		C			1							
94140	6.270	0.003	6.262	0.004		0.008	0.004	T	0.03	0.00	L	6.2712	0.0007	0.006	99		6.26	6.28		C			1							S
94141	3.340	0.002	2.937	0.002		0.377	0.021	G	0.44	0.02	A	2.9664	0.0004	0.004	93		2.96	2.97			19098−2101	I 1	1							S
94142	7.254	0.006	6.852	0.006		0.365	0.013	G	0.33	0.03	C	6.9069	0.0007	0.007	122		6.89	6.92		C			1							S
94143	9.710	0.023	7.778	0.010		1.603	0.020	T	1.62	0.02	L	7.7176	0.0020	0.013	76		7.69	7.74					1							S
94144	7.603	0.009	6.244	0.005		1.156	0.002	G	1.12	0.00	H	6.2750	0.0008	0.007	88		6.26	6.29		C	19098−1948	I 1	1							S
94145	9.241	0.013	8.975	0.015		0.248	0.023	G	0.28	0.03	H	9.0540	0.0025	0.022	106		9.02	9.09			19098+4433	I 1	1							
94146	8.010	0.008	7.591	0.008		0.408	0.015	G	0.47	0.02	H	7.6407	0.0013	0.009	115		7.63	7.66					1							S
94147	9.196	0.016	8.285	0.012		0.822	0.015	G	0.84	0.01	H	8.3605	0.0016	0.012	88		8.34	8.38		C			1							
94148	9.685	0.027	9.263	0.029	*	0.399	0.037	T	0.46	0.04	L *	9.2349	0.0029	0.021	79	*	9.20	9.28		D	19098−0017	I 1	2 C	A	AB	146	0.413	0.005	0.90	0.03	
94149	6.272	0.004	6.322	0.005		−0.042	0.006	T	−0.02	0.01	L	6.3291	0.0009	0.007	91		6.32	6.35					1							S
94150	6.455	0.004	5.409	0.003		0.901	0.001	G	0.90	0.00	H	5.4668	0.0005	0.007	168		5.46	5.48					1							S
94151	9.851	0.024	9.110	0.020		0.661	0.008	G	0.72	0.01	H	9.2116	0.0017	0.015	82		9.18	9.24					1							
94152	9.578	0.020	9.232	0.022		0.335	0.027	T	0.39	0.04	L	9.2922	0.0026	0.018	85		9.26	9.32		C			1							
94153	11.009	0.056	10.436	0.054		0.506	0.020	G	0.58	0.02	H	10.5984	0.0036	0.029	93		10.56	10.65		C			1							G
94154	8.262	0.008	7.605	0.007		0.600	0.008	T	0.67	0.01	L	7.6543	0.0014	0.016	164		7.63	7.68					1							S
94155	9.327	0.017	8.972	0.018		0.337	0.023	T	0.39	0.03	L	9.0202	0.0015	0.014	116		8.99	9.04					1							
94156	8.240	0.009	6.677	0.004		1.311	0.008	T	1.27	0.01	L	6.7019	0.0008	0.006	139		6.69	6.71		C			1							S
94157	5.752	0.003	5.845	0.004		−0.080	0.004	T	−0.06	0.01	L	5.8394	0.0008	0.008	73		5.83	5.86		M			1							S
94158	10.019	0.021	9.402	0.020		0.574	0.025	T	0.65	0.02	L	9.4993	0.0021	0.022	135		9.46	9.55		C			1							
94159	10.986	0.075	10.448	0.075	*	0.520	0.042	G	0.59	0.04	R *	10.5767	0.0049	0.031	78	*	10.52	10.62		D	19100−4032	I 1	2 C	A	AB	232	0.818	0.015	1.14	0.05	G
94160	5.653	0.003	4.244	0.002		1.163	0.077	G	1.11	0.02	A	4.2728	0.0008	0.005	75		4.26	4.28					1							S
94161	8.577	0.012	8.247	0.012		0.300	0.020	G	0.34	0.03	H	8.3015	0.0015	0.014	85		8.28	8.33		C			1							S
94162	10.302	0.030	8.652	0.013		1.406	0.027	T	3.79	0.05	O	7.9782	0.0162	0.216	90		7.68	8.35		U 2 C	19100+6606	I 1	1 V							
94163	8.868	0.012	7.481	0.007		1.173	0.011	T	1.13	0.01	L	7.5064	0.0012	0.011	105		7.49	7.53		C			1							S
94164	10.234	0.032	9.957	0.038		0.264	0.047	T	0.30	0.06	L	9.9538	0.0027	0.023	87		9.91	9.99		C			1							G
94165	8.560	0.009	8.172	0.010		0.367	0.012	T	0.43	0.01	L	8.2100	0.0013	0.012	123		8.19	8.23					1							
94166	11.220	0.077	9.781	0.033		1.180	0.020	G	1.14	0.02	H	9.7987	0.0022	0.022	93		9.76	9.85					1							
94167	7.990	0.008	7.747	0.009		0.232	0.011	T	0.26	0.01	L	7.7916	0.0013	0.012	93		7.77	7.81		C			1							S
94168	7.886	0.006	6.749	0.004		0.978	0.006	T	0.96	0.02	A	6.8025	0.0008	0.011	206		6.79	6.82					1							S
94169	8.306	0.011	7.909	0.011		0.390	0.015	G	0.46	0.02	H	7.9431	0.0043	0.031	80		7.91	7.99	4.51	P 1 A			1							S
94170	9.287	0.013	8.845	0.013		0.417	0.017	T	0.48	0.02	L	8.9108	0.0017	0.016	139		8.89	8.94					1							
94171	10.276	0.030	8.425	0.012		1.510	0.015	G	1.54	0.02	H	8.3760	0.0020	0.014	105		8.35	8.40		C			1							
94172	10.006	0.030	8.656	0.018		1.144	0.027	T	1.11	0.02	L	8.6967	0.0019	0.016	82		8.68	8.72					1							
94173	9.562	0.023	9.184	0.024	*	0.358	0.031	T	0.42	0.03	L *	9.1829	0.0031	0.021	85	*	9.15	9.23		D	19102+1606	I 1	2 C	A	BA	188	0.227	0.008	0.19	0.20	
94174	7.603	0.007	7.353	0.008		0.223	0.003	G	0.25	0.00	H	7.3989	0.0013	0.010	110		7.38	7.42					1							S
94175	9.799	0.025	9.286	0.024		0.492	0.026	T	0.56	0.03	L	9.3556	0.0019	0.016	74		9.32	9.38		C			1							
94176	10.209	0.036	9.479	0.029		0.655	0.035	T	0.72	0.03	L	9.5766	0.0023	0.017	87		9.55	9.60		C			1							
94177	8.069	0.008	7.679	0.008		0.369	0.010	T	0.43	0.01	L	7.7273	0.0010	0.009	136		7.71	7.74		C			1							S
94178	11.029	0.054	9.416	0.023		1.351	0.046	T	1.32	0.05	L	9.4317	0.0020	0.017	82		9.39	9.47		D			1							
94179	9.448	0.013	9.324	0.016		0.120	0.019	T	0.13	0.02	L	9.3367	0.0022	0.026	223		9.29	9.39					1							
94180	10.948	0.089	9.229	0.038		1.160	0.040	G	1.12	0.04	R	9.2049	0.0024	0.018	76		9.18	9.24		C			1							
94181	11.101	0.054	10.005	0.033	*	0.938	0.050	T	0.93	0.04	L *	9.9335	0.0024	0.025	119	*	9.89	9.98		D	19104−5813	I 1	2 C	A	AB	325	0.699	0.009	1.71	0.05	
94182	7.386	0.005	7.483	0.007		−0.084	0.008	T	−0.06	0.01	L	7.4822	0.0011	0.009	115		7.46	7.50		C			1							S
94183	7.309	0.005	7.222	0.006		0.085	0.007	T	0.10	0.01	L	7.2381	0.0010	0.010	106		7.22	7.26					1							S
94184	7.059	0.005	6.579	0.006		0.464	0.006	T	0.53	0.01	L	6.6218	0.0009	0.008	112		6.61	6.63		C			1							S
94185	11.856	0.113	10.594	0.058		1.075	0.099	T	1.04	0.08	L	10.6338	0.0034	0.032	107		10.57	10.70					1 X							G G
94186	9.756	0.020	9.022	0.017		0.645	0.004	G	0.71	0.00	H	9.1036	0.0019	0.018	88		9.07	9.13		C			1							
94187	9.552	0.011	8.461	0.008		0.943	0.010	T	0.93	0.01	L	8.5257	0.0014	0.018	217		8.50	8.56					1							
94188	10.726	0.042	9.400	0.022		1.125	0.037	T	1.09	0.04	L	9.4886	0.0019	0.017	111		9.46	9.51					1							
94189	10.727	0.048	8.616	0.015		1.810	0.015	G	1.82	0.09	H	8.4757	0.0021	0.017	85		8.45	8.51					1							
94190	9.189	0.016	8.635	0.015		0.519	0.020	T	0.59	0.02	L	8.7021	0.0014	0.015	89		8.67	8.74		D			1							
94191	9.445	0.015	8.898	0.014		0.543	0.015	G	0.62	0.01	H	8.9524	0.0016	0.016	150		8.92	8.98		C			1							
94192	7.138	0.006	7.099	0.006		0.041	0.008	T	0.06	0.01	L	7.1187	0.0010	0.011	119		7.10	7.14					1							S
94193	9.573	0.021	7.943	0.011		1.364	0.019	T	1.33	0.02	L	7.9619	0.0015	0.013	94		7.94	7.98		C			1							
94194	9.169	0.014	8.712	0.014	*	0.431	0.018	T	0.50	0.02	L *	8.7667	0.0021	0.018	96	*	8.74	8.81		C	19106+5429	I 1	2 C S	A	AB	306	0.138	0.018	0.88	0.63	
94195	9.288	0.012	8.769	0.012		0.470	0.015	G	0.54	0.02	H	8.8244	0.0022	0.021	166		8.79	8.86		C			1							
94196	10.880	0.047	10.108	0.038		0.698	0.023	G	0.75	0.02	H	10.0500	0.0041	0.048	97		9.97	10.14		U 2	19106−4317	I 1	1 X	S						G
94197						0.737	0.126	G	0.78	0.09	R	11.9105	0.0103	0.132	169		11.69	12.14		U			1	S						G
94198	7.312	0.008	7.315	0.013	*	−0.060	0.015	G	−0.04	0.01	H *	7.4107	0.0010	0.009	95	*	7.40	7.43		D	19106−6003	I 1	2 C	A	AB	239	2.715	0.005	1.74	0.03	S
94199	9.305	0.017	9.335	0.023		−0.023	0.026	T	0.00	0.03	L	9.3141	0.0022	0.020	99		9.29	9.36		C			1							
94200	9.354	0.015	8.664	0.013		0.625	0.015	T	0.69	0.01	L	8.7279	0.0013	0.013	121		8.70	8.75		C			1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)													Soln	
HIP	RA		Dec	V		α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	δ	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	F1	F2
	h m s		±° ′ ″	mag		deg		deg	mas	mas/yr		mas		mas	mas/yr		$\alpha*$	π	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3		4	5	6 7	8		9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
94201	19 10 41.44	−72 09 50.1	8.57	H	287.672 651 91	−72.163 918 35		3.75	−2.21	10.07	0.48	0.68	0.92	0.53	0.82	− 9 − 6 +14 +23 − 8 −14 − 7 +16 +15 − 9										1	0.12
94202	19 10 41.89	−29 48 48.4	8.01	H	287.674 541 91	−29.813 451 43		13.70	−108.42	−89.57	1.15	0.53	1.18	1.33	0.71	+11 −46 −19 +24 +13 −13 −11 −39 +19 −25										0	0.99
94203	19 10 42.12	−38 25 59.9	9.26	H	287.675 491 83	−38.433 313 10		0.33	5.59	2.13	1.50	0.86	1.45	2.93	1.31	−13 −18 −10 +19 +31 −21 + 0 −45 +20 −58										0	−0.80
94204	19 10 42.20	+23 51 05.8	7.85	G	287.675 844 52	+23.851 611 51		6.17	7.45	11.89	0.50	0.58	0.86	0.69	0.69	+ 1 − 6 − 6 −14 −20 + 3 −17 −23 +14 + 9										2	−1.30
94205	19 10 44.16	+31 05 17.2	7.95	H	287.684 019 73	+31.088 112 08		1.66	0.33	−8.33	0.59	0.65	0.87	0.69	0.81	−11 −13 + 4 +11 + 8 − 4 + 9 −14 + 0 −10										0	−1.10
94206	19 10 44.50	−75 40 30.4	8.53	H	287.685 425 10	−75.675 102 81		1.81	3.88	−6.81	0.64	0.77	1.02	0.81	0.86	− 4 −17 − 1 +18 + 0 − 6 − 3 + 0 +10 − 8										0	0.76
*94207	19 10 44.82	+21 11 20.7	8.13	H	287.686 747 60	+21.189 083 44		2.63	−5.16	−5.07	0.57	0.69	0.94	0.70	0.97	+29 −23 −10 + 3 + 8 +15 + 9 +26 − 1 +30										0	−0.63
*94208	19 10 44.78	−76 24 15.7	6.94	H	287.686 586 73	−76.404 368 36		9.78	−92.36	−126.79	0.47	0.52	0.71	0.60	0.58	−11 −16 + 7 + 1 + 0 − 5 − 1 − 4 + 9 −11										0	−1.26
94209	19 10 45.27	−56 46 07.1	7.60	H	287.688 639 23	−56.768 636 62		5.26	−1.40	−12.91	0.81	0.67	1.03	0.83	0.63	+38 −30 −22 +25 −33 − 7 −33 −39 − 3 +29										0	1.78
94210	19 10 45.57	+31 38 06.0	7.17	H	287.689 894 64	+31.634 999 48		10.13	40.09	−32.94	0.45	0.50	0.65	0.52	0.62	− 4 −11 −10 + 9 + 9 + 4 +10 + 5 + 7 − 4										0	−2.10
94211	19 10 46.80	+38 54 19.8	8.28	H	287.695 016 10	+38.905 496 86		2.55	1.92	−11.64	0.64	0.66	0.79	0.74	0.82	−17 − 7 − 4 − 5 +13 − 9 +12 + 9 − 6 − 6										0	−1.23
94212	19 10 46.87	+31 19 17.8	7.84	H	287.695 280 47	+31.321 610 16		2.03	7.84	4.42	0.50	0.58	0.75	0.58	0.70	+ 0 −16 − 6 + 8 + 8 − 1 + 6 − 5 +12 + 0										0	−0.60
94213	19 10 47.82	+21 16 22.5	8.67	H	287.699 234 58	+21.272 904 05		4.67	−3.05	6.25	0.69	0.80	1.13	0.88	1.04	+27 −20 −22 + 7 − 2 +19 + 5 +15 −12 +17										0	1.04
94214	19 10 47.86	−38 54 33.8	7.61	G	287.699 406 00	−38.909 395 28		16.41	26.69	−33.51	1.02	0.62	1.01	1.76	0.86	−17 −21 −19 +11 +34 −28 + 9 −40 +25 −55										0	1.59
94215	19 10 48.19	+03 31 51.1	8.06	H	287.700 788 42	+03.530 868 94		1.61	3.66	−1.45	0.86	0.62	1.03	0.85	0.65	−18 −33 − 4 − 7 − 4 +19 − 3 −20 − 5 −32										6	0.84
94216	19 10 48.31	+19 44 49.1	8.28	G	287.701 279 19	+19.746 973 68		5.61	−1.22	−23.61	0.62	0.72	0.99	0.76	1.09	+32 −19 −16 + 2 + 3 + 8 + 5 +21 − 9 +27										1	0.90
94217	19 10 48.59	−32 23 31.0	8.92	H	287.702 454 80	−32.391 945 76		2.76	3.68	−7.97	1.27	0.70	1.46	1.53	1.11	+21 −32 −34 +24 + 3 − 5 −19 −33 +41 − 6										0	0.24
94218	19 10 49.21	+50 43 12.5	8.63	H	287.705 055 86	+50.720 127 70		3.49	−4.89	−31.41	0.67	0.62	0.71	0.75	0.69	− 2 −23 + 8 +13 + 6 + 6 + 6 + 7 + 1 +11										0	0.13
94219	19 10 49.38	−64 59 26.9	7.95	H	287.705 766 89	−64.990 794 97		5.24	15.77	−54.52	0.68	0.55	0.92	0.91	0.69	− 7 − 5 − 6 +22 −15 + 0 − 7 −23 − 1 +11										0	0.44
94220	19 10 49.73	+10 20 44.9	7.09	G	287.707 206 43	+10.345 819 40		1.90	2.24	−17.94	0.77	0.56	0.86	0.84	0.62	− 5 −15 −12 −24 + 7 −12 + 3 −38 +13 −12										0	2.21
94221	19 10 50.60	+39 10 17.8	8.15	H	287.710 836 01	+39.171 601 88		4.36	20.77	23.86	0.63	0.65	0.78	0.71	0.84	+ 1 + 6 − 3 +16 +14 − 6 +15 +15 − 6 + 4										0	−0.86
94222 H	19 10 50.78	−12 08 35.3	7.94	H	287.711 570 23	−12.143 152 26	A	2.25	0.76	−21.58	1.64	1.07	1.64	1.56	1.26	+17 −32 − 7 + 3 + 5 + 0 + 9 −13 +14 +48										1	0.71
*94223 H	19 10 52.62	−48 04 41.1	10.28	H	287.719 229 57	−48.078 089 02	B	4.51	−519.27	−256.49	52.62	39.61	7.29	35.73	28.15	+10 + 5 −10 −17 + 4 + 1 + 9 −39 + 9 +25										2	11.29
*94224	19 10 51.55	−15 04 40.1	7.35	2 H	287.714 796 46	−15.077 816 28	*	3.91	3.39	−2.72	1.08	0.69	1.24	1.49	1.13	+15 −20 −32 +13 + 5 − 3 − 2 −15 +10 +23										0	−0.34
*94225	19 10 52.32	−47 09 25.5	9.36	G	287.717 988 99	−47.157 077 28		49.84	−54.56	−634.12	1.33	1.00	1.51	1.73	1.28	+29 −17 −11 + 0 − 3 − 6 − 5 −32 − 4 +24										4	−0.99
94226	19 10 53.46	+34 07 08.0	11.47	H	287.722 755 10	+34.118 876 87		9.77	−61.44	129.45	1.65	1.86	2.29	2.31	2.57	+ 6 −14 − 9 + 3 − 9 − 3 −11 −13 +17 + 9										2	0.47
*94227	19 10 54.51	−48 04 47.4	10.31	H	287.727 131 79	−48.079 845 82	A	4.51	−35.59	5.25	8.71	6.04	7.29	9.36	7.17	+ 0 −32 + 1 −24 +15 + 9 +23 −41 −11 +17										2	11.29
*94228	19 10 54.19	−68 23 59.3	8.45	H	287.725 781 46	−68.399 799 61		1.67	7.93	−14.13	0.65	0.77	1.17	0.65	0.86	− 1 − 3 −18 −20 + 4 − 4 + 3 −30 + 6 − 4										0	−1.20
94229	19 10 55.65	+33 19 34.1	7.53	H	287.731 857 57	+33.326 128 61		1.51	1.62	−3.38	0.51	0.55	0.73	0.57	0.63	− 3 −11 + 0 +29 − 1 −24 − 3 + 2 +22 − 4										0	−1.00
94230 H	19 10 56.96	+08 07 17.7	7.44	G	287.737 334 72	+08.121 597 16	A	11.37	−49.90	−21.27	1.24	0.90	1.32	1.20	0.87	− 1 −12 − 7 − 5 −14 + 1 −17 −19 +16 − 9										2	1.51
94231 H	19 10 57.10	−48 46 43.9	8.99	H	287.737 921 60	−48.778 857 19	A	2.02	−2.22	−4.99	1.97	1.46	2.19	2.33	1.79	+30 + 0 −24 −11 +12 −23 + 9 −39 +30 + 8										0	−0.61
94232	19 10 57.17	+39 52 24.4	7.93	H	287.738 194 19	+39.873 442 35		1.97	3.01	−4.05	0.60	0.67	0.72	0.74	0.82	+ 4 − 6 + 7 +23 +11 −15 +14 +46 + 0 − 3										1	−0.35
94233	19 10 57.33	+13 33 39.9	9.24	H	287.738 893 02	+13.561 085 42		2.57	−3.46	−0.46	1.12	0.89	1.33	1.15	0.99	−16 −15 + 1 − 7 + 8 +10 + 7 −26 +11 −10										0	−0.65
94234	19 10 57.76	+41 46 33.4	7.91	1 G	287.740 666 02	+41.775 954 84		2.56	1.87	−0.74	0.58	0.62	0.71	0.64	0.83	+ 4 −18 −10 − 9 + 4 +14 + 5 +24 + 0 + 6										0	0.50
94235	19 10 57.84	−60 16 19.0	8.31	H	287.740 987 87	−60.271 958 05		17.49	13.30	−98.88	0.79	0.58	1.08	0.99	0.89	− 4 −23 + 8 +26 −20 − 3 − 8 −18 + 1 +31										4	−0.82
94236	19 10 58.25	−06 37 18.5	6.84	H	287.742 701 90	−06.621 807 63		9.00	21.22	−20.45	0.73	0.52	0.84	1.05	0.80	−10 −19 −12 −33 +32 +10 +26 −54 + 9 −33										0	1.37
94237	19 10 58.84	−25 40 19.7	10.21	H	287.745 150 51	−25.672 136 80		2.64	−0.34	−2.12	1.83	0.92	1.84	2.01	1.40	− 5 − 8 + 0 −35 + 1 − 5 + 8 −59 +11 +10										0	−1.00
94238	19 10 59.82	−24 11 05.5	7.38	H	287.749 255 42	−24.184 858 69		4.25	6.31	−5.65	1.14	0.64	1.02	2.13	1.08	−43 + 3 − 8 −24 +44 +11 +28 −60 − 6 −74										0	−2.15
94239	19 11 00.70	+51 21 44.2	8.37	G	287.752 916 03	+51.362 266 60		5.90	26.90	−12.23	0.64	0.59	0.66	0.71	0.64	+ 8 −12 + 0 +16 +18 + 7 +16 +13 + 6 +17										0	0.99
94240	19 11 00.90	−69 13 05.3	8.88	1 H	287.753 748 60	−69.218 138 72		3.52	1.15	−8.89	0.62	0.81	1.23	0.64	0.82	− 9 − 9 −16 +30 + 7 − 9 + 0 −18 + 8 −22										0	0.42
94241 H	19 11 01.26	−07 25 38.7	6.74	H	287.755 262 50	−07.427 424 50	*	5.51	−32.90	−42.83	1.82	1.04	1.11	1.05	0.75	+19 − 6 −14 −41 − 4 + 3 − 6 −32 +22 +51										1	−0.72
94242	19 11 01.67	+09 11 49.4	8.91	H	287.756 958 42	+09.197 061 45		3.18	1.75	−16.96	1.12	0.85	1.28	1.34	0.92	+13 −18 −14 −30 − 5 −10 − 9 −42 +17 +13										0	−1.20
94243	19 11 01.91	−39 00 16.9	6.34	H	287.757 943 48	−39.004 682 19		1.24	−0.25	−9.45	0.86	0.53	0.85	1.48	0.66	−18 − 9 −25 +20 +30 −29 + 4 −36 +21 −55										0	0.43
94244	19 11 01.98	−25 48 48.7	9.16	G	287.758 255 01	−25.813 524 39		20.84	−21.08	−165.71	1.46	0.76	1.44	1.70	1.17	− 2 −10 − 1 −39 − 6 − 1 + 0 −64 + 9 +15										0	−1.57
94245	19 11 02.13	−70 04 52.2	8.38	H	287.758 889 64	−70.081 171 19		7.61	4.93	−78.39	0.37	0.61	0.94	0.44	0.70	−17 −10 − 5 +31 − 2 − 5 − 3 − 2 + 0 −22										0	0.08
94246	19 11 03.46	+28 28 09.9	8.07	H	287.764 421 69	+28.469 406 54		8.58	14.22	9.26	0.51	0.59	0.84	0.63	0.67	− 9 + 2 −14 +22 +11 − 3 + 9 + 4 +22 −12										0	0.00
94247	19 11 05.37	+05 10 47.4	7.12	H	287.772 395 72	+05.179 834 85		2.35	2.47	−6.22	0.82	0.61	0.98	0.87	0.61	+12 −18 + 2 −26 −17 −28 −20 −40 +14 −13										2	1.46
94248	19 11 05.59	−15 55 13.2	7.56	H	287.773 288 36	−15.920 333 46		4.18	20.25	−3.32	0.90	0.51	0.98	0.99	0.63	− 7 −33 − 6 − 2 + 8 +16 + 7 −23 + 9 − 7										0	0.89
94249 H	19 11 05.61	−64 17 27.5	8.04	H	287.773 357 54	−64.290 967 04	A	11.39	−40.42	9.53	1.35	1.10	1.28	1.28	0.94	−10 + 3 −11 +21 −22 + 3 − 4 −25 + 8 +14										0	0.21
94250	19 11 06.43	+05 16 28.8	7.08	H	287.776 789 17	+05.274 658 07		2.28	6.43	3.84	0.73	0.56	0.89	0.82	0.60	+13 −17 + 1 −22 −17 −16 −19 −33 + 6 −11										0	−0.71
*94251	19 11 08.12	+29 11 50.3	10.48	H	287.783 821 56	+29.197 313 03		0.75	−1.63	4.07	0.98	1.24	1.63	1.25	1.41	− 8 − 7 −22 +25 + 6 −17 + 2 + 3 +11 − 6										3	−1.44
*94252 H	19 11 08.07	+38 46 49.3	7.57	G	287.783 614 63	+38.780 357 06	B	20.52	−227.81	−106.21	1.38	1.48	1.25	1.34	1.63	− 4 −14 + 9 − 8 + 0 −10 − 1 − 4 −10 + 8										3	1.21
94253	19 11 08.30	−04 07 45.7	8.44	H	287.784 572 25	−04.129 371 63		2.24	−3.08	−4.66	0.89	0.58	1.06	0.95	0.72	+15 −29 −14 −12 +10 +18 + 8 −21 +22 +28										0	−0.51
94254	19 11 09.57	−87 11 12.1	8.63	2 H	287.789 869 12	−87.186 689 90		1.92	8.36	10.31	0.63	0.70	0.80	0.73	0.80	− 9 − 6 −22 + 7 + 4 − 7 + 3 +15 +10 −26										1	−0.41
94255	19 11 09.88	−79 29 24.5	8.10	H	287.791 153 87	−79.490 126 39		5.80	29.08	23.00	0.60	0.66	0.81	0.71	0.75	+ 0 −14 + 2 +10 −10 − 4 −10 + 9 + 6 + 1										0	0.17
94256	19 11 09.91	−02 38 17.4	7.95	H	287.791 279 53	−02.638 167 63		15.70	−133.56	−89.34	0.83	0.57	0.94	0.87	0.64	+15 −24 −10 −14 + 8 +11 + 8 −22 +10 +21										0	0.41
94257	19 11 10.30	+65 14 42.8	10.67	H	287.792 929 71	+65.245 231 45		9.80	59.28	177.23	1.22	1.66	1.28	1.43	1.91	+10 +12 + 5 +25 +16 +18 +11 +37 + 3 +10										0	0.40
94258	19 11 10.46	+23 28 47.8	7.02	H	287.793 593 99	+23.479 933 83		2.31	−3.14	−1.87	0.40	0.46	0.74	0.50	0.55	−14 − 8 − 7 −24 −12 + 5 −13 −19 +16 − 3										1	−0.88
94259	19 11 10.58	+01 53 04.4	9.45	H	287.794 090 32	+01.884 555 62		0.88	−2.16	−2.89	1.23	0.94	1.44	1.44	1.01	−11 + 9 −36 −40 +23 −24 +17 −46 +23 −21										0	−0.44
94260	19 11 11.25	+15 47 15.8	7.40	G	287.796 878 38	+15.787 727 17		4.10	5.50	−21.50	0.69	0.62	0.90	0.74	0.69	+37 −14 −10 + 3 −26 +21 −32 −35 +17 +27										0	0.95
94261	19 11 11.94	−28 32 02.8	8.56	H	287.799 758 09	−28.534 117 38		4.91	1.12	−10.11	1.64	0.55	1.61	1.61	0.85	− 1 −66 − 2 +21 + 8 + 2 −19 −41 +14 −34										0	−0.16
94262	19 11 12.06	−47 36 25.9	8.09	H	287.800 240 94	−47.607 192 53		3.40	−4.15	−41.51	0.93	0.65	1.06	1.28	0.90	+11 −19 + 6 −11 + 8 + 6 + 7 −29 − 3 + 9										0	1.47
94263	19 11 12.33	−61 57 00.6	8.40	H	287.801 385 01	−61.950 154 47		3.01	−23.17	−28.78	0.83	0.71	1.15	1.08	0.98	+ 2 −15 −16 +31 + 6 − 1 + 6 −22 +22 + 6										0	−1.44
94264	19 11 12.93	+69 25 09.1	8.63	G	287.803 881 58	+69.419 193 97		5.32	2.31	14.43	0.59	0.57	0.61	0.62	0.65	+13 −21 − 3 + 7 + 8 −13 + 7 +16 + 2 +13										1	−0.17
94265	19 11 13.35	−14 02 42.2	8.28	G	287.805 612 44	−14.045 053 83		2.29	0.33	−6.55	0.85	0.53	1.00	0.98	0.67	+10 −32 − 3 − 4 + 5 +34 + 4 −18 + 8 +12										0	0.94
94266	19 11 13.65	+52 01 28.3	7.89	H	287.806 890 28	+52.024 514 08		4.07	27.57	11.15	0.57	0.53	0.60	0.57	0.56	+ 3 −18 − 4 + 6 +13 + 7 +13 +13 + 0 +14										0	−1.82
*94267	19 11 15.39	+86 04 45.2	8.68	H	287.814 115 58	+86.079 209 45		4.69	40.33	1.60	0.69	0.67	0.78	0.86	0.86	+ 9 −18 −23 − 3 + 0 + 5 − 3 −18 +19 + 6										0	0.44
*94268	19 11 15.36	+04 11 28.0	7.48	H	287.813 979 63	+04.191 103 62		8.45	16.71	−7.07	0.74	0.58	0.91	0.79	0.62	− 8 −20 −15 −24 + 5 − 1 + 2 −35 + 5 −35										0	−1.39
94269	19 11 16.13	+67 00 57.3	8.01	H	287.817 215 59	+67.015 918 31		4.29	12.81	5.13	0.55	0.54	0.59	0.45	0.65	− 5 −17 +13 −44 +14 + 7 + 7 +19 + 3 +14										2	1.58
94270	19 11 16.79	+25 09 33.4	8.63	H	287.819 958 07	+25.159 266 57		−0.02	−0.06	−6.33	0.47	0.79	1.09	0.48	0.88	−23 + 9 −20 +34 +18 − 6 +18 −26 +20 −26										0	0.23
94271	19 11 18.03	+63 12 37.0	7.92	H	287.825 113 12	+63.210 284 15		10.15	−10.95	−61.32	0.60	0.57	0.62	0.72	0.71	+ 3 − 5 +13 + 2 + 7 + 9 + 4 +13 + 6 +25										0	0.36
94272	19 11 18.80	−29 30 08.1	6.28	H	287.828 353 31	−29.502 241 42		6.50	14.64	−21.15	0.95	0.41	0.93	1.15	0.59	+ 2 −46 −15 +31 +11 −12 −14 −35 +17 −35										0	0.90
94273	19 11 19.04	+32 43 47.4	9.46	H	287.829 334 13	+32.729 830 47		10.65	−13.03	−159.89	0.85	0.86	1.11	0.95	1.06	−10 − 6 − 5 +42 + 1 −22 + 0 +25 + 9 −13										3	−2.75
94274	19 11 19.25	−20 20 50.0	7.72	2 G	287.830 225 24	−20.347 225 71		2.46	−1.93	−10.24	0.81	0.44	0.85	1.04	0.59	−18 −17 − 6 +16 − 8 +28 − 8 −25 −17 −31										0	−0.37
*94275	19 11 20.08	−37 12 42.9	9.09	H	287.833 677 51	−37.211 903 12		16.83	74.68	−101.31	4.97	2.86	5.40	5.31	3.66	+ 2 −41 −16 − 1 + 7 −19 + 4 −41 + 4 + 0										0		
*94276	19 11 20.05	+00 42 56.6	8.83	H	287.833 533 68	+00.715 720 68		1.21	1.88	−3.88	1.05	0.75	1.20	1.10	0.82	+15 −18 − 7 −19 + 0 + 6 + 1 −34 +14 +30										0	0.84
94277	19 11 21.37	+58 19 19.9	8.24	H	287.839 025 83	+58.322 207 48		8.31	40.41	−4.01	0.63	0.63	0.65	0.74	0.75	+14 − 2 +14 +17 +17 + 2 +15 +23 −10 +30										0	−2.71
94278	19 11 21.93	−56 18 24.2	7.40	G	287.841 382 47	−56.306 717 38		2.52	5.16	0.19	0.79	0.65	1.02	0.81	0.64	+44 −29 −13 +24 −28 −15 −27 −43 − 7 +42										0	1.32
94279 H	19 11 22.81	+21 15 39.2	8.20	H	287.845 028 80	+21.260 898 22	A	0.50	1.34	−4.01	1.19	1.37	1.73	1.25	1.59	+20 −21 − 6 + 3 − 3 + 7 − 2 +15 − 5 +10										0	0.64
94280	19 11 23.16	+40 25 45.0	6.20	H	287.846 479 90	+40.429 157 94		6.92	8.81	−25.75	0.39	0.43	0.49	0.42	0.53	− 6 − 7 − 8 + 7 + 7 − 7 + 9 +29 −13 −10										0	0.60
94281	19 11 23.88	−34 54 14.4	7.68	H	287.849 485 60	−34.903 999 67		−0.28	−0.48	−3.64	1.07	0.61	1.12	1.27	0.74	+ 2 −36 − 3 +14 + 2 −17 − 7 −36 + 0 −19										0	0.49
94282	19 11 24.18	+26 50 15.2	8.43	H	287.850 747 08	+26.837 554 39		0.95	1.14	−0.77	0.55	0.64	0.88	0.62	0.75	− 5 −11 −12 +38 +13 − 4 +13 +26 − 2 −13										0	0.07
94283	19 11 24.52	−65 52 36.6	7.23	H	287.852 148 32	−65.876 830 65		3.22	3.58	6.54	0.57	0.49	0.79	0.61	0.56	−12 −16 − 6 −14 − 4 + 3 − 9 −32 + 1 −35										0	0.79
94284	19 11 25.48	+11 31 23.9	9.12	H	287.856 157 11	+11.523 301 59		1.55	27.71	1.18	1.03	1.05	1.40	1.32	1.03	+12 −17 −43 −23 − 5 − 6 −11 −41 +13 −13										0	−1.09
94285 H	19 11 25.72	+07 58 41.4	7.99	H	287.857 186 25	+07.978 166 36	*	4.65	−2.54	−16.61	0.93	0.67	1.14	0.89	0.68	+15 −42 −20 − 5 − 4 − 7 −20 −25 +28 −21										0	−1.36
94286	19 11 26.36	−51 57 12.4	8.88	H	287.859 837 08	−51.953 444 50		7.83	−22.76	50.34	1.18	1.06	1.32	1.59	1.18	+51 − 3 +12 −26 −32 −14 −35 −65 −25 +38										0	−0.93
94287	19 11 28.82	+22 22 59.3	7.99	H	287.870 098 64	+22.383 150 88		1.01	0.99	−4.88	0.54	0.61	0.98	0.71	0.74	− 9 −14 − 6 + 1 + 6 +10 + 3 − 6 +22 − 3										0	0.50
94288	19 11 30.17	+58 32 01.8	8.36	H	287.875 698 79	+58.533 845 55		6.50	15.13	21.10	0.62	0.67	0.69	0.70	0.75	+ 8 − 6 +20 +17 +12 + 4 +12 +16 −12 +21										0	−0.38
94289	19 11 30.88	+16 51 38.2	11.16	G	287.878 652 99	+16.860 624 83		0.99	0.01	−10.29	1.74	1.72	2.44	2.36	2.57	+20 − 7 − 8 +16 + 1 +24 + 5 + 6 + 7 +40										4	2.07
94290	19 11 30.96	+26 44 09.4	6.35	H	287.879 006 81	+26.735 948 91		23.20	33.02	−31.94	0.36	0.43	0.61	0.44	0.54	−14 −12 − 8 +15 +10 − 7 +10 +18 + 8 +21										0	0.14
94291	19 11 31.41	+29 53 24.7	7.48	H	287.880 886 10	+29.890 182 79		2.20	12.43	−1.67	0.48	0.57	0.75	0.56	0.67	−10 − 5 −24 +19 + 9 −15 + 5 − 1 +19 − 8										0	0.41
94292	19 11 32.53	+45 31 22.7	10.01	H	287.885 548 54	+45.522 984 88		2.57	5.13	−14.78	2.39	2.24	2.69	2.54	2.66	+ 7 −21 + 6 − 4 + 7 − 3 + 9 −11 − 4 +24										0		
94293	19 11 34.38	+56 26 40.1	8.73	H	287.893 258 82	+56.444 467 08		2.72	−2.89	5.38	0.67	0.68	0.75	0.89	0.96	+ 2 +10 + 7 +11 +15 +19 +17 + 8 +29 +25										1	−0.42
*94294	19 11 35.30	−01 23 53.2	11.13	2 H	287.897 094 99	−01.398 103 93		−0.10	1.53	−7.20	2.48	1.71	2.82	2.72	2.05	+ 9 −22 −12 −18 + 5 +17 + 8 −31 +16 +32										0	0.93
*94295	19 11 35.32	−00 04 12.9	8.84	H	287.897 149 37	−00.070 254 30		3.09	−4.56	7.06	1.14	0.76	1.23	1.23	0.89	+ 4 − 8 + 1 −26 + 2 + 2 + 5 −33 + 5 +20										0	0.45
*94296	19 11 35.25	−18 12 42.9	9.57	H	287.896 859 35	−18.211 921 08		2.72	3.66	−29.37	1.21	0.76	1.35	1.41	0.94	+17 −10 −13 −17 − 4 + 3 − 5 −39 + 1 +11										2	0.09
94297	19 11 35.44	−09 32 59.3	9.86	H	287.897 657 41	−09.549 818 83		17.97	−425.85	−28.76	1.26	0.74	1.56	1.48

No.	Tycho Magnitudes					Colour Indices					Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
94201	8.679	0.008	8.577	0.009		0.092	0.011	T	0.10	0.01	L	8.6124	0.0019	0.016	191		8.59	8.64					1							
94202	8.732	0.011	8.066	0.010		0.586	0.015	G	0.66	0.01	H	8.1327	0.0012	0.011	115		8.11	8.15		C			1							S
94203	11.040	0.076	9.438	0.033		1.342	0.065	T	1.31	0.08	L	9.4095	0.0022	0.017	68		9.38	9.43		C			1							
94204	8.167	0.006	7.869	0.007		0.305	0.001	G	0.35	0.00	H	7.9218	0.0010	0.014	199		7.90	7.95					1							S
94205	10.026	0.024	8.114	0.010		1.587	0.021	T	1.61	0.02	L	8.0642	0.0016	0.015	129		8.04	8.10		C			1							
94206	9.957	0.019	8.639	0.011		1.119	0.017	T	1.08	0.02	L	8.6983	0.0017	0.020	154		8.66	8.74		C			1							
94207	8.158	0.009	8.121	0.011		0.039	0.013	T	0.05	0.01	L	8.1464	0.0017	0.016	138		8.11	8.18					1							
94208	8.229	0.008	7.062	0.005		1.001	0.007	T	0.98	0.01	L	7.1049	0.0012	0.012	147		7.09	7.12					1							S
94209	9.163	0.015	7.727	0.009		1.212	0.014	T	1.17	0.01	L	7.7630	0.0015	0.011	96		7.74	7.78		C			1							S
94210	7.563	0.006	7.200	0.006		0.344	0.008	T	0.40	0.01	L	7.2489	0.0010	0.011	138		7.23	7.26		C			1							S
94211	9.648	0.017	8.383	0.011		1.078	0.016	T	1.04	0.01	L	8.4436	0.0014	0.016	124		8.42	8.47		C			1							
94212	7.774	0.007	7.829	0.010		−0.046	0.011	T	−0.02	0.01	L	7.8302	0.0016	0.013	133		7.81	7.86					1							S
94213	9.044	0.014	8.702	0.015		0.330	0.015	G	0.38	0.02	H	8.7478	0.0018	0.019	136		8.71	8.78					1							
94214	8.145	0.010	7.666	0.011		0.470	0.015	G	0.54	0.02	H	7.7010	0.0014	0.009	72		7.68	7.72		C			1							S
94215	8.217	0.010	8.079	0.011		0.160	0.002	G	0.18	0.00	H	8.1114	0.0014	0.013	81		8.09	8.13		C			1							
94216	8.779	0.009	8.335	0.009		0.419	0.012	T	0.49	0.01	L	8.3844	0.0015	0.017	154		8.35	8.41		C			1							
94217	10.148	0.027	9.010	0.017		0.979	0.025	T	0.96	0.02	L	9.0827	0.0025	0.020	101		9.05	9.12					1							
94218	8.670	0.011	8.624	0.014		0.020	0.015	G	0.04	0.01	H	8.6475	0.0015	0.012	111		8.62	8.67					1							
94219	8.215	0.009	7.982	0.008		0.222	0.011	T	0.24	0.01	L	8.0165	0.0013	0.014	128		7.99	8.05					1							S
94220	8.796	0.012	7.233	0.007		1.311	0.011	T	1.27	0.01	L	7.2223	0.0009	0.009	84		7.21	7.24					1							S
94221	9.703	0.018	8.279	0.010		1.230	0.015	G	1.19	0.01	H	8.3128	0.0017	0.016	129		8.28	8.34					1							
94222	8.121	0.013	7.906	0.016	*	0.199	0.021	T	0.22	0.02	L *	8.0095	0.0023	0.015	82	*	7.98	8.04		D	19108−1209	I 1	2 C	A	AB	327	4.890	0.021	2.74	0.08	S
94223	11.280	0.083	10.599	0.070	B						T	10.4167	0.0234	0.230	68	–	10.04	10.68		D	19109−4805	I 2	2 C L	C	BC	80	2.079	0.074	0.02	0.40	X
94224	9.378	0.022	7.635	0.011		1.482	0.020	T	3.05	0.04	O	7.2414	0.0110	0.081	76		7.12	7.47	U	2			1 V							S
94225	11.100	0.066	9.516	0.027		1.318	0.007	G	1.56	0.01	A	9.4606	0.0028	0.017	85		9.43	9.50		C			1							
94226											T	11.6081	0.0055	0.055	108		11.53	11.70					1							G
94227	11.941	0.157	10.517	0.066	A	0.650	0.126	G	0.71	0.11	R	10.4463	0.0301	0.183	65	–	10.10	10.63		D	19109−4805	I 2	1 C P	C						G G
94228	10.576	0.031	8.660	0.012		1.625	0.027	T	2.21	0.06	O	8.5060	0.0026	0.028	167		8.45	8.55					1							
94229	8.993	0.012	7.657	0.007		1.133	0.011	T	1.10	0.01	L	7.6969	0.0015	0.013	134		7.68	7.72		C			1							S
94230	7.799	0.009	7.421	0.008	*	0.353	0.015	G	0.41	0.02	H *	7.4838	0.0016	0.012	85	*	7.46	7.51		D	19109+0807	I 1	2 C	B	AB	122	8.581	0.033	3.23	0.14	S
94231	10.161	0.031	9.165	0.022	*	0.871	0.028	T	0.88	0.02	L *	9.1466	0.0036	0.024	85	*	9.11	9.19		D	19110−4847	I 1	2 C	A	AB	195	0.927	0.012	2.01	0.05	
94232	9.994	0.026	8.084	0.011		1.586	0.022	T	1.61	0.02	L	8.0476	0.0018	0.016	107		8.02	8.07					1							
94233	9.424	0.021	9.255	0.026		0.162	0.031	T	0.18	0.03	L	9.2892	0.0035	0.026	76		9.23	9.33					1							
94234	7.859	0.008	7.906	0.010		−0.040	0.015	G	−0.02	0.01	H	7.8954	0.0019	0.018	109		7.87	7.92		U	19110+4147	I 1	1							S
94235	9.068	0.015	8.382	0.013		0.622	0.015	T	0.69	0.01	L	8.4436	0.0028	0.021	89		8.41	8.48					1							S
94236	6.997	0.005	6.865	0.005		0.127	0.007	T	0.14	0.01	L	6.8931	0.0011	0.009	106		6.88	6.91		C			1 G							S
94237	10.203	0.028	10.223	0.049		0.013	0.003	G	0.03	0.00	H	10.2209	0.0026	0.027	114		10.18	10.28		C			1							G
94238	8.712	0.011	7.496	0.007		1.039	0.010	T	1.01	0.01	L	7.5453	0.0015	0.011	95		7.53	7.57					1							S
94239	8.870	0.012	8.398	0.011		0.470	0.015	G	0.54	0.02	H	8.4612	0.0013	0.013	109		8.44	8.49		C			1							
94240	10.084	0.019	8.987	0.012		0.947	0.017	T	0.94	0.01	L	9.0428	0.0020	0.024	192		8.99	9.08		U			1							
94241	7.731	0.007	6.840	0.006	*	0.810	0.015	G	0.84	0.01	H *	6.8891	0.0009	0.008	99	*	6.88	6.90		D	19110−0726	I 1	2 C	A	AB	60	0.285	0.007	0.54	0.08	S
94242	9.114	0.013	8.923	0.016		0.183	0.019	T	0.20	0.02	L	8.9727	0.0020	0.016	81		8.94	9.01		C			1							
94243	6.348	0.004	6.347	0.005		0.006	0.006	T	0.03	0.01	L	6.3558	0.0008	0.008	75		6.34	6.37					1							S
94244	10.238	0.036	9.276	0.026		0.866	0.002	G	0.91	0.00	H	9.3107	0.0022	0.020	110		9.29	9.35		C			1							
94245	8.821	0.007	8.415	0.007		0.384	0.009	T	0.45	0.01	L	8.4726	0.0010	0.016	306		8.45	8.50		C			1							S
94246	8.541	0.009	8.116	0.009		0.430	0.020	G	0.50	0.02	H	8.1688	0.0014	0.015	165		8.15	8.20					1							
94247	9.315	0.018	7.294	0.008		1.674	0.016	T	1.70	0.02	L	7.2308	0.0013	0.012	71		7.21	7.25		C			1							S
94248	9.208	0.016	7.678	0.009		1.285	0.014	T	1.24	0.01	L	7.7170	0.0015	0.010	94		7.70	7.74					1							
94249	8.613	0.008	8.101	0.008	*	0.491	0.008	T	0.56	0.01	L *	8.1491	0.0013	0.016	152	*	8.12	8.18		D	19111−6417	I 1	2 C	A	AB	59	0.416	0.011	2.46	0.05	S
94250	7.146	0.005	7.086	0.009		0.060	0.010	T	0.07	0.01	L	7.1096	0.0008	0.007	75		7.10	7.12		C			1							S
94251	11.883	0.104	10.523	0.048		1.152	0.090	T	1.11	0.08	L	10.6459	0.0029	0.029	135		10.59	10.70		C			1							G
94252	8.394	0.014	7.524	0.011	*	0.760	0.040	G	0.80	0.04	R *	7.6922	0.0009	0.011	124	–	7.67	7.72		D	19111+3847	I 1	3 C	B						G
94253	8.825	0.013	8.462	0.014		0.344	0.018	T	0.40	0.02	L	8.5226	0.0019	0.016	99		8.48	8.55					1							
94254	10.840	0.036	8.832	0.012		1.701	0.031	T	2.04	0.08	O	8.7133	0.0034	0.028	136		8.67	8.76	U	2			1							
94255	9.354	0.015	8.215	0.010		0.979	0.014	T	0.96	0.01	L	8.2633	0.0019	0.018	141		8.24	8.30					1							
94256	8.859	0.013	8.033	0.011		0.744	0.013	T	0.79	0.01	L	8.0914	0.0011	0.013	96		8.07	8.12		C			1							S
94257	11.358	0.063	10.654	0.055		0.649	0.068	T	0.71	0.06	L	10.8036	0.0035	0.036	116		10.74	10.87		C			1 G							G
94258	7.142	0.004	7.042	0.004		0.097	0.005	T	0.11	0.01	L	7.0605	0.0009	0.011	223		7.04	7.08					1							S
94259	9.658	0.021	9.499	0.027		0.153	0.032	T	0.17	0.03	L	9.5049	0.0025	0.022	84		9.47	9.55					1							G
94260	7.510	0.007	7.405	0.008		0.094	0.003	G	0.11	0.00	H	7.4274	0.0012	0.010	77		7.41	7.44		C			1							S
94261	9.799	0.021	8.688	0.014		0.958	0.020	T	0.95	0.01	L	8.7218	0.0016	0.013	109		8.70	8.74		C			1							
94262	9.749	0.023	8.227	0.012		1.279	0.020	T	1.24	0.02	L	8.2444	0.0013	0.011	85		8.22	8.27					1							S
94263	10.188	0.026	8.569	0.013		1.356	0.023	T	1.32	0.03	L	8.5473	0.0019	0.016	101		8.52	8.58		C			1							
94264	8.916	0.011	8.630	0.012		0.259	0.004	G	0.29	0.01	H	8.6868	0.0012	0.011	120		8.66	8.71					1							
94265	8.254	0.011	8.254	0.013		0.026	0.026	G	0.04	0.02	A	8.2871	0.0015	0.012	90		8.27	8.31		C			1							
94266	8.090	0.009	7.914	0.012		0.169	0.014	T	0.18	0.01	L	7.9471	0.0012	0.013	118		7.92	7.97		C			1							S
94267	9.697	0.019	8.768	0.015		0.821	0.018	T	0.84	0.01	L	8.8298	0.0019	0.016	116		8.80	8.86					1							
94268	8.349	0.012	7.557	0.009		0.718	0.012	T	0.77	0.01	L	7.6232	0.0013	0.010	90		7.60	7.65		C			1							S
94269	9.468	0.016	8.132	0.010		1.133	0.015	T	1.10	0.02	L	8.1760	0.0015	0.012	118		8.15	8.19		C			1							
94270	8.791	0.008	8.631	0.010		0.154	0.012	T	0.17	0.01	L	8.6829	0.0013	0.018	244		8.66	8.72					1							
94271	8.437	0.009	7.964	0.010		0.446	0.012	T	0.52	0.01	L	8.0231	0.0013	0.010	113		8.00	8.04		C	19113+6313	I 1	1							S
94272	6.233	0.003	6.270	0.005		−0.031	0.005	T	−0.01	0.01	L	6.2731	0.0007	0.007	119		6.26	6.29					1							S
94273	10.243	0.028	9.535	0.023		0.639	0.027	T	0.70	0.02	L	9.5905	0.0026	0.022	144		9.54	9.64					1							
94274	7.670	0.008	7.717	0.011		−0.030	0.002	G	−0.01	0.00	H	7.7129	0.0020	0.018	104		7.67	7.73	U	2			1							S
94275	10.108	0.030	9.153	0.021		0.828	0.028	T	0.85	0.02	L	9.2265	0.0017	0.013	86		9.20	9.26					1 X							
94276	9.237	0.017	8.836	0.018		0.379	0.023	T	0.44	0.03	L	8.9218	0.0026	0.018	81		8.89	8.95		C			1							
94277	8.618	0.010	8.270	0.010		0.330	0.013	T	0.38	0.02	L	8.3165	0.0019	0.014	102		8.29	8.34					1							S
94278	9.508	0.019	7.574	0.008		1.613	0.020	G	1.69	0.02	A	7.5243	0.0016	0.012	107		7.51	7.54					1							S
94279	8.397	0.009	8.268	0.010	*	0.125	0.012	T	0.14	0.01	L *	8.2460	0.0017	0.013	136	*	8.21	8.27		D	19114+2116	I 1	2 C	A	AB	151	0.594	0.004	1.23	0.02	S
94280	6.311	0.004	6.204	0.004		0.093	0.003	G	0.11	0.00	H	6.2338	0.0007	0.006	126		6.22	6.25		C			1							S
94281	9.762	0.021	7.866	0.009		1.575	0.018	T	1.59	0.02	L	7.7957	0.0022	0.015	86		7.77	7.82					1							S
94282	8.420	0.007	8.427	0.009		−0.002	0.010	T	0.02	0.01	L	8.4394	0.0018	0.019	192		8.41	8.47					1							
94283	7.338	0.006	7.241	0.006		0.087	0.008	T	0.10	0.01	L	7.2670	0.0010	0.011	142		7.25	7.29		C			1							S
94284	10.552	0.036	9.279	0.021		1.084	0.033	T	1.05	0.03	L	9.2928	0.0022	0.020	83		9.25	9.34		C			1							
94285	9.190	0.015	8.109	0.010	*	0.935	0.014	T	0.93	0.01	L *	8.1503	0.0018	0.013	85	*	8.12	8.18		C	19114+0759	H 1	2 C S	A	AB	32	0.135	0.009	0.59	0.45	
94286	10.126	0.031	8.977	0.020		0.987	0.029	T	0.97	0.02	L	9.0407	0.0023	0.015	78		9.01	9.07		C			1							
94287	8.044	0.007	7.990	0.009		0.055	0.011	T	0.07	0.01	L	8.0130	0.0015	0.014	165		7.98	8.04					1							S
94288	8.548	0.009	8.388	0.011		0.154	0.013	T	0.17	0.01	L	8.4155	0.0020	0.017	108		8.38	8.44					1							S
94289						1.040	0.040	G	1.01	0.03	R	11.2154	0.0076	0.057	90		11.13	11.30					1 S							D
94290	6.845	0.003	6.388	0.003		0.444	0.003	T	0.46	0.03	C	6.4450	0.0006	0.007	198		6.43	6.46					1							S
94291	9.049	0.012	7.609	0.007		1.215	0.011	T	1.17	0.01	L	7.6408	0.0011	0.011	143		7.62	7.66		C	19115+2953	I 1	1							S
94292	11.270	0.068	10.170	0.041		0.949	0.062	T	0.94	0.04	L	10.1597	0.0041	0.033	107		10.11	10.22					1 X							
94293	8.776	0.011	8.720	0.014		0.056	0.017	T	0.07	0.01	L	8.7488	0.0013	0.014	104		8.73	8.78		C			1							
94294						1.535	0.400	G	1.51	0.41	J	11.2595	0.0090	0.077	95		11.10	11.37	U	2			1 S							G
94295	10.405	0.039	8.947	0.020		1.229	0.034	T	1.19	0.03	L	9.0009	0.0026	0.018	85		8.97	9.03					1							
94296	10.084	0.033	9.593	0.033		0.474	0.036	T	0.55	0.04	L	9.6850	0.0029	0.021	85		9.65	9.72		C			1							G
94297	10.996	0.051	9.948	0.032		0.876	0.002	G	0.92	0.00	H	10.0047	0.0021	0.021	118		9.95	10.03					1 S							G
94298	7.730	0.005	7.763	0.007		−0.026	0.008	T	0.00	0.01	L	7.7782	0.0013	0.019	197		7.75	7.81	U				1							S
94299	8.290	0.009	8.146	0.010		0.139	0.013	T	0.15	0.01	L	8.1863	0.0016	0.011	83		8.16	8.21		C			1							
94300	8.698	0.012	8.338	0.013		0.341	0.016	T	0.40	0.02	L	8.3816	0.0015	0.013	98		8.36	8.42		C			1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)											Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
94301	19 11 39.93	+19 25 54.2	9.32		H	287.916 356 71	+19.431 710 10		4.36	10.76	12.29	0.88	1.03	1.47	1.11	1.55	+39	−15	−32	− 7	−16	+22	− 8	+ 8	−24	+29		3	−0.08
94302	19 11 40.52	+56 51 32.7	5.13		H	287.918 837 62	+56.859 095 94		9.57	48.09	48.00	0.44	0.45	0.47	0.51	0.61	− 1	+ 8	+ 3	+17	+ 2	− 5	+ 1	+16	−11	+ 3		1	0.76
94303	19 11 41.74	−33 42 31.2	10.70		G	287.923 923 90	−33.708 672 65		5.45	3.45	−18.20	2.44	1.16	2.39	4.06	1.96	+ 0	−16	−18	+26	+34	−17	+ 2	−45	+30	−47		0	0.43
∗94304	19 11 41.95	−81 24 46.5	7.60		H	287.924 807 49	−81.412 923 39		9.72	19.40	35.91	0.54	0.59	0.70	0.64	0.76	− 6	−23	+ 5	+ 0	−10	− 1	− 8	+13	− 5	−12		0	0.32
∗94305	19 11 41.93	+09 57 06.2	8.44		H	287.924 721 08	+09.951 709 33		3.77	1.11	−8.82	1.12	0.77	1.28	1.25	0.86	−14	−12	−19	−26	+26	−28	+16	−39	+37	−22		0	−0.29
94306 H	19 11 43.52	+17 53 01.0	8.20		G	287.931 328 93	+17.883 612 16	A	0.57	1.30	−7.00	1.31	1.17	1.58	1.83	1.60	+13	− 9	−15	+55	− 9	+15	−15	+20	−11	−10		2	0.37
94307	19 11 44.21	−47 11 16.7	9.66		H	287.934 207 13	−47.187 963 08	A	7.43	−13.75	−8.22	1.96	1.51	1.91	2.56	1.94	+39	−14	−18	−11	−19	+ 3	−23	−51	+12	+41		1	−0.02
94308	19 11 45.03	+26 14 57.6	7.80		H	287.937 607 07	+26.249 326 14	A	8.34	2.81	−5.67	0.67	0.85	1.09	0.72	0.93	−13	−17	+ 1	+23	+ 6	− 5	+ 8	+ 0	− 3	−10		2	2.19
94309	19 11 45.35	−19 11 21.6	8.15	2	H	287.938 964 02	−19.189 330 69		5.84	7.06	11.43	0.89	0.55	0.99	1.05	0.67	+ 8	−14	− 3	− 6	−11	+20	−12	−43	−14	− 3		0	0.92
94310 H	19 11 45.76	−53 19 22.0	8.90		H	287.940 663 10	−53.322 766 02	A	15.39	58.23	−37.78	2.31	2.49	2.32	2.74	1.81	+26	− 8	−14	+ 3	−11	−24	−28	−44	− 8	+ 5		1	0.68
94311	19 11 46.01	+31 17 00.5	5.93	1	H	287.941 712 76	+31.283 463 60		3.33	−3.17	−3.16	0.38	0.44	0.55	0.45	0.55	−11	− 8	−16	+ 4	+11	− 2	+11	+ 9	+13	−14		0	−1.63
94312	19 11 46.35	−31 07 45.8	12.40	2	H	287.943 111 87	−31.129 399 09		−3.74	20.08	−2.68	6.76	3.24	7.41	7.76	5.90	+16	−35	+12	+ 2	−15	−10	−22	−55	+18	+16		7	1.13
94313	19 11 46.62	+18 05 16.2	7.62		H	287.944 262 91	+18.087 820 96		7.12	−7.18	−8.16	0.61	0.59	0.86	0.93	0.86	+12	−11	−15	+43	−11	+20	−15	+20	+ 1	−15		0	−1.57
94314	19 11 47.24	+12 52 16.1	9.27		H	287.946 850 59	+12.871 136 27		3.33	0.47	3.99	1.06	0.99	1.44	1.07	0.98	+ 2	−28	−22	−26	+ 2	+20	+ 6	−31	+ 5	+ 3		3	−0.40
94315	19 11 47.60	+13 54 33.3	8.78		H	287.948 314 45	+13.909 261 07		3.87	0.97	−9.12	0.71	0.76	1.12	0.81	0.87	+27	−11	−15	+10	−29	+15	−30	−14	+ 4	+20		2	0.74
94316	19 11 49.77	+05 22 38.3	7.92		H	287.957 367 84	+05.377 298 93		3.08	22.82	12.21	0.93	0.72	1.15	1.05	0.73	+12	−14	− 1	−30	−15	−23	−16	−41	+ 7	−14		0	−1.10
94317	19 11 50.06	+08 42 39.3	11.25		H	287.958 570 84	+08.710 903 69	B	1.33	0.85	−5.84	43.82	28.65	3.89	4.57	2.98	+ 3	− 9	− 1	− 1	+ 0	− 4	− 2	− 3	+24	+ 4		1	−0.07
94318	19 11 50.30	−70 48 24.4	9.36		H	287.959 564 33	−70.806 778 51		0.28	7.80	−1.98	0.57	0.87	1.26	0.75	1.00	−20	−14	− 3	+18	−10	−13	−11	+ 6	+ 7	−30		2	−1.03
94319	19 11 50.57	+08 42 18.7	9.97		H	287.960 712 17	+08.705 205 93	A	1.33	0.85	−5.84	4.62	3.06	3.89	4.57	2.98	+ 6	− 6	−16	−27	+ 1	− 4	− 1	−30	+24	+ 4		1	−0.07
94320	19 11 52.19	−20 22 51.2	8.36		H	287.967 456 19	−20.380 887 80		2.72	−7.04	−2.58	0.98	0.56	1.08	1.29	0.75	− 8	− 3	− 3	+15	− 4	+34	− 7	−32	−17	−21		2	0.19
94321	19 11 53.34	+14 34 56.1	8.05		H	287.972 257 05	+14.582 240 63		2.50	2.58	−10.03	0.60	0.60	0.95	0.66	0.69	+31	−17	−	4	+23	−22	+11	−26	− 8	+ 4	+22		0	−0.22
94322	19 11 53.36	−44 34 13.0	10.15		H	287.972 335 96	−44.570 291 03		8.48	−35.58	−113.22	1.59	1.01	1.82	1.79	1.29	+16	−41	−12	−26	+18	+ 7	+17	−41	+ 5	+13		0	0.70
94323	19 11 54.96	−14 35 04.4	7.04		G	287.979 014 50	−14.584 562 45		2.94	51.08	6.06	0.79	0.50	0.94	0.88	0.58	+18	−32	−10	−11	− 5	+36	− 5	−33	+ 2	+ 6		0	−1.39
94324	19 11 56.51	+43 53 25.9	8.01		H	287.985 457 13	+43.890 524 95		2.65	2.14	−0.79	0.58	0.61	0.66	0.59	0.79	− 3	+ 8	− 3	+13	+23	− 1	+28	+18	+10	+ 5		3	−0.57
94325	19 11 56.86	−46 08 40.5	8.02		H	287.986 899 66	−46.144 583 06		3.79	−20.68	−11.91	1.12	0.85	1.43	1.62	1.17	+17	− 2	−37	−36	+21	−36	+ 8	−54	+30	− 4		0	0.42
94326	19 11 57.30	−39 30 00.9	8.80		H	287.988 748 43	−39.500 242 33		21.37	88.74	−102.48	1.29	0.79	1.45	2.11	1.07	+ 1	−12	−24	+15	+30	−42	+ 5	−36	+35	−41		0	0.47
94327	19 11 57.47	+22 07 22.7	9.08		H	287.989 449 37	+22.122 962 72		−0.44	1.77	1.33	0.74	0.89	1.24	1.01	1.06	+23	−13	+ 0	+20	+12	+17	+ 8	+11	+22	+29		0	0.79
94328	19 12 00.32	+39 25 14.6	7.50		H	288.001 317 95	+39.420 736 01		5.17	9.15	11.53	0.52	0.53	0.63	0.61	0.68	− 2	+ 4	− 3	+15	+ 9	−12	+10	+16	− 4	+ 2		0	0.63
94329	19 12 00.48	−30 16 13.1	10.43		H	288.001 992 90	−30.270 310 50		2.51	7.08	−1.70	2.25	1.24	2.81	3.71	1.91	+19	−22	− 3	− 6	+ 0	−54	−20	−61	+20	−20		4	0.09
94330	19 12 02.85	+07 55 46.8	9.84		H	288.011 858 21	+07.929 663 91		0.48	−1.60	−4.90	1.33	0.98	1.61	1.46	1.14	+24	−36	−24	− 4	+ 2	+ 3	− 9	−24	+21	− 9		2	0.47
94331 H	19 12 03.28	+02 37 21.4	6.94		H	288.013 660 99	+02.622 616 58	∗	4.35	−3.30	−10.44	1.28	0.77	1.07	1.02	0.82	+ 6	−24	− 2	−19	+ 4	− 2	+ 3	−27	+ 8	+13		1	0.22
94332	19 12 03.94	−31 12 21.3	9.12		G	288.016 434 70	−31.205 927 04		5.42	0.89	−12.97	1.60	0.74	1.65	1.84	1.17	+10	−40	− 4	+ 6	+ 3	−15	−15	−51	+17	−14		0	0.16
94333	19 12 04.19	−23 44 25.8	8.02		G	288.017 461 98	−23.740 509 91		−0.07	−1.82	−8.31	1.04	0.54	0.99	1.32	0.81	−31	− 4	−11	−30	+33	− 7	+30	−57	+18	−39		0	−0.43
∗94334	19 12 04.87	−43 55 27.2	10.19		G	288.020 286 12	−43.924 228 35		4.36	5.06	−5.76	1.61	1.17	1.98	2.13	1.54	+ 9	−16	−20	−23	+29	−14	+21	−49	+19	− 5		0	−1.25
∗94335	19 12 04.86	+46 19 26.5	9.35	2	H	288.020 260 65	+46.324 018 65		7.69	−0.82	45.43	0.75	0.71	0.89	0.88	0.75	+ 5	−19	+18	+ 5	+ 8	−17	+16	−14	−19	+28		3	−0.87
∗94336 H	19 12 05.22	+49 51 15.3	5.85		G	288.021 731 47	+49.854 238 07	A	40.16	−205.02	624.33	0.99	0.92	0.83	0.97	0.89	− 1	−24	+12	+12	+ 3	− 3	+ 5	+ 1	+ 3	+10		7	1.21
∗94337	19 12 05.10	+69 42 28.5	9.00		H	288.021 240 72	+69.707 914 48		5.81	8.31	8.77	0.65	0.58	0.65	0.77	0.69	+10	−19	− 1	+ 9	+ 3	− 6	+ 2	+ 4	+ 0	+12		0	−0.44
94338 H	19 12 05.81	−21 55 41.7	7.83		H	288.024 221 48	−21.928 241 09	A	3.42	5.85	−5.95	1.98	1.09	1.87	1.80	1.31	+ 1	− 1	−10	− 4	− 7	+ 4	+ 1	−34	+25	+35		2	0.23
94339	19 12 06.30	−50 14 38.2	8.02		H	288.026 262 65	−50.243 956 33		0.81	15.62	−34.94	0.84	0.60	0.94	1.13	0.66	− 2	−18	− 8	− 3	+20	+ 7	+15	−33	− 6	−15		0	−0.03
94340	19 12 06.47	−28 29 05.8	9.49		H	288.026 951 21	−28.484 941 29		12.86	−18.38	−87.28	1.98	0.76	2.02	1.95	1.09	+ 0	−63	− 4	+ 7	+12	−15	− 8	+10	+14	−27		2	1.25
94341	19 12 08.15	+24 07 48.2	11.22		G	288.033 953 64	+24.130 060 36		29.35	−119.82	−197.53	1.78	2.07	3.13	2.33	2.56	− 8	−12	− 3	−22	− 8	+ 2	− 9	−23	+12	+ 0		0	
94342	19 12 08.38	+36 09 46.4	8.78		H	288.034 905 56	+36.162 886 37		3.01	1.84	−2.13	0.63	0.69	0.82	0.71	0.79	− 8	+ 8	−11	+13	+17	−18	+16	+10	− 2	− 7		1	−0.02
94343	19 12 09.52	+41 50 15.5	8.20		H	288.039 675 39	+41.837 647 01		5.79	17.57	−15.61	0.63	0.64	0.76	0.67	0.88	− 9	−28	+ 4	− 6	+ 2	+ 6	+ 3	+26	+ 4	−13		0	−1.19
∗94344	19 12 09.78	−37 34 59.1	6.55		G	288.040 738 35	−37.583 090 57		2.37	5.47	−5.95	0.83	0.47	0.85	1.09	0.60	+ 1	−32	+ 8	+26	− 1	+ 1	−10	−35	−11	−21		0	1.30
∗94345	19 12 09.72	−16 25 49.4	8.02		G	288.040 497 17	−16.430 379 03		6.76	−15.54	−45.00	0.92	0.56	1.00	0.98	0.64	+ 1	−26	− 6	− 6	+ 2	+ 8	+ 3	−33	+ 7	+ 5		0	0.09
94346	19 12 11.12	+57 40 15.6	7.04	1	G	288.046 334 48	+57.670 989 03		50.00	217.75	408.26	0.51	0.51	0.54	0.54	0.60	+ 6	− 9	+11	+20	+11	− 4	+15	+ 6	−12	+21		0	0.55
94347	19 12 11.15	−83 29 00.2	7.26		H	288.046 443 34	−83.483 386 75		22.25	136.95	−128.05	1.50	1.61	1.94	1.71	2.02	−10	−17	+ 3	− 5	+ 0	+ 0	+ 1	−15	−10	−14		0	
94348	19 12 13.20	−52 14 33.0	9.96		G	288.054 985 34	−52.242 501 53		2.68	−2.29	−12.40	1.62	1.47	1.70	2.22	1.72	+53	+ 1	+11	−45	−45	−17	−45	−73	−18	+48		2	−0.11
94349	19 12 13.55	+02 53 15.6	11.09		G	288.056 468 21	+02.887 668 13	+	98.56	1789.15	−520.07	2.06	1.88	2.66	2.72	2.00	− 3	−26	+26	− 7	+25	+18	+ 0	− 5	+ 5	+21		2	2.14
94350 H	19 12 14.80	+32 15 09.9	7.37		G	288.061 662 66	+32.252 758 91	A	3.02	2.01	1.67	0.67	0.71	0.84	0.74	0.78	+ 0	+ 0	− 1	+27	+ 6	− 4	+ 5	+ 4	+25	+ 3		1	−0.06
94351	19 12 15.71	+47 22 30.0	6.54		H	288.065 444 51	+47.374 992 51		1.33	3.69	−1.21	0.52	0.46	0.57	0.62	0.51	+ 0	+ 3	− 9	−16	+ 8	−10	+ 6	−11	+10	+21		4	−1.61
94352	19 12 15.99	+48 08 00.6	8.56		H	288.066 627 50	+48.133 493 55		4.26	−2.06	18.08	0.72	0.68	0.77	0.82	0.78	+10	−10	−15	−39	+ 1	+ 3	− 3	−17	+16	+21		3	−0.63
94353	19 12 16.99	−51 48 43.6	8.42		G	288.070 803 02	−51.812 117 63		4.00	1.34	−27.03	0.99	0.82	1.17	1.30	0.92	+19	+ 2	+24	−22	−11	−22	− 8	−59	−39	+27		0	−1.19
94354	19 12 17.40	+41 14 16.0	7.08	2	H	288.072 500 66	+41.237 772 32		3.35	1.13	−16.63	0.48	0.50	0.58	0.50	0.64	−12	+ 5	− 9	+ 4	+ 4	− 9	+ 4	+25	− 1	−11		0	0.06
94355 H	19 12 18.64	+21 13 29.0	8.24		H	288.077 652 63	+21.224 732 22	∗	0.77	0.48	−6.14	1.15	1.26	1.18	0.98	1.03	+39	−15	+ 0	− 1	− 3	− 1	− 3	+ 0	+ 2	+29		1	0.06
94356	19 12 19.25	−35 56 30.4	10.00		G	288.080 222 33	−35.941 771 55		2.03	−6.86	−7.04	1.49	0.85	1.59	2.08	1.15	+ 8	−28	−13	+23	+ 8	−21	−14	−39	+17	−28		0	−0.28
94357	19 12 19.47	+09 19 22.5	9.56		H	288.081 110 16	+09.322 929 29		1.46	5.19	−7.98	1.36	1.12	1.75	1.62	1.09	+ 1	−18	−17	−34	+15	−22	+ 4	−44	+24	− 6		2	−0.11
94358	19 12 19.73	−08 56 09.5	9.19		H	288.082 227 00	−08.935 968 51		0.97	−2.34	−5.21	0.98	0.63	1.17	1.16	0.77	+15	−11	− 7	− 4	+ 8	+29	+ 9	−17	+13	+11		0	−2.30
94359	19 12 21.44	+53 56 52.2	9.32		H	288.089 345 97	+53.947 831 10		2.77	−26.40	−35.28	0.92	0.81	0.89	1.00	1.12	− 9	−20	+12	−37	+ 8	− 2	+ 7	−18	− 2	+12		0	1.68
94360	19 12 22.49	−04 27 47.1	8.63		G	288.093 712 04	−04.463 089 92		0.06	5.89	−3.93	1.13	0.80	1.38	1.34	1.13	+40	−28	−20	+10	+26	+14	+23	+ 5	+28	+50		0	1.34
94361	19 12 22.61	+73 53 32.3	7.26	2	H	288.094 217 13	+73.892 314 23		2.79	−1.50	16.17	0.52	0.48	0.53	0.59	0.52	− 4	−17	+15	− 1	+13	− 3	+13	− 6	+ 1	+ 9		0	−0.29
94362	19 12 22.79	+20 30 44.7	9.19		H	288.094 939 81	+20.512 404 48		2.71	−5.15	−2.49	0.71	0.82	1.23	0.82	1.13	+24	−30	− 3	−12	− 7	+ 3	− 2	+ 6	−16	+23		0	−0.32
94363 H	19 12 23.60	+30 20 51.9	7.65		G	288.098 342 26	+30.347 763 71	A	0.72	2.37	−5.26	0.97	1.09	1.28	1.01	1.32	−20	−12	− 6	+ 9	+11	− 7	+11	−12	− 3	−26		7	2.02
94364 T	19 12 23.67	−04 27 28.9	11.77		H	288.098 618 54	−04.458 039 89		4.21	−25.71	−21.46	5.51	3.43	6.21	7.62	5.74	+36	−11	+10	+14	+11	+28	+ 8	+ 2	+20	+42		9	0.25
94365	19 12 24.12	−51 48 20.0	7.06		H	288.100 493 19	−51.805 553 37		2.80	0.85	−20.68	0.78	0.65	0.89	1.02	0.69	+30	+ 5	+11	−26	−18	−26	−20	−62	−33	+28		0	−0.47
94366	19 12 24.36	+36 10 55.9	6.95		H	288.101 491 96	+36.182 204 82		3.03	5.86	9.59	0.43	0.52	0.60	0.49	0.64	− 9	+ 8	−12	− 5	+13	−19	+13	+16	− 1	−12		0	−0.82
94367 H	19 12 25.20	−33 03 43.8	8.00		G	288.104 996 81	−33.062 169 41	A	15.43	−44.84	33.68	2.11	1.58	1.92	2.34	1.44	+15	− 4	−33	− 2	+22	−26	+ 7	−38	+42	−28		2	−0.07
94368	19 12 25.55	−55 52 06.1	11.31		G	288.106 440 51	−55.868 371 87		50.04	−278.15	−169.46	2.03	1.69	2.72	2.32	2.25	+45	−26	−17	+10	−41	+ 1	−34	−44	+ 4	+60		2	3.20
94369	19 12 26.83	+19 12 30.7	8.99		H	288.111 806 31	+19.208 530 80		1.95	6.66	3.50	0.83	0.82	1.28	1.17	1.27	+29	+ 0	−23	+28	− 2	+29	+ 2	+20	− 7	+15		0	0.01
94370	19 12 27.42	−05 24 51.9	8.06		G	288.114 244 00	−05.414 414 46		19.04	−9.66	−52.48	0.87	0.61	1.07	0.95	0.73	+24	−25	−21	−23	+ 1	+22	+ 5	−25	+ 9	+17		0	0.18
94371	19 12 27.46	+16 51 02.2	7.94		H	288.114 402 11	+16.850 597 96		21.72	115.83	−175.06	0.76	0.99	1.04	0.98	1.06	+25	−10	−34	+ 0	+ 1	+19	+ 3	+ 3	− 2	+14		4	0.42
94372	19 12 28.02	−21 39 30.0	6.39		H	288.116 746 70	−21.658 327 64		7.13	31.83	−22.34	0.74	0.37	0.77	0.73	0.49	−17	−33	+ 1	− 6	+ 6	+18	+14	−37	+ 0	− 1		0	−2.03
94373	19 12 28.47	+18 00 06.8	7.45		H	288.118 608 34	+18.001 900 61		6.00	4.16	15.93	0.58	0.55	0.83	0.86	0.86	+21	−23	−15	+37	− 5	+12	−10	+17	+ 6	+ 0		1	−0.72
94374	19 12 28.72	−36 35 04.7	8.77	2	H	288.119 657 17	−36.584 632 13		0.75	16.69	−12.42	1.20	0.71	1.30	1.52	0.89	+18	−31	− 9	+21	+ 4	−15	−12	−35	+12	−10		0	1.36
94375	19 12 28.98	+23 27 33.6	8.07		H	288.120 749 74	+23.459 331 35		2.38	−1.38	−3.10	0.48	0.58	0.93	0.58	0.68	−27	− 9	− 7	−16	− 7	+ 7	− 8	−12	+13	−14		0	0.96
94376	19 12 33.15	+67 39 40.7	3.07		G	288.138 145 81	+67.661 316 95		32.54	94.49	92.30	0.47	0.41	0.46	0.47	0.45	−12	−20	+ 6	−18	+20	+ 5	+18	− 4	+ 6	+ 6		3	2.22
94377 H	19 12 34.45	+16 50 47.2	6.73	2	G	288.143 556 04	+16.846 448 22	A	3.85	2.18	−11.64	1.08	1.00	1.29	1.31	1.31	+25	− 1	−25	+17	−10	+20	−11	− 2	− 3	+ 6		0	1.07
94378	19 12 34.54	−37 31 26.4	7.15		H	288.143 924 90	−37.523 997 61		3.41	−0.68	−16.01	0.86	0.49	0.91	1.04	0.60	− 4	−38	+14	+21	− 1	+ 5	− 3	−32	−14	−14		0	1.71
94379	19 12 34.74	−58 54 08.3	9.20		G	288.144 742 16	−58.902 302 60		6.76	37.92	−13.60	1.00	0.70	1.41	1.35	1.15	+ 7	−10	−13	+22	−13	+ 4	− 7	−13	+21	+34		0	2.34
94380	19 12 35.87	+12 52 58.2	9.56		H	288.149 464 20	+12.882 829 64		2.15	−6.15	−0.52	1.14	1.02	1.54	1.18	1.07	+ 6	−15	−12	−12	+ 5	+32	+10	−11	− 5	+ 2		0	−0.13
94381	19 12 36.18	+16 18 18.5	9.18		G	288.150 751 85	+16.305 138 12		4.39	−13.76	5.02	0.97	0.96	1.41	1.18	1.43	+33	+ 1	+ 0	− 3	−14	+33	−17	−19	+ 5	+35		0	−0.13
94382	19 12 36.72	+21 33 16.4	6.02		H	288.153 018 33	+21.554 560 41		3.24	14.51	4.79	0.42	0.45	0.64	0.53	0.54	+24	−20	−19	+ 0	+ 2	+10	+ 1	− 2	+13	+26		1	−0.58
94383	19 12 37.00	+06 02 22.3	7.46		G	288.154 177 08	+06.039 537 20		4.58	−1.00	−15.20	0.83	0.60	0.92	0.88	0.61	+28	−23	−10	−17	−17	−14	−23	−32	+17	− 1		0	−1.06
94384	19 12 40.25	−06 27 31.6	9.12	2	H	288.167 726 91	−06.458 791 64		1.20	0.05	−4.39	0.99	0.71	1.20	1.21	0.89	+ 6	−14	−10	−13	+ 9	+ 6	+ 7	−23	− 3	−21		2	−1.36
94385	19 12 40.70	−07 56 22.2	5.35	1	H	288.169 598 61	−07.939 500 77		2.68	12.69	−7.06	0.73	0.45	0.80	0.72	0.47	− 9	−15	−20	−36	+30	− 2	+26	−39	+24	−11		0	−0.04
94386	19 12 42.17	+13 22 59.8	8.42		H	288.175 728 28	+13.383 287 96		2.86	2.94	−14.74	0.88	0.80	1.10	1.06	0.87	− 9	− 6	−11	− 2	+ 3	+ 5	+ 4	−26	+10	− 2		2	0.15
94387 H	19 12 42.40	+24 34 36.4	8.11		H	288.176 686 96	+24.576 782 06	∗	13.40	68.25	−5.55	1.73	2.60	1.26	0.92	1.05	−22	+10	−20	−28	+ 2	−10	+ 2	−19	+17	−12		1	1.98
94388	19 12 42.82	+39 29 50.3	8.28		G	288.178 403 91	+39.497 310 83		2.68	2.09	−0.88	0.59	0.57	0.69	0.69	0.75	− 3	− 1	− 2	+25	+ 5	− 2	+ 6	+21	−11	+ 3		0	−1.57
94389	19 12 43.00	−25 40 09.7	8.57		H	288.179 156 87	−25.669 362 17		16.93	1.89	−13.72	1.25	0.65	1.17	1.34	0.86	−32	−12	−10	−21	+32	− 4	+35	−43	+16	−22		0	0.48
94390	19 12 43.85	−11 33 01.3	7.61		H	288.182 728 38	−11.550 350 58		2.42	35.76	4.16	0.79	0.45	0.99	1.00	0.72	+24	−33	− 8	−15	+ 6	+36	+11	−19	− 3	+ 7		0	1.81
94391	19 12 43.92	−33 51 13.8	7.79		H	288.183 007 37	−33.853 846 93		12.07	51.61	−149.66	1.38	0.64	1.42	2.37	1.04	+24	−16	−27	+37	+41	−29	−17	−58	+36	−53		0	2.55
94392	19 12 44.11	−42 04 52.5	10.50		G	288.183 778 24	−42.081 253 89		1.25	−11.50	−16.16	2.09	1.37	2.18	2.14	1.48	+47	−55	−26	+ 4	−14	− 7	−28	−47	+ 6	+12		0	0.28
94393	19 12 44.13	−33 50 46.2	7.26		H	288.183 860 83	−33.846 168 20		2.19	−4.25	−8.00	1.28	0.60	1.28	2.28	0.99	+15	−17	−23	+30	+45	−26	− 9	−58	+32	−58		0	0.87
94394	19 12 44.16	−19 14 06.9	8.14		H	288.184 019 56	−19.235 245 95		13.96	−119.59	−124.36	0.87	0.50	0.98	1.00	0.68	+ 4	−20	− 5	− 8	−11	+26	− 5	−39	− 8	+11		0	−1.49
94395	19 12 44.56	+08 36 37.9	7.76		H	288.185 658 11	+08.610 514 29		4.66	6.44	−0.33	0.88	0.57	1.04	0.83	0.60	− 2	−40	−10	−20	+ 3	+ 5	− 6	−27	−20	−23		0	−1.18
94396	19 12 44.97	+18 48 44.5	10.16		H	288.187 389 57	+18.812 349 74		17.22	113.91	166.28

No.	Tycho Magnitudes					Colour Indices					Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag	Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
94301	9.612	0.015	9.360	0.018		0.240	0.022	T	0.27	0.03	L	9.3896	0.0019	0.021	145		9.35	9.44					1							
94302	6.422	0.004	5.246	0.002		1.008	0.003	T	0.98	0.00	L	5.2950	0.0007	0.005	100		5.29	5.30					1							S
94303	11.176	0.075	10.652	0.083		0.710	0.020	G	0.76	0.02	H	10.8155	0.0029	0.031	84		10.76	10.86		C			1							G
94304	8.029	0.008	7.629	0.008		0.391	0.009	T	0.46	0.01	L	7.6877	0.0011	0.013	128		7.66	7.71					1							S
94305	9.070	0.014	8.530	0.013		0.506	0.017	T	0.58	0.02	L	8.5541	0.0025	0.019	86		8.52	8.59					1							
94306	8.420	0.012	8.159	0.013	A	0.108	0.140	G	0.22	0.03	L *	8.1913	0.0018	0.015	112 *		8.17	8.22		C	19117+1753	I 1	2 C B	AB	84	1.949	0.039	3.51	0.15	
94307	10.216	0.032	9.665	0.031	A	0.522	0.033	T	0.59	0.04	L	9.7764	0.0142	0.022	85	A	9.75	9.81		C	19117−4711	I 1	2 C D	AB	152	13.901	0.063	3.37	0.32	D
94308	8.070	0.007	7.733	0.008	A	−0.016	0.009	G	0.01	0.01	H	7.8045	0.0066	0.029	196	A	7.76	7.86		D	19118+2615	I 1	2 C A	AB	23	15.113	0.013	2.48	0.06	S
94309	9.187	0.014	8.246	0.011		0.817	0.014	T	0.84	0.01	L	8.2891	0.0026	0.023	107		8.25	8.33		U 2	19118−1911	I 1	1							
94310	9.749	0.024	9.027	0.020	*	0.649	0.023	T	0.71	0.02	L *	9.0311	0.0033	0.024	76	*	8.99	9.07		D	19118−5319	I 1	2 C A	AB	182	0.438	0.007	1.33	0.04	
94311	5.851	0.003	5.924	0.003		−0.062	0.004	T	−0.04	0.00	L	5.9180	0.0013	0.012	130		5.90	5.93		U 2			1							S
94312											T	12.5469	0.0137	0.141	104		12.06	12.73		U			1 S							D
94313	8.052	0.008	7.667	0.008		0.411	0.001	G	0.48	0.00	H	7.7107	0.0018	0.015	145		7.69	7.74					1							S
94314	10.824	0.046	9.432	0.024		1.177	0.041	T	1.14	0.04	L	9.4339	0.0038	0.022	74		9.38	9.48					1							G
94315	9.010	0.013	8.814	0.016		0.187	0.019	T	0.21	0.02	L	8.8400	0.0017	0.016	115		8.81	8.88		C			1							
94316	9.425	0.018	8.067	0.011		1.150	0.017	T	1.11	0.01	L	8.0831	0.0014	0.011	68		8.06	8.11		C			1							
94317	11.916	0.165	10.806	0.092	B	0.957	0.147	T	0.94	0.11	L	11.4548	0.1277			B				D	19118+0842	I 2	1 C F D							D
94318	9.350	0.010	9.343	0.013		0.007	0.014	T	0.03	0.01	L	9.3715	0.0018	0.026	237		9.32	9.43					1							
94319	10.517	0.044	9.985	0.046	A	0.499	0.058	T	0.57	0.06	L	10.0790	0.0445	0.041	77	A	9.94	10.13		D	19118+0842	I 2	1 C P D							G D
94320	9.764	0.022	8.501	0.013		1.076	0.020	T	1.04	0.02	L	8.5268	0.0021	0.016	93		8.49	8.56					1							
94321	8.014	0.007	8.049	0.009		−0.027	0.010	T	−0.01	0.01	L	8.0475	0.0013	0.013	135		8.03	8.06		C			1							
94322	11.184	0.061	10.276	0.046		0.791	0.059	T	0.82	0.04	L	10.2922	0.0038	0.027	99		10.25	10.35		C			1							G
94323	8.890	0.015	7.176	0.007		1.431	0.013	T	1.48	0.02	A	7.1618	0.0012	0.008	82		7.15	7.17					1							S
94324	8.021	0.007	8.006	0.008		0.019	0.010	T	0.04	0.01	L	8.0282	0.0015	0.011	121		8.01	8.05		C			1							S
94325	9.607	0.019	8.160	0.011		1.220	0.017	T	1.18	0.02	L	8.1787	0.0024	0.016	87		8.16	8.21					1							S
94326	9.631	0.036	8.886	0.030		0.667	0.036	T	0.73	0.03	L	8.9326	0.0022	0.016	72		8.91	8.96		C			1							
94327	9.328	0.015	9.138	0.018		0.182	0.022	T	0.20	0.03	L	9.1415	0.0023	0.026	134		9.10	9.19		C			1							
94328	7.578	0.007	7.510	0.007		0.068	0.009	T	0.08	0.01	L	7.5329	0.0011	0.011	120		7.51	7.55					1 S							S
94329	11.618	0.094	10.512	0.053		1.050	0.020	G	1.02	0.02	H	10.5970	0.0040	0.029	109		10.53	10.63					1							G
94330	10.129	0.028	9.816	0.032		0.297	0.040	T	0.34	0.05	L	9.9123	0.0022	0.018	76		9.88	9.95		C			1							G
94331	7.064	0.005	6.955	0.006	*	0.102	0.003	G	0.12	0.00	R *	6.9845	0.0015	0.010	76	*	6.97	7.01		D	19121+0237	I 1	2 C A	BA	184	0.248	0.003	0.48	0.05	S
94332	9.791	0.022	9.178	0.020		0.574	0.020	G	0.65	0.02	H	9.2481	0.0016	0.020	115		9.20	9.28					1 S							
94333	7.987	0.007	8.033	0.009		−0.018	0.015	G	0.00	0.01	H	8.0220	0.0010	0.010	118		8.01	8.05		C			1							S
94334	10.707	0.037	10.165	0.035		0.481	0.005	G	0.55	0.01	H	10.3138	0.0026	0.031	105		10.26	10.38					1							G
94335	10.016	0.025	9.395	0.022		0.574	0.025	T	0.65	0.02	L	9.4722	0.0034	0.045	101		9.43	9.67	2.18	P 1 A			1							
94336	7.294	0.007	6.569	0.006	A	0.666	0.006	G	0.73	0.01	R *	5.9819	0.0008	0.009	109	*	5.97	6.00		D	19121+4951	I 1	2 C A	AB	208	7.648	0.003	0.15	0.01	S
94337	9.348	0.016	9.038	0.017		0.337	0.015	G	0.39	0.02	H	9.0852	0.0010	0.015	116		9.06	9.12		D			1							
94338	9.375	0.014	7.994	0.008	A	1.000	0.495	G	1.09	0.05	L *	7.9990	0.0012	0.012	128	*	7.98	8.02		D	19121−2156	I 1	2 C B	AB	330	7.565	0.049	3.71	0.32	
94339	9.899	0.027	8.183	0.012		1.440	0.001	G	1.44	0.00	H	8.1295	0.0013	0.012	90		8.11	8.15		C			1							
94340	10.424	0.031	9.576	0.024		0.760	0.020	G	0.80	0.02	H	9.6322	0.0022	0.021	104		9.60	9.67		C			1							
94341						1.410	0.020	G	1.70	0.05	I	11.3476	0.0041	0.054	193		11.25	11.43					1 X							G
94342	8.764	0.011	8.785	0.014		−0.015	0.016	T	0.01	0.01	L	8.7802	0.0015	0.016	131		8.75	8.82					1							
94343	8.541	0.010	8.232	0.011		0.296	0.003	G	0.34	0.00	H	8.2745	0.0018	0.015	110		8.25	8.30					1							
94344	7.821	0.007	6.682	0.006		1.016	0.000	G	0.99	0.00	H	6.7166	0.0008	0.007	83		6.71	6.73		C			1							S
94345	8.711	0.011	8.089	0.010		0.596	0.015	G	0.67	0.01	H	8.1352	0.0010	0.012	93		8.12	8.17		D			1							S
94346	8.037	0.008	7.118	0.007		0.804	0.009	G	0.84	0.01	H	7.1762	0.0020	0.018	100		7.15	7.21		U 2 C			1							S
94347	7.767	0.006	7.310	0.006		0.444	0.007	T	0.51	0.01	L	7.3587	0.0010	0.013	133		7.34	7.38					1 X							S
94348	11.973	0.139	10.101	0.042		1.490	0.015	G	1.49	0.02	A	10.1047	0.0027	0.021	71		10.07	10.14		C			1							G
94349						1.542	0.051	G	2.58	0.02	A	11.1029	0.0033	0.038	75		11.04	11.16		D	19122+0253	I 1	1 O							G D
94350	7.458	0.006	7.433	0.008	A	0.050	0.015	G	0.03	0.01	L *	7.4321	0.0009	0.011	133	*	7.42	7.45		D	19122+3215	I 1	2 C A	AB	147	1.083	0.016	3.25	0.08	S
94351	7.839	0.007	6.643	0.005		1.024	0.007	T	1.00	0.01	L	6.7040	0.0012	0.008	104		6.69	6.72			19123+4723	I 1	1							S
94352	9.958	0.025	8.663	0.014		1.101	0.022	T	1.06	0.02	L	8.7285	0.0012	0.015	113		8.70	8.76		C			1							
94353	9.016	0.016	8.440	0.015		0.480	0.015	G	0.55	0.02	H	8.5508	0.0024	0.016	79		8.52	8.58		C	19124−5148	I 2	1							
94354	9.160	0.013	7.307	0.006		1.573	0.012	T	2.41	0.03	O	7.1127	0.0042	0.043	124		7.05	7.18		U 2			1 S							S
94355	8.400	0.009	8.252	0.010	*	0.142	0.012	T	0.16	0.01	L *	8.2949	0.0018	0.017	133	*	8.26	8.32		D	19123+2113	I 1	2 C A	AB	113	0.208	0.003	0.27	0.10	S
94356	9.810	0.026	9.968	0.044		−0.130	0.015	G	−0.12	0.02	H	9.9743	0.0035	0.027	100		9.92	10.03		C			1							G
94357	9.943	0.027	9.540	0.029		0.381	0.037	T	0.45	0.04	L	9.6543	0.0030	0.024	78		9.62	9.69					1							G
94358	9.361	0.014	9.211	0.017		0.144	0.021	T	0.16	0.02	L	9.2413	0.0022	0.015	109		9.21	9.27					1							
94359	10.720	0.045	9.432	0.024		1.096	0.040	T	1.06	0.04	L	9.4890	0.0018	0.021	102		9.46	9.53		C			1							
94360	10.143	0.033	8.695	0.018		1.160	0.218	G	1.52	0.11	S	8.6798	0.0019	0.017	80		8.64	8.71		R	19124−0428	I 2	1							
94361	9.438	0.017	7.495	0.007		1.647	0.015	T	2.44	0.04	O	7.2945	0.0044	0.042	115		7.24	7.37		U 2			1 S							S
94362	9.663	0.014	9.225	0.014		0.413	0.018	T	0.48	0.02	L	9.2841	0.0021	0.026	157		9.23	9.32					1							
94363	7.603	0.007	7.591	0.011	*	0.010	0.015	G	0.03	0.01	H *	7.6636	0.0014	0.013	140	*	7.64	7.70		D	19124+3021	I 1	2 C A	AB	317	9.953	0.005	1.18	0.02	S
94364											T	11.9080	0.0159	0.144	76		11.37	12.09		D	19124−0428	I 2	1 S							
94365	9.023	0.018	7.231	0.009		1.480	0.015	G	1.44	0.03	L	7.1933	0.0026	0.014	78		7.17	7.22			19124−5148	I 2	1							S
94366	6.912	0.005	6.947	0.006		−0.027	0.007	T	−0.01	0.01	L	6.9487	0.0007	0.008	127		6.94	6.97		C			1							S
94367	8.729	0.011	8.080	0.010	*	0.588	0.015	G	0.66	0.01	H *	8.1128	0.0015	0.014	116	*	8.09	8.13		D	19124−3304	I 1	2 C B	AB	23	0.387	0.002	0.10	0.02	S
94368						1.450	0.020	G	1.95	0.02	A	11.3845	0.0056	0.044	107		11.29	11.45		C			1							G
94369	9.121	0.012	9.027	0.014		0.092	0.017	T	0.10	0.02	L	9.0312	0.0020	0.022	145		9.00	9.08					1							
94370	8.714	0.011	8.128	0.010		0.561	0.015	G	0.63	0.01	H	8.1716	0.0012	0.011	91		8.16	8.20		C			1							
94371	8.866	0.014	8.023	0.011		0.760	0.000	G	0.80	0.00	H	8.0810	0.0020	0.013	84		8.06	8.10			19126+1651	I 2	1 G							D
94372	7.844	0.006	6.519	0.004		1.129	0.001	G	1.09	0.00	H	6.5564	0.0007	0.007	124		6.55	6.57		C			1							S
94373	7.926	0.008	7.500	0.006		0.402	0.009	T	0.47	0.01	L	7.5454	0.0011	0.010	146		7.53	7.56		C			1							S
94374	10.953	0.054	9.046	0.019		1.583	0.045	T	1.60	0.05	L	8.8884	0.0035	0.025	97		8.85	8.94		U 2			1 S							
94375	8.379	0.006	8.092	0.006		0.273	0.008	T	0.31	0.01	L	8.1399	0.0013	0.016	241		8.11	8.17					1							
94376	4.362	0.002	3.188	0.002		0.990	0.018	G	0.94	0.03	C	3.2296	0.0005	0.004	110		3.22	3.24			19126+6740	I 1	1							S
94377	6.707	0.006	6.729	0.007	*	−0.010	0.000	G	0.01	0.00	H *	6.7103	0.0024	0.017	89	*	6.69	6.75		U 2	19126+1651	I 2	2 C A	AB	137	0.664	0.002	0.83	0.01	S P
94378	7.246	0.006	7.149	0.007		0.087	0.008	T	0.10	0.01	L	7.1818	0.0009	0.007	89		7.17	7.19					1							S
94379	9.745	0.019	9.237	0.018		0.493	0.015	G	0.57	0.02	H	9.3006	0.0026	0.020	115		9.26	9.34					1							
94380	9.888	0.027	9.567	0.030		0.305	0.038	T	0.35	0.05	L	9.6386	0.0036	0.027	72		9.58	9.69					1							G
94381	9.677	0.023	9.185	0.022		0.420	0.013	G	0.49	0.01	H	9.2760	0.0030	0.015	72		9.25	9.31		C			1							
94382	6.102	0.003	6.025	0.003		0.069	0.004	T	0.08	0.00	L	6.0510	0.0006	0.006	138		6.04	6.06		C			1							S
94383	8.231	0.012	7.537	0.010		0.640	0.013	T	0.70	0.01	L	7.5784	0.0014	0.012	74		7.56	7.60		C			1							S
94384	9.476	0.018	9.149	0.019		0.391	0.007	G	0.46	0.01	H	9.2115	0.0041	0.041	93		9.16	9.28		U 2			1							
94385	5.475	0.002	5.371	0.002		0.094	0.003	T	0.11	0.00	L	5.3864	0.0009	0.011	101		5.36	5.40		U 2			1							S
94386	9.799	0.026	8.523	0.016		1.086	0.024	T	1.05	0.02	L	8.5866	0.0018	0.017	77		8.56	8.62		C			1							
94387	8.784	0.009	8.217	0.008	*	0.530	0.011	T	0.60	0.01	L *	8.2268	0.0014	0.018	185	*	8.20	8.27		D	19127+2435	I 1	2 C A	AF	100	0.203	0.009	1.07	0.26	
94388	8.195	0.009	8.296	0.012		−0.070	0.010	G	−0.05	0.01	H	8.2753	0.0012	0.013	127		8.26	8.30					1							
94389	9.276	0.014	8.648	0.013		0.579	0.014	T	0.65	0.01	L	8.6930	0.0022	0.019	105		8.66	8.73					1							
94390	9.026	0.011	7.739	0.007		1.095	0.010	T	1.06	0.01	L	7.7785	0.0009	0.010	140		7.76	7.81					1							
94391	8.232	0.012	7.801	0.013							T	7.8394	0.0013	0.015	107		7.81	7.87		D	19127−3351	I 2	1 S							S
94392	11.141	0.066	10.553	0.060		0.516	0.020	G	0.59	0.02	H	10.6713	0.0054	0.037	73		10.62	10.72					1							G
94393	7.249	0.011	7.353	0.015		0.362	0.071	G	0.42	0.08	R	7.3481	0.0013	0.012	106		7.33	7.36		D	19127−3351	I 2	1 S							S
94394	8.780	0.010	8.221	0.010		0.528	0.010	T	0.60	0.01	L	8.2596	0.0014	0.014	114		8.24	8.29		C			1							
94395	7.944	0.007	7.788	0.010		0.150	0.011	T	0.17	0.01	L	7.8187	0.0014	0.011	79		7.80	7.84		C			1							S
94396	11.242	0.048	10.243	0.033		0.873	0.043	T	0.88	0.03	L	10.3145	0.0032	0.038	173		10.23	10.38		C			1							G
94397	7.631	0.006	7.578	0.008		0.048	0.009	T	0.06	0.01	L	7.5913	0.0010	0.009	115		7.58	7.61		C			1							S
94398	7.349	0.006	6.224	0.003		0.954	0.006	G	0.94	0.00	H	6.2771	0.0009	0.008	94		6.27	6.29		C	19128−5029	I 1	1							S
94399	9.259	0.016	8.907	0.017		0.342	0.021	T	0.40	0.03	L	8.9556	0.0017	0.013	100		8.93	8.98		C			1							
94400	8.965	0.011	7.911	0.008		0.915	0.010	T	0.91	0.01	L	7.9591	0.0012	0.012	130		7.94	7.98		C			1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
94401	19 12 47.20	+64 10 37.2	9.43		H	288.196 683 64	+64.177 013 41		3.42	−2.17	−7.07	0.91	0.83	0.87	1.07	1.09	+18	−18	+ 7	+37	+16	+ 4	+14	+27	+16	+37	3	1.16
94402	19 12 47.32	+03 33 26.7	8.41	2	T	288.197 149 38	+03.557 428 67		1.53	−0.66	−4.81	0.91	0.68	1.18	1.06	0.85	+ 3	−23	+ 5	− 1	+14	+35	+12	− 2	+12	+ 4	0	1.82
94403	19 12 48.40	−34 26 07.7	8.16		H	288.201 661 45	−34.435 463 47		8.80	17.41	−12.88	1.21	0.60	1.27	1.44	0.82	+17	−38	− 7	+10	+ 6	−27	−12	−51	+ 6	−14	0	−0.82
94404	19 12 50.33	−07 29 38.3	8.56		H	288.209 709 50	−07.493 980 59		4.33	2.44	−16.73	0.97	0.63	1.12	0.99	0.70	− 2	− 4	+11	−30	+25	+ 7	+26	−28	+17	+ 0	2	0.89
94405	19 12 51.98	+27 41 51.6	9.13		H	288.216 570 00	+27.697 675 64		2.81	−0.26	2.78	0.69	0.87	1.20	0.86	1.03	−17	− 5	−13	+27	+16	−15	+10	− 5	+22	−28	0	−0.66
94406	19 12 52.03	+55 10 35.9	9.00		H	288.216 773 82	+55.176 629 04		2.72	6.15	−13.93	0.76	0.69	0.80	0.90	0.88	+ 0	−11	+13	+15	− 8	−28	+ 2	−13	− 9	+29	2	−0.11
94407	19 12 53.00	−12 34 58.3	9.41		G	288.220 842 56	−12.582 850 90		−0.97	−1.60	−7.88	1.07	0.60	1.29	1.29	0.94	+20	−39	−12	−16	−10	+26	−12	−38	+ 9	+13	0	−0.03
94408	19 12 53.20	+60 39 02.2	9.25		H	288.221 678 20	+60.650 621 46		2.20	−0.97	0.88	0.82	0.80	0.83	0.96	1.02	+10	−15	+ 5	+30	+20	−17	+25	+14	− 8	+28	0	−0.32
94409	H 19 12 53.85	+42 32 56.5	9.43		H	288.224 385 98	+42.549 038 45	A	3.03	−3.43	−4.55	1.42	1.62	1.61	1.26	1.98	+ 7	−10	− 7	+10	+11	− 8	+13	+ 7	+17	+ 5	1	1.85
94410	19 12 54.30	−59 41 19.7	8.64		G	288.226 268 05	−59.688 803 04		9.76	23.68	38.89	0.96	0.67	1.25	1.21	0.88	− 5	− 6	+ 1	+52	−19	+ 5	+ 2	−12	+ 2	+31	0	1.52
94411	19 12 55.41	−27 42 38.4	9.83		G	288.230 892 97	−27.710 670 59		7.23	−1.09	−24.74	1.73	0.71	1.76	1.57	0.96	− 6	−57	+ 9	+ 2	+ 5	+ 5	+ 4	−44	− 4	− 6	0	−0.95
94412	19 12 56.07	+29 13 53.7	7.13		H	288.233 625 44	+29.231 593 70		2.44	2.74	10.00	0.45	0.52	0.70	0.52	0.61	− 9	− 7	−22	+28	+ 9	−20	+ 4	− 1	+18	−14	0	0.01
94413	19 12 56.46	+39 38 52.0	8.52		H	288.235 244 67	+39.647 775 78		6.66	−28.69	−37.35	0.69	0.65	0.79	0.87	0.88	− 5	− 9	+ 2	+30	+ 4	− 9	+ 5	+16	− 4	+ 0	0	−0.28
94414	19 12 57.51	−54 29 01.1	8.63		H	288.239 614 36	−54.483 628 39		2.95	−0.57	10.00	1.08	0.86	1.23	1.50	0.95	+ 1	−16	+16	−16	+11	−11	+10	−52	−22	− 4	2	−0.13
94415	19 12 58.92	−26 59 58.4	8.86		H	288.245 509 13	−26.999 542 99		1.21	3.97	−12.04	1.20	0.55	1.31	1.46	0.78	− 1	−36	− 8	+ 2	+ 7	+27	+ 1	−38	+ 7	−14	0	−0.66
94416	19 12 58.97	+17 30 24.3	8.10		H	288.245 728 53	+17.506 749 03		1.12	2.51	−4.98	0.82	0.75	1.03	1.17	1.18	+ 7	− 8	−17	+35	− 8	+ 5	− 6	+14	+ 6	+20	0	−0.52
94417	19 13 00.71	−49 54 10.1	8.36		G	288.252 946 64	−49.902 812 05		17.53	212.61	−7.35	0.89	0.65	1.04	1.15	0.71	− 5	−31	− 5	− 8	+31	+ 8	+22	−33	− 2	−24	0	1.22
94418	H 19 13 02.20	+19 08 20.4	8.69		H	288.259 174 52	+19.138 995 55	A	5.22	−2.27	−2.49	1.58	1.59	2.21	1.93	2.02	+38	− 1	−23	+12	−10	+35	−10	+ 0	+ 0	+28	1	−0.04
94419	19 13 04.07	−52 38 47.8	11.85	2	H	288.266 955 84	−52.646 612 62		−2.29	−0.77	−1.98	5.78	5.31	5.27	7.06	5.68	+68	+ 1	+13	−47	−51	−25	−54	−74	−22	+59	0	0.59
94420	H 19 13 04.58	−40 47 02.3	9.35		H	288.269 096 60	−40.783 976 33	A	6.44	−3.50	−32.48	2.97	2.27	2.81	4.24	2.11	− 3	−16	−13	+26	+ 4	−36	−24	−22	+ 9	−49	1	0.35
94421	19 13 05.59	−79 59 40.1	9.61	2	H	288.273 277 37	−79.994 474 37		4.39	−7.06	−40.52	0.88	0.96	1.18	1.08	1.13	+ 8	−18	+ 4	+16	− 3	−17	− 3	−11	+13	+11	0	2.35
94422	19 13 06.36	+30 02 46.1	8.18		H	288.276 501 40	+30.046 147 58		2.70	0.66	−4.57	0.57	0.65	0.89	0.64	0.79	−13	−11	−14	+19	+12	−19	+10	−13	+20	−14	0	−1.36
∗94423	19 13 06.95	+04 56 08.4	7.66		G	288.278 967 25	+04.935 679 48		16.09	5.82	−17.06	0.78	0.57	0.96	0.85	0.62	+ 4	−23	−10	−14	− 4	−17	−12	−33	+18	−20	0	−0.04
∗94424	19 13 06.95	−60 50 57.5	8.81		H	288.278 963 99	−60.849 319 02		−0.16	11.66	−14.16	0.92	0.65	1.26	1.11	0.88	−11	−23	− 8	+13	−14	−16	−13	−10	− 2	+ 1	0	−0.09
94425	19 13 07.12	−28 46 24.1	9.98		G	288.279 660 29	−28.773 364 49		2.38	−10.09	−31.87	2.03	0.86	2.07	2.07	1.27	+ 2	−54	− 2	+11	+ 1	− 6	− 9	−43	+10	−10	0	1.75
94426	H 19 13 07.93	+21 54 27.9	8.49		H	288.283 042 52	+21.907 743 74	A	1.28	−5.23	−6.76	1.06	1.07	1.35	1.22	1.18	+25	−18	−15	−10	− 5	− 3	− 6	−14	+ 8	+25	1	0.04
94427	19 13 08.68	+22 52 08.4	9.69	2	H	288.286 175 71	+22.869 001 81		0.58	0.90	−4.11	0.74	0.82	1.32	0.88	0.98	−10	− 4	−17	− 4	+ 5	+ 7	+ 6	− 2	+ 7	− 1	0	1.65
∗94428	19 13 09.13	−77 51 50.7	7.03	1	H	288.288 042 59	−77.864 086 97		2.38	6.07	11.64	0.46	0.58	0.71	0.49	0.69	− 8	−20	+20	+11	− 5	− 3	− 6	+ 0	+ 4	− 7	0	−1.16
∗94429	19 13 09.11	−20 25 18.6	7.84		G	288.287 964 55	−20.421 843 33		10.67	26.36	−6.48	0.88	0.44	1.02	1.10	0.61	− 8	−11	−16	+18	− 9	+43	− 3	−27	+ 8	− 5	0	−0.75
94430	19 13 09.47	+12 01 21.7	8.35		H	288.289 458 50	+12.022 701 05		3.63	1.46	−11.65	0.83	0.73	1.07	0.80	0.73	−17	−15	−19	−35	+ 5	+26	+11	−26	− 4	−19	0	−0.17
94431	19 13 12.38	−40 44 28.7	7.29		H	288.301 586 88	−40.741 312 04		6.26	−19.64	−25.20	0.95	0.61	1.06	1.59	0.79	− 3	−15	−31	+15	+17	−25	−10	−37	+22	−50	0	−1.18
94432	19 13 12.87	−63 52 37.3	7.99		H	288.303 641 99	−63.877 028 20		5.26	−2.92	14.16	0.69	0.54	0.94	1.04	0.67	−18	+ 3	− 6	+ 6	−17	−15	−10	−24	− 4	+ 1	0	0.97
94433	19 13 13.51	−03 27 26.8	8.98		H	288.306 297 00	−03.457 455 61		3.47	6.77	−0.39	0.96	0.65	1.20	1.18	0.97	+17	−18	− 9	− 7	+11	+31	+16	−11	+26	+51	0	1.37
94434	19 13 13.67	−25 54 24.3	5.79		G	288.306 957 00	−25.906 763 84		1.54	−2.11	−9.21	0.95	0.49	0.95	1.09	0.66	−19	−16	− 6	−23	+20	− 6	+21	−49	+12	−13	0	−0.44
94435	19 13 15.27	−17 06 20.6	9.24		H	288.313 613 80	−17.105 733 16		2.42	1.61	−26.17	1.14	0.71	1.25	1.33	0.92	+19	+ 3	+11	−11	−24	−10	−23	−51	− 4	+22	0	−0.19
94436	19 13 15.38	+15 02 08.3	6.70		H	288.314 102 37	+15.035 641 87		2.17	−3.25	−2.96	0.56	0.56	0.83	0.62	0.61	+22	−13	−13	+ 8	−20	+13	−21	−16	+ 3	+11	0	−0.57
∗94437	19 13 15.52	−12 16 57.0	5.51		G	288.314 649 39	−12.282 509 73		5.77	12.51	−30.44	0.72	0.41	0.89	0.82	0.54	+24	−44	−18	−20	− 6	+35	− 5	−30	+ 0	− 5	0	−0.32
∗94438	19 13 15.51	+46 58 55.9	10.24	3	H	288.314 640 05	+46.982 185 15		−1.10	7.88	−8.11	1.43	1.71	1.94	1.79	1.23	−30	−23	+58	−22	+20	+ 2	+24	−41	−21	+ 4	0	2.62
94439	19 13 15.60	+59 18 50.2	9.94		H	288.314 994 03	+59.313 956 74		5.19	4.25	−8.49	0.90	0.92	0.96	0.97	1.10	+ 1	+ 2	+15	+12	+13	− 4	+16	+ 7	− 2	+12	1	1.20
94440	19 13 15.94	+74 08 39.5	9.10		H	288.316 412 95	+74.144 295 76		12.76	−132.43	82.03	0.69	0.68	0.73	0.80	0.78	− 6	− 7	− 3	− 1	+ 9	−19	+ 9	+14	+ 3	+ 1	0	1.95
94441	19 13 16.48	−33 15 59.1	9.40		H	288.318 668 22	−33.266 411 40		9.90	−40.93	2.03	1.46	0.80	1.72	1.90	1.10	+12	−21	−31	+13	+27	−28	+ 0	−45	+40	−30	2	0.37
94442	19 13 16.61	+35 32 34.6	8.12		H	288.319 213 39	+35.542 952 44		5.25	−2.49	−9.48	0.54	0.63	0.76	0.66	0.81	+ 0	+10	− 8	− 9	+ 3	−18	+ 1	+ 1	−10	+ 3	0	−0.47
94443	19 13 16.93	−73 18 53.4	8.35	2	H	288.320 538 90	−73.314 826 33		1.45	−0.55	−9.72	0.53	0.72	0.94	0.57	0.83	−16	− 9	+29	+ 9	−12	− 9	−11	+17	+ 3	−15	1	0.70
94444	19 13 17.10	+27 40 07.3	8.91		H	288.321 256 95	+27.668 693 27		1.87	−40.93	−9.19	0.71	0.81	1.17	0.78	0.97	−14	+ 6	−15	+17	+21	−10	+20	−10	+29	−22	0	−0.71
94445	19 13 17.76	+14 56 33.7	7.27		H	288.323 983 57	+14.942 692 34		2.99	3.90	8.52	0.60	0.64	0.93	0.66	0.67	+22	−18	−10	+11	−20	+ 8	−19	−11	− 4	+10	0	−0.47
94446	19 13 18.45	−47 53 59.1	9.57		G	288.326 884 28	−47.899 742 09		3.62	−1.76	−26.25	1.21	0.87	1.42	1.59	1.01	+17	−31	−14	− 6	+10	+18	+ 8	−22	+ 1	+ 4	0	0.17
94447	19 13 18.60	+34 28 50.5	7.69		H	288.327 518 01	+34.480 686 10		7.37	12.95	−38.07	0.51	0.59	0.71	0.61	0.75	+ 1	−14	−16	+ 9	− 8	+ 3	− 8	− 9	+11	+ 8	0	−1.41
94448	19 13 19.57	+26 24 18.9	9.20		H	288.331 536 77	+26.405 242 20		3.62	4.71	3.13	0.70	0.88	1.29	0.84	1.07	−11	−10	+ 6	+30	+ 6	− 6	+ 6	+10	+10	− 7	0	−0.64
94449	19 13 20.90	−00 35 38.4	9.18		G	288.337 098 26	−00.594 003 48		7.52	−314.82	−447.43	1.22	0.81	1.36	1.34	0.97	− 5	−10	−19	−28	+20	+15	+24	−25	+12	+13	2	2.59
94450	19 13 21.87	+14 37 05.3	7.58	1	G	288.341 113 69	+14.618 134 44		3.17	−6.90	−6.14	0.60	0.62	0.95	0.69	0.67	+25	− 9	−15	+22	−21	+16	−21	− 9	+ 2	+17	0	−0.19
94451	19 13 22.20	−42 59 05.4	8.34		H	288.342 500 95	−42.984 832 67		4.15	−50.25	15.51	1.02	0.63	1.14	1.28	0.83	+ 6	−32	+12	+21	+ 6	+13	+ 0	−22	− 4	− 5	0	−1.78
94452	19 13 24.20	+11 20 42.0	7.07		H	288.350 831 58	+11.344 990 29		5.28	11.02	−25.60	0.73	0.61	0.88	0.86	0.67	− 1	−10	−24	−19	+ 0	− 4	− 3	−32	+11	−23	0	−0.63
94453	19 13 25.76	−31 41 32.4	8.08		H	288.357 325 46	−31.692 320 16		11.63	66.35	−11.76	1.26	0.56	1.22	1.75	0.91	− 3	−40	− 6	+23	+17	−12	− 7	−42	+14	−38	0	1.60
94454	H 19 13 25.82	−14 26 48.9	7.64		G	288.357 600 62	−14.446 914 05	A	11.70	38.74	−59.78	1.99	1.16	1.85	1.94	1.29	−50	− 5	− 4	− 7	− 2	+17	+19	−31	+ 5	+ 8	2	0.60
94455	19 13 26.49	−38 17 32.5	9.64		H	288.360 367 15	−38.292 367 79		5.73	20.55	−107.84	1.55	0.80	1.49	2.40	1.17	+ 1	−21	+ 3	+32	+24	+13	+ 5	−23	+ 0	−31	0	−0.14
94456	19 13 30.63	+06 39 05.5	7.92		H	288.377 625 59	+06.651 540 07		5.61	9.81	−15.96	0.84	0.65	0.96	0.95	0.68	+29	−13	− 7	−23	−12	−11	−15	−31	+13	+11	0	1.12
94457	19 13 31.21	+35 16 05.0	8.27		H	288.380 057 84	+35.268 065 60		4.67	−6.74	3.31	0.58	0.66	0.79	0.66	0.82	+ 2	+14	−11	− 5	+ 6	− 1	+ 4	+ 6	− 6	+14	0	−1.48
94458	19 13 33.04	−50 48 24.1	8.06		G	288.387 678 24	−50.806 693 02		0.38	4.28	−4.96	0.96	0.72	1.08	1.26	0.74	+19	−17	− 7	+ 2	− 3	− 3	− 3	−43	−23	+10	2	−1.69
∗94459	19 13 33.51	+04 15 50.5	7.66		G	288.389 640 77	+04.264 035 11		9.59	−12.50	−14.90	0.73	0.55	0.87	0.80	0.59	−11	−13	− 2	− 6	+ 7	+ 1	+ 3	−26	+ 8	−27	0	−0.15
∗94460	19 13 33.46	−62 55 20.7	6.59		H	288.389 421 72	−62.922 404 45		2.34	−43.32	−71.88	0.62	0.51	0.81	0.78	0.59	−10	−23	−12	+18	+12	− 9	+ 9	−39	− 2	−17	0	2.12
94461	19 13 33.52	+43 59 16.2	8.48		H	288.389 654 41	+43.987 841 32		7.92	43.24	7.19	0.60	0.61	0.69	0.64	0.72	+ 4	+ 0	− 5	+23	+22	− 3	+24	+13	+17	+15	3	1.23
94462	H 19 13 34.95	−51 33 33.0	8.73		H	288.395 640 26	−51.559 179 55	A	7.06	6.67	−32.80	1.97	1.51	1.91	2.35	1.49	+ 4	+10	+ 4	−42	+19	−12	+14	−52	−11	+ 2	3	1.00
94463	19 13 35.48	−11 13 44.9	9.44		H	288.397 839 68	−11.229 142 77		1.01	0.88	−9.49	1.13	0.61	1.39	1.51	1.00	+39	−38	−20	+10	+ 5	+12	− 9	−24	+16	+ 7	0	−0.22
94464	H 19 13 35.93	−10 20 57.6	8.09		H	288.399 697 04	−10.349 323 88	A	2.17	1.60	1.07	1.40	0.96	1.40	1.52	1.14	+51	−15	+ 0	−20	−24	+15	−24	−41	+ 7	+58	1	−0.14
94465	19 13 36.22	+34 54 52.1	7.93		H	288.400 919 27	+34.914 472 33		7.89	−9.86	29.50	0.57	0.64	0.79	0.63	0.84	− 4	+12	−10	− 3	+ 0	+10	− 1	+ 8	− 6	+ 8	0	−1.79
94466	19 13 36.73	−43 14 58.8	10.05		H	288.403 056 51	−43.249 665 90		−2.64	−82.71	−65.22	21.81	14.72	24.49	29.58	18.09	+15	−29	−17	+13	+ 4	−24	−12	−36	+14	−14	0	
94467	19 13 37.33	+25 01 39.5	8.17		H	288.405 538 73	+25.027 643 11		1.41	1.43	−3.35	0.44	0.67	0.96	0.45	0.83	−23	− 7	− 6	+35	+ 2	+ 2	+ 4	− 9	+ 4	−23	0	−0.42
94468	19 13 37.98	+37 46 32.5	8.49		H	288.408 237 19	+37.775 683 57		10.09	−30.77	−119.81	0.61	0.64	0.76	0.67	0.81	−13	− 4	− 6	+16	+ 4	−10	+ 4	+16	− 2	−14	0	−0.77
94469	19 13 38.17	−60 49 17.1	9.13		H	288.409 037 77	−60.821 414 24		4.81	−54.52	−18.00	1.04	0.72	1.32	1.21	0.91	−12	−28	− 1	+30	−17	−17	−12	+ 1	− 1	+10	0	1.19
94470	19 13 38.39	−43 14 24.6	8.84		G	288.409 973 85	−43.240 173 98		1.80	−3.86	−2.89	1.25	0.83	1.36	1.63	1.07	+19	−34	−14	+28	+ 2	+ 6	− 8	−12	+ 9	− 3	0	0.02
94471	19 13 38.75	+23 12 25.3	8.86		H	288.411 457 11	+23.207 017 10		1.12	1.45	−3.06	0.60	0.70	1.17	0.77	0.84	−16	+ 1	− 1	+ 4	+ 0	+ 9	+ 1	− 2	+12	− 8	0	1.22
94472	19 13 38.77	+50 54 31.2	8.40		G	288.411 555 58	+50.908 655 06		6.29	16.54	−25.52	0.62	0.63	0.69	0.72	0.71	+ 1	−11	+11	+18	+15	+ 4	+13	+12	+18	+23	0	0.39
94473	19 13 39.30	−27 23 39.1	8.94		H	288.413 749 44	−27.394 202 92		3.33	0.85	1.74	1.41	0.66	1.53	1.51	0.85	+10	−49	−13	− 7	+ 4	+23	+ 0	−39	+ 1	−12	0	0.52
94474	19 13 39.67	+27 18 22.0	9.87	3	H	288.415 290 16	+27.306 110 18		1.05	−1.73	−1.17	1.02	1.23	1.81	1.15	1.35	−13	−18	−27	+27	+14	−22	+ 8	+ 7	+ 8	−18	0	1.64
94475	19 13 41.10	+53 12 45.0	7.97		H	288.421 247 34	+53.212 491 08		4.62	9.96	−4.76	0.58	0.57	0.61	0.62	0.68	+ 2	−14	− 7	+ 2	+ 6	+ 9	+ 6	+29	− 3	+ 5	1	0.25
94476	19 13 41.13	+28 47 15.5	9.23		H	288.421 357 45	+28.787 652 66		1.99	−1.88	−4.01	0.68	0.81	1.06	0.83	1.00	−15	− 4	−13	+42	+ 0	− 7	− 2	+23	+21	−18	2	1.16
94477	19 13 42.70	+02 17 37.4	5.14		H	288.427 914 64	+02.293 713 70		5.09	5.78	−2.58	0.75	0.52	0.86	0.85	0.63	− 6	−29	−13	−24	+16	+ 6	+17	−28	+ 2	− 6	2	−0.50
94478	19 13 44.02	+05 30 56.3	6.47		H	288.433 424 90	+05.515 637 87		5.45	7.51	−13.44	1.02	0.82	0.95	1.04	0.86	−31	−33	− 1	−36	+10	+32	+14	−51	− 3	−19	0	−0.52
94479	19 13 44.22	+34 24 19.8	8.52		H	288.434 253 63	+34.405 508 22		2.37	1.06	2.26	0.57	0.67	0.81	0.69	0.84	− 7	− 7	−18	+10	− 6	+11	− 4	+11	+14	+ 2	0	1.05
94480	19 13 44.63	−62 34 49.9	8.53		H	288.435 969 22	−62.580 520 08		2.02	−3.18	−31.78	0.95	0.74	1.08	1.14	0.85	−20	−12	−13	+36	− 4	+ 1	− 4	−26	− 1	−22	0	0.10
94481	19 13 45.49	+39 08 45.5	4.43	1	H	288.439 536 45	+39.145 969 68		3.13	−1.59	−0.61	0.41	0.43	0.51	0.48	0.56	− 4	− 3	−11	+14	+ 3	−13	+ 1	+18	−10	+ 1	0	−0.98
94482	19 13 47.73	−01 50 06.5	8.92	2	H	288.448 860 73	−01.835 147 92		1.83	0.82	−5.15	1.03	0.70	1.20	1.07	0.79	+28	−38	−23	−25	− 7	+26	− 5	−30	+17	+36	0	−1.91
94483	19 13 51.28	+41 44 34.0	8.55		H	288.463 656 63	+41.742 784 71		3.02	3.13	−6.19	0.69	0.67	0.81	0.74	0.88	− 9	−25	+ 1	+ 2	+ 4	+ 0	+ 3	+24	+ 1	− 4	0	−0.60
94484	19 13 52.57	+36 25 27.4	7.12		H	288.469 059 82	+36.424 275 88		3.67	0.20	1.65	0.46	0.50	0.60	0.54	0.65	− 8	+ 4	−16	+ 1	+ 8	−16	+ 7	+10	+ 1	− 9	1	0.59
94485	19 13 53.39	+25 45 31.7	6.98		H	288.472 453 12	+25.758 814 59		1.64	−1.11	1.78	0.36	0.47	0.70	0.38	0.56	−20	−11	+ 3	+39	+ 2	−10	+ 1	− 2	+ 4	−25	1	0.20
∗94486	19 13 53.59	+09 01 59.7	7.06		H	288.473 275 40	+09.033 249 52		2.62	−0.01	−11.19	0.78	0.58	0.98	0.81	0.60	−10	−19	−25	−31	+18	−15	+ 8	−38	+32	−35	0	−0.11
∗94487	19 13 53.56	+48 20 57.5	7.34		H	288.473 148 22	+48.349 300 86		3.91	−4.59	−6.42	0.57	0.54	0.63	0.72	0.64	+ 6	+ 5	−14	− 9	+ 8	− 7	+ 7	− 4	+10	+16	1	0.79
94488	19 13 53.60	−05 53 45.7	9.57		H	288.473 328 46	−05.896 039 26		2.31	16.05	−5.92	1.17	0.80	1.42	1.28	0.97	+23	−13	− 9	−28	− 2	+22	+ 1	−33	− 2	+ 9	0	0.44
94489	19 13 54.60	−18 51 42.0	9.06	3	H	288.477 504 19	−18.861 656 74		1.43	−8.75	−10.76	1.15	0.64	1.20	1.39	1.03	− 6	−22	+11	− 8	−12	+ 3	−11	−49	− 1	+ 7	0	1.15
94490	19 13 55.16	+57 42 18.9	5.00		H	288.479 852 88	+57.705 255 14		20.14	−17.10	−63.15	0.44	0.43	0.46	0.49	0.53	+ 9	− 5	+13	+23	+11	− 6	+15	+11	+ 3	+25	0	−0.97
94491	19 13 56.36	−26 52 33.7	7.09		H	288.484 847 90	−26.876 034 41		15.90	−11.99	−91.63	0.89	0.44	0.94	0.87	0.55	− 4	−40	− 8	− 7	+12	+14	+11	−31	+ 8	− 5	0	−1.86
94492	19 13 57.46	−42 34 10.6	8.12		H	288.489 427 88	−42.569 605 42		4.44	−19.38	16.21	1.03	0.59	1.12	1.22	0.80	+ 0	−41	+ 7	+ 9	+ 1	+14	− 3	−27	− 2	− 5	2	1.58
94493	19 13 58.01	−63 07 20.9	9.59		H	288.491 705 52	−63.122 467 30		9.13	10.23	26.43	1.10	0.88	1.44	1.59	1.19	−27	−17	− 1	+10	+ 6	− 7	+15	−41	−11	−13	1	1.04
94494	19 13 58.05	−22 55 54.5	8.01		H	288.491 890 55	−22.931 818 83		1.24	−11.71	−2.69	0.92	0.52	0.97	0.98	0.70	− 1	−28	+13	+ 6	−14	− 8	− 9	−45	− 5	+13	0	−0.77
94495	19 13 58.08	−57 37 40.1	8.38		H	288.492 018 73	−57.627 792 75		5.08	1.12	−28.78	0.79	0.54	1.08	0.97	0.84	+ 3	−27	+ 1	+56	+ 6	− 1	+16	+27	+ 8	+42	3	0.67
94496	19 13 58.61	+00 07 32.0	7.90	2	H	288.494 200 79	+00.125 546 37		0.18	1.77	−4.07	0.94	0.65	1.12	0.97	0.74	+ 5	−15	−17	−16	+ 9	+21	+12	−19

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
94401	9.586	0.021	9.428	0.026		0.152	0.031	T	0.17	0.03	L	9.4813	0.0018	0.021	93		9.45	9.52		C			1							
94402	9.914	0.023	8.542	0.013		1.130	0.020	G	1.30	0.02	A	8.5028	0.0395	0.239	86		8.27	8.82	9.48	P 1 A			1							
94403	8.661	0.012	8.207	0.012		0.428	0.016	T	0.50	0.02	L	8.2592	0.0017	0.015	107		8.24	8.28		C			1							S
94404	10.165	0.030	8.753	0.016		1.193	0.027	T	1.15	0.02	L	8.7284	0.0013	0.013	92		8.70	8.75		C	19128−0730	I 1	1	S						
94405	9.472	0.013	9.145	0.014		0.310	0.018	T	0.36	0.02	L	9.2043	0.0022	0.024	176		9.16	9.25					1							
94406	10.294	0.028	9.099	0.017		1.023	0.026	T	1.00	0.02	L	9.1693	0.0017	0.016	104		9.15	9.20		C			1							
94407	9.438	0.019	9.436	0.026		0.090	0.015	G	0.10	0.02	H	9.4455	0.0015	0.012	107		9.43	9.47					1							
94408	9.444	0.016	9.256	0.019		0.180	0.023	T	0.20	0.03	L	9.3088	0.0021	0.017	106		9.28	9.34		C			1							
94409	11.675	0.094	9.627	0.024	A	1.607	0.143	G	1.74	0.21	K *	9.5370	0.0023	0.025	129	*	9.49	9.58			19129+4233	H 1	2 C	D	AB	252	3.267	0.057	3.51	0.24	D
94410	9.248	0.016	8.715	0.015		0.490	0.017	G	0.56	0.02	H	8.7455	0.0018	0.016	91		8.72	8.78		C			1							
94411	10.570	0.040	9.922	0.035		0.650	0.020	G	0.71	0.02	H	9.9608	0.0027	0.021	100		9.92	10.00		C			1							G
94412	7.145	0.004	7.135	0.005		0.014	0.006	T	0.03	0.01	L	7.1438	0.0009	0.009	158		7.13	7.16					1							S
94413	9.334	0.016	8.584	0.013		0.685	0.016	T	0.74	0.01	L	8.6574	0.0017	0.015	126		8.64	8.68		C			1							
94414	9.712	0.023	8.746	0.017		0.849	0.021	T	0.86	0.01	L	8.7855	0.0022	0.017	76		8.76	8.81		C			1	S						
94415	10.215	0.026	8.966	0.015		1.100	0.020	G	1.06	0.02	H	9.0266	0.0015	0.015	104		9.00	9.05		C			1							
94416	8.277	0.010	8.118	0.012		0.153	0.015	T	0.17	0.01	L	8.1572	0.0018	0.017	95		8.13	8.19					1							
94417	9.194	0.015	8.434	0.012		0.687	0.004	G	0.74	0.00	H	8.5052	0.0017	0.018	94		8.48	8.53		C			1							
94418	8.857	0.015	8.515	0.021	*	0.331	0.029	T	0.39	0.04	L *	8.7684	0.0024	0.021	148	*	8.74	8.81		D	19130+1908	I 1	2 C	A	AB	342	1.771	0.006	1.20	0.03	
94419											T	11.9884	0.0142	0.122	77		11.75	12.17		U			1	S						D
94420	9.845	0.026	9.393	0.027	*	0.403	0.005	G	0.47	0.01	R *	9.4383	0.0027	0.020	81	*	9.39	9.47		D	19131−4047	I 1	2 C	A	AB	178	0.414	0.005	0.79	0.03	
94421	11.897	0.108	9.801	0.026		1.734	0.089	T	1.76	0.09	L	9.7093	0.0034	0.037	135		9.64	9.76		U	19131−8000	I 1	1							
94422	8.113	0.008	8.165	0.010		−0.043	0.012	T	−0.02	0.01	L	8.1741	0.0012	0.013	134		8.14	8.20					1							S
94423	8.255	0.010	7.715	0.009		0.528	0.015	G	0.60	0.02	H	7.7621	0.0011	0.011	91		7.75	7.78		D			1							S
94424	10.596	0.039	8.962	0.018		1.367	0.034	T	1.34	0.04	L	8.9563	0.0017	0.014	88		8.93	8.99		C			1							
94425	10.527	0.038	10.073	0.040		0.580	0.020	G	0.65	0.02	H	10.0941	0.0032	0.026	103		10.05	10.14		C			1							G
94426	8.738	0.010	8.533	0.011	*	0.196	0.014	T	0.21	0.02	L *	8.5558	0.0016	0.018	132	*	8.52	8.58		D	19131+2154	I 1	2 C	A	AB	270	0.754	0.009	2.40	0.05	
94427	9.948	0.018	9.730	0.022		0.208	0.027	T	0.23	0.03	L	9.7593	0.0069	0.065	188		9.68	9.85	3.67	P 1 A			1							G
94428	9.380	0.013	7.263	0.005		1.860	0.015	G	2.01	0.02	A	7.1132	0.0014	0.015	157		7.09	7.14		U			1							S
94429	8.362	0.009	7.901	0.010		0.470	0.015	G	0.54	0.02	H	7.9461	0.0009	0.010	118		7.92	7.96					1							S
94430	8.391	0.011	8.357	0.013		0.036	0.016	T	0.05	0.01	L	8.3698	0.0020	0.019	80		8.34	8.39					1							S
94431	8.840	0.014	7.445	0.008		1.179	0.013	T	1.14	0.01	L	7.4522	0.0011	0.011	81		7.43	7.47		C	19132−4045	I 1	1							S
94432	8.233	0.007	8.002	0.008		0.215	0.011	T	0.24	0.01	L	8.0575	0.0018	0.017	155		8.03	8.09					1							S
94433	9.182	0.017	8.999	0.020		0.193	0.020	G	0.21	0.02	H	9.0406	0.0013	0.018	96		9.02	9.08		C	19132−0328	I 1	1							
94434	7.582	0.006	5.931	0.003		1.387	0.003	G	1.32	0.03	C	5.9443	0.0010	0.008	104		5.93	5.96					1							S
94435	10.570	0.040	9.384	0.024		1.016	0.036	T	0.99	0.03	L	9.4076	0.0021	0.018	96		9.38	9.44		C			1							
94436	8.439	0.012	6.856	0.006		1.394	0.011	G	1.34	0.03	C	6.8452	0.0009	0.008	91		6.83	6.86		C			1							S
94437	7.384	0.005	5.671	0.002		1.442	0.003	G	1.44	0.01	H	5.6348	0.0007	0.006	135		5.63	5.65					1							S
94438						1.500	0.510	G	3.20	0.98	K	10.0865	0.1757	0.666	48		9.07	11.19	355.10	P 1 B			1	S						G P
94439	10.380	0.032	9.918	0.034		0.435	0.043	T	0.50	0.05	L	10.0305	0.0028	0.019	98		10.00	10.06		C			1							G
94440	10.033	0.027	9.160	0.021		0.764	0.026	T	0.80	0.03	L	9.2356	0.0019	0.019	115		9.21	9.27					1							
94441	10.242	0.030	9.448	0.024		0.704	0.029	T	0.76	0.02	L	9.5400	0.0023	0.021	111		9.51	9.58		C			1							
94442	8.453	0.009	8.126	0.009		0.310	0.012	T	0.36	0.02	L	8.2026	0.0012	0.012	122		8.18	8.23		C			1							S
94443	10.568	0.029	8.574	0.010		1.689	0.025	T	2.41	0.05	O	8.3823	0.0027	0.035	172		8.32	8.48		U 2			1							
94444	10.088	0.020	9.030	0.014		0.918	0.018	T	0.92	0.01	L	9.0716	0.0019	0.021	170		9.03	9.11					1							
94445	9.218	0.014	7.437	0.007		1.525	0.007	G	1.39	0.03	C	7.4080	0.0013	0.012	86		7.38	7.42		C			1							S
94446	9.956	0.025	9.640	0.029		0.401	0.004	G	0.47	0.00	H	9.6653	0.0023	0.019	90		9.63	9.70		C			1							
94447	8.327	0.009	7.745	0.010		0.541	0.014	G	0.61	0.01	H	7.8083	0.0010	0.010	117		7.79	7.83		C			1							S
94448	9.501	0.013	9.219	0.015		0.268	0.019	T	0.30	0.02	L	9.2760	0.0020	0.029	179		9.23	9.32					1	S						
94449	9.818	0.025	9.308	0.026		0.538	0.025	G	0.61	0.03	H	9.2924	0.0020	0.018	95		9.26	9.34		D			1	S						
94450	9.739	0.019	7.757	0.008		1.665	0.005	G	1.94	0.05	F	7.6563	0.0022	0.016	120		7.63	7.68		U 2			1							
94451	9.812	0.023	8.474	0.013		1.135	0.021	T	1.10	0.02	L	8.5114	0.0015	0.015	79		8.49	8.54		C			1							
94452	8.034	0.008	7.168	0.006		0.774	0.008	T	0.81	0.01	L	7.2139	0.0013	0.010	86		7.19	7.23		C			1							S
94453	8.919	0.012	8.146	0.010		0.688	0.012	T	0.75	0.01	L	8.2134	0.0009	0.015	96		8.19	8.24		D			1							S
94454	8.253	0.009	7.754	0.009	A	0.474	0.005	G	0.55	0.02	A *	7.7438	0.0015	0.008	89	*	7.73	7.76		D	19134−1427	I 1	2 C	A	AB	331	1.338	0.023	2.24	0.05	S
94455	10.671	0.047	9.695	0.032		0.844	0.044	T	0.86	0.03	L	9.7865	0.0022	0.020	84		9.75	9.82		C			1							
94456	8.228	0.009	7.946	0.011		0.268	0.013	T	0.30	0.02	L	7.9893	0.0011	0.011	74		7.97	8.01					1							S
94457	8.300	0.009	8.268	0.011		0.034	0.013	T	0.05	0.01	L	8.2919	0.0016	0.014	107		8.27	8.32		C			1							
94458	8.625	0.013	8.132	0.012		0.461	0.002	G	0.55	0.02	A	8.1759	0.0019	0.017	80		8.16	8.20		C			1							S
94459	8.051	0.009	7.697	0.009		0.322	0.012	G	0.37	0.02	H	7.7461	0.0017	0.011	90		7.73	7.77					1							S
94460	8.253	0.010	6.729	0.005		1.281	0.009	T	1.24	0.01	L	6.7483	0.0012	0.010	100		6.74	6.77					1							S
94461	8.891	0.012	8.513	0.012		0.358	0.016	T	0.42	0.02	L	8.5671	0.0019	0.015	121		8.54	8.60		C			1							
94462	9.272	0.020	8.771	0.020	A	0.800	0.495	G	0.41	0.09	L *	8.8152	0.0024	0.016	73	*	8.78	8.84		C	19136−5134	I 1	2 C	D	AB	51	2.161	0.049	3.36	0.19	S D
94463	9.742	0.018	9.457	0.020		0.288	0.020	G	0.33	0.03	H	9.5148	0.0017	0.017	154		9.48	9.54		C			1							
94464	9.513	0.018	8.283	0.011	*	1.050	0.016	T	1.02	0.01	L *	8.2573	0.0016	0.013	114	*	8.23	8.28		D	19136−1021	I 1	2 C	A	AB	157	0.490	0.004	1.90	0.02	
94465	9.097	0.016	8.042	0.011		0.915	0.015	T	0.91	0.01	L	8.0958	0.0012	0.013	113		8.07	8.12		C			1							
94466	11.052	0.070	10.271	0.054							T	10.1892	0.0049	0.041	75		10.11	10.30		D	19136−4315	I 2	1 X	S						G
94467	8.141	0.006	8.165	0.008		−0.017	0.009	T	0.01	0.01	L	8.1756	0.0011	0.015	226		8.15	8.21					1							
94468	9.407	0.016	8.557	0.013		0.762	0.016	T	0.80	0.01	L	8.6378	0.0015	0.015	126		8.62	8.66		C			1							
94469	9.734	0.021	9.192	0.020		0.528	0.015	G	0.60	0.02	H	9.2484	0.0021	0.019	91		9.22	9.28		C			1							
94470	8.827	0.014	8.819	0.019		−0.004	0.004	G	0.02	0.00	H	8.8644	0.0029	0.028	77		8.83	8.97		D	19136−4315	I 2	1							
94471	9.082	0.009	8.869	0.010		0.203	0.013	T	0.22	0.01	L	8.9253	0.0018	0.021	211		8.89	8.97					1							
94472	8.702	0.011	8.429	0.012		0.250	0.015	G	0.28	0.02	H	8.4665	0.0014	0.015	108		8.44	8.49					1							
94473	10.906	0.049	9.175	0.020		1.160	0.040	G	1.12	0.04	R	9.1070	0.0022	0.017	89		9.08	9.13		C			1	S						
94474	13.046	0.342	10.257	0.042		2.292	0.280	T	2.34	0.29	L	9.9228	0.0158	0.201	175		9.51	10.19		U 2			1	S						G
94475	8.210	0.009	7.989	0.010		0.218	0.015	G	0.24	0.02	H	8.0338	0.0013	0.013	114		8.02	8.06		C			1							S
94476	9.213	0.014	9.222	0.019		−0.004	0.022	T	0.02	0.02	L	9.2350	0.0019	0.021	156		9.19	9.27					1							
94477	5.047	0.003	5.130	0.002		−0.071	0.003	T	−0.05	0.00	L	5.1207	0.0006	0.004	86		5.11	5.13		C	19137+0218	I 1	1							S
94478	6.595	0.004	6.491	0.005		0.100	0.012	G	0.11	0.01	H	6.5092	0.0009	0.008	74		6.49	6.52		C			1 G							S
94479	8.520	0.010	8.513	0.012		0.011	0.014	T	0.03	0.01	L	8.5341	0.0014	0.016	123		8.51	8.56					1							S
94480	9.869	0.021	8.663	0.014		1.032	0.020	T	1.00	0.02	L	8.7009	0.0023	0.016	90		8.68	8.74		C			1							
94481	4.210	0.002	4.382	0.002		−0.150	0.002	T	−0.19	0.03	C	4.3591	0.0006	0.007	131		4.35	4.37		M	19138+3908	I 1	1	S						S
94482	9.176	0.016	8.941	0.018		0.224	0.023	T	0.25	0.03	L	8.9879	0.0018	0.029	94		8.95	9.06		U 2			1							
94483	10.218	0.027	8.698	0.013		1.278	0.024	T	1.24	0.03	L	8.7089	0.0018	0.016	123		8.68	8.74					1							
94484	7.096	0.005	7.116	0.007		−0.014	0.008	T	0.01	0.01	L	7.1289	0.0012	0.010	112		7.12	7.14		C			1							S
94485	7.005	0.004	6.981	0.004		0.027	0.005	T	0.04	0.00	L	6.9978	0.0009	0.011	222		6.98	7.02					1							S
94486	8.657	0.011	7.200	0.007		1.228	0.010	T	1.19	0.01	L	7.2210	0.0011	0.010	88		7.21	7.24		C			1							S
94487	9.043	0.013	7.475	0.007		1.315	0.012	T	1.28	0.01	L	7.4976	0.0011	0.009	114		7.48	7.51		C			1							S
94488	10.259	0.030	9.627	0.027		0.587	0.035	T	0.66	0.03	L	9.6947	0.0027	0.023	95		9.65	9.73					1							G
94489	11.171	0.061	9.378	0.022		1.523	0.053	T	3.37	0.10	O	8.8540	0.0301	0.264	119		8.77	9.38		U 2 B			1	S						
94490	6.495	0.003	5.130	0.002		1.156	0.003	T	1.12	0.00	L	5.1633	0.0005	0.005	113		5.15	5.17					1							S
94491	7.541	0.007	7.137	0.006		0.400	0.015	G	0.47	0.02	H	7.1859	0.0009	0.009	103		7.17	7.20		C			1							S
94492	9.465	0.020	8.247	0.013		1.041	0.019	T	1.01	0.02	L	8.2875	0.0013	0.009	76		8.27	8.30		C			1							
94493	10.410	0.031	9.683	0.026		0.653	0.031	T	0.72	0.03	L	9.7219	0.0023	0.030	115		9.68	9.78					1							
94494	10.153	0.025	8.199	0.010		1.621	0.021	T	1.64	0.02	L	8.1173	0.0015	0.012	107		8.09	8.14					1							
94495	8.460	0.008	8.388	0.010		0.065	0.012	T	0.07	0.01	L	8.4065	0.0012	0.013	132		8.39	8.43		C			1							S
94496	10.045	0.026	8.278	0.012		1.472	0.023	T	1.49	0.03	L	8.0518	0.0068	0.044	100		8.00	8.12		U 2			1	S						P
94497	11.126	0.065	10.028	0.038		0.939	0.059	T	0.99	0.07	L	9.9989	0.0027	0.026	123		9.95	10.05					1							G
94498	10.016	0.026	8.142	0.011		1.557	0.022	T	1.57	0.02	L	8.0540	0.0011	0.014	138		8.03	8.08		D			1							
94499	8.152	0.007	7.856	0.010		0.267	0.010	G	0.30	0.01	H	7.9089	0.0015	0.013	85		7.88	7.93					1							S
94500	8.944	0.015	7.170	0.007		1.478	0.013	T	1.49	0.02	L	7.1514	0.0009	0.008	86		7.14	7.17		C			1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr											%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
94501	19 14 01.41	+59 33 05.6	7.97		G	288.505 873 17	+59.551 552 46		22.60	46.24	112.28	0.58	0.60	0.61	0.61	0.73	+ 8	+ 6	+14	+21	+19	+ 0	+23	+14	– 1	+20	3	0.13
94502	19 14 02.62	+10 38 44.7	8.38		H	288.510 916 74	+10.645 760 41		3.30	2.37	−15.07	0.92	0.71	1.13	1.17	0.83	– 4	−19	– 8	– 5	+ 0	+ 3	+ 0	−19	+ 2	−11	0	−1.61
94503	19 14 03.51	+32 59 12.8	8.70		H	288.514 604 82	+32.986 876 66		6.69	17.68	3.96	0.61	0.67	0.85	0.69	0.82	−14	– 2	– 7	+33	+ 2	−15	+ 3	+ 4	+ 8	– 8	0	−0.92
94504	19 14 03.59	+13 51 23.8	10.31		H	288.514 959 14	+13.856 609 06		2.23	5.19	9.89	1.05	1.21	1.81	1.21	1.34	+43	−22	−20	+14	−20	+19	−18	– 7	+ 8	+40	0	1.70
94505 H	19 14 03.91	+67 06 55.9	6.86		H	288.516 291 64	+67.115 535 61	*	5.52	2.96	9.63	0.48	0.42	0.48	0.41	0.47	– 5	−12	– 3	−38	+15	+ 9	+11	+ 1	+15	+11	1	1.52
94506	19 14 05.33	−31 01 00.8	9.60		H	288.522 191 07	−31.016 892 95		0.41	3.71	2.20	1.74	0.90	1.87	2.01	1.23	+21	−43	−25	+10	+ 0	−19	−27	−49	+29	−16	0	0.91
94507	19 14 06.03	+62 47 40.3	8.26		H	288.525 123 76	+62.794 540 00		2.81	8.77	12.66	0.66	0.66	0.70	0.80	0.73	+ 9	– 5	+22	+ 6	+13	+11	+ 9	+13	+ 4	+31	0	−0.90
94508	19 14 06.50	+75 01 51.0	8.01		H	288.527 096 90	+75.030 829 75		1.63	2.88	1.51	0.60	0.54	0.60	0.55	0.57	+19	−23	−13	+ 5	+ 6	−10	+ 6	+ 1	+ 1	+20	0	−0.94
94509	19 14 07.60	+20 04 49.1	8.98		H	288.531 677 78	+20.080 299 56		4.00	18.95	−5.93	0.77	0.86	1.21	0.94	1.10	+35	−22	+ 2	−18	−14	+ 3	−14	– 6	– 1	+41	0	1.73
94510	19 14 08.77	−22 03 38.2	6.98		H	288.536 526 09	−22.060 604 88		7.39	2.72	−13.35	0.75	0.45	0.80	0.77	0.59	– 2	−25	+ 6	−13	−10	+ 7	+ 0	−47	−10	+21	2	−1.25
94511	19 14 09.14	+10 27 40.6	8.39		H	288.538 085 09	+10.461 265 48		1.66	2.82	−3.49	0.97	0.69	1.17	1.16	0.85	−11	−33	−10	+ 5	– 8	+ 2	−15	−10	+24	−20	0	−0.16
94512	19 14 10.04	+07 45 50.7	7.23		H	288.541 847 51	+07.764 087 92		8.54	−0.06	−0.48	0.79	0.52	0.91	0.74	0.53	– 8	−39	+ 0	−13	– 2	– 9	−12	−29	+21	−28	0	−0.32
94513	19 14 10.68	−76 38 14.0	10.22		H	288.544 508 47	−76.637 231 38		0.13	17.92	−19.06	0.90	0.99	1.33	1.13	1.08	– 2	−10	+10	+28	+19	+ 3	+15	+ 1	+20	+ 5	2	−0.62
94514	19 14 11.35	+18 26 53.4	8.54		H	288.547 299 33	+18.448 173 53		1.00	0.81	−9.43	0.73	0.80	1.15	1.10	1.15	+45	−11	−17	+30	+ 4	+31	+ 8	+29	+ 5	+21	0	0.97
94515	19 14 11.36	−67 27 14.0	7.19		H	288.547 350 07	−67.453 894 42		4.32	10.55	−34.49	0.44	0.53	0.80	0.42	0.55	– 2	−19	−14	−44	+ 8	+12	+ 9	−49	+ 2	−12	0	−1.07
94516	19 14 12.15	−09 58 15.2	9.01		G	288.550 604 21	−09.970 876 07		15.98	−109.82	−265.75	1.06	0.66	1.30	1.37	1.01	+33	−22	– 7	−10	– 8	+24	– 9	−28	– 2	+19	0	−0.53
94517	19 14 12.33	+34 12 40.4	11.05		H	288.551 373 83	+34.211 216 21	B	1.84	1.24	−5.18	69.99	83.34	1.28	1.30	1.60	– 7	+ 0	+ 9	– 6	+ 1	−15	+ 5	+14	+11	−18	2	0.01
94518	19 14 12.59	+49 46 03.3	8.03		H	288.552 451 83	+49.767 580 39		1.94	7.90	21.68	0.63	0.66	0.73	0.70	0.80	– 3	−31	+ 9	+10	– 3	+ 1	– 2	+ 7	– 1	+21	0	−0.84
94519	19 14 13.67	+34 12 54.5	7.68		G	288.556 964 08	+34.215 126 36	A	1.84	1.24	−5.18	1.28	1.42	1.28	1.30	1.60	−16	−14	– 1	+29	– 6	−15	– 6	+27	+11	−18	2	0.01
94520 H	19 14 15.65	+19 03 50.7	7.66		G	288.565 205 63	+19.064 079 53	A	13.06	28.99	−26.72	1.09	1.09	1.59	1.37	1.42	+26	– 3	−11	+13	– 4	+28	– 6	+ 1	+24	+21	1	0.76
94521	19 14 15.99	−08 43 08.5	6.54		H	288.566 641 06	−08.719 027 93	+	14.54	41.37	−27.46	0.74	0.64	1.13	1.02	0.61	+ 1	– 9	−56	−10	−45	+51	– 7	+21	−36	−25	0	1.73
94522	19 14 17.16	+59 41 21.3	7.68		H	288.571 508 94	+59.689 245 92		4.27	9.45	16.17	0.55	0.57	0.58	0.60	0.69	+ 2	– 2	+15	+10	+21	+ 7	+22	+14	+ 8	+15	2	2.26
94523	19 14 18.12	−01 08 27.2	7.49		H	288.575 486 05	−01.140 896 41		4.53	20.73	−35.38	0.84	0.57	0.96	0.91	0.61	+ 8	−16	−18	−13	+ 8	+ 6	+ 8	−29	+12	+12	0	−1.63
94524	19 14 18.27	+11 42 46.0	6.77		H	288.576 115 16	+11.712 779 24		2.12	1.09	−3.16	0.68	0.53	0.80	0.71	0.58	−14	– 7	−13	−32	+ 5	+ 4	+ 5	−39	+ 6	−15	0	−0.28
94525	19 14 18.84	+23 47 18.5	9.86		H	288.578 518 86	+23.788 467 59		1.29	2.59	−4.56	1.59	1.96	3.02	2.13	2.47	−24	– 1	−11	−19	– 6	+ 3	– 4	−22	+ 8	−20	0	
94526	19 14 19.24	+25 00 47.6	7.19		H	288.580 170 36	+25.013 226 05		2.55	−0.52	−7.20	0.36	0.53	0.77	0.37	0.64	−19	– 4	−11	+33	– 2	+ 1	– 2	– 8	+ 9	−21	0	−2.35
94527	19 14 20.10	+67 54 28.8	9.28		H	288.583 730 53	+67.908 000 50	A	6.53	7.67	14.99	4.05	3.61	3.09	4.06	3.53	– 7	−32	+ 7	−10	+ 9	+ 5	+ 7	– 2	+ 1	+ 8	15	2.95
94528	19 14 20.48	+55 56 25.3	6.74		H	288.585 344 02	+55.940 354 80		5.93	17.79	15.94	0.49	0.49	0.52	0.58	0.65	+ 4	– 2	+ 3	+22	+ 3	−13	+ 6	– 7	+ 0	+11	0	0.42
94529	19 14 20.82	−05 41 32.5	8.29		H	288.586 770 40	−05.692 358 80		2.97	−3.44	−10.25	0.91	0.59	1.10	0.92	0.65	+ 5	−30	−13	−29	+ 8	+10	+ 6	−36	+11	+ 0	0	−1.01
94530	19 14 21.07	+30 21 03.1	7.84		H	288.587 789 63	+30.350 872 28		2.59	2.87	2.74	0.52	0.60	0.80	0.60	0.72	−10	−15	−25	+ 6	+ 4	– 7	– 1	– 7	+20	−11	4	−0.03
94531	19 14 21.14	+37 38 28.5	8.36		G	288.588 073 10	+37.641 245 65		8.21	1.37	2.84	0.61	0.62	0.76	0.69	0.80	−10	– 7	– 4	+28	+ 4	−12	+ 4	+18	+ 0	−13	1	−0.02
94532	19 14 21.51	−77 02 52.5	7.53		H	288.589 610 02	−77.047 922 99		5.03	1.70	15.09	0.43	0.56	0.68	0.47	0.66	– 9	−16	+ 9	+ 9	– 1	– 1	– 3	+ 2	+ 6	−11	2	0.53
*94533	19 14 22.31	−34 08 10.2	9.56	2	H	288.592 961 04	−34.136 155 55		4.92	17.85	−11.83	1.70	0.96	1.98	2.92	1.41	+11	−20	−26	+ 8	+25	−46	−10	−53	+29	−44	0	−0.52
*94534	19 14 22.15	−17 54 07.3	7.96		G	288.592 296 87	−17.902 035 52		4.90	−8.30	−42.10	1.00	0.56	1.10	1.16	0.78	+ 0	−19	+22	+ 1	−26	−19	−16	−55	−13	+19	4	−0.26
94535	19 14 22.94	+67 54 21.1	9.65		H	288.595 585 87	+67.905 848 85	B	6.09	−0.48	7.86	12.18	11.99	4.91	10.13	9.23	– 6	−33	+13	– 8	+ 7	+ 8	+ 6	– 4	– 2	+ 9	15	2.95
94536	19 14 25.47	+39 39 08.5	8.11		H	288.606 104 96	+39.652 364 52		2.47	−13.37	−36.64	0.67	0.62	0.76	0.82	0.79	+ 1	– 8	– 1	+35	+10	−16	+12	+24	−12	+10	0	−1.54
*94537 H	19 14 26.48	−29 16 25.7	8.38	2	H	288.610 333 60	−29.273 796 24	A	5.05	34.36	−7.88	3.03	1.47	2.85	3.50	2.17	+18	−30	−10	+11	– 9	+ 0	−24	−54	+ 8	– 2	2	1.25
*94538	19 14 26.37	+48 43 09.5	7.41		H	288.609 870 37	+48.719 308 98		4.16	1.97	−26.31	0.52	0.54	0.59	0.60	0.68	+ 9	−10	– 4	– 8	+ 3	+ 2	+ 1	+ 9	– 2	+22	1	−0.14
94539	19 14 27.30	+29 53 16.1	8.72		H	288.613 753 65	+29.887 814 95		0.95	3.57	2.09	0.72	0.78	1.07	0.79	1.01	−13	−19	– 2	+36	– 2	−20	– 3	– 3	+ 1	−14	0	0.17
94540	19 14 29.16	+34 33 51.0	7.26		H	288.621 518 46	+34.564 160 93		14.80	43.57	72.75	0.48	0.58	0.67	0.56	0.76	– 5	– 8	−12	+ 3	– 1	– 1	– 2	– 1	+10	+ 5	0	−0.61
94541	19 14 31.27	+02 55 56.6	8.79		H	288.630 297 19	+02.932 377 69		5.49	−2.26	−1.60	1.07	0.77	1.32	1.18	0.91	+10	−27	−27	−11	−19	+21	−10	−16	−17	– 2	2	0.80
94542	19 14 31.54	−62 13 45.2	8.43		H	288.631 401 32	−62.229 212 38		11.44	−0.52	31.60	0.80	0.73	1.09	0.96	0.83	+ 0	−23	– 5	+25	+16	– 7	+12	−26	+ 9	– 3	0	0.06
94543	19 14 32.54	+10 33 19.0	8.25		H	288.635 597 68	+10.555 279 40		0.28	1.33	0.86	0.91	0.69	1.16	1.11	0.81	– 1	−26	−21	– 8	+ 0	+ 9	– 3	−17	+13	−16	0	−1.26
94544	19 14 32.96	−18 03 35.1	8.27		H	288.637 320 67	−18.059 738 80		8.88	13.76	−12.97	0.93	0.50	1.00	1.01	0.68	– 7	−24	+ 2	– 1	−10	−13	– 7	−44	+11	+ 8	0	0.72
94545	19 14 34.83	+52 51 58.0	8.73		H	288.645 108 58	+52.866 097 89		0.21	4.41	4.68	0.74	0.76	0.81	0.76	0.94	+ 3	−21	+ 0	– 5	+14	+10	+18	+25	−15	+ 2	1	1.65
94546	19 14 35.27	+22 14 42.2	9.18		H	288.646 965 30	+22.245 052 96		3.09	7.63	7.22	0.91	0.91	1.34	1.19	1.10	+25	+ 0	−20	+ 1	+14	+ 7	+13	+ 1	+22	+34	0	−0.55
94547	19 14 36.09	+36 09 56.1	7.89		H	288.650 364 91	+36.165 585 63		3.18	0.94	1.17	0.52	0.60	0.71	0.57	0.76	– 9	+10	−16	+ 4	+ 3	−16	+ 1	+18	– 9	– 8	0	0.69
94548	19 14 36.41	−29 49 52.3	6.88		G	288.651 690 25	−29.831 197 59		3.43	18.82	−5.35	1.15	0.54	1.17	1.42	0.92	+ 1	−49	+ 1	+19	– 2	−14	−13	−35	+ 7	−15	0	2.08
94549	19 14 37.03	−35 52 06.4	9.65		H	288.654 282 54	−35.868 441 80		1.92	7.96	7.46	1.46	0.72	1.49	1.97	1.05	+22	−17	+ 4	+23	+ 9	−13	−19	−53	+ 2	−21	2	0.66
94550	19 14 37.32	−21 14 07.9	9.22		H	288.655 518 33	−21.235 523 22		3.84	0.07	−15.17	1.06	0.59	1.10	1.33	0.83	−19	−14	+ 5	+ 2	+ 8	+24	+ 9	−36	−13	−22	0	0.07
94551	19 14 37.52	+32 37 43.7	8.76		H	288.656 351 80	+32.628 799 64		2.46	8.99	4.02	0.60	0.68	0.83	0.68	0.87	+ 0	– 2	−18	+30	+ 2	– 7	+ 2	+ 5	+ 7	+ 6	0	−0.42
94552	19 14 38.52	−31 47 19.5	9.44		H	288.660 506 01	−31.788 750 15		10.97	−38.74	−121.71	1.92	0.81	2.04	1.91	1.06	+21	−67	−35	+20	+20	−16	−15	−41	+28	−31	2	0.51
94553	19 14 38.59	−36 34 27.1	8.64		H	288.660 809 32	−36.574 187 44		1.40	6.25	−7.82	1.35	0.64	1.44	1.85	0.99	+23	−36	−15	+26	+27	−30	– 4	−52	+18	−21	0	−1.00
94554	19 14 38.69	+76 18 33.8	7.52	1	H	288.661 208 55	+76.309 386 96		1.92	8.16	−13.80	0.57	0.52	0.59	0.70	0.59	+ 9	−31	+ 9	– 7	−10	+ 5	– 7	−14	– 3	+30	3	2.62
94555	19 14 38.99	+04 15 21.6	8.88		G	288.662 473 03	+04.256 005 59		2.88	2.21	−11.75	1.03	0.77	1.35	1.33	0.94	– 5	– 4	−12	+ 4	+24	−14	+17	−23	+34	−14	0	−1.96
94556	19 14 39.52	−45 11 36.4	5.91		H	288.664 673 90	−45.193 430 79		11.03	48.12	−39.61	0.71	0.52	0.82	0.87	0.62	+33	−27	– 6	−15	– 3	– 4	– 4	−40	– 8	+26	0	2.04
94557	19 14 39.54	+19 18 59.9	11.56		H	288.664 743 49	+19.316 643 95		52.45	−617.43	434.84	1.69	1.88	2.75	2.12	2.48	+33	−12	−10	– 1	+ 0	+13	+ 1	+ 1	+ 6	+26	0	3.27
94558	19 14 39.85	−29 14 35.3	7.40		H	288.666 026 98	−29.243 149 59		3.87	3.31	−38.34	1.22	0.59	1.24	1.34	0.80	– 2	−53	– 8	+13	– 2	– 1	– 9	−29	+ 2	−24	5	0.82
94559	19 14 39.94	−12 48 01.2	8.49		H	288.666 412 55	−12.800 325 71		4.43	−2.23	−18.82	0.96	0.59	1.21	1.14	0.81	+40	−18	+11	−18	– 5	+33	−14	−41	– 6	+16	0	1.44
94560	19 14 42.95	+36 59 18.0	8.04		H	288.678 959 40	+36.988 333 64		3.53	−0.17	0.54	0.56	0.56	0.72	0.64	0.73	−10	+ 5	– 3	+ 9	– 1	−15	– 1	+ 9	– 2	−16	0	1.27
94561	19 14 43.00	−31 40 44.7	9.75		H	288.679 182 54	−31.679 088 59		16.38	−60.07	−101.37	2.12	0.95	2.25	2.04	1.18	+19	−63	−35	+17	+15	−17	−15	−42	+28	−24	0	2.29
94562	19 14 43.44	+65 16 22.0	7.47		H	288.680 992 52	+65.272 787 10		5.20	3.71	8.25	0.52	0.54	0.56	0.57	0.73	+14	+ 2	+ 2	+19	+21	+ 1	+25	+13	+26	+26	0	0.79
94563	19 14 44.20	+81 56 02.8	8.23		H	288.684 159 61	+81.934 115 23		2.14	0.39	−4.68	0.61	0.57	0.65	0.70	0.72	+ 1	−28	+ 1	+ 5	+ 4	– 8	+ 9	+24	−14	+ 2	0	1.67
94564	19 14 44.71	+06 02 54.8	6.92		H	288.686 295 55	+06.048 554 59		−0.27	0.52	−2.13	0.76	0.59	0.87	0.78	0.53	+15	– 9	+10	−38	−18	−25	−18	−55	+ 1	– 1	2	−0.88
94565	19 14 45.00	+51 08 42.4	9.34		H	288.687 503 64	+51.145 098 50		5.93	−23.13	1.36	0.85	0.82	0.89	1.11	1.03	+18	+ 2	– 3	+25	+12	+ 8	+16	+ 3	+ 7	+37	0	−0.87
94566	19 14 45.80	+35 01 24.1	8.17		H	288.690 831 20	+35.023 368 50		2.16	−7.03	1.46	0.56	0.70	0.78	0.68	0.94	+ 3	+ 6	−19	−28	– 4	+11	– 2	−23	+ 6	+15	0	−1.89
94567	19 14 45.84	+04 37 12.2	8.00		H	288.690 997 97	+04.620 066 26		3.11	−1.80	−5.05	0.77	0.56	0.98	0.82	0.60	+ 2	−25	– 7	– 4	+ 9	−10	+ 0	−25	+19	−20	4	1.22
94568	19 14 46.94	+65 33 31.2	8.24		H	288.695 571 29	+65.558 678 87		1.16	−5.76	−11.05	0.60	0.66	0.70	0.56	0.87	+ 5	– 2	+ 8	– 7	+20	+ 3	+20	+12	+26	+25	0	0.36
94569	19 14 46.96	+26 43 48.1	7.75		H	288.695 678 68	+26.730 020 49		4.54	20.85	5.23	0.44	0.60	0.83	0.53	0.72	−15	– 4	– 7	+ 6	+ 6	– 6	+ 5	+ 3	+13	−17	0	−1.26
94570 H	19 14 47.46	−58 00 24.2	7.23		G	288.697 764 44	−58.006 708 35	A	19.09	68.51	−248.70	0.94	0.67	1.15	0.98	0.77	– 6	– 9	+ 8	+46	– 1	– 2	+15	+ 9	– 4	+47	0	−0.79
94571	19 14 48.48	+25 47 46.1	9.32		H	288.702 006 94	+25.796 138 67		4.01	6.19	2.93	0.73	0.97	1.39	0.76	1.10	+ 5	−15	– 3	+55	+14	−18	+ 8	+21	+14	−10	1	0.66
94572	19 14 48.76	+08 05 47.0	7.71		H	288.703 168 88	+08.096 393 62		16.00	71.36	30.14	0.88	0.58	0.98	0.85	0.60	−12	−27	– 8	−19	+ 9	– 8	+ 2	−33	+20	−27	0	0.29
94573	19 14 48.78	+09 19 08.1	8.52		H	288.703 251 93	+09.318 919 35		0.07	0.03	−2.94	1.01	0.70	1.20	1.09	0.79	– 6	−23	−13	−30	+16	−11	+ 8	−33	+28	−33	0	0.83
94574	19 14 49.86	−57 56 08.6	8.97		H	288.707 752 89	−57.935 730 71		0.65	−7.05	−23.85	0.96	0.61	1.31	1.18	0.88	−15	−35	+ 8	+61	−11	−17	+15	+13	– 7	+38	0	−0.88
94575	19 14 49.98	−30 50 14.7	7.79		H	288.708 245 12	−30.837 427 47		3.49	−3.65	−5.60	1.17	0.63	1.21	1.44	0.83	– 5	−34	−15	+14	+12	−22	– 3	−29	+19	−30	0	0.54
*94576	19 14 50.18	+31 51 37.1	6.61		H	288.709 068 64	+31.860 301 31		7.59	46.93	19.95	0.41	0.52	0.64	0.48	0.59	– 6	– 2	−30	+10	+22	−19	+17	– 1	+20	−12	0	0.31
*94577	19 14 50.16	+37 59 16.5	7.71		H	288.708 982 45	+37.987 918 43		6.87	9.97	51.30	0.54	0.56	0.67	0.55	0.71	– 2	−12	– 6	+14	+ 9	– 8	+12	+29	– 8	– 2	0	−0.04
94578	19 14 52.09	+19 35 37.1	8.82		H	288.717 054 98	+19.593 638 40		0.86	−0.71	−7.94	0.74	0.79	1.16	0.86	0.99	+35	−21	– 8	– 9	+10	+21	+ 9	+ 6	+17	+36	1	1.92
94579	19 14 53.06	−55 21 24.4	9.62		H	288.721 068 33	−55.356 785 19		4.17	5.31	−29.03	1.06	0.95	1.44	1.30	1.21	+36	−25	– 6	+ 1	−33	– 4	−28	−45	+ 3	+47	0	1.45
94580	19 14 54.24	−40 21 19.9	7.53		H	288.725 993 48	−40.355 526 22		4.70	1.60	−20.48	0.98	0.66	1.16	1.52	0.81	+10	−18	−36	+13	+25	−33	– 9	−46	+34	−43	2	−0.91
94581	19 14 55.36	−64 31 55.8	8.13		H	288.730 661 90	−64.532 176 26		2.75	9.71	0.66	0.81	0.63	1.05	1.03	0.73	– 8	−12	−11	+28	−15	−10	−13	−18	+ 3	– 3	0	−0.53
94582	19 14 55.42	+71 31 43.6	9.55		G	288.730 929 58	+71.528 768 21		18.21	113.15	170.63	0.80	0.70	0.79	0.86	0.74	+ 4	−11	+ 0	−45	– 8	– 3	– 7	−15	+ 9	– 3	0	0.08
94583	19 14 55.61	−30 17 07.4	8.75		H	288.731 691 65	−30.285 387 43		17.38	94.48	13.30	1.41	0.68	1.42	1.76	0.97	– 2	−36	+ 1	+16	+ 5	−18	– 8	−39	+ 6	−26	0	2.35
94584	19 14 56.60	+18 00 16.4	8.78		H	288.735 831 96	+18.004 553 53		1.58	2.23	−0.43	0.85	0.80	1.27	1.32	1.22	+39	−29	– 4	+35	– 5	+ 2	– 8	+ 3	+ 1	+28	0	0.70
94585	19 14 57.89	+57 22 19.5	9.66		H	288.741 193 03	+57.372 074 32		3.20	2.49	0.33	0.85	0.80	0.87	0.89	1.03	+11	+ 3	+16	+30	+ 6	– 1	+10	+ 3	−14	+27	0	−0.10
94586	19 14 57.98	+45 10 29.9	8.08		H	288.741 598 64	+45.174 965 75		4.27	4.54	−7.19	0.59	0.51	0.64	0.61	0.54	+ 0	−16	+12	+22	+17	−15	+24	+ 4	– 9	+24	1	0.67
94587	19 14 58.08	−37 23 03.9	8.60		H	288.742 005 95	−37.384 416 21		2.57	5.28	−11.65	1.13	0.53	1.11	1.38	0.71	+14	−37	– 5	+32	+18	– 6	– 1	−33	+ 9	−16	0	2.12
94588	19 14 58.10	+10 24 33.9	7.38	2	H	288.742 100 45	+10.409 407 39		2.47	3.31	−1.85	0.74	0.57	0.93	0.87	0.64	– 7	−14	−21	−18	– 1	+ 1	– 2	−21	+ 9	−34	0	−0.20
94589	19 14 58.36	−75 13 26.3	9.11		H	288.743 177 99	−75.223 964 17		5.33	10.44	1.19	0.68	0.85	1.06	0.74	0.94	−21	−20	+ 7	+ 4	+ 8	– 3	+ 8	−12	– 1	−20	0	0.03
*94590 H	19 14 58.76	+02 09 51.2	9.85		H	288.744 814 60	+02.164 233 00	A	27.74	344.19	402.72	4.68	3.27	4.71	4.88	3.63	+ 2	−13	−16	−22	+ 0	+ 0	+ 0	−28	– 3	– 2	16	1.56
*94591	19 14 58.47	+28 23 41.0	7.77		H	288.743 630 38	+28.394 715 70		1.81	−1.12	−25.62	0.53	0.62	0.85	0.61	0.72	−24	– 8	−11	+15	+ 9	– 6	+ 6	+ 1	+21	−24	1	1.46
94592	19 14 58.84	+27 57 39.9	6.91		H	288.745 185 96	+27.961 084 33		2.39	6.24	4.98	0.41	0.52	0.68	0.49	0.68	−26	– 1	−16	+ 8	+ 8	– 7	+ 8	+10	+13	−32	0	0.27
94593	19 15 00.77	−48 57 45.6	6.84		H	288.753 198 85	−48.962 657 77		2.64	18.52	4.93	0.70	0.53	0.82	0.87	0.53	– 6	−27	−21	−16	+26	– 5	+18	−36	+ 1	−26	2	−0.52
94594	19 15 00.92	+73 49 45.5	8.17		H	288.753 820 72	+73.829 311 12		2.41	4.35	12.18	0.63	0.54	0.61	0.70	0.60	+ 4	−10	−11	+ 6	+17	−13	+15	+ 4	+ 6	+ 4	0	−1.10
94595	19 15 01.24	−32 24 59.0	11.28		G	288.755 172 75	−32.416 402 70		36.45	376.39	−78.30	11.66	6.31	13.55	10.59	7.07	+42	−59	−52	+22	+22	−27	−11	−36	+30	+ 1	4	
94596	19 15 01.43	+09 48 27.5	8.01	2	G	288.755 957 44	+09.807 639 67		0.74	4.99	−8.81	0.93	0.64	1.12	1.04	0.74	– 3	−20	−13	−32	+ 8	– 7	+ 2	−31	+28	−14	0	0.42
94597	19 15 01.96	+05 59 48.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
94501	8.733	0.012	8.048	0.010		0.606	0.015	G	0.68	0.01	H	8.1047	0.0011	0.010	106		8.08	8.13					1							S
94502	8.730	0.012	8.398	0.013		0.315	0.017	T	0.36	0.02	L	8.4560	0.0022	0.015	80		8.43	8.48		C			1							
94503	9.895	0.020	8.796	0.013		0.949	0.018	T	0.94	0.01	L	8.8597	0.0015	0.014	131		8.83	8.89		C			1							
94504	12.013	0.125	10.426	0.047		1.330	0.105	T	1.29	0.12	L	10.4652	0.0029	0.028	126		10.42	10.51		C			1							G
94505	6.950	0.005	6.875	0.005	*	0.074	0.007	T	0.09	0.01	L *	6.8906	0.0007	0.007	116	*	6.88	6.90		D	19141+6707	H 1	2 C S A	AB	85	0.122	0.003	0.33	0.22	S
94506	10.157	0.028	9.664	0.028		0.475	0.030	T	0.55	0.03	L	9.7079	0.0027	0.023	96		9.66	9.74					1							
94507	8.306	0.008	8.264	0.010		0.043	0.012	T	0.06	0.01	L	8.2821	0.0013	0.013	107		8.25	8.31		C			1							S
94508	9.322	0.015	8.117	0.010		1.031	0.014	T	1.00	0.01	L	8.1782	0.0013	0.012	119		8.16	8.21		C			1							
94509	9.673	0.015	9.022	0.013		0.604	0.017	T	0.67	0.01	L	9.1072	0.0022	0.025	155		9.07	9.15					1							
94510	7.096	0.005	6.998	0.006		0.088	0.007	T	0.10	0.01	L	7.0191	0.0008	0.008	107		7.01	7.03		C			1							S
94511	8.470	0.010	8.391	0.012		0.078	0.015	T	0.09	0.02	L	8.4211	0.0024	0.015	72		8.39	8.45					1							
94512	7.434	0.006	7.253	0.007		0.173	0.009	T	0.19	0.01	L	7.2875	0.0009	0.011	87		7.27	7.30					1							S
94513	9.987	0.018	10.175	0.030		−0.150	0.015	G	−0.15	0.02	H	10.1658	0.0033	0.034	148		10.09	10.23					1							G
94514	8.763	0.009	8.555	0.010		0.199	0.013	T	0.22	0.01	L	8.6033	0.0014	0.016	181		8.57	8.64					1							S
94515	7.354	0.004	7.216	0.005		0.125	0.006	T	0.14	0.01	L	7.2405	0.0010	0.013	202		7.22	7.26					1							S
94516	9.996	0.026	9.119	0.020		0.770	0.015	G	0.81	0.01	H	9.1641	0.0015	0.017	99		9.13	9.19		C			1							
94517	10.568	0.056	10.545	0.094	B	0.026	0.101	T	0.04	0.08	L	10.7290	0.3312			B				D	19142+3413	I 2	1 C F C							
94518	9.758	0.020	8.169	0.010		1.332	0.018	T	1.30	0.02	L	8.1825	0.0016	0.015	113		8.16	8.21		C			1							
94519	7.595	0.007	7.665	0.010	A	−0.070	0.015	G	−0.05	0.01	H	7.6769	0.0253	0.016	124	A	7.65	7.70		D	19142+3413	I 2	1 C P C							S
94520	8.187	0.010	7.613	0.009	*	0.573	0.015	G	0.65	0.01	H *	7.7637	0.0012	0.012	147	*	7.74	7.79		D	19143+1904	I 1	2 C A	AB	237	2.257	0.008	1.69	0.04	S
94521	7.792	0.006	6.656	0.004		0.977	0.006	T	0.96	0.01	L	6.7068	0.0009	0.008	120		6.69	6.72		C	19143−0843	I 1	1 O							S
94522	7.891	0.007	7.684	0.008		0.160	0.007	G	0.18	0.01	H	7.7308	0.0011	0.011	102		7.71	7.75					1							S
94523	9.201	0.018	7.633	0.009		1.315	0.016	T	1.28	0.02	L	7.6416	0.0017	0.013	92		7.62	7.67					1							
94524	8.825	0.014	6.981	0.007		1.533	0.012	T	1.58	0.03	L	6.8912	0.0015	0.010	76		6.88	6.90					1							S
94525	10.037	0.016	9.908	0.022		0.125	0.025	T	0.14	0.03	L	9.9099	0.0031	0.040	222		9.85	9.98					1 X S							G
94526	7.158	0.003	7.187	0.005		−0.022	0.005	T	0.00	0.01	L	7.1957	0.0009	0.010	231		7.18	7.21					1							S
94527	9.802	0.027	9.371	0.027	A	0.407	0.035	T	0.47	0.04	L	9.3658	0.0362	0.173	102	A	9.14	9.58		D	19144+6754	I 2	1 C P A							
94528	8.078	0.010	6.851	0.006		1.048	0.009	T	1.02	0.01	L	6.9032	0.0009	0.008	105		6.89	6.92					1							S
94529	8.607	0.011	8.316	0.012		0.277	0.015	T	0.31	0.02	L	8.3600	0.0018	0.016	103		8.34	8.38		C			1							S
94530	7.855	0.007	7.836	0.009		0.022	0.011	T	0.04	0.01	L	7.8506	0.0014	0.013	144		7.83	7.87		C			1							S
94531	8.912	0.011	8.389	0.011		0.501	0.015	G	0.57	0.02	H	8.4658	0.0013	0.013	132		8.44	8.50		C			1							
94532	7.799	0.006	7.555	0.006		0.233	0.008	T	0.26	0.01	L	7.6011	0.0011	0.011	177		7.58	7.62		C			1							S
94533	10.283	0.032	9.653	0.030		0.581	0.032	T	0.65	0.03	L	9.6851	0.0042	0.035	95		9.62	9.73		U	19144−3408	I 1	1 S							
94534	9.247	0.013	8.105	0.009		1.009	0.020	G	0.98	0.02	H	8.1410	0.0011	0.014	126		8.12	8.17					1							
94535	10.500	0.049	9.750	0.039	B	0.685	0.050	T	0.74	0.04	L	9.9051	0.0426			B				D	19144+6754	I 2	1 C I A							
94536	9.313	0.014	8.193	0.010		0.965	0.013	T	0.95	0.01	L	8.2702	0.0012	0.015	128		8.24	8.29		C			1							
94537	9.785	0.047	8.686	0.030	A	1.100	0.495	G	0.79	0.06	L *	8.5291	0.0028	0.028	77	*	8.50	8.76		U 2 C	19144−2916	I 1	2 C A	AB	251	1.066	0.007	0.74	0.02	S
94538	7.452	0.007	7.423	0.009		0.031	0.011	T	0.05	0.01	L	7.4301	0.0011	0.009	96		7.41	7.45		C			1							S
94539	10.308	0.027	8.860	0.014		1.221	0.024	T	1.18	0.02	L	8.8860	0.0016	0.017	143		8.86	8.92					1							
94540	7.774	0.007	7.303	0.007		0.444	0.009	T	0.51	0.01	L	7.3541	0.0011	0.010	117		7.34	7.37		C	19145+3434	I 1	1							S
94541	10.832	0.052	8.911	0.018		1.595	0.044	T	1.61	0.04	L	8.9042	0.0018	0.015	81		8.88	8.93		C			1							
94542	9.024	0.013	8.491	0.012		0.508	0.013	T	0.58	0.01	L	8.5439	0.0020	0.019	94		8.52	8.58					1							
94543	8.763	0.013	8.306	0.013		0.431	0.017	T	0.50	0.02	L	8.3498	0.0021	0.014	80		8.33	8.37		C	19145+1033	I 1	1							S
94544	8.697	0.009	8.311	0.010		0.377	0.011	T	0.44	0.01	L	8.3527	0.0013	0.013	124		8.33	8.38			19145−1804	I 1	1							
94545	10.578	0.034	8.912	0.015		1.393	0.029	T	1.37	0.04	L	8.8722	0.0019	0.018	108		8.84	8.90		C			1							
94546	9.546	0.019	9.212	0.020		0.317	0.026	T	0.37	0.04	L	9.2585	0.0030	0.025	123		9.22	9.29		C			1 S							
94547	7.884	0.008	7.901	0.009		−0.011	0.011	T	0.01	0.01	L	7.8949	0.0011	0.013	123		7.88	7.92		C			1							S
94548	9.016	0.018	7.072	0.008		1.620	0.015	G	1.63	0.09	H	6.9740	0.0010	0.009	70		6.96	6.99					1							S
94549	10.155	0.028	9.655	0.028		0.470	0.036	T	0.54	0.04	L	9.7486	0.0016	0.016	115		9.71	9.78		C			1							
94550	9.438	0.019	9.231	0.023		0.191	0.029	T	0.21	0.03	L	9.2831	0.0019	0.017	92		9.26	9.31		C			1							
94551	8.924	0.012	8.766	0.015		0.152	0.018	T	0.17	0.02	L	8.8091	0.0013	0.014	117		8.79	8.85		C			1							
94552	10.398	0.040	9.559	0.031		0.738	0.039	T	0.79	0.03	L	9.5829	0.0024	0.021	92		9.55	9.62		C			1							
94553	10.660	0.042	8.799	0.016		1.547	0.036	T	1.61	0.08	L	8.7536	0.0017	0.016	107		8.73	8.78		R			1 S							
94554	9.666	0.020	7.737	0.009		1.601	0.017	T	1.62	0.02	L	7.6331	0.0021	0.015	113		7.61	7.67		U			1							S
94555	10.481	0.038	9.041	0.020		1.288	0.015	G	1.25	0.02	H	9.0390	0.0020	0.016	83		9.01	9.08		D			1							
94556	7.049	0.004	6.007	0.004		0.902	0.002	G	0.90	0.00	H	6.0662	0.0007	0.007	113		6.06	6.08		C			1							S
94557						1.500	0.495	G	2.07	3.83	I	11.6180	0.0053	0.060	147		11.50	11.71			19147+1919	I 1	1							G
94558	7.740	0.012	7.423	0.009		0.304	0.016	T	0.35	0.02	L	7.4750	0.0014	0.011	68		7.45	7.50					1							S
94559	9.968	0.020	8.623	0.012		1.140	0.018	T	1.10	0.02	L	8.6537	0.0013	0.013	135		8.63	8.68		C			1							
94560	9.400	0.015	8.146	0.009		1.069	0.014	T	1.03	0.01	L	8.2047	0.0015	0.013	124		8.18	8.23					1							
94561	10.579	0.048	9.830	0.040		0.670	0.047	T	0.73	0.04	L	9.8877	0.0033	0.023	90		9.85	9.93					1							G
94562	7.494	0.006	7.483	0.008		0.015	0.009	T	0.03	0.01	L	7.4872	0.0010	0.009	120		7.47	7.50		C			1							S
94563	8.337	0.010	8.246	0.012		0.089	0.015	T	0.10	0.02	L	8.2657	0.0014	0.013	118		8.24	8.29		C			1							S
94564	7.946	0.008	7.047	0.006		0.818	0.047	G	0.94	0.02	A	7.0848	0.0012	0.009	86		7.07	7.10		C			1							S
94565	10.010	0.027	9.411	0.025		0.559	0.032	T	0.63	0.03	L	9.4570	0.0025	0.021	101		9.42	9.49		C			1							
94566	9.488	0.020	8.300	0.012		1.018	0.018	T	0.99	0.01	L	8.3402	0.0012	0.012	118		8.32	8.36		C			1							
94567	8.133	0.010	8.013	0.011		0.116	0.014	T	0.13	0.01	L	8.0461	0.0027	0.018	85		8.01	8.07					1							
94568	10.295	0.028	8.418	0.011		1.560	0.024	T	1.58	0.03	L	8.3580	0.0018	0.015	116		8.33	8.39					1							
94569	7.915	0.005	7.760	0.007		0.149	0.008	T	0.16	0.01	L	7.8009	0.0014	0.015	186		7.78	7.83					1							
94570	8.015	0.007	7.316	0.006	*	0.627	0.002	G	0.69	0.00	H *	7.3646	0.0010	0.009	145	*	7.35	7.38		D	19148−5800	I 1	2 C A	AB	292	0.625	0.007	2.59	0.04	S
94571	10.907	0.041	9.484	0.020		1.201	0.036	T	1.16	0.04	L	9.4895	0.0023	0.027	211		9.44	9.54					1							
94572	8.331	0.012	7.763	0.011		0.524	0.015	G	0.60	0.02	H	7.8243	0.0018	0.012	77		7.81	7.86		C			1							S
94573	8.930	0.014	8.563	0.015		0.348	0.019	T	0.41	0.03	L	8.6074	0.0025	0.016	81		8.58	8.64		C			1							
94574	10.724	0.036	9.112	0.016		1.350	0.031	T	1.32	0.04	L	9.1211	0.0019	0.017	140		9.09	9.15		C			1							
94575	9.065	0.015	7.911	0.010		0.991	0.014	T	0.97	0.01	L	7.9535	0.0017	0.012	85		7.93	7.98					1							
94576	7.889	0.007	6.723	0.004		1.000	0.006	T	0.98	0.01	L	6.7743	0.0008	0.009	130		6.76	6.79					1							S
94577	9.138	0.017	7.837	0.010		1.106	0.015	T	1.07	0.02	L	7.8759	0.0011	0.013	128		7.86	7.90					1							
94578	8.989	0.011	8.851	0.013		0.133	0.016	T	0.15	0.02	L	8.8740	0.0025	0.022	149		8.84	8.92					1							
94579	9.736	0.022	9.643	0.028		0.084	0.032	T	0.10	0.04	L	9.6530	0.0025	0.020	90		9.62	9.68		C			1							
94580	9.321	0.019	7.695	0.010		1.361	0.017	T	1.33	0.02	L	7.6767	0.0016	0.012	92		7.66	7.70		C			1							S
94581	10.004	0.023	8.312	0.011		1.413	0.020	T	1.39	0.03	L	8.2748	0.0022	0.019	122		8.24	8.32					1							
94582	10.437	0.032	9.633	0.026		0.770	0.020	G	0.81	0.02	H	9.6881	0.0015	0.018	114		9.66	9.72		C			1							
94583	9.559	0.025	8.785	0.021		0.689	0.025	T	0.75	0.02	L	8.8857	0.0018	0.012	72		8.86	8.92		C			1							
94584	10.709	0.032	8.948	0.013		1.468	0.027	T	1.48	0.04	L	8.9082	0.0019	0.018	162		8.88	8.94		C			1							
94585	9.777	0.021	9.685	0.027		0.090	0.032	T	0.10	0.04	L	9.6975	0.0018	0.019	102		9.66	9.73		C			1							
94586	8.068	0.008	8.078	0.010		−0.004	0.012	T	0.02	0.01	L	8.0897	0.0012	0.012	111		8.07	8.11		C			1							S
94587	8.974	0.013	8.627	0.013		0.336	0.016	T	0.39	0.02	L	8.6777	0.0010	0.015	118		8.65	8.70					1							
94588	7.385	0.009	7.395	0.009		−0.004	0.012	T	0.02	0.01	L	7.3897	0.0056	0.037	70		7.34	7.45	2.17	P 1 A			1							S
94589	9.380	0.012	9.127	0.014		0.237	0.019	T	0.26	0.02	L	9.1828	0.0021	0.021	154		9.15	9.22		C			1							
94590	12.126	0.263	10.628	0.135	A	2.100	0.042	G	1.47	0.02	A *	9.9780	0.0060	0.052	85	*	9.92	10.39		D	19150+0210	I 1	2 C A	AB	174	8.592	0.014	0.88	0.08	G
94591	9.568	0.014	7.923	0.007		1.376	0.012	T	1.35	0.01	L	7.9176	0.0012	0.015	169		7.89	7.94					1							
94592	6.818	0.003	6.896	0.004		−0.068	0.006	G	−0.05	0.01	H	6.8940	0.0008	0.009	173		6.88	6.91					1							S
94593	8.478	0.010	6.967	0.006		1.271	0.009	T	1.23	0.01	L	6.9982	0.0012	0.010	87		6.98	7.02					1							S
94594	8.245	0.009	8.179	0.011		0.066	0.013	T	0.08	0.01	L	8.2020	0.0016	0.015	116		8.18	8.23					1							S
94595						1.416	0.015	G	1.71	0.04	I	11.3679	0.0031	0.029	76		11.31	11.44					1 X S							G G
94596	8.178	0.010	8.006	0.012		0.170	0.015	G	0.19	0.01	H	8.0607	0.0048	0.073	70		7.92	8.09		U 2 C			1							
94597	10.719	0.054	9.236	0.023		1.249	0.046	T	1.21	0.04	L	9.2991	0.0020	0.023	89		9.26	9.34		C			1							
94598	7.159	0.004	6.131	0.003		0.895	0.004	T	0.90	0.00	L	6.1876	0.0006	0.008	150		6.17	6.20					1							S
94599	10.333	0.023	9.877	0.024		0.443	0.026	T	0.51	0.03	L	9.9345	0.0029	0.029	182		9.89	10.00					1							
94600	10.545	0.027	10.269	0.033		0.263	0.040	T	0.30	0.05	L	10.2874	0.0033	0.043	207		10.19	10.36					1 X S							G

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ		F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas			mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
94601	19 15 05.72	−61 26 25.9	8.49		H	288.773 850 74	−61.440 524 12		0.17	−8.11	0.87	0.91	0.76	1.20	1.23	0.84	−18	− 8	−14	+21	−26	− 7	−21	− 3	− 4	−11		5	−0.21
94602	19 15 06.58	−59 01 23.7	9.70		H	288.777 418 10	−59.023 250 08		1.36	6.06	4.29	1.10	0.88	1.66	1.37	1.07	−13	− 6	−17	+34	−21	− 4	−14	+ 2	− 3	+11		0	−1.24
94603	19 15 06.67	+81 38 57.6	8.11		G	288.777 791 85	+81.649 329 00		5.85	14.88	41.74	0.56	0.55	0.60	0.69	0.72	+ 0	−20	+ 0	+ 1	+10	+ 2	+10	+ 8	+ 1	+ 7		0	0.92
∗94604	19 15 07.91	+83 27 45.8	6.50		H	288.782 955 23	+83.462 729 41		6.63	12.36	7.02	0.46	0.43	0.50	0.50	0.50	+ 9	−14	+ 7	+15	+ 9	−18	+14	+ 2	−23	+19		0	0.57
∗94605	19 15 07.74	−07 00 49.1	10.86		H	288.782 233 31	−07.013 633 46	∗	−3.50	−5.77	−1.74	2.82	1.36	2.26	2.54	1.81	−27	−15	− 4	−31	+18	+28	+16	−29	+22	+16		4	0.10
94606	19 15 08.81	+16 11 49.9	7.42		H	288.786 700 45	+16.197 195 64		2.86	0.38	−6.49	0.69	0.66	1.02	0.73	0.92	+20	+ 5	− 6	− 7	−16	+20	−20	−19	−31	+ 3		0	1.07
94607	19 15 09.83	+16 58 10.6	9.97	2	H	288.790 966 81	+16.969 608 20		2.17	1.46	−4.65	1.24	1.28	1.84	1.73	2.03	+34	+ 3	−23	+21	− 9	+35	− 3	+ 3	+14	+42		0	0.39
94608 H	19 15 10.71	+01 33 07.0	8.93		H	288.794 641 69	+01.551 957 67	∗	4.02	−12.66	−9.88	1.22	0.82	1.35	1.40	1.04	+16	−27	+ 6	−27	− 5	+ 2	− 2	−34	− 4	+34		2	−0.20
94609	19 15 11.78	+55 10 14.6	8.04		H	288.799 084 69	+55.170 724 83		2.59	1.68	8.27	0.61	0.56	0.64	0.70	0.70	+10	−16	−10	+18	+ 3	−27	+ 4	− 4	− 8	+25		0	0.50
94610	19 15 12.23	−03 57 59.5	8.94		H	288.800 961 75	−03.966 522 45		3.61	8.53	−3.49	1.10	0.82	1.32	1.06	0.80	+33	−26	−34	−28	− 5	+14	− 5	−37	+23	+32		0	−0.33
94611	19 15 13.03	−53 22 06.3	7.77		H	288.804 286 37	−53.368 408 52		4.75	−0.71	−15.41	0.73	0.61	0.91	0.96	0.69	+23	−16	−19	+13	+ 8	+ 0	+ 5	−25	− 9	+12		2	0.95
94612	19 15 13.63	+10 12 44.6	7.12		G	288.806 791 09	+10.212 393 98		4.99	4.97	5.56	0.82	0.56	0.97	0.97	0.68	+ 1	−10	−11	−20	− 9	+ 1	−12	−26	+18	−19		0	−1.21
94613	19 15 13.90	+15 04 56.6	7.67		H	288.807 900 12	+15.082 394 02		5.28	1.35	−11.39	0.70	0.65	1.05	0.77	0.86	+11	− 7	−29	+12	−25	+31	−22	+ 2	−25	−11		0	0.19
94614	19 15 13.95	−47 52 32.6	7.42	2	H	288.808 134 89	−47.875 733 81		6.78	−10.23	−65.35	0.82	0.58	0.92	1.08	0.59	+23	−21	−21	+13	+ 5	+ 9	− 6	−34	− 1	− 9		0	0.61
94615	19 15 14.38	+19 36 33.2	9.67		H	288.809 927 62	+19.609 210 47		10.07	−57.40	56.71	1.03	1.01	1.53	1.20	1.17	+26	−26	− 6	+ 3	+ 1	+15	+ 0	−10	+ 4	+24		1	0.36
94616	19 15 14.88	−45 24 38.3	8.98		H	288.811 993 44	−45.410 637 68		7.13	11.17	11.23	1.14	0.78	1.28	1.45	0.95	+15	−19	− 1	−14	+12	−12	+11	−35	− 6	+11		3	1.54
94617	19 15 16.71	+60 43 28.2	10.62		H	288.819 616 00	+60.724 486 67		10.32	−9.41	230.18	1.13	1.21	1.22	1.26	1.65	+ 9	−11	+17	+27	+16	−17	+23	+22	− 8	+21		0	2.47
94618	19 15 17.06	+13 14 58.4	9.26		H	288.821 090 93	+13.249 562 52		4.68	18.14	−14.64	0.87	0.86	1.35	1.02	0.94	+21	−15	−18	+24	−18	+20	−15	−10	+12	+24		0	−0.98
94619	19 15 17.25	+40 06 49.3	8.11	2	H	288.821 855 02	+40.113 694 61		2.49	2.14	−0.81	0.55	0.61	0.69	0.63	0.78	− 8	−11	− 4	+ 7	+ 5	−16	+ 5	+33	− 4	− 5		0	−0.89
94620	19 15 17.34	+21 13 55.6	5.65		H	288.822 246 52	+21.232 099 44		10.26	36.38	7.82	0.41	0.41	0.59	0.49	0.52	+22	−20	−15	−13	− 6	+11	− 5	−14	+ 5	+23		0	−1.44
94621	19 15 18.16	−34 48 33.7	8.05		H	288.825 681 90	−34.809 372 35		2.32	3.16	−5.73	1.07	0.56	1.12	1.32	0.78	+ 6	−34	− 5	+13	+ 5	−12	−12	−46	+ 4	−24		0	0.55
94622 H	19 15 18.69	+24 53 47.5	9.71		H	288.827 871 60	+24.896 535 55	∗	35.21	238.94	219.28	0.78	1.14	1.64	0.85	1.34	−26	+ 6	−17	+39	− 4	+ 6	− 1	−10	− 2	−23		0	4.91
94623 H	19 15 19.18	+50 04 16.0	6.27		G	288.829 928 34	+50.071 118 26	A	9.52	−6.87	3.79	0.60	0.64	0.62	0.65	0.74	− 5	−17	− 4	+ 1	+10	− 6	+11	+ 6	+ 7	+13		1	0.93
94624	19 15 20.09	+15 05 01.2	5.58		H	288.833 707 10	+15.083 678 64		5.32	1.04	−11.17	0.58	0.55	0.90	0.68	0.72	+ 7	− 4	−35	+10	−26	+33	−21	+ 5	−22	−18		0	0.29
94625	19 15 20.29	−39 39 46.9	8.02		H	288.834 535 59	−39.663 034 65		12.51	−17.79	31.44	1.08	0.66	1.14	1.87	0.88	− 3	−16	−17	+ 0	+32	−28	+ 8	−43	+21	−52		0	−0.18
94626	19 15 21.34	−63 54 12.5	9.39	1	H	288.838 917 25	−63.903 479 15		4.28	19.49	3.22	0.95	0.76	1.31	1.53	1.06	−23	− 3	+ 2	+13	−20	− 7	− 6	−31	− 2	+ 5		0	2.66
94627	19 15 22.28	−06 02 59.2	6.63		H	288.842 838 42	−06.049 789 28		11.13	17.50	10.49	0.67	0.42	0.79	0.72	0.48	− 1	−16	− 8	−26	+13	+14	+12	−35	+16	− 3		2	0.02
94628	19 15 22.35	+26 22 24.4	9.18		H	288.843 125 00	+26.373 444 94		15.57	23.03	−24.73	0.74	0.92	1.34	0.86	1.16	−14	− 9	− 2	+26	+ 3	+ 0	+ 2	+ 0	+ 0	−19		0	−0.48
94629	19 15 22.55	+38 42 40.9	7.65		G	288.843 938 42	+38.711 364 11		13.56	1.27	80.63	0.52	0.50	0.63	0.55	0.66	− 6	− 4	−15	+ 3	+ 5	− 6	+ 6	+19	−22	− 6		0	−0.46
94630	19 15 24.84	+30 31 35.2	5.88	2	H	288.853 483 10	+30.526 445 19		2.37	35.18	−26.23	0.41	0.48	0.61	0.48	0.59	− 9	−15	−19	+11	+ 2	−10	− 2	− 1	+15	−16		0	0.91
94631	19 15 25.41	−79 01 42.0	8.07		H	288.855 877 59	−79.028 325 88		16.75	−9.63	−57.52	0.62	0.64	0.83	0.70	0.75	− 4	−28	+ 6	+ 0	−11	−10	−13	+ 5	+12	− 4		1	0.71
∗94632	19 15 25.96	+30 05 09.0	9.32		H	288.858 176 45	+30.085 828 28		2.94	−9.67	−11.82	0.77	0.89	1.20	0.92	1.11	−11	− 9	− 6	+25	− 3	−25	− 6	+14	+14	−25		0	−1.00
∗94633	19 15 25.88	−11 42 53.7	9.77		G	288.857 849 10	−11.714 909 00		3.69	1.16	−1.26	1.31	0.73	1.63	1.62	1.03	+44	−41	−28	+ 5	+ 3	+ 1	−20	−37	+20	− 7		0	−0.68
94634	19 15 26.06	+54 35 01.7	8.09		H	288.858 570 21	+54.583 796 20		3.50	−2.03	2.41	0.61	0.53	0.62	0.73	0.65	+ 6	−17	−10	+13	+ 1	−17	+ 2	− 4	+ 2	+22		0	−1.17
94635	19 15 26.12	−16 05 56.8	7.43		H	288.858 825 60	−16.099 117 10		3.57	−1.98	−27.84	0.96	0.49	1.01	1.20	0.68	− 5	−13	+21	+35	−24	+21	−29	−39	−23	− 9		0	−2.80
94636	19 15 26.18	+45 20 08.5	7.49		H	288.859 074 76	+45.335 703 36		4.83	9.78	−9.59	0.52	0.47	0.58	0.55	0.47	+ 4	−13	+11	+12	+18	− 9	+21	− 2	− 6	+25		0	−1.14
94637	19 15 26.27	−19 47 12.9	7.66	1	H	288.859 465 85	−19.786 909 01		5.63	5.67	−28.91	0.82	0.44	0.92	0.89	0.55	− 9	−30	− 2	+ 1	+ 5	+36	+10	−20	− 2	− 3		0	−2.03
94638	19 15 26.88	−03 06 50.0	7.54		H	288.861 986 81	−03.113 886 45		1.21	−1.70	4.20	0.84	0.57	1.04	1.08	0.86	+ 8	−33	− 2	−22	+15	+32	+10	−36	+ 7	− 5		2	0.05
94639	19 15 27.19	+17 13 58.8	9.51		H	288.863 292 76	+17.232 998 97		1.08	−0.61	−6.98	0.97	1.00	1.57	1.42	1.73	+44	−13	−18	+20	−12	+20	−14	+12	−17	+14		0	0.95
94640	19 15 27.28	−35 09 31.3	8.60		H	288.863 682 74	−35.158 696 23		2.60	11.71	−18.19	1.27	0.64	1.31	1.52	0.87	− 9	−40	+ 9	+ 8	+10	−17	+ 6	−46	− 3	−19		0	1.03
94641	19 15 27.80	+19 25 12.0	7.21		H	288.865 826 54	+19.420 003 61		4.56	7.36	−8.16	0.53	0.59	0.87	0.66	0.72	+24	−24	−10	− 2	+ 8	+23	+ 7	+ 3	+14	+33		2	1.11
94642	19 15 31.45	−29 28 38.4	9.29		H	288.881 035 87	−29.477 346 60		1.47	−1.61	−8.24	1.89	1.05	1.98	2.11	1.21	+ 9	−48	−19	+14	−11	− 1	−15	−27	+ 0	−17		0	1.98
94643	19 15 32.40	−25 15 23.8	4.86		G	288.884 988 22	−25.256 606 77		9.89	47.56	−31.16	1.12	0.70	1.12	2.77	1.13	−44	−24	− 2	−35	+52	+43	+43	−54	−29	−81		0	0.56
94644	19 15 33.03	+41 35 34.7	8.18		H	288.887 610 20	+41.592 963 02		4.20	−8.02	−21.75	0.62	0.64	0.73	0.67	0.80	− 9	− 8	−10	+ 7	+ 5	− 5	+ 4	+27	+ 1	− 5		0	0.53
94645	19 15 33.15	−24 10 44.8	6.25		G	288.888 143 31	−24.179 104 71		36.97	114.78	−101.81	0.79	0.51	0.80	0.92	0.56	−16	−19	− 4	− 4	+17	+ 0	+17	−30	− 9	−19		0	−0.16
∗94646	19 15 33.37	+18 30 58.8	6.46	2	H	288.889 041 13	+18.516 328 09		3.04	−10.49	10.06	0.52	0.51	0.79	0.71	0.66	+24	−21	−17	+23	− 2	+17	− 3	− 2	+14	+20		0	−0.23
∗94647	19 15 33.27	−16 51 32.7	9.04		H	288.888 625 47	−16.859 091 47		7.44	−14.13	−25.95	1.11	0.60	1.16	1.24	0.87	− 7	−21	+ 8	−29	− 7	+ 4	− 2	−53	− 2	+13		0	−1.01
∗94648	19 15 33.29	+73 21 18.8	4.45		H	288.888 723 80	+73.355 214 57		21.73	−116.60	104.25	0.47	0.42	0.47	0.52	0.53	− 8	−10	+11	− 9	+ 8	− 7	+12	−17	−19	− 7		3	−0.69
94649	19 15 33.68	+61 33 54.6	7.85		H	288.890 325 31	+61.565 178 79		2.79	−9.84	−9.52	0.65	0.60	0.65	0.65	0.72	+ 1	−15	+15	+15	+19	− 8	+25	+ 6	+ 0	+12		1	0.83
94650	19 15 34.94	+11 33 18.5	8.06		H	288.895 600 06	+11.555 137 88		39.43	183.98	−173.11	0.86	0.70	1.01	0.86	0.72	−11	−20	−21	−32	+ 7	+14	+10	−26	+ 4	−17		0	−1.57
94651	19 15 35.41	−36 56 57.5	6.96		H	288.897 521 67	−36.949 304 30		6.50	2.61	−25.03	0.93	0.44	0.90	1.13	0.58	+10	−40	− 4	+32	+13	− 3	− 4	−31	+ 2	−19		2	2.60
94652	19 15 36.97	−38 50 44.0	7.93		H	288.904 053 90	−38.845 548 61		3.11	9.30	−15.62	1.03	0.53	1.01	1.50	0.75	+ 7	−28	+ 3	+22	+21	− 2	+ 1	−34	+ 0	−29		2	0.45
∗94653	19 15 38.08	+29 07 19.8	7.91		H	288.908 655 01	+29.122 175 87		11.33	−4.94	−88.73	0.51	0.62	0.82	0.58	0.71	−13	− 3	−12	+25	+ 9	−18	+ 8	− 7	+13	− 9		0	−0.13
∗94654	19 15 38.07	−39 59 29.8	10.32		H	288.908 605 73	−39.991 610 10		−4.51	11.98	−23.31	2.13	1.38	2.63	3.23	2.04	+12	−27	−34	− 4	+23	−32	−11	−55	+45	−42		5	1.16
94655	19 15 38.78	+25 43 45.9	9.05		H	288.911 596 82	+25.729 409 62		5.43	17.27	14.95	0.63	0.83	1.27	0.65	1.00	−11	− 7	−11	+50	+ 4	− 7	+ 1	+ 5	+ 1	−21		1	−0.96
94656	19 15 39.95	−44 28 10.4	9.98		G	288.916 469 93	−44.469 563 25		7.26	5.79	21.90	1.56	1.25	2.06	2.19	1.35	+25	− 9	−41	−31	+23	−39	+ 1	−51	+18	+ 2		0	1.00
94657	19 15 42.41	−14 50 15.7	7.78		H	288.926 692 78	−14.837 688 77		2.76	6.08	0.42	0.74	0.42	0.84	0.80	0.52	− 7	−23	+ 2	−11	+ 1	+27	+ 5	−39	+ 1	+ 5		0	−2.62
94658	19 15 42.79	−71 08 28.1	8.42		H	288.928 283 95	−71.141 125 47		6.64	41.15	−102.68	0.50	0.66	1.00	0.63	0.85	−19	−15	+15	+18	− 9	−11	− 9	+13	+11	−26		0	0.34
94659	19 15 43.75	+40 21 36.1	6.97		H	288.932 281 33	+40.360 036 41		4.39	−70.46	−46.64	0.46	0.51	0.57	0.49	0.66	− 7	+ 0	−12	+ 5	+ 8	− 7	+ 9	+21	− 6	− 6		0	0.00
94660	19 15 43.91	−53 51 41.3	8.92		H	288.932 938 22	−53.861 474 40		8.48	29.76	−96.71	1.02	0.81	1.23	1.45	1.05	+23	−13	−14	+14	+ 5	− 1	− 2	−27	+ 9	+ 9		2	−0.57
94661	19 15 45.19	−34 16 08.8	8.66		H	288.938 294 82	−34.269 117 74		−0.14	−0.71	3.36	1.33	0.77	1.48	2.30	1.14	− 8	−11	−24	+ 3	+28	−43	+ 0	−50	+27	−51		0	1.17
94662	19 15 45.21	−39 52 25.0	9.61		H	288.938 395 12	−39.873 618 55		4.76	15.31	−4.38	1.60	0.94	1.84	2.65	1.53	+ 4	− 1	−21	−12	+28	−40	+ 7	−55	+35	−43		0	−2.44
94663	19 15 46.73	−33 31 49.7	7.53		G	288.944 691 70	−33.530 461 88		5.94	7.54	−9.63	1.00	0.56	1.11	1.29	0.72	+ 9	−22	−24	+13	+ 9	−34	−13	−45	+17	−23		0	1.00
94664	19 15 47.99	+07 29 17.3	9.71		H	288.949 952 57	+07.488 143 38		4.66	1.51	−17.04	1.41	1.00	1.63	1.84	1.22	+27	−22	+ 0	−26	−27	− 4	−27	−46	+18	+39		0	−0.07
94665	19 15 48.27	+15 13 20.6	8.12		H	288.951 140 93	+15.222 383 11		1.30	12.85	−8.84	0.73	0.72	1.20	0.82	0.95	+ 4	− 5	−29	+11	−22	+35	−14	+ 9	−31	− 9		0	1.15
94666	19 15 48.76	+38 22 47.0	7.75		H	288.953 183 92	+38.379 709 11		15.50	29.25	242.24	0.53	0.61	0.68	0.60	0.73	+ 1	−20	+ 0	+ 6	+11	+11	+13	+37	−14	− 1		0	0.13
94667	19 15 49.12	+49 10 51.2	7.84		H	288.954 650 92	+49.180 890 51		4.15	7.72	10.54	0.64	0.61	0.72	0.69	0.88	+ 4	−29	+ 6	− 2	+ 5	+11	+ 3	+13	− 3	+27		0	1.34
94668	19 15 49.77	−41 06 35.1	8.88		H	288.957 371 03	−41.109 738 98		16.94	84.98	−57.26	2.10	1.18	1.75	2.62	1.55	−20	−14	−11	−15	+ 6	−43	−11	−56	+17	−10		0	−0.87
94669	19 15 50.14	+37 17 56.6	7.82		H	288.958 896 48	+37.299 044 41		2.51	−0.89	−8.19	0.52	0.60	0.69	0.57	0.73	− 9	− 6	− 1	+22	+ 4	−21	+ 5	+29	+ 0	−13		0	−0.26
94670	19 15 51.22	+43 12 08.4	9.30		H	288.963 416 27	+43.202 340 86		0.72	5.27	7.26	0.74	0.80	0.90	0.74	0.94	− 3	+ 1	−20	+ 4	+16	−16	+17	−10	+16	+ 0		4	1.62
94671	19 15 52.13	+30 53 57.2	8.19		H	288.967 221 55	+30.899 227 69		2.58	−7.01	−1.19	0.56	0.61	0.79	0.68	0.77	−10	−10	−17	+10	+ 4	− 1	+ 3	+ 4	+ 6	−22		1	−0.66
94672	19 15 52.85	+08 49 49.5	8.59		H	288.970 191 16	+08.830 407 61		−0.16	2.50	−2.18	1.15	0.85	1.38	1.30	0.96	−16	−15	−27	−43	+32	−25	+20	−50	+39	−48		0	−1.87
94673	19 15 53.60	−25 30 48.6	11.29		G	288.973 347 39	−25.513 493 56		−3.47	−1.22	−11.91	3.28	2.19	3.39	6.29	2.91	−25	− 9	−23	−10	+19	+14	+13	−31	−10	−63		0	−1.45
94674	19 15 53.81	−48 21 26.7	10.46		H	288.974 200 30	−48.357 426 08		21.08	−13.04	−116.44	1.57	1.13	1.81	2.02	1.25	+17	−26	− 3	−13	+14	+ 7	+ 9	−35	−11	− 5		2	0.36
94675	19 15 54.67	+47 03 40.5	8.24		G	288.977 808 24	+47.061 250 32		8.08	14.89	−30.69	0.70	0.63	0.80	0.94	0.71	− 4	+10	− 9	+ 0	+11	−23	+ 9	− 1	+ 0	+10		0	−0.83
94676	19 15 55.79	−00 28 10.4	9.76		H	288.982 452 02	−00.469 546 27		−0.27	1.44	−4.69	1.15	0.83	1.35	1.19	0.91	+21	−29	−18	−13	+ 4	+15	+ 4	−18	+12	+23		0	0.30
94677	19 15 56.12	+31 02 08.6	6.79		H	288.983 812 95	+31.035 725 91		8.07	−80.19	−92.95	0.41	0.50	0.63	0.47	0.56	−16	− 9	−19	+ 3	+12	− 7	+10	+ 0	+13	−16		0	−0.80
94678	19 15 56.77	−30 20 34.2	8.77		H	288.986 539 62	−30.342 831 30		11.82	−131.33	−68.42	1.53	0.87	1.52	1.86	0.93	−10	−41	−24	+24	−12	+ 0	−17	−13	+ 3	−39		0	1.05
94679 H	19 15 56.96	+27 27 21.4	6.54		G	288.987 332 49	+27.455 935 47	A	1.77	4.02	−4.48	0.72	0.97	1.13	0.84	1.22	−14	− 8	−15	+22	+ 8	− 6	+ 7	+16	+ 6	−24		1	0.02
94680	19 15 57.64	+31 14 27.1	6.82		H	288.990 186 41	+31.240 859 24		1.24	−3.06	−8.74	0.40	0.48	0.61	0.47	0.54	−12	− 5	−27	+ 5	+13	− 9	+10	+ 2	+12	−18		0	−1.36
94681	19 15 57.69	−07 01 02.6	9.15		H	288.990 355 14	−07.017 392 48		3.31	17.46	−19.98	1.07	0.68	1.27	1.38	0.89	+11	− 9	−14	−12	+ 6	+ 9	+ 2	−34	+22	− 2		0	−0.72
94682	19 15 57.99	+13 06 29.5	7.92		G	288.991 614 15	+13.108 204 87		2.83	2.33	−9.60	0.60	0.59	0.92	0.66	0.63	+10	−11	−15	+17	−25	+12	−25	− 9	+ 4	− 1		0	0.35
94683 H	19 15 58.87	+56 26 05.9	8.43		H	288.995 306 05	+56.434 982 27	A	3.17	2.71	7.85	0.94	1.01	0.96	1.09	1.26	+14	−11	− 8	+10	− 4	+20	− 1	−13	− 4	+13		1	−0.03
94684	19 15 58.91	+31 37 20.2	8.32		H	288.995 448 86	+31.622 288 77		1.81	−0.44	−3.42	0.54	0.69	0.83	0.63	0.84	−11	− 4	−26	− 5	+15	− 5	+16	+ 5	+ 8	+20		0	−1.15
94685	19 15 59.49	+27 55 34.7	6.18	2	T	288.997 860 92	+27.926 300 21		1.94	5.08	0.70	0.37	0.47	0.62	0.46	0.59	−23	− 3	−23	+12	+13	−10	+11	+ 6	+ 2	−34		0	0.89
94686 H	19 16 00.66	+83 47 58.8	9.47		H	289.002 741 46	+83.799 663 86	A	2.68	8.15	11.37	1.27	1.24	1.35	1.33	1.29	+13	−28	+13	+13	+ 4	−27	+13	− 6	−29	+30		0	0.16
94687	19 16 01.29	−67 05 22.9	8.45		H	289.005 391 58	−67.089 690 11		11.74	−37.86	58.25	0.57	0.73	1.16	0.54	0.85	+ 9	−15	− 6	−43	− 1	+11	− 3	−40	+20	+ 3		0	0.67
94688 H	19 16 01.84	+16 09 39.5	7.16		G	289.007 668 82	+16.160 963 73	A	4.77	20.70	19.90	1.15	1.11	1.35	1.05	1.22	+47	−14	−24	−12	−20	+10	−19	−17	−12	+18		1	0.97
94689	19 16 02.77	+23 26 51.2	8.93		H	289.011 554 70	+23.447 561 35		4.57	4.95	−10.21	0.60	0.71	1.16	0.79	0.91	−18	+ 2	−17	+ 6	+ 2	+ 6	+ 3	− 6	+10	−19		0	1.35
94690	19 16 02.85	−24 43 02.0	7.55		H	289.011 878 11	−24.717 214 15		8.03	9.21	−4.04	1.07	0.74	1.08	1.40	0.78	−21	− 2	−26	−38	+34	−22	+27	−46	+14	−25		0	−0.94
94691	19 16 04.09	−50 11 39.7	9.42		G	289.017 053 57	−50.194 372 21		11.36	183.65	−179.43	1.19	1.00	1.41	1.65	1.15	+29	−13	−12	−13	+ 3	−18	− 3	−41	− 3	+22		0	0.86
94692	19 16 05.00	+63 23 34.8	8.23		H	289.020 819 87	+63.393 013 43		3.92	19.53	8.91	0.63	0.61	0.65	0.86	0.78	+ 1	+ 3	+ 2	+11	+ 4	+ 9	+ 4	+11	− 5	+19		0	1.15
94693	19 16 05.41	−64 49 19.7	9.03	2	H	289.022 531 65	−64.822 144 02		1.87	−7.29	−4.57	1.00	0.73	1.17	1.26	0.86	− 5	−10	− 8	+32	−17	− 6	− 8	−24	+ 1	+11		0	0.31
94694	19 16 06.75	+09 19 40.1	7.70	1	H	289.028 105 30	+09.327 814 14		0.52	−2.79	5.90	0.88	0.59	1.04	0.93	0.68	− 8	−25	−17	−20	+ 8	+ 0	+ 0	−30	+26	−32		0	−0.43
94695	19 16 08.20	+24 46 46.4	7.93		G	289.034 181 06	+24.779 561 35		3.90	−82.06	−170.93	0.52	0.68	0.95	0.63	0.85	−24	+ 2	−10	+ 5	−10	+ 5	− 8	−16	+ 1	−17		0	−0.70
94696	19 16 08.67	+26 52 07.0	7.30		H	289.036 127 27	+26.868 608 08		10.69	31.38	−14.55

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
94601	9.658	0.020	8.595	0.014		0.921	0.018	T	0.92	0.01	L	8.6549	0.0023	0.018	95		8.63	8.69		C			1							
94602	10.946	0.047	9.798	0.028		0.986	0.043	T	0.97	0.04	L	9.8653	0.0026	0.021	99		9.83	9.93		C			1							
94603	8.500	0.010	8.146	0.010		0.353	0.015	G	0.41	0.02	H	8.1934	0.0013	0.012	123		8.17	8.21		C			1							S
94604	6.635	0.004	6.516	0.004		0.108	0.005	T	0.12	0.01	L	6.5446	0.0007	0.008	132		6.53	6.56		C	19151+8328	I 1	1 S							S
94605	11.122	0.067	10.912	0.090		0.194	0.110	T	0.21	0.13	L	10.9274	0.0038	0.034	98		10.79	10.98					1 V							G
94606	7.515	0.007	7.433	0.007		0.081	0.009	T	0.09	0.01	L	7.4557	0.0013	0.009	70		7.44	7.48					1							S
94607	10.362	0.036	10.046	0.044		0.300	0.053	T	0.34	0.07	L	10.0422	0.0049	0.038	75		9.99	10.11		U			1							G
94608	10.424	0.039	9.041	0.021	*	1.170	0.034	T	1.13	0.03	L *	9.0967	0.0022	0.017	80	*	9.06	9.12		D	19152+0133	H 1	2 C S A	AB	161	0.185	0.024	1.72	0.39	
94609	7.961	0.008	8.023	0.010		−0.052	0.012	T	−0.03	0.01	L	8.0299	0.0011	0.010	102		8.01	8.05		C			1							S
94610	9.449	0.017	8.982	0.017		0.440	0.022	T	0.51	0.02	L	9.0411	0.0021	0.019	92		9.00	9.07		C			1 S							
94611	8.256	0.012	7.814	0.012		0.399	0.015	G	0.46	0.02	H	7.8645	0.0012	0.009	79		7.85	7.88		C			1							S
94612	8.591	0.011	7.237	0.007		1.136	0.002	G	1.10	0.00	H	7.2844	0.0014	0.008	69		7.27	7.30		C			1							S
94613	7.732	0.008	7.649	0.009		0.086	0.009	G	0.06	0.01	L	7.6925	0.0015	0.011	91		7.67	7.71			19153+1505	I 2	1							S
94614	8.543	0.012	7.520	0.009		0.891	0.011	T	0.90	0.01	L	7.5745	0.0037	0.027	85		7.54	7.62		U 2			1							S
94615	10.601	0.034	9.758	0.027		0.687	0.015	G	0.74	0.01	H	9.8139	0.0024	0.026	141		9.77	9.86		C			1							G
94616	9.601	0.017	9.002	0.016		0.558	0.017	T	0.63	0.02	L	9.1043	0.0021	0.021	111		9.06	9.13					1							
94617	11.597	0.093	10.803	0.075		0.720	0.092	T	0.77	0.07	L	10.7608	0.0036	0.035	110		10.69	10.81		C			1							G
94618	9.757	0.023	9.285	0.022		0.445	0.029	T	0.51	0.03	L	9.3579	0.0023	0.017	105		9.32	9.38					1							G
94619	7.985	0.007	8.090	0.009		−0.091	0.010	T	−0.07	0.01	L	8.0850	0.0031	0.032	125		8.05	8.15	2.29	P 1 A			1							S
94620	5.800	0.002	5.666	0.003		0.121	0.003	T	0.14	0.00	L	5.6936	0.0007	0.006	150		5.68	5.70		C			1							S
94621	7.988	0.008	8.037	0.010		−0.040	0.012	T	−0.02	0.01	L	8.0420	0.0014	0.011	103		8.02	8.06		C			1							S
94622	11.560	0.064	9.917	0.023	*	1.304	0.002	G	1.50	0.00	I *	9.8141	0.0024	0.032	226	*	9.77	9.87			19153+2454	H 1	2 C S B	AB	284	0.191	0.013	0.46	0.52	G
94623	7.507	0.007	6.452	0.005	A	0.930	0.351	G	0.91	0.01	L *	6.4849	0.0011	0.009	109	*	6.47	6.50			19152+5004	I 1	2 C A	AB	80	2.135	0.016	3.51	0.07	S
94624	6.920	0.005	5.693	0.003		1.067	0.015	G	1.01	0.02	G	5.7457	0.0005	0.005	97		5.74	5.75		C	19153+1505	I 2	1							S
94625	8.743	0.014	8.076	0.012		0.596	0.015	G	0.67	0.01	H	8.1436	0.0018	0.011	86		8.13	8.16		C			1							S
94626	9.818	0.017	9.403	0.018		0.406	0.020	T	0.47	0.02	L	9.4820	0.0028	0.032	148		9.44	9.55		U			1							
94627	7.028	0.005	6.686	0.005		0.353	0.015	G	0.41	0.02	H	6.7173	0.0007	0.006	106		6.71	6.74					1							S
94628	9.935	0.019	9.251	0.016		0.632	0.021	T	0.70	0.02	L	9.3101	0.0019	0.027	174		9.27	9.36					1							
94629	8.111	0.007	7.713	0.007		0.400	0.006	G	0.47	0.01	H	7.7473	0.0009	0.010	130		7.73	7.76		C			1							S
94630	8.047	0.008	6.082	0.004		1.665	0.007	T	2.02	0.03	O	5.9634	0.0028	0.021	140		5.93	6.00		U 2			1							S
94631	8.652	0.009	8.123	0.009		0.519	0.015	G	0.59	0.02	H	8.1825	0.0016	0.017	138		8.15	8.21					1							S
94632	9.656	0.019	9.361	0.021		0.280	0.027	T	0.32	0.03	L	9.3928	0.0027	0.023	147		9.35	9.44					1							
94633	10.186	0.024	9.805	0.027		0.342	0.003	G	0.40	0.00	H	9.8685	0.0016	0.019	133		9.83	9.90		C			1							G
94634	8.085	0.008	8.070	0.010		0.019	0.012	T	0.04	0.01	L	8.1038	0.0013	0.011	112		8.08	8.12					1							S
94635	9.052	0.012	7.556	0.007		1.259	0.011	T	1.22	0.01	L	7.5917	0.0009	0.011	120		7.57	7.61					1							S
94636	7.534	0.005	7.502	0.009		0.034	0.010	T	0.05	0.01	L	7.5107	0.0011	0.011	120		7.49	7.53		C			1							S
94637	7.973	0.007	7.687	0.009		0.272	0.011	T	0.31	0.01	L	7.7346	0.0018	0.015	103		7.71	7.76		U			1							S
94638	9.052	0.017	7.698	0.010		1.147	0.015	T	1.11	0.01	L	7.7110	0.0012	0.011	93		7.70	7.73		C			1 G							
94639	9.902	0.025	9.556	0.028		0.328	0.035	T	0.38	0.05	L	9.5912	0.0040	0.027	113		9.55	9.64					1							G P
94640	10.372	0.031	8.732	0.014		1.372	0.027	T	1.34	0.03	L	8.7451	0.0020	0.020	109		8.72	8.77					1							
94641	8.577	0.008	7.326	0.005		1.067	0.007	T	1.03	0.01	L	7.3745	0.0012	0.011	154		7.35	7.39					1							S
94642	10.580	0.063	9.393	0.039		1.017	0.058	T	0.99	0.05	L	9.4582	0.0039	0.026	43		9.41	9.50		C			1							
94643	5.547	0.004	4.929	0.003		0.569	0.006	G	0.67	0.02	A	4.9774	0.0008	0.007	53		4.97	4.99			19155−2515	I 1	1 S							S
94644	9.611	0.017	8.315	0.011		1.102	0.016	T	1.06	0.02	L	8.3521	0.0015	0.014	124		8.33	8.38		C			1							
94645	6.899	0.006	6.307	0.005		0.548	0.009	G	0.59	0.02	A	6.3620	0.0009	0.006	57		6.35	6.37					1							S
94646	8.729	0.009	6.669	0.004		1.743	0.008	T	2.24	0.02	O	6.5196	0.0019	0.021	131		6.49	6.55		U 2	19156+1830	I 1	1							S
94647	9.593	0.019	9.102	0.019		0.475	0.015	G	0.55	0.02	H	9.1488	0.0018	0.015	121		9.13	9.17		C			1							
94648	6.094	0.003	4.594	0.002		1.257	0.011	G	1.15	0.03	C	4.6171	0.0003	0.004	100		4.61	4.62					1 G							S
94649	9.192	0.018	7.968	0.011		1.046	0.016	T	1.02	0.01	L	8.0218	0.0015	0.014	96		8.00	8.04		C			1							
94650	9.223	0.018	8.165	0.013		0.908	0.017	T	0.95	0.02	L	8.2054	0.0024	0.016	72		8.18	8.23		C			1							
94651	7.134	0.006	6.979	0.006		0.141	0.008	T	0.16	0.01	L	7.0110	0.0010	0.009	121		7.00	7.03					1							S
94652	9.449	0.021	8.059	0.012		1.176	0.019	T	1.14	0.02	L	8.1001	0.0013	0.010	104		8.08	8.11		C			1							
94653	8.719	0.009	7.985	0.008		0.673	0.010	T	0.73	0.01	L	8.0503	0.0013	0.014	157		8.02	8.07		C			1							S
94654	10.809	0.054	10.380	0.061		0.419	0.066	T	0.49	0.07	L	10.4202	0.0034	0.033	85		10.36	10.48		C			1							G
94655	9.443	0.012	9.081	0.013		0.343	0.016	T	0.40	0.02	L	9.1272	0.0020	0.023	232		9.09	9.17					1							
94656	10.461	0.032	10.011	0.034		0.449	0.020	G	0.52	0.02	H	10.1022	0.0034	0.026	99		10.06	10.15					1							G
94657	7.790	0.007	7.795	0.008		0.000	0.010	T	0.07	0.02	A	7.8040	0.0010	0.010	131		7.79	7.83					1							S
94658	9.000	0.009	8.476	0.008		0.501	0.009	T	0.57	0.01	L	8.5336	0.0016	0.019	219		8.50	8.56					1							S
94659	8.657	0.009	7.104	0.005		1.304	0.008	T	1.26	0.01	L	7.1226	0.0009	0.010	132		7.11	7.14		C			1							S
94660	9.439	0.020	8.954	0.020		0.469	0.022	T	0.54	0.02	L	9.0287	0.0021	0.021	71		8.98	9.07		C			1							
94661	10.160	0.033	8.766	0.019		1.179	0.030	T	1.14	0.03	L	8.8256	0.0029	0.018	92		8.80	8.86					1							
94662	10.316	0.035	9.712	0.032		0.562	0.035	T	0.64	0.03	L	9.7358	0.0031	0.022	90		9.70	9.78		C			1							
94663	7.553	0.010	7.530	0.012		0.010	0.015	G	0.03	0.01	H	7.5393	0.0009	0.011	85		7.52	7.56		C			1							S
94664	11.586	0.101	9.931	0.038		1.384	0.085	T	1.36	0.10	L	9.8624	0.0029	0.023	76		9.83	9.91		C			1							G
94665	9.475	0.019	8.252	0.012		1.035	0.012	G	1.01	0.01	H	8.2888	0.0015	0.014	86		8.26	8.31		C			1							
94666	8.407	0.011	7.817	0.011		0.551	0.014	T	0.62	0.01	L	7.8688	0.0013	0.011	131		7.85	7.89		C			1 G							S
94667	9.068	0.014	7.940	0.010		0.971	0.013	T	0.96	0.01	L	8.0074	0.0010	0.013	100		7.99	8.03					1							S
94668	9.802	0.027	8.982	0.022		0.724	0.027	T	0.78	0.02	L	9.0157	0.0025	0.021	80		8.98	9.05		C			1 G							
94669	7.699	0.006	7.793	0.009		−0.081	0.010	T	−0.06	0.01	L	7.7952	0.0013	0.012	135		7.78	7.82		C			1							S
94670	9.340	0.020	9.270	0.025		0.069	0.030	T	0.08	0.03	L	9.3297	0.0023	0.025	107		9.29	9.38					1							
94671	9.565	0.014	8.326	0.009		1.057	0.013	T	1.02	0.01	L	8.3550	0.0011	0.012	151		8.33	8.38		C			1							
94672	8.834	0.013	8.592	0.014		0.231	0.018	T	0.26	0.02	L	8.6627	0.0023	0.019	80		8.63	8.69					1							
94673						0.890	0.020	G	0.90	0.01	H	11.5154	0.0079	0.055	47		11.41	11.58					1							G
94674	11.741	0.143	10.389	0.065		1.420	0.020	G	1.72	0.05	I	10.5466	0.0038	0.039	86		10.48	10.61		R			1							G
94675	8.853	0.013	8.301	0.012		0.551	0.015	G	0.62	0.01	H	8.3488	0.0011	0.012	99		8.32	8.37					1							
94676	10.180	0.028	9.750	0.031		0.406	0.038	T	0.47	0.04	L	9.8546	0.0029	0.023	97		9.81	9.90					1							G
94677	8.367	0.009	6.917	0.005		1.223	0.008	T	1.18	0.01	L	6.9489	0.0008	0.009	155		6.93	6.96		C			1							S
94678	9.529	0.029	8.869	0.026		0.602	0.029	T	0.67	0.03	L	8.8978	0.0026	0.015	51		8.87	8.92		C			1							
94679	6.438	0.006	6.554	0.007	*	−0.027	0.015	G	−0.01	0.01	H *	6.5077	0.0010	0.010	173	*	6.49	6.52		D	19159+2727	I 1	2 C A	AB	159	0.887	0.002	0.45	0.01	S
94680	6.696	0.004	6.793	0.005		−0.084	0.006	T	−0.06	0.01	L	6.8010	0.0008	0.008	146		6.79	6.82					1							S
94681	10.891	0.049	9.308	0.021		1.327	0.042	T	1.29	0.05	L	9.3048	0.0026	0.020	101		9.28	9.34		C			1							
94682	7.983	0.009	7.931	0.010		0.066	0.005	G	0.08	0.01	H	7.9448	0.0010	0.011	107		7.92	7.97		C			1							
94683	9.650	0.021	8.552	0.014	A	1.300	0.495	G	0.91	0.02	L *	8.5926	0.0015	0.015	115	*	8.57	8.62			19160+5626	I 1	2 C D	AB	48	2.711	0.044	3.75	0.18	D
94684	8.281	0.008	8.317	0.010		−0.020	0.015	G	0.00	0.01	H	8.3243	0.0016	0.014	133		8.31	8.35					1							
94685	6.931	0.010	6.245	0.006		0.634	0.010	T	0.70	0.01	L	6.2977	0.0068	0.068	172		6.17	6.41	1.49	P 1 A			1							S
94686	10.003	0.026	9.538	0.025	A	0.237	0.150	G	0.26	0.19	R *	9.5370	0.0025	0.023	125	*	9.50	9.57		C	19160+8348	H 1	2 C A	AB	215	3.228	0.023	2.77	0.10	
94687	9.189	0.010	8.499	0.009		0.625	0.010	T	0.69	0.01	L	8.5802	0.0015	0.020	224		8.54	8.61					1							
94688	7.625	0.012	7.247	0.014	*	0.325	0.014	G	0.38	0.02	H *	7.2332	0.0009	0.009	80	*	7.22	7.25		D	19160+1610	I 1	2 C A	AB	218	1.119	0.005	0.93	0.02	S
94689	9.303	0.010	8.944	0.010		0.340	0.013	T	0.40	0.02	L	9.0155	0.0022	0.025	205		8.98	9.06					1							
94690	7.817	0.010	7.569	0.009		0.232	0.014	T	0.26	0.02	L	7.6160	0.0018	0.012	62		7.60	7.64					1							S
94691	10.298	0.037	9.525	0.031		0.683	0.002	G	0.74	0.00	H	9.5655	0.0033	0.024	81		9.53	9.60		C			1							
94692	9.450	0.017	8.318	0.011		0.974	0.016	T	0.96	0.01	L	8.3971	0.0015	0.012	106		8.38	8.42		C			1							
94693	9.381	0.015	9.063	0.017		0.302	0.021	T	0.35	0.03	L	9.1067	0.0056	0.054	107		9.05	9.25	2.50	P 1 A			1							
94694	7.892	0.010	7.748	0.012		0.139	0.015	T	0.15	0.01	L	7.7562	0.0019	0.017	76		7.73	7.79		U			1							S
94695	9.242	0.011	8.034	0.007		1.027	0.010	T	1.07	0.01	L	8.0738	0.0014	0.016	203		8.05	8.10		C			1							S
94696	7.920	0.006	7.362	0.006		0.527	0.006	T	0.60	0.01	L	7.4174	0.0010	0.011	176		7.40	7.44					1							S
94697	11.204	0.077	10.114	0.048		1.049	0.004	G	1.10	0.01	I	10.1512	0.0066	0.054	73		10.08	10.23		U 2			1							G
94698	9.558	0.021	8.876	0.018		0.611	0.002	G	0.68	0.00	H	8.9354	0.0013	0.014	95		8.91	8.96		C			1							
94699	8.608	0.018	7.260	0.011		1.143	0.017	T	1.11	0.01	L	7.3036	0.0017	0.009	44		7.29	7.32		C			1							S
94700	8.626	0.009	8.426	0.010	A	0.203	0.016	G	0.22	0.02	H *	8.3144	0.0018	0.016	162	*	8.28	8.34		D	19162+2817	I 1	2 C A	AB	227	1.322	0.007	1.19	0.02	

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
94701	19 16 11.89	+47 05 14.7	10.78	H	289.049 530 19	+47.087 411 86		36.24	−135.06	−193.48	1.26	1.17	1.44	1.69	1.44	+ 4	+ 0	+ 5	+ 3	+ 6	−23	+ 7	+ 9	+ 0	+ 6	0	1.36
94702	19 16 12.30	−47 16 25.4	12.29	2 H	289.051 243 03	−47.273 711 79		10.44	−35.32	−344.30	2.98	2.08	3.44	3.84	2.35	+14	−28	−18	−19	+19	− 2	+11	−43	+ 4	− 6	2	0.47
94703	19 16 13.04	+21 23 25.6	4.76	G	289.054 331 56	+21.390 442 77		3.58	0.73	−6.12	0.43	0.42	0.60	0.52	0.48	+24	−22	−15	− 8	+ 8	+ 9	− 8	−15	+11	+29	0	−1.73
94704	19 16 13.40	+37 04 18.8	11.09	G	289.055 820 23	+37.071 880 69		11.38	−188.31	190.16	1.23	1.40	1.68	1.44	1.96	− 4	+ 4	− 3	−12	+ 4	−19	+ 6	+20	−13	− 8	0	0.47
94705	19 16 13.49	−30 27 34.4	7.25	H	289.056 219 88	−30.459 567 81		7.88	16.12	−6.34	1.07	0.66	1.09	1.31	0.68	− 6	−39	−35	+32	−11	− 5	−20	− 6	+ 9	−40	0	2.12
94706	19 16 14.44	−16 58 17.0	10.78	3 H	289.060 168 86	−16.971 382 68	*	−31.67	−0.80	−9.71	2.88	1.57	9.28	2.04	1.55	+ 5	−31	+42	−24	−18	− 7	−11	−38	+10	+32	4	1.02
94707	19 16 16.07	−02 39 56.6	8.67	H	289.066 946 93	−02.665 721 99		7.97	12.85	5.39	0.90	0.62	1.13	0.99	0.74	+13	−19	−10	− 4	+12	+28	+15	−15	+20	+31	0	0.19
94708	19 16 16.66	−08 41 24.2	7.24	H	289.069 402 85	−08.690 068 63		3.62	11.75	−1.14	0.81	0.49	0.92	0.88	0.66	− 3	− 3	−21	−21	+22	+ 8	+28	−27	+30	+24	2	−0.46
94709	19 16 17.69	−48 27 58.4	8.02	G	289.073 716 72	−48.466 233 58		7.50	−9.19	−29.53	0.83	0.61	0.96	1.03	0.64	+ 9	−27	−11	− 9	+13	+ 3	+ 7	−36	− 4	−11	0	−0.38
94710	19 16 19.30	−54 40 21.0	10.25	H	289.080 428 52	−54.672 501 15		3.90	10.57	−28.42	1.41	1.14	1.70	2.09	1.85	+18	−23	−12	−19	+ 1	− 5	+ 0	−40	+15	+22	0	0.75
94711	19 16 19.35	−52 03 32.1	8.03	H	289.080 613 96	−52.058 906 83		2.61	3.04	10.20	0.96	0.80	1.12	1.46	1.02	+15	+10	+ 9	−40	− 7	−35	− 6	−56	−22	+29	0	−2.68
94712 H	19 16 21.74	−45 27 57.8	5.38	G	289.090 599 81	−45.466 062 62	*	6.11	−2.03	12.08	1.73	0.87	0.86	0.95	0.60	+56	− 8	− 7	−23	−12	−24	−16	−56	− 4	+40	0	0.36
94713	19 16 22.10	+38 08 01.4	4.35	1 H	289.092 064 26	+38.133 727 78		4.24	−0.49	1.23	0.39	0.38	0.49	0.41	0.49	− 3	−20	−11	+ 6	+ 6	− 7	+ 8	+14	−10	− 6	0	−1.34
∗94714	19 16 22.39	−75 48 00.2	6.61	H	289.093 310 78	−75.800 052 23		3.38	6.79	−20.25	0.45	0.52	0.69	0.57	0.57	−11	−19	+ 3	+ 4	+ 4	+ 2	+ 1	− 7	+ 8	−20	1	−0.06
∗94715	19 16 22.36	+49 25 28.0	7.23	H	289.093 175 58	+49.424 439 87		4.55	16.20	17.70	0.52	0.56	0.60	0.58	0.71	+ 1	−26	− 2	+ 3	+ 1	+ 3	− 4	+22	+ 2	+22	0	−0.12
∗94716	19 16 24.22	+67 08 06.7	8.00	H	289.100 898 32	+67.135 187 16		0.60	−6.48	−8.62	0.54	0.53	0.58	0.46	0.60	+ 1	−13	+ 6	−37	+13	+12	+ 6	+15	+18	+19	1	1.77
∗94717	19 16 24.19	+03 09 03.3	8.11	H	289.100 786 68	+03.150 915 02		7.45	10.38	8.31	0.86	0.55	0.99	1.02	0.72	+10	−36	−18	− 4	+ 2	+10	+ 5	−23	+10	+28	4	1.28
94718	19 16 24.72	+14 05 52.2	8.08	H	289.103 009 29	+14.097 822 69		13.14	−0.48	−59.86	0.67	0.74	1.16	0.75	0.87	+31	−17	−34	+14	−33	+27	−28	+10	−15	+11	2	1.72
94719	19 16 24.77	−41 33 20.0	8.65	H	289.103 194 45	−41.555 542 51		3.36	−4.05	−3.77	1.38	0.90	1.63	2.06	1.35	+40	−40	−42	+34	+16	−28	−28	−41	+34	−22	0	1.49
94720 H	19 16 26.78	+14 32 40.6	5.65	H	289.111 594 28	+14.544 615 09	A	8.77	9.15	0.22	0.75	0.86	1.17	0.81	0.87	+12	−18	−27	+28	−31	+24	−32	+12	+ 1	− 7	1	0.16
94721	19 16 26.98	+51 24 34.3	8.88	H	289.112 427 13	+51.409 523 15		4.04	−1.89	−17.01	0.72	0.73	0.79	0.83	0.96	+ 6	− 9	− 9	− 2	+ 3	+16	+ 2	+21	+ 2	+17	0	−1.07
94722	19 16 27.43	−11 34 06.5	7.49	1 H	289.114 283 42	−11.568 482 04		3.16	6.39	−3.03	0.79	0.44	0.96	0.90	0.57	+18	−34	−14	+ 5	+ 6	+ 9	− 5	−28	+20	+ 2	0	−0.34
94723	19 16 27.84	−65 28 14.6	9.70	H	289.116 014 12	−65.470 721 11		4.10	18.65	−42.27	1.13	0.98	1.54	1.06	1.07	− 3	−16	−11	−14	−21	− 4	−29	−21	+13	−30	1	1.95
94724	19 16 28.60	−69 11 26.7	6.25	H	289.119 168 83	−69.190 754 92		5.27	7.00	−28.72	0.37	0.42	0.69	0.41	0.53	−15	− 3	− 7	+26	+ 8	− 2	+ 4	−16	+13	−28	0	−0.25
94725	19 16 29.40	−54 58 58.5	8.06	H	289.122 480 02	−54.982 925 30		3.92	−3.16	−10.26	0.94	0.75	1.11	1.32	1.06	+11	−16	−17	−11	+11	−10	+ 6	−27	+19	+ 7	0	1.17
94726	19 16 30.00	−49 13 12.9	8.46	G	289.124 995 36	−49.220 248 97		2.21	4.56	−13.46	0.89	0.73	1.11	1.12	0.73	− 3	−26	−21	−15	+25	− 1	+19	−34	+ 2	−18	2	−1.73
94727	19 16 31.02	+04 50 05.4	5.59	H	289.129 262 42	+04.834 820 79		5.97	14.77	−10.42	0.66	0.47	0.78	0.74	0.48	−15	−23	+ 4	+ 4	+15	− 6	+15	−30	+11	+ 1	2	0.01
94728	19 16 31.16	+48 21 24.5	7.44	H	289.129 821 66	+48.356 794 57		5.03	2.41	−21.94	0.58	0.57	0.65	0.70	0.79	+ 4	+ 4	− 3	− 3	− 2	− 3	− 5	+23	−21	+10	3	−1.68
94729	19 16 31.68	−67 18 24.2	8.85	H	289.132 013 47	−67.306 725 45		3.60	−14.64	−28.02	0.62	0.81	1.19	0.59	0.93	+ 3	−18	− 8	−39	+ 4	+ 9	+ 6	−41	+ 6	+ 0	0	0.20
94730	19 16 32.76	−33 31 20.3	6.58	3 H	289.136 501 45	−33.522 315 93		0.36	10.33	−0.41	1.03	0.65	1.12	1.15	0.62	+14	−37	−11	+ 5	−10	−26	−17	−48	− 4	−10	0	0.66
94731	19 16 33.12	−12 50 02.6	8.95	H	289.137 983 78	−12.834 046 10		3.69	3.19	−11.64	1.01	0.52	1.33	1.27	0.77	+31	−36	+ 4	− 4	+ 0	+25	−20	−39	+ 6	− 6	1	0.51
94732	19 16 33.57	−63 12 40.2	8.16	H	289.139 877 18	−63.211 154 66		1.14	33.24	−36.51	0.77	0.65	0.99	1.15	0.82	−38	− 6	− 3	− 1	+ 5	−14	+12	−39	− 3	−22	0	0.74
94733	19 16 34.68	+06 35 48.1	6.68	H	289.144 511 30	+06.596 689 84		4.80	10.21	−8.35	0.71	0.54	0.82	0.70	0.50	+18	−17	+12	−27	−25	−20	−27	−47	+ 1	−10	0	−0.40
94734	19 16 34.89	+40 02 48.8	9.50	H	289.145 393 91	+40.046 895 90		7.84	11.65	176.25	0.96	0.89	1.09	1.28	1.12	− 6	− 1	−11	+25	+15	−12	+13	+22	−10	+ 3	0	−1.14
94735	19 16 36.66	−52 26 15.8	6.76	H	289.152 740 91	−52.437 732 90		4.91	17.97	−29.94	0.74	0.61	0.82	0.92	0.86	+16	−18	−18	−16	+ 1	+ 4	+ 5	−49	+12	+16	2	−1.42
94736 H	19 16 39.12	+24 16 50.0	8.28	H	289.162 995 18	+24.280 548 28	*	0.04	1.39	−5.07	0.99	1.37	1.23	0.86	0.96	−22	− 1	+ 1	−27	− 2	+19	− 5	−13	− 5	− 8	1	−0.28
94737 H	19 16 41.61	+33 09 02.4	12.25	H	289.173 394 23	+33.150 667 07	B	−14.37	3.14	−5.85	6.95	7.66	7.05	5.26	8.09	+ 0	−21	− 8	+18	−21	+ 4	−25	+23	+ 5	+ 8	28	0.25
94738	19 16 41.79	−19 18 27.6	7.91	3 T	289.174 124 98	−19.307 654 18	*	1.19	11.64	−13.22	1.58	0.99	1.90	2.03	1.24	+ 1	−15	−31	−11	+18	−42	− 1	−42	+15	−13	9	1.13
94739 H	19 16 42.74	−45 53 18.0	9.38	G	289.178 087 51	−45.888 341 68	*	63.43	215.69	−412.86	3.54	3.00	2.16	2.99	2.18	+48	−17	− 7	−14	+12	−16	+15	−16	−10	+42	0	0.07
94740	19 16 43.49	+33 07 39.3	7.22	G	289.181 220 25	+33.127 579 31		2.25	0.56	−9.69	0.47	0.54	0.64	0.54	0.69	− 2	−11	−14	+30	+ 7	−19	+ 4	+25	+ 8	− 5	0	−0.34
∗94741	19 16 43.64	+11 50 41.1	8.19	H	289.181 850 73	+11.844 752 47		7.49	3.92	−10.48	0.85	0.67	1.01	0.84	0.71	+ 0	−26	− 8	−34	+ 6	+26	+ 8	−19	+ 2	+ 2	0	−0.16
∗94742	19 16 43.59	+38 52 53.2	8.21	G	289.181 634 22	+38.881 440 19		7.01	0.27	1.11	0.58	0.63	0.75	0.66	0.81	+ 2	− 8	−14	+13	+ 9	−13	+ 9	+28	−26	+ 6	1	0.29
94743	19 16 44.50	+50 38 47.8	9.15	2 H	289.185 421 83	+50.646 624 92		7.07	−3.98	−1.76	0.81	0.79	0.89	0.92	1.03	+11	−23	− 1	−11	− 4	− 5	− 9	+ 5	+ 3	+33	1	0.03
94744	19 16 45.57	+44 46 08.0	8.61	H	289.189 884 23	+44.768 893 49		2.77	−3.88	−12.32	0.65	0.58	0.73	0.61	0.60	+ 1	− 4	+ 9	+ 2	+10	+ 2	+14	−11	+ 2	+26	3	0.04
∗94745 H	19 16 46.24	+48 01 10.0	8.60	H	289.192 671 78	+48.019 453 04	A	2.88	−0.71	−4.73	1.17	1.18	1.21	1.27	1.39	+ 4	+10	+15	+ 9	+ 5	− 9	+ 7	+ 0	− 6	+ 3	4	−0.65
∗94746	19 16 46.01	−49 59 10.3	8.02	G	289.191 709 82	−49.986 186 77	A	6.35	38.18	−7.13	1.88	1.62	1.76	2.44	1.62	+30	−24	−13	− 3	+12	−22	+ 2	−37	− 5	+16	1	0.64
94747	19 16 46.43	+10 58 46.7	8.28	G	289.193 456 12	+10.979 645 81		3.62	−6.49	2.27	0.81	0.65	0.98	1.00	0.74	−20	− 7	−10	−30	+14	− 3	+12	−33	+17	−32	0	0.18
94748	19 16 46.80	−49 58 59.8	10.71	H	289.194 993 80	−49.983 276 27	B	18.13	29.77	−6.15	30.50	22.88	13.69	19.22	12.60	+29	−29	− 3	+ 3	+11	−19	+ 5	−33	−13	+16	1	0.64
94749 H	19 16 46.83	−20 46 35.2	9.46	G	289.195 127 68	−20.776 451 87	A	4.17	−6.09	−12.63	3.26	3.69	2.82	2.74	1.72	−10	−29	−25	−10	− 9	+25	+ 3	−17	−26	−11	0	−0.23
94750	19 16 47.85	−31 25 42.7	9.71	H	289.199 369 94	−31.428 540 82		4.27	0.45	−19.81	1.63	1.13	2.04	1.87	1.17	+20	−50	−51	+14	+15	−23	−16	−31	+34	−23	3	0.37
94751	19 16 48.59	+18 58 35.2	7.02	H	289.202 438 22	+18.976 456 69		17.08	1.62	−50.51	0.56	0.54	0.81	0.78	0.81	+16	−22	−14	+ 4	+ 4	+28	+ 8	− 5	+ 1	−15	1	0.46
94752	19 16 48.83	−28 40 01.5	7.74	H	289.203 452 57	−28.667 070 69		3.81	19.96	−5.91	1.21	0.70	1.31	1.07	0.78	+28	−62	−27	+ 7	− 3	+ 7	+ 0	− 5	− 1	+12	0	1.01
94753	19 16 49.92	−48 38 01.0	7.99	G	289.207 999 62	−48.633 602 47		1.54	−4.88	6.13	0.85	0.61	0.99	1.05	0.66	+ 7	−33	−14	− 8	+15	+ 2	+12	−35	− 9	−13	0	−0.10
94754	19 16 51.21	−23 13 14.3	8.99	H	289.213 369 73	−23.220 643 65		3.52	6.65	−9.14	1.18	0.84	1.30	1.11	0.77	+35	−37	−27	− 6	− 1	+ 5	− 2	−27	+ 2	+25	0	1.27
94755	19 16 51.39	+46 59 54.2	6.02	H	289.214 144 73	+46.998 393 21		23.57	−10.10	291.80	0.52	0.47	0.57	0.67	0.56	− 5	+ 3	− 4	+ 2	+11	−17	+10	+ 4	− 2	+ 4	1	0.20
94756	19 16 51.89	+24 43 44.7	8.87	H	289.216 195 74	+24.729 072 70		0.44	−11.76	−15.13	0.69	0.87	1.20	0.94	1.12	−24	− 6	−11	− 7	−14	+ 2	−13	− 6	+ 8	−15	0	−0.01
94757	19 16 52.12	−10 58 18.5	6.93	H	289.217 177 17	−10.971 799 07		34.73	153.89	9.86	0.72	0.42	0.85	0.78	0.52	+ 9	−32	−10	− 7	+ 0	+17	− 1	−31	+ 7	+ 7	0	−1.02
94758 H	19 16 52.33	+47 10 56.1	8.24	H	289.218 053 24	+47.182 243 47	A	3.93	−3.94	1.57	1.05	0.99	1.03	1.28	1.24	+13	+ 8	+ 8	+ 6	+12	− 6	+17	+13	− 2	+18	1	−0.49
94759	19 16 52.64	+20 33 40.3	8.47	H	289.219 333 16	+20.561 201 89		6.72	13.03	4.44	0.59	0.66	0.92	0.71	0.83	+29	−25	−15	− 7	− 6	+11	− 7	− 6	+ 9	+30	0	0.87
94760 H	19 16 53.08	+63 12 26.8	6.93	G	289.221 187 27	+63.207 438 57	A	12.21	27.61	−16.06	0.99	0.97	0.92	1.07	1.11	+12	+ 5	+ 6	−17	− 1	−14	− 4	+26	− 6	+18	1	1.09
94761	19 16 55.60	+05 10 19.7	9.12	G	289.231 649 74	+05.172 140 64		170.26	−578.86	−1331.70	1.16	0.77	1.37	1.33	0.91	− 2	−35	− 1	+ 6	+16	+ 9	+14	−17	+ 4	+ 1	0	0.25
94762	19 16 56.20	−45 53 43.4	9.77	G	289.234 156 19	−45.895 388 29		5.83	15.96	−28.60	1.42	1.04	1.70	1.87	1.19	+25	−25	−13	−26	+12	−12	+ 5	−46	− 6	+ 9	0	1.19
94763	19 16 57.77	−07 51 27.5	9.79	H	289.240 705 45	−07.857 649 77		1.95	−5.31	−9.89	2.16	1.32	2.50	2.67	1.96	+11	−27	−14	−19	+ 5	+ 9	+ 5	−27	+13	+13	4	
94764	19 16 57.84	−35 11 03.0	8.64	H	289.241 013 30	−35.184 178 28		5.35	−8.69	−23.83	1.21	0.70	1.28	1.56	0.92	− 1	−21	+ 6	+ 7	+ 5	−11	− 1	−44	− 4	−15	0	1.50
94765	19 16 57.86	−21 29 46.2	8.20	H	289.241 078 07	−21.496 174 20		2.85	−3.31	−10.11	0.99	0.71	1.20	1.25	0.70	+15	−16	−33	+12	−28	+40	−19	−23	−18	−13	3	0.64
∗94766	19 16 58.13	−01 56 49.5	8.39	H	289.242 199 94	−01.947 078 14		3.86	−6.53	2.20	0.96	0.69	1.19	1.14	0.89	+ 3	+ 3	−13	− 2	+17	+28	+26	−15	+30	+36	0	−0.47
∗94767	19 16 58.11	−67 10 00.0	6.90	H	289.242 130 53	−67.166 664 61		5.13	8.23	−32.18	0.43	0.51	0.74	0.41	0.57	+ 0	−19	− 5	−43	+ 6	+ 6	+ 7	−45	+ 3	− 1	0	0.67
94768	19 16 58.53	+13 07 09.2	8.70	H	289.243 872 10	+13.119 220 85		4.68	−2.44	1.19	0.70	0.75	1.16	0.73	0.79	+27	−18	−24	+15	−30	+15	−31	+ 0	− 3	+ 0	0	−0.19
94769	19 16 58.87	+68 20 05.8	8.58	H	289.245 278 02	+68.334 937 05		4.25	20.25	44.62	0.65	0.60	0.67	0.73	0.70	+ 1	−25	+ 0	− 3	+ 7	+ 6	+ 4	+ 6	+ 6	+16	2	−1.87
94770	19 17 00.53	−65 13 39.5	6.42	H	289.252 191 58	−65.227 644 10		4.66	−4.02	−24.00	0.52	0.45	0.76	0.55	0.50	− 3	−15	−16	− 7	−14	+ 6	−18	−28	− 1	−27	0	−0.60
94771 H	19 17 00.57	+07 24 01.6	8.73	H	289.252 388 01	+07.400 454 36	A	3.11	8.21	2.01	1.66	1.30	1.75	1.70	1.17	+32	−10	+ 8	−15	−19	− 6	−23	−37	− 4	+14	2	−0.29
94772	19 17 01.67	+26 48 51.5	8.46	H	289.256 967 75	+26.814 307 31		3.02	−5.46	−6.73	0.57	0.79	1.12	0.72	0.98	−19	− 3	− 2	+19	+ 3	−14	+ 1	+ 5	+24	−25	0	−0.81
94773	19 17 03.16	+09 20 19.6	8.23	G	289.263 167 80	+09.338 772 02	A	−6.21	−2.47	9.51	4.08	2.56	3.58	4.38	3.44	− 6	−19	−14	−22	+ 2	+ 0	− 3	−23	+10	−54	15	0.48
94774	19 17 03.47	+09 20 38.5	8.73	H	289.264 471 25	+09.344 040 79	B	−6.96	−5.02	7.02	17.45	9.65	6.16	8.12	6.42	− 8	−15	− 9	−15	− 5	− 6	−10	−15	+11	−57	15	0.48
94775	19 17 04.42	+74 55 36.5	8.92	H	289.268 398 69	+74.926 793 72		1.76	1.65	4.17	0.67	0.58	0.66	0.66	0.65	− 5	− 6	+10	+ 0	+10	− 7	+12	+ 0	− 6	+10	1	−0.41
94776	19 17 04.75	+46 24 47.7	8.02	H	289.269 802 82	+46.413 257 70		2.37	10.52	13.32	0.65	0.61	0.74	0.76	0.70	+ 5	− 9	+ 4	− 5	+19	− 6	+19	+ 4	+ 0	+ 6	1	0.60
94777	19 17 05.29	−34 11 54.4	8.71	H	289.272 062 25	−34.198 457 11		11.74	3.98	4.27	1.36	0.87	1.66	2.04	1.08	− 5	− 9	−35	+19	+19	−43	− 4	−35	+29	−31	0	0.34
94778	19 17 05.31	+05 46 19.2	8.54	1 H	289.272 143 28	+05.771 986 38		7.36	33.95	−3.34	0.94	0.74	1.16	1.01	0.73	+23	−28	−25	−11	− 3	− 9	−15	−40	+23	− 1	0	0.04
94779	19 17 06.11	+53 22 05.4	3.80	G	289.275 457 94	+53.368 160 64		26.48	60.22	122.93	0.49	0.43	0.49	0.50	0.53	− 2	−23	− 6	−20	+15	− 2	+18	+17	−13	+ 2	0	−0.20
94780	19 17 08.98	+41 15 53.4	7.10	H	289.287 408 71	+41.264 827 86		3.95	0.93	−8.33	0.49	0.46	0.57	0.50	0.53	− 9	− 2	− 3	+10	+10	−15	+10	+11	+ 7	− 7	0	0.53
94781	19 17 09.07	+39 01 42.8	6.93	1 H	289.287 809 76	+39.028 566 39		3.09	26.96	24.81	0.49	0.51	0.62	0.53	0.66	+ 3	− 8	− 5	+15	+11	−16	+14	+26	−22	+ 4	0	−0.11
94782	19 17 09.08	−61 48 51.0	7.34	H	289.287 853 21	−61.814 168 86		12.17	0.97	−61.31	0.64	0.56	0.85	0.78	0.58	+ 2	−21	−20	+26	−17	− 4	−16	−16	− 2	− 5	0	3.22
94783	19 17 09.86	−18 59 09.7	8.89	H	289.291 075 96	−18.986 033 58		4.70	−7.10	−13.86	1.23	0.72	1.24	1.53	0.91	− 5	−29	−14	+35	− 8	− 1	−20	− 4	+20	−28	0	−1.51
94784	19 17 10.87	−21 45 24.1	8.36	G	289.295 271 49	−21.756 700 76		13.29	160.00	−131.56	0.96	0.67	1.09	1.29	0.77	+ 4	− 8	− 7	+13	− 8	+29	− 8	−22	−29	−20	0	1.07
94785	19 17 11.04	+00 29 50.7	7.64	H	289.295 993 05	+00.497 410 06		3.37	−9.37	−27.88	0.88	0.60	1.04	1.07	0.73	− 8	+ 6	−32	−28	+17	− 9	+16	−31	+16	−18	0	0.25
94786	19 17 11.10	−71 09 45.6	9.43	2 H	289.296 259 21	−71.162 675 09		8.44	−26.87	31.59	0.70	0.91	1.37	0.86	1.14	− 6	− 5	+ 4	+25	+ 1	−12	− 1	+13	+16	−14	3	0.80
94787	19 17 11.17	+22 25 33.9	7.91	H	289.296 558 26	+22.426 080 11		4.14	0.28	−11.32	0.67	0.58	0.86	0.87	0.76	+21	− 7	− 7	+17	+ 9	+18	+10	+12	+28		0	0.39
94788	19 17 11.91	+35 59 29.1	8.23	H	289.299 623 25	+35.991 429 06		4.86	6.65	5.85	0.52	0.58	0.71	0.61	0.85	+ 6	+ 5	+ 8	− 5	+ 0	−21	+ 2	+ 7	+ 7	+ 2	0	1.43
94789 H	19 17 12.22	−66 39 39.7	5.52	G	289.300 916 57	−66.661 037 56	A	11.00	8.89	−4.33	0.68	0.75	0.85	0.57	0.66	+ 2	−12	+ 3	−10	−18	+ 1	−20	−30	+ 0	− 2	2	1.17
∗94790	19 17 13.49	+29 49 57.8	8.97	H	289.306 226 39	+29.832 734 18		−0.12	−1.88	−4.13	0.72	0.83	1.12	0.81	1.02	− 9	−24	− 6	+38	+ 4	−26	+ 1	+17	+ 4	−21	1	0.54
∗94791	19 17 13.48	−29 55 11.3	10.07	H	289.306 148 30	−29.919 816 31		5.07	16.76	−8.86	2.37	1.41	2.64	2.72	1.51	+ 3	−52	−41	− 1	+13	− 7	− 8	−30	+26	−43	0	0.58
94792	19 17 14.05	−40 04 27.8	8.41	1 H	289.308 550 92	−40.074 391 38		2.70	−24.20	−32.18	1.31	0.80	1.55	2.36	1.32	+28	−19	−22	− 6	+14	−46	−17	−62	+26	−22	0	−0.78
94793	19 17 14.80	+01 03 33.9	8.28	2 H	289.311 683 79	+01.059 426 16		2.08	−0.84	−3.52	0.85	0.58	0.98	1.01	0.73	+10	−22	− 6	−16	+ 4	+18	+ 3	−19	+14	+16	0	1.67
94794 H	19 17 15.53	+37 14 30.1	8.64	H	289.314 700 29	+37.241 694 59	A	4.58	2.00	1.09	1.06	1.16	1.28	1.07	1.37	−20	+ 0	+ 4	+13	−10	−28	− 7	+ 8	+21	−20	2	0.03
94795	19 17 16.34	+28 46 57.7	7.60	G	289.318 082 25	+28.782 706 32		13.07	−25.12	−101.49	0.48	0.60	0.76	0.54	0.67	−20	− 4	−14	+22	+13	−17	+12	− 3	+13	−15	0	2.52
94796	19 17 16.72	−56 00 45.4	8.49	H	289.319 660 41	−56.012 619 93		4.53	5.45	−16.86	0.90	0.78	1.14	1.02	0.92	+43	−17	− 9	+23	−26	+ 1	−20	−25	+ 7	+56	5	1.16
94797	19 17 17.62	+54 17 46.9	8.21	H	289.323 407 59	+54.296 372 99		6.32	−21.87	35.41	0.64	0.60	0.67	0

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
94701	12.924	0.451	10.729	0.102		1.600	0.197	G	2.60	0.49	I	10.7761	0.0056	0.034	91		10.72	10.83				1							G
94702						2.000	0.490	G	3.76	1.45	I	11.8850	0.0109	0.080	85		11.69	12.03		U 2		1							G
94703	4.668	0.002	4.751	0.002		−0.058	0.012	G	−0.05	0.03	C	4.7421	0.0004	0.005	144		4.74	4.75			19162+2123	I 1	1						S
94704	11.936	0.142	11.096	0.107		0.664	0.020	G	0.73	0.02	H	11.2674	0.0039	0.036	126		11.19	11.33		C			1						G
94705	7.480	0.008	7.300	0.009		0.190	0.015	G	0.21	0.02	A	7.3137	0.0019	0.013	55		7.30	7.33					1						S
94706	11.736	0.144	9.559	0.035		1.840	0.122	T	2.34	0.56	K	10.8263	0.2237	1.501	96		8.02	11.99	384.40	P 1 B			1 V						G P
94707	9.274	0.016	8.733	0.016		0.507	0.020	T	0.58	0.02	L	8.7818	0.0020	0.016	97		8.75	8.81		C			1						
94708	8.544	0.009	7.366	0.006		1.010	0.008	T	0.99	0.01	L	7.4076	0.0013	0.010	120		7.39	7.43		C			1						S
94709	8.675	0.015	8.080	0.013		0.550	0.002	G	0.62	0.00	H	8.1508	0.0015	0.013	92		8.13	8.18		C			1						S
94710	10.643	0.047	10.293	0.054		0.340	0.064	T	0.40	0.09	L	10.3338	0.0028	0.022	70		10.29	10.37					1						G
94711	9.381	0.019	8.159	0.012		1.044	0.018	T	1.01	0.01	L	8.2011	0.0017	0.016	85		8.17	8.23		C			1						
94712	7.126	0.004	5.532	0.003	*	1.349	0.001	G	1.31	0.00	H *	5.5242	0.0007	0.006	123	*	5.52	5.53		D	19164−4528	H 1	2 C	A	AB	197	0.288	0.018	3.04	0.13	S
94713	5.969	0.003	4.481	0.002		1.258	0.010	G	1.13	0.03	C	4.5178	0.0007	0.006	126		4.51	4.53		M	19164+3808	I 1	1						S
94714	6.804	0.004	6.628	0.004		0.169	0.005	T	0.18	0.01	L	6.6632	0.0009	0.010	154		6.65	6.68		C			1						S
94715	8.555	0.010	7.331	0.007		1.046	0.010	T	1.02	0.01	L	7.3965	0.0008	0.008	113		7.38	7.41					1						S
94716	7.764	0.007	7.959	0.010		−0.170	0.011	T	−0.18	0.01	L	7.9392	0.0012	0.011	113		7.92	7.96					1						
94717	8.563	0.009	8.154	0.009		0.407	0.015	G	0.47	0.02	H	8.1990	0.0010	0.011	95		8.17	8.22					1						
94718	8.796	0.012	8.158	0.011		0.593	0.014	T	0.66	0.01	L	8.2055	0.0012	0.012	121		8.19	8.23		C			1						
94719	10.499	0.044	8.793	0.019		1.424	0.038	T	1.41	0.06	L	8.7897	0.0022	0.021	74		8.75	8.82		C			1 S						
94720	5.626	0.003	5.635	0.003	*	−0.020	0.015	G	0.01	0.05	F *	5.6510	0.0007	0.006	91	*	5.64	5.66		D	19164+1433	I 1	2 C	D	AB	347	8.316	0.028	3.90	0.13	S D
94721	9.468	0.017	8.921	0.016		0.512	0.021	T	0.58	0.02	L	8.9946	0.0024	0.019	103		8.97	9.03		C			1						
94722	9.868	0.024	7.765	0.009		1.739	0.020	T	1.77	0.02	L	7.5853	0.0022	0.021	126		7.55	7.61		U 2			1						
94723	10.290	0.025	9.718	0.024		0.538	0.026	T	0.61	0.03	L	9.8160	0.0027	0.026	121		9.77	9.87					1						
94724	6.481	0.003	6.279	0.003		0.193	0.004	T	0.21	0.01	L	6.3154	0.0008	0.009	198		6.30	6.33					1						S
94725	8.377	0.011	8.090	0.012		0.273	0.015	T	0.31	0.02	L	8.1361	0.0025	0.015	69		8.11	8.16		C			1						S
94726	9.754	0.023	8.551	0.014		1.044	0.002	G	1.01	0.00	H	8.6292	0.0015	0.015	95		8.60	8.66					1						
94727	5.684	0.003	5.587	0.003		0.101	0.006	G	0.06	0.04	D	5.6080	0.0007	0.005	78		5.60	5.62		C			1						S
94728	8.691	0.011	7.539	0.007		0.990	0.010	T	0.97	0.01	L	7.6063	0.0010	0.010	105		7.59	7.62		C			1						S
94729	10.020	0.017	8.915	0.011		0.953	0.016	T	0.94	0.01	L	9.0106	0.0018	0.024	232		8.97	9.06					1 S						
94730	7.998	0.161	7.239	0.126		0.692	0.161	T	0.75	0.13	L	6.7382	0.1050	0.701	67		6.25	7.99		U 2 B			1						S P
94731	10.802	0.038	9.120	0.015		1.405	0.032	T	1.38	0.04	L	9.0927	0.0017	0.018	174		9.06	9.12					1 S						
94732	9.586	0.016	8.275	0.010		1.114	0.015	T	1.08	0.02	L	8.3304	0.0015	0.015	143		8.31	8.36		C			1						
94733	6.817	0.005	6.702	0.005		0.111	0.007	T	0.12	0.01	L	6.7269	0.0011	0.009	92		6.71	6.74					1						S
94734	10.276	0.030	9.593	0.026		0.631	0.033	T	0.70	0.03	L	9.6289	0.0022	0.031	123		9.58	9.67					1						
94735	8.070	0.011	6.873	0.007		1.025	0.010	T	1.00	0.02	A	6.9281	0.0008	0.008	90		6.91	6.95		C			1 G						S
94736	8.450	0.007	8.317	0.008	*	0.128	0.010	T	0.14	0.01	L *	8.3316	0.0014	0.018	214	*	8.30	8.36		D	19167+2417	I 1	2 C	A	AB	58	0.284	0.003	0.75	0.04	
94737											T *	12.3831	0.0202	0.163	110	*	12.04	12.73		D	19167+3308	I 2	2 C	C	BC	53	3.152	0.029	0.19	0.13	G
94738	9.652	0.047	8.057	0.026		1.337	0.042	T	1.30	0.05	L	9.0160	0.3283	1.772	66		6.84	11.35	268.90	P 1 A			1 V						G
94739	11.075	0.071	9.553	0.032	*	1.432	0.009	G	1.89	0.01	A *	9.4460	0.0021	0.020	112	*	9.40	9.49		D	19167−4553	I 1	2 C	A	AB	337	0.208	0.008	0.01	0.23	
94740	7.083	0.006	7.219	0.008		−0.115	0.005	G	−0.10	0.01	H	7.2064	0.0012	0.010	122		7.19	7.23		D	19167+3308	I 2	1						S
94741	8.526	0.012	8.212	0.012		0.298	0.016	T	0.34	0.02	L	8.2641	0.0014	0.014	83		8.24	8.29		D	19167+1151	I 1	1						S
94742	8.499	0.009	8.246	0.010		0.240	0.015	G	0.27	0.02	H	8.2790	0.0015	0.016	129		8.25	8.31		C			1						
94743	9.504	0.020	9.210	0.022		0.280	0.028	T	0.32	0.04	L	9.2229	0.0044	0.042	101		9.16	9.31		U 2 C			1						P
94744	9.851	0.026	8.738	0.016		0.959	0.024	T	0.95	0.02	L	8.7766	0.0015	0.014	117		8.75	8.80		C			1						
94745	8.632	0.013	8.551	0.017	*	0.080	0.020	T	0.09	0.02	L *	8.6328	0.0020	0.018	116	*	8.61	8.67		R	19168+4801	I 1	2 C	A	AB	312	7.691	0.008	1.76	0.04	
94746	8.426	0.011	8.052	0.011	A	0.392	0.015	G	0.46	0.02	H	8.1037	0.0068	0.024	81	A	8.07	8.16		D	19168−4959	I 2	1 C P A								S
94747	8.500	0.010	8.272	0.011		0.218	0.014	T	0.24	0.02	L	8.3334	0.0021	0.014	85		8.31	8.36		C			1						
94748	11.148	0.100	10.438	0.084	B	0.653	0.106	T	0.72	0.09	L	10.8692	0.0745			B				D	19168−4959	I 2	1 C I A							
94749	9.500	0.024	9.495	0.034	*	0.046	0.002	G	0.06	0.00	H *	9.4783	0.0034	0.022	63	*	9.42	9.51		D	19168−2047	H 1	2 C	B	AB	152	0.446	0.022	2.34	0.17	
94750	10.071	0.036	9.861	0.046		0.201	0.055	T	0.22	0.06	L	9.7745	0.0027	0.021	58		9.73	9.81					1						
94751	7.711	0.006	7.100	0.006		0.588	0.004	G	0.66	0.00	H	7.1492	0.0014	0.014	138		7.13	7.17					1 G						S
94752	9.394	0.023	7.895	0.013		1.261	0.021	T	1.22	0.02	L	7.9038	0.0017	0.011	60		7.88	7.93		C			1						S
94753	8.427	0.011	8.014	0.011		0.394	0.015	G	0.46	0.02	H	8.0758	0.0019	0.016	92		8.06	8.10		C			1						S
94754	9.475	0.026	9.048	0.027		0.417	0.030	T	0.48	0.03	L	9.0881	0.0025	0.017	62		9.06	9.11					1						
94755	6.580	0.005	6.070	0.004		0.479	0.006	T	0.55	0.01	L	6.1235	0.0007	0.005	95		6.11	6.13		C			1						S
94756	10.751	0.030	9.028	0.013		1.438	0.026	T	1.43	0.04	L	9.0066	0.0021	0.024	187		8.96	9.04					1						
94757	7.603	0.006	6.991	0.005		0.570	0.007	T	0.64	0.01	L	7.0485	0.0010	0.008	126		7.03	7.06		C	19169−1058	I 1	1						S
94758	9.549	0.019	8.398	0.013	A	1.100	0.495	G	0.93	0.03	L *	8.3990	0.0017	0.015	104	*	8.37	8.43		D	19169+4711	I 1	2 C	B	AB	283	4.852	0.036	3.54	0.15	S
94759	8.767	0.010	8.484	0.010		0.269	0.013	T	0.30	0.02	L	8.5473	0.0017	0.014	138		8.52	8.58					1						
94760	7.720	0.026	7.207	0.025	A	0.505	0.016	G	0.58	0.02	H *	7.0666	0.0008	0.009	107	*	7.05	7.08		D	19169+6312	I 1	2 C	A	AB	329	1.733	0.003	0.76	0.01	S
94761	10.935	0.055	9.279	0.024		1.464	0.005	G	2.32	0.00	A	9.1262	0.0021	0.017	81		9.09	9.16		C			1						
94762	10.366	0.032	9.819	0.030		0.490	0.015	G	0.56	0.02	H	9.8874	0.0028	0.026	109		9.82	9.94					1						
94763	11.571	0.092	10.003	0.037		1.315	0.078	T	1.28	0.09	L	9.9448	0.0022	0.022	109		9.90	10.00		D			1 X S						G
94764	9.871	0.027	8.754	0.018		0.962	0.025	T	0.95	0.02	L	8.8101	0.0016	0.015	82		8.79	8.84					1 S						
94765	10.119	0.036	8.356	0.015		1.469	0.031	T	1.48	0.05	L	8.3350	0.0023	0.014	66		8.31	8.36					1 S						
94766	10.285	0.032	8.524	0.014		1.468	0.028	T	1.48	0.04	L	8.5246	0.0016	0.015	88		8.49	8.56		C			1						
94767	8.121	0.006	7.006	0.004		0.961	0.006	T	0.95	0.01	L	7.0602	0.0009	0.011	219		7.04	7.08					1						S
94768	8.941	0.011	8.724	0.013		0.200	0.015	G	0.22	0.02	H	8.7692	0.0016	0.013	108		8.75	8.79		C			1						
94769	8.996	0.013	8.613	0.014		0.363	0.018	T	0.42	0.02	L	8.6660	0.0018	0.012	106		8.64	8.69		C			1						
94770	6.314	0.003	6.393	0.004		−0.046	0.020	G	−0.07	0.02	A	6.3912	0.0010	0.009	122		6.38	6.41					1						S
94771	8.890	0.017	8.772	0.020	A	0.200	0.495	G	0.04	0.04	L *	8.7419	0.0032	0.019	73	*	8.71	8.77		D	19170+0724	I 1	2 C	B	AB	172	1.997	0.029	3.14	0.10	
94772	8.990	0.010	8.527	0.010		0.436	0.013	T	0.50	0.01	L	8.5607	0.0018	0.019	173		8.52	8.60					1						
94773	9.854	0.023	8.307	0.012	A	1.360	0.000	G	1.33	0.00	H	8.4003	0.0390	0.124	76	A	8.18	8.51		D	19171+0920	I 2	1 C P A							
94774	9.094	0.017	8.712	0.018	B	0.362	0.023	T	0.42	0.03	L	8.8681	0.0527			B				D	19171+0920	I 2	1 C I A							P
94775	9.021	0.012	8.932	0.014		0.087	0.017	T	0.10	0.02	L	8.9518	0.0013	0.014	118		8.92	8.97					1						
94776	9.844	0.023	8.171	0.011		1.398	0.020	T	1.37	0.02	L	8.1660	0.0014	0.012	101		8.14	8.19		C			1						
94777	9.481	0.026	8.815	0.023		0.607	0.026	T	0.68	0.02	L	8.8397	0.0027	0.023	61		8.80	8.89					1						
94778	9.135	0.015	8.592	0.014		0.509	0.018	T	0.58	0.02	L	8.6537	0.0021	0.021	98		8.62	8.69		U			1						
94779	5.007	0.002	3.900	0.002		0.950	0.009	G	0.85	0.03	C	3.9512	0.0005	0.005	107		3.94	3.96					1						S
94780	8.244	0.008	7.200	0.006		0.907	0.008	T	0.91	0.01	L	7.2555	0.0010	0.011	133		7.24	7.28					1						S
94781	8.958	0.012	7.096	0.005		1.548	0.010	T	1.61	0.02	L	7.0403	0.0015	0.016	128		7.02	7.06		U			1						S
94782	7.737	0.009	7.374	0.007		0.354	0.010	T	0.42	0.01	L	7.4200	0.0013	0.011	94		7.40	7.44					1						S
94783	9.096	0.025	8.944	0.030		0.138	0.037	T	0.15	0.04	L	8.9396	0.0024	0.015	61		8.92	8.97		C			1						
94784	9.167	0.031	8.441	0.027		0.634	0.002	G	0.70	0.00	H	8.4956	0.0027	0.013	61		8.48	8.53					1						
94785	9.231	0.017	7.763	0.010		1.237	0.015	T	1.20	0.01	L	7.8057	0.0016	0.010	88		7.79	7.82		C			1						
94786	10.022	0.016	9.462	0.015		0.529	0.016	T	0.60	0.02	L	9.5440	0.0029	0.033	211		9.47	9.60		U			1 S						
94787	8.025	0.007	7.922	0.011		0.120	0.015	G	0.13	0.01	H	7.9533	0.0014	0.015	114		7.93	7.98		C			1						S
94788	8.509	0.009	8.247	0.010		0.249	0.013	T	0.28	0.02	L	8.3011	0.0012	0.012	117		8.28	8.33		C			1						
94789	5.734	0.002	5.534	0.003	*	0.170	0.006	G	0.19	0.01	H *	5.5607	0.0007	0.008	196	*	5.55	5.58		D	19172−6640	I 1	2 C	A	AB	317	0.504	0.002	0.70	0.01	S
94790	9.018	0.011	8.981	0.014		0.039	0.016	T	0.05	0.01	L	8.9917	0.0020	0.023	139		8.95	9.02					1						
94791	10.835	0.078	10.270	0.080		0.529	0.099	T	0.60	0.10	L	10.1848	0.0063	0.033	44		10.14	10.24					1 S						G
94792	9.823	0.024	8.560	0.015		1.076	0.022	T	1.04	0.02	L	8.5750	0.0015	0.018	101		8.54	8.61		U			1						
94793	8.525	0.011	8.309	0.012		0.206	0.015	T	0.23	0.02	L	8.3451	0.0065	0.039	88		8.28	8.39	0.18	P 1 A			1						
94794	8.736	0.010	8.656	0.012	*	0.079	0.015	T	0.09	0.02	L *	8.6709	0.0020	0.015	124	*	8.65	8.71			19173+3715	H 1	2 C	B	AB	119	0.767	0.029	3.25	0.13	S
94795	8.109	0.008	7.628	0.007		0.453	0.015	G	0.52	0.02	H	7.6965	0.0012	0.011	148		7.68	7.72		C			1						S
94796	10.033	0.025	8.644	0.014		1.175	0.022	T	1.14	0.02	L	8.6525	0.0022	0.015	101		8.63	8.68					1						
94797	8.833	0.012	8.276	0.011		0.534	0.015	G	0.61	0.02	H	8.3268	0.0016	0.014	115		8.30	8.35		C			1						S
94798	7.704	0.008	7.286	0.007		0.397	0.015	G	0.46	0.02	H	7.3474	0.0010	0.010	117		7.33	7.36		C			1						S
94799	8.011	0.008	6.690	0.005		1.122	0.007	T	1.08	0.01	L	6.7416	0.0009	0.009	133		6.73	6.76		C			1						S
94800	10.293	0.030	9.595	0.026		0.666	0.005	G	0.73	0.00	H	9.6953	0.0028	0.025	91		9.66	9.75					1						

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$			F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr														%	
1 2	3	4	5 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			29	30
94801	19 17 22.15	+80 28 35.3	7.85	H	289.342 311 61	+80.476 473 29		3.03	−6.57	−12.08	0.63	0.54	0.63	0.75	0.63	+ 3	−19	+ 3	−14	− 4	+ 0	− 4	− 5	− 4	+11			0	1.18
94802	19 17 22.30	+71 20 49.7	7.07	H	289.342 914 58	+71.347 135 36		25.64	7.03	−48.28	2.04	1.74	1.93	2.15	1.83	+ 1	−13	+ 4	−47	− 2	− 7	− 3	−29	+ 5	+ 3			0	
94803	19 17 23.85	−16 04 24.1	7.65	H	289.349 358 53	−16.073 365 07		3.75	−2.00	−27.33	0.95	0.56	1.04	1.06	0.76	+17	−30	+ 1	−12	−23	+17	−23	−47	+ 0	+21			0	−1.04
94804	19 17 25.83	−51 29 48.4	7.96	H	289.357 624 47	−51.496 778 32		1.59	5.90	−13.60	0.92	0.79	1.03	1.25	0.91	+24	+ 6	+22	−32	−25	−16	−21	−57	−31	+32			0	−0.43
94805	19 17 26.44	+07 49 12.0	9.01	H	289.360 161 09	+07.819 998 31		4.67	−1.80	−0.93	1.27	0.87	1.42	1.52	1.02	+20	− 9	+ 6	−43	−20	+ 1	−21	−48	+ 6	+18			0	−0.78
94806	19 17 28.00	+04 15 22.1	9.59	H	289.366 685 39	+04.256 143 00		6.40	12.58	−9.40	1.33	0.93	1.49	1.67	1.12	− 3	−21	+ 5	+ 9	− 6	−16	− 4	−30	− 3	− 1			2	1.24
94807	19 17 28.14	−14 30 04.9	8.69	2 H	289.367 249 96	−14.501 364 94		2.84	1.24	−6.20	0.86	0.46	1.03	1.03	0.64	+19	−29	+ 0	+ 9	− 4	+14	−15	−33	+13	+ 5			0	−0.23
94808	19 17 29.32	+39 14 40.5	8.25	H	289.372 181 53	+39.244 589 72		1.34	12.55	10.52	0.64	0.67	0.81	0.75	0.78	−10	− 1	+11	+14	− 3	−14	− 2	+21	+ 1	− 6			1	−0.74
94809	19 17 30.74	+42 16 02.5	9.32	H	289.378 078 63	+42.267 356 41		3.99	−0.27	−11.57	0.76	0.78	0.88	0.79	0.83	−20	+ 1	− 5	− 9	+24	−16	+23	− 4	+ 9	−11			2	3.11
94810	19 17 30.98	+25 14 17.8	7.59	H	289.379 097 80	+25.238 290 01		3.41	13.43	21.34	0.39	0.60	0.84	0.46	0.75	−27	−10	+ 2	+35	+ 2	− 8	− 7	−15	− 9	−26			0	−1.23
94811	19 17 31.47	−17 49 18.4	8.61	H	289.381 126 56	−17.821 779 37		2.35	8.29	6.65	1.00	0.66	1.08	1.07	0.77	+ 9	−23	−11	− 4	+ 9	+ 6	+11	−21	+ 6	+19			0	1.06
94812	19 17 31.84	+21 48 49.9	6.89	H	289.382 679 63	+21.813 863 11		6.35	32.66	−6.68	0.45	0.48	0.68	0.57	0.61	+20	−15	−15	− 3	− 5	+ 6	− 6	− 3	+ 7	+21			0	0.41
94813	19 17 32.67	+47 57 08.5	7.26	H	289.386 122 81	+47.952 370 34		5.43	30.73	32.59	0.55	0.55	0.61	0.62	0.73	− 8	+ 4	+ 1	−16	+11	−10	+11	+23	− 7	− 2			1	−0.80
94814	19 17 33.21	+51 20 47.3	7.49	2 H	289.388 367 96	+51.346 460 39		2.17	−17.28	23.87	0.57	0.62	0.66	0.72	0.81	+10	+ 1	− 8	+ 9	+ 1	+19	+ 3	+ 7	− 3	+27			0	−0.20
94815	19 17 35.88	+04 16 27.4	10.65	H	289.399 502 89	+04.274 269 31		1.67	−4.08	−4.30	1.72	1.13	1.99	2.07	1.33	− 1	−27	+ 4	− 2	− 1	− 7	+ 2	−35	+ 1	+12			0	0.68
94816	19 17 36.51	+54 08 58.7	8.63	H	289.402 128 05	+54.149 625 84		1.10	1.60	−10.23	0.73	0.64	0.75	0.82	0.82	+10	−11	− 7	−14	+ 3	−23	+ 0	+12	−12	+19			0	2.10
94817	19 17 36.60	−71 47 10.6	9.71	G	289.402 483 06	−71.786 265 70		9.37	−83.63	−222.68	0.81	1.08	1.44	0.93	1.41	−16	− 2	+11	+35	−11	− 8	−11	+23	+ 2	−16			0	1.25
94818	19 17 36.65	−34 31 36.1	8.53	H	289.402 692 35	−34.526 701 18		7.99	7.17	−18.18	1.25	0.88	1.43	2.21	0.99	− 8	−11	−35	+20	+ 9	−32	−15	−33	+18	−47			0	−0.25
94819	19 17 37.01	−17 55 17.9	8.07	H	289.404 221 68	−17.921 640 56		7.03	−13.00	−48.13	0.85	0.57	0.91	0.96	0.66	+ 8	−24	−12	+ 2	+12	+ 3	+12	−14	+ 4	+12			0	0.04
94820	19 17 38.09	−18 57 10.4	4.88	H	289.408 689 94	−18.952 882 15		6.09	−10.05	−10.64	0.84	0.50	0.86	0.99	0.57	− 7	−38	−24	+27	− 3	− 5	−12	− 4	+ 8	−36			0	0.94
94821	19 17 39.18	−22 54 45.5	9.26	H	289.413 246 92	−22.912 625 09		−0.18	3.81	1.31	1.18	0.82	1.27	1.20	0.84	+12	−25	− 5	−20	− 4	+ 7	+ 0	−38	− 8	+19			0	0.19
*94822	19 17 39.99	+22 26 28.4	6.82	3 H	289.416 627 98	+22.441 232 57	*	3.49	1.06	−9.87	0.60	0.57	0.88	0.84	0.75	+16	− 6	−17	+ 3	+ 8	+21	+ 9	+ 3	+12	+32			0	0.72
*94823	H 19 17 39.94	−15 58 01.5	6.62	1 G	289.416 435 89	−15.967 092 61	A	6.32	22.13	−18.33	1.64	1.04	1.58	1.69	1.18	+ 8	−13	− 3	−14	−12	+ 8	−18	−39	− 8	− 8			4	0.74
*94824	19 17 40.97	+08 36 50.9	8.94	2 H	289.420 699 46	+08.614 145 83		−0.24	0.22	−0.22	1.24	0.99	1.67	1.53	1.09	+ 3	−12	−35	−40	+18	−29	+ 4	−48	+42	−28			5	0.77
*94825	19 17 40.96	−27 15 13.4	9.02	G	289.420 648 84	−27.253 714 84		2.64	42.63	−31.98	1.34	0.92	1.58	1.27	0.86	+32	−48	−43	− 8	+ 7	+10	+ 6	−15	+10	+12			0	−0.17
94826	19 17 41.26	+10 21 07.5	9.06	H	289.421 931 86	+10.352 080 67		−0.18	−0.05	−7.90	1.08	0.78	1.25	1.34	0.94	+ 1	− 9	− 3	−20	+ 2	− 1	− 1	−28	+14	−23			0	−0.21
94827	H 19 17 43.64	+23 01 32.0	5.46	1 G	289.431 813 65	+23.025 549 04	A	1.70	1.49	−3.69	0.51	0.49	0.63	0.58	0.54	+ 6	+ 0	−20	−16	+ 6	+ 0	+ 8	− 8	+16	+ 7			2	0.08
94828	19 17 43.99	+25 51 04.1	8.45	H	289.433 298 72	+25.851 127 87		1.52	11.38	6.27	0.47	0.66	0.97	0.50	0.76	−16	− 2	−20	+46	+ 5	−12	+ 1	− 5	+ 8	−23			0	−0.45
94829	19 17 45.04	+58 44 39.7	8.77	H	289.437 662 70	+58.744 372 08		2.44	5.28	10.60	0.73	0.61	0.69	0.85	0.76	+ 7	−11	+ 2	+26	+10	+ 0	+13	+ 7	+ 4	+26			0	−1.01
94830	19 17 46.23	+76 37 08.7	7.58	1 H	289.442 610 92	+76.619 082 01		10.86	−0.90	9.68	0.61	0.51	0.60	0.77	0.68	+13	−32	− 8	−24	−10	+16	− 8	− 8	− 8	+32			0	0.02
94831	19 17 46.77	+07 22 10.8	8.79	H	289.444 883 84	+07.369 653 47		4.83	−0.72	−19.11	1.15	0.88	1.38	1.24	0.82	+19	− 9	+10	−29	−23	−12	−23	−47	+ 1	+ 2			0	−1.13
94832	19 17 47.07	−45 11 57.0	10.19	H	289.446 127 23	−45.199 169 34		17.20	12.19	−73.18	1.82	1.15	1.95	2.33	1.29	+12	− 9	−16	−51	+19	−22	+13	−56	+ 1	− 9			0	−0.01
94833	19 17 48.18	+02 01 54.5	6.19	H	289.450 767 22	+02.031 795 81		11.84	2.70	−28.20	0.70	0.46	0.79	0.75	0.54	− 3	−23	− 3	−13	+ 6	+16	+ 9	−18	+ 1	+17			0	2.33
94834	19 17 49.00	+11 35 43.4	5.28	H	289.454 160 14	+11.595 391 26		7.72	0.25	12.62	0.56	0.44	0.68	0.65	0.52	−15	− 4	− 3	−11	+11	+25	+12	−11	+11	− 1			4	−1.06
94835	H 19 17 49.26	+59 50 10.8	7.63	G	289.455 261 39	+59.836 336 90	*	4.88	−1.58	21.11	0.59	0.56	0.60	0.66	0.69	+ 0	−10	+15	+22	+16	+ 3	+19	+ 8	−10	+ 6			0	0.62
94836	19 17 49.84	−74 19 29.2	8.38	H	289.457 672 37	−74.324 773 38		9.56	19.86	−18.32	0.55	0.68	0.87	0.55	0.81	−24	−19	+ 3	− 1	− 8	− 7	− 8	+ 8	− 1	−27			0	−0.23
94837	19 17 49.91	+18 50 55.0	7.60	1 H	289.457 978 21	+18.848 618 28		0.63	0.82	−3.27	0.64	0.64	0.91	0.86	0.79	+27	− 5	− 8	+28	+10	+26	+12	+ 6	+14	+31			0	0.04
94838	19 17 50.47	+20 14 18.7	9.41	H	289.460 280 65	+20.238 534 78		5.19	11.12	−2.88	0.83	0.96	1.37	1.01	1.12	+35	−26	−22	+ 1	+ 4	+15	+ 6	+ 7	+ 5	+33			3	1.09
94839	19 17 50.79	−16 55 16.9	8.11	G	289.461 632 91	−16.921 371 49		2.13	1.76	−7.88	0.94	0.57	0.97	1.05	0.68	− 5	−33	− 5	+19	−16	+10	− 9	−14	−15	− 8			0	0.00
94840	19 17 50.82	+21 31 17.1	9.63	H	289.461 741 26	+21.521 429 15		4.38	−2.41	−36.34	0.95	1.02	1.44	1.15	1.23	+28	−25	−18	− 2	− 4	+ 5	− 6	− 1	+12	+19			1	0.71
94841	19 17 51.48	+61 54 20.9	8.89	H	289.464 485 18	+61.905 801 70		2.38	9.70	18.38	0.82	0.74	0.82	0.87	0.87	+13	− 6	+23	+ 9	+ 9	+ 8	+ 6	+17	+ 6	+27			1	0.60
94842	19 17 53.59	+25 22 09.0	8.31	H	289.473 306 83	+25.369 162 43		20.02	159.75	232.78	0.47	0.66	0.99	0.48	0.75	−20	− 8	− 6	+44	− 3	− 8	− 4	−13	+ 5	−21			0	0.61
94843	19 17 54.34	+70 54 25.3	7.92	H	289.476 417 81	+70.907 018 53		1.76	−3.21	−7.97	0.60	0.50	0.56	0.66	0.52	+ 0	− 6	− 5	−34	+10	−13	+ 7	−18	+10	+ 6			0	0.77
94844	19 17 55.74	−34 31 10.1	8.31	H	289.482 268 41	−34.519 476 38		4.50	−1.14	−5.83	1.16	0.82	1.27	1.71	0.87	−21	− 4	−25	+ 4	+15	−31	+ 5	−31	+10	−34			0	−0.80
94845	19 17 55.84	−19 52 19.3	9.32	H	289.482 660 19	−19.872 027 89		3.49	−8.16	0.10	1.27	0.95	1.48	1.39	0.93	+28	−34	−34	−10	−15	+23	− 5	−20	−11	+ 4			2	1.18
94846	19 17 57.21	−00 56 36.6	7.34	G	289.488 369 64	−00.943 512 29		4.83	8.07	−17.07	0.82	0.54	0.96	0.97	0.75	− 2	− 8	+ 2	− 5	+12	+23	+21	−20	+26	+48			0	1.97
94847	H 19 17 57.89	+20 11 33.7	8.09	H	289.491 201 42	+20.192 696 10	*	5.97	2.64	−27.85	0.63	0.66	0.97	0.74	0.77	+28	−26	−14	+ 1	+ 7	+ 6	+ 5	+ 0	+ 9	+28			0	0.85
94848	19 17 58.07	−08 13 24.4	10.07	H	289.491 964 86	−08.223 443 56		3.49	0.46	−22.05	1.48	0.85	1.73	1.87	1.47	+13	−17	− 7	−33	+ 3	+13	+ 3	−27	+28	+26			7	0.54
94849	19 17 59.18	−47 04 28.4	7.27	H	289.496 567 14	−47.074 547 47		2.21	−1.39	−11.15	0.74	0.61	0.98	1.10	0.60	+ 1	− 7	−42	−19	+42	−24	+19	−52	+27	−35			0	1.72
94850	19 17 59.51	+34 45 53.0	8.36	H	289.497 950 85	+34.764 723 65		3.88	−1.55	−1.93	0.52	0.63	0.75	0.59	0.85	− 7	− 2	−17	+ 3	+ 5	+ 6	+ 8	+20	+ 1	−10			0	1.76
94851	19 18 00.66	−09 41 10.4	8.03	H	289.502 764 59	−09.686 226 81		3.91	12.84	9.39	0.84	0.50	0.98	0.87	0.58	+ 9	−25	−18	−22	+ 1	+13	+ 3	−38	+15	+16			2	−0.30
94852	19 18 00.85	+31 01 18.6	6.69	H	289.503 553 98	+31.021 840 29		3.22	10.19	9.39	0.39	0.52	0.63	0.48	0.68	−12	− 5	−29	− 5	+ 1	− 2	+ 1	+ 1	+18	−17			0	−1.08
94853	H 19 18 02.17	−25 04 19.9	8.79	G	289.509 047 01	−25.072 208 14	A	4.68	5.27	−20.71	4.43	2.83	2.66	2.85	1.77	+27	−12	−48	− 3	+28	−25	+ 7	−13	+27	−12			1	−0.08
94854	19 18 02.52	−01 00 32.0	8.35	H	289.510 500 38	−01.008 895 71		−0.50	13.41	−13.97	1.06	0.71	1.23	1.32	1.05	+19	−12	+ 6	+ 1	+16	+23	+21	− 7	+19	+56			2	1.48
94855	H 19 18 05.54	−15 57 13.5	7.81	2 H	289.523 085 37	−15.953 738 05	A	4.88	9.02	−1.19	3.16	1.89	2.66	2.87	1.89	+17	−12	+ 6	−17	+11	+13	+14	−30	− 7	− 9			4	1.26
94856	H 19 18 06.36	−05 24 54.1	9.92	H	289.526 510 40	−05.415 015 70	A	8.34	−17.50	−47.96	6.04	4.10	5.83	5.64	4.01	+31	−10	+ 7	−10	+ 2	+34	− 1	−18	− 5	+22			11	3.36
94857	19 18 07.11	−05 25 24.3	7.40	G	289.529 611 01	−05.423 421 69		−0.30	0.13	−5.84	0.86	0.55	0.99	0.87	0.60	+ 8	−27	− 3	−17	+12	+16	+10	−21	+11	+12			0	−0.52
94858	19 18 09.76	−53 23 12.8	6.36	H	289.540 653 61	−53.386 888 37		21.94	24.65	−81.41	0.63	0.52	0.75	0.87	0.75	+22	−13	− 4	+11	+12	+ 3	+18	−18	− 2	+37			4	−1.81
94859	19 18 10.94	−18 51 49.6	7.00	G	289.545 592 91	−18.863 768 11		0.95	0.36	−15.58	0.86	0.54	0.93	0.83	0.52	− 1	−41	−27	+ 9	+13	−12	+ 2	−20	+16	−14			0	1.22
94860	19 18 11.66	+60 57 35.9	7.14	H	289.548 580 09	+60.959 982 84		4.52	2.91	22.01	0.54	0.56	0.57	0.55	0.67	+ 1	− 2	+24	+20	+20	− 7	+28	+12	+ 7	+17			0	1.94
94861	19 18 11.72	+24 24 54.6	7.21	G	289.548 835 08	+24.415 160 76		8.07	86.95	160.84	0.45	0.54	0.86	0.55	0.69	−25	+ 5	−14	−23	−14	+14	−16	−11	− 5	−16			0	−0.08
94862	19 18 12.12	+34 08 10.2	8.35	2 H	289.550 486 71	+34.136 171 82		2.62	13.58	−10.44	0.60	0.67	0.83	0.67	0.89	−11	− 6	−11	+20	+ 4	−17	+ 5	+25	− 2	−17			0	−0.42
94863	19 18 12.57	−38 23 03.6	8.46	2 H	289.552 367 01	−38.384 345 13		24.00	99.53	−93.00	1.17	0.56	1.17	1.37	0.80	+ 8	−47	+ 7	+23	+21	+ 2	+13	−19	− 2	− 5			0	−0.31
94864	19 18 13.61	−42 08 49.3	9.84	H	289.556 717 55	−42.147 030 97		1.76	−6.65	6.68	1.50	0.90	1.64	2.36	1.31	+ 5	−16	−25	+27	+10	−13	−18	−32	+28	−44			2	−0.56
94865	19 18 16.28	+53 27 24.8	8.40	H	289.567 829 86	+53.456 878 54		3.65	2.55	5.57	0.62	0.54	0.63	0.66	0.66	+ 6	−21	− 4	− 8	+11	+ 7	+13	+10	− 8	+13			0	0.50
94866	H 19 18 18.67	−55 26 39.5	8.02	H	289.577 810 37	−55.444 302 90	A	3.82	−7.36	−34.78	2.00	1.62	2.11	2.27	1.59	+21	−19	−21	−11	+12	− 9	+ 2	−35	+ 4	+10			5	−0.05
94867	19 18 19.64	+31 58 01.0	8.43	H	289.581 824 74	+31.966 937 15		3.68	−8.94	3.02	0.58	0.69	0.87	0.69	0.88	−11	+ 5	−20	+28	− 3	− 1	− 4	+20	+ 2	−15			0	0.04
94868	19 18 20.22	−58 52 27.2	7.91	G	289.584 263 45	−58.874 232 68		4.42	6.67	−28.59	0.66	0.52	0.97	0.77	0.61	+ 5	−19	−16	+36	−16	+ 1	− 5	−16	− 4	+23			0	−0.02
94869	19 18 20.69	+66 24 47.7	11.40	3 H	289.586 217 14	+66.413 253 38		1.31	−16.09	29.97	1.35	1.16	1.36	1.05	1.38	− 5	−15	+ 3	−63	+19	+18	+ 6	+ 2	+28	+23			0	−2.22
94870	19 18 22.61	+12 09 41.7	9.01	H	289.594 199 07	+12.161 587 00		2.93	13.85	−6.44	0.98	0.85	1.25	1.14	1.05	+ 2	− 4	−25	−22	− 5	+31	+ 1	− 8	+10	+17			0	−2.15
94871	19 18 22.75	+14 28 27.1	7.49	H	289.594 795 48	+14.474 195 72		5.96	12.32	38.26	0.65	0.78	1.17	0.79	0.93	+12	− 5	−45	+13	−36	+37	−24	+29	−29	−16			0	1.15
94872	19 18 23.18	+53 23 35.9	8.18	H	289.596 565 88	+53.393 307 42		2.66	0.48	11.31	0.60	0.58	0.63	0.62	0.68	+ 8	−21	− 5	− 9	+13	+ 4	+12	+25	− 6	+14			0	0.81
94873	19 18 23.27	+05 07 51.6	7.15	H	289.596 966 45	+05.130 998 92		16.11	64.47	18.64	0.70	0.50	0.82	0.80	0.53	+ 9	−23	− 5	+ 1	+ 7	− 3	+ 0	−32	+13	− 1			2	−0.19
94874	19 18 24.31	+48 33 17.1	8.73	H	289.601 277 17	+48.554 742 10		2.36	3.08	3.71	0.73	0.77	0.83	0.83	1.04	+ 3	+ 7	+ 4	+ 3	+ 0	− 7	− 4	+23	− 8	+18			3	−0.42
94875	19 18 27.11	+29 57 24.6	7.87	H	289.612 947 74	+29.956 829 41		1.53	0.39	−4.06	0.51	0.66	0.84	0.59	0.83	−11	−12	−15	+24	+ 3	−26	− 1	+18	+ 9	−24			0	0.44
94876	19 18 28.19	+26 03 25.6	7.54	H	289.617 475 90	+26.057 111 70		1.00	0.43	−3.58	0.40	0.56	0.77	0.44	0.62	−24	+ 0	−20	+22	+14	−12	+12	−24	+12	−25			0	−0.09
94877	19 18 28.70	+33 56 44.4	7.41	H	289.619 577 52	+33.945 660 39		7.24	−81.43	−5.49	0.51	0.53	0.67	0.56	0.70	− 3	− 7	−16	+20	+12	−14	+13	+21	+ 3	− 9			1	−1.24
94878	19 18 29.39	−39 13 45.0	9.03	H	289.622 466 22	−39.229 164 61		1.00	2.49	−0.71	1.43	0.76	1.49	2.02	1.21	+11	−29	+ 4	+ 6	+17	− 8	− 1	−44	+ 9	−22			0	1.12
94879	19 18 29.85	−18 41 48.6	7.48	G	289.624 367 34	−18.696 834 57		5.86	20.15	4.71	0.89	0.56	0.94	0.88	0.53	− 5	−32	−23	+13	+ 7	− 4	+ 4	−20	+ 7	− 8			0	0.38
94880	19 18 30.13	+50 13 39.5	7.51	G	289.625 525 86	+50.227 626 84		1.20	−4.99	−3.80	0.56	0.55	0.62	0.69	0.73	+ 4	−23	− 7	−13	− 2	− 2	− 7	− 2	+12	+24			0	0.44
94881	19 18 30.25	+17 44 09.7	9.33	H	289.626 059 33	+17.736 039 79		2.68	0.75	−6.55	0.93	0.86	1.33	1.34	1.03	+55	−30	−19	+22	− 9	+16	−21	−30	+17	+31			0	−1.81
94882	19 18 30.43	−65 38 56.6	9.07	H	289.626 798 37	−65.649 052 28		2.49	10.68	−9.87	0.86	0.89	1.37	0.86	0.93	− 7	−10	−23	− 6	−28	+ 3	−33	−14	+13	−41			0	−0.81
94883	19 18 31.27	+00 25 24.2	6.72	H	289.630 301 10	+00.423 384 24		9.87	28.98	33.02	0.76	0.52	0.85	0.90	0.62	+ 1	− 6	−15	−21	+12	− 4	+ 9	−32	+10	−15			0	1.23
94884	19 18 31.37	+16 41 51.9	7.48	H	289.630 717 89	+16.697 762 38		6.54	3.32	−27.10	0.62	0.59	0.90	0.77	0.70	+40	−16	−18	+13	−18	+12	−25	−22	+13	+16			2	0.04
94885	H 19 18 32.49	+01 05 06.3	5.10	H	289.635 370 19	+01.085 085 48	A	8.56	11.24	17.87	0.79	0.52	0.80	0.77	0.53	+ 3	−30	−10	−25	+14	+15	+14	−10	+ 7	+10			2	0.88
94886	19 18 33.54	−78 48 40.1	9.26	H	289.639 734 69	−78.811 128 80		11.31	5.08	−16.21	0.81	0.79	1.08	0.94	0.99	+10	−28	− 2	+ 1	− 5	+ 0	−11	− 8	+21	+ 9			0	1.00
94887	19 18 33.94	+50 52 26.7	8.37	H	289.641 397 62	+50.874 090 64		2.84	1.60	32.05	0.69	0.76	0.80	0.96	1.01	+ 7	−11	−17	+11	−10	+10	− 8	+ 4	+11	+26			2	−0.02
94888	H 19 18 35.88	+53 58 05.7	8.02	H	289.649 512 15	+53.968 258 50	A	4.45	−2.02	0.75	1.09	0.92	0.94	1.08	1.09	+ 7	− 2	+ 6	−15	+ 3	− 7	− 5	+21	− 3	+26			0	0.02
94889	19 18 37.77	+23 51 22.9	8.58	H	289.657 355 76	+23.856 359 47		6.36	−17.46	19.36	0.55	0.71	1.08	0.69	0.95	−27	+ 4	− 9	+ 1	− 5	+19	− 4	+ 2	−11	−26			0	0.85
94890	19 18 37.85	+49 34 09.6	6.32	H	289.657 718 14	+49.569 347 00		7.89	21.18	44.91	0.46	0.47	0.52	0.53	0.63	+ 4	−17	+ 3	− 7	− 2	− 7	+ 4	− 7	+10	+25			1	−0.19
94891	19 18 38.15	−35 11 45.5	9.37	H	289.658 941 89	−35.195 979 21		1.99	5.94	5.34	1.76	1.24	1.89	2.50	1.38	− 2	−29	−26	+18	+20	−29	+ 6	−15	+ 8	−20			0	0.67
94892	H 19 18 38.58	−50 36 41.4	9.50	H	289.660 733 93	−50.611 506 86	B	1.85	6.44	−19.00	6.06	4.56	3.27	3.66	3.26	+71	− 2	− 1	− 3	+ 1	+ 5	+ 1	− 9	+21	+10			2	0.49
94893	19 18 39.13	−40 40 05.1	10.99	2 H	289.663 033 47	−40.668 089 82		4.59	7.08	−4.71	2.56	1.66	3.43	4.10	2.26	+34	−33	−49	+12	+32	−55	−20	−63	+43	−31			0	−0.50
94894	19 18 39.40	+15 40 50.4	7.95	H	289.664 149 93	+15.680 658 31		4.17	1.99	−14.83	0.66	0.64	0.97	0.70	0.69	+17	−16	−22	+ 6	−11	+22	− 8	− 9	+ 1	+ 7			0	−0.56
94895	19 18 39.43	−61 20 36.9	8.88	H	289.664 282 61	−61.343 587 65		1.36	57.19	−24.17	1.06	0.76	1.26	1.44	0.89	+ 2	−19	+ 9	+16	−18	−22	− 7	−20	− 8	+26			2	1.01
94896	19 18 40.87	+52 14 50.6	7.88	G	289.670 276 93	+52.247 384 04	

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
94801	8.972	0.012	7.935	0.009		0.902	0.011	T	0.90	0.01	L	8.0084	0.0012	0.012	109		7.98	8.03					1							S
94802	7.955	0.008	7.149	0.006		0.729	0.008	T	0.78	0.01	L	7.2178	0.0009	0.008	121		7.20	7.23		C			1 X S							S
94803	9.489	0.018	7.819	0.009		1.396	0.016	T	1.37	0.02	L	7.7987	0.0009	0.011	101		7.79	7.82		C			1							
94804	9.241	0.019	8.049	0.012		1.021	0.018	T	0.99	0.01	L	8.1253	0.0020	0.016	76		8.10	8.16		C			1							
94805	9.214	0.020	8.984	0.023		0.219	0.029	T	0.24	0.03	L	9.0799	0.0030	0.019	63		9.04	9.11		C			1							
94806	10.021	0.029	9.613	0.031		0.386	0.039	T	0.45	0.04	L	9.6759	0.0037	0.022	79		9.63	9.71		C			1 S							G
94807	8.712	0.009	8.697	0.011		0.019	0.013	T	0.04	0.01	L	8.7023	0.0030	0.027	153		8.67	8.75		U 2			1							
94808	9.894	0.021	8.393	0.011		1.263	0.019	T	1.22	0.02	L	8.4090	0.0014	0.015	131		8.38	8.44					1							
94809	9.638	0.019	9.348	0.023		0.276	0.028	T	0.31	0.04	L	9.3951	0.0018	0.024	130		9.35	9.44					1 S							
94810	7.648	0.004	7.589	0.006		0.059	0.007	T	0.07	0.01	L	7.6116	0.0010	0.013	261		7.59	7.64					1 G							S
94811	10.641	0.049	8.792	0.018		1.537	0.041	T	1.59	0.09	L	8.7295	0.0024	0.014	81		8.70	8.75					1							
94812	7.105	0.005	6.912	0.005		0.185	0.007	T	0.20	0.01	L	6.9504	0.0008	0.008	135		6.93	6.97					1							S
94813	8.639	0.010	7.377	0.006		1.075	0.009	T	1.04	0.01	L	7.4273	0.0013	0.010	120		7.41	7.44		C			1							S
94814	9.513	0.017	7.750	0.008		1.469	0.015	T	1.48	0.02	L	7.6241	0.0031	0.027	90		7.58	7.66		U 2			1 S							S
94815	10.908	0.060	10.549	0.076		0.340	0.090	T	0.40	0.12	L	10.7377	0.0035	0.028	82		10.70	10.79		C			1 S							G
94816	10.219	0.028	8.795	0.015		1.202	0.025	T	1.16	0.03	L	8.7936	0.0015	0.013	111		8.77	8.82					1							
94817	10.485	0.024	9.757	0.020		0.647	0.003	G	0.71	0.00	H	9.8420	0.0028	0.034	190		9.76	9.91					1							
94818	8.925	0.019	8.565	0.020		0.350	0.024	T	0.41	0.03	L	8.6153	0.0035	0.021	54		8.58	8.64					1							
94819	8.527	0.012	8.121	0.012		0.415	0.015	G	0.48	0.02	H	8.1683	0.0020	0.014	77		8.14	8.19					1							S
94820	6.171	0.005	4.995	0.003		1.013	0.025	G	0.99	0.03	C	5.0469	0.0006	0.005	61		5.04	5.06					1 S							S
94821	10.885	0.067	9.392	0.030		1.256	0.058	T	1.21	0.06	L	9.4253	0.0026	0.020	59		9.39	9.45		C			1							
94822	6.926	0.017	6.848	0.018		0.070	0.022	T	0.08	0.02	L	6.8538	0.0048	0.151	121		6.82	7.64	4.48	P 1 A			1 V							S
94823	6.885	0.006	6.637	0.006	*	0.242	0.015	G	0.27	0.02	H	* 6.6903	0.0012	0.009	91	*	6.68	6.72		U 2	19177−1558	I 1	2 C A	AB	16	8.377	0.004	0.81	0.03	S
94824	9.367	0.018	9.018	0.019		0.331	0.024	T	0.39	0.03	L	9.0201	0.0086	0.111	77		8.96	9.27	4.81	P 1 A			1 S							
94825	9.630	0.026	9.064	0.025		0.570	0.020	G	0.64	0.02	H	9.1349	0.0026	0.017	60		9.12	9.17		C			1							
94826	9.392	0.017	9.095	0.019		0.282	0.024	T	0.32	0.03	L	9.1315	0.0026	0.024	84		9.09	9.16		C			1							
94827	5.464	0.003	5.476	0.003	A	0.020	0.003	G	0.04	0.00	H	* 5.4586	0.0013	0.012	132	*	5.44	5.48		U 2	19177+2302	I 1	2 C A	AB	127	1.748	0.012	3.55	0.06	S
94828	8.634	0.008	8.467	0.009		0.160	0.011	T	0.18	0.01	L	8.5036	0.0014	0.018	224		8.47	8.54		C			1							
94829	9.038	0.013	8.786	0.014		0.240	0.018	T	0.27	0.02	L	8.8403	0.0019	0.017	109		8.82	8.88					1							
94830	7.956	0.008	7.620	0.009		0.319	0.011	T	0.37	0.01	L	7.6581	0.0015	0.015	106		7.62	7.68		U			1							S
94831	9.251	0.018	8.821	0.019		0.427	0.015	G	0.49	0.02	H	8.8839	0.0027	0.015	72		8.86	8.92		C			1							
94832	11.225	0.057	10.195	0.037		0.897	0.051	T	0.94	0.05	L	10.3590	0.0030	0.028	110		10.31	10.41		C			1							G
94833	6.213	0.003	6.184	0.004		0.019	0.002	G	0.04	0.00	H	6.2013	0.0009	0.006	92		6.19	6.21		C			1							S
94834	5.523	0.003	5.318	0.003		0.196	0.004	T	0.21	0.01	L	5.3490	0.0007	0.005	84		5.34	5.36		C			1							S
94835	7.711	0.007	7.647	0.008	*	0.050	0.015	G	0.06	0.01	H	* 7.6722	0.0014	0.011	103	*	7.66	7.70		C	19178+5950	H 1	2 C S A	AB	3	0.111	0.009	1.15	0.61	S
94836	8.832	0.010	8.421	0.010		0.402	0.012	T	0.47	0.01	L	8.4745	0.0013	0.017	158		8.45	8.51					1							S
94837	9.533	0.015	7.843	0.008		1.412	0.013	T	1.39	0.02	L	7.7455	0.0014	0.016	132		7.71	7.77		U			1 S							S
94838	9.717	0.016	9.430	0.019		0.273	0.023	T	0.31	0.03	L	9.4871	0.0028	0.032	134		9.43	9.53					1							G
94839	8.067	0.019	8.118	0.024		−0.060	0.002	G	−0.04	0.00	H	8.1086	0.0018	0.014	82		8.09	8.13		C	19178−1655	I 1	1							S
94840	10.450	0.038	9.669	0.031		0.624	0.015	G	0.69	0.01	H	9.7606	0.0027	0.026	138		9.71	9.83		C			1							G
94841	10.481	0.040	9.037	0.020		1.218	0.035	T	1.18	0.03	L	9.0507	0.0025	0.017	93		9.02	9.09					1							
94842	9.171	0.009	8.381	0.007		0.680	0.015	G	0.74	0.01	H	8.4417	0.0011	0.017	257		8.41	8.48		C	19179+2523	I 1	1							
94843	9.978	0.021	8.082	0.009		1.575	0.018	T	1.59	0.02	L	8.0344	0.0012	0.011	107		8.01	8.05		C			1							
94844	8.730	0.018	8.357	0.018		0.339	0.003	G	0.40	0.00	H	8.3960	0.0019	0.012	55		8.36	8.41		C			1							
94845	10.579	0.061	9.471	0.038		0.955	0.056	T	0.94	0.04	L	9.4836	0.0029	0.021	59		9.45	9.51		C			1							
94846	7.657	0.008	7.370	0.008		0.290	0.015	G	0.33	0.02	H	7.3955	0.0016	0.012	96		7.38	7.42		C	19180−0057	I 1	1							S
94847	8.446	0.008	8.114	0.008	*	0.315	0.010	T	0.36	0.01	L	* 8.1656	0.0016	0.014	140	*	8.13	8.19			19180+2012	I 1	2 C S B	BA	336	0.126	0.019	0.00	1.36	
94848	10.685	0.047	10.147	0.046		0.504	0.059	T	0.58	0.06	L	10.1972	0.0027	0.024	99		10.14	10.26		C			1 S							G
94849	7.147	0.006	7.255	0.007		−0.085	0.003	G	−0.07	0.00	H	7.2433	0.0010	0.009	95		7.22	7.26		C			1							S
94850	8.342	0.008	8.358	0.010		−0.010	0.012	T	0.01	0.01	L	8.3679	0.0020	0.017	139		8.34	8.40					1							
94851	8.594	0.011	8.086	0.010		0.477	0.013	T	0.55	0.01	L	8.1337	0.0011	0.011	121		8.11	8.15		C			1							S
94852	6.812	0.004	6.699	0.005		0.102	0.006	T	0.12	0.01	L	6.7302	0.0009	0.007	119		6.72	6.74		C			1							S
94853	9.127	0.021	8.837	0.024	*	0.304	0.020	G	0.35	0.03	H	* 8.8674	0.0021	0.012	54	*	8.84	8.92			19180−2504	H 1	2 C B	AB	88	0.443	0.068	2.82	0.24	
94854	10.651	0.053	8.590	0.017		1.746	0.020	G	1.73	0.02	J	8.4569	0.0020	0.015	90		8.43	8.48		C			1							
94855	7.791	0.012	7.739	0.015	*	0.047	0.017	T	0.06	0.01	L	* 7.8356	0.0024	0.020	89	*	7.82	7.89		U 2	19181−1557	I 1	2 C A	AB	196	4.957	0.008	0.28	0.02	S
94856	11.004	0.060	10.325	0.052	A			T	*			10.0576	0.0058	0.047	106	*	9.93	10.15		D	19181−0525	I 2	2 C A	AD	215	1.021	0.027	0.83	0.10	G
94857	10.021	0.025	7.811	0.009		1.276	0.218	G	1.95	0.07	M	7.6748	0.0016	0.015	104		7.65	7.71		D	19181−0525	I 2	1							S
94858	6.949	0.005	6.420	0.004		0.505	0.005	T	0.58	0.01	L	6.4735	0.0009	0.007	76		6.46	6.49		C			1							S
94859	6.959	0.006	6.984	0.008		−0.030	0.001	G	−0.01	0.00	H	6.9988	0.0016	0.008	64		6.99	7.01			19182−1852	I 1	1							S
94860	7.030	0.005	7.121	0.005		−0.078	0.006	T	−0.06	0.01	L	7.1150	0.0014	0.012	102		7.10	7.13					1							S
94861	8.626	0.007	7.340	0.005		1.085	0.005	G	1.05	0.00	H	7.3802	0.0008	0.011	221		7.36	7.40		C			1							S
94862	9.787	0.020	8.470	0.011		1.118	0.018	T	1.08	0.02	L	8.5193	0.0057	0.047	132		8.45	8.59		U 2			1							
94863	9.436	0.020	8.505	0.015		0.809	0.019	T	0.84	0.01	L	8.6006	0.0032	0.028	108		8.56	8.66		U 2 C			1							
94864	11.028	0.060	9.891	0.036		0.970	0.055	T	0.95	0.04	L	9.9831	0.0026	0.023	85		9.92	10.03					1							G
94865	8.443	0.012	8.404	0.014		0.040	0.015	G	0.06	0.01	H	8.4186	0.0014	0.014	116		8.40	8.44		C			1							
94866	9.637	0.023	8.175	0.013	A	1.200	0.495	G	1.19	0.04	L	* 8.1793	0.0024	0.016	79	*	8.15	8.20			19183−5527	I 1	2 C B	AB	31	1.462	0.055	3.31	0.20	
94867	9.764	0.017	8.551	0.011		1.096	0.015	G	1.06	0.02	H	8.6003	0.0013	0.013	138		8.57	8.62					1							
94868	8.145	0.008	7.946	0.009		0.233	0.006	G	0.26	0.01	H	7.9715	0.0014	0.010	113		7.96	7.99		C			1							S
94869	11.345	0.086	10.933	0.101		0.389	0.123	T	0.45	0.14	L	11.4852	0.0760	0.485	92		10.51	11.78	0.59	P 1 A			1							G
94870	10.521	0.033	9.168	0.018		1.147	0.029	T	1.11	0.03	L	9.1817	0.0016	0.018	84		9.15	9.21		C			1							
94871	8.859	0.013	7.603	0.008		1.080	0.015	G	1.04	0.01	H	7.6536	0.0007	0.008	75		7.64	7.67					1							
94872	8.207	0.010	8.194	0.012		0.017	0.014	T	0.04	0.01	L	8.1929	0.0012	0.012	117		8.17	8.22		C			1							S
94873	7.702	0.007	7.209	0.007		0.490	0.004	G	0.56	0.00	H	7.2583	0.0012	0.011	96		7.24	7.28					1							S
94874	8.791	0.012	8.756	0.015		0.037	0.018	T	0.05	0.01	L	8.7533	0.0017	0.016	91		8.73	8.78		C			1							S
94875	7.834	0.006	7.879	0.009		−0.030	0.015	G	−0.01	0.01	H	7.8732	0.0012	0.015	137		7.85	7.91					1							S
94876	7.474	0.004	7.531	0.006		−0.047	0.007	T	−0.03	0.01	L	7.5348	0.0010	0.013	206		7.51	7.56					1							S
94877	8.510	0.009	7.517	0.007		0.869	0.008	T	0.88	0.01	L	7.5696	0.0014	0.010	125		7.55	7.59					1							S
94878	11.285	0.083	9.231	0.022		1.738	0.071	T	2.15	0.14	O	9.0980	0.0018	0.017	97		9.06	9.13		C			1							
94879	7.855	0.009	7.509	0.011		0.328	0.013	T	0.38	0.02	L	7.5597	0.0010	0.009	69		7.54	7.57		C			1							S
94880	9.587	0.018	7.691	0.008		1.600	0.015	G	1.61	0.09	H	7.6291	0.0017	0.013	116		7.61	7.66					1							S
94881	9.830	0.018	9.399	0.019		0.407	0.024	T	0.47	0.03	L	9.4238	0.0018	0.017	142		9.40	9.45		C			1							G
94882	10.975	0.048	9.234	0.018		1.452	0.041	T	1.45	0.07	L	9.2021	0.0025	0.024	139		9.17	9.25		C			1							
94883	7.201	0.005	6.776	0.006		0.401	0.007	T	0.47	0.01	L	6.8162	0.0012	0.008	85		6.80	6.83		C	19187+0023	I 2	1							S
94884	7.781	0.006	7.506	0.007		0.234	0.010	G	0.26	0.01	H	7.5478	0.0008	0.008	133		7.53	7.56		C			1							S
94885	6.530	0.007	5.207	0.004	*	1.143	0.005	G	1.11	0.03	C	* 5.2688	0.0007	0.006	99	*	5.26	5.28		D	19185+0105	I 1	2 C A	AB	4	3.254	0.008	3.45	0.05	S
94886	9.954	0.020	9.287	0.018		0.608	0.020	T	0.68	0.02	L	9.3857	0.0022	0.022	130		9.35	9.43		C			1							
94887	10.184	0.026	8.505	0.012		1.403	0.023	T	1.38	0.03	L	8.5163	0.0020	0.017	110		8.49	8.55					1							
94888	8.321	0.009	8.090	0.010	*	0.220	0.012	T	0.24	0.01	L	* 8.0895	0.0011	0.012	111	*	8.07	8.11		D	19186+5358	I 1	2 C A	AB	252	0.730	0.003	1.21	0.02	S
94889	9.021	0.009	8.619	0.010		0.391	0.015	G	0.46	0.02	H	8.6671	0.0015	0.017	199		8.63	8.70					1							
94890	7.768	0.008	6.445	0.004		1.123	0.007	T	1.09	0.01	L	6.4863	0.0009	0.008	112		6.47	6.50					1							S
94891	10.810	0.100	9.488	0.055		1.122	0.089	T	1.08	0.09	L	9.5428	0.0039	0.020	39		9.51	9.59					1							
94892	9.504	0.048	8.894	0.040	*	0.566	0.046	T	0.64	0.04	L	* 9.6182	0.0034	0.025	70	*	9.58	9.65		D	19186−5037	I 1	2 C A	BA	261	1.537	0.012	0.02	0.03	
94893	11.189	0.069	10.971	0.096		0.134	0.100	G	0.15	0.10	R	11.0407	0.0051	0.043	109		10.92	11.12		U			1							G
94894	7.995	0.009	7.958	0.011		0.039	0.013	T	0.05	0.01	L	7.9660	0.0009	0.012	99		7.95	7.99					1							S
94895	10.080	0.030	8.988	0.021		0.944	0.028	T	0.93	0.02	L	9.0404	0.0025	0.020	79		9.01	9.08		C			1							
94896	9.318	0.018	8.002	0.011		1.120	0.015	G	1.08	0.02	H	8.0619	0.0014	0.014	94		8.04	8.09					1							
94897	11.019	0.058	9.224	0.022		1.525	0.051	T	2.59	0.08	O	8.9871	0.0040	0.039	93		8.92	9.05		U 2			1 S							
94898	10.507	0.039	9.523	0.027		0.850	0.037	T	0.86	0.03	L	9.6330	0.0018	0.019	118		9.60	9.67					1							
94899	6.585	0.005	6.777	0.005		−0.165	0.005	G	−0.17	0.01	H	6.7490	0.0007	0.007	113		6.74	6.76			19187−5609	I 1	1 S							S
94900	10.989	0.057	9.119	0.021		1.554	0.048	T	1.57	0.05	L	9.0969	0.0031	0.022	82		9.06	9.13					1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%		
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
94901	19 18 42.83	+57 00 51.7	8.24	H	289.678 442 21	+57.014 369 85		5.59	15.85	−0.33	0.62	0.56	0.62	0.67	0.68	+15	− 8	+10	+23	+ 2	− 5	+ 7	− 6	− 2	+31		0	1.59
94902	19 18 43.25	−39 32 51.5	7.43	G	289.680 226 51	−39.547 640 67		16.37	44.19	−83.05	0.98	0.52	1.02	1.38	0.80	+ 4	−42	− 5	+ 3	+13	− 9	− 4	−41	+ 8	−34		2	−0.63
94903	19 18 43.70	+30 55 51.7	8.88	H	289.682 073 25	+30.931 026 44		0.32	−5.46	−4.07	0.64	0.76	1.00	0.79	1.01	−11	+ 6	−16	+12	+ 2	− 5	+ 2	+10	+16	−24		0	−1.74
94904	19 18 44.83	+32 13 32.4	9.28	H	289.686 802 22	+32.225 672 78		3.30	−0.95	−3.07	0.75	0.88	1.06	0.83	1.11	− 1	+ 2	−14	+38	+ 1	−14	− 1	+30	− 7	+ 1		0	−3.07
94905	19 18 45.18	+16 29 18.2	7.01	H	289.688 250 89	+16.488 389 11		27.40	−29.40	−10.49	0.57	0.55	0.84	0.64	0.61	+26	−16	−22	+ 8	−20	+ 7	−27	−22	+ 0	− 5		0	−1.24
94906	19 18 45.48	−44 17 48.8	8.95	H	289.689 482 93	−44.296 883 58		6.08	3.91	−4.52	1.32	0.91	1.42	1.76	0.93	+24	−29	− 8	+ 2	−10	− 9	−16	−46	−10	− 2		0	0.84
94907	19 18 46.16	+13 04 06.1	8.62	H	289.692 328 08	+13.068 351 40		0.78	2.52	−6.33	0.72	0.71	1.07	0.76	0.88	+24	−15	− 9	+21	−35	+ 6	−40	+ 5	−13	− 2		0	−0.52
94908 H	19 18 47.19	−05 46 20.6	7.98	G	289.696 637 38	−05.772 401 76	A	3.34	6.63	−19.25	1.10	0.68	1.14	1.12	0.74	+24	−46	+ 2	− 4	+14	+ 1	+ 6	−10	+14	+29		0	−0.43
94909	19 18 47.60	−35 24 24.4	9.77	H	289.698 353 48	−35.406 766 51		1.11	1.13	−0.22	1.98	1.27	2.01	2.48	1.34	+ 9	−40	−19	+36	+ 9	−14	+ 2	− 2	− 6	−13		3	−1.38
94910	19 18 48.41	+19 36 37.7	6.50	3 H	289.701 701 05	+19.610 475 66		3.22	−0.29	0.44	0.46	0.50	0.74	0.54	0.58	+25	−33	−22	+ 5	+ 1	+ 7	− 1	− 3	+10	+23		1	1.96
94911 H	19 18 48.90	+17 36 22.8	8.79	H	289.703 738 36	+17.606 337 94	*	5.02	2.02	10.64	0.84	0.80	1.23	1.32	0.99	+53	−15	− 9	+21	−12	+24	−23	−32	+21	+32		0	1.82
94912	19 18 49.83	+36 02 08.8	8.46	H	289.707 631 00	+36.035 787 04		2.35	−4.01	−24.32	0.64	0.75	0.87	0.72	1.05	+ 8	+ 0	+ 1	+ 5	− 2	−14	− 3	+11	− 4	+19		0	−0.82
94913	19 18 50.93	+00 20 20.4	6.40	H	289.712 224 80	+00.339 001 38		6.68	16.97	9.21	0.76	0.51	0.86	0.92	0.63	− 1	−10	−17	−22	+10	− 3	+ 8	−32	+13	−12		0	0.50
94914 H	19 18 52.28	−28 13 49.8	8.32	H	289.717 813 02	−28.230 510 16	A	4.36	−0.41	−12.15	1.80	1.36	1.82	1.74	1.14	+35	−12	−42	−23	−14	+12	−11	−32	− 3	+29		2	1.01
94915 H	19 18 52.46	+76 47 33.0	7.23	H	289.718 594 68	+76.792 507 28	A	3.65	−9.62	4.48	0.74	0.68	0.67	0.83	0.79	+11	−13	+ 1	−22	−11	+12	−11	−14	−10	+31		1	1.31
94916	19 18 52.75	+09 37 05.4	6.31	H	289.719 798 20	+09.618 161 61		6.31	2.86	−37.46	0.71	0.51	0.84	0.82	0.58	−11	−10	−16	−18	+ 4	+ 3	+ 0	−32	+11	−39		0	−2.19
94917	19 18 53.42	−03 46 30.9	7.96	H	289.722 584 72	−03.775 254 66		3.59	4.95	−12.28	0.84	0.57	1.04	1.11	0.84	+ 4	−29	− 5	−18	+11	+25	+ 4	−41	+14	−10		0	0.92
94918 H	19 18 54.11	+43 29 47.0	9.51	H	289.725 470 13	+43.496 391 61	A	7.24	27.39	−37.49	2.25	2.17	2.33	2.13	2.08	− 8	−22	+13	− 4	+20	+ 2	+25	−20	− 3	+14		5	1.63
94919	19 18 54.31	−22 06 13.1	8.05	H	289.726 292 81	−22.103 647 41		5.11	2.21	−1.38	0.88	0.58	1.04	1.14	0.62	− 2	− 5	−21	+18	− 9	+43	− 2	− 9	−22	−20		0	1.10
94920	19 18 55.56	+50 53 06.6	8.82	H	289.731 496 34	+50.885 170 37		2.05	18.85	21.03	0.78	0.81	0.87	1.03	1.08	+ 4	− 3	− 2	+ 6	− 7	+ 8	− 6	− 1	− 3	+19		0	−1.33
94921	19 18 55.98	+73 33 02.7	6.95	G	289.733 237 43	+73.550 744 72		8.87	13.30	62.46	0.51	0.46	0.52	0.53	0.48	− 3	−12	+ 3	− 5	+14	−21	+14	− 1	+ 4	+ 3		0	0.81
94922 H	19 18 56.53	+49 51 35.6	8.79	H	289.735 524 91	+49.859 885 52	A	17.91	16.37	−40.41	1.31	1.30	1.33	1.45	1.60	+ 5	−25	− 3	− 7	− 1	+10	− 3	− 7	+15	+20		1	0.47
94923	19 18 58.11	+40 21 37.6	6.88	H	289.742 115 39	+40.360 439 25		4.72	7.66	7.05	0.43	0.48	0.56	0.49	0.56	− 3	− 1	− 4	+ 5	+14	−15	+13	+13	+ 7	+ 7		0	0.33
94924 H	19 18 58.22	+39 16 01.8	7.92	G	289.742 595 18	+39.267 174 70	A	8.15	−6.53	−4.54	0.98	1.00	1.07	1.03	1.03	+15	−10	+ 1	+24	+ 1	−22	+ 7	+ 7	+ 8	+ 2		1	0.07
*94925	19 18 59.09	−10 55 47.6	8.25	H	289.746 227 82	−10.929 878 78		5.32	3.62	−8.95	0.81	0.46	0.98	0.84	0.54	+ 7	−26	− 2	−18	− 2	+10	− 4	−44	+11	+11		0	0.10
*94926 H	19 18 59.08	−33 16 40.8	6.94	G	289.746 167 31	−33.278 012 10	B	19.17	−32.17	−112.65	4.88	4.12	1.32	2.83	1.77	+29	− 3	− 7	+53	−22	− 2	−35	−14	− 3	− 7		4	0.70
94927	19 18 59.49	+44 33 43.8	8.60	H	289.747 885 14	+44.562 161 58		0.85	1.04	−1.50	0.61	0.58	0.70	0.57	0.62	+ 8	−12	+ 4	+ 6	+ 6	+ 3	+10	−10	− 3	+28		1	−0.55
94928	19 18 59.57	−27 04 07.8	9.69	H	289.748 205 96	−27.068 839 82		−2.26	0.29	2.32	1.78	1.21	2.09	1.88	1.16	+12	−43	−48	−22	+23	−18	+ 3	−44	+25	−15		0	−1.41
94929	19 19 00.15	−15 32 09.2	6.09	1 G	289.750 626 22	−15.535 885 80		6.31	−88.85	−281.33	0.74	0.48	0.80	0.82	0.63	+34	−23	+ 0	−26	−17	+ 6	−13	−44	−13	+31		0	−0.41
*94930	19 19 02.34	−85 10 52.4	10.07	H	289.759 752 42	−85.181 215 75		−3.12	5.27	−2.70	4.04	4.52	5.05	4.41	5.68	+ 0	−10	− 3	−12	− 8	− 2	−10	−21	− 7	−16		3	
*94931	19 19 00.47	+41 38 10.1	8.87	H	289.751 966 03	+41.636 139 32		28.28	97.77	−631.61	0.70	0.69	0.86	0.80	0.77	− 2	−14	− 8	− 1	+17	−18	+14	+ 3	+11	− 1		3	2.00
*94932	19 19 01.15	+37 26 43.1	6.25	H	289.754 785 26	+37.445 312 78		4.92	5.56	13.75	0.44	0.45	0.55	0.47	0.55	− 4	−10	+ 2	+20	+ 0	−15	+ 1	+18	+ 3	− 2		0	−1.54
94933	19 19 03.27	+30 14 35.2	10.56	H	289.763 605 63	+30.243 123 16		0.11	2.29	0.55	0.96	1.40	1.66	1.16	1.78	− 3	− 6	−30	+19	+ 2	− 7	+ 2	+32	− 9	−17		0	0.22
94934	19 19 03.75	+33 23 20.0	6.60	H	289.765 622 60	+33.388 893 52		1.76	−13.43	−34.16	0.44	0.46	0.58	0.50	0.63	+ 4	− 9	−16	+32	+ 4	− 4	+ 3	+27	+14	+ 3		0	0.53
94935	19 19 04.07	+18 46 06.0	8.89	H	289.766 945 31	+18.768 326 18		1.80	28.00	6.07	0.83	0.89	1.16	1.08	1.22	+30	− 6	+ 1	− 3	− 8	+16	− 6	−20	− 8	+39		0	−0.22
94936	19 19 05.03	+10 02 44.5	8.43	H	289.770 946 09	+10.045 704 65		0.92	1.25	−0.63	0.95	0.70	1.18	1.07	0.78	− 7	−27	−12	− 6	+ 1	− 3	− 7	−23	+16	−37		0	−2.11
94937	19 19 05.66	+27 15 40.7	6.77	2 H	289.773 572 47	+27.261 311 96		1.23	10.07	−5.73	0.43	0.52	0.72	0.54	0.61	−21	− 2	−17	+14	+ 2	− 6	+ 1	−13	+13	−21		2	−0.24
94938 H	19 19 07.09	−33 09 30.3	7.78	G	289.779 549 62	−33.158 411 08	A	15.06	125.91	−1.00	2.55	1.52	2.24	2.77	1.34	+18	−40	−39	+23	− 6	−12	−27	−19	+ 5	−26		3	−0.44
94939	19 19 08.93	−45 47 54.9	11.45	H	289.787 202 39	−45.798 576 53		22.61	36.38	−415.21	2.93	1.95	3.46	3.99	3.05	+26	−28	−12	−22	+22	+18	+20	−21	+23	+37		5	−0.77
94940	19 19 09.59	−15 54 30.0	6.86	2 H	289.789 948 95	−15.908 329 93		2.52	11.16	−5.11	0.76	0.50	0.82	0.80	0.59	+21	−39	−10	−15	+ 0	+10	+ 6	−25	−13	+13		0	1.51
94941	19 19 10.02	+02 13 57.2	8.71	1 H	289.791 744 98	+02.232 546 28		4.95	−1.37	−16.74	0.97	0.69	1.16	1.16	0.84	+13	−14	+ 1	−15	− 7	+19	− 5	−27	− 3	+29		0	1.70
94942	19 19 10.72	+26 55 55.4	7.37	H	289.794 671 89	+26.932 055 71		3.95	12.21	−14.56	0.42	0.54	0.74	0.55	0.66	−21	− 3	−25	+ 8	+ 4	−10	+ 0	−19	+18	−26		0	−1.38
94943	19 19 10.90	−72 38 58.8	7.83	H	289.795 424 44	−72.649 660 24		7.72	17.54	−25.73	0.46	0.59	0.79	0.50	0.72	−17	− 7	+ 5	+21	−18	+ 0	−21	+10	− 2	−24		0	1.03
94944	19 19 14.26	+15 24 59.0	8.32	G	289.809 402 11	+15.416 377 49		12.65	0.05	15.94	0.70	0.71	1.11	0.73	0.75	+19	−17	−28	− 7	− 8	+29	− 1	− 1	+ 5	+14		0	0.55
94945	19 19 15.63	+76 28 49.5	8.05	G	289.815 127 14	+76.480 427 53		12.44	18.27	67.69	0.71	0.58	0.71	0.94	0.73	+ 7	−32	−11	− 7	−11	+22	− 6	− 2	− 5	+21		2	1.84
94946	19 19 15.66	+09 04 50.3	8.15	H	289.815 259 96	+09.080 641 14		3.28	10.23	−7.95	0.96	0.66	1.09	1.00	0.72	− 7	− 6	− 1	−28	− 5	−12	− 8	−38	+ 3	−25		0	−0.23
94947	19 19 16.13	+23 18 14.8	7.62	H	289.817 206 37	+23.304 122 84		2.60	0.97	−7.36	0.50	0.53	0.75	0.67	0.74	− 2	−14	−14	+ 2	+ 7	+11	+ 9	+ 1	+ 1	− 4		1	−0.35
94948	19 19 16.18	−20 53 30.4	8.35	H	289.817 415 51	−20.891 774 82		0.54	−11.25	5.36	0.94	0.67	1.09	1.11	0.70	+20	−29	−29	+ 3	−17	+28	− 8	−17	−10	+ 1		0	0.17
94949	19 19 17.00	+14 10 39.2	7.51	H	289.820 851 69	+14.177 550 43		13.17	1.97	9.67	0.72	0.61	0.98	0.88	0.81	− 6	−20	− 6	+43	−25	+14	−30	+23	+ 5	−24		0	−1.80
94950	19 19 17.27	−58 43 18.7	8.40	H	289.821 939 82	−58.721 862 47		10.86	−1.36	−59.98	0.75	0.58	1.06	0.89	0.66	+ 3	−25	−11	+36	−18	−10	− 5	−18	−12	+22		0	−0.96
94951	19 19 17.69	−23 33 29.2	7.78	H	289.823 694 79	−23.558 106 27		8.73	35.39	−20.19	0.93	0.65	1.00	0.92	0.68	+13	−26	− 6	− 8	+ 4	+ 4	+ 9	−25	− 5	+33		0	0.45
94952	19 19 18.70	+40 36 08.2	9.17	H	289.827 923 72	+40.602 282 12		1.64	4.36	9.91	0.73	0.75	0.90	0.77	0.82	− 9	+ 3	−13	+ 3	+ 7	−14	+ 6	+ 1	+ 1	+ 2		1	0.31
94953	19 19 19.24	−43 06 20.0	10.40	G	289.830 164 62	−43.105 558 45		3.49	2.52	8.03	2.10	1.18	2.13	2.15	1.26	+42	−60	−35	+23	− 8	− 6	−16	−33	+ 0	+10		0	−2.21
94954	19 19 19.55	+07 08 37.1	7.75	H	289.831 456 30	+07.143 630 98		7.01	9.10	16.14	0.89	0.63	1.04	0.93	0.65	− 4	−27	+ 2	−15	−14	− 3	−15	−37	− 5	−24		0	−0.54
94955	19 19 21.19	−07 01 13.8	8.76	H	289.838 307 07	−07.020 489 27		1.68	−7.37	−13.23	1.01	0.63	1.11	1.12	0.82	− 9	− 9	− 6	−22	+19	+20	+25	−28	+14	+25		0	0.35
94956	19 19 21.83	−36 53 40.0	6.91	H	289.840 949 57	−36.894 439 51		8.04	−127.83	−36.01	0.95	0.59	0.91	1.28	0.68	− 1	−28	−22	+39	+10	− 7	− 1	+ 6	+ 7	−27		0	0.23
94957	19 19 22.94	−60 51 00.1	8.82	H	289.845 587 16	−60.850 021 53		6.55	−11.26	16.34	0.85	0.69	1.16	0.98	0.79	−16	−16	+ 1	+33	−20	− 2	−13	− 1	− 3	+ 4		0	0.57
94958	19 19 25.66	−29 01 15.7	8.11	H	289.856 922 14	−29.021 026 26		12.86	−140.26	−1.71	1.14	0.73	1.21	1.08	0.68	+30	−54	−24	+ 7	−14	+12	−14	−21	+ 5	+ 9		0	0.32
94959	19 19 26.19	+19 43 06.2	8.20	H	289.859 127 91	+19.718 385 94	A	2.81	−3.93	−3.56	1.57	1.63	1.90	1.63	1.77	+26	−33	− 9	−17	+ 1	+24	− 7	− 3	+22	+38		1	0.32
94960 H	19 19 26.50	−01 36 57.7	10.55	H	289.860 417 20	−01.616 036 93	A	16.38	156.88	98.35	5.84	4.96	6.03	5.25	3.75	−13	−34	− 3	−21	− 2	+25	− 3	−16	+ 3	− 2		1	0.64
94961	19 19 26.73	+19 43 24.6	11.50	H	289.861 376 99	+19.723 495 62	B	−5.67	−8.03	−52.31	76.62	81.13	62.04	49.61	54.78	+27	−27	− 7	−15	+ 2	+21	− 3	− 6	+17	+34		1	0.32
94962	19 19 27.70	+31 57 58.8	6.83	1 H	289.865 424 58	+31.966 328 90		0.98	−1.93	−2.92	0.41	0.52	0.61	0.45	0.64	− 6	− 9	−17	+24	+ 5	− 9	+ 5	+31	+ 0	− 9		0	−0.99
94963	19 19 27.72	−35 38 40.4	9.22	G	289.865 482 18	−35.644 557 60		3.45	9.05	−38.61	1.55	1.06	1.54	1.94	1.21	+ 3	−30	− 5	+33	+15	− 9	+12	+ 9	+ 1	+ 4		0	−0.72
94964	19 19 28.51	−20 25 38.1	9.57	G	289.868 790 37	−20.427 258 98		2.68	−39.97	−170.25	1.32	0.96	1.51	1.46	1.00	+15	−26	−12	−10	−11	+22	− 1	−27	−23	+ 7		0	0.81
94965	19 19 30.90	−32 28 35.8	9.78	H	289.878 751 39	−32.476 606 05		12.40	4.63	−24.13	1.93	1.28	2.13	2.19	1.26	+21	−42	−27	+15	− 9	−11	−17	−29	+ 2	− 9		6	1.15
94966	19 19 30.98	−36 39 29.9	7.25	G	289.879 065 05	−36.658 298 79		20.26	36.40	−95.38	1.00	0.64	0.98	1.28	0.72	− 8	−28	−26	+36	+ 1	+ 0	− 5	+ 6	+ 9	−25		0	1.59
94967	19 19 31.47	+45 44 52.0	9.92	H	289.881 143 18	+45.747 765 71		2.53	−69.67	−59.56	1.05	1.04	1.18	1.25	1.45	+ 4	− 9	+ 7	+12	+11	− 6	+13	+15	+ 3	+ 3		1	−0.08
94968	19 19 31.54	+10 07 52.4	8.71	H	289.881 399 35	+10.131 218 96		1.14	4.66	−4.96	1.10	0.89	1.38	1.37	1.01	−18	+10	−34	−30	+23	−21	+17	−43	+30	−50		2	0.08
94969	19 19 31.89	+22 34 14.7	6.95	2 H	289.882 878 13	+22.570 759 82		3.69	6.43	−5.85	0.58	0.57	0.80	0.77	0.73	+16	− 7	−24	− 4	+ 7	+ 8	+ 7	+ 4	+10	+26		0	−0.03
94970	19 19 32.81	−14 09 12.6	7.70	H	289.886 714 12	−14.153 504 65		5.07	−25.60	−8.33	0.80	0.48	0.98	1.00	0.72	+36	−13	+10	−20	−10	+23	−16	−45	−17	+14		0	0.13
94971	19 19 33.07	−42 03 54.7	8.00	G	289.887 778 95	−42.065 199 26		11.86	75.41	−14.63	1.07	0.60	1.11	1.63	0.74	+ 7	−27	−24	+33	+21	−14	− 9	−33	+11	−42		0	0.19
94972	19 19 33.71	+41 16 16.3	7.68	H	289.890 472 66	+41.271 198 70		4.52	−35.15	−21.01	0.54	0.54	0.65	0.57	0.59	− 8	+ 6	− 8	− 4	+13	−11	+13	+ 0	+11	+ 4		1	0.94
94973 H	19 19 36.10	+40 35 07.4	8.06	H	289.900 427 23	+40.585 384 37	*	2.77	−0.72	−15.29	0.55	0.59	0.69	0.61	0.65	− 9	+ 2	− 3	+12	+11	−19	+11	+13	+ 3	+ 5		1	−1.26
94974	19 19 36.42	+54 22 33.8	6.23	H	289.901 756 62	+54.376 056 72		7.25	16.51	−28.46	0.51	0.45	0.51	0.56	0.54	− 2	−14	− 4	− 6	+14	−16	+13	+19	−10	+11		1	−1.07
94975	19 19 37.40	−51 34 21.0	6.57	H	289.905 844 88	−51.572 503 65		7.55	22.90	−40.84	0.76	0.65	0.84	1.12	0.87	+38	+ 1	+20	−36	−31	−20	−27	−58	−24	+45		2	−0.08
94976	19 19 37.58	+46 29 39.7	9.79	H	289.906 568 30	+46.494 363 81		0.82	−0.81	−8.95	1.00	0.93	1.08	1.27	1.29	− 1	+ 1	− 3	+21	+ 6	+ 9	+ 7	+22	−12	− 7		3	−0.27
94977	19 19 37.84	+40 16 01.8	7.32	H	289.907 668 00	+40.267 167 75		0.88	−1.33	−2.86	0.50	0.51	0.61	0.56	0.60	− 5	+ 4	+ 8	+ 7	+16	−12	+18	+ 7	+ 5	+ 3		0	−1.40
94978	19 19 38.03	+81 47 45.9	7.71	2 H	289.908 443 05	+81.796 080 20		2.18	−12.17	−3.93	0.55	0.52	0.59	0.67	0.65	− 1	−23	+ 2	− 5	+ 0	− 5	+ 0	+13	− 2	+ 2		0	1.63
94979	19 19 38.61	−55 19 31.8	8.59	H	289.910 894 69	−55.325 489 22		3.86	−0.76	−17.96	1.09	0.87	1.31	1.50	0.94	+14	−28	−31	− 5	+ 7	− 9	− 1	−34	+ 2	−13		0	0.29
94980 H	19 19 38.97	−40 48 56.5	9.50	H	289.912 364 16	−40.815 700 27	*	14.03	81.59	−122.64	5.31	7.55	4.31	5.52	3.16	−15	− 7	−25	− 4	+16	−56	− 6	−53	+37	− 8		1	−0.57
94981	19 19 39.04	+37 19 51.5	6.29	H	289.912 680 60	+37.330 984 54		39.64	−62.18	−183.08	0.44	0.45	0.56	0.48	0.54	− 2	− 6	+ 3	+15	− 2	−17	− 2	+ 9	+ 1	+ 2		0	−2.18
*94982	19 19 39.35	+12 22 28.7	5.53	1 H	289.913 939 71	+12.374 639 18		9.39	4.28	16.69	0.52	0.43	0.69	0.66	0.64	− 8	− 2	−17	+25	−18	+21	−18	+16	− 4	− 6		2	−2.30
*94983	19 19 39.31	+08 11 23.5	9.22	H	289.913 810 22	+08.189 849 86		3.36	4.13	5.36	1.33	1.06	1.72	1.68	1.09	+10	− 6	−23	−46	+ 3	−32	− 5	−49	+26	−12		0	−0.41
*94984	19 19 39.34	−50 20 34.2	8.57	H	289.913 914 01	−50.342 844 98		3.26	11.10	−16.03	1.11	0.83	1.30	1.60	1.22	+13	− 5	+15	−13	+ 6	−24	+13	−34	−19	+26		0	1.26
94985 H	19 19 39.45	−28 36 18.6	9.20	H	289.914 373 17	−28.605 157 51	A	8.49	−20.92	−29.43	6.60	4.77	4.50	4.55	3.32	+11	−14	− 8	− 7	− 6	+13	− 2	−15	− 6	+56		1	−0.36
94986	19 19 39.99	−35 25 17.1	5.59	H	289.916 620 81	−35.421 424 87		1.77	7.04	−11.14	0.87	0.56	0.84	1.15	0.61	−23	−12	−17	+17	+15	+ 4	+ 9	−15	+ 7	−36		0	2.98
94987	19 19 40.94	+07 47 44.0	7.82	H	289.920 567 41	+07.795 567 67		6.31	−3.06	4.34	1.02	0.70	1.10	1.08	0.70	+10	−13	−15	−51	− 5	−18	− 9	−56	+14	−20		2	0.82
94988	19 19 42.37	−00 02 59.4	8.55	H	289.926 540 80	−00.049 843 36		0.31	0.34	−6.57	1.12	0.72	1.29	1.67	1.13	− 6	+21	−22	− 4	+25	− 4	+31	−24	+31	+12		0	0.19
94989	19 19 43.48	−41 27 39.1	10.13	H	289.931 175 66	−41.460 861 78		5.93	9.09	−94.59	1.61	0.94	1.89	2.41	1.38	+26	−15	−26	+17	+29	−23	− 5	−49	+36	−28		0	−1.13
94990	19 19 44.73	+12 55 16.0	7.84	2 H	289.936 384 54	+12.921 107 24		5.52	2.48	−6.19	0.60	0.58	0.91	0.66	0.72	+16	− 6	−26	+24	−36	+25	−40	+12	−11	− 6		0	−2.39
94991	19 19 45.90	+16 29 54.2	10.22	G	289.941 269 51	+16.498 384 53		9.73	−15.17	−176.50	1.03	1.04	1.69	1.21	1.19	+33	−16	−17	+ 9	−23	+20	−25	− 3	+ 1	− 2		0	0.37
94992	19 19 45.95	+36 45 51.4	7.48	G	289.941 460 25	+36.764 284 59		8.25	18.45	18.64	0.49	0.51	0.62	0.61	0.66	+ 2	+ 2	+ 3	+14	+ 2	− 7	+ 2	+18	+ 0	+ 8		0	−2.03
94993	19 19 46.14	+64 23 26.8	6.52	H	289.942 253 43	+64.390 788 22		3.62	−1.07	8.69	0.50	0.45	0.49	0.55	0.52	+10	− 4	+ 6	+26	+10	− 7	+15	− 6	+ 6	+25		0	−0.01
94994	19 19 47.15	+50 42 06.8	8.70	H	289.946 438 63	+50.701 888 29		2.41	9.55	−29.84	0.78	0.71	0.82	0.94	1.00	− 1	−11	−13	−12	− 4	+ 3	− 8	+ 2	+ 3	+24		0	−0.03
94995 H	19 19 47.47	−62 53 49.1	7.91	H	289.947 788 50	−62.896 971 60	A	6.34	7.08	−98.25	2.01	1.37	2.06	2.64	1.53	−21	−13	+10	+24	− 8	−10	+ 6	−39	−11	+ 4		1	−0.08
94996	19 19 49.43	+06 10 05.6	9.89	H	289.955 977 97	+06.168 220 78		0.26	0.35	0.03	1.24	0.91	1.49	1.51	0.99	+10	−19	+ 1	+10	+11	− 9	+ 7	−20	+15	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
94901	8.510	0.010	8.253	0.011		0.240	0.015	G	0.27	0.02	H	8.3127	0.0011	0.013	119		8.29	8.33		C			1							
94902	7.972	0.009	7.493	0.010		0.485	0.015	G	0.56	0.02	H	7.5296	0.0011	0.011	104		7.51	7.55					1							S
94903	8.939	0.011	8.882	0.014		0.057	0.017	T	0.07	0.01	L	8.9053	0.0025	0.022	133		8.87	8.94					1							
94904	9.305	0.013	9.235	0.017		0.069	0.020	T	0.08	0.02	L	9.3083	0.0021	0.023	131		9.27	9.35		C			1							
94905	7.635	0.007	7.077	0.007		0.541	0.006	G	0.61	0.01	H	7.1249	0.0010	0.010	127		7.11	7.14					1							S
94906	10.150	0.032	8.997	0.021		1.100	0.020	G	1.06	0.02	K	9.1157	0.0041	0.025	82		9.07	9.16					1							
94907	11.321	0.057	8.860	0.014		2.026	0.047	T	2.06	0.05	L	8.6940	0.0019	0.019	119		8.66	8.72		R			1	S						
94908	8.180	0.008	8.032	0.010	A	0.154	0.015	G	0.17	0.01	H *	8.0410	0.0013	0.012	111	*	8.02	8.06		D	19188−0546	I 1	2	C	A	AB	11	5.851	0.020	3.57	0.08	S
94909			10.106	0.043		0.597	0.107	G	0.67	0.10	R	9.8934	0.0053	0.021	35		9.86	9.94					1							
94910	6.495	0.004	6.507	0.005		−0.006	0.006	T	0.01	0.01	L	6.5025	0.0028	0.033	150		6.48	6.74	3.38	P 1 A	19188+1937	I 1	1								S
94911	9.133	0.011	8.811	0.012	*	0.306	0.015	T	0.35	0.02	L *	8.8674	0.0016	0.015	156	*	8.84	8.89		C	19188+1736	I 1	2	C	S A	AS	102	0.170	0.008	0.87	0.24	
94912	9.697	0.018	8.569	0.012		0.971	0.017	T	0.96	0.01	L	8.6214	0.0017	0.016	111		8.59	8.65		C			1							
94913	7.743	0.007	6.521	0.005		1.050	0.000	G	1.02	0.00	H	6.5686	0.0012	0.008	94		6.55	6.58			19187+0023	I 2	1								S
94914	9.884	0.034	8.494	0.019	*	1.176	0.031	T	1.14	0.03	L *	8.4821	0.0025	0.015	52	*	8.45	8.50		D	19189−2814	H 1	2	C	A	AB	317	0.594	0.013	2.67	0.07	
94915	8.778	0.013	7.355	0.008	*	1.201	0.012	T	1.16	0.01	L *	7.3906	0.0010	0.009	102	*	7.38	7.40		D	19189+7648	H 1	2	C	A	AB	82	0.752	0.017	3.59	0.09	S
94916	7.677	0.008	6.428	0.005		1.065	0.007	T	1.04	0.02	A	6.4796	0.0009	0.009	82		6.46	6.50					1							S
94917	9.467	0.017	8.092	0.010		1.160	0.015	G	1.12	0.01	H	8.1246	0.0011	0.010	95		8.10	8.14		C			1	G						
94918	10.242	0.026	9.577	0.024	A	0.560	0.072	G	0.63	0.07	R *	9.6273	0.0023	0.023	115	*	9.59	9.67		D	19189+4330	M 1	2	C	C	AB	260	2.710	0.074	2.99	0.19	
94919	8.304	0.013	8.090	0.015		0.204	0.019	T	0.22	0.02	L	8.1130	0.0016	0.011	56		8.09	8.13		C			1							
94920	10.260	0.030	8.953	0.017		1.111	0.027	T	1.07	0.03	L	8.9890	0.0017	0.016	103		8.96	9.02		C			1							
94921	7.252	0.005	6.983	0.006		0.271	0.015	G	0.31	0.02	H	7.0196	0.0010	0.008	110		7.01	7.03		C			1							S
94922	9.556	0.018	8.918	0.016	A	0.635	0.400	G	0.73	0.03	L *	8.9263	0.0021	0.020	115	*	8.89	8.96			19189+4952	I 1	2	C	B	AB	134	6.741	0.066	3.86	0.30	
94923	6.911	0.006	6.878	0.006		0.035	0.008	T	0.05	0.01	L	6.8971	0.0008	0.008	132		6.88	6.91		C			1							S
94924	8.372	0.009	8.029	0.009	A	0.330	0.015	G	0.38	0.02	H *	8.0071	0.0013	0.016	125	*	7.99	8.04		D	19190+3916	I 1	2	C	A	AB	203	1.261	0.013	2.17	0.04	S
94925	8.323	0.008	8.261	0.009		0.062	0.011	T	0.07	0.01	L	8.2750	0.0011	0.015	150		8.26	8.30					1							
94926	7.653	0.009	7.017	0.008	*	0.579	0.001	G	0.65	0.00	H *	7.0638	0.0013	0.008	58	*	7.05	7.08		D	19190−3317	I 1	2	C	A	BA	316	0.313	0.006	0.03	0.05	S
94927	8.691	0.010	8.604	0.012		0.085	0.015	T	0.10	0.02	L	8.6321	0.0016	0.015	120		8.61	8.67		C			1							
94928	11.895	0.168	9.872	0.046		1.676	0.139	T	1.70	0.14	L	9.8006	0.0031	0.023	56		9.76	9.83		C			1							
94929	7.920	0.009	6.235	0.004		1.420	0.012	G	1.52	0.00	G	6.2026	0.0013	0.009	103		6.19	6.22		M	19190−1532	I 1	1								S
94930	11.659	0.084	10.170	0.035		1.253	0.072	T	1.21	0.07	L	10.2378	0.0039	0.043	137		10.16	10.33					1	X						G G
94931	9.924	0.026	8.948	0.019		0.806	0.004	G	0.85	0.00	H	9.0081	0.0016	0.018	129		8.98	9.04		C			1	S						
94932	6.255	0.003	6.247	0.004		0.012	0.005	T	0.03	0.01	L	6.2627	0.0007	0.007	132		6.25	6.28		C			1							S
94933	10.803	0.048	10.448	0.056		0.337	0.069	T	0.39	0.09	L	10.6488	0.0040	0.033	136		10.59	10.71		C			1							G
94934	6.334	0.003	6.553	0.004		−0.191	0.004	T	−0.20	0.01	L	6.5300	0.0007	0.007	117		6.52	6.55		C			1							S
94935	10.494	0.030	9.016	0.015		1.245	0.026	T	1.20	0.03	L	9.0529	0.0023	0.021	119		9.01	9.09					1							
94936	8.678	0.011	8.469	0.013		0.200	0.016	T	0.22	0.02	L	8.4922	0.0016	0.020	86		8.46	8.53		C			1							
94937	9.274	0.028	7.014	0.011		1.865	0.024	T	1.90	0.03	L	6.8563	0.0026	0.028	173		6.82	6.91		U 2			1							S P
94938	8.444	0.029	7.750	0.019	*	0.699	0.003	G	0.76	0.00	H *	7.9307	0.0019	0.014	61	*	7.91	7.96		D	19191−3310	I 1	2	C	A	AB	153	1.656	0.003	0.19	0.02	
94939						1.100	0.020	G	1.18	0.03	I	11.5835	0.0057	0.053	120		11.46	11.70		R			1							G
94940	10.280	0.044	7.145	0.009		2.479	0.033	T	2.54	0.03	L	6.8719	0.0148	0.108	78		6.78	7.06		U 2 C			1	S						S
94941	9.190	0.017	8.781	0.017		0.460	0.015	G	0.53	0.02	H	8.8080	0.0030	0.025	88		8.77	8.84		U			1							
94942	7.535	0.005	7.387	0.007		0.142	0.008	T	0.16	0.01	L	7.4215	0.0009	0.011	173		7.40	7.44					1							S
94943	8.286	0.007	7.864	0.007		0.399	0.009	T	0.46	0.01	L	7.9235	0.0012	0.015	184		7.89	7.95					1							S
94944	8.832	0.013	8.379	0.013		0.453	0.018	G	0.52	0.02	H	8.4122	0.0010	0.012	90		8.39	8.44		D			1							
94945	8.723	0.012	8.101	0.010		0.551	0.015	G	0.62	0.01	H	8.1690	0.0012	0.012	103		8.15	8.19		C			1							S
94946	8.333	0.010	8.172	0.012		0.155	0.015	T	0.17	0.01	L	8.2101	0.0018	0.015	77		8.19	8.24					1							
94947	7.670	0.006	7.630	0.009		0.036	0.010	T	0.05	0.01	L	7.6412	0.0010	0.011	136		7.63	7.66		C			1							S
94948	10.009	0.029	8.498	0.015		1.271	0.026	T	1.23	0.03	L	8.5114	0.0019	0.014	70		8.49	8.54					1							
94949	8.127	0.011	7.564	0.008		0.527	0.012	T	0.60	0.01	L	7.6227	0.0015	0.012	86		7.61	7.65		C			1							S
94950	9.180	0.014	8.465	0.012		0.644	0.014	T	0.71	0.01	L	8.5303	0.0015	0.016	115		8.51	8.55					1							S
94951	8.971	0.016	7.887	0.011		0.937	0.015	T	0.93	0.01	L	7.9372	0.0010	0.009	65		7.92	7.96		D			1							
94952	11.197	0.058	9.331	0.019		1.551	0.048	T	1.57	0.05	L	9.2934	0.0019	0.020	126		9.26	9.34					1							
94953	11.057	0.064	10.488	0.062		0.467	0.020	G	0.54	0.02	H	10.5153	0.0030	0.032	78		10.46	10.57		C			1	S						G
94954	8.362	0.009	7.799	0.009		0.527	0.011	T	0.60	0.01	L	7.8627	0.0018	0.014	89		7.84	7.88		C			1							S
94955	10.286	0.029	8.881	0.015		1.187	0.026	T	1.15	0.02	L	8.9249	0.0021	0.019	113		8.89	8.96		C			1							
94956	8.272	0.013	7.041	0.008		1.051	0.012	T	1.02	0.01	L	7.0734	0.0013	0.008	64		7.06	7.10					1							S
94957	9.360	0.016	8.884	0.016		0.486	0.015	G	0.56	0.02	H	8.9259	0.0020	0.018	94		8.89	8.96		C			1							
94958	8.614	0.015	8.182	0.015		0.495	0.015	G	0.57	0.02	H	8.2196	0.0020	0.011	57		8.20	8.25		C			1							S
94959	8.285	0.007	8.195	0.008	A	0.088	0.010	T	0.10	0.01	L	8.2367	0.0223	0.031	163	A	8.19	8.28		D	19194+1943	I 2	1	C	P D							D
94960	12.379	0.289	10.362	0.070	*	1.814	0.170	G	3.19	0.57	I *	10.3986	0.0057	0.040	85	*	10.35	10.48		D	19194−0137	M 1	2	C	A	AP	165	0.366	0.007	0.40	0.09	G
94961	11.289	0.069	10.736	0.075	B	0.518	0.091	T	0.59	0.10	L	11.3079	0.3126			B				D	19194+1943	I 2	1	C	I D							D
94962	6.709	0.003	6.812	0.004		−0.085	0.005	G	−0.07	0.01	H	6.8058	0.0010	0.010	142		6.79	6.82		M			1							S P
94963			9.536	0.028		0.525	0.071	G	0.59	0.06	L	9.3843	0.0048	0.022	41		9.35	9.42					1							
94964	10.633	0.047	9.711	0.034		0.802	0.003	G	0.83	0.00	H	9.7135	0.0026	0.024	68		9.68	9.76		C			1							
94965	10.506	0.069	9.838	0.060		0.555	0.020	G	0.63	0.02	H	9.9022	0.0035	0.027	52		9.85	9.96		C			1							
94966	7.831	0.011	7.310	0.008		0.513	0.015	G	0.59	0.02	H	7.3541	0.0013	0.008	61		7.34	7.37			19195−3640	I 1	1								S
94967	11.039	0.058	10.026	0.039		0.884	0.052	T	0.89	0.04	L	10.0689	0.0032	0.036	110		10.02	10.14					1							
94968	11.160	0.065	8.961	0.018		1.816	0.054	T	1.84	0.06	L	8.8059	0.0026	0.019	79		8.78	8.84					1							
94969	9.053	0.013	7.251	0.006		1.531	0.012	T	3.19	0.03	O	6.7980	0.0109	0.079	117		6.69	6.98		U 2			1	S						S P
94970	9.019	0.011	7.831	0.008		1.018	0.011	T	0.99	0.01	L	7.8669	0.0009	0.011	143		7.85	7.89					1							
94971	8.680	0.013	8.076	0.011		0.570	0.002	G	0.64	0.00	H	8.1280	0.0018	0.014	107		8.10	8.16					1							S
94972	9.124	0.012	7.806	0.007		1.119	0.011	T	1.08	0.01	L	7.8512	0.0011	0.012	139		7.83	7.87					1							S
94973	8.163	0.007	8.065	0.009	*	0.096	0.010	T	0.11	0.01	L *	8.1025	0.0012	0.014	133	*	8.08	8.12		D	19196+4035	M 1	2	C	S A	AS	253	0.133	0.006	0.46	0.40	S
94974	6.262	0.004	6.232	0.004		0.030	0.000	G	0.05	0.00	H	6.2503	0.0009	0.007	107		6.24	6.27					1							S
94975	6.663	0.005	6.587	0.005		0.068	0.006	T	0.08	0.01	L	6.5940	0.0010	0.009	81		6.58	6.61		C	19196−5134	I 1	1								S
94976	10.923	0.056	9.888	0.037		0.900	0.050	T	0.90	0.04	L	9.9483	0.0030	0.024	93		9.91	9.99		C			1							G
94977	9.379	0.015	7.483	0.007		1.575	0.013	T	1.59	0.01	L	7.4318	0.0014	0.013	129		7.41	7.46					1							S
94978	9.830	0.020	7.971	0.009		1.545	0.017	T	1.61	0.04	L	7.8226	0.0025	0.023	125		7.79	7.87		U 2 C			1	S						
94979	9.899	0.025	8.706	0.016		1.022	0.023	T	1.00	0.02	L	8.7558	0.0022	0.016	69		8.73	8.78		C			1							
94980	10.437	0.034	9.619	0.026	*	0.722	0.033	T	0.77	0.02	L *	9.6442	0.0020	0.021	109	*	9.61	9.68		D	19197−4049	I 1	2	C	A	AS	38	0.203	0.025	0.20	0.62	
94981	7.137	0.004	6.358	0.004		0.676	0.003	G	0.74	0.00	H	6.4235	0.0007	0.007	133		6.41	6.44		C			1							S
94982	5.835	0.005	5.556	0.004		0.265	0.006	T	0.30	0.01	L	5.5969	0.0030	0.018	90		5.57	5.63	0.15	P 1 A	19197+1222	I 1	1								S P
94983	9.493	0.022	9.285	0.025		0.199	0.031	T	0.22	0.04	L	9.2859	0.0023	0.025	85		9.24	9.32		D			1	S						
94984	10.067	0.033	8.691	0.018		1.165	0.029	T	1.13	0.03	L	8.7354	0.0019	0.019	73		8.70	8.76					1							
94985	9.991	0.034	9.328	0.029	*	0.605	0.034	T	0.67	0.03	L *	9.3321	0.0037	0.020	50	*	9.30	9.36		D	19197−2836	I 1	2	C	A	AB	214	0.394	0.009	0.32	0.06	
94986	5.428	0.004	5.565	0.005		−0.122	0.003	G	−0.11	0.00	H	5.5500	0.0011	0.007	42		5.54	5.57					1							S
94987	8.178	0.011	7.844	0.012		0.317	0.015	T	0.37	0.02	L	7.8998	0.0013	0.013	85		7.88	7.93					1							S
94988	8.846	0.014	8.598	0.016		0.260	0.015	G	0.29	0.02	H	8.6212	0.0020	0.018	81		8.59	8.66		C			1							
94989	10.837	0.048	10.137	0.040		0.633	0.047	T	0.70	0.04	L	10.2606	0.0030	0.029	123		10.22	10.30		C			1							G
94990	8.201	0.007	7.876	0.009		0.309	0.011	T	0.35	0.01	L	7.9211	0.0026	0.024	129		7.89	7.96		U 2			1							S
94991	11.153	0.052	10.416	0.044		0.709	0.015	G	0.76	0.01	H	10.3418	0.0025	0.029	149		10.29	10.39		C			1							G
94992	7.914	0.009	7.534	0.008		0.360	0.011	T	0.42	0.01	L	7.5696	0.0010	0.009	118		7.56	7.59		C			1							S
94993	6.392	0.005	6.505	0.006		−0.098	0.007	T	−0.08	0.01	L	6.4883	0.0008	0.007	103		6.48	6.50		C	19198+6423	I 1	1								S
94994	10.175	0.028	8.825	0.016		1.144	0.025	T	1.11	0.02	L	8.8734	0.0018	0.018	109		8.85	8.90					1							
94995	8.814	0.011	8.031	0.009	*	0.711	0.011	T	0.77	0.01	L *	8.0584	0.0014	0.014	149	*	8.04	8.09		D	19198−6254	I 1	2	C	A	AB	278	0.673	0.004	0.60	0.02	S
94996	10.309	0.035	9.920	0.039		0.368	0.049	T	0.43	0.05	L	9.9820	0.0031	0.024	93		9.92	10.04		C			1							G
94997						1.580	0.020	G	2.56	0.05	I	12.1243	0.0111	0.078	75		11.96	12.26					1	G						G
94998	9.396	0.015	7.974	0.008		1.201	0.013	T	1.16	0.01	L	8.0227	0.0014	0.014	126		7.99	8.05					1							
94999	8.240	0.009	7.686	0.008		0.538	0.015	G	0.61	0.02	H	7.7474	0.0012	0.010	88		7.73	7.77		C			1							S
95000	9.588	0.018	9.358	0.022	B	0.940	0.015	G	0.93	0.01	I	9.4690	0.0122			B				D	19199+3532	I 2	1	C	I A							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
95001	19 19 52.83	+35 32 16.6	8.19		H	289.970 118 07	+35.537 938 09	A	2.21	2.95	−0.78	1.61	1.75	1.61	1.67	2.31	+ 2 − 6 + 3 + 6 − 2 − 5 − 2 + 2 − 3 +14										18	1.28
95002	19 19 53.04	+11 32 05.7	6.03		H	289.971 001 82	+11.534 910 74		11.71	42.44	22.14	0.64	0.48	0.81	0.73	0.63	−13 − 3 −16 −15 −15 +35 −12 − 4 −17 −33										0	−1.69
*95003	19 19 54.95	−29 50 44.7	10.05		G	289.978 964 37	−29.845 744 77		4.82	1.54	−17.04	2.38	1.31	2.72	2.04	1.19	+27 −70 −49 + 0 +16 −14 − 8 −37 +20 −22										0	−0.85
*95004	19 19 54.92	−30 41 43.3	7.97		H	289.978 814 13	−30.695 359 48		−1.10	−0.08	−3.54	1.53	0.89	1.69	2.09	0.96	− 1 −44 −49 +33 −27 +25 −25 +11 − 2 −53										0	−0.23
95005	19 19 55.05	+45 01 55.3	7.19		H	289.979 392 44	+45.032 021 43		5.04	17.13	29.00	0.52	0.49	0.59	0.54	0.56	+ 5 − 7 + 1 + 8 + 8 −11 +10 + 1 + 1 +20										1	−0.42
95006	19 19 56.12	−30 28 07.3	8.79		H	289.983 828 40	−30.468 698 43		22.21	57.49	−172.03	1.63	0.94	1.88	1.70	0.92	+20 −62 −51 +19 + 9 − 3 −10 −13 +17 −36										0	0.47
95007	19 19 56.66	+11 05 32.4	8.03		H	289.986 064 94	+11.092 335 02		4.66	3.39	−2.84	0.82	0.59	0.97	0.86	0.72	+ 0 −14 − 7 −26 −10 +22 − 9 −20 − 6 −14										0	0.47
95008	19 19 57.30	+23 22 16.4	10.14	2	G	289.988 752 93	+23.371 219 47		6.44	170.28	−41.27	1.87	2.10	2.93	2.35	2.56	− 1 −17 −18 − 2 + 6 − 6 + 4 − 6 + 6 − 4										0	
95009	19 19 57.77	+28 33 47.9	8.15		H	289.990 690 47	+28.563 312 67		3.16	1.06	0.44	0.53	0.67	0.88	0.62	0.83	−16 − 2 −28 +29 + 5 −14 + 1 +14 + 2 −27										1	3.12
95010	19 19 57.80	−54 27 32.1	8.31		H	289.990 823 04	−54.458 930 44		4.42	12.34	−44.09	0.95	0.86	1.20	1.34	0.96	+30 −17 −28 −12 − 8 + 9 −10 −35 + 6 +18										0	−1.03
95011	19 19 58.48	+24 58 34.8	9.11		H	289.993 668 36	+24.976 321 34		2.43	9.68	−7.51	0.55	0.90	1.29	0.67	1.22	−26 − 6 + 0 + 0 + 0 − 2 + 2 −27 −14 −18										1	0.40
95012	19 19 59.18	+28 29 18.0	8.56		H	289.996 595 69	+28.488 320 83		1.75	−2.64	−4.50	0.65	0.78	1.05	0.72	1.02	−20 − 4 −18 +20 +13 − 4 +15 + 8 −15 −28										0	0.73
95013	19 19 59.22	−57 58 47.2	8.64		H	289.996 755 45	−57.979 784 34		4.74	1.89	−20.35	0.79	0.60	1.16	0.98	0.73	− 1 −18 − 2 +47 −23 −11 + 2 −16 −20 +35										0	−0.45
95014	19 19 59.27	−19 21 58.6	7.47		G	289.996 971 08	−19.366 279 85		0.58	−0.10	−0.86	0.89	0.58	0.98	0.89	0.56	+ 3 −35 −23 + 3 + 3 −14 − 1 −29 + 6 − 2										0	0.71
95015	19 20 00.17	−09 19 22.2	8.59		G	290.000 709 08	−09.322 828 12		20.49	−120.77	−317.80	1.03	0.58	1.19	1.08	0.70	+ 3 −17 −15 −43 + 6 +13 + 6 −46 +19 + 7										0	0.96
95016	19 20 00.97	+05 35 45.6	8.52		H	290.004 032 40	+05.596 008 08		5.07	0.79	3.88	1.07	0.82	1.29	1.20	0.79	− 1 −17 +12 − 5 +16 −10 +13 −29 +14 + 2										0	0.60
95017	19 20 01.09	+05 35 15.7	7.59		H	290.004 556 20	+05.587 689 12		3.53	−0.87	3.79	0.84	0.64	0.99	0.93	0.61	− 7 −14 + 2 − 3 +17 − 8 +14 −33 +17 + 0										0	0.27
95018	19 20 01.66	+26 51 03.4	8.64		H	290.006 933 28	+26.850 948 76		2.35	4.27	1.36	0.58	0.74	1.01	0.71	0.90	− 9 − 8 −13 +23 − 1 − 8 − 5 − 5 +19 −17										0	0.05
95019	19 20 01.69	+03 36 58.1	8.77		H	290.007 027 64	+03.616 141 64		2.93	10.45	−4.41	1.10	0.71	1.28	1.18	0.79	+ 2 −42 + 0 − 2 +16 −11 +12 −24 + 7 + 9										0	2.65
95020	19 20 02.58	−09 24 41.8	7.41		H	290.010 747 15	−09.411 606 58		9.67	55.89	−9.02	0.84	0.46	0.94	0.86	0.51	−14 −10 −15 −45 +15 + 8 +16 −52 +13 −12										0	0.04
95021	19 20 02.80	−06 37 40.7	6.76	1	H	290.011 657 53	−06.627 972 06		2.96	5.09	−15.11	0.75	0.43	0.87	0.84	0.61	− 3 −31 − 7 −13 +14 +18 +13 −20 +23 +21										0	0.38
95022	19 20 03.04	+33 17 27.8	8.46		H	290.012 662 67	+33.291 046 15		2.49	1.69	2.86	0.60	0.68	0.83	0.67	0.92	+ 8 −18 −14 +25 + 6 − 7 + 6 +30 + 4 − 1										0	−0.30
95023	19 20 03.82	−75 49 46.1	9.17		H	290.015 903 38	−75.829 477 67		6.00	−33.15	3.19	0.76	0.87	1.16	1.08	1.07	−19 −17 + 7 +15 − 7 − 9 − 7 − 6 + 0 −27										0	1.23
95024	19 20 03.94	+37 52 27.5	11.31		H	290.016 433 88	+37.874 303 23		0.76	−1.54	−8.11	1.48	1.44	1.81	1.57	1.67	+ 0 + 3 −10 + 7 + 1 − 7 + 1 + 6 − 1 + 6										2	−1.84
95025	19 20 05.59	+14 38 12.3	8.45		G	290.023 301 87	+14.636 744 76		10.39	29.09	−16.76	0.73	0.74	1.18	0.85	0.82	+ 9 + 3 −30 + 9 −13 +34 − 3 − 6 + 9 +14										0	0.11
95026	19 20 06.20	+04 28 49.5	7.93		H	290.025 821 06	+04.480 408 68		2.54	8.51	1.04	0.88	0.58	1.01	1.11	0.69	+ 1 −31 − 7 − 2 − 6 + 5 − 3 −27 + 4 +11										0	−0.32
95027	19 20 07.17	−26 27 00.1	9.11		G	290.029 883 43	−26.450 014 57		4.07	7.15	−10.08	1.75	1.06	1.93	2.78	1.25	− 4 −48 −47 −46 +21 +22 +31 −42 − 7 −65										0	0.36
95028	19 20 07.47	+26 38 42.1	7.36		H	290.031 116 05	+26.645 040 14		12.98	12.12	−52.84	0.44	0.58	0.78	0.56	0.76	−27 − 9 −17 +22 + 7 −12 + 4 −27 +10 −36										2	0.95
95029	19 20 07.49	+26 39 43.8	7.35		H	290.031 216 24	+26.662 177 68		3.22	−20.67	10.65	0.47	0.62	0.84	0.57	0.70	−19 − 7 −22 +21 + 4 −11 + 0 −19 +21 −23										0	−1.19
95030	19 20 07.65	+36 23 11.3	8.76		H	290.031 856 41	+36.386 481 45		3.79	6.92	−15.39	0.67	0.70	0.86	0.79	0.91	− 7 + 3 −10 +18 − 3 −14 − 4 + 1 +12 − 4										0	1.07
95031	19 20 08.51	−03 03 06.7	9.90		G	290.035 476 94	−03.051 863 66		21.69	−53.59	−6.39	1.29	0.88	1.50	1.34	0.96	+11 −15 −12 −25 − 2 +19 + 0 −35 +11 +18										0	1.09
95032	19 20 08.76	+41 40 59.2	11.35	3	H	290.036 487 77	+41.683 105 28	*	7.24	−9.28	−10.00	2.45	2.50	2.54	2.45	3.06	−12 −15 + 1 −25 +19 − 5 +23 + 0 −13 −10										13	2.46
95033	19 20 08.99	+27 54 36.3	7.80		H	290.037 465 16	+27.910 073 96		3.30	4.79	10.10	0.48	0.61	0.81	0.57	0.75	−25 + 6 −11 + 0 +18 + 4 +18 −13 − 2 −29										0	−1.04
95034	19 20 11.34	−47 30 49.9	9.77		H	290.047 265 70	−47.513 867 66		4.23	−0.97	20.35	1.46	1.07	1.82	2.04	1.36	+13 −14 −21 −37 +26 −15 +15 −53 +18 −17										0	0.71
95035	19 20 11.63	+14 08 19.6	7.93		H	290.048 459 28	+14.138 778 57		3.32	−0.14	−12.39	0.67	0.64	1.03	0.79	0.70	+ 7 −18 −19 +24 −23 +18 −23 + 3 + 6 − 8										0	0.69
95036	19 20 13.42	−36 13 39.7	7.98	2	H	290.055 921 76	−36.227 705 36		0.63	8.10	−10.66	1.15	0.75	1.17	1.42	0.78	+14 −33 −35 +41 +11 − 9 + 0 + 3 + 6 −12										0	−0.06
95037	19 20 15.43	−69 52 38.7	8.25		H	290.064 292 29	−69.877 429 77		11.78	25.01	−42.51	0.41	0.62	1.06	0.48	0.78	−16 −11 −12 +29 + 5 − 9 + 3 −19 + 9 −20										0	−0.81
95038	19 20 16.00	+57 38 42.4	5.91	1	H	290.066 683 55	+57.645 117 43		3.70	28.34	4.94	0.46	0.47	0.49	0.51	0.57	+11 − 3 +12 +16 + 3 − 3 + 6 − 6 + 1 +26										0	0.58
95039	19 20 16.18	+29 28 29.1	10.14		H	290.067 400 04	+29.474 738 65		1.15	−0.56	−4.09	0.97	1.14	1.46	1.07	1.55	−14 −19 −13 +41 − 7 −21 −10 +35 + 3 −18										0	2.04
95040	19 20 17.47	−24 37 54.1	8.37		H	290.072 803 38	−24.631 692 42		6.59	5.87	−9.01	1.14	0.75	1.33	1.21	0.69	+20 −43 −44 +12 + 6 − 3 − 6 −21 +14 −14										0	0.33
95041	19 20 17.86	−48 01 45.4	9.53		G	290.074 431 50	−48.029 277 25		0.46	4.81	2.48	1.20	0.90	1.52	1.59	1.13	+21 −21 −19 + 5 +15 − 3 + 3 −33 +16 − 2										0	−1.38
95042	19 20 19.00	+56 53 09.8	8.02		H	290.079 163 57	+56.886 051 38		3.87	7.36	6.31	0.54	0.53	0.57	0.61	0.62	+ 5 −17 + 6 +16 + 4 − 4 + 6 + 1 + 3 +25										0	−1.22
95043	19 20 19.26	−34 16 10.5	8.76		H	290.080 261 69	−34.269 584 13		2.30	8.21	−29.07	1.28	0.96	1.45	1.56	0.98	+ 8 −18 −23 +21 + 0 −21 − 6 −15 + 9 − 2										3	2.75
95044	19 20 19.42	+69 54 57.2	9.42		H	290.080 911 03	+69.915 901 60		20.55	70.14	221.43	2.30	2.12	2.30	2.52	2.28	+ 2 −15 − 3 − 9 + 9 − 5 + 9 −11 + 0 +12										0	
95045	19 20 19.50	+04 46 41.3	7.04		H	290.081 258 45	+04.778 140 30		6.78	−22.70	−102.53	0.71	0.52	0.82	0.86	0.54	+ 1 −22 −11 − 6 + 3 − 8 + 3 −36 +12 +16										2	0.03
95046	19 20 20.26	+03 48 11.1	9.17		H	290.084 401 73	+03.803 073 38		0.15	1.78	−4.65	1.15	0.73	1.34	1.38	0.88	+ 8 −32 + 7 − 4 − 8 + 3 − 6 −30 +17 +36										0	−0.70
95047	19 20 20.46	+20 51 48.9	8.22		H	290.085 233 03	+20.863 587 89		3.63	−11.54	−5.05	0.65	0.71	1.01	0.78	0.86	+34 −17 −15 − 4 − 5 +11 − 4 − 9 + 8 +38										1	0.03
95048	19 20 24.13	−38 09 32.6	8.48		H	290.100 557 78	−38.159 062 50		5.91	16.18	6.88	1.27	0.76	1.27	1.56	0.84	+ 2 −27 −21 +33 − 2 − 3 −12 − 8 + 2 −28										0	1.61
95049	19 20 24.68	−10 33 37.4	6.97	2	H	290.102 828 49	−10.560 376 26		2.87	12.24	1.87	0.76	0.43	0.91	0.74	0.49	− 1 −31 − 2 −28 + 2 +20 + 3 −45 +14 +16										5	2.18
95050	19 20 25.08	−57 17 20.1	9.79		H	290.104 489 73	−57.288 928 09		8.24	23.24	−52.88	0.94	0.71	1.52	1.16	0.86	− 9 −15 −18 +52 −18 −13 + 5 + 1 −27 +31										0	0.60
95051	19 20 25.54	+32 05 56.2	6.84		H	290.106 412 62	+32.098 935 79		3.14	0.47	−5.48	0.42	0.50	0.60	0.47	0.63	− 8 −12 −16 +34 − 2 −15 − 4 +32 − 1 −16										0	−2.84
95052	19 20 25.75	+45 35 40.6	8.65		H	290.107 281 59	+45.594 614 15		1.46	3.52	3.05	0.64	0.67	0.75	0.85	0.90	− 3 − 1 − 5 − 1 +11 − 6 +11 + 3 + 3 − 4										3	0.33
95053	19 20 26.03	+01 13 31.4	8.95		G	290.108 459 57	+01.225 381 96		4.21	9.48	−2.63	1.05	0.70	1.29	1.15	0.85	+ 1 −29 − 6 − 9 − 2 +31 − 2 −15 +16 +19										0	1.38
95054	19 20 26.20	−31 49 03.4	6.56	1	H	290.109 154 64	−31.817 618 93		3.91	−7.56	7.95	1.05	0.68	1.15	1.25	0.66	+ 5 −33 −22 +18 + 6 −17 − 6 −27 + 2 −22										0	−0.39
95055	19 20 27.03	−01 18 35.6	6.57		H	290.112 626 30	−01.309 883 96		20.21	73.03	51.45	0.75	0.48	0.94	0.75	0.53	− 9 −31 −12 −17 +11 +25 +12 −26 + 9 −10										0	1.30
95056	19 20 27.10	+39 55 34.3	6.81		H	290.112 903 87	+39.926 207 26		4.61	12.30	−3.77	0.49	0.48	0.59	0.57	0.53	−14 − 6 − 3 +15 +15 −24 +15 + 4 + 6 − 6										1	0.03
95057	19 20 27.55	+16 50 28.7	8.57		H	290.114 792 05	+16.841 296 46		5.14	18.20	6.40	0.80	0.75	1.19	0.97	0.87	+31 −15 − 8 +21 −19 − 2 −30 −10 − 4 −16										0	−1.20
95058	19 20 28.40	+21 47 18.0	8.74		H	290.118 348 05	+21.788 334 87		2.27	11.15	10.16	0.78	0.81	1.23	0.91	1.02	+25 −25 −28 −14 −11 +21 − 2 + 7 −12 +16										0	0.62
95059	19 20 29.32	−04 30 31.7	10.53		G	290.122 182 74	−04.508 810 86		18.16	5.68	−466.71	1.60	1.06	1.88	1.72	1.24	+14 −15 − 5 −22 + 0 +16 + 2 −32 + 9 +23										2	1.20
95060	19 20 29.78	+19 05 47.1	8.06		H	290.124 104 12	+19.096 422 69		2.54	4.22	−11.26	0.65	0.68	1.01	0.77	0.93	+29 −24 +11 − 9 + 1 +12 + 0 − 5 − 1 +44										0	−0.77
95061	19 20 30.14	−13 15 05.6	9.04		G	290.125 564 57	−13.251 551 77		0.90	−2.17	−9.21	1.01	0.58	1.16	1.13	0.75	+22 −36 − 7 −10 + 5 + 9 + 1 −27 +10 +15										3	1.74
95062	19 20 31.45	+50 20 24.5	7.32		H	290.131 040 15	+50.340 144 02		4.68	20.72	33.38	0.58	0.53	0.62	0.68	0.75	+ 0 −26 + 2 −11 − 7 − 3 −11 − 2 + 2 +22										4	2.46
95063	19 20 31.83	−17 02 40.0	7.69	2	H	290.132 620 18	−17.044 433 48		1.99	11.33	1.26	0.92	0.58	0.91	1.15	0.62	−16 −22 −14 +23 − 6 +16 − 5 − 6 − 6 −29										0	1.72
95064	19 20 32.24	+38 25 31.4	8.38		H	290.134 324 30	+38.425 375 36		1.02	9.69	5.51	0.60	0.62	0.76	0.61	0.71	− 2 −15 − 1 + 0 +17 + 5 +19 +15 − 9 + 1										0	0.79
95065	H 19 20 32.66	−59 38 48.9	8.59		G	290.136 064 15	−59.646 905 83	A	13.22	−185.31	−109.08	3.74	2.03	3.28	3.95	1.86	+ 2 − 3 − 3 +55 −16 −14 + 3 −10 −15 +28										1	1.54
95066	19 20 32.84	−05 24 57.1	4.98		H	290.136 825 88	−05.415 874 89	+	21.17	113.42	44.83	2.10	1.47	0.77	0.78	0.57	−18 − 5 − 9 −11 + 2 +17 − 9 +14 +21 +24										0	0.49
95067	19 20 33.05	+35 11 09.4	6.30		H	290.137 714 45	+35.185 954 54		4.49	5.54	1.20	0.40	0.52	0.53	0.48	0.60	− 8 + 4 −16 + 1 +26 − 1 +20 +15 + 7 − 9										0	−0.04
95068	H 19 20 34.06	−06 44 51.6	8.00		H	290.141 935 92	−06.747 669 85	*	1.34	2.02	−0.45	0.91	0.54	1.04	0.97	0.68	− 3 −28 − 7 −24 + 7 +17 + 8 −32 +18 +23										2	0.66
95069	H 19 20 34.37	+39 11 04.8	9.05		H	290.143 209 49	+39.184 672 37	A	1.72	−1.44	−4.08	1.09	1.15	1.25	1.18	1.20	− 3 −12 + 5 +14 + 7 −23 +11 − 4 + 2 + 6										0	0.22
95070	19 20 34.57	−37 23 48.1	9.07		H	290.144 047 16	−37.396 706 28		4.50	−20.38	20.56	1.42	0.95	1.44	1.88	0.99	−12 −21 −28 +19 +20 −24 + 6 −10 +15 −31										0	0.56
95071	19 20 34.96	−07 39 58.6	12.28	2	G	290.145 663 29	−07.666 291 10		89.08	−54.81	−160.23	6.14	3.87	7.16	6.89	4.69	+ 6 − 8 −14 −22 + 5 + 8 + 7 −35 +15 +15										0	
95072	H 19 20 35.38	−39 59 20.0	7.38		H	290.147 430 73	−39.988 889 76	A	0.80	15.94	−9.39	3.19	2.07	1.57	2.37	1.05	+32 +12 − 2 −22 + 2 −71 − 9 −40 + 5 −14										1	0.15
95073	19 20 35.68	−00 53 31.8	5.46		H	290.148 679 94	−00.892 168 54		6.40	5.63	3.10	0.71	0.49	0.88	0.76	0.53	−14 −21 −19 −21 +11 +25 +15 −32 + 7 −19										0	−0.64
95074	19 20 36.86	+49 27 35.5	7.88		H	290.153 584 37	+49.459 873 50		2.18	7.43	2.12	0.59	0.56	0.64	0.64	0.72	+13 − 7 + 8 − 1 + 7 − 6 + 7 + 6 + 5 +26										0	−0.73
95075	19 20 36.88	−27 59 57.8	8.81	2	H	290.153 654 96	−27.999 397 61		−0.32	0.65	−4.66	1.28	0.94	1.45	1.30	0.84	+23 −28 −36 −22 + 9 + 3 + 4 −31 +15 +12										0	−0.36
95076	19 20 37.20	−02 28 32.1	7.54		H	290.154 995 42	−02.475 588 44		4.71	5.02	−11.36	0.90	0.58	1.05	0.89	0.57	+16 −27 −19 −26 − 9 +21 −10 −46 +23 +19										2	1.93
95077	19 20 38.16	−22 24 09.4	5.59		H	290.158 982 77	−22.402 603 14		17.52	−10.44	27.94	0.77	0.51	0.85	0.99	0.55	− 1 + 2 − 9 +37 −16 +40 −12 − 6 −30 −13										0	2.92
95078	19 20 38.69	+19 00 30.4	8.85	2	H	290.161 208 20	+19.008 432 42		1.30	−1.17	−11.31	0.75	0.84	1.20	0.98	1.14	+35 −16 − 5 −14 −17 +10 −15 −22 + 3 +47										0	−1.16
95079	H 19 20 38.90	+02 56 15.6	7.52		H	290.162 063 46	+02.937 659 84	A	5.93	16.91	6.41	2.51	1.86	1.93	2.12	1.38	+63 − 9 − 1 −12 + 6 − 7 + 3 −12 +23 − 9										1	1.30
95080	19 20 39.39	+02 47 00.3	9.36		H	290.164 123 88	+02.783 421 98		2.71	5.51	4.95	1.29	0.81	1.40	1.43	0.95	−14 − 7 +13 −22 +16 + 5 +17 −27 +12 +10										2	2.01
95081	19 20 40.07	+65 42 51.9	4.60		H	290.166 966 56	+65.714 430 30		14.52	14.09	41.61	0.41	0.43	0.46	0.36	0.48	+ 0 − 2 − 3 −24 +16 + 5 +17 −11 +23 +23										1	0.13
95082	19 20 40.85	+14 25 08.8	7.71	2	G	290.170 198 38	+14.419 104 22		1.96	−1.32	−4.96	0.66	0.60	0.99	0.75	0.66	− 5 − 3 −19 + 7 −13 +23 − 9 −12 + 9 − 5										0	0.20
95083	19 20 41.08	−24 12 36.3	6.82		H	290.171 160 69	−24.210 080 68		6.22	4.20	−135.21	0.88	0.57	0.97	0.81	0.54	+16 −47 −28 − 1 +16 +10 +16 − 8 + 4 +14										0	−1.28
95084	19 20 41.63	−23 03 19.5	8.51		H	290.173 453 43	−23.055 402 95		0.30	5.23	−6.23	1.06	0.73	1.15	1.38	0.85	− 6 − 4 −13 − 3 + 5 +24 +11 −25 − 8 + 4										0	0.68
95085	19 20 41.74	−31 41 14.1	11.17		H	290.173 928 54	−31.687 250 92		6.14	3.08	−2.09	3.75	2.35	4.17	3.67	2.12	+31 −56 −27 +12 + 1 −11 −11 −32 + 6 − 5										0	1.42
95086	19 20 42.64	−74 39 35.1	7.80		H	290.177 675 09	−74.659 737 92		5.13	5.39	−22.31	0.48	0.58	0.76	0.49	0.65	−19 −16 − 2 + 3 − 6 − 5 − 5 +17 + 4 −26										0	−0.67
95087	19 20 42.66	+78 09 36.3	7.60		H	290.177 731 03	+78.160 093 31		8.30	21.14	−6.33	0.57	0.55	0.60	0.67	0.71	− 2 −11 + 0 + 4 + 2 − 4 + 4 − 5 − 9 − 2										0	0.20
95088	19 20 43.03	+10 39 09.9	8.21		H	290.179 274 48	+10.652 750 44		7.60	2.74	−46.42	0.87	0.75	1.10	1.01	0.85	+ 6 −11 −21 −25 − 8 +15 − 6 −25 + 5 −18										0	−1.12
95089	19 20 44.44	−42 28 07.6	8.12		G	290.185 181 23	−42.468 770 28		9.13	−43.17	22.30	1.06	0.57	1.10	1.63	0.71	+13 −28 −13 +24 +27 −23 − 6 −46 + 1 −39										2	0.02
95090	19 20 44.48	−74 46 47.3	8.66		H	290.185 342 47	−74.779 799 96		2.61	−8.58	−0.66	0.65	0.79	1.04	0.69	0.90	−14 −20 + 3 + 6 − 3 − 3 + 5 + 9 + 9 −27										0	−1.36
95091	19 20 45.49	+64 04 36.0	7.79		G	290.189 544 85	+64.076 673 23		6.92	23.15	−1.19	0.62	0.60	0.64	0.74	0.63	+ 7 − 8 +24 +20 +18 + 0 +18 + 7 +13 +28										1	−0.72
95092	19 20 45.66	+48 46 13.6	9.83		H	290.190 249 44	+48.770 453 79		3.10	3.12	4.33	0.92	0.80	0.97	1.00	1.03	+ 5 − 8 + 8 +10 + 8 −22 + 8 +26 − 2 +24										0	1.42
95093	19 20 46.38	+72 06 06.2	7.29		H	290.193 249 46	+72.101 723 86		3.47	5.62	17.39	0.52	0.45	0.52	0.51	0.50	−10 −24 + 7 −36 + 3 + 2 − 2 +14 + 7 −10										0	2.56
95094	19 20 46.70	−49 31 58.1	11.33		H	290.194 574 95	−49.532 807 44	B	10.58	20.45	−34.50	17.34	14.01	12.69	18.37	17.26	+50 −33 −19 −31 −25 +13 −14 −46 + 9 +68										10	1.23
95095	19 20 47.25	+21 48 41.7	7.84		H	290.196 883 78	+21.811 584 14		3.91	16.24	−2.64	0.64	0.62	0.93	0.75	0.76	+14 −23 −11 −11 − 8 +15 − 6 −13 − 3 +13										0	0.22
95096	19 20 47.31	−38 44 46.7	7.30		H	290.197 104 83	−38.746 307 31		1.79	14.57	−15.19	1.07	0.61	1.08	1.21	0.69	+ 4 −40 − 3 +19 + 0 + 1 − 2 −24 − 7 −11									

No.	Tycho Magnitudes					Colour Indices					Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
95001	9.328	0.015	8.291	0.011	A	0.902	0.014	T	0.90	0.01	L	8.3515	0.0051	0.031	127	A	8.32	8.42		D	19199+3532	I 2	1 C P A							
95002	6.148	0.004	6.033	0.004		0.087	0.007	G	0.10	0.01	H	6.0602	0.0007	0.006	72		6.05	6.07					1						S
95003	10.492	0.053	10.175	0.064		0.380	0.020	G	0.44	0.02	H	10.1606	0.0037	0.019	51		10.13	10.19		C			1						G
95004	10.045	0.039	8.143	0.017		1.579	0.034	T	1.60	0.04	L	8.0923	0.0021	0.014	45		8.07	8.12					1 S						
95005	8.471	0.011	7.300	0.007		1.004	0.010	T	0.98	0.01	L	7.3578	0.0011	0.009	119		7.34	7.37					1						S
95006	9.835	0.036	8.862	0.026		0.842	0.035	T	0.86	0.03	L	8.9361	0.0027	0.013	48		8.92	8.96		C			1						
95007	8.143	0.010	8.058	0.011		0.083	0.014	T	0.10	0.01	L	8.0612	0.0014	0.011	77		8.04	8.08		C			1						
95008	10.938	0.050	10.100	0.037		0.624	0.015	G	0.69	0.01	H	10.2473	0.0025	0.034	127		10.18	10.30		U			1 X						G
95009	8.179	0.007	8.161	0.009		0.021	0.011	T	0.04	0.01	L	8.1703	0.0015	0.017	163		8.15	8.20					1						
95010	9.633	0.023	8.418	0.015		1.039	0.021	T	1.01	0.02	L	8.4770	0.0017	0.014	74		8.45	8.50		C			1						
95011	11.171	0.046	9.246	0.015		1.598	0.038	T	1.62	0.04	L	9.2221	0.0016	0.021	213		9.19	9.26		C			1						
95012	9.800	0.018	8.676	0.012		0.968	0.017	T	0.95	0.01	L	8.7282	0.0016	0.019	165		8.70	8.76		C			1						
95013	9.003	0.013	8.665	0.014		0.326	0.021	T	0.38	0.03	L	8.7191	0.0015	0.014	112		8.69	8.76		C			1						
95014	8.805	0.014	7.580	0.009		1.044	0.015	G	1.01	0.01	H	7.6371	0.0010	0.007	64		7.62	7.66					1						S
95015	9.659	0.018	8.691	0.013		0.841	0.002	G	0.88	0.00	H	8.7341	0.0013	0.014	129		8.71	8.76		C			1						
95016	9.219	0.018	8.572	0.016		0.737	0.126	G	0.74	0.04	L	8.6571	0.0022	0.021	95		8.61	8.71		D	19200+0535	I 2	1						
95017	9.016	0.016	7.712	0.010		0.731	0.126	G	0.99	0.03	L	7.7596	0.0019	0.015	94		7.74	7.79		D	19200+0535	I 2	1						S
95018	8.703	0.009	8.635	0.011		0.068	0.013	T	0.08	0.01	L	8.6643	0.0018	0.020	180		8.63	8.69					1						
95019	9.862	0.026	8.886	0.019		0.856	0.024	T	0.87	0.02	L	8.9258	0.0022	0.017	85		8.90	8.96		C			1						
95020	7.777	0.007	7.442	0.007		0.344	0.015	G	0.40	0.02	H	7.4930	0.0009	0.010	133		7.48	7.51		C			1						S
95021	9.000	0.021	6.968	0.009		1.683	0.018	T	1.71	0.02	L	6.8672	0.0016	0.016	112		6.85	6.90		U 2	19200−0638	I 1	1						S
95022	8.556	0.010	8.469	0.012		0.108	0.015	G	0.12	0.02	H	8.5007	0.0014	0.015	116		8.48	8.53					1						
95023	9.628	0.015	9.186	0.015		0.431	0.017	T	0.50	0.02	L	9.2651	0.0027	0.026	144		9.23	9.32					1						
95024						1.600	0.510	G	1.57	0.52	J	11.4322	0.0051	0.052	103		11.33	11.52			19201+3752	I 1	1						G Y
95025	8.941	0.013	8.507	0.013		0.460	0.013	G	0.53	0.01	H	8.5655	0.0015	0.014	90		8.54	8.59		C			1						
95026	9.283	0.014	8.066	0.009		1.040	0.013	T	1.01	0.01	L	8.0939	0.0013	0.012	89		8.07	8.12		C			1						
95027	9.713	0.036	9.184	0.036		0.489	0.020	G	0.56	0.02	H	9.2481	0.0022	0.017	45		9.22	9.27		C			1						
95028	7.871	0.007	7.397	0.006		0.446	0.008	T	0.52	0.01	L	7.4559	0.0010	0.009	186		7.44	7.47		C	19201+2639	I 2	1 G						S
95029	9.338	0.014	7.495	0.006		1.533	0.012	T	1.58	0.03	L	7.4704	0.0011	0.014	185		7.45	7.49			19201+2639	I 2	1						S
95030	8.955	0.012	8.770	0.014		0.177	0.017	T	0.19	0.02	L	8.8179	0.0019	0.018	115		8.79	8.86					1						
95031	10.890	0.054	10.019	0.038		0.880	0.015	G	0.92	0.01	H	10.0168	0.0026	0.028	97		9.95	10.07		C			1						G
95032						1.500	0.510	G	1.93	0.56	K	11.4415	0.1100	0.962	118		10.53	13.04	100.30	P 1 A			1 V						D
95033	8.011	0.006	7.822	0.008		0.181	0.009	T	0.20	0.01	L	7.8588	0.0011	0.012	161		7.84	7.88					1						S
95034	10.559	0.040	9.759	0.032		0.708	0.039	T	0.76	0.03	L	9.9062	0.0023	0.021	83		9.87	9.94		C			1						
95035	8.306	0.010	7.971	0.010		0.318	0.013	T	0.37	0.02	L	8.0042	0.0013	0.011	101		7.99	8.03					1						S
95036	10.246	0.039	8.182	0.014		1.747	0.034	T	2.25	0.08	O	8.0307	0.0045	0.039	61		7.98	8.10		U 2			1						
95037	8.855	0.006	8.311	0.006		0.517	0.006	T	0.59	0.01	L	8.3669	0.0012	0.017	295		8.34	8.39		C			1						S
95038	8.023	0.009	6.105	0.004		1.626	0.008	T	1.93	0.03	O	5.9999	0.0014	0.010	106		5.98	6.02		M			1						S
95039	11.472	0.072	10.168	0.036		1.108	0.063	T	1.07	0.07	L	10.3085	0.0026	0.032	154		10.26	10.36					1						G
95040	9.902	0.033	8.493	0.018		1.190	0.029	T	1.15	0.03	L	8.5402	0.0019	0.012	58		8.52	8.57		C			1						
95041	10.000	0.025	9.609	0.027		0.466	0.005	G	0.54	0.01	H	9.6318	0.0029	0.021	90		9.60	9.66		C			1						
95042	8.027	0.007	8.012	0.009		0.019	0.011	T	0.04	0.01	L	8.0367	0.0013	0.010	116		8.02	8.05					1						S
95043	10.805	0.064	8.986	0.025		1.514	0.054	T	1.55	0.08	L	8.8842	0.0036	0.021	46		8.83	8.92					1						
95044	10.631	0.041	9.576	0.028		0.906	0.039	T	0.95	0.04	L	9.5625	0.0021	0.019	109		9.52	9.59		C			1 X S						
95045	7.229	0.006	7.079	0.006		0.144	0.008	T	0.16	0.01	L	7.0964	0.0010	0.008	90		7.08	7.11		C			1						S
95046	9.481	0.020	9.215	0.024		0.253	0.029	T	0.28	0.04	L	9.2369	0.0020	0.015	84		9.21	9.27		C	19203+0348	I 1	1 S						
95047	9.811	0.019	8.367	0.010		1.230	0.015	G	1.19	0.01	H	8.3773	0.0018	0.017	128		8.35	8.41					1						
95048	9.094	0.019	8.545	0.018		0.534	0.015	G	0.61	0.02	H	8.5985	0.0017	0.015	59		8.57	8.62		C			1						
95049	8.924	0.009	7.233	0.005		1.439	0.008	T	2.93	0.02	O	6.8892	0.0023	0.033	145		6.83	6.99		U 2 C	19204−1034	I 1	1 S						S
95050	10.451	0.029	9.847	0.026		0.562	0.029	T	0.64	0.03	L	9.9089	0.0021	0.023	152		9.87	9.96		C			1						
95051	6.701	0.004	6.820	0.004		−0.103	0.005	T	−0.09	0.01	L	6.8146	0.0010	0.009	155		6.80	6.83		C			1						S
95052	10.011	0.024	8.770	0.015		1.059	0.022	T	1.03	0.02	L	8.8193	0.0019	0.015	110		8.79	8.85					1						
95053	9.571	0.019	9.016	0.018		0.561	0.015	G	0.63	0.01	H	9.0647	0.0021	0.019	94		9.04	9.09		C			1						
95054	8.758	0.021	6.750	0.009		1.680	0.016	G	1.84	0.10	N	6.6514	0.0031	0.018	46		6.62	6.68		U 2			1						S
95055	7.077	0.005	6.612	0.005		0.438	0.006	T	0.51	0.01	L	6.6726	0.0009	0.006	90		6.66	6.68		C			1						S
95056	7.793	0.007	6.894	0.006		0.799	0.007	T	0.83	0.01	L	6.9602	0.0008	0.009	124		6.94	6.97					1						S
95057	9.165	0.010	8.619	0.010		0.512	0.013	T	0.58	0.01	L	8.6847	0.0019	0.022	166		8.65	8.73					1						
95058	9.019	0.012	8.789	0.014		0.219	0.017	T	0.24	0.02	L	8.8067	0.0020	0.020	122		8.77	8.84		C			1						
95059						0.889	0.014	G	0.93	0.01	H	10.6969	0.0035	0.035	96		10.63	10.76		C			1						G
95060	8.302	0.007	8.085	0.008		0.207	0.010	T	0.23	0.01	L	8.1204	0.0016	0.019	143		8.09	8.15					1						S
95061	9.150	0.014	9.101	0.019		0.099	0.020	G	0.11	0.02	H	9.0865	0.0023	0.019	115		9.06	9.12					1						
95062	9.282	0.014	7.503	0.007		1.482	0.012	T	1.50	0.02	L	7.4451	0.0011	0.011	113		7.43	7.47		D	19206+5020	I 1	1 S						S
95063	9.917	0.028	7.909	0.011		1.701	0.025	T	2.39	0.06	O	7.7221	0.0062	0.046	57		7.60	7.77		U 2			1 S						P
95064	10.075	0.023	8.497	0.011		1.323	0.020	T	1.28	0.02	L	8.5349	0.0010	0.015	146		8.51	8.56					1						
95065	9.525	0.018	8.729	0.015	*	0.689	0.002	G	0.75	0.00	H	* 8.7247	0.0020	0.017	99	*	8.70	8.77		D	19205−5939	I 1	2 C A	AB	265	0.611	0.004	0.13	0.02	
95066	6.177	0.003	5.093	0.002		0.937	0.003	T	0.93	0.00	L	5.1423	0.0005	0.006	114		5.13	5.15		C	19205−0524	I 1	1 O						S
95067	6.170	0.003	6.277	0.004		−0.092	0.004	T	−0.07	0.01	L	6.2701	0.0007	0.007	154		6.26	6.28		C	19205+3511	I 1	1 G						S
95068	9.907	0.023	8.286	0.011	*	1.357	0.020	T	1.32	0.02	L *	8.1489	0.0015	0.014	110	*	8.13	8.17		C	19206−0645	H 1	2 C S A	AB	345	0.126	0.007	0.63	0.46	
95069	9.131	0.018	9.056	0.025	*	0.074	0.029	T	0.09	0.03	L *	9.0851	0.0022	0.022	126	*	9.06	9.13		D	19206+3911	I 1	2 C A	AB	300	9.561	0.010	1.92	0.05	
95070	10.475	0.052	9.212	0.029		1.076	0.047	T	1.04	0.04	L	9.2403	0.0033	0.017	56		9.21	9.28		C			1 S						
95071						0.070	0.040	G	0.08	0.02	A	12.3795	0.0111	0.093	96		12.15	12.52		U 2	19206−0740	I 1	1 X						D
95072	7.541	0.006	7.414	0.008	*	0.123	0.009	T	0.14	0.01	L *	7.4243	0.0015	0.013	88	*	7.40	7.45		D	19206−3959	H 1	2 C A	AB	225	0.308	0.006	0.96	0.05	S
95073	5.406	0.002	5.456	0.003		−0.041	0.003	T	−0.02	0.00	L	5.4532	0.0006	0.005	93		5.44	5.47					1						S
95074	9.744	0.017	8.020	0.008		1.438	0.015	T	1.43	0.02	L	8.0157	0.0010	0.011	117		7.99	8.03		C			1						
95075	10.920	0.064	9.058	0.023		1.580	0.056	T	2.54	0.09	O	8.8300	0.0050	0.031	57		8.75	8.86		U 2			1						
95076	8.935	0.014	7.654	0.009		1.090	0.013	T	1.05	0.01	L	7.7036	0.0012	0.009	94		7.68	7.73					1						
95077	5.924	0.005	5.617	0.004		0.276	0.003	G	0.31	0.00	H	5.6590	0.0011	0.005	47		5.65	5.67		C			1						S
95078	9.192	0.012	8.864	0.013		0.311	0.017	T	0.36	0.02	L	8.9318	0.0036	0.034	135		8.89	8.98		U 2			1						
95079	7.855	0.010	7.579	0.010	*	0.263	0.013	T	0.30	0.02	L *	7.5933	0.0014	0.010	84	*	7.58	7.61		D	19206+0256	I 1	2 C A	AB	309	0.530	0.003	0.37	0.01	S
95080	9.781	0.023	9.373	0.025		0.386	0.031	T	0.45	0.03	L	9.4521	0.0030	0.018	76		9.40	9.48					1						G
95081	4.643	0.003	4.588	0.002		0.033	0.010	G	0.01	0.03	C	4.6039	0.0004	0.004	118		4.59	4.61					1						S
95082	9.300	0.015	7.869	0.009		1.208	0.014	T	1.68	0.03	C	7.7917	0.0037	0.033	102		7.75	7.85		U 2	19206+1425	I 1	1						S P
95083	8.070	0.011	6.944	0.008		0.969	0.011	T	0.95	0.01	L	6.9885	0.0014	0.008	68		6.98	7.01		C			1						S
95084	10.039	0.033	8.644	0.018		1.179	0.029	T	1.14	0.03	L	8.6760	0.0016	0.011	51		8.66	8.69		C			1						
95085											T	11.3085	0.0092	0.045	44		11.22	11.39					1						G
95086	7.922	0.007	7.803	0.008		0.108	0.010	T	0.12	0.01	L	7.8440	0.0012	0.014	164		7.82	7.87					1						S
95087	8.072	0.009	7.647	0.011		0.425	0.015	G	0.49	0.02	H	7.6965	0.0011	0.009	105		7.68	7.71		C			1						S
95088	8.883	0.013	8.268	0.012		0.591	0.015	G	0.66	0.01	H	8.3390	0.0015	0.013	75		8.32	8.37		C			1						
95089	8.693	0.013	8.160	0.012		0.475	0.003	G	0.55	0.00	H	8.2319	0.0016	0.012	112		8.20	8.26		C			1						S
95090	10.236	0.024	8.805	0.013		1.208	0.021	T	1.17	0.02	L	8.8249	0.0019	0.021	150		8.79	8.86					1						
95091	8.219	0.009	7.829	0.011		0.369	0.013	T	0.43	0.01	L	7.8892	0.0011	0.012	103		7.85	7.91					1						S
95092	9.869	0.023	9.838	0.033		0.033	0.037	T	0.05	0.03	L	9.8445	0.0035	0.024	105		9.79	9.89					1						G
95093	8.542	0.010	7.387	0.007		0.992	0.010	T	0.97	0.01	L	7.4558	0.0012	0.010	116		7.43	7.47					1						S
95094						0.371	0.107	G	0.43	0.12	R	11.4412	0.0268			B				D	19208−4932	I 2	1 C I A						
95095	9.599	0.017	7.987	0.009		1.350	0.015	T	1.32	0.02	L	7.9943	0.0016	0.015	121		7.96	8.02					1						
95096	9.287	0.021	7.461	0.010		1.519	0.018	T	1.54	0.02	A	7.4225	0.0016	0.010	61		7.41	7.44					1						S
95097	10.341	0.035	9.947	0.040	A	0.385	0.045	T	0.45	0.05	L	10.0729	0.0089	0.036	80	A	10.02	10.15		D	19208−4932	I 2	1 C P A						G
95098	10.140	0.030	9.505	0.027		0.590	0.035	T	0.66	0.03	L	9.5948	0.0020	0.022	122		9.55	9.63		C			1						
95099	9.686	0.021	7.187	0.007		2.070	0.020	G	2.09	0.09	H	6.9604	0.0030	0.024	102		6.92	7.00		U 2			1 S						S P
95100	8.535	0.008	7.971	0.007		0.532	0.008	T	0.60	0.01	L	8.0282	0.0013	0.015	187		8.00	8.06					1						S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas			mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
95101	19 20 51.14	+35 08 51.2	9.11		H	290.213 103 57	+35.147 546 76		5.42	2.01	−1.86	1.01	1.09	1.33	1.09	1.34	− 2	− 1	− 7	− 4	+15	+ 9	+17	− 2	+ 2	+ 2	1	
95102	19 20 51.28	−32 29 18.5	10.03		H	290.213 667 80	−32.488 480 48		1.59	9.38	−19.80	1.68	1.22	1.97	2.23	1.29	+ 3	−17	−17	+ 1	− 1	−33	− 9	−32	+ 5	−12	0	−1.67
95103	19 20 51.63	−38 24 39.2	9.14		H	290.215 145 26	−38.410 902 36		13.72	27.46	−69.79	1.42	0.99	1.53	1.75	1.10	+ 5	−34	− 5	+12	−15	+ 4	−17	−17	+ 5	− 8	0	1.21
95104	19 20 51.67	−11 18 03.3	7.25		H	290.215 295 34	−11.300 920 84		2.89	14.56	3.56	0.73	0.41	0.90	0.77	0.48	+12	−30	− 8	−15	+ 2	+13	− 2	−38	+21	+16	2	0.67
95105	19 20 53.35	−21 32 08.3	8.05		H	290.222 287 35	−21.535 636 49		4.97	−0.41	−15.56	0.87	0.63	1.08	1.10	0.64	+21	− 5	−21	+18	− 8	+48	+ 0	− 6	−10	+ 6	0	1.53
95106	19 20 53.56	−33 03 09.3	8.17		G	290.223 186 22	−33.052 588 46	A	20.77	9.42	−150.12	3.05	2.03	2.34	3.63	1.92	−23	−30	+ 8	+24	− 8	−18	− 9	−19	− 5	−28	13	1.76
95107	19 20 53.89	+13 34 36.1	6.91		H	290.224 529 89	+13.576 701 84		5.45	18.06	−44.34	0.56	0.49	0.83	0.59	0.55	+11	−25	−15	+12	−24	+14	−28	− 8	+14	+ 0	0	−1.41
95108	19 20 54.13	+07 21 14.7	9.65		G	290.225 522 83	+07.354 075 45		−0.04	−1.43	−7.83	1.39	0.95	1.55	1.58	1.03	−12	−19	−16	−39	+10	−10	+ 4	−51	+17	−27	0	−0.57
95109	19 20 54.30	+22 11 55.7	6.56		H	290.226 253 58	+22.198 807 16		6.30	−1.18	−8.42	0.50	0.51	0.73	0.64	0.69	+ 9	− 9	−30	− 6	− 7	+10	− 3	+11	−13	+ 2	0	−0.50
∗95110	19 20 54.45	−33 03 17.3	9.91		H	290.226 883 40	−33.054 801 77	B	25.92	17.14	−143.67	24.77	15.23	13.67	20.63	11.07	−20	−33	+ 2	+30	−12	−15	−16	−13	+ 1	−29	13	1.76
∗95111	19 20 54.38	+18 10 07.7	8.87		H	290.226 587 55	+18.168 805 73		9.28	−53.27	−62.80	0.83	0.74	1.17	1.16	1.05	+37	− 9	− 4	+31	+ 2	+28	− 4	+ 1	+24	+29	0	−1.83
95112	19 20 56.29	+00 54 53.9	7.52		H	290.234 543 41	+00.914 960 01		9.55	23.12	−0.53	0.83	0.55	1.00	0.89	0.67	+13	−36	− 2	−15	+ 2	+19	+ 1	−18	+ 7	+24	7	0.37
95113	19 20 57.85	−48 47 04.1	8.69		H	290.241 039 14	−48.784 471 69		1.48	−5.46	−0.32	1.01	0.72	1.18	1.37	1.12	− 1	−27	+11	− 8	+22	+ 8	+25	−25	− 3	+ 8	0	−1.61
95114	19 20 58.23	−25 31 57.7	8.28		G	290.242 613 14	−25.532 689 79		11.57	20.44	−27.77	1.15	0.92	1.52	1.37	0.79	+12	−32	−64	−16	+32	−20	+11	−40	+29	−35	0	−0.73
95115	19 20 59.15	+38 47 23.6	8.38		H	290.246 456 19	+38.789 878 36		4.52	18.55	27.49	0.56	0.61	0.72	0.59	0.70	− 2	− 9	+ 2	+15	+ 7	+ 1	+ 7	+13	+ 5	− 1	0	0.31
95116	H 19 20 59.85	+19 08 43.4	6.82	1	H	290.249 385 79	+19.145 385 95	A	17.07	60.80	62.20	0.88	0.84	1.09	1.02	1.06	+45	−15	+ 2	−21	−18	+10	−21	−14	+ 2	+52	3	−0.32
95117	19 21 01.12	+59 25 59.6	10.89		G	290.254 682 93	+59.433 222 15		−0.52	9.95	−9.36	2.54	2.55	2.67	2.92	3.12	+ 1	+ 3	+ 2	+ 2	+11	− 3	+13	−15	+10	+ 9	0	
95118	19 21 02.34	+08 30 58.8	10.11	3	H	290.259 768 64	+08.516 338 82		1.42	2.77	−2.76	1.71	1.24	1.80	2.06	1.39	+29	− 9	+ 8	−31	−31	− 9	−31	−49	− 4	+15	0	0.10
95119	19 21 02.83	+42 41 13.4	7.05		H	290.261 782 14	+42.687 058 37		6.27	−15.12	−38.72	0.50	0.50	0.59	0.48	0.49	− 8	− 4	− 3	− 2	+23	−11	+25	−12	+ 1	+ 6	2	−0.22
95120	19 21 02.96	−31 12 21.2	8.51		H	290.262 328 05	−31.205 889 73		2.87	4.46	−2.23	1.73	1.10	1.92	1.99	0.99	+18	−49	−36	+13	−16	+ 8	−23	−33	+ 9	−22	0	0.47
95121	19 21 03.41	+05 06 42.1	7.06		H	290.264 190 38	+05.111 690 91		3.25	−15.69	−60.05	0.72	0.52	0.83	0.85	0.56	+ 6	−29	+ 4	+ 0	+ 0	− 1	+ 1	−26	+ 7	+21	0	1.36
95122	H 19 21 03.53	−11 58 48.5	8.97		G	290.264 696 49	−11.980 150 49	A	1.80	4.64	−1.83	1.76	1.04	2.00	1.91	1.25	+25	−11	−12	+ 9	− 1	+17	− 6	−24	+26	+24	1	2.44
95123	H 19 21 03.93	−63 51 56.3	9.45		H	290.266 394 59	−63.865 632 06	∗	2.12	5.39	−17.51	4.58	2.75	2.28	2.65	2.13	+ 9	−27	+ 3	+ 1	+ 6	−23	+10	−32	+ 1	+ 7	0	−0.02
95124	19 21 04.26	−23 37 10.2	7.55		H	290.267 750 67	−23.619 495 68		8.66	−45.15	−31.23	0.85	0.56	0.92	0.88	0.57	+ 0	−32	−17	− 9	+14	+22	+20	−15	− 3	+ 9	0	0.48
95125	19 21 05.67	−52 43 22.3	7.67		G	290.273 624 56	−52.722 867 74		17.17	114.11	68.96	0.71	0.69	0.93	1.01	0.69	+ 7	+ 1	−25	− 1	+30	−12	+19	−39	+ 8	+ 0	4	−1.20
95126	19 21 06.83	−01 10 35.2	6.95		G	290.278 442 66	−01.176 451 48		3.43	6.31	−5.64	0.76	0.53	0.93	0.79	0.57	+ 8	−20	−21	−17	+ 1	+21	+ 4	−26	+11	+ 2	0	1.04
95127	19 21 07.32	−31 23 50.3	10.76		H	290.280 514 49	−31.397 292 03		1.84	−19.89	−16.98	3.62	2.73	4.61	4.48	2.18	+32	−37	−56	+29	− 1	−21	−37	−43	+29	−30	0	−0.28
95128	19 21 08.82	−18 31 05.0	8.25		H	290.286 738 84	−18.518 045 63		1.59	−5.08	−17.33	0.91	0.64	0.97	0.96	0.64	+ 5	−20	−14	−17	+ 2	+ 3	+ 3	−33	− 1	+ 6	0	−0.50
95129	19 21 10.52	+07 17 14.8	8.41		H	290.293 825 88	+07.287 432 97		2.73	−1.33	−14.90	1.08	0.75	1.19	1.20	0.78	−15	−19	−16	−39	+13	−13	+ 7	−52	+18	−28	0	0.51
95130	19 21 15.57	−43 36 18.8	8.22		H	290.314 878 41	−43.605 214 80		2.45	0.58	−23.90	1.04	0.64	1.09	1.26	0.75	+24	−28	+12	+15	− 8	+ 1	−11	−41	−18	+12	0	1.67
95131	19 21 17.32	+20 57 46.1	7.42		H	290.322 149 47	+20.962 816 51		2.35	0.94	−7.54	0.52	0.54	0.79	0.63	0.71	+26	−17	−19	− 6	− 2	+13	+ 1	+ 0	+ 1	+28	1	−1.67
95132	19 21 17.60	+14 38 01.4	7.70		H	290.323 318 38	+14.633 715 10		3.35	0.60	−8.92	0.64	0.54	0.91	0.75	0.66	+11	− 6	− 5	+18	+ 3	+28	+ 4	+25	+ 6	+24	2	1.39
95133	19 21 18.28	+05 25 21.8	8.77		H	290.326 179 36	+05.422 713 15		0.18	3.90	−4.63	0.95	0.68	1.08	1.14	0.78	+ 9	−17	+ 0	+ 1	+ 0	− 4	− 1	−22	+ 9	+14	2	−1.35
95134	19 21 18.85	−55 58 11.5	8.40		H	290.328 537 12	−55.969 865 46		5.40	5.99	2.34	0.73	0.60	1.09	0.89	0.70	+ 9	−14	− 8	+34	−12	− 6	− 1	−13	−11	+30	0	1.53
95135	19 21 19.19	−12 15 59.6	9.19		G	290.329 949 48	−12.266 548 58		3.05	1.99	2.11	1.12	0.63	1.34	1.27	0.80	+26	−30	− 8	+12	+ 2	+13	− 5	−22	+19	+22	0	2.26
95136	19 21 19.25	−13 08 10.7	8.67		H	290.330 198 66	−13.136 295 36		4.28	16.84	−5.25	0.97	0.64	1.10	1.12	0.77	+34	−21	− 9	+ 0	+ 6	+18	+ 6	−14	+ 4	+28	2	1.10
95137	19 21 21.89	+29 48 00.7	8.26		H	290.341 200 48	+29.800 205 83		3.28	6.46	−6.01	0.58	0.77	0.92	0.72	1.06	−18	− 4	− 8	+30	− 5	− 8	− 5	+28	+ 6	−21	0	2.64
95138	19 21 22.17	−10 10 34.1	7.61	1	H	290.342 358 38	−10.176 129 30		2.44	−2.72	−0.69	0.77	0.44	0.92	0.82	0.52	+ 2	−17	− 6	−25	− 1	+17	+ 1	−44	+10	+10	0	−1.04
95139	19 21 23.12	−54 34 56.7	8.21		H	290.346 336 78	−54.582 415 54		4.29	−2.37	12.83	0.85	0.69	1.02	1.12	0.76	+16	−20	−13	− 8	+ 4	+ 4	+ 4	−31	−13	+ 7	0	−1.14
95140	H 19 21 23.52	+19 47 53.7	9.50		H	290.347 979 74	+19.798 242 89	A	−0.99	−1.29	−3.21	1.78	2.10	2.55	1.82	2.23	+45	−16	−17	−11	− 2	− 5	+ 0	− 7	+ 2	+25	1	0.03
95141	19 21 23.92	−05 35 51.9	9.00		H	290.349 687 42	−05.597 756 92		1.04	4.64	1.12	0.99	0.63	1.14	1.10	0.81	+ 0	− 5	−11	− 8	+14	+26	+22	−17	+21	+32	0	1.38
95142	19 21 23.96	−19 53 03.8	9.41		H	290.349 852 79	−19.884 402 47		1.17	0.79	−7.64	1.44	0.99	1.60	1.61	1.04	+22	−29	−15	+ 2	+ 0	−15	− 8	−29	+ 9	+ 6	0	−0.77
95143	19 21 25.37	+57 46 00.2	6.59		H	290.355 702 63	+57.766 709 54		3.39	20.94	41.61	0.49	0.49	0.52	0.56	0.61	+ 9	+ 5	+ 5	+ 9	+ 5	− 5	+ 8	−10	+ 7	+21	0	0.01
95144	19 21 25.52	+08 18 27.7	8.49		H	290.356 338 97	+08.307 688 45		−0.14	−0.04	−5.24	1.10	0.83	1.25	1.24	0.81	+ 2	− 5	+12	−39	−13	−29	− 9	−47	− 1	−17	0	−0.12
95145	19 21 26.83	+34 17 20.0	8.31		H	290.361 776 61	+34.288 885 29		2.05	−1.42	−2.21	0.60	0.62	0.77	0.66	0.81	− 7	− 1	−10	+25	+12	− 4	+14	+13	+ 3	− 7	0	1.56
95146	H 19 21 26.91	+32 40 40.0	7.32		H	290.362 104 19	+32.677 790 99	A	1.45	1.11	−3.28	0.95	0.96	0.92	0.83	0.99	+ 0	− 4	−10	+35	+11	−14	+10	+28	+ 4	− 7	0	0.02
95147	19 21 27.88	+25 36 14.3	7.43		G	290.366 187 28	+25.603 973 29		1.77	0.95	−3.95	0.36	0.60	0.93	0.38	0.75	−24	+ 1	−20	+37	+ 1	−17	+ 0	− 8	+21	−25	0	−1.30
95148	19 21 29.11	+13 15 27.7	7.99		H	290.371 284 39	+13.257 686 02		4.92	−4.02	−9.29	0.61	0.55	0.99	0.66	0.61	+20	−26	−21	+16	−30	+23	−31	− 7	+12	+12	0	−0.54
95149	19 21 29.70	−34 58 59.6	6.48		G	290.373 748 69	−34.983 222 76		47.95	78.88	−108.93	2.59	1.62	1.28	4.08	2.50	−79	+ 1	−26	−84	+79	−10	+76	−84	+34	−85	0	1.82
95150	19 21 31.02	−41 50 24.0	10.01		G	290.379 261 65	−41.840 012 64		6.01	24.08	−25.79	1.74	1.08	2.07	2.59	1.33	+25	−31	−36	+21	+29	−32	−11	−47	+30	−34	0	0.52
95151	19 21 33.54	−69 24 31.2	9.74		H	290.389 751 86	−69.408 656 43		4.32	8.88	−38.11	0.76	1.01	1.50	0.95	1.34	−12	− 8	− 7	+49	+ 6	+ 4	− 2	−22	− 3	−26	0	−0.67
95152	19 21 34.72	+08 52 22.6	9.07		H	290.394 656 63	+08.872 952 47		1.04	−1.53	−3.85	1.30	0.85	1.48	1.49	0.97	− 6	− 1	+ 6	−25	−16	− 9	−17	−37	− 8	−16	0	−0.64
95153	19 21 34.89	−55 22 40.5	7.81		H	290.395 390 51	−55.377 906 57		5.12	3.74	−8.00	0.89	0.71	1.03	1.31	0.76	+13	−14	−17	−18	+ 5	−10	− 2	−41	− 6	−12	0	−0.03
95154	19 21 35.53	+76 33 34.6	6.22	2	H	290.398 060 52	+76.559 597 65		1.75	−7.21	−0.79	0.54	0.43	0.52	0.67	0.52	+ 8	−32	− 1	−22	−11	+19	−11	−15	+ 2	+30	0	1.50
95155	19 21 36.00	+00 26 37.1	7.64		G	290.399 986 38	+00.443 632 63		4.38	2.36	−7.44	0.81	0.53	0.96	0.92	0.69	+ 2	−27	+ 4	−18	+ 2	+18	+ 1	−22	+10	+29	0	1.22
∗95156	H 19 21 36.09	+52 22 34.9	6.94		G	290.400 386 44	+52.376 347 88	∗	4.82	18.13	23.63	0.51	0.55	0.59	0.55	0.71	+ 7	−20	+ 1	− 4	+10	+16	+ 8	+ 4	+11	+24	0	0.17
∗95157	19 21 36.05	+19 48 49.5	8.48		H	290.400 227 13	+19.813 748 38		3.71	17.62	−3.26	0.64	0.72	1.08	0.80	0.90	+21	−18	−23	+ 0	− 6	+ 7	− 4	− 7	− 1	+17	0	−0.28
95158	19 21 36.74	−02 28 59.3	8.16		H	290.403 078 87	−02.483 138 12		1.40	1.43	−2.18	1.14	0.81	1.19	1.78	1.25	−14	−11	−24	−52	+23	+17	+21	−68	+11	−37	0	2.00
95159	19 21 37.11	−19 14 03.9	6.25	1	H	290.404 632 61	−19.234 417 85		4.80	0.80	−11.46	0.76	0.47	0.82	0.78	0.47	− 2	−36	−26	+11	+ 8	− 6	+ 4	−19	+ 6	−12	0	−0.08
95160	19 21 37.24	−66 43 26.0	8.90	2	H	290.405 150 24	−66.723 888 01		2.94	7.49	−15.32	0.65	0.76	1.16	0.71	0.94	+ 4	−22	+ 3	−21	− 6	+13	−11	−19	+17	+ 2	0	1.67
95161	19 21 37.85	+10 26 59.7	8.31		H	290.407 701 26	+10.449 904 65		3.76	8.68	−8.88	0.91	0.76	1.16	1.10	1.01	− 4	−10	− 6	−14	+ 0	+18	+ 3	− 6	−13	−36	0	−0.49
95162	19 21 38.79	−41 41 15.7	9.79		G	290.411 611 97	−41.687 681 66		5.76	1.24	−10.83	1.68	0.99	2.00	2.58	1.33	+32	−31	−31	+21	+35	−36	− 8	−50	+30	−31	0	1.06
95163	19 21 39.11	+25 34 29.5	7.30	3	H	290.412 949 73	+25.574 851 38	∗	2.86	−3.08	−1.35	0.47	0.79	0.95	0.46	0.83	−26	− 5	− 4	+17	+ 7	−12	+ 8	−30	+ 6	−19	0	−0.33
95164	19 21 39.29	−29 36 19.6	7.10		G	290.413 687 58	−29.605 440 93		19.98	122.62	−10.17	0.91	0.59	1.04	0.91	0.54	+25	−53	−42	+ 6	− 9	+18	− 7	−16	+ 8	− 2	0	1.89
95165	19 21 39.38	+21 13 49.0	9.39		G	290.414 063 04	+21.230 275 42		7.60	−3.10	−49.06	0.85	0.98	1.41	1.09	1.39	+30	−24	−13	+ 3	+ 3	+ 4	+ 8	+ 9	−20	+30	3	−2.15
95166	19 21 39.54	+10 45 38.9	10.45		H	290.414 753 10	+10.760 791 93		−0.89	1.82	−2.81	1.74	1.21	2.15	1.88	1.75	− 8	−24	− 5	−26	− 2	+33	+ 4	−11	−19	−26	0	−0.07
95167	19 21 40.24	+79 36 10.4	6.06		H	290.417 670 71	+79.602 893 62		10.56	22.75	−26.33	0.45	0.46	0.50	0.47	0.50	+11	−11	+16	+ 0	− 3	−16	+ 2	−16	− 8	+23	0	−0.19
95168	19 21 40.38	−17 50 50.1	3.92	1	G	290.418 230 37	−17.847 251 55		26.79	−26.95	22.24	0.73	0.45	0.77	0.83	0.50	− 6	−28	−11	+23	− 8	+24	− 2	+ 1	−19	−20	0	2.05
95169	19 21 40.56	+26 38 07.9	7.72		H	290.419 006 93	+26.635 518 67		13.09	6.53	−30.73	0.42	0.67	0.87	0.50	0.89	−24	− 6	−16	+20	+ 3	−15	+ 1	+ 9	+ 7	−37	0	0.22
95170	19 21 41.16	+29 54 19.7	7.46		H	290.421 498 65	+29.905 470 75		2.89	1.96	−5.06	0.47	0.58	0.72	0.57	0.76	−16	− 6	−18	+31	− 1	−14	− 4	+21	+14	−21	0	−0.75
95171	19 21 41.54	−54 11 08.1	7.47		H	290.423 082 82	−54.185 581 17		5.90	−9.51	−122.21	0.81	0.62	0.93	1.03	0.69	+15	−26	−13	−15	+ 4	+ 5	+ 5	−31	−10	+ 5	0	−1.24
95172	19 21 41.69	−17 14 43.2	7.38		H	290.423 708 40	−17.245 330 61		13.30	−76.21	−39.92	0.82	0.49	0.95	0.87	0.53	+24	−44	−26	+ 1	+ 6	+22	+10	− 7	− 7	− 9	4	1.88
95173	19 21 42.05	+17 40 00.1	8.69	2	H	290.425 194 45	+17.666 681 02	∗	2.22	5.02	−23.68	0.97	0.90	1.25	1.47	1.60	+46	−18	− 5	−12	−41	− 1	−44	−41	+ 9	+39	0	2.28
95174	19 21 42.08	+41 05 48.1	9.08		H	290.425 341 58	+41.096 706 69		2.46	2.99	1.63	0.70	0.72	0.90	0.80	0.79	− 8	+ 3	+ 5	+ 2	+15	−27	+19	− 7	+11	+ 2	3	0.51
95175	19 21 43.32	−15 34 07.3	8.98		G	290.430 500 87	−15.568 688 61		4.54	5.34	−37.60	1.02	0.62	1.15	1.20	0.81	+36	−26	− 2	−11	+ 4	− 2	+ 3	−27	−13	+10	0	0.81
95176	19 21 43.62	−15 57 18.0	4.52	2	G	290.431 758 42	−15.955 002 33		1.95	1.79	−6.27	0.65	0.40	0.72	0.69	0.45	+19	−39	−18	− 7	+10	+11	+10	−17	− 3	− 7	0	0.52
95177	19 21 44.19	−26 09 58.6	7.29		H	290.434 144 35	−26.166 284 95		4.98	−13.91	−38.71	1.11	0.88	1.35	1.41	0.73	+ 0	−25	−59	−39	+21	− 3	+15	−54	+17	−39	0	−0.53
95178	H 19 21 44.70	+77 07 38.2	9.58		H	290.436 233 39	+77.127 278 52	A	19.67	136.96	384.66	2.14	2.13	1.70	1.90	2.16	+ 2	−12	− 6	−19	− 4	− 8	− 3	− 6	−18	+17	0	−0.06
95179	19 21 44.83	−14 02 00.0	7.67		G	290.436 809 04	−14.033 332 53		7.82	27.56	−13.18	0.85	0.55	0.92	0.95	0.69	+41	−29	− 8	−23	−14	+ 7	−12	−37	− 7	+32	0	1.51
95180	19 21 46.31	−04 48 50.9	8.60		H	290.442 944 96	−04.814 152 43		3.70	−1.12	−0.45	0.93	0.57	1.05	1.09	0.79	+ 3	−18	− 2	−11	+14	+22	+17	−16	+14	+30	0	0.89
95181	19 21 46.83	−01 50 21.6	7.94		H	290.445 105 61	−01.839 323 29		2.92	3.25	−3.81	0.88	0.57	1.08	0.95	0.62	+ 8	−27	−19	−23	− 4	+25	− 4	−38	+13	− 5	0	1.19
95182	19 21 46.90	−28 44 33.4	9.84		G	290.445 425 93	−28.742 608 30		−0.24	3.03	−3.81	1.68	1.40	2.25	2.06	1.18	+16	−23	−58	− 6	−13	+29	+ 1	−19	+ 6	− 1	0	−0.83
95183	19 21 47.85	+62 48 03.0	8.30		H	290.449 384 29	+62.800 829 91		1.36	−5.11	−10.78	0.70	0.66	0.71	0.84	0.69	+20	+ 6	+21	+13	+18	+14	+15	+18	+16	+35	0	0.53
95184	19 21 48.24	+36 02 26.4	11.22		G	290.450 995 84	+36.040 658 47		5.16	−167.77	−102.15	1.30	1.50	1.85	1.53	1.72	− 8	+ 6	−10	− 3	+ 8	−23	+ 8	−17	+ 8	+ 1	0	0.84
95185	19 21 48.76	+55 44 18.7	8.25		H	290.453 177 32	+55.738 532 88		4.49	−2.71	−6.83	0.60	0.59	0.62	0.72	0.71	+13	−20	+ 5	+36	+13	−17	+18	+22	−13	+28	0	1.98
95186	19 21 49.85	+25 28 38.7	8.93		H	290.457 694 52	+25.477 408 00		9.94	46.74	115.46	0.52	0.90	1.32	0.54	1.09	−19	+10	−26	+33	+10	−13	+11	−19	+12	−15	1	−1.63
∗95187	19 21 50.86	+28 39 56.0	11.52	2	G	290.461 897 48	+28.665 549 57		38.90	866.67	265.26	4.13	5.62	7.24	4.79	7.20	−10	− 6	−15	+ 4	− 1	− 8	− 2	+ 2	− 5	−13	3	
∗95188	19 21 50.83	−18 18 29.4	5.84		H	290.461 802 86	−18.308 162 37		9.09	102.34	−92.96	0.72	0.49	0.80	0.78	0.50	+10	−25	−27	+ 0	+ 2	− 2	+ 0	−22	+ 1	+ 1	0	−0.05
95189	19 21 51.03	−81 47 41.7	8.51		H	290.462 642 14	−81.794 930 43		1.28	−6.71	−6.21	0.70	0.76	0.91	0.81	1.06	−20	−29	+ 9	− 1	− 3	− 4	+ 3	+29	− 6	−27	1	1.26
95190	19 21 51.38	−37 58 41.8	9.45		G	290.464 090 97	−37.978 285 98		11.65	−166.69	−83.52	1.56	1.14	1.71	2.02	1.08	+ 0	− 9	−17	+ 9	+ 3	−21	− 4	−28	+10	+ 0	0	1.44
95191	19 21 52.41	+07 06 08.2	8.34		G	290.468 383 24	+07.102 291 45		6.75	−11.38	14.12	0.99	0.67	1.15	1.22	0.78	−13	−15	−17	−25	+21	+ 3	+18	−40	+16	−13	2	0.94
95192	19 21 53.15	+10 55 13.7	7.39		H	290.471 458 58	+10.920 485 49		3.39	12.22	62.66	0.84	0.61	1.05	0.90	0.84	− 8	− 6	− 7	−25	− 4	+29	− 2	−14	−18	−25	0	0.28
95193	19 21 53.50	−21 38 39.2	8.58		H	290.472 936 82	−21.644 221 66		7.67	59.77	0.95	1.05	0.77	1.33	1.32	0.85	+25	−11	−12	+ 7	− 2	+47	+ 6	− 6	−12	+17	0	−0.69
95194	19 21 54.46	+55 52 45.0	9.05		H	290.476 934 61	+55.879 161 53		3.05	3.14	13.67	0.70	0.67	0.72	0.80	0.81	+12	−17	− 5	+30	+10	−14	+12	+25	−15	+23	0	−0.71
95195	H 19 21 54.99	+63 06 05.5	8.54		H	290.479 116 19	+63.101 537 48	A	1.82	5.72	−5.93	1.02	0.95	0.94	1.14	0.99	+ 1	− 2	+ 1	+ 2	+17	+ 5	+12	+25	+13	+13	0	−0.43
95196	19 21 55.61	−40 32 51.7	9.87		G	290.481 729 08	−40.547 691 17		2.99	8.15	−8.42	1.76	1.06	1.79	3.34	1.43	+ 0	−17	−14	+ 1	+43	− 8	+10	−54	+ 8	−56	3	−0.30
95197	H 19 21 57.26

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
95101	9.103	0.013	9.158	0.018		−0.046	0.020	T	−0.02	0.02	L	9.1057	0.0022	0.024	149		9.07	9.16					1 X							
95102	10.683	0.072	10.169	0.073		0.575	0.071	G	0.65	0.07	R	10.1589	0.0040	0.024	57		10.12	10.20					1							G
95103	9.863	0.029	9.224	0.026		0.587	0.029	T	0.66	0.03	L	9.2664	0.0025	0.021	56		9.23	9.30		C			1							
95104	9.008	0.011	7.417	0.006		1.334	0.010	T	1.30	0.01	L	7.4026	0.0007	0.009	129		7.39	7.42					1							S
95105	8.062	0.011	8.042	0.014		−0.005	0.015	G	0.02	0.01	H	8.0583	0.0013	0.012	61		8.04	8.08		C			1							S
95106	8.945	0.020	8.193	0.017	A	0.656	0.015	G	0.72	0.01	H	8.2748	0.0150	0.062	54	A	8.20	8.38		D	19209−3303	I 2	1 C P A							S
95107	8.322	0.010	7.028	0.005		1.100	0.009	T	1.06	0.01	L	7.0743	0.0009	0.008	108		7.06	7.09		C			1							S
95108	10.069	0.028	9.639	0.030		0.382	0.015	G	0.45	0.02	H	9.7581	0.0027	0.023	93		9.72	9.80		C			1							G
95109	6.473	0.004	6.547	0.005		−0.063	0.006	T	−0.04	0.01	L	6.5437	0.0010	0.009	112		6.53	6.56					1							S
95110						0.636	0.155	G	0.70	0.14	R	10.2618	0.0645			B				D	19209−3303	I 2	1 C I A							
95111	9.522	0.017	8.910	0.016		0.576	0.015	G	0.65	0.01	H	8.9930	0.0018	0.014	116		8.97	9.02		C			1							
95112	7.876	0.009	7.550	0.007		0.330	0.015	G	0.38	0.02	H	7.5965	0.0012	0.011	96		7.58	7.62					1							S
95113	10.468	0.036	8.850	0.016		1.355	0.031	T	1.32	0.04	L	8.8450	0.0021	0.020	94		8.83	8.88					1							
95114	8.831	0.016	8.339	0.016		0.490	0.015	G	0.56	0.02	H	8.3786	0.0017	0.012	59		8.35	8.39		C			1							
95115	8.896	0.011	8.425	0.011		0.433	0.005	G	0.50	0.01	H	8.4784	0.0014	0.021	136		8.45	8.51					1							
95116	7.320	0.005	6.833	0.006	*	0.458	0.007	T	0.53	0.01	L *	6.9218	0.0017	0.015	136	*	6.90	6.96		U 2	19210+1909	I 1	2 C A	AB	283	8.793	0.006	2.22	0.04	S
95117	11.467	0.071	10.696	0.060		0.562	0.072	G	0.64	0.07	R	10.9838	0.0043	0.037	106		10.92	11.04					1 X							G
95118	11.846	0.145	10.336	0.064		1.270	0.125	T	1.23	0.13	L	10.2651	0.0278	0.228	79		9.92	10.51	7.24	P 1 A			1							G
95119	8.627	0.010	7.169	0.006		1.229	0.009	T	1.19	0.01	L	7.2092	0.0009	0.009	113		7.19	7.22					1							S
95120	10.616	0.060	8.747	0.023		1.160	0.040	G	1.12	0.04	R	8.6773	0.0034	0.022	42		8.64	8.71					1							
95121	9.177	0.015	7.256	0.007		1.595	0.013	T	1.61	0.01	L	7.1764	0.0014	0.013	95		7.16	7.20					1							S
95122	9.024	0.012	8.981	0.016	A	0.149	0.095	G	0.07	0.04	L *	8.9221	0.0017	0.015	114	*	8.89	8.95		D	19211−1159	H 1	2 C A	AB	179	3.571	0.026	3.24	0.16	
95123	9.832	0.020	9.489	0.022	*	0.332	0.033	T	0.39	0.04	L *	9.5336	0.0030	0.024	99	*	9.49	9.59		C	19211−6352	H 1	2 C A	AB	229	0.234	0.051	1.96	0.60	
95124	8.851	0.015	7.658	0.010		1.022	0.014	T	1.00	0.01	L	7.7149	0.0013	0.008	63		7.70	7.73		C			1							
95125	8.578	0.012	7.761	0.010		0.716	0.006	G	0.77	0.01	H	7.8140	0.0018	0.012	83		7.80	7.84					1							S
95126	8.674	0.014	7.095	0.007		1.327	0.003	G	1.29	0.00	H	7.1065	0.0009	0.010	90		7.09	7.12		C			1							S
95127											T	10.9180	0.1225	0.534	37		10.21	11.56					1							G
95128	9.431	0.021	8.352	0.015		0.934	0.020	T	0.93	0.01	L	8.4151	0.0026	0.013	68		8.39	8.43		C			1							
95129	9.768	0.023	8.546	0.014		1.044	0.021	T	1.01	0.02	L	8.5741	0.0019	0.016	94		8.55	8.60		C			1							
95130	9.516	0.020	8.319	0.013		1.025	0.019	T	1.00	0.02	L	8.3817	0.0016	0.012	87		8.36	8.41		C			1							
95131	7.408	0.006	7.416	0.007		0.004	0.005	G	0.02	0.01	H	7.4285	0.0009	0.012	131		7.41	7.44					1							S
95132	7.661	0.007	7.692	0.008		−0.024	0.010	T	0.00	0.01	L	7.7060	0.0012	0.012	103		7.68	7.73		C			1							S
95133	9.291	0.016	8.831	0.016		0.466	0.015	G	0.54	0.02	H	8.8787	0.0021	0.017	88		8.85	8.90		C			1							
95134	10.067	0.026	8.546	0.014		1.278	0.023	T	1.24	0.02	L	8.5626	0.0012	0.012	118		8.54	8.59		C			1							
95135	9.675	0.022	9.199	0.022		0.455	0.020	G	0.52	0.02	H	9.3042	0.0020	0.019	100		9.27	9.35					1							
95136	8.941	0.013	8.717	0.015		0.214	0.019	T	0.24	0.02	L	8.7412	0.0017	0.015	92		8.72	8.76		C			1 S							S
95137	10.160	0.024	8.405	0.010		1.463	0.021	T	1.47	0.03	L	8.3886	0.0017	0.015	157		8.35	8.42					1							
95138	9.909	0.020	7.813	0.007		1.734	0.017	T	1.76	0.02	L	7.7096	0.0012	0.012	138		7.69	7.73		M			1							
95139	8.519	0.014	8.203	0.015		0.303	0.022	T	0.35	0.03	L	8.2856	0.0021	0.014	86		8.26	8.31					1							S
95140	10.137	0.022	9.614	0.021	A	0.100	0.495	G	0.55	0.08	L *	9.6094	0.0030	0.027	152	*	9.57	9.66		D	19214+1948	I 1	2 C A	AB	27	1.249	0.016	1.49	0.06	G
95141	10.972	0.050	9.197	0.019		1.479	0.042	T	1.50	0.06	L	9.1262	0.0016	0.018	124		9.09	9.16					1							
95142	11.268	0.081	9.524	0.030		1.454	0.068	T	1.46	0.11	L	9.5505	0.0047	0.028	64		9.50	9.59					1							
95143	8.302	0.011	6.745	0.005		1.307	0.010	T	1.27	0.01	L	6.7461	0.0008	0.008	101		6.73	6.76		C			1							S
95144	8.875	0.012	8.529	0.013		0.341	0.015	G	0.40	0.02	H	8.5681	0.0015	0.017	87		8.53	8.60		C			1							
95145	8.318	0.009	8.298	0.011		0.023	0.013	T	0.04	0.01	L	8.3241	0.0018	0.014	126		8.30	8.35		C			1							
95146	8.778	0.010	7.441	0.006	*	1.134	0.009	T	1.10	0.01	L *	7.4896	0.0009	0.010	140	*	7.47	7.50		D	19214+3241	H 1	2 C A	AB	296	0.514	0.016	3.12	0.07	S
95147	7.378	0.004	7.429	0.005		−0.032	0.007	G	−0.01	0.01	H	7.4252	0.0008	0.011	232		7.41	7.45					1							S
95148	8.077	0.007	7.993	0.011		0.083	0.012	T	0.10	0.01	L	8.0242	0.0013	0.010	119		8.01	8.04					1							
95149	7.246	0.008	6.552	0.008		0.628	0.002	G	0.69	0.02	A	6.6148	0.0019	0.011	46		6.60	6.64					1 G							S
95150	10.856	0.048	10.058	0.039		0.710	0.020	G	0.76	0.02	H	10.1727	0.0032	0.029	113		10.12	10.21		C			1							G
95151	10.559	0.022	9.775	0.018		0.696	0.022	T	0.75	0.02	L	9.8803	0.0024	0.032	244		9.82	9.94					1 S							
95152	9.522	0.022	9.136	0.024		0.438	0.015	G	0.51	0.02	H	9.1672	0.0012	0.013	76		9.14	9.20					1							
95153	8.981	0.016	7.917	0.011		0.922	0.015	T	0.92	0.01	L	7.9702	0.0016	0.014	71		7.95	7.99					1							S
95154	9.961	0.025	6.560	0.005		2.673	0.019	T	2.74	0.02	L	6.1949	0.0205	0.121	101		5.98	6.38		U 2 B			1 S							S P
95155	8.626	0.014	7.743	0.011		0.787	0.013	T	0.82	0.01	L	7.7699	0.0012	0.010	83		7.75	7.79		C			1							S
95156	7.266	0.006	6.963	0.006	*	0.288	0.015	G	0.33	0.02	H *	7.0085	0.0007	0.009	113	*	6.99	7.02		D	19216+5223	I 1	2 C S A	AB	352	0.197	0.003	0.15	0.07	S
95157	8.624	0.009	8.486	0.010		0.133	0.013	T	0.15	0.01	L	8.5345	0.0016	0.020	150		8.49	8.58					1							S
95158	10.768	0.051	8.479	0.013		1.888	0.042	T	1.92	0.04	L	8.2537	0.0024	0.018	94		8.22	8.28					1 G							
95159	6.124	0.005	6.234	0.005		−0.091	0.004	G	−0.07	0.01	H	6.2240	0.0029	0.019	69		6.19	6.25	1.24	P 1 A	19216−1914	I 1	1							S P
95160	9.298	0.014	8.970	0.015		0.316	0.022	T	0.36	0.03	L	8.9789	0.0042	0.073	172		8.92	9.24	1.80	P 1 A			1							
95161	8.533	0.011	8.329	0.013		0.195	0.016	T	0.21	0.02	L	8.3715	0.0022	0.016	82		8.34	8.40		C			1							
95162	10.544	0.037	9.834	0.031		0.670	0.020	G	0.73	0.02	H	9.9343	0.0031	0.027	114		9.89	9.98					1							
95163	7.420	0.014	7.339	0.015		0.073	0.019	T	0.08	0.02	L	7.3297	0.0072	0.154	228		7.27	8.23	2.45	P 1 A	19217+2535	I 1	1 V							S
95164	7.798	0.011	7.180	0.009		0.568	0.011	G	0.64	0.01	H	7.2246	0.0012	0.008	60		7.21	7.24		C			1							S
95165	9.908	0.022	9.393	0.022		0.511	0.015	G	0.58	0.02	H	9.4829	0.0028	0.025	122		9.44	9.53		C			1							G
95166	11.734	0.119	10.555	0.066		0.897	0.008	G	0.90	0.01	H	10.6145	0.0038	0.029	68		10.56	10.65		C			1							G
95167	6.150	0.003	6.070	0.003		0.072	0.004	T	0.08	0.00	L	6.0885	0.0006	0.005	122		6.08	6.10		C			1							S
95168	4.209	0.004	3.959	0.003		0.228	0.007	G	0.25	0.02	A	3.9884	0.0014	0.008	59		3.98	4.01		M			1							S P
95169	8.186	0.007	7.760	0.007		0.402	0.009	T	0.47	0.01	L	7.8091	0.0008	0.013	191		7.79	7.83		C			1							S
95170	7.603	0.006	7.476	0.007		0.123	0.009	T	0.14	0.01	L	7.5114	0.0010	0.011	157		7.49	7.53		C			1							S
95171	9.060	0.022	7.595	0.013		1.234	0.020	T	1.19	0.02	L	7.6284	0.0014	0.010	79		7.61	7.65		C			1							S
95172	7.957	0.012	7.454	0.008		0.484	0.011	T	0.56	0.01	L	7.4872	0.0009	0.010	83		7.47	7.50		C	19217−1715	I 1	1							S
95173	11.616	0.076	9.550	0.020		1.748	0.065	T	3.56	0.97	K	8.3882	0.0118	0.166	122		8.14	8.59		U 2 C			1 V							
95174	9.059	0.012	9.046	0.016		0.017	0.018	T	0.04	0.02	L	9.0916	0.0016	0.018	130		9.06	9.12					1							
95175	9.747	0.020	9.106	0.018		0.625	0.020	G	0.69	0.02	H	9.1294	0.0017	0.018	128		9.10	9.16					1							
95176	4.661	0.004	4.585	0.004		0.079	0.006	G	0.34	0.02	A	4.5738	0.0015	0.038	132		4.50	4.65		U 2			1							S P
95177	9.157	0.023	7.440	0.011		1.440	0.015	G	1.44	0.02	H	7.4283	0.0006	0.006	53		7.42	7.44		D			1							S
95178	10.704	0.050	9.625	0.030	*	0.924	0.046	T	0.97	0.05	L *	9.7211	0.0023	0.023	97	*	9.68	9.76		C	19218+7708	H 1	2 C C	AB	349	0.531	0.053	3.23	0.18	
95179	7.974	0.008	7.702	0.010		0.278	0.015	G	0.32	0.02	H	7.7415	0.0007	0.007	99		7.73	7.75					1							S
95180	8.811	0.012	8.604	0.014		0.198	0.017	T	0.22	0.02	L	8.6655	0.0014	0.016	110		8.63	8.69					1							
95181	8.096	0.008	7.956	0.014		0.135	0.015	T	0.15	0.01	L	7.9887	0.0012	0.008	89		7.98	8.01					1							S
95182	10.362	0.044	9.893	0.046		0.444	0.020	G	0.51	0.02	H	9.9454	0.0040	0.022	57		9.92	9.99		C			1							G
95183	10.005	0.026	8.436	0.013		1.316	0.023	T	1.28	0.03	L	8.4538	0.0013	0.013	105		8.43	8.49					1							
95184						0.560	0.020	G	0.63	0.02	H	11.3435	0.0044	0.043	113		11.28	11.42					1							G
95185	8.484	0.011	8.261	0.012		0.198	0.011	G	0.22	0.01	H	8.3166	0.0014	0.012	109		8.30	8.34					1							
95186	9.671	0.015	9.002	0.013		0.627	0.015	G	0.69	0.01	H	9.0570	0.0016	0.022	234		9.02	9.09					1							
95187						1.420	0.015	G	1.72	0.04	I	11.5312	0.0089	0.090	160		11.34	11.65		U 2			1 X S							G
95188	7.218	0.006	5.967	0.004		1.062	0.002	G	1.03	0.00	H	6.0125	0.0008	0.006	69		6.00	6.02		C			1							S
95189	10.674	0.036	8.727	0.013		1.615	0.030	T	1.64	0.03	L	8.6243	0.0018	0.019	125		8.59	8.65					1							
95190	10.087	0.039	9.573	0.040		0.559	0.003	G	0.63	0.00	H	9.5788	0.0032	0.023	55		9.54	9.61		C			1							
95191	8.887	0.014	8.391	0.013		0.460	0.015	G	0.53	0.02	H	8.4209	0.0022	0.012	83		8.40	8.45		C			1							
95192	9.220	0.016	7.556	0.008		1.391	0.014	T	1.36	0.02	L	7.5333	0.0014	0.011	74		7.52	7.55		C	19219+1055	I 1	1 S							S
95193	9.084	0.020	8.638	0.021		0.434	0.023	T	0.50	0.02	L	8.6753	0.0025	0.015	58		8.65	8.70		C			1							
95194	9.210	0.016	9.041	0.019		0.110	0.015	G	0.12	0.01	H	9.0920	0.0019	0.017	102		9.06	9.12		C			1							
95195	8.758	0.012	8.591	0.014	A	0.600	0.495	G	0.13	0.03	L *	8.5824	0.0023	0.020	111	*	8.55	8.61			19219+6306	I 1	2 C A	AB	345	3.255	0.024	3.30	0.11	S
95196	10.534	0.050	9.890	0.045		0.546	0.020	G	0.62	0.02	H	9.9894	0.0030	0.020	81		9.96	10.03		C			1							G
95197	7.454	0.009	7.495	0.010	*	−0.010	0.015	G	0.01	0.01	H *	7.4382	0.0011	0.012	121	*	7.42	7.46		D	19220+2230	I 1	2 C A	AB	82	0.898	0.005	1.58	0.02	S
95198	11.918	0.115	10.695	0.063		1.380	0.015	G	1.72	0.02	A	10.9194	0.0036	0.031	113		10.87	10.98		C			1							G
95199	10.767	0.038	9.597	0.023		1.004	0.035	T	0.98	0.03	L	9.6864	0.0022	0.019	118		9.65	9.72					1							
95200	8.389	0.009	8.250	0.010	*	0.134	0.012	T	0.15	0.01	L *	8.2871	0.0014	0.011	112	*	8.27	8.31		D	19220+7037	H 1	2 C S A	AB	6	0.180	0.004	0.29	0.16	S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
95201	19 22 01.83	+39 29 14.9	7.79		H	290.507 642 29	+39.487 460 96		2.27	2.53	8.55	0.59	0.60	0.72	0.70	0.67	+ 1	+ 1	– 2	+27	+13	–20	+13	+10	+10	+ 0	1	–0.47
95202	19 22 03.68	–04 44 20.0	7.69		H	290.515 340 24	–04.738 886 24	A	10.99	9.39	–53.94	1.80	1.11	1.59	1.92	1.36	+14	–19	– 5	– 5	+ 1	+ 1	+ 0	–25	+21	+21	2	1.12
95203	19 22 03.77	–29 31 23.2	7.09		H	290.515 697 03	–29.523 100 07		18.28	138.67	7.56	0.89	0.58	1.05	0.98	0.67	+26	–53	–41	– 1	– 8	+28	– 1	– 6	+ 7	– 7	0	0.66
95204	19 22 03.88	+17 45 12.3	7.07		H	290.516 178 10	+17.753 405 68		3.89	1.59	–8.96	0.61	0.59	0.87	0.70	0.70	+33	–10	– 7	– 8	–21	+12	–22	–15	– 6	+10	0	0.26
95205	19 22 04.17	–04 44 01.4	9.90		H	290.517 369 76	–04.733 722 88	B	10.99	9.39	–53.94	26.66	16.69	1.59	1.92	1.36	+14	+ 6	– 4	+ 6	+ 2	+ 1	+ 8	+ 1	+21	+21	2	1.12
95206	19 22 04.89	+13 54 55.4	9.11		G	290.520 376 74	+13.915 396 20		5.88	–0.11	–9.60	0.94	0.80	1.30	1.05	0.87	+16	–19	–19	+ 8	–23	+15	–25	–15	+15	+ 1	0	–0.70
95207	19 22 06.09	+01 51 23.5	10.43		H	290.525 376 19	+01.856 528 10		1.87	–1.59	–4.50	1.45	1.01	1.74	1.63	1.16	– 8	–22	+ 2	–12	+18	+26	+19	–19	+ 6	+11	2	0.68
95208	19 22 06.72	–70 28 45.0	12.01		H	290.527 986 98	–70.479 180 42	B	0.34	5.19	–11.93	48.84	66.13	2.15	1.37	1.82	–18	+ 5	– 5	– 6	+ 2	–10	+ 2	– 4	+ 6	–27	0	–0.20
95209	19 22 06.96	+23 28 11.4	8.63		H	290.528 999 50	+23.469 826 22		5.47	2.10	6.13	0.79	0.91	1.17	0.92	1.01	+10	–24	–36	–10	+ 1	+12	+ 2	+12	+ 8	+ 9	0	–0.74
95210	19 22 08.61	–70 28 32.7	8.70		H	290.535 862 62	–70.475 763 10	A	0.50	5.10	–11.19	1.31	1.89	2.24	1.37	2.03	–19	–16	–15	+ 4	+ 9	–10	+ 5	–24	+ 6	–27	0	–0.20
95211	19 22 09.57	–42 00 57.4	6.33		G	290.539 880 02	–42.015 951 58		10.14	–55.83	–30.83	0.88	0.52	1.02	1.46	0.63	+25	–37	–39	+27	+37	–41	–12	–49	+26	–45	0	0.27
95212	19 22 11.61	–06 02 43.2	8.06		H	290.548 373 23	–06.045 322 78		7.51	13.20	–1.47	0.82	0.50	0.95	0.89	0.59	– 3	–16	– 9	–16	+ 7	+18	+ 9	–32	+21	+17	0	1.68
95213	19 22 12.38	+22 32 10.6	7.81		H	290.551 589 09	+22.536 277 69		2.78	–0.11	–6.17	0.64	0.63	0.88	0.82	0.72	+12	– 3	–22	–11	– 1	+ 1	– 1	– 4	+10	+14	0	–1.30
95214 H	19 22 12.87	+16 39 45.0	8.70		G	290.553 622 20	+16.662 510 01	A	1.85	–0.21	–4.29	1.15	1.09	1.68	1.37	1.27	+60	–25	–11	+26	+ 3	+23	– 4	+22	+11	+17	1	–0.38
95215	19 22 15.56	–22 04 25.4	8.31		H	290.564 850 98	–22.073 722 80		2.92	8.91	–17.03	1.06	0.70	1.22	1.51	0.75	+11	–11	–30	+34	–25	+47	–17	– 4	–11	–11	0	0.50
95216	19 22 16.84	–16 35 23.2	8.86		H	290.570 162 96	–16.589 770 57		1.37	2.69	–1.38	0.94	0.56	1.04	1.03	0.70	+19	–32	– 6	–13	+16	+14	+20	–18	–11	+ 1	0	0.17
95217	19 22 18.62	–44 56 53.0	10.76		G	290.577 587 61	–44.948 055 85		7.72	177.29	–416.25	2.36	1.44	2.54	3.28	1.91	+24	–37	–18	+12	+11	–15	– 5	–30	+ 8	–11	0	0.31
95218	19 22 19.17	+52 07 06.2	7.66		H	290.579 880 91	+52.118 380 38		2.20	–3.82	–27.83	0.63	0.55	0.66	0.64	0.73	+ 6	–26	+ 0	–15	+12	+19	+ 9	– 1	+16	+26	0	1.27
95219	19 22 20.81	–08 12 03.7	6.66		H	290.586 721 49	–08.201 020 55		3.88	2.95	–21.18	0.70	0.40	0.81	0.73	0.45	– 3	–18	–12	–33	+ 5	+ 5	+ 3	–47	+18	+ 4	0	–0.46
95220	19 22 21.26	–41 01 58.6	9.67		G	290.588 597 58	–41.032 942 22		6.99	1.16	21.83	1.61	0.99	1.74	2.75	1.29	+ 1	–18	–30	+14	+37	–22	+ 4	–43	+26	–51	0	1.12
95221	19 22 21.30	+00 22 58.3	7.65		H	290.588 759 07	+00.382 860 15		14.05	62.10	50.67	0.80	0.54	0.93	0.99	0.82	+ 1	–38	+ 4	–32	+ 6	+20	+ 3	–49	+ 0	– 7	0	1.47
95222	19 22 21.51	–00 15 08.2	5.81		H	290.589 624 36	–00.252 278 29		8.98	60.43	–27.28	0.66	0.44	0.82	0.71	0.49	– 4	–27	–15	–14	+10	+18	+ 8	–28	+13	–11	0	–0.03
95223	19 22 21.85	+33 52 59.7	9.95		H	290.591 060 83	+33.883 246 42		35.00	121.03	728.69	0.98	1.07	1.41	1.08	1.44	+ 0	–15	–14	+17	– 3	– 9	– 9	+25	+22	+ 0	3	2.69
95224	19 22 24.53	+03 20 19.0	8.40		H	290.602 197 40	+03.338 600 82		3.11	–5.94	2.14	0.96	0.65	1.14	1.21	0.76	+11	–20	+ 5	–13	–10	– 3	–11	–32	+19	+24	0	1.07
95225	19 22 25.57	–03 38 01.7	8.95		H	290.606 543 78	–03.633 791 68		1.76	–1.79	–4.06	0.95	0.62	1.11	1.06	0.76	+ 9	–22	–10	–15	+ 7	+18	+ 8	–21	+12	+23	0	–0.22
95226	19 22 25.67	–31 56 11.8	6.94	2	H	290.606 951 99	–31.936 600 26		2.42	1.32	–7.23	1.05	0.69	1.09	1.37	0.78	–11	–33	– 6	+22	–12	–12	–12	–17	– 6	–25	0	1.98
95227	19 22 28.58	+11 31 37.0	9.86		H	290.619 083 12	+11.526 934 14		2.13	6.40	–0.73	1.17	1.03	1.47	1.21	1.13	+ 0	+ 5	– 3	–37	+ 2	+11	+ 3	–29	–13	–16	0	1.77
95228	19 22 28.94	–07 13 07.7	8.09		H	290.620 563 76	–07.218 802 18		3.57	–3.56	–16.20	0.92	0.52	1.09	0.92	0.58	+ 0	–17	– 2	–32	+ 0	+10	+ 1	–47	+12	+11	1	–1.64
95229	19 22 30.78	+22 11 17.0	8.06		H	290.628 254 43	+22.188 055 79		2.02	–1.73	–5.25	0.69	0.66	0.95	0.85	0.76	+ 1	+ 3	–29	–13	+ 1	+ 7	+ 3	–19	+13	+ 8	0	–1.85
95230	19 22 31.35	–48 41 58.0	9.45		H	290.630 643 09	–48.699 456 50		12.47	–41.54	–13.11	1.21	0.92	1.41	1.65	1.14	+26	–31	–16	– 1	– 4	+ 2	–10	–45	+ 4	+10	0	–1.73
95231	19 22 32.00	+27 09 35.0	7.85		H	290.633 314 82	+27.159 719 62		2.74	–19.48	–28.83	0.50	0.70	0.94	0.61	0.94	–21	– 1	–21	+12	+ 2	+ 6	+ 4	+ 3	– 1	–27	0	1.58
95232	19 22 32.27	–66 10 01.9	8.26		H	290.634 462 82	–66.167 194 85		3.87	–0.72	10.84	0.75	0.69	1.14	0.84	0.93	– 7	–14	+ 1	+ 4	–19	–10	–28	–10	+28	–31	0	0.03
95233	19 22 32.42	–20 18 58.5	8.66		H	290.635 072 01	–20.316 237 59		2.93	11.25	22.96	1.05	0.71	1.16	1.10	0.72	+14	–24	–19	+ 8	+18	– 3	+12	–12	+16	+11	0	–1.93
95234	19 22 33.25	+53 02 49.0	8.06		H	290.638 521 76	+53.046 949 72		3.57	4.65	15.83	0.61	0.57	0.64	0.66	0.74	+19	–19	– 9	– 1	+ 8	+15	+ 7	+12	+10	+30	0	0.96
95235	19 22 33.35	+33 31 05.6	6.09		H	290.638 961 06	+33.518 235 41		9.63	3.44	–29.87	0.45	0.46	0.62	0.52	0.55	– 3	–17	–15	+12	+11	– 4	+ 9	+ 5	+11	– 8	0	–0.95
95236	19 22 33.97	–03 43 05.3	7.07		H	290.641 554 15	–03.718 130 38		3.78	0.89	–17.08	0.71	0.45	0.82	0.76	0.52	– 2	–24	– 6	–17	+14	+20	+14	–24	+13	+16	0	–0.57
95237	19 22 36.34	+42 26 10.6	9.02		H	290.651 399 92	+42.436 273 41		1.35	–5.36	–12.15	0.73	0.71	0.87	0.72	0.78	– 6	–15	+ 1	+ 0	+23	–12	+25	– 1	+ 4	+ 8	3	0.69
95238	19 22 36.98	+45 20 48.1	8.82		H	290.654 075 67	+45.346 703 48		4.28	–7.92	–36.39	0.75	0.75	0.86	0.87	1.05	+12	–17	–12	+ 1	+ 9	– 4	+10	– 2	+ 4	+13	1	0.04
95239	19 22 37.68	–51 13 52.5	6.42		H	290.656 998 53	–51.231 262 80		14.06	83.07	–5.40	1.01	0.86	0.90	3.01	1.23	+21	–40	+ 5	–29	–11	+15	–11	–74	–11	– 9	5	–0.30
95240	19 22 37.87	–08 45 19.3	9.28		H	290.657 798 91	–08.755 349 41		1.65	–0.63	–5.49	1.02	0.58	1.18	1.17	0.76	+ 5	–26	– 4	–34	–11	+11	–10	–53	+16	+22	0	–0.22
95241	19 22 38.29	–44 27 32.1	3.96		H	290.659 527 18	–44.458 910 13		8.62	7.31	–22.43	0.96	0.55	0.95	2.58	0.76	– 4	–57	+ 8	– 6	–10	+22	–16	–38	+ 5	–38	0	0.65
95242	19 22 38.52	–50 48 14.1	8.18		H	290.660 512 36	–50.803 909 79		3.02	18.50	–33.27	0.98	0.76	1.14	1.48	0.96	+23	+10	+16	–42	– 9	–25	–11	–54	–30	+25	2	–0.52
95243	19 22 39.15	–39 47 14.1	9.57	1	H	290.663 141 07	–39.787 251 07		5.22	19.60	–7.10	1.59	1.05	1.66	1.95	1.05	+10	–47	–25	+ 6	– 5	– 2	– 6	–33	– 3	–14	0	1.48
95244	19 22 40.30	–20 38 33.6	6.72	2	H	290.667 903 75	–20.642 655 05		11.40	5.29	–105.09	0.75	0.52	0.85	0.86	0.55	+20	–29	–11	+12	– 4	+33	– 1	– 5	+ 0	+13	3	0.35
95245	19 22 40.92	+37 34 52.3	6.60		H	290.670 484 35	+37.581 198 68		3.59	–14.10	10.03	0.45	0.49	0.60	0.50	0.57	+ 3	+ 0	+ 5	+ 5	– 1	–20	+ 0	+11	– 3	+ 7	0	–0.38
95246	19 22 41.40	+31 44 10.0	8.26		H	290.672 497 62	+31.736 114 69		4.35	3.90	7.17	0.55	0.70	0.82	0.59	0.91	– 5	– 9	–19	+15	– 5	+ 0	– 5	+34	+ 2	– 8	0	1.47
95247	19 22 43.49	+24 55 34.2	7.94		H	290.681 226 31	+24.926 155 93		1.97	–22.41	2.32	0.48	0.67	1.09	0.63	0.88	–27	+11	–25	– 9	–15	– 5	–15	– 2	+14	–26	0	0.08
95248	19 22 43.86	+07 55 29.7	8.67		H	290.682 736 11	+07.924 924 44		5.08	–0.26	–7.95	1.11	0.80	1.28	1.24	0.84	–12	–23	– 7	–18	+ 3	–15	+ 0	–38	+ 7	–26	0	1.20
95249	19 22 46.60	+30 16 15.9	7.30		H	290.694 177 50	+30.271 070 18		4.88	24.23	13.39	0.46	0.56	0.72	0.58	0.78	–14	– 3	–12	+ 8	– 2	–14	– 2	+19	+ 2	–27	1	0.28
95250	19 22 47.11	+12 54 53.9	7.89		H	290.696 298 56	+12.914 972 39		2.79	–8.61	–21.11	0.58	0.56	0.98	0.68	0.64	+27	–18	–15	+22	–28	+20	–26	– 5	+ 5	+26	2	1.21
95251	19 22 47.44	–54 36 55.6	8.64		H	290.697 658 47	–54.615 443 41		2.71	17.92	–23.87	1.01	0.86	1.21	1.31	0.84	+27	–22	–24	–12	– 4	+ 5	– 8	–40	– 3	+ 7	0	1.32
95252	19 22 47.88	–32 30 11.6	8.07	2	H	290.699 485 99	–32.503 211 73		–0.04	7.87	–10.64	1.20	0.86	1.40	1.49	0.89	+22	–39	–35	+21	+11	–28	– 7	–22	+14	– 6	0	0.81
95253	19 22 48.35	+09 54 46.4	6.34		H	290.701 441 98	+09.912 889 91		27.99	8.18	107.08	0.72	0.54	0.87	0.95	0.79	+ 6	– 5	– 3	–10	–10	+13	–15	–19	–21	–40	0	–1.55
95254	19 22 48.44	+48 53 07.1	8.30		H	290.701 851 61	+48.885 302 99		1.82	12.34	–9.42	0.64	0.59	0.70	0.73	0.73	+17	– 9	+ 5	+ 7	+13	–29	+14	+24	– 3	+30	0	–0.77
95255	19 22 49.33	+74 21 28.5	11.83		H	290.705 534 51	+74.357 914 41		4.73	–56.32	–147.87	1.89	1.77	1.96	2.07	2.08	–10	–15	+15	– 8	+ 5	–10	+ 8	– 4	– 8	+ 6	0	1.80
95256	19 22 49.66	–66 09 03.9	8.97		G	290.706 927 77	–66.151 071 98		22.66	2.92	–362.11	0.87	0.77	1.32	0.95	1.03	–11	–16	+ 7	+ 0	–15	– 3	–24	–14	+20	–30	0	–0.45
95257	19 22 49.81	–02 52 58.5	9.29		H	290.707 562 40	–02.882 903 84		3.31	5.44	– 3.73	1.10	0.71	1.21	1.22	0.77	–23	– 8	–18	–23	+20	+11	+23	–34	+10	– 7	0	–0.67
95258	19 22 50.67	–56 23 18.4	9.08		H	290.711 122 03	–56.388 444 39		3.77	16.60	–37.33	0.75	0.57	1.21	0.97	0.81	+ 4	–21	– 3	+54	– 3	– 9	+20	+10	–15	+49	0	0.87
95259	19 22 50.79	+69 57 00.0	9.64		H	290.711 629 10	+69.949 987 94		2.22	5.94	12.11	0.82	0.74	0.81	0.94	0.85	+ 4	–18	+10	+11	+17	–10	+17	+16	+ 1	+14	0	–0.33
95260	19 22 50.88	+26 15 44.7	5.22	1	H	290.712 020 82	+26.262 429 70		8.10	–1.73	–10.93	0.37	0.60	0.68	0.72	1.65	–34	–12	–19	+17	+31	–19	+35	–22	–19	–26	0	1.63
95261	19 22 51.18	–54 25 25.4	5.03		H	290.713 252 45	–54.423 728 82		20.98	25.57	–83.03	0.61	0.48	0.68	0.75	0.49	+16	–31	– 9	–23	+ 2	+ 9	+ 2	–40	– 8	+ 5	0	–1.34
95262	19 22 52.92	–32 55 05.0	7.84		G	290.720 515 67	–32.918 043 18		17.88	89.37	–415.97	1.10	0.80	1.31	1.50	0.96	+18	–33	–33	+18	+14	–29	– 2	–16	+13	– 6	0	1.62
95263	19 22 54.21	+02 40 27.0	9.40		H	290.725 890 50	+02.674 164 56		–0.15	–1.54	– 5.80	1.18	0.81	1.44	1.31	0.90	+ 1	–27	– 3	–16	+11	+ 1	+ 4	–28	+24	+15	0	1.71
95264	19 22 54.58	+57 00 59.8	8.18	1	H	290.727 409 39	+57.016 617 50	A	2.79	1.38	–12.09	1.08	1.15	1.07	1.07	1.20	+ 8	–12	–11	– 1	+ 8	+13	+12	– 8	+11	+21	0	1.86
95265	19 22 54.88	–61 49 25.6	8.83		H	290.728 675 42	–61.823 776 62		1.99	–11.15	– 5.18	0.86	0.69	1.19	1.17	0.89	–18	–21	– 6	+25	–24	–14	–18	– 8	+ 8	+ 4	0	0.54
95266	19 22 57.23	–14 15 32.0	9.45		H	290.738 464 24	–14.258 877 67		12.91	52.76	– 6.76	1.20	0.77	1.28	1.26	0.87	+39	–31	–12	–31	–13	+17	–11	–38	– 1	+27	0	2.02
95267 H	19 22 57.42	–01 44 26.0	9.47		H	290.739 263 20	–01.740 567 80	*	0.64	2.11	– 3.55	1.15	0.75	1.37	1.24	0.85	+ 5	–25	–19	–27	–10	+18	– 7	–45	+14	+14	0	2.30
95268	19 22 57.70	+55 04 06.1	7.32		H	290.740 414 79	+55.068 356 05		6.01	–4.39	– 6.64	0.58	0.52	0.58	0.69	0.60	+ 9	–15	+ 0	+23	+20	–15	+20	+25	–10	+21	0	0.88
*95269	19 22 58.98	+71 54 14.4	8.58		H	290.745 733 87	+71.904 002 15		3.48	–14.34	–15.73	0.62	0.55	0.63	0.65	0.68	– 2	–24	– 2	–41	– 6	+ 5	– 3	– 8	+ 3	–17	0	1.85
*95270	19 22 58.92	–54 32 16.3	7.04		G	290.745 495 48	–54.537 849 21		19.77	23.84	–81.77	0.71	0.58	0.81	0.89	0.57	+21	–29	–17	–12	– 1	+ 6	– 3	–39	– 6	+ 4	0	0.18
95271	19 23 00.36	+56 13 32.0	7.40		H	290.751 510 00	+56.225 559 11		10.49	–3.67	65.26	0.53	0.57	0.56	0.79	0.73	+ 4	–18	– 5	+11	+ 4	–10	+ 5	+ 6	–19	+46	4	1.73
95272	19 23 00.37	+42 58 27.1	7.01		H	290.751 554 31	+42.974 186 07		6.46	3.33	0.88	0.45	0.43	0.53	0.46	0.45	– 1	–19	– 1	+14	+18	–10	+20	+ 2	–10	+ 9	0	–1.54
95273	19 23 00.55	+51 02 02.8	8.59		G	290.752 308 31	+51.034 120 23		4.15	10.87	5.38	0.65	0.68	0.73	0.88	0.94	– 8	– 2	+ 8	+20	– 1	+12	+ 2	+ 6	+ 6	+17	0	–0.69
95274	19 23 01.94	+47 42 53.1	8.97		H	290.758 084 53	+47.714 763 67		20.94	2.57	–72.50	0.78	0.70	0.81	0.89	0.88	+ 5	– 5	+ 8	– 2	+19	– 4	+17	+29	– 8	+20	3	1.35
95275	19 23 02.44	–26 43 23.2	9.07		H	290.760 157 64	–26.723 120 56		10.97	–13.25	–75.05	1.79	1.16	2.02	3.42	1.34	–10	–35	–41	–47	+16	+37	+34	–40	–18	–66	0	0.43
95276	19 23 03.19	–35 08 51.1	8.62		H	290.763 276 65	–35.147 537 46		3.96	3.55	– 5.60	1.34	1.01	1.52	2.02	1.06	–22	+ 4	–51	+24	+15	–23	– 2	–16	+25	–41	0	–0.35
95277	19 23 03.33	+14 18 18.5	9.82		G	290.763 891 41	+14.305 143 00		6.15	–3.63	–69.57	1.06	0.94	1.48	1.18	1.06	+23	– 7	–28	– 4	–19	+17	–19	–22	+17	+13	0	0.86
95278	19 23 03.57	–28 32 44.3	10.85		H	290.764 887 19	–28.545 644 49		3.33	10.72	–17.23	2.72	2.05	3.18	2.52	1.77	+29	–42	–50	–25	+ 5	+ 1	– 1	–35	+14	+16	0	–0.21
95279	19 23 03.60	–71 30 30.9	8.78		H	290.765 005 99	–71.508 592 73		3.96	–7.37	– 3.43	0.63	0.72	1.17	0.75	0.90	– 1	–19	+ 7	+32	– 3	–11	– 7	–14	– 5	–13	0	1.91
95280	19 23 03.96	–53 39 17.3	9.03	2	H	290.766 519 25	–53.654 793 43	A	5.24	–6.74	1.11	1.70	1.49	1.89	2.05	1.32	+21	–18	–34	– 9	+13	+10	+10	–26	+ 9	+15	3	0.54
95281	19 23 04.44	–07 24 02.0	6.31		H	290.768 501 34	–07.400 563 18		6.61	15.11	–21.45	0.75	0.41	0.86	0.72	0.45	–12	–25	– 5	–31	+ 9	+ 9	+ 9	–46	+15	+ 5	0	–0.13
95282	19 23 04.61	+33 03 44.3	7.63		H	290.769 228 29	+33.062 316 68		7.18	43.02	–39.17	0.56	0.52	0.69	0.67	0.65	+ 8	–10	– 9	+42	+16	– 7	+14	+12	+11	+ 6	1	1.80
95283	19 23 05.62	+03 39 00.7	9.47		H	290.773 409 64	+03.650 188 75		2.98	–13.25	–10.05	1.16	0.83	1.39	1.55	0.90	+13	–18	– 6	+ 3	– 5	+12	– 3	–28	+23	+34	0	0.20
95284	19 23 05.88	+31 39 38.6	8.13		H	290.774 510 66	+31.660 726 37		2.95	–1.90	–11.35	0.50	0.69	0.79	0.55	0.89	+ 0	– 5	– 6	+17	+ 1	– 5	+ 3	+40	+ 5	– 6	0	0.41
95285	19 23 06.18	–43 12 38.3	7.74		H	290.775 745 84	–43.210 650 17		3.88	5.74	–11.52	1.07	0.58	1.08	1.44	0.76	+27	–21	+ 2	+15	+ 2	– 4	–16	–47	– 8	– 7	0	0.70
95286	19 23 07.63	–41 08 22.3	10.28		G	290.781 803 19	–41.139 540 47		14.41	43.95	–35.18	2.05	1.36	2.41	3.51	1.79	+ 8	–20	–43	+24	+32	–30	– 3	–37	+35	–45	0	0.53
95287	19 23 08.24	+14 55 15.7	6.65		H	290.784 318 35	+14.921 029 59		12.18	–26.32	1.24	0.56	0.48	0.79	0.80	0.71	– 3	–14	–21	+ 4	– 4	+ 20	– 6	–12	+19	–18	2	2.05
95288	19 23 09.77	–25 28 17.3	8.18		H	290.790 722 73	–25.471 473 65		2.83	2.43	– 6.71	1.12	0.78	1.30	1.17	0.70	+31	–50	–46	– 7	– 4	– 2	–16	–39	+17	– 7	0	–0.95
95289	19 23 10.07	–10 42 11.6	6.99	2	G	290.791 971 96	–10.703 210 65		0.00	7.11	1.72	0.80	0.51	0.98	0.80	0.50	+24	–26	–22	–14	+ 6	+34	+ 8	–22	+20	+22	0	0.42
95290	19 23 10.38	–50 03 10.6	8.77		G	290.793 229 69	–50.052 956 71		11.60	–87.05	–200.55	1.04	0.89	1.27	1.42	1.08	+27	+ 6	+21	–36	–11	–19	–11	–59	–22	+25	4	0.00
95291	19 23 12.22	+20 16 39.7	7.11		H	290.800 917 93	+20.277 703 30		9.11	–7.42	98.67	0.51	0.55	0.79	0.62	0.68	+21	–20	–11	– 8	– 2	+14	– 1	–12	+ 5	+27	1	–0.89
95292	19 23 12.30	–35 23 03.2	9.36		H	290.801 261 45	–35.384 211 16		2.83	–1.95	–3.50	1.56	1.08	1.72	2.31	1.21	– 9	–21	–40	+17	+28	–30	+ 6	–16	+24	–37	0	1.46
95293	19 23 12.55	+19 22 32.1	7.81		G	290.802 301 84	+19.375 590 58		19.04	3.32	–73.27	0.65	0.65	0.97	0.77	0.85	+40	–25	–12	–23	–13	+ 8	–13	–15	+ 6	+40	3	0.86
95294	19 23 13.06	–44 47 58.7	4.27		H	290.804 419 20	–44.799 647 88		23.52	92.78	–53.73	0.94	0.44	0.89	0.91	0.59	– 2	–56	+11	+23	–19	+ 7	–25	–28	+11	+ 9	0	0.46
95295	19 23 14.83	+47 11 45.0	7.90		H	290.811 784 77	+47.195 834 67		3.71	0.15	–23.23	0.60	0.54	0.63	0.69	0.68	+ 2	+ 3	– 6	– 1	+13	– 7	+15	+25	–10	+ 0	1	–0.43
95296	19 23 14.85	–62 32 16.2	10.01		H	290.811 861 58	–62.537 821 48		11.31	–3.34	–167.33	1.04	0.87	1.61	1.43	1.45	–20	–20	+10	+19	–18	– 9	–14	– 7	+20	+14	0	–0.85
95297	19 23 14.93	+77 54 27.5	8.26		H	290.812 209 21

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
95201	9.011	0.013	7.900	0.009		0.958	0.012	T	0.95	0.01	L	7.9582	0.0013	0.012	118		7.94	7.98					1							
95202	8.228	0.008	7.723	0.010	A	0.475	0.012	T	0.55	0.01	L	7.7939	0.0174	0.039	109	A	7.72	7.84		D	19221−0444	I 2	1 C P A						S
95203	7.788	0.010	7.169	0.008		0.573	0.009	T	0.65	0.01	L	7.2178	0.0014	0.008	61		7.20	7.23		C			1 G						S
95204	7.112	0.005	7.074	0.005		0.040	0.007	T	0.06	0.01	L	7.0871	0.0012	0.011	125		7.07	7.11		C			1						S
95205	10.491	0.043	9.666	0.033	B	0.743	0.041	T	0.79	0.03	L	9.6127	0.0769			B				D	19221−0444	I 2	1 C F A						
95206	9.491	0.016	9.135	0.017		0.359	0.015	G	0.42	0.02	H	9.1947	0.0026	0.021	103		9.17	9.23					1						
95207	10.829	0.053	10.526	0.064		0.288	0.078	T	0.33	0.10	L	10.5074	0.0043	0.031	79		10.44	10.56		C			1						G
95208											T	12.0547	0.2165			B				D	19221−7029	I 2	1 C F B						
95209	10.217	0.029	8.761	0.015		1.227	0.026	T	1.19	0.03	L	8.7857	0.0026	0.026	112		8.75	8.83					1						
95210	10.438	0.021	8.842	0.010	A	1.337	0.018	T	1.30	0.02	L	8.8543	0.0121	0.028	235	A	8.80	8.90		D	19221−7029	I 2	1 C P B						
95211	7.787	0.009	6.451	0.004		1.129	0.000	G	1.09	0.00	H	6.4983	0.0009	0.008	110		6.48	6.51		C			1						S
95212	8.664	0.010	8.114	0.009		0.515	0.012	T	0.59	0.01	L	8.1720	0.0013	0.014	128		8.15	8.20					1						S
95213	7.739	0.007	7.798	0.010		−0.050	0.011	T	−0.03	0.01	L	7.8029	0.0016	0.015	119		7.78	7.83					1						S
95214	8.939	0.016	8.513	0.016	*	0.400	0.015	G	0.47	0.02	H	*	8.8324	0.0012	0.013	171	*	8.81	8.86		D	19222+1640	I 1	2 C A	AB	190	2.785	0.012	2.23	0.04	
95215	9.679	0.029	8.396	0.018		1.092	0.027	T	1.05	0.03	L	8.4824	0.0020	0.014	59		8.46	8.50					1						
95216	10.945	0.045	9.018	0.016		1.599	0.038	T	1.62	0.04	L	8.9825	0.0016	0.013	122		8.95	9.01					1						
95217						0.505	0.003	G	0.58	0.00	H	10.8954	0.0037	0.033	86		10.84	10.97		C			1 S						G
95218	9.710	0.022	7.864	0.010		1.535	0.019	T	1.58	0.04	L	7.7792	0.0018	0.013	114		7.76	7.80					1						
95219	6.604	0.003	6.658	0.004		−0.045	0.005	T	−0.02	0.01	L	6.6538	0.0007	0.009	149		6.64	6.67					1						S
95220	10.224	0.036	9.725	0.037		0.529	0.020	G	0.60	0.02	H	9.8077	0.0027	0.027	87		9.77	9.84		D			1						
95221	8.198	0.011	7.697	0.009		0.476	0.015	G	0.55	0.02	H	7.7571	0.0014	0.009	88		7.74	7.78		C			1 G						S
95222	7.222	0.006	5.939	0.004		1.093	0.001	G	1.05	0.00	H	5.9781	0.0005	0.006	98		5.97	5.99					1						S
95223	11.471	0.082	10.045	0.037		1.603	0.218	G	2.61	0.54	I	9.9441	0.0035	0.033	113		9.88	10.00					1						G
95224	9.191	0.016	8.481	0.014		0.653	0.017	T	0.72	0.01	L	8.5409	0.0019	0.015	87		8.52	8.57		C			1						
95225	9.330	0.015	8.991	0.016		0.322	0.020	T	0.37	0.03	L	9.0270	0.0019	0.021	105		8.99	9.06					1						
95226	9.180	0.021	7.150	0.009		1.719	0.019	T	2.29	0.05	O	6.9866	0.0036	0.029	50		6.93	7.04		U 2			1 S						S P
95227	10.075	0.027	9.882	0.036		0.185	0.042	T	0.20	0.05	L	9.9192	0.0033	0.022	74		9.88	9.97		C			1						G
95228	8.226	0.010	8.089	0.011		0.132	0.014	T	0.15	0.01	L	8.1357	0.0012	0.015	134		8.11	8.16		C			1						
95229	8.041	0.008	8.066	0.011		−0.018	0.012	T	0.00	0.01	L	8.0660	0.0018	0.016	113		8.04	8.09					1						
95230	10.220	0.030	9.489	0.025		0.656	0.030	T	0.72	0.03	L	9.5821	0.0025	0.021	84		9.54	9.62		C			1						
95231	9.352	0.013	7.984	0.008		1.158	0.012	T	1.12	0.01	L	8.0149	0.0013	0.016	166		7.98	8.04					1						
95232	10.169	0.024	8.420	0.010		1.458	0.021	T	1.46	0.03	L	8.3938	0.0021	0.018	138		8.36	8.43					1						
95233	10.053	0.033	8.747	0.019		1.190	0.020	G	1.15	0.02	H	8.8207	0.0020	0.015	67		8.80	8.86		C			1						
95234	8.142	0.009	8.061	0.010		0.080	0.013	T	0.09	0.01	L	8.0947	0.0013	0.011	116		8.07	8.11		C			1						S
95235	7.437	0.005	6.205	0.004		1.052	0.005	T	1.02	0.00	L	6.2535	0.0007	0.007	124		6.24	6.27					1						S
95236	7.232	0.005	7.097	0.006		0.130	0.007	T	0.14	0.01	L	7.1226	0.0007	0.009	106		7.11	7.14					1						S
95237	10.303	0.027	9.137	0.016		1.000	0.024	T	0.98	0.02	L	9.1862	0.0020	0.019	125		9.15	9.24		C			1						
95238	10.178	0.028	8.933	0.016		1.062	0.025	T	1.03	0.02	L	8.9837	0.0026	0.021	99		8.94	9.01					1						
95239	6.807	0.005	6.468	0.004		0.328	0.007	T	0.38	0.01	L	6.5031	0.0006	0.008	93		6.49	6.52		C			1 G						S
95240	9.611	0.015	9.319	0.017		0.289	0.020	G	0.33	0.03	H	9.3514	0.0014	0.016	130		9.33	9.39					1						
95241	3.845	0.003	3.945	0.003		−0.085	0.003	G	−0.07	0.02	A	3.9357	0.0004	0.004	86		3.93	3.94		C	19226−4428	I 1	1 G						S
95242	9.480	0.020	8.258	0.013		1.044	0.019	T	1.01	0.02	L	8.3439	0.0018	0.014	87		8.33	8.37		C			1						
95243	10.025	0.036	9.589	0.037		0.425	0.042	T	0.49	0.04	L	9.6632	0.0037	0.023	48		9.61	9.70		U			1						
95244	8.039	0.015	6.851	0.010		1.032	0.000	G	1.00	0.00	H	6.8922	0.0067	0.060	61		6.80	6.98		U 2 C			1						S P
95245	8.029	0.007	6.728	0.005		1.106	0.007	T	1.07	0.01	L	6.7651	0.0010	0.009	126		6.75	6.78		C			1						S
95246	8.606	0.010	8.282	0.010		0.288	0.015	G	0.33	0.02	H	8.3323	0.0018	0.017	132		8.30	8.36			19227+3144	I 1	1						
95247	9.850	0.014	8.094	0.007		1.464	0.012	T	1.47	0.02	L	8.0693	0.0012	0.016	222		8.05	8.10		C			1						
95248	9.022	0.013	8.691	0.014		0.265	0.002	G	0.30	0.00	H	8.7435	0.0022	0.020	103		8.71	8.78		C			1						
95249	8.564	0.009	7.416	0.006		0.986	0.008	T	0.97	0.01	L	7.4646	0.0013	0.011	149		7.45	7.49		C			1						S
95250	9.083	0.011	8.009	0.008		0.930	0.010	T	0.92	0.01	L	8.0478	0.0013	0.012	143		8.03	8.08					1						
95251	9.996	0.042	8.707	0.025		1.096	0.038	T	1.06	0.04	L	8.8081	0.0027	0.017	85		8.78	8.84		C			1						
95252	10.294	0.040	8.310	0.015		1.681	0.035	T	2.48	0.07	O	8.0996	0.0076	0.045	68		8.01	8.17		U 2			1						P
95253	6.877	0.006	6.403	0.006		0.458	0.015	G	0.54	0.03	C	6.4477	0.0007	0.006	73		6.44	6.46		C			1						S
95254	10.017	0.021	8.450	0.011		1.315	0.019	T	1.28	0.02	L	8.4566	0.0014	0.015	123		8.43	8.48		C			1						
95255											T	11.9653	0.0055	0.056	104		11.85	12.04					1						G
95256	10.145	0.023	9.050	0.016		0.872	0.002	G	0.92	0.00	H	9.1204	0.0017	0.021	140		9.08	9.17		C			1						
95257	9.625	0.022	9.333	0.025		0.331	0.020	G	0.39	0.03	H	9.3720	0.0022	0.018	100		9.32	9.40					1						
95258	9.298	0.012	9.092	0.014		0.197	0.017	T	0.22	0.02	L	9.1409	0.0014	0.017	138		9.12	9.17					1						
95259	9.883	0.024	9.679	0.030		0.195	0.036	T	0.21	0.04	L	9.7014	0.0025	0.020	116		9.67	9.75		C			1						
95260	5.036	0.002	5.177	0.002		−0.119	0.001	G	−0.16	0.03	C	5.1604	0.0017	0.020	203		5.13	5.20	1.26	P 1 A			1 G						S
95261	5.053	0.002	5.032	0.002		0.020	0.002	T	0.04	0.00	L	5.0409	0.0005	0.003	85		5.03	5.05					1						S
95262	8.565	0.014	7.917	0.012		0.599	0.019	G	0.67	0.02	H	7.9657	0.0021	0.013	59		7.94	7.98					1						S
95263	9.657	0.020	9.399	0.023		0.246	0.029	T	0.28	0.04	L	9.4709	0.0021	0.018	95		9.42	9.51					1						G
95264	9.861	0.022	8.300	0.012	A	1.310	0.020	T	1.27	0.02	L	8.3326	0.0123	0.024	107	A	8.30	8.37		U	19229+5701	I 1	2 C B	AB	85	16.721	0.028	2.68	0.14	
95265	10.641	0.032	9.007	0.015		1.367	0.028	T	1.34	0.03	L	8.9812	0.0020	0.021	130		8.95	9.02		C			1						
95266	10.483	0.039	9.627	0.029		0.810	0.012	G	0.84	0.01	H	9.5919	0.0031	0.024	96		9.55	9.64					1						
95267	11.666	0.106	9.645	0.028	*	0.541	0.107	G	1.58	0.14	S	*	9.5930	0.0033	0.029	93	*	9.53	9.63		R	19230−0144	H 1	2 C S A	AB	155	0.142	0.023	1.50	0.62	G
95268	8.756	0.012	7.442	0.008		1.116	0.011	T	1.08	0.01	L	7.4853	0.0011	0.010	103		7.47	7.50					1						S
95269	8.967	0.013	8.628	0.014		0.367	0.015	G	0.43	0.02	H	8.6669	0.0015	0.011	104		8.65	8.69					1						
95270	7.595	0.007	7.095	0.007		0.480	0.004	G	0.55	0.00	H	7.1443	0.0011	0.010	86		7.13	7.16		C			1						S
95271	7.806	0.007	7.427	0.007		0.359	0.009	T	0.42	0.01	L	7.4815	0.0009	0.011	118		7.47	7.50		C			1 G						S
95272	7.037	0.005	6.996	0.005		0.019	0.003	G	0.04	0.00	H	7.0195	0.0010	0.008	131		7.01	7.04		C			1						S
95273	8.815	0.011	8.606	0.013		0.170	0.015	G	0.19	0.01	H	8.6264	0.0028	0.018	104		8.60	8.66					1						
95274	9.890	0.022	9.034	0.017		0.751	0.021	T	0.79	0.01	L	9.1045	0.0019	0.018	109		9.07	9.14					1						
95275	9.820	0.030	9.215	0.028		0.563	0.030	T	0.64	0.03	L	9.1908	0.0033	0.018	45		9.16	9.23					1						
95276	9.925	0.032	8.759	0.021		1.000	0.030	T	0.98	0.02	L	8.7890	0.0021	0.014	54		8.76	8.82					1						
95277	10.398	0.032	9.843	0.029		0.544	0.015	G	0.62	0.01	H	9.9281	0.0025	0.021	103		9.89	9.98					1						G
95278	11.528	0.123	10.790	0.101		0.417	0.107	G	0.48	0.11	R	10.9487	0.0066	0.038	56		10.88	11.00		C			1 S						G
95279	10.326	0.022	8.881	0.011		1.219	0.019	T	1.18	0.02	L	8.9405	0.0018	0.021	208		8.90	8.98					1						
95280	9.589	0.022	9.061	0.020	A	0.495	0.027	T	0.57	0.03	L	9.1375	0.0125	0.035	87	A	9.09	9.20		U	19231−5339	I 1	2 C A	AB	328	14.030	0.017	2.29	0.10	
95281	8.211	0.009	6.478	0.004		1.455	0.003	G	1.46	0.01	H	6.4482	0.0008	0.008	145		6.43	6.46		C			1						S
95282	8.256	0.010	7.701	0.008		0.520	0.011	T	0.59	0.01	L	7.7397	0.0012	0.011	129		7.72	7.76		C			1 G						S
95283	9.426	0.020	9.490	0.028		−0.054	0.031	T	−0.03	0.03	L	9.4550	0.0023	0.023	88		9.40	9.50					1						G
95284	8.346	0.008	8.156	0.009		0.182	0.011	T	0.20	0.01	L	8.1899	0.0011	0.014	143		8.16	8.21					1						S
95285	9.756	0.021	7.908	0.009		1.537	0.018	T	1.59	0.04	L	7.8615	0.0011	0.012	107		7.84	7.88					1						S
95286	11.081	0.086	10.308	0.069		0.750	0.020	G	0.79	0.02	H	10.4471	0.0040	0.029	73		10.38	10.50		C			1						G
95287	6.985	0.005	6.674	0.004		0.297	0.007	T	0.34	0.01	L	6.7259	0.0007	0.008	110		6.71	6.74					1 G						S
95288	9.599	0.025	8.288	0.015		1.114	0.023	T	1.08	0.02	L	8.3495	0.0013	0.008	52		8.34	8.36					1						
95289	8.303	0.012	7.110	0.008		1.022	0.011	T	0.98	0.03	C	7.1584	0.0030	0.019	78		7.13	7.20		U 2			1						S
95290	9.423	0.019	8.842	0.017		0.540	0.002	G	0.61	0.00	H	8.8909	0.0019	0.014	86		8.86	8.91		C			1						
95291	8.613	0.009	7.235	0.005		1.144	0.003	G	1.11	0.06	F	7.2769	0.0012	0.010	146		7.26	7.30					1						S
95292	9.916	0.036	9.444	0.036		0.457	0.040	T	0.53	0.04	L	9.4623	0.0034	0.022	58		9.42	9.50		C			1						
95293	8.383	0.010	7.848	0.009		0.493	0.018	G	0.57	0.02	H	7.9185	0.0010	0.011	129		7.90	7.94		C			1						S
95294	4.683	0.004	4.314	0.003		0.350	0.012	G	0.42	0.02	A	4.3514	0.0009	0.006	87		4.34	4.36					1 G						S
95295	8.052	0.009	7.914	0.010		0.133	0.013	T	0.15	0.01	L	7.9481	0.0012	0.013	106		7.92	7.97			19233+4712	I 1	1						S
95296	10.949	0.043	10.092	0.030		0.752	0.040	T	0.80	0.03	L	10.1509	0.0024	0.027	163		10.10	10.20					1						G
95297	9.819	0.021	8.351	0.012		1.237	0.019	T	1.20	0.02	L	8.4222	0.0013	0.015	103		8.40	8.44		C			1						
95298	10.289	0.031	8.320	0.012		1.700	0.023	G	1.74	0.02	A	8.2195	0.0021	0.017	91		8.20	8.25					1						
95299	11.168	0.064	9.821	0.030	*	1.094	0.001	G	1.17	0.00	I	*	9.7950	0.0023	0.028	143	*	9.75	9.85			19233−0635	H 1	2 C D	AB	38	0.905	0.079	3.35	0.27	G D
95300	8.239	0.009	8.245	0.011		−0.001	0.013	T	0.02	0.01	L	8.2352	0.0014	0.013	109		8.21	8.26		C			1						S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
95301 H	19 23 17.80	+09 30 41.7	7.86	H	290.824 179 14	+09.511 594 95	A	5.50	20.88	−1.46	1.98	1.60	1.81	2.29	1.84	+24	− 5	+ 1	−16	−17	+ 2	−27	−25	−13	−33		1	−0.01
95302	19 23 20.54	−50 41 19.6	9.03	H	290.835 575 72	−50.688 788 59		13.24	30.99	−82.91	1.14	0.97	1.25	1.69	1.16	+33	− 3	+ 2	−38	−24	−14	−25	−60	− 7	+29		2	0.77
95303	19 23 21.08	+14 42 46.9	8.18	H	290.837 812 58	+14.713 024 10		5.51	6.98	−1.17	0.69	0.63	1.02	0.71	0.64	+	4 −	8	−30	−	1	−12	+26	−	7	−13	+15	+	1	4	−0.89
95304	19 23 23.10	−65 34 43.6	7.27	H	290.846 255 78	−65.578 767 08		4.55	11.96	−12.45	0.57	0.50	0.87	0.61	0.69	−16	−15	+	5	−12	−12	−	8	−23	−18	+22	−43		0	−1.12
95305	19 23 23.52	−45 01 58.2	9.52	G	290.847 990 94	−45.032 823 03		3.96	3.29	−5.04	1.56	0.92	1.72	2.01	1.29	+32	−41	−29	+16	+15	−	3	−	7	−25	+27	−	7	0	0.41
95306	19 23 23.79	+50 16 16.5	6.51	G	290.849 104 58	+50.271 249 60		3.85	2.32	16.21	0.47	0.46	0.52	0.54	0.63	−	2 −12	+	4	−10	−	1	−	5	+	5	+13	+	5	+13	0	−0.26
95307	19 23 23.93	+15 12 57.3	9.50	G	290.849 704 56	+15.215 910 97		−1.28	−1.47	−7.25	0.93	0.80	1.30	1.08	0.92	+	4 −	9	−	6	+17	−	3	+27	−	4	−	1	+21	+	4	0	0.62
95308	19 23 23.97	−24 13 05.1	8.61	H	290.849 859 17	−24.218 084 52		1.23	10.53	1.41	1.18	0.77	1.29	1.01	0.70	+18	−49	−28	−23	+	4	+16	+13	−26	−11	+11		0	−2.55
95309	19 23 24.68	+20 34 09.2	7.91	H	290.852 831 77	+20.569 233 52		21.26	13.13	−186.93	0.61	0.69	1.00	0.85	1.05	+24	−28	−15	−	9	−	4	+20	+	6	−15	−12	+	8	1	−1.64
95310	19 23 25.41	−40 18 59.5	9.06	H	290.855 857 03	−40.316 522 89		3.11	9.88	−5.62	1.48	0.97	1.49	2.02	1.08	−12	−30	−18	+	8	+	5	+	2	+	1	−20	+	1	−34	0	−0.70
95311	19 23 29.55	+54 43 52.7	9.07	H	290.873 116 27	+54.731 314 86		2.30	−11.11	−19.39	0.81	0.77	0.86	0.98	0.94	+	1 −	4	+	0	+20	+11	−18	+12	+22	−21	+15		0	0.28
95312	19 23 29.61	+23 58 33.1	7.62	H	290.873 368 64	+23.975 874 33		8.47	30.21	14.03	0.52	0.65	0.86	0.63	0.78	−15	+	0	−36	+13	+	1	+11	+	6	+16	−10	−	5	0	−1.79
95313 H	19 23 29.72	−34 31 36.3	8.83	2 H	290.873 816 96	−34.526 757 54	A	12.82	−49.17	−47.59	4.84	3.47	4.27	5.20	3.72	+26	−28	−23	+13	+15	−23	+	6	−	5	+10	+38		9	0.94
95314	19 23 30.74	+48 04 10.8	7.55	H	290.878 080 89	+48.069 675 46		5.46	−18.11	−10.90	0.57	0.53	0.60	0.67	0.64	+	2 −	5	+	3	+	0	+	9	−	1	+	5	+32	+	1	+14	4	2.23
95315	19 23 31.30	−69 24 27.4	7.85	H	290.880 404 70	−69.407 611 67		16.59	−50.64	77.09	0.44	0.59	0.98	0.54	0.81	−20	−12	−	2	+39	+	6	−	4	−	2	−19	+	7	−34	0	0.03
95316	19 23 31.62	−00 32 26.1	7.94	H	290.881 759 77	−00.540 573 33		0.69	1.23	−3.28	0.86	0.58	1.07	0.97	0.59	+13	−27	−25	−	3	+10	+	0	−	5	−38	+24	−21		0	1.77
95317	19 23 32.48	−13 15 40.9	8.24	H	290.885 331 91	−13.261 367 66		3.89	−14.02	−4.60	1.03	0.68	1.12	1.18	0.72	+38	−21	−11	−12	−16	−14	−22	−45	−	6	+18		0	0.99
95318	19 23 32.71	+04 12 35.5	8.98	H	290.886 303 41	+04.209 862 70		2.15	5.93	1.55	1.05	0.70	1.24	1.33	0.82	−	6 −21	+	7	−	7	+15	+	7	+10	−20	+11	−	1	0	−1.41
95319	19 23 33.96	+33 13 17.7	6.37	G	290.891 480 75	+33.221 570 11		64.54	82.04	162.92	0.46	0.45	0.60	0.54	0.52	−	5 −	4	−15	+32	+	7	−	5	+	6	−	2	+13	−	5	0	−1.12
95320	19 23 34.19	+69 00 53.1	6.96	2 H	290.892 444 12	+69.014 761 42		2.75	−14.58	−27.53	0.50	0.47	0.51	0.55	0.50	+10	−24	+12	+17	+19	−	3	+16	+16	+10	+26		3	0.82
95321	19 23 36.60	−63 11 29.7	8.05	H	290.902 514 04	−63.191 592 31		15.82	−85.30	−135.68	0.78	0.61	1.07	1.05	1.03	−15	− 5	+	4	+21	−	6	−	8	−	1	−	4	+21	+	7	2	2.19
95322	19 23 36.90	−53 56 46.0	6.62	H	290.903 753 65	−53.946 117 75		7.83	14.80	−6.17	0.66	0.54	0.77	0.83	0.54	+19	−22	−18	−	4	+	9	−	1	+	6	−31	−11	+	8	0	0.99
95323	19 23 37.08	−15 48 44.3	7.41	H	290.904 488 69	−15.812 312 93		2.91	0.82	−12.27	0.75	0.43	0.84	0.86	0.54	+30	−45	−21	+	7	+14	+	5	+	8	−10	+	2	−	7	0	0.27
95324	19 23 38.12	−39 11 03.7	10.01	H	290.908 816 82	−39.184 374 08	A	11.27	4.61	−5.84	5.30	3.96	4.37	5.50	3.44	+38	−49	−27	+	1	−25	−14	−25	−47	+	0	+25		0	−0.44
95325	19 23 38.73	+08 39 36.1	7.05	H	290.911 357 03	+08.660 022 35		−0.02	−1.22	−6.54	0.91	0.60	1.01	1.23	0.84	−15	− 4	+	3	−22	−	7	+	6	−10	−29	−25	−57		0	1.58
95326	19 23 38.93	−39 11 21.0	12.39	H	290.912 224 73	−39.189 160 47	B	77.71	101.74	−21.62	115.21	77.92	57.93	74.85	41.67	+24	−50	−34	+23	−22	−	7	−20	−30	+	1	+10		0	−0.44
*95327	19 23 39.19	−38 16 46.3	9.98	H	290.913 311 81	−38.279 534 03		15.84	53.41	12.43	2.07	1.91	2.15	2.89	1.69	+46	−15	−22	−20	−48	−20	−53	−62	+	2	+25		0	0.93
*95328 H	19 23 39.13	−60 16 08.0	9.65	H	290.913 033 63	−60.268 887 12	*	8.58	−25.97	−124.87	2.96	2.38	2.19	1.91	1.55	−	3 +	1	+	4	+19	−16	+	3	−	3	+11	+	7	+14	0	−0.17
95329	19 23 39.56	−55 56 07.2	7.35	G	290.914 834 60	−55.935 323 81		12.37	89.36	−65.27	0.69	0.56	0.95	1.02	0.69	−15	−18	−	6	−	5	+17	−14	+16	−32	−14	−15		4	0.29
95330	19 23 39.76	+27 59 06.9	8.75	H	290.915 669 22	+27.985 253 07		4.45	1.27	−5.21	0.60	0.77	1.08	0.70	1.02	−13	+	1	−19	+	5	−	1	+	9	+	1	+	1	−	3	−11	0	2.58
95331	19 23 40.54	+09 18 06.3	8.49	H	290.918 920 85	+09.301 748 60		0.80	−4.32	−8.67	1.12	0.81	1.16	1.47	1.07	+26	+10	−	2	−35	−19	−15	−24	−39	−	8	−39		0	0.26
95332	19 23 42.34	−38 57 06.6	9.99	H	290.926 425 02	−38.951 833 22		1.48	24.41	−26.48	5.54	3.99	5.92	6.00	4.20	+13	−29	−21	−16	−14	−15	−16	−40	+	7	+15		0		
95333	19 23 42.80	−45 04 49.8	9.68	H	290.928 335 35	−45.080 491 22		11.31	−70.60	−814.46	1.58	0.94	1.76	2.33	1.43	+25	−34	−19	+	3	+18	−12	+	1	−38	+12	−11		0	0.80
95334	19 23 42.87	+15 45 34.6	8.54	H	290.928 640 66	+15.759 606 37		2.53	−0.15	4.25	0.68	0.62	1.08	0.91	0.81	+30	−13	−	9	+14	−15	+25	−20	+	3	+	9	−	3	0	−1.33
95335	19 23 43.77	−81 22 55.8	8.77	H	290.932 377 00	−81.382 166 10		3.68	−2.27	−27.20	0.70	0.73	0.89	0.88	0.93	−15	−14	+	6	+12	−	2	−12	−	3	+13	+14	−14		0	−1.65
95336	19 23 44.63	+40 47 14.0	7.97	H	290.935 944 08	+40.787 217 59		2.48	6.67	1.41	0.50	0.53	0.64	0.54	0.56	−	8 +10	−	3	+	0	+22	−21	+23	−	3	+	4	+	7	0	0.03
95337	19 23 44.85	−37 04 37.8	8.39	G	290.936 891 95	−37.077 174 47		6.71	2.68	−34.61	1.14	0.76	1.20	1.38	0.67	+17	−37	−27	+25	−	8	−	1	−14	−27	−	2	−15		0	1.29
95338 H	19 23 45.89	−76 08 54.8	9.42	H	290.941 215 86	−76.148 544 69	A	2.31	−2.31	−38.35	1.22	1.36	1.69	1.38	1.43	−17	−23	+18	+13	+	7	−	9	+	7	−16	+	6	−11	2	−0.43
95339	19 23 46.08	+39 49 08.7	8.02	H	290.942 016 18	+39.819 090 22		3.05	6.01	−11.59	0.62	0.59	0.74	0.74	0.65	−	1 −	5	+	6	+28	+15	−15	+17	+	9	−	3	+11	1	−0.02
95340	19 23 46.93	+20 15 51.7	6.40	H	290.945 532 32	+20.264 354 87		2.88	3.07	0.42	0.44	0.49	0.69	0.55	0.65	+19	−19	−13	+	3	+	1	+12	+	3	+	3	+	1	+24	0	−0.44
95341	19 23 47.43	+68 03 55.5	10.08	H	290.947 622 62	+68.065 419 53		6.71	−9.59	−45.06	0.91	0.83	0.95	1.13	1.02	+	3 −21	+	5	+	9	+11	+20	+	6	+12	+19	+32		0	0.02
95342	19 23 47.77	+39 35 25.3	7.00	H	290.949 036 30	+39.590 363 80		3.08	29.70	34.22	0.52	0.52	0.65	0.60	0.60	−	8 −	8	+	4	+26	+	7	−28	+	9	+15	+	4	+	0	1	0.45
95343	19 23 48.94	−17 11 44.6	7.05	H	290.953 897 87	−17.195 729 50		7.35	5.70	−26.22	0.77	0.43	0.87	0.75	0.51	+35	−43	−17	−	8	+	9	+13	−14	−	6	+	9		0	0.62
95344	19 23 49.32	−81 32 24.9	8.72	G	290.955 520 27	−81.540 261 23		11.59	−213.84	−154.42	0.68	0.73	0.89	0.80	0.97	−15	−26	−	1	+	7	−11	−	8	+	8	+23	−	2	−26	0	−0.20
95345	19 23 50.15	−34 58 01.1	7.11	H	290.958 947 16	−34.966 980 77		5.12	10.21	−4.68	0.96	0.67	1.08	1.18	0.58	+	3 −28	−43	+25	+17	−16	−	1	−22	+20	−24		0	−0.05
95346	19 23 50.49	+16 00 50.9	7.62	H	290.960 375 50	+16.014 137 21		2.75	3.71	0.71	0.55	0.51	0.93	0.73	0.66	+25	−24	−17	+25	−	9	+22	−15	+10	+16	−	6		0	−0.67
95347	19 23 53.15	−40 36 56.3	3.96	G	290.971 464 11	−40.615 646 29		19.20	32.67	−120.81	1.02	0.70	0.99	1.41	0.62	−31	−28	−38	−21	+43	−18	+28	−55	+14	−60		0	1.90
95348 H	19 23 54.54	−33 21 04.9	9.62	H	290.977 267 35	−33.351 361 82	A	7.52	−20.95	−8.32	2.37	1.60	2.46	2.66	1.50	+45	−36	−46	+28	+23	−36	+	4	−12	+10	+13		2	−0.06
95349	19 23 54.84	+72 35 00.1	7.97	2 H	290.978 481 06	+72.583 367 54		2.69	−1.23	−13.12	0.62	0.54	0.63	0.61	0.64	+	0 −26	−	5	−24	+	9	−	5	+	5	+	3	+	8	+	6	0	1.51
95350	19 23 55.24	−62 52 14.5	9.44	G	290.980 173 05	−62.870 683 20		23.18	136.16	−457.39	0.96	0.80	1.44	1.32	1.35	−14	−17	+13	+18	−28	−12	−18	−26	+11	+19		0	2.30
95351	19 23 56.10	−59 58 21.6	8.94	H	290.983 762 64	−59.972 662 75		0.99	3.22	12.95	0.97	0.78	1.34	1.13	0.94	−	5 −15	+	0	+35	−17	−	3	−	9	−	2	+	1	+17	0	−0.62
95352	19 23 56.49	+43 23 17.7	5.85	H	290.985 369 34	+43.388 237 10		8.06	16.30	−27.36	0.41	0.41	0.47	0.41	0.46	−	2 −	7	+	1	+13	+15	−	5	+16	+20	−11	+	6	0	−1.19
95353	19 23 57.44	+38 06 51.8	7.94	H	290.989 340 95	+38.114 391 26		4.15	6.72	12.40	0.50	0.54	0.65	0.57	0.66	+	4 +	7	+	0	−	1	+12	+11	+12	+13	−	7	+	5	1	0.21
95354	19 23 57.96	+32 43 25.2	6.76	H	290.991 481 24	+32.723 676 49		5.88	36.77	28.93	0.46	0.46	0.61	0.52	0.53	−	3 −	4	−	6	+36	+	6	−10	+	4	+	6	+	7	−	5	0	−0.30
95355 H	19 23 58.31	+24 33 09.2	9.35	H	290.992 938 64	+24.552 559 54	A	3.84	1.29	−7.42	1.94	2.06	1.84	1.28	1.80	−14	+10	−22	+12	−	1	+	0	+	0	+10	−11	−37		0	0.39
95356 H	19 23 58.75	−28 42 14.1	9.28	H	290.994 797 45	−28.703 918 19	A	5.37	−6.31	3.27	2.71	2.00	2.86	2.67	1.71	+25	−40	−47	−19	+13	−	6	+	3	−30	+21	+16		2	0.14
95357	19 23 59.03	+32 38 52.6	8.59	H	290.995 946 20	+32.647 949 55		3.52	7.29	9.10	0.65	0.73	0.95	0.74	0.83	+	5 −	2	−	9	+34	+15	−19	+12	+	9	+	9	−	3	0	0.75
95358	19 24 01.64	−33 32 32.2	7.67	2 H	291.006 818 88	−33.542 289 13		10.66	16.35	−10.25	1.17	0.72	1.08	1.71	0.77	−25	− 6	−15	+40	−17	+	4	−21	−	6	−	9	−41		8	1.96
95359	19 24 02.24	−35 56 24.7	8.25	H	291.009 319 36	−35.940 190 80		0.49	4.39	9.45	1.18	0.76	1.19	1.53	0.70	−	9 −27	−28	+21	+18	−22	+	6	−21	+	1	−29		0	0.60
95360 H	19 24 02.50	−53 19 34.1	8.51	H	291.010 432 04	−53.326 146 50	*	12.00	76.00	−146.08	0.94	0.86	1.19	1.31	0.83	+21	−12	−31	−	5	+26	−	7	+15	−26	+	4	+	8	0	−0.69
95361	19 24 02.69	−59 29 35.0	8.93	H	291.011 227 00	−59.493 068 74		1.83	12.01	−18.62	0.96	0.79	1.36	1.20	1.01	+15	−27	+	4	+30	−	8	−17	+	3	−	8	−	1	+44	0	−1.45
95362	19 24 03.30	+44 56 00.4	7.01	H	291.013 764 79	+44.933 447 94		18.34	92.48	37.20	0.51	0.48	0.58	0.56	0.62	−	8 +	3	−13	+	3	+10	−21	+11	+17	+	9	−15		1	0.38
95363	19 24 03.34	−06 58 38.3	7.44	H	291.013 926 55	−06.977 305 76		12.37	12.99	12.96	0.81	0.44	0.91	0.75	0.46	−12	−33	+	1	−34	+	9	+10	+	7	−46	+11	+	3	0	−1.15
95364	19 24 03.76	+11 26 27.9	7.42	H	291.015 675 90	+11.441 081 69		4.96	11.58	11.97	0.77	0.65	0.93	0.77	0.63	−	6 +	5	−12	−30	+	3	+	8	+	3	−39	+	0	−13	0	1.01
95365	19 24 03.92	+28 14 39.5	9.41	H	291.016 352 06	+28.244 295 20	A	1.36	−0.72	−3.22	1.27	1.65	2.03	1.44	2.05	−11	+	2	−	6	+28	−	6	−	1	−	7	+27	+	2	−	7	0	1.16
95366	19 24 04.35	−35 34 52.1	10.10	H	291.018 107 23	−35.581 136 89		3.57	−4.54	−2.98	1.86	1.27	1.95	3.31	1.42	−17	−10	−40	+36	+	6	−23	−18	−15	+19	−55		0	0.31
95367	19 24 04.40	+18 01 06.4	7.87	H	291.018 321 43	+18.018 450 77		6.92	4.63	−8.02	0.71	0.61	0.94	0.79	0.77	+28	+	0	+	4	−	4	−27	+17	−32	−21	−	5	+16		0	1.90
*95368 H	19 24 05.53	+46 26 18.3	7.56	G	291.023 026 87	+46.438 419 04	A	3.05	4.42	0.30	0.86	0.82	0.80	0.79	0.86	−	4 −21	−	7	+23	+	9	+	9	+17	+21	−29	−11		3	0.13
*95369	19 24 05.51	−68 22 15.9	6.33	G	291.022 973 40	−68.371 079 84		4.82	−20.76	−0.77	0.42	0.48	0.76	0.41	0.62	−26	− 4	−12	−25	+29	−	7	+30	−39	+16	−38		2	2.29
95370	19 24 06.05	+36 27 06.9	6.44	H	291.025 211 09	+36.451 902 93		9.05	5.59	78.49	0.45	0.48	0.58	0.52	0.55	−	3 −	6	−	1	+13	+	4	−	9	+	3	+19	+	8	+	8	0	−1.88
95371	19 24 06.73	+10 32 40.4	8.57	H	291.028 036 73	+10.544 568 14		6.25	0.62	−20.82	0.97	0.70	1.14	1.04	0.80	−	5 +	2	−10	−32	−	5	+13	−	5	−37	−	6	−10	2	−0.01
95372	19 24 07.57	+29 37 16.7	4.99	1 H	291.031 549 01	+29.621 311 20		4.21	10.57	10.85	0.39	0.45	0.58	0.48	0.61	−21	− 7	−14	+27	−	4	−17	−	7	+11	+12	−24		0	0.81
95373 H	19 24 07.94	+61 12 12.2	7.68	G	291.033 080 31	+61.203 397 13	A	4.18	5.29	−6.08	0.83	0.77	0.77	0.77	0.75	−	4 +	1	+	8	+	7	+	7	+	0	+11	+	2	+	8	+16	0	0.74
95374	19 24 08.67	−34 32 38.3	9.70	H	291.036 105 54	−34.543 982 56		4.57	−0.22	−9.77	3.46	2.43	3.74	3.82	2.51	+	9 −27	−22	+	8	+15	−19	+11	−15	+	4	+11		0		
95375	19 24 09.78	+60 20 56.0	7.66	H	291.040 770 14	+60.348 902 66		5.93	−22.77	10.79	0.59	0.54	0.60	0.63	0.58	−	4 −20	+	6	+17	+13	−15	+16	−23	+14	+10		1	1.22
95376	19 24 09.89	+48 25 40.7	8.31	H	291.041 226 88	+48.427 960 36		2.94	5.02	2.46	0.63	0.55	0.65	0.66	0.66	+	0 −	1	+	9	−	5	+14	−15	+13	+25	+	6	+15	0	−0.01
95377	19 24 09.96	+39 12 42.3	7.47	G	291.041 481 27	+39.211 754 02		3.84	−48.70	−36.18	0.53	0.57	0.69	0.59	0.66	+	0 −	8	−12	+23	+18	−30	+17	+21	−	2	+	1	2	0.17
95378	19 24 09.96	−55 32 03.0	9.99	H	291.041 488 97	−55.534 154 87		12.01	−7.77	−76.26	1.34	1.04	1.95	2.18	1.50	−25	−11	+	6	−	2	+20	−	7	+22	−23	−20	−14		4	1.26
95379	19 24 11.32	+34 34 30.4	9.28	H	291.047 164 88	+34.575 101 36		1.77	−0.53	2.21	0.70	0.80	0.96	0.74	0.92	−	1 −14	−	5	−	8	+22	+	8	+23	+	6	+	2	+	0	0	−0.19
95380	19 24 11.35	−31 55 55.3	9.37	H	291.047 290 58	−31.932 038 75		3.48	0.22	−10.93	1.75	1.10	1.65	2.38	1.26	−23	−23	−	9	+41	−29	+	3	−24	−	1	−11	−29		0	0.02
95381	19 24 11.64	−42 53 00.3	9.75	G	291.048 489 14	−42.883 424 48		10.42	11.24	21.51	1.74	1.03	1.82	2.32	1.43	+45	−36	−22	+13	−	1	−23	−33	−53	+	8	−	8		0	0.40
95382	19 24 11.91	+79 46 55.1	8.11	H	291.049 643 48	+79.781 981 89		6.46	−24.09	−10.36	0.56	0.58	0.63	0.58	0.63	+13	−17	+17	+	5	−	2	−21	+	3	−	9	−	6	+22	0	1.43
95383	19 24 12.47	−68 15 31.8	7.82	H	291.051 972 42	−68.258 846 38		2.04	11.59	−12.51	0.58	0.74	0.96	0.71	1.06	−33	+	6	−18	−27	+56	−	8	+40	−60	+19	−62		0	−0.15
95384	19 24 12.70	+18 44 28.3	7.91	G	291.052 910 92	+18.741 197 11		5.73	1.76	−13.71	0.60	0.62	0.96	0.73	0.83	+35	−18	+	7	−10	+	6	+30	+	0	+	4	+22	+47	0	1.23
95385	19 24 12.75	−62 59 53.7	6.58	G	291.053 143 49	−62.998 245 62		18.54	−77.08	25.30	0.60	0.47	0.78	0.73	0.71	−18	−22	+	9	+32	−20	−	8	−17	+	1	+12	+	7	0	0.71
95386	19 24 14.62	−27 50 41.1	9.03	H	291.060 920 73	−27.844 759 75		1.70	1.10	2.07	1.83	1.08	1.94	2.03	1.08	−	9 −49	−46	−34	+38	−	4	+25	−46	+18	−52		0	1.90
95387	19 24 17.23	+27 12 52.9	8.89	1 H	291.071 803 66	+27.214 688 04		−0.01	−1.15	−3.17	0.60	0.85	1.14	0.71	1.08	−14	+	6	−33	+21	+	2	+	3	+	2	+	2	−	21	0	2.49
95388	19 24 18.00	+31 02 50.4	7.39	H	291.075 012 70	+31.047 321 64		3.08	0.89	−2.84	0.45	0.51	0.68	0.50	0.59	−	8 −13	−	6	+13	+	1	−	2	+	1	+14	+	3	−12	0	−0.61
95389 H	19 24 18.14	+20 31 51.1	8.67	G	291.075 566 82	+20.530 871 40	*	9.90	2.58	−2.15	1.54	2.02	1.47	1.04	1.20	+20	−32	−	7	−16	−18	+	4	−15	−13	−11	+27		2	−0.07
95390	19 24 18.18	−70 06 26.1	7.80	H	291.075 752 57	−70.107 240 90		12.27	34.08	−163.91	0.37	0.55	0.91	0.44	0.70	−23	−11	−	9	+15	+	8	−11	+	4	−12	−29		0	−1.97
95391	19 24 18.26	−69 08 34.1	7.53	H	291.076 086 80	−69.142 792 54		4.09	−12.75	−3.14	0.49	0.56	0.93	0.57	0.76	−17	− 7	−	3	+16	+18	+	1	+13	−28	+	8	−31		1	−0.56
95392	19 24 18.38	+85 21 57.2	9.66	H	291.076 564 02	+85.365 876 44		−0.11	−2.07	3.25	0.88	0.99	1.02	1.04	1.27	−	4 −30	+	8	−18	−	5	+12	−	2	−33	−	1	+18	3	−1.23
95393 H	19 24 19.21	+31 55 35.7	9.26	H	291.080 044 49	+31.926 581 34	A	2.19	0.92	−0.65	1.41	1.66	1.68	1.38	1.50	−	5 −	3	−	2	+38	−15	−	4	−16	−16	+	0	−	8	1	0.35
95394	19 24 20.39	−57 37 28.6	9.03	H	291.084 940 83	−57.624 623 84		3.04	−12.91	−18.51	0.95	0.79	1.29	1.14	0.97	+	7 −11	−	4	+49	−23	+	1	−	6	−	9	−	4	+36	2	−0.19
95395	19 24 20.98	+22 57 53.2	8.70	H	291.087 419 24	+22.964 775 55		2.81	9

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
95301	8.097	0.010	7.806	0.011	*	0.740	0.495	G	0.22	0.12	S *	7.9200	0.0021	0.020	83	–	7.90	7.98		R	19233+0931	I 1	3 C B							S G
95302	9.945	0.025	9.117	0.020		0.746	0.024	T	0.79	0.02	L	9.1764	0.0024	0.024	88		9.14	9.22					1						
95303	8.547	0.010	8.219	0.010		0.311	0.013	T	0.36	0.02	L	8.2599	0.0018	0.015	107		8.23	8.29					1						
95304	7.219	0.004	7.262	0.006		−0.035	0.007	T	−0.01	0.01	L	7.2679	0.0011	0.012	148		7.24	7.28					1						S
95305	9.738	0.036	9.558	0.043		0.170	0.015	G	0.19	0.01	H	9.5783	0.0028	0.026	89		9.54	9.62		C			1						
95306	6.410	0.004	6.505	0.005		−0.071	0.006	G	−0.05	0.01	H	6.4966	0.0009	0.006	98		6.49	6.51		C			1						S
95307	10.287	0.031	9.622	0.028		0.750	0.015	G	0.79	0.01	H	9.6363	0.0021	0.022	108		9.60	9.68					1						G
95308	10.503	0.050	8.810	0.021		1.160	0.040	G	1.12	0.04	R	8.7761	0.0023	0.014	59		8.75	8.80		C			1						
95309	8.626	0.010	7.993	0.009		0.578	0.012	G	0.65	0.01	H	8.0364	0.0016	0.015	133		8.01	8.06					1 G						S
95310	10.538	0.074	9.295	0.044		1.061	0.067	T	1.03	0.06	L	9.2291	0.0018	0.017	52		9.20	9.27		D			1						
95311	10.743	0.047	9.218	0.021		1.282	0.040	T	1.24	0.04	L	9.2232	0.0020	0.016	95		9.19	9.25		C			1						
95312	8.160	0.007	7.666	0.008		0.465	0.010	T	0.54	0.01	L	7.7277	0.0011	0.013	139		7.71	7.75		C			1						S
95313	10.418	0.046	9.497	0.035	A	1.200	0.495	G	0.96	0.07	B *	8.9957	0.0076	0.113	53	*	8.94	9.34		R 2 C	19235−3432	I 1	2 C A	AB	186	4.318	0.008	0.26	0.05	W
95314	8.978	0.012	7.670	0.007		1.111	0.011	T	1.07	0.01	L	7.7155	0.0011	0.008	118		7.70	7.73		C			1 S						S
95315	8.526	0.007	7.926	0.006		0.559	0.007	T	0.63	0.01	L	7.9694	0.0012	0.014	245		7.94	7.99			19235−6924	I 1	1 S						S
95316	8.141	0.009	7.959	0.011		0.174	0.013	T	0.19	0.01	L	7.9956	0.0017	0.012	92		7.98	8.02		C			1						S
95317	9.786	0.023	8.401	0.013		1.172	0.021	T	1.13	0.02	L	8.4116	0.0016	0.013	91		8.39	8.43		C			1						
95318	9.366	0.019	9.038	0.021		0.488	0.005	G	0.56	0.01	H	9.0876	0.0028	0.019	80		9.05	9.11					1						
95319	7.370	0.006	6.444	0.004		0.804	0.006	G	0.84	0.01	H	6.5068	0.0007	0.008	122		6.49	6.52		C			1						S
95320	9.171	0.014	7.172	0.006		1.693	0.013	T	2.22	0.04	O	7.0199	0.0042	0.036	121		6.96	7.08		U 2			1 S						S P
95321	8.822	0.012	8.125	0.010		0.630	0.012	T	0.70	0.01	L	8.1858	0.0016	0.016	114		8.16	8.21					1						S
95322	7.851	0.008	6.727	0.006		0.968	0.008	T	0.95	0.01	L	6.7811	0.0014	0.008	88		6.76	6.80					1						S
95323	7.428	0.007	7.413	0.008		0.019	0.010	T	0.04	0.01	L	7.4247	0.0009	0.007	115		7.41	7.44		C			1						S
95324	10.584	0.054	10.027	0.052	A	0.527	0.056	T	0.60	0.06	L	10.1270	0.0595	0.044	48	A	10.04	10.19		D	19236−3911	I 2	1 C P D							G D
95325	8.702	0.013	7.194	0.007		1.289	0.048	G	1.26	0.03	C	7.2074	0.0011	0.010	85		7.19	7.23		C			1 S						S
95326											T	12.0815	0.3055			B				D	19236−3911	I 2	1 C I D							D
95327	11.130	0.089	10.041	0.057		0.932	0.083	T	0.98	0.09	L	10.1214	0.0039	0.025	48		10.07	10.16		C	19237−3817	I 1	1 S							G
95328	10.500	0.036	9.685	0.029	*	0.720	0.035	T	0.77	0.03	L *	9.7934	0.0029	0.025	94	*	9.75	9.84		C	19237−6016	H 1	2 C D	AB	153	0.264	0.118	3.17	0.70	D
95329	7.854	0.007	7.385	0.007		0.471	0.007	G	0.54	0.01	H	7.4483	0.0010	0.010	107		7.43	7.47					1						S
95330	8.892	0.010	8.769	0.012		0.119	0.015	T	0.13	0.01	L	8.7982	0.0016	0.021	164		8.76	8.83					1						
95331	9.003	0.015	8.551	0.015		0.426	0.019	T	0.49	0.02	L	8.5867	0.0023	0.019	86		8.55	8.63		C			1						
95332	11.431	0.114	10.249	0.066		1.006	0.105	T	0.98	0.08	L	10.1328	0.0032	0.027	50		10.09	10.19		D	19237−3857	I 1	1 X							G
95333	10.172	0.042	9.757	0.045		0.473	0.034	G	0.54	0.04	H	9.7891	0.0024	0.021	93		9.75	9.82		C			1						
95334	10.548	0.027	8.706	0.011		1.532	0.023	T	1.58	0.05	L	8.6593	0.0017	0.019	160		8.63	8.69					1						
95335	10.336	0.026	8.887	0.014		1.222	0.023	T	1.18	0.02	L	8.9358	0.0014	0.018	136		8.91	8.97					1						
95336	7.891	0.008	7.951	0.010		−0.050	0.015	G	−0.03	0.01	H	7.9617	0.0015	0.014	134		7.94	7.98					1						S
95337	8.923	0.018	8.440	0.018		0.471	0.015	G	0.54	0.02	H	8.4962	0.0025	0.014	54		8.47	8.52		C			1						
95338	10.042	0.021	9.536	0.021	A	0.436	0.071	G	0.53	0.04	L *	9.5209	0.0027	0.023	133	*	9.47	9.56		C	19238−7609	H 1	2 C D	AB	107	4.226	0.035	3.15	0.16	D
95339	8.097	0.007	8.023	0.009		0.073	0.011	T	0.08	0.01	L	8.0519	0.0015	0.012	118		8.03	8.08		C			1						S
95340	6.413	0.004	6.399	0.004		0.013	0.005	T	0.03	0.01	L	6.4130	0.0008	0.008	137		6.40	6.43					1						S
95341	10.554	0.041	10.193	0.047		0.342	0.058	T	0.40	0.08	L	10.1561	0.0024	0.022	97		10.11	10.19					1						G
95342	8.479	0.010	7.123	0.006		1.149	0.009	T	1.11	0.01	L	7.1697	0.0008	0.010	115		7.15	7.19					1						S
95343	7.065	0.005	7.055	0.006		0.010	0.007	T	0.03	0.01	L	7.0587	0.0007	0.007	116		7.05	7.08		C	19238−1712	I 1	1							S
95344	9.556	0.017	8.779	0.013		0.656	0.002	G	0.72	0.00	H	8.8504	0.0019	0.018	138		8.82	8.88					1						
95345	8.753	0.016	7.250	0.009		1.264	0.014	T	1.22	0.01	L	7.2674	0.0019	0.010	62		7.25	7.29					1						S
95346	7.771	0.006	7.633	0.006		0.133	0.008	T	0.15	0.01	L	7.6699	0.0009	0.010	168		7.65	7.69		C			1						S
95347	3.843	0.004	3.941	0.003		−0.105	0.007	G	−0.10	0.02	A	3.9295	0.0008	0.004	52		3.93	3.95					1						S
95348	10.509	0.056	9.652	0.040	A						T *	9.7128	0.0040	0.017	48	*	9.69	9.76		C	19239−3321	I 1	2 C D	AB	136	8.232	0.079	3.63	0.38	D
95349	10.236	0.026	8.197	0.010		1.688	0.022	T	1.71	0.02	L	8.0695	0.0023	0.018	104		8.04	8.11		U 2			1						
95350	10.661	0.036	9.560	0.022		0.932	0.015	G	0.98	0.02	I	9.5858	0.0025	0.025	135		9.55	9.62					1						
95351	10.985	0.048	9.114	0.017		1.588	0.042	T	1.79	0.12	O	9.0308	0.0022	0.020	99		9.00	9.07		C			1						
95352	7.025	0.005	5.956	0.003		0.924	0.000	G	0.92	0.00	H	6.0136	0.0007	0.006	138		6.00	6.03		C			1						S
95353	8.214	0.010	7.973	0.010		0.230	0.013	T	0.26	0.02	L	8.0105	0.0014	0.013	128		7.99	8.03					1						S
95354	8.370	0.010	6.914	0.005		1.227	0.009	T	1.19	0.01	L	6.9245	0.0009	0.009	146		6.91	6.94					1						S
95355	9.498	0.012	9.374	0.016	*	0.120	0.019	T	0.13	0.02	L *	9.3928	0.0023	0.025	200	*	9.34	9.44			19240+2433	H 1	2 C A	AB	51	0.362	0.014	2.41	0.11	G P
95356	9.692	0.029	9.278	0.030	A	0.413	0.400	G	0.20	0.11	L *	9.3413	0.0026	0.020	58	*	9.30	9.39		D	19240−2842	I 1	2 C A	AB	277	1.267	0.037	2.55	0.11	
95357	9.126	0.012	8.638	0.012		0.459	0.015	T	0.53	0.02	L	8.6917	0.0018	0.019	140		8.66	8.72					1						S
95358	7.986	0.016	7.693	0.015		0.328	0.015	G	0.38	0.02	H	7.7532	0.0055	0.025	52		7.69	7.79		U 2			1						S
95359	9.947	0.030	8.382	0.016		1.313	0.027	T	1.27	0.03	L	8.4048	0.0027	0.014	57		8.38	8.43		C			1						
95360	9.325	0.019	8.579	0.016	*	0.667	0.019	T	0.73	0.02	L *	8.6454	0.0022	0.016	81	*	8.62	8.68		D	19240−5320	H 1	2 C S B	AB	59	0.161	0.029	1.01	0.80	
95361	10.870	0.045	9.037	0.017		1.525	0.038	T	1.56	0.06	L	9.0542	0.0022	0.017	109		9.02	9.09					1						
95362	8.016	0.008	7.111	0.007		0.808	0.001	G	0.83	0.00	H	7.1673	0.0009	0.007	106		7.15	7.18		C			1						S
95363	7.819	0.007	7.476	0.008		0.342	0.015	G	0.40	0.02	H	7.5190	0.0008	0.010	146		7.50	7.54		C			1						S
95364	8.768	0.011	7.528	0.007		1.058	0.010	T	1.02	0.01	L	7.5847	0.0016	0.012	86		7.57	7.61		C			1						
95365	9.425	0.015	9.381	0.020	A	0.045	0.023	T	0.06	0.02	L	9.4311	0.0112	0.025	160	A	9.38	9.48		C	19241+2815	I 1	2 C A	AB	39	10.627	0.027	2.74	0.15	G
95366	10.661	0.066	10.244	0.077		0.426	0.071	G	0.49	0.07	R	10.2008	0.0035	0.023	57		10.14	10.24					1						G
95367	8.042	0.008	7.881	0.010		0.140	0.015	G	0.15	0.01	H	7.9201	0.0015	0.016	124		7.89	7.94					1						S
95368	7.501	0.007	7.582	0.010	A	−0.060	0.015	G	−0.04	0.01	H *	7.5196	0.0016	0.012	112	*	7.50	7.54		D	19241+4626	I 1	2 C A	AB	231	1.816	0.007	2.39	0.04	S
95369	7.947	0.006	6.483	0.004		1.238	0.003	G	1.20	0.00	H	6.4983	0.0006	0.009	201		6.49	6.51					1						S
95370	7.819	0.008	6.559	0.004		1.074	0.007	T	1.04	0.01	L	6.6041	0.0007	0.007	121		6.59	6.62		C			1						S
95371	8.911	0.015	8.603	0.017		0.293	0.021	T	0.33	0.03	L	8.6421	0.0019	0.015	83		8.61	8.67					1						
95372	4.826	0.002	4.964	0.002		−0.120	0.003	T	−0.11	0.00	L	4.9499	0.0006	0.006	151		4.94	4.96		M	19241+2937	I 1	1							S
95373	9.049	0.014	7.811	0.009	A	1.040	0.015	G	1.01	0.01	H *	7.8618	0.0010	0.012	112	*	7.84	7.89		D	19241+6112	I 1	2 C C	AB	306	2.662	0.033	3.74	0.16	
95374	11.142	0.089	9.788	0.045		1.147	0.078	T	1.11	0.07	L	9.8649	0.0023	0.016	55		9.84	9.90					1 X						
95375	9.067	0.014	7.782	0.009		1.070	0.015	G	1.03	0.01	H	7.8304	0.0011	0.010	104		7.82	7.85		C			1						S
95376	8.327	0.009	8.304	0.011		0.026	0.013	T	0.04	0.01	L	8.3252	0.0016	0.014	119		8.30	8.35					1						S
95377	9.260	0.017	7.601	0.009		1.380	0.015	G	1.35	0.02	H	7.6131	0.0008	0.013	122		7.60	7.64					1						S
95378	10.984	0.061	10.051	0.042		0.810	0.057	T	0.84	0.04	L	10.1321	0.0034	0.026	97		10.09	10.17		C			1						G
95379	9.255	0.015	9.286	0.020		−0.024	0.023	T	0.00	0.02	L	9.2822	0.0022	0.021	125		9.25	9.34					1						
95380	10.637	0.064	9.541	0.041		0.938	0.060	T	0.93	0.04	L	9.5204	0.0038	0.024	58		9.47	9.56					1						
95381	10.686	0.044	9.785	0.032		0.760	0.020	G	0.80	0.02	H	9.9057	0.0032	0.029	96		9.85	9.95			19242−4253	I 1	1							
95382	8.603	0.011	8.166	0.011		0.424	0.020	G	0.49	0.02	H	8.2077	0.0012	0.011	121		8.19	8.23					1						S
95383	7.822	0.005	7.823	0.007		0.004	0.008	T	0.02	0.01	L	7.8351	0.0016	0.019	205		7.81	7.87					1 G						S
95384	7.897	0.006	7.900	0.007		0.007	0.005	G	0.03	0.01	H	7.9201	0.0014	0.013	132		7.90	7.95					1						S
95385	7.064	0.005	6.636	0.005		0.455	0.001	G	0.52	0.00	H	6.6728	0.0011	0.009	126		6.66	6.69					1 S						S
95386	10.306	0.046	9.191	0.031		1.000	0.040	G	0.98	0.03	R	9.1976	0.0038	0.015	39		9.18	9.22					1						
95387	9.043	0.011	8.950	0.013		0.235	0.015	G	0.26	0.02	H	8.9632	0.0021	0.026	170		8.93	9.01		U			1						
95388	7.275	0.005	7.371	0.006		−0.083	0.007	T	−0.06	0.01	L	7.3625	0.0009	0.013	159		7.34	7.38					1						S
95389	9.330	0.014	8.756	0.013	*	0.524	0.019	G	0.60	0.02	H *	8.7936	0.0016	0.020	130	*	8.76	8.83		D	19243+2032	H 1	2 C A	AB	228	0.206	0.026	1.68	0.38	
95390	8.440	0.007	7.857	0.006		0.546	0.007	T	0.62	0.01	L	7.9149	0.0012	0.016	290		7.89	7.94					1						S
95391	8.872	0.010	7.647	0.006		1.047	0.009	T	1.02	0.01	L	7.6974	0.0012	0.016	189		7.67	7.73					1						S
95392	11.714	0.102	9.739	0.029		1.632	0.077	T	1.65	0.08	L	9.7734	0.0027	0.024	109		9.73	9.82					1						
95393	9.226	0.012	9.260	0.017	*	−0.026	0.019	T	0.00	0.02	L *	9.2571	0.0030	0.031	148	*	9.21	9.31		D	19243+3156	I 1	2 C A	AB	193	0.557	0.009	1.97	0.05	
95394	9.808	0.019	9.098	0.016		0.640	0.019	T	0.70	0.02	L	9.1663	0.0022	0.019	117		9.13	9.20		C			1						
95395	8.912	0.013	8.753	0.015		0.153	0.019	T	0.17	0.02	L	8.7574	0.0017	0.018	98		8.73	8.80		C			1						
95396	8.217	0.011	6.327	0.005		1.603	0.010	T	1.96	0.03	O	6.2164	0.0013	0.010	107		6.20	6.23		M			1						S
95397	9.045	0.012	7.751	0.007		1.100	0.011	T	1.06	0.01	L	7.8008	0.0011	0.013	161		7.78	7.82					1						
95398	6.352	0.003	6.268	0.003	*	0.075	0.009	G	0.06	0.03	C *	6.2952	0.0007	0.007	139	*	6.28	6.31		C	19245+1657	I 2	2 C C	AC	149	0.398	0.034	3.99	0.12	S
95399	9.247	0.017	9.112	0.021		0.130	0.025	T	0.14	0.03	L	9.1007	0.0018	0.021	184		9.07	9.14					1						
95400	6.416	0.003	6.510	0.004		−0.080	0.004	T	−0.06	0.01	L	6.5038	0.0007	0.008	155		6.49	6.52		C			1						S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	$\mu_{\alpha*}$	μ_δ	π	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
95401	19 24 23.00	+05 33 51.8	7.77		H	291.095 846 01	+05.564 382 39		10.47	7.68	27.73	0.92	0.58	1.00	1.16	0.72	+ 3	−27	−12	+21	− 1	+ 9	− 6	− 4	+26	+ 8	2	2.06
95402	19 24 23.28	−09 20 17.8	7.24		H	291.096 992 05	−09.338 289 67		4.02	−3.54	−36.75	0.94	0.58	1.06	0.87	0.55	+25	−32	−18	−22	+13	+ 9	+ 7	−29	+19	+19	0	−1.25
95403	19 24 25.56	−63 21 41.3	8.32	2	H	291.106 496 33	−63.361 479 18		3.87	3.49	−14.93	0.89	0.73	1.29	1.26	1.21	−20	+ 5	− 4	+ 5	+ 4	−17	+ 8	−19	+20	− 8	0	0.19
95404	19 24 26.29	−55 53 17.9	7.49		H	291.109 551 00	−55.888 294 53		3.00	3.61	−10.49	0.67	0.55	0.96	0.99	0.71	−18	−20	+ 2	− 2	+15	− 3	+17	−27	−21	−16	2	−0.25
95405	19 24 26.58	−71 48 57.8	8.40	2	H	291.110 744 07	−71.816 049 34		0.53	9.15	−12.67	0.60	0.67	1.09	0.67	0.85	− 7	−21	+ 4	+30	− 3	−14	− 5	−15	− 2	−14	0	0.50
95406	19 24 27.51	+12 16 58.3	7.02		H	291.114 610 29	+12.282 853 57		3.04	5.66	8.28	0.54	0.52	0.85	0.56	0.52	+28	−12	−11	+12	−39	+11	−43	−17	+ 0	+ 2	0	−0.13
95407	19 24 29.54	−18 55 40.8	7.89		H	291.123 072 77	−18.928 004 28		2.34	−8.70	−14.08	0.91	0.56	0.99	1.10	0.65	+ 9	−32	−19	− 1	+ 7	+ 7	+ 6	−17	− 4	−16	0	1.51
95408	19 24 30.17	−27 51 57.3	6.03	1	H	291.125 719 55	−27.865 905 74		2.48	11.07	−16.26	1.35	0.80	1.40	1.44	0.73	−15	−50	−47	−43	+46	+ 1	+36	−53	+12	−58	0	0.61
95409	19 24 30.63	+37 11 16.1	7.86	1	H	291.127 633 44	+37.187 797 44		1.94	−3.55	−8.75	0.52	0.57	0.67	0.59	0.71	− 2	− 8	− 7	+13	− 5	−11	− 8	+19	+12	+ 8	1	0.01
95410	19 24 31.29	−46 23 52.8	8.55		H	291.130 373 93	−46.398 012 29		0.24	9.38	−16.71	1.04	0.75	1.25	1.30	0.92	+27	−17	+ 5	−18	+12	−12	+13	−34	−17	+16	0	−0.05
95411	19 24 31.78	−47 52 44.4	9.90		G	291.132 405 20	−47.878 997 42		4.35	18.41	−26.15	1.43	1.10	1.78	2.00	1.34	+ 7	−29	−17	−28	+21	−12	+11	−53	+ 6	− 9	0	0.61
95412	19 24 32.70	−27 00 45.7	9.24		H	291.136 244 25	−27.012 688 72		3.03	7.27	− 9.81	1.70	1.08	1.88	3.24	1.35	−17	−25	−38	−47	+20	+38	+37	−37	−17	−67	0	1.37
95413	19 24 33.07	+50 14 29.3	8.84	3	H	291.137 809 26	+50.241 472 58		3.73	−6.77	−19.75	0.79	0.75	0.85	0.92	1.14	−10	−17	+11	−13	− 1	+ 8	− 5	+11	− 6	+ 6	0	0.11
95414 H	19 24 33.33	+21 30 57.3	8.17		G	291.138 867 26	+21.515 912 88	A	4.69	15.37	43.71	1.21	1.49	1.66	1.15	1.47	+25	−16	−41	− 6	− 3	+ 0	− 4	−15	+ 8	+30	7	1.21
95415	19 24 33.48	−23 10 32.4	8.56		H	291.139 490 06	−23.175 666 97		12.44	−20.22	−78.36	1.13	0.90	1.52	1.39	0.71	+20	−21	−58	+16	−11	+29	+ 1	− 3	− 6	−16	3	−2.29
95416	19 24 34.29	−30 48 08.2	7.63		H	291.142 867 39	−30.802 284 42		4.40	33.60	−119.28	1.28	0.82	1.44	1.44	0.77	+28	−48	−37	+25	+ 3	−15	−15	−23	+ 9	−16	0	−0.18
95417	19 24 34.38	−22 03 39.9	10.91	2	G	291.143 252 70	−22.061 077 41		34.92	−234.36	−453.49	1.91	1.38	2.27	2.35	1.45	+21	−19	−16	+ 7	+ 7	+38	+16	− 3	−11	+16	0	0.39
95418 H	19 24 35.41	+06 28 30.4	9.85	2	H	291.147 548 61	+06.475 122 17	*	0.25	0.72	− 3.68	1.40	0.96	1.72	1.83	1.20	−16	−13	−19	−27	+18	− 1	+13	−31	+29	−18	0	0.87
95419	19 24 35.55	+10 29 30.5	9.22		H	291.148 127 38	+10.491 798 90		−1.53	−0.40	− 7.36	1.21	0.94	1.46	1.31	1.03	+ 1	+10	− 4	−30	− 3	− 6	− 3	−43	− 8	+ 9	6	0.23
95420	19 24 35.57	−31 55 28.1	9.59		H	291.148 224 00	−31.924 480 38		15.65	48.66	−163.05	1.82	1.13	1.77	2.35	1.32	−19	−31	− 8	+31	−20	+ 2	−16	− 6	− 7	−25	0	−0.84
95421 H	19 24 36.26	+05 23 58.6	9.07		H	291.151 088 13	+05.399 613 31	A	7.93	10.78	6.60	2.17	1.54	2.35	2.61	1.72	+30	−31	− 4	+16	+ 4	− 8	− 4	− 8	+22	+27	1	1.59
95422	19 24 36.28	+30 39 07.9	11.01	2	H	291.151 155 17	+30.652 206 34		−0.91	− 7.06	−17.61	1.13	1.43	1.78	1.35	1.72	−16	− 8	+ 1	+ 3	+ 6	− 3	+ 6	+ 6	+ 3	−23	0	1.19
95423	19 24 40.93	+38 45 54.6	8.31		G	291.170 559 06	+38.765 164 33		1.53	− 2.93	0.24	0.57	0.67	0.75	0.65	0.78	−10	− 2	+ 7	+17	+16	+ 6	+14	+ 2	+ 6	−10	0	1.12
95424 H	19 24 41.01	−12 40 57.9	9.03		G	291.170 878 02	−12.682 760 29	A	6.80	17.15	− 6.93	2.12	1.72	1.87	1.82	1.17	+35	−22	−16	−10	− 7	− 6	−11	−33	+ 5	+31	0	−0.93
95425 H	19 24 41.26	+10 05 11.3	7.96		H	291.171 924 17	+10.086 484 18	*	4.41	− 1.77	−14.91	0.91	0.71	1.07	0.98	0.74	+18	− 9	+ 6	−34	−25	+ 1	−24	−45	−19	− 7	0	−0.40
95426	19 24 41.52	−12 36 56.1	7.23		H	291.172 988 46	−12.615 569 95		3.89	33.99	3.37	0.83	0.56	0.88	0.85	0.57	+37	−24	−10	−19	−15	− 5	−14	−45	− 3	+39	0	0.60
95427	19 24 41.55	+26 57 01.9	8.98		H	291.173 104 83	+26.950 519 51		4.05	9.03	8.39	0.65	0.93	1.27	0.77	1.29	−22	+ 5	−23	+30	− 3	− 4	− 6	+11	+ 1	−33	0	−0.42
95428	19 24 41.79	+22 12 06.2	7.81		H	291.174 119 89	+22.201 730 04		29.97	134.98	−84.09	0.60	0.69	0.95	0.79	0.83	+ 5	− 4	−37	− 9	− 7	+ 7	− 4	−13	− 5	+ 4	0	−0.10
95429	19 24 42.06	+08 33 01.4	11.19		H	291.175 245 29	+08.550 396 90		33.11	59.54	−191.73	2.53	1.59	3.00	3.92	2.81	−10	− 3	−14	−19	−12	+28	−12	−16	−32	−58	2	1.54
95430	19 24 43.07	−51 47 26.1	8.19		H	291.179 463 82	−51.790 579 27		3.83	− 6.17	−11.31	0.83	0.71	1.04	1.12	0.77	+23	−18	− 6	+ 1	+11	+ 4	+ 2	−34	+ 4	+ 5	2	0.42
95431	19 24 44.27	−77 40 35.0	9.65		H	291.184 451 52	−77.676 390 10		5.94	4.92	−30.45	0.74	0.91	1.12	0.84	1.04	− 4	−15	+14	+18	+ 1	+ 0	+ 0	+ 0	+ 4	− 6	5	−1.14
95432	19 24 44.33	+19 56 21.8	7.16		H	291.184 726 66	+19.939 401 86		5.98	19.30	9.35	0.51	0.57	0.83	0.64	0.82	+29	−10	− 9	−16	− 1	+12	− 3	− 2	+10	+41	0	−0.96
95433	19 24 44.48	−05 25 04.5	7.70		H	291.185 345 26	−05.417 928 48		6.83	5.26	4.86	0.73	0.45	0.87	0.74	0.48	− 4	−26	+ 1	−24	+ 1	+15	+ 3	−43	+14	+22	0	0.67
95434 H	19 24 44.82	+23 36 56.2	8.22		H	291.186 752 23	+23.615 602 05	A	2.60	0.94	− 8.03	1.30	1.50	1.74	1.39	1.80	+14	−14	−24	− 7	− 4	+16	− 2	+17	−12	+14	1	0.77
95435	19 24 45.39	+16 57 25.4	6.84		H	291.189 109 84	+16.957 057 08		8.01	36.70	−14.45	0.61	0.52	0.93	0.72	0.66	+15	−36	− 8	+17	−14	+15	−24	+ 2	+17	−17	0	1.23
95436	19 24 46.85	+66 13 42.2	10.82		H	291.195 197 45	+66.228 384 57		0.58	6.07	3.76	1.08	1.13	1.22	0.86	1.42	− 4	−16	+ 4	−49	+15	+ 8	+ 9	− 7	+ 2	+29	1	0.24
95437	19 24 48.40	−48 05 31.5	8.49		H	291.201 675 65	−48.092 094 31		0.61	10.93	− 1.88	1.06	0.86	1.40	1.58	0.97	+ 8	+16	− 9	−24	+20	−35	+10	−47	+ 0	− 5	0	1.05
95438	19 24 48.70	+43 31 18.6	8.10		H	291.202 899 11	+43.521 843 40		3.91	− 5.10	−14.75	0.59	0.57	0.66	0.60	0.68	+ 0	−13	+ 3	+15	+12	+ 4	+13	+28	− 5	+ 9	0	−0.20
95439	19 24 49.60	+54 23 06.6	8.99		H	291.206 684 11	+54.385 176 52		1.44	1.92	−13.39	0.82	0.70	0.84	0.98	0.89	− 1	−17	+ 5	+ 2	+ 5	−22	+ 7	− 2	− 3	+ 8	0	0.55
95440	19 24 50.52	−18 37 00.4	7.47		H	291.210 488 34	−18.616 791 61		2.18	8.95	− 0.89	0.87	0.50	0.97	1.08	0.64	+16	−31	− 9	− 8	+ 7	+12	+ 6	−23	−12	−16	0	0.68
95441 H	19 24 51.21	−51 48 28.3	9.24		H	291.213 384 62	−51.807 873 03	A	14.36	9.49	10.08	2.04	1.68	2.22	2.54	1.69	+29	−22	− 2	+15	+24	− 6	+14	−22	− 1	+12	1	−0.66
95442 H	19 24 52.06	−11 50 27.8	9.01		H	291.216 937 15	−11.841 067 55	A	1.91	3.33	− 9.47	1.82	1.23	1.81	1.83	1.16	+28	−17	− 5	−22	+ 1	−13	− 4	−28	+ 0	+32	2	−0.56
95443	19 24 53.51	+01 50 05.3	7.99	2	H	291.222 946 01	+01.834 810 84		3.95	4.08	− 4.24	1.16	0.77	1.36	1.25	0.86	− 3	− 8	− 9	−32	+ 6	+15	+ 7	−40	+29	+24	0	−0.97
95444	19 24 53.79	−31 04 16.4	11.57		G	291.224 119 54	−31.071 218 93		1.50	− 8.15	−24.58	3.33	2.29	3.74	3.81	2.57	+11	−28	−21	+ 7	+ 1	−25	− 1	−24	− 9	+11	3	−1.68
95445	19 24 56.04	−44 11 41.2	6.88		G	291.233 479 93	−44.194 778 88		7.62	−54.07	− 6.98	0.95	0.49	0.95	1.00	0.62	+34	−50	− 9	+22	− 6	+ 7	−12	−30	− 7	+12	0	−0.04
95446	19 24 56.09	+31 48 05.1	8.18		H	291.233 701 99	+31.801 424 13		15.13	78.32	−94.97	0.55	0.66	0.84	0.62	0.73	+ 0	− 6	− 1	+26	+ 5	− 8	+ 3	+10	+11	− 4	0	−1.41
95447	19 24 57.77	+11 56 34.3	5.17		H	291.240 709 60	+11.942 851 22		66.01	721.27	643.60	0.54	0.46	0.77	0.55	0.47	+20	−16	− 8	+25	−39	− 1	−52	−23	+ 1	−18	0	−1.49
95448	19 24 58.97	−55 06 23.4	7.61		G	291.245 699 03	−55.106 490 65		5.18	13.30	0.46	0.68	0.58	0.94	0.95	0.67	+ 6	−10	+ 5	− 7	+ 7	− 1	+ 8	−32	−22	+10	0	1.20
95449	19 24 59.30	−61 09 13.6	9.54		H	291.247 095 78	−61.153 770 05		3.65	40.56	−22.24	1.03	0.87	1.53	1.30	1.23	−16	−14	+ 0	+13	−21	− 7	−21	− 2	+ 9	+ 7	0	0.73
95450	19 24 59.54	+19 47 59.9	8.87		G	291.248 063 11	+19.799 973 76		3.14	7.29	6.11	0.76	0.88	1.24	0.97	1.31	+38	−18	−12	−16	− 1	+10	− 3	+ 0	+ 9	+49	0	−0.31
95451	19 24 59.94	+01 49 57.4	8.86	1	H	291.249 735 86	+01.832 621 98		3.97	2.44	− 9.17	1.41	0.87	1.64	1.72	1.09	− 4	−21	− 1	−32	− 3	+ 3	− 4	−42	+25	+25	0	−0.52
95452 H	19 25 00.10	+30 00 43.6	8.88		G	291.250 417 74	+30.012 119 77	*	−1.51	0.20	− 1.80	2.28	2.34	1.44	1.22	1.20	+ 2	+ 4	− 5	+38	− 2	−13	− 3	+14	+18	− 6	1	0.41
95453	19 25 01.51	−04 53 04.4	6.50		H	291.256 299 73	−04.884 555 03		9.92	35.58	7.88	0.85	0.61	0.85	1.02	0.69	−12	−35	− 4	−43	+ 9	+33	+ 3	−63	+12	−15	0	0.27
95454	19 25 02.10	−37 32 52.3	8.85		H	291.258 746 59	−37.547 858 51		3.74	10.48	−41.15	1.45	1.01	1.52	1.89	0.95	+16	−41	−28	+28	−27	+ 4	−27	−24	− 1	−16	3	1.52
95455 H	19 25 03.33	+18 38 59.5	8.67		H	291.263 887 56	+18.649 856 60	B	4.24	24.52	6.20	2.65	2.56	2.91	2.35	2.45	+45	−23	+ 1	−16	+ 1	+21	+ 0	+ 5	+ 8	+41	2	1.32
95456	19 25 04.05	−29 18 33.2	5.91		H	291.266 879 08	−29.309 208 84		12.07	−13.12	−61.77	0.90	0.61	1.06	0.85	0.51	+30	−53	−45	− 6	− 7	+20	− 2	−23	+ 5	+ 4	2	3.10
95457	19 25 06.17	−23 02 30.5	7.58		H	291.275 711 96	−23.041 808 05		19.78	21.09	− 9.20	0.86	0.65	1.17	1.14	0.74	+26	−29	−45	+ 8	−14	+48	+14	+16	−28	−12	0	−0.57
95458	19 25 07.12	−18 33 46.1	7.02		G	291.279 669 56	−18.562 799 92		5.22	− 4.32	2.58	0.78	0.45	0.88	0.90	0.56	+24	−35	− 8	+11	− 1	+22	− 1	−13	−15	− 3	0	0.88
95459	19 25 08.27	+35 59 58.0	8.14	2	H	291.284 477 60	+35.999 446 79		0.99	4.50	4.74	0.57	0.64	0.76	0.60	0.72	+ 1	−18	+ 2	+27	+13	−18	+14	+29	− 1	+ 6	3	−0.89
95460	19 25 08.41	+23 48 07.5	9.23		H	291.285 042 66	+23.802 081 78		3.30	2.85	− 2.51	0.89	0.99	1.37	1.00	1.32	+ 4	+ 4	−33	+ 1	− 4	+21	+ 1	+23	−32	+ 9	2	0.23
95461	19 25 08.45	−25 51 01.5	9.44		H	291.285 224 16	−25.850 422 00		9.20	47.59	−56.26	1.48	1.10	1.81	1.59	0.95	+36	−48	−54	− 4	+ 9	−16	−14	−39	+25	− 5	0	−0.95
95462 H	19 25 08.84	+22 12 56.9	8.73		H	291.286 839 82	+22.215 808 02	*	2.62	0.66	− 7.00	1.38	1.56	1.41	1.20	1.37	+23	+14	−42	−21	−19	− 8	−23	− 9	− 7	+23	0	−0.05
95463	19 25 09.34	−56 59 00.6	8.23		G	291.288 908 96	−56.983 487 85		6.16	− 7.69	−23.85	0.73	0.60	1.02	0.85	0.74	+19	−22	−11	+52	−10	− 6	+ 6	+ 3	− 4	+48	0	1.06
95464	19 25 09.44	−39 51 08.0	8.27		H	291.289 349 16	−39.852 217 32		2.86	1.31	−22.35	1.23	0.73	1.25	1.42	0.76	− 7	−44	−11	+25	−11	+17	− 8	+ 0	− 7	−24	0	1.61
95465	19 25 09.55	−56 10 52.0	7.90		H	291.289 776 90	−56.181 105 53		1.83	42.83	−11.69	0.79	0.70	1.17	1.21	0.93	−14	−18	−17	+ 5	+21	−23	+19	−24	− 3	−10	0	−0.19
95466	19 25 09.59	−00 51 42.9	8.57		H	291.289 937 72	−00.861 913 89		1.11	1.20	2.42	1.00	0.66	1.23	1.18	0.69	+ 3	−20	−39	−13	+14	− 1	+ 5	−42	+30	−13	0	1.06
95467	19 25 09.90	−66 28 09.7	8.40		G	291.291 269 90	−66.469 371 15		38.24	−231.66	236.02	0.78	0.72	1.15	0.83	0.98	− 6	−19	+ 2	+15	−18	− 4	−30	− 6	+23	−29	0	−0.95
95468	19 25 09.96	−51 06 02.1	6.88	1	H	291.291 517 59	−51.100 580 36		4.31	− 1.65	−20.96	0.70	0.58	0.85	0.96	0.64	+16	−21	− 3	−11	+15	− 3	+10	−39	−12	+ 3	4	0.60
95469	19 25 10.19	−47 27 24.1	7.80		H	291.292 473 06	−47.456 682 66		11.08	51.16	− 7.36	1.05	0.67	1.14	1.05	0.91	− 2	−46	− 7	−22	+13	+12	+13	−53	+ 7	+ 7	2	−0.83
95470 H	19 25 11.28	+02 27 26.4	8.11		H	291.297 010 45	+02.457 330 29	A	10.60	29.98	92.06	2.16	1.45	2.35	2.25	1.48	+ 3	−30	−14	+ 3	− 1	− 5	− 7	−14	+15	− 3	1	0.70
95471	19 25 11.50	−58 22 20.1	9.51		H	291.297 920 07	−58.372 238 81		1.93	− 1.36	− 1.88	1.02	0.84	1.46	1.22	1.09	− 9	−17	+ 5	+45	−16	−10	− 5	+ 9	+ 3	+23	2	−0.09
95472	19 25 11.99	−29 07 25.6	10.60		G	291.299 941 26	−29.123 784 28		4.04	0.53	0.66	2.08	1.66	2.60	2.24	1.58	+32	−37	−51	− 8	− 1	+18	+ 5	−16	+12	+24	0	−0.27
95473	19 25 12.32	+53 46 07.9	8.48		H	291.301 318 81	+53.768 851 55		1.36	1.18	− 2.19	0.72	0.61	0.75	0.65	0.77	− 5	−37	+ 7	−17	+ 5	+18	− 1	+ 3	+11	+11	2	0.70
95474	19 25 14.60	−15 54 33.8	9.47		H	291.310 848 41	−15.909 376 16		−1.09	16.12	− 3.05	1.24	0.75	1.43	1.53	0.93	+39	−34	−27	+11	+ 3	+19	+ 0	− 8	−13	−13	0	0.79
95475	19 25 15.03	+65 01 58.8	9.86		H	291.312 614 57	+65.032 987 11		2.46	0.46	0.68	0.95	0.92	0.96	0.92	0.97	+11	− 5	+22	+25	+16	− 3	+24	−13	+ 3	+27	3	−0.82
95476	19 25 16.33	+25 42 27.3	8.69		G	291.318 042 71	+25.707 592 56		5.37	1.79	− 6.10	0.53	1.08	1.29	0.68	1.25	−32	+ 0	− 8	+41	+ 2	−10	−11	−13	+ 0	−34	1	1.40
95477	19 25 16.45	−24 30 30.4	5.02		G	291.318 544 26	−24.508 448 92	+	14.78	63.61	−51.90	5.76	0.80	1.11	1.88	0.50	+71	−41	−50	−92	−65	+39	−12	−32	+ 5	+18	0	0.11
95478 H	19 25 16.96	+07 39 28.5	8.71		G	291.320 670 67	+07.657 907 34	A	4.34	4.85	− 8.13	2.31	1.64	2.35	2.79	1.96	+17	+ 3	−10	+40	−23	+14	−40	+ 8	− 7	−60	1	−0.44
95479	19 25 17.48	−57 22 33.4	8.68	2	H	291.322 830 88	−57.375 956 18		−0.60	10.01	− 6.80	0.78	0.63	1.15	0.97	0.86	+11	−16	+11	+53	−11	− 5	+ 9	+ 0	− 6	+49	0	1.82
95480	19 25 18.15	+37 14 43.0	6.80		H	291.325 629 08	+37.245 270 75		10.02	− 3.28	−29.89	0.44	0.51	0.58	0.51	0.69	− 1	+ 0	−10	+ 2	− 1	−12	− 6	+24	+ 1	+11	1	0.27
95481	19 25 18.72	−11 30 48.3	8.55		H	291.328 020 74	−11.513 415 93		15.18	−52.85	−99.61	1.04	0.72	1.14	1.19	0.76	+30	−21	−10	− 9	− 3	+11	− 5	−30	+ 5	+23	0	−0.12
95482	19 25 18.97	−16 50 11.2	7.79		H	291.329 039 88	−16.836 444 55		5.26	−33.83	−54.26	0.80	0.51	0.91	0.86	0.60	+21	−22	+ 7	−15	+ 5	+11	+ 7	−31	−22	+ 8	0	0.13
95483	19 25 19.84	−03 26 17.2	9.84		H	291.332 650 73	−03.438 100 46		7.84	28.33	2.55	1.45	0.83	1.77	1.74	1.07	−12	− 8	+ 1	−17	+16	+38	+20	−25	+13	+ 7	0	2.53
95484	19 25 21.17	−17 38 34.9	8.60		H	291.338 220 81	−17.643 018 88		3.96	11.19	− 3.51	0.94	0.55	1.10	1.09	0.75	+26	−28	+12	− 2	+ 3	+ 0	+ 5	−31	−23	+10	0	−0.31
95485	19 25 21.56	−13 53 50.2	5.72		H	291.339 842 03	−13.897 264 17		4.51	52.85	55.20	0.77	0.45	0.84	0.77	0.50	+24	−41	−19	− 5	+ 6	− 5	+ 2	−26	+11	+29	0	−1.15
95486	19 25 22.34	−24 24 43.5	7.27		G	291.343 085 66	−24.412 094 52		2.75	2.95	− 4.05	0.98	0.65	1.15	0.85	0.55	+27	−57	−43	−29	−15	+35	+ 4	−29	− 5	+ 9	0	−1.10
95487	19 25 22.40	+20 16 18.4	6.31		H	291.343 314 86	+20.271 768 31		8.16	− 5.87	−17.08	0.44	0.51	0.74	0.54	0.66	+24	−18	−11	− 4	− 1	+21	+ 0	+ 0	+ 8	+31	0	0.01
95488	19 25 23.35	−14 31 33.2	7.66		H	291.347 308 58	−14.525 879 32		2.33	14.59	− 7.38	0.83	0.51	0.93	0.85	0.56	+31	−42	−21	−10	+ 2	+15	+ 0	−21	+ 9	+20	0	−0.75
95489	19 25 23.49	−45 00 42.7	7.62		H	291.347 863 71	−45.011 852 14		1.12	1.45	2.02	0.94	0.52	1.02	1.11	0.64	+28	−45	− 6	+13	+10	+ 8	− 3	−33	+ 1	+ 1	0	2.46
95490	19 25 24.29	+61 21 33.6	9.25		G	291.351 194 20	+61.359 342 04		1.12	3.63	10.48	0.77	0.69	0.77	0.79	0.73	+ 6	− 8	+ 9	+24	+ 3	− 6	+ 6	+ 5	− 4	+15	1	−0.22
95491	19 25 25.83	+46 57 29.2	8.40		H	291.357 636 19	+46.958 118 53		5.57	2.13	−16.14	0.71	0.60	0.73	0.92	0.77	+ 4	− 4	− 6	+22	+ 8	− 7	+ 8	+17	−14	+13	1	0.51
95492	19 25 25.87	+24 54 51.5	6.19		H	291.357 798 19	+24.914 308 32		36.05	−177.20	−631.08	0.37	0.50	0.73	0.49	0.68	−35	+ 2	−24	−18	+ 1	+ 1	+ 1	− 5	+ 1	−36	0	0.65
95493	19 25 26.04	−67 18 01.6	9.84		H																							
95494	19 25 26.60	−03 44 06.0	8.59		H	291.360 835 98	−03.735 013 08		10.62	−44.66	−77.61	0.94	0.55	1.14	1.13	0.68	−12	−12	−14	−20	+10	+37	+17	−31	+16	+ 4	0	0.92
95495	19 25 26.93	+49 54 45.2	9.23		H	291.362 200 71	+49.912 542 84		3.22	30.45	31.62	0.76	0.85	0.89	0.88	1.18	+ 1	− 4	+16	+ 6	+ 5	+ 0	+ 5	+20	−12	+ 5	3	−1.18
95496	19 25 27.95	+13 42 04.0	8.73		H	291.366 450 58	+13.701 120 42		2.65	− 9.05	− 8.54	0.83	0.72	1.24	1.09	0.92	+17	+ 6	−15	+ 2	−24	+22	−21	−22	+12	+18	0	0.82
95497	19 25 28.00	+42 47 05.4	7.92	3	T	291.366 666 95

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
95401	8.497	0.013	7.847	0.010		0.617	0.015	G	0.69	0.01	H	7.9005	0.0015	0.011	91		7.88	7.92		C			1							S
95402	9.318	0.019	7.396	0.008		1.595	0.016	T	1.61	0.02	L	7.3547	0.0015	0.010	81		7.33	7.37					1							S
95403	10.325	0.028	8.599	0.013		1.468	0.025	T	2.92	0.07	O	8.2556	0.0192	0.109	101		8.14	8.45		U 2			1 S							
95404	7.422	0.006	7.477	0.009		−0.047	0.009	T	−0.03	0.01	L	7.4839	0.0011	0.012	109		7.46	7.50					1							S
95405	10.641	0.027	8.606	0.009		1.723	0.023	T	2.16	0.06	O	8.4700	0.0048	0.047	202		8.39	8.53		U 2			1							
95406	8.877	0.010	7.168	0.005		1.427	0.009	T	1.41	0.01	L	7.1592	0.0008	0.010	132		7.14	7.18		C			1							S
95407	9.175	0.017	8.008	0.011		1.001	0.016	T	0.98	0.01	L	8.0579	0.0011	0.011	84		8.04	8.07		C			1							
95408	5.873	0.004	6.011	0.006		−0.117	0.008	G	−0.10	0.01	H	5.9915	0.0025	0.017	43		5.98	6.04		U 2			1							S
95409	7.990	0.008	7.883	0.011		0.104	0.013	T	0.12	0.01	L	7.8990	0.0016	0.019	121		7.86	7.93		U			1							S P
95410	10.255	0.026	8.690	0.013		1.313	0.023	T	1.27	0.03	L	8.7005	0.0021	0.015	118		8.67	8.73		C			1							
95411	10.470	0.035	9.934	0.034		0.531	0.020	G	0.60	0.02	H	10.0272	0.0031	0.027	92		9.98	10.07					1							G
95412	9.231	0.021	9.240	0.028		0.026	0.020	G	0.04	0.02	H	9.2552	0.0024	0.012	43		9.24	9.40		C			1 S							
95413	10.530	0.038	8.980	0.018		1.323	0.035	T	4.57	0.06	O	7.9551	0.0222	0.186	84		7.47	8.25		U 2 B			1 S							S G
95414	8.765	0.011	8.407	0.011	A	0.360	0.020	G	0.42	0.02	H *	8.2931	0.0020	0.016	108	*	8.27	8.33		D	19246+2131	I 1	2 C A	AB	115	4.318	0.006	1.77	0.03	
95415	9.334	0.025	8.627	0.022		0.630	0.002	G	0.70	0.00	H	8.6914	0.0011	0.012	53		8.67	8.72					1							
95416	9.115	0.021	7.763	0.013		1.150	0.015	G	1.11	0.01	H	7.7929	0.0018	0.013	56		7.77	7.83					1							S
95417						1.391	0.019	G	1.69	0.02	A	11.0143	0.0056	0.033	67		10.91	11.08		U			1							G
95418	12.190	0.167	10.214	0.047	*	0.889	0.150	G	0.89	0.11	R *	10.0106	0.0056	0.037	76	*	9.95	10.08		U	19246+0629	H 1	2 C S A	AB	6	0.135	0.014	0.21	0.68	G
95419	9.312	0.017	9.241	0.022		0.070	0.026	T	0.08	0.03	L	9.2539	0.0021	0.020	74		9.20	9.29		C			1							
95420	10.520	0.059	9.796	0.053		0.651	0.060	T	0.71	0.05	L	9.7228	0.0037	0.027	57		9.67	9.76					1 S							
95421	9.665	0.019	9.136	0.018	*	0.505	0.020	T	0.58	0.02	L *	9.1858	0.0024	0.019	85	*	9.15	9.24		C	19246+0524	H 1	2 C B	AB	274	0.806	0.066	3.43	0.21	
95422											T	11.1513	0.0090	0.062	150		11.03	11.26		U 2			1 S							G
95423	8.503	0.009	8.333	0.010		0.164	0.010	G	0.18	0.01	H	8.3590	0.0016	0.016	125		8.34	8.41					1 G							
95424	9.662	0.023	9.138	0.023	*	0.510	0.020	G	0.58	0.02	H *	9.1562	0.0016	0.016	89	*	9.13	9.19		D	19247−1241	H 1	2 C A	AB	153	0.470	0.024	3.05	0.12	
95425	8.100	0.008	7.986	0.013	*	0.111	0.014	T	0.12	0.01	L *	8.0063	0.0018	0.014	86	*	7.98	8.03		C	19247+1005	H 1	2 C S A	AB	15	0.197	0.023	2.12	0.41	
95426	8.991	0.013	7.393	0.007		1.339	0.012	T	1.30	0.01	L	7.3832	0.0010	0.010	94		7.37	7.40		C			1							S
95427	9.628	0.014	9.034	0.014		0.554	0.017	T	0.63	0.02	L	9.1032	0.0017	0.021	190		9.07	9.14		C			1							
95428	8.692	0.011	7.879	0.009		0.718	0.011	T	0.77	0.01	L	7.9441	0.0013	0.014	115		7.92	7.96		C			1							S
95429	12.223	0.261	11.305	0.192		0.799	0.250	T	0.83	0.18	L	11.3330	0.0058	0.044	75		11.24	11.41					1 S							G
95430	9.300	0.018	8.258	0.013		0.906	0.017	T	0.91	0.01	L	8.3550	0.0020	0.016	86		8.33	8.38		C			1							
95431	10.211	0.020	9.706	0.020		0.475	0.026	T	0.55	0.03	L	9.7498	0.0023	0.029	162		9.70	9.81					1							
95432	7.328	0.005	7.179	0.006		0.156	0.010	G	0.17	0.01	H	7.2096	0.0010	0.009	121		7.19	7.22		C			1							S
95433	7.960	0.009	7.715	0.009		0.233	0.012	T	0.26	0.01	L	7.7633	0.0012	0.012	152		7.75	7.79		C			1							S
95434	9.620	0.027	8.294	0.015	*	1.125	0.024	T	1.09	0.03	L *	8.3926	0.0020	0.018	103	*	8.36	8.43		D	19247+2337	I 1	2 C A	AB	0	7.717	0.017	2.56	0.11	S
95435	7.025	0.004	6.867	0.005		0.148	0.004	G	0.16	0.00	H	6.8932	0.0007	0.008	139		6.88	6.90		C	19245+1657	I 2	1							S
95436	11.140	0.063	10.654	0.064		0.355	0.072	G	0.42	0.08	R	10.9026	0.0042	0.031	99		10.82	10.95		C			1							G
95437	10.053	0.027	8.600	0.015		1.225	0.024	T	1.18	0.02	L	8.6495	0.0028	0.021	95		8.62	8.68					1							
95438	9.346	0.015	8.209	0.010		0.978	0.014	T	0.96	0.01	L	8.2600	0.0014	0.016	135		8.24	8.29					1							
95439	10.982	0.052	9.136	0.020		1.535	0.044	T	1.58	0.10	L	9.1071	0.0024	0.021	95		9.06	9.14					1							
95440	9.565	0.018	7.656	0.008		1.585	0.016	T	1.60	0.02	L	7.5822	0.0013	0.014	99		7.56	7.61					1							
95441	10.248	0.034	9.492	0.028	A	0.800	0.495	G	0.80	0.11	L *	9.3888	0.0032	0.022	81	*	9.35	9.42		D	19249−5148	I 1	2 C A	AB	162	2.026	0.013	2.15	0.06	
95442	9.172	0.015	9.081	0.019	A	0.100	0.495	G	0.02	0.03	L *	9.0165	0.0020	0.020	97	*	8.99	9.05		D	19249−1150	I 1	2 C A	AB	89	1.599	0.024	2.37	0.06	S
95443	8.005	0.009	7.977	0.012		0.127	0.180	G	0.02	0.04	L	7.9942	0.0034	0.030	85		7.95	8.04		U	19249+0150	I 2	1							
95444						1.420	0.020	G	1.40	0.03	I	11.7272	0.0072	0.064	52		11.56	11.85					1							D
95445	8.314	0.009	7.011	0.005		1.091	0.003	G	1.05	0.00	H	7.0503	0.0010	0.009	110		7.03	7.07		C			1							S
95446	8.827	0.010	8.244	0.009		0.573	0.015	G	0.65	0.01	H	8.3001	0.0013	0.013	145		8.27	8.33					1							
95447	6.106	0.003	5.241	0.002		0.761	0.018	G	0.75	0.07	F	5.3090	0.0004	0.005	130		5.30	5.32		C	19249+1157	I 1	1							S
95448	7.967	0.010	7.661	0.009		0.291	0.013	T	0.33	0.02	L	7.6785	0.0013	0.012	97		7.66	7.70		C			1							S
95449	10.100	0.026	9.582	0.026		0.496	0.028	T	0.57	0.03	L	9.6472	0.0032	0.026	112		9.60	9.70					1							
95450	9.036	0.013	8.879	0.015		0.090	0.015	G	0.10	0.02	H	8.9108	0.0020	0.016	109		8.88	8.94		C			1							
95451	10.330	0.036	8.970	0.019		1.078	0.243	G	1.04	0.20	K	9.0304	0.0026	0.019	80		8.99	9.07		U	19249+0150	I 2	1							
95452	10.862	0.043	9.091	0.017	*	1.500	0.040	G	1.50	0.10	R *	9.0292	0.0019	0.024	148	*	8.99	9.06		D	19250+3001	H 1	2 C A	AB	249	0.268	0.012	1.53	0.18	
95453	6.912	0.005	6.541	0.004		0.340	0.010	G	0.40	0.01	H	6.5849	0.0008	0.010	148		6.57	6.60					1 G							S
95454	10.671	0.065	9.009	0.028		1.389	0.056	T	1.36	0.07	L	8.9978	0.0032	0.020	44		8.97	9.02		C			1							
95455	9.185	0.012	8.797	0.012	*	0.367	0.016	T	0.43	0.02	L *	8.7592	0.0017	0.019	138	*	8.73	8.81		D	19251+1839	I 1	2 C A	BA	242	0.813	0.004	0.17	0.01	
95456	7.587	0.011	6.066	0.006		1.278	0.010	T	1.24	0.01	L	6.0708	0.0010	0.007	55		6.05	6.09			19251−2919	I 1	1 S							S
95457	8.213	0.014	7.654	0.011		0.528	0.013	T	0.60	0.01	L	7.6969	0.0014	0.011	64		7.68	7.72		C	19251−2303	I 1	1 G							S
95458	7.854	0.007	7.100	0.006		0.689	0.007	T	0.75	0.01	L	7.1476	0.0011	0.009	108		7.13	7.16					1							S
95459	8.148	0.009	8.143	0.011		0.009	0.013	T	0.03	0.01	L	8.1544	0.0073	0.085	125		8.07	8.30	1.49	P 1 A			1							S G
95460	9.287	0.015	9.261	0.020		0.116	0.015	G	0.13	0.01	H	9.2783	0.0030	0.027	106		9.23	9.34					1							
95461	10.274	0.047	9.579	0.041		0.629	0.047	T	0.70	0.04	L	9.5672	0.0019	0.018	46		9.53	9.60		C			1							
95462	8.812	0.012	8.739	0.015	*	0.072	0.018	T	0.08	0.02	L *	8.7604	0.0021	0.019	107	*	8.73	8.79		D	19251+2213	I 1	2 C A	AB	355	0.228	0.006	0.70	0.14	
95463	8.701	0.010	8.255	0.010		0.445	0.001	G	0.51	0.00	H	8.3210	0.0018	0.017	134		8.30	8.35					1							S
95464	8.369	0.015	8.313	0.018		0.051	0.021	T	0.06	0.02	L	8.2944	0.0018	0.013	56		8.27	8.32					1							S
95465	9.589	0.017	8.060	0.009		1.285	0.015	T	1.24	0.02	L	8.0586	0.0017	0.014	108		8.03	8.08		C			1							
95466	11.004	0.057	8.859	0.015		1.500	0.040	G	1.50	0.10	R	8.6958	0.0025	0.017	100		8.67	8.72					1							
95467	9.725	0.018	8.504	0.011		1.006	0.045	G	1.02	0.02	A	8.5415	0.0022	0.022	128		8.51	8.59					1							
95468	8.906	0.013	7.081	0.006		1.550	0.012	T	2.03	0.04	O	6.9618	0.0021	0.014	86		6.93	6.98		M			1							S
95469	8.272	0.009	7.840	0.008		0.403	0.014	G	0.47	0.01	H	7.8950	0.0013	0.013	123		7.87	7.92		C			1 G							S
95470	8.611	0.019	8.052	0.014	*	0.523	0.021	T	0.60	0.02	L *	8.2250	0.0034	0.021	92	*	8.19	8.25		R	19252+0227	I 1	2 C A	AB	327	2.073	0.004	0.91	0.02	
95471	10.865	0.043	9.613	0.024		1.068	0.038	T	1.03	0.03	L	9.6755	0.0033	0.024	113		9.65	9.72					1							
95472	12.107	0.242	10.635	0.100		1.200	0.020	G	1.16	0.02	I	10.7886	0.0062	0.036	58		10.71	10.85					1							G
95473	8.526	0.012	8.483	0.015		0.020	0.015	G	0.04	0.01	H	8.4978	0.0014	0.011	95		8.47	8.52		C			1							
95474	11.443	0.085	9.635	0.028		1.505	0.071	T	1.53	0.11	L	9.6108	0.0033	0.027	97		9.57	9.66					1 S							
95475	11.217	0.061	9.920	0.031		1.103	0.054	T	1.07	0.06	L	10.0338	0.0027	0.026	111		9.97	10.07		C			1							G
95476	8.868	0.009	8.734	0.011		0.150	0.015	G	0.17	0.01	H	8.7388	0.0013	0.020	242		8.71	8.77					1 G							
95477	5.311	0.003	5.050	0.003		0.235	0.008	G	0.26	0.01	H	5.0816	0.0006	0.004	58		5.07	5.09		C	19253−2431	I 1	1 O							S
95478	9.143	0.016	8.892	0.018	A	0.148	0.141	G	0.33	0.08	L *	8.8309	0.0021	0.019	80	*	8.79	8.87		D	19253+0739	I 1	2 C A	AB	51	1.299	0.022	1.84	0.05	
95479	10.485	0.031	8.831	0.014		1.383	0.027	T	1.36	0.03	L	8.8289	0.0061	0.047	137		8.77	8.90		U 2 C			1							
95480	8.260	0.009	6.930	0.007		1.129	0.009	T	1.09	0.01	L	6.9664	0.0010	0.009	118		6.95	6.98					1							S
95481	9.248	0.016	8.600	0.014		0.601	0.018	T	0.67	0.02	L	8.6812	0.0021	0.017	85		8.65	8.72		C			1							
95482	9.498	0.017	7.947	0.009		1.302	0.015	T	1.26	0.02	L	7.9472	0.0015	0.012	120		7.93	7.97					1							
95483	10.508	0.040	9.904	0.037		0.563	0.048	T	0.64	0.04	L	9.9646	0.0029	0.027	111		9.91	10.02		C			1							G
95484	9.796	0.018	8.682	0.012		0.960	0.017	T	0.95	0.01	L	8.7602	0.0011	0.011	122		8.74	8.78		C			1							
95485	7.512	0.006	5.872	0.004		1.372	0.006	T	1.34	0.01	L	5.8688	0.0007	0.006	97		5.85	5.88					1							S
95486	7.270	0.008	7.285	0.013		−0.002	0.015	G	0.02	0.01	H	7.2869	0.0010	0.008	59		7.27	7.30		C			1							S
95487	6.292	0.004	6.302	0.004		−0.014	0.003	G	0.01	0.00	H	6.3130	0.0007	0.006	122		6.30	6.32		C			1							S
95488	9.275	0.015	7.783	0.008		1.256	0.013	T	1.21	0.01	L	7.8209	0.0014	0.012	104		7.80	7.84		C			1							
95489	9.725	0.025	7.793	0.011		1.603	0.022	T	1.62	0.02	L	7.7419	0.0013	0.013	122		7.72	7.76					1							
95490	10.841	0.044	9.365	0.021		1.260	0.015	G	1.22	0.02	I	9.3931	0.0017	0.022	119		9.36	9.43		C			1							
95491	8.972	0.012	8.444	0.012		0.495	0.015	T	0.57	0.02	L	8.5082	0.0016	0.017	109		8.48	8.53		C			1 S							
95492	6.811	0.003	6.252	0.002		0.528	0.003	T	0.60	0.00	L	6.3085	0.0006	0.007	231		6.30	6.32		C	19254+2455	I 1	1							S
95493											T	9.9528	0.0027	0.033	227		9.89	10.03		D	19254−6718	I 1	S							G
95494	9.435	0.015	8.693	0.013		0.679	0.016	T	0.74	0.01	L	8.7258	0.0014	0.015	108		8.70	8.75		C			1							
95495	9.520	0.022	9.242	0.025		0.264	0.031	T	0.30	0.04	L	9.3021	0.0027	0.021	101		9.26	9.34					1 S							
95496	9.935	0.020	8.832	0.014		0.951	0.019	T	0.94	0.01	L	8.8955	0.0020	0.015	95		8.86	8.93		C			1							
95497	8.431	0.034	7.970	0.027		0.435	0.040	T	0.50	0.04	L	7.9979	0.0279	0.261	132		7.44	8.17	0.57	P 1 A			1							S
95498	6.433	0.003	5.261	0.002		0.999	0.003	G	0.98	0.00	H	5.3097	0.0005	0.005	113		5.30	5.32		C	19255+1948	I 1	1 S							S
95499	11.667	0.094	9.315	0.019		1.939	0.077	T	1.97	0.08	L	9.1441	0.0038	0.030	126		9.10	9.20		U 2			1 G							
95500	10.237	0.029	9.770	0.030		0.450	0.015	G	0.52	0.02	H	9.8338	0.0034	0.027	121		9.80	9.87		C			1							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
*95501	19 25 29.75	+03 06 52.5	3.36	G	291.373 969 41	+03.114 579 23	+	65.05	253.06	80.67	0.89	0.55	0.81	0.98	0.78	−38	−19	+ 6	+ 0	+ 1	− 5	+36	−41	+ 9	+20		2	2.97
*95502	19 25 29.66	−60 56 27.5	9.71	H	291.373 567 62	−60.940 983 56		2.21	16.10	−9.37	1.06	0.82	1.59	1.22	1.28	−15	−24	+ 1	+27	−22	+ 0	−22	− 6	+31	+14		0	−1.35
*95503	19 25 29.67	−23 57 44.7	5.45	G	291.373 631 16	−23.962 424 15		6.45	−18.24	−13.36	0.81	0.61	1.03	0.91	0.52	+35	−43	−51	−15	−23	+37	− 7	−25	− 4	+ 1		3	−1.85
95504	19 25 29.76	+50 04 15.2	8.34	H	291.373 988 61	+50.070 889 79		4.54	−38.83	−31.68	0.62	0.69	0.73	0.69	0.94	− 9	−16	+ 4	+ 3	− 5	− 2	− 4	+19	−13	− 4		0	−1.48
95505	19 25 30.79	+34 11 39.7	7.24	H	291.378 271 19	+34.194 369 34		2.47	1.01	0.43	0.49	0.55	0.68	0.54	0.64	− 5	− 7	−16	+ 4	+ 9	− 3	+ 8	− 9	+10	− 7		0	0.15
95506	19 25 31.23	+52 24 08.7	9.15	G	291.380 132 03	+52.402 423 61		4.12	−0.24	6.76	0.80	0.74	0.86	0.88	1.02	+15	−31	+ 0	+ 1	+ 0	+ 4	+ 0	− 5	+ 6	+31		0	−0.68
*95507	19 25 32.05	−83 38 21.0	8.97	H	291.383 548 72	−83.639 175 31		4.40	−12.79	−8.55	0.77	0.74	0.94	0.79	0.87	−23	−23	+17	+22	−10	− 1	− 7	+ 0	−18	−26		0	1.28
*95508	19 25 31.77	+00 03 39.8	8.06	H	291.382 355 31	+00.061 056 78		5.04	−4.61	−105.45	0.88	0.53	1.04	0.88	0.56	+10	−44	−10	−18	+ 2	+13	− 5	−34	+17	+ 8		0	0.95
95509	19 25 32.12	−30 17 44.4	8.52	H	291.383 849 56	−30.295 667 79		6.21	3.75	−17.55	1.02	0.76	1.14	1.12	0.72	+22	−20	−23	+ 4	−23	+15	−18	−32	−13	+ 9		0	0.36
95510	19 25 36.77	+11 03 46.2	8.86	H	291.403 202 39	+11.062 842 95		0.43	−2.76	−4.67	0.93	0.82	1.13	0.95	0.80	− 5	+ 5	−11	−34	+ 2	+10	+ 3	−40	− 2	−10		0	0.65
95511	19 25 38.09	−02 03 40.1	7.81	H	291.408 727 19	−02.061 131 44		5.49	15.29	7.16	0.81	0.48	0.93	0.93	0.62	−12	−12	−16	−12	+ 8	+25	+15	−24	+17	+12		0	−0.48
95512	19 25 39.02	+26 06 14.4	7.37	1 H	291.412 600 78	+26.104 008 97		1.68	−2.14	−2.62	0.40	0.62	0.90	0.48	0.94	−33	− 2	− 8	+36	− 6	−12	−10	+ 4	+ 7	−46		0	1.15
95513	19 25 41.95	−74 40 21.8	8.17	H	291.424 771 96	−74.672 709 35		3.75	36.40	−13.18	0.58	0.64	0.94	0.59	0.76	−14	−22	−11	− 5	− 2	− 4	− 4	+ 7	−25			0	0.83
95514	19 25 42.63	−44 22 10.3	9.10	G	291.427 644 60	−44.369 515 61		3.43	5.72	−10.85	1.24	0.73	1.28	1.57	0.95	+33	−28	+ 0	+17	+ 0	+ 8	−12	−32	+ 1	+10		0	0.96
95515	19 25 42.90	−46 37 00.1	9.03	H	291.428 769 20	−46.616 682 52		11.26	−13.41	−8.77	1.12	0.88	1.48	1.39	1.10	+39	−22	+ 4	−10	+ 7	− 4	+ 2	−43	− 9	+22		0	−0.45
*95516	19 25 43.32	−22 27 05.5	6.79	H	291.430 515 94	−22.451 541 27		9.69	30.54	−52.40	0.80	0.59	1.05	0.94	0.52	+16	−31	−47	+ 6	−18	+43	+ 8	+ 3	−26	−15		0	−0.94
*95517 H	19 25 43.30	−62 11 10.9	7.60	G	291.430 437 07	−62.186 352 44	A	10.11	53.94	−146.38	0.92	0.72	1.14	1.12	0.96	−14	− 1	+17	+21	−20	+ 5	− 2	−23	+11	+29		1	0.03
95518	19 25 43.70	−58 23 14.3	9.06	H	291.432 095 12	−58.387 299 88		10.55	−123.14	17.18	0.95	0.78	1.37	1.11	1.02	− 3	−15	+ 2	+45	−11	− 3	− 2	+10	+ 4	+27		0	0.36
95519	19 25 45.36	−28 40 51.3	9.57	G	291.438 999 54	−28.680 925 34		11.47	23.98	−28.33	1.74	1.15	2.02	1.72	1.04	+13	−50	−48	−24	+22	+ 2	+12	−34	+17	−11		0	−0.50
95520	19 25 46.77	+58 01 38.3	6.60	H	291.444 862 70	+58.027 309 84		2.60	−2.00	5.01	0.49	0.50	0.52	0.54	0.58	+ 6	+ 8	+ 7	+19	+10	+ 6	+14	− 8	+11	+16		0	0.50
95521 H	19 25 48.00	+28 45 34.0	7.41	H	291.450 001 43	+28.759 435 92	A	5.03	12.30	4.17	0.80	1.01	1.22	0.88	1.16	−23	+ 0	− 2	+29	−10	−28	−12	+ 7	+ 7	−28		2	1.21
95522 H	19 25 48.29	+14 36 31.2	8.09	H	291.451 213 61	+14.608 679 72	A	11.22	14.63	−26.53	1.03	0.92	1.27	0.97	0.89	+23	−14	−10	− 5	−14	+15	−15	+ 1	+ 3	+ 8		1	0.73
95523	19 25 49.43	+82 46 24.1	8.42	H	291.455 972 39	+82.773 358 31		2.09	8.76	20.80	0.57	0.55	0.62	0.66	0.62	+ 9	− 7	+ 8	+12	+ 7	− 5	+ 8	+12	−19	+13		0	−0.41
95524	19 25 49.57	+50 51 06.5	7.36	1 G	291.456 525 51	+50.851 801 21		0.95	0.97	−26.27	0.54	0.55	0.62	0.69	0.76	− 1	−18	+ 6	+ 3	+ 2	+ 7	+ 0	+ 3	+ 9	+13		1	−0.36
95525	19 25 50.13	−11 13 03.1	8.98	H	291.458 872 98	−11.217 525 64		2.00	−4.05	−6.00	1.21	0.81	1.34	1.28	0.84	+34	−19	−19	−29	−11	+22	− 7	−34	− 2	+23		0	−0.52
95526	19 25 51.14	+25 11 22.1	8.98	H	291.463 072 08	+25.189 468 02		2.98	0.74	−5.53	0.56	0.90	1.35	0.64	1.22	−36	+ 3	−12	+32	−16	+ 4	−17	+ 3	−10	−35		0	−0.06
95527	19 25 53.66	−10 47 57.0	10.03	G	291.473 593 43	−10.799 176 33		2.94	−11.79	−61.70	1.42	0.89	1.58	1.74	1.03	+14	−15	−23	−26	+10	+ 7	+ 8	−30	+16	+ 2		0	−0.53
95528	19 25 53.87	+41 11 52.8	7.88	H	291.474 468 12	+41.197 991 90		2.57	−0.75	−5.67	0.54	0.57	0.69	0.61	0.63	−11	+ 7	− 3	− 4	+21	−28	+23	−10	+ 4	+ 3		0	0.01
95529	19 25 54.04	−54 05 27.8	8.46	H	291.475 176 92	−54.091 054 41		10.02	8.67	−57.16	0.79	0.71	1.00	1.08	0.79	+26	−20	−19	− 9	+ 5	+ 3	− 1	−35	+ 2	+ 9		0	−1.17
95530	19 25 54.38	−39 37 00.3	8.71	H	291.476 599 77	−39.616 744 06		1.25	12.49	−6.25	1.39	0.88	1.39	1.70	1.06	−13	−42	− 1	+34	−13	+13	−16	+24	+ 5	−24		0	−0.36
95531	19 25 55.09	−32 39 34.2	9.22	H	291.479 549 59	−32.659 499 88		3.21	13.96	−4.43	1.58	0.98	1.67	1.86	0.92	+ 4	−42	−17	+18	+14	−15	+ 7	−24	− 3	−11		0	2.00
95532	19 25 56.40	−49 50 33.6	6.66	G	291.485 004 98	−49.842 671 18		15.64	−227.19	−88.76	0.72	0.61	0.87	0.95	0.65	+28	−11	+ 9	−26	−12	− 9	−13	−52	−22	+19		2	0.70
95533	19 25 56.48	−09 00 45.3	7.87	1 H	291.485 352 73	−09.012 582 87		1.06	−3.17	−7.10	1.04	0.70	1.14	1.13	0.79	+32	−12	− 9	− 1	+30	+22	+28	+ 1	+29	+41		0	0.20
95534	19 25 56.65	+44 55 51.4	6.68	H	291.486 056 29	+44.930 943 70		6.77	−42.32	−78.41	0.49	0.47	0.55	0.54	0.59	− 6	+ 3	− 7	+ 5	+13	−20	+16	+23	− 6	−12		1	−1.83
95535	19 25 57.38	−41 53 13.6	8.84	H	291.489 067 61	−41.887 112 37		2.38	5.91	−11.15	1.37	0.97	1.57	2.49	1.00	−11	−14	−44	+32	+11	−42	−16	−14	+15	−41		0	0.09
95536	19 25 57.96	+25 03 10.8	7.95	G	291.491 488 13	+25.052 996 34		2.86	0.90	−0.35	0.44	0.67	1.03	0.53	0.92	−36	+ 4	−24	+22	−15	+ 4	−16	+ 4	− 4	−38		0	0.85
95537 H	19 25 58.34	+36 11 11.4	7.48	2 G	291.493 063 70	+36.186 508 34	*	1.84	3.99	−0.11	0.50	0.56	0.65	0.55	0.70	− 1	−12	−13	+29	+ 6	−10	+ 6	+32	− 9	+ 0		0	−1.38
95538	19 25 58.58	+64 04 24.8	9.77	H	291.494 073 10	+64.073 546 86		3.80	−8.97	24.54	0.93	0.91	0.96	1.09	1.02	+ 6	−12	− 5	+ 4	+25	− 3	+22	− 1	+16	+23		3	−0.31
95539	19 25 59.65	−67 59 58.3	8.34	H	291.498 561 57	−67.999 537 00		2.40	−15.04	18.23	0.62	0.74	1.16	0.55	0.90	−12	− 2	− 5	−35	+25	− 8	+30	−36	+19	−17		0	0.17
95540	19 26 00.45	+08 21 05.5	9.10	H	291.501 869 07	+08.351 518 53		1.34	0.75	−2.37	1.21	0.83	1.50	1.67	1.12	−20	−12	−14	−13	+ 2	+20	+ 4	−16	− 9	−49		2	−0.98
95541	19 26 00.49	+13 23 06.8	9.27	H	291.502 032 99	+13.385 222 84		0.02	1.00	−4.28	0.97	0.82	1.43	1.20	0.93	+13	−16	− 7	+16	−23	+11	−26	− 9	+12	− 4		0	−0.44
95542 H	19 26 00.87	+15 33 24.7	8.05	G	291.503 621 55	+15.556 847 80	A	3.18	8.97	−7.82	1.00	0.88	1.39	1.18	0.99	+39	−26	−11	+22	−15	+12	−26	+ 4	+ 8	−10		0	−0.51
95543	19 26 01.21	+45 00 47.1	7.08	1 H	291.505 052 62	+45.013 074 06		3.71	3.08	6.37	0.47	0.46	0.53	0.53	0.61	− 2	− 3	− 4	+10	+12	−16	+14	+18	− 2	− 6		0	−0.13
95544	19 26 03.45	−80 14 13.3	9.01	H	291.514 393 12	−80.237 030 56		7.11	−18.04	−30.12	0.70	0.79	0.99	0.71	0.91	− 9	− 2	+ 5	+11	−11	−23	−12	− 5	− 9	− 9		4	−1.30
95545	19 26 03.60	+54 53 10.8	7.51	H	291.514 994 24	+54.886 346 32		2.79	1.90	6.63	0.60	0.52	0.59	0.73	0.56	+ 7	− 7	+13	+33	+10	−17	+16	+ 8	−11	+26		0	−0.55
95546	19 26 05.00	+07 11 54.9	8.31	1 H	291.520 839 70	+07.198 589 76		8.85	20.30	25.23	0.94	0.66	1.13	1.30	1.02	−10	−18	+ 3	− 4	+12	+15	+12	+ 6	+14	−33		0	2.02
95547	19 26 05.12	+03 31 09.8	8.05	2 H	291.521 331 97	+03.519 384 21		4.46	24.57	−7.01	0.87	0.61	1.05	1.10	0.69	− 2	−18	+ 9	−11	+11	+ 2	+11	−26	+ 2	+17		0	−0.07
95548	19 26 05.48	+42 19 33.9	8.00	H	291.522 845 78	+42.326 091 12		7.27	17.52	43.88	0.52	0.53	0.61	0.54	0.62	− 3	− 1	− 8	+ 8	+18	− 1	+20	+12	+ 0	+11		2	−2.11
95549 H	19 26 05.94	+38 48 49.1	8.10	G	291.524 761 49	+38.813 646 71	A	4.23	22.86	−14.47	1.04	1.15	1.21	0.99	1.32	+ 5	−13	+ 6	+20	+12	−17	+14	+ 1	−20	+ 6		1	0.50
95550	19 26 06.09	+03 46 43.1	8.86	H	291.525 369 30	+03.778 642 45		3.66	13.20	−10.15	0.99	0.66	1.21	1.29	0.81	+ 4	−28	+ 7	−18	− 2	+17	− 4	−27	+11	+22		0	0.93
95551	19 26 06.80	+28 38 43.1	8.48	H	291.528 316 68	+28.645 299 58		7.47	0.57	−8.01	0.55	0.68	0.96	0.65	0.81	−18	− 5	− 5	+30	+ 2	−31	− 1	+ 5	+13	−26		0	0.05
95552	19 26 06.89	+12 35 54.7	8.06	H	291.528 707 07	+12.598 529 37		5.06	6.32	−5.20	0.68	0.62	1.11	0.69	0.65	+28	−22	− 8	+ 4	−35	+18	−40	−25	+ 6	+13		0	0.10
95553	19 26 06.99	−34 03 38.2	9.48	H	291.529 137 73	−34.060 606 96		9.05	15.28	3.13	1.69	0.99	1.67	2.40	0.97	+ 3	−23	−33	+40	+10	+ 1	− 7	−13	+ 4	−33		0	1.14
95554	19 26 07.14	−21 32 39.3	8.03	H	291.529 766 74	−21.544 248 56		0.17	7.53	−2.17	0.88	0.60	1.01	1.00	0.57	+24	−33	−24	+ 7	+ 2	+29	+ 6	−12	− 2	+ 7		0	−2.02
95555	19 26 07.92	−32 36 22.8	9.92	H	291.532 986 87	−32.606 322 36		9.97	77.34	−53.74	2.00	1.22	2.11	2.38	1.17	+ 4	−45	−14	+19	+14	−14	+ 8	−24	− 6	−11		0	1.55
95556	19 26 09.12	+36 19 04.3	5.17	H	291.538 016 21	+36.317 864 78		4.99	4.22	12.95	0.39	0.43	0.51	0.44	0.55	+ 2	−11	−11	+16	+10	− 5	+11	+25	− 6	+ 5		1	−3.15
95557	19 26 11.03	−15 03 11.7	5.71	H	291.545 964 70	−15.053 250 05		3.78	17.43	−0.55	0.66	0.40	0.74	0.66	0.41	+15	−39	−25	−10	+ 6	+ 8	+ 7	−24	+ 0	+ 3		0	1.58
95558	19 26 11.32	+22 45 26.3	8.61	G	291.547 149 43	+22.757 305 99		1.12	3.51	−5.78	0.73	0.76	1.04	0.91	1.02	+11	−22	−12	−14	−11	+ 8	− 9	+ 6	− 1	+ 2		0	−0.34
95559	19 26 12.22	+15 33 06.8	8.27	H	291.550 929 01	+15.551 898 99		2.37	1.19	−8.87	0.62	0.56	1.00	0.85	0.80	+15	−25	−14	+29	−24	+12	−29	+24	+11	−37		0	−1.95
95560	19 26 13.24	+20 05 52.2	5.60	H	291.555 183 56	+20.097 820 36		14.94	3.36	−36.13	0.43	0.48	0.71	0.54	0.65	+21	−18	− 8	− 4	+ 0	+22	+ 0	− 6	+11	+36		0	−0.78
95561	19 26 14.67	−65 43 23.4	8.83	H	291.561 115 86	−65.723 176 68		3.01	2.41	9.16	0.87	0.75	1.26	0.90	0.99	−21	− 8	+10	−11	−16	− 9	−22	− 5	+20	−47		0	0.53
95562	19 26 17.76	−00 05 58.0	7.92	H	291.574 018 23	−00.099 441 93		1.31	−0.03	−2.43	0.83	0.48	0.98	0.83	0.52	+ 4	−45	−14	−23	+ 6	+24	+ 3	−32	+14	+ 6		0	0.78
95563	19 26 18.46	−55 22 27.8	7.50	H	291.576 922 80	−55.374 395 53		2.81	15.44	3.45	0.70	0.56	0.99	1.00	0.75	−16	−16	+ 6	− 6	+22	+ 1	+26	−23	−23	+ 5		0	0.42
95564	19 26 19.13	−21 46 36.1	5.57	H	291.579 723 63	−21.776 681 85		5.86	36.16	−4.55	0.70	0.49	0.81	0.77	0.47	+23	−39	−27	+ 7	− 4	+31	+ 8	− 3	−12	+ 5		0	−1.62
95565	19 26 19.87	−71 27 57.2	8.02	H	291.582 810 39	−71.465 889 29		5.71	13.58	−19.85	0.48	0.57	0.91	0.58	0.70	− 3	−10	− 4	+26	+ 5	−19	+ 3	− 7	+ 6	− 5		1	0.52
95566	19 26 21.18	+59 25 41.8	8.04	H	291.588 245 61	+59.428 274 58		3.30	−1.19	−6.28	0.59	0.64	0.63	0.66	0.66	− 2	−11	+ 1	+11	+ 8	− 1	+14	−32	+ 3	+15		0	0.60
95567	19 26 21.70	−65 11 46.7	7.99	H	291.590 417 87	−65.196 313 41		6.29	8.08	−6.87	0.62	0.60	1.00	0.69	0.83	− 4	−12	− 4	− 4	−10	− 4	−24	−29	+28	−35		1	0.94
95568	19 26 22.06	+50 59 13.7	8.15	H	291.591 934 91	+50.987 135 13		11.85	29.74	73.71	0.60	0.60	0.67	0.76	0.73	+ 1	− 4	+ 5	− 9	+ 4	+ 6	+ 2	− 5	+13	+19		1	−0.54
95569	19 26 22.20	−76 22 01.7	8.48	H	291.592 494 33	−76.367 136 83		3.16	11.69	−10.67	0.63	0.75	0.96	0.86	0.96	−19	−19	+ 8	+20	− 8	− 9	− 5	− 2	−13	−19		3	1.33
95570	19 26 22.51	−01 56 46.8	8.34	H	291.593 786 73	−01.946 328 17		1.85	2.94	0.39	0.87	0.55	1.01	0.99	0.67	− 1	− 4	−11	−18	+ 7	+27	+11	−25	+20	+20		2	1.53
95571	19 26 23.07	−63 13 47.8	7.91	1 H	291.596 125 71	−63.229 958 10		21.09	46.13	−0.86	0.71	0.58	0.98	0.93	0.88	− 4	− 5	+16	+30	−10	− 2	− 4	− 5	+17	+17		0	0.60
95572	19 26 24.13	+13 01 25.2	5.76	H	291.600 527 21	+13.023 658 08		17.96	14.10	59.03	0.56	0.48	0.78	0.61	0.53	+ 8	+ 2	−11	− 8	−29	+10	−33	−25	−14	−16		0	1.68
95573	19 26 24.39	−38 14 03.8	9.29	H	291.601 619 74	−38.234 391 52		9.97	54.36	−28.29	1.56	1.19	1.68	1.86	1.29	+45	−43	−35	+11	−10	−26	−23	−32	+ 2	+22		0	2.47
95574 H	19 26 24.55	−14 33 04.3	6.70	H	291.602 276 65	−14.551 193 16	*	7.82	42.91	−7.85	0.69	0.42	0.75	0.70	0.43	+10	−35	−17	−13	+11	+12	+13	−23	− 2	+ 5		0	0.26
95575	19 26 25.57	+49 27 48.9	8.01	H	291.606 557 71	+49.463 575 57		39.73	457.19	713.97	0.95	0.88	1.03	1.09	1.14	− 3	− 7	+ 5	+ 7	+ 0	− 7	+ 1	+ 4	− 2	+ 8		0	
95576	19 26 26.46	+62 33 25.4	6.38	H	291.610 235 91	+62.557 052 86		4.78	31.86	37.80	0.59	0.48	0.56	0.80	0.52	+ 7	+10	+14	− 2	− 1	−10	+ 0	− 1	− 5	+19		2	3.38
*95577	19 26 27.65	−21 14 45.2	7.01	H	291.615 204 89	−21.245 892 14		1.77	−2.04	−22.94	0.81	0.57	0.88	0.80	0.54	+26	−34	−21	+ 4	+14	+11	+12	−12	+11	+28		0	−1.32
*95578	19 26 27.69	−45 45 26.9	9.97	2 G	291.615 391 39	−45.757 462 62		0.05	4.28	15.98	1.71	1.05	1.80	2.43	1.40	+ 5	−13	+ 0	− 6	+10	−10	+ 3	−37	− 5	−18		0	−0.53
*95579 H	19 26 27.31	−13 07 54.9	9.34	H	291.613 792 46	−13.131 915 20	A	14.45	17.57	3.85	5.37	3.53	4.77	5.31	3.34	+61	−24	−17	+ 8	+ 5	−30	− 2	−14	+ 6	+57	24	1.68
95580	19 26 28.38	+48 52 15.0	8.15	H	291.618 254 47	+48.870 835 40		5.09	4.96	1.63	0.60	0.55	0.64	0.65	0.65	− 4	− 8	+ 0	− 1	+13	−18	+12	+25	− 6	+10		0	−0.44
95581	19 26 28.50	+47 58 11.7	7.57	H	291.618 742 39	+47.969 908 49		3.75	5.58	−4.57	0.56	0.49	0.58	0.63	0.57	+ 2	− 2	+ 5	− 7	+11	− 7	+ 9	+23	− 5	+13		4	0.92
95582	19 26 28.69	+19 53 29.8	5.84	1 H	291.619 527 82	+19.891 610 03		7.17	0.64	−48.14	0.47	0.51	0.75	0.60	0.73	+30	−16	−11	−21	−11	+20	−12	−15	+16	+43		0	1.63
95583	19 26 29.57	+17 02 20.9	9.18	G	291.623 193 11	+17.039 143 61		1.43	0.49	−5.83	0.79	0.72	1.15	0.94	0.92	+19	−25	− 5	+14	−19	+13	−27	− 1	+12	−14		0	−0.72
95584	19 26 30.60	+20 15 32.4	6.64	H	291.627 495 39	+20.259 010 17		5.77	−1.31	−11.27	0.48	0.54	0.79	0.61	0.73	+27	−19	− 7	− 5	− 1	+20	− 2	− 5	+13	+39		0	1.03
95585	19 26 31.09	+00 20 18.9	4.64	H	291.629 540 29	+00.338 575 66		0.28	−0.86	−2.30	0.76	0.42	0.87	0.70	0.42	− 7	−48	−13	−17	+11	+20	+ 6	−35	+11	−13		0	1.03
95586	19 26 31.88	+11 51 03.6	6.91	H	291.632 836 67	+11.851 006 72		16.05	94.25	25.92	0.56	0.49	0.85	0.57	0.48	+26	−14	−12	+22	−34	+ 8	−43	−25	+ 4	− 2		0	−0.20
95587	19 26 32.24	+40 08 09.2	8.54	H	291.634 346 62	+40.135 894 10		4.61	12.71	−0.81	0.64	0.64	0.80	0.64	0.67	− 3	−11	+ 0	− 3	+22	−13	+24	− 4	− 7	+13		0	0.41
95588	19 26 33.18	−08 09 42.2	8.01	2 H	291.638 250 19	−08.161 715 28		9.17	−5.62	−11.00	1.01	0.65	1.14	0.96	0.66	+26	−31	−17	− 8	+24	+20	+21	− 8	+23	+41		2	−0.78
95589 H	19 26 33.70	+27 19 20.8	7.46	H	291.640 435 81	+27.322 458 10	A	13.96	102.26	87.57	1.31	1.52	1.78	1.13	1.38	−15	+ 3	−21	+ 6	+ 1	+ 8	+ 3	− 7	− 4	−11		2	2.35
95590 H	19 26 34.01	+31 19 53.4	8.24	G	291.641 717 09	+31.331 505 98	A	9.81	7.46	−14.85	1.17	1.49	1.28	0.91	1.18	+13	−19	+13	+22	+ 0	− 8	+ 4	+ 8	− 5	+ 2		1	−0.65
95591	19 26 34.35	+09 54 52.4	9.43	H	291.643 134 76	+09.914 549 32		0.70	2.25	−0.75	1.21	0.92	1.44	1.32	1.01	− 4	− 9	+ 9	−34	− 8	+ 7	− 6	−42	−22	− 8		0	0.63
95592	19 26 34.60	−56 55 19.0	7.82	2 H	291.644 170 96	−56.921 940 24		0.96	12.93	−8.13	0.72	0.58	0.97	0.82	0.72	+ 4	−16	− 6	+47	−22	− 4	−11	− 1	− 8	+27		2	1.55
95593 H	19 26 35.77	+25 29 48.3	8.63	H	291.649 032 91	+25.496 752 98	A	4.06	16.46	−13.69	1.83	2.77	3.42	1.62	2.98	−39	+18	−20	+14	−10	+16	−12	− 9	−11	−40		0	0.73
95594 H	19 26 37.15	+26 18 44.3	8.93	G	291.654 807 36	+26.312 311 44	A	1.61	6.29	−1.68	0.97	1.47	1.75	1.07	1.86	− 9	+ 7	−14	+34	− 7	− 9	−14	+ 4	+10	−27		1	−0.86
95595	19 26 38.11	−62 19 55.8	8.74	H	291.658 779 23	−62.332 162 68		0.09	−16.06	−21.40	1.08	0.90	1.39	1.16	1.12	+ 7	−46	−15	+24	−30	−14	−37	− 6	+18	− 3		0	−0.07
95596	19 26 38.58	+32 20 38.2	10.28	H	291.660 757 36	+32.343 932 94	B	−1.56	19.05	−19.70	9.64	12.89	6.10	8.37	9.38	− 7	+ 1	−10	+22	+ 5	− 4	+ 5	− 1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
95501	3.752	0.003	3.405	0.003		0.319	0.004	G	0.38	0.02	A	3.4408	0.0004	0.004	83		3.44	3.45			19254+0307	I 1	1 O							S
95502	10.088	0.026	9.730	0.029		0.348	0.034	T	0.41	0.05	L	9.7888	0.0021	0.024	115		9.74	9.83					1							
95503	7.315	0.009	5.602	0.005		1.442	0.001	G	1.44	0.00	H	5.5860	0.0013	0.006	51		5.57	5.60					1							S
95504	8.887	0.013	8.397	0.013		0.500	0.015	G	0.57	0.02	H	8.4518	0.0017	0.015	98		8.43	8.48		C			1							
95505	8.156	0.008	7.353	0.006		0.727	0.008	T	0.78	0.01	L	7.3888	0.0013	0.012	127		7.37	7.41		C			1							S
95506	9.161	0.014	9.123	0.018		0.050	0.015	G	0.06	0.01	H	9.1677	0.0017	0.016	106		9.14	9.20		C			1							
95507	9.585	0.015	9.030	0.014		0.520	0.018	T	0.59	0.02	L	9.0852	0.0015	0.016	126		9.06	9.12					1							
95508	9.832	0.027	8.222	0.013		1.348	0.024	T	1.31	0.03	L	8.2110	0.0015	0.013	93		8.19	8.23		C			1							
95509	9.365	0.021	8.603	0.018		0.679	0.021	T	0.74	0.02	L	8.6547	0.0024	0.018	62		8.63	8.69		C			1							
95510	9.017	0.014	8.865	0.016		0.146	0.020	T	0.16	0.02	L	8.9087	0.0021	0.021	84		8.87	8.94		C			1							
95511	7.950	0.007	7.822	0.010		0.124	0.011	T	0.14	0.01	L	7.8539	0.0013	0.011	119		7.84	7.87		C			1							S
95512	7.467	0.004	7.386	0.006		0.080	0.007	T	0.09	0.01	L	7.4000	0.0012	0.015	209		7.38	7.43	6.42	P 1 A			1							S
95513	9.726	0.017	8.309	0.010		1.197	0.015	T	1.16	0.01	L	8.3363	0.0019	0.020	159		8.31	8.37					1 S							
95514	9.534	0.020	9.168	0.021		0.340	0.004	G	0.40	0.01	H	9.1933	0.0015	0.015	104		9.16	9.22					1							
95515	9.674	0.017	9.085	0.016		0.551	0.017	T	0.62	0.02	L	9.1502	0.0020	0.020	121		9.11	9.18		C			1 S							
95516	8.477	0.014	6.934	0.007		1.296	0.012	T	1.26	0.01	L	6.9474	0.0012	0.008	63		6.94	6.96					1							S
95517	8.166	0.007	7.685	0.008	A	0.467	0.007	G	0.54	0.01	H *	7.7048	0.0011	0.014	166 *		7.68	7.73			19257−6211	I 1	2 C A	AB	52	3.171	0.020	3.51	0.10	S
95518	10.116	0.024	9.154	0.017		0.833	0.023	T	0.85	0.02	L	9.1995	0.0025	0.018	117		9.16	9.23		C			1							
95519	10.370	0.049	9.668	0.042		0.686	0.005	G	0.74	0.00	H	9.6961	0.0034	0.024	55		9.67	9.76		C			1							
95520	6.408	0.005	6.567	0.004		−0.139	0.006	T	−0.13	0.01	L	6.5575	0.0009	0.007	83		6.55	6.57		C			1							S
95521	7.429	0.008	7.346	0.010	*	0.082	0.012	T	0.09	0.01	L *	7.4444	0.0011	0.012	163 *		7.43	7.46		D	19258+2846	I 1	2 C A	AB	338	4.530	0.004	1.22	0.01	S
95522	8.626	0.015	8.109	0.015	*	0.486	0.019	T	0.56	0.02	L *	8.1976	0.0016	0.016	101 *		8.18	8.23		D	19258+1437	I 1	2 C A	AB	352	5.510	0.009	2.46	0.05	S
95523	10.259	0.030	8.555	0.014		1.423	0.026	T	1.41	0.04	L	8.5585	0.0016	0.013	122		8.53	8.58		C			1							
95524	9.504	0.018	7.558	0.008		1.630	0.015	G	1.64	0.09	H	7.4474	0.0016	0.018	107		7.42	7.48		U			1							S
95525	11.226	0.075	9.254	0.022		1.635	0.062	T	1.66	0.06	L	9.0938	0.0023	0.019	90		9.05	9.12					1							
95526	9.098	0.009	8.999	0.011		0.097	0.013	T	0.11	0.01	L	9.0226	0.0015	0.021	257		8.98	9.06					1							
95527	10.874	0.061	10.066	0.047		0.710	0.020	G	0.76	0.02	H	10.1719	0.0021	0.022	92		10.14	10.22		C			1							G
95528	9.171	0.013	7.981	0.009		1.019	0.012	T	0.99	0.01	L	8.0424	0.0014	0.012	129		8.03	8.06					1							
95529	8.939	0.016	8.477	0.016		0.449	0.018	T	0.52	0.02	L	8.5612	0.0017	0.013	86		8.54	8.59					1							
95530	10.212	0.043	8.867	0.024		1.140	0.039	T	1.10	0.04	L	8.8812	0.0020	0.017	54		8.86	8.93		C			1							
95531	11.553	0.144	9.366	0.035		1.807	0.119	T	1.84	0.12	L	9.3183	0.0030	0.019	52		9.28	9.35		C			1							
95532	7.881	0.008	6.761	0.005		0.953	0.001	G	0.94	0.00	H	6.8138	0.0011	0.010	96		6.80	6.83					1							S
95533	10.227	0.031	8.146	0.011		1.700	0.351	G	1.69	0.24	O	7.9742	0.0024	0.019	76		7.94	8.01		U			1 S							
95534	7.982	0.007	6.796	0.005		1.016	0.007	T	0.99	0.01	L	6.8458	0.0007	0.008	124		6.83	6.86					1							S
95535	8.859	0.018	8.857	0.023		0.003	0.026	T	0.02	0.02	L	8.8473	0.0025	0.014	50		8.82	8.88		C			1							
95536	8.139	0.006	7.973	0.008		0.160	0.015	G	0.18	0.01	H	7.9988	0.0009	0.015	251		7.97	8.02					1							S
95537	9.378	0.021	7.549	0.010	*	1.620	0.015	G	1.63	0.09	H *	7.3150	0.0062	0.073	133 *		7.22	7.46		U 2	19260+3611	H 1	2 C S A	AB	17	0.124	0.013	0.32	0.74	P
95538	10.695	0.040	9.848	0.029		0.760	0.037	T	0.80	0.03	L	9.9199	0.0026	0.024	110		9.87	9.96		C			1							
95539	9.719	0.015	8.469	0.009		1.066	0.014	T	1.03	0.01	L	8.5046	0.0018	0.021	211		8.47	8.53					1							
95540	9.226	0.017	9.088	0.022		0.133	0.026	T	0.15	0.03	L	9.1522	0.0027	0.018	79		9.12	9.19		C			1							
95541	9.603	0.022	9.279	0.023		0.308	0.030	T	0.35	0.04	L	9.3473	0.0015	0.016	94		9.32	9.38					1							G
95542	9.071	0.009	8.162	0.007	A	0.833	0.027	G	0.84	0.01	L *	8.1872	0.0011	0.013	178 *		8.17	8.21		D	19260+1533	I 1	2 C A	AB	34	1.373	0.028	3.19	0.10	
95543	6.873	0.005	7.046	0.007		−0.151	0.008	T	−0.15	0.01	L	7.0290	0.0041	0.024	125		7.00	7.06	1.09	P 1 A			1							S P
95544	9.743	0.016	9.067	0.014		0.625	0.018	T	0.69	0.02	L	9.1433	0.0023	0.022	153		9.10	9.18					1							
95545	9.276	0.015	7.639	0.008		1.370	0.013	T	1.34	0.02	L	7.6642	0.0012	0.010	103		7.65	7.68					1							S
95546	8.785	0.012	8.370	0.012		0.399	0.001	G	0.46	0.00	H	8.4006	0.0029	0.020	83		8.37	8.44		U			1							
95547	8.315	0.013	8.080	0.015		0.224	0.019	T	0.25	0.02	L	8.1199	0.0033	0.027	84		8.09	8.23		U 2 C			1							
95548	8.378	0.008	8.033	0.008		0.327	0.011	T	0.38	0.01	L	8.0778	0.0009	0.014	156		8.06	8.11					1							S
95549	8.748	0.010	8.264	0.010	*	0.445	0.015	G	0.51	0.02	H *	8.2124	0.0014	0.014	125 *		8.19	8.24		D	19261+3849	I 1	2 C A	AB	265	1.013	0.005	1.15	0.02	
95550	9.550	0.022	8.943	0.021		0.606	0.015	G	0.68	0.01	H	8.9910	0.0020	0.017	87		8.95	9.02		C			1							
95551	8.650	0.010	8.505	0.011		0.140	0.014	T	0.15	0.01	L	8.5290	0.0016	0.018	160		8.50	8.56					1							
95552	8.425	0.009	8.088	0.009		0.320	0.012	T	0.37	0.02	L	8.1404	0.0021	0.017	115		8.11	8.17					1							S
95553	10.355	0.051	9.530	0.038		0.727	0.049	T	0.78	0.04	L	9.6246	0.0036	0.021	56		9.58	9.65					1							
95554	7.979	0.009	8.010	0.012		−0.026	0.013	T	0.00	0.01	L	8.0337	0.0016	0.010	62		8.02	8.05		C			1							
95555	10.660	0.072	10.000	0.064		0.602	0.072	T	0.67	0.06	L	10.0512	0.0044	0.022	50		10.01	10.10					1							G
95556	5.029	0.002	5.156	0.003		−0.120	0.001	G	−0.11	0.00	H	5.1363	0.0006	0.006	133		5.13	5.15					1							S
95557	5.718	0.003	5.716	0.003		0.007	0.004	T	0.03	0.00	L	5.7206	0.0006	0.005	104		5.71	5.73		C			1							S
95558	8.776	0.013	8.672	0.015		0.158	0.007	G	0.17	0.01	H	8.6612	0.0023	0.019	94		8.63	8.70					1							
95559	8.567	0.007	8.291	0.008		0.263	0.010	T	0.30	0.01	L	8.3444	0.0010	0.013	174		8.33	8.37		C			1							
95560	5.596	0.003	5.594	0.003		−0.006	0.002	G	0.01	0.00	H	5.6090	0.0005	0.006	114		5.60	5.62					1							S
95561	10.320	0.025	8.965	0.014		1.148	0.022	T	1.11	0.02	L	8.9988	0.0022	0.026	142		8.96	9.04					1							
95562	8.034	0.011	7.982	0.013		0.220	0.015	G	0.24	0.02	H	7.9896	0.0011	0.011	102		7.97	8.00		C			1							S
95563	9.323	0.014	7.651	0.007		1.397	0.012	T	1.37	0.01	L	7.6399	0.0012	0.012	107		7.62	7.66		C			1							S
95564	7.169	0.009	5.710	0.004		1.228	0.000	G	1.19	0.00	H	5.7325	0.0010	0.008	70		5.72	5.74		C			1							S
95565	8.084	0.006	8.024	0.007		0.054	0.008	T	0.07	0.01	L	8.0489	0.0013	0.016	203		8.02	8.08					1							S
95566	9.278	0.014	8.148	0.009		0.960	0.015	G	0.95	0.01	H	8.2040	0.0014	0.011	109		8.19	8.22					1							
95567	7.980	0.007	7.981	0.009		0.000	0.010	T	0.02	0.01	L	7.9952	0.0015	0.015	152		7.96	8.02		C			1							S
95568	8.870	0.012	8.219	0.010		0.593	0.013	G	0.66	0.01	H	8.2785	0.0014	0.015	113		8.25	8.31		C			1							S
95569	8.662	0.009	8.504	0.011		0.144	0.013	T	0.16	0.01	L	8.5335	0.0016	0.019	138		8.51	8.57					1							
95570	8.569	0.010	8.367	0.011		0.193	0.014	T	0.21	0.02	L	8.3983	0.0014	0.015	114		8.38	8.43					1							
95571	8.544	0.010	7.978	0.009		0.534	0.010	T	0.61	0.01	L	8.0317	0.0020	0.016	109		8.01	8.06		U			1							S
95572	6.320	0.003	5.815	0.003		0.456	0.012	G	0.55	0.03	C	5.8701	0.0006	0.005	104		5.86	5.88		C			1							S
95573	10.085	0.038	9.380	0.034		0.636	0.038	T	0.70	0.03	L	9.4220	0.0027	0.012	50		9.40	9.45					1							
95574	6.763	0.004	6.703	0.005	*	0.054	0.005	T	0.07	0.00	L *	6.7243	0.0007	0.006	102 *		6.71	6.74		D	19264−1433	H 1	2 C S B	AB	39	0.187	0.060	3.00	0.55	S
95575	9.240	0.016	8.129	0.011		0.929	0.009	G	0.97	0.01	I	8.1542	0.0014	0.013	106		8.14	8.17		C			1 X							
95576	8.217	0.009	6.525	0.006		1.413	0.009	T	1.39	0.01	L	6.5251	0.0008	0.007	95		6.51	6.54		C			1							S
95577	9.029	0.017	7.199	0.008		1.522	0.015	T	1.56	0.02	L	7.1361	0.0011	0.011	62		7.12	7.16					1							S
95578	10.563	0.040	10.010	0.038		0.541	0.020	G	0.61	0.02	H	10.1317	0.0190	0.124	105		9.98	10.34	0.21	P 1 A			1							G P
95579	11.273	0.104	9.811	0.045	A	1.133	0.122	G	1.10	0.13	R *	9.5070	0.0117	0.120	85 *		9.41	9.90		D	19265−1308	H 1	2 C D	AB	74	4.170	0.019	0.73	0.10	D
95580	8.177	0.008	8.160	0.010		0.020	0.012	T	0.04	0.01	L	8.1616	0.0013	0.012	118		8.14	8.20					1							S
95581	7.739	0.006	7.596	0.009		0.138	0.010	T	0.15	0.01	L	7.6246	0.0011	0.010	116		7.61	7.64		C			1							S
95582	7.893	0.008	6.018	0.003		1.558	0.007	T	1.58	0.01	L	5.9540	0.0009	0.009	115		5.94	5.97		M	19265+1954	I 1	1 S							S
95583	9.442	0.015	9.251	0.018		0.210	0.015	G	0.23	0.02	H	9.2629	0.0022	0.021	136		9.23	9.30					1							
95584	6.652	0.006	6.631	0.006		0.012	0.002	G	0.03	0.00	H	6.6492	0.0008	0.007	115		6.64	6.66					1							S
95585	5.356	0.003	4.742	0.002		0.576	0.005	G	0.75	0.02	A	4.7784	0.0007	0.006	96		4.77	4.79			19265+0021	I 1	1							S
95586	7.422	0.004	6.956	0.005		0.439	0.006	T	0.51	0.01	L	7.0048	0.0008	0.008	145		6.99	7.02					1							S
95587	8.547	0.009	8.537	0.012		0.014	0.014	T	0.03	0.01	L	8.5490	0.0015	0.015	119		8.52	8.59			19265+4008	I 1	1 S							
95588	8.467	0.012	8.067	0.012		0.393	0.015	G	0.46	0.02	H	8.1039	0.0025	0.023	83		8.08	8.27		U 2 C			1							S
95589	8.060	0.008	7.463	0.008	*	0.573	0.006	G	0.65	0.01	H *	7.5840	0.0012	0.013	177 *		7.56	7.61		D	19266+2719	I 1	2 C A	AB	292	1.974	0.002	0.27	0.01	S
95590	8.738	0.009	8.312	0.010	*	0.438	0.015	G	0.51	0.02	H *	8.3337	0.0013	0.016	154 *		8.31	8.36		D	19266+3120	H 1	2 C A	AB	200	0.451	0.013	2.33	0.05	
95591	9.835	0.027	9.466	0.029		0.350	0.037	T	0.41	0.05	L	9.5147	0.0036	0.023	81		9.48	9.57					1							G
95592	9.994	0.021	8.041	0.009		1.655	0.019	T	2.28	0.06	O	7.8749	0.0067	0.050	121		7.81	7.95		U 2			1							S P
95593	8.796	0.009	8.520	0.011	*	0.263	0.013	T	0.30	0.02	L *	8.7000	0.0016	0.021	268 *		8.67	8.74		R	19266+2530	I 1	2 C A	AB	86	5.622	0.003	0.35	0.01	
95594	9.160	0.011	8.966	0.013	*	0.333	0.015	G	0.39	0.02	H *	8.9699	0.0017	0.022	202 *		8.94	9.01			19266+2619	H 1	2 C A	AB	206	0.785	0.025	3.05	0.13	
95595	10.289	0.028	8.870	0.014		1.198	0.025	T	1.16	0.03	L	8.9028	0.0021	0.022	138		8.87	8.94					1 G							
95596	10.667	0.043	10.238	0.050	B	0.405	0.061	T	0.47	0.07	L	10.5122	0.0412			B				D	19267+3221	I 2	1 C I A							
95597	8.408	0.011	8.315	0.014		0.123	0.015	G	0.14	0.01	H	8.3220	0.0021	0.018	86		8.30	8.37		U 2			1							
95598	10.254	0.024	9.650	0.022		0.578	0.003	G	0.65	0.00	H	9.6975	0.0021	0.021	152		9.67	9.74					1							G
95599	9.183	0.012	8.767	0.012	A	0.441	0.015	G	0.51	0.02	H	8.8254	0.0103	0.056	151	A	8.77	8.92		D	19267+3221	I 2	1 C P A							
95600	9.206	0.012	9.206	0.016		0.005	0.018	T	0.03	0.02	L	9.2184	0.0021	0.020	137		9.18	9.26		C			1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr											%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
95601	19 26 41.11	+74 05 50.3	10.27		H	291.671 294 70	+74.097 291 70		2.00	−4.42	−5.23	1.13	1.02	1.13	1.25	1.22	− 1	− 8	+15	−12	+10	− 8	+10	+ 3	− 2	+17	0	2.65
95602	19 26 41.37	+22 42 28.2	9.69		G	291.672 369 64	+22.707 829 65		5.14	−27.01	−21.93	1.01	1.17	1.60	1.39	1.74	+ 0	−11	− 8	+ 4	−15	− 5	−16	+30	−12	+ 1	0	−0.30
95603	19 26 41.58	−46 34 44.0	6.65	2	H	291.673 239 22	−46.578 899 12		1.43	−2.42	−6.41	0.71	0.53	0.89	0.89	0.61	+20	−31	− 4	−12	+14	− 4	+ 8	−45	−13	+ 0	0	−1.17
95604	19 26 42.17	−26 19 06.1	7.75		H	291.675 720 87	−26.318 356 11		2.81	5.08	−18.53	0.97	0.75	1.12	1.10	0.70	+28	−32	−45	−17	+ 7	− 5	− 4	−34	+20	− 3	0	3.13
95605	19 26 44.23	+39 57 41.4	7.42		H	291.684 301 20	+39.961 507 16		5.14	−1.34	−2.02	0.52	0.49	0.62	0.60	0.54	− 7	+ 7	+ 1	+22	+14	−12	+16	− 4	− 1	+ 4	0	0.14
95606	19 26 44.51	−25 35 01.8	8.47		H	291.685 476 97	−25.583 826 72		8.39	−5.10	−48.34	1.27	0.83	1.40	1.14	0.78	+32	−50	−36	−26	− 2	+22	+ 0	−27	+11	+28	0	0.51
95607	19 26 44.62	−71 27 57.8	8.29		H	291.685 902 30	−71.466 053 10		4.69	23.18	−10.09	0.50	0.59	0.89	0.60	0.74	− 4	− 6	+ 0	+20	+ 9	−11	+10	−14	− 2	− 2	0	−0.87
95608	19 26 44.67	+21 39 11.3	7.43		H	291.686 115 43	+21.653 131 92		2.50	0.45	−5.76	0.55	0.63	0.90	0.70	0.86	+12	− 4	−39	− 1	+ 1	+11	+ 8	− 2	+ 0	+19	5	2.29
95609	19 26 44.95	+29 14 15.3	9.26		H	291.687 308 95	+29.237 582 80		6.11	9.78	9.85	0.77	1.00	1.25	0.87	1.15	−13	−12	− 5	+44	+ 0	−26	− 4	+19	+ 9	−23	0	−1.01
95610	19 26 46.20	−16 47 00.5	7.87		H	291.692 496 42	−16.783 478 95		4.97	−1.32	−16.14	0.82	0.49	0.92	0.89	0.62	+29	−40	− 7	− 9	+ 1	+13	+ 2	−21	− 4	+17	0	−0.06
95611	19 26 47.90	+50 08 43.1	7.38	2	H	291.699 564 18	+50.145 312 28		12.60	56.48	74.61	0.54	0.50	0.58	0.61	0.58	−11	− 5	+14	+ 6	+ 7	+ 1	+ 8	− 1	− 1	+ 4	0	−0.63
95612 H	19 26 48.38	+21 09 46.2	7.36		H	291.701 574 10	+21.162 847 02	A	2.24	3.95	−6.70	1.41	1.56	1.85	1.51	1.91	+24	−16	−32	−10	+ 9	−10	+ 5	− 6	+ 1	+24	3	1.49
95613	19 26 49.17	−34 06 47.0	8.90		H	291.704 883 26	−34.113 061 69		3.34	27.66	−4.15	1.42	0.87	1.40	1.98	0.84	− 6	−13	−30	+38	+12	+ 3	− 2	−13	+ 8	−32	0	1.80
95614	19 26 52.82	+45 50 09.6	8.04		H	291.720 075 42	+45.836 001 19		3.06	0.40	20.00	0.65	0.61	0.72	0.76	0.79	− 5	+ 2	+ 8	− 5	+ 9	+ 3	+10	− 2	− 5	+ 4	0	−1.76
95615 H	19 26 53.20	−38 59 36.5	9.91		H	291.721 667 71	−38.993 471 60	A	2.95	12.60	−9.77	5.23	4.74	3.11	3.67	2.04	+ 7	−19	−27	+11	+16	−31	+ 3	− 4	+18	− 7	0	−0.86
95616	19 26 53.30	+35 54 24.3	7.74		H	291.722 090 70	+35.906 749 81		2.29	2.75	0.33	0.53	0.55	0.66	0.56	0.70	− 1	−15	− 8	+34	+ 5	−15	+ 5	+35	− 2	− 1	1	−1.26
95617 H	19 26 54.67	+18 18 08.6	8.94		H	291.727 785 49	+18.302 392 62	*	3.58	16.94	5.77	3.57	4.06	2.08	1.41	1.60	+28	−21	−11	−28	−20	+14	−18	−16	+ 3	+27	2	−0.27
95618	19 26 56.44	−10 15 01.4	8.81		H	291.735 178 27	−10.250 400 50		6.80	28.68	−17.00	1.09	0.63	1.20	1.07	0.65	+10	−39	− 8	−23	+14	+12	+ 8	−30	+14	+14	0	−1.47
95619	19 26 56.47	−29 44 35.2	5.66		H	291.735 292 68	−29.743 105 37		14.47	17.55	−49.32	0.80	0.56	0.90	0.91	0.49	+17	−27	−19	+ 9	−20	+24	−12	−34	−19	− 4	3	0.30
95620 H	19 26 56.75	+12 03 43.5	7.06		H	291.736 462 36	+12.062 087 75	A	2.67	5.13	−12.01	0.94	0.87	1.26	0.95	0.87	+22	−20	− 2	+15	−36	+ 7	−36	−20	+12	+29	2	0.22
95621	19 26 57.21	+35 10 44.4	7.87	1	H	291.738 368 46	+35.178 988 41		3.29	−0.49	−3.26	0.50	0.60	0.69	0.55	0.78	− 1	− 5	−17	+18	+13	+ 0	+16	+32	− 7	− 2	1	−1.34
95622	19 26 57.78	−00 54 41.7	7.99		H	291.740 741 02	−00.911 571 08		15.07	−83.73	−152.56	0.82	0.50	0.95	0.96	0.59	+ 5	−33	−17	−11	+ 6	+17	+ 3	−26	+24	+19	0	1.29
95623	19 26 57.85	−24 02 46.2	7.80		H	291.741 036 69	−24.046 179 67		3.25	12.48	−9.57	0.92	0.75	1.23	1.19	0.67	+33	−34	−55	−16	−30	+41	−10	−23	− 7	+ 0	0	−1.35
95624	19 26 58.87	+21 06 23.0	7.14		H	291.745 294 83	+21.106 382 94		1.79	1.69	−6.18	0.53	0.63	0.92	0.68	0.93	+13	−18	−26	+ 6	+ 9	+ 5	+10	+ 6	+11	+ 8	2	0.03
95625 H	19 26 59.48	+73 21 58.7	7.69		G	291.747 817 83	+73.366 291 76	A	6.59	12.15	41.56	1.75	1.39	1.48	1.67	1.27	+ 8	−39	+ 2	+ 5	+ 2	−20	+ 6	−12	−13	+ 4	2	1.85
95626	19 26 59.62	−71 46 20.1	8.41		H	291.748 416 37	−71.772 236 86		10.49	6.96	9.44	0.61	0.75	1.15	0.76	0.94	−19	−10	+ 5	+24	+ 1	− 9	+ 5	−14	+ 6	−12	6	3.00
95627	19 27 00.08	+16 32 17.1	8.10		H	291.750 336 91	+16.538 079 79		2.90	1.95	−13.44	0.67	0.56	0.97	0.89	0.69	+17	−27	−21	+25	−11	+15	− 7	+12	−10	0	1.78
95628	19 27 00.29	+73 53 48.2	10.77		H	291.751 197 23	+73.896 731 69		7.31	90.49	118.43	2.34	2.20	2.37	2.66	2.59	+ 8	− 8	+ 7	+ 1	+15	− 6	+15	+ 0	+ 2	+16	0	
95629	19 27 03.59	+34 51 38.9	7.76		H	291.764 964 62	+34.860 797 98		2.93	2.75	7.18	0.55	0.59	0.76	0.67	0.77	+ 1	−14	−15	− 5	+ 7	+20	+10	+ 0	+ 4	+ 6	0	−0.48
95630	19 27 04.86	+37 34 14.0	8.44		H	291.770 241 86	+37.570 543 24		3.80	4.35	−16.73	0.65	0.66	0.85	0.77	0.84	+ 0	− 2	+ 2	+ 6	− 1	−12	+ 0	− 1	− 3	+20	3	1.24
95631	19 27 05.78	+46 27 14.5	9.10		H	291.774 070 25	+46.454 039 80		14.62	−63.79	−250.05	0.87	0.77	0.93	1.12	1.00	+15	−20	−11	+ 7	+ 7	+ 2	+ 6	+ 7	+ 8	+25	0	−0.57
95632	19 27 06.03	+52 47 58.6	8.65		H	291.775 114 50	+52.799 597 88		5.54	5.60	−31.02	0.74	0.68	0.79	0.84	0.84	+ 5	−12	+ 7	+ 2	+ 9	+25	+ 9	− 5	+ 7	+21	0	0.78
95633	19 27 07.39	+19 25 29.0	10.38		G	291.780 793 13	+19.424 710 84		7.07	6.60	−24.47	0.99	1.13	1.72	1.26	1.70	+36	−18	−11	−12	− 2	+19	− 5	− 6	+27	+44	0	−1.85
95634 H	19 27 09.59	+16 26 27.6	9.00		G	291.789 951 54	+16.441 008 82	A	5.23	−0.47	−9.91	1.44	1.97	1.80	1.56	1.44	+15	−34	−12	+19	− 3	+ 7	− 9	+ 7	+12	+ 4	0	0.26
95635	19 27 11.80	−56 29 56.2	8.44	2	H	291.799 176 98	−56.498 944 06		3.13	−3.02	−10.28	0.78	0.71	1.21	1.04	1.04	− 3	− 7	−12	+31	−11	− 7	− 9	+ 9	− 3	+18	0	−0.48
95636	19 27 13.34	−42 35 50.3	10.29		H	291.805 569 87	−42.597 295 33		3.68	−28.65	−5.46	1.88	1.49	2.36	2.84	1.41	+24	−22	−53	+21	+16	−36	−17	−31	+24	−23	7	−1.03
95637	19 27 13.74	+50 50 56.5	9.16		H	291.807 237 50	+50.849 017 93		4.91	29.64	10.80	0.74	0.77	0.85	0.98	0.89	− 4	− 9	+ 8	+ 6	+ 5	−11	+ 7	− 8	+ 6	+11	1	−0.26
95638	19 27 14.11	+43 15 38.5	10.57		H	291.808 807 16	+43.260 699 78		8.44	14.21	179.70	1.16	1.07	1.31	1.18	1.45	+ 8	−23	− 3	+14	+ 9	− 1	+ 9	+17	+ 3	+ 9	0	0.05
95639	19 27 14.69	−36 06 02.6	9.07		H	291.811 204 21	−36.100 718 73		4.07	−12.64	−19.62	1.51	1.10	1.67	2.49	1.04	−10	+ 4	−27	+10	+ 8	−30	− 6	−34	+14	−36	0	1.58
95640	19 27 14.91	−72 10 27.6	9.46		G	291.812 118 04	−72.174 325 19		15.07	199.92	−268.86	0.79	0.97	1.36	0.86	1.24	−13	− 3	+ 5	+30	− 8	+ 2	−10	+10	+ 2	−19	0	1.53
95641	19 27 15.86	−34 32 48.5	10.56		G	291.816 066 99	−34.546 815 90		20.83	−71.65	−203.90	2.10	1.30	2.15	2.53	1.41	− 1	−38	−20	+29	+ 0	− 3	− 1	− 1	− 3	−13	0	0.70
95642	19 27 16.31	−51 27 42.8	8.60		H	291.817 960 74	−51.461 893 99		2.13	8.22	−7.63	0.97	0.86	1.18	1.25	0.85	+30	−25	−31	+14	+45	− 3	+33	− 4	+12	+ 9	0	1.90
95643	19 27 17.71	−48 30 40.6	7.90		H	291.823 802 31	−48.511 279 55		0.63	5.45	−4.88	1.01	0.87	1.36	1.54	0.91	+29	+13	−12	−33	+ 6	−46	−12	−62	− 6	+13	2	0.33
95644	19 27 18.11	−69 18 06.1	9.23		H	291.825 468 17	−69.301 685 17		22.94	−50.50	−7.42	0.67	0.93	1.53	0.84	1.32	−23	− 9	− 4	+34	+11	− 9	+ 4	−24	+ 5	−39	0	0.61
95645	19 27 18.47	−23 20 49.7	7.95		H	291.826 974 54	−23.347 148 33		4.54	−7.14	−20.15	0.93	0.74	1.25	1.20	0.66	+34	−29	−51	+ 2	−36	+52	−12	−13	− 8	+ 6	0	−1.94
95646 H	19 27 20.85	+20 40 08.0	8.12		H	291.836 883 53	+20.668 891 10	A	5.86	4.31	−6.07	1.42	1.73	2.34	1.64	2.31	+ 8	−17	−11	−17	− 1	+19	− 2	− 8	+18	+40	6	2.58
95647	19 27 20.97	−42 48 13.7	10.17		G	291.837 387 40	−42.803 818 97		2.34	−4.74	9.21	1.95	1.37	2.23	2.85	1.43	+ 3	−24	−26	+ 5	+13	−36	− 1	−27	+11	−21	0	0.46
95648	19 27 22.24	−40 56 10.5	8.93		H	291.842 653 03	−40.936 245 10		2.97	−7.81	2.71	1.62	1.03	1.64	2.47	1.20	− 8	−30	−24	+ 8	+ 8	−19	+ 2	−19	− 6	−35	3	0.90
95649	19 27 22.68	+13 59 18.5	9.58		G	291.844 498 89	+13.988 466 44	A	14.58	−0.99	−13.14	4.05	3.45	4.14	3.77	3.43	+20	+ 5	− 1	− 5	−26	+10	−30	−26	− 6	+ 7	1	0.17
95650	19 27 22.69	+30 25 26.0	8.41		H	291.844 537 91	+30.423 901 03		2.43	6.27	4.87	0.59	0.73	0.92	0.71	0.84	−16	− 8	− 8	+ 6	+13	− 1	+12	+ 8	+ 7	−21	0	−0.44
95651	19 27 22.83	−02 01 14.2	8.39		H	291.845 128 63	−02.020 606 82		0.51	0.81	−2.42	0.86	0.55	1.00	0.94	0.60	− 1	− 5	−13	−26	+ 0	+24	+ 4	−39	+22	+18	0	1.44
95652 T	19 27 23.55	+13 59 18.1	10.40		H	291.848 137 42	+13.988 365 98	S	15.12	15.72	54.76	13.92	11.82	9.78	8.68	8.19	+22	+13	+ 3	−10	−22	+14	−26	−26	− 8	+17	1	0.17
95653	19 27 24.41	+42 13 45.7	7.57		H	291.851 720 92	+42.229 358 52		3.38	10.62	−25.90	0.46	0.48	0.55	0.49	0.57	− 2	− 7	− 1	+ 8	+16	− 3	+15	+20	+ 1	+13	1	−2.07
95654	19 27 24.53	+38 09 19.4	9.28		H	291.852 187 51	+38.155 398 86		2.62	0.40	14.12	1.07	1.16	1.38	1.19	1.27	+ 0	− 8	+ 7	−27	+ 7	+ 5	+ 7	−29	− 2	+14	0	
95655	19 27 24.81	−26 11 57.7	9.30		H	291.853 362 14	−26.199 373 28		8.92	8.16	−51.80	1.31	0.94	1.50	1.49	0.92	+34	−37	−42	−10	− 3	− 7	−16	−37	+19	+ 2	0	2.16
95656	19 27 25.97	+52 19 13.8	5.73		H	291.858 210 62	+52.320 502 63		9.02	−13.16	−27.58	0.46	0.45	0.52	0.53	0.53	+ 3	−22	+ 2	+ 6	+ 6	+11	+ 4	−11	+23	+25	1	−1.33
95657	19 27 26.56	+18 17 45.2	6.84	2	G	291.860 684 17	+18.295 900 39		2.70	0.78	−5.47	0.53	0.51	0.78	0.55	0.57	+24	−18	−13	−21	−20	+14	−20	−14	+13	+ 4	1	0.86
95658	19 27 26.82	+11 05 10.4	9.71		H	291.861 744 14	+11.086 213 10		3.38	−1.14	−17.25	0.97	0.91	1.31	1.04	0.91	+45	+ 2	− 5	−15	−35	+13	−37	−42	− 6	+32	0	1.08
95659	19 27 30.54	+09 58 16.9	9.02		H	291.877 255 66	+09.971 354 93		−0.04	−0.69	−3.74	1.12	0.84	1.22	1.06	0.76	+ 6	−11	+ 8	−26	−27	− 3	−24	−46	−16	− 2	0	−1.02
95660	19 27 31.28	+24 10 52.2	8.07		H	291.880 328 24	+24.181 175 27		2.98	4.16	6.55	0.75	0.80	1.12	0.92	1.15	+12	− 1	−27	− 6	+ 2	+ 7	+ 4	+17	−15	+13	0	−1.23
95661	19 27 32.80	+49 15 23.4	8.15		G	291.886 680 58	+49.256 490 82		5.47	7.46	21.18	0.61	0.58	0.66	0.71	0.66	− 4	−11	− 4	+ 7	+10	−14	+10	+14	− 6	+ 2	1	−0.89
95662 H	19 27 33.04	−31 23 01.8	8.92		H	291.887 661 48	−31.383 842 37	B	14.25	−25.08	−66.86	4.24	3.01	2.89	3.48	1.97	− 7	−15	− 6	+ 1	−10	−12	− 8	−27	− 9	+16	0	−0.24
95663	19 27 33.26	+32 38 20.7	8.83		H	291.888 589 41	+32.639 096 90		0.30	−4.04	−0.69	0.61	0.67	0.86	0.73	0.85	− 2	− 5	−16	+23	− 4	− 5	− 5	+ 4	+10	− 1	1	2.04
95664	19 27 33.90	+14 16 57.0	6.31	2	T	291.891 266 83	+14.282 491 31		3.91	7.07	−4.29	0.54	0.50	0.79	0.61	0.56	+ 2	− 2	−20	+ 1	−19	+18	−17	−12	− 4	− 6	0	−1.27
95665	19 27 34.00	+24 33 03.1	7.97		G	291.891 659 76	+24.550 868 38		3.21	8.66	−5.25	0.66	0.75	1.08	0.84	1.06	−11	−13	−19	+13	+23	− 2	+29	− 2	−18	− 5	0	−1.18
95666	19 27 34.24	+37 07 04.6	8.52		H	291.892 647 05	+37.117 953 09		1.19	6.17	17.46	0.63	0.69	0.86	0.73	0.89	+ 6	− 5	−14	+ 5	+10	−20	+ 7	+11	+ 0	+20	0	0.90
95667	19 27 34.30	−40 46 42.8	8.98		H	291.892 930 63	−40.778 544 06		3.37	−10.51	−26.07	1.71	1.02	1.74	2.03	1.10	+ 0	−50	−27	+11	+10	− 5	+ 3	−14	+ 1	−27	0	1.13
95668	19 27 34.80	−20 21 48.1	8.60		H	291.895 015 57	−20.363 374 28		1.78	−3.50	−2.05	0.98	0.62	1.08	1.04	0.71	+36	−24	−12	+13	+14	+ 5	+11	− 7	+16	+35	0	1.18
95669	19 27 35.07	−78 13 15.9	8.63		H	291.896 121 74	−78.221 088 02		15.18	6.68	15.94	0.64	0.77	0.94	0.78	0.92	− 1	−22	+ 2	+13	+ 4	+14	+ 0	− 1	+13	+ 0	0	0.17
95670	19 27 35.08	−16 27 10.7	8.49		G	291.896 168 41	−16.452 967 36		7.90	−26.46	−67.43	0.99	0.65	1.10	1.13	0.79	+42	−27	− 9	+ 4	+ 0	+20	− 2	−15	− 6	+17	0	0.80
95671	19 27 35.35	−52 35 54.0	8.01		H	291.897 289 49	−52.598 342 72		8.42	18.95	−48.74	0.78	0.69	0.94	1.04	0.80	+36	−28	− 4	+ 0	+17	+ 1	+ 9	− 3	+11	+25	0	0.80
95672	19 27 36.32	+02 03 21.0	11.03	3	H																							
95673	19 27 36.40	+37 56 28.3	6.30	2	H	291.901 651 50	+37.941 207 74		1.58	−0.90	−4.46	0.42	0.46	0.54	0.48	0.53	− 5	+ 6	−12	−10	+ 5	− 2	+ 7	−20	+10	+18	3	−0.32
95674	19 27 39.21	+33 00 31.1	8.40		H	291.913 388 82	+33.008 632 44		2.78	−3.28	2.89	0.65	0.69	0.89	0.77	0.87	+ 1	− 8	−15	+30	+ 1	− 6	+ 1	+22	− 5	− 1	1	0.75
95675 H	19 27 39.25	−59 54 28.1	8.26		H	291.913 550 56	−59.907 795 26	*	0.57	2.13	−9.91	0.74	0.64	1.05	0.82	0.78	− 5	−22	− 1	+16	−20	− 6	−16	− 8	+ 1	+17	0	−0.22
95676	19 27 39.60	−45 52 31.3	9.53	3	H	291.914 998 88	−45.875 348 51	*	−5.39	5.04	−4.35	6.03	2.36	6.58	5.71	4.88	+26	−58	−33	−22	+53	−20	+33	−65	+19	−51	9	1.23
95677	19 27 40.09	−18 21 02.7	7.19		H	291.917 040 45	−18.350 750 92		19.06	−0.27	−34.83	0.79	0.46	0.94	1.01	0.66	+21	−30	− 1	− 0	+24	+35	+23	−21	+ 3	+ 7	0	1.85
95678	19 27 40.52	−08 22 15.3	8.40		H	291.918 843 97	−08.370 913 83		2.90	6.71	2.82	1.07	0.65	1.17	1.05	0.72	+32	−30	−17	−13	+14	+17	+13	−12	+20	+41	0	0.67
95679 H	19 27 40.62	+36 31 44.4	7.55		H	291.919 239 39	+36.528 998 36	A	1.95	6.56	5.59	1.13	1.29	1.30	1.14	1.52	+ 0	− 5	− 4	+ 8	+10	+ 5	+ 9	+10	− 1	+23	6	1.72
95680	19 27 41.08	+04 42 34.9	6.73		H	291.921 171 07	+04.709 695 74		4.44	17.60	8.88	0.71	0.50	0.87	0.86	0.57	+ 6	−23	+12	− 2	−11	− 6	−11	−23	+ 7	+ 6	0	−0.68
95681	19 27 41.27	+41 39 14.0	8.72		H	291.921 956 35	+41.653 880 79		1.37	1.23	−0.47	0.60	0.62	0.71	0.62	0.73	− 7	− 4	+ 0	− 7	+22	− 4	+23	+15	− 9	+ 5	0	−1.01
95682	19 27 42.15	+12 29 16.3	7.39		H	291.925 640 73	+12.487 864 79		3.83	28.84	−18.25	0.64	0.57	0.98	0.70	0.62	+16	−13	− 4	+10	−29	+13	−31	−20	− 3	+ 6	0	0.17
95683	19 27 42.49	+06 11 30.6	8.76		H	291.927 056 52	+06.191 839 65		0.86	−0.95	−2.19	1.05	0.65	1.21	1.58	1.09	−14	− 7	−15	−41	+19	−12	+21	−33	+15	−50	4	−0.25
95684	19 27 43.27	−40 05 49.0	7.15		G	291.930 288 58	−40.096 935 28		14.74	34.54	−115.07	0.96	0.60	0.93	1.19	0.63	−12	−36	− 9	+36	−16	+ 6	−10	− 3	−13	+ 2	0	1.89
95685	19 27 44.18	+27 06 51.7	8.43	1	H	291.934 096 53	+27.114 359 28		3.15	5.09	−16.51	0.51	0.69	0.99	0.57	0.83	−22	+ 0	−10	+22	+ 1	− 1	+ 2	+ 7	− 1	−24	1	1.57
95686	19 27 44.38	−38 48 11.4	9.60		H	291.934 913 07	−38.803 173 59		0.35	3.50	2.10	1.75	1.23	1.81	2.03	1.39	−15	− 9	−11	+ 4	+18	−13	+13	− 1	+25	−11	0	1.18
95687	19 27 45.50	+47 32 12.6	7.67		H	291.939 572 89	+47.536 843 87		3.76	−15.34	36.16	0.63	0.53	0.65	0.69	0.63	+ 0	+ 1	− 4	− 8	+ 4	− 6	+ 1	+ 7	− 6	+15	6	−0.05
95688	19 27 46.99	+65 16 26.7	10.21		H	291.945 808 48	+65.274 077 58		2.86	4.08	11.45	0.91	0.99	1.05	0.85	1.14	+12	+ 5	+24	+ 2	+16	+ 6	+19	+ 3	+ 1	+26	0	1.01
95689	19 27 47.92	+03 45 57.4	8.68		H	291.949 671 28	+03.765 942 31		1.72	7.03	0.33	0.93	0.65	1.09	1.16	0.80	+15	−25	− 4	− 5	− 3	+ 3	− 6	−24	+10	+11	0	−1.30
95690	19 27 48.12	−54 19 31.1	5.70		G	291.950 511 31	−54.325 297 23		5.63	−5.70	10.26	0.55	0.48	0.71	0.78	0.55	+25	− 3	−14	+ 0	+ 5	− 8	+ 0	−30	− 8	+18	0	−1.27
95691	19 27 48.97	+50 44 13.2	8.61	2	H	291.954 028 56	+50.737 006 20		3.37	−14.38	−11.72	0.66	0.69	0.75	0.86	0.79	− 5	+ 1	+15	+ 1	+ 6	+ 0	+ 6	− 3	+10	+ 5	1	0.40
95692	19 27 49.37	+48 10 36.2	8.31		H	291.955 707 24	+48.176 731 90		−0.18	3.79	9.25	0.62	0.52	0.64	0.67	0.59	− 2	− 3	+ 2	− 2	+12	−14	+13	+ 9	− 5	+ 5	0	0.76
95693	19 27 49.69	+72 28 39.3	7.82		H	291.957 039 32	+72.477 580 91		4.74	50.85	55.94	0.57	0.49	0.57	0.56	0.57	− 3	−19	− 2	−37	+ 1	− 4	+ 1	− 2	+ 2	− 5	1	1.56
95694	19 27 51.18	+14 37 09.2	9.97		G	291.963 257 50	+14.619 232 45		5.82	−5.41	61.43	1.08	0.96	1.71	1.51	1.39	+29	−16	− 8	+ 9	−23	+11	−24	+ 4	− 3	+15	0	−0.66
95695 H	19 27 51.62	−29 29 54.7	7.87		H	291.965 070 21	−29.498 517 19	A	5.98	3.58	−9.72	3.99	2.40	3.08	3.12	2.32	−17	−15	−18	−13	−10	− 8	− 5	−34	− 4	+31	2	1.36
95696	19 27 51.72	+08 58 10.1	8.06		H	291.965 482 12	+08.969 461 80		14.85	96.29	76.93	1.14	0.95	1.25	1.28	0.95	−10	−44	+ 0	−35	+ 7	+40	+ 7	−33	− 1	−14	0	−0.57
95697	19 27 51.81	+02 10 27.5	7.24		H	291.965 893 36	+02.174 317 44		3.75	14.19	−8.83

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags		AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61		62	63	64	65	66	67	68-70
95601	12.269	0.162	10.429	0.051		0.637	0.400	G	1.75	0.12	S	10.3679	0.0048	0.034	98		10.31	10.42		R			1 S							G
95602	10.348	0.035	9.797	0.033		0.666	0.015	G	0.73	0.01	H	9.8132	0.0023	0.019	96		9.75	9.86		D			1							G
95603	8.807	0.012	6.845	0.005		1.663	0.011	T	2.02	0.04	O	6.7266	0.0028	0.028	122		6.68	6.76		U 2			1							S
95604	7.859	0.012	7.760	0.014		0.089	0.017	T	0.10	0.02	L	7.7885	0.0024	0.011	51		7.77	7.81		C	19267−2619	I 1	1							S
95605	7.386	0.006	7.419	0.007		−0.026	0.008	T	0.00	0.01	L	7.4181	0.0013	0.010	118		7.40	7.44					1							S
95606	9.212	0.020	8.581	0.018		0.582	0.020	T	0.65	0.02	L	8.5985	0.0012	0.009	51		8.58	8.61		D			1							
95607	8.753	0.008	8.335	0.008		0.395	0.009	G	0.46	0.01	H	8.3835	0.0015	0.018	203		8.35	8.41					1							S
95608	7.486	0.006	7.437	0.007		0.050	0.009	T	0.06	0.01	L	7.4531	0.0014	0.012	97		7.44	7.47					1							S
95609	9.820	0.019	9.348	0.019		0.529	0.015	G	0.60	0.02	H	9.3745	0.0024	0.029	156		9.32	9.42					1							
95610	8.153	0.009	7.885	0.012		0.255	0.014	T	0.29	0.02	L	7.9402	0.0012	0.011	105		7.92	7.96		C			1							S
95611	7.997	0.011	7.455	0.011		0.508	0.014	T	0.58	0.01	L	7.4916	0.0015	0.016	103		7.47	7.68	2.47	P 1 A	19268+5009	I 1	1 S							S P
95612	7.310	0.009	7.280	0.009	*	0.028	0.011	T	0.04	0.01	L *	7.3733	0.0014	0.013	106	*	7.35	7.40		D	19269+2108	I 1	2 C A		AB	148	6.347	0.003	0.12	0.01	S
95613	10.277	0.038	9.030	0.022		1.064	0.034	T	1.03	0.03	L	9.0724	0.0022	0.015	55		9.05	9.12		C			1							
95614	9.478	0.017	8.158	0.010		1.121	0.015	T	1.08	0.02	L	8.2057	0.0017	0.017	118		8.18	8.23					1							S
95615	10.433	0.043	9.927	0.042	*	0.486	0.046	T	0.56	0.05	L *	10.0240	0.0036	0.022	59	*	9.98	10.07		D	19269−3900	I 1	2 C A		AB	314	0.317	0.007	0.54	0.11	G
95616	7.721	0.007	7.750	0.008		−0.022	0.010	T	0.00	0.01	L	7.7451	0.0010	0.010	128		7.73	7.76		C			1							S
95617	9.191	0.012	8.963	0.014	*	0.218	0.017	T	0.24	0.02	L *	9.0023	0.0012	0.019	129	*	8.96	9.03		D	19269+1818	H 1	2 C B		AB	115	0.260	0.056	3.04	0.41	
95618	9.477	0.018	8.874	0.017		0.562	0.022	T	0.64	0.02	L	8.9359	0.0015	0.014	91		8.90	8.97		C			1							
95619	5.652	0.003	5.650	0.005		−0.014	0.003	G	0.01	0.00	H	5.6598	0.0009	0.006	51		5.65	5.68		C			1							S
95620	7.240	0.005	7.108	0.007	*	0.127	0.008	T	0.14	0.01	L *	7.1114	0.0009	0.009	149	*	7.10	7.13		D	19269+1204	I 1	2 C A		AB	199	0.653	0.003	1.28	0.01	S
95621	7.871	0.006	7.871	0.009		0.005	0.010	T	0.03	0.01	L	7.8830	0.0020	0.018	128		7.85	7.91		U			1							S
95622	8.978	0.013	8.083	0.010		0.772	0.015	G	0.81	0.01	H	8.1387	0.0011	0.013	118		8.12	8.16		C			1							S
95623	7.959	0.011	7.823	0.014		0.131	0.017	T	0.15	0.02	L	7.8540	0.0011	0.010	53		7.84	7.87		C			1							
95624	7.287	0.006	7.178	0.007		0.158	0.006	G	0.17	0.01	H	7.1958	0.0011	0.010	110		7.18	7.22			19270+2106	I 1	1							S
95625	7.989	0.012	7.635	0.012	*	0.378	0.015	G	0.44	0.02	H *	7.7830	0.0017	0.015	108	*	7.76	7.80		D	19270+7321	I 1	2 C A		AB	250	1.941	0.003	0.02	0.01	S
95626	8.794	0.008	8.455	0.008		0.322	0.011	T	0.37	0.01	L	8.4852	0.0016	0.022	215		8.45	8.53			19270−7146	I 1	1 G							S
95627	8.185	0.007	8.122	0.008		0.063	0.010	T	0.07	0.01	L	8.1274	0.0012	0.012	135		8.11	8.15					1							
95628	11.828	0.123	10.836	0.076		0.868	0.108	T	0.88	0.08	L	10.9317	0.0048	0.042	105		10.85	11.00					1 X S							G
95629	9.650	0.019	7.901	0.009		1.458	0.017	T	1.46	0.03	L	7.8987	0.0015	0.014	133		7.88	7.92		C			1							
95630	9.721	0.018	8.551	0.012		1.004	0.017	T	0.98	0.01	L	8.6000	0.0022	0.018	114		8.58	8.63					1							
95631	10.073	0.030	9.167	0.022		0.790	0.029	T	0.82	0.02	L	9.2388	0.0027	0.021	113		9.21	9.28					1							
95632	8.930	0.013	8.671	0.014		0.296	0.015	G	0.34	0.02	H	8.7212	0.0017	0.015	92		8.70	8.76		C			1							
95633	10.953	0.043	10.454	0.044		0.558	0.015	G	0.63	0.01	H	10.4973	0.0026	0.027	117		10.44	10.55		C			1							G
95634	9.178	0.011	9.074	0.014	*	0.130	0.015	G	0.14	0.01	H *	9.0820	0.0018	0.015	127	*	9.06	9.12		D	19272+1626	H 1	2 C A		AB	179	0.372	0.009	2.05	0.08	
95635	10.499	0.037	8.621	0.014		1.593	0.033	T	1.76	0.12	O	8.5423	0.0102	0.058	107		8.47	8.63		U 2			1							
95636	10.764	0.054	10.372	0.063		0.550	0.020	G	0.62	0.02	H	10.4120	0.0031	0.033	63		10.35	10.46		D			1							G
95637	9.629	0.020	9.202	0.020		0.403	0.026	T	0.47	0.03	L	9.2550	0.0029	0.021	106		9.21	9.28					1							
95638	11.362	0.076	10.627	0.061		0.659	0.074	T	0.72	0.06	L	10.7029	0.0038	0.035	117		10.64	10.76					1							G
95639	11.514	0.180	9.379	0.043		1.805	0.152	T	1.95	0.19	K	9.1570	0.0037	0.036	37		9.10	9.23					1							
95640	10.280	0.021	9.572	0.018		0.689	0.003	G	0.75	0.00	H	9.5895	0.0029	0.028	182		9.54	9.63					1 S							
95641	11.767	0.145	10.760	0.090		0.935	0.003	G	0.98	0.00	I	10.6993	0.0048	0.030	58		10.63	10.76		C			1							G
95642	9.897	0.029	8.674	0.017		1.045	0.026	T	1.02	0.02	L	8.7664	0.0023	0.015	69		8.74	8.79		C			1							
95643	9.402	0.019	8.028	0.011		1.163	0.017	T	1.12	0.01	L	8.0694	0.0016	0.015	88		8.04	8.09		C			1							
95644	10.278	0.018	9.343	0.014		0.812	0.018	T	0.84	0.01	L	9.3700	0.0021	0.027	218		9.33	9.42					1 S							
95645	9.246	0.020	8.057	0.013		1.018	0.019	T	0.99	0.01	L	8.1198	0.0014	0.010	61		8.10	8.14		C			1							
95646	8.409	0.016	8.083	0.018	*	0.280	0.400	G	0.22	0.03	L *	8.1849	0.0016	0.015	108	−	8.16	8.21		D	19273+2040	I 1	3 C A							G
95647	10.937	0.064	10.327	0.057		0.592	0.020	G	0.66	0.02	H	10.3314	0.0043	0.027	56		10.25	10.37					1							G
95648	10.414	0.050	9.118	0.029		1.102	0.045	T	1.06	0.05	L	9.1021	0.0031	0.020	51		9.07	9.13		C			1 S							
95649	10.070	0.022	9.541	0.021	A	0.556	0.015	G	0.63	0.01	H	9.6583	0.0190	0.084	109	A	9.59	9.86		D	19274+1359	I 2	1 C P B							D
95650	8.306	0.008	8.397	0.010		−0.078	0.012	T	−0.06	0.01	L	8.3900	0.0016	0.017	153		8.36	8.42		C			1							
95651	8.486	0.009	8.391	0.011		0.093	0.013	T	0.11	0.01	L	8.4236	0.0016	0.016	125		8.40	8.47					1							
95652	10.811	0.052	10.308	0.053	S	0.473	0.067	T	0.54	0.07	L	10.4939	0.0383			S				D	19274+1359	I 2	1 C I B							
95653	7.611	0.007	7.575	0.009		0.038	0.011	T	0.05	0.01	L	7.5856	0.0010	0.011	150		7.56	7.60					1							S
95654	9.804	0.024	9.314	0.025		0.461	0.032	T	0.53	0.03	L	9.3851	0.0030	0.025	113		9.35	9.42					1 X S							
95655	9.982	0.038	9.291	0.032		0.626	0.037	T	0.69	0.03	L	9.4299	0.0031	0.012	49		9.41	9.46					1							
95656	5.740	0.003	5.723	0.003		−0.002	0.002	G	0.02	0.00	H	5.7339	0.0008	0.005	106		5.72	5.74					1							S
95657	8.200	0.008	7.023	0.006		1.009	0.008	T	1.61	0.03	C	6.9524	0.0027	0.034	132		6.89	7.04		U 2			1							S
95658	10.073	0.029	9.726	0.032		0.329	0.040	T	0.38	0.05	L	9.7902	0.0021	0.018	110		9.77	9.84					1							G
95659	9.136	0.016	8.999	0.020		0.132	0.024	T	0.15	0.03	L	9.0704	0.0020	0.019	82		9.04	9.11		C			1							
95660	8.555	0.011	8.117	0.011		0.433	0.015	G	0.50	0.02	H	8.1680	0.0017	0.017	104		8.14	8.20					1							
95661	8.542	0.010	8.171	0.010		0.327	0.015	G	0.38	0.02	H	8.2256	0.0016	0.016	114		8.20	8.25					1							S
95662	9.861	0.034	9.094	0.027	*	0.683	0.033	T	0.74	0.03	L *	9.0530	0.0033	0.021	59	*	9.02	9.10		D	19275−3123	I 1	2 C A		BA	263	1.295	0.006	0.03	0.02	
95663	8.880	0.011	8.846	0.014		0.036	0.016	T	0.05	0.01	L	8.8521	0.0016	0.017	143		8.82	8.88					1 S							
95664	6.220	0.004	6.300	0.004		−0.068	0.005	T	−0.05	0.01	L	6.3008	0.0040	0.025	93		6.25	6.33		U 2 C			1							S
95665	10.241	0.029	8.222	0.011		1.710	0.015	G	1.72	0.09	H	8.0722	0.0020	0.018	133		8.05	8.10					1							
95666	10.381	0.032	8.648	0.014		1.446	0.028	T	1.44	0.04	L	8.6550	0.0016	0.016	115		8.62	8.67		C			1							
95667	9.611	0.033	9.014	0.030		0.557	0.033	T	0.63	0.03	L	9.1037	0.0023	0.016	49		9.08	9.13		C			1							
95668	8.997	0.014	8.646	0.015		0.341	0.018	T	0.40	0.02	L	8.6838	0.0019	0.015	86		8.66	8.71		C			1							
95669	9.262	0.013	8.688	0.012		0.558	0.015	G	0.63	0.01	H	8.7521	0.0017	0.021	148		8.72	8.79					1							
95670	9.038	0.014	8.582	0.014		0.510	0.015	G	0.58	0.02	H	8.5906	0.0019	0.015	98		8.57	8.62		C			1							
95671	8.309	0.010	8.032	0.011		0.254	0.002	G	0.29	0.00	H	8.0797	0.0012	0.013	74		8.06	8.10		C			1							S
95672						1.500	0.510	G	4.27	0.96	Q	10.3350	0.1430	0.741	77		8.95	10.85	281.00	P 1 B			S							D Y
95673	6.141	0.004	6.281	0.004		−0.120	0.005	T	−0.11	0.01	L	6.2632	0.0028	0.024	119		6.22	6.30		U 2			1							S
95674	10.146	0.023	8.530	0.011		1.353	0.020	T	1.32	0.02	L	8.5521	0.0020	0.018	130		8.51	8.58					1							
95675	8.376	0.010	8.265	0.012	*	0.100	0.015	T	0.11	0.02	L *	8.2992	0.0020	0.015	99	*	8.27	8.32			19277−5954	H 1	2 C S B		AB	123	0.138	0.050	1.88	1.13	S
95676						1.500	0.510	G	1.93	0.56	K	9.6203	0.0100	1.033	83		9.57	12.60	227.70	P 1 A			1 V							D
95677	7.745	0.009	7.244	0.007		0.482	0.009	T	0.55	0.01	L	7.3011	0.0009	0.009	129		7.29	7.31		C			1 G							S
95678	10.565	0.041	8.592	0.015		1.636	0.035	T	1.66	0.04	L	8.5103	0.0015	0.010	85		8.49	8.54		C			1							
95679	7.472	0.008	7.513	0.011	*	−0.033	0.013	T	−0.01	0.01	L *	7.5453	0.0010	0.010	132	*	7.53	7.57		D	19277+3632	I 1	2 C A		AB	63	6.869	0.002	0.21	0.01	S
95680	7.151	0.005	6.762	0.006		0.368	0.007	T	0.43	0.01	L	6.8133	0.0009	0.009	87		6.80	6.83		C			1							S
95681	8.690	0.010	8.690	0.013		−0.020	0.015	G	0.00	0.01	H	8.7180	0.0013	0.013	137		8.69	8.75					1							
95682	9.311	0.015	7.546	0.007		1.471	0.013	T	1.48	0.02	L	7.5185	0.0015	0.012	119		7.50	7.54					1							
95683	8.979	0.016	8.821	0.020		0.152	0.024	T	0.17	0.03	L	8.8152	0.0021	0.013	76		8.79	8.84		C			1							
95684	7.837	0.013	7.212	0.009		0.574	0.007	G	0.65	0.01	H	7.2741	0.0012	0.008	57		7.25	7.29		C			1							S
95685	8.741	0.008	8.467	0.009		0.261	0.011	T	0.29	0.01	L	8.4981	0.0017	0.018	196		8.46	8.53		M			1							
95686	10.939	0.061	9.710	0.036		1.050	0.055	T	1.02	0.04	L	9.7670	0.0043	0.029	58		9.70	9.80					1							
95687	8.980	0.012	7.788	0.008		1.021	0.011	T	0.99	0.01	L	7.8345	0.0011	0.010	111		7.82	7.85					1							
95688	10.788	0.047	10.327	0.049		0.435	0.062	T	0.50	0.07	L	10.3041	0.0024	0.032	101		10.26	10.35					1							G
95689	8.903	0.013	8.715	0.016		0.180	0.019	T	0.20	0.02	L	8.7421	0.0015	0.016	101		8.72	8.78		C			1							
95690	7.541	0.007	5.852	0.004		1.406	0.005	G	1.38	0.01	H	5.8471	0.0010	0.007	89		5.84	5.86			19278−5420	I 1	1							S
95691	9.234	0.015	8.661	0.014		0.536	0.018	T	0.61	0.02	L	8.7247	0.0031	0.028	108		8.68	8.77	1.00	P 1 A			1							
95692	8.119	0.009	8.294	0.012		−0.153	0.013	T	−0.15	0.02	L	8.2591	0.0018	0.013	112		8.24	8.29					1							
95693	9.215	0.015	7.942	0.010		1.084	0.014	T	1.05	0.01	L	7.9851	0.0009	0.012	109		7.97	8.01		D	19278+7228	I 1	1							S
95694	10.595	0.033	10.086	0.033		0.574	0.015	G	0.65	0.01	H	10.0740	0.0026	0.029	140		10.03	10.12					1							G
95695			8.569	0.016	*	1.100	0.495	G	0.84	0.07	B *	8.0267	0.0028	0.018	55	*	8.01	8.07		R	19279−2930	I 1	2 C A		AB	127	1.251	0.015	0.31	0.02	S
95696	8.809	0.012	8.141	0.011		0.606	0.015	G	0.68	0.01	H	8.1939	0.0012	0.013	90		8.18	8.22		C			1 G							
95697	9.302	0.016	7.433	0.007		1.553	0.014	T	1.57	0.01	L	7.3585	0.0018	0.013	99		7.34	7.38			19278+0210	I 1	1							
95698	9.104	0.012	7.530	0.007		1.320	0.011	T	1.28	0.01	L	7.5304	0.0014	0.011	128		7.51	7.55		C			1							S
95699	7.674	0.006	7.385	0.007		0.290	0.015	G	0.33	0.02	H	7.4329	0.0011	0.010	124		7.41	7.45					1							S
95700	6.828	0.005	6.871	0.005		−0.033	0.002	G	−0.01	0.00	H	6.8782	0.0013	0.011	104		6.86	6.89					1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	α*	δ	π	$\mu_{\alpha*}$	α*	δ	π	$\mu_{\alpha*}$	α*	δ	π	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		α*	α*	δ	α*	δ	π	α*	δ	π	$\mu_{\alpha*}$	π	π	$\mu_{\alpha*}$	μ_δ	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28					29	30
95701	19 27 54.33	−42 33 37.2	7.82		H	291.976 367 99	−42.560 333 80		6.04	4.37	−18.00	1.20	0.84	1.29	1.74	0.79	−24	+ 0	−35	+ 5	+10	−30	− 2	−25	+11	−37					0	−1.15
95702	19 27 56.09	+24 20 50.8	11.00	3	H	291.983 704 82	+24.347 440 18		5.89	−41.88	−36.79	1.26	1.52	2.11	1.67	1.94	− 5	+ 0	−19	+11	+12	−18	+ 9	+ 3	− 1	− 3					0	2.03
95703	19 27 57.18	+42 46 34.5	7.88		H	291.988 263 36	+42.776 260 62		10.39	71.39	154.75	0.52	0.56	0.63	0.52	0.69	− 2	− 3	− 1	+ 7	+ 7	− 6	+ 6	+30	− 3	+10					2	−1.92
95704	19 28 00.32	−72 25 05.1	11.65		H	292.001 336 46	−72.418 078 36	B	−11.74	14.03	−57.38	36.32	40.33	32.24	23.94	33.84	−14	− 5	+ 7	+27	− 3	+ 2	− 6	− 2	− 8	−26					0	−0.10
95705	19 28 00.98	+21 45 14.8	8.64		H	292.004 071 57	+21.754 100 45		2.68	1.73	−9.41	0.73	0.83	1.15	0.98	1.22	+10	+ 6	−21	+11	+ 4	+18	+ 9	+10	+ 1	+18					0	1.43
95706	19 28 01.86	−55 04 53.8	8.92		H	292.007 752 12	−55.081 605 35		2.22	5.60	5.44	0.91	0.76	1.24	1.27	1.07	+ 4	−11	− 1	− 1	+17	+ 6	+21	−16	− 9	+23					0	0.18
95707	19 28 02.76	−01 20 18.8	8.31		H	292.011 499 46	−01.338 547 34		3.45	2.10	−1.45	0.88	0.52	1.05	1.04	0.58	− 2	−23	− 8	−10	+ 4	+ 9	+ 0	−35	+27	+ 8					0	1.38
95708	19 28 03.02	−09 25 31.6	8.49		H	292.012 598 93	−09.425 447 11		4.83	4.91	−0.92	1.01	0.65	1.14	1.10	0.63	+20	−24	−24	−18	+14	+ 1	+ 5	−38	+22	+ 9					0	0.12
95709	19 28 03.09	−22 52 27.7	8.39		H	292.012 893 61	−22.874 365 37		2.94	16.01	0.02	0.96	0.79	1.26	1.20	0.72	+40	−34	−52	− 5	−33	+46	−11	−13	− 7	+ 9					0	0.18
95710	19 28 03.20	+05 20 49.3	8.67		H	292.013 331 58	+05.347 032 61		2.47	2.15	−9.54	1.04	0.74	1.27	1.50	0.98	+12	− 2	−13	+11	−21	+17	−25	−11	− 2	−22					0	0.26
95711	19 28 03.29	−19 20 34.1	7.84		H	292.013 721 88	−19.342 806 00		2.94	−7.29	−6.82	0.94	0.53	1.06	1.15	0.68	+33	−15	+ 7	− 3	+20	+13	+15	−14	+ 4	− 1					0	−0.22
95712	19 28 03.62	−72 25 07.2	9.18		H	292.015 063 61	−72.418 664 09	A	6.33	1.70	−57.07	2.12	2.42	2.72	2.03	2.97	−19	− 1	+ 8	+24	− 8	+ 3	−11	+10	− 2	−32					0	−0.10
95713	19 28 05.26	−18 21 33.4	6.73		H	292.021 913 11	−18.359 285 01		1.76	4.80	−9.38	0.75	0.45	0.84	0.81	0.49	+25	−27	− 3	+ 3	+10	+14	+ 7	−17	− 1	+ 9					0	−0.14
95714	19 28 05.55	−40 50 04.8	8.37	2	H	292.023 110 75	−40.834 676 48		4.16	28.04	−16.86	1.37	0.88	1.39	1.77	0.94	− 4	−40	−11	+ 5	− 4	−11	+ 0	−26	−12	−18					0	0.89
95715	19 28 05.77	−00 25 07.8	7.63		H	292.024 049 08	−00.418 846 92		16.30	0.47	37.13	0.81	0.44	0.96	0.91	0.57	−14	−42	+ 2	−22	+ 8	+27	+ 0	−25	+26	+24					0	1.65
95716	19 28 06.19	+11 47 00.8	8.65	2	H	292.025 795 24	+11.783 562 04		−0.09	4.54	−1.65	0.74	0.67	1.15	0.86	0.74	+26	− 6	−23	+29	−39	+21	−40	−15	− 8	+12					0	0.79
95717	19 28 06.29	+17 50 48.4	6.89		H	292.026 188 92	+17.846 774 01		13.23	42.10	−34.94	0.52	0.50	0.81	0.71	0.70	+13	−24	−15	+ 3	− 8	+27	−12	− 2	+14	− 5					0	−1.01
95718	19 28 06.52	−69 37 55.3	6.72		H	292.027 186 57	−69.632 039 53		18.19	−54.09	76.18	0.32	0.49	0.77	0.40	0.65	−24	− 9	− 1	+25	+ 9	− 7	+ 5	−32	+ 2	−32					1	−0.20
95719	19 28 09.91	+54 46 47.2	7.44		H	292.041 287 55	+54.779 773 12		2.61	1.06	4.33	0.58	0.50	0.59	0.67	0.52	+ 2	−12	+11	+15	− 1	−19	+ 4	− 5	− 3	+19					1	1.23
95720	19 28 11.01	−73 05 25.6	7.05	1	H	292.045 887 56	−73.090 442 64		12.87	1.09	−78.75	0.45	0.54	0.69	0.55	1.08	−15	− 2	+ 2	+18	−18	− 2	−14	+15	+11	−46					1	0.12
95721	19 28 12.09	+18 55 02.9	7.64		G	292.050 381 77	+18.917 479 25		11.15	−11.21	−25.39	0.59	0.65	0.91	0.65	0.90	+32	−14	− 9	−25	−16	+ 7	−16	− 9	+ 0	+27					0	1.15
95722	H 19 28 12.26	−12 08 40.6	7.57		G	292.051 085 95	−12.144 610 06	A	26.29	68.90	−87.46	3.05	2.14	2.19	2.95	1.82	+32	− 9	− 7	−11	−13	+ 3	−20	−33	+ 2	− 8					2	0.59
95723	19 28 12.38	+13 59 55.6	11.07		H																											
95724	19 28 12.92	−09 32 15.7	8.38		G	292.053 834 72	−09.537 686 15	A	4.62	4.84	−27.57	4.04	2.43	3.11	4.11	2.25	+23	−24	−20	−24	+ 0	+ 5	− 4	−41	+14	+20					19	2.22
95725	19 28 13.05	+47 01 34.7	7.76		H	292.054 381 46	+47.026 309 24		3.93	8.31	23.45	0.62	0.52	0.65	0.72	0.61	+13	−20	− 2	+ 4	+ 4	− 5	+ 1	+ 6	+ 9	+27					1	−0.32
95726	19 28 13.57	−09 32 22.2	8.54		H	292.056 552 12	−09.539 496 23	B	6.62	6.76	−29.25	7.05	4.26	3.66	5.18	2.90	+32	−26	−22	−10	+ 8	+ 4	+ 1	−28	+13	+16					19	2.22
95727	19 28 13.77	+14 00 05.5	9.00		G	292.057 368 33	+14.001 522 37		24.85	236.53	28.99	1.06	0.94	1.55	1.18	1.12	+14	+10	− 7	+ 1	−26	+25	−27	−27	− 9	+16					2	−1.53
95728	19 28 13.86	+29 27 01.2	6.57		H	292.057 759 46	+29.450 330 69		6.94	−2.58	−23.25	0.39	0.49	0.65	0.46	0.59	−16	− 2	− 9	+29	+ 1	−21	− 1	+ 7	+ 8	−21					1	0.74
95729	19 28 14.43	+27 55 17.3	8.29		H	292.060 109 00	+27.921 476 31		2.58	1.72	−2.35	0.50	0.62	0.86	0.60	0.76	−18	− 6	+ 1	+20	+ 0	− 5	+ 0	− 3	+ 7	−16					0	0.19
95730	H 19 28 15.43	+12 32 09.6	9.17		G	292.064 280 45	+12.536 000 21	A	36.33	−52.85	−39.76	1.88	1.63	2.45	1.90	1.57	+26	− 3	+ 0	+10	−26	+11	−30	−24	− 5	+13					2	0.85
95731	19 28 20.40	−35 08 00.1	8.66		H	292.085 014 31	−35.133 369 89		12.32	−18.13	−166.96	1.22	0.91	1.40	1.44	0.91	+18	−27	−30	+10	− 9	−15	−16	−26	+ 6	+ 0					0	1.57
95732	19 28 20.80	+02 55 48.2	5.84		H	292.086 653 05	+02.930 067 20		3.18	2.66	−15.24	0.69	0.46	0.81	0.89	0.49	−11	−12	+ 3	− 3	− 9	+11	−12	−37	− 5	−30					0	−0.48
95733	19 28 21.01	+39 04 50.6	11.02		H	292.087 560 72	+39.080 714 18		9.30	−26.78	−180.66	1.31	1.20	1.60	1.60	1.31	+ 8	+ 4	− 2	+31	+13	−17	+15	− 8	− 2	+17					0	1.35
95734	H 19 28 21.64	−43 53 04.7	7.51		H	292.090 160 17	−43.884 643 37	A	17.07	−111.75	−94.68	1.59	1.20	1.62	2.29	1.07	+27	−12	−44	+27	+ 9	−45	−27	−39	+24	−18					3	0.99
95735	19 28 22.12	−29 23 13.1	8.43		H	292.092 151 82	−29.386 979 42		5.75	7.45	3.37	1.25	0.88	1.39	1.23	0.74	+19	−34	−26	−25	+ 0	− 2	+ 1	−45	−10	+ 3					0	−0.28
95736	19 28 22.24	−38 22 15.0	9.17		H	292.092 659 36	−38.370 836 21		3.70	−23.54	−30.03	1.50	0.97	1.52	1.91	0.97	+ 6	−37	−23	+28	+ 3	− 7	− 2	−11	− 2	−15					0	−0.11
95737	19 28 22.51	+53 58 13.1	7.96		H	292.093 799 55	+53.970 312 68		3.86	17.87	8.24	0.62	0.57	0.66	0.68	0.64	+10	−12	+ 6	− 9	+ 2	+16	+ 0	−14	+20	+31					0	1.62
95738	19 28 22.82	+47 46 32.9	8.40		H	292.095 087 14	+47.775 799 32		2.44	2.79	3.34	0.68	0.54	0.68	0.74	0.62	+ 4	+ 4	+ 4	−10	+ 5	− 3	+ 4	+ 2	+ 7	+16					3	−0.13
95739	19 28 23.92	+26 37 02.5	9.07		H	292.099 660 30	+26.617 350 86		8.96	7.75	20.46	0.62	0.98	1.35	0.72	1.12	−23	− 7	+12	+24	+ 3	− 8	+ 6	−12	− 8	−18					3	−1.81
95740	19 28 24.58	+08 21 29.3	7.86		H	292.102 429 98	+08.358 134 67		18.93	−17.78	−33.14	0.88	0.59	1.06	1.16	0.72	−18	+ 3	− 8	+ 5	+23	+21	+23	−17	+29	−14					0	−1.50
*95741	19 28 25.52	−43 28 07.6	8.91		H	292.106 351 99	−43.468 783 34		3.66	7.09	−7.28	1.31	0.90	1.30	1.84	0.87	+ 2	− 7	− 7	+31	− 7	− 8	− 6	−21	−10	− 1					0	2.09
*95742	19 28 25.51	−47 52 55.9	7.78		H	292.106 284 40	−47.882 187 75		3.20	1.66	−18.54	0.90	0.75	1.13	1.15	0.84	+33	−24	−12	−25	+10	−10	+ 0	−51	+ 2	+19					0	−0.29
95743	19 28 25.79	−36 59 20.2	8.86		H	292.107 464 58	−36.988 947 24		0.08	1.07	− 8.92	1.49	1.22	1.78	1.72	1.15	+29	−41	−54	+ 0	− 8	−16	−28	−40	+19	− 9					0	1.77
95744	19 28 26.19	+24 59 43.5	7.14		H	292.109 139 64	+24.995 429 48		2.19	−9.27	−9.26	0.43	0.60	0.90	0.53	0.74	−35	−10	− 6	− 3	+ 1	− 3	+ 0	− 7	+12	−32					0	0.04
95745	19 28 26.44	−46 28 31.3	7.70		H	292.110 185 75	−46.475 350 06		5.45	20.42	−59.22	0.98	0.64	1.14	1.50	0.90	+ 8	−23	+ 8	− 6	+29	−12	+15	−50	− 9	−26					0	−1.90
95746	19 28 27.44	−17 43 27.3	9.01		H	292.114 339 15	−17.724 243 07		3.64	−6.36	−10.52	1.10	0.66	1.24	1.15	0.73	+24	−32	−14	− 9	+10	+21	+14	−15	− 5	+12					0	−0.42
95747	19 28 27.59	−31 23 12.5	7.67		H	292.114 951 24	−31.386 799 66		4.73	4.94	−87.37	1.02	0.71	1.14	1.22	0.69	+19	−25	−29	+14	+ 3	+ 7	+ 0	−19	+ 7	+ 6					0	0.73
95748	19 28 27.89	+09 37 46.8	8.19	2	H	292.116 207 17	+09.629 656 07		−0.72	2.17	0.76	0.92	0.65	1.10	1.06	0.66	−21	− 9	+ 0	−15	+ 7	+20	+ 9	−32	+16	+ 0					2	−1.21
95749	19 28 28.37	+00 24 15.4	8.29		H	292.118 222 14	+00.404 286 72		1.30	−4.29	−1.63	1.03	0.57	1.22	1.12	0.66	− 1	−38	−18	−20	+ 2	+27	+ 3	−35	+20	+14					2	2.11
95750	19 28 28.42	−40 18 01.0	8.90		H	292.118 419 11	−40.300 267 09		3.62	8.79	−24.59	1.56	0.95	1.55	1.85	0.99	+ 0	−46	−15	+30	−14	+ 3	− 9	− 2	− 8	−16					0	−0.24
95751	19 28 28.87	−75 10 26.0	7.73		H	292.120 286 84	−75.173 877 73		2.87	17.10	−17.41	0.52	0.54	0.81	0.62	0.65	− 5	−18	−13	+18	− 4	−11	− 9	−10	+ 6	−17					0	0.26
95752	19 28 31.03	+51 41 49.6	8.32		H	292.129 307 25	+51.697 101 59		2.41	2.72	10.99	0.58	0.56	0.64	0.72	0.65	+ 0	−15	− 1	− 3	+ 4	+17	+ 3	− 7	+15	+21					2	0.94
95753	19 28 32.03	−35 07 58.7	9.71		H	292.133 439 63	−35.132 978 61		4.27	−16.33	−14.35	1.88	1.40	2.11	2.11	1.35	+31	−38	−28	+12	−13	−16	−19	−29	+ 1	+12					0	−1.24
95754	19 28 33.46	+44 40 21.8	8.47	2	H	292.139 420 58	+44.672 717 98		4.12	−2.56	4.19	0.66	0.63	0.73	0.67	0.85	− 8	− 8	− 3	+12	+13	−13	+17	+23	+ 2	− 7					0	−1.42
95755	19 28 35.33	−15 06 08.3	6.77	1	G	292.147 215 49	−15.102 293 01		2.25	1.19	−3.51	0.73	0.44	0.81	0.72	0.49	+18	−40	−10	−12	+ 7	+11	+12	−20	− 8	+17					0	−2.51
95756	19 28 35.73	+18 15 48.0	9.98		H	292.148 869 74	+18.263 330 25		18.54	−201.96	19.85	0.98	1.08	1.67	0.98	1.29	+39	−29	−15	−23	−14	+18	− 9	− 1	+ 6	+12					3	1.19
95757	19 28 35.90	+08 51 49.0	7.45	1	G	292.149 597 39	+08.863 608 70		6.78	14.92	− 6.92	0.72	0.52	0.85	0.85	0.53	−12	−19	+ 1	− 3	+10	+ 8	+ 6	−22	+14	−15					0	0.32
95758	19 28 36.64	−14 09 37.6	7.53		H	292.152 680 58	−14.160 453 96		1.81	1.70	0.46	0.79	0.47	0.88	0.86	0.50	+18	−38	−25	+ 9	+14	− 3	+ 9	−15	+ 7	+ 6					4	−1.59
95759	H 19 28 37.70	+37 11 18.9	8.02		H	292.157 102 55	+37.188 582 25	A	4.00	3.85	−20.72	1.03	1.01	1.20	1.01	1.14	− 3	− 5	− 8	+11	+ 9	−19	+10	+10	− 5	+10					1	1.21
95760	19 28 38.16	+36 46 45.1	8.65		H	292.159 005 80	+36.779 197 70		−1.20	−6.23	−6.54	0.68	0.61	0.82	0.78	0.74	− 5	+ 0	−11	+22	+15	− 9	+18	+ 4	− 9	+12					0	0.65
95761	19 28 38.37	+41 11 53.8	8.84		H	292.159 877 96	+41.198 265 05		4.33	−7.82	−16.90	0.65	0.67	0.79	0.72	0.80	− 4	+ 8	− 1	− 3	+27	−25	+27	+22	+ 3	+ 8					3	0.47
95762	19 28 38.43	+59 45 50.5	8.00		H	292.160 139 97	+59.764 021 20		2.39	5.39	10.65	0.60	0.55	0.61	0.67	0.64	+ 8	−17	− 3	+15	+ 3	− 2	+ 6	−12	+12	+25					0	1.42
95763	19 28 38.45	−10 20 49.1	7.82		H	292.160 223 80	−10.346 973 30		1.36	21.52	2.45	1.00	0.56	1.07	0.99	0.62	+31	−32	−21	−28	+ 5	+ 8	+ 6	−25	+ 8	+31					0	−0.30
95764	19 28 38.52	+39 56 27.1	6.90		H	292.160 506 06	+39.940 850 04		1.81	−0.94	−6.76	0.52	0.48	0.62	0.58	0.53	+ 1	− 3	+ 1	+17	+17	− 9	+20	− 5	− 4	+16					0	−0.94
95765	19 28 38.93	−60 19 20.5	9.53		H	292.162 228 29	−60.322 361 79		0.53	−4.07	−25.51	1.01	0.85	1.55	1.40	1.42	− 8	− 3	+ 4	+20	−41	+13	−20	−37	+ 5	+46					0	0.98
95766	19 28 39.66	+58 15 39.7	8.47		H	292.165 234 93	+58.261 028 37		2.38	8.89	− 3.02	0.69	0.67	0.71	0.76	0.72	+ 2	+ 2	+ 2	+26	+16	+ 3	+21	−16	+21	+17					0	−0.67
95767	19 28 40.36	+03 41 38.3	7.33		H	292.168 149 76	+03.693 983 06		4.85	1.82	−13.55	0.74	0.52	0.88	0.91	0.60	+ 1	−24	+ 9	+ 2	− 6	+ 1	− 7	−23	+ 7	+ 5					0	−0.38
95768	19 28 40.56	+21 58 52.7	7.74		G	292.168 981 76	+21.981 316 44		4.31	2.44	10.44	0.69	0.73	0.99	0.90	1.06	+17	− 2	−16	+10	+ 6	+18	+ 7	+33	+ 3	+26					0	0.16
95769	19 28 41.77	+34 36 38.2	8.19		H	292.174 020 85	+34.610 606 11	+	17.49	49.29	229.85	4.03	2.94	0.94	0.65	1.28	+66	−34	−32	+ 3	+ 8	+ 3	− 6	+21	−20	+ 2					0	−0.86
95770	19 28 42.09	+32 04 30.8	7.95		H	292.175 389 06	+32.075 214 09		7.38	4.41	−23.31	0.51	0.68	0.84	0.59	1.40	− 0	+ 2	−20	+18	+ 4	−19	− 1	+16	−19	−10					0	1.87
95771	19 28 42.41	+24 39 54.6	4.44	1	G	292.176 712 61	+24.665 164 82		11.00	−126.45	−106.99	0.47	0.49	0.68	0.66	0.66	−22	− 9	−12	+19	+10	− 6	+ 7	−13	+11	−27					1	−0.26
95772	19 28 46.39	+11 01 37.4	7.45		H	292.193 307 87	+11.027 052 23		22.37	−11.98	−29.02	0.65	0.61	0.93	0.64	0.58	+38	+ 3	− 5	− 7	−47	+ 9	−55	−39	−16	+ 6					0	0.23
95773	19 28 46.46	−71 35 49.1	8.32		H	292.193 578 86	−71.596 969 45		8.15	−0.09	21.16	0.53	0.61	0.99	0.61	0.76	−10	−13	− 4	+19	+ 6	−19	+ 4	−15	+ 6	−17					0	−1.36
95774	19 28 46.87	−36 00 00.9	7.46		H	292.195 281 24	−36.000 259 31		5.38	2.36	0.64	1.02	0.82	1.34	1.47	0.82	+15	−15	−43	+ 7	+ 4	−36	−21	−34	+24	−27					0	−0.79
95775	19 28 46.98	+22 33 36.7	8.07		H	292.195 732 30	+22.560 188 15		1.83	1.35	−0.44	0.67	0.70	0.94	0.91	0.92	+11	− 5	+ 5	+ 5	−16	− 7	−15	+11	+10	+ 5					0	0.15
95776	19 28 47.03	+67 37 36.0	7.46		H	292.195 962 86	+67.626 672 80		4.35	−11.86	−1.41	0.57	0.50	0.59	0.63	0.62	+12	−23	+ 1	− 8	+ 4	+29	− 3	+15	+15	+34					1	−0.02
95777	H 19 28 47.57	+46 02 38.1	8.25	2	H	292.198 192 96	+46.043 929 84	*	0.10	5.27	−1.91	0.66	0.57	0.70	0.80	0.70	− 1	− 1	+ 4	− 1	+ 8	− 2	+ 8	+ 0	+ 7	+ 3					3	2.25
95778	19 28 48.82	−65 41 44.9	9.31		H	292.203 417 88	−65.695 806 47		8.00	20.83	−101.91	0.96	0.92	1.59	1.08	1.25	− 2	−23	+ 9	− 5	− 6	−13	−16	−23	+34	−18					0	0.66
95779	19 28 50.66	−16 31 02.8	8.41	2	H	292.211 066 98	−16.517 439 23		2.05	14.84	4.02	1.03	0.62	1.20	1.24	0.67	+23	−32	−18	− 3	− 1	+19	− 3	−29	−10	−12					0	−1.26
95780	19 28 52.39	+68 11 12.4	8.66		H	292.218 292 89	+68.186 780 35		2.27	−0.97	−5.20	0.62	0.60	0.68	0.76	0.79	+ 5	−23	+ 4	+ 5	+14	+23	+ 6	+17	+25	+34					0	1.10
95781	19 28 53.86	−84 43 11.8	7.70		H	292.224 423 33	−84.719 953 62		13.00	68.97	−80.35	0.58	0.61	0.73	0.72	0.76	−13	−14	+14	+ 8	− 3	−14	− 3	−22	−10	−25					0	0.93
95782	19 28 53.89	−28 58 11.9	7.88		H	292.224 554 69	−28.969 985 27		6.87	11.19	− 5.45	1.39	0.82	1.35	1.60	0.73	−21	−17	−20	−45	+29	−26	+25	−58	− 4	−30					3	−0.44
95783	19 28 54.28	−35 53 16.5	9.11		H	292.226 176 48	−35.887 907 47		2.70	2.53	0.73	1.40	1.14	1.80	1.86	1.31	+21	− 2	−26	− 8	− 8	−28	−17	−34	+28	+ 4					3	−0.34
95784	19 28 55.66	+21 37 27.2	8.36		H	292.231 914 33	+21.624 212 04		1.30	1.46	− 6.59	0.69	0.80	1.10	0.94	1.18	+ 9	− 1	− 7	+19	+14	+26	+17	+30	+16	+15					0	0.25
95785	19 28 57.08	+24 46 07.3	5.82		H	292.237 823 15	+24.768 681 31		6.74	8.61	17.03	0.45	0.53	0.72	0.62	0.66	−21	−12	− 1	+16	+11	−12	+ 9	−10	+12	−20					1	−1.30
95786	19 28 57.11	+08 02 23.8	8.43		H	292.237 969 80	+08.039 953 83		1.81	3.63	−15.58	1.03	0.67	1.27	1.42	0.85	−30	+13	−20	−16	+22	+22	+28	−36	+26	−27					0	−0.67
95787	H 19 28 57.73	+15 14 35.7	8.17		H	292.240 525 04	+15.243 248 07	*	2.60	5.35	−11.06	1.15	0.98	1.20	0.97	0.92	+57	− 6	− 8	+ 1	−22	+18	−34	−14	−13	+ 6					0	−0.10
95788	19 28 58.45	+86 37 52.4	8.77		H	292.243 538 69	+86.631 215 91		2.28	7.89	22.53	0.70	0.70	0.81	0.81	0.86	+ 8	+ 0	−22	+ 1	− 4	+18	+ 2	−19	+25	+21					0	−0.93
95789	19 28 59.35	−40 50 33.5	10.00		G	292.247 302 06	−40.842 625 86		11.52	33.99	−46.59	2.15	1.26	2.20	2.58	1.31	− 6	−56	− 9	+ 7	+ 9	−21	+14	−25	−16	−18					0	0.05
95790	19 28 59.67	+12 28 14.5	7.95		H	292.248 613 39	+12.470 697 70		3.90	2.78	6.59	0.77	0.69	1.18	0.79	0.66	+12	−13	−20	+12	−26	+19	−28	−21	− 2	−11					0	1.65
95791	19 29 00.01	+12 51 29.5	7.45		H	292.250 028 42	+12.858 197 11		2.97	0.55	−5.51	0.67	0.57	1.00	0.78	0.58	+ 6	+ 0	−23	+ 6	−22	+ 4	−24	−22	+ 8	−12					0	1.49
95792	19 29 00.76	+39 56 10.2	8.40		G	292.253 185 18	+39.936 155 48		2.90	−0.15	−6.81	0.61	0.61	0.75	0.68	0.66	− 1	+ 4	+ 7	+ 9	+20	− 9	+22	− 9	− 3	+13					0	0.49
95793	19 29 00.99	+01 57 01.9	5.79		H	292.254 118 87	+01.950 528 61		16.95	−0.51	−33.35	0.71	0.42	0.87	0.72	0.43	− 2	−39	−13	− 1	+ 8	− 5	− 4	−37	+23	−14					2	1.63
95794	19 29 02.12	+14 33 52.4	8.29		H	292.258 845 61	+14.564 566 75		9.93	−22.74	−74.08	0.71	0.60	1.02	0.89	0.73	+30	−11	− 2	+ 6	−31	+ 1	−41	−23	+ 1	−14					0	−0.66
95795	19 29 02.90	−49 52 29.2	8.87		H

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
95701	9.403	0.021	7.942	0.012		1.231	0.019	T	1.19	0.02	L	7.9808	0.0030	0.016	54		7.96	8.00					1							
95702	11.543	0.130	10.845	0.115		0.644	0.142	T	0.71	0.13	L	11.1356	0.0694	0.470	111		10.46	11.59	0.59	P 1 A			1 S							D
95703	8.786	0.010	7.964	0.008		0.724	0.015	G	0.78	0.01	H	8.0203	0.0016	0.013	140		8.00	8.05					1							S
95704											T	11.6880	0.1330			B				D	19281−7225	I 2	1 C I D							D
95705	8.716	0.012	8.643	0.015		0.060	0.015	G	0.07	0.01	H	8.6609	0.0015	0.017	102		8.63	8.69					1							
95706	10.113	0.024	9.030	0.016		0.937	0.022	T	0.93	0.02	L	9.0867	0.0018	0.017	112		9.06	9.13					1							
95707	8.530	0.009	8.341	0.011		0.181	0.013	T	0.20	0.01	L	8.3737	0.0015	0.014	127		8.35	8.41		C			1							
95708	9.995	0.024	8.639	0.014		1.149	0.022	T	1.11	0.02	L	8.6555	0.0015	0.012	97		8.63	8.68		C			1							
95709	9.644	0.028	8.525	0.019		0.964	0.026	T	0.95	0.02	L	8.5583	0.0016	0.015	63		8.53	8.58		C			1							
95710	8.810	0.015	8.703	0.018		0.104	0.022	T	0.12	0.02	L	8.7062	0.0025	0.017	78		8.68	8.75		C			1							
95711	9.352	0.014	7.962	0.008		1.176	0.013	T	1.14	0.01	L	8.0024	0.0009	0.010	123		7.98	8.02					1							
95712	10.710	0.030	9.266	0.015	A	1.218	0.027	T	1.18	0.03	L	9.3476	0.0164	0.036	181	A	9.28	9.41		D	19281−7225	I 2	1 C P D							D
95713	8.813	0.012	6.905	0.005		1.584	0.010	T	1.60	0.01	L	6.8485	0.0009	0.010	113		6.84	6.87					1							S
95714	9.959	0.040	8.536	0.023		1.201	0.036	T	1.16	0.04	L	8.5370	0.0088	0.051	46		8.47	8.65		U 2			1							P
95715	8.152	0.009	7.689	0.009		0.458	0.015	G	0.53	0.02	H	7.7327	0.0008	0.008	117		7.72	7.75					1							S
95716	10.976	0.043	8.952	0.014		1.714	0.037	T	3.12	0.04	O	8.5280	0.0040	0.057	136		8.42	8.63		U 2			1 S							P
95717	7.254	0.004	6.915	0.006		0.315	0.006	G	0.31	0.03	C	6.9655	0.0009	0.008	115		6.95	6.98		C			1 G							S
95718	7.316	0.003	6.780	0.003		0.510	0.003	T	0.58	0.00	L	6.8318	0.0007	0.010	273		6.82	6.85					1							S
95719	8.678	0.011	7.541	0.007		0.978	0.010	T	0.96	0.01	L	7.6009	0.0010	0.011	111		7.58	7.63		C	19282+5447	I 1	1							S
95720	7.325	0.005	7.073	0.005		0.240	0.007	T	0.24	0.02	A	7.1112	0.0010	0.013	184		7.09	7.13		M			1 G							S
95721	8.195	0.008	7.707	0.008		0.459	0.010	T	0.53	0.01	L	7.7447	0.0014	0.013	136		7.73	7.77		C			1							S
95722	8.535	0.012	7.663	0.009	*	0.741	0.003	G	0.79	0.00	H *	7.7024	0.0010	0.009	76	*	7.69	7.72		D	19282−1209	I 1	2 C A	AS	216	0.521	0.005	0.19	0.01	
95723											T	11.2132	0.2002	1.150	79		9.63	12.99		D	19282+1400	I 2	S							G G
95724	8.744	0.013	8.354	0.013	A	0.401	0.015	G	0.47	0.02	H	8.4496	0.0090	0.047	96	A	8.40	8.60		D	19282−0932	I 2	1 C P A							S
95725	9.056	0.014	7.868	0.009		1.010	0.015	G	0.99	0.01	H	7.9278	0.0011	0.010	112		7.91	7.95					1							S
95726	8.972	0.014	8.562	0.015	B	0.388	0.019	T	0.45	0.02	L	8.6782	0.0107			B				D	19282−0932	I 2	1 C I A							
95727	9.949	0.024	9.090	0.019		0.780	0.010	G	0.82	0.01	H	9.1624	0.0027	0.023	102		9.13	9.20		D	19282+1400	I 2	1 S							
95728	7.958	0.006	6.690	0.004		1.080	0.006	T	1.04	0.01	L	6.7398	0.0008	0.009	165		6.73	6.76		C			1							S
95729	8.297	0.008	8.283	0.010		0.018	0.012	T	0.04	0.01	L	8.3000	0.0016	0.015	171		8.27	8.32					1							
95730	10.576	0.042	9.293	0.022	A	1.080	0.020	G	1.04	0.02	H *	9.2752	0.0030	0.022	104	*	9.24	9.30			19283+1232	I 1	2 C B	AB	18	1.757	0.043	3.17	0.21	
95731	9.495	0.032	8.732	0.027		0.680	0.032	T	0.74	0.03	L	8.7985	0.0029	0.016	49		8.77	8.82					1							
95732	5.838	0.003	5.846	0.004		−0.003	0.005	T	0.02	0.01	L	5.8515	0.0007	0.006	98		5.84	5.87		C			1							S
95733	11.771	0.106	11.053	0.089		0.660	0.112	T	0.72	0.09	L	11.1601	0.0038	0.039	127		11.10	11.23		C			1							G
95734											T *	7.6646	0.0018	0.017	52	*	7.64	7.70		D	19284−4353	I 1	2 C A	AB	259	5.813	0.007	1.43	0.02	S
95735	9.690	0.029	8.530	0.019		0.996	0.027	T	0.97	0.02	L	8.5904	0.0014	0.013	59		8.57	8.62					1							
95736	10.032	0.036	9.246	0.029		0.698	0.035	T	0.75	0.03	L	9.3106	0.0028	0.020	57		9.28	9.35		C			1							
95737	8.055	0.009	7.968	0.012		0.085	0.014	T	0.10	0.01	L	7.9949	0.0013	0.013	100		7.96	8.02					1							S
95738	8.361	0.009	8.401	0.012		−0.032	0.014	T	−0.01	0.01	L	8.4003	0.0013	0.017	118		8.37	8.43		C			1							S
95739	9.754	0.017	9.137	0.015		0.578	0.015	G	0.65	0.01	H	9.2001	0.0022	0.025	200		9.16	9.25					1							
95740	8.669	0.011	7.928	0.010		0.678	0.012	T	0.74	0.01	L	8.0008	0.0020	0.014	91		7.97	8.02					1							S
95741	8.993	0.020	8.908	0.025		0.077	0.029	T	0.09	0.03	L	8.9435	0.0037	0.017	50		8.90	8.98		C			1							
95742	9.211	0.013	7.900	0.008		1.114	0.012	T	1.08	0.01	L	7.9450	0.0014	0.013	125		7.92	7.97		C			1							S
95743	9.381	0.027	8.919	0.027		0.449	0.030	T	0.52	0.03	L	8.9681	0.0038	0.018	44		8.94	9.01					1							
95744	9.140	0.011	7.312	0.005		1.521	0.010	T	1.56	0.01	L	7.2607	0.0010	0.013	215		7.24	7.28					1							S
95745	8.956	0.014	7.799	0.009		0.993	0.013	T	0.97	0.01	L	7.8615	0.0017	0.012	109		7.84	7.88					1							
95746	10.510	0.043	9.151	0.022		1.151	0.038	T	1.11	0.03	L	9.1778	0.0021	0.021	109		9.14	9.22		C			1 S							
95747	8.961	0.018	7.797	0.012		0.999	0.017	T	0.98	0.01	L	7.8391	0.0013	0.011	63		7.82	7.86					1							S
95748	10.319	0.033	8.452	0.013		1.584	0.029	T	2.68	0.04	O	8.1841	0.0043	0.044	80		8.08	8.26		U 2			1 S							P
95749	10.232	0.032	8.481	0.014		1.460	0.028	T	1.47	0.04	L	8.4188	0.0014	0.016	106		8.39	8.44					1							
95750	10.194	0.046	9.040	0.030		0.991	0.043	T	0.97	0.04	L	9.0623	0.0027	0.015	49		9.03	9.09					1							
95751	8.085	0.007	7.756	0.007		0.312	0.009	T	0.36	0.01	L	7.8117	0.0015	0.017	154		7.78	7.84					1							S
95752	8.279	0.010	8.314	0.012		−0.027	0.014	T	−0.01	0.01	L	8.3189	0.0009	0.012	123		8.30	8.34					1							
95753	10.547	0.059	9.757	0.052		0.692	0.015	G	0.75	0.01	H	9.8511	0.0067	0.038	50		9.79	9.91					1							
95754	8.755	0.010	8.501	0.011		0.249	0.015	G	0.28	0.02	H	8.5423	0.0014	0.018	125		8.52	8.61		U 2			1							
95755	6.715	0.005	6.772	0.005		−0.026	0.007	G	0.00	0.01	H	6.7670	0.0016	0.014	96		6.75	6.79	1.02	P 1 A			1							S
95756	11.129	0.049	10.087	0.031		0.760	0.020	G	0.80	0.02	H	10.1219	0.0022	0.023	123		10.08	10.15		C			1							G
95757	7.925	0.008	7.508	0.009		0.397	0.015	G	0.46	0.02	H	7.5494	0.0019	0.017	95		7.52	7.58		U			1							S
95758	9.104	0.015	7.648	0.008		1.227	0.013	T	1.19	0.01	L	7.6895	0.0011	0.011	96		7.67	7.71		D			1							S
95759	8.362	0.009	8.104	0.010	*	0.246	0.012	T	0.28	0.01	L *	8.0945	0.0015	0.014	120	*	8.07	8.11		D	19286+3711	I 1	2 C A	AB	305	0.824	0.005	1.41	0.02	S
95760	8.428	0.010	8.625	0.014		−0.158	0.007	G	−0.16	0.01	H	8.5907	0.0014	0.016	121		8.56	8.63		C			1							
95761	9.098	0.011	8.882	0.013		0.206	0.016	T	0.23	0.02	L	8.9063	0.0018	0.016	141		8.87	8.93		C			1							
95762	9.547	0.018	8.105	0.010		1.216	0.016	T	1.18	0.02	L	8.1621	0.0011	0.013	107		8.14	8.18		C			1							
95763	9.824	0.024	8.004	0.011		1.514	0.021	T	1.55	0.03	L	7.9432	0.0015	0.013	85		7.92	7.96		C			1							
95764	8.004	0.010	7.003	0.006		0.875	0.009	T	0.88	0.01	L	7.0588	0.0008	0.008	109		7.04	7.07		C			1							S
95765	10.868	0.043	9.670	0.026		1.025	0.039	T	1.00	0.03	L	9.6971	0.0018	0.021	136		9.66	9.73					1							
95766	9.578	0.020	8.559	0.015		0.888	0.019	T	0.89	0.01	L	8.6263	0.0015	0.014	100		8.60	8.65		C			1							
95767	7.352	0.006	7.340	0.008		0.016	0.009	T	0.04	0.01	L	7.3478	0.0011	0.012	102		7.33	7.37		C			1							S
95768	8.942	0.013	7.846	0.009		0.956	0.012	G	0.94	0.01	H	7.9123	0.0017	0.014	106		7.89	7.94		C			1							
95769	8.836	0.010	8.252	0.009		0.527	0.007	G	0.60	0.01	H	8.3081	0.0014	0.019	143		8.27	8.34					1 O							
95770	8.573	0.009	8.010	0.008		0.527	0.011	T	0.60	0.01	L	8.0617	0.0011	0.015	152		8.04	8.09					1 G							S
95771	6.398	0.004	4.612	0.002		1.502	0.004	G	1.68	0.02	G	4.5419	0.0010	0.010	128		4.53	4.56		U 2	19288+2442	I 2	1							S
95772	8.192	0.008	7.519	0.008		0.623	0.009	T	0.69	0.01	L	7.5824	0.0011	0.012	131		7.57	7.60		C			1							S
95773	8.900	0.009	8.385	0.008		0.493	0.009	T	0.57	0.01	L	8.4325	0.0018	0.020	209		8.40	8.47					1							S
95774	7.627	0.010	7.483	0.012		0.131	0.015	T	0.15	0.01	L	7.5125	0.0018	0.009	45		7.50	7.54					1							S
95775	8.204	0.009	8.080	0.010		0.120	0.013	T	0.13	0.01	L	8.1185	0.0013	0.014	108		8.10	8.14					1							
95776	8.652	0.011	7.555	0.007		0.947	0.010	T	0.94	0.01	L	7.6240	0.0011	0.010	110		7.60	7.64					1							S
95777	12.892	0.344	8.996	0.018	*	1.600	0.510	G	1.57	0.52	J *	8.3698	0.0081	0.080	113	*	8.28	8.60		U 2 C	19288+4603	H 1	2 C S A	AB	135	0.161	0.011	0.47	0.38	D
95778	10.021	0.021	9.354	0.019		0.608	0.021	T	0.68	0.02	L	9.4390	0.0032	0.030	130		9.39	9.49					1							
95779	10.775	0.046	8.659	0.015		1.750	0.039	T	1.78	0.04	L	8.5062	0.0023	0.027	99		8.47	8.57		U 2			1							
95780	8.794	0.011	8.647	0.013		0.141	0.016	T	0.16	0.02	L	8.7121	0.0018	0.011	113		8.69	8.74		C			1							
95781	8.606	0.010	7.780	0.008		0.744	0.010	T	0.79	0.01	L	7.8465	0.0010	0.011	125		7.83	7.87		C			1							S
95782	8.105	0.013	7.903	0.015		0.193	0.019	T	0.21	0.02	L	7.9451	0.0028	0.014	55		7.93	7.97		C			1							S
95783	10.480	0.053	9.190	0.031		0.680	0.040	G	0.74	0.03	R	9.2449	0.0036	0.017	43		9.21	9.29					1 S							
95784	8.406	0.010	8.362	0.012		0.030	0.015	G	0.05	0.01	H	8.3737	0.0014	0.016	111		8.35	8.41		C			1							
95785	7.127	0.005	5.932	0.003		1.023	0.005	T	1.00	0.00	L	5.9890	0.0005	0.006	138		5.98	6.00			19288+2442	I 2	1							S
95786	10.652	0.044	8.653	0.016		1.693	0.039	T	2.35	0.08	O	8.4747	0.0027	0.018	85		8.45	8.50					1							
95787	8.225	0.006	8.171	0.008	*	0.055	0.009	T	0.07	0.01	L *	8.1899	0.0015	0.016	161	*	8.17	8.21		D	19290+1515	I 1	2 C A	AB	256	0.286	0.008	1.47	0.10	
95788	10.084	0.024	8.881	0.015		1.029	0.022	T	1.00	0.02	L	8.9349	0.0014	0.018	108		8.91	8.97		C			1							
95789	10.910	0.073	10.031	0.059		0.740	0.020	G	0.79	0.02	H	10.1599	0.0027	0.020	50		10.12	10.20					1							G
95790	8.310	0.011	7.990	0.010		0.317	0.015	G	0.37	0.02	H	8.0324	0.0022	0.018	102		8.00	8.06			19290+1228	I 1	1 S							
95791	7.360	0.006	7.439	0.008		−0.067	0.009	T	−0.04	0.01	L	7.4356	0.0012	0.013	99		7.42	7.46					1							S
95792	8.342	0.010	8.378	0.013		−0.050	0.015	G	−0.03	0.01	H	8.3961	0.0013	0.012	112		8.37	8.42		C			1							
95793	5.900	0.003	5.802	0.004		0.088	0.005	T	0.10	0.01	L	5.8243	0.0008	0.007	97		5.81	5.83					1							S
95794	8.741	0.008	8.334	0.008		0.385	0.010	T	0.45	0.01	L	8.3784	0.0010	0.012	166		8.36	8.40		C			1							
95795	9.920	0.025	8.952	0.018		0.808	0.002	G	0.85	0.00	H	9.0092	0.0024	0.015	84		8.98	9.03		C			1							
95796	8.561	0.009	8.198	0.010		0.367	0.006	G	0.43	0.01	H	8.2380	0.0017	0.019	173		8.21	8.27					1 S							
95797	10.045	0.023	9.536	0.022		0.574	0.015	G	0.65	0.01	H	9.5574	0.0022	0.025	162		9.51	9.61					1							G
95798	10.998	0.059	9.517	0.028		1.247	0.051	T	1.21	0.05	L	9.5049	0.0032	0.027	79		9.47	9.57		C			1							
95799	11.123	0.053	9.848	0.030		1.086	0.048	T	1.05	0.04	L	9.8891	0.0017	0.019	110		9.86	9.92					1							
95800	9.237	0.010	8.810	0.010		0.409	0.001	G	0.48	0.00	H	8.8742	0.0012	0.019	251		8.84	8.91		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
*95801 T	19 29 11.03	−53 05 46.5	8.54	H	292.295 963 09	−53.096 242 10	5.54	17.77	−103.75	10.61	8.92	13.32	14.67	12.03	+20	−24	−16	−15	+10	− 7	+ 5	−28	+ 8	− 2	0	
*95802	19 29 10.95	+46 59 52.4	8.89	H	292.295 629 91	+46.997 900 19	11.92	−83.12	−179.21	0.80	0.71	0.86	0.93	0.80	+13	−15	+ 5	+ 3	+ 0	+ 6	− 2	+ 4	+14	+29	0	0.93
95803	19 29 12.53	−19 44 50.0	9.43	1 H	292.302 217 85	−19.747 217 38	−0.06	−1.48	−1.36	1.19	0.64	1.33	1.54	0.97	+45	−28	− 3	−10	+15	+27	+14	−10	+12	+19	0	0.12
95804	19 29 12.91	−32 42 24.2	9.85	H	292.303 788 48	−32.706 729 87	7.33	12.67	−44.11	1.85	1.05	1.84	2.49	1.19	+ 5	−33	−21	+37	+ 2	+20	+ 0	+ 8	− 5	−18	0	1.28
95805	19 29 14.59	+29 42 46.0	10.12	H	292.310 808 80	+29.712 772 76	7.52	1.63	41.96	1.14	1.35	1.75	1.37	1.81	−21	−11	+ 4	+49	− 8	− 7	−11	+22	− 8	−36	2	1.12
95806	19 29 14.65	+26 43 00.6	8.07	1 H	292.311 046 31	+26.716 820 14	0.53	−0.38	−6.87	0.46	0.71	1.01	0.54	0.83	−24	− 3	+ 1	+15	+ 6	− 4	+ 6	− 9	− 3	−22	0	0.04
95807	19 29 15.39	−25 28 03.4	8.30	H	292.314 141 92	−25.467 615 13	6.34	0.05	−14.51	1.27	0.77	1.39	1.09	0.70	+18	−58	−28	−39	− 8	+39	+ 6	−32	− 2	+17	3	1.15
95808	19 29 15.44	+30 32 56.9	7.40	H	292.314 316 32	+30.549 130 22	3.05	13.74	8.41	0.46	0.64	0.77	0.53	0.85	−11	−15	+ 3	+ 8	+ 1	+ 6	+ 2	+31	+ 4	−14	0	−0.85
*95809	19 29 15.96	−46 51 14.2	9.86	H	292.316 496 77	−46.853 958 08	−2.82	7.03	−50.71	2.26	1.55	2.29	2.27	1.93	−10	−39	−22	−31	+24	+11	+19	−65	+20	− 7	0	1.94
*95810	19 29 15.93	−39 28 05.1	9.13	H	292.316 371 85	−39.468 088 87	2.54	6.18	− 7.19	1.37	1.07	1.70	1.95	1.16	−	4	−	9	−36	+	6	+	8	−20	−	5	−28	+31	−31	6	−1.65
95811	19 29 17.61	−46 51 18.8	10.17	H																									
95812	19 29 18.02	+00 14 46.0	6.25	G	292.325 080 68	+00.246 105 06	5.41	12.46	−10.38	0.73	0.42	0.85	0.85	0.49	−18	−22	−	7	−14	+	6	+33	+	9	−26	+	8	−	5	0	2.57
95813	19 29 18.88	+35 19 14.1	8.11	H	292.328 687 23	+35.320 591 49	3.87	0.97	− 1.90	0.53	0.58	0.72	0.60	0.75	+	2	−10	−	8	+18	+	0	−	3	−	1	+18	+	6	+15	0	−1.20
95814	19 29 19.07	−01 22 53.6	7.81	H	292.329 475 85	−01.381 557 35	6.63	26.24	0.47	0.82	0.47	0.98	0.92	0.51	−	4	−22	−	4	−18	−	2	+20	−	3	−38	+19	+	7	0	0.46
95815 H	19 29 19.53	−68 33 17.7	9.17	H	292.331 361 45	−68.554 909 95 *	1.66	16.87	−16.40	0.77	0.87	1.32	0.81	1.18	−34	+	8	−11	−23	+33	−	5	+37	−33	+12	−41	2	−1.09		
95816	19 29 20.27	+30 24 28.6	10.74	2 H	292.334 477 48	+30.407 941 45	11.55	−4.96	−12.59	5.18	6.23	8.04	6.11	8.62	−12	−	6	−12	−	5	+	8	−	1	+	9	+	5	−	8	−14	1	
95817	19 29 20.48	−04 22 39.0	8.89	H	292.335 326 63	−04.377 500 95	4.15	11.97	5.92	1.03	0.69	1.28	1.15	0.70	+13	−12	−	8	−19	+	3	+37	+	5	−32	+10	+16	0	1.57		
95818	19 29 20.90	+20 16 47.2	6.34	1 H	292.337 067 76	+20.279 777 62	4.29	2.95	−16.89	0.46	0.54	0.76	0.61	0.86	+24	−12	−	4	+	1	+	7	+26	+	6	+13	+11	+41	0	1.47		
95819	19 29 21.07	−62 47 17.5	8.52	H	292.337 779 52	−62.788 199 10	2.22	16.09	2.54	0.79	0.79	1.16	0.94	1.09	−12	−21	+28	+27	−11	+	0	−13	+16	+16	+16	0	0.73			
95820	19 29 21.36	−07 02 38.6	6.37	3 T	292.339 004 10	−07.044 063 67	2.05	−0.33	− 9.40	0.85	0.53	0.93	1.02	0.72	+10	−46	−27	−30	+29	+23	+34	−25	−	3	−40	2	2.14			
95821	19 29 21.46	+31 36 34.8	6.95	H	292.339 420 55	+31.609 655 99	27.47	−24.08	−411.53	0.42	0.51	0.68	0.50	0.67	−13	+	4	−21	+14	+	8	−24	+	4	+10	−	1	−18	0	1.29		
95822	19 29 22.12	+14 35 45.9	5.57	H	292.342 183 84	+14.596 076 71	11.38	50.77	−23.72	0.48	0.42	0.73	0.58	0.53	+20	−	5	−	6	+	2	−25	+14	−30	−15	−16	−21	0	−2.10		
95823	19 29 23.77	−43 26 41.7	5.70	H	292.349 045 57	−43.444 915 71	17.42	93.03	−114.90	0.78	0.58	0.87	1.25	0.55	−10	+	4	−35	+10	+	0	−25	−11	−28	+10	−31	0	1.80		
95824	19 29 24.00	−02 48 26.9	9.38	H	292.350 002 25	−02.807 459 47	−0.55	9.11	2.52	1.12	0.70	1.34	1.20	0.70	+	4	−22	−14	−22	+	5	+14	+	3	−42	+20	+	9	0	0.90		
95825	19 29 24.84	−47 34 50.4	9.04	H	292.353 506 90	−47.580 659 34	1.43	14.73	− 6.15	1.11	0.97	1.40	1.45	1.17	+41	−22	−	3	−13	+	6	−	2	+	0	−41	−	1	+35	0	1.20		
95826	19 29 25.57	+15 11 06.6	7.64	H	292.356 532 13	+15.185 168 08	2.31	1.34	− 4.78	0.63	0.56	0.94	0.81	0.67	+32	−	4	+	0	+	9	−22	+	6	−32	−18	+	0	−15	0	−0.17		
95827	19 29 25.80	−32 30 48.9	8.04	H	292.357 494 05	−32.513 585 55	13.81	−23.48	−67.37	1.86	0.79	1.48	1.85	1.02	−26	−48	+	3	+44	−	9	−	1	−	9	+	9	+	8	−29	0	0.86		
95828	19 29 26.11	−48 57 51.9	9.84	G	292.358 773 32	−48.964 427 58	11.32	−55.97	−191.09	1.53	1.37	2.16	2.28	1.74	+27	−	6	−	9	−23	+14	−31	+	1	−56	+	3	+	2	0	1.44		
95829	19 29 26.36	+00 31 43.4	10.73	G	292.359 830 13	+00.528 719 08	21.04	−27.64	−237.86	1.85	1.06	2.24	2.31	1.39	−15	−24	−17	−20	+	5	+29	+	6	−32	+28	+12	0	1.22			
95830	19 29 27.98	+60 40 08.3	7.61	G	292.366 586 29	+60.668 962 69	7.71	−21.41	−98.14	0.59	0.55	0.60	0.63	0.61	+	8	−15	+	3	+23	+	3	−15	+	7	−12	+	7	+21	1	2.32		
95831	19 29 29.57	+21 19 57.0	8.52	H	292.373 188 94	+21.332 499 85	1.32	−2.86	−10.55	0.65	0.70	1.03	0.85	0.96	+12	+	5	−	2	−	2	+	2	+22	+	0	−13	+17	+21	0	0.59		
95832	19 29 30.03	+78 15 55.8	7.67	G	292.375 124 41	+78.265 492 32 A	9.38	28.87	6.48	1.95	1.78	1.56	1.78	1.79	+	3	−36	+11	−	8	−	6	−	3	+	0	−22	−	5	+23	11	1.00		
95833	19 29 30.06	+36 17 14.1	6.66	1 H	292.375 229 52	+36.287 249 11	11.04	20.17	94.83	0.45	0.45	0.56	0.50	0.53	−	6	−	8	−11	+21	+11	−	5	+12	+	9	−	2	+	2	1	2.95		
95834	19 29 30.07	+03 05 23.6	8.07	H	292.375 309 58	+03.089 893 17	−0.53	4.46	− 0.93	1.02	0.71	1.19	1.19	0.69	−	1	−19	+15	−	7	−	8	+	0	−	8	−38	−	4	−	8	0	0.65		
95835	19 29 30.18	+62 34 00.8	8.53	H	292.375 737 30	+62.566 882 09	2.47	1.13	−16.02	0.80	0.63	0.76	1.08	0.69	+	8	+	8	−10	+	4	+13	−26	+	9	+	1	−	9	+19	0	1.01		
*95836	19 29 31.21	+78 16 06.4	8.30	H	292.380 062 47	+78.268 446 73 B	9.42	29.87	5.60	5.76	5.23	2.38	3.66	3.48	+	4	−38	+12	−	5	−	5	−	1	−	1	−19	−	2	+24	11	1.00		
*95837	19 29 31.07	+03 05 51.2	10.15	H	292.379 476 55	+03.097 555 59	2.80	− 6.24	− 0.77	2.16	1.28	2.44	2.92	1.62	+21	−18	−	3	−40	−20	+19	−21	−47	+	5	+	8	2	2.73		
*95838	19 29 31.07	−31 45 37.7	9.02	H	292.379 443 65	−31.760 480 83	7.59	23.75	− 5.10	1.38	0.97	1.41	1.52	0.98	+23	−27	−12	+16	+17	−	5	+17	−10	−10	+22	0	−0.52			
95839	19 29 31.93	+31 22 27.4	8.02	H	292.383 024 60	+31.374 289 69	2.41	2.03	− 3.97	0.48	0.61	0.76	0.53	0.79	−	1	−10	−17	+16	+	4	−12	+	4	+26	−12	−	4	0	−0.10		
95840	19 29 32.61	−64 53 04.3	9.06	H	292.385 872 20	−64.884 518 55	6.52	19.52	− 8.73	0.97	0.84	1.48	1.02	1.21	−21	−34	+	1	−	2	−	7	+	4	−26	−20	+15	−61	0	1.33		
95841	19 29 32.73	−61 34 23.8	9.81	H	292.386 372 13	−61.573 282 89	1.26	− 2.89	−20.42	1.10	0.80	1.53	1.44	1.27	−28	−	9	+	6	+14	−17	−	8	−16	+	6	+22	+12	0	0.03		
95842	19 29 33.82	−15 21 31.4	7.12	H	292.390 897 83	−15.358 733 73	5.33	12.85	− 3.46	0.71	0.48	0.78	0.72	0.47	+17	−21	+	4	−11	+	5	+	5	+	6	−31	−	5	+22	0	−1.45		
95843	19 29 35.34	+45 30 46.3	9.24	H	292.397 264 46	+45.512 873 82	7.32	11.26	36.48	0.85	0.74	0.88	1.03	0.90	−	6	−	9	−	6	+23	+18	−10	+17	+	2	+	6	−	6	−1.37		
95844	19 29 35.79	+17 35 06.3	8.48	H	292.399 145 58	+17.585 093 35	10.35	41.81	−72.37	0.67	0.69	1.10	0.83	0.93	+	3	−10	−23	+12	−27	+36	−20	+29	−11	−16	0	−0.89			
95845 H	19 29 35.87	+12 24 15.7	7.83	H	292.399 468 52	+12.404 359 99 *	3.62	− 4.02	− 9.60	1.56	0.97	1.19	0.90	0.78	+24	−13	−24	+	5	−32	+21	−27	−19	−	9	+	5	3	0.15			
95846	19 29 36.73	−50 09 05.6	8.40	1 H	292.403 024 77	−50.151 553 29	0.84	5.45	− 3.84	0.93	0.77	1.20	1.25	1.04	+28	−25	+	9	−14	+	3	+	2	+	4	−38	−14	+25	0	0.87		
95847 H	19 29 37.80	−12 38 47.8	6.89	G	292.407 505 70	−12.646 622 57 A	15.08	98.08	−37.48	1.47	1.02	1.10	1.17	0.73	+31	−10	−24	−33	−18	−	2	−26	−45	+	2	+21	1	−0.39			
95848	19 29 37.97	−52 37 24.9	9.04	H	292.408 193 11	−52.623 592 83	1.48	13.37	8.32	1.06	0.85	1.23	1.40	1.13	+27	−	7	+	5	+	4	+11	+18	+	8	−	3	+22	+30	0	0.29		
*95849	19 29 40.57	−30 47 49.6	7.13	G	292.419 032 19	−30.797 122 95	28.78	5.58	−262.27	0.84	0.57	0.96	0.97	0.52	+19	−33	−28	+14	−12	+28	−	2	−18	−	9	+	3	0	0.86			
*95850	19 29 40.50	−45 27 29.3	11.11	G	292.418 768 82	−45.458 130 01	8.50	−77.70	−110.17	5.03	3.50	5.91	6.75	4.46	+20	−26	+	5	+	5	+	6	−	5	−	7	−49	−10	−	7	2		
95851	19 29 40.66	+26 00 48.0	10.84	H	292.419 435 01	+26.013 338 19	2.23	−1.55	− 6.17	1.39	2.20	3.21	1.60	2.46	−22	−	3	−10	+24	−	5	−	4	−	4	−18	+	5	−17	1			
95852	19 29 42.03	+57 57 57.1	8.81	H	292.425 124 09	+57.965 849 29	12.46	22.59	−61.56	0.75	0.70	0.76	0.85	0.79	+	5	+	9	+	6	+23	+16	+	0	+20	−	7	+15	+13	0	−0.01		
95853	19 29 42.34	+51 43 46.1	3.76	H	292.426 413 89	+51.729 467 47	26.63	20.92	128.12	0.41	0.42	0.46	0.46	0.46	−	9	−14	+	0	−13	+	8	−10	+	6	−10	+	4	+	4	0	−0.12		
95854	19 29 42.90	+25 13 41.0	9.59	H	292.428 737 19	+25.228 053 31	2.07	− 1.97	− 6.43	0.66	1.07	1.56	0.73	1.22	−33	+	1	−	1	+33	−	6	−	7	−	3	+	4	+13	−24	0	0.77		
95855	19 29 43.39	−21 20 19.3	8.18	H	292.430 771 12	−21.338 705 91	1.76	1.46	−23.41	1.10	0.64	1.25	0.99	0.66	+48	−53	−37	+	3	+12	−16	−	6	−28	+18	+16	0	−0.14			
95856	19 29 44.14	+01 01 31.8	11.74	G	292.433 917 07	+01.025 486 50	6.01	−176.24	−175.25	2.83	1.66	3.22	3.05	1.91	−	8	−32	−12	−27	+	4	+11	+	4	−39	+16	+16	0	0.86		
95857	19 29 45.42	−67 18 29.9	7.70	H	292.439 242 31	−67.308 307 62 A	5.04	− 1.50	−16.86	1.41	1.56	1.81	1.25	1.65	+15	−	1	+	1	−37	−14	−	4	−14	−28	+	2	+	5	2	0.79		
95858	19 29 48.02	−37 39 56.8	9.81	H	292.450 100 80	−37.665 764 27	2.92	4.47	− 6.89	1.88	1.20	1.95	2.19	1.18	+	8	−42	−32	+25	−	3	−	6	−	4	−	9	−	3	−10	0	1.70		
95859	19 29 48.13	+39 36 12.1	9.13	H	292.450 540 58	+39.603 370 78 A	5.81	−11.96	25.50	1.29	1.26	1.44	1.43	1.50	+	0	−	2	+11	+	3	−	1	−20	+	1	−17	−	8	−	5	4	0.51		
95860	19 29 48.39	−67 18 51.4	9.36	H	292.451 616 01	−67.314 283 30 B	−2.34	20.30	−47.39	5.93	7.10	5.89	3.93	5.44	+11	−	6	−	5	−29	−11	−	1	−12	−13	+	4	+	7	2	0.79		
95861	19 29 48.55	−49 20 23.2	8.92	H	292.452 277 29	−49.339 779 79	7.66	−59.39	11.18	1.14	1.02	1.52	1.72	1.37	+25	−	5	+35	−24	−11	−14	−	7	−55	−35	+28	0	0.66			
95862 H	19 29 48.83	−11 01 49.1	9.16	G	292.453 459 14	−11.030 304 32 *	5.13	8.94	− 9.88	1.24	0.74	1.32	1.20	0.72	+19	−24	+	5	−38	+	2	+18	+	2	−42	−	3	+24	0	2.53		
95863	19 29 50.01	−36 17 44.0	8.31	H	292.458 380 47	−36.295 549 97	0.34	−10.10	− 0.57	1.25	0.97	1.52	1.74	0.85	−17	+	0	−50	+	8	+	9	−28	−	4	−33	+21	−27	0	0.35		
95864	19 29 51.14	−37 02 16.5	9.03	H	292.463 086 91	−37.037 923 68	21.79	−22.23	−14.67	1.42	1.06	1.68	1.91	1.00	+24	−30	−45	+13	+	9	−30	−11	−28	+	9	−	4	0	0.13		
95865 H	19 29 52.17	−26 59 07.8	5.46	H	292.467 385 03	−26.985 510 60 A	12.85	22.16	−42.97	1.07	0.97	1.35	1.21	0.67	+27	−35	−73	+	0	+46	−46	+	0	−37	+40	−23	4	−0.19			
95866	19 29 52.59	−55 26 29.7	6.14	H	292.469 108 89	−55.441 592 58	9.07	23.83	−66.49	0.58	0.44	0.76	0.79	0.64	−	7	−23	−	6	+	4	+27	+	1	+32	−	4	−16	+13	0	−0.44		
95867	19 29 52.76	+22 42 23.9	7.35	1 H	292.469 819 89	+22.706 631 19	1.61	−0.34	− 0.21	0.63	0.63	0.92	0.80	0.76	+	7	−18	−	1	−	1	−	9	+	7	−10	−	3	+10	+13	0	−1.26		
95868	19 29 54.17	+13 08 14.8	7.72	H	292.475 711 56	+13.137 447 59	3.42	8.10	8.09	0.70	0.66	1.05	0.78	0.65	+10	+12	−28	−	3	−25	+19	−24	−22	−	6	−	7	0	0.42			
95869 H	19 29 55.29	+49 30 31.7	8.05	H	292.480 371 56	+49.508 792 49 A	0.80	8.89	8.87	1.04	0.99	1.02	1.10	1.00	−	3	−16	−	6	+17	−	9	−16	−	4	+	1	+	5	+10	0	0.83		
95870	19 29 55.44	+06 40 32.5	8.62	1 H	292.480 995 10	+06.675 703 75	5.54	3.65	1.74	1.16	0.76	1.39	1.41	0.84	+12	−30	−	5	−23	−	8	+	7	−13	−37	+19	+12	0	−1.58			
95871	19 29 55.45	−50 16 12.0	7.97	G	292.481 038 32	−50.270 003 40	10.83	−22.85	10.68	0.85	0.66	1.03	1.08	0.81	+23	−23	−	2	−	2	+13	+	7	+11	−18	+	1	+15	2	1.33		
95872	19 29 55.57	+52 34 43.2	8.69	H	292.481 540 87	+52.578 670 23	2.66	18.39	28.30	0.73	0.76	0.81	0.84	0.86	+	0	−18	+	0	−23	−	2	+20	−	3	−26	+15	+17	1	0.92		
95873	19 29 55.59	+28 43 27.7	7.63	H	292.481 642 19	+28.724 365 09	4.29	−0.79	−27.93	0.46	0.60	0.80	0.55	0.75	−15	−	6	−15	+24	+	3	−28	−	1	+	2	+	5	−18	0	−0.91		
95874	19 29 56.14	+32 11 44.8	8.36	H	292.483 928 64	+32.195 771 43	4.01	−0.78	− 8.68	0.53	0.67	0.81	0.60	0.84	−	6	−	3	−23	+26	+	1	−16	−	2	+28	−	7	−	9	3	−1.34		
95875	19 29 56.60	+72 16 21.3	7.95	H	292.485 853 77	+72.272 589 10	8.61	−69.39	112.53	0.62	0.53	0.61	0.55	0.56	−	5	−29	−	6	−47	+	5	+	7	+	6	−13	−	2	−	7	0	1.37		
95876	19 29 56.69	+44 41 23.1	7.81	G	292.486 213 89	+44.689 749 76	11.90	0.59	−39.98	0.56	0.53	0.63	0.59	0.62	+	1	−	4	−11	+10	+15	−16	+16	+	9	+	0	+	2	0	−0.54		
95877	19 29 57.30	−57 56 20.0	8.58	H	292.488 742 73	−57.938 880 43	1.64	−12.85	−16.11	0.87	0.78	1.20	1.08	1.06	+22	−10	−	5	+53	+	2	+	5	+10	+21	+	6	+49	0	1.02		
95878	19 29 58.42	+53 58 28.4	8.31	G	292.493 424 30	+53.974 547 73	8.70	37.46	−35.68	0.63	0.63	0.74	0.80	0.74	+12	−15	−	7	−14	−15	+25	−11	−14	+	2	+31	2	1.03			
95879	19 29 58.90	+46 56 47.3	6.88	H	292.495 426 21	+46.946 485 64	3.37	12.61	0.80	0.52	0.44	0.54	0.61	0.51	+12	−20	+	1	−	8	−	6	+	7	−	8	−	9	+13	+30	0	0.12		
95880	19 30 00.89	+23 38 09.1	9.04	H	292.503 709 30	+23.635 862 50	0.86	6.74	− 3.62	0.95	1.01	1.41	1.03	1.24	+16	+	8	−	8	−31	−	8	+13	−	8	−21	+	4	+29	0	−0.32		
95881	19 30 01.40	−53 37 06.9	7.83	H	292.505 848 35	−53.618 577 51	4.48	3.88	−15.60	0.75	0.69	1.00	1.03	0.89	+23	−26	−24	−	8	+16	−14	+	7	−25	+15	+	2	2	0.34		
95882	19 30 01.64	−27 20 50.9	8.32	H	292.506 849 16	−27.347 475 48	0.93	1.06	3.16	1.10	0.94	1.43	1.39	0.79	+	9	−17	−60	−25	+26	−27	+	3	−51	+35	−17	0	1.82			
95883	19 30 02.04	−12 34 49.3	8.57	H	292.508 493 19	−12.580 357 36	3.42	3.53	− 9.45	0.95	0.57	1.05	1.13	0.69	+23	−34	−20	−	7	+	4	+13	+	4	−17	+	1	+	7	0	0.05		
95884	19 30 02.15	−15 58 32.1	7.70	H	292.508 957 39	−15.975 596 89	6.85	8.85	−10.55	0.82	0.51	0.92	0.89	0.60	+24	−29	−	7	+	2	+17	+20	+18	−	2	+	5	+28	0	0.29		
95885	19 30 02.22	+26 00 08.3	8.91	H	292.509 269 99	+26.002 317 61	1.92	7.12	0.24	0.50	0.89	1.31	0.55	1.02	−27	−10	−	9	+21	−	1	−13	−	2	−15	+	9	−26	0	−0.15		
*95886	19 30 04.70	−00 26 41.8	7.34	1 H	292.519 580 26	−00.444 944 41	9.47	2.55	− 9.84	0.75	0.42	0.89	0.82	0.46	−14	−32	−	3	−12	+	4	+23	+	3	−30	+12	−	5	0	2.17		
*95887	19 30 04.69	−27 34 17.1	9.42	H	292.519 547 49	−27.571 407 78	6.00	−20.24	−13.69	1.31	1.10	1.71	1.73	0.94	+14	−23	−61	−21	+22	−20	+	1	−48	+29	−23	0	0.87			
95888	19 30 05.00	+45 29 05.3	8.64	H	292.520 812 91	+45.484 796 18	2.77	16.72	33.36	0.77	0.68	0.83	0.93	0.79	−	8	−	4	+	2	+23	+18	−11	+18	+	3	+20	−	3	3	1.34		
95889	19 30 05.33	−50 45 59.9	8.90	H	292.522 218 61	−50.766 652 55	0.57	− 5.41	−13.66	0.94	0.79	1.25	1.25	1.03	+30	−20	−11	−	2	+23	+	5	+14	−23	+22	+16	0	0.51			
95890	19 30 05.61	+21 40 35.8	9.98	G	292.523 389 93	+21.676 606 89	33.64	−214.13	−202.86	1.02	1.10	1.55	1.42	1.30	+	4	+	4	−	3	+	7	+	1	+15	+	2	−21	+15	+	7	0	−0.26		
95891 H	19 30 08.30	−49 03 57.4	9.87	G	292.534 595 57	−49.065 949 46 A	13.28	−26.29	−25.77	2.73	2.48	2.82	3.32	2.53	+21	+	7	+11	−42	−	5	−29	−11	−59	−	9	+17	3	0.38		
95892	19 30 08.51	−15 18 28.9	9.52	H	292.535 454 65	−15.308 026 06	1.60	0.14	3.70	1.31	0.82	1.43	1.39	0.89	+43	−39	−21	−22	−	8	+	9	−13	−37	+11	+23	0	−2.50			
95893	19 30 08.55	−18 14 35.3	7.73	H	292.535 622 54	−18.243 128 63	10.35	−0.52	−18.69	0.87	0.66	1.04	1.24	1.06	+33	−	8	+20	−16	−	5	+28	−	4	−48	−	6	+40	2	0.18		
95894	19 30 09.10	+57 14 36.6	9.87	H	292.537 932 99	+57.243 499 10	−0.51	− 6.10	4.04	0.76	0.77	0.81	0.87	0.89	+	1	−	8	+	7	+14	+14	−	7	+15	+	7	−	1	+	3	0	−0.22		
95895	19 30 09.47	−21 58 40.9	9.11	H	292.539 461 08	−21.978 031 97	9.64	− 7.24	−13.45	1.28	0.74

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
95801	9.359	0.018	8.829	0.017		0.506	0.019	T	0.58	0.02	L	8.6647	0.0026	0.018	87		8.64	8.71		D	19292−5306	I 1	1 X S							G
95802	9.692	0.020	8.932	0.016		0.693	0.020	T	0.75	0.02	L	9.0343	0.0018	0.017	105		9.00	9.06		C			1							
95803	11.733	0.086	9.653	0.023		1.760	0.073	T	2.12	0.23	K	9.4995	0.0021	0.026	130		9.46	9.55		U			1 S							
95804	10.356	0.058	9.882	0.056		0.459	0.063	T	0.53	0.07	L	9.9506	0.0033	0.020	44		9.92	9.99		C			1							G
95805	11.101	0.055	10.251	0.041		0.747	0.053	T	0.79	0.04	L	10.2619	0.0028	0.037	144		10.17	10.33					1							G
95806	8.229	0.007	8.079	0.008		0.144	0.010	T	0.16	0.01	L	8.1212	0.0016	0.020	206		8.09	8.16		U			1							
95807	9.817	0.033	8.414	0.019		1.186	0.030	T	1.15	0.03	L	8.4637	0.0023	0.011	56		8.45	8.48		C			1							
95808	8.982	0.011	7.523	0.006		1.230	0.010	T	1.19	0.01	L	7.5601	0.0012	0.013	159		7.53	7.58					1							S
95809	10.643	0.039	9.951	0.034		0.677	0.096	G	0.74	0.08	R	10.0001	0.0041	0.035	123		9.93	10.06		D	19293−4651	I 2	1 G							
95810	10.569	0.048	9.290	0.027		1.089	0.043	T	1.05	0.04	L	9.3003	0.0023	0.018	61		9.26	9.33					1							
95811											T	10.3137	0.0302	0.314	123		10.04	11.41		D	19293−4651	I 2	S							G G
95812	7.942	0.008	6.395	0.004		1.317	0.003	G	1.28	0.00	H	6.3977	0.0008	0.008	123		6.38	6.41		C			1							S
95813	8.253	0.008	8.143	0.010		0.107	0.012	T	0.12	0.01	L	8.1580	0.0013	0.014	127		8.14	8.18		C			1							
95814	9.584	0.016	7.976	0.008		1.347	0.014	T	1.31	0.02	L	7.9635	0.0014	0.013	141		7.93	7.99					1							
95815	11.275	0.053	9.395	0.017	*	1.310	0.218	G	1.27	0.23	R *	9.3235	0.0022	0.026	187	*	9.28	9.36			19293−6833	H 1	2 C S C	AB	61	0.175	0.096		2.35	1.42	
95816	11.227	0.072	10.827	0.082		0.378	0.101	T	0.44	0.11	L	10.8303	0.0234	0.202	148		10.68	11.21	0.58	P 1 A			1 X							G
95817	9.642	0.020	8.970	0.018		0.622	0.022	T	0.69	0.02	L	9.0224	0.0017	0.019	95		9.00	9.07					1							
95818	6.204	0.003	6.317	0.004		−0.097	0.004	T	−0.08	0.01	L	6.3122	0.0013	0.012	100		6.29	6.34		U 2			1							S
95819	10.088	0.024	8.626	0.013		1.232	0.022	T	1.19	0.02	L	8.6545	0.0018	0.019	106		8.62	8.68					1 S							
95820	7.593	0.065	6.475	0.043		0.870	0.020	G	1.05	0.02	A	6.4943	0.0518	0.359	85		6.22	6.99	7.02	P 1 A	19294−0703	I 1	1 G							S
95821	7.842	0.006	7.029	0.006		0.718	0.001	G	0.77	0.00	H	7.0923	0.0008	0.010	143		7.08	7.11		C			1							S
95822	6.916	0.004	5.687	0.002		1.050	0.003	T	1.02	0.00	L	5.7389	0.0005	0.006	168		5.73	5.75		C			1							S
95823	5.954	0.004	5.730	0.004		0.214	0.005	T	0.24	0.01	L	5.7643	0.0007	0.005	52		5.76	5.77		C			1							S
95824	11.456	0.067	9.570	0.022		1.567	0.056	T	1.59	0.06	L	9.4987	0.0022	0.022	136		9.46	9.54					1							
95825	10.751	0.034	9.147	0.015		1.344	0.029	T	1.31	0.03	L	9.1892	0.0021	0.021	130		9.16	9.23					1							
95826	10.343	0.023	7.931	0.007		1.987	0.019	T	2.02	0.02	L	7.7220	0.0014	0.016	152		7.70	7.75					1							
95827	8.605	0.016	8.107	0.016		0.480	0.017	T	0.55	0.02	L	8.1448	0.0017	0.013	50		8.12	8.17		D			1 G							S
95828	10.594	0.036	9.932	0.033		0.571	0.005	G	0.64	0.01	H	9.9668	0.0030	0.027	82		9.90	10.01		C			1							
95829						1.280	0.020	G	1.46	0.03	I	10.8314	0.0037	0.032	105		10.78	10.90		C			1							G
95830	9.171	0.014	7.741	0.008		1.180	0.015	G	1.14	0.01	H	7.7771	0.0011	0.009	103		7.76	7.79		C	19295+6040	I 1	1							S
95831	8.496	0.010	8.533	0.012		−0.029	0.014	T	−0.01	0.01	L	8.5178	0.0018	0.019	115		8.49	8.55					1							
95832	8.033	0.010	7.674	0.009	A	0.378	0.015	G	0.44	0.02	H	7.7385	0.0080	0.071	107	A	7.70	7.97		D	19295+7816	I 2	1 C P A							S
95833	7.077	0.004	6.709	0.005		0.349	0.006	T	0.41	0.01	L	6.7460	0.0027	0.021	136		6.71	6.78	0.71	P 1 A			1							S
95834	8.157	0.013	8.106	0.017		0.200	0.495	G	0.10	0.05	L	8.1030	0.0024	0.018	93		8.07	8.13		D	19295+0305	I 2	1 S							S
95835	8.589	0.011	8.542	0.013		0.048	0.016	T	0.06	0.01	L	8.5574	0.0026	0.019	96		8.53	8.59					1							S
95836	8.711	0.012	8.277	0.012	B	0.410	0.016	T	0.48	0.02	L	8.4240	0.0128			B				D	19295+7816	I 2	1 C I A							S
95837	10.388	0.046	10.034	0.056		0.291	0.122	G	0.33	0.17	R	10.2231	0.0048	0.045	86		10.06	10.28		D	19295+0305	I 2	1 S							
95838	9.928	0.038	9.130	0.030		0.707	0.037	T	0.76	0.03	L	9.1618	0.0024	0.015	46		9.13	9.19		D			1							
95839	7.952	0.007	7.998	0.008		−0.037	0.010	T	−0.01	0.01	L	8.0159	0.0012	0.013	159		7.99	8.04					1							
95840	10.210	0.024	9.155	0.016		0.915	0.022	T	0.91	0.02	L	9.2188	0.0024	0.024	132		9.18	9.26					1							
95841	10.286	0.025	9.846	0.026		0.429	0.029	T	0.50	0.03	L	9.9105	0.0026	0.028	149		9.86	9.95					1							
95842	7.277	0.006	7.143	0.007		0.121	0.009	T	0.14	0.01	L	7.1709	0.0014	0.011	102		7.15	7.19					1							S
95843	9.730	0.018	9.298	0.019		0.408	0.024	T	0.47	0.03	L	9.3296	0.0027	0.023	120		9.29	9.36					1							
95844	9.089	0.013	8.549	0.012		0.544	0.015	G	0.62	0.01	H	8.6029	0.0013	0.012	114		8.58	8.64					1							
95845	8.096	0.009	7.860	0.011	*	0.225	0.013	T	0.25	0.01	L *	7.8969	0.0014	0.012	103	*	7.87	7.92		D	19296+1224	I 1	2 C A	AB	179	0.220	0.007		1.32	0.14	S
95846	10.524	0.037	8.590	0.014		1.640	0.033	T	1.83	0.10	O	8.5011	0.0025	0.019	92		8.47	8.54		U			1							
95847	7.439	0.008	6.957	0.007	*	0.471	0.015	G	0.54	0.02	H *	6.9964	0.0009	0.008	92	*	6.99	7.02		D	19296−1239	I 1	2 C A	AB	304	0.428	0.003		1.04	0.02	S
95848	10.217	0.032	9.137	0.021		0.934	0.029	T	0.93	0.02	L	9.1985	0.0017	0.016	81		9.17	9.23		D			1							
95849	7.867	0.011	7.210	0.008		0.599	0.005	G	0.67	0.00	H	7.2610	0.0011	0.011	65		7.24	7.28		C			1							S
95850						0.740	0.020	G	0.79	0.02	H	11.2789	0.0070	0.044	77		11.23	11.36		C			1 X							G
95851	11.808	0.087	10.858	0.060		0.790	0.015	G	0.82	0.01	H	10.9850	0.0035	0.043	239		10.91	11.06		C			1 X							G
95852	9.351	0.017	8.854	0.016		0.467	0.021	T	0.54	0.02	L	8.9149	0.0022	0.017	107		8.89	8.94		C			1							S
95853	3.959	0.002	3.785	0.002		0.148	0.001	G	0.18	0.03	C	3.8136	0.0005	0.004	116		3.81	3.82					1							S
95854	9.781	0.014	9.634	0.019		0.141	0.022	T	0.16	0.02	L	9.6403	0.0020	0.026	235		9.60	9.69		C			1 S							G
95855	9.491	0.020	8.294	0.013		1.025	0.019	T	1.00	0.02	L	8.3506	0.0015	0.012	105		8.33	8.37					1							
95856						0.614	0.009	G	0.68	0.01	H	11.9507	0.0076	0.075	92		11.84	12.07					1							D
95857	8.857	0.012	7.787	0.008	A	0.927	0.011	T	0.92	0.01	L	7.8582	0.0060	0.017	218	A	7.82	7.90		D	19298−6718	I 2	1 C P B							S
95858	11.512	0.117	10.051	0.052		1.231	0.101	T	1.19	0.10	L	9.9768	0.0049	0.029	50		9.91	10.03		C			1							
95859	9.801	0.024	9.170	0.022	A	0.587	0.029	T	0.66	0.03	L	9.2585	0.0118	0.023	109	A	9.22	9.30			19298+3936	H 1	2 C D	AB	88	14.200	0.085		3.72	0.36	D
95860	10.171	0.020	9.370	0.017	B	0.725	0.020	T	0.78	0.01	L	9.4635	0.0190			B				D	19298−6718	I 2	1 C I B							
95861	9.531	0.019	8.962	0.017		0.536	0.019	T	0.61	0.02	L	9.0375	0.0020	0.015	83		9.00	9.07		C			1							
95862	11.036	0.075	9.254	0.028	*	1.000	0.040	G	0.98	0.03	R *	9.1896	0.0030	0.021	83	*	9.15	9.22			19298−1102	H 1	2 C S D	AB	344	0.114	0.067		1.53	1.42	D
95863	10.433	0.048	8.509	0.018		1.160	0.040	G	1.55	0.28	L	8.4339	0.0028	0.014	52		8.41	8.46		C			1							
95864	9.974	0.030	9.114	0.024		0.754	0.029	T	0.80	0.02	L	9.1739	0.0020	0.015	45		9.12	9.20					1							
95865	6.865	0.007	5.564	0.004	*	1.120	0.015	G	1.08	0.02	H *	5.6252	0.0009	0.005	64	*	5.62	5.64		D	19299−2659	I 1	2 C A	AB	143	7.590	0.019		3.38	0.07	S
95866	7.379	0.005	6.243	0.003		0.974	0.000	G	0.96	0.00	H	6.2994	0.0008	0.008	134		6.29	6.31					1							S
95867	9.686	0.018	7.550	0.007		1.806	0.016	T	2.29	0.04	O	7.4036	0.0018	0.018	111		7.37	7.43		U			1							S
95868	8.087	0.009	7.757	0.010		0.331	0.015	G	0.39	0.02	H	7.8012	0.0013	0.012	95		7.78	7.84		C			1							S
95869	8.011	0.009	7.947	0.012	*	0.064	0.014	T	0.07	0.01	L *	8.0770	0.0015	0.010	113	*	8.06	8.10		D	19299+4931	I 1	2 C A	AB	192	2.202	0.004		1.17	0.02	S
95870	10.461	0.039	8.815	0.018		1.377	0.034	T	1.35	0.04	L	8.7705	0.0027	0.021	85		8.72	8.80		U			1 S							
95871	8.499	0.011	8.037	0.010		0.435	0.014	T	0.50	0.01	L	8.0815	0.0018	0.012	91		8.06	8.10		C			1							S
95872	9.138	0.016	8.733	0.017		0.370	0.015	G	0.43	0.02	H	8.7788	0.0019	0.016	96		8.74	8.80					1							
95873	9.381	0.013	7.796	0.007		1.350	0.015	G	1.32	0.02	H	7.7843	0.0010	0.013	166		7.76	7.80		C			1							
95874	8.399	0.008	8.357	0.010		0.043	0.012	T	0.06	0.01	L	8.3858	0.0014	0.015	150		8.36	8.42		C			1							
95875	9.225	0.015	8.049	0.010		1.008	0.014	T	0.98	0.01	L	8.1116	0.0014	0.011	95		8.10	8.13		C	19300+7216	I 1	1							S
95876	8.344	0.008	7.873	0.008		0.444	0.010	T	0.51	0.01	L	7.9091	0.0011	0.011	118		7.89	7.93		D			1 S							S
95877	10.482	0.028	8.758	0.012		1.438	0.024	T	1.43	0.04	L	8.7220	0.0019	0.020	132		8.69	8.76					1							
95878	8.899	0.013	8.350	0.012		0.510	0.015	G	0.58	0.02	H	8.4290	0.0012	0.010	99		8.41	8.45					1 G							
95879	6.852	0.005	6.882	0.006		−0.023	0.007	T	0.00	0.01	L	6.8847	0.0007	0.007	116		6.87	6.90					1							S
95880	10.923	0.044	9.200	0.017		1.438	0.037	T	1.43	0.06	L	9.1815	0.0034	0.027	107		9.14	9.22					1							
95881	7.793	0.009	7.833	0.012		−0.032	0.014	T	−0.01	0.01	L	7.8315	0.0014	0.012	80		7.81	7.85					1							S
95882	10.501	0.046	8.512	0.016		1.601	0.020	G	1.58	0.02	J	8.4434	0.0019	0.016	57		8.42	8.47					1							
95883	10.083	0.027	8.685	0.015		1.182	0.024	T	1.14	0.02	L	8.7315	0.0016	0.014	95		8.70	8.76		C			1							
95884	7.842	0.008	7.713	0.010		0.109	0.002	G	0.12	0.00	H	7.7392	0.0012	0.010	94		7.72	7.75		C			1							S
95885	9.101	0.009	8.918	0.011		0.175	0.013	T	0.19	0.01	L	8.9691	0.0016	0.023	252		8.93	9.01		C			1							
95886	7.595	0.006	7.363	0.008		0.208	0.015	G	0.23	0.02	H	7.4014	0.0014	0.012	138		7.37	7.42		M	19301−0027	I 1	1 S							S
95887	10.203	0.046	9.449	0.038		0.673	0.045	T	0.73	0.04	L	9.5544	0.0026	0.015	60		9.52	9.58		C			1							
95888	9.946	0.022	8.725	0.013		1.043	0.020	T	1.01	0.02	L	8.8044	0.0020	0.016	112		8.78	8.83		C			1							
95889	10.824	0.054	9.116	0.022		1.426	0.046	T	1.41	0.07	L	9.0385	0.0028	0.019	86		9.01	9.06		C			1							
95890	11.445	0.072	10.120	0.038		1.160	0.015	G	1.26	0.03	I	10.0796	0.0023	0.031	115		10.03	10.13		C			1							G
95891	10.837	0.045	9.987	0.034	*	0.780	0.020	G	0.82	0.02	H *	10.0242	0.0042	0.032	88	*	9.96	10.08			19301−4904	H 1	2 C C	AB	163	0.468	0.037		2.90	0.16	
95892	10.209	0.032	9.637	0.031		0.535	0.040	T	0.61	0.04	L	9.6359	0.0022	0.018	87		9.60	9.67		C	19301−1518	I 1	1							
95893	8.095	0.011	7.740	0.010		0.337	0.014	T	0.39	0.02	L	7.8082	0.0010	0.009	96		7.79	7.83		C			1 G							S
95894	9.651	0.020	9.795	0.031		−0.125	0.033	T	−0.11	0.05	L	9.8312	0.0024	0.021	117		9.79	9.87		C			1							G
95895	9.861	0.026	9.164	0.023		0.630	0.026	T	0.70	0.02	L	9.2449	0.0030	0.021	91		9.21	9.28					1							
95896	10.909	0.082	10.424	0.080		0.492	0.071	G	0.56	0.07	R	10.3927	0.0048	0.025	47		10.32	10.43					1							G
95897	10.353	0.028	9.855	0.028		0.480	0.030	T	0.55	0.03	L	9.9410	0.0028	0.025	125		9.90	9.98		C			1							
95898	8.438	0.013	6.295	0.005		1.820	0.020	G	1.83	0.09	H	6.1310	0.0016	0.015	76		6.11	6.15		U 2	19302+0254	I 1	1 S							S
95899	8.095	0.008	6.981	0.006		0.960	0.008	T	0.95	0.01	L	7.0443	0.0008	0.008	112		7.02	7.05			19303+5525	I 1	1							S
95900	11.245	0.102	10.093	0.058		0.990	0.091	T	0.97	0.07	L	10.1352	0.0049	0.029	59		10.08	10.19					1							G

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
95901 H	19 30 12.60	+56 38 40.1	6.92	H	292.552 506 58	+56.644 459 27	*	3.92	−7.23	−16.05	0.49	0.48	0.51	0.57	0.53	− 8	− 5	− 1	+ 8	+18	− 7	+17	+ 4	+ 8	− 4	1	1.09
95902	19 30 12.82	+46 08 52.1	6.99	3 H	292.553 396 58	+46.147 812 28		3.30	46.50	−4.94	0.53	0.47	0.58	0.64	0.51	− 1	−11	+ 1	+ 9	+ 6	− 6	+ 6	+10	− 2	+ 9	0	1.79
95903	19 30 13.67	−54 56 16.7	11.33	G	292.556 977 90	−54.937 977 26		28.85	18.56	−314.12	1.79	1.53	2.62	2.65	2.16	− 8	− 5	− 8	− 3	+25	− 4	+27	−13	−10	+16	0	0.20
95904	19 30 14.50	+30 28 08.2	10.01	H	292.560 418 70	+30.468 952 13		5.12	−20.72	9.82	0.85	1.07	1.38	1.02	1.53	+ 1	+ 3	−14	+ 8	+ 8	−10	+ 9	+26	− 8	− 8	0	1.49
95905	19 30 14.83	−32 05 28.7	6.60	H	292.561 783 92	−32.091 309 42		20.27	111.07	−35.56	0.93	0.57	0.91	1.19	0.52	−17	−19	−18	+19	+12	+ 8	+ 5	−23	+ 5	−32	3	3.56
95906	19 30 15.15	+18 42 18.0	8.25	G	292.563 111 71	+18.704 990 71		3.94	−25.63	−24.22	0.64	0.72	1.02	0.63	0.82	+35	−28	−21	−25	−15	+ 8	− 9	− 6	+ 3	+ 0	0	0.73
95907	19 30 17.33	+48 39 23.5	8.80	H	292.572 189 96	+48.656 526 56		0.70	16.66	8.07	0.75	0.66	0.80	0.85	0.72	− 9	− 5	+ 7	+ 1	+10	−20	+12	− 7	+ 4	+ 0	0	−1.12
95908	19 30 17.33	+33 43 42.6	6.55	H	292.572 198 95	+33.728 513 03		7.04	−5.94	−23.89	0.45	0.55	0.66	0.55	0.63	−20	+ 8	−37	− 1	+34	−25	+23	−17	+ 9	−30	0	1.69
95909	19 30 17.48	−03 10 55.7	8.48	H	292.572 846 23	−03.182 133 10		7.08	24.78	29.16	0.92	0.56	1.08	0.95	0.57	+ 2	−30	− 7	−27	+ 0	+21	+ 0	−41	+14	+23	0	0.24
95910	19 30 18.85	−06 31 59.8	8.97	H	292.578 522 18	−06.533 269 58		0.76	−1.10	−11.28	1.18	0.79	1.37	1.13	0.68	+36	−46	−30	−10	+ 1	+16	− 8	−32	+20	+18	0	−0.02
95911	19 30 19.00	+57 10 49.2	7.65	H	292.579 145 91	+57.180 328 99		1.21	2.04	4.00	0.57	0.58	0.60	0.64	0.61	− 1	+ 0	+13	+21	+20	− 2	+21	− 1	− 1	+ 7	0	−0.17
95912	19 30 19.62	−20 50 03.7	8.43	H	292.581 748 34	−20.834 349 37		4.66	16.92	−2.41	1.01	0.54	1.13	0.92	0.58	+44	−52	−35	− 2	+12	− 4	+ 5	−20	+ 7	+11	0	1.96
95913	19 30 20.17	+39 17 41.0	9.38	H	292.584 046 33	+39.294 721 22		3.54	−0.37	−1.44	0.85	0.84	1.07	1.07	1.10	− 5	+ 3	+ 4	+12	+ 4	−20	+ 4	− 7	− 4	− 5	0	0.24
95914	19 30 21.31	+19 11 34.6	9.51	G	292.588 783 24	+19.192 953 98		1.48	−0.62	−5.00	0.87	0.96	1.46	0.93	1.31	+30	−25	− 9	−33	−13	+11	− 9	− 8	−13	+28	0	−0.23
95915	19 30 22.28	+16 42 40.1	7.29	H	292.592 813 24	+16.711 132 83		3.93	10.40	0.62	0.57	0.54	0.86	0.73	0.74	− 5	−24	−27	+22	−33	+26	−26	+29	−14	−37	0	−1.42
95916	19 30 23.30	+70 57 05.3	7.87	H	292.597 063 44	+70.951 462 84		4.21	−13.66	3.97	0.68	0.59	0.66	0.74	0.72	− 7	−24	−11	−19	+20	−13	+18	+19	− 2	− 4	0	0.23
95917	19 30 23.59	+23 47 08.0	9.41	H	292.598 277 84	+23.785 546 08		0.19	−16.27	−6.63	0.98	1.06	1.44	1.06	1.24	+14	+ 2	+ 6	−32	− 5	+ 1	− 5	−24	+ 6	+23	0	−0.82
95918	19 30 24.50	−49 54 00.3	9.00	H	292.602 062 57	−49.900 094 42		9.27	67.71	−67.04	1.12	0.87	1.40	1.54	1.18	+22	−24	+ 4	− 6	+15	+ 7	+14	−28	− 6	+16	0	0.45
95919	19 30 25.27	+17 41 42.8	7.25	H	292.605 280 66	+17.695 236 06		4.39	2.79	6.89	0.50	0.53	0.82	0.58	0.67	+ 9	−24	−31	+ 5	−10	+24	− 2	+22	− 4	− 2	0	0.82
95920	19 30 27.18	+61 52 24.9	9.89	H	292.613 255 98	+61.873 584 42		7.33	−6.46	−159.78	0.95	0.92	0.98	1.04	1.12	− 1	− 5	− 2	+20	+11	− 7	+12	+20	−14	+16	0	1.20
95921	19 30 29.12	−34 56 14.6	10.74	G	292.621 344 04	−34.937 395 97		15.39	151.74	−169.22	2.36	1.64	2.61	3.02	1.69	+19	−40	−26	+18	−16	+ 2	−21	−24	+ 8	− 7	0	−1.93
95922	19 30 29.76	+43 10 00.7	8.32	H	292.623 990 92	+43.166 867 70		2.82	−1.18	3.40	0.55	0.57	0.65	0.56	0.67	− 7	− 8	− 9	+ 4	+14	+ 1	+15	+ 7	+ 2	− 1	1	−2.06
95923	19 30 30.74	+20 44 57.4	8.58	H	292.628 101 59	+20.749 280 85		5.23	13.14	10.15	0.70	0.84	1.20	0.96	1.08	+33	−11	+ 0	−14	− 1	+12	− 5	− 8	+19	+49	2	0.78
95924	19 30 31.04	+10 10 15.0	9.36	H	292.629 318 88	+10.170 832 09		10.12	2.04	−31.95	1.10	0.89	1.38	1.63	1.37	+16	+ 4	−12	−31	−24	+38	−24	−43	−14	+11	0	−0.33
95925 H	19 30 31.57	−48 26 09.4	7.89	H	292.631 545 42	−48.435 945 59	*	13.39	−47.46	−42.45	1.94	1.50	1.56	1.76	1.35	+36	− 3	−20	−19	+12	−35	+ 3	−38	+22	+22	2	−1.04
95926	19 30 31.74	+12 49 01.3	6.91	H	292.632 270 10	+12.817 019 19		16.17	−82.38	−49.04	0.64	0.57	0.95	0.76	0.59	+ 1	+ 8	−24	+16	−28	+12	−32	−14	− 2	−29	0	1.19
95927	19 30 31.77	+16 48 04.7	8.07	H	292.632 383 83	+16.801 295 00		9.55	29.96	−11.57	0.71	0.60	0.97	0.84	0.84	−10	−24	−11	+34	−32	+20	−35	+30	− 2	−39	0	−0.72
95928	19 30 31.98	+23 55 51.5	9.75	G	292.633 268 52	+23.930 979 01		3.40	57.75	64.35	1.25	1.46	1.80	1.53	1.65	+ 7	− 9	+ 8	−31	− 2	+ 6	− 2	−33	− 7	+26	2	0.95
95929	19 30 33.11	+03 26 39.8	6.09	2 H	292.637 978 28	+03.444 400 06		3.39	13.17	1.39	0.72	0.45	0.83	0.91	0.58	+ 8	−27	−10	− 8	−19	+11	−25	−32	− 2	−27	2	0.31
95930	19 30 33.49	−84 23 01.9	8.60	H	292.639 532 07	−84.383 860 88		10.09	37.83	−53.78	0.71	0.75	0.90	0.87	0.88	−15	−24	+ 6	+21	− 6	−14	− 5	−10	−12	−23	0	0.18
95931	19 30 34.47	+56 08 10.3	6.68	H	292.643 634 48	+56.136 181 91		4.35	6.58	11.06	0.48	0.46	0.51	0.55	0.49	− 6	− 7	−11	+13	+24	−21	+21	− 4	+17	+ 1	0	0.62
95932	19 30 34.57	−55 06 36.1	6.29	H	292.644 051 70	−55.110 020 87		27.25	38.71	−13.30	0.57	0.46	0.77	0.79	0.64	− 8	−21	−12	+ 0	+25	+ 0	+28	− 7	−12	+ 8	0	−0.77
95933	19 30 34.86	+22 59 14.6	9.40	H	292.645 250 45	+22.987 399 19		2.49	−0.45	−22.31	0.87	0.96	1.39	1.08	1.19	+ 2	− 9	+ 4	− 4	− 7	+ 8	− 9	− 5	+17	+10	0	0.08
95934	19 30 35.80	+31 58 48.4	7.54	H	292.649 156 90	+31.980 105 34		1.18	−5.30	−10.07	0.47	0.57	0.74	0.53	0.72	−10	+ 1	−28	+26	+ 3	−21	− 4	+24	−16	−12	1	0.21
95935	19 30 37.34	+25 07 15.0	7.35	G	292.655 583 27	+25.120 828 00		1.58	−1.20	−2.55	0.43	0.65	1.00	0.50	0.83	−26	− 2	−13	+25	− 2	− 8	− 3	− 9	+24	−25	3	1.86
95936	19 30 37.37	−24 34 55.0	8.66	H	292.655 692 09	−24.581 951 49		1.85	14.40	−6.22	1.10	0.83	1.42	1.54	0.70	+15	−14	−53	+ 0	−22	+34	−11	−28	+ 2	−12	0	0.82
95937	19 30 39.82	−02 47 19.9	5.03	1 H	292.665 933 16	−02.788 861 35		6.49	23.06	−10.53	0.67	0.41	0.75	0.73	0.41	−17	−11	− 3	−23	+11	+15	+13	−42	+ 7	− 4	0	−0.22
95938	19 30 39.98	+35 06 08.6	7.81	H	292.666 576 55	+35.102 379 77		19.90	48.38	71.56	0.52	0.54	0.71	0.58	0.69	+ 6	−12	−12	+ 6	+ 5	− 2	+ 5	+11	+ 0	+17	0	0.28
95939	19 30 40.01	−39 39 22.5	9.55	H	292.666 711 92	−39.656 236 96		7.78	7.88	−89.22	1.66	1.13	1.82	2.00	1.10	+ 9	−40	−25	+20	+ 2	−14	− 1	−19	− 8	− 9	0	−0.13
95940	19 30 40.25	−59 13 17.5	7.99	H	292.667 717 78	−59.221 538 98		5.26	2.86	−17.47	0.65	0.57	0.90	0.73	0.73	+ 2	−25	− 5	+35	−12	− 9	− 7	+ 2	+ 1	+22	0	−0.92
95941	19 30 40.59	−29 39 11.5	9.41	H	292.669 129 42	−29.653 190 92		6.49	0.42	−4.92	1.45	0.95	1.52	1.61	1.01	− 5	−34	−10	−10	+14	− 8	+15	−28	− 6	− 1	3	1.58
95942	19 30 41.06	−18 19 24.6	7.32	H	292.671 065 18	−18.323 488 42		5.06	5.83	0.03	0.83	0.54	0.92	0.90	0.64	+34	−22	+ 0	− 2	+20	+24	+21	− 2	+ 6	+30	0	1.87
95943	19 30 41.18	+43 02 15.8	7.76	2 H	292.671 585 92	+43.037 734 70		1.79	0.16	−8.44	0.53	0.54	0.63	0.57	0.62	− 9	− 6	+ 1	+ 9	+12	−10	+13	+ 6	− 2	+ 0	2	−0.18
95944	19 30 41.94	−08 11 11.3	7.47	G	292.674 750 48	−08.186 463 24		5.76	−1.36	−19.00	0.83	0.51	0.95	0.79	0.48	+25	−39	−26	−16	+12	+16	+ 2	−31	+30	+28	0	2.22
95945	19 30 42.07	+68 44 48.1	7.35	H	292.675 277 63	+68.746 689 61		5.85	53.15	78.74	0.51	0.48	0.52	0.59	0.58	+ 4	−21	+ 0	− 1	+22	+ 3	+17	+14	+11	+22	0	−0.84
95946	19 30 42.38	−70 02 49.4	7.93	2 H	292.676 583 21	−70.047 065 74		2.55	5.17	−15.85	0.42	0.64	0.99	0.52	0.88	−33	− 5	− 8	+ 8	+ 9	− 8	+ 6	−20	+10	−43	0	0.82
95947 H	19 30 43.29	+27 57 34.9	3.05	H	292.680 355 29	+27.959 694 80	A	8.46	−7.09	−5.63	0.59	0.64	0.58	0.52	0.66	−32	−16	−11	+11	−13	+ 7	−13	+ 6	− 3	−27	1	−0.53
95948	19 30 43.62	−33 45 17.5	9.15	H	292.681 747 28	−33.754 871 22		0.00	4.20	3.51	1.37	0.88	1.47	1.65	0.85	+ 4	−37	−29	+19	+23	−18	+12	−17	+ 5	−11	0	1.16
95949	19 30 44.37	−11 51 35.9	8.28	H	292.684 887 81	−11.859 962 39		3.57	9.56	−1.25	0.98	0.58	1.06	1.03	0.58	+ 9	−12	−35	−34	+10	− 1	+ 7	−41	+20	+11	0	−1.31
95950	19 30 44.61	−68 58 19.5	8.75	H	292.685 854 79	−68.972 095 05		11.87	66.26	129.82	0.71	0.75	1.23	0.72	1.00	−24	− 2	−18	−27	+34	−15	+37	−41	+19	−27	0	0.81
95951	19 30 45.40	+27 57 55.0	5.12	G	292.689 152 93	+27.965 278 90		8.67	−1.95	−0.98	0.40	0.49	0.65	0.52	0.66	−15	−14	−17	+13	−13	+ 2	−13	+11	− 3	−21	1	−0.56
95952	19 30 46.74	−16 10 00.4	7.43	H	292.694 748 67	−16.166 791 34		1.22	−2.03	−9.25	0.79	0.50	0.87	0.82	0.55	+17	−27	− 6	− 4	+ 9	+ 9	+13	−16	− 8	+22	2	−1.04
95953	19 30 46.83	+36 13 42.7	6.26	H	292.695 128 16	+36.228 532 76		4.30	0.69	−12.03	0.42	0.43	0.54	0.47	0.49	−10	− 6	− 8	+17	+13	+ 2	+16	−10	− 6	+ 0	0	−0.35
95954	19 30 47.01	−40 27 19.0	8.42	H	292.695 873 90	−40.455 288 03		10.05	76.63	6.75	1.42	0.85	1.23	1.89	0.84	−29	− 8	−23	+53	−37	+28	−27	+18	−20	−36	0	1.43
95955 H	19 30 47.57	+63 37 04.3	9.35	H	292.698 195 37	+63.617 858 14	*	4.86	19.97	0.00	0.84	0.81	0.85	1.04	1.01	+ 5	+ 0	− 2	+ 7	+17	− 1	+19	− 6	− 1	+19	1	0.64
95956	19 30 49.00	−38 07 19.0	8.66	H	292.704 171 39	−38.121 935 51		2.78	−2.10	−12.96	1.21	0.84	1.35	1.60	0.82	+ 7	−29	−33	+19	−14	+17	−15	−18	+ 4	−21	0	1.51
95957	19 30 49.69	+18 15 02.4	7.47	H	292.707 023 08	+18.250 679 10		2.38	0.19	− 2.44	0.56	0.59	0.90	0.61	0.74	+16	−28	−20	−15	−12	+20	− 7	+ 6	+ 4	− 6	0	−0.29
95958	19 30 50.00	−79 59 09.2	9.10	H	292.708 345 93	−79.985 875 65		5.20	9.11	−18.50	0.75	0.80	1.02	0.79	0.92	+ 1	−26	−10	+23	− 3	− 9	− 2	−10	− 7	− 1	0	0.17
95959	19 30 50.22	+55 35 17.9	8.28	H	292.709 257 03	+55.588 305 37		1.53	−1.63	−5.50	0.66	0.62	0.71	0.80	0.70	+ 4	−15	+ 9	+20	+ 6	−26	+11	− 1	− 6	+20	0	1.12
95960	19 30 50.23	+17 15 39.1	8.64	H	292.709 304 93	+17.260 855 05		7.89	62.54	2.36	0.73	0.70	1.08	0.89	0.99	−11	− 9	−23	+16	−27	+24	−25	+23	− 8	−12	0	−1.16
95961	19 30 50.44	+03 47 49.8	8.41	H	292.710 174 75	+03.797 175 36		1.14	0.03	− 3.19	0.89	0.61	1.02	1.03	0.64	− 2	−24	+11	+ 2	−14	+ 1	−17	−32	+ 3	−14	0	−0.76
95962	19 30 52.80	−06 30 50.7	7.27	H	292.720 009 78	−06.514 079 84		29.18	−142.00	−141.30	0.84	0.53	1.00	0.84	0.51	+13	−39	−19	−16	+10	+31	+12	−17	+ 7	+ 5	0	−0.33
95963	19 30 53.21	+16 25 33.4	9.69	G	292.721 711 73	+16.425 951 68		13.20	−20.71	30.96	0.98	0.88	1.48	1.31	1.39	+ 2	−26	+ 3	+30	−28	+ 5	−36	+20	+ 5	−36	0	−1.00
95964	19 30 53.35	+40 30 48.2	8.07	H	292.722 282 29	+40.513 401 84		4.07	−31.35	34.72	0.53	0.56	0.67	0.58	0.66	− 4	+ 3	+ 5	+ 7	+17	−24	+20	+12	+ 3	+ 1	1	0.56
*95965	19 30 54.04	−21 18 43.9	6.11	H	292.725 157 64	−21.312 183 88		2.64	15.13	−22.03	0.80	0.42	0.90	0.77	0.44	+40	−57	−36	+ 9	+13	−15	− 6	−27	+14	+ 2	0	1.03
*95966	19 30 54.03	−09 10 08.3	9.40	H	292.725 140 23	−09.168 963 79		1.81	−7.79	−1.56	1.28	0.86	1.37	1.22	0.76	+25	−22	−22	−26	+ 1	+12	+ 0	−41	+16	+37	0	0.91
95967	19 30 54.83	−23 57 08.4	7.60	G	292.728 448 07	−23.952 333 16		4.95	18.95	−33.89	0.93	0.72	1.28	1.29	0.58	+27	−23	−51	+ 3	−30	+53	− 9	−21	− 2	+ 2	3	0.59
95968 H	19 30 55.34	+54 01 35.9	8.91	H	292.730 579 22	+54.026 648 54	A	2.60	2.65	−14.74	1.30	1.22	1.17	1.26	1.24	+25	− 1	+ 6	−21	−13	+13	−15	−23	+ 3	+36	1	−0.11
95969	19 30 57.13	−13 22 53.7	7.93	H	292.738 052 99	−13.381 581 78		4.40	3.18	−5.62	0.79	0.48	0.87	0.84	0.49	+12	−32	−17	− 7	+ 9	+ 9	+ 9	−25	+ 1	+ 4	0	1.04
95970	19 30 57.24	+43 50 41.9	8.32	H	292.738 483 16	+43.844 981 94		3.41	−9.64	−13.69	0.65	0.59	0.71	0.66	0.66	− 3	−11	− 1	+29	+16	− 6	+18	+ 3	+ 8	+ 1	1	0.76
95971	19 30 57.60	−25 32 02.9	8.39	H	292.739 980 92	−25.534 131 66		6.06	1.29	−16.39	1.26	0.82	1.54	1.09	0.63	+32	−56	−50	−22	− 9	+34	+ 7	−22	+ 2	+10	0	0.18
95972	19 30 57.81	−44 45 15.3	9.39	G	292.740 865 21	−44.754 254 67		1.15	9.04	−0.59	1.62	1.37	1.73	2.29	1.58	+ 4	− 5	+ 3	+26	−41	+ 0	−37	−25	−31	− 8	0	0.92
95973	19 30 57.99	−11 29 04.6	7.07	H	292.741 634 68	−11.484 624 95		16.67	79.65	−14.57	0.83	0.50	0.88	0.87	0.50	+ 6	−13	−29	−34	+13	− 4	+10	−37	+18	+10	0	−0.13
95974	19 30 58.20	−14 33 47.6	6.93	H	292.742 497 68	−14.563 223 10		3.53	−0.78	2.43	0.75	0.48	0.83	0.79	0.50	+26	−28	− 5	+ 6	+ 2	+ 1	+ 1	−27	+ 3	+28	0	0.98
95975	19 30 59.71	−73 47 16.5	9.59	H	292.748 804 28	−73.787 923 82		7.72	3.61	−50.71	0.79	0.84	1.37	0.86	1.07	−16	−20	−11	+ 6	− 2	− 7	− 7	− 8	− 2	−40	2	1.63
95976	19 30 59.95	−02 02 05.0	7.73	1 H	292.749 788 67	−02.034 730 52		2.07	2.21	−1.61	0.84	0.50	1.00	1.01	0.53	+ 5	−27	−20	−12	+ 6	+11	+ 0	−41	+28	+ 9	2	−1.33
95977	19 31 00.18	+66 15 24.4	8.55	H	292.750 748 32	+66.256 777 77		3.01	3.57	−10.41	0.95	0.94	1.03	0.76	1.18	+ 0	+ 6	+13	−46	+19	− 1	+15	+ 3	+11	+29	1	
95978	19 31 00.29	+70 59 21.3	6.06	H	292.751 210 58	+70.989 258 74		5.23	−10.91	32.98	0.49	0.45	0.49	0.58	0.53	− 6	−17	−11	−18	+17	− 9	+14	+18	+ 2	− 5	1	0.40
95979	19 31 01.00	−73 59 06.6	7.40	H	292.754 168 74	−73.985 176 21		3.72	16.27	−20.68	0.47	0.46	0.75	0.48	0.59	−17	−23	− 1	− 3	+ 2	+ 0	+ 1	− 8	+ 2	−26	3	−1.01
95980	19 31 01.09	+46 19 54.4	7.17	H	292.754 543 04	+46.331 782 66		5.44	3.28	3.30	0.52	0.45	0.55	0.61	0.47	+ 5	− 5	+ 5	+22	+ 6	− 8	+ 7	+ 8	− 3	+12	1	−0.80
95981	19 31 02.42	+50 11 48.7	7.53	H	292.760 079 17	+50.196 860 95		4.09	5.82	4.32	0.55	0.50	0.58	0.62	0.53	− 5	− 2	− 3	+ 8	+17	−11	+16	+ 0	+ 5	+ 3	1	0.44
95982	19 31 02.96	+08 29 51.4	9.86	2 G	292.762 314 51	+08.497 618 29		2.77	−1.34	−9.67	1.57	1.08	1.74	1.97	1.67	+ 4	−24	+14	− 1	+ 8	+ 8	+ 9	−32	− 2	+ 2	4	1.08
95983 H	19 31 03.14	+08 23 44.9	8.26	H	292.763 078 96	+08.395 806 17	A	12.60	−5.89	−43.05	1.62	1.24	1.75	2.13	1.45	+ 1	− 3	−14	+ 4	+ 7	+ 6	+ 6	−19	+28	+ 2	0	−0.68
95984	19 31 03.15	−47 40 44.6	9.61	G	292.763 135 57	−47.679 063 67		12.14	−144.64	−183.69	1.37	1.10	1.80	1.77	1.54	+47	−21	+20	−15	− 8	−15	− 3	−53	−29	+42	0	0.44
95985	19 31 04.03	−39 17 36.0	9.96	G	292.766 803 93	−39.293 327 05		17.06	190.30	−111.38	1.78	1.28	2.00	2.17	1.30	− 1	−34	−19	+ 7	+ 8	−18	+ 1	−23	+ 6	−14	0	1.78
95986	19 31 04.15	+63 18 53.1	8.03	2 H	292.767 304 75	+63.314 761 06		4.07	−5.92	−10.78	0.64	0.56	0.62	0.77	0.63	+ 4	+ 3	+ 5	− 1	+12	− 6	+13	−11	+ 0	+14	1	0.58
95987	19 31 05.21	+02 00 42.3	6.52	H	292.771 712 92	+02.011 758 31		3.25	2.24	− 7.19	0.75	0.44	0.89	0.83	0.51	− 9	−41	−17	− 3	+13	+ 8	+ 5	−24	+18	−21	0	1.60
95988	19 31 05.55	+69 31 37.0	7.64	H	292.773 117 86	+69.526 956 09		4.03	−32.86	8.65	0.57	0.56	0.58	0.64	0.64	+ 3	− 6	+ 7	+ 9	+20	− 1	+19	+20	+11	+10	0	1.18
95989	19 31 05.57	+48 34 55.6	7.22	H	292.773 223 31	+48.582 123 83		2.53	1.84	2.47	0.52	0.44	0.54	0.59	0.49	− 2	−14	+ 1	+ 4	+ 6	−10	+ 6	+ 1	+ 5	+11	0	0.01
95990	19 31 05.69	−44 37 27.6	8.59	H	292.773 720 84	−44.624 322 16		5.73	−10.08	1.50	1.31	1.00	1.38	1.74	1.16	+ 2	+ 3	+15	+25	−20	− 6	−17	−26	−29	+ 3	0	0.94
95991	19 31 06.47	−29 29 41.6	7.45	H	292.776 969 84	−29.494 887 37		7.11	−20.62	−56.66	1.20	0.77	1.12	1.44	0.75	−33	−18	−14	−35	+37	−19	+33	−47	− 3	−29	3	−0.71
95992	19 31 06.66	−73 47 56.6	8.35	H	292.777 767 81	−73.799 052 05		6.36	7.55	−49.50	0.66	0.64	0.98	0.76	0.95	− 7	−10	−10	− 2	+13	− 0	+14	− 6	+10	−40	0	1.34
95993 H	19 31 06.90	+71 40 53.6	8.40	H	292.778 735 24	+71.681 544 94	*	1.97	−4.14	− 2.82	0.70	0.65	0.73	0.81	0.75	− 4	−13	−18	−23	+ 2	− 1	+ 8	+11	− 4	−23	0	0.29
95994	19 31 07.84	−57 23 49.3	9.28	H	292.782 670 53	−57.397 040 30		5.19	12.49	−10.12	0.96	0.84	1.40	1.14	1.17	− 9	−10	+ 7	+55	−19	+14	−11	+22	+22	+33	2	0.07
95995 H	19 31 08.54	+58 35 13.1	6.60	G	292.785 601 66	+58.586 976 65	*	59.84	−510.04	−397.54	1.69	6.18	0.64	0.68	0.68	+87	− 4	− 8	− 2	− 3	+12	+ 7	− 6	+29	+22	1	3.42
95996	19 31 09.24	+36 09 15.1	10.22	H	292.788 493 85	+36.154 196 58		9.55	−15.37	−562.86	0.95	1.02	1.30	1.09	1.08	− 8	−17	+ 1	+16	+18	− 6	+21	−23	− 2	+ 7	1	−0.28
95997	19 31 09.57	+22 00 41.1	9.16	H	292.789 872 51	+22.011 409 90		5.06	13.77	4.46	0.87	0.93	1.33	1.19	1.12	− 1	− 5	− 5	+ 4	− 1	+13	− 2	+ 0	+19	+ 1	0	0.47
95998	19 31 10.49	+27 20 14.9	8.79	H	292.793 715 42	+27.337 460 82		2.71	14.65	1.46	0.60	0.83	1.16	0.69	1.16	−21	+ 9	−18	+27	− 5	− 1	− 4

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
95901	6.972	0.005	6.921	0.006	*	0.052	0.007	T	0.06	0.01	L *	6.9391	0.0011	0.009	104	*	6.92	6.96		D	19302+5639	I 1	2 C S A	AS	95	0.161	0.004	0.44	0.20	S
95902	8.880	0.011	7.248	0.006		1.391	0.010	T	3.16	0.09	O	6.8304	0.0340	0.249	104		6.26	7.16		U 2 B			1 S							S
95903						1.370	0.015	G	1.69	0.02	A	11.4347	0.0043	0.043	113		11.35	11.49		C			1							G
95904	10.660	0.041	10.067	0.038		0.518	0.015	G	0.59	0.02	H	10.1255	0.0031	0.030	151		10.07	10.17					1							G
95905	7.054	0.008	6.633	0.006		0.394	0.008	G	0.46	0.01	H	6.6878	0.0013	0.008	54		6.67	6.70					1							S
95906	10.192	0.027	8.393	0.011		1.430	0.015	G	1.42	0.02	H	8.3887	0.0018	0.014	130		8.36	8.41					1							
95907	10.386	0.036	8.956	0.019		1.207	0.032	T	1.17	0.03	L	8.9606	0.0020	0.021	122		8.92	8.99		R			1							
95908	8.013	0.008	6.684	0.006		1.128	0.008	T	1.09	0.01	L	6.7188	0.0006	0.007	124		6.71	6.73		C			1 G							S
95909	9.215	0.013	8.574	0.012		0.595	0.015	T	0.67	0.01	L	8.6052	0.0014	0.014	136		8.58	8.64					1							
95910	10.979	0.061	9.151	0.022		1.521	0.051	T	1.56	0.08	L	9.0918	0.0023	0.018	86		9.06	9.13		C			1							
95911	9.755	0.021	7.844	0.009		1.587	0.018	T	1.61	0.02	L	7.7678	0.0015	0.012	120		7.75	7.79					1							
95912	8.611	0.010	8.459	0.011		0.138	0.014	T	0.15	0.01	L	8.4835	0.0012	0.015	133		8.46	8.51					1							S
95913	10.587	0.036	9.466	0.022		0.965	0.033	T	0.95	0.03	L	9.5425	0.0021	0.019	111		9.51	9.58		C			1							
95914	9.963	0.022	9.540	0.023		0.430	0.015	G	0.50	0.02	H	9.6006	0.0025	0.023	115		9.56	9.64		C			1							G
95915	7.420	0.005	7.308	0.006		0.109	0.007	T	0.12	0.01	L	7.3353	0.0010	0.010	126		7.32	7.35		C			1							S
95916	9.085	0.013	7.965	0.009		0.965	0.012	T	0.95	0.01	L	8.0347	0.0013	0.013	108		8.01	8.05					1							
95917	9.623	0.019	9.466	0.024		0.151	0.029	T	0.17	0.03	L	9.4635	0.0024	0.022	100		9.42	9.51		C			1							G
95918	10.229	0.030	9.105	0.020		0.968	0.028	T	0.95	0.02	L	9.1653	0.0020	0.017	85		9.13	9.19		C			1							
95919	7.452	0.005	7.275	0.005		0.170	0.007	T	0.19	0.01	L	7.3112	0.0009	0.010	130		7.30	7.33		C			1							S
95920	10.701	0.039	9.945	0.031		0.690	0.039	T	0.75	0.03	L	10.0304	0.0022	0.025	110		9.99	10.08		C			1							G
95921	11.459	0.151	10.816	0.132		0.825	0.007	G	0.87	0.01	H	10.9034	0.0070	0.032	45		10.84	10.98					1							G
95922	8.340	0.008	8.306	0.010		0.036	0.012	T	0.05	0.01	L	8.3437	0.0014	0.012	132		8.32	8.37					1							S
95923	9.862	0.023	8.693	0.015		0.960	0.015	G	0.95	0.01	H	8.7418	0.0020	0.017	103		8.72	8.78					1							
95924	9.949	0.024	9.459	0.024		0.461	0.031	T	0.53	0.03	L	9.4638	0.0028	0.028	105		9.41	9.52					1 G							G
95925	8.469	0.012	7.954	0.010	*	0.483	0.002	G	0.55	0.00	H *	7.9973	0.0013	0.011	112	*	7.98	8.02		D	19305−4826	I 1	2 C A	AB	24	0.266	0.005	0.12	0.06	S
95926	8.075	0.011	7.021	0.007		0.915	0.010	T	0.91	0.01	L	7.0719	0.0011	0.009	93		7.06	7.09					1							S
95927	8.522	0.008	8.081	0.008		0.416	0.010	T	0.48	0.01	L	8.1623	0.0013	0.011	126		8.14	8.19					1							
95928	10.284	0.036	9.780	0.036		0.528	0.015	G	0.60	0.02	H	9.8610	0.0026	0.032	93		9.81	9.93		D			1							G
95929	6.061	0.007	6.087	0.006		−0.019	0.008	T	0.00	0.01	L	6.0969	0.0041	0.037	91		6.06	6.16		U 2			1							S
95930	9.135	0.012	8.656	0.012		0.463	0.013	T	0.53	0.01	L	8.7017	0.0018	0.017	129		8.67	8.74		C			1							
95931	6.687	0.005	6.676	0.006		0.015	0.007	T	0.03	0.01	L	6.6889	0.0008	0.007	100		6.68	6.70					1							S
95932	6.808	0.004	6.344	0.003		0.450	0.004	T	0.52	0.00	L	6.3945	0.0008	0.006	127		6.38	6.40		C			1							S
95933	9.719	0.021	9.433	0.024		0.272	0.030	T	0.31	0.04	L	9.4672	0.0021	0.024	116		9.41	9.52					1							G
95934	9.447	0.015	7.670	0.007		1.480	0.013	T	1.50	0.02	L	7.6653	0.0013	0.013	157		7.65	7.70					1							
95935	8.894	0.009	7.500	0.005		1.208	0.004	G	1.32	0.03	C	7.4842	0.0009	0.012	213		7.47	7.50			19306+2507	I 1	1							S
95936	10.101	0.035	8.752	0.020		1.143	0.032	T	1.11	0.03	L	8.8261	0.0023	0.010	58		8.81	8.85		C			1							
95937	7.330	0.007	5.238	0.003		1.770	0.006	T	2.29	0.02	O	5.0826	0.0011	0.010	127		5.07	5.11		U 2			1							S
95938	8.455	0.011	7.879	0.009		0.561	0.015	G	0.63	0.01	H	7.9295	0.0013	0.013	127		7.91	7.96		C			1							S
95939	10.227	0.036	9.613	0.033		0.569	0.036	T	0.64	0.03	L	9.6772	0.0039	0.022	54		9.64	9.71		C			1							
95940	7.922	0.007	7.990	0.010		−0.058	0.011	T	−0.04	0.01	L	7.9779	0.0015	0.012	119		7.96	8.01		C			1							S
95941	10.237	0.037	9.464	0.031		0.688	0.037	T	0.75	0.03	L	9.5465	0.0028	0.016	61		9.51	9.57					1							
95942	8.704	0.011	7.430	0.007		1.085	0.010	T	1.05	0.01	L	7.4865	0.0012	0.008	96		7.47	7.50		C			1							S
95943	9.932	0.021	7.933	0.008		1.693	0.019	T	1.79	0.06	O	7.8523	0.0018	0.019	132		7.82	7.88		U 2			1							
95944	7.579	0.008	7.507	0.009		0.089	0.015	G	0.10	0.02	H	7.5154	0.0007	0.008	94		7.50	7.53					1							S
95945	8.851	0.010	7.490	0.006		1.153	0.009	T	1.12	0.01	L	7.5163	0.0013	0.010	127		7.50	7.53		C			1							
95946	10.133	0.016	8.133	0.006		1.694	0.014	T	2.03	0.04	O	8.0152	0.0018	0.027	276		7.98	8.06		U 2			1							
95947	4.478	0.002	3.200	0.001	*	1.088	0.002	T	1.05	0.00	L *	3.2177	0.0004	0.004	164	*	3.21	3.22		D	19307+2758	I 2	2 C A	AC	152	0.389	0.005	2.12	0.02	S
95948	11.281	0.086	9.314	0.026		1.631	0.071	T	1.65	0.07	L	9.2569	0.0023	0.019	60		9.22	9.29		C			1							
95949	8.483	0.010	8.302	0.012		0.166	0.015	T	0.18	0.01	L	8.3355	0.0015	0.013	96		8.31	8.35					1							S
95950	9.501	0.014	8.815	0.012		0.622	0.014	T	0.69	0.01	L	8.8828	0.0019	0.020	170		8.85	8.91					1							
95951	5.010	0.002	5.082	0.003		−0.095	0.009	G	−0.07	0.01	L	5.0997	0.0007	0.008	175		5.08	5.11		D	19307+2758	I 2	1							S
95952	7.392	0.006	7.446	0.009		−0.012	0.004	G	0.01	0.00	H	7.4395	0.0014	0.011	97		7.42	7.45					1							S
95953	6.241	0.003	6.262	0.004		−0.015	0.005	T	0.01	0.01	L	6.2664	0.0008	0.008	134		6.25	6.28		C	19308+3614	I 1	1							S
95954	9.009	0.020	8.459	0.018		0.521	0.020	T	0.59	0.02	L	8.5321	0.0021	0.018	48		8.49	8.58		D			1							S
95955	9.839	0.024	9.425	0.025	*	0.391	0.032	T	0.46	0.04	L *	9.4390	0.0021	0.017	105	*	9.41	9.47		D	19308+6337	I 1	2 C S A	AB	149	0.161	0.008	0.31	0.39	
95956	10.091	0.039	8.770	0.023		1.122	0.035	T	1.08	0.04	L	8.8326	0.0023	0.017	55		8.81	8.85		C			1							
95957	9.133	0.011	7.621	0.006		1.271	0.010	T	1.23	0.01	L	7.6275	0.0009	0.011	146		7.61	7.64		C			1							S
95958	9.641	0.016	9.116	0.016		0.502	0.017	T	0.57	0.02	L	9.2106	0.0017	0.020	137		9.18	9.25					1							
95959	10.131	0.026	8.428	0.012		1.422	0.023	T	1.41	0.04	L	8.4226	0.0013	0.013	104		8.40	8.45		C			1							
95960	9.270	0.014	8.717	0.013		0.524	0.015	G	0.65	0.01	L	8.7666	0.0018	0.017	123		8.74	8.80		C			1							
95961	8.450	0.010	8.412	0.013		0.040	0.015	T	0.06	0.01	L	8.4334	0.0017	0.016	100		8.40	8.46		C			1							
95962	8.061	0.009	7.340	0.007		0.640	0.015	G	0.70	0.01	H	7.4010	0.0014	0.013	90		7.38	7.43			19309−0631	I 1	1							S
95963	10.367	0.028	9.718	0.024		0.563	0.015	G	0.64	0.01	H	9.8142	0.0020	0.025	129		9.77	9.86		C			1							G
95964	9.406	0.015	8.185	0.010		1.043	0.014	T	1.01	0.01	L	8.2364	0.0011	0.014	137		8.21	8.27		C			1							
95965	6.271	0.003	6.133	0.003		0.121	0.008	G	0.14	0.01	H	6.1608	0.0006	0.006	121		6.15	6.17					1							S
95966	11.205	0.074	9.583	0.029		1.358	0.063	T	1.33	0.07	L	9.5543	0.0031	0.022	91		9.51	9.59		C			1							
95967	8.986	0.017	7.670	0.010		1.118	0.015	T	1.08	0.02	L	7.7598	0.0019	0.011	61		7.74	7.78		C			1							S
95968	9.221	0.018	9.044	0.021	A	0.300	0.495	G	0.17	0.06	L *	8.9645	0.0018	0.014	98	*	8.94	8.99		D	19309+5402	I 1	2 C A	AB	52	1.499	0.009	1.54	0.04	
95969	9.338	0.017	8.069	0.011		1.081	0.016	T	1.04	0.01	L	8.1008	0.0011	0.011	95		8.08	8.12		C			1							
95970	10.139	0.025	8.473	0.012		1.393	0.022	T	1.37	0.03	L	8.4600	0.0022	0.014	117		8.43	8.48					1							
95971	8.604	0.014	8.406	0.017		0.182	0.021	T	0.20	0.02	L	8.4557	0.0017	0.014	51		8.44	8.48		C			1							S
95972	9.991	0.039	9.486	0.038		0.549	0.008	G	0.62	0.01	H	9.4976	0.0039	0.022	40		9.46	9.54					1							
95973	7.618	0.008	7.128	0.007		0.490	0.015	G	0.56	0.02	H	7.1735	0.0014	0.009	93		7.15	7.19					1							S
95974	8.612	0.012	7.086	0.007		1.282	0.011	T	1.24	0.01	L	7.0872	0.0010	0.006	88		7.08	7.10		C			1							S
95975	10.157	0.023	9.596	0.021		0.525	0.028	T	0.60	0.03	L	9.6969	0.0024	0.029	170		9.65	9.75			19311−7348	I 2	1							
95976	10.281	0.028	8.006	0.009		1.877	0.024	T	1.91	0.03	L	7.8194	0.0017	0.018	127		7.79	7.85		U			1							
95977	9.903	0.022	8.670	0.013		1.053	0.020	T	1.02	0.02	L	8.7182	0.0017	0.014	106		8.69	8.74					1 X							
95978	7.924	0.008	6.229	0.004		1.416	0.007	T	1.40	0.01	L	6.2020	0.0010	0.008	107		6.19	6.22		C			1							S
95979	7.328	0.005	7.392	0.006		−0.051	0.003	G	−0.03	0.00	H	7.3920	0.0010	0.013	177		7.37	7.42					1							S
95980	7.124	0.006	7.162	0.006		−0.030	0.008	T	−0.01	0.01	L	7.1648	0.0011	0.009	127		7.15	7.19					1							S
95981	8.705	0.010	7.644	0.007		0.920	0.009	T	0.92	0.01	L	7.6929	0.0013	0.012	123		7.67	7.71			19310+5012	I 1	1							S
95982	10.017	0.032	9.799	0.041		0.250	0.015	G	0.28	0.02	H	9.9191	0.0061	0.041	91		9.85	9.98		U			1 G							G
95983	9.072	0.017	8.443	0.015	*	0.585	0.020	T	0.66	0.02	L *	8.3873	0.0017	0.013	94	*	8.37	8.41		D	19311+0824	I 1	2 C A	AB	109	1.027	0.005	0.59	0.02	
95984	10.392	0.026	9.695	0.023		0.667	0.002	G	0.73	0.00	H	9.7452	0.0022	0.021	142		9.70	9.77					1							
95985	11.010	0.073	10.077	0.053		0.862	0.004	G	0.90	0.00	H	10.1085	0.0042	0.029	52		10.06	10.15		C			1							G
95986	7.959	0.010	7.995	0.012		−0.028	0.014	T	−0.01	0.01	L	8.0349	0.0020	0.017	96		7.99	8.06		U 2	19312+6319	I 2	1							S
95987	8.424	0.011	6.683	0.005		1.452	0.010	T	1.45	0.02	L	6.6594	0.0011	0.007	101		6.64	6.67			19310+0201	I 1	1							S
95988	8.833	0.016	7.731	0.011		0.951	0.015	T	0.94	0.01	L	7.7975	0.0013	0.012	115		7.78	7.82					1							S
95989	7.083	0.005	7.207	0.007		−0.108	0.008	T	−0.09	0.01	L	7.1929	0.0008	0.009	114		7.18	7.21		C			1							S
95990	9.054	0.025	8.628	0.025		0.402	0.033	T	0.47	0.04	L	8.6791	0.0029	0.019	41		8.64	8.70		C			1							
95991	9.439	0.021	7.622	0.010		1.512	0.018	T	1.54	0.03	L	7.5698	0.0015	0.013	63		7.55	7.59					1							S
95992	8.750	0.009	8.376	0.010		0.354	0.013	T	0.42	0.01	L	8.4296	0.0015	0.022	173		8.40	8.47			19311−7348	I 2	1 G							S
95993	9.739	0.022	8.540	0.013	*	1.026	0.020	T	1.00	0.02	L *	8.5689	0.0016	0.013	97	*	8.55	8.59			19311+7141	H 1	2 C S B	AB	158	0.157	0.054	2.11	1.11	
95994	10.877	0.044	9.452	0.021		1.203	0.038	T	1.16	0.04	L	9.4468	0.0024	0.020	128		9.42	9.48					1							
95995	7.711	0.006	6.710	0.005	*	0.859	0.001	G	0.90	0.00	H *	6.7499	0.0007	0.007	107	*	6.74	6.76		D	19311+5835	M 1	2 C B	AS	284	0.100	0.022	1.39	0.63	S
95996	10.760	0.045	10.274	0.045		0.510	0.042	G	0.58	0.04	H	10.3334	0.0025	0.027	126		10.29	10.38		C			1							G
95997	10.297	0.028	9.271	0.019		0.883	0.026	T	0.89	0.02	L	9.3017	0.0030	0.028	105		9.25	9.35			19312+2201	I 1	1 S							
95998	9.156	0.011	8.837	0.012		0.303	0.015	T	0.35	0.02	L	8.8628	0.0023	0.022	174		8.83	8.91					1							
95999	8.148	0.006	6.172	0.003		1.638	0.005	T	1.66	0.01	L	6.0850	0.0012	0.013	198		6.07	6.11		U 2			1							S
96000	8.740	0.015	8.257	0.014		0.467	0.016	T	0.54	0.02	L	8.2957	0.0017	0.015	59		8.27	8.32		D			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
96001	19 31 11.97	+74 46 09.1	8.42	H	292.799 854 85	+74.769 199 94		3.58	3.67	−8.81	0.63	0.62	0.66	0.62	0.67	+ 1	−10	+23	+ 6	+17	− 6	+19	+19	− 7	+20	0	−0.98
96002 H	19 31 12.26	+63 18 52.3	8.22	H	292.801 070 32	+63.314 535 04	A	2.04	40.89	22.82	1.13	0.95	0.98	1.22	1.01	− 6	+ 9	− 5	−23	+ 6	−22	+ 7	− 6	− 6	+ 4	2	0.28
96003	19 31 13.56	+55 43 54.8	6.37	2 G	292.806 490 13	+55.731 880 11		3.10	−2.67	−18.19	0.46	0.45	0.50	0.56	0.50	+ 0	−10	+ 6	+16	+ 4	−23	+ 6	− 4	+ 7	+ 6	1	1.58
96004	19 31 14.19	−31 44 24.3	8.99	H	292.809 136 65	−31.740 071 76		3.57	−1.84	−36.51	1.29	0.88	1.35	1.34	0.80	+26	−38	−27	+16	+23	+ 1	+20	− 3	− 3	+14	0	1.41
96005	19 31 14.32	−02 06 24.8	10.27	H																							
96006	19 31 14.63	+47 03 38.9	8.85	H	292.810 943 86	+47.060 804 44		4.65	7.64	7.99	0.74	0.65	0.80	0.88	0.75	+ 4	−23	− 1	+ 9	+ 2	− 6	− 1	+ 1	+11	+10	4	−0.60
∗96007 H	19 31 15.78	−02 06 36.7	7.09	2 H	292.815 766 19	−02.110 205 65	A	0.77	−0.99	−2.06	1.37	0.88	1.43	1.67	0.82	+ 2	−19	− 2	+ 7	+12	+10	+ 2	−28	+12	−13	4	1.23
∗96008	19 31 15.78	−16 23 50.7	8.41	H	292.815 748 66	−16.397 411 88		2.21	3.59	−2.46	0.94	0.60	1.03	1.00	0.67	+18	−16	− 7	+ 2	+17	+16	+20	− 7	+ 1	+26	2	−2.35
96009	19 31 16.17	+33 28 14.8	6.70	H	292.817 368 63	+33.470 779 06		4.73	0.15	−10.55	0.47	0.48	0.66	0.56	0.62	− 6	+ 7	−33	+ 8	+15	−20	+11	− 5	+12	−14	0	1.57
96010	19 31 16.22	+38 24 02.9	7.67	H	292.817 567 34	+38.400 807 16		6.72	13.97	−12.01	0.51	0.53	0.64	0.54	0.62	+ 0	− 9	− 8	+ 0	+ 6	+ 1	+ 8	−11	+ 6	+19	0	0.77
96011 H	19 31 16.38	+47 28 52.6	6.87	2 H	292.818 237 31	+47.481 271 53	A	3.98	−13.27	−37.68	1.83	1.38	0.79	0.91	1.01	− 8	− 5	− 8	−16	+10	+ 8	+ 1	− 1	+16	+16	6	1.37
96012	19 31 16.57	−25 44 12.9	7.28	H	292.819 025 43	−25.736 918 69		6.42	−13.20	−58.00	1.09	0.64	1.26	0.84	0.50	+31	−66	−46	−25	− 5	+29	+ 7	−24	+ 0	+ 8	0	−0.39
96013	19 31 18.15	+42 59 13.0	7.18	H	292.825 616 85	+42.986 956 58		5.62	−7.17	15.48	0.47	0.49	0.57	0.50	0.55	− 2	− 2	+ 0	+ 5	+ 8	− 1	+ 8	+ 8	+ 0	+ 8	1	−0.59
96014	19 31 19.36	+50 18 23.7	5.55	H	292.830 664 58	+50.306 594 51		7.01	−30.60	45.82	0.41	0.41	0.46	0.48	0.43	−10	− 5	− 1	− 9	+ 7	−10	+ 6	− 9	+ 3	+ 0	1	0.94
96015	19 31 20.63	+64 17 13.2	7.97	H	292.835 971 87	+64.286 996 92		1.93	−1.72	−19.30	0.63	0.59	0.63	0.72	0.70	+ 6	− 6	− 3	+20	+17	−14	+19	+ 9	+ 1	+21	0	−1.26
96016	19 31 21.61	+26 37 01.6	5.89	H	292.840 059 24	+26.617 109 97		16.87	11.33	25.23	0.31	0.48	0.67	0.36	0.67	−26	− 2	− 3	+16	+ 4	− 8	+ 5	− 1	− 6	−28	0	−0.87
96017	19 31 21.97	+11 10 17.5	8.26	H	292.841 533 59	+11.171 515 55		0.42	−0.93	−6.36	0.77	0.63	1.07	0.81	0.64	+23	−26	− 6	+30	−50	− 4	−60	−24	+14	− 6	0	−1.44
96018	19 31 22.18	−46 16 22.7	6.84	H	292.842 412 24	−46.272 974 10		4.00	14.71	−7.52	0.78	0.52	0.88	0.98	0.69	+11	−37	+ 0	+ 8	+ 3	+ 2	− 3	−39	−10	−10	2	1.35
96019 H	19 31 22.19	+36 42 17.5	8.33	H	292.842 445 20	+36.704 851 50	C	8.06	−1.14	1.60	1.40	1.43	1.54	1.46	1.44	−11	−10	+ 3	− 6	+10	+ 7	+15	− 7	−13	− 3	2	2.15
96020	19 31 22.87	+35 17 39.8	9.24	H	292.845 294 20	+35.294 400 39		1.70	−6.65	−7.67	0.78	0.75	1.01	0.87	0.90	+ 1	+ 0	−15	+14	+ 0	+ 4	+ 4	−13	+ 1	+15	0	−0.35
96021	19 31 24.61	−21 02 24.1	7.28	H	292.852 523 82	−21.040 022 01		1.76	−4.38	−30.07	0.90	0.47	1.00	0.89	0.50	+43	−47	−27	− 6	+ 0	+ 1	−10	−35	+ 4	+ 1	0	0.01
96022	19 31 25.10	−13 58 41.2	8.71	H	292.854 579 31	−13.978 101 81		5.49	20.65	−6.53	0.99	0.61	1.14	1.10	0.68	+27	−26	−13	+ 0	+ 6	+15	+ 5	−19	+ 1	+16	0	0.69
96023	19 31 25.42	−17 40 24.0	8.83	H	292.855 905 21	−17.673 338 93		5.00	−15.21	−19.32	1.05	0.67	1.18	1.36	0.81	+30	−16	+ 6	+13	+12	+17	+ 5	−11	− 9	+ 2	0	0.76
96024	19 31 25.50	+11 37 40.6	7.31	1 G	292.856 237 63	+11.627 941 02		3.48	2.68	2.87	0.64	0.57	0.92	0.69	0.56	+22	−14	−13	+12	−49	+13	−54	−26	+ 4	− 5	0	0.94
96025	19 31 26.20	+36 42 37.8	8.91	H	292.859 177 14	+36.710 499 64		2.01	7.55	−13.51	0.81	0.74	0.98	0.88	0.88	− 6	+ 2	− 5	+12	+23	+ 0	+27	− 7	− 7	+ 7	3	1.67
96026	19 31 27.00	−66 33 12.5	7.70	H	292.862 497 08	−66.553 462 84		1.04	1.84	−25.19	0.65	0.55	0.92	0.71	0.76	−13	−13	− 1	− 1	− 2	−18	−13	−19	+33	−40	0	−0.08
96027	19 31 27.31	−03 54 02.8	9.49	1 H	292.863 803 31	−03.900 773 30		14.45	−60.54	−38.07	1.26	0.77	1.44	1.42	0.88	+27	−24	+ 0	−27	− 4	+30	− 6	−29	+17	+46	0	0.50
96028	19 31 28.34	+55 15 52.0	6.84	H	292.868 099 12	+55.264 445 46		8.48	64.78	138.41	0.51	0.47	0.54	0.63	0.52	+ 8	−12	+ 6	+18	+ 4	−19	+ 6	+ 3	+ 4	+20	0	0.89
96029	19 31 29.92	+28 43 02.1	7.60	H	292.874 651 63	+28.717 252 09		7.45	18.77	11.52	0.46	0.57	0.75	0.54	0.74	−13	− 9	−19	+26	− 5	−19	− 9	+15	+ 2	−15	1	0.91
96030	19 31 30.34	+34 28 11.0	8.08	H	292.876 421 37	+34.469 720 04		3.38	−1.84	−4.11	0.50	0.60	0.76	0.52	0.73	+ 7	−20	−34	+ 8	+11	− 2	+16	+26	−24	+ 1	0	−0.40
96031	19 31 31.42	+34 42 17.9	10.39	3 H	292.880 915 08	+34.704 983 75		4.78	−17.62	−9.72	1.19	1.69	1.86	1.82	2.12	+ 1	− 2	−26	+ 8	+ 6	+13	+ 8	+34	− 5	+ 0	0	3.14
96032	19 31 32.51	+13 09 58.6	8.54	G	292.885 468 33	+13.166 267 53	A	13.59	45.70	26.07	1.25	1.23	1.72	1.22	1.08	+33	− 3	−18	− 6	−34	+23	−30	−18	− 7	+14	2	1.80
96033	19 31 34.55	+17 57 29.4	7.55	H	292.893 955 22	+17.958 165 94		5.37	11.65	4.34	0.54	0.54	0.89	0.58	0.62	+ 5	−25	−26	−12	+ 6	+14	+ 7	−11	+17	− 7	0	0.06
96034 H	19 31 36.38	+26 59 11.7	7.29	1 H	292.901 569 19	+26.986 570 23	A	1.25	0.91	−4.33	0.69	0.87	0.96	0.59	0.95	−25	+ 1	+ 0	+ 9	− 7	+ 5	− 6	+ 0	+ 1	−10	1	−0.57
96035	19 31 36.39	−53 15 27.0	8.09	G	292.901 637 11	−53.257 500 22		11.62	17.90	−62.56	0.78	0.68	0.98	1.04	0.91	+30	−21	−15	− 3	+ 4	−11	− 3	−26	+14	+15	0	0.37
96036	19 31 36.99	−43 05 17.4	8.86	H	292.904 139 05	−43.088 154 77		5.00	−12.10	−10.18	1.32	1.12	1.59	2.10	1.23	+18	− 9	−26	+21	+ 5	−22	− 8	−22	+26	− 6	0	1.59
96037 H	19 31 37.80	+17 46 59.7	8.27	G	292.907 517 26	+17.783 237 06	A	21.01	4.80	−116.17	0.96	0.95	1.43	1.01	1.05	+19	−10	−15	−11	− 6	+14	− 8	−10	+20	+14	1	−0.38
96038	19 31 38.38	+05 01 16.5	7.45	H	292.909 927 75	+05.021 252 28		2.90	−8.96	−3.29	0.82	0.55	1.00	1.06	0.56	−10	− 2	−12	− 6	− 1	− 5	− 5	−41	+12	−30	0	−0.34
96039	19 31 39.70	−46 06 17.5	9.52	G	292.915 430 29	−46.104 858 98		7.01	8.79	−33.42	1.39	0.99	1.70	1.73	1.33	+16	−45	−15	+ 3	+11	+ 0	− 6	−42	+18	− 9	0	0.60
96040	19 31 41.48	−60 59 41.0	9.76	H	292.922 813 31	−60.994 722 05		6.48	3.25	8.24	1.05	0.75	1.47	1.29	1.18	−18	− 9	+13	+45	−13	+13	+ 2	+ 0	+23	+30	0	0.13
96041	19 31 42.05	−42 05 39.5	9.89	G	292.925 193 51	−42.094 301 78		11.30	50.58	−62.73	2.14	1.59	2.34	4.08	2.07	−14	−10	−23	+11	− 2	−31	−12	− 6	+19	−53	0	1.20
96042	19 31 42.20	+65 56 31.8	8.65	H	292.925 824 00	+65.942 163 65		2.73	14.85	0.49	0.60	0.65	0.68	0.48	0.90	+ 5	− 4	+ 8	−34	+24	− 2	+25	+15	− 1	+30	2	1.32
96043	19 31 42.46	−29 55 05.2	9.63	H	292.926 926 69	−29.918 115 65		13.76	−0.48	−33.67	1.62	1.02	1.66	2.21	1.53	− 4	−36	−17	−36	+20	+12	+22	−38	+ 0	−21	3	0.51
96044	19 31 42.58	−19 23 11.2	7.19	H	292.927 407 24	−19.386 450 17		0.84	13.03	−9.44	0.84	0.47	0.98	0.89	0.47	+31	−40	−31	+ 7	+ 3	+27	+ 4	−18	+ 6	+10	0	0.64
96045	19 31 43.11	+13 37 09.5	7.61	H	292.929 613 04	+13.619 293 07		3.07	6.73	1.86	0.63	0.59	1.01	0.71	0.66	+35	− 8	−22	− 7	−33	+30	−33	−16	−12	− 4	0	−1.38
96046	19 31 43.16	+19 17 37.6	9.85	H	292.929 839 10	+19.293 774 57		1.29	6.78	1.78	0.91	1.04	1.42	0.95	1.16	+27	−14	−15	−32	− 5	+ 7	− 5	−22	+ 8	+25	1	0.60
96047	19 31 43.21	+05 46 08.6	6.95	H	292.930 025 34	+05.769 047 41		12.81	95.15	12.21	0.80	0.51	0.95	1.05	0.58	−14	− 9	+ 5	−34	+ 9	+ 2	+ 8	−41	+18	+ 2	0	−0.78
96048	19 31 44.46	−41 37 06.6	9.87	H	292.935 241 71	−41.618 490 94		3.61	45.82	−34.48	1.73	1.19	1.72	2.55	1.28	− 8	−27	−12	− 8	+18	−18	+10	−20	+ 6	−32	0	0.65
96049	19 31 44.64	+60 51 51.9	8.26	H	292.935 991 89	+60.864 409 21		12.76	−53.09	−91.67	0.68	0.63	0.68	0.68	0.78	+11	− 8	− 1	+18	+ 5	− 5	+ 7	+ 9	− 3	+25	4	0.80
96050	19 31 44.88	+06 51 31.5	8.02	H	292.936 992 72	+06.858 749 33		2.08	11.33	−13.83	0.95	0.61	1.16	1.24	0.72	+ 2	−17	+ 0	−20	+ 0	+ 7	− 4	−32	+19	− 2	0	−1.37
96051	19 31 45.83	+38 01 12.0	8.22	H	292.940 978 84	+38.019 999 53		2.98	12.82	14.69	0.55	0.56	0.69	0.64	0.65	− 3	−10	− 6	− 2	+21	+ 6	+20	+ 5	+ 6	+14	2	1.64
96052	19 31 46.32	+34 27 10.7	4.74	H	292.943 004 36	+34.452 977 07		5.20	1.06	−3.58	0.39	0.42	0.55	0.41	0.50	+ 3	−14	−31	+ 6	+ 8	+ 4	+12	+16	− 9	+ 1	0	−0.74
96053	19 31 47.91	−42 25 46.7	7.50	G	292.949 606 90	−42.429 644 26		9.12	42.10	6.93	1.10	0.79	1.14	1.80	0.91	−20	+ 7	−26	− 5	+13	−30	+ 5	−21	+16	−32	0	−0.16
96054	19 31 51.38	+04 20 53.9	8.59	H	292.964 073 89	+04.348 295 50		4.03	−26.32	12.24	1.04	0.72	1.23	1.24	0.68	+ 4	−22	+ 1	− 1	−20	− 3	−21	−41	+ 4	−12	0	1.77
96055	19 31 51.62	+09 09 10.1	8.87	H	292.965 082 22	+09.152 793 99		1.74	−1.74	2.52	1.02	0.65	1.28	1.22	0.78	−17	−22	−15	+ 8	+ 3	+20	− 2	−11	+24	−25	0	−0.21
96056	19 31 51.68	−53 21 37.5	8.45	H	292.965 339 79	−53.360 413 45		1.32	−8.17	−31.33	0.92	0.78	1.19	1.32	1.10	+30	−18	− 9	+ 5	+15	− 6	+11	−15	+11	+22	0	−0.48
96057	19 31 53.64	+14 58 08.3	7.64	H	292.973 515 49	+14.968 977 75		6.03	−5.43	−11.33	0.57	0.52	0.91	0.77	0.76	+11	− 8	−16	+11	−35	+17	−35	+ 8	−20	−32	0	0.46
96058	19 31 53.67	+31 12 53.6	7.77	2 H	292.973 638 67	+31.214 892 49		1.56	10.20	19.84	0.53	0.65	0.85	0.61	0.89	−10	− 1	−22	+ 9	+ 4	−13	+ 2	+15	−10	−13	0	−0.71
96059	19 31 54.65	+29 08 31.6	8.68	H	292.977 716 23	+29.142 102 93		4.35	−14.14	−52.86	0.59	0.80	1.03	0.70	1.03	−11	− 9	−11	+31	− 2	−22	− 4	+23	+ 0	−16	0	0.29
96060	19 31 55.59	+14 18 58.7	8.57	H	292.981 621 71	+14.316 303 38		3.18	4.82	−8.20	0.77	0.67	1.20	0.88	0.95	+47	+ 2	− 6	− 8	−43	+19	−50	−18	−35	−15	0	−2.78
∗96061	19 31 56.39	+52 59 03.6	9.64	H	292.984 969 94	+52.984 337 95	B	4.68	−6.42	4.71	6.88	7.91	3.67	3.60	4.17	+ 5	−39	+ 1	−18	+13	+20	+ 6	+ 4	+15	+24	2	2.32
∗96062	19 31 55.96	+48 35 31.3	8.51	G	292.983 159 82	+48.592 016 34		9.13	67.17	330.62	0.65	0.62	0.73	0.72	0.68	+ 1	−18	− 2	+ 0	− 3	−19	− 4	+ 2	− 1	+ 7	3	−1.55
∗96063	19 31 56.00	+30 11 16.4	7.50	H	292.983 338 89	+30.187 902 15		4.32	−4.51	−5.36	0.50	0.65	0.81	0.59	0.84	−16	−10	−14	+14	+ 7	− 1	+10	+19	− 8	−22	0	0.68
96064	19 31 56.68	−18 39 21.3	8.10	2 H	292.986 186 62	−18.655 906 77		2.50	0.28	−4.05	0.93	0.59	1.04	1.00	0.63	+30	−22	−13	− 5	+19	+25	+21	− 9	+ 9	+25	0	−0.24
96065	19 31 57.14	−54 09 54.8	6.82	2 H	292.988 070 21	−54.165 218 61		2.99	−8.83	−11.93	0.64	0.54	0.96	0.98	0.87	− 3	+ 9	− 6	+ 1	+19	−17	+22	−17	+10	+ 9	0	0.34
96066	19 31 57.62	+52 59 06.9	8.86	H	292.990 095 05	+52.985 242 71	A	4.52	−5.36	1.04	2.86	2.50	2.34	2.36	2.50	+ 1	−42	+ 0	−22	+11	+19	+ 3	− 9	+16	+24	2	2.32
96067	19 31 58.45	−23 34 33.7	8.68	H	292.993 549 09	−23.576 031 21	A	3.30	6.49	−4.04	2.01	1.41	2.32	2.48	1.33	+40	−24	−36	−12	−17	+53	+ 0	−18	+ 0	+17	1	2.12
96068	19 31 59.54	+10 27 53.4	8.52	H	292.998 064 54	+10.464 820 56		2.47	7.64	0.36	0.76	0.69	1.17	0.85	0.70	+31	+ 0	− 2	+15	−31	+17	−32	−22	+ 1	+22	0	0.75
96069	19 32 00.05	−37 10 36.3	9.66	H	293.000 226 50	−37.176 754 92		5.91	11.71	−15.06	1.62	1.15	1.77	2.38	1.11	+ 6	−28	−36	+24	+15	−24	− 1	−17	+ 9	−19	0	1.30
96070	19 32 00.09	+19 48 24.2	9.85	H	293.000 384 54	+19.806 715 64		15.41	−24.31	−105.87	0.86	1.05	1.43	1.08	1.25	+20	−14	−19	−12	−12	+14	−11	−18	+ 6	+ 8	0	1.32
96071	19 32 00.68	+07 29 16.5	6.80	H	293.002 837 57	+07.487 916 31		6.53	−3.26	−30.32	0.82	0.51	0.93	1.13	0.64	−22	− 7	−15	− 6	+ 0	+18	+ 2	−20	+ 7	−25	0	−1.96
96072	19 32 00.93	+05 23 55.9	8.44	H	293.003 894 19	+05.398 854 42		20.50	81.44	−118.19	1.05	0.65	1.22	1.34	0.74	− 9	−11	− 8	−24	+ 5	− 7	+ 2	−40	+19	− 9	0	−0.24
96073	19 32 01.02	+38 48 34.4	9.33	G																							
96074	19 32 01.35	+38 48 08.6	11.57	H	293.005 614 97	+38.802 392 38		14.09	−10.60	64.99	19.23	20.22	23.79	22.01	23.86	+ 6	+ 6	− 6	−11	− 2	− 8	+ 0	−22	+ 8	+23	0	
96075	19 32 01.81	+20 55 46.0	7.00	H	293.007 546 64	+20.929 438 64		4.18	2.24	−4.61	0.51	0.51	0.77	0.67	0.69	+21	− 5	− 7	− 6	− 3	+20	− 4	+ 2	+17	+37	0	−0.33
96076	19 32 02.21	+50 43 44.6	8.20	H	293.009 204 41	+50.729 048 59		1.71	3.05	21.98	0.63	0.61	0.69	0.77	0.65	+ 1	−11	+ 7	+ 2	+ 7	−12	+ 8	− 7	− 5	+ 4	0	0.27
96077	19 32 02.61	+50 10 51.0	8.05	1 H	293.010 882 93	+50.180 835 36		19.16	−90.99	292.17	0.60	0.54	0.63	0.72	0.58	− 3	− 7	+ 1	+14	+ 8	− 1	+ 9	− 1	+ 4	+ 7	1	−0.40
96078	19 32 04.12	+16 28 27.3	8.97	G	293.017 176 45	+16.474 252 32		9.22	63.68	15.49	0.75	0.72	1.14	0.92	0.85	+13	−17	− 6	+ 9	−29	+17	−31	− 7	− 2	−11	0	−1.32
96079	19 32 04.25	+05 29 48.5	8.66	H	293.017 698 09	+05.496 799 06		3.58	−5.62	−35.40	1.23	0.74	1.34	1.49	0.79	−27	−19	+ 6	−21	+12	−11	+12	−43	+13	−16	0	−1.45
96080	19 32 04.46	−74 58 53.9	8.94	H	293.018 565 62	−74.981 627 49		6.92	21.94	−9.67	0.65	0.69	1.06	0.69	0.83	+ 0	−16	− 7	+12	+ 0	−14	− 5	− 6	+13	−10	0	−1.00
96081	19 32 05.42	+25 35 46.4	6.87	H	293.022 600 68	+25.596 225 39		12.61	48.65	44.73	0.32	0.53	0.77	0.37	0.81	−33	+ 0	− 7	+29	−10	+ 4	−11	+ 6	+ 1	−36	1	−0.89
96082	19 32 05.73	−25 28 05.1	11.17	H	293.023 884 38	−25.468 080 66		1.05	−24.44	−40.63	2.71	2.06	3.57	3.02	1.73	+24	−32	−54	−21	−17	+39	+ 4	−24	+ 3	+12	0	−2.80
96083 H	19 32 05.91	+28 16 00.5	7.52	H	293.024 637 46	+28.266 804 06	A	5.22	3.41	−3.45	0.62	0.73	0.89	0.68	0.93	−11	−13	−20	+25	−10	− 8	−16	+14	+10	−19	1	−0.04
96084	19 32 06.42	−49 02 19.1	8.82	H	293.026 762 89	−49.038 646 85		6.54	11.03	−16.82	1.17	0.99	1.50	1.76	1.57	+29	+ 2	+17	−42	−11	−26	− 2	−56	−12	+38	0	2.61
96085	19 32 06.56	−11 16 29.9	7.53	H	293.027 353 01	−11.274 986 01		55.50	235.44	18.03	0.87	0.51	0.90	0.83	0.47	+ 2	−29	−14	−31	+12	+ 0	+10	−43	+ 5	+12	0	2.27
96086	19 32 06.82	−20 24 01.2	8.17	H	293.028 410 12	−20.400 333 38		3.71	11.30	1.76	1.06	0.56	1.21	1.15	0.58	+45	−55	−36	− 3	+ 2	+15	− 7	−27	+ 2	−12	0	1.20
96087	19 32 08.43	+31 00 42.1	10.19	H	293.035 144 80	+31.011 691 34		1.79	2.08	−10.13	0.94	1.20	1.57	1.07	1.56	−15	+ 1	+ 6	+10	+ 7	+ 5	+ 7	+ 2	−22	−16	0	1.95
96088	19 32 09.39	−33 02 16.8	9.31	H	293.039 107 33	−33.038 012 81		6.51	56.25	−24.40	1.65	0.95	1.70	2.27	0.93	+ 4	−26	−36	+41	− 9	+16	−13	− 8	−13	−32	0	−0.41
96089	19 32 11.06	−30 44 53.7	8.70	1 H	293.046 066 83	−30.748 261 75		12.95	32.03	−70.80	1.21	0.85	1.49	1.52	0.77	+29	−22	−38	+18	− 3	+39	+10	− 7	− 1	+14	0	1.17
96090 H	19 32 11.88	−60 16 10.7	7.07	H	293.049 509 55	−60.269 636 54	A	2.69	19.42	−35.75	1.04	0.77	1.31	1.13	1.04	− 1	− 7	+ 7	+15	−29	+ 0	− 8	−22	−10	+36	1	0.73
96091	19 32 12.01	−42 16 44.1	9.73	G	293.050 055 66	−42.278 912 35		4.68	16.54	−14.70	1.84	1.39	2.00	3.14	1.64	−17	− 5	−30	+ 2	+ 8	−32	− 3	−15	+25	−40	0	−1.16
96092 H	19 32 12.68	+09 20 03.4	7.04	H	293.052 851 82	+09.334 285 59	A	2.21	9.54	−0.65	1.00	0.72	1.17	1.16	0.72	−26	+23	−39	+ 1	− 2	+19	+12	−38	+28	−29	1	−0.35
96093	19 32 13.30	+06 40 51.4	8.81	H	293.055 420 83	+06.680 953 33		3.64	6.64	−13.09	1.25	0.87	1.63	1.84	0.97	−14	− 2	+42	−13	−11	−22	+ 2	−42	−12	− 6	0	0.79
96094	19 32 14.07	−28 22 30.9	8.46	H	293.058 638 81	−28.375 252 36		6.54	9.21	−45.13	1.30	0.87	1.42	1.63	0.85	−15	− 7	−16	−24	+24	−30	+18	−39	− 9	−17	0	0.55
96095	19 32 14.11	−44 32 47.3	6.48	H	293.058 796 40	−44.546 466 47		23.85	−138.41	32.77	0.88	0.74	0.98	1.23	0.78	+ 3	−14	+15	+21	−25	− 4	−20	−31	−24	− 9	0	1.98
96096	19 32 15.80	−21 31 00.8	7.19	H	293.065 827 94	−21.516 875 26		7.52	31.35	−1.99	0.93	0.49	1.03	0.85	0.51	+56	−56	−38	− 5	− 2	− 6	−18	−38	+14	+19	2	1.12
96097	19 32 15.94	−01 26 07.5	8.58	H	293.066 434 94	−01.435 405 87		−0.05	0.66	−2.11	0.89	0.48	1.06	1.00	0.54	+ 1	−35	− 2	−21	− 1	+26	− 5	−38	+18	+15	0	0.17
96098	19 32 19.24	+35 12 06.2	7.91	H	293.080 167 05	+35.201 723 26		6.76	−0.62	−16.55	0.54	0.54	0.74	0.59	0.59	+ 4	−14	−15	+24	+13

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
96001	8.725	0.011	8.442	0.011		0.288	0.015	G	0.33	0.02	H	8.4919	0.0020	0.016	123		8.46	8.53					1							
96002	9.299	0.020	8.343	0.015	A	1.054	0.197	G	0.86	0.02	L *	8.3755	0.0018	0.017	100	*	8.34	8.40			19312+6319	I 2	2 C D	AB	328	2.117	0.033	3.58	0.15	S D
96003	7.821	0.007	6.498	0.004		1.123	0.006	T	1.09	0.01	L	6.5153	0.0022	0.019	103		6.49	6.55		U 2			1							S P
96004	10.445	0.048	9.164	0.027		1.090	0.043	T	1.05	0.04	L	9.1557	0.0019	0.014	56		9.13	9.19		D			1							
96005											T	10.4081	0.1328	0.915	119		8.53	11.04		D	19313−0207	I 2	S							G
96006	9.238	0.017	8.882	0.018		0.290	0.015	G	0.33	0.02	H	8.9269	0.0018	0.018	107		8.90	8.96					1							
96007	7.270	0.009	7.136	0.011	A	−0.140	0.230	G	0.11	0.04	L *	7.1262	0.0067	0.089	126	*	7.03	7.46	5.29	P 1 A	19313−0207	I 2	2 C A	AB	63	1.281	0.015	2.50	0.07	S
96008	8.432	0.010	8.434	0.013		0.003	0.015	T	0.02	0.01	L	8.4218	0.0012	0.015	100		8.40	8.46					1							S
96009	6.812	0.004	6.710	0.005		0.099	0.006	T	0.11	0.01	L	6.7409	0.0007	0.007	118		6.73	6.75		C			1							S
96010	7.830	0.008	7.687	0.008		0.138	0.011	T	0.15	0.01	L	7.7239	0.0010	0.011	121		7.70	7.74					1							S
96011	7.199	0.006	6.906	0.006	*	0.279	0.008	T	0.32	0.01	L *	6.9418	0.0020	0.020	110	*	6.92	7.13	1.87	P 1 A	19313+4729	I 1	2 C A	AB	277	0.331	0.003	0.42	0.03	S
96012	8.920	0.017	7.436	0.010		1.249	0.015	T	1.21	0.01	L	7.4454	0.0015	0.008	58		7.43	7.46		C			1							S
96013	8.496	0.008	7.292	0.006		1.030	0.008	T	1.00	0.01	L	7.3477	0.0010	0.010	130		7.33	7.37					1							S
96014	7.201	0.005	5.685	0.003		1.274	0.005	T	1.23	0.01	L	5.7099	0.0005	0.005	126		5.70	5.72					1							S
96015	9.541	0.017	8.097	0.009		1.218	0.015	T	1.18	0.01	L	8.1324	0.0014	0.014	125		8.11	8.16		C			1							
96016	7.047	0.004	5.992	0.003		0.915	0.004	T	0.91	0.00	L	6.0507	0.0004	0.006	216		6.04	6.06					1							S
96017	8.125	0.007	8.233	0.009		−0.093	0.010	T	−0.07	0.01	L	8.2361	0.0012	0.012	138		8.22	8.26		C			1							S
96018	8.085	0.011	6.933	0.006		0.990	0.010	T	0.97	0.01	L	7.0028	0.0008	0.007	82		6.99	7.02		C			1							S
96019	8.837	0.015	8.305	0.014	*	0.499	0.019	T	0.57	0.02	L *	8.4354	0.0017	0.014	128	*	8.42	8.46		D	19314+3642	I 2	2 C A	CD	50	5.880	0.003	0.41	0.02	
96020	10.681	0.044	9.323	0.022		1.150	0.039	T	1.11	0.04	L	9.4073	0.0022	0.020	123		9.37	9.45		C			1							
96021	9.212	0.013	7.445	0.006		1.472	0.011	T	1.49	0.02	L	7.4053	0.0008	0.009	136		7.39	7.42		C			1							S
96022	10.578	0.045	8.882	0.019		1.426	0.041	T	1.41	0.07	L	8.8262	0.0032	0.020	79		8.80	8.86					1							
96023	9.387	0.018	8.894	0.018		0.475	0.020	T	0.55	0.02	L	8.9340	0.0021	0.018	91		8.90	8.97		C			1							
96024	9.033	0.013	7.432	0.007		1.315	0.008	G	1.28	0.01	H	7.4906	0.0012	0.011	123		7.47	7.52		M			1							S
96025	9.498	0.018	8.984	0.018		0.511	0.400	G	0.59	0.04	L	9.0273	0.0020	0.018	122		8.98	9.06		D	19314+3642	I 2	1 S							
96026	9.393	0.016	7.887	0.009		1.267	0.014	T	1.23	0.01	L	7.8632	0.0011	0.014	127		7.83	7.89		C			1							S
96027	10.281	0.037	9.585	0.031		0.630	0.036	T	0.70	0.03	L	9.6117	0.0028	0.028	81		9.57	9.66		U			1							
96028	8.279	0.011	6.969	0.007		1.113	0.010	T	1.08	0.01	L	7.0069	0.0007	0.009	113		6.99	7.02		C			1							S
96029	7.929	0.007	7.628	0.007		0.328	0.001	G	0.38	0.00	H	7.6775	0.0012	0.012	169		7.66	7.70		C			1							S
96030	8.038	0.016	8.070	0.021		−0.025	0.024	T	0.00	0.02	L	8.0811	0.0010	0.012	144		8.05	8.11					1							S
96031	12.408	0.321	10.627	0.106		1.484	0.268	T	1.50	0.40	L	10.5116	0.0612	0.542	77		9.68	12.32	149.10	P 1 B			1							G P
96032	9.197	0.015	8.568	0.014	A	0.607	0.015	G	0.68	0.01	H	8.6479	0.0076	0.021	103	A	8.62	8.69			19315+1310	I 1	2 C B	AB	239	11.101	0.035	3.15	0.14	
96033	7.662	0.005	7.570	0.007		0.090	0.008	T	0.10	0.01	L	7.5849	0.0011	0.011	143		7.57	7.61					1							S
96034	7.444	0.004	7.315	0.005	*	0.125	0.006	T	0.14	0.01	L *	7.3409	0.0018	0.020	181	*	7.31	7.37	1.24	P 1 A	19316+2659	H 1	2 C A	AB	111	0.481	0.009	2.89	0.04	S
96035	8.600	0.012	8.112	0.012		0.456	0.003	G	0.53	0.00	H	8.1828	0.0010	0.010	88		8.16	8.20		C			1							S
96036	10.189	0.043	9.000	0.027		1.018	0.040	T	0.99	0.03	L	9.0301	0.0036	0.020	42		9.00	9.07		C			1							
96037	9.071	0.011	8.388	0.010	A	0.637	0.002	G	0.70	0.00	H *	8.3797	0.0013	0.015	141	*	8.36	8.41		D	19316+1747	I 1	2 C A	AB	110	1.859	0.013	2.93	0.06	
96038	7.481	0.007	7.435	0.007		0.047	0.009	T	0.06	0.01	L	7.4677	0.0013	0.014	110		7.45	7.49					1							S
96039	10.000	0.029	9.553	0.029		0.440	0.005	G	0.51	0.01	H	9.6195	0.0031	0.020	72		9.58	9.65		C			1							
96040	10.330	0.023	9.766	0.021		0.528	0.028	T	0.60	0.03	L	9.8765	0.0029	0.028	177		9.83	9.93					1							
96041	10.648	0.074	9.857	0.061		0.770	0.020	G	0.81	0.02	H	10.0660	0.0055	0.025	31		10.03	10.11					1							
96042	8.906	0.013	8.687	0.015		0.209	0.019	T	0.23	0.02	L	8.7187	0.0015	0.014	102		8.70	8.74		C			1							
96043	10.423	0.048	9.798	0.044		0.577	0.048	T	0.65	0.04	L	9.7503	0.0032	0.021	62		9.71	9.78		C			1 G							
96044	9.271	0.017	7.364	0.007		1.583	0.015	T	1.60	0.01	L	7.3045	0.0010	0.009	95		7.28	7.32					1							S
96045	9.814	0.019	7.810	0.008		1.661	0.016	T	1.68	0.02	L	7.7217	0.0012	0.012	145		7.70	7.74		C			1							
96046	11.415	0.070	9.999	0.033		1.196	0.061	T	1.16	0.06	L	10.0146	0.0025	0.022	110		9.97	10.05		C			1						G	
96047	7.481	0.007	7.005	0.007		0.485	0.006	G	0.56	0.01	H	7.0542	0.0009	0.008	94		7.04	7.07					1							S
96048	10.558	0.065	10.000	0.061		0.527	0.066	T	0.60	0.07	L	9.9844	0.0044	0.023	41		9.93	10.02		C			1							
96049	8.885	0.013	8.333	0.012		0.540	0.015	G	0.61	0.02	H	8.3757	0.0011	0.012	97		8.35	8.40		D			1							S
96050	8.076	0.010	8.019	0.012		0.057	0.015	T	0.07	0.01	L	8.0438	0.0018	0.012	85		8.02	8.07		C			1							
96051	8.201	0.008	8.215	0.010		−0.008	0.012	T	0.01	0.01	L	8.2259	0.0015	0.014	128		8.20	8.25		C			1							S
96052	4.552	0.002	4.716	0.002		−0.150	0.005	G	−0.12	0.03	C	4.6931	0.0003	0.005	136		4.69	4.70					1							S
96053	8.109	0.017	7.548	0.015		0.530	0.010	G	0.60	0.01	H	7.6139	0.0018	0.010	38		7.59	7.63					1							S
96054	10.066	0.026	8.737	0.015		1.128	0.023	T	1.09	0.02	L	8.7565	0.0023	0.020	97		8.73	8.80		C			1							
96055	8.931	0.013	8.864	0.017		0.067	0.020	T	0.08	0.02	L	8.8957	0.0022	0.017	88		8.87	8.92		C			1							
96056	9.895	0.029	8.577	0.016		1.119	0.026	T	1.08	0.03	L	8.6150	0.0014	0.016	92		8.59	8.64		C			1							
96057	7.694	0.006	7.643	0.007		0.052	0.009	T	0.06	0.01	L	7.6633	0.0010	0.014	142		7.64	7.69		C			1							S
96058	9.912	0.019	7.955	0.008		1.659	0.017	T	1.85	0.06	O	7.8633	0.0029	0.029	157		7.82	7.90		U 2			1							
96059	10.138	0.024	8.808	0.014		1.129	0.022	T	1.09	0.02	L	8.8525	0.0017	0.019	168		8.82	8.88		C			1							
96060	8.638	0.009	8.547	0.011		0.089	0.013	T	0.10	0.01	L	8.6064	0.0013	0.015	172		8.58	8.63		C			1							
96061	9.710	0.026	9.521	0.033	B	0.181	0.039	T	0.20	0.04	L	9.6190	0.0184			B				D	19320+5259	I 2	1 C I A							
96062	9.074	0.014	8.552	0.013		0.460	0.000	G	0.53	0.00	H	8.6170	0.0017	0.014	113		8.59	8.64		C			1							
96063	9.264	0.013	7.651	0.007		1.351	0.012	T	1.32	0.01	L	7.6485	0.0011	0.013	159		7.63	7.67					1							
96064	10.341	0.031	8.310	0.011		1.720	0.027	T	2.20	0.07	O	8.1646	0.0047	0.032	96		8.12	8.21		U 2			1							
96065	8.780	0.020	7.052	0.010		1.470	0.018	T	2.66	0.03	O	6.8019	0.0038	0.033	108		6.74	6.87		U 2			1 S							S P
96066	8.876	0.014	8.802	0.018	A	0.073	0.021	T	0.08	0.02	L	8.8911	0.0105	0.055	98	A	8.86	9.03		D	19320+5259	I 2	1 C P A							
96067	10.065	0.036	8.847	0.021	A	1.041	0.033	T	1.01	0.03	L	8.8447	0.0074	0.017	74	A	8.82	8.88			19320−2335	I 1	2 C C	AB	164	10.525	0.057	3.72	0.22	
96068	9.780	0.019	8.626	0.013		0.991	0.018	T	0.97	0.01	L	8.6883	0.0017	0.017	132		8.65	8.72		C			1							
96069	10.164	0.041	9.666	0.042		0.480	0.045	T	0.55	0.05	L	9.7634	0.0052	0.024	48		9.71	9.80					1							
96070	10.797	0.050	9.932	0.037		0.758	0.048	T	0.80	0.03	L	9.9928	0.0030	0.024	112		9.94	10.03		C			1						G	
96071	8.640	0.013	6.938	0.007		1.421	0.012	T	1.41	0.02	L	6.9400	0.0015	0.008	85		6.92	6.95					1							S
96072	9.457	0.018	8.531	0.014		0.805	0.018	T	0.83	0.01	L	8.5769	0.0021	0.015	98		8.55	8.60		C			1							
96073						0.560	0.072	G	0.63	0.07	R	9.4684	0.0026	0.024	124		9.43	9.52		D	19320+3848	I 2	S						G	
96074											T	11.7026	0.0452	0.403	119		10.32	12.06		D	19320+3848	I 2	1 X S							
96075	6.972	0.004	6.995	0.005		−0.016	0.006	T	0.01	0.01	L	7.0064	0.0008	0.008	114		6.99	7.02		C			1							S
96076	10.293	0.026	8.373	0.010		1.628	0.023	T	1.74	0.07	O	8.2964	0.0021	0.021	130		8.27	8.33					1							
96077	8.855	0.011	8.138	0.009		0.659	0.011	T	0.72	0.01	L	8.1846	0.0016	0.016	132		8.16	8.21		U 2			1							S
96078	9.598	0.016	9.044	0.016		0.539	0.015	G	0.61	0.02	H	9.0929	0.0018	0.019	133		9.06	9.13		C			1							
96079	10.240	0.033	8.821	0.018		1.198	0.029	T	1.16	0.03	L	8.8206	0.0025	0.019	89		8.79	8.85		C			1							
96080	9.413	0.013	8.968	0.013		0.434	0.015	T	0.50	0.02	L	9.0353	0.0020	0.020	150		9.00	9.07					1							
96081	7.391	0.003	6.921	0.003		0.456	0.003	T	0.53	0.00	L	6.9736	0.0007	0.009	285		6.95	6.99		C			1							S
96082	12.259	0.293	11.010	0.160		1.065	0.261	T	1.03	0.21	L	11.3388	0.0078	0.049	55		11.27	11.40		C			1							G
96083	7.595	0.007	7.509	0.010	*	0.084	0.011	T	0.10	0.01	L *	7.5553	0.0012	0.012	161	*	7.54	7.57		D	19321+2816	I 1	2 C A	AC	3	5.445	0.005	2.20	0.02	S
96084	9.996	0.022	8.919	0.015		0.932	0.020	T	0.93	0.01	L	8.9840	0.0018	0.013	104		8.96	9.01		C			1							
96085	8.717	0.011	7.638	0.008		0.922	0.002	G	0.97	0.00	I	7.6726	0.0011	0.010	94		7.65	7.69		C			1							S
96086	9.438	0.017	8.280	0.011		0.994	0.016	T	0.97	0.01	L	8.3398	0.0013	0.012	119		8.32	8.36		C			1							
96087	10.842	0.054	10.284	0.048		0.527	0.054	T	0.60	0.06	L	10.3101	0.0033	0.033	155		10.25	10.37					1 S						G	
96088	10.105	0.038	9.320	0.030		0.713	0.038	T	0.77	0.03	L	9.4539	0.0030	0.020	59		9.42	9.48					1 S							
96089	9.434	0.024	8.778	0.022		0.609	0.028	T	0.68	0.03	L	8.8251	0.0031	0.029	55		8.79	8.88		U			1							
96090	7.344	0.009	7.200	0.011	*	0.139	0.013	T	0.15	0.01	L *	7.1191	0.0008	0.010	150	*	7.10	7.14		D	19322−6016	I 1	2 C A	AB	184	1.029	0.002	0.61	0.01	S
96091	9.808	0.044	9.786	0.063		0.080	0.015	G	0.09	0.02	H	9.7727	0.0050	0.027	35		9.72	9.81					1							
96092	7.119	0.007	7.060	0.007	A	0.200	0.495	G	0.06	0.01	L *	7.0609	0.0011	0.010	86	*	7.04	7.08		D	19322+0920	I 1	2 C A	AB	97	2.275	0.030	3.72	0.16	S
96093	9.350	0.020	8.858	0.020		0.456	0.015	G	0.53	0.02	H	8.9143	0.0022	0.017	82		8.89	8.94		C			1							
96094	9.936	0.036	8.575	0.021		1.153	0.033	T	1.12	0.03	L	8.6314	0.0023	0.014	51		8.61	8.65		C			1							
96095	7.103	0.010	6.547	0.006		0.526	0.009	T	0.60	0.01	L	6.5955	0.0015	0.007	39		6.59	6.62					1							S
96096	7.480	0.006	7.221	0.006		0.243	0.009	T	0.27	0.01	L	7.2619	0.0008	0.008	132		7.25	7.28		C			1							S
96097	8.649	0.011	8.585	0.014		0.064	0.017	T	0.07	0.02	L	8.6070	0.0012	0.013	124		8.58	8.64					1							
96098	8.168	0.008	7.932	0.011		0.225	0.013	T	0.25	0.01	L	7.9820	0.0014	0.015	123		7.95	8.00		C			1							S
96099						0.487	0.053	G	0.56	0.06	H	10.3209	0.0077	0.034	35		10.20	10.38					1							G
96100	5.681	0.006	4.756	0.007		0.786	0.007	G	0.85	0.02	G	4.8114	0.0005	0.004	99		4.81	4.82			19322+6941	I 1	1							S

35750 | 13805

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
96101	19 32 20.79	−23 51 12.3	10.63	3 H	293.086 605 61	−23.853 408 57		−0.71	−5.82	−54.43	1.67	1.14	2.10	2.01	1.11	+36	−26	−37	−	7	−20	+45	−	7	−19	−	4	+ 8	8	1.07
96102	19 32 21.98	−45 22 04.7	7.53	H	293.091 599 03	−45.367 967 11		2.95	11.42	−5.90	1.04	0.80	1.06	1.36	0.97	−22	−21	+	3	+42	−38	+13	−29	+	5	−23	−22	0	−0.73
96103	19 32 22.59	−32 45 32.0	9.78	H	293.094 106 26	−32.758 892 74		11.72	76.29	−41.73	1.84	1.06	1.75	2.32	1.09	−14	−34	−14	+31	−	7	+	8	−	4	−	6	−	5	−21	0	0.76
96104	19 32 23.24	+41 08 09.2	8.77	H	293.096 835 61	+41.135 894 31		1.13	2.45	0.81	0.60	0.64	0.77	0.69	0.70	−	8	+	9	+17	−	1	+	7	−19	+10	+10	+	6	−	3	0	1.04
96105	19 32 23.33	−14 55 47.9	9.75	H	293.097 218 56	−14.929 968 94		8.74	13.38	−51.65	1.33	0.84	1.45	1.55	0.94	+31	−	6	+	2	+16	+12	+	1	+12	−14	+	8	+37	0	−0.19
96106	19 32 23.88	+39 18 33.2	8.55	G	293.099 508 77	+39.309 222 94		2.85	9.42	−8.69	0.73	0.77	0.90	0.84	0.89	−	6	−	4	+	0	+12	+	8	−	9	+10	−16	+	8	+	4	0	−1.53
96107	19 32 24.66	−22 44 26.4	7.67	G	293.102 737 50	−22.740 675 75		6.52	−3.68	6.54	0.95	0.54	1.05	0.82	0.50	+50	−56	−38	−11	−	4	+22	−	3	−25	+	5	+24	0	2.72
96108	19 32 25.78	+39 18 19.7	12.25	H																									
96109	19 32 26.02	−15 45 05.5	7.88	H	293.108 413 86	−15.751 525 60		4.49	13.11	−6.19	0.94	0.57	1.04	0.90	0.56	+28	−42	−25	−14	+	6	+13	+	3	−26	+13	+27	0	−0.09
96110	19 32 26.33	+23 14 43.0	8.17	G	293.109 717 85	+23.245 266 75		10.44	35.52	33.62	0.67	0.80	1.07	0.78	1.07	−	4	−20	−17	−19	+	7	+12	+11	−17	−	3	+	3	0	1.03
96111	19 32 28.50	−30 52 09.8	6.58	2 H	293.118 747 18	−30.869 387 91		4.25	22.06	−32.53	0.90	0.57	0.98	1.15	0.55	+21	−14	−13	+37	+11	+40	+16	+	6	−	9	+11	3	1.14
96112	19 32 29.22	+56 23 17.7	9.87	3 H	293.121 739 76	+56.388 253 16		2.28	83.51	−24.17	0.78	0.79	0.86	1.00	0.92	+	2	−12	−	1	+13	+	8	−19	+	6	−	4	+	6	+	1	0	−0.29
96113	19 32 30.48	−35 27 07.6	8.69	G	293.126 983 30	−35.452 111 96		45.34	−289.08	161.39	1.24	0.87	1.43	1.36	0.81	+21	−48	−41	+	8	−19	+	8	−18	−27	+	6	−	6	0	2.22
96114	19 32 30.57	+27 25 21.4	8.56	H	293.127 386 92	+27.422 599 76		3.05	4.80	−42.73	0.58	0.86	1.14	0.67	1.20	−18	+	7	−	1	+25	−	3	−	1	−	3	+22	−	7	−20	0	−1.57
96115	19 32 31.91	+26 23 27.6	9.37	H	293.132 956 08	+26.391 012 24		6.93	0.91	−172.49	0.60	1.04	1.48	0.65	1.46	−20	−	6	−15	+20	+	2	−	5	+	4	+	9	−17	−15	1	0.60
96116	19 32 33.22	−04 52 34.7	9.58	G	293.138 434 92	−04.876 303 50		3.94	−0.49	2.64	1.34	0.87	1.56	1.34	0.74	+	9	−15	−33	−27	+14	+11	+12	−40	+23	+	8	0	2.65
96117	19 32 34.37	+31 20 34.4	9.47	H	293.143 198 17	+31.342 894 65		0.56	−8.79	−3.36	0.77	0.98	1.24	0.93	1.37	−	9	+	6	−17	+14	+	4	−17	+	1	+15	−	7	−18	0	−1.11
96118	19 32 35.79	−79 11 39.9	8.60	H	293.149 131 28	−79.194 411 44		11.41	−23.73	107.94	0.69	0.79	0.99	0.79	1.03	+	8	−40	−	7	+	5	−	5	−	3	−	6	+	1	+	9	0	2.37
96119	19 32 37.20	−38 09 11.4	9.48	H	293.155 004 85	−38.153 171 34		9.66	0.16	−60.98	1.49	1.06	1.63	1.73	1.03	+	4	−36	−22	+23	−	8	+	4	−10	−	8	+	2	−17	0	−0.54
96120 H	19 32 37.25	+12 02 37.0	8.11	G	293.155 225 52	+12.043 603 69	*	6.65	29.33	19.51	1.21	1.25	1.27	1.20	1.10	+29	+18	−	9	−12	−32	+28	−35	−25	−14	+	8	2	0.46
96121	19 32 37.79	+00 34 38.8	10.42	G	293.157 456 54	+00.577 455 78		43.86	219.74	23.23	1.64	1.05	1.92	1.73	1.02	−19	−19	−	9	−36	+12	+19	+11	−47	+18	−	9	2	−0.38
96122	19 32 38.99	+22 12 34.8	8.52	H	293.162 444 01	+22.209 673 03		4.99	11.78	−4.29	0.84	0.91	1.28	1.09	1.05	+	6	−	2	−	8	+	6	+11	+	0	+	9	+	3	+23	+	5	0	1.60
96123	19 32 39.91	+10 22 26.7	8.30	H	293.166 306 05	+10.374 096 79		1.03	1.91	−0.95	0.68	0.62	1.12	0.81	0.65	+23	+	2	−16	+21	−29	+28	−27	−10	+	2	+16	0	0.03
96124	19 32 40.28	−28 01 04.8	7.14	H	293.167 850 25	−28.017 987 32		38.38	71.64	−748.43	0.94	0.71	1.09	1.28	0.66	−	1	+	4	−33	−23	+26	−30	+12	−34	−	1	−14	0	0.47
96125	19 32 40.39	+44 52 51.3	8.28	H	293.168 282 52	+44.880 919 06		3.96	9.17	11.81	0.60	0.56	0.69	0.67	0.61	−	3	+	1	−12	+12	+17	−17	+15	+	3	+18	+	0	0	−0.67
96126	19 32 42.24	+02 07 10.5	8.74	H	293.175 985 12	+02.119 591 89		1.70	22.07	−10.81	0.98	0.62	1.20	1.41	0.75	−14	−15	−23	−	2	+	5	+15	+	1	−32	+21	−30	0	0.50
96127	19 32 42.83	−00 41 02.5	9.09	H	293.178 473 04	−00.684 026 92		3.61	2.25	−1.02	1.04	0.62	1.25	1.15	0.64	+	6	−25	+	0	−27	+	0	+29	−	2	−39	+13	+16	2	−0.64
96128	19 32 42.91	−81 31 49.4	7.83	H	293.178 787 16	−81.530 396 16		7.86	56.96	−52.19	0.58	0.61	0.75	0.66	0.78	−12	−21	−	3	+	7	−	3	−	7	−	3	+23	+	4	−18	0	−0.63
96129	19 32 44.23	+46 18 38.3	7.94	H	293.184 296 78	+46.310 631 10		3.82	−6.66	−5.88	0.60	0.58	0.67	0.71	0.58	+10	−	4	+18	+21	+15	+	1	+14	+18	+	2	+15	1	−0.22
96130	19 32 45.18	−26 09 46.6	9.80	G	293.188 247 07	−26.162 954 17		3.99	2.00	0.11	1.69	1.05	1.86	1.48	0.95	+21	−57	−30	−40	−	7	+39	+	6	−38	+	1	+22	0	−0.91
96131	19 32 47.70	+37 29 02.4	8.81	H	293.198 729 71	+37.483 998 83		2.34	0.68	−9.76	0.62	0.68	0.84	0.66	0.71	−14	+	1	−10	+	0	+19	−14	+18	+	0	+15	−	1	0	−0.85
96132	19 32 48.38	−73 29 46.6	7.51	H	293.201 575 07	−73.496 273 17		2.08	10.51	0.61	0.50	0.50	0.82	0.56	0.69	−13	−16	−	5	+	8	+	1	+	1	−	2	−	9	−	3	−31	2	0.02
96133	19 32 49.19	+13 45 07.7	9.18	H	293.204 950 03	+13.752 150 55		4.72	3.21	−4.77	0.81	0.70	1.39	0.97	0.98	+35	−12	−10	−	5	−30	+31	−32	−	5	−20	−13	0	0.47
96134 H	19 32 49.64	−15 19 23.3	9.61	H	293.206 853 43	−15.323 126 12	*	3.09	1.92	−10.93	3.25	1.99	1.94	2.05	1.25	+17	−21	−	9	+	0	+13	−16	+13	−12	−	2	+33	2	−0.98
96135	19 32 50.19	+06 01 19.9	8.41	H	293.209 109 19	+06.022 202 29		2.94	3.20	−26.73	1.04	0.70	1.26	1.37	0.82	−15	−10	+20	−21	+	4	+	1	+	5	−39	−	8	−15	0	−0.14
96136	19 32 52.05	+76 39 39.1	8.95	H	293.216 877 66	+76.660 857 48		2.35	−0.27	−19.54	0.75	0.67	0.74	0.88	0.77	−11	−19	−	7	−29	+	9	+	7	+	8	−17	−	1	−	1	3	1.69
96137 H	19 32 52.18	+75 19 51.7	7.77	H	293.217 419 63	+75.331 039 64	A	4.03	−0.04	−7.27	1.29	1.22	0.77	0.80	0.82	−17	−10	−	1	−	1	+	8	−	7	+	9	+15	−	6	+	8	0	0.42
96138 H	19 32 52.79	−46 46 36.5	7.11	H	293.219 958 38	−46.776 810 88	A	8.19	71.49	−156.81	2.59	1.91	2.48	3.27	2.68	−22	−13	+	1	+	1	+	3	−	8	+	8	−43	+	2	+27	1	0.18
96139	19 32 52.93	−26 01 41.2	7.65	H	293.220 533 04	−26.028 113 61		8.29	−24.15	0.09	1.00	0.68	1.17	0.91	0.55	+32	−55	−40	−23	−19	+33	−	6	−38	+	5	+20	0	1.04
96140	19 32 53.12	−57 37 21.3	8.57	H	293.221 331 22	−57.622 573 92		1.67	7.99	−3.14	0.74	0.72	1.18	0.92	1.04	+22	−17	−	4	+42	−	5	+	0	+	3	+11	+	0	+53	2	2.33
96141	19 32 53.79	−53 11 08.2	5.76	H	293.224 125 48	−53.185 601 03		8.05	32.87	−6.87	0.55	0.47	0.74	0.77	0.67	+20	−21	−	9	+	0	+18	−	9	+16	−	5	+	5	+22	0	−1.03
96142	19 32 54.19	+07 24 18.9	9.41	H	293.225 800 41	+07.405 259 55		11.76	84.26	−333.34	1.61	1.06	1.70	2.01	1.14	−25	+28	−16	−32	+	9	+	2	+14	−51	+11	−16	0	−0.20
96143	19 32 54.89	+31 14 09.8	6.70	H	293.228 709 09	+31.236 062 40		7.44	9.41	9.29	0.41	0.49	0.64	0.46	0.62	−	5	−	5	−16	+18	+	8	−16	+	7	+12	−	1	−	7	0	0.31
96144	19 32 55.05	−39 44 24.8	8.73	H	293.229 355 40	−39.740 234 60		15.45	9.48	−12.22	1.36	1.07	1.61	1.83	1.01	+26	−36	−43	+19	+29	−42	+	3	−12	+14	−10	4	1.47
96145	19 32 55.94	+39 39 45.7	7.80	H	293.233 069 47	+39.662 699 77		4.29	−1.29	2.73	0.54	0.50	0.63	0.62	0.56	−	3	−	8	−	3	+	2	+11	−	6	+10	−14	+13	+	3	0	−0.82
96146	19 32 56.38	+50 55 52.1	9.06	H	293.234 926 42	+50.931 140 10		6.84	11.05	13.94	0.72	0.72	0.81	0.93	0.84	−	8	−	8	+14	+	9	+	2	−	1	+	3	−	1	−10	+	1	0	−0.98
96147	19 32 57.10	−07 59 48.1	8.72	H	293.237 925 42	−07.996 708 18		1.89	−0.21	−5.87	1.10	0.66	1.24	1.10	0.64	+24	−37	−25	−13	+10	+17	+	6	−26	+21	+30	0	−0.55
96148	19 32 57.45	−59 07 36.0	9.14	H	293.239 377 41	−59.126 654 41		6.87	−60.66	2.54	0.86	0.72	1.31	1.12	1.15	+	4	−11	+	1	+38	−22	+13	−	5	−21	+19	+44	2	0.12
96149	19 32 58.30	+75 36 30.1	8.22	H	293.242 921 30	+75.608 348 42		3.38	−6.07	17.05	0.63	0.59	0.65	0.68	0.69	+	0	−	3	+10	+	1	+14	−	4	+16	+	8	−11	+	8	0	−0.26
96150	19 32 59.30	+06 04 23.0	8.00	1 H	293.247 064 70	+06.073 049 77		−0.03	−1.29	−4.18	1.01	0.69	1.22	1.31	0.78	−18	−12	+23	−24	+	6	+	2	+	6	−43	−10	−21	0	0.16
96151	19 32 59.55	−30 35 07.8	8.93	G	293.248 130 24	−30.585 494 25		8.20	−4.42	−13.72	1.35	0.96	1.43	1.37	0.88	+34	−34	−29	+10	+24	+	2	+24	+	0	−	7	+27	3	−0.03
96152	19 33 00.37	+60 09 52.3	8.11	G	293.251 546 81	+60.164 539 31		2.54	14.89	10.77	0.68	0.62	0.69	0.70	0.74	+13	−21	+	5	+16	+	7	−10	+10	+	4	+	0	+31	0	0.07
96153	19 33 00.76	+21 00 10.4	7.79	H	293.253 151 81	+21.002 882 41		3.99	−4.02	−27.57	0.62	0.66	0.95	0.79	0.80	+29	−14	−21	−	8	−	3	+19	−	3	+	1	+19	+36	2	0.48
96154	19 33 03.16	−30 21 45.9	6.76	H	293.263 156 10	−30.362 740 81		2.52	8.97	−26.07	0.90	0.58	0.97	0.93	0.55	+	7	−38	−22	+	0	+15	+15	+18	−11	−	4	+	5	0	2.17
96155	19 33 04.41	−34 23 59.3	9.22	H	293.268 364 11	−34.399 796 46		7.40	22.31	−23.17	1.49	1.14	1.71	1.84	1.08	+30	−30	−25	+	7	−	4	−17	−14	−36	+	8	+10	0	2.27
96156	19 33 05.44	+02 17 03.5	9.29	H	293.272 651 90	+02.284 304 26		2.46	−1.80	−7.77	1.18	0.62	1.32	1.44	0.79	−21	−38	−	3	−12	+11	+20	+	5	−27	+14	−19	0	−0.40
96157	19 33 05.72	−59 38 07.2	9.16	H	293.273 828 71	−59.635 327 06		3.10	13.31	−6.48	0.78	0.63	1.30	1.10	1.13	−	9	−	3	+14	+21	−23	+	8	−	7	−18	+15	+47	0	−0.30
96158	19 33 06.23	+09 58 12.6	8.59	H	293.275 958 23	+09.970 166 64		0.32	0.45	3.59	0.71	0.62	1.10	0.82	0.66	+	7	+	4	−18	+12	−	3	+30	+	3	−	1	+16	+12	0	0.23
96159	19 33 07.77	+05 01 45.8	6.61	2 H	293.282 359 90	+05.029 393 98		1.61	−1.77	−0.61	0.84	0.52	0.90	1.02	0.53	−32	−11	+	0	−34	+15	−16	+16	−53	+10	−36	0	−1.28
96160	19 33 08.49	−54 31 55.8	8.67	H	293.285 357 40	−54.532 171 03		16.90	108.58	−84.25	0.84	0.67	1.19	1.28	1.09	−24	−	7	+	0	−16	+30	−17	+31	−16	+13	−21	0	−2.37
96161	19 33 08.63	+46 02 21.7	7.58	H	293.285 949 62	+46.039 373 53		6.77	10.79	7.14	0.53	0.47	0.57	0.61	0.49	+	2	−10	+	1	+	6	+	7	−13	+	6	+	7	−	1	+10	1	0.66
96162 H	19 33 08.94	+32 53 38.7	8.14	H	293.287 242 92	+32.894 086 03	*	3.16	1.57	−3.73	1.18	1.76	1.04	0.89	1.24	−10	−	3	−	4	+23	+14	−	8	+14	+23	+	8	−21	1	0.60
96163	19 33 09.08	+59 23 45.7	7.81	H	293.287 828 77	+59.396 023 82		2.54	8.61	17.07	0.56	0.54	0.58	0.62	0.70	+10	−	5	−	9	+	6	+10	+	8	+10	+11	+12	+22	0	−0.13
96164	19 33 10.06	+60 09 31.2	6.30	1 H	293.291 937 49	+60.158 677 82		2.71	3.94	5.29	0.52	0.50	0.54	0.55	0.64	+	5	−12	−	3	+21	+	9	−	5	+11	+12	+	2	+23	1	−0.35
96165	19 33 11.13	+27 23 01.2	8.01	H	293.296 395 39	+27.383 656 26		9.31	−74.18	−157.60	0.47	0.71	0.95	0.54	0.97	−16	+	6	+	3	+21	−	6	−	4	−	6	+23	−	8	−18	0	−1.37
96166	19 33 12.16	+07 46 21.8	7.78	H	293.300 667 18	+07.772 732 48		5.28	16.46	24.22	0.84	0.55	1.01	1.10	0.63	−18	−14	+	1	−	4	+	5	+15	+	5	−24	+10	−	8	0	−2.17
96167	19 33 12.77	−00 49 58.8	8.51	H	293.303 204 12	−00.833 003 93		4.05	1.52	−3.34	0.97	0.54	1.12	1.11	0.57	−	5	−33	−	4	−13	+	5	+19	+	2	−33	+10	−	2	0	0.55
96168	19 33 15.12	−72 06 01.8	8.18	H	293.312 993 52	−72.100 486 19		9.74	33.17	0.59	0.54	0.63	0.95	0.60	0.88	−	8	−	8	+	9	+25	−	6	−	4	−	8	+	6	+	9	−12	0	1.36
96169	19 33 15.28	−15 00 27.7	8.01	H	293.313 656 57	−15.007 697 25		9.41	−17.82	−59.01	0.93	0.55	1.03	0.98	0.53	+26	−37	−25	+15	+	6	−	6	−	1	−25	+	8	+12	0	−1.29
96170	19 33 16.12	−47 05 33.1	10.00	H	293.317 165 05	−47.092 515 42		7.29	15.72	22.32	2.13	1.40	2.39	3.76	2.48	+	3	−13	+	1	−25	+33	−34	+29	−53	+	0	−29	0	1.04
96171 H	19 33 17.05	+20 24 50.5	7.31	H	293.321 046 99	+20.414 019 59	A	7.22	27.04	51.70	0.88	0.84	1.13	1.01	0.94	+18	−	6	−	2	+	0	+	2	+14	+	8	−	4	+	8	+37	1	0.12
96172	19 33 18.14	−31 37 56.6	10.10	G	293.325 583 31	−31.632 402 35		1.68	0.15	−17.69	1.61	1.14	1.75	1.69	1.04	+29	−33	−17	+10	+14	+16	+16	−	9	−10	+23	9	−1.47
96173	19 33 18.95	+27 44 22.8	8.59	H	293.328 972 48	+27.739 670 59		2.29	4.30	−4.03	0.59	0.79	1.06	0.72	1.08	−19	−	8	+11	+21	−14	−	4	−14	+26	+	2	−20	0	1.18
96174	19 33 19.02	+34 04 38.1	8.24	H	293.329 254 56	+34.077 255 71		2.60	−0.03	−8.32	0.52	0.58	0.76	0.55	0.60	+10	−	3	−14	+	5	+11	−	6	+11	−10	−	9	+13	0	−1.11
96175	19 33 19.78	−47 05 53.6	10.44	2 H	293.332 412 22	−47.098 233 62		7.37	11.23	23.68	2.58	1.70	2.91	4.43	2.97	+	6	−14	−	3	−20	+36	−34	+31	−47	+	5	−28	0	0.31
96176	19 33 20.34	−16 36 36.3	7.66	2 H	293.334 762 36	−16.610 086 58		1.84	0.27	−25.30	0.95	0.63	1.04	0.93	0.60	+40	−24	−	7	−19	−13	+	3	−12	−44	+	1	+43	0	0.73
96177	19 33 20.42	+32 34 37.3	9.00	H	293.335 101 97	+32.577 016 55		3.12	2.82	−16.30	0.63	0.76	0.99	0.75	0.91	−	7	−	8	−21	+28	+12	−27	+	7	+15	+	2	−14	0	−1.21
96178	19 33 21.63	−45 16 18.1	5.59	H	293.340 142 79	−45.271 689 03		7.47	−16.24	−24.46	0.83	0.62	0.86	0.95	0.75	−	7	−37	−	9	+32	−40	+15	−28	+	0	−19	−13	0	1.56
96179	19 33 21.77	+41 19 47.1	8.16	H	293.340 701 14	+41.329 742 08		1.51	−0.89	−18.36	0.58	0.58	0.70	0.61	0.61	−	8	+	2	+	8	−	7	+	5	−10	+	4	+13	+	0	+	6	2	−1.82
96180 H	19 33 22.44	+62 03 11.4	8.19	G	293.343 495 94	+62.053 168 32	A	6.10	32.17	−5.53	1.26	1.25	1.16	1.22	1.28	+	8	+	4	−16	+	5	+26	−	4	+27	+14	+16	+26	2	0.07
*96181	19 33 23.83	−37 37 45.0	8.90	G	293.349 311 03	−37.629 162 23		4.30	−2.52	−4.57	1.26	0.95	1.39	1.72	1.07	−10	−	6	−19	+10	+	6	−11	+	0	−	9	+21	−27	0	0.22
*96182	19 33 23.75	+30 17 10.0	9.88	G	293.348 977 08	+30.286 118 94		6.67	35.81	−48.54	0.81	1.23	1.38	0.88	1.51	−	2	−	2	−23	+	6	+11	−	3	+15	+40	−11	−10	0	0.47
96183	19 33 25.57	+21 50 27.0	6.89	H	293.356 525 95	+21.840 827 28		49.61	−20.96	−204.81	0.61	0.60	0.94	0.85	0.81	+	6	−14	−	6	+	2	−	3	+25	−	4	+	3	+16	+19	2	0.06
96184	19 33 26.23	+23 29 51.0	7.81	G	293.359 308 54	+23.497 513 27		22.52	−32.06	−0.23	0.70	0.74	1.03	0.77	1.03	−	4	−10	−	1	−18	+	7	+11	+	7	−	1	+	3	+	5	0	−0.30
96185	19 33 27.40	+33 12 04.8	6.62	H	293.364 185 18	+33.201 319 99		31.29	−464.14	224.23	0.45	0.46	0.62	0.55	0.52	−	4	−	4	−17	+20	+13	−	4	+11	−	5	+15	−	5	0	−0.10
96186	19 33 27.74	−75 12 41.5	8.40	H	293.365 576 76	−75.211 532 85		15.04	−37.12	−133.83	0.60	0.60	0.92	0.71	0.74	+	1	−16	−	2	+24	−	2	−14	−	5	−	2	+	2	−	9	0	−1.72
96187	19 33 28.27	+08 13 45.2	7.61	H	293.367 796 66	+08.229 214 12		4.61	12.81	−12.78	0.90	0.62	1.05	1.19	0.74	−	7	−16	−20	−	2	−	6	+	7	−	6	−23	+16	−10	0	−0.09
96188	19 33 29.47	+78 03 32.8	8.34	H	293.372 803 17	+78.059 117 35		3.81	5.80	33.67	0.61	0.62	0.68	0.68	0.72	−	2	−23	+18	+	5	−	3	−12	+	4	−24	+	0	+19	0	−0.81
96189	19 33 29.81	+36 01 19.3	7.35	1 H	293.374 214 08	+36.022 035 69		7.66	−37.78	−11.03	0.46	0.51	0.65	0.52	0.54	−	1	−17	−19	+11	+	6	+	0	+	9	−27	+16	+15	0	−0.93
96190	19 33 30.76	−47 54 55.8	9.45	H	293.378 174 92	−47.915 496 18		3.50	7.40	−27.00	1.31	1.19	1.60	1.75	1.72	+56	−	9	+	7	−28	−23	−11	−23	−57	−	3	+49	0	1.03
96191	19 33 32.47	+18 42 20.1	8.61	G	293.385 304 04	+18.705 577 76		17.48	10.69	−3.64	0.65	0.70	1.09	0.71	0.75	+	6	−27	−25	+	2	−17	+14	−17	−	7	+12	−10	0	−1.61
96192	19 33 34.82	+23 31 48.4	10.13	H	293.395 088 14	+23.530 109 14		12.85	−195.53	−23.65	1.38	1.33	1.93	1.45	2.03	+	8	−	6	−	4	−36	+	0	+	6	−	4	+	5	−14	+22	0	−0.19
96193	19 33 35.22	−00 17 00.3	8.09	H	293.396 748 87	−00.283 415 22		2.96	7.81	6.33	2.13	1.33	2.67	2.61	1.45	−	4	−	7	−15	−11	−	5	+30	−	1	−31	+	4	−	3	2		
96194	19 33 36.00	+36 02 46.0	7.86	H	293.400 011 58	+36.046 110 53		0.89	−8.55	−28.30	0.50	0.60	0.71	0.59	0.66	−	3	−17	−21	+	1	+	3	−	1	+	5	−33	+16	+10	0	0.59		
96195 H	19 33 36.43	+38 45 42.9	6.61	H	293.401 792 71	+38.761 918 52	*	7.76	6.93	23.38	0.44	0.48	0.57	0.51	0.54	+	2

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
96101	10.607	0.072	10.557	0.113		0.051	0.124	T	0.06	0.10	L	10.6474	0.0785	0.455	71		9.68	10.92	0.48	P 1 A			1 S							G
96102	8.741	0.026	7.626	0.018		0.961	0.025	T	0.95	0.02	L	7.6931	0.0024	0.012	46		7.67	7.72		C			1							S
96103	10.739	0.057	9.863	0.043		0.767	0.055	T	0.81	0.04	L	9.9193	0.0031	0.023	55		9.88	9.96		C			1							
96104	8.945	0.010	8.771	0.012		0.167	0.015	T	0.18	0.01	L	8.8219	0.0015	0.019	145		8.80	8.86					1							
96105	10.519	0.044	9.768	0.038		0.671	0.044	T	0.73	0.04	L	9.8867	0.0024	0.020	90		9.85	9.92		C			1							G
96106	9.049	0.015	8.607	0.015		0.421	0.010	G	0.49	0.01	H	8.6447	0.0020	0.019	116		8.61	8.67		D	19324+3919	I 2	1 S							
96107	8.171	0.007	7.723	0.008		0.415	0.015	G	0.48	0.02	H	7.7684	0.0011	0.012	115		7.75	7.79		C	19324−2244	I 1	1							S
96108											T	12.3810	0.1345	0.980	73		10.38	13.05		D	19324+3919	I 2	S							G
96109	8.154	0.009	7.904	0.009		0.238	0.012	T	0.27	0.01	L	7.9487	0.0014	0.011	96		7.93	7.97					1							S
96110	8.747	0.010	8.220	0.010		0.518	0.006	G	0.59	0.01	H	8.2810	0.0019	0.017	118		8.26	8.31					1							
96111	8.656	0.015	6.830	0.007		1.551	0.014	T	2.69	0.05	O	6.5588	0.0173	0.073	55		6.47	6.65		U 2			1 S							S P
96112	9.872	0.026	9.609	0.029		0.250	0.037	T	0.28	0.05	L	9.9737	0.0532	0.448	102		9.08	10.22	0.47	P 1 A			1							G P
96113	10.082	0.036	8.818	0.022		1.088	0.013	G	1.16	0.02	I	8.7952	0.0018	0.010	48		8.78	8.81					1 S							
96114	9.862	0.018	8.679	0.012		1.014	0.017	T	0.99	0.01	L	8.7222	0.0017	0.020	177		8.69	8.76					1							
96115	9.820	0.016	9.407	0.017		0.390	0.022	T	0.46	0.02	L	9.4577	0.0019	0.024	239		9.41	9.51		C			1							G
96116	10.198	0.034	9.674	0.035		0.630	0.020	G	0.70	0.02	H	9.6986	0.0030	0.026	87		9.66	9.75					1							G
96117	11.374	0.074	9.692	0.027		1.405	0.062	T	1.38	0.07	L	9.6119	0.0024	0.032	150		9.55	9.66					1							G
96118	9.424	0.015	8.658	0.012		0.682	0.015	T	0.74	0.01	L	8.7343	0.0017	0.019	128		8.70	8.77		C			1							
96119	10.323	0.046	9.575	0.039		0.669	0.046	T	0.73	0.04	L	9.6194	0.0030	0.022	52		9.58	9.67					1							
96120	8.641	0.012	8.147	0.012	*	0.480	0.015	G	0.55	0.02	H	* 8.2041	0.0015	0.012	108	*	8.18	8.23		D	19326+1203	M 1	2 C A	AB	147	0.222	0.004	0.47	0.10	
96121						1.406	0.017	G	1.76	0.00	A	10.5376	0.0038	0.030	120		10.47	10.57					1							G
96122	9.695	0.018	8.640	0.013		0.915	0.017	T	0.91	0.01	L	8.6860	0.0025	0.023	101		8.64	8.72					1							
96123	9.646	0.018	8.429	0.012		1.040	0.017	T	1.01	0.01	L	8.4648	0.0016	0.014	131		8.44	8.49		C			1							
96124	7.982	0.014	7.218	0.011		0.675	0.005	G	0.73	0.00	H	7.2819	0.0014	0.008	55		7.27	7.30		C			1							S
96125	8.519	0.010	8.305	0.011		0.204	0.014	T	0.22	0.02	L	8.3488	0.0017	0.015	114		8.32	8.38		C			1							
96126	10.638	0.038	8.909	0.015		1.442	0.032	T	1.44	0.05	L	8.8781	0.0017	0.017	124		8.85	8.91		C			1							
96127	9.166	0.014	9.100	0.019		0.066	0.022	T	0.08	0.02	L	9.1132	0.0017	0.019	128		9.08	9.14		C			1							
96128	8.328	0.010	7.880	0.009		0.463	0.015	G	0.53	0.02	H	7.9339	0.0014	0.013	134		7.91	7.96		C			1							S
96129	9.226	0.014	8.057	0.009		1.020	0.015	G	0.99	0.01	H	8.1107	0.0014	0.011	121		8.09	8.13		C			1							
96130	9.702	0.029	9.910	0.050		−0.075	0.003	G	−0.05	0.00	H	9.7852	0.0036	0.022	60		9.75	9.82		C			1							G
96131	10.010	0.020	8.921	0.014		0.941	0.019	T	0.93	0.01	L	8.9724	0.0019	0.018	133		8.94	9.01					1							
96132	8.778	0.009	7.616	0.006		0.997	0.008	T	0.98	0.01	L	7.6758	0.0011	0.014	173		7.65	7.70					1							S
96133	9.528	0.014	9.207	0.015		0.305	0.019	T	0.35	0.03	L	9.2612	0.0018	0.018	157		9.22	9.29		C			1							
96134	10.032	0.029	9.637	0.030	*	0.374	0.039	T	0.44	0.04	L	* 9.6988	0.0030	0.019	92	*	9.67	9.73		C	19328−1519	H 1	2 C A	AB	176	0.282	0.015	1.81	0.15	
96135	9.897	0.028	8.544	0.016		1.147	0.025	T	1.11	0.02	L	8.5804	0.0017	0.013	94		8.56	8.61					1							
96136	10.149	0.024	9.057	0.016		0.944	0.022	T	0.93	0.02	L	9.1161	0.0017	0.016	119		9.09	9.14		C			1							
96137	7.986	0.007	7.789	0.007	*	0.188	0.009	T	0.21	0.01	L	* 7.8287	0.0014	0.012	125	*	7.81	7.85		D	19329+7520	H 1	2 C A	AB	105	0.362	0.008	2.22	0.05	S
96138	8.515	0.013	7.305	0.009	A	0.700	0.495	G	0.99	0.02	L	* 7.2771	0.0014	0.010	70	*	7.26	7.30		D	19329−4647	I 1	2 C B	AB	139	1.194	0.035	2.12	0.07	S
96139	8.058	0.012	7.689	0.010		0.350	0.015	T	0.41	0.02	L	7.7367	0.0017	0.013	64		7.71	7.75					1							S
96140	10.604	0.035	8.738	0.013		1.551	0.030	T	1.57	0.03	L	8.6896	0.0017	0.019	125		8.66	8.73		C			1 S							
96141	6.123	0.004	5.785	0.004		0.300	0.000	G	0.34	0.03	C	5.8365	0.0006	0.005	98		5.82	5.85		C			1							S
96142	10.283	0.055	9.518	0.046		0.690	0.042	G	0.75	0.04	R	9.5488	0.0026	0.016	56		9.52	9.58		C	19329+0724	I 1	1							G
96143	7.199	0.005	6.736	0.005		0.450	0.006	T	0.52	0.01	L	6.7971	0.0009	0.011	160		6.77	6.81					1							S
96144	9.406	0.022	8.799	0.020		0.564	0.022	T	0.64	0.02	L	8.8516	0.0043	0.019	47		8.82	8.90					1							
96145	7.691	0.006	7.779	0.009		−0.080	0.015	G	−0.06	0.02	H	7.7764	0.0008	0.009	122		7.76	7.80		C			1							S
96146	9.664	0.019	9.131	0.018		0.506	0.015	G	0.58	0.02	H	9.1716	0.0017	0.020	127		9.14	9.21					1							
96147	11.096	0.063	8.989	0.018		1.500	0.040	G	1.50	0.10	R	8.8502	0.0017	0.015	93		8.83	8.87		C			1 S							
96148	9.741	0.017	9.215	0.016		0.502	0.018	T	0.57	0.02	L	9.2532	0.0019	0.020	156		9.21	9.30					1							
96149	9.877	0.020	8.354	0.011		1.280	0.018	T	1.24	0.02	L	8.3810	0.0015	0.014	117		8.36	8.40					1							
96150	10.532	0.042	8.236	0.012		1.894	0.035	T	1.93	0.04	L	8.0983	0.0026	0.018	95		8.07	8.13		U			1 S							
96151	9.479	0.026	8.957	0.025		0.510	0.003	G	0.58	0.00	H	9.0356	0.0029	0.021	54		9.00	9.07		C			1							
96152	9.284	0.015	8.191	0.010		0.950	0.020	G	0.94	0.01	H	8.2708	0.0014	0.013	105		8.25	8.29			19331+6010	I 2	1							
96153	7.902	0.007	7.797	0.008		0.095	0.010	T	0.11	0.01	L	7.8302	0.0013	0.012	103		7.81	7.85					1							S
96154	8.861	0.018	6.933	0.008		1.600	0.016	T	1.62	0.02	L	6.8760	0.0021	0.009	62		6.86	6.90					1							S
96155	9.939	0.042	9.224	0.036		0.644	0.042	T	0.71	0.04	L	9.3533	0.0022	0.016	44		9.32	9.38		D			1							
96156	9.490	0.017	9.329	0.021		0.155	0.025	T	0.17	0.03	L	9.3495	0.0017	0.020	123		9.31	9.37		C			1 S							
96157	9.681	0.016	9.197	0.016		0.456	0.021	T	0.53	0.02	L	9.2627	0.0018	0.020	164		9.23	9.29					1							
96158	8.576	0.011	8.580	0.014		0.001	0.016	T	0.02	0.01	L	8.5973	0.0015	0.017	107		8.56	8.63		C			1							
96159	9.050	0.014	6.859	0.006		1.851	0.013	T	2.89	0.02	O	6.5490	0.0040	0.052	99		6.40	6.63		U 2 C			1 S							S
96160	9.500	0.016	8.773	0.013		0.653	0.016	T	0.72	0.01	L	8.8089	0.0020	0.017	129		8.78	8.84		C			1							
96161	7.710	0.007	7.593	0.008		0.113	0.010	T	0.13	0.01	L	7.6239	0.0008	0.008	118		7.61	7.64					1							S
96162	8.138	0.008	8.136	0.011	*	0.007	0.013	T	0.03	0.01	L	* 8.1457	0.0014	0.014	132	*	8.12	8.18		D	19332+3254	I 1	2 C A	AB	153	0.285	0.005	0.49	0.09	S
96163	7.801	0.008	7.805	0.009		−0.018	0.002	G	0.00	0.00	H	7.8175	0.0012	0.011	106		7.80	7.84					1							S
96164	8.366	0.010	6.463	0.005		1.580	0.009	T	1.60	0.01	L	6.4160	0.0013	0.010	104		6.40	6.43		M	19331+6010	I 2	1							S
96165	8.634	0.009	8.081	0.008		0.518	0.011	T	0.59	0.01	L	8.1184	0.0011	0.016	172		8.09	8.15					1							
96166	7.884	0.009	7.797	0.010		0.085	0.013	T	0.10	0.01	L	7.8180	0.0016	0.010	89		7.80	7.83		C			1							S
96167	8.573	0.010	8.534	0.013		0.041	0.015	T	0.06	0.01	L	8.5269	0.0018	0.017	116		8.50	8.55					1							
96168	8.587	0.007	8.222	0.008		0.375	0.015	G	0.44	0.02	H	8.2637	0.0014	0.016	191		8.24	8.29		C			1							S
96169	8.621	0.011	8.081	0.010		0.513	0.015	G	0.59	0.02	H	8.1260	0.0014	0.014	93		8.11	8.16		C			1							S
96170	10.555	0.051	9.876	0.044		0.504	0.071	G	0.58	0.07	R	10.1095	0.0049	0.032	66		10.06	10.15			19333−4706	I 2	1							G
96171	7.609	0.008	7.302	0.008	*	0.292	0.010	T	0.33	0.01	L	* 7.3830	0.0013	0.013	125	*	7.37	7.40		D	19332+2024	I 1	2 C A	AB	147	5.271	0.005	1.73	0.02	S
96172	11.601	0.136	10.034	0.049		1.290	0.020	G	1.25	0.02	I	10.2021	0.0024	0.023	66		10.16	10.25					1							G
96173	8.758	0.009	8.602	0.011		0.150	0.013	T	0.17	0.01	L	8.6394	0.0018	0.021	163		8.60	8.67					1							
96174	8.212	0.010	8.242	0.013		−0.023	0.015	T	0.00	0.01	L	8.2425	0.0014	0.015	135		8.22	8.27		C			1							
96175	11.217	0.099	10.398	0.073		0.659	0.126	G	0.72	0.10	R	10.5805	0.0043	0.040	64		10.49	10.64		U	19333−4706	I 2	1							G
96176	9.797	0.024	7.882	0.010		1.624	0.021	T	2.36	0.06	O	7.6978	0.0066	0.060	97		7.59	7.75		U 2			1 S							S P
96177	9.356	0.016	9.022	0.017		0.290	0.003	G	0.33	0.00	H	9.0783	0.0020	0.021	143		9.03	9.11		C			1							
96178	5.557	0.004	5.581	0.004		−0.020	0.005	T	0.00	0.01	L	5.5879	0.0010	0.006	48		5.58	5.60		C			1							S P
96179	9.167	0.012	8.265	0.009		0.801	0.011	T	0.83	0.01	L	8.3095	0.0019	0.016	134		8.29	8.34					1							
96180	9.009	0.012	8.397	0.011	*	0.598	0.015	G	0.67	0.01	H	* 8.3164	0.0013	0.015	106	*	8.29	8.34		D	19334+6203	I 1	2 C A	AB	124	1.005	0.004	0.81	0.02	S
96181	9.595	0.026	8.936	0.023		0.644	0.015	G	0.71	0.01	H	9.0271	0.0041	0.017	45		9.00	9.05					1							
96182	10.451	0.032	9.859	0.030		0.523	0.015	G	0.60	0.02	H	9.9702	0.0026	0.032	161		9.91	10.03					1							G
96183	7.807	0.008	6.959	0.007		0.745	0.008	T	0.79	0.01	L	7.0263	0.0013	0.009	93		7.01	7.04					1							S
96184	8.615	0.010	7.891	0.009		0.654	0.015	G	0.72	0.01	H	7.9434	0.0019	0.016	109		7.92	7.97					1							S
96185	7.328	0.005	6.697	0.005		0.595	0.022	G	0.68	0.03	C	6.7521	0.0006	0.007	133		6.74	6.77		C			1							S
96186	8.989	0.010	8.446	0.010		0.516	0.011	T	0.59	0.01	L	8.5123	0.0017	0.020	160		8.49	8.55		C			1							S
96187	9.093	0.015	7.735	0.009		1.150	0.014	T	1.11	0.01	L	7.7780	0.0014	0.012	92		7.76	7.80		C			1							
96188	9.655	0.018	8.458	0.012		1.025	0.017	T	1.00	0.01	L	8.5096	0.0015	0.011	102		8.50	8.54					1							
96189	7.733	0.006	7.384	0.007		0.331	0.009	T	0.39	0.01	L	7.4297	0.0025	0.021	122		7.40	7.47	0.09	P 1 A			1							S
96190	10.044	0.026	9.522	0.025		0.499	0.027	T	0.57	0.03	L	9.5570	0.0025	0.025	135		9.52	9.60					1							
96191	9.333	0.013	8.670	0.012		0.605	0.013	T	0.67	0.01	L	8.7270	0.0015	0.016	136		8.69	8.77		C			1							
96192	11.001	0.056	10.266	0.048		0.673	0.059	T	0.73	0.05	L	10.2668	0.0045	0.042	103		10.19	10.34					1							G
96193	8.551	0.011	8.138	0.011		0.390	0.014	T	0.46	0.01	L	8.1827	0.0021	0.018	122		8.15	8.22		D	19336−0017	I 1	1 X S							S
96194	9.549	0.019	8.011	0.010		1.292	0.017	T	1.25	0.02	L	8.0133	0.0010	0.010	125		8.00	8.03		C			1							
96195	6.757	0.005	6.632	0.006	*	0.113	0.007	T	0.13	0.01	L	* 6.6540	0.0009	0.009	119	*	6.64	6.67		D	19336+3846	M 1	2 C S A	AB	17	0.130	0.005	0.49	0.29	S
96196	6.982	0.010	6.981	0.012		0.006	0.014	T	0.03	0.01	L	6.9913	0.0106	0.089	96		6.91	7.16		U 2 C			1 S							S
96197	10.331	0.032	9.738	0.031		0.700	0.020	G	0.76	0.02	H	9.7971	0.0026	0.023	83		9.77	9.84		C			1							G
96198	8.054	0.011	6.235	0.010		1.545	0.012	T	2.55	0.05	O	6.0075	0.0092	0.074	119		5.91	6.09		U 2			1 S							S P
96199	7.011	0.007	6.947	0.008		0.039	0.015	G	0.09	0.02	A	6.9713	0.0016	0.007	49		6.96	6.98					1							S
96200	8.848	0.012	7.783	0.009		0.923	0.011	T	0.92	0.01	L	7.8452	0.0016	0.014	110		7.82	7.87		C			1 S							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
96201	19 33 43.20	+39 43 40.7	7.86	H	293.429 988 09	+39.727 976 83	7.22	7.90	−6.47	0.55	0.52	0.65	0.63	0.58	− 5	− 5	− 4	+10	+ 7	− 7	+ 6	− 5	+17	+ 0	0	0.61
96202	19 33 43.47	−04 44 30.8	7.73	H	293.431 109 67	−04.741 902 37	4.39	15.14	−2.14	0.91	0.56	1.04	0.91	0.49	+11	−22	−13	−26	+ 7	+25	+ 5	−40	+18	+19	0	2.05
96203	19 33 45.25	+83 20 32.3	8.26	H	293.438 547 45	+83.342 304 41	2.14	−9.57	−13.24	0.60	0.61	0.69	0.62	0.65	+ 0	−25	+11	+11	+ 9	−17	+17	− 7	−21	+17	0	−0.06
96204	19 33 46.03	+05 27 56.8	6.35	2 H	293.441 809 53	+05.465 765 13	3.80	−5.11	−23.67	0.80	0.53	0.90	0.98	0.57	−30	−22	+12	−30	+13	+ 1	+13	−48	− 6	−40	0	−2.49
96205	19 33 46.56	+07 55 05.1	7.44	H	293.444 015 50	+07.918 078 47	1.37	2.18	−5.35	0.75	0.52	0.90	1.03	0.67	−12	−12	−11	− 3	− 8	+17	− 7	−22	+ 8	−14	0	−1.31
96206	19 33 46.73	+62 36 46.3	7.55	H	293.444 695 38	+62.612 867 43	4.73	13.30	30.29	0.63	0.53	0.61	0.86	0.60	+ 0	+10	− 9	−12	+19	−20	+15	− 8	+ 3	+16	0	0.56
96207	19 33 47.13	+43 31 02.4	7.98	H	293.446 384 32	+43.517 325 33	3.30	4.45	5.50	0.57	0.53	0.64	0.62	0.58	− 5	−13	− 4	+16	+12	− 3	+12	− 5	+ 8	+ 0	1	−0.97
96208	19 33 47.36	+17 19 40.9	9.09	H	293.447 318 58	+17.328 039 63	1.19	−0.22	−0.52	0.74	0.76	1.22	0.83	0.83	+11	−16	−16	− 6	− 7	+10	−10	−24	+12	− 6	0	−1.07
96209	19 33 47.42	−63 03 29.6	7.41	H	293.447 578 93	−63.058 209 87	5.72	11.77	−39.22	0.69	0.55	0.87	0.81	0.84	− 6	−26	+10	+44	− 9	− 4	− 9	+22	+13	+22	0	0.40
96210	19 33 49.68	+41 28 45.3	9.20	H	293.457 019 68	+41.479 251 09	−0.10	0.28	−8.95	0.68	0.70	0.83	0.74	0.76	− 9	+ 3	+ 1	− 2	+ 1	− 7	+ 0	+ 5	− 8	+ 4	3	0.36
96211	19 33 49.81	−56 11 16.0	8.26	H	293.457 551 63	−56.187 776 59	0.44	−5.83	−15.99	0.80	0.64	0.98	1.10	0.87	+ 2	− 8	− 6	+ 8	+15	+12	+19	− 7	− 5	+18	0	0.01
96212	19 33 50.46	−15 49 27.4	8.19	H	293.460 258 98	−15.824 286 85	0.11	0.70	7.41	0.92	0.61	1.01	1.05	0.66	+32	−29	− 8	− 2	+ 5	− 5	+ 3	−25	+ 4	+36	0	−0.60
96213	19 33 53.23	−36 38 01.6	9.93	H	293.471 784 14	−36.633 784 02	9.87	−35.68	−60.00	1.76	1.50	2.25	2.22	1.33	+28	−33	−53	+23	+19	−32	− 5	−18	+15	− 1	0	2.06
96214	19 33 53.75	+56 27 35.5	6.87	H	293.473 976 74	+56.459 856 73	4.73	−6.53	35.56	0.51	0.54	0.56	0.57	0.64	− 1	−18	+ 4	+11	+18	− 9	+20	+15	− 8	+ 6	3	−1.76
96215	19 33 56.95	+60 16 17.2	9.71	H	293.487 306 29	+60.271 440 02 B	−10.44	−0.85	−6.72	12.11	13.65	4.75	5.68	7.71	− 4	−27	+18	+11	+ 3	−20	+ 8	+ 4	+ 7	+26	7	1.32
96216	19 33 57.58	+60 16 35.2	9.06	H	293.489 936 36	+60.276 440 64 A	−4.07	1.40	−7.49	3.07	2.85	2.44	3.21	3.85	− 2	−32	+15	+19	+ 5	−18	+ 7	+14	+ 5	+27	7	1.32
96217 H	19 33 57.75	−16 16 26.0	8.17	H	293.490 612 93	−16.273 875 85 A	1.05	0.87	−8.22	2.70	1.59	2.51	2.50	1.69	+22	− 7	+16	−26	− 9	+ 0	− 8	−29	+ 2	+40	1	0.93
96218	19 33 59.55	+09 11 21.2	8.24	H	293.498 139 80	+09.189 218 44	3.74	−7.31	−27.46	0.95	0.76	1.23	1.04	0.76	−32	+11	−42	−18	+ 9	+23	+23	−26	+12	−23	0	−0.51
96219	19 33 59.64	+15 22 27.9	8.48	H	293.498 507 99	+15.374 415 54	12.76	24.24	−6.47	0.68	0.62	1.08	0.90	0.77	+ 9	− 5	− 5	+ 8	−29	+24	−30	− 6	−11	−10	0	−0.34
96220	19 34 00.73	+26 03 45.3	7.06	H	293.503 053 46	+26.062 578 40	5.04	28.85	19.91	0.32	0.54	0.77	0.38	0.82	−32	− 3	+ 0	+17	−11	+ 0	−12	+ 8	+ 0	−37	0	−0.64
96221	19 34 01.30	−50 45 08.8	8.47	H	293.505 406 71	−50.752 431 62	4.32	5.47	2.54	0.91	0.75	1.17	1.11	0.95	+44	−30	−22	+13	+30	+15	+23	+ 8	+27	+32	0	0.10
96222	19 34 01.75	+65 31 51.6	7.91	H	293.507 289 32	+65.530 996 38	5.01	−8.28	−16.31	0.53	0.55	0.60	0.43	0.62	+ 5	+ 4	+ 3	−29	+20	− 2	+22	+ 6	+13	+24	2	1.57
96223	19 34 01.82	−39 47 10.6	8.06	H	293.507 563 01	−39.786 277 10	5.15	−1.66	−17.16	1.12	0.85	1.24	1.58	0.96	− 4	−21	−23	+ 4	+ 5	−24	− 5	− 9	+21	−22	0	0.78
96224	19 34 02.20	+12 38 10.8	8.83	G	293.509 157 38	+12.636 322 11	23.98	−69.54	−263.21	0.85	0.72	1.23	0.97	0.78	+31	− 3	−11	+ 0	−36	+13	−40	−14	− 3	−18	0	0.05
96225	19 34 02.26	+25 48 21.3	7.38	H	293.509 435 65	+25.805 908 76	3.15	4.57	−20.66	0.36	0.63	0.90	0.40	0.89	−33	− 6	+ 4	+39	−14	+ 4	−14	+17	+ 5	−32	0	−0.74
96226	19 34 03.44	−67 56 32.8	7.94	1 H	293.514 314 80	−67.942 435 55	2.93	8.81	0.19	0.48	0.57	0.93	0.43	0.71	−12	−12	−10	−27	+18	− 2	+23	−10	+ 9	−24	0	0.49
96227	19 34 04.53	+24 35 16.5	8.77	H	293.518 880 24	+24.587 916 58	5.16	−1.76	−6.10	0.92	0.97	1.28	1.27	1.62	− 3	+ 1	− 8	+ 9	− 6	− 7	− 9	+31	− 3	+ 1	0	0.33
96228	19 34 04.71	+24 18 36.6	9.92	2 H	293.519 614 85	+24.310 178 30	2.17	−5.48	−2.65	1.26	1.41	1.94	1.42	2.16	− 9	−28	−20	−13	−15	− 1	−17	+21	−13	−11	0	2.56
96229	19 34 05.23	+07 22 45.5	4.45	G	293.521 782 28	+07.379 319 18	29.50	212.76	−155.39	0.68	0.46	0.78	0.89	0.51	−10	− 2	− 2	+ 1	− 6	+12	− 6	−32	− 6	−15	0	−1.69
96230 H	19 34 05.78	−58 20 48.2	9.28	H	293.524 073 29	−58.346 733 12 A	5.62	0.77	−17.44	1.75	1.45	2.30	1.90	2.10	+10	−26	+13	+25	−16	−10	+ 6	−15	− 5	+58	3	0.81
96231	19 34 05.92	−56 06 00.2	7.00	H	293.524 669 68	−56.100 048 27	0.44	14.48	−31.83	0.65	0.54	0.83	0.88	0.74	+ 9	−20	− 6	+ 9	+24	+ 4	+26	+ 2	− 4	+24	2	−0.49
96232	19 34 06.69	−43 27 51.4	9.19	H	293.527 881 73	−43.464 274 62	1.40	4.45	−10.38	1.46	1.20	1.63	2.35	1.73	−21	+ 6	−11	+37	−30	−15	−33	+ 6	+18	−38	0	0.13
96233	19 34 07.39	−22 06 16.0	8.44	1 H	293.530 792 46	−22.104 448 97	1.90	−8.89	−7.47	1.16	0.65	1.28	1.15	0.69	+59	−45	−33	+ 6	+11	−11	− 9	−27	+21	+23	0	0.07
96234	19 34 08.48	−40 02 04.7	5.89	2 H	293.535 342 54	−40.034 633 08	7.49	4.44	−2.12	0.88	0.62	0.88	1.00	0.74	− 1	−41	− 6	+23	−17	− 4	−15	+13	− 2	− 8	0	0.74
96235	19 34 08.97	−32 25 46.3	9.02	H	293.537 384 48	−32.429 518 32	8.47	−39.94	−3.96	1.25	0.90	1.31	1.40	0.88	− 6	−14	−20	− 3	+14	− 4	+15	−20	− 7	+ 5	3	−0.88
96236	19 34 09.08	−17 19 06.6	9.16	H	293.537 833 61	−17.318 495 06	2.49	4.68	−24.82	1.18	0.82	1.31	1.24	0.82	+41	−10	+14	−14	− 1	+17	− 3	−31	− 6	+40	2	1.46
96237	19 34 09.11	−48 40 38.5	7.78	H	293.537 940 63	−48.677 347 90	3.62	6.31	−2.84	0.85	0.64	1.10	1.13	0.97	+43	−11	+ 0	−15	+10	− 1	+10	−25	+22	+34	0	0.73
96238 H	19 34 09.42	−19 34 14.9	8.15	H	293.539 241 40	−19.570 815 27 *	3.49	−0.19	−16.78	0.98	0.57	1.14	0.98	0.56	+29	−42	−33	−14	− 1	+24	+ 5	−26	+ 0	+11	0	1.80
96239	19 34 09.61	−55 01 42.9	9.77	G	293.540 021 83	−55.028 577 40	11.65	−15.53	162.62	1.32	1.14	1.79	1.67	1.35	+11	−29	−46	−25	+21	− 3	+23	−22	+ 3	− 8	2	0.36
96240	19 34 09.81	−23 01 00.0	10.11	G	293.540 895 23	−23.016 656 48	20.28	19.88	33.14	1.69	0.87	1.82	1.71	1.06	+52	−44	−20	−12	− 1	+11	− 8	−28	+13	+23	0	0.06
96241 H	19 34 11.13	+07 47 08.8	6.89	H	293.546 372 42	+07.785 789 06 *	1.22	−1.68	−8.44	0.77	0.51	0.89	0.97	0.59	− 6	−12	− 1	+ 1	−13	+10	−16	−26	+ 1	−24	0	−1.35
96242	19 34 11.48	+28 24 56.4	7.98	H	293.547 849 51	+28.415 664 62	4.36	1.89	−2.76	0.51	0.66	0.86	0.61	0.89	−14	−10	− 3	+23	−12	−16	−14	+21	+ 1	−14	1	−1.33
96243	19 34 13.54	−50 33 53.9	7.89	H	293.556 425 58	−50.564 980 09	1.10	−1.35	−6.17	0.91	0.73	1.18	1.15	0.95	+39	−29	−20	+12	+29	+14	+21	+ 1	+27	+24	0	0.93
96244	19 34 13.56	+51 49 37.2	8.94	H	293.556 484 45	+51.826 996 79	2.09	11.95	20.68	0.76	0.73	0.83	0.81	0.91	−10	−17	+ 9	− 3	+13	− 2	+17	− 5	−13	+ 2	3	1.42
96245	19 34 14.10	+25 21 09.2	7.07	1 H	293.558 732 33	+25.352 565 70	1.19	−1.80	−16.57	0.40	0.64	0.90	0.45	0.97	− 5	− 7	− 7	+31	+ 6	− 8	+ 9	+18	+ 4	− 3	0	0.24
96246	19 34 14.17	+54 26 38.3	8.66	H	293.559 046 31	+54.443 967 98	1.95	17.66	12.10	0.80	0.74	0.82	1.07	0.93	+17	− 8	− 1	−10	−15	+ 0	−14	− 8	+ 0	+34	0	−0.74
96247	19 34 14.56	+19 23 12.8	8.54	H	293.560 674 59	+19.386 885 85	5.42	22.75	38.74	0.65	0.68	1.04	0.73	0.78	+13	−11	−22	−15	− 4	+15	− 2	−15	+ 8	− 2	0	0.49
96248	19 34 15.31	−16 18 58.5	7.59	H	293.563 781 33	−16.316 247 71	3.28	129.91	−197.33	0.86	0.56	0.95	0.87	0.54	+34	−29	−13	− 8	+ 2	+10	− 1	−30	+11	+33	0	0.59
96249	19 34 17.37	−23 19 31.7	8.55	H	293.572 359 08	−23.325 482 89	2.49	0.37	−5.02	1.08	0.57	1.16	1.02	0.64	+51	−50	−26	− 5	+ 0	+ 6	−11	−29	+13	+22	4	−0.54
96250	19 34 17.53	−37 32 12.9	8.78	H	293.573 034 81	−37.536 920 85	9.57	−26.54	−121.83	1.18	0.90	1.38	1.62	0.98	− 6	−17	−32	+16	+ 9	−12	− 3	−13	+23	−33	3	0.10
96251	19 34 17.59	+70 15 35.0	7.78	H	293.573 280 17	+70.259 725 11	1.48	−5.34	−9.74	0.61	0.56	0.60	0.71	0.70	− 9	− 5	− 4	−15	+19	−14	+17	+11	+ 3	+ 0	0	−0.86
96252	19 34 18.18	+41 55 38.1	6.68	H	293.575 757 16	+41.927 238 98	7.10	10.84	−8.32	0.42	0.44	0.52	0.46	0.50	− 7	− 1	− 3	+ 7	+ 5	− 3	+ 6	+ 4	+ 2	+ 2	1	−0.82
96253	19 34 18.20	−56 25 04.3	7.99	H	293.575 852 72	−56.417 859 11	2.95	19.11	−19.99	0.71	0.60	0.89	0.98	0.84	+ 4	−15	+ 2	+ 0	+18	+ 5	+20	−12	− 4	+17	0	0.47
96254	19 34 18.70	+16 15 54.0	7.01	H	293.577 935 34	+16.265 013 33	1.99	2.49	−5.90	0.57	0.48	0.83	0.67	0.58	+ 8	−14	− 4	+16	−26	+11	−29	− 7	− 6	−12	0	−0.77
96255	19 34 18.99	−16 22 27.0	7.05	2 H	293.579 136 43	−16.374 179 05	0.21	1.48	1.11	0.85	0.55	0.92	0.87	0.55	+29	−17	+ 7	−19	− 8	+ 4	− 5	−41	− 6	+40	0	−0.07
96256	19 34 19.21	+41 25 44.6	7.16	H	293.580 030 35	+41.429 044 77	3.99	7.05	−2.33	0.74	0.77	0.91	0.77	0.85	− 4	+ 2	+ 0	−13	+ 7	−11	+ 6	+ 4	− 2	+ 4	1	
96257 H	19 34 19.64	+00 21 15.3	8.19	G	293.581 853 99	+00.354 240 81 A	8.08	−22.03	−17.96	2.78	1.60	2.38	2.27	1.37	− 2	−25	+ 9	−26	−10	+30	−12	−24	− 3	+36	1	−0.90
96258	19 34 19.76	+51 14 13.5	5.71	H	293.582 335 94	+51.237 077 06	39.08	31.72	−188.14	0.42	0.42	0.47	0.47	0.50	−12	−19	+ 7	− 5	+ 6	+ 4	+ 6	+12	−11	+ 2	1	0.02
96259	19 34 20.03	−36 14 58.4	9.48	H	293.583 440 77	−36.249 552 83	9.18	−19.51	−21.53	1.61	1.31	1.87	1.91	1.27	+38	−42	−42	+16	+ 1	−18	−10	−20	+ 8	+17	0	1.85
96260	19 34 20.79	−24 37 46.4	8.84	H	293.586 610 82	−24.629 556 74	2.85	8.35	−14.47	1.09	0.70	1.32	1.37	0.73	+41	−31	−42	+10	− 9	+35	− 4	−12	+ 0	+ 1	0	−0.12
96261	19 34 21.30	+21 42 35.7	9.22	G	293.588 734 38	+21.709 914 97	1.45	2.95	−5.99	0.91	0.95	1.35	1.38	1.55	+21	− 5	−25	− 5	−15	+ 7	−15	+15	− 4	+21	0	−1.25
96262	19 34 23.76	+28 38 43.0	9.10	H	293.599 011 51	+28.645 272 75	2.80	−1.10	−8.32	0.72	1.03	1.23	0.83	1.34	−11	−10	+ 0	+25	− 7	−15	− 9	+38	+12	−10	0	1.40
96263	19 34 24.89	−27 09 08.8	8.30	H	293.603 692 11	−27.152 442 30	4.33	−25.52	−5.00	1.20	0.86	1.34	1.14	0.79	+21	−32	− 7	−17	− 4	− 3	+ 4	−39	−25	+24	0	−0.08
96264 H	19 34 25.18	+71 36 19.9	6.70	H	293.604 928 08	+71.605 529 76 A	15.19	−109.73	−71.64	0.84	0.66	0.67	0.74	0.64	+ 0	−26	+ 4	−40	+16	+ 0	+14	− 3	+ 8	+ 0	3	1.08
96265	19 34 26.13	−12 55 35.2	7.73	G	293.608 858 74	−12.926 448 35	20.34	−170.90	−94.15	0.82	0.54	0.91	0.83	0.47	+18	−15	− 4	−21	+ 4	+10	+ 2	− 43	+ 1	+18	0	1.86
96266	19 34 26.85	+10 42 45.9	8.72	H	293.611 860 74	+10.712 741 43	0.83	1.02	−4.24	0.82	0.67	1.23	0.95	0.84	+ 0	−24	−13	+50	−38	+ 7	−42	+26	+ 1	−14	1	0.23
96267	19 34 28.23	−52 16 10.3	8.10	H	293.617 634 62	−52.269 531 82	4.45	−7.85	41.18	0.90	0.79	1.14	1.20	1.01	+27	−28	−22	− 8	+14	+ 0	+ 7	−25	+13	+ 8	0	1.17
96268	19 34 28.56	+17 58 52.6	8.66	H	293.619 016 65	+17.981 264 29	4.28	−3.48	−10.69	0.67	0.68	1.15	0.75	0.79	+19	−35	−17	− 9	− 2	+18	− 3	−11	+ 9	+17	1	1.27
96269	19 34 30.24	−06 47 11.1	8.69	H	293.625 993 16	−06.786 419 25	2.29	1.50	−14.15	1.09	0.69	1.31	1.06	0.62	+27	−35	−10	−17	+ 8	+35	+ 5	−23	+12	+22	0	2.12
96270	19 34 30.61	+01 28 55.9	8.69	H	293.627 527 97	+01.482 182 05	3.97	18.39	3.89	0.97	0.52	1.17	1.25	0.63	−23	−31	− 7	−16	+ 4	+11	− 1	−37	+14	−34	0	0.58
96271	19 34 31.31	+26 24 03.1	9.37	H	293.630 471 76	+26.400 866 12	0.37	1.53	−0.94	0.63	1.15	1.53	0.71	1.76	−35	+ 1	+11	+33	−16	+ 9	−15	+32	− 8	−38	1	1.14
96272	19 34 32.87	−62 22 56.8	7.92	H	293.636 965 40	−62.382 446 05	2.32	12.92	2.34	0.78	0.60	0.97	1.00	0.89	−11	+ 1	+ 4	+28	−17	− 2	−13	+ 2	+ 8	+11	0	−0.47
96273	19 34 33.36	−27 09 35.9	8.91	G	293.639 001 67	−27.159 970 93	16.52	27.70	−19.43	1.34	0.96	1.49	1.30	0.90	+17	−28	− 3	−19	− 1	− 2	+ 6	−40	−27	+21	0	−0.82
96274	19 34 33.94	−23 51 31.7	6.51	H	293.641 414 24	−23.858 811 77	1.70	3.48	−7.98	0.82	0.45	0.95	0.88	0.48	+46	−50	−33	− 7	− 1	+34	+ 2	−17	− 3	+ 1	0	1.25
96275	19 34 34.89	+19 46 24.2	5.00	H	293.645 366 54	+19.773 397 42	5.36	13.41	2.22	0.43	0.44	0.65	0.47	0.51	+17	−17	−22	− 7	−15	+16	−13	− 6	+ 5	− 2	0	0.38
96276	19 34 35.33	−70 30 40.9	8.17	G	293.647 198 04	−70.511 363 22	5.69	8.87	−42.55	0.47	0.58	0.92	0.56	0.79	−27	− 6	− 4	− 4	+15	−11	+15	−17	+10	−35	0	−0.41
96277	19 34 36.46	+47 50 14.2	9.93	H	293.651 927 15	+47.837 281 90	1.39	−2.03	−16.18	0.94	0.85	1.01	1.14	1.04	+ 4	− 1	−15	− 5	+ 7	+ 9	+ 8	− 8	+19	+22	2	0.58
96278	19 34 36.54	+15 28 01.4	8.37	H	293.652 235 43	+15.467 067 13	1.99	3.99	2.22	0.70	0.61	1.08	0.94	0.77	+11	−11	− 3	+11	−25	+12	−28	− 7	− 5	−16	0	−1.19
96279	19 34 37.09	+39 13 56.4	8.87	G	293.654 561 36	+39.232 324 27	2.79	25.16	26.24	0.67	0.70	0.87	0.83	0.76	+ 4	−11	−20	+ 6	+ 5	−20	+ 0	−19	+20	+10	0	−0.19
96280 H	19 34 37.43	+18 07 41.0	7.31	H	293.655 965 05	+18.128 062 71 A	4.58	21.45	20.94	0.97	1.05	1.44	1.04	1.10	+23	−18	−14	−15	−10	+14	− 9	−14	+10	+33	1	−0.11
96281	19 34 37.81	+11 54 33.7	8.20	H	293.657 559 49	+11.909 347 80	2.52	−0.04	1.23	0.76	0.65	1.15	0.89	0.67	+ 8	− 4	−28	+ 3	−33	+24	−30	−10	− 1	−13	0	−1.41
96282	19 34 38.46	+10 57 09.8	7.06	H	293.660 264 86	+10.952 714 41	2.80	1.79	−0.72	0.59	0.53	0.96	0.73	0.68	+ 2	+ 2	−32	+29	−34	+33	−30	+18	−10	− 1	2	0.18
96283	19 34 39.12	+39 16 08.9	8.78	H	293.662 982 56	+39.269 148 06	3.52	−6.13	−21.05	0.70	0.69	0.86	0.85	0.76	+ 0	− 6	−16	+ 9	+ 8	−14	+ 8	−14	+15	+16	1	2.35
96284	19 34 39.53	−65 01 50.7	8.28	G	293.664 694 74	−65.030 754 58	6.34	15.97	−5.94	0.73	0.67	1.08	0.85	1.03	−29	−31	+ 2	+14	− 9	− 6	−27	−11	+25	−57	0	−0.28
96285	19 34 39.53	+04 34 54.3	9.35	G	293.664 720 43	+04.581 757 85	69.09	524.89	312.09	1.33	0.86	1.65	1.97	1.08	− 7	− 7	−25	−26	+18	− 8	+10	−44	+23	−36	0	−0.38
96286	19 34 39.87	+48 09 53.1	6.79	G	293.666 144 21	+48.164 740 84	10.94	−15.37	−78.32	0.53	0.47	0.56	0.59	0.54	+ 3	− 7	−11	−18	+ 0	+ 1	− 3	−10	+14	+20	1	1.42
96287 H	19 34 40.30	+28 54 27.0	8.78	H	293.667 916 41	+28.907 495 30 A	16.46	43.10	−56.35	1.34	1.73	1.92	1.46	2.04	−14	− 9	− 2	+35	−12	− 2	−14	+32	+ 4	−17	1	1.45
96288	19 34 41.26	+42 24 45.3	5.34	H	293.671 905 27	+42.412 584 65	6.37	2.56	−31.28	0.39	0.40	0.47	0.39	0.45	− 4	− 3	− 5	− 4	+ 8	− 1	+ 8	+ 2	− 5	+ 4	1	−0.04
96289	19 34 41.59	−72 47 44.3	9.34	H	293.673 294 30	−72.795 626 75	13.67	−2.94	−14.74	0.74	0.88	1.26	0.81	1.18	−13	−13	+ 0	+17	−10	+10	−12	+14	+ 1	−30	1	−0.35
96290	19 34 42.78	−49 41 05.3	8.16	G	293.678 238 23	−49.684 819 22	−0.18	3.34	−6.90	0.88	0.72	1.31	1.24	1.04	+19	−20	−38	− 9	+45	−14	+26	−37	+47	−15	0	0.73
96291 H	19 34 43.44	−18 06 04.3	9.35	H	293.681 011 44	−18.101 207 73 A	3.10	1.99	−13.32	4.96	2.80	1.94	2.06	1.15	+21	− 5	−10	+ 1	+ 4	− 1	+ 3	−11	+ 7	+23	2	−0.22
96292	19 34 43.91	+43 56 45.1	6.64	1 H	293.682 972 12	+43.945 857 69	6.06	19.62	−0.89	0.43	0.42	0.50	0.45	0.46	− 4	− 8	−13	+ 7	+16	−18	+15	−10	+11	+ 1	0	1.18
96293	19 34 44.63	−28 49 21.7	9.18	H	293.685 944 10	−28.822 702 54	6.60	4.63	−42.97	1.46	0.95	1.46	2.00	0.90	−24	− 5	−20	−14	+29	−18	+22	−35	− 1	−26	3	1.08
*96294	19 34 45.30	+16 38 30.0	7.35	H	293.688 734 52	+16.641 674 13	5.49	7.76	−2.81	0.61	0.54	0.87	0.63	0.58	+13	−10	− 8	− 6	−20	+ 5	−25	−22	− 3	−14	0	−0.79
*96295	19 34 45.24	+30 30 59.0	10.00	2 G	293.688 479 88	+30.516 395 94	−1.63	−4.16	−10.19	1.41	1.67	2.37	1.52	1.73	− 7	+ 9	− 2	+30	+ 9	+24	+10	+ 4	− 5	− 3	0	1.37
96296	19 34 45.53	+46 28 03.2	7.23	H	293.689 701 63	+46.467 544 23	3.42	12.33	25.06	0.57	0.51	0.59	0.72	0.55	− 2	− 1	+10	+38	+ 7	− 4	+ 6	+28	− 6	− 6	0	−0.57
96297	19 34 46.34	+63 26 03.0	6.47	H	293.693 068 23	+63.434 179 49	6.05	10.18	−3.26	0.51	0.46	0.51	0.61	0.51	+ 5	+ 5	+ 3	− 4	+15	−10	+14	− 4	+ 9	+15	0	−0.63
96298	19 34 46.82	+67 48 15.5	8.70	H	293.695 102 63	+67.804 314 21	2.93	5.27	−7.56	0.71	0.68	0.74	0.80	0.79	+11	− 7	+10	− 1	+13	+15	+10	+ 8	+10	+27	0	1.47

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
96201	8.142	0.009	7.911	0.009		0.220	0.012	T	0.24	0.01	L	7.9310	0.0012	0.011	124		7.91	7.95					1							S
96202	9.376	0.018	7.882	0.010		1.257	0.016	T	1.22	0.02	L	7.8897	0.0013	0.013	99		7.87	7.91					1 S							
96203	10.015	0.023	8.416	0.011		1.340	0.020	T	1.30	0.02	L	8.4118	0.0014	0.013	125		8.39	8.44		C			1							
96204	8.364	0.014	6.635	0.011		1.471	0.015	T	3.14	0.04	O	6.2090	0.0067	0.071	92		6.03	6.27		U 2			1 S							S
96205	7.305	0.007	7.419	0.009		−0.099	0.010	T	−0.08	0.01	L	7.4142	0.0013	0.010	91		7.40	7.43		C			1							S
96206	8.858	0.012	7.659	0.008		1.026	0.011	T	1.00	0.01	L	7.7179	0.0014	0.010	109		7.70	7.73					1							S
96207	8.113	0.007	7.989	0.009		0.120	0.011	T	0.13	0.01	L	8.0230	0.0011	0.013	122		8.00	8.04		D			1							S
96208	11.006	0.045	9.259	0.018		1.457	0.038	T	1.46	0.06	L	9.2221	0.0022	0.021	131		9.19	9.26					1 S							
96209	7.621	0.007	7.429	0.006		0.176	0.009	T	0.19	0.01	L	7.4719	0.0013	0.013	114		7.45	7.49					1							S
96210	9.118	0.015	9.209	0.021		−0.078	0.023	T	−0.06	0.03	L	9.1847	0.0022	0.019	126		9.16	9.22		C			1							
96211	9.768	0.021	8.366	0.012		1.185	0.019	T	1.15	0.02	L	8.4275	0.0020	0.015	107		8.40	8.45		C			1							
96212	9.872	0.023	8.324	0.012		1.300	0.020	T	1.26	0.02	L	8.3433	0.0018	0.015	98		8.31	8.37					1							
96213	10.717	0.078	10.000	0.064		0.645	0.076	T	0.71	0.07	L	10.0607	0.0041	0.021	45		10.00	10.10		C			1							G
96214	8.092	0.008	6.991	0.005		0.950	0.007	T	0.94	0.01	L	7.0352	0.0007	0.008	105		7.02	7.05		C			1							S
96215	9.886	0.028	9.608	0.031	B	0.264	0.039	T	0.30	0.05	L	9.7061	0.0354			B				D	19340+6016	I 2	1 C I A							
96216	9.189	0.015	9.007	0.017	A	0.174	0.022	T	0.19	0.03	L	9.1184	0.0256	0.131	104	A	8.94	9.32		D	19340+6016	I 2	1 C P A							
96217	9.464	0.025	8.223	0.015	*	1.059	0.023	T	1.03	0.02	L *	8.3361	0.0021	0.017	94	*	8.31	8.37		R	19340−1616	I 1	2 C A	AB	150	4.085	0.004	0.12	0.02	
96218	9.535	0.024	8.351	0.015		1.015	0.022	T	0.99	0.02	L	8.4092	0.0013	0.016	81		8.39	8.45		D			1							
96219	9.033	0.010	8.529	0.010		0.474	0.013	T	0.55	0.01	L	8.5800	0.0018	0.018	139		8.56	8.61		C			1							
96220	7.384	0.003	7.085	0.004		0.267	0.009	G	0.30	0.01	H	7.1286	0.0007	0.010	281		7.11	7.15		C			1							S
96221	8.574	0.011	8.464	0.013		0.099	0.016	T	0.11	0.02	L	8.5142	0.0016	0.012	94		8.49	8.54		C			1							S
96222	8.065	0.009	7.924	0.011		0.136	0.013	T	0.15	0.01	L	7.9608	0.0017	0.013	103		7.94	7.98					1							S
96223	9.939	0.032	8.195	0.015		1.454	0.028	T	1.46	0.04	L	8.1965	0.0021	0.011	48		8.18	8.22		C			1							
96224	9.841	0.021	8.881	0.016		0.800	0.010	G	0.84	0.01	H	8.9708	0.0020	0.020	131		8.93	9.01					1							
96225	9.080	0.008	7.512	0.004		1.315	0.007	T	1.28	0.01	L	7.5363	0.0008	0.012	293		7.52	7.56					1							
96226	8.857	0.008	8.035	0.007		0.725	0.008	T	0.78	0.01	L	8.0809	0.0013	0.020	239		8.05	8.11		U			1							S
96227	8.864	0.013	8.803	0.016		0.061	0.019	T	0.07	0.01	L	8.8001	0.0031	0.025	93		8.76	8.84					1							
96228	10.484	0.041	9.969	0.041		0.484	0.052	T	0.56	0.06	L	10.0272	0.0068	0.059	89		9.95	10.16	0.68	P 1 A			1 S							G
96229	5.977	0.004	4.585	0.003		1.176	0.005	G	1.14	0.02	A	4.6104	0.0004	0.004	85		4.60	4.62		C	19341+0723	I 1	1							S
96230	9.962	0.023	9.527	0.023	A	0.600	0.495	G	0.49	0.09	L *	9.3715	0.0019	0.019	142	*	9.34	9.40		D	19341−5821	I 1	2 C A	AB	113	3.718	0.011	1.30	0.04	
96231	8.818	0.011	7.139	0.006		1.403	0.010	T	1.38	0.01	L	7.1418	0.0013	0.010	113		7.12	7.16					1							S
96232	10.429	0.052	9.275	0.032		0.991	0.048	T	0.97	0.04	L	9.3551	0.0037	0.025	48		9.32	9.40		C			1							
96233	10.603	0.040	8.651	0.015		1.654	0.035	T	2.19	0.08	O	8.5021	0.0027	0.021	106		8.48	8.54		U			1							
96234	6.026	0.010	5.918	0.013		0.105	0.015	T	0.12	0.02	L	5.9328	0.0020	0.060	55		5.92	6.13	4.63	P 1 A			1							S P
96235	9.606	0.029	9.061	0.027		0.517	0.030	T	0.59	0.03	L	9.1283	0.0031	0.023	65		9.09	9.17					1							
96236	10.604	0.044	9.265	0.023		1.136	0.039	T	1.10	0.04	L	9.3317	0.0022	0.021	88		9.29	9.37					1							
96237	7.867	0.006	7.792	0.007		0.074	0.009	T	0.09	0.01	L	7.8078	0.0014	0.015	164		7.78	7.84					1							S
96238	10.046	0.030	8.340	0.014	*	1.424	0.026	T	1.41	0.04	L *	8.2901	0.0019	0.015	87	*	8.26	8.32			19342−1934	H 1	2 C S B	AB	335	0.129	0.033	1.81	1.14	
96239	10.474	0.036	9.842	0.033		0.599	0.004	G	0.67	0.00	H	9.8801	0.0035	0.030	103		9.83	9.94					1 G							
96240	11.432	0.068	10.179	0.036		1.010	0.015	G	1.06	0.02	I	10.2564	0.0023	0.023	124		10.22	10.30		C			1							G
96241	6.869	0.005	6.894	0.006	*	−0.018	0.007	T	0.00	0.01	L *	6.8944	0.0013	0.012	98	*	6.87	6.92		D	19342+0747	H 1	2 C S D	AB	247	0.142	0.022	0.92	0.52	S D
96242	7.921	0.007	7.977	0.009		−0.046	0.010	T	−0.02	0.01	L	7.9704	0.0011	0.014	162		7.95	8.00					1							
96243	9.421	0.016	8.023	0.009		1.163	0.020	G	1.10	0.02	A	8.0632	0.0013	0.011	91		8.04	8.09					1							S
96244	10.366	0.031	9.063	0.018		1.107	0.028	T	1.07	0.03	L	9.1043	0.0019	0.020	111		9.07	9.14		C			1							
96245	9.395	0.013	7.281	0.005		1.780	0.015	G	2.00	0.03	C	7.1521	0.0015	0.017	189		7.12	7.18		U 2			1							S
96246	10.448	0.042	8.812	0.020		1.369	0.037	T	1.34	0.04	L	8.8063	0.0014	0.015	85		8.77	8.84		C			1							
96247	9.939	0.022	8.648	0.013		1.052	0.003	G	1.02	0.00	K	8.7104	0.0018	0.016	143		8.68	8.74		C			1							
96248	8.250	0.012	7.665	0.010		0.548	0.012	T	0.62	0.01	L	7.7082	0.0013	0.010	95		7.69	7.73		C			1							S
96249	8.710	0.009	8.555	0.011		0.141	0.013	T	0.16	0.01	L	8.6022	0.0015	0.013	131		8.58	8.62					1							
96250	9.714	0.031	8.851	0.024		0.757	0.030	T	0.80	0.02	L	8.9246	0.0029	0.014	47		8.90	8.96		C			1							
96251	7.879	0.007	7.791	0.010		0.086	0.011	T	0.10	0.01	L	7.8119	0.0016	0.013	102		7.79	7.83					1							S
96252	6.663	0.004	6.677	0.005		−0.008	0.006	T	0.01	0.01	L	6.6903	0.0007	0.007	130		6.68	6.70		C			1							S
96253	8.196	0.008	8.008	0.009		0.180	0.011	T	0.20	0.01	L	8.0491	0.0017	0.014	106		8.03	8.08		C			1							S
96254	6.976	0.004	7.015	0.005		−0.031	0.006	T	−0.01	0.01	L	7.0107	0.0013	0.012	127		6.99	7.03					1							S
96255	11.227	0.081	7.398	0.007		2.985	0.059	T	3.06	0.06	L	6.9492	0.0140	0.090	88		6.81	7.08		U 2 C			1 S							
96256	7.104	0.005	7.159	0.006		−0.046	0.007	T	−0.02	0.01	L	7.1561	0.0011	0.008	130		7.14	7.17					1 X							S
96257	8.750	0.011	8.253	0.011	*	0.524	0.015	G	0.60	0.02	H *	8.2783	0.0011	0.011	123	*	8.26	8.30		D	19343+0021	H 1	2 C A	AB	36	0.399	0.003	0.03	0.01	
96258	6.302	0.003	5.775	0.003		0.475	0.011	G	0.58	0.03	C	5.8251	0.0005	0.006	120		5.82	5.84					1							S
96259	10.283	0.053	9.504	0.044		0.692	0.052	T	0.75	0.04	L	9.6228	0.0027	0.022	45		9.59	9.67					1							
96260	9.051	0.015	8.841	0.017		0.194	0.022	T	0.21	0.03	L	8.9030	0.0015	0.016	97		8.86	8.92		C			1							
96261	9.355	0.018	9.212	0.022		0.100	0.015	G	0.11	0.02	H	9.2625	0.0021	0.018	82		9.23	9.30		C			1							
96262	10.316	0.030	9.264	0.020		0.913	0.027	T	0.91	0.02	L	9.2541	0.0019	0.024	166		9.22	9.29		C			1 S							
96263	9.672	0.029	8.408	0.017		1.077	0.026	T	1.04	0.02	L	8.4644	0.0026	0.015	50		8.44	8.49		C			1							
96264	7.194	0.006	6.755	0.006	*	0.428	0.006	T	0.50	0.01	L *	6.7939	0.0007	0.007	94	*	6.78	6.80		D	19344+7136	I 1	2 C A	AB	240	0.584	0.005	2.01	0.02	S
96265	8.490	0.009	7.786	0.010		0.614	0.001	G	0.68	0.00	H	7.8596	0.0014	0.009	96		7.85	7.88		C			1							S
96266	8.762	0.012	8.739	0.016		0.026	0.018	T	0.04	0.01	L	8.7356	0.0011	0.014	138		8.71	8.76		D			1							
96267	9.626	0.021	8.201	0.012		1.203	0.019	T	1.16	0.02	L	8.2648	0.0018	0.017	88		8.23	8.29					1							
96268	8.940	0.010	8.683	0.011		0.270	0.015	G	0.30	0.02	H	8.7281	0.0018	0.021	152		8.70	8.76					1 S							
96269	10.461	0.041	8.874	0.019		1.330	0.036	T	1.29	0.04	L	8.8503	0.0019	0.015	91		8.82	8.88					1							
96270	8.961	0.012	8.731	0.014		0.219	0.017	T	0.24	0.02	L	8.7544	0.0017	0.019	144		8.72	8.78					1							
96271	9.703	0.015	9.409	0.017		0.280	0.021	T	0.32	0.03	L	9.4400	0.0023	0.030	253		9.39	9.50					1							G
96272	9.271	0.015	8.045	0.009		1.047	0.014	T	1.02	0.01	L	8.0857	0.0019	0.015	117		8.06	8.11					1							
96273	9.746	0.034	9.004	0.029		0.680	0.020	G	0.74	0.02	H	9.0548	0.0031	0.018	48		9.01	9.08					1							
96274	8.702	0.010	6.677	0.004		1.677	0.009	T	1.70	0.01	L	6.6193	0.0011	0.008	120		6.61	6.63					1							S
96275	4.874	0.002	4.981	0.002		−0.093	0.003	G	−0.08	0.03	C	4.9733	0.0006	0.006	130		4.96	4.98			19345+1947	I 1	1							S
96276	8.485	0.007	8.196	0.008		0.287	0.003	G	0.33	0.00	H	8.2427	0.0012	0.017	215		8.21	8.27					1							S
96277	10.267	0.030	9.955	0.034		0.296	0.042	T	0.34	0.06	L	10.0037	0.0030	0.025	102		9.97	10.04		C			1							G
96278	9.774	0.015	8.502	0.010		1.083	0.014	T	1.05	0.01	L	8.5347	0.0016	0.017	151		8.51	8.57					1							
96279	9.415	0.016	8.910	0.015		0.456	0.005	G	0.53	0.01	H	8.9685	0.0021	0.017	121		8.94	9.00		C			1							
96280	8.456	0.010	7.458	0.007	*	0.873	0.009	T	0.88	0.01	L *	7.4629	0.0008	0.009	150	*	7.44	7.48		D	19346+1808	I 1	2 C A	AB	179	0.620	0.003	0.99	0.01	S
96281	8.206	0.008	8.186	0.010		0.023	0.012	T	0.04	0.01	L	8.2116	0.0019	0.014	110		8.19	8.24		C			1							
96282	8.304	0.009	7.172	0.007		0.974	0.009	T	0.96	0.01	L	7.2243	0.0009	0.009	119		7.21	7.24					1							S
96283	9.294	0.015	8.839	0.015		0.429	0.019	T	0.50	0.02	L	8.8747	0.0015	0.018	128		8.84	8.91					1							
96284	8.774	0.011	8.333	0.011		0.445	0.004	G	0.51	0.00	H	8.3751	0.0014	0.017	130		8.35	8.40		C			1							S
96285	11.138	0.068	9.519	0.026		1.390	0.013	G	1.64	0.01	A	9.4275	0.0019	0.017	94		9.40	9.46		C			1							
96286	7.088	0.005	6.813	0.005		0.256	0.006	G	0.29	0.01	H	6.8503	0.0011	0.008	112		6.83	6.86		C			1							S
96287	9.863	0.020	8.918	0.015	A	1.000	0.495	G	0.83	0.04	L *	8.9263	0.0020	0.024	155	*	8.89	8.97			19347+2854	I 1	2 C A	AB	237	1.838	0.031	3.21	0.19	
96288	5.420	0.003	5.354	0.002		0.060	0.003	T	0.07	0.00	L	5.3695	0.0005	0.005	133		5.36	5.38					1							S
96289	10.338	0.022	9.374	0.016		0.835	0.021	T	0.85	0.01	L	9.4810	0.0023	0.031	182		9.43	9.54					1							
96290	8.139	0.008	8.137	0.010		−0.024	0.005	G	0.00	0.01	H	8.1579	0.0015	0.013	93		8.14	8.18		C			1							S
96291	9.465	0.019	9.379	0.024	*	0.078	0.028	T	0.09	0.03	L *	9.3793	0.0016	0.020	96	*	9.34	9.41		D	19347−1806	H 1	2 C C	AB	291	0.311	0.064	3.00	0.39	
96292	6.597	0.004	6.619	0.005		−0.034	0.004	G	−0.01	0.00	H	6.6335	0.0020	0.015	122		6.60	6.65	1.85	P 1 A			1							S P
96293	9.718	0.032	9.247	0.031		0.612	0.015	G	0.68	0.01	H	9.3129	0.0034	0.020	54		9.27	9.35		C			1							
96294	8.821	0.010	7.475	0.006		1.141	0.009	T	1.10	0.01	L	7.5217	0.0010	0.011	119		7.51	7.54		C			1							S
96295	10.332	0.028	10.403	0.049		−0.013	0.009	G	0.01	0.01	H	9.4823	0.0041	0.038	154		9.42	9.53		U 2 C			1 S							G
96296	8.608	0.011	7.349	0.007		1.060	0.015	G	0.95	0.04	D	7.3981	0.0010	0.009	115		7.39	7.42					1							S
96297	8.203	0.010	6.621	0.006		1.326	0.009	T	1.29	0.01	L	6.6296	0.0010	0.008	109		6.62	6.64		C			1							S
96298	10.167	0.025	8.848	0.015		1.120	0.023	T	1.08	0.02	L	8.8707	0.0019	0.019	99		8.82	8.90			19348+6748	I 1	1							
96299	9.832	0.023	9.296	0.022		0.503	0.029	T	0.58	0.03	L	9.4297	0.0029	0.030	117		9.38	9.47					1							
96300	10.130	0.026	9.692	0.027	A						T *	9.6423	0.0016	0.020	119	*	9.61	9.69		D	19348+7501	I 1	2 C A	AB	33	7.542	0.017	2.40	0.09	

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
96301	19 34 49.11	+14 09 52.4	9.30		H	293.704 623 90	+14.164 542 82		8.26	2.94	−5.30	0.85	0.75	1.38	1.16	0.97	+21	−11	−10	+13	−13	+14	−18	− 9	+ 7	− 5	3	1.85
96302	19 34 50.92	+29 27 46.5	5.39		H	293.712 160 81	+29.462 911 11		6.06	15.14	17.81	0.35	0.43	0.58	0.44	0.53	−21	− 3	−11	+ 9	+ 4	−28	+ 0	− 8	+15	−28	0	1.25
96303	19 34 51.49	−41 09 18.3	8.05	1	H	293.714 535 50	−41.155 070 64		4.76	−4.02	−19.43	1.20	0.82	1.13	1.48	1.00	−17	−31	− 2	+31	−20	+ 7	−17	+24	− 5	−22	0	−1.35
96304	19 34 51.84	+20 03 17.5	8.56		H	293.716 015 75	+20.054 868 72		1.53	0.15	−13.64	0.74	0.78	1.16	0.90	0.98	+19	−27	−19	+ 8	−10	+14	− 6	+16	− 4	+ 0	0	1.69
96305	19 34 51.92	+13 04 39.7	8.56	1	H	293.716 318 19	+13.077 705 24		2.22	2.27	0.50	0.66	0.55	1.05	0.76	0.63	+37	+ 0	− 8	− 1	−28	+31	−34	−15	−11	−13	0	−0.87
96306	19 34 51.92	+57 46 21.3	8.15		H	293.716 329 41	+57.772 571 97		12.21	−35.07	23.02	0.63	0.58	0.64	0.67	0.67	+ 3	+17	+ 4	+22	+20	− 5	+25	+18	+22	+10	0	0.70
96307	19 34 53.28	−32 36 56.6	11.10		G	293.721 981 91	−32.615 731 53		2.49	−11.92	−20.18	2.28	1.86	2.49	2.63	2.10	+23	−25	−18	+ 3	+ 6	−10	+ 7	− 9	− 6	+32	0	−0.53
96308	19 34 55.45	+11 25 26.7	7.91		H	293.731 047 34	+11.424 082 65		23.69	279.20	7.56	0.69	0.56	1.13	0.84	0.65	+ 7	+ 1	−25	+14	−35	+37	−32	− 8	+ 2	− 1	0	1.28
96309	19 34 55.78	+06 14 02.1	8.34	2	H	293.732 422 79	+06.233 921 91		0.05	5.91	−0.10	1.08	0.71	1.22	1.50	0.80	−27	− 3	− 6	−19	+10	− 7	+ 7	−43	+ 2	−45	0	−0.16
96310	19 34 56.09	+33 47 43.7	6.64	2	H	293.733 717 39	+33.795 473 47		3.10	21.72	5.85	0.43	0.44	0.60	0.49	0.48	− 1	− 4	−10	+ 4	+ 3	− 5	+ 3	− 5	+ 9	+ 5	0	−0.57
96311	19 34 58.43	−84 04 33.0	8.46		H	293.743 445 91	−84.075 835 07		10.12	56.74	−95.17	0.70	0.67	0.81	0.83	0.84	−18	−17	+15	+34	−15	− 8	−18	− 7	−16	−32	2	−0.59
96312	19 34 58.55	+00 37 38.4	8.76		H	293.743 969 94	+00.627 333 78		1.72	−1.63	−4.58	1.13	0.68	1.34	1.24	0.70	+10	−33	+ 4	−10	−12	+ 7	−15	−38	+ 9	+ 8	0	1.95
96313	19 34 58.93	+27 13 30.9	6.74		H	293.745 543 24	+27.225 252 24		15.49	59.64	37.34	0.37	0.52	0.75	0.44	0.72	−14	+ 5	− 2	+19	+ 1	− 6	+ 2	+ 1	+ 1	−16	0	−0.68
96314	19 34 59.74	−81 45 10.7	6.63		H	293.748 896 54	−81.752 967 25		6.10	6.41	8.88	0.51	0.49	0.64	0.55	0.62	−11	−27	+ 1	+ 7	− 3	−11	− 4	+13	+10	−19	1	0.54
96315	H 19 35 00.82	+29 47 01.4	8.38		H	293.753 423 25	+29.783 710 43	A	3.12	1.32	1.42	1.65	2.45	2.23	1.54	2.37	−28	− 6	− 1	+16	− 5	−18	− 6	+12	+14	−40	3	−0.83
96316	19 35 01.23	+52 30 07.6	6.39		H	293.755 138 96	+52.502 101 40		8.92	1.47	−34.13	0.46	0.45	0.51	0.50	0.49	− 7	−26	+ 6	− 1	+ 3	+ 1	+ 4	+ 1	− 4	+11	0	1.13
96317	H 19 35 01.71	+23 28 27.3	7.93		H	293.757 112 76	+23.474 260 74	*	5.03	10.38	−1.60	1.43	1.31	1.30	1.04	1.34	+10	− 7	+ 0	−17	− 3	+10	− 5	− 7	+15	+28	1	0.19
96318	19 35 01.82	+04 18 41.0	7.60		H	293.757 586 90	+04.311 395 74		6.48	−22.01	−19.88	0.90	0.55	1.02	1.19	0.57	−18	− 9	− 5	+ 0	+ 8	+ 3	+ 6	−34	+14	−18	0	−1.26
96319	19 35 02.97	−50 07 28.8	7.71		G	293.762 379 13	−50.124 661 16		2.19	10.56	−9.71	0.99	0.73	1.12	1.25	0.93	+40	−34	−20	+27	+49	+ 5	+39	+16	+18	+23	0	0.80
96320	19 35 03.87	−71 45 17.5	8.86		H	293.766 110 54	−71.754 848 92		2.63	−9.31	−9.73	0.65	0.83	1.26	0.73	1.08	−13	−13	+ 6	+ 6	+15	−18	+17	− 6	+12	−10	0	−0.51
96321	H 19 35 04.51	+50 37 38.7	8.30		G	293.768 779 18	+50.627 405 78	*	9.89	3.06	90.47	1.49	1.31	0.93	1.16	1.05	+16	− 5	+14	+20	+10	+17	+ 8	+22	+ 1	+21	0	−0.24
96322	19 35 04.53	−38 27 45.4	9.06		H	293.768 872 31	−38.462 598 62		2.95	4.00	−18.77	1.47	1.01	1.56	1.76	1.19	+ 4	−42	−29	+12	+10	− 9	+ 8	+ 6	− 3	−17	0	2.43
96323	19 35 04.77	+54 12 35.6	8.85		H	293.769 888 66	+54.209 889 97		2.31	4.53	13.04	0.80	0.77	0.84	1.02	0.99	+13	− 4	+11	+ 9	−11	− 4	− 5	−14	− 5	+36	0	−1.32
96324	19 35 05.26	+33 33 21.8	8.10		H	293.771 929 10	+33.556 058 39		3.30	−1.09	−5.58	0.61	0.57	0.81	0.64	0.55	− 2	+ 9	− 3	+27	+17	+12	+19	−14	+ 6	+ 8	1	0.27
96325	19 35 05.28	−02 11 45.5	9.14		H	293.772 002 40	−02.195 972 00		2.18	15.99	0.50	1.21	0.77	1.37	1.36	0.72	+25	−26	+ 4	− 9	− 2	+ 4	− 6	−35	+ 8	+26	0	0.25
96326	19 35 05.43	−53 31 15.2	7.91		G	293.772 628 01	−53.520 893 65		9.40	21.27	−4.01	0.67	0.55	0.97	1.01	0.87	+ 2	+ 0	+15	+ 9	+18	− 6	+20	+ 3	+16	+13	4	−0.45
*96327	19 35 07.25	−10 33 37.6	5.12		G	293.780 221 88	−10.560 436 44		7.34	6.87	−3.04	0.69	0.42	0.76	0.64	0.34	+ 9	−35	−28	−20	+13	+ 5	+ 7	−43	+16	+10	0	0.37
*96328	H 19 35 07.45	+34 11 59.5	7.48		H	293.781 044 32	+34.199 863 51	A	8.23	7.15	−9.92	0.61	0.66	0.79	0.63	0.64	+ 6	−25	− 2	+14	+ 9	− 3	+11	−15	−12	+14	3	−0.55
*96329	19 35 07.61	+19 00 18.0	6.82	1	H	293.781 687 77	+19.004 998 04		1.83	0.04	−12.49	0.50	0.51	0.84	0.54	0.65	+ 2	−20	−25	−18	− 6	+15	− 2	− 4	− 5	−12	0	0.27
*96330	19 35 07.94	+22 09 31.0	7.41		H	293.783 094 36	+22.158 600 09		3.51	2.07	−1.09	0.61	0.67	0.99	0.83	1.04	+ 0	−12	−17	− 6	+ 9	+14	+12	+ 8	+12	− 2	0	−1.00
*96331	19 35 08.73	+51 20 37.4	7.99		H	293.786 365 35	+51.343 722 00		12.64	−20.67	99.83	0.59	0.60	0.66	0.64	0.68	−13	−16	+14	− 8	+17	+ 7	+18	− 4	−13	+ 2	0	0.52
*96332	19 35 08.82	−27 27 05.9	9.26		H	293.786 767 51	−27.451 634 28		12.60	−33.11	−69.86	1.24	0.98	1.34	1.33	0.94	+24	−22	−11	−14	+ 0	− 7	+ 0	−32	− 6	+28	0	1.11
*96333	H 19 35 09.68	−25 08 01.0	9.02		G	293.790 336 98	−25.133 612 46	A	10.09	−78.48	−308.65	2.26	1.46	2.35	3.03	1.56	+47	−15	−26	+13	+ 6	+17	−16	−32	+12	−23	1	0.46
*96334	19 35 09.73	−69 58 30.6	7.89	2	H	293.790 525 34	−69.975 153 80		28.22	−3.95	−175.78	0.42	0.62	0.98	0.52	0.86	−34	− 3	− 7	+ 8	+12	− 6	+ 9	−20	+ 8	−43	1	−0.78
*96335	19 35 10.21	+74 22 38.8	6.97		H	293.792 525 07	+74.377 447 27		3.62	8.37	13.25	0.85	0.80	0.88	0.88	0.85	+ 0	−16	+ 8	+ 6	+11	−12	+13	− 5	− 2	+12	0		
*96336	H 19 35 10.29	−41 25 23.8	8.55		H	293.792 880 21	−41.423 268 60	A	4.64	20.52	−13.24	2.45	1.84	2.02	3.23	2.10	+ 9	−21	−17	−12	− 5	+ 6	+ 2	−34	− 3	+ 1	0	0.74
*96337	19 35 10.23	+62 39 33.5	7.84		H	293.792 635 78	+62.659 317 34		3.73	−5.50	−6.24	0.67	0.58	0.65	0.92	0.64	+ 1	+ 2	+ 2	+ 3	+16	− 9	+15	− 7	+ 4	+18	0	−0.53
*96338	19 35 10.24	+35 37 42.5	8.56		H	293.792 666 43	+35.628 471 23		−1.34	0.46	−1.15	0.54	0.60	0.77	0.62	0.62	+ 0	− 6	−28	+15	+19	−19	+14	−20	+18	+ 1	0	0.08
*96339	19 35 06.32	+08 27 39.1	10.38		G	293.776 315 87	+08.460 873 33		35.76	−61.11	−49.99	2.13	1.69	2.86	3.35	2.68	− 7	− 1	−16	− 8	− 7	− 1	− 4	+ 9	− 6	−30	12	4.36
96340	19 35 10.93	+35 42 19.8	8.08		H	293.795 549 45	+35.705 503 80		1.12	−0.98	−2.50	0.50	0.57	0.70	0.58	0.61	+ 1	−10	−19	+17	+17	−15	+15	−16	+14	+ 6	0	1.43
96341	19 35 12.99	−48 05 56.8	4.88		G	293.804 140 74	−48.099 110 61		8.19	−7.04	−37.43	0.72	0.53	0.85	0.91	0.76	+38	−31	+ 0	−20	− 6	+10	− 6	−36	− 1	+33	2	0.53
96342	19 35 13.44	+14 29 15.0	8.44		H	293.806 005 07	+14.487 505 53		3.22	3.92	13.37	0.77	0.61	1.07	0.90	0.74	+18	−13	+ 6	+ 9	−28	− 1	−38	−14	− 1	−31	0	1.35
96343	19 35 14.75	+52 33 10.8	9.70		H	293.811 444 85	+52.552 989 83		3.19	3.54	−3.29	0.88	0.84	0.95	1.02	0.99	+ 5	−23	− 2	+ 0	+12	− 1	+11	+ 6	− 3	+21	0	0.60
96344	19 35 14.96	+69 55 43.9	9.79		G	293.812 330 28	+69.928 870 31		12.43	−105.31	−220.27	0.88	0.82	0.89	0.99	1.05	− 4	− 3	− 3	− 2	+11	− 7	+12	− 4	+ 7	+ 7	3	−0.52
96345	19 35 16.63	−69 05 34.7	8.16		G	293.819 309 42	−69.092 970 72		22.65	−24.28	−176.64	0.49	0.64	1.12	0.56	0.83	−21	− 8	−15	+ 5	+18	− 9	+17	−30	+14	−25	0	0.15
96346	19 35 16.89	−42 11 02.6	8.73		H	293.820 357 17	−42.184 054 86		5.82	−9.22	−20.21	1.38	1.04	1.41	2.11	1.40	−11	−21	+ 0	− 7	− 1	−19	− 1	−17	+ 3	−18	0	0.58
96347	19 35 19.92	+44 48 42.7	8.48		H	293.832 996 90	+44.811 874 47		0.89	7.41	−14.20	0.66	0.58	0.74	0.70	0.64	− 2	− 8	− 2	+15	+11	−17	+11	+ 3	+12	+ 7	0	−0.93
96348	19 35 21.84	+34 41 16.8	7.14		H	293.841 018 78	+34.688 004 20		3.63	−1.17	−0.61	0.41	0.45	0.60	0.45	0.46	− 8	−14	+ 3	+ 1	+15	+ 8	+15	−10	− 1	− 2	1	0.05
96349	19 35 24.12	+05 50 17.9	10.67	3	H	293.850 512 65	+05.838 297 13		7.65	−1.90	−24.45	1.95	1.34	2.35	2.78	1.65	−29	− 6	− 1	−11	+ 9	− 3	+ 8	−36	+ 2	−35	0	−2.18
96350	19 35 24.17	+69 48 19.5	7.03	2	H	293.850 692 35	+69.805 426 94		2.35	4.62	19.89	0.53	0.51	0.54	0.61	0.65	− 8	−14	+ 1	+ 4	+15	− 7	+16	+ 4	+ 8	+ 2	0	1.38
96351	19 35 25.13	+02 54 48.5	6.37		H	293.854 690 16	+02.913 475 98		23.79	11.26	53.24	0.66	0.37	0.79	0.74	0.38	−22	−36	− 9	+ 1	+ 4	+14	− 5	−33	+25	−24	0	−0.53
96352	19 35 25.40	−39 51 28.6	8.55		H	293.855 844 70	−39.857 957 78		5.90	−3.69	−9.47	1.36	0.94	1.39	1.81	1.12	−22	− 8	−22	+ 3	+ 3	−24	− 2	+ 4	+ 4	−36	0	0.10
96353	19 35 27.22	+15 36 38.0	6.55		H	293.863 426 84	+15.610 568 59		2.85	5.77	2.65	0.56	0.44	0.80	0.67	0.54	+ 3	−21	− 3	+10	−29	+ 5	−35	− 7	+ 2	−32	0	0.70
96354	H 19 35 28.03	−69 05 41.4	9.17		H	293.866 803 01	−69.094 846 47	A	2.60	7.81	−10.80	1.29	1.59	2.29	1.26	1.77	−20	−13	−10	+ 4	+17	−10	+17	−29	+ 6	−22	1	0.57
96355	19 35 28.55	−33 45 23.1	9.77		H	293.868 946 83	−33.756 408 36		6.85	12.35	3.44	2.03	1.59	2.11	2.99	1.79	+ 8	−18	−30	+37	−45	+32	−42	− 5	− 6	−20	0	−0.58
96356	19 35 29.79	−07 27 36.7	6.32		G	293.874 132 66	−07.460 185 39		9.18	22.84	−40.04	0.79	0.48	0.90	0.85	0.47	+19	−29	−16	− 9	+ 7	+22	+ 5	−25	+14	+19	2	0.71
96357	19 35 29.97	+45 26 08.6	8.17		H	293.874 859 76	+45.435 710 26		1.08	6.46	5.80	0.64	0.56	0.70	0.68	0.61	− 4	−27	− 4	+26	+10	−11	+11	+10	− 4	+ 2	0	−0.38
96358	19 35 30.58	−53 07 10.1	8.34		H	293.877 419 12	−53.119 462 43		2.40	5.11	−18.64	0.79	0.68	1.16	1.12	1.02	+12	−12	+ 2	−17	+14	− 3	+14	−11	− 4	+23	0	0.38
96359	19 35 31.80	+53 32 44.8	7.38	1	H	293.882 485 00	+53.545 765 99		7.51	11.75	29.74	0.52	0.49	0.56	0.58	0.58	+ 6	−15	+ 4	−10	+ 2	+10	+ 0	− 5	+ 6	+31	1	1.82
96360	H 19 35 31.84	+20 49 19.3	8.28		H	293.882 669 53	+20.822 022 46	A	4.35	3.16	−6.47	0.90	0.92	1.23	1.04	1.21	+19	− 9	− 8	−20	+ 8	+10	+ 5	+14	+23	+31	1	0.52
96361	19 35 31.88	−41 07 16.0	7.24		H	293.882 817 10	−41.121 116 73		2.70	10.08	−7.84	1.16	0.78	1.03	1.48	0.97	−27	−25	−12	+44	−37	+ 6	−31	+31	−20	−38	0	0.11
96362	19 35 32.01	+31 16 35.9	7.46		H	293.883 361 00	+31.276 640 12		1.79	4.81	2.42	0.43	0.49	0.66	0.49	0.51	− 7	− 7	−11	+24	+ 3	−11	+ 2	− 7	+10	− 7	0	0.29
96363	19 35 33.20	+47 26 08.9	7.65		H	293.888 352 20	+47.435 809 79		2.63	0.21	−13.65	0.56	0.49	0.59	0.57	0.58	+ 2	−16	+ 0	− 4	+13	− 6	+13	+24	− 9	+10	1	1.13
96364	19 35 33.31	+32 22 35.4	8.52		H	293.888 788 35	+32.376 504 40		2.72	1.87	−5.31	0.54	0.62	0.85	0.64	0.70	−12	+ 1	−13	+17	+12	−29	+ 9	− 8	+11	−16	1	−0.47
96365	19 35 33.46	−12 15 11.0	6.27		G	293.889 433 08	−12.253 066 22		9.41	−7.74	−19.87	0.83	0.50	0.89	0.82	0.44	− 2	−14	−20	−37	+21	−13	+15	−46	+13	+ 7	0	0.53
96366	19 35 33.59	+27 06 30.1	7.61		H	293.889 949 16	+27.108 374 29		5.18	0.95	−14.99	0.40	0.64	0.90	0.45	0.78	−17	+ 5	+11	+21	+ 2	− 5	+ 4	− 5	+ 0	−15	1	−0.06
96367	19 35 34.02	−39 11 36.7	10.10		H	293.891 735 96	−39.193 533 87		7.70	5.88	−33.20	1.96	1.43	2.08	2.46	1.56	+23	−47	−45	+34	−10	− 4	−11	+15	− 6	−16	0	−0.81
96368	19 35 35.54	−07 18 58.5	8.31		H	293.898 088 10	−07.316 240 23		5.32	−4.47	−6.59	1.04	0.61	1.15	1.23	0.63	+14	−29	+ 0	+ 9	+ 9	+ 8	+ 6	−23	+ 3	+16	2	1.55
96369	19 35 35.67	+21 09 51.8	8.72		G	293.898 612 13	+21.164 376 39		3.76	6.87	12.21	0.81	0.82	1.18	1.20	1.18	+ 8	− 9	−15	+18	+ 1	+ 7	+ 1	+10	+14	+16	0	−1.86
96370	19 35 35.72	−20 46 54.1	6.74		G	293.898 846 07	−20.781 683 28		31.60	100.24	−167.69	0.96	0.50	1.10	0.92	0.50	+46	−60	−41	− 7	+ 5	+15	− 2	−21	+12	+ 5	0	0.18
96371	H 19 35 36.44	+40 01 39.0	7.91		H	293.901 844 49	+40.027 503 23	*	5.90	−11.10	−25.49	1.17	1.47	0.85	0.77	0.80	+ 9	+10	−17	+ 1	+ 8	− 6	+11	−10	+ 2	+19	2	−0.27
96372	19 35 36.52	+09 19 12.9	8.02	1	H	293.902 168 00	+09.320 241 44		2.42	−1.56	−4.73	0.76	0.58	1.00	0.90	0.71	−20	+12	−34	− 6	+ 1	+23	+12	−11	+10	− 9	0	−0.98
96373	19 35 37.79	+22 30 06.9	7.86		H	293.907 444 99	+22.501 912 24		5.91	2.42	−5.66	0.65	0.67	0.95	0.75	0.98	+ 3	−23	−17	−23	+ 3	+27	+10	− 4	− 1	+ 5	0	−0.84
96374	19 35 37.97	−37 00 09.6	9.42		G	293.908 224 36	−37.002 680 03		14.45	−5.46	−6.54	1.34	1.13	1.84	1.92	1.46	+ 5	−18	−37	+12	+ 5	−27	−13	−13	+45	−34	0	1.55
96375	19 35 38.64	−33 06 27.1	8.76		H	293.911 005 86	−33.107 528 95		4.38	6.74	4.57	1.33	1.10	1.44	1.62	1.30	+11	−12	−15	−14	− 9	+ 0	− 5	−34	−10	+19	0	−0.41
96376	19 35 39.78	−09 16 23.9	8.12		G	293.915 767 01	−09.273 318 79		10.17	11.47	−4.32	0.98	0.57	1.05	1.00	0.50	+24	−38	−13	−20	+ 0	+ 1	− 8	−46	+14	+17	0	1.29
96377	19 35 41.65	+17 06 30.9	7.80		H	293.923 534 69	+17.108 585 59		5.71	17.41	15.67	0.58	0.54	0.86	0.60	0.61	+15	−10	− 8	−19	−15	+14	−18	−29	− 9	−10	0	−1.43
96378	19 35 43.64	+01 43 43.8	10.01		G	293.931 845 65	+01.728 839 90		7.37	−53.95	−227.87	1.32	0.76	1.63	1.78	0.87	− 8	−19	− 9	− 7	− 3	+14	− 4	−36	+18	− 7	0	−0.35
96379	19 35 44.93	−00 14 22.7	8.83		G	293.937 195 64	−00.239 641 89		13.44	−82.30	−326.57	1.19	0.68	1.38	1.33	0.71	+ 8	−27	+ 2	−12	+12	+25	+ 5	−20	+17	+10	0	−0.90
96380	H 19 35 45.49	+23 16 14.2	9.13		H	293.939 559 71	+23.270 604 52	*	5.50	−0.66	1.45	2.01	2.70	1.82	1.39	2.36	−23	+ 5	− 4	−20	− 2	− 4	− 5	− 2	−19	+41	2	−0.71
96381	19 35 46.12	−61 37 51.1	7.62		G	293.942 177 46	−61.630 865 30		12.15	29.02	−25.90	0.69	0.52	0.91	0.83	0.81	−13	− 6	+11	+30	−16	− 7	−12	+ 7	+ 9	+23	0	0.79
96382	19 35 46.86	−34 30 36.6	8.32		H	293.945 239 61	−34.510 173 09		1.10	10.41	4.21	1.23	0.90	1.37	1.46	1.07	− 4	−23	−11	+ 6	+ 4	−18	− 1	− 4	+13	−10	3	0.92
96383	19 35 47.23	+25 10 27.9	8.09		H	293.946 777 94	+25.174 415 53		1.95	5.78	2.22	0.54	0.73	1.05	0.60	1.02	+ 3	− 5	− 4	+35	+ 6	− 7	+ 7	+22	+ 7	+ 9	0	−0.04
96384	19 35 47.52	+55 57 33.5	8.63		H	293.948 011 65	+55.959 303 13		1.35	0.91	7.47	0.70	0.76	0.80	0.82	0.88	+ 4	−13	+ 6	+19	+ 0	+14	+ 2	− 4	+11	+12	0	0.73
96385	19 35 47.61	−63 28 47.4	10.50		H	293.948 375 11	−63.479 819 60		3.17	−8.16	−6.81	1.68	1.46	2.33	1.63	1.79	−14	−35	− 9	+14	−41	+ 0	−49	+16	+25	−42	0	−0.64
96386	19 35 47.92	+25 48 50.2	7.61		H	293.949 647 63	+25.813 944 73		0.43	−1.10	−9.39	0.38	0.63	0.92	0.42	0.82	−26	−12	+ 5	+39	− 9	− 2	− 9	+10	+13	−24	0	−0.41
96387	19 35 48.30	+36 56 40.4	6.03		H	293.951 255 91	+36.944 543 20		4.42	3.92	−1.69	0.41	0.45	0.55	0.44	0.48	−18	− 8	−10	+21	+ 8	− 9	+ 7	− 1	+22	− 7	1	−0.05
96388	19 35 49.11	−10 21 53.9	8.35		H	293.954 622 25	−10.364 984 92		1.94	8.82	1.00	0.95	0.59	1.01	0.98	0.52	+ 6	−21	−25	−26	+12	+ 3	+ 9	−41	+13	+12	0	−0.79
96389	19 35 49.45	−15 33 34.5	9.65		H	293.956 047 87	−15.559 577 62		1.71	−5.47	−6.69	1.45	1.00	1.54	1.82	1.05	+45	− 8	− 4	+ 4	−16	+10	−18	−41	+ 6	+41	0	2.12
96390	19 35 49.87	+42 21 58.1	8.13	1	H	293.957 776 65	+42.366 125 66		0.39	−3.66	−12.97	0.57	0.60	0.69	0.58	0.72	− 5	− 1	− 2	− 1	+13	+ 0	+15	+ 7	+ 0	− 5	2	−1.66
96391	19 35 50.10	−40 29 51.3	8.92		H	293.958 766 58	−40.497 592 17		5.50	−10.93	−50.76	1.38	1.08	1.39	1.77	1.32	+ 3	−12	+ 4	+27	+ 4	−11	+ 3	+32	+13	+ 0	7	1.16
96392	19 35 50.78	−02 27 20.1	6.99		H	293.961 585 04	−02.455 596 90		15.38	−74.17	−57.45	0.83	0.50	0.95	0.90	0.47	+ 9	−23	− 7	− 8	− 2	+ 8	− 4	−37	− 6	− 7	2	−0.97
96393	19 35 51.95	−20 55 18.1	8.88		H	293.966 440 40	−20.921 702 60		11.78	54.65	−14.95	1.54	0.71	1.68	1.36	0.74	+45	−71	−41	−36	− 2	+32	+12	−21	− 7	+ 3	0	0.07
96394	19 35 55.36	−24 22 30.2	9.09		H	293.980 674 18	−24.375 041 92		6.16	4.34	−18.49	1.14	0.69	1.39	1.35	0.75	+45	−39	−36	− 6	− 8	+40	+ 0	−16	− 4	+ 5	0	0.32
96395	19 35 55.61	+56 59 03.8	6.73		H	293.981 721 44	+56.984 387 63		41.24	0.25	−200.32	0.45	0.45	0.49	0.51	0.51	− 2	−12	+ 8	+10	+12	−12	+12	+ 2	+12	+ 0	0	−0.90
96396	19 35 55.95	+50 14 18.7	6.47		H	293.983 118 50	+50.238 528 91		5.35	−2.16	36.65	0.45	0.45	0.50	0.52	0.54	−11	−11	+ 2	+ 1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags		AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61		62	63	64	65		66	67	68-70
96301	9.817	0.018	9.381	0.019		0.425	0.015	G	0.49	0.02	H	9.3930	0.0026	0.021	142		9.35	9.44					1 S								G
96302	6.085	0.003	5.469	0.002		0.581	0.020	G	0.65	0.01	H	5.5161	0.0006	0.006	158		5.51	5.53		C	19348+2928	I 1	1								S
96303	8.388	0.016	8.112	0.018		0.260	0.025	T	0.29	0.03	L	8.1181	0.0032	0.020	43		8.09	8.16		U			1								S
96304	10.319	0.033	8.713	0.016		1.310	0.015	G	1.27	0.02	H	8.7103	0.0018	0.019	127		8.68	8.74		C			1								
96305	8.555	0.007	8.561	0.010		−0.001	0.011	T	0.02	0.01	L	8.5660	0.0022	0.021	182		8.53	8.60		U			1								
96306	8.689	0.012	8.202	0.011		0.452	0.016	G	0.52	0.02	H	8.2555	0.0011	0.011	102		8.23	8.28					1								S
96307						1.230	0.020	G	1.19	0.02	I	11.2444	0.0071	0.049	50		11.16	11.31					1								G
96308	8.757	0.011	7.982	0.009		0.670	0.006	G	0.73	0.01	H	8.0490	0.0011	0.012	123		8.03	8.07		C			1								S
96309	10.538	0.038	8.543	0.013		1.690	0.033	T	2.10	0.09	O	8.4138	0.0068	0.057	99		8.32	8.47	144.00	P 1 A			1								
96310	8.714	0.010	6.868	0.005		1.567	0.009	T	2.40	0.03	O	6.6751	0.0029	0.027	126		6.64	6.72		U 2			1	S							S
96311	9.060	0.012	8.521	0.011		0.513	0.012	T	0.59	0.01	L	8.5733	0.0014	0.017	132		8.55	8.60					1								
96312	9.991	0.024	8.908	0.016		0.937	0.022	T	0.93	0.02	L	8.9249	0.0019	0.017	116		8.89	8.96		C			1								
96313	7.075	0.004	6.770	0.004		0.290	0.005	T	0.33	0.01	L	6.8168	0.0008	0.009	175		6.80	6.83		C			1								S
96314	7.954	0.006	6.735	0.004		1.042	0.006	T	1.01	0.01	L	6.7965	0.0008	0.009	135		6.79	6.81		C			1								S
96315	9.117	0.014	8.497	0.012	*	0.574	0.013	T	0.65	0.01	L *	8.5001	0.0016	0.019	164	*	8.47	8.53		D	19350+2947	I 1	2 C	A	AB	154	0.512	0.003		0.16	0.02	
96316	7.826	0.007	6.504	0.004		1.122	0.006	T	1.08	0.01	L	6.5549	0.0009	0.008	120		6.54	6.57		C			1								S
96317	8.182	0.010	7.967	0.011	*	0.205	0.014	T	0.23	0.02	L *	7.9939	0.0014	0.016	98	*	7.97	8.02		D	19350+2328	I 1	2 C	A	AB	260	0.234	0.004		0.04	0.10	S
96318	8.175	0.009	7.658	0.009		0.486	0.011	T	0.56	0.01	L	7.7033	0.0015	0.012	110		7.68	7.73					1								S
96319	7.639	0.008	7.718	0.009		−0.062	0.004	G	−0.04	0.00	H	7.7050	0.0018	0.014	90		7.69	7.72		C			1								S
96320	10.486	0.023	8.995	0.012		1.255	0.020	T	1.21	0.02	L	9.0205	0.0020	0.023	200		8.98	9.06		C			1								
96321	8.984	0.013	8.382	0.012	*	0.552	0.025	G	0.62	0.02	H *	8.4174	0.0019	0.017	122	*	8.39	8.45		D	19351+5038	I 1	2 C	A	AB	224	0.281	0.006		0.95	0.08	
96322	10.674	0.051	9.157	0.025		1.275	0.045	T	1.23	0.05	L	9.2208	0.0025	0.014	47		9.19	9.24		C			1								
96323	10.720	0.056	9.025	0.024		1.416	0.048	T	1.40	0.08	L	8.9885	0.0020	0.021	87		8.96	9.02		C			1								
96324	9.398	0.015	8.203	0.010		1.023	0.014	T	1.00	0.01	L	8.2630	0.0014	0.013	136		8.24	8.29		C			1								
96325	10.588	0.041	9.288	0.023		1.105	0.037	T	1.07	0.04	L	9.3121	0.0034	0.025	95		9.28	9.36					1								
96326	8.336	0.010	7.956	0.009		0.383	0.015	G	0.45	0.02	H	8.0002	0.0011	0.010	117		7.98	8.02		C			1								S
96327	6.543	0.004	5.253	0.003		1.122	0.005	G	1.08	0.01	H	5.2829	0.0011	0.007	97		5.27	5.29					1								S
96328	7.648	0.007	7.543	0.008	A	0.122	0.140	G	0.06	0.01	L *	7.5059	0.0010	0.011	132	*	7.49	7.52		D	19351+3412	I 1	2 C	A	AB	233	2.926	0.008		2.83	0.04	S
96329	9.012	0.010	7.019	0.005		1.652	0.009	T	1.76	0.03	C	6.9248	0.0013	0.012	135		6.91	6.95		M			1								S
96330	7.464	0.008	7.409	0.007		0.080	0.015	G	0.09	0.02	H	7.4428	0.0014	0.011	98		7.43	7.46		C			1								S
96331	9.136	0.014	8.104	0.010		0.898	0.013	T	0.90	0.01	L	8.1444	0.0013	0.012	120		8.12	8.17					1								S
96332	9.916	0.043	9.308	0.040		0.565	0.043	T	0.64	0.04	L	9.3822	0.0023	0.019	54		9.35	9.41		C			1								
96333	9.994	0.034	9.258	0.030	A	0.682	0.015	G	0.74	0.01	H *	9.1493	0.0028	0.021	92	*	9.12	9.18		D	19352−2508	I 1	2 C	A	AB	122	1.585	0.011		1.68	0.06	
96334	8.692	0.006	7.971	0.005		0.648	0.006	T	0.71	0.01	L	8.0225	0.0017	0.024	283		7.99	8.07		U 2			1								S
96335	8.320	0.009	7.096	0.007		1.046	0.009	T	1.02	0.01	L	7.1341	0.0010	0.009	114		7.12	7.15		C	19352+7423	I 1	1 X								S
96336	8.686	0.025	8.382	0.032	*	0.290	0.044	T	0.33	0.06	L *	8.6196	0.0025	0.021	39	*	8.59	8.66		D	19352−4125	I 1	2 C	A	AB	306	1.984	0.004		0.47	0.02	S
96337	9.161	0.014	7.949	0.009		1.036	0.013	T	1.01	0.01	L	8.0025	0.0011	0.011	106		7.97	8.03					1								S
96338	8.468	0.009	8.538	0.012		−0.060	0.029	G	−0.04	0.03	H	8.5424	0.0011	0.013	132		8.52	8.56		C			1								
96339	12.384	0.244	10.670	0.080		1.460	0.015	G	1.47	0.02	I	10.3259	0.0027	0.027	81		10.28	10.38		D			1	S							G
96340	7.954	0.007	8.061	0.009		−0.092	0.010	T	−0.07	0.01	L	8.0537	0.0011	0.010	126		8.04	8.08					1								
96341	6.296	0.003	5.007	0.002		1.096	0.003	G	1.06	0.00	H	5.0505	0.0004	0.005	126		5.04	5.06		C			1								S
96342	8.939	0.010	8.472	0.010		0.440	0.013	T	0.51	0.01	L	8.5379	0.0015	0.017	144		8.51	8.57		C			1								
96343	9.886	0.023	9.703	0.029		0.175	0.035	T	0.19	0.04	L	9.7661	0.0024	0.022	106		9.70	9.80		C			1								G
96344	10.518	0.047	9.823	0.040		0.600	0.007	G	0.67	0.01	H	9.9419	0.0020	0.020	96		9.90	9.97					1								
96345	8.976	0.009	8.215	0.008		0.672	0.002	G	0.73	0.00	H	8.2939	0.0013	0.018	220		8.26	8.33					1								S
96346	9.401	0.025	8.775	0.022		0.553	0.002	G	0.63	0.00	H	8.8462	0.0021	0.015	42		8.82	8.87		D			1								
96347	10.570	0.037	8.678	0.014		1.605	0.033	T	1.98	0.09	O	8.5651	0.0024	0.018	114		8.53	8.60					1								
96348	7.016	0.005	7.125	0.006		−0.100	0.010	G	−0.08	0.01	H	7.1101	0.0008	0.010	131		7.10	7.13					1								S
96349											T	10.8003	0.0310	0.277	99		10.62	11.28	0.37	P 1 A			1								G P
96350	8.903	0.014	7.294	0.008		1.372	0.013	T	3.11	0.03	O	6.9002	0.0080	0.066	98		6.81	6.98		U 2			1	S							S
96351	6.859	0.004	6.420	0.004		0.414	0.005	T	0.48	0.01	L	6.4661	0.0007	0.007	150		6.45	6.48					1								S
96352	9.798	0.028	8.675	0.019		0.967	0.026	T	0.95	0.02	L	8.7121	0.0035	0.018	49		8.67	8.75					1								
96353	8.000	0.008	6.663	0.005		1.134	0.007	T	1.10	0.01	L	6.7143	0.0005	0.007	150		6.70	6.73					1								S
96354	9.233	0.015	9.040	0.020	*	0.177	0.024	T	0.19	0.03	L *	9.2284	0.0020	0.027	215	*	9.18	9.27		D	19355−6906	I 1	2 C	A	AB	27	3.756	0.010		1.65	0.05	
96355	10.483	0.077	9.806	0.069		0.468	0.071	G	0.54	0.07	R	9.8776	0.0035	0.017	32		9.84	9.91					1								
96356	7.765	0.008	6.458	0.005		1.124	0.002	G	1.09	0.00	H	6.4802	0.0010	0.007	93		6.47	6.49		C			1								S
96357	10.310	0.029	8.346	0.011		1.629	0.025	T	1.65	0.03	L	8.2733	0.0021	0.020	125		8.24	8.30		R			1								
96358	9.911	0.023	8.463	0.012		1.221	0.020	T	1.18	0.02	L	8.5020	0.0017	0.018	108		8.47	8.54					1								
96359	7.708	0.007	7.410	0.007		0.283	0.009	T	0.32	0.01	L	7.4581	0.0014	0.016	124		7.43	7.48		U 2			1								S
96360	8.296	0.008	8.296	0.010	*	−0.005	0.020	G	0.02	0.02	H *	8.2922	0.0015	0.015	119	*	8.27	8.32		D	19355+2049	I 1	2 C	A	AB	50	0.829	0.016		2.96	0.05	
96361	8.620	0.020	7.360	0.013		1.074	0.019	T	1.04	0.02	L	7.4048	0.0018	0.009	44		7.39	7.42		C			1								S
96362	7.236	0.005	7.424	0.008		−0.162	0.008	T	−0.17	0.01	L	7.4040	0.0012	0.011	155		7.39	7.42		C			1								S
96363	7.727	0.006	7.662	0.009		0.065	0.010	T	0.07	0.01	L	7.6805	0.0009	0.009	109		7.66	7.69		C			1								S
96364	8.323	0.007	8.501	0.010		−0.140	0.015	G	−0.13	0.02	H	8.4685	0.0015	0.016	156		8.44	8.50		C			1								
96365	7.684	0.007	6.402	0.005		1.089	0.001	G	1.05	0.00	H	6.4389	0.0006	0.008	93		6.43	6.45		C			1								S
96366	7.794	0.005	7.625	0.007		0.162	0.008	T	0.18	0.01	L	7.6672	0.0010	0.011	187		7.65	7.69		C			1								
96367	10.777	0.064	10.195	0.063		0.546	0.066	T	0.62	0.06	L	10.2246	0.0030	0.025	46		10.13	10.25					1								G
96368	9.877	0.026	8.498	0.014		1.167	0.023	T	1.13	0.02	L	8.4826	0.0015	0.013	90		8.46	8.52					1								
96369	9.949	0.022	8.822	0.015		0.943	0.015	G	0.93	0.01	H	8.8966	0.0025	0.020	101		8.86	8.93					1								
96370	7.385	0.007	6.807	0.006		0.557	0.014	G	0.63	0.01	H	6.8549	0.0007	0.006	91		6.85	6.87					1								S
96371	8.312	0.010	7.942	0.010	*	0.351	0.013	T	0.41	0.01	L *	7.9952	0.0009	0.011	125	*	7.98	8.02		D	19356+4002	I 1	2 C	A	AB	83	0.232	0.010		1.71	0.17	S
96372	7.992	0.010	7.992	0.014		0.005	0.016	T	0.03	0.01	L	8.0275	0.0026	0.020	94		8.00	8.07		U			1								S
96373	7.922	0.008	7.855	0.010		0.060	0.015	G	0.07	0.01	H	7.8861	0.0009	0.011	107		7.86	7.91		C			1								S
96374	10.354	0.053	9.553	0.043		0.651	0.044	G	0.71	0.04	H	9.5814	0.0045	0.035	47		9.53	9.63		R			1								
96375	10.114	0.050	8.931	0.032		1.014	0.046	T	0.99	0.04	L	8.9273	0.0030	0.016	36		8.90	8.95					1								
96376	8.658	0.010	8.181	0.010		0.463	0.015	G	0.53	0.02	H	8.2194	0.0013	0.010	95		8.20	8.24		C			1								S
96377	8.237	0.008	7.836	0.008		0.362	0.015	G	0.42	0.02	H	7.8903	0.0014	0.013	127		7.87	7.91					1								S
96378	11.260	0.066	10.103	0.038		0.960	0.005	G	1.01	0.01	I	10.1574	0.0027	0.028	126		10.10	10.21		C			1								G
96379	9.611	0.019	8.894	0.016		0.663	0.004	G	0.72	0.00	H	8.9619	0.0019	0.014	93		8.94	9.00		C	19357−0014	I 1	1								
96380	9.692	0.019	9.223	0.019	*	0.442	0.025	T	0.51	0.03	L *	9.2274	0.0023	0.022	96	*	9.19	9.27		D	19358+2316	I 1	2 C	A	BA	218	0.205	0.008		0.07	0.23	
96381	8.149	0.008	7.665	0.008		0.500	0.001	G	0.57	0.00	H	7.7237	0.0010	0.010	107		7.71	7.74		C			1								S
96382	9.830	0.032	8.442	0.018		1.174	0.029	T	1.14	0.03	L	8.4886	0.0034	0.019	49		8.47	8.52					1								
96383	8.256	0.008	8.091	0.009		0.158	0.011	T	0.17	0.01	L	8.1409	0.0013	0.015	167		8.12	8.17		C			1								
96384	10.102	0.026	8.738	0.015		1.155	0.024	T	1.12	0.02	L	8.7875	0.0020	0.017	102		8.76	8.81		C			1								
96385	10.970	0.047	10.494	0.048		0.448	0.061	T	0.52	0.07	L	10.5941	0.0042	0.042	116		10.51	10.70					1								G
96386	7.586	0.004	7.609	0.006		−0.016	0.007	T	0.01	0.01	L	7.6169	0.0010	0.013	276		7.59	7.64		C			1								S
96387	5.926	0.003	6.020	0.004		−0.080	0.004	T	−0.06	0.01	L	6.0135	0.0007	0.006	118		6.00	6.03		C			1								S
96388	8.501	0.011	8.368	0.013		0.128	0.016	T	0.14	0.02	L	8.3980	0.0011	0.013	94		8.38	8.42		C			1								
96389	11.232	0.073	9.760	0.032		1.240	0.063	T	1.20	0.06	L	9.8217	0.0030	0.027	85		9.76	9.86		C			1								
96390	10.335	0.038	8.316	0.013		1.673	0.032	T	1.70	0.03	L	8.2385	0.0018	0.016	131		8.21	8.27		M			1								
96391	9.516	0.024	8.992	0.024		0.492	0.031	T	0.56	0.03	L	9.0270	0.0028	0.017	46		8.98	9.07		C			1								S
96392	7.566	0.007	7.044	0.007		0.503	0.001	G	0.58	0.00	H	7.1012	0.0012	0.008	99		7.08	7.12		C			1								S
96393	9.482	0.023	8.907	0.022		0.540	0.024	T	0.61	0.03	L	8.9937	0.0015	0.012	89		8.97	9.02		C			1								
96394	9.729	0.021	9.151	0.019		0.543	0.021	T	0.62	0.02	L	9.2117	0.0018	0.016	117		9.19	9.24		C			1								
96395	7.491	0.006	6.802	0.005		0.636	0.006	T	0.70	0.01	L	6.8598	0.0008	0.007	116		6.85	6.87		C			1								S
96396	7.806	0.007	6.597	0.005		1.034	0.007	T	1.01	0.01	L	6.6388	0.0008	0.006	119		6.63	6.65					1								S
96397	8.974	0.015	8.276	0.013		0.725	0.009	G	0.78	0.01	H	8.3160	0.0034	0.026	94		8.28	8.37		U			1								
96398	8.000	0.018	7.804	0.015	*	0.180	0.022	T	0.20	0.03	L *	7.7901	0.0017	0.010	49	*	7.76	7.81		D	19360−3648	I 1	2 C	A	AB	140	0.779	0.004		0.73	0.02	S
96399	8.575	0.013	6.938	0.007		1.395	0.012	T	2.75	0.02	O	6.6726	0.0025	0.021	110		6.61	6.70		U 2			1	S							S
96400	9.056	0.011	8.729	0.012		0.310	0.015	T	0.36	0.02	L	8.7725	0.0015	0.017	134		8.74	8.80		C			1								

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s	±° ′ ″	mag	6 7	deg	deg	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	% 29	30
96401	19 35 59.34	+13 50 30.8	8.91	H	293.997 266 53	+13.841 884 36	4.33	0.39	−4.39	0.81	0.66	1.26	0.93	0.78	+25	−21	−	3	−	6	−16	+22	−18	−11	−	3	−15	0	0.31
96402	19 36 00.66	+00 05 31.6	7.55	G	294.002 755 29	+00.092 122 39	25.56	−14.66	−384.96	0.92	0.51	1.01	0.99	0.53	−	2	−36	+	1	−12	+	8	+16	+	5	−27	+	5	+	0	−0.12
*96403	19 36 01.00	+00 14 58.8	7.16	H	294.004 146 85	+00.249 673 49	2.15	−0.24	−7.77	0.83	0.50	0.94	0.87	0.47	−	1	−36	−	9	−	3	+15	+	9	+	7	−26	+16	−	4	0	0.31
*96404	19 36 00.99	−38 24 16.4	10.38	H	294.004 104 55	−38.404 558 71	5.83	5.54	−38.12	1.87	1.41	1.88	2.37	1.71	+	7	−26	−20	+22	+20	−16	+14	+24	+	7	+	2	0	−0.27
96405	19 36 01.59	+25 32 47.2	8.40	G	294.006 609 37	+25.546 442 22	1.46	5.32	−0.02	0.52	0.68	0.98	0.58	0.98	−11	−	4	−	2	+48	−	5	+	0	−	5	+18	+	8	−12	0	−0.50
96406	19 36 01.65	−24 43 08.5	5.64	G	294.006 872 66	−24.719 017 37	11.23	6.08	−26.37	0.75	0.45	0.90	0.87	0.49	+48	−41	−34	−	4	−19	+43	−13	−28	−	8	+	8	0	0.32
96407 H	19 36 01.72	−36 07 27.6	9.13	H	294.007 155 22	−36.124 339 77 B	2.19	4.00	−1.52	3.61	3.58	2.22	2.41	1.84	+21	−31	+	0	+11	+	3	+	6	+	3	+	3	+	7	+33	0	−0.44
96408	19 36 03.18	−28 40 06.1	7.93	H	294.013 235 49	−28.668 361 35	5.49	13.71	−7.69	0.96	0.75	1.08	1.30	0.81	+	0	−	8	−30	−13	+30	−16	+20	−17	+21	−	9	3	−0.50	
96409	19 36 03.76	−25 54 03.9	8.02	G	294.015 667 61	−25.901 091 40	2.75	−2.84	−23.72	1.01	0.65	1.17	1.24	0.69	+39	−26	−32	+	2	−15	+28	−15	−32	−11	+	4	0	0.56	
*96410	19 36 06.96	−10 01 38.3	10.79	2 G																								
*96411	19 36 05.50	+33 44 46.2	7.45	H	294.022 908 51	+33.746 162 39	5.16	−0.44	−44.13	0.46	0.50	0.65	0.55	0.51	−	7	−	1	−19	+	9	+10	−	9	+	9	−14	+	5	−	1	0	−1.43
*96412	19 36 05.48	+24 43 48.7	8.25	H	294.022 846 64	+24.730 199 93	17.28	84.14	41.88	0.78	0.78	1.13	1.10	1.15	+	7	+	4	−17	−30	−	8	−	3	−13	−	2	−	7	+20	0	0.26
*96413	19 36 06.03	−55 47 34.8	8.93	H	294.025 106 06	−55.793 003 64	2.23	2.03	−42.30	0.88	0.71	1.09	1.27	1.07	−	3	−15	+11	−	1	+23	+12	+25	−	5	−	5	+30	0	0.83	
*96414	19 36 06.63	+27 14 02.5	8.26	H	294.027 631 96	+27.234 029 46	8.80	9.09	−4.80	0.48	0.75	1.02	0.57	0.86	−12	+	0	+20	+21	+	1	−	5	+	3	−	9	+	0	−	8	0	−1.31
96415	19 36 07.45	+35 12 49.2	6.75	G	294.031 060 41	+35.213 652 89	0.28	−0.47	−0.18	0.40	0.47	0.59	0.46	0.47	−	5	−	3	−18	+11	+12	−	9	+12	−15	+15	+	3	0	0.45	
96416	19 36 08.04	+11 09 00.6	6.70	H	294.033 495 00	+11.150 179 37	6.10	−7.26	−4.71	0.56	0.43	0.85	0.68	0.51	−	8	+	1	−16	+29	−25	+34	−23	+	7	−	3	−14	0	1.37
96417	19 36 08.35	+22 35 08.8	6.33	H	294.034 791 04	+22.585 780 91	5.71	3.42	−7.23	0.51	0.52	0.76	0.62	0.69	+	0	−15	−21	−12	+	6	+19	+11	−	8	+	5	+	5	0	0.09	
96418	19 36 08.69	−46 09 04.6	7.18	H	294.036 202 92	−46.151 284 21	3.70	7.61	−29.19	0.97	0.73	0.95	1.23	0.92	+14	−25	−10	+48	−11	+19	−	6	+21	−	6	+14	0	0.72	
96419	19 36 10.08	+39 20 12.1	8.22	G	294.041 994 34	+39.336 695 04	4.45	8.84	19.31	0.57	0.60	0.71	0.69	0.73	+	0	−11	−19	+21	+	5	−14	+	5	−	6	+	9	+10	1	−0.74	
96420	19 36 11.65	+12 09 41.9	6.72	H	294.048 538 37	+12.161 638 91	2.00	6.14	−11.96	0.61	0.47	0.85	0.79	0.56	+25	−12	−16	+	2	−32	+10	−33	−10	+	2	−10	0	−0.53	
96421	19 36 11.79	+04 07 10.2	8.25	H	294.049 144 79	+04.119 513 04	2.52	2.48	4.64	1.03	0.67	1.27	1.43	0.70	−34	−	8	−35	−16	+31	−	2	+20	−52	+35	−52	0	−0.62	
96422	19 36 12.19	−18 54 13.0	8.76	H	294.050 799 13	−18.903 622 88	0.41	10.53	0.18	1.17	0.72	1.30	1.17	0.73	+29	−45	−23	−19	+	4	+22	+10	−20	−	6	+10	0	1.34	
96423	19 36 12.61	+06 00 26.8	6.62	H	294.052 557 78	+06.007 449 19 A	3.67	3.82	−12.57	1.46	1.05	1.30	1.87	1.00	−28	+	6	−10	−	8	+	9	−	6	+12	−39	+11	−24	1	1.12	
96424	19 36 13.37	−20 03 54.2	8.77	H	294.055 712 13	−20.065 043 95	5.46	−4.01	7.62	1.16	0.67	1.36	1.08	0.65	+45	−52	−37	−17	−12	+30	−	7	−30	+	9	+27	0	0.68	
*96425	19 36 14.99	−81 14 50.6	8.46	H	294.062 478 37	−81.247 393 64	22.20	95.16	107.51	0.61	0.66	0.81	0.68	0.82	−	7	−12	−	2	+14	+	6	−19	+	6	+14	+10	−	9	0	−0.01
*96426	19 36 14.80	−47 56 50.8	10.21	G	294.061 663 53	−47.947 455 93	20.65	52.21	−367.92	1.73	1.31	2.07	2.62	1.95	+30	−	9	+11	−13	−	2	−23	−	3	−38	−12	+16	0	2.79	
96427	19 36 15.58	+04 45 57.0	9.18	G	294.064 932 66	+04.765 846 59	13.51	10.75	−216.08	1.22	0.71	1.34	1.48	0.80	−23	−26	+	3	−24	+	2	+	8	+	1	−42	+	9	−20	0	−2.15	
96428	19 36 15.68	+14 23 28.2	6.37	G	294.065 324 85	+14.391 172 75	9.22	13.60	−42.21	0.59	0.45	0.83	0.70	0.54	+10	−	9	+	3	+18	−29	+	6	−40	−	6	+	1	−37	0	3.56	
96429	19 36 16.09	+75 44 48.3	10.15	2 H	294.067 060 13	+75.746 751 55	1.25	−2.92	−1.62	0.93	0.83	0.94	1.04	0.95	−	1	−	5	+11	+	5	+13	+	6	+14	−	2	−13	+	8	3	−2.07	
96430	19 36 16.90	+33 27 41.1	7.32	H	294.070 432 23	+33.461 403 31	3.30	3.09	−0.46	0.47	0.47	0.62	0.55	0.48	−11	+	3	−20	+27	+	7	−	6	+	8	−	5	+	4	−	2	0	−0.13
96431	19 36 18.14	−23 11 21.1	11.23	H	294.075 602 31	−23.189 182 69	3.16	−4.85	−3.28	3.02	1.74	3.59	3.42	2.37	+38	−54	−37	−	9	+28	−	8	−	3	−46	+30	−18	0	1.24	
96432	19 36 18.94	−56 46 42.3	9.39	H	294.078 934 98	−56.778 427 57	8.08	0.41	−46.47	1.02	0.95	1.33	1.47	1.34	+	7	+	8	+	5	−	6	+14	+	0	+16	−16	+11	+27	0	1.35	
96433	19 36 22.44	−29 59 28.3	10.51	H	294.093 494 90	−29.991 182 78	9.08	−4.31	−17.86	2.76	1.94	2.70	3.24	1.90	−	4	−34	−12	−23	+52	−	4	+40	−10	+	7	−13	3	1.76	
96434	19 36 22.98	+15 53 31.9	7.12	H	294.095 761 88	+15.892 184 85	19.20	44.17	57.73	0.66	0.53	0.90	0.82	0.69	−17	−22	−	5	+37	−42	+	3	−49	+13	+	7	−47	0	−0.24	
96435	19 36 22.98	−09 19 11.8	8.40	H	294.095 768 67	−09.319 951 21	1.32	−1.22	−4.06	1.08	0.61	1.14	1.05	0.58	+25	−39	−20	−32	−	4	+24	−	4	−37	+12	+24	0	−0.34	
96436	19 36 23.10	+26 40 09.3	8.23	H	294.096 258 96	+26.669 251 09	2.10	5.50	0.61	0.46	0.76	1.11	0.53	0.94	−26	−	7	+20	+19	−	1	−	4	+	1	−	4	+	2	−23	0	0.11	
96437	19 36 23.47	+28 14 03.3	9.35	G	294.097 781 88	+28.234 253 52	8.96	−32.52	−11.78	0.76	0.93	1.28	0.87	1.16	−	9	−	2	+	8	+18	−	4	−	8	−	3	−	3	+	0	−	8	0	1.40
96438	19 36 25.57	−28 40 28.3	7.53	H	294.106 551 51	−28.674 519 67	6.92	−5.52	−7.28	0.97	0.74	1.08	1.28	0.78	+	1	+	1	−31	−14	+34	−16	+26	−15	+24	−11	3	1.70	
96439	19 36 25.80	−05 58 11.7	8.69	H	294.107 509 62	−05.969 925 79	2.89	−0.15	−5.72	1.16	0.73	1.36	1.14	0.59	+15	−37	−	7	−27	+18	+38	+10	−35	+15	+19	4	2.21	
96440	19 36 26.06	−18 51 10.4	6.13	H	294.108 590 40	−18.852 890 16	13.60	21.35	−12.87	0.74	0.46	0.81	0.71	0.44	+27	−43	−23	−	9	+10	+11	+	9	−20	+	4	+20	0	0.32	
96441	19 36 26.54	+50 13 13.7	4.49	G	294.110 593 44	+50.220 463 47	53.78	−8.15	262.98	0.43	0.41	0.47	0.49	0.44	−11	−15	+	9	+	6	+11	−11	+12	+	9	−	5	−	2	0	−0.66	
96442	19 36 26.92	+41 53 33.7	7.53	H	294.112 187 01	+41.892 707 34	3.67	12.48	18.21	0.47	0.48	0.55	0.50	0.58	−	9	+	3	+	3	+	0	+13	+	0	+15	+15	−	4	−	4	0	−1.17	
96443 H	19 36 29.43	+24 00 11.0	8.52	H	294.122 628 76	+24.003 045 94 *	1.01	−1.09	−7.00	1.64	1.45	1.55	1.35	1.32	−22	−18	+	3	+	5	−19	−20	−18	+13	+	7	−32	1	−0.20	
96444	19 36 29.68	−68 19 25.4	8.97	H	294.123 662 93	−68.323 734 68	−0.91	−0.92	−0.80	0.63	0.71	1.22	0.58	0.86	−15	−12	−10	−19	+13	−	2	+17	−	6	+	8	−27	1	1.25	
96445	19 36 30.55	−60 56 23.9	8.89	H	294.127 299 39	−60.939 984 65	1.76	1.44	−4.90	0.98	0.72	1.26	1.17	1.10	−	8	−	9	+	0	+41	−20	+	3	−	8	−	2	+	2	+30	3	0.64	
96446 H	19 36 30.58	+36 37 56.8	8.57	G	294.127 416 92	+36.632 438 00 A	1.34	17.29	4.73	0.91	0.95	1.12	0.94	1.06	−13	−26	−	5	+	6	+	7	−	4	+	0	+	1	+28	−	3	3	0.32	
96447	19 36 31.19	+22 36 01.7	9.16	H	294.129 972 76	+22.600 479 19	13.19	−48.19	−221.95	0.87	0.86	1.28	1.01	1.08	+	5	−16	−23	−17	+	2	+16	+	5	−13	+	7	+	7	0	0.90	
96448 H	19 36 32.28	+41 00 35.1	7.45	H	294.134 491 50	+41.009 739 22 A	2.71	−0.06	−15.03	0.89	0.89	0.99	0.88	0.95	−	9	+	1	+	8	+18	+	0	−32	+	2	+21	+	2	−	2	4	−0.70	
96449	19 36 32.42	+43 42 22.0	6.60	H	294.135 082 67	+43.706 123 91	3.79	−1.40	−5.14	0.44	0.45	0.52	0.47	0.54	−	5	−	2	−	1	+15	+18	−	8	+20	+16	−	5	+	2	1	1.10	
96450	19 36 32.74	+28 06 39.3	9.80	G	294.136 404 62	+28.110 904 54	6.98	−14.47	−23.56	0.93	1.14	1.62	1.04	1.30	−12	−15	+	9	+37	−	9	−13	−	6	+	9	−	2	−	4	6	1.18	
96451	19 36 34.09	−04 46 18.2	7.88	H	294.142 052 64	−04.771 708 74	5.31	13.38	6.26	0.99	0.54	1.09	0.96	0.48	+13	−30	−12	−13	+	6	+15	+	3	−39	+18	+22	0	3.21	
96452	19 36 34.48	+31 14 09.6	8.00	H	294.143 679 49	+31.236 005 11	2.04	0.52	2.54	0.49	0.58	0.77	0.57	0.63	−10	+	1	−11	+25	+10	−15	+	8	−	1	+	3	−10	1	−2.05	
96453	19 36 36.07	−32 41 27.1	6.90	H	294.150 305 30	−32.690 858 41	3.78	4.18	−2.85	0.88	0.74	0.97	0.98	0.90	+35	−34	−17	−	8	−18	+	1	−	9	−27	−17	+40	3	−0.19	
96454	19 36 36.68	−11 14 25.2	9.08	H	294.152 831 86	−11.240 336 88	1.60	−4.28	−5.45	1.15	0.68	1.30	1.24	0.61	+20	−24	−21	−14	+10	−	8	+	2	−40	+17	+20	0	0.44	
96455	19 36 36.98	−31 15 33.4	10.29	G	294.154 068 09	−31.259 288 27	0.08	−5.46	0.92	1.50	1.16	1.67	1.63	1.32	+12	−29	−19	−	1	+	3	+10	+	9	−	1	−13	+16	0	−0.48	
96456	19 36 37.13	+20 52 53.1	8.85	H	294.154 718 54	+20.881 408 78	13.31	35.37	−178.90	0.83	0.78	1.12	0.96	1.06	+	6	−	5	−10	−	7	−15	+14	−16	+	1	+	1	−	4	1	0.85	
96457	19 36 37.54	+48 30 58.8	7.00	H	294.156 434 04	+48.516 322 55	2.91	19.16	−17.86	0.56	0.49	0.60	0.60	0.59	+	5	−23	−12	−	8	+	2	−	7	−	2	−	6	+10	+19	0	0.96	
96458	19 36 37.73	+20 19 58.6	7.01	3 H	294.157 201 06	+20.332 948 92	0.59	1.60	−2.39	0.54	0.55	0.77	0.61	0.67	+18	−19	−25	−	5	−	8	+11	−	6	−	1	+	0	+	0	0	0.17	
96459	19 36 38.05	+44 41 42.7	5.17	H	294.158 561 19	+44.695 188 22	24.64	−94.61	−103.78	0.44	0.40	0.49	0.46	0.47	−	2	−10	−	4	+13	+11	−	7	+13	+12	−	4	+12	0	0.57	
96460	19 36 38.74	−31 36 40.5	9.03	H	294.161 422 65	−31.611 242 64	5.51	4.60	6.06	1.17	0.95	1.42	1.44	1.05	+19	−26	−32	+13	−15	+35	−	1	+10	−	9	+10	0	−1.65	
96461	19 36 39.15	−46 52 57.7	8.43	H	294.163 144 78	−46.882 685 41	4.74	10.90	1.31	1.25	0.97	1.34	1.57	1.33	−	1	−23	+21	+	9	−19	−	3	−	8	−29	−23	+21	0	1.77	
96462	19 36 41.74	−17 20 03.9	8.54	H	294.173 920 75	−17.334 412 53	3.27	−2.35	−13.48	0.93	0.59	1.03	0.88	0.55	+32	−32	−21	+	1	+17	+14	+18	−12	+	6	+36	0	0.59	
96463	19 36 41.83	−05 35 47.4	8.16	H	294.174 271 96	−05.596 502 19	4.20	−2.76	−7.65	1.05	0.63	1.19	1.01	0.49	+12	−19	−24	−22	+11	+19	+	7	−49	+25	+13	2	1.21	
96464	19 36 41.98	+03 02 54.4	8.33	H	294.174 909 85	+03.048 452 43	1.58	0.23	28.77	0.90	0.50	1.14	1.06	0.53	−13	−39	−	6	+	1	−	2	+	7	−13	−35	+30	−18	0	−0.77	
96465	19 36 42.39	−24 53 00.8	4.59	G	294.176 621 07	−24.883 566 64	17.24	68.70	−23.19	0.74	0.46	0.89	0.88	0.49	+48	−38	−32	−	5	−20	+45	−14	−28	−	9	+	8	0	1.44	
96466	19 36 42.56	+13 21 44.9	7.72	H	294.177 317 41	+13.362 471 12	6.29	3.89	0.12	0.60	0.49	0.95	0.69	0.55	+31	−17	−17	−10	−30	+28	−29	−12	−	7	−18	0	−1.50	
96467	19 36 42.58	+27 53 03.0	7.77	2 G	294.177 402 38	+27.884 172 67	3.44	3.61	−13.90	0.51	0.63	0.90	0.62	0.80	−	6	+	6	+	4	+22	−	1	−11	+	1	+	3	+15	−	8	0	−0.20	
96468	19 36 43.28	−01 17 11.6	4.36	1 G	294.180 318 92	−01.286 550 47	10.61	1.89	−20.75	0.82	0.46	0.94	0.91	0.42	−	6	−32	−	4	−14	+12	+23	+	7	−39	+	6	−14	0	3.35	
96469	19 36 44.56	+07 33 03.5	7.60	H	294.185 680 08	+07.550 979 77	6.07	10.02	−5.44	0.94	0.59	1.08	1.22	0.64	−	5	−19	+	2	+	0	−22	−	4	−24	−27	+	3	−29	0	−0.82	
96470	19 36 45.30	−04 17 59.1	8.17	G	294.188 754 63	−04.299 759 64	3.59	26.88	−11.41	1.01	0.56	1.12	1.02	0.51	+	3	−29	−18	−26	+15	+23	+12	−36	+18	+	5	0	0.32	
96471 H	19 36 45.81	−10 26 34.0	8.38	G	294.190 889 68	−10.442 767 95 A	32.98	−293.92	−273.39	2.03	1.22	1.79	1.60	0.93	+15	+16	−	8	−24	+	7	+	4	+	8	−27	+	3	+27	2	1.12	
96472	19 36 46.80	−49 48 06.9	8.31	H	294.194 984 92	−49.801 908 06	2.01	11.53	−3.50	1.09	0.87	1.57	1.39	1.24	+49	−27	−43	+28	+55	−15	+33	−	6	+47	+12	0	0.17	
96473	19 36 48.17	−51 04 59.1	9.24	H	294.200 712 80	−51.083 073 53	6.65	−18.10	−59.70	1.13	0.97	1.49	1.68	1.65	+44	−13	−10	−14	−	4	+11	−	2	−30	+20	+50	2	−0.09	
96474	19 36 48.99	−22 16 06.2	9.43	H	294.204 112 56	−22.268 378 67	5.34	−2.75	5.22	1.28	0.76	1.43	1.46	0.85	+44	−36	−25	+	7	+	1	+	3	−14	−28	+19	+10	0	−0.85	
96475	19 36 49.18	−18 47 04.0	8.01	H	294.204 903 12	−18.784 435 69	5.82	10.96	−29.47	0.90	0.55	0.99	0.92	0.59	+37	−48	−23	−	5	+	5	+12	+	3	−17	+	4	+21	0	1.57	
96476	19 36 49.37	−65 46 16.7	8.03	G	294.205 722 52	−65.771 305 70	9.98	22.47	−66.77	0.71	0.66	1.05	0.89	1.07	−26	−20	−	3	+	1	−	5	−	4	−11	+	0	+31	−55	3	0.28	
96477	19 36 50.48	+36 17 54.6	8.85	H	294.210 319 26	+36.298 501 63	1.11	0.13	−0.28	0.65	0.70	0.93	0.76	0.81	−	3	−19	−	8	+15	+	7	+	6	+	2	+	1	+31	+13	1	−0.57	
96478	19 36 50.61	+61 17 19.4	9.14	H	294.210 857 29	+61.288 721 88	2.04	9.70	2.27	0.84	0.73	0.83	0.94	0.92	+	8	+11	+	5	+21	+12	+12	+20	−	5	+22	+29	0	−0.41	
96479	19 36 50.73	−10 09 26.8	6.77	H	294.211 384 39	−10.157 444 73	3.34	−13.16	−19.71	0.78	0.46	0.84	0.78	0.39	+	1	−30	−20	−23	+15	+	6	+12	−43	+11	+	7	0	0.39	
96480	19 36 52.19	+30 19 30.1	7.64	2 H	294.217 470 62	+30.325 024 45	2.93	0.63	−3.39	0.43	0.52	0.69	0.51	0.53	−10	−	4	+	1	+16	+13	+11	+13	−12	+	3	−	4	0	−0.29	
*96481	19 36 52.45	+11 16 23.5	5.98	G	294.218 529 27	+11.273 198 15	2.86	9.16	3.21	0.55	0.42	0.82	0.69	0.50	−	8	+	9	−12	+31	−22	+29	−22	+	4	+	3	−14	0	0.73	
*96482	19 36 52.44	+10 22 39.2	8.19	H	294.218 510 29	+10.377 542 79	3.69	3.59	−0.91	0.81	0.53	1.11	0.99	0.66	−	2	−15	−11	+60	−32	+16	−38	+10	+22	−	9	0	0.37	
96483	19 36 53.45	−07 01 38.9	4.93	1 H	294.222 702 40	−07.027 470 69	2.24	1.29	−2.69	0.74	0.43	0.81	0.76	0.36	+	9	−36	−	6	−15	+	9	+16	+	3	−44	+11	+12	2	3.01	
96484	19 36 53.53	−67 11 41.5	9.08	H	294.223 056 95	−67.194 851 12	2.30	5.88	−10.87	0.73	0.91	1.48	0.73	1.04	−	1	−	1	−12	−25	−	1	−16	−	2	−20	+26	−25	0	0.03	
96485	19 36 53.61	+23 32 32.3	8.24	2 H	294.223 375 51	+23.542 307 10	3.08	3.15	1.03	0.78	0.81	1.22	0.97	0.97	−	4	−20	−	5	−	2	+	1	−	7	−	3	−11	+16	−11	2	0.66	
96486	19 36 53.66	−29 37 04.3	9.65	H	294.223 590 39	−29.617 868 35	15.12	−68.95	−73.02	2.44	1.56	2.27	4.29	2.22	−10	−43	−	6	−19	+50	+14	+43	−10	−	8	−53	0	0.53	
96487 H	19 36 54.56	−69 49 00.2	9.17	1 H	294.227 329 34	−69.816 735 01 A	13.75	55.11	−38.36	0.88	1.18	1.55	0.96	1.43	−33	+	2	−	4	+	7	+20	−14	+20	−33	+	5	−35	2	0.34	
96488	19 36 54.83	−21 54 09.7	7.68	H	294.228 469 51	−21.902 688 77	2.33	0.35	−9.64	1.00	0.63	1.12	1.14	0.62	+47	−38	−33	+	1	−	6	+21	−12	−30	+10	+15	0	−1.15	
96489	19 36 55.16	+57 21 04.4	9.05	H	294.229 838 34	+57.351 211 82	3.06	−10.43	−2.58	0.66	0.66	0.73	0.76	0.79	−	5	+	1	+	7	+	3	+12	−22	+15	−	1	+17	−	7	0	−1.87	
96490	19 36 55.75	+18 38 27.6	9.60	H	294.232 292 37	+18.640 999 89	12.09	−30.33	−159.82	0.89	0.92	1.58	1.07	1.27	−	2	−	4	−27	−12	−	4	+	9	−	3	+	8	2	0	−0.98	
96491	19 36 56.65	+38 23 01.8	6.51	H	294.236 024 66	+38.383 829 46	2.59	4.97	−1.32	0.41	0.44	0.53	0.45	0.48	−	5	+	1	−	9	+	8	+	9	−	7	+	9	+	5	+	7	+	7	0	−0.84
96492	19 36 56.70	+19 27 53.9	8.78	H	294.236 242 11	+19.464 969 40	0.87	0.67	−10.25	0.65	0.64	0.95	0.75	0.78	+16	−16	−18	−	7	−13	+15	−11	−11	−	8	−	3	0	−0.36	
96493 H	19 36 57.93	+20 57 09.1	9.41	2 G	294.241 392 42	+20.952 532 43 A	16.17	−14.28	−250.15	1.84	1.58	2.12	1.98	1.87	−	7	−14	−14	−	7	−17	+10	−16	−	2	−	2	−20	1	1.77	
96494	19 37 02.02	−25 04 48.3	8.37	G	294.258 418 20	−25.080 080 16	8.72	−15.29	−77.64	1.05	0.61	1.11	1.37	0.86	+55	−29	−21	+	6	−	8	+24	−24	−35	−	2	+	8	0	0.95	
96495	19 37 02.23	−13 10 22.7	7.05	H	294.259 276 04	−13.172 958 80	3.63	2.39	−8.94	0.77	0.47	0.86	0.74	0.38	+10	−24	−25	−18	+17	+	4	+12	−42	+11	+11	4	0.07	
96496	19 37 03.33	−18 13 51.7	5.66	G	294.263 894 22	−18.231 018 61	7.37	10.54	−13.78	0.68	0.43	0.75	0.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
96401	9.034	0.010	8.917	0.013		0.113	0.015	T	0.13	0.01	L	8.9516	0.0018	0.022	152		8.91	8.98		C			1							S
96402	8.383	0.013	7.626	0.010		0.675	0.015	G	0.73	0.01	H	7.6858	0.0013	0.009	98		7.67	7.70		C	19360+0005	I 1	1							S
96403	7.522	0.007	7.207	0.006		0.299	0.009	T	0.34	0.01	L	7.2384	0.0008	0.012	104		7.22	7.26			19360+0015	I 1	1							S
96404	11.088	0.080	10.546	0.080		0.501	0.071	G	0.57	0.07	R	10.4941	0.0042	0.028	51		10.44	10.56		C			1							G
96405	8.515	0.008	8.383	0.009		0.130	0.015	G	0.14	0.01	H	8.4333	0.0013	0.016	211		8.41	8.46		C			1							
96406	5.874	0.003	5.666	0.003		0.185	0.006	G	0.16	0.03	C	5.7009	0.0004	0.004	117		5.69	5.71		C			1							S
96407	10.014	0.035	9.223	0.028	*	0.701	0.034	T	0.76	0.03	L *	9.2665	0.0021	0.015	48	*	9.23	9.29		D	19360−3607	I 1	2 C	A	BA	15	0.318	0.005	0.29	0.06	
96408	7.983	0.010	7.924	0.017		0.053	0.018	T	0.07	0.01	L	7.9492	0.0020	0.011	58		7.93	7.96		C			1							S
96409	8.626	0.013	8.098	0.013		0.497	0.007	G	0.57	0.01	H	8.1415	0.0016	0.013	79		8.12	8.17					1							S
96410						0.838	0.008	G	0.88	0.01	H	10.8899	0.0096	0.099	69		10.58	10.97		U			S							G G
96411	8.968	0.012	7.567	0.007		1.180	0.015	G	1.14	0.01	H	7.6154	0.0008	0.010	126		7.60	7.63					1							S
96412	8.938	0.012	8.322	0.011		0.574	0.014	T	0.65	0.01	L	8.3704	0.0020	0.018	115		8.34	8.40		C	19361+2444	I 1	1							
96413	9.330	0.015	8.957	0.016		0.364	0.019	T	0.43	0.02	L	9.0184	0.0021	0.018	100		8.99	9.05		C			1							
96414	8.615	0.008	8.283	0.009		0.321	0.015	G	0.37	0.02	H	8.3386	0.0014	0.017	188		8.31	8.37		C			1							
96415	8.781	0.010	6.917	0.005		1.520	0.015	G	1.56	0.02	H	6.9007	0.0008	0.008	138		6.89	6.91		C			1							S
96416	6.810	0.004	6.719	0.005		0.082	0.006	T	0.09	0.01	L	6.7359	0.0007	0.008	131		6.72	6.75		C	19361+1109	I 1	1							S
96417	6.256	0.003	6.316	0.004		−0.059	0.006	G	−0.04	0.01	H	6.3171	0.0007	0.007	111		6.30	6.33		C			1							S
96418	9.186	0.024	7.329	0.011		1.544	0.021	T	1.60	0.05	L	7.2930	0.0018	0.012	48		7.28	7.32					1							S
96419	8.589	0.010	8.242	0.010		0.288	0.006	G	0.33	0.01	H	8.2973	0.0013	0.012	119		8.28	8.32		C			1							
96420	8.573	0.009	6.874	0.004		1.419	0.008	T	1.40	0.01	L	6.8644	0.0007	0.008	157		6.85	6.88		C			1							S
96421	10.488	0.032	8.462	0.011		1.678	0.027	T	1.70	0.03	L	8.3608	0.0015	0.017	127		8.33	8.39		C			1							
96422	10.048	0.028	8.869	0.018		1.011	0.026	T	0.99	0.02	L	8.9280	0.0023	0.018	91		8.90	8.96					1							
96423	8.032	0.008	6.759	0.005	A	1.084	0.007	T	1.05	0.01	L	6.7906	0.0058	0.010	105	A	6.78	6.81			19362+0600	I 1	2 C	D	AB	154	12.995	0.067	4.10	0.25	S D
96424	9.132	0.019	8.780	0.020		0.334	0.026	T	0.39	0.04	L	8.8528	0.0018	0.014	77		8.82	8.87		C			1							
96425	9.434	0.014	8.548	0.011		0.774	0.014	T	0.81	0.01	L	8.6025	0.0015	0.015	138		8.58	8.63		C			1							
96426	11.471	0.150	10.401	0.097		1.163	0.004	G	1.27	0.01	I	10.3388	0.0042	0.030	88		10.29	10.38		C			1							G
96427	9.977	0.024	9.293	0.022		0.660	0.006	G	0.72	0.01	H	9.3052	0.0019	0.019	99		9.28	9.34		C			1							
96428	7.708	0.007	6.475	0.004		1.045	0.001	G	1.02	0.00	H	6.5461	0.0009	0.009	139		6.53	6.56					1							S
96429	11.739	0.108	10.037	0.036		1.448	0.094	T	3.94	0.80	K	9.6464	0.0091	0.065	98		9.57	9.76		U 2			1							G
96430	7.190	0.006	7.293	0.006		−0.089	0.008	T	−0.07	0.01	L	7.2920	0.0008	0.008	133		7.28	7.31		C			1							S
96431						1.095	0.015	G	1.06	0.02	I	11.3730	0.0065	0.044	92		11.30	11.45					1 G							G
96432	10.464	0.031	9.469	0.022		0.870	0.028	T	0.88	0.02	L	9.5397	0.0030	0.028	104		9.49	9.61					1							
96433	11.180	0.111	10.696	0.117		0.544	0.107	G	0.62	0.10	R	10.6303	0.0064	0.033	33		10.55	10.67					1							G
96434	7.732	0.006	7.185	0.005		0.531	0.007	G	0.60	0.01	H	7.2397	0.0012	0.010	130		7.22	7.26			19364+1553	I 1	1							S
96435	10.618	0.038	8.592	0.014		1.678	0.032	T	1.70	0.03	L	8.5100	0.0017	0.014	96		8.49	8.54		C			1							
96436	9.586	0.013	8.358	0.008		1.049	0.012	T	1.02	0.01	L	8.3971	0.0013	0.020	239		8.37	8.43					1							
96437	9.960	0.023	9.430	0.022		0.475	0.015	G	0.55	0.02	H	9.4564	0.0016	0.028	161		9.41	9.51					1							G
96438	9.429	0.026	7.680	0.012		1.458	0.023	T	1.46	0.04	L	7.6646	0.0021	0.011	56		7.65	7.68		C			1							S
96439	8.860	0.012	8.697	0.014		0.156	0.017	T	0.17	0.02	L	8.7447	0.0023	0.020	100		8.71	8.78					1							S
96440	6.458	0.005	6.157	0.004		0.273	0.005	G	0.31	0.01	H	6.2022	0.0012	0.008	94		6.19	6.22					1							S P
96441	4.964	0.002	4.543	0.002		0.395	0.015	G	0.44	0.03	C	4.5790	0.0004	0.004	116		4.57	4.59		C	19364+5013	I 1	1							S
96442	7.542	0.006	7.535	0.008		0.011	0.009	T	0.03	0.01	L	7.5423	0.0009	0.010	124		7.53	7.56		C			1							
96443	8.602	0.012	8.535	0.015	*	0.090	0.015	G	0.10	0.02	H *	8.5522	0.0027	0.018	87	*	8.51	8.58		D	19365+2400	I 1	2 C	A	AB	188	0.224	0.006	0.55	0.15	
96444	9.060	0.010	8.983	0.013		0.076	0.015	T	0.09	0.02	L	9.0006	0.0017	0.025	203		8.96	9.04					1							
96445	10.851	0.043	8.998	0.016		1.541	0.036	T	1.60	0.08	L	9.0083	0.0019	0.023	127		8.96	9.05					1							
96446	8.653	0.010	8.508	0.012	A	0.163	0.150	G	0.14	0.04	L *	8.5014	0.0018	0.013	121	*	8.48	8.53		D	19365+3638	I 1	2 C	D	AB	135	7.582	0.027	3.31	0.12	D
96447	9.984	0.024	9.223	0.019		0.654	0.015	G	0.72	0.01	H	9.2983	0.0025	0.023	113		9.25	9.33					1							
96448	7.649	0.013	7.593	0.015	A	0.094	0.150	G	0.04	0.02	L *	7.4637	0.0012	0.010	127	*	7.44	7.48		D	19365+4101	I 1	2 C	A	AB	286	1.399	0.005	1.17	0.02	S
96449	8.523	0.009	6.751	0.004		1.476	0.008	T	1.49	0.01	L	6.7271	0.0010	0.009	126		6.71	6.74					1							S
96450	10.323	0.028	9.891	0.032		0.432	0.015	G	0.50	0.02	H	9.8715	0.0023	0.031	160		9.82	9.94					1							G
96451	8.170	0.009	7.920	0.012		0.238	0.014	T	0.27	0.02	L	7.9505	0.0012	0.012	100		7.93	7.97		C			1							S
96452	8.098	0.007	8.009	0.008		0.087	0.010	T	0.10	0.01	L	8.0383	0.0012	0.014	157		8.02	8.06					1							S
96453	6.810	0.006	6.880	0.008		−0.059	0.009	T	−0.04	0.01	L	6.8832	0.0021	0.009	49		6.87	6.90					1							S
96454	11.001	0.060	9.254	0.022		1.457	0.051	T	1.46	0.08	L	9.2166	0.0022	0.019	94		9.19	9.26					1							
96455	10.717	0.065	10.482	0.086		0.446	0.015	G	0.52	0.02	H	10.3742	0.0063	0.034	56		10.32	10.42					1							G
96456	9.708	0.021	8.904	0.017		0.711	0.021	T	0.77	0.02	L	8.9859	0.0019	0.021	114		8.94	9.02					1							
96457	8.902	0.013	7.163	0.006		1.450	0.011	T	1.45	0.02	L	7.1384	0.0010	0.010	118		7.12	7.16		C			1							S
96458	8.699	0.010	7.282	0.006		1.197	0.009	T	1.16	0.01	L	7.1769	0.0403	0.325	119		6.93	7.62	7.99	P 1 A			1							S
96459	6.366	0.003	5.278	0.002		0.928	0.001	G	0.92	0.00	H	5.3355	0.0005	0.005	118		5.33	5.34		C			1							S
96460	10.296	0.045	9.142	0.030		0.991	0.042	T	0.97	0.03	L	9.1920	0.0028	0.018	58		9.16	9.22		C			1							
96461	9.681	0.031	8.519	0.020		0.997	0.029	T	0.98	0.02	L	8.5914	0.0021	0.014	39		8.57	8.65					1							
96462	8.542	0.011	8.528	0.013		0.008	0.002	G	0.03	0.00	H	8.5499	0.0017	0.013	96		8.52	8.57		C			1							
96463	8.465	0.010	8.205	0.011		0.248	0.014	T	0.28	0.02	L	8.2297	0.0014	0.014	94		8.21	8.26		C			1							S
96464	9.776	0.018	8.492	0.011		1.093	0.016	T	1.05	0.02	L	8.4980	0.0013	0.014	142		8.48	8.52		C			1							
96465	4.520	0.002	4.592	0.002		−0.075	0.010	G	−0.06	0.02	A	4.5762	0.0005	0.005	108		4.57	4.59		D	19367−2453	I 1	1							S
96466	7.686	0.006	7.710	0.007		−0.017	0.008	T	0.01	0.01	L	7.7261	0.0011	0.011	164		7.71	7.75		C			1							S
96467	9.348	0.013	7.908	0.008		1.215	0.012	T	1.17	0.01	L	7.8956	0.0054	0.053	168		7.81	7.96	40.15	P 1 A			1							P
96468	4.247	0.003	4.341	0.003		−0.079	0.008	G	−0.06	0.02	A	4.3265	0.0007	0.006	95		4.32	4.34		M	19367−0117	I 1	1							S
96469	7.824	0.010	7.628	0.009		0.170	0.015	G	0.19	0.01	H	7.6618	0.0017	0.015	97		7.63	7.69					1							S
96470	9.702	0.021	8.329	0.012		1.188	0.004	G	1.24	0.02	A	8.3334	0.0015	0.012	105		8.31	8.35		C			1							
96471	9.602	0.028	8.445	0.016	*	1.011	0.010	G	1.11	0.02	A *	8.5111	0.0018	0.014	102	*	8.49	8.54		D	19368−1027	I 1	2 C	A	AB	327	5.296	0.007	1.43	0.02	
96472	9.573	0.017	8.425	0.011		0.986	0.016	T	0.97	0.01	L	8.4785	0.0019	0.015	123		8.45	8.51		C			1	S						
96473	9.894	0.021	9.267	0.019		0.579	0.021	T	0.65	0.02	L	9.3677	0.0026	0.018	92		9.34	9.40		C			1							
96474	10.189	0.034	9.505	0.030		0.620	0.034	T	0.69	0.03	L	9.5637	0.0018	0.017	98		9.53	9.60					1							
96475	8.588	0.012	8.058	0.011		0.519	0.015	G	0.59	0.02	H	8.1187	0.0013	0.012	98		8.10	8.14					1							S
96476	8.616	0.011	8.074	0.010		0.524	0.015	G	0.60	0.02	H	8.1373	0.0014	0.014	114		8.11	8.16					1							S
96477	8.764	0.011	8.836	0.015		−0.061	0.017	T	−0.04	0.02	L	8.8330	0.0017	0.019	126		8.80	8.87					1							
96478	10.831	0.049	9.256	0.021		1.321	0.042	T	1.28	0.05	L	9.2923	0.0027	0.017	88		9.27	9.32					1							
96479	8.803	0.012	6.940	0.006		1.549	0.011	T	1.61	0.02	L	6.8832	0.0011	0.009	104		6.86	6.90					1							S
96480	7.534	0.006	7.632	0.007		−0.084	0.008	T	−0.06	0.01	L	7.6194	0.0016	0.017	163		7.59	7.65		U 2	19369+3019	I 1	1							S
96481	7.068	0.004	6.075	0.004		0.881	0.015	G	0.89	0.07	F	6.1311	0.0007	0.008	129		6.12	6.15			19369+1116	I 1	1							S
96482	8.410	0.009	8.213	0.010		0.188	0.013	T	0.21	0.01	L	8.2500	0.0012	0.014	151		8.22	8.27					1							
96483	4.903	0.003	4.958	0.003		−0.046	0.004	T	0.03	0.02	A	4.9475	0.0007	0.008	105		4.94	4.96		M			1							S
96484	10.371	0.022	9.186	0.014		1.015	0.020	T	0.99	0.02	L	9.2462	0.0021	0.027	210		9.20	9.28					1							
96485	8.253	0.009	8.237	0.012		0.019	0.014	T	0.04	0.01	L	8.2513	0.0030	0.024	97		8.20	8.28		U 2			1							
96486	10.465	0.064	9.643	0.050		0.741	0.062	T	0.79	0.04	L	9.7965	0.0025	0.020	32		9.75	9.82					1							
96487	10.167	0.015	9.306	0.012	A	0.900	0.495	G	0.81	0.02	L *	9.3157	0.0021	0.029	322	*	9.26	9.36		U	19369−6949	I 1	2 C	A	AB	39	5.749	0.031	2.82	0.12	
96488	9.009	0.014	7.813	0.009		1.024	0.013	T	1.00	0.01	L	7.8501	0.0013	0.012	95		7.83	7.88		C			1							
96489	10.267	0.029	9.154	0.019		0.959	0.027	T	0.95	0.02	L	9.2115	0.0019	0.014	94		9.19	9.24		C			1							
96490	10.488	0.035	9.704	0.029		0.696	0.035	T	0.75	0.03	L	9.7364	0.0029	0.026	130		9.69	9.79		C			1							G
96491	6.339	0.003	6.485	0.004		−0.127	0.004	T	−0.12	0.01	L	6.4681	0.0006	0.007	136		6.46	6.48					1							S
96492	8.952	0.013	8.788	0.015		0.157	0.019	T	0.17	0.02	L	8.8307	0.0017	0.018	145		8.79	8.86		C			1							
96493	10.364	0.034	9.449	0.025	A	0.788	0.015	G	0.83	0.01	H *	9.4972	0.0061	0.057	109	*	9.39	9.56		U 2	19370+2057	H 1	2 C	D	AB	310	4.641	0.073	3.50	0.28	G D
96494	9.030	0.017	8.441	0.015		0.554	0.015	G	0.63	0.01	H	8.4813	0.0010	0.011	118		8.47	8.50					1							
96495	7.126	0.006	7.061	0.006		0.065	0.008	T	0.07	0.01	L	7.0808	0.0007	0.006	95		7.07	7.09		C			1							S
96496	7.259	0.006	5.789	0.004		1.237	0.007	G	1.20	0.01	H	5.8162	0.0004	0.005	96		5.81	5.83		C			1							S
96497	9.674	0.016	8.231	0.009		1.217	0.014	T	1.18	0.01	L	8.2603	0.0010	0.014	153		8.24	8.29		C			1							
96498	9.918	0.022	8.206	0.010		1.429	0.019	T	1.42	0.03	L	8.1539	0.0016	0.015	111		8.12	8.17					1							
96499	7.145	0.005	6.933	0.005		0.202	0.007	T	0.22	0.01	L	6.9812	0.0010	0.009	106		6.97	7.00		C			1							S
96500	9.634	0.031	9.119	0.031		0.563	0.002	G	0.64	0.00	H	9.1342	0.0032	0.015	42		9.11	9.17		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	mas/yr 13	mas 14	mas 15	mas 16	mas/yr 17	mas/yr 18	19	20	21	22	23	24	25	26	27	28	29	30
*96501	19 37 08.86	+40 12 50.0	7.97	H	294.286 905 22	+40.213 891 78	8.44	6.35	−43.39	0.91	1.05	1.21	0.98	1.37	+ 0	− 2	−15	− 2	+ 0	− 7	− 2	+14	−18	+ 4	0	
*96502	19 37 09.37	−46 19 57.8	7.97	H	294.289 027 13	−46.332 735 76	2.23	10.65	−4.84	1.12	0.83	1.11	1.40	1.15	− 5	−33	+ 2	+35	−31	+ 2	−19	+ 4	−17	+ 8	0	2.29
*96503	19 37 09.62	+29 20 01.4	6.43	G	294.290 074 44	+29.333 712 47	3.73	0.94	−5.15	0.39	0.47	0.65	0.45	0.51	−10	−11	+ 0	+13	− 2	−10	− 3	− 2	+15	− 5	1	−0.34
*96504	19 37 09.65	+28 11 18.8	8.07	H	294.290 225 25	+28.188 548 32	3.31	16.95	14.74	0.61	0.74	1.09	0.73	0.84	− 4	− 6	+12	+31	− 5	−16	− 2	+ 8	+ 7	+ 1	1	1.97
*96505	19 37 10.63	−54 09 12.7	7.85	H	294.294 297 03	−54.153 535 27	5.78	−11.56	−35.33	0.67	0.58	0.96	0.92	0.86	+12	−24	−11	+ 4	+31	−19	+29	+ 7	+ 4	+14	0	−0.02
*96506	19 37 11.05	−14 25 52.6	7.08	H	294.296 046 82	−14.431 281 13	2.19	0.10	−1.15	0.77	0.48	0.85	0.78	0.43	+13	−31	−13	− 3	+ 7	+ 9	+ 7	−33	+ 4	+19	0	2.39
*96507	19 37 11.76	+28 30 00.2	6.67	H	294.299 008 95	+28.500 060 16	21.11	−32.13	−80.81	0.42	0.53	0.74	0.50	0.61	−13	− 5	+ 0	+23	− 8	−19	− 6	− 7	+22	− 8	0	0.37
*96508	19 37 11.92	−39 44 36.6	7.97	2 H	294.299 680 96	−39.743 487 35	3.15	1.42	−51.12	1.13	0.83	1.16	1.48	1.02	−14	−24	−10	+13	−14	− 6	−16	+ 7	+ 8	−22	0	0.12
*96509	19 37 12.06	+28 47 43.4	8.96	H	294.300 266 34	+28.795 398 04	2.73	−4.01	−16.50	0.73	0.98	1.27	0.88	1.11	−15	− 9	+ 7	+13	− 4	−31	− 2	−22	+22	−15	0	1.85
*96510	19 37 12.33	−16 22 07.4	9.57	H	294.301 364 16	−16.368 712 69	3.50	−1.37	4.43	1.29	0.85	1.40	1.35	0.79	+47	−37	−26	+12	+13	− 1	+ 2	−19	+15	+35	0	−0.61
*96511	19 37 12.76	+52 17 59.1	8.07	H	294.303 164 85	+52.299 736 18	5.37	13.44	30.80	0.56	0.55	0.62	0.66	0.56	− 9	−17	+21	+ 9	+ 4	− 1	+ 5	− 4	− 2	+ 3	0	0.10
*96512	19 37 14.22	+70 44 30.6	9.98	G	294.309 270 38	+70.741 821 72	19.20	−64.59	−150.86	1.02	0.89	1.03	1.31	1.05	+ 4	−18	− 6	− 7	+15	−17	+ 9	+ 9	+13	+12	0	−0.32
*96514	19 37 15.97	+26 09 15.9	8.44	H	294.316 539 09	+26.154 419 11	13.74	7.73	−15.44	0.47	0.80	1.16	0.51	0.96	−31	− 6	+ 0	+27	− 4	+ 4	− 3	+ 8	+10	−26	0	2.20
*96515	19 37 08.70	−51 34 00.7	11.73	2 H	294.286 257 74	−51.566 849 09	16.90	95.14	−24.68	7.19	5.93	9.28	9.40	8.15	+31	−30	−30	−21	+12	− 8	+ 4	−37	+17	+ 9	0	
96516	19 37 17.38	+16 27 46.0	5.67	H	294.322 430 04	+16.462 769 21	6.89	17.24	13.70	0.50	0.43	0.72	0.57	0.54	− 1	−10	− 5	− 4	−18	+13	−21	−12	− 3	−23	0	−0.73
96517	19 37 17.59	+38 35 39.1	6.93	1 H	294.323 293 62	+38.594 193 11	5.14	0.00	6.28	0.46	0.45	0.57	0.52	0.49	− 2	− 7	− 9	+16	+13	−16	+12	− 1	+ 9	+ 5	0	−1.67
96518	19 37 17.84	+15 15 02.4	8.09	H	294.324 320 06	+15.250 663 66	1.70	5.15	2.04	0.73	0.63	1.17	0.89	0.77	+16	−26	−20	+ 5	−42	+26	−41	+ 5	+ 0	−28	3	−0.51
96519	19 37 18.43	−44 17 03.3	8.40	H	294.326 771 86	−44.284 241 55	2.81	−2.97	−7.76	1.13	1.03	1.55	1.73	1.30	+30	−37	−49	+27	+17	−41	−21	−29	+34	−21	0	0.62
96520	19 37 20.45	−74 13 42.0	8.40	H	294.335 191 62	−74.228 344 61	1.40	−2.86	−11.95	0.61	0.65	0.99	0.60	0.81	− 8	−17	−10	− 3	+ 2	− 5	+ 0	−10	+ 7	−23	0	−0.64
96521	19 37 21.08	−47 31 22.7	8.52	H	294.337 831 78	−47.522 963 82	4.17	10.24	−49.10	1.22	0.98	1.32	1.77	1.36	+ 4	−16	−10	+ 3	−13	−11	−15	−19	+10	+ 1	0	0.00
96522	19 37 21.36	+06 11 46.0	10.59	G	294.339 017 96	+06.196 111 77	15.81	−117.91	−131.30	1.86	1.14	2.24	2.74	1.31	−17	+ 6	−22	− 9	−10	+16	− 5	−36	+ 6	−24	0	2.47
96523	19 37 21.77	+26 21 32.7	7.46	H	294.340 715 52	+26.359 082 14	3.69	−1.50	6.23	0.36	0.64	0.91	0.41	0.79	−33	− 4	+ 3	+17	− 5	− 2	− 4	+ 2	+10	−29	0	−1.50
96524	19 37 23.45	+18 58 35.5	6.67	H	294.347 704 65	+18.976 540 09	3.88	11.79	−9.60	0.46	0.47	0.76	0.54	0.55	+ 9	−15	−23	−12	− 4	+17	− 1	− 8	+ 3	+12	1	−0.17
96525	19 37 25.00	+05 27 17.0	8.63	H	294.354 177 95	+05.454 728 85	2.05	−0.98	−4.42	1.10	0.61	1.26	1.44	0.70	−32	−12	− 1	− 7	+ 9	+ 9	+ 6	−35	+11	−38	0	−0.99
96526	19 37 25.51	+73 31 29.2	8.96	2 H	294.356 304 19	+73.524 791 05	2.73	−3.72	−8.03	0.77	0.65	0.76	0.83	0.70	− 2	−38	+10	+22	+15	−19	+18	+20	− 9	+13	3	1.48
96527	19 37 27.29	−35 14 25.1	8.38	H	294.363 718 35	−35.240 299 39	4.05	3.13	14.91	1.23	0.93	1.43	1.49	1.07	+19	−35	−27	+10	+ 3	−26	− 8	− 6	+10	− 1	0	−0.66
96528	19 37 27.71	+40 35 20.2	8.42	G	294.365 455 17	+40.588 932 75	7.69	−14.79	−27.09	0.59	0.62	0.74	0.66	0.78	+ 8	+ 0	−15	+ 5	+ 1	−16	− 2	+22	−16	+11	0	−0.38
96529	19 37 29.27	−42 56 43.6	9.34	G	294.371 942 13	−42.945 433 59	2.09	−4.11	14.64	1.52	1.24	1.81	2.44	1.70	−10	+ 9	−21	− 1	+ 0	−34	− 7	−21	+26	−34	0	−0.44
96530	19 37 29.88	+29 36 54.3	7.44	H	294.374 508 94	+29.615 083 07	7.35	21.61	12.35	0.41	0.53	0.72	0.49	0.57	−11	+ 1	− 8	+10	+ 9	− 7	+ 9	− 8	+12	− 7	1	−0.42
96531	19 37 31.37	−34 15 24.9	9.24	H	294.380 708 78	−34.256 911 88	6.63	4.92	−47.06	1.63	1.17	1.83	2.45	1.53	+10	−26	−29	+11	−25	+24	−18	−10	−21	−24	0	0.34
96532	19 37 32.11	+46 19 15.1	11.49	G	294.383 795 99	+46.320 855 80	−3.98	−1.26	−8.41	1.73	1.61	1.92	2.36	1.90	− 9	− 6	+ 3	+ 5	+11	−11	+11	− 1	− 4	− 1	3	0.62
96533	19 37 32.19	+54 57 28.3	7.29	2 H	294.384 105 19	+54.957 866 03	1.70	−7.87	−9.72	0.61	0.60	0.68	0.73	0.69	+13	−25	+ 5	+15	+ 0	−32	+ 2	−22	+ 2	+17	0	0.30
96534	19 37 33.44	−00 07 45.5	7.31	H	294.389 353 01	−00.129 317 57	13.04	−2.59	19.22	0.83	0.47	0.92	0.88	0.42	− 9	−30	+ 3	− 8	+15	+17	+10	−35	+11	− 3	2	1.58
96535	19 37 33.96	−01 02 02.5	8.21	H	294.391 500 86	−01.034 040 36	3.34	3.57	−3.38	1.02	0.64	1.25	1.16	0.53	+11	−19	− 4	− 4	+ 2	+33	− 2	−40	+ 4	+ 1	2	0.00
96536	19 37 34.48	−14 18 05.2	5.46	G	294.393 652 82	−14.301 444 32	32.36	−104.36	−146.68	0.68	0.43	0.74	0.73	0.42	+13	−30	− 5	− 3	+12	+ 7	+12	−24	+ 2	+23	0	−0.14
96537	19 37 34.76	+05 19 26.0	9.91	H	294.394 820 18	+05.323 877 62	2.30	3.42	2.80	1.47	0.82	1.79	1.86	0.94	−14	−22	− 8	−26	− 3	+ 4	− 5	−41	+19	−21	0	−0.79
96538	19 37 34.99	+46 20 53.9	11.38	G	294.395 771 55	+46.348 299 45	−0.56	−6.38	−7.99	1.63	1.57	1.84	2.34	1.86	− 2	− 3	+ 8	+12	+11	−11	+10	− 5	− 3	+ 2	0	−0.68
96539	19 37 35.59	+12 41 24.6	7.93	H	294.398 293 46	+12.690 171 15	6.45	−18.78	−11.03	0.64	0.51	0.96	0.81	0.65	+37	− 8	−13	− 7	−32	+24	−32	− 8	− 5	+ 0	0	−0.09
96540	19 37 36.25	+64 01 00.3	8.30	H	294.401 029 22	+64.016 760 32	4.89	−4.35	−21.31	0.63	0.60	0.65	0.73	0.68	+ 0	−11	− 6	+ 4	+ 7	+ 0	+ 7	+ 1	− 3	+10	0	0.34
96541 H	19 37 36.52	−02 41 56.4	8.62	2 H	294.402 174 85	−02.698 997 04 A	3.31	1.08	−4.11	2.69	2.77	1.84	2.00	1.00	+26	−34	+ 0	+ 0	+ 1	+13	+ 1	−14	+ 8	+17	0	0.37
96542	19 37 37.03	+84 46 17.2	8.26	H	294.404 309 46	+84.771 438 40	3.41	1.63	−12.98	0.60	0.56	0.65	0.71	0.65	+ 6	−21	+ 1	− 3	+ 0	− 5	+ 3	− 7	−12	+ 6	1	−0.06
96543	19 37 38.68	+63 44 04.0	8.58	G	294.411 159 60	+63.734 433 70	3.45	−3.54	31.22	0.69	0.61	0.68	0.75	0.73	+ 3	+ 6	+ 9	− 6	+ 8	− 4	+ 9	− 4	− 6	+12	0	0.79
96544	19 37 38.87	+65 37 18.0	8.84	H	294.411 955 10	+65.621 659 93	3.07	11.67	−26.27	0.60	0.62	0.66	0.50	0.72	+ 7	+ 1	+ 5	−36	+16	− 1	+14	+ 1	+ 7	+33	1	1.21
96545 H	19 37 39.38	−41 27 29.5	7.65	G	294.414 085 29	−41.458 192 65 *	7.15	12.58	−31.54	1.23	0.89	1.13	1.73	1.25	−26	−17	+ 5	+37	−43	+ 8	−39	+16	−17	−29	0	−1.56
96546	19 37 40.82	+35 01 21.2	6.44	H	294.420 088 87	+35.022 561 20	1.95	−7.60	−10.23	0.42	0.49	0.60	0.46	0.51	− 8	− 1	−22	+15	+19	−13	+17	− 2	+ 9	− 3	1	0.44
96547	19 37 42.27	+80 30 55.3	8.47	2 H	294.426 122 60	+80.515 356 22	1.40	−7.59	−4.55	0.71	0.60	0.69	0.85	0.75	+10	− 4	+10	−15	− 4	− 5	− 4	− 3	+ 0	+10	0	0.02
96548	19 37 42.72	+80 00 25.7	8.75	H	294.428 000 00	+80.007 140 70	3.55	5.33	11.07	0.70	0.66	0.75	0.79	0.82	− 7	− 9	+ 4	+15	− 5	−19	− 4	− 3	−16	− 8	0	1.20
96549 H	19 37 43.16	+29 23 37.6	8.15	H	294.429 828 96	+29.393 776 51 *	0.86	−1.78	−5.16	5.32	5.12	1.97	1.46	1.72	+18	− 2	− 7	− 2	− 3	− 5	− 4	−12	+12	− 2	1	0.86
96550	19 37 43.50	+24 15 40.2	7.76	H	294.431 229 37	+24.261 157 62	5.86	0.14	−9.93	0.69	0.68	1.00	0.87	0.82	+ 1	− 2	− 2	− 6	− 4	− 7	− 4	−16	+ 1	+ 3	0	−0.49
96551	19 37 43.71	−05 03 42.3	7.47	H	294.432 128 62	−05.061 751 54	12.19	17.62	−15.05	0.98	0.51	1.17	1.04	0.44	+16	−29	−10	− 2	+13	+32	+ 5	−35	+20	+11	0	1.19
96552	19 37 44.94	−20 48 56.7	9.14	H	294.437 250 73	−20.815 752 50	2.65	−0.69	−21.00	1.37	0.82	1.54	1.45	0.91	+42	−44	−36	−15	+ 7	+ 6	− 1	−26	+19	+23	0	1.24
96553	19 37 45.41	−25 41 11.7	9.09	H	294.439 218 73	−25.686 585 95	−0.63	−6.27	−13.66	1.56	0.99	1.58	2.00	1.72	+61	+13	+13	+ 5	−14	+ 9	−34	−41	−27	+29	0	−0.14
96554	19 37 46.15	−34 11 58.7	9.40	H	294.442 282 29	−34.199 643 63	6.41	−3.38	−0.25	1.75	1.20	1.81	2.48	1.49	− 8	−25	−35	+33	−41	+28	−32	+17	−18	−36	0	0.90
96555	19 37 47.16	+12 56 19.5	8.06	H	294.446 502 49	+12.938 749 73	0.64	−1.31	−4.11	0.68	0.57	1.03	0.83	0.75	+37	− 2	− 8	− 9	−30	+23	−34	−16	−10	+ 8	0	−0.87
96556	19 37 47.26	−04 38 51.0	5.45	H	294.446 901 67	−04.647 509 66	31.14	104.78	−53.59	0.77	0.42	0.86	0.81	0.37	+ 9	−32	−22	−15	+ 7	+19	+ 3	−43	+16	+ 0	0	0.87
96557	19 37 48.36	−14 45 56.3	9.00	H	294.451 490 34	−14.765 648 94	−1.08	10.00	0.07	1.14	0.75	1.27	1.33	0.78	+32	− 4	+ 7	− 2	− 3	+15	− 2	−32	+ 4	+43	0	0.39
96558	19 37 48.58	−13 57 22.8	6.86	H	294.452 424 14	−13.956 337 92	6.13	13.22	−9.04	0.72	0.47	0.80	0.76	0.45	+19	−25	−11	−11	+12	+18	+12	−22	+ 6	+29	0	−0.25
96559	19 37 50.04	+06 20 38.2	8.61	H	294.458 504 63	+06.343 932 15	0.15	3.85	3.54	1.12	0.64	1.27	1.62	0.78	−26	+ 7	− 9	−11	− 1	+19	+ 0	−33	− 9	−37	0	−0.93
96560	19 37 50.57	−06 08 37.4	8.24	H	294.460 728 69	−06.143 726 40	3.29	−1.14	−11.06	1.05	0.61	1.20	1.04	0.50	+18	−27	−16	−20	+ 6	+32	+ 3	−42	+25	+26	2	2.54
96561	19 37 51.69	+43 37 33.5	8.98	H	294.465 369 35	+43.625 960 23	22.85	53.36	−214.11	0.73	0.72	0.84	0.77	0.85	− 6	+ 2	+ 2	+ 3	+13	− 5	+16	− 7	+11	+ 6	0	−1.70
96562	19 37 51.75	−30 17 43.1	8.05	H	294.465 624 12	−30.295 308 07	12.32	13.77	−14.98	1.45	0.92	1.23	1.71	1.12	−37	−22	− 4	−42	+47	+ 0	+46	−22	+ 4	−39	0	3.45
96563 H	19 37 52.06	+22 47 50.1	7.57	G	294.466 915 04	+22.797 246 44 *	4.85	−13.49	−24.01	1.15	1.02	1.06	0.93	0.93	+21	− 6	− 9	−10	−10	+ 2	−13	+ 7	+14	+ 1	1	0.19
96564	19 37 52.11	−75 24 25.1	8.71	H	294.467 125 64	−75.406 979 99	2.31	−7.61	−60.90	0.67	0.67	1.02	0.83	0.87	+ 4	−10	− 6	+18	− 4	− 7	− 6	+ 1	− 5	− 4	1	−0.30
96565	19 37 52.18	+18 48 47.2	8.67	H	294.467 403 88	+18.813 118 25	1.09	0.42	−4.48	0.66	0.67	1.08	0.79	0.77	+ 8	−13	−18	− 8	−12	+19	− 8	−14	− 1	+ 7	0	0.46
96566	19 37 52.81	−28 48 57.6	8.12	G	294.470 030 61	−28.816 009 85	8.44	3.85	−44.58	1.13	0.86	1.15	1.60	1.10	+ 2	+ 5	−21	−11	+39	−24	+36	+18	+14	− 5	9	1.87
96567 H	19 37 53.42	+01 29 57.4	7.31	H	294.472 580 02	+01.499 266 22 *	1.41	0.33	−1.09	1.47	1.09	1.13	1.23	0.59	+ 8	−24	−11	−21	+12	+21	+ 4	−44	+13	−20	1	0.35
96568	19 37 53.95	+24 42 46.4	7.80	H	294.474 804 82	+24.712 881 05	3.60	4.89	0.83	0.64	0.68	0.98	0.82	0.82	+ 2	− 1	− 8	−18	+ 1	+ 0	+ 0	− 5	+ 5	+ 5	0	0.38
96569	19 37 54.22	+49 16 57.4	10.09	H																						
96570 H	19 37 55.00	+19 21 32.2	8.02	H	294.479 149 77	+19.358 946 20 A	1.30	7.50	2.92	1.23	1.26	1.78	1.33	1.30	+12	−10	+ 2	−16	− 1	+ 8	− 2	− 2	+ 5	+28	6	0.98
96571 H	19 37 56.03	+18 35 32.9	7.14	H	294.483 456 95	+18.592 482 47 *	5.89	10.41	−9.22	4.68	1.19	1.79	1.38	1.24	+ 9	−11	−15	+ 2	− 2	+ 5	− 4	−13	+ 9	+ 3	1	1.58
*96572	19 37 56.68	+49 17 02.6	6.47	G	294.486 170 77	+49.284 062 40	6.48	36.44	145.53	0.51	0.49	0.56	0.61	0.60	− 8	−12	− 1	−10	+ 2	− 9	+ 2	− 3	− 3	+ 1	4	1.92
*96573 H	19 37 56.61	+43 12 07.5	8.67	H	294.485 894 21	+43.202 096 20 A	2.89	14.42	3.05	1.89	4.36	1.73	1.46	1.87	−12	− 1	+ 2	−12	+11	− 3	+23	+ 0	+ 1	− 2	1	−0.25
96574	19 37 57.41	+26 01 00.0	7.86	H	294.489 203 31	+26.016 660 58	4.36	15.56	4.14	0.41	0.67	0.95	0.44	0.82	−28	−12	+11	+25	+ 0	− 5	+ 2	+ 4	+ 9	−21	1	−1.55
96575	19 37 58.76	−57 05 09.9	8.54	H	294.494 853 00	−57.086 076 73	3.20	28.12	−44.21	0.85	0.72	1.16	1.29	1.18	+ 7	− 7	− 5	− 5	+ 8	−11	+12	−16	− 9	+32	0	0.93
96576	19 37 59.29	+33 53 35.3	7.51	G	294.497 050 83	+33.893 148 08	31.04	−98.05	51.98	0.46	0.55	0.68	0.50	0.59	− 9	−13	−15	+ 5	+ 5	− 1	+ 7	− 7	− 3	+ 1	0	−1.25
96577	19 38 00.45	−32 54 45.8	6.86	H	294.501 854 62	−32.912 730 14	8.52	29.25	−27.66	0.92	0.73	1.03	1.02	0.86	+37	−36	−23	+ 4	− 2	+14	− 4	− 2	+13	+32	0	−0.24
96579	19 38 01.46	+35 15 32.7	6.55	H	294.506 099 50	+35.259 092 14	5.89	0.67	−41.16	0.42	0.50	0.62	0.49	0.52	− 5	+ 0	−22	+18	+24	−22	+19	− 4	+14	− 5	0	0.51
96580	19 38 01.60	+11 43 18.3	10.01	3 H	294.506 659 07	+11.721 763 55	0.00	8.48	−13.76	1.09	0.87	2.10	2.13	1.61	+44	+26	+ 6	+25	+ 4	+65	+ 3	+30	− 6	+ 5	0	−0.98
96581	19 38 03.38	−60 36 39.6	12.64	3 H	294.514 092 55	−60.610 988 02	0.68	0.80	−4.50	3.55	2.46	5.00	4.49	4.22	−17	− 4	− 7	+39	−21	+16	− 8	− 1	+16	+32	5	−1.72
96582	19 38 03.44	+58 31 33.0	8.52	H	294.514 330 83	+58.525 835 71	1.66	−4.86	−14.36	0.66	0.62	0.67	0.73	0.67	+14	− 1	+15	+22	+17	+ 1	+17	+20	+10	+17	0	0.97
96583	19 38 03.92	−50 37 09.6	8.51	H	294.516 341 43	−50.619 338 53	8.43	7.38	−34.44	0.97	0.78	1.24	1.34	1.19	+27	− 8	−12	− 8	+15	− 2	+14	−23	+25	+21	0	0.72
96584	19 38 03.98	−04 36 30.0	8.91	G	294.516 571 05	−04.608 321 80	5.18	11.03	11.77	1.13	0.67	1.32	1.22	0.58	+16	−23	−24	−17	+ 9	+20	+ 4	−39	+22	+ 9	0	0.03
96585	19 38 04.83	+38 46 30.3	8.62	H	294.520 109 31	+38.775 070 50	0.55	2.49	−5.19	0.67	0.73	0.86	0.74	0.84	− 6	+ 2	+ 2	+12	+18	−18	+21	+ 9	+ 8	+ 7	0	−1.00
96586	19 38 08.24	−42 24 32.7	8.76	H	294.534 343 22	−42.409 088 49	3.89	34.08	−54.49	1.27	0.94	1.35	1.65	1.29	− 9	−33	+ 1	− 3	− 6	+ 4	− 7	−21	− 2	−23	0	−0.61
96587	19 38 08.88	−12 45 28.9	8.54	H	294.537 018 16	−12.758 020 47	5.18	25.38	8.21	1.09	0.67	1.18	1.08	0.61	+20	−14	−20	−31	+13	+ 5	+ 9	−32	+16	+23	0	0.56
96588	19 38 09.69	+17 14 35.6	6.93	H	294.540 384 18	+17.243 226 87	4.47	2.61	−3.03	0.47	0.45	0.74	0.51	0.51	+ 0	−11	− 2	−20	− 7	+13	− 8	−22	+ 0	− 9	0	−0.95
96589	19 38 10.51	+01 45 53.9	9.75	2 H	294.543 770 91	+01.764 984 54 A	1.96	2.15	−1.74	2.49	1.33	2.55	2.70	1.26	+10	−31	+ 0	−11	− 6	+ 3	−13	−33	+16	− 3	1	−0.05
96590	19 38 10.69	−63 54 55.7	7.45	H	294.544 522 90	−63.915 459 17	1.56	−2.86	−5.83	0.63	0.54	0.85	0.66	0.67	−19	−22	− 1	+ 4	−26	− 1	−32	+ 3	+18	+20	0	0.36
96591 H	19 38 10.96	−50 27 33.6	8.91	H	294.545 655 30	−50.459 344 65 A	2.06	−4.90	14.14	1.73	1.25	1.88	2.21	1.77	+32	−35	−14	−29	+16	+12	+14	−34	+12	+16	1	−0.12
96592	19 38 11.07	−60 24 45.4	8.19	H	294.546 127 35	−60.412 619 12	3.61	−16.40	1.50	0.79	0.57	1.09	0.93	0.89	−12	−15	−11	+23	−11	− 3	− 4	− 8	+ 2	+18	2	1.68
96593	19 38 11.43	+08 44 52.8	7.78	H	294.547 615 15	+08.748 003 09	5.21	−3.81	−8.34	0.84	0.54	1.01	0.92	0.59	− 4	+ 9	−11	−20	− 5	+ 20	− 6	−33	−10	−21	4	−1.14
96594	19 38 11.43	−64 07 59.6	8.99	H	294.547 615 26	−64.133 214 10	12.92	−17.87	−21.67	0.82	0.76	1.26	0.89	0.92	− 5	−23	−20	− 4	−22	−10	−29	− 4	+33	−30	0	−1.64
96595	19 38 11.55	+51 14 08.9	7.21	H	294.548 133 68	+51.235 797 29	3.78	16.40	23.69	0.49	0.49	0.54	0.52	0.53	−20	−21	+18	−15	+16	+ 2	+15	−10	− 2	+ 0	1	0.37
96596	19 38 11.59	+32 29 22.5	10.75	2 H	294.548 279 16	+32.489 579 88	0.83	−1.51	−5.36	1.04	1.27	1.64	1.33	1.52	− 9	− 1	− 3	+ 3	+11	− 5	+10	−10	−12	− 8	0	1.96
96597	19 38 11.61	−46 01 58.8	9.38	H	294.548 383 28	−46.033 000 72	14.29	−26.82	−185.62	1.58	1.21	1.61	2.05	1.66	− 6	−23	+12	+41	−23	+ 0	−16	+10	−23	+ 0	0	1.26
96598	19 38 11.95	−41 48 15.9	7.56	H	294.549 776 27	−41.804 407 46	7.70	23.64	−23.38	1.09	0.82	1.05	1.48	1.18	−22	−18	+ 8	+34	−36	+ 9	−34	+ 6	−16	−20	0	−0.27
96599	19 38 12.06	+16 48 25.9	8.57	2 H	294.550 262 68	+16.807 200 36	1.61	12.87	−32.39	0.69	0.65	1.11	0.79	0.76	+11	− 7	+ 0	−17	−15	+16	−17	−28	+ 7	+ 6	0	−0.72
96600	19 38 13.49	+52 57 19.5	11.30	H	294.556 228 07	+52.955 425 09	5.68	0.08	−25.11	1.64	1.31	1.58	1.70	1.50	+ 1	−14	+11	− 9	+ 6	+ 7	+ 7	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
96501	8.773	0.011	8.027	0.009		0.682	0.011	T	0.74	0.01	L	8.1138	0.0015	0.013	114		8.09	8.13					1 X							S
96502	9.096	0.023	8.036	0.016		0.919	0.021	T	0.92	0.01	L	8.1275	0.0016	0.009	43		8.12	8.15		C			1							
96503	6.315	0.003	6.436	0.004		−0.087	0.014	G	−0.09	0.01	L	6.4163	0.0009	0.011	152		6.40	6.44		D	19372+2920	I 1	1						S
96504	9.442	0.015	8.206	0.009		1.055	0.014	T	1.02	0.01	L	8.2395	0.0017	0.019	172		8.21	8.28					1 S						
96505	8.896	0.011	7.957	0.008		0.829	0.010	T	0.85	0.01	L	8.0059	0.0016	0.015	116		7.98	8.03		C			1						S
96506	9.002	0.014	7.211	0.007		1.491	0.012	T	1.51	0.02	L	7.2043	0.0014	0.010	102		7.19	7.22		C			1						S
96507	7.395	0.005	6.742	0.005		0.606	0.006	T	0.68	0.01	L	6.7953	0.0008	0.010	164		6.78	6.81					1						S
96508	9.655	0.029	8.186	0.016		1.238	0.026	T	1.20	0.03	L	8.1316	0.0062	0.030	49		8.10	8.20		U 2			1						S
96509	11.027	0.055	9.139	0.019		0.967	0.150	G	1.74	0.09	S	9.0630	0.0030	0.029	143		9.01	9.11		R			1 S						
96510	10.036	0.028	9.626	0.030		0.388	0.038	T	0.45	0.04	L	9.6616	0.0031	0.020	82		9.63	9.69		C			1						
96511	8.534	0.009	8.116	0.009		0.410	0.015	G	0.48	0.02	H	8.1615	0.0010	0.011	137		8.14	8.18					1						S
96512	11.120	0.057	10.012	0.034		0.810	0.020	G	0.85	0.02	H	10.1125	0.0031	0.025	109		10.07	10.16					1						G
96514	9.114	0.009	8.526	0.008		0.550	0.009	T	0.62	0.01	L	8.5550	0.0017	0.021	276		8.52	8.59					1						
96515						1.664	0.143	G	1.64	0.15	J	11.8376	0.0069	0.068	93		11.68	12.28		U			1 X S						D P
96516	6.947	0.005	5.773	0.003		1.007	0.005	T	0.98	0.00	L	5.8360	0.0005	0.006	117		5.83	5.85		C	19373+1628	I 1	1						S
96517	7.267	0.005	6.965	0.005		0.287	0.007	T	0.33	0.01	L	7.0037	0.0015	0.014	141		6.98	7.03		U 2			1						S
96518	8.124	0.007	8.079	0.009		0.041	0.010	T	0.06	0.01	L	8.1060	0.0012	0.014	127		8.08	8.13		C			1						
96519	10.697	0.068	8.582	0.022		1.789	0.059	T	2.07	0.15	O	8.4723	0.0031	0.019	48		8.44	8.50					1						
96520	9.874	0.019	8.520	0.011		1.147	0.017	T	1.11	0.01	L	8.5651	0.0018	0.020	159		8.53	8.60					1						
96521	9.987	0.037	8.610	0.021		1.165	0.033	T	1.13	0.03	L	8.6857	0.0015	0.014	42		8.67	8.72		D			1						
96522	11.782	0.134	10.533	0.065		1.034	0.001	G	1.08	0.00	I	10.7450	0.0038	0.037	104		10.67	10.81					1						G
96523	8.591	0.006	7.551	0.005		0.904	0.006	T	0.91	0.00	L	7.6166	0.0010	0.013	276		7.59	7.64					1						
96524	8.659	0.009	6.841	0.004		1.513	0.008	T	1.55	0.01	L	6.7917	0.0009	0.010	138		6.78	6.81					1						S
96525	8.715	0.012	8.630	0.015		0.083	0.018	T	0.10	0.02	L	8.6620	0.0012	0.015	114		8.63	8.70		C			1						
96526	9.106	0.014	8.980	0.017		0.122	0.021	T	0.14	0.02	L	9.0050	0.0019	0.015	103		8.98	9.05		U			1						
96527	9.185	0.023	8.456	0.020		0.744	0.015	G	0.79	0.01	H	8.5300	0.0026	0.013	47		8.51	8.57					1						
96528	9.029	0.014	8.489	0.013		0.534	0.015	G	0.61	0.02	H	8.5351	0.0016	0.013	115		8.51	8.56		C			1						
96529	10.523	0.062	9.485	0.043		0.932	0.002	G	0.93	0.00	I	9.5001	0.0034	0.020	41		9.45	9.53		C			1						
96530	7.600	0.006	7.455	0.007		0.132	0.009	T	0.15	0.01	L	7.4852	0.0013	0.012	159		7.47	7.51		C			1						S P
96531	9.827	0.033	9.324	0.032		0.484	0.035	T	0.56	0.04	L	9.3511	0.0030	0.016	36		9.32	9.38					1						
96532						0.320	0.020	G	0.37	0.03	H	11.5729	0.0059	0.047	113		11.50	11.64					1						D
96533	9.402	0.017	7.511	0.008		1.604	0.015	T	2.29	0.05	O	7.3410	0.0051	0.033	90		7.29	7.40		U 2			1 S						S
96534	7.668	0.006	7.354	0.007		0.321	0.001	G	0.37	0.00	H	7.3916	0.0012	0.012	114		7.37	7.41					1						S
96535	8.382	0.011	8.233	0.013		0.160	0.015	G	0.18	0.01	H	8.2691	0.0015	0.016	92		8.24	8.30		C			1						
96536	6.053	0.003	5.521	0.004		0.501	0.008	G	0.56	0.02	A	5.5725	0.0005	0.005	95		5.56	5.58					1						S
96537	10.134	0.037	10.021	0.052		0.110	0.060	T	0.12	0.06	L	9.9526	0.0027	0.022	106		9.92	9.99		C			1						G
96538	11.300	0.084	11.122	0.131		0.390	0.020	G	0.46	0.02	H	11.4981	0.0057	0.048	113		11.40	11.59					1						D
96539	8.372	0.008	7.988	0.007		0.403	0.001	G	0.47	0.00	H	8.0267	0.0010	0.014	190		8.00	8.05					1						S
96540	8.566	0.010	8.330	0.011		0.225	0.014	T	0.25	0.02	L	8.3718	0.0017	0.017	106		8.35	8.41					1						S
96541	8.787	0.012	8.651	0.014	*	0.131	0.017	T	0.15	0.02	L *	8.6705	0.0033	0.051	106	*	8.61	8.77		U 2 C	19376−0242	H 1	2 C A	AB	198	0.319	0.033	3.07	0.28	
96542	8.318	0.009	8.260	0.011		0.085	0.015	G	0.10	0.02	H	8.2933	0.0014	0.012	115		8.27	8.32		C			1						S
96543	9.019	0.014	8.617	0.014		0.407	0.015	G	0.47	0.02	H	8.6709	0.0015	0.014	103		8.65	8.70		C	19376+6344	I 1	1						
96544	10.266	0.028	8.953	0.016		1.115	0.025	T	1.08	0.03	L	9.0081	0.0014	0.013	115		8.98	9.03		C			1						
96545	8.096	0.019	7.673	0.013	*	0.438	0.015	G	0.51	0.02	H *	7.7351	0.0022	0.013	45	*	7.72	7.75		D	19377−4127	I 1	2 C S A	BA	300	0.166	0.026	0.33	0.28	S
96546	8.485	0.010	6.609	0.004		1.559	0.009	T	1.58	0.01	L	6.5565	0.0009	0.008	145		6.54	6.57		C			1						S
96547	10.568	0.035	8.721	0.015		1.568	0.031	T	2.63	0.05	O	8.4706	0.0059	0.054	106		8.38	8.53		U 2			1 S						P
96548	8.856	0.013	8.762	0.015		0.092	0.019	T	0.10	0.02	L	8.7881	0.0019	0.016	109		8.76	8.82					1						S
96549	9.664	0.017	8.273	0.010	*	1.176	0.016	T	1.14	0.01	L *	8.3215	0.0012	0.016	154	*	8.29	8.35			19377+2924	H 1	2 C C	AB	256	0.281	0.054	3.16	0.54	
96550	7.908	0.007	7.778	0.010		0.140	0.015	G	0.15	0.01	H	7.8122	0.0017	0.013	111		7.79	7.84		C			1						S
96551	7.897	0.008	7.528	0.008		0.350	0.011	T	0.41	0.01	L	7.5580	0.0012	0.009	95		7.54	7.58		C			1						S
96552	11.022	0.067	9.248	0.025		1.478	0.057	T	1.49	0.09	L	9.2671	0.0021	0.016	70		9.24	9.29		C			1						
96553	11.190	0.071	9.283	0.022		1.583	0.059	T	1.60	0.06	L	9.2031	0.0026	0.022	100		9.15	9.23		C			1						
96554	10.125	0.040	9.464	0.036		0.603	0.040	T	0.67	0.04	L	9.5342	0.0030	0.017	39		9.49	9.56		D			1						
96555	9.242	0.011	8.171	0.008		0.927	0.010	T	0.92	0.01	L	8.2199	0.0015	0.015	168		8.20	8.25					1						
96556	5.955	0.003	5.497	0.003		0.429	0.003	G	0.50	0.00	H	5.5444	0.0005	0.006	105		5.54	5.55					1						S
96557	10.787	0.049	9.174	0.021		1.351	0.042	T	1.32	0.05	L	9.1500	0.0019	0.016	86		9.12	9.17					1						
96558	8.175	0.009	6.989	0.008		1.016	0.009	T	0.99	0.01	L	7.0305	0.0007	0.009	105		7.02	7.05					1						S
96559	10.621	0.043	8.766	0.016		1.542	0.036	T	1.60	0.08	L	8.7304	0.0018	0.015	109		8.70	8.75					1						
96560	9.619	0.021	8.375	0.013		1.061	0.019	T	1.03	0.02	L	8.4088	0.0016	0.015	105		8.38	8.43		C			1						
96561	10.075	0.024	9.098	0.017		0.845	0.023	T	0.86	0.02	L	9.1193	0.0020	0.019	135		9.08	9.15		C			1						
96562	8.566	0.014	8.103	0.014		0.433	0.007	G	0.50	0.01	H	8.1461	0.0009	0.007	45		8.13	8.16		D			1 S						S
96563	8.706	0.011	7.686	0.008	*	0.901	0.011	G	0.90	0.01	H *	7.7448	0.0013	0.013	115	*	7.72	7.77		D	19379+2248	I 1	2 C A	AB	238	0.299	0.006	1.15	0.06	S
96564	10.457	0.026	8.832	0.012		1.360	0.023	T	1.33	0.03	L	8.8570	0.0020	0.020	165		8.82	8.89		C			1						
96565	8.854	0.010	8.694	0.012		0.154	0.015	T	0.17	0.01	L	8.7280	0.0018	0.017	145		8.70	8.76		C			1						
96566	8.954	0.021	8.198	0.017		0.700	0.015	G	0.76	0.01	H	8.2363	0.0017	0.012	46		8.22	8.26		C			1						S
96567	7.543	0.006	7.352	0.007	*	0.183	0.008	T	0.20	0.01	L *	7.3752	0.0016	0.009	96	*	7.36	7.39		D	19379+0130	M 1	2 C A	BA	328	0.211	0.003	0.08	0.09	S
96568	7.939	0.009	7.810	0.008		0.130	0.015	G	0.14	0.01	H	7.8481	0.0018	0.017	127		7.82	7.88					1						S
96569											T	10.2228	0.1559	1.370	97		7.63	11.35		D	19379+4917	I 2	S						G
96570	8.156	0.009	7.924	0.011	*	0.221	0.013	T	0.24	0.01	L *	8.0923	0.0015	0.016	149	*	8.07	8.13		D	19379+1922	I 1	2 C A	AB	195	5.256	0.004	0.71	0.01	S
96571	7.439	0.006	7.171	0.007	*	0.255	0.008	T	0.29	0.01	L *	7.2149	0.0009	0.009	136	*	7.20	7.23		D	19379+1836	H 1	2 C B	AB	328	0.230	0.037	2.37	0.30	S
96572	7.723	0.007	6.577	0.005		0.990	0.020	G	0.97	0.01	L	6.6266	0.0009	0.008	116		6.61	6.64		D	19379+4917	I 2	1						S
96573	9.128	0.012	8.716	0.012	*	0.389	0.016	T	0.45	0.02	L *	8.7552	0.0023	0.018	137	*	8.73	8.79			19379+4312	H 1	2 C B	AB	179	0.439	0.029	3.17	0.33	
96574	7.979	0.005	7.879	0.006		0.097	0.007	T	0.11	0.01	L	7.8962	0.0009	0.014	257		7.88	7.92					1						S
96575	10.046	0.022	8.670	0.013		1.165	0.020	T	1.13	0.02	L	8.7113	0.0020	0.020	124		8.67	8.76					1						
96576	8.400	0.012	7.559	0.008		0.719	0.126	G	0.80	0.02	L	7.6094	0.0010	0.010	126		7.59	7.63		D			1						S
96577	8.104	0.013	6.967	0.008		0.978	0.012	T	0.96	0.01	L	7.0297	0.0011	0.008	54		7.01	7.05		C			1						S
96579	7.737	0.007	6.657	0.004		0.934	0.006	T	0.93	0.00	L	6.7165	0.0008	0.008	145		6.70	6.73					1						S
96580						1.500	0.510	G	4.62	0.96	Q	9.1307	0.2253	0.914	127		7.98	11.02	324.60	P 1 B			1						G P
96581											T	12.7189	0.0669	0.467	117		11.95	13.37	0.57	P 1 A			1						D
96582	10.554	0.036	8.685	0.013		1.553	0.030	T	1.57	0.03	L	8.6339	0.0020	0.019	101		8.60	8.67					1						
96583	8.848	0.013	8.525	0.014		0.307	0.018	T	0.35	0.02	L	8.5914	0.0025	0.017	104		8.57	8.62					1						S
96584	9.471	0.017	8.991	0.017		0.520	0.020	G	0.59	0.02	H	9.0284	0.0016	0.017	100		9.00	9.05		C			1						
96585	9.843	0.020	8.756	0.013		0.940	0.018	T	0.93	0.01	L	8.7799	0.0021	0.019	124		8.74	8.81		C			1						
96586	9.320	0.027	8.844	0.027		0.461	0.030	T	0.53	0.03	L	8.8584	0.0023	0.013	41		8.84	8.88		C			1						
96587	9.932	0.024	8.655	0.015		1.087	0.022	T	1.05	0.02	L	8.7042	0.0021	0.016	85		8.68	8.74		C			1						
96588	6.929	0.004	6.929	0.005		0.005	0.006	T	0.03	0.01	L	6.9427	0.0010	0.008	141		6.93	6.96		C	19382+1715	I 1	1						S
96589	9.988	0.028	9.806	0.036	A	0.174	0.043	T	0.19	0.05	L	9.8111	0.0110	0.027	96	A	9.77	9.90		U	19382+0146	I 1	2 C A	AB	75	12.504	0.031	2.15	0.09	G
96590	9.651	0.016	7.646	0.007		1.661	0.014	T	1.68	0.01	L	7.5544	0.0014	0.016	150		7.53	7.58					1						S
96591	10.315	0.031	9.034	0.018	*	1.090	0.028	T	1.05	0.03	L *	9.0736	0.0017	0.014	100	*	9.05	9.11		C	19382−5028	H 1	2 C A	AB	350	0.632	0.023	3.29	0.10	
96592	9.777	0.018	8.307	0.010		1.238	0.016	T	1.20	0.02	L	8.3508	0.0015	0.013	131		8.33	8.37					1						
96593	7.836	0.007	7.774	0.008		0.047	0.004	G	0.06	0.00	H	7.7992	0.0014	0.014	97		7.78	7.83					1						S
96594	9.764	0.017	9.056	0.015		0.639	0.017	T	0.70	0.01	L	9.1220	0.0018	0.025	149		9.09	9.18					1						
96595	8.579	0.011	7.331	0.007		1.064	0.010	T	1.03	0.01	L	7.3813	0.0009	0.009	117		7.37	7.40		C			1						S
96596	11.800	0.124	10.995	0.097		0.728	0.121	T	0.78	0.09	L	10.8954	0.0132	0.110	139		10.73	11.01	5.57	P 1 A			1 S						G
96597	10.249	0.048	9.442	0.039		0.714	0.047	T	0.77	0.04	L	9.5219	0.0033	0.017	43		9.49	9.55		C			1						
96598	7.846	0.011	7.589	0.011		0.241	0.016	T	0.27	0.02	L	7.6288	0.0024	0.012	43		7.60	7.65					1						S
96599	11.221	0.059	8.836	0.014		2.000	0.015	G	1.99	0.01	J	8.6512	0.0163	0.110	129		8.46	8.84		U 2			1 S						
96600											T	11.4405	0.0060	0.048	110		11.36	11.52					1						G

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
96601	19 38 17.79	+20 47 00.5	6.50	H	294.574 142 64	+20.783 473 23	5.70	−6.81	−33.84	0.56	0.51	0.76	0.64	0.61	+10	−18	−17	−10	−19	+11	−19	−15	+ 1	− 4	0	1.22
96602	19 38 18.04	+31 45 32.4	7.66	H	294.575 160 86	+31.759 013 33	4.73	22.21	12.04	0.49	0.56	0.73	0.56	0.60	−	6	+	5	+	2	+22	+	9	−10	+11	−	9	+	7	+	0	0	−0.09
96603 H	19 38 21.68	+00 20 43.6	7.22	G	294.590 348 98	+00.345 446 15 A	9.96	23.20	16.76	1.13	0.76	1.21	1.47	0.65	+	17	−17	−20	+26	+12	+14	+	2	−36	+30	+	3	1	−0.58
96604	19 38 24.04	−00 55 22.5	8.62	G	294.600 152 56	−00.922 910 67	1.67	1.00	−2.65	1.13	0.56	1.29	1.20	0.53	+	5	−36	+	1	−11	+	5	+11	+	3	−38	+	2	+	5	0	1.53
96605	19 38 25.02	−26 22 03.5	9.73	H	294.604 243 02	−26.367 633 91	13.55	−83.22	−106.93	1.42	0.77	1.62	1.89	1.45	+43	+	0	+15	+	8	+14	+29	+10	−14	−18	+16	0	0.10
96606 H	19 38 25.09	−36 02 11.8	8.91	H	294.604 550 95	−36.036 618 51 A	7.03	−11.70	−10.33	2.32	1.73	2.42	2.85	1.97	+26	−35	−28	+22	+	5	−	3	−11	−13	+21	−10	2	−0.02
96607	19 38 25.92	−57 58 59.5	6.19	H	294.608 000 87	−57.983 188 19	6.77	30.83	−62.79	0.48	0.37	0.72	0.55	0.61	−	3	−17	−	3	+38	−25	−	3	−18	−	9	+	7	+32	0	1.18
96608	19 38 27.48	+17 15 26.1	7.45	G	294.614 501 73	+17.257 252 69	1.45	3.70	−6.54	0.57	0.54	0.91	0.81	0.86	+	7	−26	+	6	−29	−15	+20	−19	−36	+	7	+17	0	−0.46
96609	19 38 29.17	+37 44 35.6	7.53	1 H	294.621 546 83	+37.743 211 27	3.76	−2.88	−17.96	0.50	0.54	0.64	0.52	0.61	−	3	−	7	−11	−	1	+15	−	5	+13	+14	+	7	+	9	0	−1.54
96610	19 38 29.20	−65 54 51.3	6.79	H	294.621 672 94	−65.914 238 25	9.13	1.48	5.00	0.58	0.51	0.80	0.71	0.74	−25	−24	−	1	+	1	−	2	−	7	−12	−	8	+29	−51	0	−0.34
96611	19 38 30.13	−35 52 36.5	9.20	H	294.625 557 55	−35.876 795 46	1.99	1.97	−10.72	1.40	1.04	1.59	1.99	1.37	−	2	−28	−24	+31	−18	−	1	−27	+12	+27	−32	0	0.26
96612	19 38 30.19	+25 58 43.4	7.96	H	294.625 781 07	+25.978 732 06	3.05	6.10	0.43	0.42	0.72	0.97	0.47	0.90	−29	−	5	−	8	+20	−	2	+	2	+	0	−	3	−	3	−25	1	0.15
96613	19 38 30.62	−48 00 56.7	8.36	H	294.627 570 65	−48.015 752 85	1.74	4.85	6.88	1.17	0.98	1.33	1.79	1.40	+13	−19	−29	+12	−24	+	4	−27	−15	+25	+	0	0	0.91
96614	19 38 33.41	−85 00 16.5	8.27	H	294.639 200 42	−85.004 594 38	10.72	92.80	−29.93	0.64	0.71	0.80	0.72	0.84	−20	−10	−	5	+13	−	4	−	6	−	7	−15	−	4	−30	0	0.14
96615	19 38 37.09	+07 36 54.0	8.28	H	294.654 524 31	+07.614 991 75	5.42	−1.64	−2.10	1.05	0.67	1.32	1.50	0.74	+	5	−	9	−	8	+	0	−19	−	7	−24	−27	+16	−33	2	−1.36
96616 H	19 38 38.18	+63 28 56.9	8.49	2 G	294.659 100 61	+63.482 459 06 *	1.71	2.86	6.70	0.73	0.68	0.74	0.81	0.79	+	3	−11	+	4	−	2	+14	+12	+13	+	3	+	1	+13	0	−1.60
96617	19 38 38.31	+23 02 32.4	7.29	H	294.659 643 23	+23.042 340 93	3.90	−2.72	−4.16	0.62	0.58	0.89	0.68	0.70	−	4	−27	−22	−15	+	3	+16	+	3	−18	+15	−	3	0	1.29
96618	19 38 38.73	+31 13 09.3	7.59	H	294.661 386 89	+31.219 240 71	8.18	2.34	−6.71	0.44	0.54	0.72	0.52	0.58	−11	−	5	−10	+17	+13	−19	+11	−17	+12	−12	0	0.67
96619	19 38 39.37	+32 24 22.0	7.21	H	294.664 029 54	+32.406 097 88	9.45	−0.76	12.01	0.46	0.50	0.65	0.53	0.55	−16	−	4	+	0	+20	+	7	−	9	+	8	−11	−	4	−10	0	0.20
96620	19 38 41.15	+54 58 24.2	5.89	2 H	294.671 448 62	+54.973 395 00	25.12	35.41	163.89	0.51	0.50	0.56	0.65	0.58	+	9	−	9	+14	+15	−	8	−32	+	0	−31	−	6	+20	0	−0.99
96621	19 38 43.08	+37 19 19.9	8.81	H	294.679 505 58	+37.322 190 99	3.85	1.42	−13.01	0.55	0.67	0.78	0.67	0.77	−	2	−	1	−12	+	2	+	9	−	1	+	7	+	9	+13	+12	0	−1.36
96622 H	19 38 43.36	−10 09 23.7	6.61	G	294.680 676 18	−10.156 582 66 A	12.38	−8.11	−32.98	1.23	0.76	1.20	1.19	0.66	+	0	−16	+18	+	1	+	7	+16	+12	−25	−	5	+26	2	0.30
*96623 H	19 38 46.02	+23 06 51.3	7.45	H	294.691 747 33	+23.114 255 62 *	6.52	16.70	3.53	1.75	1.53	1.13	0.97	0.92	+	9	−25	−20	−26	−	5	+13	−	6	−20	+11	−	6	1	1.07
*96624	19 38 45.75	−67 37 08.5	9.44	H	294.690 632 45	−67.619 028 61	3.57	7.34	−7.28	0.65	0.84	1.34	0.60	0.98	−14	−	4	+	3	−30	+25	−12	+29	−13	+21	−22	0	2.13
96625	19 38 46.29	+21 54 32.1	8.03	H	294.692 854 97	+21.908 905 22	2.86	13.30	33.33	0.79	0.72	1.09	1.01	0.84	+	3	+	3	−20	−	3	+13	+21	+17	−	4	+18	+17	0	−0.57
96626	19 38 46.54	−44 22 30.1	8.55	H	294.693 896 43	−44.375 025 54	12.55	6.07	−27.34	1.24	0.99	1.50	2.06	1.42	+	0	−31	−48	+44	−	2	−27	−33	−	3	+25	−55	0	0.01
96627	19 38 46.69	−45 15 47.8	10.28	G	294.694 533 27	−45.263 278 78	11.93	−41.74	−127.08	1.99	1.51	2.06	2.92	2.27	−16	−19	+	7	+23	−	3	−11	−	5	+15	+15	−16	0	−0.52
96628	19 38 47.07	−62 53 23.2	8.42	G	294.696 124 88	−62.889 788 82	5.08	9.75	21.63	0.77	0.67	1.13	0.95	1.05	+10	−12	−	4	+24	−	7	−11	−	4	−	1	−	5	+30	0	−0.66
96629	19 38 47.14	+00 36 20.5	8.30	G	294.696 428 71	+00.605 683 90	3.32	7.25	−10.00	1.11	0.64	1.31	1.43	0.55	+18	−17	−21	+16	+	5	+16	−11	−44	+25	−	7	0	1.37
96630	19 38 48.99	+03 22 53.5	6.36	H	294.704 128 52	+03.381 521 87	−0.33	1.30	0.22	0.74	0.41	0.83	1.05	0.42	−34	−	9	−11	+12	−	4	+16	−	3	−34	+10	−38	0	0.35
96631	19 38 50.02	+33 20 46.7	7.75	G	294.708 396 85	+33.346 294 87	6.16	12.07	−20.70	0.53	0.55	0.71	0.58	0.61	−	2	+10	−10	+30	+15	+	3	+16	+10	−	7	+	5	0	−1.49
96632	19 38 50.46	+10 52 57.8	8.77	2 H	294.710 269 66	+10.882 721 38	7.44	−17.97	16.81	0.78	0.59	1.37	1.01	0.69	+	6	+	4	−12	+27	−18	+46	−14	−	7	+	6	+10	0	0.05
96633	19 38 51.00	−30 56 21.4	10.32	G	294.712 484 87	−30.939 269 87	4.01	21.47	−46.47	1.97	1.31	1.98	2.07	1.60	−	7	−36	−11	−22	+26	−	9	+26	−14	−	6	+	1	0	−0.80
96634	19 38 51.16	+43 52 28.2	9.15	H	294.713 183 01	+43.874 498 67	22.34	−104.83	−322.20	0.76	0.76	0.88	0.79	0.88	−	9	−12	+	6	+11	+13	−11	+15	+16	+	0	+	0	0	−0.69
96635	19 38 51.43	−25 52 17.4	9.11	2 G	294.714 311 66	−25.871 507 84	28.29	133.09	−245.03	1.31	0.68	1.40	1.74	1.33	+56	−	8	+	9	+17	+14	+15	+	2	−18	−16	+18	0	0.80
96636 H	19 38 51.56	+51 50 03.6	8.31	G	294.714 825 14	+51.834 338 37 A	5.26	−13.15	−38.54	1.45	1.22	1.20	1.22	1.06	+	0	−	2	+	8	+20	+15	+	3	+15	+	4	−	3	+11	1	0.90
96637	19 38 52.01	+15 44 10.5	9.04	2 H	294.716 691 49	+15.736 237 42	2.42	−1.82	−13.28	0.81	0.73	1.22	1.07	0.92	+	5	−	9	+11	+	9	−23	+	0	−28	−18	+	8	−15	0	−2.05
96638	19 38 52.16	−30 16 51.9	7.79	H	294.717 330 29	−30.281 078 48	0.29	5.20	−7.62	1.36	0.83	1.20	2.14	1.24	−34	−24	−17	−36	+38	+	5	+41	−25	−	5	−63	0	0.69
96639	19 38 52.85	−38 53 38.8	8.49	H	294.720 214 49	−38.894 119 79	10.82	8.27	−22.73	1.15	0.85	1.24	1.48	1.16	+	4	−24	−19	+14	−	7	−	7	−13	+14	+22	−	8	0	−0.17
96640	19 38 53.33	−47 30 52.7	8.91	H	294.722 189 53	−47.514 651 85	8.34	−38.47	−55.21	1.52	0.98	1.45	1.87	1.30	−	9	−30	−12	−10	+12	+17	−11	−	9	+	2	−	6	0	−0.21
96641 H	19 38 53.87	−42 07 05.4	9.56	H	294.724 478 86	−42.118 174 68 A	2.60	−18.64	−1.39	6.01	3.72	4.53	9.27	6.12	+17	−28	−	8	−	8	−	7	+	3	−	7	−12	+	2	−24	1	1.13
96642	19 38 55.04	+42 01 23.6	9.69	H	294.729 315 30	+42.023 217 72	4.39	7.66	45.38	0.80	0.85	0.99	0.95	1.06	−	1	−	5	+	6	−	5	+	9	−	5	+	9	+	5	−	6	−14	2	−0.54
96643	19 38 55.80	−10 20 02.5	9.48	G	294.732 517 76	−10.334 028 71 B	29.48	1.98	−8.11	42.68	25.50	26.57	30.29	16.42	+26	−23	+	5	−13	+	3	+12	+	2	−23	+	3	+33	1	0.30
96644	19 38 56.21	−28 36 25.9	6.72	1 H	294.734 213 11	−28.607 206 50	4.15	9.71	−3.97	0.86	0.53	0.84	0.92	0.78	+13	−	5	−14	−11	+40	−	5	+45	+14	+22	+15	2	1.44
96645	19 38 56.46	−27 22 17.2	8.07	H	294.735 234 23	−27.371 437 77	3.88	−0.31	−20.39	0.99	0.50	1.07	1.09	0.87	+29	−36	−	7	−	8	+	8	+17	+12	−	7	+	6	+25	0	1.06
96646 T	19 38 56.50	−10 20 20.6	8.08	G	294.735 412 66	−10.339 066 38 A	9.02	−2.73	−9.74	2.79	1.72	2.40	2.76	1.57	+20	−27	+	2	−22	+	3	+19	+	1	−24	+	4	+29	1	0.30
96647	19 38 57.74	+28 30 46.7	10.59	3 H	294.740 564 64	+28.512 964 30	3.96	5.97	−6.96	0.72	0.97	1.41	0.90	1.19	−	11	−	3	−10	+19	−	4	−32	−	4	−13	+12	+	0	0	−0.64
96648	19 38 57.96	+32 33 43.5	7.86	H	294.741 496 97	+32.562 091 60	3.23	−2.37	−7.04	0.50	0.55	0.74	0.58	0.58	−13	+	2	+	2	+24	+	6	−	4	+	9	−16	−	5	−	4	0	0.24
96649	19 39 00.28	+25 15 43.0	8.72	H	294.751 163 81	+25.261 942 76	−0.11	−1.38	2.29	0.64	0.82	1.19	0.69	1.07	−	3	−	2	−17	+44	−	5	+	3	−	4	+	3	+21	+	3	0	1.39
96650	19 39 01.18	−41 07 41.0	8.35	H	294.754 914 69	−41.128 058 89	8.90	−33.91	−65.68	1.31	1.04	1.44	1.90	1.73	+19	−12	+	1	+	8	−28	−31	−21	−24	−35	+40	0	−0.60
96651	19 39 02.26	+32 45 31.8	8.70	H	294.759 413 39	+32.758 819 54	3.53	−0.96	−6.38	0.63	0.69	0.97	0.71	0.84	−	2	−16	+	0	+20	+12	−10	+14	+	7	−18	+	4	0	1.51
96652	19 39 03.29	+51 06 16.3	8.02	G	294.763 719 93	+51.104 531 46	6.75	2.84	3.40	0.58	0.54	0.63	0.62	0.59	−	9	−17	+15	−	3	+14	+10	+13	−	7	+	3	+	7	0	0.32
96653	19 39 03.40	+02 26 29.5	9.02	H	294.764 148 67	+02.441 528 96	0.56	−3.61	1.48	1.08	0.64	1.26	1.35	0.62	−	7	−25	+10	+	7	−	1	+	2	−	7	−34	+	7	−18	2	0.64
96654	19 39 04.78	−08 26 35.4	9.28	H	294.769 919 53	−08.443 160 57	2.70	1.53	−0.71	1.10	0.69	1.21	1.11	0.57	+27	−19	−21	−26	−	6	+24	−	7	−47	+18	+28	0	1.79
96655	19 39 05.58	+54 10 52.9	7.88	H	294.773 256 91	+54.181 366 48	7.55	24.12	16.48	0.65	0.55	0.66	0.81	0.64	+	4	−18	−	1	+	9	+	3	+	4	+	1	−	9	+18	1	−0.47
96656 H	19 39 05.98	+76 25 18.0	8.04	H	294.774 917 70	+76.421 679 65 *	33.28	158.23	141.39	1.21	2.56	0.69	1.21	2.03	+54	−	3	+	4	−	5	+10	+	4	+42	+26	−10	+	6	0	1.88
96657	19 39 06.06	−13 40 10.9	7.85	H	294.775 246 80	−13.669 708 33	4.19	−0.52	−10.10	0.88	0.57	0.95	0.94	0.53	+	4	−	7	−11	−15	+23	+	7	+21	−25	+17	+26	0	1.11
96658	19 39 06.21	−76 05 05.1	8.79	H	294.775 881 56	−76.084 763 30	3.27	19.15	−28.87	0.65	0.61	0.93	0.82	0.84	+	3	−10	−	1	+	6	−	4	−	2	−	5	−	7	−	3	+	0	1	−0.12
96659	19 39 07.56	+40 37 36.7	7.76	H	294.781 492 20	+40.626 848 96	0.35	−2.62	−3.75	0.53	0.58	0.70	0.56	0.66	+	1	−13	−16	+	1	−	2	−20	−	4	+	7	−19	+	7	3	−1.07
96660 H	19 39 10.05	+35 55 42.7	9.03	H	294.791 860 84	+35.928 531 85 A	5.21	18.76	14.23	1.06	1.18	1.30	1.12	1.25	+	6	−23	+	0	+32	+	1	−28	+	7	+14	−10	+	4	2	−0.40
96661	19 39 10.19	+43 50 22.2	7.97	G	294.792 446 45	+43.839 513 25	2.32	2.16	−5.39	0.52	0.54	0.62	0.55	0.61	−	6	−	5	+11	+15	+11	−	7	+14	+	9	+	6	+	6	0	0.04
96662	19 39 10.36	+68 39 09.0	6.78	H	294.793 152 80	+68.652 503 36	6.40	−23.45	22.40	0.53	0.48	0.56	0.66	0.65	+	2	−28	+	8	−15	+16	+22	+14	−	7	+	1	+	0	0	0.85
96663	19 39 10.63	+02 19 56.1	9.12	H	294.794 295 69	+02.332 247 50	0.85	−0.90	−1.82	1.12	0.65	1.31	1.36	0.61	+	0	−31	+12	+	2	−	1	+	6	−	7	−35	+	8	−	6	0	1.11
96664	19 39 10.93	−37 36 55.5	9.52	H	294.795 549 87	−37.615 421 37	2.74	−2.54	−20.85	1.54	1.29	2.06	2.42	1.61	−	5	−18	−52	+31	+	8	−33	−16	+	7	+34	−44	0	1.77
96665	19 39 11.64	+05 23 52.0	5.18	2 H	294.798 500 93	+05.397 782 41	4.78	2.08	−3.78	0.70	0.40	0.82	0.91	0.42	−36	−19	−17	−23	+23	+13	+16	−47	+21	−51	0	−0.55
96666 H	19 39 12.38	−16 54 34.2	7.45	H	294.801 592 75	−16.909 494 51 B	9.99	25.69	25.90	8.00	5.11	3.85	4.67	3.00	+10	−33	−17	−	5	+31	−	8	+23	−	9	+	5	+16	4	0.68
96667 H	19 39 12.96	−16 54 28.6	7.32	H	294.803 984 19	−16.907 936 33 A	8.41	30.48	24.21	3.56	2.26	2.93	3.36	2.10	+18	−32	−18	−	6	+20	−	8	+15	−20	+	4	+23	4	0.68
96668	19 39 13.07	−03 10 21.8	8.95	H	294.804 471 43	−03.172 714 19	4.77	0.51	−8.71	1.24	0.67	1.38	1.47	0.56	+25	−37	−20	+15	+	1	−	1	−18	−47	+25	−	2	0	0.11
96669	19 39 13.97	+47 42 05.1	8.63	G	294.808 224 41	+47.701 418 21	4.53	2.63	−14.08	0.69	0.58	0.72	0.79	0.65	−	1	+	7	+	9	+10	+10	+	4	+	9	+	9	−	3	+	0	1	1.45
96670	19 39 14.07	+37 02 37.9	8.29	H	294.808 639 87	+37.043 870 15	2.38	12.89	1.79	0.54	0.66	0.79	0.64	0.76	+	7	−	7	−14	+12	+	9	−	3	+	7	+	3	+23	+21	0	−1.44
96671	19 39 14.16	+18 41 01.8	7.50	H	294.809 005 95	+18.683 830 94	0.38	0.21	−4.59	0.50	0.50	0.80	0.51	0.53	+11	−18	−	8	−26	−	4	+14	−	4	−23	+	4	+	3	0	0.54
96672 H	19 39 14.23	+76 33 38.6	8.08	G	294.809 270 99	+76.560 725 72 A	4.44	11.45	40.02	1.09	0.95	0.88	0.94	0.78	−12	−20	+	5	−21	+	8	+	2	+	9	−15	−	4	+	1	0	−0.04
96673	19 39 14.59	−02 36 43.4	10.29	G	294.810 795 25	−02.612 062 02	8.20	215.25	−147.42	1.60	0.78	1.71	1.72	0.78	+11	−44	−	8	−16	−	2	+10	+	7	−41	+10	+	4	0	−0.19
96674	19 39 15.05	−24 10 41.8	9.08	H	294.812 704 90	−24.178 278 53	7.68	13.06	−12.24	1.12	0.66	1.20	1.19	1.04	+49	−52	−26	−	8	−10	+13	−15	−24	+14	+37	0	−2.02
*96675	19 39 15.42	−81 18 09.3	10.32	H	294.814 241 12	−81.302 584 12	3.16	18.62	−46.93	0.98	1.05	1.30	1.19	1.31	−11	−19	−	2	+	2	+	8	−12	+	6	+16	+11	−12	3	−0.74
*96676	19 39 15.24	−66 03 23.1	8.61	H	294.813 508 72	−66.056 424 49	1.80	29.56	−20.04	0.88	0.83	1.30	1.01	1.24	−17	−27	−	5	+	3	−12	−	3	−22	+	3	+34	−48	0	−1.57
96677	19 39 18.62	−56 18 49.7	8.24	G	294.827 602 68	−56.313 795 49	5.14	18.65	−20.92	0.77	0.61	0.95	1.07	0.89	+	5	−16	−	1	+	8	+15	+11	+17	+	5	−	5	+18	0	0.55
96678	19 39 18.78	−59 51 29.6	8.84	H	294.828 238 49	−59.858 229 55	8.55	13.66	−18.16	0.83	0.58	1.10	0.96	0.97	+	0	−25	+	1	+39	−	9	−	2	−	2	−	5	+20	+32	0	1.21
*96679	19 39 19.21	+44 26 10.9	7.01	H	294.830 057 32	+44.436 357 13	6.68	3.59	−45.04	0.52	0.45	0.57	0.54	0.52	−16	−10	+11	+25	+	3	−	7	+	3	+	9	−	8	−13	0	1.50
*96680	19 39 19.17	−45 25 41.5	7.48	G	294.829 880 32	−45.428 191 66	14.53	38.89	−43.87	1.04	0.77	1.06	1.44	1.06	−13	−14	−12	+21	−	7	−	5	−	9	+	3	+	8	−17	0	1.39
96681 H	19 39 19.42	−77 11 33.5	9.69	H	294.830 912 50	−77.192 626 17 A	1.49	5.42	−13.63	1.54	1.80	1.76	1.24	1.77	−	6	−10	+10	−	9	+	5	+	2	+	3	−	9	+10	−30	1	−0.44
96682	19 39 20.67	+10 23 16.4	8.55	2 H	294.836 126 31	+10.387 901 14	0.41	−3.14	−3.45	0.82	0.59	1.20	1.03	0.69	+	2	+13	−22	+41	−36	+37	−35	−10	−	3	−	6	0	−0.75
96683	19 39 22.60	+30 09 11.6	4.68	H	294.844 184 56	+30.153 233 50 +	13.00	1.95	36.07	0.55	0.41	0.59	0.40	0.46	+12	+29	+	9	−34	−	2	−19	−16	−24	−	8	+	3	1	1.59
96684	19 39 23.28	−01 28 04.7	8.44	H	294.847 018 63	−01.467 958 76	3.90	1.15	−2.62	1.10	0.60	1.20	1.28	0.47	−	3	−18	−16	−16	+16	+	7	+	7	−58	+18	−11	3	−0.93
96686	19 39 24.08	−69 20 16.4	6.95	H	294.850 331 12	−69.337 888 86	7.20	12.59	3.15	0.36	0.52	0.82	0.44	0.65	−29	−	6	−18	+22	+11	−	9	+	9	−20	+11	−31	0	−0.16
96687	19 39 24.93	+29 55 29.1	8.22	2 H	294.853 866 29	+29.924 738 62	2.07	−10.46	−8.76	0.54	0.69	0.96	0.59	0.72	−	9	+	4	+12	+12	+14	+	3	+15	−19	−	8	+	0	0	1.45
*96688	19 39 25.34	+16 34 16.1	6.37	2 H	294.855 566 76	+16.571 136 26	1.42	0.29	−6.41	0.51	0.47	0.77	0.54	0.50	+10	−15	−	4	−15	−17	+16	−19	−24	+	1	−10	0	−1.03
*96689	19 39 25.24	−00 50 25.1	10.39	G	294.855 169 30	−00.840 311 33	20.53	56.47	−145.27	1.76	1.07	1.96	1.92	0.92	+13	−	3	+15	−30	+	0	+	2	−	3	−51	−	6	+	8	0	0.61
96690	19 39 25.88	−30 10 06.9	10.17	H	294.857 824 08	−30.168 578 19	8.23	−4.25	0.20	2.27	1.38	2.16	3.92	2.20	−29	−29	−12	−13	+21	−15	+17	−47	+21	+63	0	0.23
96691 H	19 39 26.31	+22 15 23.2	7.39	G	294.859 614 88	+22.256 451 88 A	6.64	4.07	16.93	1.81	1.79	1.65	1.47	1.43	+26	−	6	−12	−	2	+	3	−	8	+	2	−	6	+24	+32	1	−0.76
96692	19 39 26.39	+20 02 05.0	9.65	H	294.859 951 35	+20.034 716 49	−3.67	11.86	−4.37	0.83	0.94	1.41	1.01	1.11	+	1	−12	−14	−	7	−11	+10	−10	−13	−	6	−15	0	1.01
96693	19 39 26.47	+42 49 05.6	5.41	H	294.860 276 86	+42.818 211 58	4.76	23.75	27.26	0.42	0.42	0.49	0.44	0.46	−	6	−	1	+	1	+	7	+15	+	0	+16	+	9	+	6	+	4	1	−1.65
96694	19 39 28.82	−41 11 08.7	7.84	H	294.870 070 16	−41.185 750 05	3.49	10.22	−34.28	1.13	0.85	1.23	1.39	1.16	+	8	−33	−10	+24	−12	−	8	−10	+	0	−13	+	1	0	0.44
96695	19 39 28.95	+37 41 01.3	8.89	G	294.870 624 57	+37.683 683 52	1.33	0.97	0.20	0.61	0.66	0.80	0.64	0.77	−	2	+	6	−	8	−	3	+13	−	3	+12	+13	+	9	+12	0	−1.22
96696	19 39 29.51	+47 26 48.9	8.95	H	294.872 965 21	+47.446 913 68	3.44	−28.14	−9.66	0.74	0.64	0.77	0.77	0.72	−	4	+	6	+	4	−	6	+19	−	8	+20	+	2	+	4	+	1	0	−0.03
96697	19 39 29.77	+30 24 29.8	7.17	H	294.874 033 13	+30.408 290 25	2.30	0.61	−8.69	0.41	0.50	0.68	0.50	0

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
96601	7.825	0.008	6.612	0.005		1.037	0.007	T	1.01	0.01	L	6.6658	0.0008	0.008	98		6.66	6.68					1							S
96602	8.951	0.012	7.773	0.008		1.010	0.011	T	0.99	0.01	L	7.8220	0.0015	0.015	143		7.80	7.85					1							
96603	7.573	0.008	7.291	0.007	*	0.278	0.005	G	0.32	0.02	A *	7.2965	0.0009	0.008	106	*	7.28	7.31		D	19384+0021	I 1	2 C A	AB	114	0.905	0.007	1.91	0.02	S
96604	8.737	0.011	8.685	0.014		0.120	0.015	G	0.13	0.01	H	8.6829	0.0019	0.020	98		8.66	8.72					1							
96605	10.760	0.053	9.799	0.033		0.832	0.048	T	0.85	0.04	L	9.8774	0.0027	0.019	105		9.84	9.91		C			1							
96606	9.604	0.027	9.102	0.026	A	0.500	0.495	G	0.50	0.06	L *	9.0087	0.0015	0.014	51	*	8.98	9.03		D	19384−3602	I 1	2 C A	AB	96	2.035	0.010	1.55	0.05	
96607	7.432	0.005	6.295	0.003		0.973	0.005	G	0.96	0.00	H	6.3582	0.0007	0.009	201		6.34	6.37					1							S
96608	7.692	0.006	7.533	0.006		0.145	0.008	T	0.16	0.01	L	7.5318	0.0012	0.013	141		7.51	7.56			19385+1715	I 1	1 G							S
96609	9.164	0.013	7.659	0.007		1.266	0.012	T	1.22	0.01	L	7.6861	0.0011	0.011	134		7.67	7.71		M			1							
96610	6.873	0.005	6.804	0.006		0.062	0.007	T	0.07	0.01	L	6.8165	0.0009	0.008	115		6.80	6.83		C			1							S
96611	9.871	0.035	9.254	0.031		0.574	0.041	T	0.65	0.04	L	9.3244	0.0034	0.020	52		9.29	9.36		C			1							
96612	8.246	0.007	7.988	0.008		0.246	0.010	T	0.28	0.01	L	8.0344	0.0012	0.017	240		8.01	8.06					1							S
96613	9.687	0.029	8.483	0.019		1.030	0.027	T	1.00	0.02	L	8.5254	0.0021	0.014	51		8.51	8.55		C			1							
96614	8.982	0.011	8.315	0.010		0.608	0.011	T	0.68	0.01	L	8.3950	0.0013	0.015	130		8.37	8.43		C			1							S
96615	9.635	0.018	8.421	0.012		1.110	0.015	G	1.07	0.02	H	8.4453	0.0018	0.021	113		8.42	8.48					1							
96616	10.597	0.036	8.622	0.013	*	0.713	0.126	G	1.49	0.07	M *	8.4797	0.0039	0.027	102	*	8.43	8.53		U 2	19386+6329	H 1	2 C S C	AB	141	0.147	0.019	0.08	1.11	
96617	7.293	0.006	7.288	0.007		0.009	0.008	T	0.03	0.01	L	7.2998	0.0011	0.011	122		7.28	7.32		C	19386+2303	I 1	1							S
96618	7.698	0.007	7.609	0.008		0.087	0.010	T	0.10	0.01	L	7.6268	0.0011	0.012	157		7.61	7.65		C			1							S
96619	7.290	0.005	7.225	0.006		0.065	0.007	T	0.07	0.01	L	7.2376	0.0012	0.011	152		7.22	7.26		C			1							S
96620	6.445	0.004	5.944	0.003		0.482	0.004	T	0.55	0.00	L	5.9926	0.0006	0.006	97		5.98	6.09		P 1 A			1							S
96621	8.916	0.011	8.832	0.014		0.083	0.017	T	0.10	0.02	L	8.8486	0.0014	0.016	123		8.83	8.88		C			1							
96622	6.935	0.007	6.573	0.007	*	0.342	0.015	G	0.40	0.02	H *	6.6798	0.0010	0.009	95	*	6.67	6.70		D	19387−1009	I 1	2 C A	AB	325	3.815	0.009	2.02	0.03	S
96623	8.806	0.011	7.574	0.007	*	1.052	0.010	T	1.02	0.01	L *	7.6198	0.0012	0.011	119	*	7.60	7.64		D	19388+2307	H 1	2 C A	AB	243	0.279	0.024	2.58	0.24	
96624	9.408	0.010	9.433	0.014		−0.021	0.015	T	0.00	0.01	L	9.4471	0.0022	0.029	261		9.39	9.50					1							
96625	9.418	0.014	8.139	0.009		1.089	0.013	T	1.05	0.01	L	8.1986	0.0018	0.017	108		8.16	8.23					1							S
96626	9.215	0.021	8.610	0.019		0.563	0.021	T	0.64	0.02	L	8.6744	0.0016	0.013	53		8.65	8.70		D			1							
96627	10.912	0.091	10.080	0.069		0.630	0.020	G	0.70	0.02	H	10.4189	0.0074	0.031	44		10.38	10.47					1							G
96628	8.771	0.011	8.436	0.012		0.333	0.003	G	0.39	0.00	H	8.5031	0.0018	0.018	116		8.48	8.54					1							S
96629	10.519	0.030	8.509	0.011		1.710	0.004	G	1.79	0.02	A	8.4026	0.0018	0.014	98		8.38	8.44					1							
96630	6.357	0.004	6.361	0.004		0.001	0.005	T	0.02	0.01	L	6.3678	0.0008	0.009	135		6.35	6.38					1							S
96631	8.182	0.009	7.779	0.009		0.367	0.005	G	0.43	0.01	H	7.8344	0.0013	0.013	133		7.81	7.86		C			1							S
96632	9.161	0.014	8.816	0.015		0.403	0.015	G	0.47	0.02	H	8.8566	0.0027	0.028	136		8.80	8.90		U 2			1							
96633	10.884	0.071	10.285	0.062		0.540	0.015	G	0.61	0.02	H	10.4399	0.0045	0.027	51		10.36	10.49		C			1							G
96634	10.204	0.030	9.278	0.022		0.805	0.029	T	0.83	0.02	L	9.2924	0.0020	0.021	121		9.26	9.32		C			1							
96635	10.216	0.033	9.156	0.021		0.872	0.006	G	0.92	0.01	H	9.2266	0.0031	0.032	114		9.20	9.32		U 2			1							
96636	9.076	0.013	8.481	0.012	*	0.596	0.015	G	0.67	0.01	H *	8.4277	0.0015	0.015	142	*	8.40	8.45		D	19389+5150	I 1	2 C A	AB	270	0.939	0.004	0.90	0.02	
96637	11.518	0.100	9.421	0.025		1.774	0.085	T	2.85	0.90	K	8.9872	0.0143	0.089	102		8.77	9.08		U 2			1 S							
96638	7.907	0.011	7.816	0.013		0.089	0.016	T	0.10	0.02	L	7.8255	0.0023	0.013	52		7.81	7.85					1							S
96639	9.053	0.020	8.533	0.019		0.498	0.021	T	0.57	0.02	L	8.6031	0.0017	0.012	49		8.55	8.62					1							
96640	9.475	0.026	8.969	0.025		0.486	0.027	T	0.56	0.03	L	9.0212	0.0024	0.025	46		8.98	9.07					1							
96641	10.360	0.054	9.930	0.062	*	0.420	0.066	T	0.49	0.07	L *	9.6491	0.0035	0.026	39	*	9.61	9.69		D	19389−4207	I 1	2 C A	AB	187	1.075	0.010	0.23	0.03	
96642	10.293	0.031	9.732	0.029		0.525	0.038	T	0.60	0.04	L	9.8095	0.0020	0.024	133		9.76	9.86		C			1 G							G
96643	9.981	0.033	9.544	0.035	B	0.462	0.033	G	0.53	0.04	H	10.0020	0.1246			B				D	19389−1021	I 2	1 C I D							D
96644	6.615	0.007	6.700	0.010		−0.073	0.011	T	−0.05	0.01	L	6.7009	0.0038	0.023	77		6.67	6.73	1.74	P 1 A			1							S P
96645	9.580	0.019	8.206	0.011		1.163	0.017	T	1.12	0.01	L	8.2380	0.0012	0.010	101		8.22	8.26		C			1							
96646	8.308	0.013	8.089	0.014	A	0.218	0.036	G	0.24	0.04	H	8.1446	0.0275	0.024	89	A	8.10	8.19		D	19389−1021	I 2	1 C P D							S D
96647	11.681	0.114	10.511	0.068		1.010	0.109	T	5.00	0.96	Q	9.4858	0.0705	0.542	164		8.93	10.35	287.30	P 1 B			1 S							G P
96648	7.926	0.007	7.847	0.008		0.078	0.010	T	0.09	0.01	L	7.8895	0.0012	0.012	141		7.86	7.91		C			1							S
96649	8.753	0.013	8.709	0.016		0.045	0.019	T	0.06	0.01	L	8.7419	0.0016	0.018	152		8.71	8.78					1							
96650	9.759	0.030	8.489	0.019		1.082	0.028	T	1.04	0.02	L	8.5204	0.0032	0.016	48		8.49	8.54		C			1							
96651	8.722	0.011	8.689	0.014		0.035	0.016	T	0.05	0.01	L	8.7241	0.0018	0.020	132		8.69	8.76					1 G							
96652	8.661	0.012	8.085	0.011		0.538	0.011	G	0.61	0.01	H	8.1439	0.0014	0.012	112		8.12	8.17					1							S
96653	9.454	0.017	9.040	0.017		0.391	0.022	T	0.46	0.02	L	9.1140	0.0022	0.020	108		9.09	9.15		C			1							
96654	9.374	0.017	9.280	0.021		0.092	0.025	T	0.10	0.03	L	9.3137	0.0024	0.015	99		9.29	9.35		C			1							
96655	8.499	0.013	7.944	0.010		0.544	0.015	G	0.62	0.01	H	7.9985	0.0013	0.014	112		7.97	8.02					1							S
96656	9.169	0.014	8.157	0.010	*	0.881	0.005	G	0.92	0.01	H *	8.2024	0.0013	0.010	112	*	8.19	8.21		D	19391+7625	I 1	2 C A	AB	116	0.159	0.008	0.68	0.28	
96657	9.223	0.016	7.979	0.010		1.061	0.015	T	1.03	0.01	L	8.0140	0.0011	0.010	90		8.00	8.03		C			1							
96658	8.916	0.010	8.796	0.012		0.109	0.014	T	0.12	0.01	L	8.8362	0.0018	0.023	160		8.80	8.88					1							
96659	7.606	0.007	7.713	0.011		−0.092	0.012	T	−0.07	0.01	L	7.7290	0.0012	0.011	108		7.70	7.75		C			1							S
96660	9.350	0.015	9.069	0.017	A	0.346	0.072	G	0.26	0.05	L *	9.0989	0.0024	0.022	120	*	9.07	9.15		C	19392+3556	H 1	2 C D	AB	217	2.367	0.100	4.30	0.38	D
96661	7.897	0.007	7.979	0.008		−0.070	0.010	T	−0.05	0.01	L	7.9670	0.0012	0.012	124		7.95	7.99					1							S
96662	7.876	0.007	6.888	0.006		0.865	0.007	T	0.88	0.01	L	6.9380	0.0008	0.008	111		6.92	6.95		C			1 G							S
96663	9.227	0.017	9.148	0.022		0.078	0.026	T	0.09	0.03	L	9.1478	0.0019	0.020	102		9.12	9.19		C			1							
96664	10.148	0.037	9.578	0.034		0.537	0.037	T	0.61	0.04	L	9.6344	0.0027	0.021	51		9.60	9.66		C			1							
96665	5.175	0.003	5.178	0.004		−0.001	0.004	T	0.02	0.00	L	5.1849	0.0016	0.030	147		5.16	5.30	1.95	P 1 A	19392+0524	I 1	1							S
96666	7.728	0.018	7.414	0.017	B	0.446	0.107	G	0.25	0.04	L *	7.5504	0.0204			B				D	19392−1655	I 2	1 C I B							S
96667	7.626	0.011	7.334	0.011	A	0.324	0.100	G	0.29	0.04	L *	7.3956	0.0181	0.072	84	A	7.36	7.59		D	19392−1655	I 2	1 C P B							S
96668	9.594	0.016	9.022	0.016		0.535	0.020	T	0.61	0.02	L	9.0683	0.0025	0.018	110		9.04	9.10		C			1 S							
96669	8.797	0.012	8.644	0.014		0.142	0.002	G	0.16	0.00	H	8.6799	0.0019	0.015	92		8.65	8.70		C			1							
96670	9.547	0.016	8.396	0.011		0.989	0.015	T	0.97	0.01	L	8.4549	0.0018	0.016	125		8.43	8.48					1							
96671	7.679	0.006	7.521	0.007		0.152	0.009	T	0.17	0.01	L	7.5572	0.0009	0.011	143		7.54	7.57		C			1							
96672	8.714	0.010	8.188	0.009	*	0.505	0.015	G	0.58	0.02	H *	8.1925	0.0011	0.012	110	*	8.17	8.22		D	19392+7634	I 1	2 C A	AB	297	0.919	0.005	1.46	0.02	S
96673	11.032	0.056	10.412	0.051		0.665	0.002	G	0.73	0.00	H	10.4388	0.0026	0.026	123		10.40	10.48		C			1							G
96674	9.527	0.023	9.113	0.023		0.405	0.027	T	0.47	0.03	L	9.1739	0.0018	0.016	99		9.15	9.20		C			1							
96675	11.190	0.052	10.410	0.042		0.709	0.052	T	0.76	0.04	L	10.4657	0.0032	0.026	129		10.42	10.52		C			1							G
96676	9.884	0.021	8.724	0.014		0.996	0.020	T	0.97	0.02	L	8.7734	0.0023	0.019	112		8.74	8.81					1							
96677	8.563	0.010	8.244	0.011		0.324	0.015	G	0.38	0.02	H	8.3122	0.0017	0.019	125		8.28	8.35					1							S
96678	9.402	0.013	8.881	0.012		0.498	0.013	T	0.57	0.01	L	8.9474	0.0020	0.022	154		8.91	8.98					1							
96679	8.414	0.010	7.138	0.006		1.086	0.009	T	1.05	0.01	L	7.1768	0.0011	0.008	114		7.16	7.19		C			1 G							S
96680	7.965	0.014	7.549	0.010		0.391	0.008	G	0.46	0.01	H	7.5830	0.0016	0.014	42		7.56	7.60		C			1							S
96681	10.294	0.026	9.717	0.023	*	0.539	0.031	T	0.61	0.03	L *	9.8046	0.0022	0.026	155	*	9.75	9.87		D	19393−7712	H 1	2 C A	AB	57	0.482	0.021	2.58	0.08	
96682	10.772	0.041	8.808	0.014		1.664	0.036	T	2.66	0.05	O	8.5463	0.0080	0.062	134		8.48	8.65		U 2			1 S							
96683	5.920	0.003	4.787	0.002		0.971	0.001	G	0.89	0.03	C	4.8387	0.0006	0.006	169		4.83	4.85					1 O							S
96684	8.632	0.009	8.454	0.010		0.171	0.013	T	0.19	0.01	L	8.4962	0.0013	0.013	122		8.48	8.52		C			1							
96686	8.674	0.006	7.093	0.003		1.326	0.005	T	1.29	0.01	L	7.1052	0.0008	0.013	288		7.09	7.13					1							S
96687	10.483	0.039	8.437	0.013		1.732	0.034	T	2.41	0.06	O	8.2505	0.0030	0.034	165		8.20	8.31		U 2			1							
96688	8.993	0.010	6.601	0.004		1.918	0.015	G	2.27	0.03	C	6.4223	0.0049	0.036	126		6.37	6.47		U 2	19394+1634	I 1	1 S							S
96689	11.430	0.093	10.464	0.065		0.906	0.020	G	0.95	0.02	I	10.5429	0.0046	0.032	100		10.48	10.60					1							G
96690	11.117	0.106	10.289	0.076		0.730	0.100	T	0.78	0.07	L	10.3114	0.0067	0.032	48		10.26	10.37					1							G
96691	7.871	0.007	7.435	0.007	*	0.420	0.015	G	0.49	0.02	H *	7.4730	0.0010	0.010	110	*	7.46	7.49		D	19394+2215	I 1	2 C A	AB	17	0.354	0.003	0.47	0.03	S
96692	10.186	0.028	9.729	0.030		0.431	0.038	T	0.50	0.04	L	9.7469	0.0025	0.023	128		9.71	9.80		C			1 S							G
96693	5.325	0.002	5.399	0.003		−0.063	0.003	T	−0.04	0.00	L	5.3929	0.0005	0.005	124		5.38	5.40					1							S
96694	9.753	0.027	7.993	0.013		1.467	0.024	T	1.48	0.04	L	7.9771	0.0035	0.017	55		7.94	8.00					1							
96695	8.802	0.012	8.855	0.016		−0.060	0.015	G	−0.04	0.01	H	8.8730	0.0023	0.022	134		8.84	8.90					1							
96696	10.378	0.032	9.081	0.018		1.103	0.029	T	1.07	0.03	L	9.1224	0.0018	0.015	102		9.08	9.15		C			1							
96697	7.064	0.005	7.156	0.006		−0.079	0.007	T	−0.06	0.01	L	7.1468	0.0009	0.010	162		7.13	7.17		C			1							S
96698	10.935	0.075	9.870	0.046		0.880	0.020	G	0.89	0.01	H	9.9869	0.0043	0.023	46		9.96	10.04					1 S							
96699	10.352	0.041	9.402	0.030		0.837	0.038	T	0.86	0.03	L	9.3983	0.0021	0.020	113		9.35	9.43		C			1							
96700	9.412	0.013	7.822	0.007		1.333	0.012	T	1.30	0.01	L	7.8319	0.0012	0.013	149		7.81	7.85					1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
96701	19 39 33.10	−58 13 54.6	7.13	H	294.887 934 21	−58.231 821 05	11.32	64.56	13.22	0.50	0.37	0.77	0.58	0.65	−13	−16	+ 3	+38	−28	+ 5	−19	− 8	+11	+32	1	−0.10
96702	19 39 33.23	+71 52 23.0	10.94	G	294.888 437 53	+71.873 065 94	45.88	−190.42	−443.71	1.45	1.10	1.29	1.42	1.25	− 9	−23	+10	−50	+16	+10	+12	−14	+ 9	+ 0	0	0.61
96703	19 39 33.48	−40 49 02.9	9.52	H	294.889 489 16	−40.817 476 10	3.53	21.22	−12.75	1.68	1.29	2.14	2.63	2.13	+17	− 3	+ 2	− 6	−12	−55	−10	−22	−41	+45	0	−0.11
96704	19 39 33.61	+26 45 04.8	9.00	G	294.890 027 78	+26.751 346 09	6.88	17.47	−9.66	0.52	0.83	1.24	0.59	0.97	−22	− 6	+ 2	+12	− 4	+ 9	− 4	− 1	− 3	−16	0	0.38
96705	19 39 34.11	−70 22 59.8	9.29	H	294.892 107 91	−70.383 286 43	7.51	17.18	−33.86	0.71	0.92	1.53	0.79	1.18	−23	−11	−11	+ 2	+16	−13	+15	−22	+ 9	−25	0	1.43
96706	19 39 34.53	+45 57 26.6	6.25	H	294.893 862 16	+45.957 380 10	8.10	11.67	24.31	0.47	0.43	0.52	0.54	0.49	− 1	−20	+ 8	+ 9	+12	− 4	+12	+ 9	+ 0	+ 9	1	0.83
96707	19 39 34.60	−24 35 01.3	9.72	G	294.894 181 76	−24.583 702 12	9.93	−67.57	−162.07	1.46	0.91	1.58	1.75	1.59	+56	−41	−19	−17	−21	+26	−14	−29	− 2	+54	0	−0.44
96708	19 39 34.73	−69 36 08.8	6.95	H	294.894 723 66	−69.602 432 12	4.12	1.18	−11.59	0.33	0.53	0.81	0.41	0.67	−35	− 3	−12	+15	+10	− 9	+ 6	−22	+10	−43	1	−0.79
96709	19 39 35.20	+29 44 55.5	7.51	1 H	294.896 662 50	+29.748 749 08 A	3.46	−0.51	−3.16	0.79	0.97	1.25	0.86	1.00	+ 0	+ 0	+ 6	+17	+ 2	+ 3	+ 3	−12	− 2	+ 5	4	0.84
96710	19 39 35.93	−26 45 04.8	10.49	G	294.899 710 54	−26.751 319 85	44.84	369.39	−263.70	1.64	0.92	1.91	2.28	1.63	+33	−11	+ 0	+ 1	+10	+37	+14	− 6	− 8	+16	0	−0.37
96711	19 39 36.18	−64 32 07.7	7.18	H	294.900 731 08	−64.535 468 05	5.01	13.75	−54.38	0.57	0.50	0.83	0.64	0.67	−15	−26	− 9	− 3	−15	−12	−24	− 2	+33	−38	0	−1.41
96712	19 39 37.47	+20 46 58.4	8.25	H	294.906 104 33	+20.782 897 43	2.62	1.45	− 8.46	0.70	0.67	0.98	0.78	0.76	+ 3	−15	−21	−16	− 9	+ 9	− 8	−27	− 4	−12	0	0.44
96713	19 39 37.66	−39 29 29.2	8.80	H	294.906 926 28	−39.491 433 07	15.50	−28.46	−19.50	1.54	1.02	1.42	2.36	1.59	−23	−12	− 2	+41	−33	+ 3	−32	+29	−17	−41	0	0.24
96714	19 39 38.80	−06 03 49.2	8.28	2 H	294.911 683 65	−06.063 671 53	4.25	22.77	−27.82	1.05	0.58	1.11	1.19	0.52	+24	−27	−15	−16	− 4	+16	− 8	−46	+13	+20	4	0.85
96715	19 39 39.21	+66 28 04.6	8.02	H	294.913 389 55	+66.467 949 91	3.24	10.07	6.56	0.54	0.54	0.60	0.46	0.60	+ 6	−12	+10	−28	+19	+ 8	+12	+21	+ 6	+30	1	0.51
96716	19 39 39.29	−39 51 14.0	8.85	H	294.913 718 57	−39.853 889 80	6.12	−44.48	14.84	1.61	1.06	1.53	2.32	1.62	−18	−22	−13	+38	−36	+ 4	−31	+18	−24	−32	0	0.80
96717	19 39 39.44	+07 50 38.1	7.94	H	294.914 350 33	+07.843 909 40	5.25	19.94	20.02	0.91	0.55	1.07	1.26	0.54	− 4	−12	−12	+ 1	−17	+16	−19	−38	+ 3	−32	0	0.87
96718	19 39 40.21	−06 42 30.8	7.60	H	294.917 521 19	−06.708 556 93	9.32	21.08	−37.30	0.88	0.52	0.90	0.91	0.44	+27	−23	−10	−26	− 5	+16	− 9	−48	+16	+34	2	2.10
96719 H	19 39 41.33	−39 44 46.8	7.50	H	294.922 221 92	−39.746 331 47 A	4.78	−14.22	−47.81	1.66	1.24	1.46	2.15	1.46	+22	−14	−30	+32	−18	−12	−39	+ 2	− 7	− 7	1	0.42
96720	19 39 41.43	+14 02 53.4	10.66	H	294.922 624 72	+14.048 167 56	0.94	−3.38	−7.28	1.28	1.02	1.78	1.46	1.14	+16	−20	−11	+ 0	−30	+16	−31	−15	− 4	−13	0	−0.02
96721	19 39 41.80	−45 16 42.8	6.24	1 G	294.924 157 05	−45.278 565 26	10.05	−24.76	6.13	0.86	0.63	0.88	1.15	0.87	− 8	−30	−10	+27	− 7	− 8	−11	+13	+12	−19	3	−0.41
96722	19 39 41.90	+19 35 23.3	8.95	G	294.924 573 81	+19.589 802 12	−0.07	− 8.85	−21.19	0.78	0.72	1.13	0.97	0.85	− 1	−24	− 5	+ 2	− 8	+19	− 6	−13	− 5	−10	0	0.65
96723	19 39 44.21	−21 36 21.5	8.79	H	294.934 206 11	−21.605 973 36	−0.21	6.23	− 0.98	1.33	0.74	1.45	1.34	1.01	+33	−51	−31	−24	+ 6	+16	+ 6	−14	+14	+16	0	2.35
96724 H	19 39 44.92	+33 58 44.1	6.10	G	294.937 183 92	+33.978 908 36 A	6.88	− 3.62	12.23	0.48	0.53	0.60	0.48	0.58	+ 4	−17	+ 0	+21	+15	− 9	+14	+19	− 2	+ 9	4	1.27
96725	19 39 45.87	−48 11 33.9	9.04	G	294.941 105 69	−48.192 744 20	21.29	−35.73	−247.13	1.39	1.09	1.51	1.97	1.43	+14	−16	−23	+31	− 1	+ 7	− 5	+ 9	+15	− 6	0	0.40
96726	19 39 47.00	−19 13 50.2	7.83	G	294.945 842 49	−19.230 622 94	8.64	54.16	−19.94	1.01	0.64	1.07	0.95	0.77	+60	−60	−43	+ 9	+16	+ 5	+13	+10	+ 6	+46	0	1.80
96727	19 39 48.21	+38 53 48.0	8.77	G	294.950 865 84	+38.896 661 49	0.34	1.56	− 0.73	0.66	0.65	0.81	0.75	0.76	−14	+ 6	− 3	+17	+ 7	−18	+ 8	+ 9	+10	− 8	0	0.93
96728	19 39 48.64	−49 33 24.3	8.72	H	294.952 653 07	−49.556 758 93	3.16	26.00	−31.58	1.06	0.82	1.39	1.27	1.17	+35	−29	−28	− 8	+38	+ 1	+35	− 8	+24	+26	0	0.78
96729 H	19 39 49.46	−23 25 39.4	6.33	G	294.956 064 57	−23.427 610 00 *	8.03	7.98	−37.17	0.90	0.51	0.99	0.80	0.67	+45	−63	−33	+ 1	− 2	+ 4	−12	−16	+19	+30	0	0.07
96730	19 39 49.98	+25 30 55.7	8.85	H	294.958 244 82	+25.515 481 65	3.83	8.17	−14.76	0.72	0.97	1.40	0.77	1.24	− 4	−28	− 5	+47	− 4	−21	+ 0	− 2	+ 2	+ 7	0	−0.76
96731	19 39 50.25	−55 37 07.3	9.82	H	294.959 389 02	−55.618 685 21	2.90	−13.03	−16.75	1.19	0.97	1.53	1.69	1.50	+ 7	− 4	−14	+12	+36	− 1	+38	+ 5	+17	+25	2	0.27
96732	19 39 50.52	−58 09 11.4	7.32	H	294.960 495 79	−58.153 173 98	6.99	−13.62	19.51	0.58	0.43	0.82	0.67	0.68	−15	− 6	− 4	+48	−31	+ 7	−20	− 5	+ 5	+24	0	1.46
96733	19 39 51.34	+24 32 13.5	7.14	H	294.963 913 10	+24.537 084 75	3.57	− 7.54	−27.51	0.61	0.60	0.90	0.75	0.69	− 4	+ 4	−18	− 7	+ 1	+ 0	+ 2	−17	+14	− 6	0	−0.83
*96734	19 39 52.13	−66 41 07.5	6.37	H	294.967 210 53	−66.685 407 41	9.72	35.16	−40.34	0.59	0.49	0.74	0.68	0.68	−19	−13	+ 4	+ 0	−15	−15	−21	− 4	+22	−47	0	0.28
*96735	19 39 52.12	+45 09 33.0	9.18	H	294.967 179 56	+45.159 166 32	27.14	121.25	281.53	0.85	0.75	0.92	0.89	0.89	− 9	−14	+12	+12	+16	− 8	+21	+ 4	− 6	− 4	3	1.23
96736	19 39 52.28	−15 10 02.6	6.73	1 H	294.967 835 71	−15.167 375 40	5.13	9.28	−25.13	0.73	0.48	0.80	0.82	0.47	+26	−12	+ 1	+12	+21	+20	+20	− 8	+10	+35	2	0.48
96737	19 39 53.01	−53 18 35.5	8.87	H	294.970 865 31	−53.309 857 89	−0.19	1.49	− 4.08	0.93	0.68	1.19	1.35	1.12	− 9	− 8	− 4	−16	+37	− 8	+38	− 5	+ 3	+ 6	0	−0.37
96738	19 39 54.01	−14 50 57.5	7.59	G	294.975 054 63	−14.849 316 88	2.94	2.65	− 3.46	0.83	0.54	0.90	0.92	0.56	+38	−25	+ 3	+15	+26	+18	+19	+ 2	+18	+49	2	0.84
96739	19 39 55.49	−39 25 58.0	6.60	2 G	294.981 223 03	−39.432 775 51	11.84	43.28	−47.98	0.96	0.67	0.97	1.23	0.88	− 4	−23	−18	+16	−13	− 3	−14	+10	+ 1	−15	0	1.74
*96740	19 39 55.70	+19 23 59.1	8.04	G	294.982 099 25	+19.399 744 64	4.17	5.94	−25.33	0.60	0.59	0.92	0.71	0.67	+ 0	−22	− 8	− 8	+ 1	+25	+ 3	−14	− 2	− 1	1	0.89
*96741	19 39 55.69	−22 03 45.8	7.39	H	294.982 043 26	−22.062 728 32	3.35	2.25	−15.37	0.83	0.54	0.96	0.90	0.69	+41	−39	−34	− 6	+ 6	+17	+ 6	− 3	+18	+21	0	0.05
96742	19 39 56.50	+59 50 27.6	7.75	H	294.985 436 45	+59.841 004 26	5.68	23.08	19.90	0.56	0.53	0.57	0.58	0.60	+ 4	+ 0	+ 2	+14	+16	+ 2	+19	+ 1	+18	+19	0	0.42
96743	19 39 56.72	+52 05 41.1	8.40	H	294.986 340 96	+52.094 744 41	1.87	0.25	− 7.54	0.62	0.60	0.68	0.74	0.65	− 7	−15	+13	+10	+ 4	− 7	+ 4	+11	+ 0	+ 4	0	−0.41
96744	19 39 58.70	+21 34 05.0	8.33	H	294.994 582 42	+21.568 059 84	4.73	5.52	− 9.50	0.75	0.72	1.03	1.01	0.77	+ 0	− 6	−18	− 8	+ 2	+ 9	+ 2	−24	+ 9	− 7	0	−0.50
96745	19 39 59.26	+07 34 01.7	7.27	H	294.996 903 46	+07.567 149 54	6.04	4.15	5.64	0.88	0.53	1.03	1.18	0.52	−22	−16	− 6	+ 5	−11	+ 2	−12	−35	+16	−36	0	0.15
96746	19 40 02.65	−49 56 57.3	7.24	H	295.011 035 78	−49.949 243 10	6.70	− 9.88	−27.50	0.77	0.63	1.08	1.08	0.96	+32	−17	−34	− 7	+28	−14	+18	−30	+36	+11	0	0.53
96747 H	19 40 02.70	+55 45 14.6	9.12	G	295.011 252 85	+55.754 058 04 *	2.56	− 1.23	− 6.38	1.53	1.26	0.94	1.14	1.18	+ 7	+ 4	+ 2	+ 4	−10	−24	− 6	−18	+ 2	+12	2	−0.82
96748	19 40 02.76	−44 38 45.6	9.28	G	295.011 497 68	−44.646 001 24	7.19	17.93	−61.29	1.49	1.11	1.59	2.39	1.76	−14	−23	−13	+27	− 1	−21	− 8	+10	+19	−28	0	0.02
96749	19 40 03.29	−00 18 58.3	8.36	H	295.013 702 31	−00.316 204 29	7.73	14.70	− 2.89	1.02	0.56	1.17	1.14	0.44	+ 5	−22	+ 2	+12	+ 4	+10	− 3	−48	+11	− 1	0	−1.02
96750 H	19 40 03.37	−31 36 31.6	8.77	H	295.014 028 44	−31.608 772 83 A	1.01	1.19	−12.09	2.52	1.71	2.37	2.37	2.05	+41	−38	−25	− 3	+ 2	− 6	+ 5	− 6	−11	+39	4	1.46
96751	19 40 03.92	+40 52 02.3	9.07	H	295.016 338 71	+40.867 292 20	1.95	−1.50	− 7.92	0.74	0.75	0.91	0.83	0.92	+ 6	−10	+ 2	+ 1	+ 0	−19	+ 1	+20	+ 0	+ 7	1	−0.07
96752	19 40 04.98	−37 24 04.7	7.76	H	295.020 759 30	−37.401 297 76	1.15	− 7.75	− 7.16	1.10	0.78	1.20	1.25	0.94	+11	−35	−34	+22	+ 2	− 8	− 3	+18	+ 6	− 5	6	−0.15
96753	19 40 05.07	−14 02 40.6	7.17	H	295.021 125 28	−14.044 604 78	8.48	6.86	−28.46	0.81	0.57	0.85	0.92	0.61	+31	− 8	+10	−18	− 4	+ 7	− 1	−34	+ 1	+55	0	0.67
96754	19 40 05.33	−07 58 45.6	7.54	G	295.022 222 53	−07.979 319 83	19.14	65.33	−187.85	0.96	0.56	1.04	1.19	0.85	+27	−40	−18	−13	+ 6	+26	+ 5	−21	+10	+ 4	0	1.03
96755	19 40 05.50	+55 54 27.0	7.30	H	295.022 925 53	+55.907 512 28	5.85	42.67	− 8.59	0.53	0.57	0.61	0.64	0.68	+ 7	−12	+ 5	+ 6	− 8	−26	− 4	−25	+ 2	+19	0	−0.87
96756	19 40 05.54	+25 05 29.4	9.16	G	295.023 066 97	+25.091 507 40	3.69	−16.89	− 5.85	0.72	0.96	1.37	0.79	1.29	+ 2	− 5	− 5	+24	− 4	−13	− 4	−14	+13	+ 7	0	−0.59
96757	19 40 05.78	+18 00 50.2	4.39	H	295.024 093 94	+18.013 938 39	6.89	15.09	−19.72	0.42	0.40	0.69	0.45	0.43	+ 1	−14	+ 4	− 5	−12	+ 8	−15	−19	+ 2	−13	0	−0.80
96758	19 40 05.90	−34 07 46.7	8.64	H	295.024 593 61	−34.129 633 07	3.77	9.45	1.58	1.42	1.01	1.44	1.82	1.46	+27	−40	−25	+32	+14	−16	+18	+28	−21	+27	0	0.48
96759	19 40 06.89	+35 08 52.1	8.15	G	295.028 722 81	+35.147 807 29 A	1.82	1.92	− 5.97	0.80	0.95	1.06	0.83	1.00	− 1	+ 7	− 1	+15	+ 4	−14	+ 4	+ 5	− 4	− 1	1	−0.34
96760	19 40 07.15	−23 25 44.6	5.97	G	295.029 778 88	−23.429 054 63	7.86	29.69	−12.77	0.89	0.50	0.97	0.79	0.67	+44	−62	−32	+ 0	− 4	+ 5	−13	−18	+18	+32	0	1.29
96761	19 40 07.65	+53 41 04.5	9.54	G	295.031 865 05	+53.684 594 25	1.59	− 7.18	− 6.18	0.82	0.70	0.83	0.99	0.85	− 4	+ 3	+ 1	+19	+ 4	+16	+ 5	− 6	+ 6	+ 2	0	1.41
96762	19 40 07.76	+39 20 38.3	9.13	H	295.032 319 52	+39.343 974 16	2.85	− 7.70	− 4.29	0.72	0.76	0.89	0.85	0.92	− 6	+ 3	−21	+23	+ 6	−10	+ 5	+20	+ 3	− 5	3	−0.87
96763	19 40 09.91	−20 32 51.9	7.71	1 H	295.041 289 41	−20.547 760 57	3.58	4.19	− 9.70	1.01	0.68	1.33	1.29	0.92	+34	−32	−33	−10	− 7	+53	+13	+11	+ 8	+30	0	1.10
96764	19 40 10.31	−72 19 19.5	8.98	H	295.042 962 03	−72.322 080 76	2.23	−0.07	− 8.67	0.66	0.79	1.18	0.71	1.02	−15	−13	+ 0	+21	− 7	− 7	−12	+ 4	+18	−30	0	−0.54
96765	19 40 10.97	+17 53 57.3	7.33	H	295.045 717 72	+17.899 251 42	2.57	4.83	− 0.63	0.50	0.50	0.87	0.53	0.53	+12	−12	+ 3	−18	−12	+ 1	−13	−24	+11	+ 1	1	−1.54
96766	19 40 11.30	−40 52 32.0	9.44	G	295.047 067 40	−40.875 559 38	4.69	4.21	− 0.76	1.55	1.22	1.85	2.38	2.08	+17	− 8	+ 6	+ 0	−17	−46	−13	−17	−31	+45	0	0.03
96767	19 40 11.67	+23 53 05.9	7.50	H	295.048 611 93	+23.884 984 42	4.04	−10.58	− 1.34	0.73	0.61	0.97	0.97	0.72	+ 0	− 6	−22	+20	+ 2	+10	+ 4	− 8	+16	+ 6	0	0.05
96768	19 40 12.15	−38 07 55.3	8.89	H	295.050 627 65	−38.132 034 97	3.53	−15.68	1.31	1.52	1.19	2.07	2.88	1.52	+17	−35	−63	+43	+12	−43	−31	+ 1	+25	−55	0	0.98
96769	19 40 12.55	−11 39 42.8	8.76	H	295.052 275 49	−11.661 885 50	0.87	3.44	− 6.78	1.05	0.65	1.17	1.43	1.00	+21	−22	−19	−19	+19	+23	+22	−23	+16	− 8	5	0.41
96770	19 40 12.60	+35 14 55.9	8.23	G	295.052 493 35	+35.248 854 88	1.80	0.85	−13.27	0.58	0.66	0.82	0.64	0.72	− 3	− 1	−13	+17	+13	−19	+11	− 5	+ 6	− 4	0	−1.41
96771	19 40 13.19	+60 30 25.7	6.49	H	295.054 967 23	+60.507 130 97 A	8.33	3.27	− 6.93	1.19	1.04	0.93	1.22	1.13	+ 2	−29	− 8	+23	+ 6	− 2	+ 3	−11	+21	+19	2	1.51
96772	19 40 13.49	+26 59 43.2	7.32	H	295.056 196 96	+26.995 339 99	4.06	1.52	− 5.39	0.34	0.55	0.77	0.41	0.70	−21	+ 5	− 4	+14	− 4	− 1	− 4	+ 6	− 3	−19	1	−0.53
96773	19 40 14.30	+60 30 41.9	9.10	H	295.059 582 02	+60.511 652 14 B	17.84	−0.01	−51.75	26.87	29.50	9.98	21.84	24.42	+ 5	−33	− 2	+23	+ 8	− 1	+ 4	− 8	+20	+22	2	1.51
96774	19 40 14.31	+02 52 33.8	9.03	H	295.059 610 24	+02.876 045 27	−0.97	0.79	− 2.17	1.24	0.62	1.43	1.78	0.55	+ 8	+ 7	− 4	+15	+ 2	− 5	−13	−49	+24	−28	0	−0.91
96775	19 40 15.42	+39 40 58.5	8.88	H	295.064 264 87	+39.682 907 07	5.12	14.43	− 1.90	0.69	0.73	0.87	0.81	0.92	− 5	−11	−19	+ 6	+ 0	+11	+ 0	+20	+ 1	+ 3	0	−0.99
96776	19 40 15.99	+52 23 22.5	9.52	G	295.066 611 49	+52.389 588 54	1.12	3.39	3.33	0.79	0.75	0.85	0.87	0.83	− 4	− 6	+15	−10	+ 6	+ 3	+ 3	+12	− 7	+14	1	−0.26
96777	19 40 16.10	+55 47 38.1	7.35	H	295.067 064 05	+55.793 906 57	8.98	26.73	50.00	0.57	0.55	0.60	0.75	0.64	+ 9	− 3	+10	+20	− 8	−26	+ 2	−30	− 4	+26	2	−1.30
96778	19 40 16.59	−21 18 08.0	7.85	H	295.069 132 29	−21.302 233 18	2.10	5.04	− 5.91	1.00	0.58	1.11	0.99	0.78	+32	−52	−22	+ 2	+ 3	+19	+ 6	+ 4	+ 3	+26	2	1.34
96779	19 40 17.36	−16 52 41.1	8.65	H	295.072 329 47	−16.878 070 46	6.51	5.08	− 9.06	1.01	0.63	1.10	1.08	0.76	+35	−40	−18	+11	+22	+11	+18	+ 9	+13	+37	0	1.63
96780	19 40 17.42	+79 43 07.9	10.34	G	295.072 576 76	+79.718 866 25	10.55	191.72	188.90	1.02	0.98	1.09	1.08	1.28	− 1	− 8	+ 9	+ 7	− 1	−16	+ 1	−12	− 1	+ 4	0	0.88
96781	19 40 18.64	−54 25 03.9	6.24	H	295.077 679 96	−54.417 761 64	8.82	76.43	−11.84	0.54	0.49	0.77	0.74	0.72	+17	−21	− 8	− 4	+23	−16	+23	+ 1	+ 1	+19	0	−0.92
96782	19 40 21.11	−15 48 34.4	8.66	H	295.087 943 80	−15.809 560 63	1.41	− 1.62	− 4.09	1.20	0.73	1.27	1.23	0.84	+47	−40	−24	+22	+34	+15	+33	+22	+12	+53	0	−0.08
96783	19 40 21.30	−05 26 51.0	6.59	1 H	295.088 739 33	−05.447 494 01	2.84	1.05	− 9.29	0.87	0.44	0.99	0.98	0.40	+ 6	−28	− 6	− 7	+ 8	+32	+ 3	−38	+14	+ 4	0	1.17
96784	19 40 22.54	+16 20 00.2	7.42	H	295.093 926 97	+16.333 382 03	2.06	−0.30	− 9.76	0.61	0.53	0.86	0.74	0.58	+ 8	− 2	− 1	− 6	−27	+12	−26	−25	+ 3	+ 0	0	0.91
96785	19 40 23.73	−22 43 40.9	9.03	H	295.098 877 22	−22.728 022 86	13.74	−27.36	−190.17	1.28	0.74	1.42	1.43	1.06	+46	−53	−35	− 8	−11	+11	−15	−25	+ 6	+ 7	0	−0.20
96786	19 40 23.74	+23 28 48.3	7.09	H	295.098 928 34	+23.480 087 07	10.35	27.92	19.23	0.60	0.55	0.84	0.80	0.69	− 4	−11	−28	+12	− 7	− 1	−10	− 3	+21	−14	0	1.14
96787	19 40 25.17	+09 05 33.8	8.67	G	295.104 893 41	+09.092 724 66	−0.78	0.64	− 2.24	0.68	0.55	1.06	0.78	0.56	+35	+12	− 1	+16	−31	+28	−36	−32	− 5	+19	0	0.62
96788	19 40 25.60	+26 18 57.3	7.86	H	295.106 650 96	+26.315 928 76	3.36	5.05	7.66	0.38	0.62	0.89	0.43	0.75	−25	+ 1	− 9	+18	− 8	+ 1	− 8	+11	− 1	−18	2	−0.27
96789	19 40 28.32	+20 28 37.5	6.52	H	295.118 019 47	+20.477 089 07	1.15	0.84	− 6.07	0.52	0.52	0.78	0.58	0.56	− 1	−16	−12	−10	−10	+ 8	−10	−23	− 4	−11	0	−1.17
96790 H	19 40 29.96	−46 41 20.2	9.35	H	295.124 838 93	−46.688 932 88 A	2.22	11.97	−37.27	7.66	8.60	5.33	10.23	10.30	+17	−29	−23	+36	−24	+ 5	−28	+21	+12	− 1	0	1.39
96791	19 40 32.34	+21 34 34.3	7.65	H	295.134 740 94	+21.576 189 19	1.88	−2.35	− 7.40	0.66	0.58	0.87	0.81	0.69	+ 5	− 2	−16	−22	− 8	+ 5	− 7	−25	+ 9	− 8	0	0.56
96792	19 40 33.92	−21 15 11.0	8.19	H	295.141 329 13	−21.253 053 91	16.62	58.21	−35.45	1.06	0.66	1.26	1.12	0.85	+33	−37	−36	−16	− 2	+32	+12	− 4	+ 5	+28	7	1.37
96793	19 40 34.27	+05 27 02.5	8.14	H	295.142 773 15	+05.450 696 03	9.86	14.11	0.67	0.95	0.48	1.12	1.29	0.46	−30	−19	−13	+ 7	+ 0	+26	− 3	−41	+16	−38	0	−0.55
96794	19 40 34.38	−58 28 11.4	8.58	H	295.143 238 29	−58.469 827 56	1.11	14.07	− 7.32	0.75	0.57	1.12	0.85	0.97	−11	−16	+ 8	+43	−32	− 4	−23	− 6	− 2	+29	0	−0.13
*96795	19 40 34.83	+66 56 21.7	9.19	H	295.145 108 25	+66.939 370 34	0.90	− 3.44	− 5.38	0.82	0.75	0.86	0.79	0.89	+ 7	− 7	+12	−34	+ 6	+ 9	+ 0	+ 2	+17	+24	2	0.69
*96796 H	19 40 34.81	+62 39 52.5	7.36	G	295.145 028 05	+62.664 575 99 A	8.28	27.45	110.38	2.09	1.55	1.20	2.11	1.39	+11	+ 0	− 6	−14	+12	+10	+ 3	−16	+22	+23	2	−0.57
96797	19 40 35.79	+56 43 08.5	8.06	H	295.149 105 16	+56.719 026 59	3.28	5.08	0.64	0.55	0.55	0.61	0.64	0.65	+ 3	−22	− 1	+ 7	+ 6	+ 4	+ 3	− 3	+17	+18	0	−0.61
96798	19 40 35.90	+21 32 25.5	9.49	H	295.149 601 90	+21.540 407 02	3.23	12.60	4.19	0.97	0.91	1.31	1.21	1.03	+25	− 5	−13	−23	−12	− 1	−11	−21	+ 1	+ 8	2	−1.09
96799	19 40 38.17	+09 44 27.0	10.05	G	295.159 034 72	+09.740

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
96701	7.548	0.004	7.165	0.004		0.363	0.005	T	0.42	0.01	L	7.2152	0.0005	0.007	221		7.20	7.23		C			1 S							S
96702						1.480	0.015	G	1.95	0.09	I	11.0362	0.0037	0.029	101		10.97	11.08		C			1							G
96703	10.057	0.032	9.565	0.032		0.474	0.035	T	0.55	0.04	L	9.6303	0.0034	0.022	51		9.60	9.66		C			1							
96704	9.436	0.012	9.018	0.013		0.380	0.029	G	0.44	0.03	H	9.0922	0.0022	0.029	251		9.04	9.14		R			1 S							
96705	10.152	0.019	9.382	0.015		0.685	0.018	T	0.74	0.01	L	9.4301	0.0020	0.029	210		9.38	9.48		C			1							
96706	7.424	0.007	6.349	0.004		0.931	0.006	T	0.93	0.00	L	6.4115	0.0007	0.006	117		6.40	6.42		C			1							S
96707	10.465	0.042	9.737	0.035		0.638	0.015	G	0.70	0.01	H	9.8436	0.0020	0.017	90		9.82	9.88		C			1							
96708	8.159	0.005	7.058	0.003		0.950	0.005	T	0.94	0.00	L	7.1179	0.0007	0.011	331		7.10	7.14					1							S
96709	7.417	0.005	7.484	0.005	A	−0.056	0.006	T	−0.03	0.01	L	7.4935	0.0045	0.016	166	A	7.47	7.52		M	19396+2945	I 1	2 C A	AB	103	11.076	0.018	2.87	0.06	S
96710						1.391	0.009	G	1.65	0.02	I	10.5666	0.0025	0.024	120		10.51	10.61		C			1							G
96711	8.554	0.009	7.289	0.006		1.078	0.008	T	1.04	0.01	L	7.3446	0.0013	0.014	145		7.33	7.37					1							S
96712	8.364	0.009	8.250	0.011		0.094	0.020	G	0.11	0.02	H	8.2878	0.0014	0.012	106		8.27	8.31		C			1							
96713	9.606	0.031	8.833	0.026		0.688	0.031	T	0.75	0.03	L	8.9343	0.0043	0.019	44		8.91	8.97					1							
96714	9.769	0.020	8.455	0.012		1.271	0.015	G	1.23	0.02	H	8.4408	0.0090	0.099	104		8.37	8.64	26.21	P 1 A			1							P
96715	8.242	0.009	8.047	0.010		0.187	0.013	T	0.21	0.01	L	8.0873	0.0015	0.016	113		8.07	8.11					1							S
96716	9.714	0.033	8.945	0.027		0.685	0.032	T	0.74	0.03	L	8.9825	0.0031	0.017	44		8.95	9.01		C			1							
96717	8.299	0.008	7.984	0.011		0.310	0.015	G	0.36	0.02	H	8.0207	0.0012	0.014	127		7.99	8.05		C			1							S
96718	7.898	0.007	7.638	0.008		0.248	0.010	T	0.28	0.01	L	7.6707	0.0014	0.013	111		7.65	7.69					1							S
96719	8.472	0.018	7.491	0.012	*	0.860	0.016	T	0.87	0.01	L *	7.6534	0.0014	0.009	45	*	7.63	7.67		D	19397−3945	I 1	2 C A	AB	191	2.380	0.009	1.73	0.05	S
96720	11.148	0.058	10.810	0.073		0.430	0.015	G	0.50	0.02	H	10.7532	0.0036	0.035	134		10.69	10.81		C			1							G
96721	6.602	0.007	6.274	0.007		0.293	0.010	G	0.33	0.01	H	6.3193	0.0035	0.020	46		6.28	6.35	0.06	P 1 A			1							S
96722	9.658	0.018	9.027	0.017		0.634	0.015	G	0.70	0.01	H	9.0688	0.0018	0.019	138		9.04	9.11					1							
96723	11.039	0.068	9.004	0.022		1.685	0.057	T	1.71	0.06	L	8.8929	0.0030	0.021	71		8.85	8.92					1							
96724	6.229	0.003	6.123	0.004	A	0.094	0.015	G	0.08	0.01	L *	6.1339	0.0008	0.007	145	*	6.12	6.15		D	19397+3359	I 1	2 C A	AB	15	1.223	0.015	3.44	0.06	S
96725	10.268	0.042	9.150	0.027		0.907	0.008	G	0.95	0.01	I	9.1780	0.0067	0.028	49		9.13	9.22					1							
96726	8.326	0.012	7.885	0.013		0.458	0.015	G	0.53	0.02	H	7.9301	0.0009	0.007	73		7.92	7.94					1							S
96727	8.883	0.011	8.786	0.013		0.100	0.015	G	0.11	0.02	H	8.8038	0.0015	0.016	124		8.78	8.83					1							
96728	10.151	0.021	8.836	0.012		1.117	0.019	T	1.08	0.02	L	8.8909	0.0019	0.019	145		8.85	8.92					1							
96729	6.373	0.004	6.328	0.005	*	0.034	0.006	G	0.05	0.01	H *	6.3464	0.0006	0.005	91	*	6.34	6.36		D	19398−2326	I 1	2 C S A	AB	332	0.127	0.005	0.70	0.24	S
96730	10.336	0.038	8.927	0.020		1.190	0.034	T	1.15	0.03	L	9.0121	0.0025	0.025	156		8.97	9.05					1							
96731	10.420	0.034	9.894	0.034		0.502	0.036	T	0.57	0.04	L	9.9316	0.0028	0.025	84		9.90	9.98					1							
96732	8.433	0.007	7.431	0.005		0.876	0.006	T	0.89	0.00	L	7.4796	0.0009	0.012	218		7.46	7.50					1							S
96733	8.901	0.011	7.271	0.006		1.364	0.010	T	1.33	0.01	L	7.2912	0.0014	0.011	124		7.27	7.31		C			1							S
96734	6.413	0.004	6.372	0.004		0.037	0.005	T	0.05	0.00	L	6.3921	0.0009	0.009	114		6.38	6.41			19399−6641	I 1	1							S
96735	10.316	0.035	9.278	0.023		0.892	0.033	T	0.94	0.03	L	9.3259	0.0022	0.023	110		9.29	9.36					1							
96736	6.662	0.005	6.722	0.007		−0.050	0.008	T	−0.03	0.01	L	6.7215	0.0017	0.011	83		6.71	6.75		U 2			1							S
96737	10.730	0.039	9.048	0.016		1.405	0.033	T	1.38	0.04	L	9.0124	0.0016	0.017	128		8.98	9.04		C			1 S							
96738	7.508	0.009	7.580	0.010		−0.054	0.015	G	−0.03	0.01	H	7.5626	0.0014	0.009	86		7.55	7.58			19399−1451	I 1	1							S
96739	6.904	0.011	6.637	0.013		0.247	0.002	G	0.28	0.00	H	6.6724	0.0014	0.025	45		6.66	6.89		P 1 A			1							S P
96740	9.158	0.012	8.157	0.009		0.903	0.015	G	0.90	0.01	H	8.2008	0.0014	0.014	141		8.17	8.23					1							
96741	7.578	0.008	7.403	0.007		0.160	0.010	T	0.18	0.01	L	7.4415	0.0008	0.007	83		7.43	7.45		C	19399−2204	I 1	1							S
96742	8.202	0.010	7.794	0.010		0.403	0.015	G	0.47	0.02	H	7.8442	0.0016	0.013	105		7.82	7.87					1							S
96743	10.085	0.022	8.521	0.011		1.312	0.019	T	1.27	0.02	L	8.5558	0.0013	0.018	143		8.53	8.60					1							
96744	8.490	0.009	8.337	0.010		0.147	0.013	T	0.16	0.01	L	8.3839	0.0022	0.016	109		8.36	8.42					1							
96745	8.521	0.009	7.377	0.006		0.983	0.008	T	0.96	0.01	L	7.4324	0.0012	0.012	131		7.41	7.45					1							S
96746	8.868	0.010	7.368	0.005		1.262	0.009	T	1.22	0.01	L	7.3987	0.0013	0.013	149		7.38	7.42			19400−4957	I 1	1							S
96747	9.204	0.017	9.136	0.021	*	0.090	0.015	G	0.10	0.02	H *	9.1354	0.0019	0.015	102	*	9.11	9.16		D	19400+5545	I 1	2 C A	AB	171	0.207	0.005	0.38	0.14	
96748	9.886	0.031	9.296	0.028		0.548	0.020	G	0.62	0.02	H	9.3974	0.0033	0.019	49		9.36	9.43		C			1							
96749	8.710	0.010	8.403	0.011		0.292	0.014	T	0.33	0.02	L	8.4368	0.0014	0.014	120		8.41	8.47		C			1							
96750	10.329	0.047	8.991	0.028	*	1.135	0.043	T	1.10	0.04	L *	8.9387	0.0024	0.017	48	*	8.91	8.96		D	19401−3137	I 1	2 C A	AB	81	0.626	0.007	0.82	0.03	
96751	10.538	0.037	9.142	0.019		1.180	0.033	T	1.14	0.03	L	9.2326	0.0023	0.017	110		9.20	9.27		C			1							
96752	9.896	0.032	7.973	0.013		1.596	0.027	T	1.62	0.03	L	7.8738	0.0019	0.011	51		7.86	7.90					1							
96753	7.210	0.006	7.173	0.007		0.034	0.008	T	0.05	0.01	L	7.1887	0.0011	0.008	81		7.18	7.20		C			1							S
96754	8.220	0.009	7.591	0.010		0.570	0.011	G	0.64	0.01	H	7.6614	0.0011	0.009	92		7.65	7.68		C			1 G							S
96755	8.631	0.011	7.408	0.007		1.045	0.010	T	1.02	0.01	L	7.4659	0.0017	0.011	107		7.45	7.49					1							S
96756	9.737	0.021	9.157	0.019		0.551	0.015	G	0.62	0.01	H	9.2594	0.0021	0.021	137		9.22	9.29		C			1							
96757	5.357	0.002	4.472	0.002		0.777	0.014	G	0.77	0.02	G	4.5281	0.0006	0.004	129		4.52	4.54			19401+1801	I 1	1							S
96758	10.216	0.046	8.789	0.025		1.205	0.041	T	1.16	0.04	L	8.8012	0.0016	0.018	45		8.77	8.85					1							
96759	8.055	0.007	8.140	0.010	A	−0.030	0.015	G	−0.01	0.01	H	8.1494	0.0053	0.015	135	A	8.13	8.17			19401+3509	I 1	2 C B	AB	289	11.362	0.023	3.25	0.11	
96760	7.289	0.006	6.082	0.004		1.038	0.002	G	1.01	0.00	H	6.1336	0.0008	0.005	96		6.12	6.14		C			1							S
96761	9.585	0.019	9.539	0.025		0.000	0.015	G	0.02	0.01	H	9.5475	0.0019	0.018	113		9.52	9.58		C			1							
96762	9.148	0.014	9.122	0.019		0.029	0.022	T	0.05	0.02	L	9.1452	0.0021	0.019	112		9.12	9.18		C			1							
96763	9.935	0.026	7.903	0.010		1.720	0.023	T	2.07	0.06	O	7.7812	0.0026	0.017	72		7.76	7.81		U			1							
96764	10.670	0.031	9.088	0.014		1.326	0.027	T	1.29	0.03	L	9.1393	0.0022	0.026	180		9.10	9.18					1 S							
96765	9.066	0.016	7.486	0.009		1.325	0.014	T	1.29	0.02	L	7.4823	0.0013	0.012	138		7.46	7.50					1							
96766	9.545	0.023	9.417	0.029		0.108	0.001	G	0.12	0.00	H	9.4978	0.0039	0.023	52		9.46	9.54		C			1							
96767	8.786	0.011	7.636	0.007		0.988	0.010	T	0.97	0.01	L	7.6686	0.0015	0.016	119		7.65	7.69					1							S
96768	11.060	0.081	9.118	0.027		1.611	0.068	T	1.63	0.07	L	9.0000	0.0027	0.021	51		8.96	9.04					1 S							
96769	8.834	0.014	8.762	0.017		0.071	0.020	T	0.08	0.02	L	8.7877	0.0015	0.016	82		8.77	8.82		C			1 G							
96770	10.131	0.026	8.411	0.011		1.450	0.020	G	1.45	0.03	H	8.3604	0.0013	0.014	133		8.34	8.38		C			1							
96771	6.749	0.005	6.514	0.005	A	0.212	0.005	G	0.23	0.01	H	6.5543	0.0095	0.033	111	A	6.50	6.61		D	19402+6030	I 2	1 C P A							S
96772	7.244	0.004	7.312	0.005		−0.057	0.006	T	−0.04	0.01	L	7.3047	0.0008	0.011	237		7.28	7.32					1							S
96773	9.346	0.020	8.909	0.020	B	0.413	0.026	T	0.48	0.03	L	9.2857	0.0908			B				D	19402+6030	I 2	1 C I A							
96774	9.094	0.013	9.006	0.016		0.086	0.019	T	0.10	0.02	L	9.0628	0.0023	0.022	132		9.03	9.10					1							
96775	9.461	0.019	8.897	0.018		0.528	0.023	T	0.60	0.02	L	8.9948	0.0016	0.017	123		8.97	9.03		C			1							
96776	9.738	0.018	9.524	0.022		0.200	0.015	G	0.22	0.02	H	9.5886	0.0026	0.018	122		9.55	9.62					1							
96777	7.611	0.006	7.372	0.009		0.226	0.008	G	0.25	0.01	H	7.4175	0.0011	0.010	106		7.40	7.43		C			1							S
96778	7.799	0.009	7.846	0.012		−0.027	0.003	G	−0.01	0.00	H	7.8530	0.0015	0.011	75		7.83	7.87		C			1							S
96779	8.799	0.013	8.639	0.016		0.146	0.019	T	0.16	0.02	L	8.7029	0.0020	0.012	83		8.68	8.72					1							
96780	11.396	0.074	10.345	0.044		0.700	0.020	G	0.75	0.02	H	10.4992	0.0025	0.019	100		10.46	10.53					1							G
96781	7.534	0.005	6.359	0.004		1.001	0.002	G	0.98	0.00	H	6.4101	0.0008	0.007	124		6.40	6.42		C			1							S
96782	10.235	0.035	8.787	0.018		1.221	0.031	T	1.18	0.03	L	8.8230	0.0019	0.012	81		8.79	8.84		C			1							
96783	8.048	0.010	6.721	0.005		1.126	0.009	T	1.09	0.01	L	6.7542	0.0009	0.008	107		6.74	6.77		M			1							S
96784	7.462	0.005	7.428	0.007		0.036	0.008	T	0.05	0.01	L	7.4424	0.0016	0.014	120		7.42	7.46					1							S
96785	9.876	0.028	9.102	0.023		0.689	0.028	T	0.75	0.02	L	9.1693	0.0015	0.012	86		9.14	9.19					1							
96786	7.340	0.005	7.107	0.007		0.222	0.008	T	0.24	0.01	L	7.1542	0.0012	0.010	123		7.14	7.17					1							S
96787	8.791	0.009	8.684	0.011		0.102	0.018	G	0.12	0.02	H	8.6997	0.0010	0.014	163		8.68	8.73		C			1							
96788	7.919	0.005	7.861	0.006		0.058	0.007	T	0.07	0.01	L	7.8864	0.0009	0.015	266		7.86	7.91					1							S
96789	6.911	0.005	6.571	0.005		0.323	0.007	T	0.49	0.03	C	6.6122	0.0011	0.009	118		6.60	6.63					1							S
96790	10.050	0.038	9.452	0.035	*	0.558	0.038	T	0.63	0.04	L *	9.4692	0.0032	0.015	46	*	9.43	9.52		D	19405−4641	I 1	2 C A	AB	198	0.607	0.006	0.36	0.04	
96791	7.835	0.008	7.670	0.008		0.158	0.011	T	0.17	0.01	L	7.7090	0.0014	0.012	111		7.68	7.72					1							S
96792	8.939	0.016	8.259	0.014		0.617	0.016	T	0.69	0.01	L	8.3170	0.0015	0.010	75		8.30	8.33		C			1							S
96793	8.710	0.010	8.188	0.010		0.515	0.015	G	0.59	0.02	H	8.2477	0.0013	0.016	188		8.23	8.28		C			1							
96794	10.632	0.028	8.778	0.011		1.541	0.024	T	1.60	0.05	L	8.7012	0.0016	0.019	225		8.67	8.74					1							
96795	11.200	0.059	9.381	0.021		1.514	0.050	T	1.55	0.07	L	9.3098	0.0032	0.021	107		9.27	9.35					1							
96796	7.984	0.008	7.441	0.007	*	0.508	0.013	G	0.58	0.01	H *	7.4831	0.0012	0.010	114	*	7.47	7.50		D	19406+6240	I 1	2 C A	AB	262	0.415	0.003	0.09	0.02	S
96797	8.088	0.007	8.058	0.009		0.032	0.011	T	0.05	0.01	L	8.0794	0.0013	0.012	122		8.06	8.10		C			1							S
96798	9.741	0.020	9.477	0.023		0.251	0.029	T	0.28	0.04	L	9.5604	0.0031	0.026	107		9.52	9.60					1							G
96799	10.166	0.027	10.171	0.042		0.070	0.015	G	0.08	0.02	H	10.0826	0.0031	0.031	149		10.02	10.13					1							G
96800	8.591	0.010	7.291	0.006		1.105	0.009	T	1.07	0.01	L	7.3473	0.0012	0.011	123		7.33	7.37					1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
96801	19 40 39.58	+23 43 04.7	6.64	H	295.164 921 09	+23.717 972 74	3.56	−2.65	−8.83	0.56	0.50	0.77	0.69	0.61	− 5	−16	−24	+ 3	− 2	+ 6	− 3	−13	+17	−11	0	2.26
96802	19 40 40.17	−41 47 49.9	8.05	H	295.167 362 73	−41.797 197 63	2.20	22.16	−21.50	1.18	0.85	1.16	1.61	1.25	−20	−15	+ 5	+35	−32	+ 8	−32	+13	−15	−27	0	−0.74
96803	19 40 40.70	−51 32 59.7	7.85	H	295.169 603 70	−51.549 915 55	3.65	13.78	−59.55	0.78	0.60	1.13	1.09	0.98	+23	−13	−11	− 5	+20	− 6	+21	−10	+14	+19	0	0.63
96804	19 40 41.03	+31 24 23.4	6.99	H	295.170 978 56	+31.406 497 22	2.23	3.33	−0.59	0.43	0.49	0.68	0.47	0.55	+ 0	− 8	− 4	+20	+10	−17	+10	− 2	+ 4	+ 1	0	1.23
96805	19 40 41.15	+43 04 40.2	6.17	2 H	295.171 451 81	+43.077 826 14	2.33	1.99	−0.78	0.44	0.43	0.51	0.45	0.50	− 7	+ 1	+ 4	+ 3	+17	− 1	+19	+ 0	+ 7	+ 3	0	−1.18
96806	19 40 42.04	−54 12 37.1	6.90	H	295.175 178 61	−54.210 318 81	5.25	4.88	−17.39	0.54	0.49	0.77	0.74	0.71	+12	−16	−11	− 4	+18	−12	+17	− 4	+ 2	+13	0	−0.11
96807	19 40 43.31	−00 37 16.7	5.64	1 H	295.180 470 34	−00.621 292 80	11.44	12.59	24.51	0.83	0.43	0.89	1.04	0.73	− 3	−22	+ 1	−10	+18	+16	+13	−41	+ 8	−21	0	2.06
96808	19 40 43.34	−16 17 35.3	5.30	H	295.180 588 38	−16.293 145 55	13.31	69.65	−50.20	0.74	0.44	0.80	0.80	0.50	+31	−44	−20	+16	+14	+11	+13	− 2	+ 8	+34	2	0.79
96809	19 40 44.01	+12 32 53.8	8.38	H	295.183 360 60	+12.548 283 76	4.50	−2.63	−10.25	0.67	0.51	1.01	0.85	0.61	+20	+ 5	− 5	+14	−17	+33	−21	−11	+ 3	+ 0	0	0.03
96810	19 40 44.54	+41 04 53.0	8.11	H	295.185 569 82	+41.081 401 32	2.53	22.54	45.62	0.60	0.58	0.70	0.62	0.67	− 2	+ 9	− 4	−16	+10	−16	+ 9	+17	+ 6	+ 2	1	0.67
96811	19 40 44.69	−04 02 00.2	8.10	H	295.186 211 83	−04.033 387 02	5.78	22.55	1.22	0.96	0.53	1.28	1.19	0.45	+18	+ 5	− 6	+ 2	+14	+49	+10	−38	+31	+21	0	0.51
96812	19 40 44.99	−49 20 36.4	9.78	H	295.187 473 12	−49.343 455 53	5.16	−2.75	11.18	1.35	1.05	1.70	1.64	1.55	+38	−25	−21	+ 2	+37	+ 4	+39	+ 3	+17	+37	0	0.71
96813	19 40 45.08	−07 30 43.9	6.97	H	295.187 838 33	−07.512 201 78	20.86	67.70	−58.96	0.78	0.47	0.83	0.80	0.42	+26	−29	−11	−18	+ 5	+20	+ 0	−36	+16	+34	0	2.64
96814	19 40 45.32	+27 43 47.0	8.01	1 H	295.188 851 03	+27.729 728 31	3.12	−0.28	−8.24	0.54	0.72	1.11	0.64	0.97	−13	+ 5	+ 1	+31	+ 0	−13	+ 1	+ 4	− 6	−11	0	0.78
96815	19 40 45.40	+48 30 44.9	7.89	G	295.189 156 83	+48.512 481 42	7.07	−17.24	18.65	0.59	0.54	0.64	0.64	0.62	− 4	−10	− 4	+ 5	+ 7	−19	+ 6	+ 8	+ 0	+ 1	0	−0.25
96816	19 40 46.41	+44 31 42.5	7.81	H	295.193 387 17	+44.528 461 30	12.61	31.18	22.88	0.55	0.52	0.61	0.57	0.63	− 7	−14	+ 8	+20	+ 9	− 7	+11	+28	− 2	− 3	0	0.51
96817	19 40 46.76	+46 23 08.1	7.63	H	295.194 844 11	+46.385 584 37	5.46	20.76	−49.23	0.58	0.53	0.63	0.69	0.60	−11	− 7	+10	+ 5	+12	−11	+12	+12	+ 2	− 1	3	−2.09
*96818	19 40 47.47	+23 43 52.0	8.19	H	295.197 804 05	+23.731 105 41	3.32	−5.28	−7.02	0.84	0.82	1.22	1.01	1.01	+ 1	−20	−34	+13	− 5	+ 4	− 7	+ 6	+ 6	−26	0	−0.45
*96819	19 40 47.36	−32 12 50.0	9.74	H	295.197 320 14	−32.213 883 37	A 5.22	27.83	−60.80	2.25	1.72	2.35	2.30	1.79	+44	−36	−35	+ 4	−13	+12	−17	−12	+10	+24	2	0.38
*96820	19 40 47.42	+24 34 27.1	7.92	G	295.197 585 46	+24.574 193 39	7.58	32.63	44.86	0.70	0.67	1.03	0.90	0.88	− 1	+12	−23	−16	− 7	−12	− 9	− 1	− 1	− 6	0	−2.41
96821	19 40 47.66	+87 55 20.4	8.01	H	295.198 591 27	+87.922 337 44	2.78	4.43	−12.84	0.63	0.61	0.71	0.76	0.70	+ 8	− 5	+ 1	+21	+ 5	−16	+11	−19	+17	+22	0	−1.29
96822	19 40 48.10	−35 52 34.8	9.62	H	295.200 428 56	−35.876 334 58	2.99	2.24	9.24	1.53	1.04	1.76	1.80	1.36	+ 5	−33	−24	+ 3	+21	−11	+11	+ 6	+26	−15	0	−0.79
96823	19 40 48.84	−27 41 43.6	7.68	H	295.203 504 28	−27.695 431 59	2.09	7.07	−21.59	0.96	0.47	1.03	0.99	0.83	+36	−35	− 3	+ 1	+19	+26	+25	+13	+11	+39	0	0.37
96824	19 40 49.45	+06 06 34.3	9.01	H	295.206 055 58	+06.109 519 42	2.00	25.80	−3.78	1.14	0.55	1.40	1.56	0.56	−13	−21	− 1	−23	− 2	+35	− 3	−41	+ 5	−23	0	−0.11
*96825	19 40 50.11	+45 31 28.7	5.06	H	295.208 806 18	+45.524 649 40	20.51	84.06	120.38	0.45	0.40	0.50	0.54	0.46	+ 0	−20	+ 9	+16	+ 9	− 3	+10	+10	− 4	+12	0	0.35
*96826	19 40 50.08	+30 57 49.2	8.61	H	295.208 684 34	+30.963 671 90	3.75	14.07	−4.61	0.64	0.80	1.05	0.74	0.91	− 4	− 7	+ 1	+26	+13	−14	+15	− 6	− 5	+ 0	1	1.77
96827	19 40 50.81	+27 08 07.9	10.94	H	295.211 698 17	+27.135 514 96	B 21.05	48.35	19.08	36.17	48.22	18.96	24.77	33.30	−20	− 8	+ 4	+13	− 3	+ 2	− 4	+ 1	− 1	−12	1	1.76
96828	19 40 51.12	+01 40 22.8	7.88	H	295.212 989 91	+01.672 987 72	−0.04	2.68	0.39	1.01	0.48	1.14	1.17	0.41	+ 5	−41	+ 3	+10	+ 6	+13	−13	−43	+19	−11	0	−1.00
96829	19 40 51.51	−33 24 07.6	9.54	H	295.214 632 01	−33.402 107 29	13.25	31.19	−109.62	1.46	1.18	1.60	1.73	1.44	+28	−22	−24	− 7	+ 7	−10	+ 7	− 1	−11	+34	0	−0.52
96830	19 40 51.97	+27 07 58.7	7.78	H	295.216 538 75	+27.132 966 35	A 7.03	26.95	20.91	0.96	1.44	1.58	1.03	1.72	−19	−10	+ 7	+20	− 6	+ 3	− 6	+ 6	− 5	−12	1	1.76
96831	19 40 52.88	−58 16 10.4	7.08	H	295.220 343 01	−58.269 547 17	6.36	−3.53	−24.43	0.52	0.40	0.81	0.59	0.64	− 7	− 2	− 3	+36	−27	+ 6	−16	−13	− 5	+30	0	0.29
96832	19 40 54.35	−43 21 36.5	9.89	H	295.226 438 62	−43.360 140 68	5.94	18.11	−12.29	1.77	1.46	2.28	2.79	2.01	− 7	+ 1	−43	+11	+21	−42	+ 3	−14	+32	−30	0	−0.02
96833	19 40 54.75	+34 23 32.0	8.89	H	295.228 118 44	+34.392 233 30	3.18	−1.79	2.43	0.62	0.73	0.90	0.66	0.88	+ 0	− 5	−13	− 4	+14	+ 2	+16	+ 0	+ 5	+ 7	0	0.73
96834	19 40 54.97	−01 52 11.9	7.53	H	295.229 035 10	−01.869 961 81	21.06	161.49	−29.69	0.91	0.46	1.03	1.05	0.38	+ 3	−28	−10	− 5	+ 8	+31	+ 3	−47	+11	− 2	1	0.79
96835	19 40 55.03	−53 16 32.5	8.88	H	295.229 297 48	−53.275 685 06	1.38	−18.21	14.71	0.94	0.69	1.18	1.31	1.07	−16	−18	− 8	−18	+33	− 3	+35	− 7	− 9	− 8	0	0.10
96836	19 40 57.02	+32 37 05.8	7.63	2 H	295.237 579 91	+32.618 270 60	* 1.96	−5.34	−3.40	0.56	0.70	0.80	0.65	0.81	−10	− 5	+11	+ 1	− 7	− 8	− 4	+ 6	+ 2	−15	0	1.55
96837	19 41 02.93	+17 28 34.0	4.39	H	295.262 223 78	+17.476 123 56	6.99	9.06	−33.90	0.42	0.39	0.67	0.48	0.43	+ 8	−12	− 8	−21	−11	+ 1	−12	−26	+11	− 3	0	−1.06
96838	19 41 04.57	−23 39 00.7	8.39	H	295.269 056 75	−23.650 186 16	3.93	−27.04	−8.39	1.22	0.82	1.37	1.38	1.20	+52	−39	−33	−17	−14	−15	−23	−38	+19	+48	0	1.78
96839	19 41 05.05	+84 43 47.0	8.48	H	295.271 022 30	+84.729 734 56	19.64	67.33	66.44	0.63	0.63	0.70	0.78	0.72	− 3	−23	+ 6	+ 2	+ 6	− 5	+ 8	− 7	−10	+ 3	0	1.18
96840 H	19 41 05.53	+13 48 56.5	5.98	2 G	295.273 034 53	+13.815 708 26	* 1.98	0.00	−10.95	0.64	0.45	0.82	0.82	0.53	− 1	− 3	− 2	+17	−35	+ 6	−35	−12	+ 5	−14	0	−0.17
96841	19 41 05.84	−11 05 22.8	9.22	H	295.274 317 36	−11.089 672 83	2.96	−0.94	4.48	1.31	0.94	1.42	1.45	0.98	+45	−11	−13	−24	− 8	+27	− 7	−30	+19	+57	0	−0.76
96842	19 41 06.66	+10 40 48.7	8.05	H	295.277 767 15	+10.680 189 84	10.08	−58.82	−68.16	0.68	0.49	0.96	0.91	0.56	+29	− 8	−15	+18	−32	+25	−36	−23	− 2	+ 3	0	0.01
96843	19 41 07.18	+20 08 14.8	8.44	G	295.279 920 47	+20.137 449 39	6.06	21.60	11.06	0.68	0.68	1.10	0.74	0.82	− 6	−15	+11	−11	− 6	+ 9	− 8	−13	− 1	−11	0	−0.49
96844	19 41 07.53	+13 34 53.8	8.32	H	295.281 378 65	+13.581 600 14	5.07	7.54	2.65	0.72	0.57	0.98	0.88	0.64	+19	− 7	− 6	+ 1	−26	+18	−27	−15	+ 2	+ 6	0	0.73
96845	19 41 08.08	+13 10 13.8	7.27	H	295.283 678 38	+13.170 502 41	11.08	58.72	8.57	0.64	0.48	0.84	0.78	0.54	+19	− 7	− 2	−11	−24	+ 9	−24	−22	+ 5	+ 3	0	0.26
96846	19 41 08.36	+42 54 59.3	9.07	H	295.284 849 69	+42.916 481 00	3.22	5.06	3.81	0.70	0.73	0.85	0.74	0.82	−11	− 1	+ 8	− 2	+16	−15	+19	− 4	+ 1	− 4	0	−1.66
*96847	19 41 10.55	+14 05 04.9	9.09	H	295.293 949 71	+14.084 698 88	2.27	13.69	0.96	0.85	0.65	1.25	1.15	0.77	− 1	+ 1	+ 3	+20	−31	+20	−30	−10	+ 4	+ 0	0	−0.74
*96848	19 41 10.58	−36 19 53.8	8.19	G	295.294 101 51	−36.331 623 47	7.13	9.77	−5.63	1.11	0.75	1.19	1.40	0.93	+16	−38	−36	+30	+ 4	+ 0	+ 0	+20	+ 7	−17	0	2.24
*96849	19 41 10.53	−51 31 32.7	8.02	G	295.293 855 35	−51.525 752 03	15.41	−83.39	32.73	0.76	0.54	1.13	1.07	0.95	+ 7	−17	− 2	− 7	+29	− 1	+32	− 1	+ 5	+17	0	−0.13
96850	19 41 11.33	+31 35 26.2	8.73	H	295.297 204 69	+31.590 604 22	6.38	20.08	81.18	0.63	0.76	0.98	0.72	0.92	−10	+ 0	+ 6	+ 6	+11	−13	+11	−21	− 2	−12	0	0.05
96851	19 41 11.99	−02 18 48.4	7.22	1 H	295.299 947 23	−02.313 443 07	2.91	−0.04	−1.97	0.85	0.43	0.91	0.91	0.35	−13	−29	− 8	− 9	+19	+24	+14	−48	+13	−10	0	−1.56
96852	19 41 12.88	+12 03 44.8	9.36	G	295.303 678 07	+12.062 431 17	1.02	−0.21	−5.90	0.84	0.64	1.39	1.13	0.78	+14	+ 4	−11	+18	−17	+33	−19	− 5	+ 1	− 8	1	−0.02
96853	19 41 13.45	−71 28 13.4	9.00	H	295.306 027 33	−71.470 377 04	4.03	37.95	−9.09	0.63	0.79	1.16	0.77	1.11	−16	− 1	− 9	+ 7	+22	−13	+24	−15	+ 5	−17	0	1.46
96854	19 41 13.73	−32 52 23.0	8.11	H	295.307 200 04	−32.873 064 96	24.09	−75.46	−119.13	1.04	0.77	1.15	1.09	0.90	+14	−23	−13	− 5	− 9	+10	− 3	− 9	−16	+20	0	0.43
96855 H	19 41 14.09	+50 22 42.0	7.70	H	295.308 688 01	+50.378 335 04	A 2.04	−1.17	−12.88	1.48	1.20	0.89	1.03	0.87	+ 3	− 9	+ 7	+ 2	+ 4	+ 3	+ 0	+ 3	− 1	+ 7	1	0.40
96856	19 41 14.65	+22 27 10.0	6.43	H	295.311 037 37	+22.452 781 33	2.26	0.38	−3.45	0.55	0.54	0.78	0.66	0.69	+ 6	−16	−20	− 5	+ 4	+11	+ 4	+ 2	+11	+11	0	−1.31
96857	19 41 14.98	+42 08 30.0	8.03	H	295.312 432 68	+42.141 657 97	3.32	6.12	−1.92	0.51	0.54	0.64	0.54	0.57	− 4	− 3	− 6	−10	+11	−14	+10	− 2	+ 6	+ 4	2	−0.49
96858 H	19 41 15.48	+30 43 16.8	7.09	H	295.314 516 39	+30.721 328 74	A 1.26	0.15	−1.17	0.69	0.80	1.02	0.81	0.82	− 1	+ 6	+21	+25	+ 8	− 5	+13	−17	− 5	+10	5	−0.43
96859	19 41 16.72	+11 56 55.9	9.39	H	295.319 653 80	+11.948 864 03	4.59	−0.93	−7.10	0.86	0.60	1.36	1.20	0.78	+18	− 8	−10	+24	−18	+27	−24	− 2	+ 9	− 8	2	0.85
96860	19 41 18.03	−62 49 39.1	8.20	H	295.325 109 22	−62.827 526 82	0.25	−8.42	−2.79	0.77	0.69	1.10	0.78	0.85	− 1	−13	−20	+11	−29	+ 3	−38	− 7	+13	−22	0	1.55
96861	19 41 18.08	−56 19 18.3	9.03	H	295.325 352 79	−56.321 747 82	29.58	−162.20	−53.26	0.91	0.68	1.15	1.27	1.14	− 3	−18	− 4	−18	− 1	+15	+ 2	−25	+ 2	+21	0	−1.02
96862	19 41 19.86	+29 08 40.1	8.50	H	295.332 733 33	+29.144 458 83	−1.50	−1.86	−6.86	0.57	0.71	0.98	0.72	0.84	− 8	− 8	+11	+28	+ 1	− 5	+ 9	− 9	− 6	+14	0	−1.24
96863	19 41 21.37	+27 42 19.1	7.89	H	295.339 052 80	+27.705 305 69	3.35	6.84	−1.61	0.49	0.66	0.98	0.57	0.83	−15	− 3	+ 7	+29	− 3	−11	− 1	+ 4	+ 4	−13	0	0.20
96864	19 41 21.99	+38 47 12.6	8.64	G	295.341 636 50	+38.786 826 11	1.01	−4.99	−16.67	0.64	0.68	0.82	0.73	0.82	−10	+ 9	−15	+14	+20	−20	+19	+13	+ 5	− 5	0	−0.83
96865	19 41 22.50	−64 53 20.0	9.07	H	295.343 729 54	−64.888 898 08	8.14	8.91	−14.35	0.88	0.75	1.32	0.92	0.99	−13	−29	−10	+10	−16	− 6	−27	+ 3	+35	−31	0	−0.19
96866	19 41 23.22	+38 27 28.7	7.59	H	295.346 762 13	+38.457 969 50	0.50	−0.08	−2.36	0.51	0.55	0.66	0.58	0.65	− 4	+ 5	+ 1	+ 9	+11	−16	+12	+17	+11	− 2	0	−0.22
96867	19 41 23.41	−03 50 56.9	9.70	H	295.347 551 31	−03.849 144 39	1.68	−1.47	−4.48	1.46	0.75	1.58	1.87	0.67	+29	−19	− 7	+27	+20	+19	+ 5	−28	+27	+22	2	−0.17
96868	19 41 24.86	+28 52 36.5	8.78	H	295.353 563 80	+28.876 813 95	2.37	7.35	−2.29	0.64	0.88	1.20	0.81	1.07	− 5	− 1	+ 6	+20	+ 4	−15	+11	−11	−15	+19	0	−0.11
96869	19 41 24.87	−43 08 24.7	9.55	H	295.353 622 30	−43.140 181 65	9.41	10.81	−22.93	1.76	1.24	2.01	2.70	1.93	− 8	−27	−26	− 8	+25	−37	+10	−17	+30	−41	0	0.50
96870	19 41 24.94	−61 49 15.7	8.02	H	295.353 936 03	−61.821 035 86	5.88	−48.23	15.83	0.80	0.63	1.01	0.91	0.91	− 8	−16	+ 2	+34	−13	− 2	− 9	+ 4	+ 2	+17	0	0.08
96871	19 41 25.76	+07 01 33.1	9.44	H	295.357 332 94	+07.025 859 64	5.32	10.32	−2.79	1.27	0.69	1.55	1.84	0.63	− 6	−19	− 9	+14	−10	− 3	−22	−45	+28	−40	0	0.62
96872	19 41 27.54	+47 19 41.1	7.23	2 H	295.364 763 66	+47.328 082 56	1.93	−5.72	11.31	0.57	0.52	0.61	0.60	0.58	−13	− 4	+ 1	− 4	+16	+ 4	+15	+11	− 3	− 1	0	−1.15
96873	19 41 28.49	−20 05 06.3	8.71	2 H	295.368 710 35	−20.085 088 66	0.67	5.17	−5.07	1.09	0.67	1.20	1.13	0.86	+44	−51	−25	−12	+ 3	+21	+ 0	− 8	+17	+44	0	1.85
96874	19 41 33.76	−51 46 27.9	9.18	H	295.390 686 26	−51.774 415 24	6.11	23.15	−18.82	0.92	0.70	1.36	1.32	1.22	+22	−16	+ 4	+ 4	+26	+ 4	+27	+ 7	+12	+32	0	0.40
96875	19 41 34.08	−46 46 11.8	9.80	2 H	295.391 984 14	−46.769 957 07	7.03	43.74	−96.72	1.70	1.33	1.66	2.57	1.91	−15	−18	−26	+36	−49	+20	−48	+18	+ 4	−27	0	2.99
96876	19 41 34.70	+21 04 10.3	8.91	G	295.394 565 56	+21.069 536 08	3.12	36.59	34.82	0.86	0.83	1.27	1.12	1.12	+10	+ 0	− 5	− 4	−16	+ 7	−18	−10	− 6	−19	1	−0.28
96877	19 41 34.93	−30 07 39.6	9.72	G	295.395 541 56	−30.127 662 25	1.08	0.04	4.74	1.55	0.83	1.72	2.16	1.45	+27	−21	−17	−12	+10	−19	+ 8	−20	+ 3	− 3	0	0.73
96878	19 41 35.36	+49 41 43.1	7.95	H	295.397 330 12	+49.695 295 52	5.31	−7.43	28.00	0.61	0.57	0.67	0.72	0.64	+ 1	−18	+ 9	− 8	+ 0	−14	+ 0	− 7	+ 6	+21	0	1.66
96879	19 41 35.49	−24 50 15.5	8.50	H	295.397 875 46	−24.837 643 29	3.02	−0.91	−6.14	1.17	0.76	1.20	1.23	1.11	+53	−36	−10	− 4	+ 0	+ 3	+ 8	−11	− 6	+59	0	0.19
96880	19 41 35.72	−72 26 44.3	9.23	2 H	295.398 840 22	−72.445 647 02	24.15	0.03	−160.33	0.70	0.79	1.32	0.74	1.05	− 1	− 7	− 8	+ 8	+10	− 4	+ 7	−23	+20	−15	0	−0.22
96881	19 41 36.07	−35 43 31.1	8.72	G	295.400 309 77	−35.725 318 50	14.23	85.51	−250.41	1.22	0.77	1.30	1.44	0.99	− 9	−33	−24	+ 1	+ 5	+ 0	+ 0	+ 2	+15	−27	0	0.09
96882	19 41 37.24	−65 51 15.3	6.08	1 H	295.405 182 56	−65.854 239 20	4.33	14.47	−71.82	0.59	0.51	0.76	0.72	0.74	−23	−17	− 7	− 2	− 1	− 4	− 8	−11	+22	−52	0	0.78
96883	19 41 37.43	−08 37 44.2	8.46	1 H	295.405 973 07	−08.628 951 22	4.08	1.71	−14.53	1.03	0.61	1.13	1.19	0.63	+30	−23	−10	+ 5	+17	+ 8	+13	−16	+16	+43	0	0.59
96884	19 41 38.13	−55 15 58.1	7.36	H	295.408 886 46	−55.266 136 73	0.71	32.25	−7.42	0.62	0.51	0.91	0.93	0.87	+ 5	+ 2	+ 4	+ 6	+25	+ 9	+24	+ 9	+39	+15	0	−1.64
96885	19 41 38.90	+33 04 58.7	7.04	H	295.412 064 65	+33.082 971 65	1.20	−3.13	−4.30	0.44	0.48	0.63	0.52	0.60	− 7	−13	+ 0	+26	+ 0	−10	+ 1	+18	+ 2	− 1	1	−0.68
96886	19 41 38.99	+24 05 02.8	8.54	G	295.412 449 36	+24.084 113 52	11.78	−36.89	−179.80	0.78	0.76	1.07	0.99	0.94	− 1	− 6	−27	+ 2	+ 4	+ 2	+ 4	−14	+ 3	− 9	0	0.09
96887	19 41 39.80	+40 01 20.3	6.91	H	295.415 823 80	+40.022 310 75	4.58	23.09	14.10	0.47	0.50	0.59	0.52	0.62	− 6	−21	− 9	+14	− 5	+ 4	− 6	+19	+ 6	+ 3	0	1.68
96888	19 41 40.58	+30 48 30.9	6.85	H	295.419 101 60	+30.808 586 09	2.27	12.46	16.62	0.43	0.54	0.72	0.51	0.63	− 9	− 1	+19	+19	+ 4	−11	+ 8	−14	− 6	− 2	0	−0.09
96889	19 41 41.84	−33 27 58.0	8.85	H	295.424 347 32	−33.466 111 45	3.99	3.25	−15.89	1.31	0.99	1.43	1.55	1.31	+34	−28	−24	− 5	+ 3	− 9	+ 6	− 5	−16	+44	0	0.47
96890	19 41 43.63	+04 43 42.7	8.97	H	295.431 775 07	+04.728 534 36	4.39	5.79	10.07	1.20	0.54	1.43	1.75	0.55	−23	−13	− 7	− 8	+ 2	+26	+ 1	−42	+19	−27	1	0.88
96891	19 41 44.16	−32 52 15.6	11.43	3 G	295.433 995 15	−32.871 001 25	−0.98	0.97	−18.12	7.15	5.51	7.86	8.69	6.28	+26	−21	−21	−15	−10	+ 5	− 6	−28	−12	+26	3		
*96892	19 41 44.43	−77 34 28.9	7.58	1 H	295.435 107 23	−77.574 688 08	3.68	−1.06	6.78	0.52	0.57	0.76	0.54	0.75	− 3	−28	+ 1	+13	− 2	− 5	− 9	−16	+ 3	−21	0	1.09
*96893	19 41 44.38	−53 15 07.9	8.10	H	295.434 901 50	−53.252 197 55	10.55	13.39	−99.18	0.83	0.62	1.13	1.13	0.95	+ 0	−24	−12	−15	+28	+ 3	+30	−10	+ 1	− 4	0	1.40
96894	19 41 47.65	−04 17 21.2	7.97	H	295.448 539 57	−04.289 214 51	2.23	−0.37	−19.38	0.91	0.50	1.10	1.15	0.46	+16	− 2	−16	− 7	+ 7	+40	+ 7	−41	+35	+28	0	−0.36
96895	19 41 49.09	+50 31 31.6	5.99	H	295.454 537 69	+50.525 446 35	46.25	−147.75	−158.85	0.45	0.44	0.50	0.56	0.50	− 4	−17	+ 1	+ 7	+ 6	− 5	+ 6	− 3	+ 4	+ 7	0	0.16
96896	19 41 49.40	−36 53 15.2	7.38	H	295.455 837 11	−36.887 557 70	6.54	10.80	−6.21	0.97	0.64	1.00	1.09	0.73	+11	−35	−25	+20	+12	− 1	+12	+15	+ 0	+ 5	0	1.80
96897	19 41 49.82	−60 47 30.9	9.50	H	295.457 597 55	−60.791 925 15	8.11	32.29	−96.88	1.02	0.76	1.37	1.28	1.30	+11	− 4	+ 7	+17	−14	+ 0	− 5	−21	+ 4	+41	0	0.69
*96898

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
96801	6.634	0.004	6.649	0.005		−0.009	0.006	T	0.01	0.01	L	6.6469	0.0010	0.010	127		6.63	6.67			19407+2343	I 2	1 S							S
96802	9.833	0.033	8.211	0.016		1.358	0.029	T	1.33	0.03	L	8.1953	0.0026	0.012	50		8.17	8.21					1							
96803	9.460	0.015	7.983	0.008		1.244	0.013	T	1.20	0.01	L	8.0116	0.0016	0.017	124		7.99	8.04			19407−5133	I 1	1							S
96804	8.343	0.009	7.105	0.006		1.057	0.008	T	1.02	0.01	L	7.1544	0.0011	0.012	162		7.13	7.17					1							S
96805	8.164	0.009	6.370	0.005		1.561	0.002	G	2.23	0.05	F	6.2235	0.0026	0.022	126		6.19	6.26		U 2			1 S							S
96806	7.084	0.005	6.928	0.005		0.142	0.007	T	0.16	0.01	L	6.9546	0.0010	0.010	122		6.94	6.97					1							S
96807	5.787	0.002	5.667	0.003		0.123	0.006	G	0.14	0.01	H	5.6857	0.0006	0.006	130		5.68	5.70		M	19407−0037	I 1	1 G							S
96808	6.746	0.005	5.421	0.003		1.109	0.015	G	1.14	0.04	E	5.4627	0.0007	0.006	88		5.45	5.47		C	19407−1618	I 1	1							S
96809	8.477	0.008	8.394	0.010		0.082	0.012	T	0.09	0.01	L	8.4130	0.0014	0.018	168		8.38	8.44					1							
96810	9.758	0.020	8.265	0.011		1.256	0.018	T	1.21	0.02	L	8.2743	0.0016	0.013	114		8.25	8.30		C			1							
96811	8.328	0.009	8.116	0.010		0.202	0.013	T	0.22	0.01	L	8.1669	0.0015	0.014	105		8.14	8.19		C			1							S
96812	10.252	0.026	9.805	0.027		0.435	0.030	T	0.50	0.03	L	9.8743	0.0023	0.023	115		9.83	9.92					1							
96813	7.589	0.007	7.028	0.006		0.525	0.008	T	0.60	0.01	L	7.0805	0.0008	0.008	114		7.07	7.10					1							S
96814	9.264	0.012	8.121	0.008		0.983	0.011	T	0.96	0.01	L	8.1711	0.0015	0.017	171		8.14	8.21		U			1							
96815	8.335	0.010	7.918	0.009		0.413	0.015	G	0.48	0.02	H	7.9764	0.0010	0.012	104		7.96	8.00					1							S
96816	8.457	0.011	7.873	0.008		0.545	0.012	T	0.62	0.01	L	7.9329	0.0013	0.011	115		7.92	7.95		C			1							S
96817	8.822	0.011	7.737	0.007		0.938	0.010	T	0.93	0.01	L	7.7944	0.0011	0.010	114		7.78	7.82					1							
96818	9.376	0.016	8.292	0.011		0.937	0.015	T	0.93	0.01	L	8.3533	0.0014	0.015	123		8.33	8.38			19407+2343	I 2	1							
96819	10.578	0.056	9.761	0.046	A	0.721	0.055	T	0.77	0.04	L	9.8838	0.0119	0.022	55	A	9.84	9.92		C	19408−3213	M 1	2 C A	AB	25	11.704	0.035		2.66	0.14	
96820	8.537	0.009	7.968	0.009		0.548	0.015	G	0.62	0.01	H	8.0334	0.0016	0.014	126		8.01	8.06					1							
96821	9.614	0.017	8.140	0.010		1.260	0.015	G	1.22	0.02	H	8.1691	0.0016	0.015	127		8.14	8.20					1							
96822	10.513	0.051	9.656	0.039		0.752	0.049	T	0.80	0.04	L	9.7617	0.0035	0.025	56		9.72	9.80		C			1							
96823	9.672	0.020	7.836	0.009		1.527	0.017	T	1.57	0.04	L	7.7988	0.0011	0.011	117		7.78	7.81					1							S
96824	10.767	0.040	9.181	0.018		1.330	0.035	T	1.29	0.04	L	9.1612	0.0019	0.021	160		9.13	9.20		C			1							
96825	5.563	0.003	5.111	0.002		0.426	0.003	T	0.49	0.00	L	5.1602	0.0005	0.005	127		5.15	5.17		C	19409+4531	I 1	1							S
96826	10.419	0.034	8.770	0.015		1.379	0.029	T	1.35	0.04	L	8.7579	0.0015	0.019	153		8.73	8.79		C			1 S							
96827	10.853	0.041	10.618	0.054	B	0.224	0.064	T	0.25	0.07	L	10.8674	0.1044			B				D	19409+2708	I 2	1 C I A							
96828	8.138	0.008	7.902	0.007		0.225	0.010	T	0.25	0.01	L	7.9503	0.0016	0.013	147		7.93	7.98					1							S
96829	10.392	0.042	9.615	0.034		0.691	0.041	T	0.75	0.03	L	9.6807	0.0039	0.023	58		9.65	9.73		C			1							
96830	8.080	0.006	7.754	0.007	A	0.100	0.015	G	0.11	0.02	H	7.8221	0.0073	0.020	225	A	7.79	7.85		D	19409+2708	I 2	1 C P A							
96831	8.734	0.008	7.225	0.005		1.269	0.007	T	1.23	0.01	L	7.2380	0.0008	0.011	228		7.22	7.26					1							S
96832	10.349	0.051	10.013	0.060		0.497	0.071	G	0.57	0.07	R	10.0018	0.0040	0.026	43		9.95	10.04		C			1							
96833	9.047	0.012	8.885	0.014		0.156	0.017	T	0.17	0.02	L	8.9428	0.0021	0.020	134		8.91	8.98					1							
96834	8.163	0.007	7.589	0.007		0.537	0.009	T	0.61	0.01	L	7.6480	0.0010	0.012	134		7.63	7.68					1							S
96835	10.496	0.030	9.017	0.015		1.245	0.026	T	1.20	0.03	L	9.0427	0.0020	0.017	129		9.01	9.07		C			1							
96836	11.622	0.099	7.886	0.008		2.917	0.073	T	2.99	0.07	L	7.5520	0.0113	0.090	146		7.35	7.74		U 2 B	19409+3237	I 1	1 V							P
96837	5.716	0.003	4.497	0.002		1.041	0.019	G	0.96	0.03	C	4.5523	0.0004	0.004	140		4.54	4.56					1							S
96838	9.809	0.026	8.515	0.015		1.100	0.023	T	1.06	0.02	L	8.5593	0.0019	0.016	85		8.54	8.58					1							
96839	9.272	0.017	8.570	0.015		0.647	0.018	T	0.71	0.02	L	8.6136	0.0016	0.016	117		8.59	8.65					1							
96840	5.884	0.004	5.979	0.004	*	−0.078	0.002	G	−0.06	0.00	H	5.9709	0.0014	0.023	144	*	5.96	6.07		P 1 A	19411+1349	I 1	2 C S A	AS	311	0.189	0.002		0.06	0.06	S D
96841	10.920	0.064	9.399	0.028		1.278	0.055	T	1.24	0.06	L	9.3786	0.0013	0.015	84		9.35	9.42		D			1 S							
96842	8.612	0.008	8.106	0.007		0.476	0.010	T	0.55	0.01	L	8.1516	0.0012	0.014	192		8.12	8.17		C	19411+1041	I 1	1							S
96843	8.748	0.010	8.443	0.011		0.312	0.015	G	0.36	0.02	H	8.5023	0.0014	0.017	124		8.47	8.53					1							
96844	8.324	0.008	8.314	0.010		0.014	0.012	T	0.03	0.01	L	8.3340	0.0015	0.015	141		8.30	8.36					1							
96845	7.824	0.007	7.311	0.006		0.490	0.001	G	0.56	0.00	H	7.3797	0.0010	0.013	139		7.36	7.40					1							S
96846	10.553	0.045	9.198	0.023		1.148	0.040	T	1.11	0.04	L	9.2354	0.0022	0.018	125		9.20	9.28					1							
96847	9.169	0.012	9.092	0.016		0.076	0.019	T	0.09	0.02	L	9.1190	0.0016	0.016	134		9.09	9.15					1							
96848	8.453	0.013	8.167	0.014		0.257	0.015	G	0.29	0.02	H	8.2403	0.0011	0.009	56		8.22	8.26					1							S
96849	8.695	0.010	8.081	0.009		0.566	0.009	G	0.64	0.01	H	8.1450	0.0015	0.012	128		8.12	8.16					1							S
96850	9.686	0.020	8.811	0.016		0.759	0.015	G	0.80	0.01	H	8.8715	0.0016	0.023	153		8.84	8.91					1							
96851	7.239	0.005	7.211	0.006		0.031	0.007	T	0.05	0.01	L	7.2372	0.0011	0.013	138		7.21	7.26		M			1							S
96852	9.491	0.013	9.436	0.018		0.124	0.015	G	0.14	0.01	H	9.4116	0.0020	0.023	178		9.37	9.45					1							G
96853	9.597	0.013	9.029	0.012		0.535	0.013	T	0.61	0.01	L	9.1141	0.0017	0.023	194		9.07	9.16		C			1							
96854	8.998	0.016	8.186	0.013		0.734	0.016	T	0.78	0.01	L	8.2546	0.0018	0.015	67		8.22	8.28					1							
96855	9.138	0.014	7.847	0.009	*	1.098	0.013	T	1.06	0.01	L	*	7.8689	0.0015	0.013	123	*	7.85	7.89		D	19412+5023	H 1	2 C A	AB	269	0.403	0.018		2.93	0.10	S
96856	8.351	0.009	6.573	0.005		1.481	0.008	T	1.50	0.01	L	6.5578	0.0011	0.009	110		6.54	6.58					1							S
96857	7.960	0.006	8.018	0.008		−0.048	0.009	T	−0.03	0.01	L	8.0211	0.0010	0.012	138		8.00	8.05					1							S
96858	8.012	0.009	7.252	0.007	*	0.693	0.009	T	0.75	0.01	L	*	7.2349	0.0009	0.009	134	*	7.22	7.25		D	19413+3043	I 1	2 C A	AB	270	0.864	0.003		1.71	0.02	S
96859	9.436	0.014	9.385	0.019		0.052	0.022	T	0.06	0.02	L	9.4109	0.0017	0.025	182		9.37	9.45					1 S							G
96860	9.609	0.018	8.325	0.011		1.093	0.016	T	1.05	0.02	L	8.3727	0.0018	0.017	126		8.35	8.40		C			1							
96861	10.368	0.025	9.143	0.015		1.040	0.015	G	1.09	0.02	I	9.1740	0.0021	0.021	145		9.13	9.21		C			1							
96862	8.690	0.010	8.530	0.012		0.200	0.015	G	0.22	0.02	H	8.5662	0.0015	0.020	167		8.53	8.60					1							
96863	8.167	0.007	7.919	0.010		0.220	0.015	G	0.24	0.02	H	7.9582	0.0016	0.017	175		7.93	7.98					1							S
96864	8.755	0.011	8.637	0.013		0.116	0.010	G	0.13	0.01	H	8.6758	0.0016	0.016	119		8.64	8.71					1							
96865	9.656	0.016	9.124	0.015		0.507	0.016	T	0.58	0.02	L	9.1804	0.0027	0.026	134		9.14	9.23					1							
96866	7.550	0.006	7.589	0.008		−0.020	0.015	G	0.00	0.01	H	7.5934	0.0016	0.014	123		7.57	7.62					1							S
96867	9.774	0.019	9.696	0.027		0.077	0.031	T	0.09	0.03	L	9.7321	0.0018	0.017	115		9.70	9.77					1							G
96868	10.079	0.024	8.906	0.015		1.006	0.022	T	0.98	0.02	L	8.9464	0.0022	0.024	168		8.90	8.98					1 S							
96869	10.186	0.043	9.553	0.038		0.583	0.043	T	0.65	0.04	L	9.6704	0.0055	0.022	41		9.63	9.70					1							
96870	8.581	0.010	8.079	0.010		0.503	0.015	G	0.58	0.02	H	8.1339	0.0014	0.012	104		8.11	8.16		C			1							S
96871	9.868	0.018	9.456	0.019		0.366	0.022	G	0.43	0.02	H	9.5217	0.0023	0.026	167		9.47	9.56		C			1							
96872	9.405	0.016	7.435	0.007		1.669	0.014	T	2.12	0.04	O	7.2991	0.0038	0.037	104		7.23	7.37		U 2			1 S							S
96873	10.829	0.056	8.942	0.020		1.601	0.049	T	2.43	0.09	O	8.7417	0.0095	0.061	79		8.64	8.82	17.68	P 1 A			1 S							P
96874	9.753	0.017	9.226	0.016		0.503	0.018	T	0.58	0.02	L	9.2906	0.0021	0.021	136		9.25	9.32					1 S							
96875	11.139	0.087	9.943	0.048		1.017	0.079	T	0.99	0.06	L	9.9462	0.0082	0.071	49		9.81	10.03	1.72	P 1 A			1 S							
96876	9.507	0.018	8.989	0.017		0.541	0.015	G	0.61	0.02	H	9.0129	0.0026	0.020	110		8.98	9.06					1							
96877	10.461	0.049	9.713	0.039		0.539	0.015	G	0.61	0.02	H	9.8286	0.0026	0.025	94		9.78	9.88					1							
96878	9.184	0.013	8.050	0.009		0.976	0.012	T	0.96	0.01	L	8.1179	0.0014	0.014	117		8.09	8.14		C			1							S
96879	8.860	0.013	8.517	0.014		0.332	0.021	T	0.39	0.03	L	8.5829	0.0023	0.017	86		8.56	8.62		C			1							
96880	10.298	0.023	9.329	0.017		0.838	0.022	T	0.88	0.02	L	9.3696	0.0032	0.036	169		9.31	9.43		U			1							
96881	9.610	0.027	8.782	0.021		0.686	0.002	G	0.74	0.00	H	8.8617	0.0024	0.018	59		8.83	8.89					1							
96882	8.146	0.008	6.274	0.004		1.556	0.007	T	1.57	0.01	L	6.1998	0.0015	0.012	112		6.18	6.21		M			1							S
96883	10.091	0.024	8.644	0.013		1.220	0.021	T	1.18	0.02	L	8.6267	0.0028	0.022	103		8.59	8.66		U			1 S							
96884	9.369	0.016	7.531	0.008		1.529	0.014	T	1.57	0.03	L	7.4827	0.0012	0.011	111		7.46	7.50					1							S
96885	7.308	0.005	7.078	0.005		0.219	0.007	T	0.24	0.01	L	7.1035	0.0007	0.008	143		7.08	7.12					1							S
96886	9.117	0.012	8.621	0.012		0.484	0.006	G	0.56	0.01	H	8.6424	0.0020	0.021	127		8.61	8.67					1							
96887	7.088	0.005	6.935	0.005		0.147	0.007	T	0.16	0.01	L	6.9621	0.0010	0.011	126		6.94	6.98					1							S
96888	8.933	0.012	7.031	0.005		1.613	0.011	T	1.82	0.03	O	6.9420	0.0010	0.010	141		6.92	6.96		C			1							S
96889	10.288	0.037	8.986	0.021		1.107	0.033	T	1.07	0.03	L	9.0158	0.0026	0.016	60		8.98	9.04		C			1							
96890	10.660	0.030	9.108	0.014		1.303	0.026	T	1.26	0.03	L	9.1296	0.0015	0.016	175		9.10	9.16					1							
96891						1.270	0.020	G	1.23	0.02	H	11.5922	0.0076	0.043	60		11.49	11.69		U			1 X							G
96892	9.399	0.013	7.739	0.007		1.388	0.012	T	1.36	0.01	L	7.7230	0.0015	0.015	149		7.70	7.75		M			1							S
96893	8.681	0.009	8.156	0.009		0.502	0.010	T	0.57	0.01	L	8.2094	0.0014	0.014	124		8.19	8.25					1							S
96894	8.129	0.007	7.984	0.010		0.140	0.011	T	0.15	0.01	L	8.0261	0.0014	0.012	122		8.01	8.04					1							S
96895	6.762	0.005	6.034	0.004		0.643	0.006	G	0.61	0.03	C	6.1084	0.0007	0.007	124		6.10	6.12		C	19418+5031	I 2	1							S
96896	7.508	0.008	7.392	0.010		0.105	0.012	T	0.12	0.01	L	7.4192	0.0010	0.009	53		7.40	7.43		D			1							S
96897	10.369	0.032	9.555	0.025		0.735	0.031	T	0.78	0.02	L	9.6440	0.0020	0.020	113		9.60	9.68					1							
96898	10.733	0.072	10.048	0.059		0.524	0.015	G	0.60	0.02	H	10.1175	0.0044	0.020	56		10.09	10.17					1							G
96899	9.993	0.023	8.490	0.012		1.264	0.020	T	1.22	0.02	L	8.5101	0.0014	0.015	123		8.49	8.53		C			1							S
96900	9.525	0.016	8.424	0.011		0.950	0.015	T	0.94	0.01	L	8.4998	0.0012	0.013	122		8.47	8.52					1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
96901	19 41 52.10	+50 31 04.5	6.25	H	295.467 066 51	+50.517 920 62	46.70	−135.15	−163.53	0.47	0.47	0.52	0.60	0.52	+ 2	−12	+ 6	+10	+12	− 2	+12	− 1	+ 4	+14	0	−0.40
96902	19 41 52.34	+23 22 42.2	8.56	H	295.468 086 05	+23.378 392 14	10.91	69.36	−163.98	0.94	0.84	1.31	1.16	1.09	− 1	−12	−24	− 4	− 5	− 4	− 7	+ 4	+ 7	− 1	0	1.09
96903 H	19 41 52.62	+27 22 55.7	6.67	H	295.469 241 47	+27.382 151 55 A	0.82	1.68	−3.46	1.33	1.55	0.92	0.56	0.91	−65	+ 3	− 2	+10	− 2	− 5	− 1	+ 0	− 5	−47	4	−0.05
96904	19 41 53.97	+15 13 40.4	9.48	G	295.474 867 27	+15.227 878 93	5.43	−6.26	−25.45	0.99	0.77	1.40	1.27	0.93	−10	−27	− 9	+22	−22	+ 4	−32	− 7	+14	−45	0	0.25
96905	19 41 54.78	+13 14 48.4	8.35	2 H	295.478 256 05	+13.246 780 60	3.44	4.20	0.31	0.70	0.54	0.96	0.92	0.62	+ 9	− 5	− 6	+11	−27	+17	−28	−13	+ 7	− 7	0	0.52
96906	19 41 57.23	+36 13 32.6	7.48	H	295.488 469 18	+36.225 719 35	18.75	165.93	−12.55	0.50	0.52	0.67	0.55	0.60	+ 3	−15	−16	+16	+12	−10	+11	+12	− 1	+ 6	0	1.66
96907	19 41 57.63	+40 15 14.6	6.22	H	295.490 107 81	+40.254 053 13	12.00	−12.77	37.43	0.47	0.49	0.59	0.51	0.58	− 1	−22	−11	+10	− 4	+ 2	− 4	+10	+ 0	+ 8	3	−0.41
96908	19 41 58.40	+01 10 56.2	8.84	H	295.493 344 36	+01.182 277 82	5.93	−59.73	−86.97	1.11	0.55	1.24	1.41	0.53	− 4	−32	+22	+11	+ 4	+ 8	+ 1	−36	− 5	− 4	0	2.04
96909	19 41 59.56	−29 17 58.2	9.07	H	295.498 160 04	−29.299 490 55	−0.06	4.89	−7.87	1.21	0.61	1.25	1.49	1.07	+21	−16	−14	−24	+16	−10	+23	−16	+ 9	− 2	0	2.88
96910	19 42 00.14	−41 30 40.7	8.51	H	295.500 567 58	−41.511 304 05	6.76	37.00	−2.33	1.11	0.83	1.16	1.35	1.04	−15	−22	+ 7	+17	−17	+ 4	−15	− 4	− 2	− 8	0	0.18
96911	19 42 00.20	+21 27 38.9	8.48	H	295.500 830 65	+21.460 803 06	2.98	−5.21	−18.07	0.88	0.80	1.21	1.12	1.08	+ 3	+ 7	− 5	−20	− 4	− 1	− 3	− 1	+ 2	− 2	0	−2.12
96912 H	19 42 00.65	+22 16 57.9	9.21	G	295.502 705 48	+22.282 757 21 A	12.80	78.34	111.25	1.52	1.42	1.96	1.70	1.88	+ 4	−13	− 7	−11	− 6	+24	− 4	+12	− 8	+ 6	1	−0.54
96913 H	19 42 00.82	−22 22 51.9	8.97	H	295.503 412 14	−22.381 069 72 *	−0.04	−5.64	−11.42	1.12	0.71	1.24	1.19	0.85	+31	−43	−37	−28	− 3	+16	− 1	−28	+13	+22	0	0.79
96914	19 42 01.23	+31 29 43.6	7.99	H	295.505 121 06	+31.495 452 52	6.67	30.53	−15.07	0.52	0.69	0.87	0.61	0.86	−13	−12	+ 1	+20	+ 8	−24	+ 9	+11	+ 5	−15	0	−1.75
*96915 H	19 42 02.03	−30 19 33.5	9.10	G	295.508 477 12	−30.325 983 70 A	11.98	−7.02	−60.28	6.28	2.16	5.96	4.98	3.90	+36	−13	− 2	− 7	+ 3	−25	+ 9	−16	+12	+20	3	0.87
*96916	19 42 02.00	−10 05 31.6	9.23	2 H	295.508 346 33	−10.092 105 58	0.27	12.52	−13.47	1.27	0.77	1.35	1.46	0.77	+32	−10	+ 4	−12	+12	− 1	+ 9	−24	+ 7	+49	0	0.38
96917	19 42 02.90	−09 11 36.4	6.31	H	295.512 073 44	−09.193 449 10	9.75	43.67	−84.44	0.72	0.42	0.78	0.80	0.41	+ 8	−24	− 8	−11	+16	+13	+13	−26	+12	+25	0	1.41
96918	19 42 03.50	−24 54 47.9	9.89	H	295.514 564 79	−24.913 315 65	16.11	24.86	−68.52	1.50	0.93	1.64	1.77	1.44	+29	−18	+15	+ 1	+12	+ 4	+18	− 2	−10	+39	0	1.55
96919	19 42 04.13	+55 27 47.9	6.42	2 H	295.517 228 04	+55.463 314 72	4.25	12.97	−38.29	0.56	0.50	0.59	0.68	0.64	− 2	− 8	+ 1	+18	− 5	−27	− 2	−17	+ 4	+ 9	2	−1.13
96920	19 42 05.09	+25 54 07.6	9.99	G	295.521 218 66	+25.902 115 62	4.36	17.13	12.88	0.82	1.16	1.70	0.83	1.58	+ 4	−10	−10	+44	+ 6	+ 1	+12	+21	−22	+11	0	1.74
96921	19 42 06.55	−17 59 13.9	9.55	H	295.527 297 76	−17.987 201 52	4.66	−10.80	−9.48	1.64	1.09	1.70	1.71	1.30	+59	−42	−27	+ 5	+17	+16	+13	+ 2	+21	+69	5	−1.03
96922	19 42 07.98	+28 59 45.6	8.94	H	295.533 253 10	+28.996 005 19	0.96	−0.60	−6.61	0.63	0.83	1.17	0.75	0.88	+ 0	− 6	+12	+20	+ 2	−21	+10	−15	−15	+20	0	0.61
96923	19 42 08.24	−83 39 15.2	9.32	H	295.534 319 63	−83.654 224 72	10.51	38.32	−83.56	0.81	0.83	1.02	0.90	0.98	−21	−17	+ 9	+27	−19	− 1	−18	− 6	−24	−31	0	0.14
96924	19 42 08.36	+36 21 04.2	9.30	H	295.534 832 97	+36.351 153 02	2.10	−0.30	−2.74	0.63	0.71	0.87	0.75	0.83	+ 6	− 9	−12	+11	+ 9	−11	+ 8	+ 8	− 2	+11	0	0.99
96925	19 42 08.59	+31 32 26.8	8.30	H	295.535 788 88	+31.540 775 16	7.73	7.38	−24.37	0.60	0.76	0.97	0.68	0.97	− 9	−15	− 7	+25	+ 7	−28	+ 6	+19	+ 6	−16	0	−0.24
96926	19 42 09.34	+33 41 15.8	8.92	H	295.538 932 88	+33.687 726 19	2.28	−15.07	−11.61	0.70	0.71	0.94	0.72	0.84	− 4	+ 3	+ 8	+21	+16	− 3	+19	+13	+ 9	+ 6	0	−1.52
96927	19 42 11.32	+59 50 31.6	8.74	H	295.547 149 05	+59.842 108 19	3.00	1.59	13.20	0.75	0.68	0.75	0.81	0.85	+ 8	− 6	+10	+21	+16	− 5	+19	+18	+ 5	+28	0	0.20
96928	19 42 12.52	+70 56 59.0	8.90	G	295.552 182 78	+70.949 731 01	4.59	0.59	8.65	0.77	0.64	0.74	0.95	0.80	− 5	−20	− 3	−17	+14	− 5	+ 9	+11	+ 7	+ 8	0	−0.68
*96929 H	19 42 12.65	+29 29 51.0	7.57	G	295.552 695 96	+29.497 493 34 *	9.85	37.62	53.59	0.49	0.59	0.86	0.57	0.67	− 3	−13	+13	+ 7	+ 5	+ 3	+ 9	−15	−10	+13	0	0.69
*96930	19 42 12.62	−29 37 37.1	10.36	H	295.552 578 74	−29.626 963 51	−1.22	4.32	−15.00	1.96	1.05	2.25	2.59	1.91	+37	+ 5	− 3	−22	− 1	−26	+ 2	−25	+25	+ 3	0	2.16
96931	19 42 12.81	+12 11 35.8	6.33	H	295.553 386 88	+12.193 281 67	4.53	0.01	−8.44	0.53	0.39	0.79	0.66	0.41	+ 7	− 6	−14	+ 6	−19	+29	−19	−22	+ 2	−10	0	−1.31
96932	19 42 13.02	−36 37 59.7	6.86	H	295.554 262 17	−36.633 262 36	19.88	10.62	−69.74	1.00	0.66	1.03	1.32	0.88	− 2	−38	−27	+35	−10	+ 1	−13	+31	+ 9	−33	12	3.49
96933	19 42 14.40	+60 33 47.3	8.42	H	295.560 004 15	+60.563 152 12	2.79	2.21	7.63	0.68	0.60	0.67	0.77	0.76	+ 1	−12	− 9	+28	+ 8	− 3	+ 9	+10	+12	+15	1	0.04
96934 H	19 42 15.86	−52 56 57.0	7.38	H	295.566 084 07	−52.949 167 20 A	4.73	19.17	−45.28	1.24	0.87	1.42	1.76	1.37	−11	− 1	− 2	−24	+43	−24	+45	−10	+12	+ 0	3	0.70
96935	19 42 19.27	−57 08 24.8	8.09	H	295.580 310 04	−57.140 223 67	2.46	10.93	−10.63	0.69	0.50	0.93	1.04	0.92	−11	−11	+10	+ 6	+ 2	+13	+10	−15	+ 2	+25	0	−1.33
96936	19 42 19.31	+18 27 56.3	6.92	H	295.580 468 91	+18.465 631 24	7.10	13.63	5.47	0.45	0.46	0.74	0.47	0.52	+ 0	−10	+ 4	−27	− 4	+11	− 3	−17	− 9	−12	1	0.34
96937	19 42 21.09	−50 29 31.1	7.77	H	295.587 876 22	−50.491 963 80	10.35	28.46	−1.24	0.82	0.59	1.16	1.19	1.05	+19	−11	−17	−14	+32	− 7	+32	−18	+28	+18	0	0.08
96938	19 42 22.63	−24 51 33.3	6.70	H	295.594 305 06	−24.859 246 53	5.26	23.10	−25.55	0.75	0.52	0.80	0.85	0.69	+41	−21	− 4	+ 9	+11	+ 8	+13	− 1	+ 3	+47	2	1.61
96939 H	19 42 23.41	+15 15 11.1	8.22	H	295.597 521 65	+15.253 086 77 *	0.07	−1.88	−6.69	0.77	0.58	1.02	0.93	0.71	−13	−26	− 7	+22	−28	+ 2	−35	+ 5	+12	−50	1	0.75
96940	19 42 23.52	−26 26 37.7	8.45	H	295.597 999 20	−26.443 807 60	1.11	3.05	4.14	1.07	0.59	1.16	1.58	0.90	+25	− 6	−10	+32	+13	+34	+14	+14	+ 3	+ 3	0	3.72
96941	19 42 25.73	+44 01 18.3	8.09	H	295.607 227 14	+44.021 763 55	1.98	−0.65	−5.21	0.55	0.57	0.64	0.56	0.68	−13	−22	− 4	+30	− 3	−12	+ 0	+34	−12	− 9	0	0.70
96942	19 42 25.98	−13 19 18.6	8.36	H	295.608 241 31	−13.321 826 45	3.59	2.89	3.57	1.02	0.60	1.09	1.05	0.65	+26	−18	− 8	−18	+12	+16	+11	−20	+22	+53	0	0.59
96943	19 42 27.24	+08 09 16.9	8.99	H	295.613 480 48	+08.154 707 92	21.05	154.61	141.46	0.85	0.56	1.27	1.06	0.48	+ 3	+ 8	−12	+21	−27	+36	−25	−39	+ 8	− 6	0	−0.14
96944	19 42 27.66	+80 29 06.3	8.48	H	295.615 247 30	+80.485 076 89	1.32	3.33	−4.32	0.63	0.63	0.71	0.73	0.78	− 2	−12	+ 4	− 3	− 4	−21	− 2	− 3	−12	+ 4	0	1.59
96945	19 42 28.72	−31 22 02.9	9.65	H	295.619 670 02	−31.367 485 46	2.95	−18.22	−3.01	2.09	0.88	2.12	2.27	1.34	+23	−52	−27	−35	+ 8	− 2	+ 4	−34	+14	−22	0	−1.69
96946	19 42 28.83	+31 44 27.2	8.38	H	295.620 132 32	+31.740 879 57	19.60	−16.10	−199.37	0.61	0.80	1.05	0.71	1.04	−12	−10	+ 9	+13	+ 2	−26	+ 6	+10	+ 7	−16	0	−1.14
96947	19 42 29.21	−45 18 55.2	8.32	H	295.621 701 15	−45.315 321 82	5.66	9.99	−91.01	1.22	0.96	1.45	1.89	1.19	+ 7	− 9	−29	+10	+ 6	−36	− 8	−17	+18	−14	0	2.98
96948	19 42 29.67	+01 35 12.0	7.64	G	295.623 613 37	+01.586 671 15	24.81	159.06	−60.09	0.96	0.49	1.07	1.13	0.44	+13	−36	− 7	+18	+ 7	+ 5	−11	−38	+22	− 5	2	−0.94
96949	19 42 30.76	+36 12 52.5	9.21	H	295.628 185 04	+36.214 575 44	−0.26	−1.52	−11.24	0.73	0.78	1.02	0.86	0.87	+ 9	−11	−14	+12	+ 8	−20	+ 6	+ 9	+ 0	+12	0	−0.79
96950	19 42 31.09	−16 07 26.3	5.06	H	295.629 552 50	−16.123 973 92	18.67	67.78	−9.23	0.81	0.48	0.88	0.82	0.53	+26	−42	−17	+10	+17	+15	+17	− 1	+11	+40	0	0.01
96951	19 42 31.18	+24 48 59.4	9.40	H	295.629 908 41	+24.816 493 82	3.33	1.52	−12.81	0.99	0.96	1.42	1.29	1.12	− 4	+ 4	−19	−34	+ 0	−15	− 1	−18	+ 4	−12	0	−0.45
96952	19 42 32.30	−68 18 33.5	9.09	H	295.634 589 54	−68.309 303 99	10.64	20.96	−15.15	0.68	0.84	1.37	0.65	0.93	+ 0	−25	− 5	−14	+ 1	− 7	− 2	− 4	+17	−14	0	1.81
96953	19 42 32.48	+64 41 43.2	8.80	H	295.635 320 75	+64.695 325 14	6.33	−14.01	−27.89	0.64	0.63	0.68	0.62	0.71	+17	− 4	+14	− 1	+17	− 3	+18	+14	− 2	+32	0	−1.89
96954	19 42 32.62	+26 09 52.9	8.92	H	295.635 935 35	+26.164 684 58	3.27	5.58	−0.06	0.54	0.81	1.15	0.64	1.05	−15	+ 0	−14	+23	+ 3	+ 5	+ 7	− 4	− 4	− 7	0	−0.15
96955 H	19 42 33.17	−59 00 34.1	7.48	G	295.638 201 69	−59.009 465 88 A	24.12	168.29	−168.28	1.26	0.90	1.43	1.15	1.22	− 8	−22	− 1	+47	−27	− 2	−10	− 4	− 3	+47	1	−0.10
96956	19 42 33.48	−50 40 03.3	6.90	H	295.639 509 10	−50.667 593 71	4.71	−1.52	−1.02	0.74	0.54	1.03	1.17	0.82	+11	− 1	−18	−22	+35	−25	+30	−28	+21	− 2	0	−1.27
96957 H	19 42 34.01	+11 49 35.8	5.28	H	295.641 696 97	+11.826 608 40 A	4.34	3.43	−10.49	0.92	0.60	0.86	0.79	0.51	+37	+ 0	− 8	+11	−17	+19	−14	−19	+ 5	− 2	1	0.06
*96958	19 42 34.24	+40 01 35.5	7.94	G	295.642 686 59	+40.026 515 06	3.57	9.03	10.89	0.53	0.55	0.66	0.60	0.65	+ 6	−12	−13	+20	+ 5	+14	+ 8	+20	− 3	+13	2	−0.55
*96959	19 42 34.21	+16 26 37.2	9.03	H	295.642 548 39	+16.443 661 93	3.58	−11.59	−18.25	0.73	0.71	1.28	0.80	0.82	+19	−17	− 6	−20	−11	+ 4	−12	−16	+12	+ 6	0	0.66
96960	19 42 34.30	−05 38 45.0	9.93	H	295.642 918 64	−05.645 847 14	12.41	−51.10	−56.85	1.55	0.74	1.57	1.76	0.76	+18	−30	− 3	−31	+ 3	+29	− 1	−34	+14	+31	0	1.35
96961	19 42 34.62	+20 18 07.9	9.07	H	295.644 232 68	+20.302 181 65	1.33	2.50	−7.52	0.78	0.81	1.23	0.98	1.07	+ 2	− 6	−11	+ 2	−24	+ 4	−26	+ 0	+ 0	−33	0	−0.95
96962	19 42 34.66	+04 57 13.9	7.76	H	295.644 425 64	+04.953 864 32	0.63	−0.53	−1.78	0.84	0.45	0.98	1.16	0.42	−20	−21	−16	− 5	+ 7	+25	+ 2	−48	+21	−30	1	0.19
96963	19 42 35.16	+64 01 48.3	9.23	G	295.646 493 37	+64.030 073 67	0.21	−2.88	7.33	0.79	0.73	0.79	0.93	0.88	+11	− 7	+ 5	+ 2	+14	− 7	+14	+ 3	− 1	+18	1	−0.43
96964	19 42 35.47	−32 14 21.4	8.75	H	295.647 799 80	−32.239 288 53	8.54	−41.15	−13.91	1.23	0.77	1.32	1.21	0.89	+13	−43	−18	−17	+ 3	+15	+ 8	−13	− 4	+11	0	−1.84
96965	19 42 36.17	−02 35 03.0	8.75	1 H	295.650 724 55	−02.584 163 89	2.48	−0.76	18.63	1.20	0.65	1.43	1.39	0.64	+19	−27	−12	−19	+12	+37	+ 7	−25	+21	+20	3	0.04
96966	19 42 36.23	+28 20 53.2	8.24	1 H	295.650 939 46	+28.348 113 91	4.22	21.14	20.03	0.54	0.72	1.04	0.63	0.87	− 8	+ 8	− 3	+18	+ 8	−23	+11	+ 0	−11	+10	0	0.00
96967	19 42 37.13	−24 22 45.8	7.68	2 H	295.654 694 51	−24.379 394 44	6.24	1.00	−39.90	0.95	0.61	1.01	1.00	0.80	+42	−42	− 8	+16	+13	− 9	+15	+ 0	− 4	+46	0	1.47
96968	19 42 37.42	−72 12 48.3	8.74	G	295.655 910 30	−72.213 425 04	1.09	5.75	−61.62	0.59	0.82	1.14	0.63	0.98	−17	− 9	+ 9	+ 5	+ 4	− 5	+ 3	−10	+ 5	−24	0	0.29
96969	19 42 37.85	+09 13 39.1	8.54	H	295.657 711 96	+09.227 516 26	1.13	0.12	−1.78	0.67	0.48	1.02	0.81	0.41	+16	+10	+ 0	+31	−35	+27	−37	−43	+ 1	+ 4	1	−1.06
96970	19 42 37.97	−41 43 25.0	8.58	H	295.658 207 15	−41.723 612 80	2.33	19.41	−46.94	1.23	0.98	1.31	1.56	1.24	+33	−32	−17	+13	−19	+ 3	−21	−22	+ 0	+19	0	1.47
96971	19 42 38.46	−25 41 00.0	9.26	H	295.660 234 97	−25.683 326 95	1.45	31.88	1.28	1.14	0.72	1.34	1.51	1.04	+35	−11	−12	+21	+ 5	+41	+ 9	+ 9	+ 3	+27	0	1.63
96972	19 42 39.92	−30 39 24.7	10.24	H	295.666 334 73	−30.656 874 59	3.55	5.14	−17.54	2.66	1.17	2.95	4.34	2.08	+40	−49	−34	+10	+17	−22	−13	−31	+19	−35	0	0.64
96973	19 42 41.42	−46 02 49.7	8.21	H	295.672 579 78	−46.047 146 79	6.03	18.16	−24.31	1.17	0.85	1.21	1.48	1.04	+ 3	−33	− 7	+25	− 2	+ 7	− 5	+15	+12	+ 5	0	1.15
*96974	19 42 43.56	−69 22 18.9	11.66	H	295.681 493 65	−69.371 920 65	2.19	−36.25	−367.70	1.46	2.09	3.60	1.67	2.55	−30	−10	+ 0	+24	+12	− 6	+12	− 8	+15	−30	1	−0.03
*96975	19 42 43.47	+16 12 08.3	8.78	H	295.681 139 99	+16.202 301 50	2.69	11.08	0.29	0.76	0.71	1.22	0.81	0.70	+18	+ 0	−19	−19	−23	+28	−21	−27	+ 1	− 9	3	1.67
96976	19 42 44.12	+08 22 48.9	8.70	H	295.683 850 43	+08.380 243 18 B	8.96	28.03	51.71	12.08	7.58	8.19	7.53	3.83	+ 1	+ 2	− 8	+34	−25	+21	−25	−28	+15	− 4	7	1.01
96977	19 42 44.60	+32 25 36.3	5.93	H	295.685 852 35	+32.426 744 36	1.45	2.10	−1.21	0.38	0.45	0.57	0.44	0.57	−13	− 6	− 6	+22	− 2	− 9	− 3	+ 9	+13	−12	0	−0.13
96978	19 42 45.04	−43 04 31.2	8.60	H	295.687 671 24	−43.075 328 63	1.58	3.55	1.69	1.40	0.92	1.38	1.73	1.19	−16	−39	−10	+ 3	− 1	+ 2	+ 0	−13	− 3	−24	0	0.86
96979	19 42 45.86	+08 22 57.5	6.89	H	295.691 088 39	+08.382 631 50 A	14.93	24.55	53.92	1.60	1.23	1.93	2.10	0.92	+ 9	+14	− 7	+32	−27	+36	−31	−33	+ 6	− 7	7	1.01
96980 H	19 42 46.22	−06 28 25.5	8.37	G	295.692 589 97	−06.473 747 29 A	−1.71	−14.33	−5.65	1.65	0.96	1.54	1.73	0.80	+49	+ 8	−11	+22	+12	+20	+13	−16	+30	+48	1	1.18
96981	19 42 47.33	+21 05 51.7	9.03	H	295.697 199 41	+21.097 692 29	15.00	−129.72	90.92	0.87	0.87	1.43	1.09	1.07	+ 0	−13	− 8	+ 2	− 7	+ 4	− 8	− 7	+ 0	−21	0	0.87
96982	19 42 47.57	+47 12 32.1	7.25	H	295.698 222 72	+47.208 925 99	1.68	2.53	2.06	0.54	0.53	0.60	0.58	0.64	− 7	+ 2	− 2	+ 1	+17	− 3	+17	+18	−12	+ 1	0	−0.68
96983	19 42 47.80	−20 11 45.0	9.26	2 H	295.699 174 96	−20.195 831 10	2.52	4.46	−1.77	1.32	0.81	1.41	1.38	1.03	+46	−45	−28	−28	−11	+19	− 7	−23	+ 9	+41	0	0.86
96984	19 42 48.28	+17 58 05.8	7.79	2 H	295.701 150 76	+17.968 286 26	−0.74	−1.83	−8.52	0.55	0.53	0.94	0.60	0.62	+ 1	−14	− 2	−10	−20	+11	−21	−12	−10	−18	1	−0.06
96985	19 42 48.41	+22 51 06.0	6.54	H	295.701 725 19	+22.851 677 13	6.46	50.48	−18.02	0.54	0.56	0.83	0.68	0.70	− 2	−10	−29	− 6	− 5	+16	− 2	+ 4	+ 2	+ 6	0	−1.74
96986	19 42 48.56	+37 41 12.5	7.56	H	295.702 351 64	+37.686 813 59	1.35	−10.77	7.27	0.61	0.66	0.79	0.68	0.77	+ 1	−19	−23	−21	+10	+11	+ 7	+ 6	+12	+12	0	−1.20
96987	19 42 48.85	−48 12 08.8	8.85	H	295.703 541 43	−48.202 448 29	4.84	13.79	−69.46	1.54	1.01	1.50	2.00	1.28	− 5	−36	−16	+ 5	+26	− 1	+18	− 2	+11	−15	0	0.96
96988	19 42 49.07	+29 19 53.9	6.54	H	295.704 470 94	+29.331 649 97	12.25	57.94	46.52	0.38	0.49	0.67	0.46	0.58	− 4	− 5	+ 7	+10	+ 2	− 7	+ 7	−14	− 9	+16	0	0.57
96989	19 42 49.34	+55 01 36.7	8.23	2 H	295.705 573 19	+55.026 869 50	1.88	−2.52	−9.93	0.67	0.59	0.68	0.87	0.72	+ 3	−11	− 3	+15	+ 8	−15	+10	−17	+10	+16	0	−1.32
96990	19 42 49.63	+23 27 47.9	8.75	G	295.706 775 43	+23.463 315 13	2.86	−2.06	−3.57	0.90	0.85	1.29	1.16	1.12	+ 5	−12	−19	− 5	− 3	− 3	− 4	−10	+ 6	− 1	0	0.30
96991	19 42 49.85	+48 26 07.7	8.60	H	295.707 698 65	+48.435 478 87	1.29	6.44	5.72	0.72	0.62	0.76	0.75	0.72	− 3	−10	+12	+10	+13	−18	+18	+12	− 5	+11	0	1.94
96992	19 42 49.93	+42 39 00.4	8.53	H	295.708 026 54	+42.650 100 54	2.41	−0.01	−1.67	0.56	0.60	0.70	0.57	0.74	− 4	+16	− 6	+ 3	+14	−12	+18	+ 8	+16	+ 5	0	0.97
96993	19 42 50.15	+01 31 52.6	8.46	H	295.708 974 90	+01.531 266 39	−0.38	−1.33	−1.95	1.18	0.67	1.32	1.41	0.59	+17	−35	− 7	+12	− 3	− 1	−15	−43	+19	+ 2	0	−1.44
96994	19 42 50.53	−18 11 56.4	8.85	H	295.710 550 87	−18.198 999 44	8.41	−29.68	−0.29	1.18	0.75	1.31	1.25	0.95	+48	−37	−21	− 5	+16	+29	+14	+ 5	+25	+64	0	0.10
96995	19 42 51.18	+35 45 00.6	7.81	H	295.713 260 80	+35.750 161 00	2.20	1.80	1.67	0.55	0.56	0.76	0.61	0.68	− 8	−11	+ 2	+19	+ 5	−15	+ 6	+ 1	+10	− 2	0	−0.66
96996	19 42 51.76	+06 11 08.8	9.32	H	295.715 664 45	+06.185 777 89	1.29	0.48	−1.92	1.00	0.57	1.25	1.42	0.56	−22	−19	−10	+ 3	− 8	+34	− 5	−37	+12	−21	0	−1.83
*96997	19 42 52.92	+37 40 41.5	7.92	H	295.720 506 81	+37.678 184 85	0.30	0.59	−1.19	0.60	0.61	0.76	0.65	0.75	+ 5	−17	−23	−21	+10	+12	+10	+ 8	+10	+13	0	−1.99
*96998	19 42 52.80	−45 04 51.0	10.03	H	295.719 989 66	−45.080 840 40	34.74	−76.97	−247.59	2.05	1.54	2.33	3.20	1.97	+15	−19	−24	+25	+12	−33	+ 1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
96901	7.029	0.006	6.286	0.004		0.661	0.005	G	0.61	0.03	C	6.3656	0.0007	0.007	123		6.35	6.38		C	19418+5031	I 2	1						S
96902	9.357	0.014	8.630	0.012		0.642	0.015	G	0.71	0.01	H	8.6884	0.0020	0.019	117		8.64	8.73					1						G
96903	6.621	0.003	6.669	0.004	*	−0.039	0.005	T	−0.02	0.01	L *	6.6691	0.0007	0.009	210	*	6.65	6.69		D	19419+2723	I 1	2 C A	AB	328	0.310	0.002	0.25	0.03	S
96904	10.172	0.027	9.539	0.025		0.558	0.015	G	0.63	0.01	H	9.5744	0.0021	0.023	126		9.54	9.62		C			1							G
96905	8.343	0.011	8.345	0.014		0.003	0.016	T	0.02	0.01	L	8.3629	0.0016	0.019	150		8.33	8.40		U 2	19419+1315	I 1	1 S							
96906	7.995	0.007	7.529	0.007		0.439	0.009	T	0.51	0.01	L	7.5810	0.0012	0.011	125		7.56	7.60		C			1						S
96907	6.446	0.004	6.248	0.004		0.182	0.005	T	0.20	0.01	L	6.2830	0.0009	0.008	124		6.27	6.30		C	19420+4015	I 1	1 S						S
96908	9.489	0.020	8.932	0.019		0.616	0.001	G	0.68	0.00	H	8.9703	0.0017	0.015	117		8.95	9.00		C			1						
96909	10.323	0.029	9.174	0.017		0.987	0.026	T	0.97	0.02	L	9.2326	0.0017	0.018	123		9.20	9.26		C			1						
96910	8.730	0.015	8.572	0.017		0.152	0.021	T	0.17	0.02	L	8.5654	0.0023	0.020	59		8.53	8.60		C			1						
96911	9.719	0.019	8.599	0.013		0.965	0.018	T	0.95	0.01	L	8.6415	0.0016	0.019	104		8.61	8.68		D			1						
96912	9.937	0.026	9.370	0.025	A	0.626	0.015	G	0.69	0.01	H *	9.3419	0.0029	0.023	106	*	9.30	9.40		D	19420+2217	I 1	2 C A	AB	80	3.152	0.017	2.56	0.10	
96913	11.020	0.059	9.207	0.022	*	1.031	0.150	G	1.00	0.12	R *	9.1380	0.0024	0.018	83	*	9.11	9.17		C	19420−2223	H 1	2 C S D	AB	181	0.140	0.018	1.64	0.95	D
96914	8.339	0.008	7.997	0.008		0.331	0.012	T	0.39	0.02	L	8.0704	0.0014	0.014	152		8.05	8.10					1						S
96915						0.927	0.150	G	0.97	0.15	I *	9.2288	0.0022	0.024	86	*	9.20	9.28		D	19420−3019	I 1	2 C A	AB	32	6.562	0.014	1.12	0.05	
96916	11.598	0.095	9.558	0.026		1.689	0.078	T	1.71	0.08	L	9.3574	0.0033	0.032	95		9.31	9.41		U 2			1 S						
96917	8.058	0.008	6.457	0.004		1.341	0.007	T	1.31	0.01	L	6.4588	0.0007	0.006	116		6.45	6.47		C			1						S
96918	11.032	0.061	10.002	0.038		0.910	0.015	G	0.95	0.01	I	10.0359	0.0036	0.021	82		9.99	10.07		C			1						G
96919	8.393	0.015	6.686	0.018		1.453	0.019	T	2.94	0.06	O	6.3357	0.0110	0.121	93		6.19	6.54		U 2			1 S						S P
96920	10.518	0.029	10.194	0.035		0.531	0.015	G	0.60	0.02	H	10.1258	0.0027	0.034	192		10.06	10.18					1						G
96921	10.269	0.035	9.655	0.032		0.569	0.035	T	0.64	0.03	L	9.6759	0.0028	0.020	74		9.64	9.72		C			1						
96922	8.930	0.011	8.936	0.014		0.010	0.015	G	0.03	0.01	H	8.9485	0.0015	0.019	160		8.91	8.98		C			1						
96923	10.063	0.023	9.360	0.020		0.635	0.023	T	0.70	0.02	L	9.4542	0.0015	0.017	128		9.42	9.49					1						
96924	9.231	0.014	9.295	0.020		−0.054	0.022	T	−0.03	0.02	L	9.2926	0.0018	0.019	126		9.26	9.32					1						
96925	8.868	0.012	8.368	0.012		0.481	0.013	T	0.55	0.01	L	8.4033	0.0019	0.022	156		8.37	8.44			19421+3132	I 1	1						S
96926	10.426	0.028	9.067	0.015		1.151	0.025	T	1.11	0.02	L	9.0885	0.0017	0.022	147		9.06	9.12		R			1						
96927	9.839	0.022	8.823	0.016		0.886	0.020	T	0.89	0.01	L	8.8945	0.0015	0.014	95		8.87	8.92		C			1						
96928	9.266	0.014	8.888	0.015		0.340	0.015	G	0.40	0.02	H	8.9659	0.0020	0.021	114		8.93	9.00					1						
96929	8.155	0.008	7.624	0.007	*	0.544	0.003	G	0.62	0.00	H *	7.6742	0.0011	0.012	160	*	7.66	7.70		C	19422+2930	H 1	2 C S D	AB	277	0.193	0.082	3.22	0.72	S D
96930	10.868	0.054	10.447	0.059		0.398	0.074	T	0.46	0.08	L	10.4540	0.0030	0.032	115		10.40	10.52					1						G
96931	6.227	0.003	6.317	0.004		−0.077	0.004	T	−0.06	0.01	L	6.3119	0.0008	0.007	167		6.30	6.33					1						S
96932	7.401	0.009	6.927	0.006		0.459	0.008	T	0.53	0.01	L	6.9650	0.0012	0.008	59		6.95	6.99		C			1						S
96933	8.438	0.010	8.426	0.012		0.016	0.014	T	0.04	0.01	L	8.4373	0.0013	0.016	104		8.41	8.46					1						
96934	7.622	0.013	7.367	0.015	*	0.239	0.020	T	0.27	0.03	L *	7.4486	0.0012	0.010	132	*	7.43	7.47		D	19423−5257	I 1	2 C A	AB	47	3.357	0.005	1.57	0.02	S
96935	9.385	0.013	8.210	0.008		1.008	0.012	T	0.98	0.01	L	8.2571	0.0013	0.017	188		8.23	8.29		C			1						
96936	6.999	0.004	6.929	0.005		0.069	0.006	T	0.08	0.01	L	6.9457	0.0008	0.008	154		6.93	6.96		C			1						S
96937	8.183	0.007	7.795	0.007		0.336	0.003	G	0.39	0.00	H	7.8483	0.0016	0.015	146		7.82	7.87					1						S
96938	6.942	0.005	6.737	0.005		0.196	0.007	T	0.21	0.01	L	6.7689	0.0007	0.008	94		6.75	6.78					1						S
96939	8.273	0.007	8.218	0.009	*	0.056	0.010	T	0.07	0.01	L *	8.2447	0.0020	0.018	141	*	8.22	8.27			19424+1515	H 1	2 C S A	AB	188	0.174	0.013	1.57	0.27	
96940	10.242	0.029	8.595	0.013		1.378	0.025	T	1.35	0.03	L	8.6016	0.0019	0.015	98		8.58	8.64					1						
96941	8.023	0.007	8.078	0.009		−0.040	0.015	G	−0.02	0.01	H	8.0825	0.0010	0.012	120		8.07	8.10					1						
96942	8.499	0.010	8.383	0.012		0.112	0.015	T	0.13	0.01	L	8.4053	0.0014	0.012	93		8.39	8.43		C			1						S
96943	9.926	0.017	9.089	0.014		0.733	0.003	G	0.78	0.00	H	9.1325	0.0017	0.020	207		9.10	9.16					1						
96944	8.749	0.011	8.512	0.012		0.226	0.015	T	0.25	0.02	L	8.5559	0.0018	0.018	97		8.52	8.59					1						
96945	10.083	0.035	9.701	0.039		0.417	0.015	G	0.48	0.02	H	9.7471	0.0031	0.021	74		9.72	9.78					1						
96946	9.330	0.014	8.449	0.011		0.770	0.014	T	0.81	0.01	L	8.5209	0.0019	0.021	149		8.49	8.55					1						
96947	9.693	0.026	8.443	0.016		1.066	0.024	T	1.03	0.02	L	8.4898	0.0022	0.016	47		8.46	8.52		C			1						
96948	8.441	0.008	7.715	0.008		0.664	0.015	G	0.73	0.01	H	7.7731	0.0010	0.010	126		7.75	7.79					1						S
96949	11.092	0.055	9.379	0.020		1.430	0.046	T	1.42	0.07	L	9.3416	0.0015	0.019	127		9.31	9.37		C			1						
96950	5.452	0.002	5.101	0.002		0.319	0.002	G	0.37	0.00	H	5.1368	0.0005	0.004	89		5.13	5.14			19425−1607	I 1	1						S
96951	9.659	0.020	9.432	0.023		0.217	0.029	T	0.24	0.03	L	9.4656	0.0027	0.028	123		9.41	9.51		C			1						G
96952	9.807	0.015	9.154	0.013		0.597	0.015	T	0.67	0.01	L	9.2184	0.0023	0.026	210		9.17	9.27					1						
96953	9.268	0.014	8.843	0.014		0.401	0.018	T	0.47	0.02	L	8.8928	0.0018	0.017	125		8.86	8.93		C			1						
96954	9.057	0.010	8.928	0.012		0.125	0.015	T	0.14	0.01	L	8.9674	0.0014	0.018	222		8.93	9.00					1						
96955	8.264	0.008	7.488	0.008	*	0.711	0.009	G	0.77	0.01	H *	7.6234	0.0009	0.010	169	*	7.61	7.64		D	19426−5901	I 1	2 C A	AB	153	2.178	0.003	1.08	0.01	S
96956	8.517	0.008	7.035	0.005		1.248	0.007	T	1.21	0.01	L	7.0602	0.0010	0.010	147		7.04	7.08		C			1						S
96957	5.982	0.003	5.360	0.002	*	0.575	0.003	T	0.65	0.00	L *	5.4016	0.0004	0.006	184	*	5.39	5.41		D	19425+1150	I 1	2 C A	AB	77	0.425	0.002	0.88	0.01	S
96958	7.958	0.008	7.923	0.012		0.037	0.013	T	0.05	0.01	L	7.9603	0.0016	0.013	133		7.94	7.98			19426+4001	I 1	1						S
96959	9.429	0.017	9.088	0.019		0.323	0.024	T	0.37	0.03	L	9.1081	0.0017	0.019	135		9.07	9.15					1						
96960	10.660	0.044	9.988	0.039		0.622	0.049	T	0.69	0.04	L	10.0588	0.0024	0.024	124		10.02	10.10					1						G
96961	9.108	0.012	9.073	0.016		0.037	0.019	T	0.05	0.01	L	9.0862	0.0020	0.023	127		9.05	9.13					1						
96962	7.719	0.008	7.757	0.009		−0.030	0.011	T	−0.01	0.01	L	7.7543	0.0009	0.012	159		7.73	7.78					1						S
96963	9.253	0.017	9.232	0.022		0.030	0.015	G	0.05	0.01	H	9.2213	0.0020	0.021	105		9.19	9.27					1						
96964	9.331	0.018	8.787	0.017		0.517	0.018	T	0.59	0.02	L	8.8628	0.0021	0.015	58		8.84	8.89		C			1						
96965	11.200	0.064	9.059	0.018		1.770	0.053	T	1.80	0.05	L	8.8524	0.0023	0.021	103		8.81	8.88		U			1 S						
96966	8.878	0.010	8.312	0.009		0.540	0.015	G	0.61	0.02	H	8.3615	0.0029	0.031	164		8.31	8.40	0.11	P 1 A			1						
96967	8.112	0.011	7.735	0.014		0.392	0.015	G	0.46	0.02	H	7.7679	0.0118	0.061	83		7.70	7.86	0.36	P 1 A			1						S
96968	10.005	0.020	8.871	0.013		0.994	0.005	G	0.97	0.00	H	8.9159	0.0020	0.023	182		8.88	8.95		C			1						
96969	8.587	0.007	8.540	0.009		0.052	0.002	G	0.06	0.00	H	8.5626	0.0012	0.016	219		8.54	8.59					1						
96970	10.057	0.032	8.712	0.019		1.140	0.029	T	1.10	0.03	L	8.7479	0.0019	0.013	51		8.72	8.77		C			1						
96971	10.520	0.039	9.397	0.024		0.967	0.036	T	0.95	0.03	L	9.4273	0.0016	0.018	98		9.40	9.46					1						
96972	10.885	0.077	10.279	0.069		0.481	0.071	G	0.55	0.07	R	10.3504	0.0046	0.032	80		10.31	10.41		C			1						G
96973	8.491	0.015	8.255	0.016		0.225	0.021	T	0.25	0.02	L	8.2800	0.0021	0.011	49		8.26	8.30		D			1						S
96974											T	11.7959	0.0044	0.064	290		11.69	11.90					1						D
96975	10.122	0.023	8.906	0.014		1.039	0.021	T	1.01	0.02	L	8.9487	0.0017	0.017	135		8.92	8.97		C			1						
96976	9.572	0.018	8.781	0.015	B	0.717	0.018	T	0.77	0.01	L	8.9237	0.0339			B				D	19427+0823	I 2	1 C I C						
96977	6.068	0.003	5.946	0.004		0.118	0.005	T	0.13	0.01	L	5.9726	0.0006	0.006	154		5.96	5.98					1						S
96978	10.301	0.042	8.747	0.021		1.304	0.037	T	1.26	0.04	L	8.7525	0.0032	0.013	45		8.74	8.77					1						
96979	7.472	0.004	6.936	0.004	A	0.503	0.005	T	0.58	0.01	L	7.0018	0.0079	0.010	229	A	6.98	7.02		D	19427+0823	I 2	1 C P C						S
96980	10.374	0.030	8.521	0.012	A	1.160	0.040	G	1.12	0.04	R *	8.4756	0.0020	0.020	134	*	8.44	8.50			19428−0628	H 1	2 C D	AB	195	2.774	0.093	4.32	0.61	D
96981	9.927	0.024	9.049	0.019		0.768	0.024	T	0.81	0.02	L	9.1688	0.0019	0.021	124		9.12	9.20		C			1						
96982	8.545	0.010	7.353	0.006		1.021	0.009	T	0.99	0.01	L	7.4148	0.0010	0.010	111		7.40	7.43		C			1						S
96983	11.464	0.100	9.506	0.029		1.659	0.086	T	2.56	0.11	O	9.2749	0.0085	0.057	80		9.20	9.39		U 2 C			1 S						
96984	7.856	0.006	7.798	0.008		0.052	0.009	T	0.06	0.01	L	7.8172	0.0015	0.016	140		7.67	7.84		U 2 C			1						S
96985	7.897	0.008	6.658	0.005		1.057	0.007	T	1.02	0.01	L	6.7039	0.0009	0.010	107		6.69	6.72					1						S
96986	9.311	0.015	7.696	0.008		1.352	0.013	T	1.32	0.01	L	7.7109	0.0012	0.013	130		7.69	7.74			19428+3741	I 2	1						
96987	9.310	0.024	8.917	0.026		0.384	0.030	T	0.45	0.03	L	8.9445	0.0019	0.015	42		8.91	8.97		C			1						
96988	6.933	0.005	6.570	0.004		0.337	0.012	G	0.35	0.03	C	6.6147	0.0008	0.009	159		6.60	6.63		C			1						S P
96989	10.365	0.032	8.452	0.012		1.622	0.028	T	2.37	0.06	O	8.2651	0.0044	0.049	108		8.20	8.35		U 2			1 S						P
96990	9.497	0.017	8.855	0.015		0.656	0.014	G	0.72	0.01	H	8.8934	0.0024	0.023	117		8.85	8.93					1						G
96991	8.474	0.010	8.578	0.013		−0.090	0.015	T	−0.07	0.02	L	8.5800	0.0019	0.018	109		8.56	8.61		C			1						
96992	8.519	0.009	8.516	0.012		0.007	0.014	T	0.03	0.01	L	8.5374	0.0017	0.013	125		8.51	8.56		C			1						
96993	10.338	0.030	8.615	0.013		1.438	0.026	T	1.43	0.04	L	8.6017	0.0017	0.020	110		8.57	8.63					1						
96994	9.395	0.017	8.882	0.017		0.492	0.018	T	0.56	0.02	L	8.9613	0.0021	0.015	83		8.93	8.98		C			1						
96995	9.298	0.017	7.930	0.010		1.160	0.015	G	1.12	0.01	H	7.9755	0.0010	0.011	130		7.95	8.00					1						
96996	9.401	0.014	9.322	0.019		0.078	0.022	T	0.09	0.02	L	9.3562	0.0020	0.022	179		9.31	9.40		C			1						
96997	8.431	0.010	7.955	0.012		0.530	0.015	G	0.60	0.02	H	8.0311	0.0010	0.012	128		8.01	8.05			19428+3741	I 2	1						S
96998	11.825	0.158	10.181	0.055		1.347	0.003	G	1.57	0.00	I	10.1317	0.0040	0.020	46		10.09	10.16		D			1						G
96999	9.182	0.015	9.116	0.019	A	0.090	0.015	G	0.10	0.02	H *	9.0652	0.0021	0.022	143	*	9.03	9.10		D	19429+1731	H 1	2 C D	AB	282	4.879	0.088	4.02	0.55	D
97000	8.048	0.014	7.683	0.014		0.394	0.015	G	0.46	0.02	H	7.7293	0.0020	0.009	51		7.71	7.75		C			1						S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	$\mu_{\alpha*}$	μ_δ	π	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
97001 H	19 42 56.26	+40 43 18.3	6.71		G	295.734 401 48	+40.721 757 02	A	4.83	5.45	0.19	0.64	0.70	0.73	0.63	0.82	+12	+ 3	+ 7	+ 4	+ 0	−30	− 1	+21	+13	+21	1	0.19
97002 H	19 42 56.32	+28 22 03.2	9.60		H	295.734 686 96	+28.367 555 03	*	0.73	0.92	−2.14	3.76	5.11	1.75	2.59	1.45	+77	+ 2	− 4	+76	+73	−13	+13	+11	+ 2	+10	0	−0.13
97003	19 42 57.58	+23 11 35.1	8.81		G	295.739 936 31	+23.193 072 79		9.23	59.80	−56.61	0.92	0.87	1.35	1.19	1.08	+ 8	−16	−11	− 1	− 2	+ 9	− 1	− 2	+ 0	+13	0	−0.94
97004	19 42 58.30	−21 28 59.0	8.21		H	295.742 917 41	−21.483 046 77		3.89	9.65	−15.53	1.04	0.63	1.21	1.07	0.75	+29	−44	−32	−14	−12	+32	− 1	−15	+ 0	+23	0	1.11
97005	19 42 58.60	−45 02 57.6	9.91		G	295.744 184 78	−45.049 323 99		12.58	−83.06	−176.05	2.01	1.56	2.34	3.22	2.03	+24	−25	−35	+30	+ 9	−30	−10	− 5	+12	−10	0	0.69
97006	19 42 59.15	+27 24 30.6	7.21		H	295.746 441 54	+27.408 501 94		5.79	−14.26	0.10	0.40	0.58	0.83	0.47	0.68	−22	− 1	+ 4	+22	+ 2	− 3	+ 4	−10	− 4	−16	0	0.19
97007	19 42 59.35	−35 58 54.9	7.95		H	295.747 271 77	−35.981 919 61		9.31	−29.22	−6.92	1.12	0.74	1.17	1.38	0.82	− 2	−14	−29	+14	+15	−13	+ 9	+ 2	+ 5	−13	3	−0.02
97008	19 43 00.15	−75 23 52.1	8.02		H	295.750 629 18	−75.397 805 73		10.64	−48.85	76.94	0.56	0.54	0.84	0.71	0.71	− 4	−16	− 3	+11	+ 3	−14	+ 4	− 4	−11	− 3	2	−1.26
97009	19 43 00.49	+34 25 19.0	7.91		H	295.752 059 18	+34.421 957 98		2.29	0.15	−2.67	0.50	0.54	0.72	0.54	0.67	−12	−11	− 4	+ 3	+ 8	− 8	+ 6	+10	+12	− 6	0	0.30
97010	19 43 01.24	−62 02 55.4	9.98		H	295.755 149 04	−62.048 735 72		4.51	89.71	−30.13	1.21	0.81	1.43	1.43	1.29	− 3	−22	− 1	+14	− 7	−12	− 4	− 7	+ 3	+18	0	0.49
97011	19 43 02.14	+35 27 37.5	8.25		G	295.758 936 52	+35.460 409 89		2.39	3.42	−0.26	0.57	0.59	0.76	0.61	0.71	− 7	− 9	− 2	+25	+ 3	−19	+ 6	− 3	+ 2	+ 2	0	−0.15
97012	19 43 02.46	+27 56 36.0	8.53		H	295.760 247 06	+27.943 339 11		10.76	34.78	32.16	0.59	0.73	1.14	0.67	0.83	− 8	+ 5	− 1	+29	+ 8	−15	+11	−17	−10	+ 2	0	−1.60
97013	19 43 02.62	−14 13 55.2	8.04		H	295.760 901 77	−14.232 001 65		3.09	3.13	−1.85	0.99	0.63	1.10	1.01	0.56	+12	−14	−35	−19	+32	+12	+27	−22	+30	+32	2	2.61
97014	19 43 03.04	−49 34 54.6	9.02		H	295.762 668 77	−49.581 826 37		7.00	27.12	−19.88	1.29	1.14	1.77	1.90	1.53	+17	+11	−32	−23	+21	−23	+16	−30	+30	+17	4	−0.68
97015	19 43 03.12	+04 21 49.1	8.61		H	295.763 015 76	+04.363 637 06		0.01	−0.63	−2.47	1.10	0.56	1.26	1.40	0.54	− 8	−27	− 8	−17	+15	+ 6	+ 1	−45	+27	−25	0	0.89
97016	19 43 03.26	−08 18 26.2	7.07		H	295.763 603 79	−08.307 265 50	+	16.94	24.73	−56.58	4.00	2.04	1.43	1.35	0.63	−36	−79	+27	+51	−10	−28	+ 6	−55	+ 4	+ 1	0	0.62
97017	19 43 04.36	+61 36 27.0	9.44		H	295.768 163 96	+61.607 506 34		3.43	1.10	3.52	0.86	0.84	0.89	0.92	1.12	+11	+12	+ 4	+21	+14	− 4	+22	+ 0	+ 9	+27	0	0.45
97018	19 43 04.50	+39 59 49.5	6.95	1	H	295.768 741 98	+39.997 076 59		14.25	−6.32	18.30	0.46	0.50	0.58	0.50	0.64	− 1	−17	− 6	+16	+ 3	+ 0	+ 3	+27	− 4	+ 5	2	−0.33
97019	19 43 04.65	+22 18 07.9	8.07		G	295.769 393 30	+22.302 187 88		5.83	−9.57	−0.26	0.68	0.70	1.03	0.83	0.93	+ 2	+ 8	−14	− 8	− 6	+25	− 4	+ 3	+ 8	+16	3	−0.55
97020	19 43 05.54	+20 10 19.3	8.94		H	295.773 093 97	+20.172 018 70		1.97	5.66	−25.07	0.76	0.78	1.29	0.85	1.02	−11	−10	−13	−22	+ 7	+21	+10	− 8	+ 2	+ 2	0	0.18
97021	19 43 06.06	−49 02 23.7	9.99		H	295.775 257 44	−49.039 904 04		11.32	−55.71	−17.87	1.58	1.29	1.76	2.12	1.50	+38	−31	−38	+33	+21	− 3	+14	+ 8	+12	+22	0	0.68
97022 H	19 43 06.92	−08 19 46.2	7.51		G	295.778 849 29	−08.329 499 37	A	16.71	16.77	−56.55	2.72	1.82	1.35	1.41	0.77	−11	+ 0	− 3	− 5	+ 1	+22	+ 6	−14	+11	+29	0	−0.27
97023	19 43 06.97	+24 35 55.0	6.87		H	295.779 057 78	+24.598 599 81		22.10	87.13	−271.16	0.55	0.54	0.82	0.70	0.68	−11	− 6	−20	−11	− 1	− 3	− 2	+ 0	+14	−17	0	−0.03
*97024	19 43 07.21	−73 14 53.6	8.95		G	295.780 060 25	−73.248 228 89		12.22	10.01	−243.12	0.64	0.74	1.10	0.69	0.94	−11	−22	−14	+21	−10	− 6	−15	+ 4	+ 1	−29	1	−0.32
*97025	19 43 07.13	+26 55 54.5	7.73		G	295.779 690 90	+26.931 805 30		11.51	17.39	31.28	0.36	0.58	0.87	0.42	0.67	−26	+ 4	− 9	+ 0	+ 0	− 6	+ 1	−14	+ 2	−18	0	1.03
97026	19 43 07.49	−11 09 04.7	8.68		H	295.781 212 19	−11.151 303 92		0.48	11.68	−2.73	1.08	0.59	1.20	1.18	0.67	+23	−34	− 5	−24	+ 6	+31	+ 2	−22	+19	+49	0	−0.48
97027	19 43 08.44	−71 52 24.2	8.23		H	295.785 187 48	−71.873 385 20		1.26	1.31	13.52	0.52	0.70	1.01	0.61	0.95	−12	− 4	− 6	+11	+ 5	− 4	+ 3	−13	− 1	−24	2	−0.21
97028	19 43 09.60	+30 40 40.4	6.08		H	295.789 981 46	+30.677 880 39		9.68	2.53	4.30	0.36	0.47	0.61	0.44	0.59	− 9	− 5	+ 5	+13	− 1	− 7	− 1	+ 8	− 5	−11	1	−0.55
97029	19 43 10.76	+38 40 18.2	6.37		H	295.794 839 42	+38.671 712 85		2.26	6.90	0.30	0.47	0.48	0.58	0.51	0.61	− 8	+ 5	−13	+20	+ 3	− 8	+ 2	+27	−12	+ 0	0	−0.71
97030	19 43 11.53	−10 40 45.9	7.89		H	295.798 056 29	−10.679 424 62		23.99	61.97	−144.15	0.94	0.51	1.00	1.05	0.53	+19	−34	− 5	−10	+15	+ 2	+10	−23	+ 9	+37	0	0.58
97031	19 43 12.26	−19 06 43.6	8.59		H	295.801 086 69	−19.112 103 11		0.35	2.03	−4.77	1.00	0.65	1.10	1.00	0.76	+45	−44	−27	−12	+ 1	+23	+ 1	−13	+20	+59	0	0.26
97032	19 43 13.66	−56 15 36.5	7.69	2	H	295.806 924 05	−56.260 145 64		3.60	−21.22	−49.86	0.71	0.49	0.91	1.01	0.78	−10	− 3	− 3	− 7	+10	+ 4	+14	−16	+ 0	+15	0	−0.10
97033	19 43 14.28	+58 01 00.3	6.29		H	295.809 490 04	+58.016 752 05		22.23	128.30	−55.56	0.47	0.44	0.48	0.51	0.52	+ 9	+ 7	+18	+24	+10	− 6	+13	+13	+ 2	+14	1	0.60
97034 H	19 43 14.87	+72 21 45.3	8.46		H	295.811 976 62	+72.362 596 83	A	4.94	−0.37	−10.30	1.31	1.53	0.99	0.88	0.96	−40	−19	+21	−25	+ 9	+12	+ 0	+ 9	+ 6	−14	0	−1.05
97035	19 43 15.10	+30 13 56.5	7.21		H	295.812 910 99	+30.232 367 86		4.39	9.74	−2.05	0.40	0.53	0.70	0.46	0.65	− 7	+ 5	+ 4	+ 6	+ 5	+ 0	+ 5	+ 3	− 8	− 7	1	−0.07
97036	19 43 16.36	+09 29 50.1	7.88		H	295.818 161 68	+09.497 250 81		6.01	−0.58	−18.59	0.82	0.47	1.07	1.10	0.41	+ 1	− 9	+14	+53	−41	+ 2	−50	−32	+ 8	−22	2	−0.26
97037	19 43 16.88	+52 33 40.2	7.83		H	295.820 316 59	+52.561 176 03		2.48	−7.84	−12.03	0.54	0.56	0.61	0.59	0.68	− 5	−10	+ 4	− 1	+10	− 7	+10	+20	− 9	+ 3	0	0.79
97038	19 43 17.87	−42 46 57.3	9.28		H	295.824 451 78	−42.782 591 92		5.20	16.68	−47.03	1.63	1.05	1.71	2.03	1.44	+ 0	−41	−20	+17	−16	+ 5	− 8	− 3	−22	−25	0	1.77
97039	19 43 18.14	+69 20 50.8	8.65		H	295.825 599 90	+69.347 442 85		2.96	−5.09	−45.28	0.70	0.68	0.73	0.84	1.02	− 6	−18	+ 4	− 7	+10	− 1	+ 7	+ 8	+10	+15	1	0.81
97040	19 43 19.12	−44 23 50.2	8.23		H	295.829 667 87	−44.397 284 93		3.23	−27.59	13.01	1.24	0.93	1.39	1.87	1.26	−16	+ 6	−20	+13	+14	−26	+10	+ 2	+35	−22	0	−2.17
*97041 H	19 43 20.32	+69 29 20.4	8.26		H	295.834 671 99	+69.488 999 43	A	7.60	15.39	29.61	1.06	1.10	1.01	1.12	1.36	− 1	−12	− 9	− 4	+ 9	− 7	+ 4	+14	+ 3	+25	2	0.10
*97042	19 43 20.05	−69 26 14.7	8.80		H	295.833 544 26	−69.437 404 68		10.23	32.35	−38.38	0.49	0.75	1.20	0.56	0.88	−34	−12	+ 1	+22	+ 9	− 6	+ 8	−13	+11	−34	0	0.57
*97043	19 43 20.08	+30 56 03.5	8.11		H	295.833 672 25	+30.934 314 25		0.65	−2.54	0.55	0.54	0.75	0.98	0.66	1.04	− 1	− 6	+ 2	+ 9	+ 7	−21	+ 9	+ 6	−21	+10	0	−0.42
97044	19 43 21.09	+04 10 27.9	7.68		G	295.837 859 72	+04.174 416 89		6.62	−3.31	−4.62	0.96	0.51	1.10	1.17	0.50	−10	−34	−10	−13	+20	+ 6	+ 3	−41	+27	−30	2	1.45
97045	19 43 22.49	+47 14 41.0	7.75		G	295.843 700 77	+47.244 718 00		0.66	−2.47	−3.87	0.56	0.52	0.62	0.61	0.66	−12	− 1	−10	+ 3	+13	+ 2	+15	+15	−22	− 8	2	−1.44
97046	19 43 22.87	−74 46 08.7	7.60		H	295.845 273 54	−74.769 091 66		1.03	−4.96	−18.29	0.53	0.51	0.79	0.59	0.68	− 6	−10	− 4	+20	− 1	−11	− 1	+ 7	− 1	−13	0	−1.50
97047	19 43 23.39	−48 12 15.5	7.87		H	295.847 467 01	−48.204 308 63		3.55	14.55	−14.58	1.28	0.94	1.40	1.54	1.04	+34	−51	−47	+44	+23	−21	+ 9	+ 4	+ 6	+ 8	0	1.16
97048	19 43 23.43	+23 23 28.8	11.32		H	295.847 627 28	+23.391 335 29		21.14	−158.73	−143.56	3.19	3.07	4.56	4.18	3.69	+11	− 9	−23	− 7	− 7	+ 3	− 6	−13	+ 0	+10	2	
97049	19 43 24.55	+56 25 34.1	8.83		H	295.852 303 66	+56.426 134 98		4.92	5.53	5.84	0.70	0.68	0.76	0.91	0.99	+ 8	−18	+ 4	+11	−10	−18	−10	− 8	+ 6	+15	0	−0.08
97050	19 43 25.04	+22 29 42.0	6.82		H	295.854 340 22	+22.495 001 25		2.65	0.98	−4.77	0.56	0.54	0.81	0.67	0.75	+ 4	− 9	−24	− 7	− 7	+18	− 3	+ 0	− 2	+12	0	−1.03
97051	19 43 25.23	+10 05 21.4	10.00		G	295.855 106 62	+10.089 264 96		44.18	189.71	101.54	1.04	0.68	1.86	1.39	0.63	+34	+17	+10	+19	−27	+45	−48	−44	−11	− 8	1	1.23
97052	19 43 26.52	−50 10 39.8	8.11		H	295.860 517 95	−50.177 710 71		5.51	9.42	−9.27	0.87	0.69	1.26	1.27	0.99	+13	+ 1	−19	−21	+32	−19	+29	−20	+20	+13	0	1.54
97053	19 43 27.64	−61 37 05.5	9.04		H	295.865 154 47	−61.618 203 36		6.38	24.82	−32.73	0.95	0.65	1.17	1.10	1.03	+ 1	− 4	+ 0	+49	− 9	+14	− 2	+ 5	+ 5	+29	0	0.21
97054	19 43 28.55	+35 04 27.9	8.70		H	295.868 952 48	+35.074 430 13		−0.71	−2.50	−9.22	0.68	0.71	0.97	0.80	0.94	− 1	− 1	−10	+21	+ 5	−19	+ 3	+10	+30	+ 1	0	−0.27
*97055	19 43 28.87	−32 31 18.7	8.76		H	295.870 306 58	−32.521 859 16		−0.69	3.39	−5.95	1.28	0.69	1.36	1.36	1.07	+25	−40	− 3	− 7	− 5	+ 3	+ 3	−22	−18	+25	0	−1.11
*97056	19 43 28.87	+11 33 32.5	10.66		H	295.870 306 35	+11.559 020 36		6.25	11.15	0.41	1.35	1.00	2.07	1.86	1.00	+24	+ 6	− 9	+16	−25	+20	−33	−31	+ 4	−13	0	2.06
97057	19 43 29.39	+23 10 40.7	9.31		H	295.872 444 42	+23.177 963 19		1.52	0.11	−1.63	1.05	1.06	1.64	1.39	1.39	+ 3	−16	−11	− 8	+ 8	+ 9	+ 8	+ 1	− 2	+21	0	−0.68
97058	19 43 30.09	+06 28 53.4	8.15	2	G	295.875 354 60	+06.481 493 90		0.69	0.38	−2.41	1.00	0.49	1.11	1.35	0.47	−28	−25	−10	+28	−11	+14	−18	−32	+21	−40	0	−2.30
97059	19 43 30.47	+00 40 32.5	8.30	2	H	295.876 963 39	+00.675 680 72	A	0.74	−2.52	−1.99	1.55	0.86	1.57	1.87	0.95	+17	−15	+ 0	+ 8	+13	+22	+ 7	−13	+ 0	− 5	3	0.07
97060	19 43 30.64	−50 56 43.7	8.40		H	295.877 655 91	−50.945 482 50		6.22	2.38	1.32	1.03	0.77	1.49	1.64	1.12	+10	− 9	−29	−16	+45	−29	+37	−23	+15	− 6	0	−0.14
97061	19 43 31.64	+14 16 58.5	10.45	2	H	295.881 822 54	+14.282 915 17		−0.85	−0.24	−0.69	1.27	1.05	2.01	1.91	1.12	+17	− 6	− 4	+10	−32	+19	−32	−20	+ 2	−11	0	0.06
97062 H	19 43 31.77	−41 06 01.3	9.22		H	295.882 390 07	−41.100 353 81	*	4.68	2.64	13.58	1.47	1.13	1.68	2.03	1.40	+ 5	−10	−19	− 1	−10	−17	−16	−24	+12	−11	0	−0.37
97063	19 43 33.45	−15 28 10.8	5.49		H	295.889 367 52	−15.469 655 41		27.26	135.55	−185.17	2.23	1.38	2.35	2.55	1.37	+16	−16	−22	−31	+15	− 5	+ 8	−34	+12	+23	4	
97064	19 43 33.86	−66 57 37.3	7.69		H	295.891 092 69	−66.960 348 78		6.92	−17.23	−23.55	0.64	0.68	1.01	0.80	0.96	−28	−10	−11	+24	− 4	− 9	−17	− 3	+16	−65	1	1.01
97065 H	19 43 34.14	−09 04 02.1	8.83	2	H	295.892 231 78	−09.067 246 32	A	2.12	6.43	3.61	2.57	1.52	2.44	2.66	1.43	+42	+ 0	+10	−15	−12	− 1	−10	−33	− 1	+57	6	1.83
97066	19 43 36.88	−38 52 30.2	8.27		H	295.903 673 73	−38.875 043 00		4.82	−5.13	−21.70	1.24	1.03	1.42	1.94	1.36	+41	+ 4	−11	−13	−23	−35	−29	−43	−14	+43	4	−0.22
97067	19 43 37.62	−37 32 19.4	6.14		H	295.906 737 75	−37.538 722 52		3.82	1.04	−17.44	0.81	0.55	0.87	0.97	0.64	+ 7	−22	−17	+ 8	+ 4	−14	+ 3	− 3	− 5	+ 8	0	1.10
97068	19 43 37.78	+48 46 41.2	8.44	3	T	295.907 399 37	+48.778 116 37		−0.87	−9.17	14.39	0.75	0.68	0.77	0.84	0.81	+ 5	−19	−13	−15	+10	− 8	+ 7	−17	+10	+16	1	2.14
97069	19 43 39.16	+66 32 43.2	8.42		H	295.913 174 48	+66.545 323 52		2.75	13.15	−7.49	0.66	0.60	0.69	0.57	0.77	+ 6	−17	+10	−40	+12	+15	+ 4	+ 8	+10	+32	1	1.43
97070	19 43 39.49	+57 02 33.6	6.28		H	295.914 552 72	+57.042 656 06		12.88	3.44	23.61	0.44	0.48	0.50	0.49	0.65	+ 4	−11	+11	+ 6	− 8	−14	− 6	− 3	− 6	+18	1	1.46
97071	19 43 39.62	+48 55 44.4	8.47		H	295.915 089 14	+48.929 006 14		8.82	0.60	−69.82	0.72	0.61	0.79	0.85	0.73	− 4	−16	+ 7	+ 1	+ 9	+ 4	+13	+ 4	−14	− 4	1	0.30
97072	19 43 39.68	+25 16 09.3	9.89		H	295.915 344 87	+25.269 237 36		1.24	1.75	−15.89	0.86	0.99	1.51	0.93	1.23	+ 2	−18	− 9	+32	−11	−10	−11	−10	+ 3	+ 7	1	−1.26
97073	19 43 40.75	−46 39 19.7	8.72		H	295.919 804 74	−46.655 481 70		3.66	25.92	−4.93	1.32	1.02	1.31	1.84	1.22	−13	−13	− 6	+37	−36	+24	−34	+21	+ 8	−16	0	2.60
97074	19 43 40.80	+75 19 44.4	8.31		H	295.920 012 93	+75.328 999 29		3.62	21.65	32.44	0.60	0.59	0.63	0.60	0.66	− 8	−13	+ 9	− 5	+10	− 4	+11	+ 7	−10	+ 3	1	1.06
97075	19 43 42.41	+00 00 49.2	8.38		H	295.926 709 26	+00.013 680 00		2.71	1.43	−9.47	1.10	0.63	1.23	1.67	0.80	+ 6	+ 1	−12	+23	+10	+27	+ 6	− 6	+ 0	−17	0	0.64
97076	19 43 42.85	−44 08 01.4	7.28		G	295.928 547 08	−44.133 718 67		5.76	11.69	10.73	1.14	0.79	1.13	1.68	1.06	−33	+17	−20	+21	+ 1	−10	+ 3	+ 9	+35	−38	0	−0.09
97077	19 43 42.92	+25 46 18.7	5.50		H	295.928 823 57	+25.771 872 57		9.15	11.60	23.05	0.40	0.52	0.66	0.43	0.65	+ 6	− 9	−21	+38	+ 4	− 2	− 3	− 8	− 5	+ 7	2	0.00
97078	19 43 43.11	+51 04 00.7	7.90	2	H	295.929 622 97	+51.066 848 74		1.22	−4.23	−7.20	0.60	0.57	0.65	0.64	0.68	− 1	−14	+ 8	−18	+ 2	+ 1	− 3	+ 6	+ 2	+20	0	0.62
97079	19 43 43.23	+79 32 23.4	7.89		H	295.930 120 27	+79.539 845 88		5.89	6.38	16.00	0.59	0.55	0.63	0.64	0.71	+ 7	− 3	+22	+ 5	− 2	−20	+ 4	− 4	− 5	+11	0	0.16
97080	19 43 43.40	−38 54 21.2	8.93		H	295.930 812 81	−38.905 883 63		0.89	−6.69	10.88	3.42	1.50	2.12	4.66	2.67	+16	+28	+14	−66	−17	−57	− 9	−62	−22	+13	0	−0.82
97081	19 43 45.08	+41 46 23.1	5.86	1	H	295.937 841 16	+41.773 083 97		5.17	19.09	10.07	0.43	0.45	0.52	0.47	0.51	+ 5	+ 3	+ 0	−14	+ 7	−14	+ 5	+10	− 9	+16	3	−0.05
97082	19 43 46.13	−01 57 32.8	8.33		H	295.942 200 76	−01.959 111 36		4.80	23.50	3.12	1.14	0.64	1.34	1.43	0.73	+ 8	−28	−14	−13	+17	+24	+16	−14	+ 7	+ 0	0	−0.34
97083 H	19 43 47.09	+38 19 20.5	7.18		G	295.946 218 96	+38.322 354 31	A	1.06	0.45	−1.26	0.85	0.99	1.02	0.90	1.15	− 6	− 2	−21	+ 4	+ 9	− 9	+ 6	−19	+ 2	− 8	1	−0.11
97084	19 43 48.67	−58 30 58.4	9.05		H	295.952 804 77	−58.516 222 27		4.33	5.77	−23.41	0.84	0.68	1.22	1.03	1.07	+14	− 5	− 3	+46	−20	+ 9	− 2	−15	+ 9	+53	0	0.47
*97085	19 43 48.85	+14 55 48.5	8.38		H	295.953 553 16	+14.930 125 57		1.81	0.32	−4.81	0.81	0.60	1.11	1.02	0.67	+ 6	−20	+ 1	+13	−23	− 2	−28	−14	+19	−16	0	−2.12
*97086	19 43 48.84	+52 36 38.8	7.66		H	295.953 494 65	+52.610 785 75		10.62	19.61	28.90	0.58	0.54	0.61	0.59	0.63	−13	−20	+19	−16	+20	+ 7	+17	+11	− 7	+ 6	5	2.14
97087	19 43 51.45	+34 09 45.8	6.04		H	295.964 362 60	+34.162 714 63		3.62	6.39	3.95	0.38	0.42	0.54	0.41	0.53	−10	− 5	− 3	+ 4	+11	− 6	+12	+11	+10	− 2	0	−1.89
97088	19 43 52.52	−35 15 10.5	8.38		G	295.968 834 62	−35.252 927 11		22.26	153.20	−229.45	1.42	0.83	1.36	2.18	1.08	−25	− 5	−21	+39	−18	+31	−17	+19	−12	−44	0	0.51
97089	19 43 53.03	+77 32 00.4	8.50		H	295.970 949 10	+77.533 435 19		6.81	−11.68	93.04	0.68	0.59	0.69	0.72	0.65	− 3	−21	+18	+ 6	+12	−13	+13	+12	+ 0	+15	0	3.12
97090	19 43 53.98	+20 42 08.7	8.34		H	295.974 925 83	+20.702 408 00		1.35	15.47	−6.20	0.76	0.68	1.11	0.86	0.86	+ 5	−12	− 6	−21	− 6	+ 7	− 7	−17	+12	+ 7	0	0.06
97091 H	19 43 55.97	+27 08 07.5	6.27	2	H	295.983 223 59	+27.135 406 09	A	0.75	0.73	−3.35	0.97	1.12	0.89	0.54	0.81	−34	− 1	+ 1	+ 1	+ 0	+ 2	+ 0	− 8	+ 1	−28	4	1.41
97092	19 43 56.18	+31 52 26.5	8.91		G	295.984 090 81	+31.874 036 09		6.63	35.88	8.97	0.66	0.78	0.99	0.78	1.17	−15	+ 3	+ 1	+26	− 2	− 8	− 2	+ 9	+ 4	−22	0	0.61
*97093	19 43 56.71	−48 34 51.6	9.95		H	295.986 289 99	−48.580 992 04		15.20	58.11	−101.19	1.85	1.48	2.15	3.09	1.90	+ 7	−22	−43	+21	+28	−32	+ 5	−11	+28	−26	0	−0.59
*97094	19 43 56.63	+49 47 00.0	7.46		H	295.985 949 01	+49.783 343 92		2.96	−2.48	5.92	0.58	0.50	0.61	0.65	0.62	+ 1	−25	+ 2	−16	+ 3	− 9	− 3	+ 1	+ 9	+20	1	−0.61
*97095	19 43 57.36	−66 56 50.7	8.24		H	295.989 003 61	−66.947 428 39		8.13	−14.00	−4.37	0.70	0.71	1.04	0.85	1.00	−31	−11	− 7	+24	− 3	− 5	−16	− 4	+12	−66	0	−0.06
*97096	19 43 57.06	−66 17 36.8	9.29		H	295.987 753 01	−66.293 557 52	B	15.84	−19.26	−214.11	50.51	44.60	2.36	2.55	2.52	−38	− 1	+ 0	− 1	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
97001	6.749	0.007	6.782	0.007	*	−0.020	0.015	G	0.00	0.01	H *	6.7471	0.0007	0.006	116	*	6.73	6.76		D	19430+4044	I 1	2 C A	AB	16	0.852	0.002	1.26	0.01	S
97002	11.715	0.100	9.820	0.029	*	1.206	0.150	G	1.17	0.15	K *	9.7690	0.0025	0.027	155	*	9.72	9.81			19429+2822	H 1	2 C C	AB	129	0.203	0.054	1.30	0.88	G
97003	9.569	0.020	8.884	0.018		0.630	0.010	G	0.70	0.01	H	8.9501	0.0028	0.021	108		8.91	8.99					1							G
97004	9.743	0.025	8.331	0.014		1.193	0.022	T	1.15	0.02	L	8.3740	0.0018	0.013	75		8.35	8.40		C			1							
97005	10.742	0.053	9.928	0.042		0.656	0.002	G	0.72	0.00	H	10.0579	0.0040	0.027	46		10.02	10.09		C			1							
97006	8.697	0.009	7.339	0.005		1.150	0.008	T	1.11	0.01	L	7.3786	0.0010	0.012	212		7.36	7.40		C			1							S
97007	9.154	0.019	8.057	0.013		0.947	0.018	T	0.94	0.01	L	8.1089	0.0013	0.010	56		8.09	8.13					1							
97008	8.660	0.008	8.072	0.008		0.550	0.006	G	0.61	0.02	A	8.1326	0.0012	0.017	161		8.11	8.16					1							S
97009	7.889	0.008	7.908	0.010		−0.013	0.012	T	0.01	0.01	L	7.9167	0.0010	0.012	146		7.89	7.94		C			1							S
97010	10.605	0.041	10.025	0.038		0.544	0.041	T	0.62	0.04	L	10.0957	0.0021	0.020	99		10.06	10.13		C			1							
97011	8.144	0.008	8.213	0.010		−0.070	0.015	G	−0.05	0.01	H	8.2255	0.0016	0.013	126		8.20	8.25					1							
97012	9.182	0.012	8.585	0.011		0.540	0.015	G	0.61	0.02	H	8.6470	0.0015	0.018	165		8.62	8.68		C			1							
97013	10.295	0.036	8.253	0.013		1.691	0.030	T	1.72	0.03	L	8.1499	0.0013	0.011	95		8.13	8.17		D			1 S							
97014	9.687	0.021	9.090	0.019		0.557	0.021	T	0.63	0.02	L	9.1442	0.0030	0.026	90		9.10	9.20		C			1							
97015	8.706	0.011	8.638	0.013		0.068	0.016	T	0.08	0.02	L	8.6430	0.0014	0.013	112		8.62	8.67		C			1 S							
97016	7.530	0.006	7.114	0.006		0.405	0.004	G	0.47	0.00	H	7.1658	0.0008	0.008	127		7.15	7.18		C	19431−0819	I 2	1 O							S
97017	10.672	0.041	9.496	0.024		1.008	0.037	T	0.98	0.03	L	9.6134	0.0018	0.021	105		9.57	9.65		D			1							
97018	7.305	0.006	6.981	0.006		0.308	0.008	T	0.35	0.01	L	7.0318	0.0015	0.016	137		7.01	7.06		U			1							S
97019	8.340	0.010	8.090	0.011		0.212	0.015	G	0.23	0.02	H	8.1506	0.0018	0.017	96		8.12	8.18					1							
97020	9.456	0.017	8.960	0.017		0.466	0.022	T	0.54	0.02	L	9.0417	0.0021	0.021	129		9.00	9.08		C			1							
97021	10.652	0.056	10.074	0.051		0.543	0.056	T	0.62	0.05	L	10.1109	0.0032	0.022	57		10.08	10.18		C			1							
97022	8.075	0.009	7.568	0.009	*	0.501	0.012	G	0.57	0.01	H *	7.6189	0.0010	0.009	130	*	7.60	7.64		D	19431−0819	I 2	2 C A	AC	295	0.318	0.032	2.90	0.19	S
97023	7.549	0.006	6.938	0.005		0.567	0.006	T	0.64	0.01	L	6.9951	0.0008	0.010	127		6.98	7.01					1							S
97024	9.781	0.016	9.030	0.013		0.655	0.002	G	0.72	0.00	H	9.0828	0.0015	0.020	165		9.04	9.12		C			1							
97025	8.149	0.006	7.764	0.006		0.387	0.009	G	0.45	0.01	H	7.8189	0.0008	0.013	260		7.80	7.84		C			1							S
97026	10.829	0.053	8.851	0.016		1.640	0.044	T	1.66	0.04	L	8.7975	0.0015	0.016	101		8.77	8.82		C			1							
97027	10.346	0.023	8.402	0.009		1.613	0.020	T	1.63	0.02	L	8.3432	0.0018	0.021	198		8.31	8.38					1							
97028	6.081	0.003	6.079	0.003		0.003	0.004	T	0.02	0.00	L	6.0896	0.0005	0.007	157		6.08	6.10					1							S
97029	7.943	0.007	6.496	0.004		1.220	0.006	T	1.18	0.01	L	6.5367	0.0008	0.007	120		6.53	6.55			19432+3840	I 1	1							S
97030	8.601	0.010	7.965	0.009		0.591	0.015	G	0.66	0.01	H	8.0144	0.0010	0.011	105		8.00	8.04		C			1							S
97031	10.777	0.047	8.765	0.017		1.667	0.040	T	1.69	0.04	L	8.6989	0.0019	0.015	87		8.67	8.72					1							
97032	9.367	0.013	7.901	0.007		1.254	0.012	T	3.46	0.05	O	7.4139	0.0197	0.132	161		7.19	7.56		U 2 C			1 S							S
97033	7.005	0.004	6.362	0.004		0.590	0.004	T	0.66	0.00	L	6.4180	0.0005	0.007	117		6.41	6.43					1							S
97034	8.574	0.011	8.490	0.014	*	0.083	0.017	T	0.10	0.02	L *	8.4985	0.0015	0.014	114	*	8.47	8.53		D	19432+7222	H 1	2 C A	AB	148	0.426	0.032	3.25	0.13	S
97035	7.293	0.005	7.219	0.005		0.073	0.007	T	0.08	0.01	L	7.2438	0.0009	0.009	153		7.23	7.26		C			1							S
97036	9.761	0.014	8.039	0.007		1.399	0.082	G	1.46	0.02	A	8.0122	0.0011	0.014	241		7.99	8.04		C			1							
97037	8.020	0.008	7.858	0.009		0.156	0.011	T	0.17	0.01	L	7.8863	0.0013	0.012	117		7.87	7.91		C			1							S
97038	9.794	0.031	9.340	0.032		0.442	0.035	T	0.51	0.04	L	9.3766	0.0026	0.016	45		9.34	9.41		C			1							
97039	10.008	0.025	8.766	0.015		1.060	0.023	T	1.03	0.02	L	8.8160	0.0020	0.020	107		8.79	8.84					1							
97040	9.480	0.027	8.315	0.018		1.000	0.025	T	0.98	0.02	L	8.3952	0.0025	0.017	47		8.37	8.44		C			1							
97041	8.654	0.014	8.251	0.015	*	0.381	0.019	T	0.45	0.02	L *	8.3516	0.0017	0.017	114	*	8.33	8.39		D	19433+6929	I 1	2 C A	AB	351	8.628	0.008	1.72	0.04	S
97042	9.377	0.009	8.852	0.008		0.502	0.009	T	0.57	0.01	L	8.9054	0.0015	0.022	314		8.87	8.95					1							
97043	10.234	0.028	8.313	0.011		1.595	0.024	T	1.61	0.03	L	8.2301	0.0021	0.018	145		8.20	8.26					1 S							
97044	8.183	0.009	7.735	0.009		0.422	0.015	G	0.49	0.02	H	7.7747	0.0014	0.010	94		7.76	7.79			19434+0410	I 1	1							S
97045	7.499	0.005	7.702	0.009		−0.190	0.014	G	−0.20	0.02	H	7.6870	0.0011	0.012	113		7.67	7.71		C	19433+4715	I 1	1							S
97046	9.289	0.012	7.738	0.007		1.302	0.011	T	1.29	0.02	A	7.7514	0.0012	0.014	150		7.73	7.77					1							S
97047	9.171	0.023	7.990	0.015		1.012	0.021	T	0.99	0.02	L	8.0385	0.0024	0.011	45		8.02	8.06		C			1							
97048						1.900	0.495	G	1.85	0.29	S	11.4095	0.0087	0.058	103		11.32	11.53		R			1 X							G
97049	8.868	0.011	8.845	0.014		0.026	0.016	T	0.04	0.01	L	8.8426	0.0016	0.018	110		8.82	8.88		C			1							
97050	6.707	0.005	6.806	0.005		−0.085	0.006	T	−0.07	0.01	L	6.8019	0.0009	0.009	98		6.79	6.82					1							S
97051	11.574	0.069	10.120	0.028		1.260	0.015	G	1.45	0.02	A	10.0855	0.0019	0.028	263		10.03	10.14					1							G
97052	9.574	0.016	8.237	0.010		1.134	0.015	T	1.10	0.02	L	8.2816	0.0015	0.014	152		8.25	8.31					1							
97053	9.587	0.018	9.087	0.018		0.475	0.015	G	0.55	0.02	H	9.1434	0.0019	0.022	121		9.10	9.17					1							
97054	10.791	0.043	8.875	0.015		1.625	0.038	T	1.67	0.11	O	8.8089	0.0022	0.021	136		8.77	8.84					1							
97055	10.843	0.060	8.952	0.022		1.571	0.051	T	1.59	0.05	L	8.8758	0.0026	0.016	73		8.85	8.90		C			1							
97056	11.370	0.062	10.751	0.058		0.576	0.074	T	0.65	0.07	L	10.7892	0.0036	0.041	178		10.72	10.85					1							G
97057	10.614	0.039	9.430	0.024		1.184	0.005	G	1.14	0.01	I	9.4750	0.0024	0.025	104		9.42	9.51		C			1							G
97058	8.081	0.006	8.106	0.008		−0.040	0.015	G	−0.02	0.01	H	8.1436	0.0020	0.024	173		8.09	8.18		U 2			1							
97059	8.364	0.012	8.276	0.015	A	0.086	0.018	T	0.10	0.02	L	8.3321	0.0100	0.033	84	A	8.28	8.39		U 2	19435+0041	I 1	2 C A	AB	88	13.279	0.041	3.19	0.15	
97060	10.169	0.021	8.573	0.010		1.337	0.018	T	1.30	0.02	L	8.5578	0.0020	0.019	157		8.53	8.59		C			1 S							S
97061	11.032	0.058	10.491	0.058		0.507	0.074	T	0.58	0.08	L	10.5686	0.0033	0.042	139		10.46	10.62		U			1 S							G
97062	9.643	0.027	9.236	0.028	*	0.409	0.004	G	0.48	0.00	R *	9.3107	0.0053	0.026	58	*	9.28	9.36			19435−4106	I 1	2 C S B	AS	130	0.162	0.013	0.65	0.49	
97063	6.040	0.004	5.542	0.003		0.460	0.006	G	0.53	0.01	H	5.5943	0.0005	0.004	102		5.59	5.60		C	19436−1529	I 1	1 X							S
97064	8.093	0.008	7.732	0.009		0.385	0.007	G	0.45	0.01	H	7.7781	0.0014	0.015	147		7.75	7.81					1							S
97065	9.022	0.021	8.581	0.018	*	0.416	0.026	T	0.48	0.03	L *	8.9254	0.0026	0.092	118	*	8.89	9.25	1.76	P 1 A	19436−0904	I 1	2 C A	AB	307	2.685	0.008	1.05	0.03	
97066	8.407	0.014	8.273	0.017		0.121	0.020	T	0.14	0.02	L	8.3152	0.0016	0.011	43		8.30	8.34		C			1							S
97067	6.150	0.006	6.135	0.005		0.019	0.007	T	0.04	0.01	L	6.1541	0.0008	0.005	51		6.15	6.16		C			1							S
97068	10.091	0.038	8.581	0.020		1.270	0.034	T	1.23	0.04	L	9.1472	0.3344	1.679	116		7.25	11.43	189.70	P 1 B			1							G P
97069	9.757	0.021	8.530	0.013		1.048	0.019	T	1.02	0.02	L	8.5876	0.0016	0.015	106		8.57	8.62		C			1							
97070	7.402	0.006	6.385	0.004		0.887	0.005	T	0.89	0.00	L	6.4391	0.0007	0.006	110		6.43	6.45		C			1							S
97071	8.934	0.011	8.513	0.011		0.422	0.015	G	0.49	0.02	H	8.5613	0.0017	0.015	115		8.54	8.59		C			1 G							
97072	11.168	0.048	9.993	0.028		1.008	0.043	T	0.98	0.04	L	10.0521	0.0028	0.028	167		10.00	10.10					1 S							G
97073	10.112	0.036	8.854	0.022		1.072	0.033	T	1.04	0.03	L	8.8850	0.0029	0.019	54		8.86	8.91					1							
97074	9.458	0.017	8.419	0.012		0.903	0.016	T	0.90	0.01	L	8.4717	0.0012	0.013	114		8.45	8.50					1							
97075	8.659	0.013	8.427	0.015		0.221	0.019	T	0.24	0.02	L	8.4488	0.0019	0.014	81		8.43	8.49		C			1							
97076	8.870	0.020	7.415	0.011		1.230	0.015	G	1.14	0.02	A	7.4536	0.0015	0.014	47		7.43	7.48		C			1							S
97077	6.681	0.003	5.595	0.002		0.939	0.003	T	0.93	0.00	L	5.6580	0.0007	0.008	182		5.65	5.67					1 G							S
97078	10.028	0.024	8.127	0.010		1.612	0.021	T	2.33	0.05	O	7.9488	0.0022	0.025	118		7.91	7.99		U 2			1							
97079	7.972	0.008	7.895	0.010		0.076	0.012	T	0.09	0.01	L	7.9169	0.0011	0.011	105		7.90	7.94		C			1							S
97080	10.350	0.067	9.048	0.040		1.107	0.061	T	1.07	0.06	L	9.0934	0.0039	0.023	40		9.07	9.13			19437−3854	I 1	1 G							
97081	7.929	0.007	6.045	0.004		1.598	0.007	T	1.76	0.03	O	5.9653	0.0014	0.012	122		5.95	5.99		U 2			1							S
97082	9.761	0.023	8.458	0.014		1.107	0.021	T	1.07	0.02	L	8.5032	0.0019	0.014	88		8.49	8.53		C			1							
97083	7.095	0.011	7.248	0.013	*	−0.112	0.004	G	−0.10	0.01	H *	7.1395	0.0011	0.009	116	*	7.13	7.15		D	19438+3819	I 1	2 C A	AB	196	1.044	0.003	0.60	0.01	S
97084	10.416	0.025	9.162	0.014		1.069	0.022	T	1.03	0.02	L	9.2167	0.0018	0.021	180		9.18	9.26		C			1							
97085	9.728	0.016	8.511	0.010		1.040	0.015	T	1.01	0.01	L	8.5460	0.0017	0.015	137		8.52	8.57					1							
97086	7.985	0.009	7.669	0.009		0.284	0.001	G	0.32	0.00	H	7.7329	0.0011	0.011	117		7.72	7.76		C			1							S
97087	5.967	0.003	6.050	0.003		−0.071	0.004	T	0.00	0.03	C	6.0447	0.0006	0.006	143		6.04	6.06			19439+3410	I 1	1							S
97088	9.239	0.018	8.479	0.015		0.679	0.007	G	0.74	0.01	H	8.5121	0.0022	0.012	60		8.49	8.53		C			1							S
97089	9.734	0.018	8.607	0.012		0.970	0.017	T	0.95	0.01	L	8.6679	0.0018	0.017	122		8.64	8.70		C			1							
97090	9.819	0.018	8.462	0.011		1.150	0.017	T	1.11	0.01	L	8.5100	0.0018	0.018	120		8.47	8.54					1							
97091	7.655	0.006	6.461	0.003	*	1.015	0.006	T	0.99	0.01	L *	6.4135	0.0011	0.015	246	*	6.40	6.47	3.82	P 1 A	19439+2708	I 1	2 C A	AB	283	0.336	0.003	1.20	0.02	S
97092	9.379	0.016	8.994	0.017		0.417	0.015	G	0.48	0.02	H	9.0058	0.0020	0.020	147		8.97	9.04					1							
97093	11.163	0.091	10.034	0.052		0.972	0.082	T	1.02	0.07	L	10.0873	0.0031	0.026	43		10.03	10.14		D			1							
97094	9.238	0.012	7.586	0.006		1.382	0.011	T	1.35	0.01	L	7.6023	0.0009	0.011	131		7.59	7.62		C			1							S
97095	8.723	0.010	8.298	0.010		0.415	0.012	T	0.48	0.01	L	8.3395	0.0015	0.016	142		8.31	8.37					1							S
97096	10.867	0.069	9.669	0.037	B	1.025	0.061	T	1.00	0.05	L	9.2256	0.1918			B				D	19440−6618	I 2	1 C F D							D
97097	10.693	0.061	9.592	0.038		1.070	0.040	G	1.03	0.03	R	9.5951	0.0027	0.016	48		9.55	9.63		C			1							
97098	10.730	0.046	9.665	0.028		0.923	0.041	T	0.92	0.03	L	9.7161	0.0016	0.015	100		9.69	9.74					1							
97099	8.281	0.009	7.608	0.009	A	0.641	0.009	G	0.71	0.01	H	7.6989	0.0579	0.037	116	A	7.63	7.74		D	19440−6618	I 2	1 C P D							S D
97100	7.688	0.008	7.581	0.008		0.104	0.011	T	0.12	0.01	L	7.6080	0.0013	0.011	112		7.59	7.63		C			1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA		Dec	V		α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\mu_{\alpha*}$	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s		±° ′ ″	mag		deg		deg	mas	mas/yr		mas		mas	mas/yr													%	
1 2	3		4	5	6 7	8		9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			29	30
97101	19 44 01.79		+09 31 03.4	6.57	H	296.007 478 99		+09.517 624 05	1.95	5.25	0.52	0.62	0.35	0.91	0.94	0.33	− 2	+11	− 2	+46	−35	+29	−42	−26	+ 5	−27			1	0.53
97102	19 44 03.15		+27 43 15.0	8.60	H	296.013 145 29		+27.720 823 58	3.93	24.83	−9.02	0.59	0.86	1.24	0.70	0.95	−18	+ 1	+14	+25	+ 4	−10	+11	−19	−11	− 4			0	−1.37
97103	19 44 04.25		+37 55 57.3	8.92	H	296.017 695 62		+37.932 593 88	−1.40	0.59	−1.70	0.67	0.71	0.85	0.84	1.09	−10	−16	−20	−28	+ 5	+ 7	+ 7	− 4	− 3	−11			0	0.34
97104	19 44 04.30		−34 44 24.7	11.19	G	296.017 900 06		−34.740 180 65	2.76	−16.37	−13.82	2.29	1.62	2.39	2.63	1.85	+ 9	−29	−14	+ 9	+14	+ 6	+14	+ 9	+ 1	+ 5			0	0.27
97105	19 44 04.36		+03 30 28.9	7.99	H	296.018 171 67		+03.508 023 92	13.48	52.82	−128.33	1.01	0.67	1.14	1.24	1.05	+13	−35	−20	+ 8	+ 8	+ 5	+11	+27	+ 6	− 8			0	0.93
97106	19 44 04.60		+50 53 57.8	8.26	G	296.019 159 06		+50.899 384 77	2.09	0.59	−3.65	0.61	0.57	0.66	0.65	0.66	− 3	−13	+17	− 1	+ 9	− 2	+ 9	+ 2	+ 0	+17			1	0.51
97107	19 44 04.96		−02 00 22.1	8.44	H	296.020 683 16		−02.006 145 74	3.01	−1.00	−3.47	1.18	0.65	1.38	1.44	0.86	+17	−27	− 9	− 7	+12	+34	+14	+ 3	+ 8	+12			0	0.26
97108	19 44 06.10		+12 22 21.1	7.94	2 H	296.025 403 29		+12.372 541 10	A 2.44	0.64	−9.44	1.09	0.81	1.54	1.24	0.84	+10	− 5	+ 7	+ 8	−11	+21	−15	−28	+ 0	− 2			4	0.45
97109	19 44 06.15		−35 05 17.4	8.81	H	296.025 632 51		−35.088 173 40	3.90	29.10	−0.90	1.33	0.83	1.35	1.83	1.02	−18	−14	−26	+29	−20	+26	−16	+13	− 5	−37			0	1.33
97110	19 44 06.81		+25 00 52.9	8.70	H	296.028 365 82		+25.014 690 31	12.34	−7.80	5.31	0.74	0.84	1.29	0.84	1.12	+ 7	−18	−20	+34	− 4	− 6	− 9	+10	+ 9	− 1			1	−0.87
97111	19 44 07.66		−35 39 19.9	9.61	H	296.031 918 04		−35.655 514 43	9.07	−10.22	−91.47	1.73	1.05	1.73	2.04	1.22	+ 2	−40	−23	+17	+13	− 7	+11	+12	− 3	− 9			0	1.60
97112	19 44 08.71		−39 25 28.9	9.78	H	296.036 304 91		−39.424 691 05	8.38	−34.25	17.92	1.83	1.33	2.20	2.84	1.75	+13	+23	− 6	−11	−15	−47	−24	−26	−31	+29			0	0.01
97113	19 44 10.09		−26 32 35.3	11.23	H	296.042 026 34		−26.543 145 95	12.33	43.91	−60.02	3.23	1.83	3.19	4.52	2.77	+55	− 3	− 4	+43	+35	+26	+34	+31	+13	+35			2	0.12
97114	19 44 12.21		+53 59 55.3	8.60	H	296.050 867 78		+53.998 690 06	1.83	−6.15	−15.72	0.82	0.72	0.83	1.05	0.85	+ 3	−15	+17	+23	+19	+ 0	+19	+ 0	+ 5	+13			0	0.48
97115	19 44 13.24		+54 00 39.5	9.87	H	296.055 178 48		+54.010 964 23	1.67	−6.50	1.98	1.35	1.18	1.34	1.71	1.36	+10	−15	+20	+31	+25	+ 5	+25	+ 4	+ 2	+22			0	−0.28
97116	19 44 15.35		−62 52 46.3	9.63	H	296.063 963 88		−62.879 534 13	11.47	42.94	−112.60	1.07	0.87	1.57	1.00	1.05	+ 4	−23	−19	+ 1	−21	−10	−38	−22	+31	−32			1	0.95
97117	19 44 15.85		+07 35 17.6	8.14	2 H	296.066 053 87		+07.588 228 45	0.99	2.59	−2.84	0.79	0.48	1.11	1.15	0.46	−22	− 3	−27	+ 4	−12	+36	− 3	−40	+23	−23			1	−0.08
97118	19 44 16.55		+37 21 15.4	4.89	H	296.068 965 08		+37.354 269 67	11.70	72.58	35.14	0.37	0.42	0.50	0.40	0.51	+ 1	− 7	−18	+ 8	+ 8	− 1	+ 8	+11	+ 3	+ 8			0	1.05
97119	19 44 17.17		−74 27 20.7	7.61	G	296.071 553 45		−74.455 759 11	7.56	−21.44	−4.34	0.49	0.53	0.79	0.53	0.64	−16	−13	−12	+16	− 5	− 8	− 8	+ 3	+ 2	−26			0	−0.83
97120	19 44 17.71		+60 41 03.0	8.95	H	296.073 810 73		+60.684 168 22	1.58	−0.20	−5.15	0.74	0.73	0.76	0.80	0.98	+ 3	−17	− 1	+18	+19	− 2	+22	+19	+ 2	+15			0	0.10
*97121	19 44 18.41		+02 16 03.0	10.78	H	296.076 711 62		+02.267 499 98	4.71	1.09	−8.14	2.02	1.97	2.79	3.62	2.56	+12	+10	−58	+29	+14	− 8	+12	+21	+ 9	−28			0	1.65
*97122	19 44 18.40		+69 20 13.6	5.90	H	296.076 673 40		+69.337 118 57	7.37	8.78	−22.17	0.45	0.43	0.47	0.52	0.55	+ 2	−10	+ 4	+ 2	+15	− 2	+13	+10	+17	+17			3	−0.45
97123	19 44 19.06		−60 27 03.4	9.84	H	296.079 409 16		−60.450 947 13	3.85	21.40	−22.43	1.12	0.85	1.48	1.36	1.38	+18	− 4	+ 1	+22	−15	+ 0	− 9	−24	+11	+39			1	0.39
97124	19 44 22.74		+39 17 19.7	8.46	G	296.094 760 10		+39.288 800 63	4.57	7.76	21.50	0.63	0.67	0.78	0.68	0.84	− 4	+ 0	−14	+22	+ 6	− 9	+ 5	+37	−15	+ 0			0	−0.15
97125	19 44 23.71		−26 56 56.0	9.26	G	296.098 787 30		−26.948 882 16	11.52	42.68	−137.71	1.31	0.75	1.44	1.83	1.07	+36	−12	−14	+32	+12	+33	+12	+11	− 9	+ 6			0	1.04
97126	19 44 24.14		+53 08 49.3	8.36	H	296.100 589 72		+53.147 022 54	5.09	9.29	−5.88	0.66	0.62	0.70	0.71	0.71	− 3	−10	+ 9	− 9	+17	− 5	+18	+ 1	− 4	+ 8			1	1.26
97127	19 44 25.04		−33 59 59.1	9.22	H	296.104 344 01		−33.999 739 42	8.51	5.35	−3.93	1.08	0.71	1.19	1.22	0.85	+19	−28	−16	+ 9	+ 4	+12	+ 3	− 2	+ 9	+10			0	1.14
97128	19 44 25.80		−56 16 16.7	8.02	H	296.107 512 91		−56.271 293 27	3.66	−0.02	13.08	0.80	0.52	1.06	1.37	0.98	−19	− 2	− 3	− 1	− 3	−16	+ 4	−24	− 6	+12			0	−1.16
97129	19 44 26.07		−47 33 55.2	9.78	H	296.108 619 80		−47.565 334 24	4.12	4.36	5.38	2.01	1.30	1.95	2.53	1.51	− 3	−34	−23	+48	−21	+14	−16	+20	− 6	−17			0	0.60
97130	19 44 27.11		−20 47 16.2	8.51	H	296.112 940 40		−20.787 842 20	3.53	13.43	11.17	0.98	0.63	1.09	1.01	0.67	+35	−37	−22	−11	+ 0	+20	+ 3	−20	+ 5	+33			0	1.75
97131	19 44 27.72		−41 36 32.8	6.83	H	296.115 501 38		−41.609 117 88	4.01	9.85	−6.60	0.99	0.81	1.06	1.21	0.93	+32	−32	−16	− 2	−26	−12	−28	−41	− 5	+19			0	0.32
97132	19 44 27.87		+07 57 39.1	8.36	H	296.116 104 42		+07.960 864 47	10.08	26.70	2.02	0.69	0.45	1.07	0.87	0.45	+ 0	+ 2	−15	+20	−26	+33	−20	−31	+16	+ 4			0	−1.12
97133 H	19 44 28.61		−37 50 40.3	8.05	H	296.119 226 55		−37.844 522 37	* 3.58	22.70	−8.63	2.37	2.17	1.44	1.76	1.14	− 1	+29	+24	−43	−19	−38	−16	−41	−18	+21			1	−0.33
97134	19 44 30.80		−17 24 01.5	7.91	H	296.128 349 03		−17.400 426 71	7.27	14.46	−13.05	0.97	0.61	1.09	1.10	0.64	+45	−33	−16	+ 9	+23	+13	+12	− 4	+25	+44			0	0.07
97135	19 44 31.54		+18 35 19.1	6.78	2 H	296.131 415 16		+18.588 641 83	2.31	22.55	0.01	0.49	0.48	0.78	0.55	0.50	− 6	−13	+ 5	−21	− 2	+14	− 2	−28	− 6	−12			0	−0.88
97136	19 44 31.64		+04 58 46.1	7.55	H	296.131 826 10		+04.979 483 50	2.96	13.24	10.81	1.12	0.80	1.23	1.65	1.17	− 1	+ 1	−28	+40	−14	+41	− 1	+51	−11	−22			0	0.40
97137	19 44 32.30		−41 06 55.1	9.42	H	296.134 567 29		−41.115 309 60	1.91	−11.92	4.90	1.70	1.25	1.85	2.16	1.45	−18	+ 3	− 2	+ 3	−12	−23	−11	−14	− 6	−10			0	2.14
97138	19 44 32.63		−22 51 20.7	7.47	G	296.135 976 83		−22.855 762 70	7.25	15.67	−5.92	0.94	0.65	1.02	1.05	0.73	+40	−35	−27	− 6	+ 0	+ 4	+ 2	−22	+ 0	+38			0	2.34
97139	19 44 34.19		+13 18 10.1	6.25	H	296.142 460 74		+13.302 809 16	4.03	1.78	−10.82	0.57	0.38	0.73	0.70	0.37	−14	− 2	− 1	+19	−20	+16	−20	−30	+ 2	−24			0	−0.87
97140	19 44 34.48		−62 58 40.4	8.66	1 H	296.143 652 64		−62.977 898 15	2.49	9.83	−15.86	0.83	0.71	1.25	0.78	0.82	+ 7	−21	−13	+ 0	−23	− 8	−37	−22	+30	−29			0	0.37
97141	19 44 35.81		+13 13 49.3	6.84	2 H	296.149 221 86		+13.230 352 20	3.02	5.81	−4.92	0.60	0.41	0.80	0.74	0.39	− 4	+ 0	− 4	+18	−20	+18	−23	−31	+ 5	−20			0	−0.39
97142	19 44 38.17		+34 24 51.0	6.39	2 H	296.159 043 71		+34.414 155 88	3.93	3.64	3.35	0.42	0.47	0.60	0.46	0.59	−14	− 2	− 9	− 4	+15	− 6	+15	+ 1	+18	− 5			0	−0.82
97143	19 44 40.58		−23 15 50.7	7.35	H	296.169 078 22		−23.264 078 64	0.90	9.27	−35.36	0.88	0.61	0.96	1.05	0.73	+42	−25	−16	+ 3	− 3	+ 0	+ 0	−20	− 7	+41			0	1.47
97144	19 44 41.27		+08 43 35.7	6.43	H	296.171 978 69		+08.726 580 32	8.20	37.30	−17.50	0.55	0.37	0.85	0.78	0.62	+10	− 3	−14	+27	−35	+34	−37	−23	+13	+ 8			0	0.77
97145	19 44 41.50		+10 54 45.1	7.22	H	296.172 928 96		+10.912 521 59	10.48	8.09	2.57	0.58	0.37	0.90	0.83	0.34	+12	+15	+12	+ 7	−17	+15	−25	−39	+ 1	−27			1	2.47
97146	19 44 42.17		−44 42 49.5	10.90	G	296.175 708 07		−44.713 738 96	18.07	203.75	−33.57	2.58	2.10	3.36	4.37	2.42	+17	−19	−40	+23	+14	−47	−13	−18	+21	−19			0	0.32
97147	19 44 43.17		−46 22 43.9	10.15	H	296.179 858 71		−46.378 853 04	3.10	13.10	−12.98	1.75	1.42	1.95	2.50	1.69	+15	−24	−33	+ 6	−21	+ 3	−23	−22	+15	+ 0			0	1.15
97148	19 44 44.75		+18 43 42.4	7.72	G	296.186 469 32		+18.728 436 72	16.46	117.02	26.66	0.58	0.57	0.93	0.62	0.57	−11	−18	+10	−25	+ 5	+18	+ 4	−28	− 8	−20			0	−1.40
97149 H	19 44 47.81		+16 48 54.6	7.95	H	296.199 220 80		+16.815 168 58	A 2.24	3.46	1.33	1.32	1.25	1.73	1.18	1.06	+42	− 8	+ 5	−50	−23	+ 1	−24	−38	+ 9	+40			2	2.17
97150	19 44 48.73		+29 15 52.9	6.97	3 T	296.203 059 07		+29.264 699 39	0.51	0.28	−3.05	0.42	0.56	0.77	0.52	0.79	− 7	+ 8	− 3	+ 6	+ 2	− 6	+ 1	− 1	−21	+11			0	1.60
97151	19 44 49.09		+40 43 00.7	6.36	2 H	296.204 553 25		+40.716 863 61	3.60	−68.01	−24.79	0.44	0.49	0.57	0.46	0.59	+ 0	− 7	−16	−11	+ 9	− 7	+ 7	− 1	+15	+15			0	0.93
97152	19 44 50.48		+21 27 03.4	8.56	H	296.210 324 15		+21.450 945 23	2.06	−0.19	−8.19	0.88	0.78	1.26	0.92	0.86	− 7	+17	−12	−18	−10	− 3	− 6	−11	+16	−24			0	−1.31
97153	19 44 50.67		+50 46 58.3	8.50	H	296.211 134 32		+50.782 852 61	1.88	−15.44	−43.54	0.66	0.69	0.77	0.75	0.85	− 5	−22	+ 4	− 3	+ 4	+11	+ 2	+ 6	− 1	+15			1	1.14
97154 H	19 44 50.85		+10 57 07.0	8.94	H	296.211 869 98		+10.951 946 48	A 3.74	6.71	−4.56	2.03	1.29	2.72	2.95	1.14	+29	+ 3	+21	+17	−28	−20	−35	−24	+15	−31			1	0.12
97155	19 44 51.68		+45 59 47.7	8.27	2 H	296.215 350 68		+45.996 593 56	7.10	25.10	33.58	0.58	0.57	0.67	0.72	0.68	− 4	−13	+ 4	+21	+12	−13	+12	+11	+ 2	+ 0			0	0.77
97156	19 44 52.44		−52 20 10.0	8.74	H	296.218 516 23		−52.336 114 37	33.38	−33.21	−91.29	0.86	0.65	1.19	1.16	0.95	+18	−25	− 8	−13	+18	− 1	+20	−15	− 6	+13			0	0.10
97157	19 44 54.30		−10 34 21.8	6.63	1 H	296.226 239 07		−10.572 724 32	5.17	1.98	−62.38	0.77	0.44	0.83	0.88	0.44	+13	−13	+ 1	− 5	+26	+16	+22	−17	+20	+39			0	−0.27
97158	19 44 54.40		−31 08 45.2	9.78	H	296.226 655 99		−31.145 885 82	0.61	3.33	−7.67	1.76	0.84	1.91	3.04	1.56	+28	−22	−12	− 7	+ 5	−12	−11	−31	+11	−43			2	0.02
97159	19 44 54.50		−80 05 18.7	7.61	2 H	296.227 084 63		−80.088 532 44	2.17	8.22	−35.98	0.52	0.61	0.75	0.58	0.71	− 8	− 9	+ 3	+11	+ 3	−17	+ 4	+ 1	− 1	− 9			0	0.19
97160	19 44 56.06		−40 14 12.5	9.91	G	296.233 592 21		−40.236 814 37	20.55	196.19	65.51	1.60	1.21	1.66	2.34	1.47	+ 1	−19	−19	+11	−26	+13	−22	−25	+ 0	− 8			3	−1.76
97161	19 44 56.48		−33 15 16.4	9.00	H	296.235 350 92		−33.254 558 80	0.73	−4.24	−6.01	1.18	0.64	1.31	1.33	0.97	+34	−33	−11	+10	− 2	+28	− 1	−10	− 5	+20			0	0.12
97162 H	19 44 56.78		+10 46 30.6	7.48	H	296.236 589 29		+10.775 157 79	* 2.33	0.77	−2.00	1.41	1.04	1.39	1.36	0.61	+ 6	+ 0	+16	+ 8	−14	+ 0	−21	−24	+ 0	−26			2	2.91
97163	19 44 56.82		+13 02 47.7	9.22	H	296.236 750 51		+13.046 575 79	2.24	3.68	−1.35	0.85	0.62	1.22	1.11	0.59	+ 3	− 7	− 3	+16	−20	+16	−24	−29	+10	−18			0	1.08
97164	19 44 57.06		+59 42 47.8	9.24	H	296.237 737 86		+59.713 283 41	8.40	53.19	−1.12	0.78	0.82	0.88	0.83	0.99	+10	− 1	+19	+ 7	+ 8	−19	+15	+ 4	+ 7	+21			0	−0.12
97165 H	19 44 58.44		+45 07 50.5	2.86	G	296.243 508 78		+45.130 691 95	A 19.07	43.22	48.44	0.42	0.43	0.45	0.45	0.45	+ 2	− 5	− 2	− 2	+15	−25	+17	− 4	+20	+ 2			5	1.59
*97166	19 44 58.60		+74 03 45.6	9.92	H	296.244 162 45		+74.062 670 16	14.70	18.93	28.16	0.91	0.78	0.90	0.93	0.93	+ 0	−27	− 1	− 7	+12	− 7	+14	− 3	− 7	+14			1	0.66
*97167	19 44 58.49		+55 50 21.2	10.08	H	296.243 726 85		+55.839 232 53	7.97	−40.34	1.73	4.05	3.90	4.40	5.44	5.42	+ 0	− 9	− 4	+ 4	+ 1	−19	+ 2	−17	+11	+ 7	3			
97168	19 44 59.23		+51 35 41.1	10.35	H	296.246 773 30		+51.594 757 79	10.06	127.13	136.40	1.05	1.08	1.20	1.24	1.35	+ 1	−10	+16	+ 2	+ 9	+ 6	+ 7	+21	−13	+15			0	1.45
97169	19 44 59.50		+29 45 43.6	8.83	H	296.247 911 21		+29.762 103 83	1.93	8.31	8.30	0.67	0.87	1.17	0.71	1.18	− 1	−17	− 9	− 7	+ 3	+10	+ 5	+22	−26	+ 7			0	0.46
97170	19 45 00.08		+55 50 51.5	7.81	G	296.250 319 44		+55.847 641 22	1.39	−2.73	−5.21	0.63	0.61	0.68	0.79	0.84	+ 5	− 1	− 5	+19	+ 5	−21	+ 5	− 1	+ 9	+ 8			0	−1.72
97171	19 45 01.72		−78 19 19.5	9.30	H	296.257 163 73		−78.322 085 18	7.46	−23.99	63.57	0.81	0.83	1.13	0.99	1.04	+ 7	−24	+ 5	− 4	+ 2	− 4	+ 3	−24	+ 8	+ 5			0	−1.61
97172 H	19 45 02.58		+15 50 30.1	8.81	H	296.260 757 90		+15.841 688 53	A −1.72	2.69	4.53	1.23	1.04	1.52	1.30	0.91	+ 3	− 7	+ 2	−18	− 6	+25	− 6	−36	+ 9	− 4			1	0.93
97173	19 45 02.80		−08 38 08.9	8.29	H	296.261 650 81		−08.635 802 29	7.31	2.35	−2.03	1.00	0.52	1.09	1.23	0.92	+30	−24	+ 2	−10	+16	+28	+19	−27	+ 7	+15			0	1.46
97174	19 45 03.13		+29 19 40.6	10.32	H	296.263 027 23		+29.327 933 09	18.74	104.47	305.86	0.92	1.23	1.64	1.19	1.72	− 6	+ 2	+ 3	+ 2	+ 5	−10	+ 6	− 1	−12	+10			2	1.47
97175	19 45 03.58		+19 09 52.1	9.10	H	296.264 907 78		+19.164 470 60	3.96	1.22	−13.95	0.77	0.76	1.28	0.80	0.75	+ 0	−27	− 2	−19	− 8	+ 5	−11	−28	+11	−20			0	−0.14
97176	19 45 04.03		−65 28 02.4	9.17	H	296.266 789 12		−65.467 342 74	9.69	29.73	12.49	1.06	0.93	1.49	1.26	1.38	− 9	− 8	−22	+23	−18	+11	− 4	−31	+37	+11			2	0.97
97177	19 45 04.53		+00 45 04.3	8.47	G	296.268 895 64		+00.751 191 96	4.63	3.36	1.16	1.07	0.87	1.16	1.34	1.16	+22	−24	−18	+25	+13	+ 6	+17	+39	−10	+10			0	1.62
97178	19 45 05.08		+46 37 09.8	8.31	H	296.271 177 05		+46.619 395 58	2.74	28.28	−3.37	0.68	0.65	0.75	0.74	0.82	−12	+ 8	− 1	− 9	+11	+ 3	+11	+16	− 1	− 4			0	1.56
97179	19 45 05.99		+16 17 08.9	8.08	H	296.274 970 96		+16.285 797 41	1.26	9.66	−2.10	0.62	0.51	0.94	0.62	0.45	− 5	−13	− 2	−22	− 5	+10	− 7	−37	+15	−21			2	1.06
97180	19 45 06.13		−30 13 50.3	9.09	H	296.275 559 16		−30.230 649 84	3.26	1.12	9.40	1.29	0.74	1.39	1.70	1.11	+38	−12	−23	−31	− 4	−18	− 9	−36	+17	+ 0			4	1.63
97181	19 45 06.45		−47 41 51.7	8.30	H	296.276 877 71		−47.697 680 71	1.30	−5.85	5.28	1.28	0.85	1.24	1.73	1.03	−10	−21	−24	+43	−23	+25	−15	+14	− 8	−16			0	−0.73
97182	19 45 09.63		−12 43 34.5	7.38	H	296.290 113 42		−12.726 261 11	3.83	2.96	−4.40	0.86	0.52	0.93	0.99	0.53	+21	− 9	− 4	− 3	+29	+23	+24	− 9	+25	+42			0	0.49
97183	19 45 09.66		−03 02 07.8	7.29	H	296.290 238 66		−03.035 506 20	2.94	5.41	2.65	0.94	0.59	1.06	1.13	0.80	+11	−28	−30	−12	+ 1	+32	+15	+ 8	+ 2	− 9			0	0.08
97184	19 45 09.83		+04 54 22.2	10.26	3 H	296.290 958 12		+04.906 179 28	0.81	−17.10	12.70	2.20	1.73	2.33	3.19	2.41	+11	−20	−24	+44	− 5	+26	+ 3	+53	−10	−21			0	−0.33
97185	19 45 10.38		−70 00 59.1	7.80	G	296.293 261 79		−70.016 407 41	14.21	−54.83	−54.71	0.44	0.64	0.96	0.52	0.76	−30	− 5	−15	+16	+ 6	− 5	+ 5	−17	− 2	−31			0	0.22
97186	19 45 11.21		−25 22 34.3	8.77	H	296.296 690 36		−25.376 203 18	0.71	−5.62	−4.92	1.10	0.66	1.20	1.18	0.77	+30	−38	− 9	+ 8	+18	+ 2	+15	− 1	+ 6	+31			0	1.34
97187	19 45 12.02		−00 40 31.6	8.85	H	296.300 080 87		−00.675 433 36	1.44	0.61	−8.50	1.35	1.08	1.48	1.93	1.41	+18	−18	−26	+38	+ 4	+14	+ 7	+38	− 5	−16			0	−1.04
97188	19 45 12.44		+02 54 43.0	8.04	H	296.301 849 27		+02.911 948 61	6.11	−64.01	13.22	1.08	0.98	1.14	1.41	1.28	+34	−18	−22	+25	+34	+ 8	+40	+51	− 2	+20			0	−1.09
97189	19 45 12.64		+24 03 04.1	8.78	G	296.302 646 58		+24.051 144 51	2.57	−1.18	−4.10	0.77	0.86	1.18	1.09	0.96	− 5	+ 2	−31	+13	−10	+14	− 5	−21	+23	− 3			0	1.73
97190 H	19 45 12.94		−15 06 36.5	8.47	H	296.303 918 40		−15.110 137 55	* 5.72	0.63	10.59	1.36	6.64	1.42	1.49	0.90	+73	− 9	− 3	−13	− 2	+ 6	+ 4	− 1	+26	+50			1	0.33
97191	19 45 12.99		−29 06 48.8	9.67	H	296.304 126 76		−29.113 547 22	1.34	0.59	1.61	1.38	0.70	1.46	1.32	1.06	+27	−45	− 6	−19	+ 5	+12	+15	−15	− 6	+35			2	0.32
97192	19 45 14.15		−17 29 26.3	9.14	G	296.308 977 39		−17.490 646 07	1.34	−22.23	−84.42	1.11	0.68	1.25	1.29	0.77	+37	−36	−16	− 1	+ 9	+10	+ 3	−16	+19	+43			0	−0.12
97193	19 45 14.41		+20 51 22.9	9.14	H	296.310 051 94		+20.856 371 41	1.32	2.31	−2.44	0.83	0.85	1.36	1.00	0.86	− 5	− 9	− 9	−13	+ 1	− 2	− 2	−29	+16	−23			0	−1.18
97194 H	19 45 14.49		−42 40 13.1	10.98	G	296.310 381 97		−42.670 305 90	* 9.65	112.41	−172.18	7.19	4.32	3.37	4.55	3.06	− 6	−22	−13	+31	−13	+17	−11	+11	−17	−19			3	−0.36
97195	19 45 14.92		−27 23 46.9	8.27	H	296.312 157 32		−27.396 350 58	2.69	5.26	−3.54	0.99	0.61	1.11	1.37	0.75	+36	+ 0	− 7	+20	+10

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
97101	8.196	0.006	6.699	0.003		1.260	0.005	T	1.22	0.01	L	6.7343	0.0008	0.010	253		6.72	6.75					1							S
97102	10.106	0.022	8.730	0.012		1.165	0.020	T	1.13	0.02	L	8.7637	0.0023	0.025	186		8.72	8.80					1 S							
97103	8.869	0.012	8.897	0.015		−0.030	0.015	G	−0.01	0.01	H	8.9168	0.0015	0.015	114		8.90	8.94		C			1							
97104	12.660	0.404	11.448	0.215		1.330	0.020	G	1.29	0.02	I	11.3340	0.0051	0.044	58		11.26	11.41		C			1							G
97105	8.710	0.018	8.034	0.016		0.625	0.020	T	0.69	0.02	L	8.1185	0.0008	0.007	62		8.10	8.13		D			1							S
97106	8.175	0.008	8.208	0.010		−0.026	0.012	T	0.00	0.01	L	8.2393	0.0015	0.014	124		8.22	8.27		C			1							
97107	8.492	0.013	8.437	0.016		0.056	0.019	T	0.07	0.01	L	8.4672	0.0016	0.015	79		8.44	8.49					1 S							
97108	8.057	0.006	7.931	0.007	A	0.122	0.008	T	0.14	0.01	L	7.9869	0.0129	0.032	180	A	7.92	8.03		U 2	19441+1222	I 1	2 C A	AB	311	18.066	0.024	2.44	0.12	S
97109	10.209	0.034	8.917	0.021		1.099	0.031	T	1.06	0.03	L	8.9877	0.0031	0.022	63		8.96	9.02					1							
97110	9.208	0.012	8.747	0.012		0.435	0.016	T	0.50	0.02	L	8.7983	0.0014	0.017	143		8.77	8.83					1							
97111	10.495	0.051	9.710	0.041		0.697	0.050	T	0.75	0.04	L	9.7490	0.0027	0.020	57		9.71	9.78					1							
97112	10.326	0.040	9.886	0.041		0.429	0.046	T	0.50	0.05	L	9.8725	0.0051	0.028	42		9.82	9.95		C			1							
97113											T	11.3783	0.0073	0.058	75		11.29	11.51					1							G
97114	10.676	0.039	8.791	0.014		1.599	0.034	T	1.94	0.09	O	8.6843	0.0021	0.021	108		8.64	8.72					1							
97115	11.059	0.049	9.883	0.029		1.008	0.044	T	0.98	0.04	L	10.0324	0.0037	0.033	109		9.97	10.08		R			1							G
97116	10.415	0.028	9.683	0.024		0.657	0.028	T	0.72	0.03	L	9.7624	0.0024	0.024	135		9.72	9.81		C			1							
97117	8.209	0.008	8.130	0.009		0.051	0.022	G	0.06	0.02	H	8.1671	0.0024	0.051	166		8.05	8.19		U 2			1							
97118	6.093	0.003	4.998	0.002		0.948	0.001	G	0.94	0.00	H	5.0477	0.0005	0.004	136		5.04	5.06		C			1							S
97119	8.045	0.007	7.655	0.007		0.381	0.007	G	0.44	0.02	A	7.7065	0.0013	0.013	139		7.68	7.73		C			1							S
97120	8.890	0.014	8.934	0.018		−0.048	0.015	G	−0.03	0.01	H	8.9439	0.0016	0.015	98		8.91	8.98					1							
97121	11.099	0.099	10.916	0.123		0.175	0.148	T	0.19	0.17	L	10.8342	0.0057	0.040	51		10.76	10.91					1							G
97122	5.985	0.003	5.912	0.003		0.072	0.004	T	0.08	0.00	L	5.9341	0.0004	0.005	98		5.92	5.94					1							S
97123	10.338	0.028	9.883	0.030		0.443	0.032	T	0.51	0.03	L	9.9388	0.0026	0.025	116		9.90	9.98					1							
97124	8.939	0.011	8.521	0.012		0.390	0.015	G	0.46	0.02	H	8.5557	0.0019	0.018	124		8.53	8.58					1							
97125	10.211	0.038	9.295	0.027		0.790	0.020	G	0.83	0.02	H	9.4308	0.0018	0.015	84		9.40	9.45		C			1							
97126	10.010	0.026	8.491	0.013		1.277	0.023	T	1.24	0.02	L	8.5224	0.0015	0.014	105		8.50	8.56					1							
97127	9.674	0.031	9.262	0.032		0.403	0.037	T	0.47	0.04	L	9.3105	0.0023	0.018	83		9.28	9.35		C			1							
97128	10.089	0.021	8.229	0.009		1.546	0.018	T	1.61	0.04	L	8.1362	0.0013	0.017	176		8.11	8.17		C			1							
97129	10.243	0.042	9.853	0.045		0.381	0.052	T	0.45	0.06	L	9.8696	0.0038	0.023	39		9.82	9.94					1							
97130	9.774	0.023	8.608	0.015		1.000	0.021	T	0.98	0.02	L	8.6777	0.0012	0.014	88		8.66	8.70		C			1							
97131	8.514	0.015	6.983	0.008		1.286	0.013	T	1.25	0.01	L	6.9896	0.0012	0.009	53		6.97	7.01		C			1							S
97132	8.811	0.011	8.391	0.011		0.401	0.030	G	0.47	0.03	H	8.4477	0.0013	0.015	182		8.42	8.47					1							
97133	8.295	0.014	8.066	0.016	*	0.213	0.021	T	0.24	0.02	L	*	8.1108	0.0012	0.014	49	*	8.09	8.17		D	19445−3751	H 1	2 C A	AB	136	0.200	0.013	1.37	0.36	S
97134	8.154	0.010	7.929	0.009		0.215	0.013	T	0.24	0.01	L		7.9763	0.0016	0.010	86		7.95	7.99		C			1 S							S
97135	8.975	0.011	6.997	0.005		1.676	0.010	T	2.18	0.03	O		6.8513	0.0037	0.039	143		6.78	6.92		U 2			1							S P
97136	9.631	0.033	7.742	0.014		1.569	0.028	T	1.59	0.03	L		7.6677	0.0012	0.012	55		7.64	7.69		D	19445+0459	I 1	1							
97137	10.104	0.038	9.447	0.034		0.600	0.038	T	0.67	0.03	L		9.5481	0.0055	0.031	48		9.50	9.59					1							
97138	7.975	0.012	7.516	0.009		0.445	0.015	G	0.51	0.02	H		7.5587	0.0014	0.010	69		7.54	7.57		C			1							S
97139	6.196	0.002	6.246	0.004		−0.041	0.004	T	−0.02	0.00	L		6.2465	0.0005	0.006	159		6.24	6.26		C			1							S
97140	10.888	0.039	8.871	0.013		1.708	0.034	T	2.28	0.07	O		8.7089	0.0029	0.028	144		8.67	8.76		U			1							
97141	9.046	0.012	7.044	0.005		1.659	0.010	T	1.68	0.01	L		6.9514	0.0021	0.021	161		6.93	7.00		U 2			1							S
97142	8.439	0.013	6.649	0.010		1.521	0.014	T	2.73	0.04	O		6.3646	0.0087	0.081	147		6.26	6.52		U 2			1 S							S
97143	9.348	0.019	7.511	0.009		1.528	0.017	T	1.57	0.04	L		7.4685	0.0018	0.011	74		7.45	7.49					1							S
97144	7.624	0.005	6.536	0.003		0.940	0.004	T	0.93	0.02	A		6.5896	0.0006	0.008	219		6.58	6.61					1 G							S
97145	7.395	0.004	7.243	0.004		0.146	0.005	T	0.16	0.01	L		7.2740	0.0007	0.010	234		7.26	7.29					1							S
97146	12.225	0.264	11.276	0.172		1.049	0.005	G	1.10	0.01	I		11.0333	0.0105	0.051	46		10.94	11.12					1							G
97147	10.668	0.054	10.188	0.056		0.464	0.060	T	0.53	0.06	L		10.2579	0.0054	0.030	49		10.21	10.30					1							G
97148	8.329	0.010	7.768	0.009		0.531	0.001	G	0.60	0.00	H		7.8367	0.0012	0.012	138		7.82	7.86		C			1							S
97149	7.954	0.013	7.882	0.014	*	0.071	0.018	T	0.08	0.02	L	*	7.9778	0.0012	0.013	158	*	7.95	8.01		D	19448+1649	I 1	2 C A	AB	358	2.170	0.003	0.73	0.02	
97150	7.747	0.026	7.041	0.019		0.650	0.026	T	0.71	0.02	L		7.0885	0.0260	0.263	157		6.53	7.31	3.85	P 1 A			1							S
97151	8.422	0.015	6.584	0.012		1.561	0.016	T	2.35	0.07	O		6.4046	0.0101	0.100	114		6.26	6.56		U 2			1 S							S
97152	9.731	0.019	8.666	0.014		0.923	0.018	T	0.92	0.01	L		8.7250	0.0019	0.021	106		8.69	8.77					1							
97153	10.284	0.026	8.646	0.012		1.371	0.023	T	1.34	0.03	L		8.6404	0.0020	0.017	125		8.62	8.67		C			1							
97154	10.499	0.031	9.106	0.016	A	1.163	0.218	G	0.99	0.03	L	*	9.1037	0.0017	0.021	229	*	9.06	9.14			19448+1057	H 1	2 C C	AB	16	1.055	0.055	3.66	0.31	
97155	8.542	0.010	8.282	0.011		0.248	0.014	T	0.28	0.02	L		8.3375	0.0037	0.029	115		8.29	8.38		U 2			1							
97156	9.932	0.019	8.847	0.013		0.990	0.015	G	1.03	0.01	I		8.8790	0.0015	0.017	138		8.84	8.91		C			1							
97157	8.914	0.011	6.882	0.005		1.683	0.010	T	1.71	0.01	L		6.7380	0.0013	0.012	131		6.72	6.75		M			1 S							S
97158	10.328	0.033	9.827	0.034		0.482	0.036	T	0.55	0.04	L		9.8895	0.0033	0.024	111		9.84	9.93					1							
97159	9.919	0.018	7.849	0.007		1.752	0.016	T	2.61	0.03	O		7.6122	0.0052	0.054	149		7.55	7.72		U 2			1							S
97160	11.266	0.088	10.039	0.052		1.509	0.009	G	2.14	0.07	I		10.0087	0.0062	0.034	50		9.97	10.07					1							
97161	11.413	0.104	9.195	0.026		1.874	0.088	T	2.45	0.16	O		9.0321	0.0026	0.021	93		9.00	9.06					1							
97162	7.577	0.009	7.486	0.012	*						T	*	7.5157	0.0010	0.012	234	−	7.50	7.54		D	19449+1047	I 1	3 C A							S G
97163	10.608	0.031	9.356	0.018		1.068	0.028	T	1.03	0.02	L		9.3885	0.0020	0.022	181		9.35	9.42					1							
97164	9.797	0.026	9.312	0.026		0.456	0.033	T	0.53	0.04	L		9.3457	0.0017	0.018	91		9.31	9.38					1							
97165	2.875	0.002	2.898	0.003	A	−0.002	0.003	G	−0.02	0.03	C	*	2.8683	0.0002	0.004	112	*	2.86	2.88		D	19450+4508	I 1	2 C A	AB	228	2.520	0.017	3.73	0.07	S
97166	10.991	0.051	9.969	0.035		0.891	0.046	T	0.90	0.03	L		10.0735	0.0024	0.019	105		10.04	10.11		C			1							G
97167	10.854	0.058	10.164	0.051							T		10.2176	0.0095	0.060	106		10.03	10.30		D	19450+5551	I 2	1 X S							
97168	11.420	0.081	10.418	0.053		0.876	0.072	T	0.89	0.05	L		10.5077	0.0041	0.031	114		10.45	10.56		C			1							G
97169	8.893	0.012	8.844	0.015		0.050	0.018	T	0.06	0.01	L		8.8572	0.0015	0.021	149		8.82	8.90		C			1							
97170	9.759	0.024	7.830	0.010		1.580	0.082	G	1.71	0.17	K		7.6826	0.0048	0.047	113		7.59	7.74		D	19450+5551	I 2	1 S							
97171	10.210	0.022	9.331	0.017		0.784	0.021	T	0.82	0.01	L		9.4462	0.0024	0.023	130		9.39	9.49					1							
97172	9.355	0.013	8.885	0.013	A	0.416	0.072	G	0.51	0.04	L	*	8.9079	0.0014	0.016	160	*	8.87	8.94		D	19450+1551	H 1	2 C D	AB	139	2.052	0.043	3.77	0.18	D
97173	8.895	0.010	8.357	0.010		0.512	0.011	T	0.58	0.01	L		8.3991	0.0013	0.013	150		8.38	8.42		C			1 G							
97174	11.266	0.079	10.399	0.058		0.775	0.074	T	0.81	0.05	L		10.4672	0.0032	0.037	155		10.40	10.53		R			1							G
97175	9.262	0.014	9.095	0.017		0.160	0.021	T	0.18	0.02	L		9.1595	0.0017	0.021	128		9.12	9.21					1							
97176	9.985	0.022	9.186	0.017		0.708	0.021	T	0.76	0.02	L		9.3072	0.0033	0.025	114		9.27	9.34					1 G							
97177	8.893	0.018	8.527	0.018		0.374	0.013	G	0.44	0.01	H		8.5645	0.0026	0.017	50		8.54	8.59		C			1							
97178	9.655	0.019	8.438	0.012		1.040	0.018	T	1.01	0.01	L		8.4765	0.0022	0.013	103		8.45	8.50					1							
97179	8.098	0.006	8.078	0.008		0.023	0.009	T	0.04	0.01	L		8.0932	0.0015	0.016	163		8.07	8.12		C			1							
97180	10.483	0.035	9.176	0.019		1.111	0.031	T	1.07	0.03	L		9.2550	0.0014	0.018	110		9.22	9.29		D			1							
97181	9.443	0.025	8.364	0.018		0.934	0.023	T	0.93	0.02	L		8.4581	0.0024	0.010	41		8.44	8.48					1							
97182	8.972	0.013	7.525	0.007		1.220	0.012	T	1.18	0.01	L		7.5415	0.0008	0.009	96		7.52	7.56					1							S
97183	8.940	0.019	7.453	0.011		1.252	0.017	T	1.21	0.02	L		7.4558	0.0014	0.011	59		7.43	7.47					1							S
97184	12.254	0.287	10.477	0.095		1.510	0.249	T	2.50	0.72	K		10.2739	0.0889	0.293	45		9.86	10.60		U 2			1							G
97185	8.416	0.007	7.875	0.005		0.536	0.007	G	0.61	0.01	H		7.9073	0.0010	0.015	246		7.88	7.94			19452−7001	I 1	1							S
97186	10.520	0.039	8.875	0.017		1.376	0.034	T	1.35	0.04	L		8.9147	0.0023	0.014	86		8.89	8.94		C			1							
97187	8.847	0.020	8.851	0.026		0.001	0.030	T	0.02	0.03	L		8.8552	0.0040	0.019	49		8.82	8.90		C			1							
97188	9.400	0.024	8.169	0.015		1.051	0.022	T	1.02	0.02	L		8.2082	0.0016	0.014	54		8.19	8.23					1							S
97189	9.603	0.021	8.875	0.018		0.668	0.022	T	0.73	0.02	L		8.9097	0.0022	0.021	105		8.88	8.95					1							
97190	10.315	0.034	8.625	0.015	*	1.412	0.029	T	1.39	0.04	L	*	8.6174	0.0023	0.015	93	*	8.59	8.64			19452−1507	H 1	2 C C	AB	278	0.243	0.096	2.36	1.07	
97191	10.262	0.035	9.717	0.036		0.590	0.015	G	0.66	0.01	H		9.7943	0.0021	0.017	96		9.76	9.82		C			1							
97192	10.335	0.035	9.277	0.023		0.971	0.064	G	0.96	0.05	H		9.3059	0.0019	0.015	85		9.28	9.33		C			1							
97193	9.170	0.013	9.145	0.017		0.028	0.020	T	0.04	0.02	L		9.1543	0.0023	0.023	122		9.12	9.20					1							
97194						0.780	0.005	G	0.82	0.01	H	*	11.1241	0.0043	0.035	47	*	11.00	11.19		D	19452−4240	H 1	2 C B	AB	357	0.242	0.023	0.61	0.35	G
97195	10.562	0.041	8.489	0.015		1.716	0.035	T	1.74	0.04	L		8.3760	0.0014	0.014	90		8.35	8.40		C			1 S							
97196	11.366	0.054	10.266	0.033	*	1.049	0.007	G	1.10	0.01	I	*	10.2438	0.0024	0.035	199	*	10.17	10.30			19453−6823	H 1	2 C C	AB	298	0.318	0.105	2.64	0.73	G
97197	10.393	0.044	9.059	0.024		1.132	0.039	T	1.10	0.04	L		9.0578	0.0019	0.016	77		9.03	9.09					1 S							
97198	10.080	0.022	8.855	0.013		1.047	0.020	T	1.02	0.02	L		8.9014	0.0016	0.018	151		8.87	8.94		C			1							
97199	8.465	0.010	8.272	0.011		0.185	0.014	T	0.20	0.02	L		8.3338	0.0015	0.014	109		8.31	8.35		C			1							S
97200	8.954	0.022	8.462	0.021		0.474	0.023	T	0.55	0.02	L		8.5016	0.0023	0.013	36		8.48	8.57					1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)											Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
97201	19 45 17.16	+31 25 26.7	7.42		G	296.321 503 32	+31.424 092 14		2.32	3.27	1.20	0.44	0.60	0.78	0.51	0.80	− 4 − 2 + 0	+23 + 4	−26 + 6	+20 −10 − 6								0	−1.16
97202	19 45 17.58	−51 24 58.7	12.96	2	H																								
97203	19 45 18.04	−77 44 22.8	9.71		H	296.325 170 32	−77.739 654 93		10.34	32.92	−54.21	0.75	0.92	1.20	0.87	1.22	− 6 −21 + 1	+ 1 + 3	− 6 + 1	−24 − 6 −22								1	1.00
97204	19 45 18.41	+19 51 20.9	8.68		H	296.326 695 48	+19.855 794 35		0.11	−0.64	−5.04	0.67	0.69	1.09	0.73	0.69	− 5 −13 −12	− 9 − 2	+15 − 3	−25 + 9 −15								1	0.30
97205	19 45 22.40	−42 06 00.3	9.52		H	296.343 319 48	−42.100 083 63		15.52	55.92	−38.64	1.49	1.22	1.61	1.84	1.46	+30 −29 −16	+24 − 1 − 3	− 5 − 5	+ 9 +21								0	0.99
97206	19 45 22.66	+07 54 47.2	8.05		H	296.344 403 85	+07.913 112 01		12.80	27.11	40.53	0.62	0.45	1.08	0.82	0.54	+ 4 + 0	−28 +19	−33 +44	−23 −15 +17	+14							0	0.03
97207	19 45 22.68	−01 29 56.5	7.18		H	296.344 512 39	−01.499 023 21		4.06	16.00	1.65	0.96	0.73	1.09	0.99	0.89	+15 −35 −23	−19 +11	+24 +17	+15 − 1	+13							0	−0.36
97208	19 45 23.94	+33 46 03.3	9.86		G	296.349 770 26	+33.767 588 88		2.56	1.30	12.72	0.89	0.98	1.27	0.94	1.22	− 9 − 2 + 0	+ 1 +18	− 8 +21	+ 5 + 4	0							0	0.22
*97209	19 45 24.35	+23 56 34.4	7.03	1	G	296.351 460 26	+23.942 894 95		1.09	−2.90	−4.38	0.62	0.58	0.88	0.81	0.66	− 4 −12 −23	+ 8 − 6	− 2 − 7	−15 +16 − 5								2	0.60
*97210	19 45 24.33	−30 54 10.7	6.81		H	296.351 382 54	−30.902 964 05		4.27	5.58	−15.69	0.98	0.42	1.05	1.17	0.72	+17 −25 − 1	−23 +11	−17 +13	−23 +14	−19							0	0.64
97211	19 45 26.42	+25 54 56.3	9.43		H	296.360 066 49	+25.915 626 13		5.39	−8.61	−15.58	0.67	0.98	1.31	0.78	1.14	+ 1 − 1	−17 +23	− 4 +12	+ 2 −18 − 3	+10							0	0.81
97212	19 45 26.50	−00 08 43.4	7.88		H	296.360 427 76	−00.145 400 33		1.49	3.54	−2.02	0.98	0.82	1.35	1.44	1.07	+ 1 − 8	−54 +15	−25 +41	+ 0 +37	−40 −35							0	−0.65
97213	19 45 26.63	−50 52 02.8	8.64		G	296.360 945 25	−50.867 451 63		12.41	−62.90	−227.22	0.92	0.66	1.30	1.40	0.99	+11 −18 −20	−11 +39	−25 +36	−10 − 1	+10							0	−1.46
97214	19 45 26.66	−32 38 02.9	10.08		H	296.361 094 39	−32.634 148 87		4.77	14.47	−5.52	1.71	0.77	1.80	1.73	1.44	+22 −49 + 8	−14 − 2	+ 1 +11	−22 −15 +27								0	−0.23
97215	19 45 27.32	−03 09 06.6	9.67	2	H	296.363 822 00	−03.151 839 06		1.38	−4.92	−1.89	1.35	0.96	1.49	1.55	1.21	+ 1 −16	−26 −23 + 6	+30 +17	− 4 − 4 + 2								0	0.40
97216	19 45 28.34	−07 01 09.8	7.48		H	296.368 099 25	−07.019 391 91		12.70	53.08	−63.19	0.91	0.47	1.00	1.10	0.51	+ 9 −18 − 6	−11 +12	+21 +11	−24 +14	+24							2	0.94
97217	19 45 29.06	−13 15 44.3	8.47		H	296.371 092 20	−13.262 301 03		0.87	1.68	4.92	1.04	0.62	1.12	1.16	0.62	+39 −34 −19	+ 4 +31	+15 +22	+ 0 +18	+40							0	0.33
97218	19 45 29.25	−38 28 34.0	9.83		H	296.371 859 66	−38.476 119 11		6.00	5.41	−8.40	1.80	1.48	2.62	3.10	1.84	+36 +14 −27	−20 − 5	−61 −31	−36 −23	+45							0	1.40
97219	19 45 30.09	+50 46 18.8	9.00		H	296.375 393 84	+50.771 899 93		21.58	266.64	343.09	0.72	0.73	0.82	0.82	0.92	− 6 −14 + 9	+ 2 + 0	+13 − 1	+ 3 + 4	+11							0	0.42
97220	19 45 30.62	+26 01 52.0	10.02		H	296.377 591 15	+26.031 097 46		−0.43	0.34	−9.44	0.91	1.16	1.64	0.93	1.24	− 6 − 4	−16 +39	+ 2 + 6	+11 −22 − 8	+ 6							0	−0.06
97221	19 45 31.79	−49 59 49.8	8.12		H	296.382 476 93	−49.997 177 89		5.72	5.27	−114.04	0.86	0.72	1.17	1.20	0.93	+15 −15 −22	+ 4 +31	−12 +27	+ 8 − 1	+24							0	0.06
97222	H 19 45 33.52	+33 36 11.0	7.68		G	296.389 680 02	+33.603 056 35	A	49.09	13.30	−440.57	1.32	1.40	1.43	1.07	1.35	−18 + 4 − 7	+14 − 5	− 8 − 5	+17 + 3 − 9								5	0.69
97223	19 45 35.65	+30 00 37.7	9.15		H	296.398 551 26	+30.010 463 44		48.49	−70.45	−99.87	0.72	0.98	1.23	0.80	1.21	− 5 − 9	−23 − 2	− 2 + 7	+ 1 +18	−23 − 4							0	0.06
97224	19 45 36.20	−63 02 30.5	8.89		H	296.400 852 61	−63.041 800 90		2.04	6.20	−1.48	0.86	0.73	1.28	0.85	0.86	− 5 −14 − 1	− 1 −17	−13 −27	−18 +27	−33							0	1.83
97225	19 45 37.97	+44 57 49.5	7.50		G	296.408 217 04	+44.963 752 63		−0.18	−4.61	−3.78	0.52	0.50	0.58	0.58	0.58	+ 2 −12 − 2	+26 +17	−13 +18	+23 − 1	+12							0	0.11
97226	19 45 38.96	−70 37 35.6	7.12		H	296.412 331 72	−70.626 567 64		4.52	60.20	−62.01	0.45	0.55	0.79	0.57	0.66	−25 − 5 −17	+ 4 +22	−17 +19	−30 + 9	−26							0	0.25
97227	19 45 39.63	−50 48 53.6	8.41		H	296.415 139 62	−50.814 879 01		1.16	−15.98	−9.93	0.95	0.71	1.36	1.40	1.01	+10 −16 −22	−13 +42	−26 +38	− 7 − 1	+12							0	0.71
97228	19 45 39.65	+36 05 27.6	6.38		H	296.415 217 50	+36.091 006 55	A	1.73	2.23	6.59	2.18	2.11	2.16	2.14	2.29	+ 3 −16 − 5	+16 + 1	− 9 + 5	+ 6 + 5	+ 9							0	−1.68
97229	19 45 39.92	+07 36 47.4	5.89		H	296.416 315 72	+07.613 157 84		18.48	53.84	0.10	0.54	0.40	0.83	0.70	0.55	− 8 − 7	−36 +26	−30 +39	−22 +16 + 6	− 3							0	−1.78
97230	19 45 40.09	+16 51 34.5	9.94		H	296.417 058 48	+16.859 590 49		8.47	3.34	−145.89	2.67	2.29	3.84	2.91	2.22	+ 3 − 7 + 1	−37 + 0	− 3 − 1	−40 +11	−11							0	
97231	19 45 40.64	+25 07 36.1	9.52	1	H	296.419 334 65	+25.126 686 04		−0.21	−0.20	−4.01	0.82	0.99	1.54	0.85	1.08	+13 −27 −31	+24 + 2	−13 − 2	−21 + 5 + 6								0	0.09
97232	19 45 40.66	+36 05 19.1	7.16		G	296.419 427 36	+36.088 645 02	B	2.90	6.14	1.31	9.83	10.13	6.26	6.18	6.97	+ 6 −18 − 8	+ 6 + 1	− 6 + 4	+12 + 1 + 7								0	−1.68
97233	19 45 41.26	−00 41 47.5	7.34		G	296.421 896 68	−00.696 516 99		10.40	33.78	−52.59	1.01	0.90	1.26	1.14	1.02	+41 −49 −53	+14 + 6	+14 +27	+47 −21 + 0								0	1.08
97234	19 45 41.70	+32 42 49.8	8.06		H	296.423 739 53	+32.713 820 05		3.17	−34.61	−51.10	0.59	0.75	0.93	0.71	0.90	−13 − 9 − 7	+21 +17	−12 +17	+ 5 + 8 − 2								0	−1.18
97235	19 45 42.91	+30 15 25.5	7.60	2	H	296.428 775 40	+30.257 097 20		1.81	−0.91	8.43	0.47	0.65	0.82	0.55	0.83	− 4 − 9	−13 − 4 + 1	− 6 + 1	+ 6 −12 + 0								1	0.03
97236	19 45 44.57	+39 30 13.2	8.61		H	296.435 725 92	+39.503 669 83		10.18	25.89	−4.26	0.65	0.69	0.83	0.77	0.83	− 2 − 8 − 3	+22 +10 + 2	+11 +20	−11 + 4								0	−1.63
97237	19 45 45.24	+27 07 38.5	12.38	2	G																								
97238	19 45 45.83	+37 27 09.3	8.11		H	296.440 974 64	+37.452 579 72		3.00	4.65	−3.17	0.52	0.59	0.69	0.60	0.78	+ 1 − 6	−20 +10	+13 − 2	+15 + 4 + 0	− 1							3	2.83
97239	19 45 46.00	−52 36 57.7	9.11	2	H	296.441 666 07	−52.616 040 00		4.16	−9.63	14.33	0.99	0.70	1.35	1.41	1.03	+ 7 −28	−13 + 1	+25 − 5	+25 −12 − 9	− 3							3	0.95
97240	H 19 45 48.76	+40 33 18.9	7.56		G	296.453 168 43	+40.555 244 82	A	0.96	1.84	0.63	0.83	0.83	0.91	0.80	0.91	+ 6 + 4 + 0	+ 5 + 3	−18 + 7	+ 0 +31 + 0								0	0.14
97241	19 45 49.47	+32 23 11.9	10.61		H	296.456 145 27	+32.386 650 88	A	87.57	387.66	193.87	3.22	3.96	4.80	3.70	4.73	+ 2 − 7	−10 +15	+ 7 −19	+ 7 + 3 − 7	+11							5	6.44
97242	19 45 51.35	+35 00 46.0	6.14		H	296.463 949 10	+35.012 767 09		7.68	11.57	−6.43	0.39	0.44	0.55	0.42	0.54	−12 − 5 − 1	+12 + 4	−12 + 3	+15 +16 + 0								0	1.38
97243	19 45 51.58	+46 29 08.0	6.94		H	296.464 927 70	+46.485 543 15		4.22	−1.47	−2.11	0.53	0.50	0.59	0.57	0.58	−13 − 7 − 3	− 5 + 9	+ 3 +10	+ 3 −10 − 7								0	1.41
97244	19 45 52.23	−02 53 00.4	6.47		H	296.467 640 26	−02.883 449 29		3.00	−2.71	−1.49	0.86	0.63	1.14	1.11	0.73	+12 −27 −46	−15 −17	+49 +13	+ 8 −18 −17								3	−0.92
97245	19 45 52.42	−43 18 11.7	8.10		H	296.468 410 95	−43.303 240 00		2.71	4.83	−15.76	1.15	0.76	1.13	1.63	0.96	−14 −28 −11	+13 − 1	+18 + 2	− 2 − 6 −22								0	1.65
97246	19 45 54.13	+24 05 47.0	7.87	1	G	296.475 561 94	+24.096 397 45		1.45	−3.19	−4.53	0.65	0.67	1.01	0.87	0.69	− 2 −15	−23 + 5	+ 0 − 6	− 2 −27 +18	− 1							1	0.79
97247	19 45 54.35	+47 57 19.2	9.77		H	296.476 467 10	+47.955 332 21		1.10	−12.80	−13.40	0.91	0.73	0.92	1.03	0.91	− 2 −16	+11 + 5	+11 −12	+14 + 8 − 4	+16							1	0.32
97248	19 45 54.58	−52 31 51.6	7.52		H	296.477 431 72	−52.531 009 32		9.58	24.19	−82.29	0.68	0.47	0.91	0.96	0.70	+ 7 −28	− 8 − 9	+25 + 3	+25 −16 − 5	− 1							0	−0.26
*97249	19 45 54.67	+05 50 45.7	8.88		H	296.477 797 65	+05.846 018 44		1.53	−1.25	10.05	1.18	0.99	1.45	1.66	1.40	+21 −19 −42	−12 + 4	+20 +15	+11 +16 + 6								0	0.54
*97250	19 45 54.66	−59 35 35.4	8.29		H	296.477 757 20	−59.593 153 94		1.00	3.79	−12.48	0.71	0.57	0.97	0.77	0.74	− 4 −12	−19 +52	−24 + 8	−19 + 8 − 4	+10							0	0.77
97251	19 45 55.23	−22 04 20.0	8.93		H	296.480 106 85	−22.072 224 05		1.55	−0.14	1.56	1.20	0.73	1.41	1.57	0.95	+33 −35 −24	−14 −12	+32 − 2	−21 − 7	+19							0	1.04
97252	19 45 55.39	−57 32 49.9	7.98		H	296.480 781 29	−57.547 200 79		13.22	83.30	−61.39	0.67	0.53	0.88	0.91	0.74	+ 1 −11	+ 0 − 2	+ 8 +14	+12 −18 − 5	+20							0	−0.10
97253	19 45 55.50	−53 59 14.0	7.68		H	296.481 256 91	−53.987 215 37		2.79	8.37	−4.59	0.64	0.46	0.87	0.93	0.72	− 3 −10	− 2 − 5	+13 +10	+15 −16 + 8	+12							0	2.11
97254	19 45 56.20	+39 39 55.7	9.07		H	296.484 176 41	+39.665 474 11		1.12	1.00	5.59	0.70	0.69	0.86	0.86	0.84	− 5 − 6	− 4 +19	+10 + 6	+12 +11 −10 + 4								3	−0.39
97255	19 45 57.30	+04 14 54.6	7.02		G	296.488 747 76	+04.248 497 18		33.05	77.67	−2.72	0.84	0.70	0.99	1.03	0.87	+ 9 −26	−33 + 8	+13 + 9	+23 +34 −10 −18								0	0.80
97256	H 19 45 57.72	−07 35 13.8	8.80		G	296.490 481 41	−07.587 164 75	*	−0.35	0.23	−9.17	1.21	0.60	1.39	1.37	0.67	+16 +11 + 0	−14 +16	+35 +19	−17 +27 +37								2	−0.51
97257	19 45 58.07	+28 19 41.3	8.75		H	296.491 967 00	+28.328 135 52		0.38	4.93	−2.56	0.56	0.78	1.01	0.66	1.04	− 5 + 2	− 1 +14	− 1 −19	+ 1 − 9	− 8 + 4							0	−0.38
97258	19 45 59.62	−67 17 10.7	9.22		H	296.498 409 13	−67.286 294 65		3.77	9.98	−6.14	0.77	0.87	1.27	0.71	1.06	−31 −11 − 5	−44 +30	− 2 +35	−21 + 1 −41								0	−0.41
97259	19 45 59.87	+35 27 07.4	7.95		H	296.499 461 44	+35.452 046 34		2.43	−0.48	6.54	0.56	0.59	0.78	0.62	0.73	− 5 − 9	−13 +11	+ 4 − 4	+ 2 +12 +16	+12							0	1.46
97260	19 46 01.22	−31 54 30.7	5.51		H	296.505 066 32	−31.908 538 54		5.98	1.49	−13.52	1.07	0.42	1.00	1.34	0.60	+ 4 −47	−11 −36	+23 +10	+26 −28 − 3	−34							2	0.56
97261	19 46 01.57	−40 55 39.0	9.09		H	296.506 553 05	−40.927 504 78		1.46	−4.27	−5.88	1.45	1.13	1.65	1.88	1.30	+21 −30 −23	+ 3 −20	+ 2 −22	−27 + 2 − 3								0	0.44
97262	19 46 02.17	+67 44 16.4	7.73		H	296.509 051 68	+67.737 899 96		4.54	−1.68	41.61	0.56	0.57	0.59	0.62	0.75	+ 1 −10	+ 4 − 9	+16 + 2	+17 + 9 − 7	+15							0	−1.43
97263	19 46 02.51	+69 55 08.8	8.13	2	H	296.510 477 51	+69.919 122 23		5.96	14.94	17.18	0.58	0.58	0.62	0.66	0.74	+ 5 − 8	+ 8 − 1	+14 − 7	+11 +14 +20	+24							0	−0.09
97264	19 46 03.87	−67 02 52.6	8.16		H	296.516 104 58	−67.047 939 16		9.95	27.96	−55.92	0.67	0.75	1.09	0.89	0.91	−33 −10 − 9	+26 +10 − 2	− 5 −13	− 4 −63								0	−0.24
97265	19 46 04.37	+67 28 37.0	8.20		H	296.518 187 72	+67.476 941 68		4.43	−36.70	−3.61	0.65	0.63	0.67	0.70	0.81	+ 0 −15	+ 2 − 6	+24 +10	+26 + 9 − 5	+14							0	1.17
97266	19 46 04.72	+33 33 26.0	10.36	2	H	296.519 670 12	+33.557 230 88		4.58	−103.71	−123.20	0.99	1.14	1.45	1.20	1.46	+ 4 − 8	− 9 + 6	+10 −13	+ 9 + 5	+ 4 +22							1	1.08
97267	19 46 05.83	+63 30 31.1	8.23		G	296.524 274 89	+63.508 642 16		10.73	21.62	−24.58	0.64	0.61	0.67	0.76	0.78	+11 −14 − 5	+ 0 +11	+11 + 9	− 3 +22 +36								0	1.43
97268	19 46 06.27	+51 40 12.2	8.03		H	296.526 120 74	+51.670 043 23		6.99	2.68	−26.50	0.65	0.60	0.69	0.72	0.70	+ 4 −23 + 5	+17 +14	− 2 +16	+ 3 − 4 +13								1	−0.64
97269	19 46 06.84	−46 10 54.0	8.01		H	296.528 483 42	−46.181 666 79		5.51	3.49	−12.71	1.03	0.82	1.16	1.46	1.02	+18 −24 −19	+ 7 −10	− 4 −16	−12 +26 + 6								0	0.02
97270	19 46 07.74	+18 01 27.7	8.45		H	296.532 245 94	+18.024 365 07		2.18	−0.41	−4.99	0.67	0.65	1.07	0.70	0.57	+ 1 − 4 + 6	−29 − 5 +10	− 6 −43 + 3	−12								0	−0.98
97271	19 46 08.85	+62 30 37.2	8.42		H	296.536 887 61	+62.510 325 43		3.52	19.82	−11.40	0.81	0.65	0.78	1.24	0.86	+12 + 8 + 4	+ 3 +14	+11 +11	+12 +23 +39								0	−1.58
*97272	19 46 09.23	−04 11 04.4	9.39		H	296.538 465 89	−04.184 562 10		10.90	5.96	−48.07	1.37	0.99	1.50	1.68	1.40	+17 −26 −19	+ 4 + 5	+12 +12	+17 −17 +17								0	−0.26
*97273	H 19 46 09.19	−15 20 00.0	8.72		H	296.538 278 96	−15.333 346 80	*	4.92	2.61	−24.90	3.95	1.73	1.76	1.76	1.10	+22 − 5 −15	−15 +14	+21 − 4	− 9 +33 +54								2	−1.08
97274	19 46 12.37	+14 44 39.6	8.23		H	296.551 533 33	+14.744 343 18		9.45	35.77	35.18	0.74	0.55	0.99	0.98	0.49	+11 −14 +14	− 2 −24	− 6 −24	−40 + 9 − 8								0	0.90
97275	19 46 13.56	+05 59 17.3	8.45		H	296.556 498 35	+05.988 139 26		2.11	1.51	−1.30	1.24	0.92	1.45	1.60	1.35	+15 −37 −34	+20 + 6	− 5 − 5	+18 +29 −12								0	0.41
97276	19 46 13.64	+25 10 01.4	8.04		H	296.556 844 58	+25.167 043 92		4.06	6.50	−17.78	0.55	0.71	1.01	0.57	0.68	+10 −29 −17	+29 − 2	− 4 − 6	−28 +12 + 5								0	0.15
97277	19 46 14.17	+58 22 00.3	7.91		H	296.559 045 20	+58.366 740 68		5.30	4.99	−9.37	0.62	0.58	0.61	0.67	0.65	+ 5 − 1	+12 +43	+ 9 − 6	+11 +19 + 4	+11							0	−0.47
*97278	19 46 15.57	+10 36 47.8	2.72	1	G	296.564 875 67	+10.613 268 69		7.08	15.72	−3.08	0.54	0.34	0.75	0.74	0.32	+ 2 + 5 + 2	+15 −21 +17	−25 −33 + 9	−23								1	2.68
*97279	19 46 15.52	+43 56 51.3	8.37		H	296.564 654 63	+43.947 583 52		3.14	17.19	5.40	0.59	0.61	0.70	0.63	0.68	− 2 −12 +16	+22 +11 −16	+15 − 5	+ 9 + 0								0	0.00
97280	19 46 15.90	+32 06 58.2	7.49		H	296.566 266 56	+32.116 176 13		−0.01	−4.24	−8.08	0.43	0.59	0.75	0.50	0.71	− 4 − 5	−20 +11	+19 −28 +16	− 4 + 4 − 3								1	−1.98
97281	19 46 15.94	+28 16 19.1	10.19		H	296.566 424 05	+28.271 979 61		−0.85	−2.53	−4.98	0.84	1.16	1.54	1.00	1.39	−12 + 6	−17 +11	+ 7 −19	+ 5 −27 − 2 − 6								0	−0.95
97282	19 46 17.49	+45 44 10.3	7.42		H	296.572 862 86	+45.736 206 54		4.74	3.81	−6.50	0.56	0.54	0.62	0.62	0.61	− 8 −28 + 5	+14 +23 − 8	+23 +21 − 3	− 4	0							0	0.80
97283	19 46 17.79	+79 27 37.0	7.29		H	296.574 114 23	+79.460 268 81		4.28	−24.87	−14.12	0.55	0.52	0.58	0.60	0.73	+ 7 −11	+10 − 2	− 7 −11	− 6 − 8 −10	+14							2	−0.29
97284	19 46 17.97	+37 39 30.3	8.33		H	296.574 858 39	+37.658 428 87		1.96	−7.47	−4.50	0.63	0.74	0.85	0.68	0.95	− 5 −14	−10 −10	+14 + 8	+17 + 3 + 0 − 5	0							1	1.84
97285	19 46 18.99	+44 33 54.1	7.57		H	296.579 111 71	+44.565 022 44		3.85	9.36	1.17	0.54	0.54	0.63	0.58	0.61	− 5 −15 − 2	+13 +17	−18 +17	+18 − 2 + 5								1	−0.18
97286	19 46 19.22	+54 38 18.6	8.27		H	296.580 074 42	+54.638 513 31		15.31	−7.57	−27.71	0.68	0.58	0.69	0.93	0.74	− 5 − 7 + 2	+12 +14	− 1 +11	+ 7 +18 + 1								1	0.65
97287	19 46 19.27	−27 15 56.1	7.59		H	296.580 279 92	−27.265 588 54		6.47	5.35	41.85	0.86	0.54	0.99	1.12	0.66	+25 −15 − 5	+24 −10 +33	−12 −18 −21 + 1									0	2.00
97288	19 46 19.40	+20 55 35.1	8.56		H	296.580 827 74	+20.926 409 49		5.47	11.47	−13.29	0.68	0.67	1.07	0.91	0.70	− 4 − 9	−24 + 6	−12 − 2	−15 −22 +25	−22							0	−1.08
97289	19 46 19.49	+22 28 09.9	7.85		H	296.581 203 05	+22.469 426 95		1.62	8.37	−1.63	0.65	0.62	0.87	0.74	0.67	+ 9 − 4 − 5	−19 −13	+15 −13	−38 + 7 + 8								0	0.49
97290	19 46 21.82	−19 45 39.2	4.87		H	296.590 913 51	−19.760 894 82		15.92	−128.89	−89.81	0.71	0.47	0.77	0.69	0.51	+41 −46 −23	− 7 − 4	+15 + 1	−20 + 3 +49								0	−0.65
97291	19 46 22.27	−80 38 33.9	9.94		H	296.592 780 92	−80.642 759 69		5.23	55.47	−93.89	0.85	0.92	1.12	0.91	1.09	− 7 − 6 + 5	+11 +16 + 0	+17 +11 + 6	− 8								0	0.02
97292	H 19 46 23.61	+32 01 04.8	9.74		H	296.598 373 25	+32.018 005 44	A	74.90	464.87	−392.50	2.15	2.94	2.93	1.86	2.49	+ 1 − 2 − 8	− 1 + 4 − 6	+ 4 − 5	− 9 − 4								2	1.81
97293	19 46 24.69	+54 24 20.2	6.75		H	296.602 877 13	+54.405 602 75		3.52	1.23	2.15	0.53	0.45	0.53	0.67	0.54	− 2 − 9 + 7	+14 +14 − 4	+13 + 5 + 4	+ 2	0							0	−1.54
97294	H 19 46 25.42	−24 52 42.2	7.89		G	296.605 934 87	−24.878 378 91	A	9.38	30.49	−3.90	1.50	0.91	1.45	1.59	1.02	+29 −27 −18	+17 +24 − 8	+23 + 3	+14 +34								1	−0.70
97295	19 46 25.58	+33 43 43.3	5.00		H	296.606 599 60	+33.728 688 13		47.94	23.05	−448.66	0.38	0.41	0.54	0.42	0.50	− 9 + 3	−10 +12 +12	− 4 +15 − 1	+16 + 7	0							0	−0.33
97296	19 46 26.07	−18 09 06.4	9.13	2	H	296.608 626 12	−18.151 774 82		−0.43	9.12	−3.13	1.35	0.85	1.47	1.48	0.96	+49 −45 −21	− 7 + 0	+11 − 7	−23 +20 +55								0	0.01
97297	19 46 26.81	−11 53 02.6	8.33		H	296.611 723 07	−11.884 060 77		4.50	29.90	−20.88	0.99

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
97201	7.336	0.005	7.413	0.007		−0.063	0.010	G	−0.04	0.01	H	7.4048	0.0009	0.011	151		7.39	7.43		C			1							S
97202						1.470	0.015	G	1.90	0.07	I	13.0366	0.0113	0.153	153		12.71	13.33		U			S							D G
97203	10.543	0.029	9.779	0.023		0.681	0.028	T	0.74	0.02	L	9.8503	0.0021	0.026	142		9.79	9.91					1							
97204	8.867	0.011	8.721	0.013		0.140	0.016	T	0.15	0.02	L	8.7276	0.0020	0.020	131		8.69	8.77					1							
97205	10.571	0.051	9.580	0.034		0.856	0.048	T	0.87	0.04	L	9.6634	0.0052	0.029	54		9.61	9.70					1							
97206	8.625	0.010	8.092	0.010		0.483	0.018	G	0.55	0.02	H	8.1561	0.0011	0.012	161		8.14	8.17		C			1							S
97207	8.943	0.020	7.324	0.011		1.356	0.018	T	1.32	0.02	L	7.3344	0.0016	0.009	47		7.32	7.35		C			1							S
97208	10.390	0.056	9.883	0.055		0.485	0.015	G	0.56	0.02	H	9.9493	0.0020	0.029	137		9.89	10.01		D			1 S							G
97209	8.051	0.010	7.149	0.007		0.907	0.022	G	1.13	0.03	C	7.1664	0.0019	0.017	105		7.14	7.20		U 2			1							S
97210	6.972	0.005	6.836	0.006		0.123	0.007	T	0.14	0.01	L	6.8612	0.0005	0.006	128		6.85	6.87		C			1							S
97211	9.829	0.020	9.501	0.023		0.311	0.029	T	0.36	0.04	L	9.5032	0.0025	0.025	148		9.46	9.55					1							G
97212	8.230	0.013	7.926	0.015		0.356	0.015	G	0.42	0.02	H	7.9617	0.0007	0.008	50		7.94	7.98		D			1							S
97213	9.523	0.014	8.750	0.011		0.697	0.003	G	0.75	0.00	H	8.7912	0.0018	0.021	171		8.76	8.83					1							
97214	10.795	0.053	10.196	0.050		0.558	0.054	T	0.63	0.05	L	10.1972	0.0019	0.022	104		10.16	10.23		C			1							G
97215	9.606	0.028	9.689	0.041		−0.006	0.003	G	0.01	0.00	H	9.6796	0.0035	0.031	51		9.62	9.71		U			1							G
97216	8.135	0.009	7.547	0.007		0.549	0.010	T	0.62	0.01	L	7.6014	0.0012	0.010	109		7.59	7.62		C			1							S
97217	10.161	0.030	8.600	0.014		1.310	0.026	T	1.27	0.03	L	8.6236	0.0010	0.011	103		8.60	8.64					1							
97218	10.302	0.051	9.903	0.053		0.390	0.062	T	0.46	0.07	L	9.9205	0.0034	0.017	40		9.88	9.95					1							
97219	10.081	0.022	9.054	0.015		0.884	0.021	T	0.89	0.01	L	9.1425	0.0022	0.018	132		9.11	9.17		C			1							
97220	10.243	0.026	10.006	0.033		0.226	0.039	T	0.25	0.04	L	10.0873	0.0032	0.031	146		10.04	10.15		C			1							G
97221	9.388	0.016	8.224	0.011		0.999	0.015	T	0.98	0.01	L	8.2865	0.0016	0.017	118		8.25	8.32		C			1							
97222	8.807	0.018	7.715	0.014	*	1.000	0.010	G	1.04	0.01	I *	7.7931	0.0014	0.014	129	*	7.77	7.81		D	19456+3336	I 1	2 C A	AB	169	2.459	0.004	0.16	0.01	
97223	10.744	0.045	9.352	0.022		1.175	0.041	T	1.29	0.07	L	9.2749	0.0015	0.022	156		9.22	9.31		D			1							
97224	10.125	0.022	9.001	0.014		0.968	0.020	T	0.95	0.02	L	9.0488	0.0024	0.025	151		9.01	9.09					1							
97225	7.333	0.006	7.485	0.008		−0.129	0.011	G	−0.12	0.01	H	7.4605	0.0010	0.009	102		7.44	7.48					1							S
97226	8.326	0.007	7.230	0.005		0.947	0.007	T	0.94	0.01	L	7.2795	0.0010	0.013	190		7.26	7.30					1							S
97227	10.353	0.051	8.573	0.022		1.483	0.044	T	1.50	0.07	L	8.5407	0.0019	0.020	164		8.51	8.57		C			1							
97228	6.314	0.004	6.372	0.004	A	−0.049	0.005	T	−0.03	0.01	L	6.3674	0.0191	0.078	132	A	6.33	6.57		D	19456+3605	I 2	1 C P B							S
97229	6.112	0.003	5.907	0.003		0.180	0.004	G	0.20	0.01	H	5.9462	0.0004	0.006	133		5.94	5.96					1							S
97230	10.731	0.037	10.100	0.033		0.587	0.043	T	0.66	0.04	L	10.0687	0.0023	0.025	157		10.02	10.12		C			1 X							G
97231	10.836	0.043	9.664	0.026		1.207	0.068	G	1.17	0.07	H	9.6857	0.0027	0.031	150		9.64	9.73		U			1							G
97232	7.106	0.006	7.100	0.006	B	0.024	0.007	G	0.04	0.01	H	6.9743	0.0318			B				D	19456+3605	I 2	1 C I B							S
97233	8.630	0.017	7.431	0.011		0.996	0.015	G	0.97	0.01	H	7.5016	0.0014	0.009	46		7.48	7.52					1							S
97234	9.696	0.018	8.194	0.010		1.263	0.016	T	1.22	0.02	L	8.2178	0.0018	0.017	139		8.18	8.25					1							
97235	9.679	0.019	7.785	0.008		1.700	0.015	G	2.90	0.03	C	7.5327	0.0096	0.154	156		7.30	7.73		U 2			1 S							P
97236	9.241	0.014	8.639	0.013		0.561	0.017	T	0.63	0.02	L	8.7294	0.0017	0.018	127		8.70	8.77					1							
97237						1.720	0.015	G	2.93	0.04	I	12.3964	0.0079	0.101	231		12.18	12.53		U	19458+2707	I 1	S							G G
97238	8.353	0.010	8.134	0.011		0.209	0.014	T	0.23	0.02	L	8.1779	0.0019	0.015	122		8.15	8.20					1 S							
97239	10.395	0.026	9.260	0.017		0.976	0.024	T	0.96	0.02	L	9.2774	0.0020	0.023	157		9.23	9.31		U			1 S							
97240	7.565	0.007	7.664	0.009	A	−0.070	0.015	G	−0.05	0.01	H *	7.5794	0.0010	0.011	139	*	7.56	7.60		D	19458+4033	I 1	2 C A	AB	50	1.238	0.007	1.80	0.03	S
97241											T	10.7493	0.0610	0.109	137	A	10.62	10.95		D	19458+3223	M 1	2 C D	AB	339	12.765	0.082	2.26	0.53	G D
97242	7.478	0.006	6.218	0.004		1.070	0.011	G	0.95	0.03	C	6.2811	0.0007	0.007	144		6.27	6.29			19459+3501	I 1	1							S
97243	8.788	0.011	7.096	0.006		1.413	0.010	T	1.39	0.02	L	7.0802	0.0009	0.008	99		7.07	7.09		C			1							S
97244	6.484	0.006	6.472	0.007		0.016	0.008	T	0.04	0.01	L	6.4805	0.0014	0.007	49		6.47	6.49					1							S
97245	9.953	0.034	8.244	0.016		1.427	0.030	T	1.41	0.05	L	8.2365	0.0021	0.011	46		8.22	8.26		C			1							
97246	8.737	0.011	7.971	0.009		0.779	0.017	G	0.81	0.01	H	7.9955	0.0021	0.019	105		7.97	8.02		U			1							S
97247	11.790	0.123	9.887	0.033		1.580	0.101	T	1.60	0.10	L	9.8902	0.0023	0.021	103		9.85	9.92		C			1							G
97248	8.072	0.007	7.576	0.006		0.468	0.015	G	0.54	0.02	H	7.6257	0.0009	0.011	160		7.61	7.65		C			1							S
97249	10.352	0.053	9.008	0.029		0.680	0.040	G	0.74	0.03	R	9.0229	0.0027	0.019	43		8.98	9.05					1 S							
97250	8.300	0.008	8.294	0.010		0.010	0.012	T	0.03	0.01	L	8.3015	0.0013	0.015	147		8.27	8.33		C			1							S
97251	10.987	0.076	9.100	0.026		1.568	0.064	T	1.59	0.07	L	9.0464	0.0014	0.013	63		9.03	9.08					1							
97252	8.524	0.008	8.037	0.008		0.491	0.004	G	0.56	0.00	H	8.0870	0.0015	0.013	154		8.06	8.12		C			1							S
97253	9.281	0.013	7.806	0.007		1.242	0.012	T	1.20	0.01	L	7.8412	0.0015	0.013	151		7.82	7.87		C			1							S
97254	9.223	0.013	9.114	0.016		0.106	0.019	T	0.12	0.02	L	9.1149	0.0016	0.012	124		9.09	9.14		C			1							
97255	7.755	0.010	7.091	0.011		0.612	0.015	G	0.68	0.01	H	7.1352	0.0016	0.012	51		7.12	7.16			19460+0415	I 1	1 S							S
97256	11.045	0.053	8.946	0.015	*	1.160	0.040	G	1.12	0.04	R *	8.8484	0.0024	0.020	116	*	8.82	8.88			19460−0735	H 1	2 C S B	AB	175	0.104	0.008	0.70	0.86	
97257	8.842	0.009	8.778	0.012		0.064	0.014	T	0.07	0.01	L	8.7779	0.0019	0.019	174		8.75	8.81					1							
97258	10.296	0.022	9.285	0.015		0.871	0.021	T	0.88	0.01	L	9.3624	0.0020	0.024	198		9.32	9.41					1							
97259	9.836	0.020	8.093	0.009		1.453	0.017	T	1.46	0.03	L	8.0877	0.0018	0.019	140		8.06	8.11					1							
97260	5.537	0.002	5.516	0.003		0.024	0.003	T	0.04	0.00	L	5.5249	0.0006	0.005	120		5.52	5.53		C			1							S
97261	10.743	0.076	9.232	0.035		1.271	0.066	T	1.23	0.07	L	9.2520	0.0025	0.014	47		9.22	9.27					1							
97262	8.048	0.008	7.747	0.010		0.279	0.004	G	0.32	0.01	H	7.8046	0.0012	0.011	118		7.78	7.82		C			1							S
97263	8.392	0.010	8.170	0.011		0.212	0.014	T	0.23	0.02	L	8.2005	0.0020	0.019	113		8.17	8.25	0.77	P 1 A			1							S
97264	8.773	0.010	8.214	0.009		0.563	0.009	G	0.64	0.01	H	8.2795	0.0016	0.017	159		8.25	8.31					1							S
97265	9.756	0.018	8.331	0.010		1.203	0.016	T	1.16	0.02	L	8.3681	0.0017	0.015	110		8.34	8.39					1							S
97266	11.323	0.141	10.662	0.133		0.603	0.145	T	0.67	0.13	L	10.4854	0.0052	0.054	131		10.39	10.56		U			1 S							G
97267	8.665	0.011	8.238	0.010		0.411	0.015	G	0.48	0.02	H	8.3178	0.0014	0.012	109		8.30	8.35		C			1							S
97268	8.619	0.011	8.083	0.010		0.503	0.013	T	0.58	0.01	L	8.1455	0.0014	0.015	118		8.12	8.17		C			1							S
97269	9.437	0.026	8.107	0.016		1.129	0.024	T	1.09	0.03	L	8.1736	0.0019	0.013	54		8.15	8.20		C			1							
97270	9.584	0.015	8.563	0.011		0.890	0.014	T	0.90	0.01	L	8.6046	0.0015	0.018	152		8.58	8.63		C			1							
97271	9.690	0.021	8.525	0.013		1.000	0.019	T	0.98	0.01	L	8.5899	0.0018	0.015	99		8.56	8.61		C			1							
97272	10.290	0.042	9.475	0.033		0.680	0.040	G	0.74	0.03	R	9.5260	0.0026	0.023	55		9.46	9.55					1							
97273	10.165	0.030	8.903	0.018	*	1.075	0.027	T	1.04	0.02	L *	8.8931	0.0028	0.021	92	*	8.86	8.92			19462−1520	H 1	2 C B	AB	47	0.230	0.047	2.17	0.44	
97274	8.757	0.009	8.267	0.009		0.461	0.012	T	0.53	0.01	L	8.3284	0.0014	0.015	167		8.30	8.36		C			1							
97275	8.409	0.018	8.460	0.024		−0.060	0.015	G	−0.04	0.01	H	8.4369	0.0031	0.020	42		8.41	8.47					1							
97276	9.303	0.013	8.135	0.008		1.002	0.012	T	0.98	0.01	L	8.2057	0.0014	0.014	159		8.18	8.23		C			1							
97277	8.590	0.010	7.973	0.009		0.586	0.015	G	0.66	0.01	H	8.0351	0.0012	0.012	123		8.01	8.06		C			1							S
97278	4.717	0.002	2.889	0.002		1.507	0.014	G	1.44	0.02	A	2.8695	0.0005	0.006	172		2.86	2.88		M	19462+1037	I 1	1							S
97279	8.549	0.010	8.398	0.011		0.145	0.014	T	0.16	0.01	L	8.4272	0.0016	0.015	110		8.40	8.45					1							
97280	7.533	0.006	7.503	0.008		0.032	0.009	T	0.05	0.01	L	7.5103	0.0009	0.011	145		7.49	7.53					1							S
97281	10.571	0.031	10.214	0.038		0.258	0.001	G	0.29	0.00	H	10.2561	0.0032	0.039	173		10.19	10.32					1							G
97282	8.963	0.013	7.547	0.008		1.196	0.012	T	1.16	0.01	L	7.5838	0.0010	0.010	112		7.57	7.60		C			1							S
97283	8.923	0.013	7.411	0.007		1.271	0.012	T	1.23	0.01	L	7.4493	0.0009	0.007	90		7.44	7.46					1							S
97284	9.503	0.017	8.440	0.012		0.921	0.016	T	0.92	0.01	L	8.4867	0.0014	0.014	108		8.46	8.51		C			1							
97285	8.897	0.011	7.687	0.007		1.035	0.010	T	1.01	0.01	L	7.7366	0.0010	0.013	117		7.72	7.76					1							
97286	8.881	0.013	8.350	0.012		0.498	0.016	T	0.57	0.02	L	8.3782	0.0009	0.010	108		8.36	8.40		D			1 S							
97287	9.105	0.016	7.726	0.009		1.167	0.014	T	1.13	0.01	L	7.7547	0.0013	0.009	87		7.74	7.77		C			1							S
97288	8.978	0.011	8.624	0.012		0.336	0.015	T	0.39	0.02	L	8.6448	0.0018	0.015	127		8.61	8.67					1							
97289	7.915	0.007	7.845	0.011		0.069	0.012	T	0.08	0.01	L	7.8770	0.0013	0.012	113		7.85	7.90					1							S
97290	6.244	0.004	4.999	0.003		1.061	0.002	G	1.03	0.00	H	5.0400	0.0006	0.005	96		5.03	5.05		C			1							S
97291	10.851	0.037	9.983	0.027		0.760	0.035	T	0.80	0.03	L	10.0749	0.0020	0.030	158		10.01	10.12					1							
97292	11.951	0.150	10.270	0.048	A	1.517	0.048	G	2.00	0.08	B *	9.8238	0.0031	0.035	140	*	9.76	9.89		R	19464+3201	I 1	2 C A	AB	134	4.866	0.011	0.96	0.05	G
97293	7.937	0.008	6.843	0.006		0.945	0.008	T	0.94	0.01	L	6.9096	0.0009	0.008	117		6.89	6.92		C			1							S
97294	8.462	0.016	7.997	0.016	A	0.423	0.015	G	0.49	0.02	H *	7.9825	0.0009	0.011	84	*	7.97	8.00		D	19464−2453	I 1	2 C A	AB	286	1.115	0.007	1.29	0.02	S
97295	5.562	0.003	5.055	0.003		0.476	0.004	T	0.55	0.00	L	5.1064	0.0006	0.006	128		5.10	5.11			19465+3343	I 1	1							S
97296	12.546	0.242	9.430	0.024		2.600	0.430	G	2.60	0.44	J	9.1277	0.0203	0.116	89		8.94	9.29		U 2			1							
97297	9.772	0.022	8.455	0.013		1.118	0.020	T	1.08	0.02	L	8.4957	0.0016	0.013	122		8.48	8.52		C			1							
97298	10.677	0.059	8.757	0.021		1.594	0.050	T	1.61	0.05	L	8.6877	0.0029	0.016	48		8.64	8.72		C			1							
97299	9.142	0.013	8.605	0.012		0.504	0.016	T	0.58	0.02	L	8.6633	0.0017	0.014	111		8.64	8.70		C			1							
97300	8.618	0.010	8.526	0.012		0.090	0.015	T	0.10	0.02	L	8.5470	0.0016	0.016	128		8.52	8.58					1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
97301 H	19 46 30.39	−21 31 22.8	7.55	H	296.626 604 80	−21.523 009 30	A	11.63	48.54	−15.46	1.93	1.28	1.89	2.03	1.41	+43	−47	−31	−14	−14	+15	−15	−26	+14	+49	0	−0.05
97302	19 46 31.69	−39 25 31.7	7.96	H	296.632 039 86	−39.425 479 70		1.49	12.33	6.19	1.17	0.83	1.26	1.69	1.22	− 3	−26	−25	−13	+ 9	+ 2	+ 5	−30	+ 4	−31	0	1.26
97303	19 46 32.15	−16 12 33.4	8.04	1 H	296.633 937 71	−16.209 276 35		1.26	−27.89	−15.32	0.96	0.59	1.07	1.04	0.62	+37	−33	−13	− 1	+16	+19	+10	−10	+22	+52	0	−0.29
97304	19 46 32.76	+50 00 37.4	6.68	H	296.636 512 85	+50.010 384 25		4.01	5.33	−17.68	0.47	0.45	0.52	0.57	0.51	−11	−13	+ 5	+ 7	+ 3	−11	+ 4	+ 5	− 1	+ 1	0	−0.42
97305	19 46 33.54	−53 37 56.4	9.98	H	296.639 751 40	−53.632 331 50		10.48	−114.48	−115.99	1.27	0.84	1.72	2.10	1.48	−20	− 3	− 4	−32	+36	− 8	+35	−31	+22	− 6	1	2.07
97306	19 46 34.39	+10 27 36.7	8.00	H	296.643 305 74	+10.460 186 69		3.31	−1.14	−7.67	0.70	0.49	1.03	1.06	0.56	+16	+ 1	+ 1	− 2	−27	+19	−27	−31	+ 4	− 4	1	1.42
97307	19 46 35.04	+32 53 19.0	6.18	H	296.645 982 91	+32.888 604 83		8.89	−37.42	−5.85	0.41	0.48	0.64	0.49	0.62	− 3	+ 4	−16	+12	+ 7	− 6	+ 8	+ 5	+20	+11	1	−0.77
97308 H	19 46 35.09	−01 22 36.6	7.38	H	296.646 210 56	−01.376 837 72	*	4.25	−6.99	−5.44	1.92	1.66	1.22	1.19	1.01	+49	+ 4	− 3	+ 7	+23	+15	+29	+32	+ 6	+20	0	−0.09
97309	19 46 35.19	+22 53 23.3	10.57	3 H	296.646 627 11	+22.889 797 37		−2.80	−6.73	−7.65	1.17	1.09	1.70	1.54	1.34	+ 0	−13	− 8	−11	− 5	+12	− 4	−30	+15	+12	2	0.24
97310	19 46 35.67	+12 49 01.1	8.64	H	296.648 620 15	+12.816 986 10		3.83	−0.65	−15.56	0.83	0.51	1.08	1.08	0.47	−11	− 6	+ 1	+26	−23	+14	−30	−28	+ 8	−37	0	0.04
97311	19 46 35.95	+39 30 40.3	7.46	H	296.649 793 25	+39.511 198 13		4.52	2.25	−10.25	0.53	0.54	0.63	0.62	0.63	+10	− 8	− 9	+29	+18	−10	+17	+26	− 5	+17	3	1.32
97312	19 46 36.08	+07 03 20.5	8.20	H	296.650 327 51	+07.055 700 77		15.74	40.54	−8.06	1.48	1.18	1.34	1.52	1.28	−39	−33	−10	+45	−24	+10	−29	+60	+ 7	−26	0	1.23
97313	19 46 36.19	+27 09 29.5	9.00	H	296.650 787 25	+27.158 208 26		4.07	−6.28	−9.36	0.48	0.80	1.06	0.61	0.93	−26	− 6	− 8	−14	+ 5	− 3	+ 6	−24	− 4	−20	0	−0.47
97314	19 46 36.34	+41 44 16.9	8.61	H	296.651 403 63	+41.738 028 87		2.32	3.68	3.10	0.61	0.66	0.74	0.64	0.79	− 1	− 5	+ 2	−16	+14	− 4	+10	+14	+ 7	+17	5	2.00
97315 H	19 46 36.56	+43 45 48.0	8.16	H	296.652 320 20	+43.763 344 29	A	3.11	8.67	12.40	1.32	1.68	0.92	0.85	0.94	+33	− 4	+ 5	+14	+ 4	− 6	+10	− 3	− 9	+ 3	2	−0.60
97316	19 46 37.74	+51 01 14.0	8.76	H	296.657 267 90	+51.020 563 15		8.41	−2.93	−57.29	0.69	0.67	0.76	0.72	0.82	− 6	−20	+ 3	− 9	+ 5	+ 7	+ 3	+14	− 8	+14	1	0.84
97317	19 46 37.81	+17 48 10.9	8.10	G	296.657 532 75	+17.803 036 63		11.03	21.82	−45.72	0.61	0.57	0.91	0.63	0.50	+13	−12	− 4	−26	−11	+14	−13	−44	+10	− 7	2	0.91
97318	19 46 38.51	+14 27 48.5	8.50	H	296.660 477 43	+14.463 485 87		1.18	−0.41	−3.55	0.75	0.56	1.06	1.07	0.51	+ 3	− 5	+ 5	+10	−20	+12	−25	−37	+ 5	−27	0	−1.05
97319	19 46 39.50	+25 08 01.8	6.66	H	296.664 567 64	+25.133 840 38		16.37	80.76	−2.73	0.42	0.48	0.74	0.45	0.51	+ 2	−19	− 9	+28	− 9	+ 3	−10	−17	+13	+ 2	1	−0.27
97320 H	19 46 39.54	+35 51 52.9	8.51	H	296.664 731 55	+35.864 689 09	A	2.66	2.90	0.69	0.91	0.97	1.12	0.92	1.09	− 1	−24	− 1	+23	+ 2	− 9	+ 1	+18	+ 7	+ 7	1	0.16
97321	19 46 41.20	+44 20 54.7	7.07	H	296.671 681 93	+44.348 525 64		23.36	133.86	−2.26	0.51	0.51	0.58	0.55	0.67	− 8	−11	+13	+17	+ 6	−14	+10	− 6	− 7	+10	1	−0.14
97322	19 46 41.31	−11 28 47.1	10.06	G	296.672 140 19	−11.479 748 14	A	−3.93	−19.01	−25.84	7.03	3.26	6.59	8.37	3.20	+48	− 7	+ 6	− 4	− 1	− 5	− 1	−20	+11	+60	17	−0.04
97323	19 46 41.93	−52 48 45.6	8.44	H	296.674 689 11	−52.812 663 50		13.36	48.43	−31.48	0.84	0.57	1.17	1.19	0.93	+ 6	−30	− 4	− 5	+26	− 2	+31	−14	−15	+ 9	0	−0.34
97324	19 46 42.26	−48 31 30.0	10.20	G	296.676 073 68	−48.525 004 76		6.48	44.56	−336.55	2.31	1.60	2.39	2.81	1.90	+ 9	−52	−19	− 4	+10	+ 9	−14	−21	+18	+10	0	−1.78
97325	19 46 44.01	−29 36 07.0	9.69	H	296.683 355 58	−29.601 956 74		6.15	2.38	−2.43	1.60	0.82	1.56	1.55	1.02	+19	−34	−21	−42	+10	+ 4	+14	−27	+ 8	+12	0	0.37
97326	19 46 44.66	+68 26 16.8	6.34	1 H	296.686 072 34	+68.438 002 00		6.21	7.43	−1.66	0.50	0.46	0.51	0.60	0.56	+ 5	−19	+ 2	+ 7	+13	+ 3	+11	+12	+ 4	+20	3	1.89
97327	19 46 48.19	+29 42 54.4	8.98	H	296.700 789 38	+29.715 099 52		1.34	−20.88	−12.09	0.72	0.91	1.17	0.86	1.07	− 1	− 4	−11	− 8	− 3	+ 6	− 1	−11	−10	+14	0	−0.43
97328	19 46 49.61	+75 18 13.8	9.79	H	296.706 727 14	+75.303 819 78		2.43	6.58	17.68	0.79	0.83	0.87	0.86	0.96	−11	−13	+ 4	− 9	+10	− 8	+12	+ 1	−17	+ 2	0	−0.14
97329	19 46 51.41	+29 32 06.3	8.19	H	296.714 218 04	+29.535 074 09		1.44	−0.43	−1.37	0.54	0.68	0.92	0.63	0.80	+ 0	− 2	+ 3	+ 7	− 1	− 1	+ 0	− 4	−13	+12	1	0.00
97330	19 46 52.70	+60 26 55.5	9.13	H	296.719 598 97	+60.448 750 02		−0.11	2.56	−0.04	0.89	0.86	0.89	1.01	1.14	+ 5	−17	+15	+36	+16	− 6	+21	+20	− 8	+ 9	3	−0.34
97331	19 46 52.82	+18 52 54.7	8.43	G	296.720 063 12	+18.881 859 62		6.97	11.13	−0.40	0.68	0.66	1.10	0.76	0.62	− 7	−13	−16	−25	− 4	− 2	− 6	−41	+20	−24	0	1.16
97332	19 46 54.10	+72 27 52.4	7.56	H	296.725 431 50	+72.464 544 45		4.79	2.36	34.71	0.57	0.55	0.63	0.52	0.56	−14	−27	+28	−34	+ 6	+ 7	+ 3	+13	+ 1	− 3	0	−0.30
97333	19 46 56.84	−02 16 13.3	8.51	H	296.736 846 68	−02.270 353 03		0.80	0.80	3.30	1.18	0.82	1.36	1.29	0.95	+20	−41	−35	−18	− 4	+30	+ 8	+ 0	− 1	+ 0	0	−0.42
97334	19 46 57.39	+39 53 57.7	8.92	H	296.739 144 28	+39.899 374 74		3.02	0.10	−12.29	0.72	0.71	0.87	0.82	0.88	− 5	−14	+ 5	+20	+22	− 8	+19	− 8	− 4	− 6	1	0.26
97335	19 46 57.80	−70 38 33.7	8.72	H	296.740 841 58	−70.642 707 38		0.81	13.88	−12.18	0.66	0.83	1.19	0.82	0.96	−23	− 4	−18	+11	+20	−18	+16	−15	+14	−24	0	1.05
97336	19 46 58.01	+34 25 11.4	7.83	H	296.741 715 84	+34.419 823 86		20.87	143.13	−123.23	0.51	0.56	0.71	0.53	0.66	−12	− 8	− 2	+14	+15	− 7	+16	+13	+ 9	− 7	0	−1.95
*97337	19 47 10.19	+40 20 25.0	11.01	H	296.792 454 89	+40.340 283 05		26.90	143.81	391.57	1.17	1.26	1.53	1.38	1.43	−10	−16	−14	+ 2	+12	−14	+11	−10	+ 2	+ 0	0	1.86
*97338	19 46 58.82	−29 48 40.7	9.93	H	296.745 100 16	−29.811 317 14		7.72	59.64	−10.42	1.76	0.90	1.72	1.84	1.18	+16	−23	−11	−40	+ 7	+ 0	+11	−30	− 1	+12	0	−1.92
*97339 H	19 46 59.65	+19 10 50.6	8.07	H	296.748 521 75	+19.180 722 07	*	3.74	3.26	−4.28	0.62	0.56	0.97	0.73	0.57	− 4	−16	−14	− 3	− 9	+ 9	−12	−32	+20	−15	0	0.54
*97340	19 47 00.38	−26 29 25.7	7.68	H	296.751 587 13	−26.490 467 67		4.48	10.98	−37.10	0.85	0.57	0.98	0.88	0.62	+29	−24	−15	− 3	+ 0	+18	+ 7	−17	−12	+29	0	0.70
*97341	19 47 01.00	+48 55 55.3	8.89	H	296.754 178 38	+48.932 030 41		9.79	−36.87	−14.50	0.70	0.63	0.76	0.78	0.73	− 3	−15	+11	− 4	+18	−17	+20	+12	+ 0	+ 3	0	0.33
*97342	19 47 02.58	+04 31 42.8	8.00	H	296.760 734 07	+04.528 552 41		3.36	3.36	−9.32	1.09	0.89	1.31	1.57	1.16	+ 0	− 5	−49	+39	−20	+34	− 3	+51	−42	−36	0	−0.25
*97343	19 47 03.49	+39 18 52.9	8.35	H	296.764 555 39	+39.314 683 85		7.29	21.22	18.75	0.60	0.65	0.76	0.66	0.77	− 5	− 5	− 9	+16	+ 7	−19	+ 4	+24	− 3	+ 9	4	0.81
*97344	19 47 03.62	−65 16 32.7	9.02	H	296.765 078 12	−65.275 751 26		12.88	51.73	−17.19	0.96	0.72	1.15	1.09	0.94	− 1	−19	−13	+21	− 8	+ 4	−10	−11	+ 8	− 5	0	1.04
*97345	19 47 05.80	−62 27 12.8	6.71	1 H	296.774 182 54	−62.453 568 43		4.51	7.80	−57.07	0.64	0.47	0.80	0.66	0.57	− 7	− 8	− 5	−21	−13	− 1	−17	−21	+ 9	−35	0	2.06
*97346	19 47 06.11	−31 25 45.5	9.67	H	296.775 445 05	−31.429 301 94		5.69	−0.04	−11.91	1.88	0.90	2.05	3.10	1.20	+45	−39	−24	+18	+20	−23	− 6	−25	+10	−11	2	0.61
*97347	19 47 06.56	−68 38 37.0	8.51	H	296.777 315 58	−68.643 607 28		4.28	−26.73	−15.78	0.60	0.79	1.17	0.62	0.83	−24	−15	−10	−28	+12	− 4	+ 8	− 6	+16	−22	0	−0.88
*97348 H	19 47 06.78	−19 52 50.1	8.17	H	296.778 246 40	−19.880 590 98	A	10.81	−45.36	−27.63	1.77	1.23	1.57	1.38	0.99	+30	−21	−15	− 4	+10	+ 7	+12	−10	+ 6	+46	1	0.30
*97349	19 47 07.42	−23 44 05.1	8.54	H	296.780 900 56	−23.734 736 73		3.95	8.66	−6.67	0.98	0.64	1.09	1.13	0.73	+38	−22	−20	+14	+17	+12	+15	+ 2	+14	+32	0	1.88
*97350 H	19 47 08.04	−08 09 09.9	8.04	G	296.783 502 83	−08.152 754 79	*	6.25	−0.63	−24.06	1.77	1.11	1.36	1.41	0.79	+50	− 6	− 5	−33	−13	+19	−12	−33	+16	+52	2	0.33
*97351	19 47 09.02	−17 04 41.2	6.87	2 H	296.787 570 02	−17.078 111 81		0.61	20.91	−4.06	0.87	0.52	1.01	1.13	0.75	+36	−34	− 9	− 2	+12	+35	+ 9	−16	+ 5	+11	0	−0.43
*97352 H	19 47 10.10	−55 13 25.8	8.53	G	296.792 103 82	−55.223 838 02	A	9.31	−7.97	−54.11	1.17	0.80	1.43	1.61	1.20	−10	+ 0	+ 4	+ 0	+ 6	+ 4	+13	−20	− 4	+20	1	−0.38
97353	19 47 10.30	−10 03 25.5	8.57	H	296.792 905 51	−10.057 095 78		6.16	26.42	−35.04	1.27	0.97	1.13	1.95	1.11	− 0	−27	−15	−58	+ 6	+38	− 7	−54	+17	+21	0	−1.82
97354	19 47 11.18	−37 09 37.2	9.98	H	296.796 573 99	−37.160 323 97		4.32	27.48	−32.96	1.71	1.32	2.03	2.38	1.67	+30	− 2	+30	− 3	−27	−27	−18	−50	−38	+37	0	1.34
97355	19 47 16.37	+11 28 25.5	7.95	H	296.818 213 88	+11.473 739 45		3.77	12.05	−7.80	0.66	0.48	1.08	0.81	0.46	+24	+27	+10	+ 6	−21	+36	−31	−36	−14	− 3	0	−0.02
97356	19 47 17.51	+09 18 27.9	9.80	H	296.822 974 84	+09.307 754 39		−2.19	−2.58	−7.16	0.95	0.71	1.56	1.47	1.21	+29	− 5	−30	+25	−29	+48	−29	+20	− 1	+ 7	1	0.47
97357	19 47 17.56	+30 50 24.7	7.67	H	296.823 186 95	+30.840 207 62		3.10	3.93	−2.15	0.42	0.57	0.72	0.52	0.69	−11	+ 2	−12	+10	+ 9	−22	+ 6	− 3	+ 2	−14	1	0.70
97358	19 47 18.14	−18 44 47.0	7.60	H	296.825 598 35	−18.746 386 79		32.32	−68.71	−112.15	0.81	0.52	0.90	0.85	0.58	+31	−38	−20	− 5	+11	+14	+11	− 8	+ 7	+35	0	0.16
97359	19 47 18.53	+21 46 17.4	7.07	2 H	296.827 211 86	+21.771 505 28		1.69	7.22	9.37	0.57	0.53	0.83	0.58	0.48	− 7	− 5	−12	−20	− 5	+10	− 5	−37	+19	−15	1	0.84
97360	19 47 19.79	+40 59 39.5	7.89	G	296.832 438 61	+40.994 297 08		5.20	3.79	11.97	1.43	1.56	1.79	1.57	1.86	+ 6	− 6	+14	−17	+ 4	− 6	+ 3	−13	+ 9	+21	0	
97361	19 47 20.88	−06 20 34.6	8.30	H	296.837 015 46	−06.342 953 01		6.07	−20.67	−47.49	0.99	0.78	1.16	1.23	1.02	+ 9	− 9	−31	−12	+ 4	+14	+11	+ 7	− 6	+ 1	0	−0.46
97362	19 47 21.60	−54 55 01.9	8.36	H	296.839 981 07	−54.917 185 81		5.42	17.43	−8.14	0.67	0.51	0.94	0.96	0.81	+ 4	−16	+ 8	− 4	+ 7	+ 6	+11	−19	− 1	+27	1	2.72
97363	19 47 22.55	+31 25 52.2	7.87	H	296.843 947 50	+31.431 176 45		8.64	−7.41	−23.88	0.51	0.62	0.85	0.59	0.67	− 3	− 6	+ 5	+28	− 1	−26	+ 0	+ 1	+ 8	− 4	0	−0.34
97364 H	19 47 22.95	+64 41 38.4	8.75	H	296.845 628 02	+64.693 993 42	A	9.19	12.41	77.94	0.97	1.11	1.02	0.88	1.18	+18	− 9	+24	−11	+28	+13	+15	+27	+10	+45	0	0.32
97365 H	19 47 23.27	+18 32 03.3	3.68	2 H	296.846 938 42	+18.534 259 12	*	7.28	−4.58	11.10	3.88	2.33	0.83	0.62	0.52	+12	− 3	+ 1	− 8	− 1	+ 0	+ 4	−15	+14	− 5	9	1.80
97366	19 47 23.52	+42 28 59.0	7.50	H	296.847 994 77	+42.483 044 01		10.73	9.06	−7.24	0.47	0.51	0.58	0.52	0.62	+ 4	+ 3	+ 1	+ 4	+ 4	−14	+ 2	+21	−11	+17	0	−2.41
97367 H	19 47 23.94	−01 48 28.8	8.22	H	296.849 751 47	−01.807 994 52	*	8.16	−0.89	−19.38	1.87	1.55	1.36	1.41	1.06	+11	−16	− 4	−13	+11	+20	+17	− 6	+ 1	−17	0	−0.08
97368	19 47 24.69	−48 09 42.1	8.49	H	296.852 867 46	−48.161 681 50		5.08	33.80	4.07	1.53	1.03	1.71	1.91	1.16	+ 5	−51	−28	+12	−13	+27	− 2	− 8	− 5	+12	0	−1.33
97369	19 47 25.00	+12 22 35.0	9.40	H	296.854 146 47	+12.376 402 37		1.23	0.32	−4.16	0.95	0.65	1.31	1.09	0.60	+15	+ 4	+11	+ 1	−21	+17	−26	−34	− 1	− 9	0	0.15
97370	19 47 25.17	−43 20 41.8	7.12	H	296.854 887 93	−43.344 948 82		26.61	−101.75	−70.92	1.31	0.69	1.13	1.31	0.90	−12	−54	− 6	+20	−11	+ 3	−14	+ 3	+14	−26	6	2.76
97371	19 47 26.05	−65 34 43.6	9.61	H	296.858 550 85	−65.578 773 36		1.99	−25.52	−55.57	1.16	0.99	1.52	1.22	1.03	− 6	+ 2	− 9	+16	−14	− 4	+22	−27	+ 5	−25	0	0.12
97372	19 47 26.85	+47 54 27.6	6.14	1 H	296.861 858 55	+47.907 655 16		2.65	−21.34	−37.66	0.47	0.46	0.52	0.52	0.49	− 5	− 2	+10	+ 5	+23	−10	+22	+19	− 1	+ 5	4	0.62
97373	19 47 27.33	−64 16 04.4	9.97	H	296.863 860 45	−64.267 890 90		3.91	17.33	−37.89	1.23	0.94	1.51	1.42	1.17	−21	−22	−13	+ 1	−15	+ 7	−17	+ 7	+11	−36	3	−1.01
97374	19 47 27.38	+29 26 57.6	8.95	G	296.864 083 51	+29.449 337 59		2.05	−0.22	−6.25	0.55	0.78	1.03	0.70	0.87	− 3	+ 1	+ 8	− 1	− 3	− 9	+ 0	−23	− 7	+ 8	0	0.59
97375	19 47 27.50	+57 06 00.1	7.77	H	296.864 563 83	+57.100 030 71		3.87	−10.10	−18.65	0.52	0.50	0.55	0.61	0.64	+ 8	−19	+ 4	+ 0	−14	− 8	−12	−15	+ 0	+23	1	0.42
97376	19 47 27.78	+38 24 27.4	5.83	H	296.865 734 41	+38.407 616 71		6.67	4.45	−1.16	0.45	0.46	0.56	0.51	0.57	+ 3	− 7	− 9	+ 4	− 4	− 3	− 5	+ 7	+ 5	+21	0	1.13
97377	19 47 27.98	+28 29 08.9	8.15	H	296.866 596 69	+28.485 818 07		2.52	−12.97	−21.81	0.50	0.72	0.91	0.61	0.78	−13	+ 2	−16	+ 8	+ 7	−17	+ 7	−34	+ 8	− 8	0	−0.78
97378	19 47 28.18	−35 10 35.8	7.64	H	296.867 432 66	−35.176 603 06		3.09	−5.01	−49.47	0.96	0.53	1.01	1.16	0.74	+28	−20	− 4	+ 1	+ 8	+ 9	+ 9	−16	− 2	+23	0	0.46
97379	19 47 28.37	+34 18 16.4	7.89	H	296.868 222 10	+34.304 565 03		3.08	8.18	2.06	0.49	0.56	0.71	0.55	0.68	−16	− 7	− 6	+ 0	+11	−10	+10	+ 1	+11	−10	0	−2.64
97380	19 47 28.61	−09 40 48.9	8.86	H	296.869 199 70	−09.680 261 96		13.69	30.70	−25.33	0.99	0.58	1.13	1.17	0.64	+24	−11	+ 8	+ 8	+23	+31	+21	− 2	+ 9	+36	0	−0.20
97381	19 47 29.37	−22 48 36.8	8.53	H	296.872 367 95	−22.810 226 34		2.46	13.20	−3.23	1.03	0.63	1.13	1.20	0.72	+16	−27	−10	+ 2	+16	+ 6	+13	− 6	+ 7	+10	0	2.20
97382	19 47 30.40	+56 54 40.1	7.04	H	296.876 657 02	+56.911 133 62		4.47	−3.89	−70.64	0.50	0.52	0.56	0.58	0.61	+10	−19	+13	+10	− 8	−15	− 3	−11	+ 0	+26	4	1.85
97383 H	19 47 30.79	−21 49 39.9	8.12	G	296.878 302 32	−21.827 742 16	A	9.78	91.44	−5.20	3.76	2.80	3.19	3.74	2.92	+40	− 7	−15	−15	−17	+17	−12	−24	− 4	+69	0	0.11
97384	19 47 33.34	+01 05 22.0	6.77	H	296.888 904 77	+01.089 439 25		20.22	−31.44	−226.23	0.83	0.66	0.92	1.07	0.86	+10	−23	−25	+14	+ 9	+ 0	+10	+22	+ 2	−10	0	2.27
97385	19 47 33.98	−78 08 33.8	9.46	H	296.891 573 56	−78.142 730 95		8.28	10.91	10.07	0.81	0.84	1.16	0.94	1.05	+ 1	−29	+ 9	+ 6	+ 2	− 7	+ 8	−21	−17	+ 4	0	0.41
97386	19 47 36.25	+58 33 20.2	12.67	H	296.901 034 07	+58.555 619 32		1.84	−3.13	−3.99	2.71	2.63	2.84	3.26	3.32	+ 0	− 3	+15	−18	+ 2	+ 4	+ 2	−19	+ 6	+17	0	1.94
97387	19 47 38.10	+31 48 03.1	8.21	H	296.908 753 79	+31.800 848 84		8.09	−2.28	−5.98	0.58	0.73	0.99	0.64	0.95	− 5	− 8	+ 0	+20	+12	−26	+12	−12	+ 8	−10	0	−0.08
97388	19 47 38.21	+38 17 51.6	8.27	H	296.909 215 96	+38.297 676 86		1.05	2.24	−1.46	0.56	0.61	0.73	0.63	0.76	+ 4	−15	−25	+ 6	− 5	+ 6	− 4	+ 9	− 3	+18	0	1.95
97389	19 47 39.37	+07 38 57.6	8.37	H	296.914 042 24	+07.649 343 55		11.35	−19.60	−42.96	0.72	0.62	1.23	0.98	0.88	+21	− 2	−21	+32	−13	+49	− 9	+30	+16	+33	0	0.04
97390	19 47 39.61	−25 37 35.1	7.81	H	296.915 042 87	−25.626 420 32		0.63	−9.08	2.13	0.88	0.54	0.96	0.90	0.63	+27	−40	− 8	+ 6	+12	+ 9	+10	− 4	+ 9	+32	4	0.39
97391	19 47 39.70	+73 19 16.2	8.74	H	296.915 404 13	+73.321 170 51		0.79	5.18	1.50	0.63	0.61	0.68	0.67	0.75	−12	−22	+14	−17	− 3	− 1	− 3	+20	+ 6	−12	1	0.90
97392	19 47 39.76	+15 54 27.4	7.59	H	296.915 647 10	+15.907 619 65		1.93	2.39	5.62	0.57	0.43	0.84	0.62	0.41	− 1	−19	+ 0	−22	−11	+20	−11	−38	+ 5	− 5	0	1.29
97393	19 47 40.09	−17 04 14.8	7.22	H	296.917 047 92	−17.070 778 06		15.72	−25.09	−75.68	0.85	0.52	0.97	1.05	0.73	+38	−40	−17	− 6	+ 7	+27	+ 7	− 2	+ 4	+ 6	0	−0.19
97394	19 47 40.51	−42 00 26.0	10.32	2 H	296.918 772 92	−42.007 233 53		9.11	28.05	−40.60	1.74	1.24	1.95	2.06	1.39	+ 6	−40	−30	+20	+ 6	−16	+ 2	− 5	− 3	− 8	0	0.16
97395	19 47 41.23	+42 19 06.6	7.64	H	296.921 772 97	+42.318 513 42		1.55	8.51	−13.15	0.53	0.61	0.66	0.52	0.76	+ 1	− 5	− 5	−12	+ 7	−14	+ 1	+33	−17	+18	1	0.96
97396	19 47 43.09	+38 54 49.1	8.69	G	296.929 543 13	+38.913 627 78		2.45	5.66	3.36	0.64	0.67	0.80	0.75	0.85	+ 1	− 5	−12	+21	+ 0	− 2	+ 1	+10	− 3	+16	0	−0.22
97397	19 47 44.19	+00 13 20.9	9.64	G	296.934 114 93	+00.222 479 77		3.67	50.03	1.15	1.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
97301	7.939	0.030	7.521	0.023	*	0.395	0.035	T	0.46	0.04	L *	7.6507	0.0014	0.011	81	*	7.64	7.67		D	19465−2131	I 1	2 C B	AB	133	3.332	0.029	2.91	0.14	S
97302	9.386	0.023	8.116	0.015		1.082	0.021	T	1.04	0.02	L	8.1296	0.0019	0.012	51		8.09	8.16		C			1 G							
97303	10.373	0.034	8.276	0.012		1.774	0.030	T	2.58	0.05	O	8.0527	0.0035	0.027	94		8.00	8.09	6.69	P 1 A			1 S							
97304	8.137	0.008	6.805	0.004		1.130	0.007	T	1.09	0.01	L	6.8443	0.0012	0.011	127		6.83	6.86					1							S
97305	10.811	0.037	10.063	0.031		0.757	0.003	G	0.80	0.00	H	10.1156	0.0021	0.026	154		10.07	10.16					1							
97306	9.914	0.024	8.183	0.011		1.444	0.021	T	1.44	0.03	L	8.1387	0.0016	0.015	176		8.11	8.17					1							
97307	7.697	0.007	6.311	0.004		1.172	0.006	T	1.13	0.01	L	6.3431	0.0007	0.008	149		6.33	6.36			19466+3253	I 1	1							S
97308	7.647	0.009	7.417	0.010	*	0.219	0.012	T	0.24	0.01	L *	7.4501	0.0014	0.013	54	*	7.43	7.48		D	19466−0123	I 1	2 C A	BA	313	0.219	0.005	0.13	0.09	S
97309	12.104	0.158	10.637	0.069		1.236	0.135	T	1.19	0.13	L	10.7408	0.0419	0.300	109		10.42	11.23	5.20	P 1 A			1 S							G P
97310	8.827	0.008	8.672	0.009		0.149	0.011	T	0.16	0.01	L	8.6892	0.0014	0.019	219		8.66	8.72					1							
97311	7.615	0.007	7.480	0.008		0.130	0.010	T	0.14	0.01	L	7.5124	0.0009	0.011	124		7.49	7.53					1							S
97312	8.951	0.018	8.260	0.016		0.590	0.015	G	0.66	0.01	H	8.3261	0.0025	0.022	80		8.29	8.37					1 G							
97313	9.296	0.009	9.018	0.011		0.260	0.015	G	0.29	0.02	H	9.0721	0.0015	0.020	248		9.03	9.10					1							
97314	8.784	0.011	8.633	0.013		0.145	0.016	T	0.16	0.02	L	8.6669	0.0015	0.015	109		8.64	8.69		C			1							
97315	8.158	0.008	8.146	0.010	*	0.015	0.005	G	0.03	0.01	H *	8.1759	0.0019	0.015	118	*	8.15	8.21		D	19466+4346	H 1	2 C A	AB	37	0.345	0.022	3.09	0.16	
97316	9.253	0.014	8.793	0.014		0.434	0.018	T	0.50	0.02	L	8.8595	0.0017	0.017	112		8.84	8.88		C			1							
97317	8.853	0.009	8.176	0.008		0.608	0.003	G	0.68	0.00	H	8.2334	0.0013	0.013	167		8.20	8.26					1							
97318	10.141	0.021	8.635	0.011		1.267	0.019	T	1.23	0.02	L	8.6614	0.0015	0.018	188		8.63	8.69					1							
97319	6.998	0.004	6.687	0.004		0.295	0.005	T	0.34	0.01	L	6.7343	0.0007	0.009	176		6.72	6.75					1							S
97320	8.541	0.010	8.526	0.012	A	−0.300	0.495	G	0.01	0.02	L *	8.5183	0.0012	0.015	143	*	8.50	8.55		D	19467+3552	I 1	2 C C	AB	193	1.922	0.041	3.75	0.15	
97321	7.770	0.007	7.134	0.006		0.591	0.008	T	0.66	0.01	L	7.1991	0.0010	0.009	114		7.18	7.21					1 G							S
97322	10.759	0.053	10.084	0.048	A	0.710	0.020	G	0.76	0.02	H	10.2372	0.0306	0.158	120	A	9.96	10.48		D	19467−1129	H 1	2 C A	AB	201	16.253	0.016	0.19	0.06	G W
97323	8.996	0.010	8.477	0.010		0.497	0.011	T	0.57	0.01	L	8.5549	0.0014	0.019	171		8.52	8.59					1							S
97324						0.597	0.005	G	0.67	0.00	H	10.3416	0.0065	0.036	39		10.30	10.41					1							G
97325	10.023	0.028	9.685	0.031		0.326	0.046	T	0.38	0.06	L	9.7716	0.0020	0.015	87		9.75	9.80					1							
97326	6.693	0.004	6.368	0.005		0.309	0.006	T	0.35	0.01	L	6.4125	0.0020	0.018	103		6.39	6.45		U 2			1							S P
97327	10.327	0.030	9.095	0.017		1.052	0.027	T	1.02	0.02	L	9.1462	0.0022	0.027	153		9.11	9.20		C			1							
97328	10.306	0.031	9.830	0.031		0.448	0.040	T	0.52	0.04	L	9.8949	0.0022	0.023	104		9.86	9.93		C			1							
97329	8.136	0.007	8.176	0.009		−0.050	0.020	G	−0.03	0.02	H	8.1862	0.0014	0.017	166		8.15	8.21		C			1							
97330	11.258	0.077	9.313	0.024		1.649	0.066	T	1.82	0.16	O	9.2251	0.0033	0.023	96		9.18	9.27					1							
97331	8.903	0.012	8.494	0.012		0.400	0.015	G	0.47	0.02	H	8.5123	0.0016	0.019	153		8.48	8.54					1							
97332	8.912	0.012	7.679	0.008		1.053	0.011	T	1.02	0.01	L	7.7278	0.0009	0.010	109		7.71	7.75					1							S
97333	10.438	0.044	8.663	0.019		1.479	0.038	T	1.50	0.06	L	8.6402	0.0015	0.013	50		8.61	8.66		C			1							
97334	9.098	0.012	8.953	0.015		0.140	0.018	T	0.15	0.02	L	8.9722	0.0018	0.019	125		8.94	9.00					1 G							
97335	10.054	0.019	8.845	0.012		1.034	0.018	T	1.01	0.01	L	8.8910	0.0022	0.022	186		8.86	8.94					1							
97336	8.645	0.009	7.925	0.008		0.661	0.010	T	0.72	0.01	L	7.9689	0.0012	0.015	155		7.95	8.00					1							S
97337						1.629	0.143	G	1.60	0.15	J	11.1215	0.0039	0.039	125		11.06	11.19		C			1							G
97338	10.527	0.042	9.968	0.039		0.523	0.051	T	0.60	0.05	L	10.0403	0.0028	0.020	85		10.01	10.07		C			1							G
97339	8.061	0.007	8.058	0.009	*	0.007	0.010	T	0.03	0.01	L *	8.0833	0.0014	0.017	142	*	8.06	8.11			19470+1911	H 1	2 C S A	AB	10	0.132	0.020	1.33	0.58	
97340	9.406	0.018	7.809	0.010		1.338	0.016	T	1.30	0.02	L	7.8287	0.0013	0.012	93		7.81	7.86					1							
97341	9.455	0.018	8.929	0.017		0.494	0.022	T	0.57	0.02	L	8.9981	0.0018	0.016	118		8.97	9.03		C			1							
97342	9.364	0.024	8.123	0.015		1.059	0.022	T	1.03	0.02	L	8.1652	0.0018	0.013	48		8.15	8.19					1							S
97343	8.765	0.010	8.392	0.011		0.341	0.010	G	0.40	0.01	H	8.4334	0.0020	0.018	133		8.41	8.46					1							
97344	9.672	0.018	9.089	0.017		0.546	0.018	T	0.62	0.02	L	9.1425	0.0024	0.020	122		9.11	9.18		C			1							
97345	8.795	0.011	6.900	0.005		1.607	0.010	T	1.96	0.03	O	6.7900	0.0013	0.015	125		6.77	6.81		M			1							S
97346	10.298	0.038	9.783	0.038		0.493	0.041	T	0.57	0.04	L	9.7837	0.0018	0.020	95		9.75	9.83		C			1							
97347	9.857	0.016	8.629	0.010		1.049	0.015	T	1.02	0.01	L	8.6741	0.0018	0.020	205		8.64	8.71		C			1							
97348	8.933	0.015	8.292	0.013	*	0.589	0.015	T	0.66	0.01	L *	8.2954	0.0013	0.012	95	*	8.28	8.31		D	19471−1953	I 1	2 C A	AB	28	0.626	0.004	1.12	0.02	
97349	8.819	0.012	8.557	0.014		0.246	0.019	T	0.28	0.02	L	8.6075	0.0018	0.015	89		8.58	8.64		C			1							
97350	9.534	0.021	8.186	0.012	*	1.170	0.015	G	1.13	0.01	H *	8.2111	0.0013	0.010	92	*	8.20	8.23		D	19471−0809	I 1	2 C A	AB	88	0.288	0.007	0.50	0.09	
97351	9.172	0.015	7.101	0.006		1.753	0.013	T	2.57	0.05	O	6.8773	0.0121	0.131	91		6.66	7.01		U 2			1 G							S P
97352	9.067	0.010	8.591	0.010	*	0.468	0.015	G	0.54	0.02	H *	8.6297	0.0018	0.018	208	*	8.60	8.66		D	19472−5513	H 1	2 C A	AB	135	0.675	0.010	2.53	0.05	
97353	10.098	0.021	8.725	0.012		1.162	0.019	T	1.12	0.02	L	8.7402	0.0015	0.014	131		8.72	8.76					1 G							
97354	10.596	0.059	9.958	0.055		0.587	0.060	T	0.66	0.06	L	10.1096	0.0039	0.031	65		10.05	10.17		C			1							G
97355	9.322	0.012	8.077	0.008		1.062	0.011	T	1.03	0.01	L	8.1152	0.0012	0.013	177		8.09	8.15			19473+1128	I 1	1							
97356	9.901	0.018	9.837	0.026		0.064	0.029	T	0.07	0.03	L	9.8292	0.0019	0.024	182		9.79	9.87					1							G
97357	7.567	0.006	7.656	0.007		−0.091	0.001	G	−0.07	0.00	H	7.6484	0.0009	0.011	160		7.63	7.67		C			1							S
97358	8.448	0.011	7.687	0.009		0.689	0.015	G	0.75	0.01	H	7.7450	0.0013	0.011	95		7.72	7.76					1							S
97359	9.224	0.013	7.278	0.006		1.614	0.011	T	1.64	0.01	L	7.1794	0.0023	0.021	124		7.15	7.21		U 2			1							S
97360	8.187	0.011	7.927	0.012		0.260	0.015	G	0.29	0.02	H	7.9591	0.0014	0.012	126		7.94	7.98					1 X							S
97361	9.853	0.028	8.459	0.016		1.179	0.025	T	1.14	0.02	L	8.4610	0.0019	0.013	58		8.44	8.49		C			1							
97362	8.640	0.008	8.388	0.009		0.236	0.012	T	0.26	0.01	L	8.4270	0.0014	0.021	214		8.39	8.46					1							S
97363	8.080	0.007	7.901	0.010		0.171	0.011	T	0.19	0.01	L	7.9317	0.0013	0.015	148		7.90	7.95					1							S
97364	9.321	0.014	8.891	0.014	A	0.471	0.072	G	0.58	0.05	L *	8.8599	0.0016	0.020	107	*	8.83	8.89		D	19474+6442	I 1	2 C A	AB	169	6.936	0.014	2.68	0.06	S
97365	5.547	0.003	3.982	0.003	*	1.313	0.003	T	1.27	0.00	L *	3.8364	0.0032	0.036	157	*	3.78	3.89		U 2	19474+1832	I 1	2 C A	AB	62	0.115	0.011	0.64	0.20	S
97366	7.764	0.007	7.535	0.009		0.218	0.011	T	0.24	0.01	L	7.5709	0.0011	0.011	118		7.55	7.59					1							S
97367	8.737	0.019	8.251	0.019	*	0.457	0.025	T	0.53	0.03	L *	8.3210	0.0018	0.008	47	*	8.30	8.34		D	19474−0148	I 1	2 C A	AS	327	0.206	0.005	0.04	0.14	
97368	8.962	0.021	8.525	0.021		0.426	0.024	T	0.49	0.03	L	8.5852	0.0028	0.017	38		8.56	8.82					1							S
97369	9.436	0.014	9.380	0.018		0.056	0.021	T	0.07	0.02	L	9.4200	0.0021	0.027	195		9.38	9.47					1 S							G
97370	7.799	0.010	7.192	0.011		0.564	0.009	G	0.64	0.01	H	7.2464	0.0010	0.006	44		7.24	7.26					1 G							S
97371	10.581	0.035	9.705	0.026		0.797	0.004	G	0.83	0.00	H	9.7526	0.0028	0.026	114		9.69	9.79		C			1							
97372	8.266	0.009	6.332	0.004		1.640	0.008	T	1.93	0.03	O	6.2273	0.0017	0.015	107		6.20	6.25		U 2			1							S
97373	10.459	0.030	9.991	0.030		0.441	0.039	T	0.51	0.04	L	10.0713	0.0035	0.037	135		10.02	10.15					1							
97374	9.003	0.011	8.998	0.015		0.010	0.015	G	0.03	0.01	H	8.9761	0.0014	0.017	168		8.95	9.01					1							
97375	7.911	0.007	7.798	0.009		0.110	0.011	T	0.12	0.01	L	7.8155	0.0009	0.009	119		7.80	7.83		C			1							S
97376	5.715	0.003	5.817	0.003		−0.087	0.004	T	−0.07	0.01	L	5.8083	0.0006	0.006	124		5.80	5.82		C	19475+3824	I 1	1							S
97377	9.400	0.017	8.283	0.011		0.978	0.015	G	0.96	0.01	H	8.3199	0.0016	0.017	173		8.29	8.35					1 S							
97378	9.798	0.026	7.832	0.011		1.630	0.022	T	1.65	0.02	L	7.7479	0.0012	0.013	117		7.73	7.77		C			1							S
97379	9.929	0.020	8.053	0.009		1.559	0.017	T	1.58	0.02	L	8.0076	0.0014	0.014	144		7.98	8.03					1							
97380	9.496	0.015	8.904	0.014		0.552	0.018	T	0.62	0.02	L	8.9790	0.0016	0.015	120		8.95	9.02					1							
97381	8.879	0.014	8.540	0.015		0.328	0.023	T	0.38	0.03	L	8.6064	0.0020	0.016	78		8.58	8.64					1							
97382	8.329	0.009	7.151	0.005		1.010	0.008	T	0.99	0.01	L	7.2034	0.0008	0.009	123		7.19	7.22		C			1							S
97383	8.644	0.025	8.027	0.030	*	0.612	0.015	G	0.68	0.01	H *	8.2400	0.0016	0.012	74	*	8.21	8.26		D	19475−2150	I 1	2 C A	AB	340	1.430	0.008	0.75	0.09	S
97384	7.499	0.009	6.842	0.008		0.610	0.010	T	0.68	0.01	L	6.8990	0.0010	0.008	53		6.88	6.91		D	19476+0105	I 1	1							S
97385	9.999	0.019	9.501	0.019		0.480	0.021	T	0.55	0.02	L	9.5681	0.0024	0.025	144		9.52	9.61					1							
97386						0.800	0.200	G	0.83	0.14	R	12.8189	0.0129	0.106	86		12.63	13.02					1							G
97387	8.961	0.011	8.270	0.009		0.638	0.012	T	0.70	0.01	L	8.3422	0.0016	0.019	146		8.31	8.37					1 G							
97388	8.241	0.009	8.255	0.011		−0.008	0.013	T	0.01	0.01	L	8.2773	0.0013	0.012	112		8.25	8.30		C			1							
97389	9.101	0.014	8.441	0.012		0.560	0.015	G	0.65	0.01	L	8.4983	0.0015	0.016	146		8.47	8.53		C			1							
97390	9.690	0.022	7.976	0.011		1.431	0.019	T	1.42	0.03	L	7.9511	0.0014	0.013	92		7.93	7.97					1							S
97391	10.785	0.045	8.894	0.016		1.571	0.038	T	1.59	0.04	L	8.8656	0.0022	0.017	95		8.84	8.90					1							
97392	7.621	0.005	7.585	0.007		0.038	0.008	T	0.05	0.01	L	7.6063	0.0010	0.012	190		7.58	7.63					1 S							S
97393	7.727	0.006	7.264	0.007		0.455	0.015	G	0.52	0.02	H	7.3160	0.0009	0.008	103		7.30	7.33		C			1 G							S
97394	10.306	0.042	10.385	0.064		−0.067	0.066	T	−0.04	0.07	L	10.2977	0.0174	0.076	54		10.18	10.39		U 2			1							G
97395	9.648	0.018	7.811	0.008		1.528	0.016	T	1.57	0.04	L	7.7606	0.0013	0.012	110		7.74	7.78					1							
97396	8.809	0.011	8.709	0.013		0.110	0.015	G	0.12	0.01	H	8.7328	0.0016	0.016	124		8.70	8.76					1							
97397	10.988	0.075	9.726	0.040		1.078	0.004	G	1.04	0.00	H	9.8119	0.0036	0.023	52		9.76	9.85		C			1							G
97398	8.081	0.013	6.842	0.009		1.057	0.012	T	1.02	0.01	L	6.8685	0.0007	0.009	46		6.86	6.89		D			1							S
97399	8.556	0.009	7.926	0.008		0.602	0.015	G	0.67	0.01	H	7.9919	0.0011	0.010	109		7.97	8.01		C			1							S
97400	8.837	0.020	8.430	0.020		0.385	0.026	T	0.45	0.03	L	8.4730	0.0023	0.010	46		8.45	8.50					1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
97401	19 47 48.25	−28 29 28.2	6.89	G	296.951 039 18	−28.491 176 25		3.44	−1.13	−1.55	0.88	0.51	1.09	1.10	0.63	+35	−42	−31	− 7	−12	+41	+ 5	−12	−20	+ 1	2	1.17
97402	19 47 48.50	+25 23 02.8	6.00	H	296.952 071 86	+25.384 111 81		8.16	67.54	−21.98	0.38	0.51	0.72	0.40	0.50	− 1	−13	−12	+29	− 4	+ 6	− 3	−34	+14	+ 3	0	2.28
97403	19 47 50.11	−00 03 49.2	8.10	1 H	296.958 783 68	−00.063 677 73		2.77	3.44	−2.67	1.07	0.76	1.16	1.25	1.01	+ 5	−29	−19	+10	+ 5	+15	+12	+28	− 6	− 7	0	−0.46
97404	19 47 51.07	+06 56 25.4	9.41	G	296.962 811 77	+06.940 375 44		3.08	0.43	−10.16	1.15	1.20	1.55	1.53	1.44	+31	−19	−50	+43	− 7	+24	+ 9	+54	−22	+11	0	0.30
97405	19 47 51.17	−29 09 33.6	7.69	H	296.963 204 54	−29.159 333 42		29.37	−101.01	23.39	0.96	0.54	1.06	0.98	0.69	+24	−34	− 9	−12	+ 4	+13	+10	−15	− 9	+23	0	−0.18
97406	19 47 51.84	+15 57 29.8	8.39	H	296.965 995 42	+15.958 268 39		1.54	2.96	−4.59	0.64	0.50	0.98	0.69	0.46	+ 6	−19	+11	−23	−12	+19	−15	−39	+ 1	− 1	1	0.48
97407	19 47 52.31	−31 41 40.0	9.89	H	296.967 949 69	−31.694 446 46		9.11	21.37	−17.69	1.71	0.89	1.82	2.93	1.27	+12	−24	−14	− 7	+21	−22	+14	−19	− 5	−16	2	0.26
97408	19 47 52.47	−27 43 55.0	8.45	H	296.968 636 61	−27.731 956 98		4.95	5.46	−11.65	1.06	0.62	1.19	1.50	0.74	+35	−24	−25	+23	+ 6	+22	+ 1	− 8	− 6	− 2	0	−0.15
97409	19 47 53.56	−18 24 15.4	8.31	H	296.973 178 15	−18.404 291 06		10.99	8.24	−17.26	0.95	0.57	1.04	0.99	0.66	+38	−46	−18	+ 3	+13	+ 1	+ 9	− 7	+ 8	+46	0	0.18
97410	19 47 53.83	+10 02 45.6	9.16	H	296.974 290 12	+10.046 011 08		10.88	−21.55	31.05	0.85	0.79	1.31	1.09	1.18	+20	− 3	−14	+10	+ 3	+28	+ 6	+30	− 2	+25	0	0.40
97411	19 47 55.32	+41 38 54.6	8.38	H	296.980 507 36	+41.648 511 67		2.48	13.07	7.43	0.64	0.69	0.79	0.75	0.94	+ 4	−12	− 4	−24	− 5	− 3	−10	+12	−19	+20	3	0.53
97412	19 47 55.36	+03 47 49.2	8.96	H	296.980 676 16	+03.797 010 18		2.31	3.48	−8.55	1.34	1.07	1.59	1.82	1.35	+15	−15	−36	+12	+ 7	+ 1	+11	+22	−16	− 7	0	1.16
97413	19 47 55.61	+22 14 00.4	8.01	H	296.981 697 97	+22.233 433 30		2.25	3.23	−1.16	0.71	0.67	1.05	0.70	0.58	+ 3	−19	− 7	−26	− 5	+11	− 8	−43	+16	− 8	1	0.82
97414	19 47 56.99	+10 02 23.3	7.53	H	296.987 439 45	+10.039 812 33		1.62	−6.88	2.49	0.68	0.55	0.98	0.99	0.84	+13	−12	−33	+16	−22	+28	−17	+15	+ 0	− 1	0	1.33
97415	19 47 58.14	+62 46 48.1	9.45	H	296.992 248 02	+62.780 040 29		3.14	0.93	−0.61	0.87	0.77	0.89	1.23	1.01	+15	− 2	− 8	− 1	+ 9	+16	+ 8	+ 0	+26	+37	1	0.99
97416	19 47 59.64	+31 30 22.5	6.79	H	296.998 495 04	+31.506 246 10		10.94	6.87	13.12	0.41	0.52	0.68	0.46	0.50	− 8	− 4	+ 2	+18	+ 3	−23	+ 4	−24	+12	− 7	0	−0.14
97417 H	19 47 59.98	−20 57 27.3	6.66	H	296.999 903 39	−20.957 588 46	*	4.52	2.68	−3.19	0.89	0.58	0.95	0.97	0.73	+44	−47	−21	− 7	− 1	+ 5	+ 0	−22	+11	+64	0	0.16
97418	19 48 00.31	+01 35 51.0	9.27	H	297.001 279 80	+01.597 489 98		2.14	16.18	11.68	1.53	1.22	1.71	2.42	1.78	+10	+29	−26	+29	+ 5	+21	+ 8	+31	− 9	− 6	0	2.14
97419	19 48 00.36	−17 28 47.7	7.74	H	297.001 484 77	−17.479 914 34		6.34	16.44	−24.62	0.94	0.59	1.04	1.07	0.71	+46	−28	−17	+ 2	+ 7	+17	+ 7	−13	+24	+65	0	−0.25
97420	19 48 00.89	+27 52 08.4	6.87	H	297.003 698 84	+27.868 989 92		38.44	−8.68	222.26	0.37	0.51	0.70	0.42	0.54	−24	+11	−19	+25	+ 4	−14	+ 5	−19	+15	−20	0	0.06
97421	19 48 01.10	−56 21 44.2	5.33	H	297.004 590 18	−56.362 277 55		19.19	92.40	−137.40	0.53	0.37	0.67	0.81	0.59	− 8	−16	− 1	−11	+12	− 6	+11	−21	+ 6	− 6	0	−0.59
97422	19 48 01.78	−14 34 02.6	8.54	2 H	297.007 396 34	−14.567 377 17	A	4.81	−0.84	−8.91	1.67	0.91	1.67	1.81	1.04	+45	−15	− 8	+ 2	+16	+18	+17	+ 1	+21	+62	7	1.52
*97423	19 48 03.01	−13 42 12.8	6.11	G	297.012 537 04	−13.703 554 95		16.00	25.57	−24.95	0.82	0.44	0.88	0.91	0.46	+20	−36	−19	− 7	+25	+11	+17	−15	+20	+42	0	1.56
*97424	19 48 02.99	−24 25 43.4	9.66	H	297.012 444 92	−24.428 714 42		3.45	4.65	5.69	1.36	0.86	1.39	1.75	1.11	+29	− 9	− 3	+20	+33	+ 7	+33	+21	+ 6	+28	0	0.25
*97425	19 48 04.46	+81 35 09.9	7.99	G	297.018 581 37	+81.586 078 84		8.21	27.49	46.66	0.57	0.56	0.64	0.67	0.64	+ 2	−25	+16	− 1	− 5	+ 1	− 2	− 3	−13	+18	0	0.47
*97426	19 48 04.34	+27 42 10.2	7.57	H	297.018 064 63	+27.702 826 98		3.33	2.69	−15.09	0.39	0.57	0.78	0.45	0.61	−26	+ 8	−23	+20	+ 7	−12	+ 7	−21	+17	−22	2	0.56
97427	19 48 04.63	−21 07 51.6	9.02	H	297.019 297 61	−21.130 988 02		2.98	−5.86	−14.61	1.27	0.84	1.30	1.45	1.12	+49	−39	−29	−29	−11	+14	− 9	−28	+15	+64	0	0.76
97428	19 48 05.80	−00 46 59.0	10.54	H	297.024 172 99	−00.783 068 29		5.63	3.71	−3.12	1.72	1.41	2.13	2.75	1.78	+11	+ 1	−38	+23	−11	+40	+ 3	+25	−13	−20	0	1.38
97429	19 48 07.29	+19 59 48.2	7.96	H	297.030 365 03	+19.996 729 80		5.68	13.72	−4.98	0.61	0.55	0.94	0.63	0.51	−11	−11	− 9	−27	+ 2	+ 5	+ 0	−39	+17	−23	0	−0.16
97430	19 48 08.37	−40 27 30.2	9.40	G	297.034 870 15	−40.458 378 28		2.02	7.38	−34.97	1.41	1.07	1.53	1.80	1.22	+11	−20	+ 5	+13	− 8	− 6	− 5	−16	−14	+ 7	0	−0.35
97431	19 48 08.65	+13 27 16.6	6.95	G	297.036 036 93	+13.454 607 38		15.43	−56.59	−73.24	0.64	0.39	0.83	0.89	0.40	−18	− 7	− 3	+33	−24	+17	−33	−21	+ 6	−45	0	−1.10
97432	19 48 09.02	+61 24 40.6	7.07	H	297.037 604 10	+61.411 267 35		2.48	−6.56	−7.21	0.53	0.54	0.56	0.59	0.67	+ 8	+ 5	− 1	+26	+22	− 6	+27	+16	+15	+28	0	−1.96
97433 H	19 48 10.21	+70 16 04.2	3.84	G	297.042 556 58	+70.267 835 33	A	22.40	80.18	39.02	0.52	0.48	0.45	0.53	0.55	+ 7	− 8	+10	−16	+15	− 2	+11	− 5	+16	+28	1	−0.17
97434	19 48 11.84	+22 45 46.4	7.02	H	297.049 326 55	+22.762 888 03		2.16	0.89	−5.66	0.63	0.57	0.84	0.72	0.53	+10	−10	−10	−20	−12	+ 3	−14	−46	+20	+ 0	3	2.67
97435	19 48 12.10	+37 43 31.4	7.57	H	297.050 417 27	+37.725 401 37		0.31	1.06	−1.82	0.51	0.61	0.70	0.58	0.80	+ 1	−20	−10	+ 4	+ 7	+ 7	+11	+23	− 7	− 6	0	1.95
97436	19 48 13.76	−35 37 28.5	9.49	H	297.057 329 05	−35.624 575 89		4.00	24.50	−11.25	1.50	0.73	1.59	1.80	1.02	+19	−27	+ 4	+ 7	+ 0	−10	+ 4	−30	−29	+10	4	2.11
97437	19 48 15.06	−13 27 01.6	8.81	H	297.062 770 25	−13.450 455 42		1.55	6.55	3.30	1.08	0.59	1.15	1.31	0.61	+26	−23	−11	+11	+34	+ 4	+26	− 8	+21	+51	0	0.99
97438	19 48 15.43	+59 25 21.4	6.64	H	297.064 290 46	+59.422 618 42		35.25	15.75	116.51	0.49	0.47	0.51	0.51	0.55	− 1	+ 0	+ 7	+10	+14	− 6	+16	+ 7	+ 6	+14	1	2.37
97439	19 48 15.47	+43 07 37.0	9.16	2 H	297.064 447 62	+43.126 942 40		0.88	−1.05	−2.87	0.68	0.80	0.88	0.81	1.01	− 0	+ 7	− 0	+ 4	+11	− 0	+ 9	+ 8	−11	−12	0	−0.99
97440 H	19 48 16.48	+37 09 37.4	7.82	H	297.068 675 69	+37.160 394 80	A	0.19	−5.14	−6.72	1.20	1.38	1.41	1.13	1.64	+13	− 1	−10	+13	+16	−13	+14	+31	− 6	+14	1	−0.09
97441	19 48 17.05	−57 43 31.2	7.44	H	297.071 037 61	−57.725 321 75		6.43	18.17	−13.12	0.61	0.47	0.79	0.85	0.66	− 1	−14	− 7	−10	+ 9	+10	+10	−14	+ 4	+18	0	−0.78
97442	19 48 17.91	+21 22 33.0	8.47	H	297.074 633 61	+21.375 821 39		2.84	−1.88	−8.32	0.71	0.61	1.10	0.80	0.60	−10	+14	− 8	−11	− 4	+10	+ 0	−22	+19	−14	1	−1.96
97443	19 48 20.01	−34 36 59.0	8.67	H	297.083 356 22	−34.616 381 48		2.59	−1.37	−1.14	1.08	0.55	1.14	1.25	0.79	+28	−31	− 5	+ 7	+12	+ 8	+12	−12	+ 0	+18	0	0.59
97444	19 48 21.17	−46 01 11.4	9.01	H	297.088 211 84	−46.019 828 92		3.19	13.50	−8.12	1.44	1.14	1.61	2.23	1.32	−10	− 1	−10	+ 9	−16	−25	−14	−15	+10	− 9	0	0.00
97445 H	19 48 21.52	+74 20 58.1	8.79	G	297.089 653 66	+74.349 481 67	*	5.16	5.03	12.79	1.11	1.87	0.87	0.90	0.87	− 6	−19	+26	−10	+ 8	+ 3	+ 8	+ 9	− 8	+12	0	−0.39
97446	19 48 21.59	+25 00 34.4	7.17	H	297.089 963 71	+25.009 568 04		1.23	−0.38	−2.47	0.48	0.60	0.89	0.53	0.84	+ 2	−17	− 7	+36	− 1	− 1	+ 1	−27	+ 4	+ 8	0	−0.93
97447	19 48 22.87	−44 58 39.2	9.00	H	297.095 277 72	−44.977 568 93	A	8.33	49.04	−19.54	1.89	1.74	2.36	2.97	1.58	+29	−33	−37	+29	+ 8	−46	−23	−17	+31	−23	2	0.02
97448	19 48 23.35	−26 06 48.3	9.71	H	297.097 270 95	−26.113 415 99		15.99	−2.94	−29.44	1.37	0.87	1.52	1.36	0.95	+37	−46	− 9	+ 9	+ 1	+11	+ 2	−15	− 6	+29	4	0.26
97449	19 48 25.00	−42 40 32.3	9.90	H	297.104 154 87	−42.675 638 81		14.11	−115.88	39.15	1.90	1.42	1.91	2.55	1.60	− 3	−25	−13	+35	−17	+ 6	−13	+ 1	+ 2	− 4	0	2.42
97450	19 48 28.06	+18 39 18.2	7.59	H	297.116 906 61	+18.655 050 30		7.68	−0.39	28.66	0.60	0.49	0.90	0.66	0.50	−14	−19	− 4	−11	−12	− 1	−15	−27	+15	−34	1	−0.03
97451	19 48 28.09	+12 23 16.8	7.75	H	297.117 060 03	+12.388 007 36		2.71	5.90	2.24	0.67	0.47	0.90	0.83	0.48	+ 5	+ 4	− 3	+ 0	−17	+22	−19	−28	+ 4	−11	0	1.00
97452	19 48 28.56	+30 49 48.6	9.56	G	297.118 986 48	+30.830 176 05		4.46	−2.06	−0.42	0.75	0.93	1.24	0.86	0.98	−15	−15	+ 5	+21	+ 8	−20	+ 8	+ 7	− 1	− 2	−15	0	−1.09
97454	19 48 30.51	+10 41 38.8	6.44	G	297.127 145 44	+10.694 113 98		1.85	−2.29	−5.82	0.57	0.52	0.91	0.80	0.73	+15	− 2	−38	+ 4	−22	+38	−11	+22	−15	+ 9	0	0.03
97455	19 48 30.71	−40 58 23.6	7.43	H	297.127 977 59	−40.973 228 98		6.18	33.11	−43.05	1.01	0.72	1.05	1.52	0.82	−19	−12	−13	+20	−21	+25	−16	−14	−18	−35	0	0.15
97456	19 48 32.20	+18 12 03.7	10.43	2 H	297.134 153 70	+18.201 040 02		−0.19	1.99	−6.87	1.17	1.06	1.78	1.27	1.01	+10	− 4	+12	−35	− 7	+11	−10	−45	+ 1	−12	0	0.30
97457	19 48 32.62	−37 38 19.8	11.04	H	297.135 913 01	−37.638 843 80		2.00	3.61	−31.78	2.66	1.50	2.86	4.05	2.32	+38	−28	+ 2	+18	−15	−26	−14	−44	−18	+36	0	2.34
97458	19 48 32.82	+13 36 50.4	9.18	H	297.136 755 86	+13.613 987 60		3.55	9.09	3.44	0.95	0.63	1.47	1.28	0.63	− 6	−17	+ 6	+27	−11	+23	−28	−26	+12	−34	0	1.35
97459	19 48 33.00	−80 01 26.2	9.49	H	297.137 490 14	−80.023 944 13		4.17	21.32	−103.20	0.77	0.82	1.04	0.81	0.94	−16	−10	+ 4	+17	+ 4	− 9	+ 5	− 5	− 8	−17	0	1.69
97460	19 48 33.91	−16 09 49.3	8.29	2 H	297.141 305 13	−16.163 684 49		1.68	1.81	−9.26	0.96	0.57	1.11	1.10	0.68	+27	−17	− 2	− 7	+18	+35	+17	− 7	+28	+59	0	1.34
97461 H	19 48 34.30	+24 57 43.9	7.42	H	297.142 910 80	+24.962 194 17	A	2.34	1.53	−1.91	0.75	0.89	1.14	0.77	0.79	+10	−12	+ 4	+42	− 4	+ 1	− 9	−32	+ 6	+ 4	1	−1.15
97462	19 48 35.52	+56 30 02.9	7.47	H	297.148 016 77	+56.500 804 86		2.49	−1.13	−4.28	0.58	0.53	0.61	0.70	0.63	+ 7	−29	+10	+ 7	− 7	+ 1	− 8	− 3	+ 9	+24	0	−1.21
97463	19 48 36.04	−49 18 19.3	9.57	G	297.150 177 72	−49.305 350 10		13.37	44.50	102.42	1.50	0.87	1.60	2.39	1.36	−22	−19	+ 1	+40	+ 2	−18	+ 5	+14	− 4	− 9	0	0.92
97464	19 48 36.22	+55 43 29.2	7.64	H	297.150 928 35	+55.724 781 57		9.45	78.97	30.52	0.58	0.52	0.59	0.70	0.66	+ 7	−11	+ 7	+33	+ 0	−20	+ 3	+ 8	+ 6	+18	0	−0.68
97465	19 48 37.22	+03 41 49.5	9.68	3 H	297.155 093 17	+03.697 092 91		0.96	7.79	−9.29	1.38	0.99	1.57	1.90	1.37	+ 1	+ 5	−28	+10	+ 1	+28	+10	+ 8	− 6	− 9	0	0.42
97466	19 48 38.99	−01 49 35.3	7.34	H	297.162 457 04	−01.826 460 53		2.04	0.47	−9.99	0.85	0.66	1.00	1.00	0.80	+18	−24	−33	− 6	+12	+29	+24	+22	+12	+ 8	0	0.31
97467	19 48 39.16	−37 59 38.0	9.06	H	297.163 152 89	−37.993 875 01		0.48	−8.05	−11.44	1.33	0.79	1.52	1.63	1.26	+20	−25	+23	− 3	−25	−20	−13	−47	−32	+33	0	−0.34
97468	19 48 39.55	−12 07 19.2	7.71	H	297.164 801 87	−12.122 009 18		1.99	37.01	−58.21	0.99	0.48	1.09	1.07	0.49	+31	−32	− 2	− 3	+27	+32	+18	− 5	+28	+53	2	−0.54
97469 H	19 48 39.64	+15 03 32.4	7.64	G	297.165 153 24	+15.058 997 90	*	6.52	41.36	10.92	1.35	1.09	1.05	0.93	0.55	+21	+12	+ 8	−18	−13	+ 6	−19	−48	+ 1	− 9	2	0.07
97470	19 48 40.66	+30 49 43.1	7.67	H	297.169 407 34	+30.828 652 35		11.47	7.06	−75.22	0.46	0.58	0.75	0.53	0.60	−16	− 7	+ 0	+13	+ 6	−15	+ 4	−23	+ 3	−18	1	−1.32
97471	19 48 41.00	+21 59 05.3	8.20	H	297.170 844 85	+21.984 803 42		1.03	−0.24	−5.90	0.68	0.62	1.01	0.69	0.55	− 8	−14	−12	−18	− 2	+15	− 2	−38	+15	− 9	0	0.71
97472	19 48 41.88	+29 24 08.4	7.01	2 H	297.174 482 13	+29.402 342 30		1.05	1.09	−5.58	0.42	0.52	0.74	0.50	0.55	− 8	+ 2	+ 8	+ 9	− 1	+ 1	+ 1	−16	− 2	+ 2	0	−1.78
97473 H	19 48 42.05	+11 48 57.3	5.75	G	297.175 200 21	+11.815 920 14	A	5.72	15.95	−9.79	1.00	0.79	1.10	1.24	1.27	+36	−10	− 9	−25	−22	+16	−34	−13	+ 8	+67	3	0.55
97474	19 48 42.33	+22 38 42.3	8.69	G	297.176 377 11	+22.645 089 61		2.40	9.64	−29.52	0.83	0.82	1.19	0.93	0.79	+10	− 8	− 6	−28	− 7	− 2	− 9	−43	+13	+ 4	0	−0.94
97475	19 48 43.01	−82 55 36.2	7.62	H	297.179 211 68	−82.926 721 00		1.88	4.25	1.88	0.60	0.59	0.73	0.71	0.69	− 6	−15	+ 3	+22	−16	− 5	−16	+ 1	− 6	−10	0	−1.17
97476 H	19 48 43.64	+18 52 01.4	7.09	H	297.181 814 57	+18.867 058 96	A	−0.36	−2.07	−7.06	1.46	1.11	1.32	1.03	0.77	−12	− 9	− 5	−20	− 3	+ 0	− 1	−21	+20	−25	3	0.71
97477 H	19 48 43.75	+35 18 40.7	6.66	H	297.182 298 14	+35.311 309 99	A	14.99	70.01	65.25	0.90	1.07	1.04	0.80	1.07	−10	− 4	+13	+ 4	+ 0	− 9	+ 1	+ 3	+ 5	+ 4	3	1.21
97478	19 48 44.25	+19 39 39.9	7.39	H	297.184 376 59	+19.661 080 44		−0.92	−1.91	−5.09	0.55	0.46	0.81	0.60	0.48	−12	−10	− 9	−20	− 2	+ 9	− 3	−31	+18	−17	1	1.31
97479	19 48 45.89	+18 22 07.7	8.29	H	297.191 203 26	+18.368 817 53		4.77	−0.31	−6.68	0.68	0.55	1.04	0.70	0.51	− 8	−18	+13	−28	− 5	+ 6	− 8	−37	+ 9	−28	0	0.25
97480	19 48 47.01	−39 40 03.7	9.14	H	297.195 856 07	−39.667 686 86		3.23	−1.18	−16.23	1.29	0.81	1.40	1.81	1.08	+ 3	+ 6	−13	+14	−14	− 1	−17	−28	+12	− 6	0	−2.22
97481 H	19 48 47.09	−49 31 29.6	7.78	2 H	297.196 210 82	−49.524 883 10	*	2.88	3.32	4.42	0.98	0.56	1.15	1.44	0.90	−17	−29	+ 8	+34	+ 5	−19	+11	+ 7	+ 4	+ 5	0	0.37
97482	19 48 48.81	+37 03 55.7	8.76	H	297.203 385 65	+37.065 459 71		2.21	−1.35	−3.04	0.61	0.74	0.86	0.65	0.86	+ 1	+13	−16	+ 4	+23	−12	+24	+ 3	+10	− 4	0	0.13
97483	19 48 49.93	−60 43 38.2	8.09	H	297.208 045 45	−60.727 290 94		3.18	11.05	−18.94	0.82	0.65	1.06	0.96	0.85	+ 5	− 8	− 7	+22	− 2	− 6	+ 2	−17	− 5	+17	0	1.11
97484	19 48 50.17	−12 19 09.7	6.47	1 H	297.209 052 54	−12.319 368 53		1.99	−0.48	−21.53	0.83	0.42	0.93	0.95	0.44	+26	−28	− 2	− 1	+31	+34	+22	− 4	+31	+53	0	−0.22
97485	19 48 50.60	+33 26 14.3	6.42	2 H	297.210 835 13	+33.437 297 26		1.47	−3.64	−5.74	0.40	0.48	0.62	0.46	0.49	−13	+ 6	−18	− 3	+11	−14	+11	−22	+24	− 5	0	−0.69
97486	19 48 50.89	+46 21 31.9	9.98	H	297.212 025 66	+46.358 857 79		2.61	−0.28	−10.68	0.81	0.87	0.98	0.93	0.95	− 1	−16	−14	− 7	+ 8	− 2	+ 6	− 1	+ 5	+ 6	0	−1.17
97487	19 48 51.03	+56 53 14.2	8.50	H	297.212 639 67	+56.887 267 13		1.61	0.74	−0.56	0.65	0.63	0.70	0.72	0.74	+ 6	−22	+ 1	+ 4	− 2	+ 2	− 2	+ 2	+ 4	+24	0	−1.34
97488	19 48 52.22	−08 02 21.3	9.41	H	297.217 601 60	−08.039 261 33		4.17	18.93	−4.73	1.36	1.04	1.59	1.60	1.40	+18	+ 8	−17	−13	+12	+29	+20	+17	− 4	+22	0	0.18
97489	19 48 53.33	+11 41 06.4	6.53	H	297.222 218 13	+11.685 105 18		3.71	10.88	3.48	0.56	0.46	0.77	0.76	0.74	+21	− 5	−10	+ 9	−13	+24	−15	+10	+ 5	+30	0	−1.06
97490	19 48 54.99	+52 18 32.6	9.34	H	297.229 113 98	+52.309 048 23		1.39	22.10	1.16	0.78	0.71	0.82	0.87	0.83	−16	−16	+17	−16	+11	+ 8	+ 7	+ 1	+ 5	+ 1	0	−0.17
97491	19 48 55.07	−52 53 16.8	6.27	H	297.229 474 12	−52.887 992 11		4.15	15.47	−47.93	0.57	0.36	0.78	0.84	0.64	+ 3	−19	+10	−16	+21	+ 6	+24	−22	− 3	+ 1	0	−0.97
97492	19 48 56.46	−04 29 45.5	8.30	H	297.235 235 29	−04.495 974 50		0.36	−0.97	1.49	1.09	0.77	1.20	1.29	1.03	+ 8	−27	− 7	− 8	+10	+12	+12	+14	+ 1	+ 1	0	1.19
97493	19 48 58.07	+16 37 39.8	7.56	H	297.241 947 57	+16.627 730 92		4.28	−2.28	−15.88	0.55	0.44	0.82	0.63	0.44	− 5	−18	+ 2	−14	− 8	+14	−10	−35	+ 5	−19	0	−0.43
*97494	19 48 58.26	−74 07 36.5	8.23	G	297.242 729 99	−74.126 815 14		5.51	30.15	−38.89	0.60	0.63	0.94	0.63	0.76	−12	−18	−11	+10	− 7	− 6	−10	+ 4	+ 1	−28	0	−1.41
*97495	19 48 58.14	−44 47 40.7	9.84	G	297.242 262 43	−44.794 639 79		15.03	−55.04	−50.14	1.69	1.30	1.90	2.61	1.45	− 5	− 6	−31	−11	+15	−25	+ 5	−25	+22	−16	0	0.81
97496 H	19 48 58.65	+19 08 31.1	5.01	G	297.244 370 05	+19.141 978 06	*	9.99	17.91	26.47	1.08	2.20	0.87	0.47	0.38	−31	− 6	− 2	−16	−11	+11	− 2	−14	+ 6	− 5	12	−0.54
97497	19 48 59.40	−48 04 05.1	8.75	1 H	297.247 506 56	−48.068 089 66		0.77	7.23	−11.70	1.45	0.94	1.45	2.17	1.22	−12	−10	−13	+49	−27	+30	−15	+ 3	−16	− 6	0	0.00
97498 H	19 49 00.90	+44 22 45.1	7.16	H	297.253 737 90	+44.379 200 08	A	0.56	1.11	1.50	1.64	1.49	1.55	1.82	1.50	−13	− 8	+ 1	+13	+ 6	−23	+ 3	+12	+15	+10	16	3.51
97499	19 49 02.19	−10 52 14.6	6.00	H	297.259 106 96	−10.870 711 52		11.42	30.84	−21.34	0.71	0.41	0.76	0.83	0.47	+26	−21	− 3	+ 6	+19	+23	+18	− 1	+ 9

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
97401	8.186	0.010	7.007	0.008		1.011	0.010	T	0.99	0.01	L	7.0431	0.0009	0.008	81		7.03	7.06		C			1							S
97402	7.273	0.004	6.117	0.003		0.993	0.004	T	0.97	0.00	L	6.1647	0.0007	0.007	178		6.15	6.18					1							S
97403	8.100	0.015	8.098	0.018		0.132	0.015	G	0.01	0.01	L	8.1111	0.0034	0.021	46		8.08	8.14		U			1							S
97404	9.613	0.027	9.405	0.033		0.170	0.015	G	0.19	0.01	H	9.4862	0.0024	0.016	72		9.47	9.53		C			1							
97405	8.547	0.012	7.769	0.010		0.669	0.015	G	0.73	0.01	H	7.8268	0.0014	0.011	92		7.81	7.84		C			1							S
97406	8.682	0.009	8.423	0.010		0.247	0.013	T	0.28	0.02	L	8.4602	0.0011	0.016	193		8.43	8.49		C			1							
97407	10.544	0.052	9.963	0.048		0.545	0.052	T	0.62	0.05	L	10.0101	0.0028	0.023	85		9.97	10.05		C			1							
97408	8.575	0.012	8.469	0.015		0.118	0.015	G	0.13	0.01	H	8.4976	0.0016	0.014	82		8.48	8.52		C			1							
97409	8.834	0.013	8.360	0.013		0.466	0.015	G	0.54	0.02	H	8.4110	0.0019	0.012	102		8.39	8.43					1							
97410	9.776	0.019	9.186	0.018		0.551	0.023	T	0.62	0.02	L	9.2823	0.0021	0.024	131		9.25	9.33		C	19479+1002	I 2	1							
97411	9.677	0.019	8.480	0.012		1.025	0.018	T	1.00	0.01	L	8.5472	0.0018	0.013	104		8.53	8.57					1							
97412	10.353	0.043	9.130	0.026		1.045	0.039	T	1.02	0.03	L	9.1257	0.0033	0.021	53		9.09	9.17		C			1							
97413	10.129	0.025	8.187	0.010		1.611	0.021	T	1.63	0.02	L	8.1193	0.0014	0.014	121		8.10	8.15		C			1							
97414	9.663	0.019	7.722	0.008		1.610	0.016	T	1.63	0.02	L	7.6472	0.0014	0.013	135		7.62	7.67			19479+1002	I 2	1							
97415	9.857	0.028	9.485	0.030		0.352	0.038	T	0.41	0.04	L	9.5281	0.0023	0.021	92		9.50	9.57		C			1							
97416	6.944	0.004	6.820	0.005		0.120	0.006	T	0.13	0.01	L	6.8380	0.0010	0.011	160		6.82	6.85					1							S
97417	7.790	0.008	6.769	0.005	*	0.890	0.007	T	0.90	0.01	L	* 6.8162	0.0012	0.007	84	*	6.81	6.83		D	19480−2057	H 1	2 C S B	AB	45	0.195	0.036	1.94	0.30	S
97418	10.829	0.073	9.424	0.034		1.187	0.063	T	1.15	0.06	L	9.4356	0.0036	0.017	45		9.39	9.46		C			1							
97419	8.344	0.010	7.799	0.010		0.517	0.011	T	0.59	0.01	L	7.8524	0.0010	0.011	99		7.84	7.87					1							S
97420	7.677	0.006	6.959	0.005		0.660	0.006	T	0.72	0.01	L	7.0086	0.0008	0.011	203		6.99	7.02					1							S
97421	5.569	0.003	5.359	0.003		0.196	0.005	G	0.21	0.01	H	5.3919	0.0005	0.006	158		5.38	5.40					1							S
97422	8.670	0.012	8.536	0.015	A	0.129	0.018	T	0.14	0.02	L	8.5879	0.0112	0.029	109	A	8.53	8.63		U 2	19480−1434	H 1	2 C A	AB	139	18.198	0.016	2.04	0.07	
97423	6.346	0.003	6.122	0.003		0.193	0.011	G	0.19	0.03	C	6.1618	0.0005	0.005	123		6.15	6.17		C			1							S
97424	11.376	0.090	9.802	0.036		1.320	0.076	T	1.28	0.09	L	9.8140	0.0025	0.020	74		9.78	9.85		C			1							
97425	8.385	0.010	8.012	0.010		0.353	0.013	T	0.41	0.01	L	8.0675	0.0012	0.014	110		8.04	8.09					1							S
97426	7.532	0.005	7.565	0.006		−0.025	0.005	G	0.00	0.01	H	7.5753	0.0011	0.012	212		7.55	7.60					1							S
97427	10.482	0.042	9.180	0.024		1.107	0.038	T	1.07	0.04	L	9.1834	0.0022	0.016	87		9.16	9.21		C			1							
97428	11.245	0.090	10.506	0.070		0.677	0.091	T	0.74	0.07	L	10.6850	0.0044	0.028	49		10.64	10.73		C			1							G
97429	8.121	0.007	7.981	0.009		0.135	0.011	T	0.15	0.01	L	8.0102	0.0014	0.015	154		7.98	8.03		C			1							
97430	9.806	0.035	9.503	0.039		0.420	0.005	G	0.49	0.01	H	9.5009	0.0032	0.021	47		9.45	9.53					1							
97431	7.463	0.005	6.998	0.004		0.445	0.007	G	0.51	0.01	H	7.0559	0.0008	0.010	192		7.04	7.07		C			1							S
97432	9.076	0.015	7.222	0.007		1.541	0.013	T	1.60	0.03	L	7.1893	0.0012	0.012	115		7.17	7.21		R			1							S
97433	4.914	0.009	3.897	0.007	*	0.888	0.001	G	0.88	0.03	C	* 3.9974	0.0004	0.004	98	*	3.99	4.01		D	19482+7016	I 1	2 C A	AB	17	3.167	0.008	3.00	0.03	S
97434	9.640	0.018	7.266	0.006		2.025	0.011	G	2.02	0.03	C	7.1029	0.0017	0.016	118		7.08	7.12					1							S
97435	9.349	0.015	7.697	0.008		1.382	0.013	T	1.35	0.02	L	7.7145	0.0010	0.010	108		7.70	7.74					1							S
97436	10.009	0.030	9.525	0.030		0.468	0.033	T	0.54	0.04	L	9.5917	0.0029	0.021	103		9.56	9.63					1							
97437	9.124	0.013	8.835	0.014		0.275	0.018	T	0.31	0.02	L	8.8849	0.0016	0.015	120		8.86	8.91		C			1							
97438	7.352	0.006	6.715	0.005		0.592	0.007	T	0.66	0.01	L	6.7651	0.0011	0.010	103		6.75	6.79					1							S
97439	10.139	0.028	9.225	0.021		0.810	0.026	T	0.84	0.02	L	9.3116	0.0181	0.161	117		9.11	9.50	4.92	P 1 A			1 G							
97440	8.059	0.014	7.930	0.016	*	0.125	0.020	T	0.14	0.02	L	* 7.8725	0.0014	0.011	106	*	7.85	7.89		D	19483+3710	I 1	2 C A	AB	71	0.942	0.002	0.08	0.01	S
97441	7.647	0.006	7.456	0.007		0.175	0.009	T	0.19	0.01	L	7.5002	0.0011	0.010	140		7.48	7.52		C			1							S
97442	8.538	0.009	8.486	0.011		0.053	0.013	T	0.07	0.01	L	8.4924	0.0017	0.016	130		8.46	8.52		C			1							
97443	10.842	0.042	8.878	0.014		1.664	0.036	T	2.13	0.08	O	8.7402	0.0024	0.022	132		8.70	8.78					1							
97444	9.395	0.026	9.002	0.027		0.372	0.035	T	0.43	0.04	L	9.0943	0.0035	0.018	42		9.07	9.12		C			1							
97445	9.165	0.015	8.790	0.015	*	0.396	0.015	G	0.46	0.02	H	* 8.8481	0.0022	0.019	106	*	8.82	8.87		D	19484+7421	H 1	2 C A	AB	85	0.237	0.009	1.50	0.14	
97446	9.136	0.011	7.334	0.005		1.599	0.020	G	1.55	0.03	C	7.2938	0.0013	0.012	170		7.27	7.32					1 G							S D
97447	9.518	0.027	9.089	0.028	A	0.419	0.032	T	0.49	0.03	L	9.0962	0.0115	0.020	51	A	9.06	9.14		C	19484−4459	M 1	2 C D	AB	270	10.204	0.111	3.90	0.41	D
97448	11.115	0.070	9.797	0.035		1.115	0.063	T	1.20	0.09	L	9.8449	0.0030	0.023	91		9.81	9.88					1							
97449	11.040	0.081	10.086	0.052		0.827	0.075	T	0.87	0.08	L	10.0365	0.0044	0.030	53		9.98	10.10		C	19484−4241	I 1	1 S							
97450	8.009	0.007	7.626	0.008		0.363	0.010	T	0.42	0.01	L	7.6788	0.0011	0.014	158		7.65	7.71					1							S
97451	7.762	0.006	7.743	0.010		0.022	0.011	T	0.04	0.01	L	7.7665	0.0013	0.013	152		7.75	7.80		C			1							S
97452	9.927	0.021	9.619	0.025		0.353	0.015	G	0.41	0.02	H	9.6204	0.0021	0.024	163		9.58	9.67		C			1							G
97454	7.614	0.006	6.561	0.004		0.932	0.051	G	0.96	0.03	G	6.6003	0.0011	0.009	115		6.58	6.61					1							S
97455	8.717	0.017	7.535	0.011		1.013	0.016	T	0.99	0.01	L	7.5925	0.0012	0.010	53		7.57	7.61		C			1							S
97456	10.562	0.036	10.472	0.054		−0.011	0.017	G	0.01	0.02	H	10.4366	0.0031	0.042	159		10.35	10.50		U			1 S							G
97457	11.436	0.088	11.268	0.140		0.628	0.107	G	0.70	0.10	R	11.1699	0.0045	0.035	88		11.11	11.23		C			1							G
97458	10.867	0.044	9.325	0.019		1.295	0.038	T	1.25	0.04	L	9.3349	0.0022	0.026	179		9.29	9.38					1							
97459	10.344	0.024	9.570	0.019		0.704	0.024	T	0.76	0.02	L	9.6332	0.0016	0.022	151		9.59	9.67					1							
97460	10.636	0.042	8.576	0.014		1.743	0.036	T	2.94	0.04	O	8.2236	0.0031	0.032	104		8.17	8.27		U 2			1 S							
97461	7.364	0.007	7.323	0.010	*	0.043	0.011	T	0.06	0.01	L	* 7.4420	0.0015	0.013	167	*	7.42	7.47		D	19485+2458	I 1	2 C A	AB	226	3.765	0.009	2.37	0.04	S
97462	9.027	0.014	7.598	0.008		1.206	0.013	T	1.17	0.01	L	7.6447	0.0016	0.015	109		7.62	7.68		R			1							S
97463	10.253	0.031	9.670	0.030		0.615	0.004	G	0.68	0.00	H	9.7033	0.0032	0.027	104		9.65	9.75					1							
97464	8.155	0.008	7.687	0.008		0.441	0.010	T	0.51	0.01	L	7.7436	0.0013	0.012	106		7.73	7.77					1							S
97465	11.568	0.116	10.067	0.052		1.283	0.105	T	3.92	0.95	K	9.1884	0.0269	0.240	53		8.96	9.67		U 2			1 S							G
97466	7.487	0.007	7.361	0.011		0.122	0.012	T	0.14	0.01	L	7.3832	0.0012	0.007	49		7.37	7.39		C			1							S
97467	10.466	0.036	9.187	0.022		1.089	0.033	T	1.05	0.03	L	9.2252	0.0017	0.017	98		9.19	9.26		C			1							
97468	9.256	0.012	7.872	0.007		1.171	0.011	T	1.13	0.01	L	7.8781	0.0009	0.010	140		7.86	7.89		C			1							S
97469	8.177	0.007	7.692	0.006	*	0.446	0.018	G	0.52	0.02	H	* 7.7405	0.0011	0.014	220	*	7.72	7.76		D	19487+1504	I 1	2 C A	AB	183	0.203	0.003	0.44	0.11	S
97470	8.689	0.009	7.759	0.007		0.822	0.008	T	0.84	0.01	L	7.8248	0.0010	0.013	167		7.80	7.84					1							S
97471	8.394	0.009	8.245	0.010		0.143	0.013	T	0.16	0.01	L	8.2575	0.0017	0.016	127		8.23	8.28					1							
97472	7.174	0.005	7.025	0.006		0.143	0.007	T	0.16	0.01	L	7.0613	0.0021	0.037	166		6.97	7.10		P 1 A			1							S P
97473	6.585	0.030	6.195	0.075	B	0.546	0.015	G	0.62	0.01	H	* 5.8489	0.0007	0.006	115	*	5.84	5.86		D	19487+1149	I 1	2 C A	AB	108	1.437	0.002	0.29	0.01	S
97474	9.830	0.027	8.810	0.019		0.881	0.015	G	0.89	0.01	H	8.8594	0.0018	0.019	117		8.83	8.89					1							
97475	9.704	0.017	7.801	0.007		1.580	0.015	T	1.60	0.01	L	7.7424	0.0016	0.014	129		7.72	7.76					1							S
97476	8.209	0.008	7.233	0.006	*	0.856	0.007	T	0.87	0.01	L	* 7.2428	0.0010	0.011	154	*	7.23	7.26		D	19487+1852	M 1	2 C A	AB	99	0.403	0.005	1.46	0.03	S
97477	7.186	0.005	6.736	0.005	*	0.437	0.013	G	0.51	0.01	H	* 6.7553	0.0007	0.007	126	*	6.74	6.77		D	19487+3519	I 1	2 C A	AB	154	0.653	0.002	0.66	0.01	S
97478	7.534	0.005	7.420	0.006		0.111	0.007	T	0.12	0.01	L	7.4375	0.0010	0.012	153		7.42	7.46					1							S
97479	8.369	0.008	8.291	0.010		0.077	0.012	T	0.09	0.01	L	8.3222	0.0014	0.017	175		8.30	8.35					1							
97480	9.646	0.030	9.204	0.030		0.431	0.034	T	0.50	0.04	L	9.2328	0.0030	0.015	68		9.20	9.27		C			1							
97481	9.769	0.021	8.107	0.010	*	1.389	0.018	T	1.36	0.02	L	* 7.9158	0.0087	0.053	122	*	7.84	7.97		R 2	19488−4931	H 1	2 C S D	AB	74	0.168	0.019	1.15	0.32	D
97482	8.711	0.012	8.741	0.016		−0.023	0.018	T	0.00	0.02	L	8.7638	0.0021	0.015	104		8.73	8.79		C			1							
97483	9.717	0.018	8.246	0.010		1.239	0.016	T	1.20	0.02	L	8.2545	0.0018	0.015	128		8.23	8.28		C			1							
97484	8.700	0.009	6.677	0.004		1.676	0.008	T	1.70	0.01	L	6.5750	0.0012	0.014	143		6.55	6.60		U 2			1							S
97485	6.614	0.004	6.480	0.005		0.129	0.006	T	0.28	0.03	C	6.4903	0.0015	0.016	135		6.47	6.59	13.37	P 1 A			1							S P
97486	10.058	0.025	9.961	0.035		0.095	0.040	T	0.11	0.04	L	10.0184	0.0025	0.028	102		9.98	10.07					1							G
97487	10.346	0.029	8.644	0.013		1.421	0.025	T	1.41	0.04	L	8.6412	0.0012	0.014	116		8.62	8.67					1							
97488	10.055	0.038	9.526	0.037		0.496	0.048	T	0.57	0.05	L	9.5206	0.0029	0.022	50		9.50	9.55		C			1							
97489	7.683	0.008	6.632	0.004		0.912	0.007	T	0.91	0.01	L	6.6911	0.0007	0.007	119		6.68	6.70		C			1							S
97490	10.676	0.036	9.444	0.020		1.052	0.032	T	1.02	0.03	L	9.5050	0.0022	0.019	116		9.47	9.54		C			1							
97491	7.726	0.005	6.395	0.003		1.131	0.001	G	1.09	0.00	H	6.4358	0.0007	0.007	213		6.42	6.45		C			1							S
97492	8.363	0.014	8.294	0.017		0.069	0.020	T	0.08	0.02	L	8.3218	0.0028	0.014	49		8.29	8.35					1							
97493	7.635	0.005	7.575	0.006		0.060	0.007	T	0.07	0.01	L	7.5891	0.0010	0.013	195		7.57	7.61					1							S
97494	8.623	0.008	8.268	0.009		0.345	0.014	G	0.40	0.02	A	8.3258	0.0015	0.017	144		8.29	8.35					1							S
97495	10.799	0.063	9.885	0.044		0.830	0.020	G	0.87	0.02	H	10.0098	0.0039	0.020	43		9.95	10.05		C			1							
97496	5.131	0.002	5.041	0.002	−	0.095	0.008	G	0.11	0.01	R	* 5.0402	0.0006	0.006	153	−	5.03	5.05		D	19490+1909	I 1	3 C C							S G
97497	10.834	0.063	8.946	0.024		1.602	0.056	T	2.04	0.14	O	8.8236	0.0034	0.024	49		8.79	8.86		U			1							
97498	7.068	0.006	7.127	0.008	*	−0.049	0.009	T	−0.03	0.01	L	* 7.1482	0.0021	0.029	107	*	7.13	7.21		D	19490+4423	I 1	2 C A	AB	159	9.643	0.006	0.53	0.02	S
97499	7.608	0.007	6.135	0.004		1.233	0.002	G	1.19	0.00	H	6.1640	0.0005	0.005	107		6.16	6.17					1							S
97500	9.012	0.012	8.762	0.014		0.238	0.017	T	0.27	0.02	L	8.7873	0.0025	0.031	133		8.75	8.92		U 2 C			1							P

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
97501	19 49 02.99	+29 52 58.3	8.27	2 H	297.262 451 56	+29.882 855 47	5.58	−3.50	−0.89	0.61	0.72	0.98	0.83	0.81	+ 4	+ 2	− 4	− 2	−11	+ 6	− 8	−13	+ 7	+13	0	0.38
97502	19 49 03.91	−30 24 23.3	8.24	H	297.266 306 97	−30.406 471 66	7.08	−7.27	3.95	0.94	0.53	0.99	1.13	0.64	+14	−19	−27	−26	+21	−12	+19	−20	+ 6	− 3	0	0.68
97503	19 49 04.02	+53 46 02.9	7.09	H	297.266 766 28	+53.767 473 23	4.61	16.33	7.47	0.48	0.45	0.51	0.56	0.50	+ 1	− 1	+11	+ 0	+17	− 4	+17	+ 4	+ 6	+ 5	0	−2.42
97504 H	19 49 04.16	+16 45 22.8	9.18	H	297.267 328 75	+16.756 334 73 *	2.22	4.30	−1.29	0.76	0.64	1.15	0.86	0.64	− 5	−15	+ 3	−24	− 1	+15	− 2	−39	+ 2	−14	1	−0.35
97505	19 49 05.15	−28 24 38.8	8.48	H	297.271 466 81	−28.410 769 69	2.85	−1.95	−18.75	1.03	0.67	1.23	1.44	0.80	+36	−19	−29	+ 5	−12	+35	− 8	−17	− 4	+ 9	0	0.21
97506	19 49 05.36	+32 37 17.8	8.99	H	297.272 329 59	+32.621 609 08	0.88	−1.05	−4.60	0.64	0.80	1.04	0.74	0.78	−11	− 2	− 5	+23	+ 9	−15	+ 8	−18	+15	− 8	0	0.00
97507	19 49 06.47	−70 11 16.4	8.76	H	297.276 965 31	−70.187 878 56	18.33	−23.52	−40.29	0.59	0.82	1.14	0.67	0.90	−27	− 6	−16	+ 6	+17	−14	+18	−20	+ 3	−16	1	−1.32
97508 H	19 49 07.25	−61 48 53.2	7.28	G	297.280 197 33	−61.814 775 92 *	17.21	40.78	−97.71	2.14	1.17	1.16	0.80	0.67	+ 4	− 4	− 3	−33	+ 2	+ 0	+26	−32	−12	−10	2	−0.75
97509	19 49 08.50	+27 43 56.0	6.97	H	297.285 433 24	+27.732 220 24	20.17	94.35	−216.73	0.36	0.51	0.72	0.41	0.53	−22	+ 8	−19	+18	+ 1	−11	+ 2	−16	+17	−17	0	−0.30
97510	19 49 09.50	+08 16 38.4	7.70	1 H	297.289 601 42	+08.277 331 89	6.40	7.35	−3.27	0.66	0.58	1.15	0.90	0.86	+40	− 9	−20	+29	− 2	+49	+ 4	+45	+12	+30	0	−0.12
97511	19 49 10.09	−76 54 30.6	7.16	H	297.292 025 01	−76.908 497 92	7.84	34.75	−35.89	0.66	0.74	0.98	0.72	0.87	− 2	−10	−17	− 7	− 2	− 2	− 6	−26	− 3	−19	0	
97512	19 49 10.88	−29 10 27.4	11.56	2 G	297.295 338 80	−29.174 284 18	13.24	204.40	−182.64	3.23	2.05	3.67	4.04	2.88	+37	−42	−22	−24	− 4	+25	− 3	−46	− 2	+11	0	−0.03
97513 H	19 49 11.14	+49 54 01.3	9.15	H	297.296 431 82	+49.900 370 57 A	0.04	−4.52	−10.02	1.54	1.15	1.13	1.29	1.13	+19	− 6	+11	+ 4	+11	+ 4	+ 5	+ 9	+ 2	+13	3	−0.01
*97514	19 49 11.61	+65 57 16.3	8.52	H	297.298 360 82	+65.954 534 47	9.84	40.70	212.97	0.58	0.62	0.66	0.49	0.78	+ 0	+ 1	+11	−25	+22	− 9	+24	+ 4	− 2	+30	1	1.27
*97515	19 49 11.53	−28 47 19.4	6.04	G	297.298 039 47	−28.788 732 69	21.95	119.95	−98.62	0.78	0.48	0.96	1.03	0.60	+24	−26	−13	− 5	− 9	+40	− 2	−20	−24	− 2	2	−0.70
97516	19 49 11.63	+19 47 41.4	7.91	H	297.298 447 46	+19.794 836 67	0.94	1.54	−1.18	0.61	0.53	0.93	0.67	0.51	− 7	−10	−10	−16	− 5	+ 9	− 7	−32	+18	−19	1	1.27
97517	19 49 12.18	+57 24 34.1	7.76	H	297.300 762 00	+57.409 479 80	20.50	−7.02	−60.54	0.51	0.56	0.57	0.62	0.66	+ 7	− 4	+14	+ 8	−14	−12	− 8	−19	+ 3	+22	3	1.51
97518	19 49 13.64	−54 53 18.9	8.59	H	297.306 814 99	−54.888 581 24	1.76	4.45	−21.88	0.75	0.57	1.09	1.11	0.98	− 5	−11	+ 1	− 8	+12	+ 7	+15	−15	+ 1	+15	0	2.42
97519	19 49 14.48	−08 55 22.4	8.70	G	297.310 349 74	−08.922 881 42	3.76	−22.73	−14.26	1.06	0.80	1.18	1.24	1.04	+ 9	−14	−21	−10	+16	+26	+24	+22	− 4	+11	0	−0.10
97520	19 49 14.52	+26 47 39.0	11.39	G	297.310 488 74	+26.794 156 09	−0.16	−4.61	−2.44	1.11	1.67	2.50	1.29	1.71	−20	− 9	+ 8	+24	− 5	+ 0	− 3	− 8	− 1	−13	2	0.55
97521	19 49 14.83	−14 35 39.0	8.56	H	297.311 802 60	−14.594 166 25	1.36	5.29	−13.01	1.16	0.67	1.25	1.27	0.68	+41	−23	− 7	−15	+12	+24	+ 5	−17	+25	+60	0	3.24
97522	19 49 15.13	−20 43 29.0	9.66	H	297.313 059 87	−20.724 713 35	5.62	−6.10	−2.81	1.37	0.87	1.47	1.60	1.24	+44	−33	−16	− 6	+ 8	+12	+ 8	− 5	+13	+64	0	0.96
97523	19 49 15.66	−32 58 08.3	8.38	H	297.315 254 44	−32.968 974 30	1.78	21.99	−2.64	1.17	0.55	1.24	1.17	0.75	+11	−52	− 2	− 7	+10	+17	+12	−12	− 5	− 1	0	1.22
97524	19 49 15.93	+15 07 28.5	7.80	H	297.316 362 88	+15.124 577 25	10.32	27.03	15.61	0.67	0.47	0.95	0.77	0.42	− 9	+ 3	+ 9	− 5	−12	+18	−16	−42	− 5	−30	0	0.99
97525	19 49 16.95	+15 12 15.2	7.94	H	297.320 614 44	+15.204 229 21	−0.05	0.31	3.12	0.75	0.49	1.02	0.86	0.45	− 9	+ 7	+ 7	− 1	−15	+23	−20	−39	−10	−30	1	1.28
97526	19 49 17.66	−12 39 50.0	8.85	1 H	297.323 584 54	−12.663 876 19	2.65	−3.31	−3.86	1.12	0.57	1.29	1.36	0.66	+34	− 4	+ 6	+ 5	+26	+42	+23	− 1	+39	+61	0	0.59
97527	19 49 18.06	+41 34 58.4	7.53	H	297.325 237 85	+41.582 885 39	18.78	104.42	−176.27	0.53	0.56	0.64	0.59	0.69	− 1	−10	− 2	−24	− 4	+ 9	−12	+17	−10	+19	1	0.09
97528	19 49 19.19	+28 34 44.8	7.40	H	297.329 951 70	+28.579 100 45	5.30	1.48	−1.87	0.42	0.53	0.74	0.48	0.54	−14	− 4	− 3	+26	− 2	− 6	+ 0	−12	+11	− 8	0	0.30
97529	19 49 19.89	−33 42 15.0	9.69	H	297.332 881 88	−33.704 178 66	1.26	20.32	5.42	1.35	0.67	1.42	1.44	0.94	+16	−32	+ 3	+11	+13	+19	+17	− 6	−11	+16	0	−0.24
97530 H	19 49 21.03	−62 59 17.5	10.89	G	297.337 614 69	−62.988 192 34 A	6.62	−27.25	−500.00	6.14	3.89	3.20	2.33	2.13	−42	− 5	−10	− 9	− 7	− 4	− 9	−17	+21	−37	0	−0.29
97531	19 49 21.53	−32 52 21.6	9.14	H	297.339 727 47	−32.872 678 58	20.43	5.36	−152.21	1.39	0.66	1.36	1.57	0.94	+ 0	−34	+ 1	−23	+28	+ 7	+29	−12	+ 7	−13	0	0.10
97532	19 49 22.38	+25 30 21.2	8.19	H	297.343 236 98	+25.505 898 44	0.84	−11.42	−16.93	0.51	0.65	0.95	0.52	0.65	+ 0	−11	− 5	+32	−11	+11	−11	−31	+ 9	+ 1	0	1.16
97533	19 49 23.16	−73 31 23.2	7.35	H	297.346 500 75	−73.523 112 14	4.08	12.21	−13.89	0.45	0.48	0.71	0.48	0.56	− 8	−20	−11	+10	− 3	+ 1	− 4	− 7	− 1	−20	0	2.17
97534	19 49 25.29	−72 30 12.3	5.39	H	297.355 386 94	−72.503 414 08	24.08	6.91	14.67	0.34	0.39	0.56	0.37	0.45	− 8	−11	− 8	+ 9	+10	−11	+ 5	−22	+ 3	−21	0	1.02
97535	19 49 25.68	−58 20 13.0	9.47	H	297.357 014 66	−58.336 944 99	1.62	17.30	5.87	0.89	0.79	1.31	1.11	1.02	+ 9	− 9	−24	+20	− 6	+12	+ 3	− 6	+ 5	+33	3	1.08
97536	19 49 25.83	+63 12 13.9	6.69	H	297.357 608 07	+63.203 865 75	5.28	24.55	−1.22	0.56	0.49	0.56	0.68	0.61	+ 8	−21	+ 7	− 7	+15	+15	+ 6	+10	+18	+40	1	2.06
97537	19 49 26.80	+28 36 36.0	7.98	H	297.361 676 07	+28.610 006 03	22.20	75.46	71.93	0.51	0.61	0.86	0.59	0.62	−14	− 6	+ 1	+37	− 1	− 4	+ 0	− 7	+ 6	− 9	1	0.72
97538	19 49 27.50	+38 42 36.6	6.12	H	297.364 577 58	+38.710 172 37	4.68	7.63	−9.43	0.43	0.45	0.55	0.49	0.48	+ 3	− 4	− 8	+ 2	− 7	− 6	− 5	−16	+21	+18	0	1.65
97539	19 49 27.66	−45 44 52.1	7.26	G	297.365 259 94	−45.747 812 48	6.06	52.18	−32.53	1.06	0.81	1.19	1.74	0.90	− 2	− 1	−24	+ 9	−10	−15	−11	−22	+ 9	− 9	0	0.19
97540	19 49 28.33	−65 58 44.5	7.39	H	297.368 061 32	−65.979 014 20	4.28	−5.28	−32.73	0.68	0.69	0.98	0.74	0.73	− 6	+ 7	−24	− 4	+21	+ 2	−22	−16	+16	−26	0	−0.85
97541	19 49 29.16	−52 52 59.5	8.91	H	297.371 504 53	−52.883 190 76	4.67	−12.51	−4.00	0.81	0.51	1.23	1.26	1.08	+ 2	−25	+16	−16	+10	+12	+15	−30	+ 1	+17	0	−0.10
97542	19 49 31.00	+82 27 17.5	7.80	H	297.379 176 01	+82.454 856 28	4.84	−14.79	26.34	0.59	0.54	0.64	0.68	0.62	+ 1	−25	+14	− 2	+ 9	+ 6	+11	+ 5	−18	+16	1	−0.14
97543	19 49 31.61	+29 22 29.6	8.07	H	297.381 725 57	+29.374 896 44	10.32	41.00	34.34	0.54	0.68	0.93	0.64	0.73	− 4	+ 8	− 5	+ 9	+ 7	− 2	+ 8	−11	− 4	+ 4	0	0.21
97544	19 49 33.04	−76 24 17.1	9.60	H	297.387 684 82	−76.404 738 49	3.39	1.03	−21.01	0.83	0.91	1.29	0.98	1.06	− 5	+ 3	−16	− 2	− 9	− 7	−11	− 8	− 2	−15	0	1.33
97545	19 49 33.46	−01 06 03.7	8.12	1 H	297.389 405 30	−01.101 017 89	3.11	−5.40	−6.57	1.05	0.87	1.34	1.60	0.98	+ 9	−14	−53	+30	−23	+41	− 1	+38	−27	−32	0	0.07
97546	19 49 33.96	−37 46 49.1	7.22	H	297.391 502 44	−37.780 297 34	22.23	8.26	−104.02	1.02	0.59	1.14	1.42	0.88	+20	−20	+22	− 1	−21	−23	−13	−48	−33	+23	2	1.13
97547 H	19 49 37.17	+42 54 34.3	8.42	G	297.404 874 29	+42.909 520 10 A	1.69	−2.75	0.84	0.89	1.07	1.04	0.88	1.08	−15	− 1	− 7	−11	+ 6	−20	+ 5	− 1	+ 4	+11	2	−1.27
97548 H	19 49 37.32	−55 25 27.3	8.69	H	297.405 509 40	−55.424 260 07 A	16.10	−12.93	−3.59	1.71	1.32	2.06	2.20	1.98	+ 7	+ 7	+16	−22	− 3	−12	+ 2	−27	−19	+47	2	0.16
97549	19 49 37.77	−06 47 46.6	9.73	H	297.407 389 36	−06.796 285 27	3.70	0.01	−15.76	1.59	1.29	1.91	1.88	2.00	+27	−16	−29	−12	+16	+ 2	+20	+28	−36	+37	0	0.45
97550	19 49 38.99	+07 18 00.1	8.79	H	297.412 463 62	+07.300 019 00	15.03	1.89	−7.38	0.90	0.83	1.31	1.02	1.12	+56	−30	−38	+12	− 2	+30	+11	+46	−10	+31	4	2.37
97551	19 49 39.98	+71 26 37.3	8.86	H	297.416 582 78	+71.443 699 36	5.97	19.71	41.04	0.77	0.70	0.78	0.80	0.77	−16	−40	+16	−14	+23	+ 5	+11	+27	− 3	+21	0	1.15
97552	19 49 41.54	−36 50 06.8	9.22	H	297.423 071 26	−36.835 211 24	1.94	9.30	−27.59	1.59	0.75	1.81	2.14	1.27	+26	−25	+30	−10	−21	−27	−10	−52	−33	+29	2	1.99
97553	19 49 42.05	+33 16 36.8	8.42	H	297.425 223 89	+33.276 883 36	2.14	2.59	−6.86	0.59	0.69	0.93	0.62	0.68	+11	+ 7	+ 4	+10	+13	−15	+15	− 7	+20	+13	0	1.51
97554	19 49 42.13	−30 16 27.1	8.29	H	297.425 522 69	−30.274 185 34	8.31	5.82	−33.57	0.99	0.56	1.02	1.13	0.71	+10	−18	−26	−32	+18	− 7	+18	−20	+ 8	+ 2	0	−0.17
97555	19 49 42.88	+02 57 14.1	7.65	H	297.428 672 35	+02.953 903 74	5.61	5.39	6.63	1.00	0.72	1.11	1.17	0.96	+ 2	−32	−11	+ 8	+11	− 4	+10	+28	+15	−15	0	−0.08
97556	19 49 43.17	+38 54 44.7	8.54	G	297.429 871 12	+38.912 418 09	1.44	0.85	−0.38	0.59	0.63	0.78	0.73	0.74	+ 1	+ 2	− 9	+ 2	− 1	+ 4	+ 1	− 7	+24	+23	0	0.17
*97557	19 49 44.02	−32 45 49.7	7.78	1 H	297.433 416 88	−32.763 812 90	20.02	82.92	−63.96	1.07	0.51	1.03	1.16	0.67	− 5	−38	− 7	−28	+24	+11	+26	−20	+ 0	−19	0	0.33
*97558	19 49 43.87	−11 24 19.5	10.69	H	297.432 806 85	−11.405 410 54	1.64	−8.91	−11.33	3.18	1.69	3.33	3.92	2.00	+37	−35	− 8	+11	+32	+ 1	+26	+ 8	+ 4	+27	0	−0.34
97559	19 49 44.81	−20 44 44.8	9.07	H	297.436 729 08	−20.745 780 09	6.38	6.03	−0.66	1.18	0.75	1.24	1.27	0.94	+32	−28	−14	−12	+11	+ 2	+14	− 8	+ 5	+55	0	−1.17
97560	19 49 45.00	+16 22 31.9	7.70	H	297.437 510 02	+16.375 516 95	1.89	8.57	8.49	0.61	0.48	0.91	0.69	0.44	− 2	−17	+11	−20	−11	+12	−12	−43	− 1	−16	0	−0.16
97561	19 49 46.72	−11 24 31.3	7.26	H	297.444 662 16	−11.408 695 58	12.34	38.25	−61.95	0.92	0.52	0.98	1.09	0.55	+31	−22	−17	+11	+31	+16	+27	+ 3	+17	+34	0	0.86
97562	19 49 47.06	−50 32 15.9	8.70	H	297.446 095 84	−50.537 744 99	2.88	8.09	−9.05	0.89	0.56	1.29	1.19	1.00	− 5	− 4	+14	−25	+13	− 2	+19	−22	− 7	+23	0	−0.45
97563	19 49 47.74	+21 10 32.9	10.98	H	297.448 897 55	+21.175 817 33	0.40	−1.68	−6.36	1.63	1.34	2.30	1.64	1.21	−17	+ 5	+ 1	−35	+ 8	+10	+ 9	−47	+ 3	−19	0	−0.23
97564 H	19 49 49.07	−64 54 23.3	7.47	G	297.454 456 02	−64.906 479 18 B	15.70	1.20	105.78	2.15	1.57	1.73	1.53	1.42	− 1	−10	−10	− 8	− 1	+ 3	+ 1	−17	+10	−32	1	0.62
97565 H	19 49 49.33	−03 55 20.3	8.26	H	297.455 540 43	−03.922 313 30 A	3.78	2.54	−4.46	2.24	1.62	2.20	2.35	2.11	+31	+23	+ 2	+ 0	+29	+36	+29	+32	+13	+52	0	−0.17
97566	19 49 49.43	−60 24 42.8	8.84	H	297.455 944 49	−60.411 896 66	0.81	3.58	−5.28	0.88	0.74	1.26	1.04	1.00	+ 4	− 8	+ 3	+42	−14	− 2	− 4	− 7	−10	+25	0	−1.08
97567	19 49 49.60	−43 16 34.1	11.29	G	297.456 677 53	−43.276 125 71	19.30	246.37	−53.87	3.14	1.73	3.19	3.85	2.17	+18	−43	− 5	+27	− 8	+ 3	− 4	−23	−12	+11	0	1.06
97568	19 49 51.10	−10 43 30.2	7.56	2 H	297.462 907 63	−10.725 053 94	14.15	10.41	3.49	0.89	0.55	1.01	1.04	0.62	+23	−12	−23	+ 8	+11	+29	+20	+ 4	+ 0	+27	0	1.19
97569	19 49 53.42	−66 48 47.1	6.44	1 G	297.472 579 71	−66.813 093 00	3.03	−0.55	9.84	0.58	0.57	0.82	0.68	0.66	−28	− 5	−21	+17	+22	−13	+ 8	−22	+ 9	−58	1	0.49
97570	19 49 54.19	−23 43 02.4	12.05	3 H																						
97571	19 49 54.46	+08 01 43.7	8.44	H	297.476 927 65	+08.028 817 56	9.02	6.75	12.51	0.78	0.73	1.22	0.99	1.01	+40	−19	−36	+28	−11	+35	− 2	+46	−10	+17	0	−0.09
97572	19 49 54.72	+28 26 22.8	6.45	2 H	297.477 997 34	+28.439 680 47	1.92	1.71	−2.43	0.35	0.44	0.61	0.40	0.41	−19	− 4	− 5	+24	− 2	−10	+ 0	−24	+14	−14	1	−1.36
97573	19 49 55.81	+27 05 06.6	6.46	H	297.482 524 98	+27.085 171 05	6.86	8.86	4.57	0.31	0.44	0.66	0.37	0.46	−22	+ 4	− 2	+ 4	+ 2	− 7	+ 3	−22	+13	−20	1	−0.42
97574	19 49 55.84	−57 13 16.4	8.80	H	297.482 671 27	−57.221 212 66	0.62	−17.15	−12.64	0.86	0.69	1.14	1.34	1.17	+ 5	−11	+11	+ 2	+ 4	+ 9	+ 5	− 9	+ 7	+25	0	−1.38
97575	19 49 55.89	−62 34 00.5	7.79	H	297.482 867 13	−62.566 798 58	8.71	−3.07	−11.56	0.69	0.54	0.92	0.71	0.62	− 7	− 7	−18	−10	−22	+ 8	−27	−18	+10	−40	0	−0.40
97576	19 49 57.76	+45 09 30.9	10.01	H	297.490 646 55	+45.158 596 39	1.83	−5.59	−7.84	2.42	2.54	2.98	2.88	3.03	− 4	−25	− 3	− 5	+ 6	− 1	+ 5	− 1	+ 1	+ 5	3	
97577	19 49 59.27	−32 01 07.7	8.97	H	297.496 961 07	−32.018 812 61	1.16	2.89	−5.79	1.33	0.66	1.48	2.25	1.06	+19	−32	−26	+ 7	+17	− 5	+ 1	−16	+15	−47	0	−1.78
97578 H	19 49 59.38	+45 09 05.4	8.11	H	297.497 418 24	+45.151 487 35 A	2.57	−6.03	−10.20	0.91	0.93	0.96	0.96	1.01	− 7	−20	−10	+ 8	+17	− 4	+18	+14	− 8	− 8	1	−0.22
97579 H	19 50 01.93	+31 57 57.5	10.13	H	297.508 056 76	+31.965 961 90 A	17.34	−123.79	−126.30	2.09	2.26	2.81	2.06	2.24	− 5	+ 2	+ 7	+14	+ 5	−10	+ 5	− 1	+13	− 5	3	2.20
97580	19 50 02.52	−69 20 20.9	7.26	H	297.510 500 27	−69.339 133 34	3.14	5.75	−14.91	0.37	0.63	0.87	0.43	0.66	−40	+ 1	−19	+20	+ 6	− 8	+ 6	− 7	+ 8	−31	0	−0.40
97581	19 50 03.29	−59 15 50.3	7.04	H	297.513 700 05	−59.263 980 33	12.27	24.33	−16.08	0.55	0.46	0.81	0.61	0.63	+20	−12	− 2	+53	− 3	+ 5	+ 8	+ 0	+ 2	+44	0	1.29
97582	19 50 03.36	+43 44 04.1	9.22	H	297.513 985 14	+43.734 473 05	4.03	−7.00	−22.45	0.70	0.79	0.90	0.74	0.93	+ 3	−15	− 6	+13	+14	−27	+16	+29	−11	+ 9	1	1.87
97583	19 50 03.46	−51 46 46.3	9.24	2 H	297.514 421 23	−51.779 527 54	1.92	1.95	4.06	1.03	0.57	1.32	1.37	1.12	−22	−24	+ 8	−38	+33	+ 1	+41	−38	+ 2	−10	4	0.09
97584	19 50 04.12	+32 38 24.8	8.22	1 H	297.517 182 44	+32.640 225 03	2.50	−4.89	−8.91	0.51	0.61	0.82	0.55	0.60	− 4	+ 3	+ 1	+15	+15	−13	+15	−23	+20	− 4	0	0.54
97585	19 50 06.18	+00 02 17.9	8.77	H	297.525 752 76	+00.038 309 30	1.20	−1.18	3.64	1.28	0.94	1.49	1.48	1.21	+13	−44	−11	− 1	+16	+ 5	+ 8	+22	+22	− 7	0	0.95
97586	19 50 06.34	−07 36 52.6	10.94	H	297.526 409 79	−07.614 607 73 *	9.66	−3.51	15.45	2.90	2.09	5.53	6.78	4.50	+16	−32	+19	−28	+26	+84	−23	+39	+65	+80	0	2.59
97587	19 50 07.53	+54 39 06.4	8.03	G	297.531 380 84	+54.651 791 37 A	3.07	1.35	−2.77	1.55	1.40	1.23	1.75	1.44	+ 0	−12	+14	+16	+11	− 8	+13	+ 2	− 9	− 1	11	2.97
97588	19 50 07.87	−21 31 27.6	9.62	H	297.532 776 97	−21.524 330 09	2.69	−0.18	1.81	1.36	0.88	1.46	1.48	1.06	+33	−28	+ 1	− 3	+22	+10	+20	+ 4	+ 6	+51	0	0.39
97589	19 50 08.22	+54 38 56.4	10.48	H	297.534 260 92	+54.648 994 12 B	6.14	−14.57	−11.98	15.89	14.27	11.01	16.88	13.10	+ 2	− 8	+11	+12	+14	− 8	+14	− 2	− 9	+ 0	11	2.97
97590	19 50 08.35	−50 36 09.2	7.60	1 H	297.534 793 48	−50.602 544 72	12.58	10.88	1.75	0.72	0.48	0.98	1.00	0.81	− 4	− 4	+ 3	− 4	+11	− 6	+14	− 8	+ 2	+15	0	−0.41
97591	19 50 09.68	−60 55 25.6	8.01	G	297.540 317 89	−60.923 779 15	10.12	−8.57	13.08	0.72	0.55	0.95	0.88	0.76	+ 8	−12	− 6	+20	+ 2	− 5	+ 7	−16	− 8	+20	0	−0.35
97592 H	19 50 09.75	−10 00 25.7	6.75	H	297.540 642 50	−10.007 152 19 A	6.12	18.97	10.01	1.27	0.96	1.27	1.30	1.07	+44	− 9	−39	−19	− 6	+ 6	− 5	− 5	+ 1	+38	0	0.75
97593	19 50 10.84	−45 22 46.2	6.96	H	297.545 149 86	−45.379 505 23	5.54	5.67	−12.50	1.01	0.67	1.13	1.73	0.89	+ 4	+ 5	−14	+ 1	− 9	−27	−13	−29	+ 9	− 7	0	−0.20
97594	19 50 11.84	+35 41 03.0	10.54	2 H	297.549 316 78	+35.684 174 58 *	−0.36	−2.88	−2.92	1.08	1.31	1.58	1.47	1.54	−13	+ 2	− 2	− 6	+12	+ 5	+11	−15	+ 5	−10	0	−0.73
97595	19 50 13.17	+48 23 29.7	7.86	H	297.554 874 36	+48.391 581 10	3.30	3.50	−1.06	0.60	0.60	0.68	0.73	0.63	+ 4	− 4	− 7	+12	+20	−21	+17	+15	− 1	+12	0	0.10
97596	19 50 13.90	−17 57 13.9	8.40	H	297.557 933 32	−17.953 873 99	11.29	48.00	−41.11	0.99	0.60	1.08	1.03	0.65	+32	−35	−16	− 5	+ 9	+ 4	+ 8	−20	+11	+50	0	−0.80
97597	19 50 13.98	−66 34 47.5	8.10	H	297.558 261 75	−66.579 873 05	2.61	3.82	−18.09	0.68	0.64	1.00	0.76	0.74	−24	− 7	−15	+27	+ 5	−15	− 6	− 3	+11	−53	0	0.59
97598	19 50 14.05	−47 33 26.5	5.91	2 H	297.558 551 07	−47.557 360 33	2.92	8.52	−12.99	1.14	0.49	1.01	1.08	0.66	+22	−56	−24	+47	− 6	+ 7	− 9	−16	+ 7	+ 9	0	0.13
97599	19 50 15.13	+17 42 36.1	6.81	H	297.563 022 89	+17.710 026 10	6.49	38.07	−17.79	0.53	0.43	0.80	0.57	0.42	− 5	− 9	−10	−27	− 4	+ 5	− 6	−41	+16	−26	0	1.73
97600	19

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
97501	9.443	0.014	8.415	0.010		0.895	0.013	T	0.90	0.01	L	8.4320	0.0085	0.092	155		8.34	8.59		U 2 C			1							
97502	8.611	0.012	8.281	0.013		0.333	0.015	G	0.39	0.02	H	8.3232	0.0014	0.013	100		8.30	8.35		C			1							S
97503	6.956	0.005	7.073	0.006		−0.101	0.007	T	−0.08	0.01	L	7.0615	0.0011	0.011	112		7.05	7.08					1							S
97504	9.353	0.012	9.230	0.015	*	0.119	0.018	T	0.13	0.02	L *	9.2263	0.0019	0.022	190	*	9.18	9.26			19491+1645	H 1	2 C S C	AB	12	0.166	0.055	1.97	0.78	
97505	10.716	0.047	8.702	0.016		1.669	0.040	T	1.69	0.04	L	8.5859	0.0025	0.018	81		8.55	8.62					1							
97506	8.996	0.012	9.004	0.016		−0.003	0.018	T	0.02	0.02	L	8.9996	0.0020	0.021	142		8.97	9.03		C			1							
97507	9.601	0.014	8.850	0.012		0.671	0.014	T	0.73	0.01	L	8.8984	0.0020	0.021	201		8.87	8.94		C			1							
97508	7.872	0.008	7.289	0.008	*	0.512	0.027	G	0.60	0.01	L *	7.3586	0.0012	0.012	120	–	7.34	7.39		D	19491−6149	I 1	3 C B							S G
97509	7.666	0.005	7.027	0.005		0.611	0.005	G	0.60	0.03	C	7.0857	0.0009	0.010	213		7.07	7.10					1							S
97510	8.026	0.006	7.723	0.007		0.288	0.009	T	0.33	0.01	L	7.7701	0.0015	0.015	177		7.75	7.80		M			1							S
97511	7.170	0.004	7.144	0.005		0.024	0.006	T	−0.01	0.02	A	7.1612	0.0011	0.010	150		7.14	7.19					1 X							S
97512						1.346	0.015	G	1.56	0.02	I	11.6672	0.0069	0.055	84		11.54	11.76		U			1 G							G
97513	11.214	0.073	9.334	0.024	*	1.141	0.218	G	1.10	0.23	R *	9.3128	0.0026	0.020	98	*	9.28	9.34			19492+4954	H 1	2 C D	AB	75	0.403	0.127	4.09	0.64	D
97514	9.150	0.015	8.573	0.014		0.525	0.005	G	0.60	0.01	H	8.6300	0.0015	0.012	99		8.61	8.66		C			1							
97515	6.507	0.004	6.079	0.005		0.403	0.004	G	0.47	0.00	H	6.1332	0.0008	0.007	90		6.12	6.14		C			1							S
97516	8.859	0.009	8.013	0.007		0.759	0.009	T	0.80	0.01	L	8.0559	0.0015	0.012	161		8.03	8.08		C			1							S
97517	8.482	0.011	7.821	0.009		0.613	0.012	T	0.68	0.01	L	7.8868	0.0010	0.011	116		7.87	7.90		C			1							S
97518	9.880	0.018	8.701	0.012		1.011	0.017	T	0.99	0.01	L	8.7592	0.0015	0.019	182		8.72	8.80		C			1							
97519	10.067	0.035	8.791	0.020		1.118	0.037	G	1.13	0.03	H	8.8628	0.0026	0.016	58		8.84	8.89		R			1							
97520						0.781	0.016	G	0.82	0.01	H	11.5954	0.0042	0.061	231		11.50	11.68					1							G
97521	10.013	0.024	8.711	0.014		1.107	0.022	T	1.07	0.02	L	8.7334	0.0013	0.012	106		8.71	8.76		C			1							
97522	10.061	0.031	9.719	0.034		0.324	0.043	T	0.38	0.06	L	9.7387	0.0025	0.024	85		9.70	9.78					1							
97523	9.923	0.022	8.517	0.012		1.188	0.020	T	1.15	0.02	L	8.5441	0.0017	0.014	105		8.52	8.57		C	19493−3258	I 1	1							
97524	8.270	0.008	7.845	0.008		0.423	0.015	G	0.49	0.02	H	7.8979	0.0010	0.014	211		7.87	7.93					1							S
97525	9.288	0.011	8.042	0.007		1.063	0.010	T	1.03	0.01	L	8.1044	0.0014	0.020	215		8.06	8.14					1 S							S
97526	11.024	0.048	9.069	0.016		1.657	0.042	T	2.29	0.08	O	8.9006	0.0019	0.021	134		8.87	8.94		U			1							
97527	8.122	0.008	7.578	0.007		0.510	0.010	T	0.58	0.01	L	7.6464	0.0013	0.013	120		7.62	7.67					1							S
97528	7.585	0.005	7.428	0.006		0.151	0.007	T	0.17	0.01	L	7.4521	0.0009	0.011	181		7.43	7.47		C			1							S
97529	11.180	0.071	9.823	0.035		1.150	0.062	T	1.11	0.06	L	9.8582	0.0022	0.023	111		9.82	9.90		R			1 S							
97530	11.636	0.111	11.144	0.116	*	0.420	0.015	G	0.49	0.02	H *	10.9951	0.0048	0.043	142	*	10.91	11.07		D	19494−6259	H 1	2 C A	AB	102	0.311	0.013	0.63	0.21	G
97531	10.110	0.028	9.208	0.020		0.787	0.027	T	0.83	0.03	L	9.2830	0.0016	0.017	105		9.25	9.31					1							
97532	8.330	0.007	8.198	0.008		0.127	0.010	T	0.14	0.01	L	8.2364	0.0011	0.013	180		8.22	8.26					1							
97533	7.539	0.005	7.363	0.005		0.143	0.002	G	0.15	0.02	A	7.4023	0.0010	0.012	167		7.38	7.43					1							S
97534	5.691	0.002	5.424	0.002		0.234	0.005	G	0.26	0.02	A	5.4624	0.0006	0.006	192		5.45	5.47					1							S
97535	10.745	0.040	9.573	0.024		1.005	0.036	T	0.98	0.03	L	9.6346	0.0021	0.027	136		9.59	9.68					1							
97536	8.582	0.011	6.845	0.006		1.449	0.010	T	1.45	0.02	L	6.8297	0.0013	0.011	94		6.82	6.85					1							S
97537	8.605	0.009	8.033	0.008		0.518	0.002	G	0.59	0.00	H	8.0920	0.0013	0.014	181		8.07	8.11		C			1							
97538	7.264	0.006	6.222	0.004		0.906	0.005	T	0.91	0.00	L	6.2764	0.0007	0.007	128		6.26	6.29		C	19495+3843	I 1	1							S
97539	8.667	0.017	7.381	0.010		1.080	0.015	G	1.04	0.01	H	7.4272	0.0018	0.011	48		7.41	7.45		C			1							S
97540	9.358	0.014	7.568	0.007		1.491	0.012	T	1.51	0.02	L	7.5178	0.0015	0.014	121		7.49	7.54		C			1							S
97541	9.488	0.013	8.955	0.012		0.508	0.013	T	0.58	0.01	L	9.0225	0.0011	0.017	213		8.99	9.05					1							
97542	9.126	0.013	7.903	0.009		1.045	0.012	T	1.02	0.01	L	7.9661	0.0014	0.011	111		7.95	7.99		C			1							
97543	8.656	0.009	8.132	0.008		0.481	0.010	G	0.55	0.01	H	8.1770	0.0016	0.018	176		8.15	8.21		C			1 S							
97544	10.340	0.024	9.646	0.020		0.628	0.024	T	0.70	0.02	L	9.7268	0.0024	0.031	147		9.67	9.78					1							
97545	8.224	0.013	8.143	0.015		0.073	0.018	T	0.08	0.02	L	8.1557	0.0035	0.021	49		8.13	8.18		U			1							S
97546	7.900	0.007	7.280	0.006		0.574	0.007	T	0.65	0.01	L	7.3413	0.0013	0.010	113		7.32	7.36		C			1							S
97547	8.505	0.009	8.484	0.011	A	0.100	0.150	G	0.02	0.01	L *	8.4800	0.0014	0.014	114	*	8.45	8.51		D	19496+4255	H 1	2 C A	AB	142	1.309	0.031	3.20	0.11	
97548	9.651	0.017	8.926	0.014	*	0.651	0.017	T	0.71	0.01	L *	8.8263	0.0018	0.020	162	*	8.79	8.86		D	19496−5525	I 1	2 C A	AB	147	1.045	0.005	0.97	0.02	
97549	10.111	0.037	9.814	0.043		0.282	0.053	T	0.32	0.07	L	9.8033	0.0040	0.022	43		9.77	9.83		C			1							G
97550	9.510	0.015	8.890	0.014		0.577	0.018	T	0.65	0.02	L	8.9151	0.0013	0.014	148		8.89	8.95		C	19497+0718	I 1	1 S							
97551	9.364	0.019	8.918	0.019		0.421	0.025	T	0.49	0.03	L	8.9584	0.0015	0.014	92		8.93	8.99		C			1							
97552	10.964	0.056	9.352	0.022		1.350	0.047	T	1.32	0.06	L	9.3780	0.0024	0.017	109		9.35	9.40		C			1							
97553	8.540	0.009	8.440	0.011		0.112	0.015	G	0.13	0.01	H	8.4644	0.0018	0.021	142		8.43	8.50					1							
97554	8.732	0.011	8.333	0.012		0.398	0.015	G	0.46	0.02	H	8.3797	0.0019	0.011	83		8.36	8.40					1							S
97555	8.227	0.015	7.704	0.012		0.515	0.015	G	0.59	0.02	H	7.7627	0.0020	0.010	42		7.75	7.78					1							S
97556	8.416	0.009	8.490	0.012		−0.090	0.015	G	−0.07	0.02	H	8.5179	0.0013	0.017	128		8.49	8.55					1							
97557	8.542	0.010	7.847	0.009		0.624	0.015	G	0.69	0.01	H	7.9114	0.0018	0.016	106		7.89	7.94		U			1							S
97558	11.274	0.083	10.670	0.074		0.563	0.098	T	0.64	0.09	L	10.8146	0.0060	0.042	93		10.71	10.92		C	19498−1125	I 2	1 S							
97559	9.596	0.020	9.137	0.020		0.446	0.022	T	0.52	0.02	L	9.1706	0.0015	0.018	87		9.14	9.20		C			1							
97560	8.773	0.010	7.792	0.007		0.860	0.009	T	0.87	0.01	L	7.8516	0.0012	0.015	212		7.83	7.88					1							S
97561	7.782	0.006	7.315	0.007		0.455	0.015	G	0.52	0.02	H	7.3612	0.0009	0.007	99		7.35	7.38		C	19498−1125	I 2	1							S
97562	10.827	0.036	8.889	0.013		1.643	0.032	T	1.88	0.09	O	8.7917	0.0013	0.018	158		8.77	8.82					1							
97563	11.453	0.093	11.058	0.111		0.400	0.015	G	0.47	0.02	H	11.0736	0.0040	0.047	124		10.99	11.15					1 S							G
97564	8.173	0.021	7.594	0.021	*	0.548	0.015	G	0.62	0.01	H *	7.5794	0.0014	0.013	121	*	7.56	7.60		D	19498−6454	I 1	2 C A	BA	255	1.409	0.004	0.09	0.01	S
97565	9.035	0.029	8.209	0.021	*	0.744	0.027	T	0.79	0.02	L *	8.4036	0.0019	0.010	46	*	8.39	8.42		D	19498−0355	I 1	2 C A	AB	260	2.389	0.008	1.25	0.02	
97566	10.825	0.038	9.008	0.014		1.512	0.032	T	1.54	0.05	L	8.9658	0.0024	0.023	130		8.93	9.01					1							
97567						1.012	0.004	G	1.06	0.01	I	11.4415	0.0067	0.057	59		11.36	11.51					1							G
97568	7.947	0.012	7.606	0.012		0.355	0.015	G	0.42	0.02	H	7.6427	0.0021	0.021	78		7.59	7.67		U 2			1							S
97569	8.361	0.009	6.603	0.004		1.482	0.001	G	1.50	0.00	H	6.5742	0.0009	0.010	144		6.56	6.59		M			1							S
97570						0.104	0.100	G	0.08	0.04	L	12.0778	0.1195	0.791	60		10.20	12.87		U	19499−2343	I 1	S							S G
97571	8.974	0.010	8.496	0.010		0.465	0.015	G	0.54	0.02	H	8.5420	0.0012	0.014	157		8.52	8.57					1							
97572	6.312	0.003	6.433	0.004		−0.104	0.004	T	−0.09	0.01	L	6.4245	0.0008	0.009	189		6.33	6.44		U 2			1							S
97573	7.628	0.004	6.571	0.003		0.937	0.005	G	0.93	0.00	H	6.6245	0.0006	0.008	267		6.61	6.64		C			1							S
97574	10.536	0.032	8.982	0.015		1.304	0.028	T	1.26	0.03	L	8.9551	0.0023	0.024	131		8.92	9.00		C			1							
97575	8.302	0.009	7.846	0.009		0.466	0.001	G	0.54	0.00	H	7.8953	0.0014	0.011	132		7.88	7.92					1							S
97576	11.295	0.074	10.001	0.038		1.237	0.218	G	1.20	0.21	K	10.1695	0.0056	0.051	110		10.01	10.23		D	19500+4509	I 2	1 X							
97577	10.340	0.035	9.105	0.020		1.054	0.031	T	1.02	0.03	L	9.1402	0.0017	0.013	91		9.12	9.17		C			1							
97578	9.607	0.019	8.257	0.011	A	1.300	0.495	G	1.08	0.03	L *	8.2822	0.0012	0.014	116	*	8.26	8.31		D	19500+4509	I 2	2 C D	AB	137	8.507	0.076	4.30	0.29	D
97579	11.450	0.083	10.433	0.054	*	0.887	0.074	T	0.89	0.05	L *	10.2899	0.0034	0.039	162	*	10.23	10.38		D	19500+3158	M 1	2 C C	AC	91	0.687	0.097	3.46	0.65	G
97580	8.838	0.007	7.399	0.004		1.214	0.006	T	1.17	0.01	L	7.4290	0.0007	0.012	300		7.41	7.45					1							S
97581	7.261	0.004	7.057	0.005		0.195	0.006	T	0.21	0.01	L	7.1002	0.0010	0.009	148		7.09	7.12					1							S
97582	9.512	0.018	9.221	0.021		0.277	0.026	T	0.31	0.03	L	9.2962	0.0017	0.016	99		9.27	9.32		C			1							
97583	9.563	0.014	9.305	0.016		0.242	0.022	T	0.27	0.03	L	9.3081	0.0125	0.098	179		9.19	9.46	0.88	P 1 A			1 S							
97584	8.185	0.007	8.215	0.009		−0.010	0.015	G	0.01	0.01	H	8.2213	0.0025	0.022	152		8.18	8.25	0.89	P 1 A			1							
97585	10.977	0.061	8.976	0.021		1.658	0.051	T	1.68	0.05	L	8.8830	0.0044	0.021	51		8.85	8.91		C			1							
97586						1.500	0.510	G	4.62	0.96	Q	10.0577	0.2101	0.800	26		9.06	10.89					1 V							G P
97587	10.104	0.031	8.179	0.012	A	1.601	0.218	G	1.62	0.12	N	8.1084	0.0045	0.020	100	A	8.08	8.15		D	19501+5439	I 2	1 C P A							
97588	11.843	0.135	9.716	0.031		1.759	0.111	T	1.79	0.11	L	9.7240	0.0017	0.017	92		9.69	9.75		D			1							
97589	10.926	0.075	10.583	0.091	B	0.325	0.110	T	0.38	0.15	L	10.5834	0.0383			B				D	19501+5439	I 2	1 C I A							
97590	7.945	0.006	7.646	0.007		0.284	0.010	T	0.32	0.01	L	7.6739	0.0024	0.028	163		7.63	7.71	0.70	P 1 A			1							S
97591	8.610	0.010	8.051	0.010		0.509	0.007	G	0.58	0.01	H	8.1197	0.0013	0.012	113		8.10	8.14		C			1							S
97592	8.104	0.013	6.898	0.007	A	0.900	0.495	G	1.00	0.01	L *	6.9135	0.0012	0.008	62	*	6.90	6.93		D	19502−1000	I 1	2 C A	AB	265	1.416	0.030	3.23	0.11	S
97593	8.344	0.012	7.077	0.008		1.079	0.011	T	1.04	0.01	L	7.1278	0.0017	0.013	69		7.11	7.15			19502−4523	I 1	1							S
97594	12.179	0.224	11.159	0.152		0.889	0.202	T	0.89	0.15	L	10.6700	0.0144	0.229	125		10.50	11.08	855.00	P 1 B			1 V							G P
97595	9.690	0.018	8.008	0.009		1.405	0.016	T	1.38	0.02	L	8.0063	0.0013	0.012	114		7.99	8.03					1							
97596	8.967	0.013	8.460	0.012		0.505	0.015	G	0.58	0.02	H	8.5150	0.0014	0.011	104		8.50	8.55		C			1							
97597	8.074	0.007	8.092	0.008		−0.015	0.009	T	0.01	0.01	L	8.1034	0.0013	0.013	149		8.08	8.13		C			1							S
97598	8.094	0.013	6.113	0.006		1.678	0.012	T	2.07	0.04	O	5.9867	0.0043	0.029	92		5.96	6.04		U 2			1 G							S
97599	8.278	0.007	6.935	0.005		1.137	0.003	G	1.10	0.00	K	6.9741	0.0010	0.011	181		6.96	6.99					1							S
97600	8.964	0.018	8.670	0.020		0.280	0.025	T	0.32	0.03	L	8.7266	0.0054	0.035	62		8.67	8.79	0.35	P 1 A			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$						F1 %	F2
1 2	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28						29	30
97601	19 50 15.53	−51 10 43.5	8.99	H	297.564 710 45	−51.178 736 54		4.66	26.62	−3.08	1.03	0.69	1.40	1.45	1.19	−18	−	4	+	8	−29	+25	−16	+30	−24	+	1	+	7			0	−1.21
97602	19 50 16.28	−22 46 47.7	7.83	G	297.567 846 66	−22.779 911 90		3.09	11.38	0.40	0.84	0.52	0.95	0.93	0.65	+33	−35	−	9	+	9	+17	+27	+17	+12	+12	+43					0	0.22
97603	19 50 16.33	+30 01 05.4	8.34	H	297.568 039 83	+30.018 159 56		0.52	0.75	−3.58	0.55	0.71	0.93	0.79	0.74	+	0	+	5	+	0	+	0	+	2	+	7	+	2			1	−0.99
97604	19 50 16.91	−34 39 50.1	9.00	H	297.570 454 94	−34.663 918 11		9.40	−7.74	−14.86	1.19	0.67	1.29	1.28	0.91	+41	−35	−17	+	7	−	6	+	9	+	1	−21	−16	+33			0	−0.11
97605	19 50 17.00	−65 46 58.9	9.42	2 H	297.570 823 21	−65.783 034 15		3.22	−4.19	−7.63	1.17	1.10	1.75	1.15	1.29	+	7	−15	−18	−	4	−15	−	6	−24	−21	+36	−17			0	0.00
97606	19 50 17.33	−59 42 51.9	9.13	H	297.572 211 93	−59.714 419 93		8.12	5.91	−36.86	0.98	0.79	1.37	1.09	1.07	+10	−12	−	6	+55	−15	−10	−	4	+	1	−25	+31			0	0.13
97607	19 50 17.48	+07 54 08.7	6.49	1 H	297.572 833 11	+07.902 428 25		2.10	−1.08	−3.96	0.59	0.55	0.92	0.72	0.71	+42	−21	−30	+34	+	4	+38	+21	+59	+	2	+16					0	−0.46
97608	19 50 18.05	−62 21 58.1	8.56	H	297.575 197 89	−62.366 126 19		5.43	10.20	−36.66	0.80	0.61	1.06	0.74	0.65	−	2	−27	−11	−21	−18	+	6	−26	−26	+17	−32					0	0.27
97609	19 50 19.80	+36 05 53.6	7.08	G	297.582 489 18	+36.098 223 12		3.49	4.58	−8.81	0.43	0.49	0.61	0.50	0.54	−	9	−	5	−10	+	9	+	7	−	8	+	5	−11	+24	−	8	1	0.99
97610	19 50 20.94	−21 38 32.9	8.65	H	297.587 270 62	−21.642 470 83		2.92	16.12	−1.16	1.05	0.67	1.14	1.09	0.77	+33	−34	−	2	+	9	+31	+20	+28	+16	+11	+53					4	−0.78
97611	19 50 21.75	−61 03 40.1	6.21	H	297.590 634 50	−61.061 132 81		3.63	3.39	5.37	0.56	0.43	0.75	0.61	0.57	+	8	−21	−	8	+33	−	4	−	6	+	1	−13	−	2	+21	0	1.39
97612	19 50 21.91	+61 12 32.3	6.70	H	297.591 281 54	+61.208 973 79		18.62	−24.42	39.84	0.49	0.48	0.51	0.52	0.56	+	1	+	1	+	4	+19	+20	−12	+23	+14	+13	+15			0	−0.70
97613	19 50 21.98	−26 42 56.8	7.46	H	297.591 569 92	−26.715 764 82		4.10	13.98	−1.30	0.86	0.67	1.03	1.03	0.79	+45	−43	−36	−	3	−	3	+28	+	7	+	0	−	9	+11		2	1.85
97614	19 50 22.59	−14 56 12.1	8.18	1 H	297.594 122 70	−14.936 692 24	A	4.39	−5.25	−14.81	1.44	0.80	1.49	1.55	0.79	+44	−	2	−	1	+17	+23	+15	+22	−	5	+27	+60			0	0.49
97615	19 50 23.89	−58 39 33.4	9.11	H	297.599 544 31	−58.659 269 04		8.91	17.86	12.50	0.82	0.74	1.21	0.97	1.07	+26	−11	−	6	+44	+	1	+	8	+11	+	1	+	6	+51		0	1.25
97616	19 50 24.98	+14 30 49.9	7.95	2 H	297.604 087 81	+14.513 871 42		9.49	18.58	−3.80	0.64	0.50	0.95	0.84	0.52	−	6	−	6	−	4	+12	−10	+25	−15	−24	+	7	−25		0	0.03
97617	19 50 25.50	+43 39 40.1	7.15	H	297.606 267 65	+43.661 136 24		5.14	23.25	25.16	0.48	0.53	0.59	0.52	0.60	−	1	−12	+	3	+13	+15	−16	+17	+	7	−	5	+	8		1	0.36
97618	19 50 26.63	−13 55 25.9	7.38	1 G	297.610 974 62	−13.923 874 02		1.82	6.47	−11.33	0.92	0.47	1.00	1.15	0.49	+43	−23	−	3	+17	+32	+12	+22	−	1	+23	+59			0	0.53
97619	19 50 26.65	+30 45 58.1	7.36	H	297.611 022 62	+30.766 136 79		3.00	9.44	10.72	0.43	0.53	0.71	0.51	0.52	−	6	−10	+	3	+	8	+	0	−14	+	1	−27	+	9	−	3	0	−1.17
97620	19 50 27.30	−15 25 22.2	8.91	H	297.613 747 42	−15.422 835 29		2.91	3.57	−9.20	1.18	0.64	1.34	1.31	0.71	+21	+	9	−	7	−	7	+28	+27	+29	−	7	+40	+52			0	0.68
97621	19 50 28.42	−70 11 46.1	9.00	H	297.618 430 01	−70.196 148 09		7.15	−11.91	31.70	0.66	0.92	1.29	0.73	0.95	−29	−10	−26	+10	+18	−16	+17	−14	+	1	−17					0	−0.77
97622	19 50 28.50	+34 23 07.3	8.51	H	297.618 731 89	+34.385 354 80		5.18	3.81	1.90	0.56	0.59	0.81	0.61	0.61	−13	−19	+	5	+16	−	1	−	9	−	2	−	1	+13	−	5	0	1.24
97623	19 50 30.60	−75 10 52.1	10.19	G	297.627 504 17	−75.181 125 08		10.06	59.17	−200.13	0.95	0.97	1.54	1.09	1.07	−	7	−22	−12	+	9	+	3	−	8	+	7	−14	−17	−	1	0	−0.23
97624	19 50 31.33	+30 12 17.2	9.63	H	297.630 531 31	+30.204 778 41		4.24	−1.01	−3.56	0.76	1.05	1.34	1.02	0.97	−	8	−	6	+20	+16	+	0	+	2	+	3	−27	+	2	+	2	1	−0.91
97625	19 50 31.52	−52 14 05.8	8.72	G	297.631 343 37	−52.234 936 02		2.63	9.45	0.01	0.90	0.51	1.28	1.24	1.01	−14	−27	+10	−27	+29	−	3	+40	−32	−	8	−	1			1	0.16
97626	19 50 32.17	+17 16 07.6	7.58	H	297.634 023 65	+17.268 773 97		1.53	11.15	2.49	0.56	0.44	0.84	0.65	0.42	−15	−	8	−	1	−12	−	3	+12	−	4	−40	+	8	−28		2	−0.09
97627	19 50 32.69	−72 52 31.4	8.25	H	297.636 228 76	−72.875 385 40		0.98	12.73	−6.36	0.55	0.62	0.93	0.59	0.73	−12	−24	−	3	+13	+	4	−	3	+	6	−	8	−16	−20		0	−0.46
97628	19 50 33.24	+20 34 38.9	8.21	H	297.638 511 57	+20.577 464 55		2.55	4.67	2.74	0.69	0.55	1.00	0.75	0.57	−17	−16	+	6	−	8	−	6	−15	−11	−24	+27	−38		0	−0.80
97629	19 50 33.94	+32 54 50.9	7.91	3 H	297.641 409 92	+32.914 152 01	*	9.43	−23.57	−38.49	0.77	1.06	1.36	0.79	0.94	−37	−35	+43	+12	−	9	−38	+	5	−29	+13	−25			10	3.25
97630	19 50 33.99	+38 43 19.8	5.18	2 H	297.641 610 19	+38.722 162 11		5.08	12.65	105.85	0.43	0.45	0.54	0.49	0.46	+	3	−	6	−	8	−	1	−	8	−	4	−	6	−24	+20	+18	1	0.51
97631	19 50 35.14	−32 43 44.9	10.14	H	297.646 424 15	−32.729 135 87	A	4.75	5.38	−25.39	2.75	1.57	2.56	3.47	2.15	+14	−	5	−	1	−	5	+16	+	8	+17	−	6	+	3	−12	2	−0.14
97632	H 19 50 35.80	−53 39 54.6	9.04	G	297.649 146 26	−53.665 152 83	A	3.95	6.69	1.64	1.64	1.07	2.02	2.41	1.74	+	4	−	8	+	9	−12	+19	+	3	+20	−26	+	7	+11		3	2.13
97633	19 50 35.82	−73 47 00.7	9.25	H	297.649 258 00	−73.783 540 10		14.13	79.04	−61.05	0.74	0.80	1.12	0.77	0.93	−17	−12	+	8	+	9	−	7	−	2	−	8	+	9	+	9	−25	1	1.76
97634	19 50 37.33	+40 35 59.2	5.68	2 H	297.655 538 24	+40.599 778 00		1.27	−2.19	−7.67	0.39	0.43	0.49	0.41	0.43	−16	−	3	−	3	+	1	+10	−	5	+10	−13	+	8	−12		1	−1.12
97635	19 50 37.73	+52 59 17.4	5.03	H	297.657 223 88	+52.988 166 57		16.96	−10.28	−67.99	0.41	0.42	0.45	0.46	0.47	−13	−	3	+	1	−14	+19	−	8	+18	+	1	+	2	−	3	1	0.00
97636	19 50 38.76	+53 54 40.4	7.72	H	297.661 499 72	+53.911 222 60		4.11	5.11	13.78	0.57	0.52	0.59	0.69	0.60	−	4	−	1	+	5	+16	+	8	−	7	+	7	+13	−	1	−	4	4	−0.35
97637	19 50 39.65	−25 18 19.2	8.00	H	297.665 198 01	−25.305 335 83		3.58	0.85	0.19	0.93	0.59	1.01	1.10	0.85	+32	−35	−14	+21	+	7	−10	+	5	+10	−	2	+10			0	−0.10
97638	19 50 39.87	+68 36 03.8	8.52	G	297.666 135 23	+68.601 047 22		3.50	6.82	17.72	0.61	0.59	0.64	0.74	0.72	+	0	−16	+15	+	2	+	7	+	2	+	5	+12	+10	+11		0	1.09
97639	H 19 50 40.32	−41 51 34.4	7.65	H	297.668 007 40	−41.859 544 56	A	5.62	30.58	−13.96	1.49	0.72	1.31	1.93	0.92	+	4	−38	+	5	+	4	+	9	−10	+18	−10	−12	+16		1	0.15
97640	19 50 40.70	+34 56 58.5	8.00	H	297.669 603 20	+34.949 570 72		35.46	318.49	201.33	0.54	0.58	0.76	0.58	0.60	−20	−	9	+	9	+25	+	2	−	8	+	4	−	1	+	2	−14	0	−1.72
97641	19 50 41.55	+22 06 46.5	7.33	H	297.673 131 28	+22.112 922 60		5.00	−6.58	−16.67	0.57	0.53	0.83	0.61	0.51	−	6	−	5	+	4	−22	+	1	+14	−	1	−39	+	3	−12	1	−0.24
97642	H 19 50 41.62	−26 10 16.1	9.05	H	297.673 410 91	−26.171 143 26	A	10.04	−0.30	−53.60	5.90	3.67	3.15	3.12	2.57	+66	−	7	−	1	−	2	−	2	−	2	−	1	−	6	−11	+36	1	−0.02
97643	19 50 42.39	−63 57 08.9	8.04	G	297.676 611 11	−63.952 481 76		5.24	−1.87	9.23	0.75	0.66	1.08	0.81	0.76	−	5	−26	−18	+	6	−18	+	4	−24	−	8	+20	−23		0	0.31
97644	19 50 43.48	−71 46 17.2	10.74	3 H	297.681 174 76	−71.771 444 02	*	−0.54	0.46	−5.44	0.95	1.52	1.43	1.03	1.22	−	18	−	8	+13	−15	+17	+	6	+	3	−15	−	8	−32		0	0.63
97645	19 50 44.12	−36 28 11.7	8.86	H	297.683 814 27	−36.469 906 30		8.13	−51.82	−38.57	1.47	0.71	1.60	2.09	1.23	+31	−17	+24	+13	−10	+	8	−20	−52	−37	+	8					0	−0.53
97646	H 19 50 44.78	−59 11 37.1	5.41	G	297.686 570 02	−59.193 637 15	A	12.55	23.09	−12.21	0.60	0.52	0.71	0.55	0.59	+35	−	8	−	6	+40	−	8	+	5	−	1	−	4	+	8	+60	1	0.15
97647	19 50 45.08	+20 12 41.0	6.71	H	297.687 832 27	+20.211 398 70		6.16	−11.13	11.59	0.52	0.41	0.76	0.55	0.39	−16	−23	−	4	−11	−	6	+	7	−	9	−30	+15	−28		1	−0.06
97648	19 50 46.42	−27 21 00.6	8.18	H	297.693 411 06	−27.350 180 47		2.82	7.46	−12.72	1.01	0.65	1.23	1.27	0.96	+35	−29	−29	+	5	+	0	+37	+18	+20	−20	+11			2	−0.83
97649	19 50 46.68	+08 52 02.6	0.76	1 G	297.694 508 60	+08.867 384 91		194.44	536.82	385.54	0.60	0.53	0.94	0.73	0.68	+20	−24	−33	+27	−14	+36	−	4	+41	+	5	+	4			0	0.36
97650	19 50 46.80	−10 45 48.9	5.38	H	297.695 012 55	−10.763 589 02		37.86	−32.35	31.84	0.90	0.73	0.97	1.11	0.93	+26	−	5	−21	+28	+28	+35	+41	+55	−14	+23					0	0.53
97651	19 50 46.87	+37 49 34.7	6.13	2 H	297.695 289 37	+37.826 313 82		0.96	4.84	4.40	0.44	0.43	0.57	0.47	0.42	−	1	−18	+	7	+	2	+	3	+	6	+	0	−13	+16	+	6	0	0.51
97652	19 50 47.23	+33 39 50.4	9.87	G	297.696 786 59	+33.663 989 59		0.82	−4.44	−4.19	0.87	0.96	1.27	0.96	0.94	−	2	−	2	+	6	+19	+	8	−	2	+10	−14	+	3	+	9	0	−0.88
97653	19 50 47.89	+57 44 46.3	8.00	H	297.699 551 13	+57.746 192 05		3.67	−0.84	−17.48	0.55	0.56	0.60	0.63	0.64	+	4	−	7	+	2	+15	−	8	−15	−	4	−10	+	5	+20		0	0.20
97654	19 50 47.90	+50 21 20.1	7.94	G	297.699 580 26	+50.355 584 12		9.91	21.22	−14.95	0.56	0.60	0.65	0.62	0.65	−18	−18	+12	−	3	+	9	+	2	+	7	+12	−11	+	2		3	0.96
97655	19 50 48.65	−04 41 38.7	6.75	1 H	297.702 725 98	−04.694 076 70		4.82	10.94	−3.91	0.87	0.63	0.98	1.06	0.81	+	2	−26	−27	−17	+	0	+16	+	8	+	1	−11	−13			0	−1.07
97656	19 50 49.62	−57 13 50.0	8.37	1 H	297.706 751 19	−57.230 566 74		2.76	29.30	−37.49	0.81	0.64	1.10	1.23	1.08	+	2	−17	+11	−	4	+	9	+	6	+10	−	9	+10	+29		0	−0.60
97657	19 50 50.14	+48 04 49.1	9.46	H	297.708 902 21	+48.080 295 51		27.50	126.44	230.98	0.86	0.80	0.96	0.99	0.87	−	2	−12	−	7	+	3	+13	−16	+11	+	6	+	0	+12		0	2.28
97658	19 50 52.60	−87 50 42.8	9.82	H	297.719 166 57	−87.845 232 35		2.94	−2.68	−34.09	0.86	0.89	1.04	1.01	0.90	−21	+	7	−23	−	6	−	9	+	1	−	4	+15	−	2	−36		2	0.78
97659	19 50 52.97	+20 02 22.1	7.18	G	297.720 695 95	+20.039 463 24		4.56	24.01	8.33	0.51	0.43	0.79	0.56	0.43	−15	−24	−	6	−	5	−	8	+	7	−12	−29	+15	−32		0	1.42
97660	19 50 53.07	−46 21 37.9	7.50	G	297.721 116 74	−46.360 516 80		14.08	6.51	−34.36	1.00	0.58	1.08	1.55	0.84	−	2	−10	−32	+36	+	9	−10	−	1	−27	+23	−15			0	−0.98
97661	H 19 50 53.54	−64 20 56.2	8.28	H	297.723 101 59	−64.348 952 70	A	9.45	29.84	−107.70	1.32	1.03	1.44	1.28	1.06	−30	−16	−16	−	9	−15	−	1	−13	+	4	+11	−38			1	0.35
97662	19 50 54.79	+00 50 39.7	7.64	H	297.728 297 18	+00.844 350 05		4.39	−7.98	−1.26	0.96	0.78	1.14	1.47	1.02	+11	−13	−41	+19	+	7	−	2	+	6	+17	+17	−27			0	1.56
97663	19 50 54.90	+24 37 37.2	7.45	H	297.728 750 73	+24.627 006 55		4.34	3.37	−7.57	0.54	0.63	0.98	0.66	0.62	−10	−25	+16	+	5	−	5	−	2	−	6	−27	+13	−	5		0	0.28
97664	19 50 55.17	+06 49 25.0	9.19	2 H	297.729 882 63	+06.823 623 16		5.77	8.59	−11.51	0.93	0.94	1.42	1.04	1.18	+55	−13	−26	+32	+	9	+23	+15	+53	−19	+37					0	−0.10
97665	19 50 55.28	+49 42 01.0	7.26	H	297.730 352 07	+49.700 269 44		4.82	−2.58	1.41	0.57	0.54	0.63	0.66	0.58	−	2	−15	+17	+20	+13	−12	+15	+23	−10	+	7					0	0.73
97666	19 50 55.34	−46 41 33.9	10.51	H	297.730 578 65	−46.692 742 64		3.03	19.89	2.83	1.87	1.10	2.03	2.51	1.47	+18	−30	−21	+35	+11	−	7	+	3	−21	+13	+	7			0	1.78
97667	19 50 55.44	−39 35 32.3	8.56	H	297.731 020 59	−39.592 309 75		12.38	27.91	−131.21	1.16	0.67	1.30	1.89	1.00	+15	+	7	+	6	−	1	−	3	−14	−17	−38	−13	−22		0	0.04
97668	19 50 55.73	+03 56 49.3	9.55	G	297.732 207 10	+03.947 014 38		24.46	219.36	−101.25	1.69	1.50	1.90	2.68	2.00	+20	−	7	−24	+30	+	2	+25	+13	+47	−15	−18					0	1.48
97669	H 19 50 56.16	+68 52 23.5	9.78	H	297.733 989 98	+68.873 207 68	*	−2.82	−3.69	−5.51	5.92	3.42	1.61	1.95	1.81	−64	−	5	+	7	−	3	+	8	+	3	−	3	+	9	+	8	5	1.65
97670	19 50 58.92	+16 51 28.0	7.27	2 H	297.745 495 93	+16.857 770 85		1.73	−1.10	−13.20	0.52	0.40	0.79	0.61	0.37	−11	−11	+	9	−21	−	5	+12	−	6	−46	+	0	−27		0	−0.03
97671	19 50 59.51	+48 51 36.4	9.38	H	297.747 961 81	+48.860 123 89		1.91	−9.45	−19.53	0.75	0.70	0.83	0.87	0.77	+	2	−21	−	2	−	6	+15	−13	+13	+	5	−	1	+11		0	0.35
97672	19 50 59.98	+05 05 41.8	9.34	H	297.749 911 33	+05.094 948 22		−0.49	−33.61	−22.22	1.29	1.02	1.49	1.58	1.30	+12	−35	−18	+10	+	8	+12	+15	+26	−15	+	4					0	1.88
97673	19 51 00.46	+23 05 53.2	11.25	H	297.751 908 07	+23.098 110 82		7.16	0.01	−9.24	2.06	1.66	2.73	2.46	1.76	+	5	+	1	+15	−19	−25	−13	−21	−20	+	6	−	2			3	1.19
97674	19 51 01.09	−65 36 16.9	6.04	H	297.754 560 49	−65.604 702 81		16.67	99.70	−158.12	0.51	0.46	0.69	0.54	0.52	−	5	−15	−17	+	5	−15	+	7	−19	−10	+15	−24			0	−1.24
*97675	19 51 01.50	+10 24 57.8	5.12	H	297.756 250 98	+10.416 053 90		51.57	240.09	−134.51	0.53	0.41	0.77	0.71	0.61	−	2	−	5	−23	−	2	−25	+32	−23	+	6	−	2	+	4	0	0.51
*97676	19 51 01.44	−02 51 38.7	8.43	H	297.755 999 70	−02.860 754 91		18.18	164.98	−91.18	1.22	1.18	1.27	1.45	1.29	+39	−30	−24	−	8	+19	+16	+26	+36	−	5	+22					0	0.52
97677	19 51 03.28	+82 47 27.7	10.07	H	297.763 666 06	+82.791 035 98		6.21	−12.52	−20.49	0.77	0.79	0.86	0.91	0.95	+	0	−13	+14	−	5	+	5	+	1	+	6	−	4	−	5	+12	0	−1.26
97678	19 51 03.93	+78 37 27.3	7.64	2 H	297.766 358 68	+78.624 254 37		1.43	−3.38	−9.02	0.52	0.49	0.55	0.59	0.62	+	1	−19	+12	−	7	+	3	−	7	+	3	+	8	−	7	+19	0	1.27
97679	19 51 04.09	+22 36 36.3	4.90	2 H	297.767 056 81	+22.610 086 76		5.27	23.35	−16.65	0.48	0.42	0.69	0.52	0.40	−	6	−14	+	6	−12	−	8	−	3	−11	−33	+16	−17		0	1.25
97680	19 51 04.70	−41 01 23.6	10.24	G	297.769 588 89	−41.023 221 28		1.86	−5.38	−4.31	1.82	0.84	1.75	2.49	1.23	−	7	−30	+	3	+32	+	1	+15	+	0	−16	−18	−21		0	0.26
97681	H 19 51 04.74	+27 43 00.9	7.76	1 H	297.769 743 81	+27.716 917 81	*	2.72	0.06	−4.44	0.39	0.56	0.79	0.46	0.55	−21	+	4	−	5	+18	−	3	−11	+	0	−13	+14	−14		0	0.76
97682	19 51 06.00	+39 31 39.8	8.14	H	297.774 996 86	+39.527 715 49		13.77	14.87	−36.40	0.56	0.62	0.73	0.75	0.65	−	6	−11	+10	+	3	+	7	+	2	+	7	−12	+	8	+11	0	2.55
97683	H 19 51 09.82	−36 53 47.5	8.11	H	297.790 905 72	−36.896 518 57	A	9.30	10.26	−16.25	2.25	1.04	2.33	3.39	1.97	+29	−41	+15	+	2	−17	−27	−	7	−33	−21	+42			1	0.62
97684	19 51 10.22	−27 28 19.0	7.33	2 H	297.792 603 23	−27.471 948 67		5.07	19.42	−5.11	0.84	0.61	1.05	1.10	0.82	+38	−27	−34	+	0	−15	+42	+	0	+	4	−10	+17			5	1.22
97685	19 51 10.39	−35 11 17.4	9.65	H	297.793 298 55	−35.188 154 55		6.39	51.95	−161.32	1.51	1.02	1.77	2.13	1.87	+34	−15	+16	−12	−18	−21	−	4	−36	−36	+57			6	1.14
97686	19 51 10.44	+68 14 24.7	8.17	H	297.793 518 67	+68.240 208 25		2.97	1.35	−0.21	0.62	0.58	0.63	0.79	0.68	+	6	−11	+	6	+	1	+	4	+	2	+	3	+	0	+	3	+16	0	0.54
97687	19 51 11.10	−02 27 39.2	6.12	H	297.796 259 17	−02.460 889 46		5.72	−7.72	−41.26	0.88	0.67	0.93	1.04	0.92	+13	−25	−18	+	0	+19	+18	+18	+32	+	9	+23					0	0.91
97688	19 51 12.09	−40 12 17.7	10.06	H	297.800 369 89	−40.204 918 65		3.74	−6.18	−14.69	1.69	0.80	1.80	2.33	1.38	+	9	−18	+16	−	2	+	5	−17	+	9	−23	−	2	+	4	0	−0.71
97689	19 51 13.70	+65 32 49.1	7.77	H	297.807 066 32	+65.546 970 00		4.29	−22.66	−27.93	0.52	0.64	0.62	0.44	0.75	+	4	−	1	+15	−21	+35	+	1	+31	+22	+	0	+38		0	1.59
97690	19 51 14.13	−72 47 42.2	7.31	H	297.808 859 46	−72.795 049 67		10.84	19.51	−53.88	0.75	0.85	1.21	0.81	0.95	−10	−16	−10	−	2	+11	−10	+	9	−23	+	0	−21			0		
97691	19 51 14.29	−38 17 30.6	9.06	H	297.809 545 64	−38.291 840 60		4.96	13.74	−13.18	1.35	0.86	1.55	1.70	1.30	+31	−39	−14	−	8	−	9	+22	−21	−53	+19	+15					0	−0.69
97692	19 51 14.50	−24 53 54.9	7.52	H	297.810 400 20	−24.898 576 77		3.27	3.27	8.52	0.88	0.56	0.95	0.96	0.74	+29	−29	−10	+10	+13	−	2	+16	+	2	−	8	+31					0	−1.65
97693	19 51 14.56	−44 17 24.9	10.87	G	297.810 681 63	−44.290 254 06		23.36	132.67	−286.98	2.35	1.22	2.43	3.48	1.91	+	0	−24	+20	−12	−	6	−	1	−	2	−40	−15	+	6		0	0.61
97694	19 51 15.25	−55 51 09.4	8.98	H	297.813 558 15	−55.852 615 58		2.34	24.27	6.97	0.91	0.

No.	Tycho Magnitudes					Colour Indices					Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
97601	10.174	0.023	9.066	0.015		0.955	0.021	T	0.94	0.01	L	9.1566	0.0018	0.022	170		9.12	9.20					1							
97602	7.806	0.009	7.828	0.010		−0.026	0.002	G	0.00	0.00	H	7.8343	0.0015	0.010	82		7.82	7.85					1							S
97603	8.331	0.008	8.343	0.010		−0.006	0.012	T	0.01	0.01	L	8.3478	0.0015	0.016	146		8.32	8.37		C			1 S							
97604	9.585	0.019	9.064	0.018		0.498	0.020	T	0.57	0.02	L	9.1048	0.0020	0.019	111		9.08	9.15		C			1							
97605	10.512	0.032	9.525	0.023		0.852	0.031	T	0.87	0.02	L	9.5635	0.0038	0.037	118		9.52	9.67		P 1			1 S							
97606	9.869	0.021	9.170	0.018		0.632	0.021	T	0.70	0.02	L	9.2598	0.0019	0.021	121		9.23	9.29		C			1							
97607	6.375	0.003	6.475	0.004		−0.086	0.004	T	−0.07	0.01	L	6.4661	0.0015	0.017	156		6.44	6.49		U 2 C			1							S
97608	8.881	0.012	8.571	0.013		0.294	0.017	T	0.34	0.02	L	8.6372	0.0019	0.016	129		8.61	8.66					1							
97609	6.990	0.005	7.071	0.007		−0.070	0.015	G	−0.05	0.01	H	7.0624	0.0010	0.010	119		7.04	7.08		C			1							S
97610	8.982	0.014	8.688	0.015		0.280	0.019	T	0.32	0.02	L	8.7204	0.0020	0.017	96		8.70	8.75					1 S							
97611	6.031	0.003	6.185	0.004		−0.135	0.004	G	−0.13	0.01	H	6.1683	0.0009	0.007	115		6.16	6.18					1							S
97612	7.303	0.006	6.754	0.005		0.514	0.007	T	0.59	0.01	L	6.8128	0.0008	0.008	112		6.80	6.83		C			1							S
97613	8.821	0.013	7.579	0.009		1.060	0.015	G	1.03	0.01	H	7.6302	0.0010	0.009	96		7.61	7.65		C			1 G							S
97614	8.552	0.009	8.218	0.010	A	0.322	0.014	T	0.37	0.02	L	8.2571	0.0061	0.021	134	A	8.23	8.29		U	19504−1456	H 1	2 C A	AB	333	13.961	0.012	2.83	0.08	S
97615	10.092	0.023	9.166	0.017		0.805	0.022	T	0.83	0.02	L	9.2502	0.0018	0.020	144		9.22	9.28					1							
97616	8.303	0.008	7.987	0.011		0.300	0.013	T	0.34	0.02	L	8.0302	0.0021	0.024	160		7.99	8.06		U 2			1							S
97617	8.348	0.010	7.240	0.008		0.955	0.010	T	0.94	0.01	L	7.3133	0.0010	0.008	102		7.30	7.33		C			1							S
97618	7.397	0.005	7.386	0.007		0.017	0.002	G	0.04	0.00	H	7.3942	0.0010	0.010	140		7.38	7.43		U 2			1							S
97619	7.358	0.005	7.359	0.006		0.004	0.007	T	0.02	0.01	L	7.3748	0.0011	0.012	174		7.36	7.40		C			1							S
97620	9.028	0.012	8.944	0.015		0.083	0.018	T	0.10	0.02	L	8.9436	0.0019	0.015	115		8.91	8.97					1							S
97621	9.799	0.016	9.094	0.014		0.636	0.016	T	0.70	0.01	L	9.1333	0.0018	0.022	192		9.10	9.17					1							
97622	8.523	0.009	8.518	0.012		0.009	0.014	T	0.03	0.01	L	8.5201	0.0015	0.013	135		8.50	8.55		C			1							
97623	10.981	0.042	10.245	0.034		0.685	0.003	G	0.74	0.00	H	10.3341	0.0033	0.032	149		10.27	10.40		C			1							G
97624	9.796	0.021	9.643	0.027		0.147	0.032	T	0.16	0.03	L	9.6808	0.0029	0.032	155		9.63	9.74					1							G
97625	10.631	0.025	8.875	0.010		1.459	0.020	G	1.48	0.02	A	8.8675	0.0012	0.015	192		8.84	8.89		C			1							
97626	7.644	0.005	7.595	0.007		0.050	0.008	T	0.06	0.01	L	7.6044	0.0011	0.015	194		7.58	7.63					1							S
97627	10.401	0.027	8.453	0.010		1.616	0.023	T	1.64	0.02	L	8.3663	0.0020	0.021	193		8.34	8.40					1							
97628	8.211	0.007	8.198	0.009		0.017	0.011	T	0.04	0.01	L	8.2199	0.0016	0.018	142		8.19	8.25					1							
97629	8.789	0.014	6.960	0.006		2.100	0.510	G	6.13	0.68	O	6.1696	0.1686	1.792	101		5.13	10.32	402.30	P 1 B	19505+3254	I 1	1 V							G P
97630	7.346	0.008	5.381	0.006		1.665	0.008	T	2.07	0.04	O	5.2536	0.0035	0.041	110		5.18	5.31		U 2 C	19506+3843	I 1	1 S							S
97631	10.845	0.051	10.257	0.050	A	0.549	0.063	T	0.62	0.06	L	10.2582	0.0330	0.039	94	A	10.19	10.31			19506−3244	I 1	2 C D	AB	161	19.564	0.051	2.41	0.28	G D
97632	9.433	0.013	9.173	0.015	A	0.349	0.004	G	0.41	0.01	R *	9.1066	0.0020	0.026	193	*	9.07	9.15		D	19506−5340	I 1	2 C A	AB	284	8.316	0.017	2.33	0.06	
97633	10.080	0.019	9.335	0.016		0.667	0.019	T	0.73	0.02	L	9.3897	0.0024	0.024	161		9.35	9.44					1							
97634	5.605	0.004	5.674	0.004		−0.058	0.005	T	−0.04	0.01	L	5.6647	0.0020	0.031	127		5.64	5.74		P 1 A			1							S
97635	6.721	0.004	5.166	0.003		1.286	0.001	G	1.30	0.06	F	5.1838	0.0005	0.005	133		5.18	5.19		C			1							S
97636	7.866	0.009	7.725	0.011		0.136	0.013	T	0.15	0.01	L	7.7653	0.0015	0.010	104		7.75	7.78					1							S
97637	9.297	0.018	8.126	0.012		1.004	0.017	T	0.98	0.01	L	8.1681	0.0017	0.013	85		8.15	8.19		C			1							
97638	8.883	0.012	8.509	0.012		0.327	0.015	G	0.38	0.02	H	8.5816	0.0014	0.014	106		8.56	8.61		C			1							
97639	7.887	0.009	7.652	0.011	*	0.219	0.014	T	0.24	0.02	L *	7.7178	0.0013	0.011	93	*	7.70	7.74		D	19507−4152	I 1	2 C A	AB	337	5.216	0.009	2.53	0.05	S
97640	8.983	0.011	8.081	0.009		0.787	0.011	T	0.82	0.01	L	8.1394	0.0015	0.015	144		8.12	8.17		C			1							
97641	8.358	0.009	7.433	0.007		0.818	0.008	T	0.84	0.01	L	7.4860	0.0011	0.011	133		7.47	7.50		C			1							S
97642	10.155	0.032	9.299	0.025	*	0.751	0.031	T	0.79	0.02	L *	9.1864	0.0021	0.019	81	*	9.16	9.22		D	19507−2610	I 1	2 C A	AB	37	1.145	0.014	0.21	0.03	
97643	9.390	0.014	8.160	0.009		1.050	0.013	T	1.02	0.01	L	8.2062	0.0013	0.017	143		8.17	8.24					1							
97644						1.500	0.510	G	2.91	1.20	Q	10.6766	0.2034	1.596	154		7.70	12.09	245.30	P 1 B			1 V							G P
97645	9.388	0.017	8.928	0.017		0.447	0.019	T	0.52	0.02	L	8.9571	0.0016	0.015	117		8.93	8.98		C			1							
97646	5.538	0.002	5.443	0.003	*	0.082	0.004	G	0.09	0.00	H *	5.4503	0.0005	0.005	154	*	5.44	5.46		D	19507−5912	I 1	2 C A	AB	148	0.748	0.002	1.63	0.01	S
97647	6.905	0.003	6.742	0.004		0.156	0.005	T	0.17	0.01	L	6.7683	0.0012	0.010	146		6.75	6.78					1							S
97648	9.526	0.022	8.310	0.014		1.039	0.020	T	1.01	0.02	L	8.3513	0.0015	0.014	84		8.33	8.37					1							
97649	1.248	0.012	0.955	0.010		0.221	0.010	G	0.27	0.02	A	0.8273	0.0011	0.006	41		0.82	0.87	7.94	P 1 A	19508+0852	I 1	1							S P
97650	5.835	0.004	5.424	0.004		0.402	0.005	T	0.47	0.01	L	5.4717	0.0008	0.005	52		5.46	5.48			19508−1046	I 1	1							S
97651	8.290	0.018	6.373	0.015		1.626	0.019	T	2.63	0.06	O	6.1217	0.0168	0.167	105		6.00	6.40		U 2 C			1 S							S
97652	10.478	0.035	9.961	0.037		0.550	0.015	G	0.62	0.01	H	9.9686	0.0029	0.031	130		9.91	10.03					1							G
97653	8.209	0.009	8.029	0.010		0.172	0.013	T	0.19	0.01	L	8.0579	0.0015	0.013	102		8.04	8.09					1							S
97654	8.392	0.010	7.987	0.011		0.383	0.014	T	0.45	0.01	L	8.0396	0.0012	0.010	104		8.02	8.06					1							S
97655	7.120	0.008	6.776	0.008		0.326	0.011	T	0.38	0.01	L	6.8335	0.0014	0.011	54		6.81	6.85		M			1							S
97656	9.954	0.021	8.493	0.011		1.231	0.019	T	1.19	0.02	L	8.5346	0.0023	0.022	132		8.50	8.57		U			1							
97657	10.876	0.058	9.654	0.031		1.044	0.051	T	1.01	0.04	L	9.6169	0.0036	0.032	101		9.58	9.67		R			1							G
97658	10.385	0.026	9.842	0.026		0.516	0.027	T	0.59	0.03	L	9.9313	0.0025	0.029	140		9.87	9.98		C			1							
97659	7.444	0.005	7.203	0.006		0.214	0.005	G	0.24	0.01	H	7.2388	0.0009	0.010	152		7.22	7.26		C			1							S
97660	7.971	0.011	7.536	0.011		0.418	0.018	G	0.48	0.02	H	7.5998	0.0014	0.010	87		7.58	7.62					1							S
97661	8.865	0.010	8.360	0.010	A	0.400	0.495	G	0.54	0.02	L *	8.3806	0.0021	0.019	121	*	8.35	8.41		C	19509−6421	I 1	2 C B	AB	313	1.282	0.038	3.20	0.15	S
97662	7.798	0.009	7.656	0.015		0.137	0.016	T	0.15	0.02	L	7.6860	0.0014	0.008	44		7.66	7.71					1							S
97663	7.398	0.006	7.440	0.007		−0.034	0.008	T	−0.01	0.01	L	7.4424	0.0011	0.014	120		7.42	7.47					1							S
97664	9.636	0.016	9.239	0.017		0.376	0.022	T	0.44	0.02	L	9.2833	0.0031	0.025	134		9.22	9.32		U 2			1							P
97665	8.549	0.011	7.367	0.007		1.013	0.010	T	0.99	0.01	L	7.4250	0.0009	0.010	101		7.41	7.44		C			1							S
97666	11.104	0.079	10.478	0.076		0.469	0.071	G	0.54	0.07	R	10.6112	0.0055	0.037	82		10.54	10.66					1							G
97667	9.278	0.019	8.614	0.017		0.605	0.019	T	0.67	0.02	L	8.6929	0.0023	0.017	102		8.66	8.72					1							
97668	10.627	0.076	9.695	0.056		0.930	0.015	G	0.98	0.02	I	9.6785	0.0031	0.015	37		9.64	9.70					1							G
97669	11.813	0.109	9.994	0.036	*	1.206	0.197	G	1.17	0.19	R *	9.9398	0.0036	0.030	106	*	9.88	9.97			19509+6852	H 1	2 C C	AB	25	0.172	0.075	1.17	1.31	G
97670	7.198	0.005	7.267	0.005		−0.058	0.006	T	−0.04	0.01	L	7.2612	0.0010	0.014	231		7.24	7.33		U 2 C			1							S
97671	11.012	0.057	9.509	0.026		1.264	0.049	T	1.22	0.05	L	9.5441	0.0019	0.020	108		9.51	9.57		C			1							
97672	9.460	0.026	9.345	0.033		0.111	0.039	T	0.12	0.04	L	9.3805	0.0037	0.018	43		9.34	9.42		C			1							
97673	11.480	0.156	11.246	0.226		0.420	0.015	G	0.49	0.02	H	11.3436	0.0061	0.058	97		11.26	11.44					1							D
97674	6.399	0.004	6.065	0.004		0.317	0.005	T	0.37	0.01	L	6.1158	0.0008	0.009	129		6.10	6.13					1							S P
97675	5.788	0.003	5.183	0.002		0.563	0.003	T	0.64	0.00	L	5.2398	0.0006	0.005	137		5.23	5.25			19510+1025	I 1	1							S
97676	9.314	0.025	8.535	0.021		0.692	0.025	T	0.75	0.02	L	8.5676	0.0026	0.012	44		8.55	8.58		C			1 G							
97677	10.575	0.037	10.060	0.036		0.484	0.047	T	0.56	0.05	L	10.1787	0.0028	0.023	110		10.13	10.21		C			1							G
97678	9.954	0.022	7.905	0.009		1.696	0.019	T	1.72	0.02	L	7.7460	0.0047	0.032	118		7.70	7.80	21.74	P 1 A			1 S							
97679	4.710	0.003	4.878	0.004		−0.153	0.001	G	−0.12	0.03	C	4.8545	0.0043	0.039	111		4.78	4.89		U 2 C			1							S
97680	10.034	0.025	10.173	0.041		−0.146	0.014	G	−0.14	0.02	H	10.2019	0.0035	0.030	100		10.14	10.25					1							G
97681	7.857	0.005	7.769	0.007	*	0.079	0.008	T	0.09	0.01	L *	7.7962	0.0023	0.028	218	*	7.76	7.84	0.41	P 1 A	19511+2743	H 1	2 C S C	AB	79	0.126	0.046	2.50	1.48	S
97682	8.705	0.011	8.201	0.010		0.474	0.013	T	0.55	0.01	L	8.2434	0.0013	0.013	115		8.22	8.26		C			1							
97683	8.638	0.014	8.111	0.013	*	0.503	0.014	T	0.58	0.01	L *	8.2249	0.0017	0.013	114	*	8.21	8.25		D	19512−3654	I 1	2 C A	AB	357	7.689	0.003	1.24	0.02	S
97684	7.276	0.006	7.313	0.007		−0.043	0.002	G	−0.02	0.00	H	7.3243	0.0032	0.039	77		7.24	7.35	4.72	P 1 A			1							S P
97685	10.526	0.043	9.658	0.031		0.760	0.041	T	0.80	0.03	L	9.7896	0.0036	0.031	100		9.74	9.84					1							
97686	9.411	0.015	8.279	0.010		0.974	0.014	T	0.96	0.01	L	8.3385	0.0013	0.013	107		8.32	8.36		C			1							S
97687	8.172	0.014	6.305	0.006		1.573	0.010	G	1.58	0.09	H	6.2439	0.0010	0.006	46		6.23	6.25		C			1							S
97688	10.526	0.053	10.111	0.059		0.406	0.065	T	0.47	0.07	L	10.1546	0.0025	0.024	106		10.10	10.19		C			1							G
97689	9.000	0.015	7.878	0.010		0.966	0.014	T	0.95	0.01	L	7.9371	0.0017	0.014	100		7.91	7.96					1							S
97690	7.854	0.006	7.357	0.005		0.463	0.003	G	0.55	0.02	A	7.4178	0.0009	0.012	196		7.40	7.44			19512−7248	I 1	1 X							S
97691	10.954	0.049	9.218	0.018		1.448	0.041	T	1.45	0.07	L	9.2015	0.0025	0.022	124		9.17	9.24		C			1 G							
97692	9.037	0.015	7.662	0.009		1.164	0.014	T	1.13	0.01	L	7.6907	0.0012	0.010	85		7.67	7.71					1							S
97693						1.299	0.012	G	1.49	0.02	I	10.9808	0.0042	0.032	81		10.94	11.03		C			1							G
97694	10.281	0.026	9.082	0.016		1.026	0.024	T	1.00	0.02	L	9.1463	0.0018	0.020	139		9.10	9.18					1							
97695	10.547	0.038	8.984	0.018		1.311	0.033	T	1.27	0.04	L	8.9814	0.0025	0.020	89		8.95	9.02		C			1							
97696	11.618	0.091	10.909	0.078		0.653	0.097	T	0.72	0.09	L	11.0076	0.0035	0.043	157		10.93	11.09		C			1 X							G
97697	6.381	0.004	6.261	0.004	*	0.102	0.002	G	0.12	0.03	C *	6.2871	0.0007	0.007	120	*	6.28	6.30		D	19513+0938	H 1	2 C D	AB	55	0.401	0.019	3.21	0.10	S D
97698	8.255	0.009	8.251	0.011		0.017	0.002	G	0.04	0.00	H	8.2584	0.0019	0.015	111		8.23	8.29		C			1							S
97699						1.321	0.243	G	0.63	0.21	S	10.9480	0.0046	0.053	194		10.84	11.03		R			1 X							G
97700	6.675	0.004	6.268	0.005	*	0.398	0.005	T	0.46	0.01	L *	6.3103	0.0006	0.006	110	*	6.30	6.33		D	19513+4723	H 1	2 C S D	AB	162	0.168	0.008	0.44	0.29	S D

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s	±° ′ ″	mag	5 6 7	deg	deg	10	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	% 29	30
97701	19 51 20.43	−09 31 32.7	8.41	H	297.835 117 15	−09.525 753 48		4.44	4.55	−11.96	1.05	0.83	1.14	1.14	1.03	+21	−27	−21	− 6	+22	+23	+31	+32	−18	+22	0	0.18
97702	19 51 21.32	−35 14 21.8	9.89	H	297.838 822 82	−35.239 385 20		5.93	9.77	−31.05	1.66	1.11	1.75	1.98	1.86	+56	+ 2	+16	−27	−36	−25	−33	−54	−39	+59	0	−1.77
97703	19 51 21.61	−45 51 21.0	8.79	H	297.840 047 85	−45.855 820 34		−0.64	7.41	− 5.17	1.33	0.75	1.45	2.15	1.05	+ 9	−10	−26	+42	+ 5	− 7	−13	−29	+12	−20	0	−2.10
97704	19 51 22.31	−01 32 06.1	9.36	G	297.842 965 88	−01.535 021 45		23.81	−25.78	191.28	3.32	3.10	4.21	5.34	3.78	+12	− 6	−46	+10	−13	+25	+ 1	+24	−25	−17	0	
97705	19 51 23.62	−58 30 34.8	8.01	H	297.848 397 54	−58.509 670 82		14.73	36.80	−82.47	0.65	0.58	0.92	0.79	0.81	+21	− 4	− 3	+37	+ 8	+16	+16	+ 7	+ 4	+43	0	0.48
97706 H	19 51 24.76	+40 44 07.1	8.24	H	297.853 169 98	+40.735 305 62	A	13.13	51.45	23.76	1.57	2.72	0.88	0.71	0.94	−35	− 9	+ 4	+ 5	+ 3	− 1	+ 3	+ 6	+ 6	−14	1	1.31
97707	19 51 25.29	−28 13 30.3	9.46	H	297.855 387 44	−28.225 082 80		−0.08	2.61	1.04	1.36	0.89	1.46	1.90	1.34	+36	−16	−23	+18	−13	+10	−21	− 6	− 7	− 8	0	0.64
97708	19 51 25.42	−31 07 07.3	8.65	H	297.855 926 89	−31.118 694 71		4.28	7.98	0.65	1.10	0.66	1.18	1.32	1.04	+24	−16	−21	−19	+22	−16	+26	+ 3	+15	+10	0	−0.70
97709 H	19 51 26.84	+04 05 19.1	6.47	H	297.861 843 03	+04.088 646 71	A	−0.37	−5.62	−6.14	1.22	1.01	1.23	1.26	0.96	+ 6	−17	−37	+ 5	− 6	+20	+ 7	+29	−22	−25	2	0.60
97710	19 51 27.27	−42 05 35.8	7.85	H	297.863 635 59	−42.093 291 05		8.80	33.64	−33.62	1.04	0.50	1.05	1.43	0.76	− 2	−21	− 1	+ 9	+13	+ 3	+ 9	−20	+10	−12	0	1.29
97711	19 51 28.26	+35 01 51.7	8.65	H	297.867 756 86	+35.031 024 27		1.78	2.46	−9.24	0.58	0.69	0.88	0.62	0.73	−24	− 8	+17	+15	+ 2	− 8	+ 5	− 6	− 3	−17	0	0.16
97712	19 51 28.86	+24 19 17.3	8.67	H	297.870 256 37	+24.321 473 31		1.40	23.69	−2.74	0.88	0.76	1.18	1.27	0.78	+ 2	− 7	+ 6	−30	− 9	− 1	− 7	−32	+17	− 3	0	−1.97
97713	19 51 29.00	+23 05 06.6	9.06	H	297.870 832 09	+23.085 173 25		3.21	0.89	−2.76	1.00	0.92	1.49	1.17	1.03	− 2	+11	+11	−20	−17	−14	−15	−19	− 5	−17	0	0.44
97714	19 51 29.36	−42 29 10.5	8.75	G	297.872 335 26	−42.486 245 39		12.50	148.87	40.49	1.19	0.71	1.28	1.55	0.92	+14	−23	−21	+14	+ 4	− 5	− 4	−22	+17	+ 0	0	0.72
97715	19 51 29.54	−15 52 06.7	8.40	H	297.873 085 02	−15.868 518 27		−0.17	7.77	0.46	1.09	0.61	1.19	1.30	0.64	+23	+ 3	− 8	−26	+13	+24	+ 8	−26	+35	+59	0	−0.59
97716	19 51 30.74	+22 59 08.0	10.89	G	297.878 097 05	+22.985 549 19		−1.28	−14.13	13.85	1.82	1.65	2.64	2.00	1.78	+ 2	− 3	+17	−17	−21	−12	−19	−16	− 3	−15	0	1.07
97717	19 51 30.91	+27 27 36.9	7.34	3 T	297.878 780 66	+27.460 246 88		0.79	−1.10	−6.17	0.34	0.51	0.74	0.40	0.56	−24	+ 8	− 5	+10	+ 1	−12	+ 3	−15	+10	−17	0	0.58
97718	19 51 30.97	−22 23 03.1	9.85	H	297.879 052 41	−22.384 205 39		0.37	1.44	−16.89	1.37	0.92	1.52	1.52	1.08	+42	−19	− 7	+ 6	+26	+30	+25	+11	+24	+62	0	−0.67
97719	19 51 32.10	+22 16 51.1	7.90	H	297.883 743 43	+22.280 863 12		12.28	−110.79	−126.43	0.66	0.58	0.98	0.74	0.61	− 6	−12	+ 1	− 7	− 4	+ 5	− 7	−32	+ 6	−20	0	0.57
97720	19 51 32.89	+50 39 15.0	7.84	G	297.887 061 46	+50.654 169 91		13.49	40.92	59.31	0.55	0.62	0.65	0.59	0.65	−13	−29	+17	+ 2	+16	+ 2	+13	+17	− 1	+ 5	1	0.13
97721	19 51 33.22	−48 32 17.7	10.15	H	297.888 406 44	−48.538 263 22		4.60	−18.13	−11.69	1.58	0.73	1.77	2.28	1.23	−39	−28	+32	+31	− 6	+13	+ 9	−17	−31	−11	0	−0.74
97722	19 51 33.25	−11 49 16.4	8.51	H	297.888 542 62	−11.821 217 36		8.49	31.59	−36.69	1.07	0.85	1.16	1.37	1.20	+27	− 9	−14	+11	+23	+14	+27	+41	+11	+22	0	−1.54
97723	19 51 33.58	+50 46 24.3	7.97	H	297.889 930 37	+50.773 406 38		4.13	1.82	2.15	0.61	0.66	0.71	0.67	0.69	− 9	−13	+15	+ 0	+16	+10	+14	+ 3	− 1	+10	3	1.44
97724	19 51 33.64	+39 42 49.8	9.05	H	297.890 150 38	+39.713 834 66		1.44	5.57	0.41	0.74	0.73	0.91	0.93	0.77	− 9	− 5	+ 7	+17	+ 6	− 4	+ 7	−18	+10	− 2	0	−0.02
97725	19 51 33.95	−45 10 57.3	8.74	H	297.891 471 81	−45.182 584 60		3.85	−7.58	−15.09	1.29	0.74	1.42	2.11	1.08	+ 8	+ 3	− 8	− 7	−11	−25	−15	−42	+ 6	− 1	0	0.34
97726	19 51 35.25	−12 37 16.0	7.24	H	297.896 869 21	−12.621 110 07		7.69	26.25	20.65	0.92	0.53	1.04	1.03	0.60	+17	−23	− 8	− 9	+25	+31	+24	+ 4	+16	+31	0	0.66
97727	19 51 35.84	−19 12 40.4	7.66	2 H	297.899 339 32	−19.211 216 00		3.20	17.81	7.63	0.97	0.59	1.06	1.20	0.78	+42	−40	−11	+ 3	+ 7	+13	+ 7	−13	+17	+68	0	0.04
97728 H	19 51 35.92	+39 32 09.9	8.11	H	297.899 657 50	+39.536 089 99	A	3.09	4.03	8.80	0.94	1.06	1.09	1.08	0.98	− 2	−17	+14	+ 7	+15	− 3	+15	−17	+ 9	+10	2	0.22
97729	19 51 37.18	+22 09 22.4	8.18	G	297.904 929 50	+22.156 234 92		13.15	60.66	−55.73	0.70	0.66	1.09	0.77	0.62	−11	−20	+10	−10	+ 4	+ 7	+ 1	−34	+ 2	−19	0	−0.55
97730	19 51 37.20	+26 13 32.3	7.48	G	297.905 016 58	+26.225 640 32		1.12	1.00	−1.25	0.49	0.58	0.91	0.51	0.61	− 3	−23	+ 7	+25	− 7	− 6	− 7	−16	+ 8	+ 0	1	1.22
97731	19 51 39.66	−43 27 21.8	8.73	H	297.915 247 53	−43.456 047 21		6.91	12.00	−30.22	1.30	0.68	1.32	1.71	0.95	+13	−24	+ 4	+31	− 8	+18	− 6	−22	−10	+13	0	1.31
97732	19 51 40.47	+01 46 13.2	8.70	H	297.918 631 02	+01.770 321 65		0.08	−1.36	9.71	1.12	0.96	1.32	1.40	1.15	+21	−24	−33	− 8	+10	+ 1	+17	+21	− 7	− 2	0	−1.89
97733	19 51 41.33	+31 08 16.1	9.54	H	297.922 216 16	+31.137 796 26	C	13.85	−2.17	0.85	9.91	11.84	9.38	7.81	8.14	−11	−11	+ 7	+25	+ 2	−13	+ 3	− 8	+15	− 8	17	7.83
97734	19 51 41.38	+31 08 28.7	7.08	H	297.922 402 46	+31.141 297 45	A	1.24	−0.10	−6.57	0.80	1.03	1.03	0.85	0.87	−11	− 9	+ 5	+23	+ 3	−14	+ 4	−11	+11	− 5	17	7.83
97735 H	19 51 41.61	−37 29 32.5	9.51	H	297.923 357 18	−37.492 347 60	A	7.03	14.06	11.41	3.81	1.94	3.26	4.89	2.80	+10	−23	+ 6	−12	−12	−28	−15	−33	− 5	+ 8	0	0.28
97736	19 51 41.84	−14 46 36.7	6.88	H	297.924 315 00	−14.776 867 11		3.50	7.92	−0.08	0.83	0.44	0.92	0.96	0.46	+35	−19	+ 1	− 6	+17	+23	+11	−14	+26	+60	0	2.36
97737	19 51 42.67	−10 56 57.2	7.19	H	297.927 805 37	−10.949 232 60		13.78	72.93	15.50	0.89	0.72	1.11	1.15	0.88	+22	− 7	−27	+15	+13	+48	+33	+43	+ 0	+21	0	−0.01
97738	19 51 42.73	−50 58 42.7	6.89	H	297.928 033 90	−50.978 539 98		11.07	12.72	−93.21	0.62	0.40	0.83	0.80	0.61	− 4	−17	− 9	− 7	+14	− 1	+17	−19	+ 3	+10	0	0.20
∗97739	19 51 45.07	−13 01 57.4	6.84	H	297.937 811 46	−13.032 609 44		5.44	13.20	−29.61	0.83	0.47	1.01	1.05	0.53	+23	− 7	+ 1	+ 2	+27	+45	+25	+ 2	+29	+43	0	−0.93
∗97740	19 51 45.07	−17 16 02.8	8.41	H	297.937 807 97	−17.267 452 10		3.80	−9.53	−6.43	0.93	0.57	1.01	1.05	0.64	+32	−24	−14	+ 0	+ 8	+16	+10	−18	+18	+56	0	0.25
97741	19 51 45.24	+26 14 14.0	7.67	H	297.938 501 21	+26.237 224 35		0.77	6.04	5.28	0.56	0.64	0.98	0.59	0.64	− 1	−12	− 1	+42	−11	+ 4	−13	−15	+14	− 3	0	1.54
∗97742	19 51 46.21	−37 20 10.2	6.65	H	297.942 549 29	−37.336 170 86		5.14	−13.07	−67.07	1.00	0.52	1.17	1.49	0.89	+24	− 2	+27	− 7	−21	−40	−16	−44	−32	+21	0	−0.60
∗97743	19 51 46.19	−40 42 30.1	8.66	H	297.942 457 97	−40.708 348 79		0.42	8.10	−43.37	1.31	0.66	1.39	1.68	1.00	+10	−30	− 8	+16	+ 2	+ 6	− 2	−24	+ 5	+ 2	0	−0.50
97744	19 51 46.62	+35 36 42.3	8.09	H	297.944 259 98	+35.611 750 25		11.59	29.00	−14.11	0.57	0.77	0.84	0.73	0.90	−17	− 6	− 4	− 8	+20	−11	+20	−25	− 1	−28	0	0.94
97745	19 51 46.94	+08 04 18.3	7.37	H	297.945 598 82	+08.071 739 71		5.78	−0.17	−6.87	0.71	0.73	1.08	0.91	0.80	+ 6	−18	−52	+21	−27	+36	−10	+40	−31	−23	0	−0.14
97746	19 51 48.77	−55 25 15.0	8.35	H	297.953 206 06	−55.420 843 45		4.52	7.72	−8.91	0.77	0.65	1.05	1.13	1.06	+22	−14	+ 1	− 2	+15	− 5	+17	+ 0	− 8	+40	0	0.05
97747	19 51 49.69	+05 36 47.9	10.76	H	297.957 042 43	+05.613 296 75		8.11	−140.42	−231.74	4.89	4.40	6.21	7.71	5.97	+ 6	+ 7	−29	− 2	−12	+20	− 8	+ 6	−29	−18	0	
97748	19 51 50.46	−28 33 24.8	7.76	H	297.960 267 20	−28.556 901 11		1.22	−3.88	−5.86	0.91	0.58	1.09	1.35	0.85	+21	−17	−27	+ 8	− 8	+33	+ 1	+ 9	−23	−25	2	0.58
97749	19 51 50.59	−39 52 27.6	5.32	1 H	297.960 792 31	−39.874 338 05		9.62	19.12	−12.05	0.84	0.41	0.86	1.22	0.62	+ 4	−11	−15	− 3	+14	− 9	+ 6	−29	+ 9	−23	2	0.82
97750 H	19 51 51.00	+41 20 55.7	7.74	H	297.962 483 58	+41.348 801 37	∗	2.31	2.03	0.44	1.22	1.60	0.77	0.75	0.67	+ 3	−21	+ 1	−34	+ 2	+10	− 2	−13	+ 5	+12	2	−0.07
97751	19 51 51.96	+61 18 40.5	8.16	H	297.966 480 88	+61.311 246 35		5.03	3.71	4.75	0.58	0.59	0.62	0.61	0.65	+ 4	− 4	+ 7	+23	+17	−15	+20	+14	+16	+15	3	0.38
97752	19 51 57.16	+37 22 33.4	7.72	H	297.988 169 30	+37.375 949 68		8.46	18.15	−2.44	0.50	0.61	0.65	0.50	0.59	+ 9	+ 4	+11	+20	+12	+ 1	+ 8	+14	− 0	+ 4	1	0.04
97753	19 51 58.11	+20 55 03.9	7.82	H	297.992 134 64	+20.917 748 72		3.53	6.47	−3.60	0.63	0.53	0.88	0.68	0.50	−23	+ 4	−17	−26	+ 2	+10	+ 6	−36	+14	−25	1	−0.04
∗97754	19 51 58.47	−38 24 08.2	7.98	H	297.993 633 13	−38.402 281 21		2.59	3.13	−11.03	0.98	0.49	1.06	1.17	0.85	+16	−31	+ 3	+10	+ 0	+ 2	− 4	+21	+ 1	+ 7	0	−1.45
∗97755	19 51 58.45	+31 36 10.6	7.73	H	297.993 538 15	+31.602 944 23		1.30	−1.03	−0.67	0.50	0.55	0.80	0.57	0.52	−12	+ 4	+ 2	+27	− 1	−27	+ 6	−26	+21	− 5	0	−0.62
97756	19 51 58.93	−46 51 42.1	8.27	2 H	297.995 541 52	−46.861 705 51		3.35	0.48	−31.82	1.22	0.61	1.21	1.61	0.84	+ 0	−31	−13	+35	+ 7	− 7	+ 9	−18	+ 1	+ 2	0	1.20
97757	19 51 59.07	+47 01 38.5	5.60	1 H	297.996 132 00	+47.027 348 67		0.22	−2.76	−3.99	0.44	0.40	0.48	0.50	0.40	−13	− 6	− 2	− 7	+14	− 3	+11	− 4	+12	− 2	0	1.81
97758	19 51 59.43	+17 50 18.9	8.17	H	297.997 611 13	+17.838 581 34		10.92	44.87	−55.08	0.67	0.52	1.02	0.73	0.48	−24	−19	+12	−26	+ 6	+11	+ 3	−41	+ 5	−37	1	−0.56
97759	19 51 59.53	+23 56 55.0	9.38	H	297.998 030 39	+23.948 616 12		1.11	1.39	− 7.99	0.98	0.92	1.48	1.37	1.11	− 6	− 4	+ 9	+ 2	− 1	− 7	+ 0	−14	+13	− 2	0	2.03
∗97760	19 52 00.21	+31 42 26.2	7.84	H	298.000 876 24	+31.707 265 01		1.91	−0.71	0.66	0.44	0.57	0.76	0.51	0.54	− 9	+ 0	+ 0	+12	+ 2	−10	+ 4	−27	+25	− 4	0	0.51
∗97761	19 52 00.17	−57 39 57.4	8.10	H	298.000 696 93	−57.665 942 69		0.51	7.70	−34.94	0.73	0.61	0.97	1.03	0.86	+14	−19	− 8	− 2	+13	+ 3	+14	−11	+ 4	+25	0	0.33
97762	19 52 00.54	+01 36 12.0	7.51	H	298.002 248 98	+01.603 344 37		4.16	−10.59	− 5.77	0.92	0.71	1.05	1.34	0.88	− 3	− 4	−41	+20	−11	+19	− 4	+18	− 5	−31	0	2.45
97763	19 52 00.89	+60 41 21.9	9.08	H	298.003 716 19	+60.689 426 07		2.82	2.77	14.74	0.76	0.74	0.79	0.82	0.84	+10	+ 6	+21	+21	+21	− 4	+25	+ 5	+ 6	+14	0	−1.00
97764	19 52 01.40	+29 23 50.1	11.67	2 G	298.005 824 50	+29.397 248 18		6.37	−8.04	3.01	1.50	1.88	2.68	1.79	1.98	−10	+ 4	− 2	+ 4	+ 3	− 7	+ 4	−13	+ 1	− 2	0	2.14
97765	19 52 01.59	+24 59 31.8	5.54	1 H	298.006 642 08	+24.992 171 56		1.83	−0.15	− 3.93	0.39	0.50	0.76	0.43	0.46	+ 3	−11	+10	+27	− 7	+ 5	− 8	−33	+17	+ 6	0	−0.42
97766 H	19 52 01.89	−10 21 13.5	7.26	G	298.007 871 35	−10.353 742 17	A	11.17	−15.50	−51.10	2.38	2.05	1.89	1.90	1.91	+56	+ 2	+ 2	+40	+56	+13	+55	+70	+16	+53	3	−0.08
97767	19 52 03.64	+11 37 44.9	6.16	H	298.015 180 68	+11.629 138 62		36.15	−345.23	−333.26	0.54	0.42	0.79	0.72	0.66	− 1	− 7	−18	− 2	−18	+35	−20	+11	+15	+22	0	−0.92
97768	19 52 03.94	−02 09 11.7	7.38	H	298.016 432 58	−02.153 242 13		2.95	15.17	− 2.02	0.93	0.73	1.07	1.28	1.04	+12	+ 0	−21	+12	+ 7	+40	+16	+32	+ 2	+22	0	−1.82
97769	19 52 04.51	+28 06 02.2	8.24	H	298.018 782 78	+28.100 598 04		19.00	53.89	−91.03	0.50	0.67	0.95	0.57	0.72	−20	− 8	+ 2	+35	− 6	− 9	− 4	+ 7	+ 7	−14	0	−1.93
97770	19 52 04.58	−24 26 18.0	8.43	H	298.019 069 09	−24.438 341 17		4.40	11.29	−11.10	0.99	0.67	1.09	1.06	0.79	+32	−32	−18	− 2	− 1	+ 5	+ 3	−17	− 3	+35	0	0.53
∗97771	19 52 05.99	−56 43 10.6	7.22	H	298.024 972 74	−56.719 607 13		4.36	20.07	−66.72	0.68	0.49	0.85	1.09	0.78	−14	− 2	− 4	−15	+24	− 7	+22	−18	+15	−14	0	0.42
∗97772 H	19 52 05.99	+29 23 54.7	11.15	G	298.024 960 58	+29.398 526 73	A	8.56	5.59	−1.85	6.06	8.10	9.29	6.57	9.07	−10	− 5	+ 4	− 5	− 8	+ 1	− 3	− 9	− 5	+ 7	1	−0.10
97773	19 52 06.04	+51 59 42.5	8.07	H	298.025 171 97	+51.995 143 03		5.55	9.18	7.50	0.55	0.57	0.63	0.63	0.66	− 2	−16	+ 7	− 7	+11	+ 7	+ 7	+ 8	+15	+11	0	−0.58
∗97774	19 52 07.17	+47 55 54.5	5.91	H	298.029 881 34	+47.931 818 56		1.32	−6.25	−9.81	0.47	0.44	0.52	0.56	0.50	− 5	− 4	− 3	+10	+15	−18	+14	+14	− 2	+ 6	1	0.00
∗97775	19 52 07.17	−41 55 00.3	9.61	H	298.029 869 08	−41.916 737 08		3.35	−8.87	18.15	1.48	0.77	1.54	1.97	1.11	+ 9	−17	−14	+26	− 2	+17	− 6	−18	+11	+ 0	0	−1.13
97776	19 52 07.40	−10 53 33.7	6.67	H	298.030 826 63	−10.892 690 49		4.06	20.73	−0.09	0.91	0.74	1.04	1.09	0.94	+33	−20	−22	+13	+28	+36	+40	+49	+ 0	+31	0	−0.45
97777	19 52 08.07	+52 16 52.5	7.39	H	298.033 609 41	+52.281 251 93		6.76	13.04	27.89	0.51	0.51	0.56	0.55	0.57	− 5	−14	+ 5	−13	+13	+ 1	+11	+ 0	+ 9	+10	1	−1.37
97778	19 52 08.30	+31 47 46.0	8.83	H	298.034 599 65	+31.796 117 36		1.42	4.61	1.67	0.63	0.73	1.02	0.73	0.75	−12	− 5	+ 9	+29	− 2	−14	− 2	− 4	+18	−13	0	0.44
97779	19 52 09.31	+07 27 35.6	7.14	H	298.038 783 78	+07.459 880 46		29.91	132.81	66.76	0.63	0.60	0.97	0.74	0.78	+41	−16	−32	+19	− 4	+27	+ 8	+47	−18	+16	0	0.74
97780	19 52 09.46	+15 19 23.6	7.77	H	298.039 412 70	+15.323 234 00		6.60	7.82	17.02	0.60	0.52	0.95	0.66	0.53	+10	−15	+18	−25	− 4	+19	− 9	−28	+ 6	+11	1	−0.04
97781	19 52 10.23	+67 25 31.9	11.22	G	298.042 613 43	+67.425 531 39		9.54	49.86	187.45	1.33	1.29	1.39	1.51	1.63	+ 4	−17	+10	−11	+ 5	− 1	+ 4	− 3	+ 0	+22	1	1.50
97782	19 52 10.57	+53 13 35.2	8.49	H	298.044 028 38	+53.226 457 16		4.63	9.54	11.35	0.63	0.58	0.66	0.75	0.68	− 6	− 5	− 1	+ 2	+10	+ 5	+ 9	+10	− 4	+ 0	0	−0.99
97783	19 52 12.01	−19 02 41.5	5.88	H	298.050 021 10	−19.044 861 85		10.46	−2.46	−53.25	1.15	0.97	0.93	1.35	1.06	+36	−49	−16	−43	−23	+29	−21	−55	+12	+49	0	−0.16
97784	19 52 13.35	−60 09 42.4	9.58	H	298.055 630 73	−60.161 770 26		7.13	−12.54	38.75	1.05	0.96	1.58	1.20	1.32	+19	−29	−11	+47	− 3	− 7	+ 3	+ 7	− 2	+38	2	0.45
97785	19 52 13.59	+29 24 27.7	9.65	2 G	298.056 645 55	+29.407 693 41		0.42	−2.26	−3.83	1.55	1.95	2.64	1.89	2.02	− 6	+ 2	+ 3	− 9	+ 1	− 2	+ 3	−24	+ 2	+ 7	0	
97786	19 52 14.28	−51 14 40.6	8.50	H	298.059 494 83	−51.244 614 55		0.66	7.02	−16.51	0.89	0.57	1.16	1.12	0.89	−25	−22	+ 7	−39	+35	− 5	+40	−31	−13	− 5	0	0.07
97787	19 52 15.58	+10 21 05.8	6.52	1 H	298.064 927 87	+10.351 621 48	A	3.28	−2.07	−11.45	1.04	0.87	1.37	1.39	1.18	+35	+ 8	− 2	+15	− 6	+36	− 6	+31	+13	+31	1	1.09
97788	19 52 15.73	+28 15 07.9	6.82	H	298.065 539 03	+28.252 189 49		5.29	−30.56	−58.33	0.38	0.50	0.70	0.44	0.54	−19	− 2	− 6	+18	− 1	− 7	+ 0	− 5	+10	−14	0	−2.41
97789	19 52 16.40	+36 25 56.2	6.13	H	298.068 353 72	+36.432 284 38		4.41	12.72	4.41	0.40	0.44	0.56	0.44	0.46	−12	+ 2	− 9	+ 3	+ 9	+ 1	+10	−18	+27	− 3	0	−1.83
97790	19 52 17.58	+17 09 14.8	9.06	H	298.073 245 39	+17.154 110 03		6.75	−0.37	−17.53	0.79	0.71	1.25	0.88	0.66	− 7	+ 4	+ 9	−34	+ 3	+ 1	+ 2	−53	− 1	+21	1	−0.14
97791	19 52 18.90	+04 17 08.9	8.48	H	298.078 732 60	+04.285 813 38		−1.80	−7.29	−1.53	1.27	0.97	1.38	1.71	1.27	−11	−17	−20	+ 1	+ 9	+12	+14	+17	− 7	−29	0	0.57
97792 H	19 52 19.42	+25 51 46.4	7.54	H	298.080 920 14	+25.862 898 80	A	4.87	3.22	3.70	1.53	1.78	2.43	1.31	1.52	− 6	−26	+10	+24	−17	− 2	−15	−12	+ 0	+14	5	2.92
97793	19 52 20.70	−42 37 21.9	8.99	G	298.086 235 16	−42.622 753 73		6.95	22.00	−18.28	1.36	0.61	1.39	1.74	1.02	+22	−26	− 6	+24	+ 1	− 4	− 6	−25	+ 6	+10	0	0.21
97794	19 52 20.99	−11 22 00.7	7.80	2 T	298.087 442 95	−11.366 849 99		0.15	8.06	−10.40	1.08	0.94	1.15	1.39	1.34	+38	− 4	+ 0	+14	+46	+36	+47	+54	+14	+50	0	−1.44
97795	19 52 21.20	+25 51 26.0	9.60	H	298.088 316 58	+25.857 210 51		5.30	33.15	16.81	2.88	3.48	5.21	2.89	3.71	+ 8	−21	+ 3	− 6	−15	+13	−16	−26	+ 5	+12	3	
97796	19 52 21.77	+18 40 18.8	6.24	1 H	298.090 687 78	+18.671 900 24		0.23	−0.17	−10.45	0.47	0.37	0.70	0.51	0.34	−17	− 2	+ 2	−20	− 3	+ 6	− 4	−41	+ 6	−37	2	0.26
97797	19 52 22.48	+25 57 44.8	8.25	1 H	298.093 672 39	+25.962 451 82		−0.99	−1.08	−4.45	0.66	0.75	1.23	0.65	0.76	− 9	−37	+14	+18	−10	− 6	−13	−20	+14	− 3	1	0.96

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
97701	10.073	0.041	8.577	0.021		1.259	0.036	T	1.22	0.04	L	8.5753	0.0027	0.018	50		8.55	8.61					1							
97702	10.572	0.046	9.984	0.042		0.549	0.055	T	0.62	0.05	L	10.0058	0.0032	0.024	104		9.97	10.05		C			1							
97703	10.129	0.031	8.886	0.019		1.061	0.028	T	1.03	0.02	L	8.9541	0.0028	0.018	94		8.93	9.00		C			1							
97704	10.348	0.044	9.483	0.034		0.746	0.015	G	0.79	0.01	H	9.5016	0.0043	0.022	44		9.47	9.56					1 X							
97705	8.710	0.011	8.086	0.009		0.584	0.004	G	0.66	0.00	H	8.1356	0.0017	0.015	125		8.11	8.17		C			1							S
97706	8.999	0.012	8.354	0.010	*	0.599	0.014	T	0.67	0.01	L *	8.3672	0.0013	0.014	135	*	8.34	8.40		D	19514+4044	M 1	2 C A	AB	346	0.315	0.003	0.46	0.05	S
97707	9.324	0.017	9.447	0.024		−0.080	0.000	G	−0.06	0.00	H	9.4408	0.0022	0.019	72		9.40	9.48		C			1							
97708	9.999	0.029	8.783	0.017		1.039	0.026	T	1.01	0.02	L	8.8203	0.0017	0.013	83		8.79	8.85		C			1							
97709	8.200	0.034	6.595	0.015	*	1.345	0.029	T	1.31	0.03	L *	6.6242	0.0012	0.009	43	*	6.61	6.65		D	19514+0405	I 1	2 C A	AB	100	4.302	0.018	2.88	0.09	S
97710	8.555	0.011	7.914	0.010		0.575	0.006	G	0.65	0.01	H	7.9786	0.0012	0.010	108		7.96	7.99		C			1							S
97711	8.694	0.010	8.675	0.013		0.022	0.015	T	0.04	0.01	L	8.6705	0.0016	0.016	135		8.64	8.70					1							
97712	10.144	0.030	8.785	0.017		1.151	0.027	T	1.11	0.02	L	8.8396	0.0020	0.019	108		8.81	8.87		C			1							
97713	9.357	0.021	9.073	0.023		0.329	0.027	G	0.38	0.04	H	9.1357	0.0033	0.024	91		9.09	9.17					1							G
97714	9.536	0.020	8.832	0.017		0.642	0.004	G	0.71	0.00	H	8.8863	0.0023	0.020	99		8.85	8.92		C			1							
97715	10.721	0.040	8.648	0.013		1.716	0.034	T	1.74	0.04	L	8.5051	0.0023	0.021	118		8.48	8.54					1							
97716	12.037	0.228	11.054	0.166		0.620	0.015	G	0.69	0.01	H	11.0445	0.0050	0.047	93		10.97	11.11					1							G
97717	9.314	0.010	7.510	0.005		1.502	0.009	T	1.53	0.01	L	7.5567	0.0090	0.304	272		6.94	7.83	44.96	P 1 A			1 S							S
97718	10.203	0.034	9.884	0.041		0.303	0.050	T	0.35	0.07	L	9.9256	0.0026	0.025	90		9.89	9.97		C			1							
97719	8.717	0.011	7.968	0.010		0.685	0.012	T	0.74	0.01	L	8.0443	0.0012	0.014	122		8.02	8.07					1							S
97720	8.340	0.010	7.884	0.010		0.463	0.015	G	0.53	0.02	H	7.9413	0.0013	0.012	117		7.92	7.97					1							S
97721	10.895	0.045	10.145	0.037		0.670	0.044	T	0.73	0.04	L	10.2826	0.0016	0.022	144		10.24	10.32					1							G
97722	9.159	0.024	8.531	0.021		0.579	0.024	T	0.65	0.02	L	8.6331	0.0018	0.015	55		8.61	8.66		C			1							
97723	9.188	0.014	8.096	0.010		0.944	0.013	T	0.93	0.01	L	8.1348	0.0018	0.014	109		8.11	8.16			19516+5046	I 1	1 S							
97724	9.123	0.014	9.058	0.018		0.065	0.021	T	0.07	0.02	L	9.0790	0.0025	0.019	107		9.05	9.11					1							
97725	9.964	0.027	8.841	0.018		0.967	0.025	T	0.95	0.02	L	8.8983	0.0018	0.017	97		8.87	8.92		C			1							
97726	8.779	0.014	7.377	0.008		1.185	0.013	T	1.15	0.01	L	7.4062	0.0011	0.009	84		7.39	7.42		C			1							S
97727	10.025	0.025	7.863	0.009		1.827	0.022	T	2.39	0.05	O	7.7005	0.0032	0.025	96		7.66	7.73		U 2			1							
97728	9.521	0.017	8.239	0.010	*	1.091	0.016	T	1.05	0.02	L *	8.2780	0.0017	0.011	113	*	8.26	8.30		D	19516+3932	H 1	2 C A	AB	199	0.646	0.016	2.90	0.06	
97729	8.880	0.012	8.235	0.011		0.602	0.015	G	0.67	0.01	H	8.3037	0.0018	0.016	136		8.27	8.33		C			1							
97730	7.386	0.007	7.477	0.008		−0.061	0.002	G	−0.04	0.00	H	7.4653	0.0012	0.013	148		7.45	7.49					1							S
97731	9.330	0.019	8.757	0.018		0.539	0.019	T	0.61	0.02	L	8.8539	0.0018	0.017	98		8.82	8.89		C			1							
97732	10.590	0.056	8.849	0.024		1.452	0.048	T	1.45	0.08	L	8.8383	0.0025	0.019	55		8.80	8.89		C			1							
97733	9.996	0.034	9.527	0.035	C	0.415	0.020	G	0.48	0.02	H	9.7426	0.0312			C				D	19517+3108	I 2	1 C I A							
97734	7.418	0.005	7.106	0.005	A	0.305	0.001	G	0.35	0.00	R	7.1573	0.0033	0.018	174	A	7.13	7.19		D	19517+3108	I 2	1 C P A							S
97735	10.363	0.043	9.595	0.037	*	0.684	0.043	T	0.74	0.04	L *	9.6499	0.0026	0.024	122	*	9.62	9.68		D	19517−3730	I 1	2 C A	AB	125	0.448	0.010	1.13	0.04	
97736	7.210	0.005	6.914	0.004		0.281	0.006	T	0.32	0.01	L	6.9508	0.0007	0.009	147		6.94	6.96		C			1							S
97737	7.686	0.011	7.237	0.009		0.424	0.013	T	0.49	0.01	L	7.2824	0.0011	0.009	55		7.27	7.30		C			1							S
97738	7.474	0.005	6.942	0.004		0.499	0.009	G	0.57	0.01	H	6.9965	0.0008	0.009	186		6.98	7.01		C			1							S
97739	8.885	0.014	7.013	0.007		1.556	0.012	T	1.57	0.01	L	6.9562	0.0012	0.011	97		6.94	6.97					1							S
97740	9.803	0.026	8.575	0.016		1.049	0.024	T	1.02	0.02	L	8.5793	0.0016	0.014	102		8.56	8.60		C			1							
97741	7.761	0.007	7.679	0.008		0.081	0.010	T	0.09	0.01	L	7.7071	0.0014	0.015	152		7.69	7.74		C			1							S
97742	8.181	0.012	6.767	0.005		1.194	0.010	T	1.15	0.01	L	6.8151	0.0010	0.009	120		6.80	6.83		C			1							S
97743	10.533	0.038	8.820	0.016		1.430	0.033	T	1.42	0.05	L	8.8022	0.0019	0.018	118		8.77	8.83		C			1							
97744	8.713	0.010	8.149	0.009		0.528	0.012	T	0.60	0.01	L	8.2036	0.0012	0.014	122		8.18	8.23		C			1 G							S
97745	7.581	0.006	7.396	0.007		0.177	0.009	T	0.19	0.01	L	7.4288	0.0011	0.008	116		7.42	7.44		C			1 G							S
97746	9.626	0.017	8.448	0.011		1.010	0.016	T	0.99	0.01	L	8.5171	0.0024	0.021	149		8.49	8.55					1							
97747	11.457	0.123	11.035	0.145		0.740	0.040	G	0.79	0.03	R	10.8953	0.0048	0.034	49		10.82	10.95		C			1 X							G
97748	9.873	0.024	7.951	0.010		1.595	0.021	T	1.61	0.02	L	7.8714	0.0017	0.013	87		7.85	7.89		C			1							
97749	5.266	0.002	5.319	0.003		−0.045	0.003	T	−0.02	0.00	L	5.3147	0.0005	0.008	120		5.28	5.32		P 1 C			1							S
97750	7.630	0.007	7.715	0.009	*	−0.073	0.010	T	−0.05	0.01	L *	7.7239	0.0014	0.013	135	*	7.70	7.75			19519+4121	H 1	2 C A	AB	236	0.262	0.022	2.96	0.28	S
97751	8.371	0.011	8.208	0.012		0.156	0.015	T	0.17	0.01	L	8.2193	0.0011	0.009	115		8.20	8.24					1							S
97752	8.140	0.009	7.763	0.008		0.357	0.011	T	0.42	0.01	L	7.8069	0.0014	0.013	138		7.79	7.83					1 G							S
97753	7.968	0.008	7.838	0.009		0.126	0.011	T	0.14	0.01	L	7.8627	0.0015	0.016	145		7.84	7.89					1							S
97754	9.896	0.024	8.151	0.011		1.455	0.021	T	1.46	0.03	L	8.1157	0.0013	0.013	139		8.10	8.15					1							
97755	7.728	0.007	7.733	0.008		0.000	0.010	T	0.02	0.01	L	7.7402	0.0010	0.012	162		7.72	7.76					1							S
97756	8.639	0.012	8.337	0.013		0.287	0.017	T	0.33	0.02	L	8.3423	0.0044	0.090	104		8.30	8.71	1.61	P 1 A			1							S
97757	5.502	0.003	5.622	0.004		−0.078	0.018	G	0.00	0.03	C	5.6045	0.0019	0.017	117		5.58	5.64		U 2			1							S
97758	8.745	0.009	8.212	0.008		0.500	0.011	T	0.57	0.01	L	8.2774	0.0013	0.016	216		8.25	8.31					1							
97759	9.736	0.029	9.408	0.033		0.380	0.015	G	0.44	0.02	H	9.4648	0.0023	0.027	104		9.42	9.51		C			1							G
97760	7.823	0.007	7.827	0.009		0.001	0.010	T	0.02	0.01	L	7.8507	0.0009	0.013	169		7.83	7.87		C	19520+3142	I 1	1							S
97761	9.445	0.015	8.218	0.010		1.048	0.014	T	1.02	0.01	L	8.2700	0.0014	0.014	127		8.25	8.30		C			1							
97762	7.678	0.009	7.523	0.013		0.149	0.015	T	0.16	0.01	L	7.5612	0.0009	0.008	52		7.55	7.58		D			1							S
97763	10.261	0.034	9.170	0.022		0.943	0.031	T	0.93	0.02	L	9.2449	0.0022	0.019	99		9.21	9.27					1							
97764						0.660	0.015	G	0.72	0.01	H	11.8772	0.0052	0.065	179		11.76	11.98		U			1							D
97765	6.346	0.003	5.664	0.003		0.680	0.006	G	0.88	0.03	C	5.6930	0.0009	0.010	173		5.67	5.71		U 2			1							S
97766	7.724	0.011	7.310	0.010	*	0.403	0.015	G	0.47	0.02	H *	7.3366	0.0017	0.009	56	*	7.32	7.35		D	19520−1021	I 1	2 C A	AB	243	0.628	0.005	0.57	0.02	S
97767	6.947	0.005	6.235	0.004		0.642	0.005	T	0.71	0.00	L	6.2916	0.0007	0.007	119		6.28	6.31		C	19521+1137	I 1	1							S
97768	9.221	0.027	7.539	0.013		1.405	0.024	T	1.38	0.03	L	7.5213	0.0018	0.009	49		7.50	7.54		C			1							S
97769	9.117	0.010	8.293	0.008		0.727	0.010	T	0.78	0.01	L	8.3795	0.0014	0.018	210		8.35	8.41					1							
97770	9.129	0.016	8.501	0.014		0.609	0.015	G	0.68	0.01	H	8.5608	0.0015	0.012	82		8.54	8.58		C			1							
97771	8.637	0.010	7.341	0.006		1.102	0.009	T	1.06	0.01	L	7.3873	0.0010	0.010	126		7.37	7.40		C			1							S
97772	11.887	0.154	11.023	0.106	A	0.420	0.015	G	0.49	0.02	H *	11.2529	0.0053	0.055	181	*	11.16	11.34		D	19521+2924	M 1	2 C A	AB	115	2.367	0.031	0.64	0.07	D
97773	8.291	0.009	8.096	0.010		0.187	0.013	T	0.21	0.01	L	8.1374	0.0015	0.012	101		8.12	8.16		C			1							S
97774	5.675	0.003	5.875	0.004		−0.174	0.004	T	−0.18	0.01	L	5.8493	0.0008	0.006	112		5.84	5.86					1							S
97775	10.288	0.033	9.661	0.030		0.536	0.003	G	0.61	0.00	H	9.7287	0.0024	0.021	117		9.70	9.77		C			1							
97776	8.166	0.011	6.808	0.006		1.150	0.010	T	1.11	0.01	L	6.8343	0.0010	0.008	62		6.82	6.85		C			1							S
97777	7.398	0.006	7.378	0.007		0.023	0.009	T	0.04	0.01	L	7.4013	0.0011	0.010	114		7.38	7.42					1							S
97778	8.759	0.010	8.815	0.013		−0.046	0.015	T	−0.02	0.01	L	8.8271	0.0019	0.021	167		8.80	8.86		C	19522+3148	I 1	1							
97779	7.908	0.007	7.206	0.006		0.647	0.008	T	0.71	0.01	L	7.2756	0.0009	0.011	150		7.25	7.30		C			1							S
97780	8.112	0.008	7.808	0.009		0.278	0.010	G	0.32	0.01	H	7.8396	0.0008	0.010	154		7.82	7.86					1							S
97781						0.900	0.020	G	0.94	0.02	I	11.3902	0.0029	0.032	108		11.33	11.45					1							G
97782	8.611	0.010	8.500	0.012		0.108	0.015	T	0.12	0.02	L	8.5324	0.0010	0.013	127		8.51	8.56		D			1							
97783	7.132	0.006	6.006	0.003		0.979	0.002	G	0.96	0.00	H	6.0488	0.0006	0.005	92		6.04	6.06		C			1 G							S
97784	10.892	0.041	9.639	0.022		1.068	0.036	T	1.03	0.03	L	9.7477	0.0022	0.022	122		9.69	9.79					1							
97785	10.621	0.032	9.759	0.024		0.870	0.020	G	0.88	0.01	H	9.7307	0.0037	0.039	178		9.67	9.80		U			1 X S							D
97786	10.292	0.022	8.641	0.010		1.381	0.019	T	1.35	0.02	L	8.6435	0.0014	0.015	180		8.61	8.67		C	19522−5115	I 1	1							
97787	6.468	0.004	6.500	0.004	A	−0.027	0.005	T	−0.01	0.01	L	6.5177	0.0078	0.018	121	A	6.50	6.56		U 2 C	19523+1021	I 1	2 C C	AB	309	13.535	0.048	3.79	0.25	S P
97788	8.576	0.007	6.963	0.004		1.351	0.006	T	1.32	0.01	L	6.9680	0.0009	0.010	198		6.95	6.99					1							S
97789	7.999	0.008	6.281	0.004		1.434	0.007	T	1.43	0.01	L	6.2648	0.0007	0.007	130		6.25	6.28		C			1							S
97790	9.584	0.014	9.111	0.015		0.446	0.019	T	0.52	0.02	L	9.1551	0.0019	0.027	208		9.10	9.20					1 S							
97791	10.628	0.080	8.685	0.029		1.612	0.068	T	1.63	0.07	L	8.5975	0.0027	0.013	34		8.57	8.63					1							
97792	7.541	0.012	7.461	0.016	*	0.079	0.019	T	0.09	0.02	L *	7.5575	0.0064	0.058	138	*	7.49	7.64		R	19523+2552	I 2	2 C A	AB	138	3.888	0.004	0.13	0.02	S
97793	10.010	0.025	9.076	0.019		0.910	0.020	G	0.91	0.01	H	9.1571	0.0019	0.018	110		9.12	9.19		C			1							
97794	8.963	0.021	7.904	0.015		0.918	0.020	T	0.92	0.01	L	8.0146	0.0376	0.186	48		7.68	8.21	5.37	P 1 A			1							S
97795	10.139	0.032	9.609	0.030							T	9.7344	0.0067	0.072	136		9.41	9.82		D	19523+2552	I 2	1 X S							
97796	6.200	0.003	6.239	0.003		−0.031	0.004	T	−0.01	0.00	L	6.2329	0.0012	0.014	184		6.21	6.26		U 2			1							S
97797	11.238	0.068	8.643	0.013		1.560	0.040	G	1.69	0.16	K	8.3535	0.0026	0.023	141		8.31	8.39		U			1 S							
97798	10.169	0.023	8.548	0.011		1.357	0.020	T	1.32	0.02	L	8.5522	0.0017	0.019	170		8.52	8.59					1							
97799	9.856	0.019	8.058	0.008		1.497	0.016	T	1.52	0.02	L	8.0375	0.0014	0.015	138		8.01	8.07		C			1							S
97800	10.966	0.095	9.034	0.032		1.603	0.080	T	1.62	0.08	L	9.0253	0.0026	0.017	38		8.99	9.06					1 S							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	% 29	30
97801	19 52 25.90	−10 57 22.4	7.37		H	298.107 898 71	−10.956 233 55		1.91	12.12	0.32	0.95	0.78	1.09	1.16	1.04	+29	−11	−15	+10	+28	+36	+34	+43	+ 4	+39	0	0.54
97802	19 52 26.58	−16 53 10.5	7.70		H	298.110 752 96	−16.886 252 05		0.42	12.21	−19.83	0.88	0.52	0.95	0.97	0.55	+34	−29	−15	−16	+ 5	+21	+ 4	−25	+17	+57	2	0.88
97803	19 52 27.55	−59 10 03.3	8.58	2	H	298.114 801 91	−59.167 574 46		1.98	7.00	−1.46	0.71	0.68	1.13	0.82	0.95	+17	− 4	+ 3	+41	−11	+ 2	− 1	− 3	− 6	+45	1	−1.19
97804	19 52 28.36	+01 00 20.4	3.87	3	T	298.118 182 57	+01.005 678 27		2.78	6.94	−7.30	0.79	0.61	0.91	1.13	0.74	+ 5	−29	−40	+ 4	+ 0	+ 1	− 1	+ 2	+ 2	−36	0	1.66
97805	19 52 29.90	−23 56 56.7	9.45		H	298.124 596 98	−23.949 080 31		35.64	19.31	−42.11	1.34	0.86	1.46	1.54	1.04	+38	−38	−11	+ 2	+15	− 2	+16	+ 0	− 9	+30	2	1.48
97806	19 52 30.68	+29 19 57.3	10.35		G	298.127 814 16	+29.332 584 93		1.18	−0.12	−2.16	1.29	1.56	2.16	1.61	1.89	− 6	− 1	+ 2	− 6	+ 1	− 2	+ 2	− 9	+ 6	+ 5	0	−3.33
97807	H 19 52 31.36	+17 25 53.6	8.27	1	H	298.130 678 43	+17.431 567 85	A	3.20	25.62	3.65	1.20	1.03	1.65	1.41	0.89	− 4	− 1	+ 3	−22	− 8	− 5	− 6	−37	+ 7	−24	4	1.54
97808	19 52 32.23	+14 56 45.1	9.21	2	H	298.134 297 21	+14.945 870 90		3.27	−0.23	−3.33	0.87	0.95	1.40	1.10	1.26	+32	− 2	+ 5	+ 9	+18	+37	+15	+28	+11	+44	3	1.38
97809	H 19 52 32.57	+00 38 56.3	8.04		H	298.135 691 02	+00.648 984 27	A	6.11	3.39	−18.58	4.40	3.54	3.66	4.80	3.69	−46	+ 3	−19	+14	+ 6	− 3	+13	+20	+26	+ 2	0	1.31
97810	19 52 34.23	−49 40 35.1	8.92		H	298.142 605 93	−49.676 422 50		4.86	17.57	−22.51	1.25	0.63	1.35	2.04	0.99	−22	+ 7	+ 6	+42	− 8	+ 3	− 2	−15	− 3	− 9	0	−0.05
97811	19 52 34.33	−18 20 36.0	8.64		H	298.143 054 38	−18.343 343 70		4.28	0.44	−7.11	0.98	0.65	1.06	1.22	0.78	+43	−27	−12	+ 7	+11	+15	+13	−12	+20	+69	0	0.92
97812	19 52 34.46	+66 42 19.0	7.70		H	298.143 598 97	+66.705 270 25		6.97	4.00	−22.92	0.56	0.54	0.59	0.52	0.65	+11	+ 3	+17	−18	+19	+ 8	+17	+17	− 3	+27	1	−0.25
97813	19 52 35.55	−82 09 41.9	8.28		H	298.148 145 32	−82.161 631 63		1.02	−32.68	−42.27	0.63	0.60	0.76	0.70	0.68	− 3	−23	−11	+ 1	−14	+ 1	−14	− 3	− 1	−15	1	−1.27
97814	19 52 35.72	+19 08 10.9	8.22		H	298.148 827 40	+19.136 354 85		3.43	−37.16	−50.61	0.62	0.55	0.97	0.68	0.51	− 3	− 5	+ 0	−19	− 7	+15	− 9	−43	+ 6	−20	0	0.20
97815	19 52 36.74	+48 06 22.2	8.06		H	298.153 095 22	+48.106 164 85		3.52	8.13	0.41	0.60	0.53	0.66	0.71	0.54	− 2	− 6	− 2	+ 8	+ 9	−16	+ 8	− 6	+10	+ 0	1	1.68
97816	19 52 37.70	−54 58 15.7	5.76		H	298.157 092 06	−54.971 036 52	A	9.21	20.52	4.41	1.36	1.02	1.45	1.92	1.41	+ 5	− 5	+17	−25	+ 0	−24	+ 7	−37	−25	+26	5	1.80
97817	19 52 37.73	+15 55 59.3	8.66		H	298.157 189 97	+15.933 134 64		1.86	0.15	−3.68	0.69	0.60	1.09	0.78	0.57	+ 9	− 8	+24	−20	−10	+13	−13	−39	− 9	+ 0	0	0.65
97818	19 52 38.83	+18 44 26.5	7.68		H	298.161 808 65	+18.740 699 38		1.16	−1.77	−4.19	0.54	0.44	0.83	0.60	0.41	−15	+ 2	+ 0	−15	− 3	+ 8	− 5	−39	+ 5	−35	0	−0.40
97819	19 52 39.11	−54 58 35.2	6.50		G	298.162 971 17	−54.976 452 89	B	11.83	6.30	3.72	16.11	11.01	4.05	12.36	8.42	+ 5	−10	+13	−12	+ 7	−22	+14	−22	−20	+22	5	1.80
97820	19 52 39.43	−05 33 05.5	8.51		H	298.164 304 45	−05.551 527 48		3.92	4.08	1.30	1.23	0.99	1.27	1.62	1.34	+ 9	−22	+ 1	+32	+17	+12	+16	+56	+11	+ 4	0	1.09
97821	19 52 39.50	+51 01 51.5	8.73		H	298.164 598 40	+51.030 974 18		3.77	1.20	9.27	0.66	0.75	0.79	0.74	0.86	− 5	−24	+ 3	− 5	+ 9	+ 2	+ 6	+ 0	+ 9	+ 9	0	0.47
97822	19 52 41.56	+38 49 18.1	8.05		H	298.173 148 66	+38.821 704 05		2.51	−7.33	−7.21	0.63	0.64	0.81	0.78	0.68	+ 5	+ 7	+10	− 8	− 1	+ 0	+ 3	−25	+25	+19	0	0.35
97823	19 52 43.61	+12 10 28.5	8.55		H	298.181 691 41	+12.174 572 05		4.54	13.06	−4.42	0.82	0.64	1.05	1.23	1.03	−11	− 5	−12	+26	−29	+13	−29	+13	− 1	− 3	0	0.44
97824	19 52 44.34	−31 58 36.3	7.10		H	298.184 731 38	−31.976 741 17		0.85	3.93	−7.40	0.91	0.50	0.99	1.13	0.80	+ 7	−24	−23	−13	+26	−16	+22	− 6	+28	−22	0	−0.31
97825	19 52 44.79	−05 53 42.4	8.90	1	H	298.186 638 65	−05.895 115 11		1.75	8.93	−8.41	1.39	1.20	1.50	2.09	1.73	+27	− 7	− 6	+30	+ 7	+14	+ 9	+39	+ 7	+15	0	0.36
97826	19 52 44.84	−39 05 39.7	9.88		H	298.186 837 58	−39.094 372 77		3.94	8.69	6.04	1.43	0.68	1.58	1.72	1.32	+22	−12	+21	+ 0	− 7	− 7	−11	−34	− 8	+11	0	−1.74
97827	19 52 45.81	−43 46 35.6	8.65		H	298.190 892 84	−43.776 563 89		2.85	−15.80	−0.18	1.27	0.59	1.32	1.72	1.03	+ 1	−33	+14	+11	− 7	+12	− 6	−31	−11	+ 6	0	0.93
97828	19 52 46.37	−26 10 39.6	9.31		H	298.193 199 03	−26.177 675 04		5.81	16.82	−9.39	1.28	0.78	1.39	1.33	0.95	+35	−50	−22	+10	+ 1	+ 0	+ 2	− 5	+ 3	+22	0	1.70
97829	19 52 46.93	−37 39 42.8	8.18		H	298.195 536 23	−37.661 882 05		2.28	7.89	11.89	1.15	0.63	1.30	1.56	1.17	+11	−20	−16	+ 6	+ 8	−23	− 4	−20	+24	−19	0	−2.58
97830	19 52 47.46	+64 10 06.2	9.06		H	298.197 770 28	+64.168 382 30	B	4.14	2.22	−19.08	10.41	11.89	6.15	7.10	8.53	+11	−19	+13	− 3	+19	+11	+14	+18	+ 8	+36	3	1.29
*97831	19 52 47.67	+64 10 34.0	6.76		H	298.198 640 80	+64.176 106 92	A	5.87	1.32	−22.71	1.33	1.24	1.07	1.39	1.39	+19	−27	− 8	− 5	+18	+15	+12	+18	+15	+39	3	1.29
*97832	19 52 47.49	+34 11 12.6	7.92	1	H	298.197 855 64	+34.186 824 91		2.82	1.37	−1.62	0.54	0.57	0.77	0.62	0.60	−12	−12	+20	+18	−11	− 8	− 8	− 6	− 2	− 5	0	−0.39
97833	19 52 50.26	+28 59 33.3	7.36		H	298.209 425 47	+28.992 591 53		2.83	7.47	7.67	0.42	0.54	0.74	0.50	0.59	−19	+ 0	− 8	+ 7	+ 6	+ 3	+ 7	−12	+ 7	−12	0	−0.13
97834	19 52 50.45	−23 09 21.3	7.80		H	298.210 202 83	−23.155 903 84		3.01	4.57	−15.52	0.81	0.52	0.91	0.86	0.63	+28	−41	−11	+ 1	+ 4	+20	+ 9	− 7	+ 1	+43	0	−0.17
97835	19 52 51.05	−25 12 18.6	8.89		H	298.212 720 43	−25.205 166 90		2.31	28.65	−28.08	1.13	0.74	1.25	1.26	0.83	+32	−31	−25	+ 5	+17	− 2	+14	− 3	+ 7	+23	0	−0.19
97836	19 52 52.57	−21 03 59.4	8.42		H	298.219 058 23	−21.066 504 53		0.99	2.97	−4.46	0.85	0.57	0.94	0.94	0.70	+38	−26	+ 1	+ 7	+27	+29	+24	+18	+14	+51	2	−1.08
97837	19 52 52.58	+41 04 49.3	7.72		H	298.219 075 47	+41.080 356 96	+	18.81	−16.97	59.62	1.87	2.63	0.64	0.57	0.54	+11	+ 4	− 4	+ 4	− 3	− 1	− 8	−13	+ 9	− 7	1	−0.64
97838	19 52 53.08	−76 10 45.8	7.98		G	298.221 156 09	−76.179 391 10		4.73	17.56	−12.54	0.53	0.53	0.81	0.65	0.63	− 1	− 9	−11	− 2	+ 0	+ 0	+ 0	− 9	− 3	− 6	1	0.35
97839	19 52 53.43	+38 40 18.9	8.01		H	298.222 621 94	+38.671 911 01		2.59	28.04	4.83	0.57	0.61	0.76	0.60	0.62	+ 3	− 3	+ 9	+ 7	+11	−10	+12	−17	+19	+ 4	0	2.08
97840	19 52 54.13	+18 48 42.0	8.34		H	298.225 528 38	+18.811 673 75		3.97	−10.48	−25.12	0.68	0.53	1.05	0.73	0.50	−12	+ 9	− 7	−16	− 5	+ 3	− 6	−39	+ 9	−33	0	−0.56
97841	19 52 54.58	+66 03 20.5	9.55		H	298.227 401 54	+66.055 685 01		2.40	−10.47	−3.28	0.77	0.92	0.92	0.68	1.18	+ 8	− 5	− 3	−24	+22	− 8	+23	+ 8	− 2	+34	0	0.21
97842	19 52 57.00	+17 48 54.3	8.03		H	298.237 491 03	+17.815 086 26		2.93	−2.12	−11.23	0.62	0.44	0.96	0.67	0.42	−18	−14	+ 8	−27	+ 0	+12	− 1	−38	+ 6	−28	0	2.46
97843	19 52 58.95	−52 18 54.9	9.43		H	298.245 612 45	−52.315 256 62		6.40	−4.88	−16.74	1.01	0.63	1.44	1.43	1.07	− 3	−28	+ 6	−24	+24	+ 1	+27	−24	+ 0	+17	0	1.20
97844	19 53 00.26	+27 14 59.5	8.16		H	298.251 080 87	+27.249 868 52		4.93	−12.23	0.73	0.40	0.62	0.95	0.47	0.63	−21	+ 9	− 1	+19	− 7	− 9	− 3	− 9	+14	−15	0	0.23
97845	19 53 01.25	+47 48 27.9	6.30		H	298.255 218 88	+47.807 738 42		1.08	−7.31	−7.64	0.46	0.41	0.51	0.57	0.43	− 5	−11	− 7	+14	+14	−17	+10	− 4	+15	− 5	0	1.68
97846	19 53 01.57	+38 46 21.2	7.57		H	298.256 556 45	+38.772 544 10		17.72	−43.28	342.04	0.56	0.57	0.74	0.64	0.56	+ 6	+16	+27	+ 6	+ 1	− 6	+ 6	−15	+11	+11	0	−0.64
97847	19 53 02.95	+37 23 08.0	7.84	1	H	298.262 301 52	+37.385 562 40		1.86	−0.10	−11.60	0.52	0.53	0.69	0.53	0.52	+ 0	− 3	+13	+17	+12	+ 4	+13	+ 2	+10	+11	0	0.10
97848	19 53 04.58	−29 56 15.5	8.72		H	298.269 091 63	−29.937 631 39		6.68	7.87	−19.00	1.26	0.66	1.37	1.21	0.94	+37	−52	−34	−16	+ 7	+15	+20	+ 8	− 8	+26	0	0.29
97849	H 19 53 06.39	−14 36 11.1	6.47	3	H	298.276 607 73	−14.603 080 38	*	8.58	−0.77	−50.40	2.07	0.89	1.38	1.55	0.79	+30	−16	+ 1	−13	− 6	+32	− 4	−23	+16	+45	4	1.27
97850	19 53 08.00	−27 28 14.8	9.84	2	H	298.283 350 61	−27.470 776 97		−2.35	3.16	−22.44	1.39	1.01	1.69	1.94	1.32	+37	−23	−23	−21	− 4	+28	− 3	−29	− 2	− 0	0	0.42
97851	H 19 53 08.30	−25 27 41.2	7.91		H	298.284 604 14	−25.461 442 74	*	9.99	6.06	−34.49	1.74	1.26	1.28	1.46	1.09	+19	−22	−10	−18	+ 3	+16	+ 4	−13	+15	+41	1	0.90
97852	19 53 08.35	+26 11 38.6	9.60		H	298.284 811 92	+26.194 059 36		4.17	1.75	−2.83	0.84	1.05	1.56	0.95	1.17	+ 1	+ 0	−15	+29	−11	+ 6	−10	−16	+ 6	+ 2	0	−0.59
97853	19 53 08.87	−30 17 33.8	9.41		H	298.286 970 28	−30.292 713 72		9.21	19.28	−48.04	1.36	0.76	1.39	1.35	1.14	+25	−35	−18	−20	+15	+ 4	+22	+ 1	− 4	+37	0	0.83
97854	19 53 09.83	+00 19 31.6	8.17		H	298.290 951 82	+00.325 434 87		3.49	−8.02	−7.87	1.21	1.00	1.42	1.86	1.30	+ 8	+ 4	−34	+27	+ 7	+ 7	+12	+25	+22	−22	0	−0.44
*97855	19 53 10.55	−82 37 52.6	8.54		H	298.293 968 37	−82.631 285 50		2.56	15.01	−16.12	0.64	0.62	0.79	0.75	0.69	− 7	−12	−12	+ 1	− 4	− 6	− 5	− 7	− 2	−14	0	0.32
*97856	19 53 10.52	−53 05 32.7	6.99		H	298.293 834 55	−53.092 408 82		6.82	−12.24	−91.69	0.60	0.41	0.82	0.84	0.62	+ 7	−27	− 1	−18	+14	+ 5	+14	−24	− 1	+ 3	2	1.19
97857	19 53 10.74	−56 40 05.1	8.27		H	298.294 753 07	−56.668 089 96		3.56	8.27	−8.72	0.75	0.59	1.03	1.18	0.85	− 5	−12	− 6	−12	+22	−18	+18	−19	+14	+ 1	0	−0.68
97858	19 53 10.91	−19 15 53.8	9.18		H	298.295 474 30	−19.264 955 83		1.90	−14.71	−22.22	1.19	0.85	1.26	1.53	1.02	+42	−30	−12	+12	+13	− 6	+16	−10	+ 0	+68	0	−0.50
97859	19 53 11.06	+08 03 44.8	7.63		H	298.296 077 73	+08.062 450 04		4.75	9.59	−1.56	0.77	0.72	1.21	0.99	0.86	+33	−13	−51	+33	−24	+38	− 5	+44	−34	− 4	0	−0.53
97860	19 53 11.26	−07 05 14.8	10.00		H	298.296 895 85	−07.087 432 12		3.55	9.84	−11.69	1.44	1.16	1.67	1.79	1.52	+11	+ 0	−19	−14	+14	+31	+21	+15	+ 1	+19	0	0.72
97861	H 19 53 11.59	+42 38 07.3	8.33		H	298.298 278 80	+42.635 374 22	A	1.94	1.17	−3.42	0.96	1.12	1.01	0.98	0.95	− 3	+14	−12	−15	− 9	−22	−10	−22	+ 8	+15	0	−1.35
97862	19 53 11.69	+58 09 53.6	7.40		H	298.298 719 37	+58.164 901 71		1.53	−10.39	−25.82	0.53	0.59	0.59	0.64	0.68	+ 2	− 6	− 5	+ 9	− 9	+ 3	− 5	−23	+ 8	+16	0	0.36
97863	19 53 11.74	+21 09 28.5	8.43		H	298.298 917 58	+21.157 919 73		1.80	−0.16	−4.90	0.64	0.56	0.90	0.77	0.58	−12	+ 8	−19	−14	− 6	+ 7	− 4	−25	+12	−33	0	−1.22
97864	19 53 12.70	+39 27 45.1	8.36		H	298.302 915 56	+39.462 522 44		1.77	1.07	−1.25	0.70	0.70	0.90	0.93	0.81	− 4	−21	+ 6	− 6	+ 1	+14	− 3	− 9	+21	+15	1	0.87
97865	19 53 12.78	+26 48 14.4	9.73	2	H	298.303 245 37	+26.804 011 35		1.06	0.19	−1.73	0.73	1.07	1.50	0.83	1.11	− 4	+ 4	−20	+27	+ 6	+ 2	+ 7	−19	+ 0	− 1	3	2.73
97866	19 53 13.75	−05 32 24.7	7.42		H	298.307 274 02	−05.540 183 18		14.89	−34.47	−41.37	1.41	1.13	1.24	1.45	1.25	+13	−44	− 6	+29	+21	− 0	+17	+56	+ 4	+12	0	0.27
97867	19 53 15.94	+28 05 58.6	6.98		H	298.316 433 64	+28.099 598 03		6.26	18.63	5.91	0.37	0.49	0.72	0.43	0.53	−16	+ 2	− 1	+22	− 1	− 9	+ 0	− 7	+10	−13	0	−1.78
97868	19 53 16.94	−37 24 05.2	11.95	2	G	298.320 586 35	−37.401 456 87		1.41	−16.14	−8.98	4.06	1.96	4.40	4.73	4.09	+26	−45	− 9	− 7	− 7	− 6	−11	−27	+ 8	+18	4	0.72
97869	19 53 17.25	−72 28 24.5	7.58		H	298.321 887 21	−72.473 464 33		2.84	16.62	−13.07	0.48	0.55	0.78	0.53	0.66	−17	−19	+ 1	+ 7	+11	− 3	+10	−14	−10	−28	0	1.04
97870	19 53 17.37	+57 31 24.5	5.14	1	H	298.322 378 72	+57.523 463 29		5.11	5.96	7.64	0.43	0.46	0.49	0.48	0.54	− 4	− 6	− 4	+ 3	− 1	−12	− 1	− 4	+16	+ 9	0	0.62
97871	19 53 18.72	−03 06 52.2	5.63		H	298.328 013 07	−03.114 496 82		11.79	21.64	13.62	0.85	0.59	0.93	0.92	0.73	− 4	−36	−13	−22	+10	+16	+16	+ 5	−11	− 8	0	0.35
97872	19 53 19.21	−04 34 22.5	8.40		H	298.330 037 23	−04.572 906 97		4.27	−6.56	−7.34	1.22	0.95	1.26	1.43	1.33	−14	−24	− 4	−22	+34	+20	+38	+14	−26	− 1	3	1.86
97873	19 53 20.28	−45 06 02.8	9.93		G	298.334 479 35	−45.100 784 99		3.89	31.60	10.31	1.75	0.85	1.88	2.71	1.48	+ 2	− 6	+ 0	− 6	+ 4	−27	+ 4	−36	+ 7	− 2	0	−0.16
97874	19 53 20.64	−40 22 19.8	8.98		H	298.336 006 53	−40.372 159 04		2.07	4.12	−39.84	1.44	0.70	1.53	1.97	1.18	+14	−30	−21	+10	+14	− 9	+ 6	−19	+14	−10	4	0.61
97875	19 53 20.93	+39 31 42.1	8.72		H	298.337 216 14	+39.528 371 65		1.00	−2.00	−7.96	0.67	0.69	0.87	0.97	0.81	− 6	−14	− 1	+ 1	− 3	+20	− 4	− 6	+18	+12	3	0.12
*97876	19 53 22.63	+20 20 13.9	7.16		H	298.344 309 18	+20.337 207 86		6.62	29.90	15.19	0.59	0.48	0.88	0.70	0.48	−24	−10	− 3	− 9	− 5	− 5	− 7	−32	+14	−43	3	0.50
*97877	19 53 22.60	+04 24 01.4	6.52		H	298.344 164 48	+04.400 392 86		3.51	10.23	−0.20	0.88	0.70	1.00	1.05	0.87	+ 0	−29	−14	+24	− 1	+22	+ 3	+48	+ 0	−11	0	1.52
97878	19 53 23.20	+36 11 51.9	7.78		H	298.346 652 55	+36.197 740 06		1.92	13.34	11.48	0.51	0.56	0.72	0.57	0.59	−13	− 7	− 1	+11	+ 6	−13	+ 5	−13	+23	−11	0	−0.30
97879	H 19 53 24.27	+20 19 38.7	7.32		G	298.351 136 62	+20.327 409 52	*	6.87	30.08	16.01	1.70	1.30	1.19	1.37	0.93	− 4	− 6	− 3	+ 4	−10	−12	−16	−24	+14	−25	1	0.98
97880	19 53 24.86	−26 56 36.8	8.07		H	298.353 568 74	−26.943 558 19		2.33	12.24	−21.60	1.05	0.67	1.17	1.00	0.77	+36	−51	−22	− 4	− 2	+ 5	+ 7	−14	−11	+38	4	0.66
97881	19 53 25.54	−55 54 05.5	8.64		H	298.356 423 02	−55.901 527 72		1.25	7.61	−15.68	0.79	0.69	1.07	1.16	0.93	+15	− 8	+ 0	− 5	+16	+ 7	+15	−18	+ 8	+26	0	−0.16
97882	19 53 25.67	+06 31 30.3	8.96		G	298.356 941 22	+06.525 074 01		4.74	16.75	3.53	0.85	0.71	1.30	1.01	1.08	+41	+ 0	−17	+16	−21	+11	−27	+18	−34	+28	1	2.33
97883	19 53 25.87	+22 19 00.3	8.17		H	298.357 778 95	+22.316 752 35		2.12	5.03	−1.13	0.63	0.60	0.93	0.75	0.63	−16	−19	+14	+ 4	−10	+ 3	−13	−14	+ 7	−30	0	0.94
97884	19 53 26.86	−61 29 24.2	8.52	1	H	298.361 898 85	−61.490 050 67		3.11	6.89	2.15	0.77	0.66	1.14	0.73	0.71	+10	− 6	−17	− 1	−19	+ 7	−29	−35	+ 9	−15	2	0.62
97885	19 53 27.11	−07 25 43.6	8.36		H	298.362 951 85	−07.428 772 08		8.64	12.66	−4.40	1.10	0.83	1.25	1.34	1.10	− 3	+ 8	−25	−18	+14	+14	+18	+14	−15	− 1	0	1.03
97886	H 19 53 27.68	+24 04 46.3	4.57		G	298.365 336 77	+24.079 525 68	A	9.08	22.78	36.29	0.54	0.50	0.67	0.66	0.51	− 1	− 3	− 2	−17	− 5	− 5	− 4	−16	+17	−13	2	−0.41
97887	19 53 28.32	−01 53 04.5	9.14		H	298.367 995 61	−01.884 575 51		11.85	−21.67	−11.99	1.34	1.13	1.55	2.11	1.55	+16	+ 1	−33	+25	− 4	+30	+ 8	+40	−16	− 3	0	0.66
97888	19 53 29.64	−10 06 34.4	8.91		H	298.373 505 91	−10.109 545 56		5.32	24.55	−58.72	1.25	1.08	1.29	1.39	1.36	+42	−20	−13	+20	+43	+27	+48	+60	+ 4	+45	0	−0.30
97889	H 19 53 32.54	+21 17 19.7	8.40		H	298.385 577 12	+21.288 818 29	A	2.83	−1.63	−7.52	1.00	0.86	1.26	0.95	0.78	−19	+ 1	−16	−34	+10	+18	+13	−30	+11	−14	1	−0.19
97890	19 53 33.58	−40 43 23.0	9.33		H	298.389 917 12	−40.723 066 39		4.24	30.16	7.72	1.34	0.67	1.42	1.81	1.31	+ 1	+ 0	− 7	+14	+15	− 8	+15	− 5	+17	−26	2	−0.58
97891	19 53 34.53	+35 50 55.7	8.36		H	298.393 892 59	+35.848 802 09		3.06	3.54	1.17	0.57	0.64	0.85	0.67	0.73	−13	− 1	− 8	+ 3	+16	−13	+15	−17	+18	−13	0	2.74
97892	19 53 35.38	+59 42 30.7	6.06		H	298.397 412 51	+59.708 524 96		9.61	42.12	55.57	0.48	0.45	0.48	0.50	0.50	+ 3	+ 2	+ 5	+18	+19	− 3	+22	+ 3	+ 2	+13	1	0.42
97893	19 53 35.46	+44 14 36.0	8.44		H	298.397 741 11	+44.243 320 89		2.11	7.00	9.89	0.60	0.59	0.73	0.67	0.56	+ 0	+ 1	+ 5	+14	+10	−28	+12	− 5	+ 4	+ 3	0	1.02
97894	19 53 36.25	−53 55 42.5	8.30		H	298.401 031 62	−53.928 467 62		5.79	19.28	−14.46	0.70	0.50	1.00	1.17	0.82	+ 2	−23	+ 0	−23	+29	+ 5	+29	−23	− 8	− 4	1	−0.57
97895	19 53 38.49	+41 21 20.9	6.99		G	298.403 769 76	+41.355 810 63		1.68	−3.34	−12.49	0.43	0.43	0.52	0.46	0.42	−13	−10	+13	− 4	+ 7	+ 9	+ 5	− 9	+ 4	+ 1	0	−1.46
97896	19 53 39.01	−32 39 42.9	8.43		H	298.412 560 66	−32.661 924 21		1.55	11.21	8.87	1.27	0.70	1.38	1.62	1.13	+ 7	−20	−20	−16	+15	−12	+16	−11	+ 4	− 9	0	2.07
97897	19 53 41.92	+11 36 31.9	8.16		H	298.424 687 31	+11.608 860 91		1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
97801	9.341	0.022	7.569	0.011		1.476	0.019	T	1.49	0.03	L	7.5026	0.0019	0.011	59		7.47	7.52		C			1							S
97802	9.832	0.020	7.910	0.008		1.595	0.017	T	1.61	0.02	L	7.8113	0.0014	0.012	114		7.79	7.84			19524−1653	I 1	1 S							
97803	10.791	0.039	8.776	0.013		1.706	0.034	T	2.01	0.08	O	8.6627	0.0031	0.035	149		8.62	8.72		U 2			1							
97804	4.829	0.060	3.958	0.040		0.630	0.020	G	0.73	0.02	A	4.0440	0.0690	0.272	52		3.78	4.46	7.18	P 1 A			1 S							S P
97805	11.003	0.064	9.601	0.032		1.155	0.015	G	1.12	0.01	H	9.5826	0.0030	0.021	75		9.54	9.61		C			1							
97806	10.749	0.039	10.518	0.055		0.330	0.015	G	0.38	0.02	H	10.4039	0.0041	0.048	176		10.32	10.49					1 S							D
97807	8.673	0.008	8.351	0.009	A	0.163	0.140	G	0.33	0.06	L *	8.3469	0.0020	0.024	222	*	8.31	8.39		U	19525+1726	H 1	2 C D	AB	38	2.722	0.039	3.71	0.25	S D
97808	9.291	0.017	9.244	0.022		0.048	0.026	T	0.06	0.02	L	9.2293	0.0047	0.038	103		9.17	9.30		U 2			1							
97809	8.399	0.025	8.083	0.027	*	0.332	0.022	G	0.39	0.03	H *	8.1213	0.0026	0.014	44	*	8.10	8.14		D	19525+0039	I 1	2 C A	AB	294	4.931	0.019	0.25	0.02	S
97810	9.258	0.014	8.938	0.015		0.304	0.019	T	0.35	0.03	L	8.9950	0.0018	0.024	140		8.95	9.03					1							S
97811	8.785	0.013	8.650	0.015		0.130	0.019	T	0.14	0.02	L	8.6910	0.0017	0.014	98		8.66	8.72		C			1							
97812	7.958	0.009	7.736	0.009		0.223	0.003	G	0.25	0.00	H	7.7633	0.0012	0.012	102		7.74	7.78		C			1							S
97813	10.352	0.027	8.473	0.011		1.561	0.023	T	1.58	0.02	L	8.3972	0.0016	0.017	133		8.37	8.42					1 S							
97814	9.512	0.014	8.338	0.009		1.007	0.013	T	0.98	0.01	L	8.3885	0.0016	0.019	177		8.36	8.42					1							
97815	8.115	0.008	8.063	0.009		0.053	0.011	T	0.07	0.01	L	8.0857	0.0014	0.013	106		8.06	8.11					1							S
97816	6.873	0.005	5.818	0.004	A	0.915	0.005	T	0.91	0.00	L	5.9193	0.0247	0.049	157	A	5.79	5.95		D	19526−5458	I 2	1 C P A							S
97817	8.688	0.009	8.675	0.012		0.017	0.014	T	0.04	0.01	L	8.6756	0.0015	0.023	175		8.63	8.73					1							
97818	7.628	0.006	7.678	0.007		−0.041	0.008	T	−0.02	0.01	L	7.6791	0.0011	0.013	191		7.65	7.70					1							S
97819	6.576	0.004	6.452	0.004	B	0.100	0.015	G	0.11	0.02	H	6.5280	0.0366			B				D	19526−5458	I 2	1 C I A							S
97820	8.671	0.017	8.530	0.020		0.136	0.025	T	0.15	0.03	L	8.5613	0.0016	0.014	50		8.54	8.58		C			1							S
97821	9.238	0.015	8.779	0.015		0.429	0.015	G	0.50	0.02	H	8.8211	0.0016	0.017	120		8.79	8.85					1							
97822	9.270	0.015	8.172	0.010		0.948	0.014	T	0.94	0.01	L	8.2072	0.0014	0.014	111		8.19	8.23					1							
97823	8.580	0.011	8.534	0.014		0.016	0.015	G	0.04	0.01	H	8.5591	0.0012	0.013	101		8.53	8.59		C			1							
97824	7.321	0.006	7.124	0.007		0.188	0.009	T	0.21	0.01	L	7.1610	0.0010	0.009	92		7.14	7.18		C			1							S
97825	11.311	0.106	9.146	0.028		1.789	0.088	T	1.82	0.09	L	8.9932	0.0040	0.028	41		8.95	9.04		U			1							
97826	10.533	0.042	9.988	0.042		0.517	0.044	T	0.59	0.05	L	9.9920	0.0021	0.018	123		9.96	10.02		C			1							
97827	10.018	0.028	8.787	0.017		1.051	0.026	T	1.02	0.02	L	8.8147	0.0016	0.015	110		8.79	8.84		C			1							
97828	9.682	0.022	9.341	0.025		0.323	0.031	T	0.37	0.04	L	9.3914	0.0022	0.014	74		9.36	9.42					1							
97829	9.795	0.026	8.330	0.014		1.234	0.023	T	1.19	0.02	L	8.3442	0.0019	0.023	104		8.32	8.39					1							
97830	9.468	0.021	9.019	0.022	B	0.424	0.028	T	0.49	0.03	L	9.1584	0.0439			B				D	19528+6411	I 2	1 C I D							D
97831	8.173	0.010	6.884	0.005	A	1.096	0.009	T	1.06	0.01	L	6.9326	0.0078	0.009	108	A	6.92	6.95		D	19528+6411	I 2	1 C P D							S D
97832	7.840	0.009	7.907	0.011		−0.057	0.002	G	−0.04	0.00	H	7.9097	0.0020	0.019	125		7.88	7.95		U			1							S
97833	7.250	0.004	7.328	0.006		−0.092	0.005	G	−0.07	0.01	H	7.3333	0.0011	0.012	190		7.32	7.35					1							S
97834	7.843	0.009	7.795	0.011		0.043	0.013	T	0.06	0.01	L	7.8201	0.0012	0.008	82		7.80	7.84		C			1							S
97835	10.087	0.033	8.994	0.022		0.944	0.030	T	0.93	0.02	L	9.0493	0.0024	0.015	77		9.02	9.07		C			1							
97836	8.391	0.010	8.416	0.013		−0.019	0.003	G	0.00	0.00	H	8.4185	0.0014	0.012	100		8.40	8.44		C			1							
97837	8.399	0.011	7.785	0.010		0.572	0.013	T	0.64	0.01	L	7.8414	0.0010	0.011	142		7.82	7.86		C			1 O							S
97838	8.018	0.008	7.970	0.009		0.034	0.013	G	0.02	0.02	A	8.0051	0.0012	0.014	150		7.98	8.03		C			1							S
97839	9.604	0.018	8.150	0.010		1.226	0.016	T	1.18	0.02	L	8.1701	0.0011	0.014	124		8.15	8.20		C			1							
97840	9.892	0.018	8.459	0.010		1.209	0.016	T	1.17	0.02	L	8.5049	0.0013	0.016	187		8.48	8.54					1							
97841	11.041	0.053	9.689	0.027		1.146	0.047	T	1.11	0.04	L	9.7260	0.0019	0.020	93		9.68	9.76		C			1							
97842	8.023	0.005	8.018	0.007		0.004	0.015	G	0.02	0.01	H	8.0368	0.0011	0.015	221		8.01	8.06					1							S
97843	9.916	0.021	9.462	0.021		0.442	0.023	T	0.51	0.02	L	9.5292	0.0019	0.022	156		9.48	9.56					1							
97844	8.789	0.007	8.221	0.007		0.531	0.009	T	0.60	0.01	L	8.2794	0.0011	0.015	256		8.25	8.31					1							
97845	6.130	0.003	6.275	0.004		−0.126	0.004	T	−0.12	0.01	L	6.2572	0.0011	0.010	109		6.24	6.27					1							S
97846	8.556	0.011	7.660	0.008		0.773	0.015	G	0.81	0.01	H	7.7149	0.0012	0.011	112		7.70	7.73		C	19530+3846	I 1	1							
97847	9.970	0.022	8.021	0.009		1.652	0.020	T	1.78	0.06	O	7.9391	0.0015	0.016	142		7.92	7.97		M			1							
97848	9.124	0.018	8.742	0.019		0.362	0.024	T	0.42	0.03	L	8.8032	0.0012	0.010	76		8.79	8.82					1							
97849	6.668	0.006	6.505	0.006	*	0.149	0.008	T	0.16	0.01	L *	6.5220	0.0046	0.056	118	*	6.49	6.64	1.18	P 1 A	19531−1436	M 1	2 C B	BA	350	0.234	0.012	2.64	0.13	S D
97850	11.905	0.162	9.994	0.046		1.054	0.008	G	1.02	0.01	H	10.0053	0.0174	0.071	73		9.87	10.06		U 2			1 G							
97851	8.592	0.013	7.984	0.011	*	0.565	0.013	T	0.64	0.01	L *	8.0359	0.0017	0.014	81	*	8.02	8.06		D	19531−2528	I 1	2 C A	AB	346	0.221	0.004	0.17	0.11	S
97852	9.596	0.019	9.637	0.027		−0.033	0.030	T	−0.01	0.03	L	9.5953	0.0024	0.032	148		9.55	9.66		C			1							G
97853	10.183	0.033	9.515	0.029		0.608	0.033	T	0.68	0.03	L	9.5410	0.0023	0.016	80		9.52	9.56					1							
97854	10.448	0.056	8.378	0.019		1.713	0.047	T	1.74	0.05	L	8.2775	0.0032	0.014	39		8.25	8.30					1							
97855	10.358	0.027	8.698	0.013		1.388	0.024	T	1.36	0.03	L	8.6846	0.0016	0.016	125		8.65	8.72					1							
97856	8.326	0.007	7.107	0.005		1.042	0.007	T	1.01	0.01	L	7.1569	0.0008	0.010	200		7.14	7.17					1							S
97857	8.859	0.011	8.313	0.011		0.512	0.014	T	0.58	0.01	L	8.3822	0.0019	0.017	129		8.36	8.41					1							S
97858	10.944	0.059	9.296	0.024		1.378	0.050	T	1.35	0.06	L	9.3241	0.0027	0.017	87		9.30	9.35					1							
97859	9.159	0.015	7.757	0.009		1.185	0.014	T	1.15	0.01	L	7.7964	0.0011	0.008	104		7.78	7.82		C			1							
97860	10.401	0.047	10.061	0.053		0.380	0.015	G	0.44	0.02	H	10.0863	0.0031	0.019	59		10.04	10.12		D			1							G
97861	8.349	0.009	8.345	0.011	*	0.008	0.013	T	0.03	0.01	L *	8.3451	0.0018	0.015	124	*	8.32	8.37		D	19532+4238	M 1	2 C A	AB	160	0.560	0.006	1.88	0.03	
97862	9.483	0.018	7.591	0.008		1.572	0.016	T	1.59	0.02	L	7.5130	0.0018	0.015	91		7.49	7.54		R			1							S
97863	8.433	0.007	8.432	0.009		0.006	0.010	T	0.03	0.01	L	8.4410	0.0016	0.020	158		8.40	8.48					1							
97864	10.123	0.025	8.505	0.012		1.355	0.022	T	1.32	0.03	L	8.5076	0.0018	0.017	116		8.49	8.54					1							
97865	10.047	0.024	9.798	0.030		0.237	0.036	T	0.26	0.04	L	9.7998	0.0032	0.035	203		9.73	9.85		U			1 S							G
97866	8.070	0.011	7.477	0.009		0.554	0.015	G	0.63	0.01	H	7.5412	0.0017	0.011	50		7.52	7.56		C			1 G							S
97867	8.360	0.007	7.101	0.005		1.073	0.007	T	1.04	0.01	L	7.1510	0.0008	0.010	200		7.13	7.17		C			1							S
97868						0.870	0.020	G	0.88	0.01	H	12.1219	0.0120	0.072	76		11.89	12.25		U			1							G
97869	9.434	0.015	7.736	0.007		1.418	0.013	T	1.40	0.02	L	7.7187	0.0012	0.015	189		7.70	7.75					1							S
97870	4.974	0.002	5.119	0.003		−0.125	0.003	T	−0.11	0.00	L	5.1026	0.0010	0.009	116		5.09	5.12		M			1							S
97871	5.897	0.005	5.655	0.005		0.231	0.007	T	0.26	0.01	L	5.7002	0.0010	0.006	47		5.69	5.71		C			1							S
97872	10.851	0.081	8.612	0.023		1.848	0.067	T	1.88	0.07	L	8.4923	0.0029	0.014	39		8.47	8.51					1 S							
97873	10.784	0.048	9.984	0.038		0.730	0.020	G	0.78	0.01	H	10.0895	0.0029	0.025	115		10.04	10.14					1							
97874	10.371	0.034	9.082	0.019		1.096	0.030	T	1.06	0.03	L	9.1489	0.0028	0.023	131		9.11	9.18					1							
97875	8.656	0.009	8.705	0.012		−0.040	0.014	T	−0.02	0.01	L	8.7100	0.0016	0.019	118		8.68	8.74					1							
97876	7.310	0.005	7.169	0.006		0.136	0.007	T	0.15	0.01	L	7.2133	0.0010	0.010	152		7.19	7.23			19534+2020	I 2	1							S
97877	6.534	0.006	6.518	0.008		0.015	0.009	T	0.03	0.01	L	6.5292	0.0005	0.005	40		6.52	6.54		D			1							S
97878	8.905	0.012	7.889	0.009		0.886	0.011	T	0.89	0.01	L	7.9336	0.0011	0.012	137		7.91	7.95		C			1							S
97879	7.704	0.007	7.377	0.006	*	0.310	0.015	G	0.36	0.02	H *	7.4357	0.0008	0.010	150	*	7.42	7.45		D	19534+2020	I 2	2 C A	AC	28	0.244	0.009	1.76	0.11	S
97880	9.774	0.023	8.200	0.012		1.320	0.020	T	1.28	0.02	L	8.2290	0.0016	0.014	88		8.20	8.25		C			1							S
97881	9.941	0.020	8.751	0.013		1.019	0.019	T	0.99	0.01	L	8.8056	0.0022	0.021	137		8.78	8.84		C			1							
97882	9.314	0.013	8.996	0.014		0.315	0.015	G	0.36	0.02	H	9.0313	0.0012	0.015	163		9.01	9.07		C			1							
97883	8.127	0.007	8.163	0.009		−0.028	0.010	T	−0.01	0.01	L	8.1670	0.0015	0.019	132		8.15	8.20					1							
97884	9.632	0.018	8.621	0.013		0.882	0.017	T	0.89	0.01	L	8.6750	0.0025	0.023	114		8.65	8.72		U			1							
97885	8.909	0.019	8.386	0.018		0.491	0.024	T	0.56	0.03	L	8.4639	0.0020	0.014	58		8.43	8.50		C			1							S
97886	4.533	0.003	4.585	0.003	A	−0.047	0.012	G	−0.02	0.03	C *	4.5683	0.0006	0.005	114	*	4.56	4.58		D	19535+2405	I 1	2 C A	AB	244	1.182	0.010	2.90	0.03	S
97887	9.808	0.030	9.217	0.027		0.559	0.008	G	0.63	0.01	H	9.2574	0.0026	0.017	48		9.22	9.28		C			1							
97888	9.464	0.026	8.964	0.026		0.470	0.033	T	0.54	0.04	L	9.0123	0.0025	0.015	52		8.98	9.04		C			1							
97889	8.404	0.007	8.386	0.009	*	−0.030	0.015	G	−0.01	0.01	H *	8.4023	0.0018	0.019	152	*	8.38	8.45			19535+2117	H 1	2 C B	AB	199	0.692	0.023	3.74	0.18	
97890	9.780	0.024	9.363	0.024		0.378	0.003	G	0.44	0.00	H	9.4161	0.0028	0.025	124		9.37	9.45					1							
97891	8.277	0.008	8.347	0.010		−0.059	0.012	T	−0.04	0.01	L	8.3469	0.0019	0.018	134		8.32	8.37					1							
97892	6.101	0.003	6.065	0.004		0.033	0.004	T	0.05	0.00	L	6.0808	0.0007	0.005	113		6.07	6.09			19536+5943	I 1	1							S
97893	8.496	0.010	8.431	0.012		0.065	0.015	T	0.07	0.02	L	8.4635	0.0017	0.014	109		8.44	8.49		C			1							
97894	8.433	0.007	8.310	0.009		0.119	0.011	T	0.13	0.01	L	8.3455	0.0011	0.014	188		8.33	8.37		C			1							S
97895	6.779	0.004	6.960	0.005		−0.155	0.005	G	−0.15	0.01	H	6.9335	0.0009	0.008	143		6.92	6.95					1							S
97896	10.099	0.036	8.544	0.017		1.305	0.031	T	1.27	0.03	L	8.5872	0.0020	0.012	79		8.57	8.61		C			1							
97897	10.123	0.028	8.336	0.012		1.488	0.024	T	1.51	0.04	L	8.2886	0.0016	0.017	117		8.26	8.32					1							
97898	9.533	0.023	8.016	0.012		1.275	0.020	T	1.23	0.02	L	8.0166	0.0017	0.016	93		7.99	8.04		C			1							
97899	10.310	0.033	9.642	0.030		0.603	0.002	G	0.67	0.00	H	9.7102	0.0025	0.021	98		9.68	9.75					1							
97900	7.900	0.006	7.595	0.007		0.290	0.009	T	0.33	0.01	L	7.6371	0.0013	0.014	139		7.62	7.66					1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\mu_{\alpha*}$	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
97901	19 53 44.19	−03 44 45.6	9.30	H	298.434 130 38	−03.746 007 70		5.67	−0.82	−8.15	1.31	1.15	1.57	1.52	1.52	+23	−20	−	9	−	3	+31	+29	+35	+43	−14	+30	0	−0.62
97902	19 53 44.63	+51 09 15.7	8.06	H	298.435 971 21	+51.154 367 17		2.40	8.27	20.11	0.62	0.66	0.74	0.71	0.74	−	4	−28	+	6	−	7	+13	−	5	+	6	+	3	+17	+	6	1	0.06
97903	19 53 45.32	+26 59 59.7	7.78	H	298.438 825 16	+26.999 904 00		1.66	1.61	−5.36	0.38	0.58	0.87	0.47	0.63	−14	+	3	+	3	+10	−	7	−	5	−	4	−14	+	7	−	9	1	0.51
97904	19 53 45.93	+16 46 41.1	7.70	G	298.441 395 09	+16.778 090 84		0.40	−2.21	2.27	0.66	0.53	0.99	0.80	0.53	+	7	+16	+	2	−10	−23	+	2	−23	−40	−	2	−	9	4	0.17
97905 H	19 53 45.99	+22 36 34.1	9.58	2 G	298.441 621 74	+22.609 462 03	A	3.05	−2.14	−3.91	1.98	1.79	2.33	2.09	1.69	+20	+	2	+	3	−	6	−24	−10	−	4	+	8	+13	−37	1	1.35
97906	19 53 46.15	+45 28 13.5	7.68	H	298.442 304 88	+45.470 414 68		2.10	−1.24	−1.32	0.57	0.54	0.66	0.68	0.50	−	6	−16	+	2	+14	+14	+	2	+	9	−12	+17	+	0	0	0.72
97907	19 53 47.30	+34 35 01.8	7.02	H	298.447 083 62	+34.583 825 35		1.57	1.13	−1.89	0.43	0.48	0.62	0.48	0.48	−	8	−10	+	8	+10	−10	−	6	−	8	−23	+11	−	6	0	−1.86
97908	19 53 47.44	+13 58 54.5	9.02	H	298.447 657 52	+13.981 806 79		9.14	24.71	−86.59	0.96	0.82	1.29	1.25	1.06	+31	−14	−16	+13	+	0	+13	+	1	+	2	+	8	+29		0	0.32
97909	19 53 48.61	−16 38 41.1	8.52	H	298.452 530 81	−16.644 752 40		2.73	8.64	17.25	1.03	0.57	1.11	1.16	0.56	+35	−25	−	5	−10	+11	+15	+	6	−25	+15	+56		1	1.16
97910	19 53 48.74	+85 45 31.8	7.71	H	298.453 099 42	+85.758 832 47		1.79	−11.03	−1.73	0.60	0.61	0.67	0.76	0.76	−	2	−	9	−11	−12	+	3	−	1	+	3	−14	+	0	+	4	0	0.34
97911	19 53 48.78	−71 24 21.9	7.59	H	298.453 230 96	−71.406 087 66		4.76	8.52	−24.11	0.46	0.55	0.79	0.54	0.66	−25	+	0	+	5	+	9	+	7	−	6	+	5	−13	−	9	−37	0	−1.08
97912 H	19 53 50.64	−50 09 04.0	8.76	H	298.461 002 90	−50.151 103 35	*	5.06	−41.67	−14.80	1.07	0.60	1.13	1.57	0.87	−14	−15	−	2	+25	−	2	−	3	+	3	−16	+	7	+	2	0	−0.05
97913	19 53 51.79	+39 06 25.8	8.04	H	298.465 786 01	+39.107 166 34		1.71	2.51	−0.92	0.58	0.62	0.76	0.69	0.73	+	2	−13	+12	+	7	−	3	+	3	−	1	−14	+11	+	20	0	0.07
97914	19 53 52.34	+41 13 45.6	7.63	H	298.468 097 21	+41.229 324 81		3.70	15.00	12.97	0.49	0.48	0.59	0.51	0.47	−13	−10	+10	+	2	+	7	+	1	+	6	+	0	+	4	+	0	0	−0.49
97915	19 53 52.68	+26 35 36.5	6.84	H	298.469 506 33	+26.593 470 22		6.12	7.21	−15.49	0.45	0.51	0.77	0.50	0.58	−	3	−	8	−	8	+27	−	3	−	2	−	5	−16	+	7	−	7	0	1.26
97916	19 53 53.10	−54 21 58.3	7.61	H	298.471 263 52	−54.366 191 93		9.74	74.83	−23.25	0.80	0.51	0.96	1.29	0.81	−28	−	7	−	8	−47	+38	−19	+37	−36	+	0	−23		0	−1.24
97917 H	19 53 53.70	+32 56 49.9	9.30	G	298.473 731 61	+32.947 200 44	*	3.65	−0.60	−4.70	0.77	0.82	1.14	0.79	0.79	+	4	+	3	+	7	+14	+	6	−13	+	8	−	5	+	8	+	6	0	0.18
97918	19 53 59.66	+20 00 34.7	7.97	H	298.498 573 78	+20.009 632 27		14.01	74.00	−13.10	0.64	0.54	0.94	0.72	0.53	−25	−20	+	3	−13	−	6	−	1	−	8	−31	+11	−45		1	−0.02
*97919	19 54 00.80	+49 14 32.6	7.83	H	298.503 324 89	+49.242 381 61		2.24	12.35	−8.03	0.63	0.54	0.67	0.68	0.53	−17	−27	+13	+16	+	1	−16	+	5	−	5	−	3	+	0	1	1.36
*97920	19 54 00.79	+57 02 51.6	9.86	H	298.503 293 98	+57.047 657 55		0.58	0.46	−13.40	0.81	0.93	0.94	0.98	1.09	+	7	−13	+	3	+	1	−	2	−	2	−	2	−16	+13	+20	0	−1.06
97921	19 54 00.89	−27 29 26.4	9.13	H	298.503 703 55	−27.490 652 98		11.47	20.15	−20.65	1.27	0.84	1.41	1.41	1.01	+30	−20	−	5	+	1	+	4	+16	+	7	−	8	−	1	+37	0	−0.31
*97922 H	19 54 01.97	+15 17 31.6	7.02	G	298.508 209 07	+15.292 115 42	A	11.96	−18.61	−12.71	1.10	1.01	1.50	1.25	1.37	+41	+	0	+11	+	4	+15	+36	+12	+16	+	3	+49		2	4.01
*97923	19 54 01.90	−30 15 10.4	10.31	3 H	298.507 908 25	−30.252 888 59		0.90	16.21	−3.62	1.83	1.14	1.90	1.91	1.56	+28	−26	−12	−13	+24	+11	+29	+17	−	1	+34		0	1.38
97924	19 54 02.54	+28 23 15.2	8.37	H	298.510 577 25	+28.387 566 49		2.16	−0.99	0.53	0.49	0.68	0.92	0.57	0.77	−15	−	5	+	3	+27	−	1	−	3	+	0	+	8	+	5	−	8	0	−0.42
97925	19 54 04.01	+17 57 04.0	8.57	G	298.516 706 35	+17.951 124 54		1.23	−3.96	−1.87	0.69	0.56	1.06	0.77	0.52	−12	+	0	−	5	−32	+	6	+	3	+	5	−49	+11	−25	0	−2.83
97926 H	19 54 04.06	−69 32 28.9	9.60	H	298.516 903 68	−69.541 373 52	A	4.34	24.73	−11.70	1.96	2.99	3.33	1.79	3.07	−	8	−	7	−	9	+10	+12	−	9	+12	−20	+	7	−24	1	−0.71
97927	19 54 05.74	−32 00 11.1	10.25	H	298.523 922 92	−32.003 071 10		24.29	−159.85	−125.60	1.67	0.97	1.79	2.25	1.67	+11	−11	−	8	−14	+20	−11	+23	−	1	+15	−	4		2	0.76
97928	19 54 08.27	−08 34 27.0	5.76	1 G	298.534 469 04	−08.574 164 89		8.27	7.87	−18.97	0.90	0.73	1.06	1.05	0.85	+	9	−19	−40	−	5	+13	+30	+34	+38	−27	−	4		3	0.93
97929	19 54 08.79	−35 59 10.5	8.31	H	298.536 624 54	−35.986 242 37		3.26	−21.39	−17.62	1.00	0.64	1.16	1.37	1.31	+31	−	3	+13	−11	−13	−18	−	6	−26	−36	+50		0	0.69
97930	19 54 09.68	+33 46 51.3	6.73	H	298.540 349 12	+33.780 912 98		3.38	19.31	30.43	0.47	0.50	0.68	0.56	0.48	−13	−10	+19	+16	−	5	−	2	−	1	−22	+	0	−	2	0	−0.84
97931	19 54 10.32	−26 41 45.7	7.73	H	298.542 991 65	−26.696 032 65		2.15	12.29	−20.21	1.00	0.63	1.09	1.03	0.74	+38	−50	−17	+11	+	0	+	1	+	3	−10	−	7	+29		0	0.97
97932	19 54 10.48	+05 04 48.3	8.41	H	298.543 676 80	+05.080 088 73		0.57	2.18	−4.90	1.15	0.85	1.35	1.65	1.32	+27	−15	−21	+25	−	9	+21	+	2	+47	−	8	−15		0	−0.36
97933 H	19 54 10.75	+05 25 29.2	9.08	1 G	298.544 791 57	+05.424 779 55	A	2.31	−0.19	−9.92	1.68	1.46	1.64	2.14	2.00	+60	−14	−16	+32	+22	+	3	+26	+54	−	8	+37		1	0.16
97934	19 54 13.11	+06 15 52.8	8.60	H	298.554 613 21	+06.264 678 99		2.78	12.35	2.97	1.03	0.97	1.29	1.32	1.46	+63	−	7	−	4	+52	+38	+20	+33	+67	+	2	+59		0	1.86
97935	19 54 13.50	−49 27 42.2	8.76	2 H	298.556 249 26	−49.461 726 27		3.10	12.73	−7.88	1.12	0.60	1.25	1.67	0.90	−14	−21	+15	+27	−	2	+	4	+	8	−20	−13	+	7	0	−0.97
97936	19 54 14.72	+44 50 50.4	8.24	H	298.561 348 22	+44.847 338 64		0.78	−2.93	−6.00	0.58	0.58	0.70	0.67	0.56	+	1	−	8	−	1	+13	+	6	−12	+	4	−	9	+15	+	1	0	0.82
97937	19 54 14.78	−19 29 47.3	9.76	G	298.561 573 17	−19.496 475 77		17.43	31.08	−28.00	1.40	0.88	1.49	1.54	0.95	+39	−38	−	7	+11	+27	+	1	+23	+	3	+	5	+60		2	0.71
97938	19 54 14.82	+08 27 41.9	4.71	G	298.561 757 36	+08.461 650 27		15.96	101.43	−81.28	0.66	0.59	1.01	0.78	0.66	+34	−35	−52	+	8	−25	+31	−	5	+25	−20	−	4		0	−0.57
97939	19 54 14.87	−68 09 32.8	8.18	H	298.561 957 74	−68.159 122 78		2.03	14.25	−11.92	0.56	0.81	1.14	0.55	0.87	−16	−12	−20	−38	+16	−	4	+18	−18	+	5	−30		1	−0.06
97940	19 54 14.95	+01 56 38.7	8.78	G	298.562 308 42	+01.944 085 44		21.12	−1.35	−273.07	1.58	0.90	1.64	1.81	1.23	+	3	−52	−20	+	3	+	3	−18	−13	−	4	+25	−26		0	1.15
97941	19 54 15.52	+13 44 57.0	9.21	G	298.564 669 62	+13.749 162 38		5.91	10.16	7.95	0.91	0.84	1.31	1.43	1.17	+18	+	4	−13	+	8	−	5	+20	−	1	−	8	+12	+28		0	0.36
97942	19 54 17.27	+09 11 08.0	7.98	H	298.571 968 11	+09.185 552 84		0.29	−10.97	−33.22	0.80	0.72	1.24	0.89	0.87	+39	−31	−49	+	1	−14	+28	+13	+42	−35	+	1		0	0.27
97943	19 54 17.35	+46 00 27.5	8.01	H	298.572 303 09	+46.007 633 15		4.68	27.54	5.84	0.57	0.49	0.63	0.66	0.48	−	6	−16	+	4	+14	+	9	+	8	+	6	−10	+19	+	3	1	−1.11
97944	19 54 17.82	−23 56 24.3	6.22	1 H	298.574 266 14	−23.940 074 50		70.34	−122.67	−409.86	0.74	0.46	0.81	0.78	0.53	+25	−31	−15	−	5	+15	+10	+16	−	3	+	4	+32		0	−0.38
97945	19 54 17.95	−74 20 57.0	9.83	H	298.574 784 53	−74.349 163 02		3.85	−14.81	−69.28	0.96	0.88	1.37	1.06	1.03	−	2	−12	−	9	+27	−	2	−12	−	9	−13	−	1	−18	0	1.41
*97946	19 54 18.88	−34 29 08.4	9.29	H	298.578 654 15	−34.485 653 22		6.61	−16.08	−8.67	1.38	0.83	1.63	1.60	1.64	+23	−33	+14	+	3	−	9	−14	+	8	−20	−38	+49		0	−0.40
*97947	19 54 18.83	−40 48 46.9	9.32	H	298.578 444 65	−40.813 040 27		4.97	17.16	−39.70	1.41	0.75	1.65	1.98	1.64	+16	−	8	−15	+19	+12	−	5	+	8	−	4	+42	−	2	4	−0.45
97948	19 54 20.40	+30 42 15.2	8.51	H	298.584 982 86	+30.704 219 90		1.40	−1.35	−1.97	0.53	0.66	0.89	0.65	0.67	−	4	−	6	+	3	+16	+	1	−12	+	5	−18	+	9	+	8	0	0.08
97949 H	19 54 23.07	+30 01 31.0	8.24	H	298.596 131 37	+30.025 276 12	A	0.19	2.45	0.66	0.95	1.25	1.52	1.19	1.21	+	0	−15	−	8	+17	+11	−	9	+	7	−	5	+	5	+	6	3	0.41
97950	19 54 25.74	+01 56 31.3	8.93	G	298.607 268 93	+01.942 036 92		23.29	−0.82	−270.23	1.93	1.07	2.12	2.13	1.42	+24	−62	−41	+14	−	2	−19	−25	−	3	+31	−31		0	1.79
97951	19 54 26.75	+37 50 58.8	8.51	H	298.611 471 49	+37.849 668 43		9.70	21.14	−28.46	0.57	0.61	0.77	0.61	0.58	−	8	−16	+20	+20	+15	+	3	+14	−	8	+	6	+	2	0	−0.36
97952	19 54 26.76	−67 06 37.2	8.41	H	298.611 498 57	−67.110 340 37		0.95	4.45	−15.68	0.68	0.78	1.18	0.93	0.96	−17	−11	−16	+11	+22	−20	+	6	−26	+16	−53		0	−1.68
97953 H	19 54 26.94	−56 03 02.1	8.35	H	298.612 235 27	−56.050 578 44	B	2.87	6.16	−18.52	1.44	1.72	1.44	1.54	1.17	−	6	−19	+	0	−15	+	8	+18	+	9	−12	+	3	+22	0	0.19
97954	19 54 27.33	+33 50 17.1	9.70	G	298.613 891 62	+33.838 086 62		0.47	10.98	4.06	0.84	0.89	1.19	1.02	0.93	−	8	+	0	+	7	+29	−	5	+11	−	4	−	1	+	1	−	4	0	1.38
97955	19 54 27.57	−12 21 38.1	8.38	G	298.614 895 51	−12.360 583 68		6.39	1.14	3.13	1.13	1.00	1.19	1.26	1.20	+44	−23	−30	+15	+39	+	9	+48	+57	−	2	+33		0	−0.76
97956	19 54 28.68	−50 57 10.0	9.30	H	298.619 518 47	−50.952 772 28		8.08	76.45	−61.39	1.00	0.70	1.32	1.33	0.89	+	6	−24	−20	+	6	+12	+	1	+13	−15	−	1	+	9	0	−0.74
97957	19 54 28.80	+33 07 53.0	7.46	1 H	298.619 988 05	+33.131 401 49		1.38	1.40	−7.94	0.47	0.53	0.72	0.49	0.51	−	3	+	9	+	7	+19	+	4	−	6	+	6	−14	+	3	+	1	0	2.19
97958	19 54 29.04	+09 16 33.4	8.75	H	298.621 016 73	+09.275 957 93		1.84	1.65	−36.08	0.90	0.93	1.35	1.11	1.11	+38	−31	−53	+19	−10	+15	+	8	+43	−27	+	6		0	−0.75
97959	19 54 29.30	+47 54 49.8	7.83	1 H	298.622 067 45	+47.913 838 93		2.99	1.95	−15.07	0.62	0.52	0.65	0.70	0.52	+	0	−10	+	6	+17	+	8	−	8	+	9	+	2	+	8	0	0.62
97960	19 54 29.37	−67 54 16.9	11.63	G	298.622 357 06	−67.904 702 10		0.03	−287.25	−175.85	1.39	1.95	2.79	1.29	2.33	−14	−18	−18	−47	+19	+	0	+24	−10	+	4	−24		0	0.08
97961 H	19 54 31.06	+24 19 09.8	5.56	H	298.629 422 12	+24.319 390 41	*	6.90	23.52	−0.79	0.51	0.47	0.72	0.73	0.50	−	7	−	7	+	0	−10	−	5	+	8	−	4	−26	+11	−	8	0	0.06
97962	19 54 31.40	−28 20 20.9	10.22	H	298.630 823 74	−28.339 126 83		12.33	33.97	20.56	1.48	0.95	1.70	2.15	1.25	+33	−	6	−13	−	5	+	0	+25	+	2	−12	−	1	+21	0	−0.90
97963	19 54 31.50	+46 00 12.6	8.62	H	298.631 230 52	+46.003 486 44		3.95	−4.74	−25.96	0.65	0.56	0.71	0.74	0.55	−	8	−12	+	6	+15	+10	+	1	+	8	−	8	+20	+	0	1	−0.20
97964	19 54 35.26	+09 46 02.6	7.27	H	298.646 936 44	+09.767 393 72		2.85	10.83	0.44	0.82	0.71	1.10	1.14	0.86	+16	−24	−51	+30	−29	+21	−11	+49	−30	−30		0	−2.33
97965	19 54 35.34	+41 27 52.0	7.39	H	298.647 237 74	+41.464 445 02		4.18	−10.75	−23.89	0.54	0.51	0.63	0.53	0.52	−19	−12	+13	−16	+12	+10	+	9	−	7	+	3	−	3	0	0.36
97966	19 54 37.65	−08 13 38.0	5.70	H	298.656 865 07	−08.227 226 14		9.74	8.11	−25.71	0.88	0.73	1.08	0.94	0.82	+10	−17	−45	−	6	+13	+30	+33	+43	−26	+	8		0	0.24
97967	19 54 38.06	−08 14 13.1	6.49	G	298.658 585 12	−08.236 974 30		9.02	4.02	−30.20	0.87	0.72	1.09	0.93	0.82	+12	−19	−45	−11	+15	+32	+37	+41	−28	+	9		0	0.32
97968	19 54 38.40	+23 26 16.8	8.64	H	298.659 984 40	+23.437 991 47		1.29	4.47	−13.35	0.90	0.77	1.16	1.03	0.89	−	8	−	9	+	4	−11	−	5	+	1	−10	−29	+	6	−32	0	−2.00
97969	19 54 39.35	+27 19 50.6	8.22	H	298.663 942 80	+27.330 726 29		5.11	20.68	16.53	0.39	0.61	0.91	0.45	0.70	−21	+	6	−	6	+19	−	7	−10	−	6	+	5	+	7	−13	0	0.77
97970	19 54 40.18	+07 08 25.3	6.14	H	298.667 430 28	+07.140 353 04		12.38	29.12	−0.01	0.57	0.51	0.89	0.72	0.68	+17	+	1	−34	+33	−18	+34	−10	+42	−32	−	7	2	−2.14
97971	19 54 40.45	−61 10 14.9	6.21	H	298.668 545 96	−61.170 815 00		10.72	−8.12	9.36	0.54	0.47	0.78	0.55	0.54	+	2	−	4	+	0	+	6	−15	+	9	−25	−27	−	8	−21	1	−0.05
97972	19 54 40.95	−15 54 48.9	8.04	H	298.670 632 49	−15.913 588 66		2.68	3.82	−18.70	1.00	0.52	1.08	1.09	0.54	+31	−16	−10	−18	+	7	+22	+	6	−25	+20	+52		0	0.33
97973	19 54 40.96	+24 10 32.2	8.87	H	298.671 665 12	+24.175 600 87		6.86	73.45	59.71	0.92	0.79	1.28	1.11	0.84	−	4	−15	+	1	−25	−	2	−13	−	4	−19	+24	−13	0	−2.15
97974	19 54 41.18	+42 25 50.5	10.00	H	298.671 590 45	+42.430 700 65		9.67	172.75	206.99	0.86	0.93	1.06	0.94	0.98	+	0	+	7	−	3	−16	+	0	−	4	+	2	−21	+14	+13	1	0.17
97975	19 54 42.14	−68 15 32.1	8.04	H	298.675 593 24	−68.258 909 35		4.53	17.35	−11.12	0.52	0.70	0.99	0.53	0.80	−21	−10	−16	−41	+17	−	5	+18	−22	+	4	−30		0	−0.50
97976	19 54 42.76	−45 15 44.5	9.97	G	298.678 159 20	−45.262 356 45		8.77	32.26	−158.49	1.92	0.80	2.04	2.91	1.69	+	1	−22	−10	+17	+15	−27	+	4	−27	+25	−22		0	0.01
97977	19 54 43.24	−33 17 13.5	9.52	H	298.680 168 76	−33.287 086 75		20.10	110.76	−77.61	2.08	2.01	2.03	3.06	2.73	+49	−22	+	7	−46	−34	−30	−21	−66	−36	+52		2	0.41
97978	19 54 43.94	+60 49 25.0	7.20	1 H	298.683 093 56	+60.823 623 82		1.94	3.82	−3.85	0.54	0.50	0.56	0.58	0.56	+	0	−	2	+10	+16	+12	−22	+17	+	1	−	4	+14		3	1.23
97979	19 54 44.36	+22 25 45.3	6.73	G	298.684 850 70	+22.429 246 20		3.55	11.37	−5.41	0.54	0.47	0.77	0.63	0.52	−26	−16	+	4	+	7	−	9	+	7	−13	−11	+10	−36		1	−0.83
97980	19 54 44.77	+00 16 25.2	5.60	H	298.686 551 24	+00.273 659 59		9.45	42.37	−13.20	0.88	0.81	1.15	1.43	1.05	+21	+	0	−40	+26	+	2	+40	+28	+45	+	8	−	4	0	−0.74
97981	19 54 44.96	−22 36 59.7	9.83	G	298.687 312 67	−22.616 586 96		6.42	57.65	−14.59	1.34	0.91	1.43	1.52	1.24	+44	−38	−13	+	8	+20	+	3	+21	+11	+	0	+63		0	−1.41
97982	19 54 45.18	+17 20 44.7	7.95	H	298.688 239 38	+17.345 756 48		2.54	−1.49	−1.99	0.64	0.56	0.99	0.74	0.56	+	9	+	3	+11	−33	−16	+	2	−15	−49	−	4	+	8	1	0.75
97983	19 54 47.70	+17 07 09.6	8.46	H	298.698 744 17	+17.119 328 84		12.94	6.58	−104.92	0.73	0.71	1.18	0.82	0.71	+25	−	1	+22	−29	−17	+	4	−18	−43	−	6	+27		2	0.31
97984	19 54 47.78	+05 42 10.2	8.15	H	298.699 067 18	+05.702 844 45		6.69	12.35	2.73	1.03	0.88	1.31	1.29	1.24	+48	−23	−15	+50	+13	+15	+13	+61	−	4	+31		2	0.60
97985	19 54 48.24	+36 59 44.4	5.79	H	298.701 011 18	+36.995 655 31		2.12	11.16	8.54	0.37	0.40	0.51	0.39	0.37	−	4	−	2	+	5	−	6	+	1	+	1	+	2	−25	+18	+	6	1	−1.87
97986	19 54 48.26	−39 24 17.9	8.48	H	298.701 093 37	−39.404 959 25		5.42	−8.19	11.15	1.07	0.56	1.17	1.25	1.02	+12	−35	−	6	+10	+	4	+	0	−	3	−	1	+19	+	2	0	−0.49
97987	19 54 49.05	+35 00 20.0	8.57	G	298.704 355 22	+35.005 568 87		2.45	3.10	−16.75	0.63	0.69	0.92	0.70	0.77	−18	+	5	+11	+14	+	6	−15	+	8	−14	+14	−22		0	0.11
97988	19 54 49.43	+64 43 16.5	6.91	H	298.705 941 49	+64.721 243 97		3.87	−8.33	−10.04	0.50	0.59	0.58	0.46	0.80	+18	−10	−	3	−	9	+33	+	4	+31	+25	+	3	+50		1	1.84
97989	19 54 50.07	+60 36 53.9	6.94	1 H	298.708 607 12	+60.614 974 88		2.38	−2.40	−2.08	0.51	0.48	0.54	0.57	0.52	+	4	+	6	+15	+20	+	8	−20	+13	−	5	−	5	+13		0	0.51
97990	19 54 51.10	+24 53 18.5	7.04	H	298.712 936 82	+24.888 480 41		6.24	25.59	12.93	0.44	0.54	0.84	0.50	0.60	+	3	−	8	−10	+22	−14	+	9	−10	−18	+11	+13		1	0.51
97991	19 54 52.80	+12 45 58.4	10.79	H	298.720 016 47	+12.766 213 17		−1.04	−2.92	−9.23	1.79	1.44	2.69	2.62	2.11	+14	−	5	−	9	+18	−14	+29	−12	+11	+	7	+28		0	2.89
97992	19 54 54.16	+47 08 43.2	8.65	H	298.725 684 84	+47.145 327 92		7.71	19.66	−26.70	0.69	0.64	0.76	0.78	0.63	−10	−	8	+	7	−	8	+11	+	2	+10	−	9	+	7	+	0	0	1.30
97993	19 54 54.66	−57 34 00.8	7.97	H	298.727 729 83	−57.566 877 79		2.00	29.18	−38.87	0.70	0.59	0.94	1.03	0.79	+	9	−19	−	6	−	5	+10	−	1	+	8	−11	+	5	+	9	0	0.87
97994	19 54 54.91	+30 08 48.9	8.25	H	298.728 783 20	+30.146 914 23		3.00	0.20	−2.68	0.54	0.65	0.89	0.68

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
97901	11.248	0.093	9.505	0.034		1.160	0.040	G	1.12	0.04	R	9.4663	0.0027	0.018	52		9.42	9.50		C			1 S							
97902	10.119	0.026	8.236	0.010		1.564	0.022	T	1.58	0.02	L	8.1818	0.0016	0.015	121		8.16	8.20					1							
97903	7.800	0.006	7.780	0.008		0.023	0.009	T	0.04	0.01	L	7.7939	0.0011	0.014	224		7.77	7.82		C			1							S
97904	8.705	0.009	7.819	0.007		0.789	0.009	T	0.82	0.01	L	7.8307	0.0012	0.016	169		7.81	7.86					1							S
97905	9.899	0.023	9.703	0.030	A	0.230	0.015	G	0.26	0.02	H *	9.6402	0.0032	0.029	126	*	9.57	9.70		U	19538+2237	I 1	2 C A	AB	33	1.205	0.030	2.27	0.12	G
97906	9.226	0.014	7.809	0.008		1.197	0.013	T	1.16	0.01	L	7.8466	0.0013	0.014	124		7.82	7.87					1							
97907	6.867	0.004	6.994	0.005		−0.110	0.006	T	−0.09	0.01	L	6.9840	0.0008	0.009	136		6.97	7.00		C			1							S
97908	9.808	0.023	9.087	0.020		0.672	0.015	G	0.73	0.01	H	9.1529	0.0027	0.018	91		9.10	9.19		C			1							
97909	10.221	0.022	8.706	0.011		1.274	0.019	T	1.23	0.02	L	8.6781	0.0015	0.015	159		8.66	8.70		C	19538−1639	I 1	1 S							
97910	9.803	0.023	7.880	0.010		1.596	0.020	T	1.62	0.02	L	7.8215	0.0018	0.017	109		7.79	7.85					1							
97911	7.747	0.005	7.600	0.006		0.141	0.007	T	0.16	0.01	L	7.6421	0.0014	0.015	191		7.62	7.67					1							S
97912	9.744	0.019	8.865	0.015	*	0.784	0.018	T	0.82	0.01	L *	8.9119	0.0021	0.019	118	*	8.88	8.95			19538−5009	H 1	2 C S A	AB	341	0.154	0.020	1.35	0.52	
97913	7.940	0.008	8.034	0.010		−0.090	0.015	G	−0.07	0.02	H	8.0163	0.0013	0.013	112		7.99	8.03			19539+3906	I 1	1							
97914	7.820	0.006	7.653	0.007		0.160	0.009	T	0.18	0.01	L	7.6885	0.0010	0.011	145		7.67	7.71		C			1							S
97915	6.954	0.005	6.865	0.005		0.095	0.005	G	0.11	0.01	H	6.8818	0.0008	0.010	145		6.87	6.90		C			1							S
97916	8.802	0.009	7.723	0.007		0.934	0.009	T	0.93	0.01	L	7.7753	0.0011	0.013	165		7.75	7.80		C			1							S
97917	9.918	0.022	9.323	0.020	*	0.541	0.015	G	0.61	0.02	H *	9.3963	0.0018	0.020	151	*	9.34	9.45		D	19539+3257	M 1	2 C S A	AS	273	0.180	0.007	0.36	0.21	G
97918	8.730	0.009	8.051	0.008		0.628	0.010	T	0.70	0.01	L	8.1003	0.0014	0.015	162		8.08	8.12					1							
97919	9.494	0.017	7.958	0.009		1.290	0.015	T	1.25	0.02	L	7.9843	0.0015	0.015	119		7.96	8.01			19540+4915	I 1	1							
97920	11.776	0.120	10.022	0.039		1.462	0.100	T	1.47	0.16	L	9.9932	0.0022	0.020	96		9.96	10.03		C			1							G
97921	9.843	0.025	9.215	0.022		0.579	0.025	T	0.65	0.02	L	9.2545	0.0028	0.024	78		9.22	9.29		C			1							
97922	7.549	0.009	6.983	0.008	*	0.584	0.007	G	0.66	0.01	H *	7.0825	0.0012	0.011	120	*	7.07	7.10		D	19540+1518	I 1	2 C A	AB	304	1.954	0.003	1.29	0.02	S
97923	10.740	0.061	10.270	0.065		0.443	0.081	T	0.51	0.09	L	10.4065	0.0481	0.264	86		10.04	10.68	0.42	P 1 A			1 S							G
97924	8.682	0.008	8.401	0.009		0.294	0.015	G	0.34	0.02	H	8.4467	0.0015	0.017	200		8.42	8.48		C			1							
97925	8.632	0.008	8.584	0.010		0.055	0.002	G	0.07	0.00	H	8.5958	0.0015	0.019	205		8.56	8.63		C			1							
97926	9.537	0.037	8.961	0.030	*	0.541	0.035	T	0.61	0.04	L *	9.7134	0.0021	0.028	268	*	9.66	9.76		D	19541−6933	I 1	2 C A	AB	62	1.367	0.008	0.54	0.03	
97927	11.722	0.120	10.375	0.059		1.181	0.003	G	1.30	0.01	I	10.3725	0.0026	0.025	80		10.32	10.42		C			1							G
97928	7.938	0.011	5.967	0.005		1.664	0.006	G	1.67	0.09	H	5.8708	0.0017	0.012	49		5.86	5.89		M	19541−0834	I 1	1							S
97929	8.419	0.011	8.320	0.013		0.097	0.016	T	0.11	0.02	L	8.3470	0.0023	0.014	87		8.33	8.39		C			1							S
97930	8.812	0.026	6.929	0.012		1.100	0.020	G	1.57	0.02	M	6.8545	0.0011	0.012	138		6.84	6.87					1							S
97931	9.028	0.015	7.852	0.010		1.008	0.014	T	0.98	0.01	L	7.8934	0.0012	0.012	85		7.87	7.91		C			1							S
97932	9.854	0.029	8.537	0.016		1.118	0.026	T	1.08	0.03	L	8.5800	0.0026	0.019	78		8.55	8.61		C			1							
97933	9.085	0.015	9.043	0.020	A	−0.009	0.002	G	0.01	0.00	H *	9.0731	0.0028	0.022	103	*	9.03	9.10		U	19542+0525	H 1	2 C D	AB	110	1.790	0.090	4.25	0.35	D
97934	10.038	0.025	8.719	0.014		1.120	0.022	T	1.08	0.02	L	8.7665	0.0016	0.017	166		8.74	8.80		C			1							
97935	10.446	0.033	8.982	0.017		1.252	0.031	T	3.35	0.06	O	8.5419	0.0068	0.062	119		8.44	8.67		U 2			1 S							
97936	10.485	0.030	8.422	0.010		1.708	0.025	T	1.73	0.03	L	8.3419	0.0016	0.013	117		8.32	8.37		C			1							
97937	11.078	0.062	9.850	0.034		0.950	0.015	G	0.99	0.01	I	9.8905	0.0022	0.022	99		9.86	9.93		C			1							
97938	6.065	0.003	4.833	0.002		1.023	0.048	G	1.03	0.02	A	4.8749	0.0005	0.004	98		4.87	4.88		C			1							S
97939	9.661	0.014	8.320	0.009		1.137	0.013	T	1.10	0.01	L	8.3490	0.0016	0.021	230		8.31	8.39					1							
97940	9.911	0.040	8.890	0.027		0.878	0.002	G	0.92	0.00	H	8.9261	0.0031	0.011	38		8.91	8.96			19543+0157	I 2	1							
97941	9.728	0.020	9.283	0.021		0.471	0.015	G	0.54	0.02	H	9.2954	0.0021	0.019	103		9.26	9.34		C			1							
97942	9.769	0.023	8.117	0.011		1.382	0.020	T	1.35	0.02	L	8.1269	0.0011	0.013	100		8.10	8.14		C			1							
97943	8.252	0.008	8.033	0.009		0.209	0.011	T	0.23	0.01	L	8.0766	0.0009	0.011	125		8.06	8.09		C			1							S
97944	7.556	0.008	6.331	0.005		1.017	0.008	G	1.02	0.02	A	6.3604	0.0016	0.013	90		6.34	6.38	3.25	P 1 A	19543−2356	I 1	1							S P
97945	10.243	0.022	9.807	0.023		0.412	0.029	T	0.48	0.03	L	9.9205	0.0028	0.033	150		9.86	9.99					1							
97946	9.860	0.028	9.343	0.028		0.495	0.030	T	0.57	0.03	L	9.3990	0.0024	0.021	73		9.35	9.44					1							
97947	9.873	0.026	9.346	0.025		0.503	0.027	T	0.58	0.03	L	9.4330	0.0020	0.020	105		9.40	9.47		C			1							
97948	8.396	0.008	8.498	0.010		−0.068	0.022	G	−0.05	0.02	H	8.4899	0.0018	0.022	168		8.45	8.53					1							
97949	8.223	0.009	8.111	0.013	*	0.109	0.015	T	0.12	0.02	L *	8.2804	0.0014	0.017	173	*	8.25	8.32		D	19544+3001	I 1	2 C A	AB	201	2.114	0.007	1.62	0.03	
97950	10.124	0.045	9.093	0.032		0.900	0.015	G	0.94	0.02	I	9.0746	0.0034	0.017	39		9.05	9.10			19543+0157	I 2	1							
97951	9.445	0.015	8.611	0.012		0.750	0.015	T	0.79	0.01	L	8.6550	0.0012	0.013	132		8.63	8.68		C			1							
97952	10.150	0.023	8.545	0.011		1.345	0.020	T	1.31	0.02	L	8.5646	0.0016	0.020	150		8.52	8.60					1							
97953	8.408	0.008	8.362	0.010	*	0.042	0.012	T	0.06	0.01	L *	8.3735	0.0016	0.014	140	*	8.35	8.40			19545−5603	I 1	2 C A	BA	165	0.432	0.025	3.17	0.13	S
97954	10.288	0.032	9.778	0.032		0.511	0.015	G	0.58	0.02	H	9.8065	0.0027	0.023	132		9.77	9.85					1							G
97955	8.787	0.017	8.421	0.018		0.398	0.015	G	0.46	0.02	H	8.4609	0.0024	0.011	50		8.43	8.48		C			1							
97956	9.908	0.019	9.356	0.018		0.523	0.019	T	0.60	0.02	L	9.4140	0.0022	0.022	144		9.38	9.45		C			1							
97957	9.606	0.018	7.654	0.007		1.619	0.015	T	1.64	0.01	L	7.5680	0.0016	0.017	157		7.54	7.60		U			1							
97958	10.308	0.033	8.891	0.017		1.197	0.029	T	1.16	0.03	L	8.9147	0.0023	0.020	94		8.89	8.95					1							
97959	9.937	0.021	8.023	0.009		1.623	0.019	T	1.98	0.06	O	7.9103	0.0019	0.017	117		7.88	7.94		U			1							
97960						0.450	0.007	G	0.52	0.01	H	11.7803	0.0049	0.065	213		11.68	11.91					1							G
97961	5.536	0.002	5.561	0.003	*	−0.018	0.004	T	0.00	0.00	L *	5.5668	0.0010	0.007	114	*	5.56	5.58			19545+2419	H 1	2 C S A	AB	15	0.104	0.006	0.91	0.39	S
97962	9.947	0.028	10.195	0.050		−0.219	0.033	G	−0.23	0.04	H	10.1366	0.0037	0.021	77		10.09	10.19		C			1							G
97963	8.732	0.010	8.622	0.012		0.107	0.015	T	0.12	0.02	L	8.6635	0.0015	0.014	119		8.64	8.68		C			1							
97964	8.828	0.012	7.406	0.007		1.201	0.011	T	1.16	0.01	L	7.4355	0.0012	0.011	96		7.42	7.45		C			1							S
97965	8.567	0.009	7.501	0.006		0.924	0.008	T	0.92	0.01	L	7.5504	0.0012	0.012	129		7.53	7.57		C			1							S
97966	5.581	0.005	5.673	0.006		−0.079	0.007	T	−0.06	0.01	L	5.6769	0.0010	0.007	49		5.67	5.69			19546−0814	I 2	1							S
97967	6.416	0.009	6.436	0.008		−0.040	0.004	G	−0.02	0.00	H	6.4720	0.0016	0.008	49		6.46	6.49			19546−0814	I 2	1							S
97968	10.175	0.027	8.827	0.015		1.143	0.024	T	1.11	0.02	L	8.8125	0.0023	0.024	124		8.78	8.85					1 S							
97969	8.292	0.005	8.223	0.007		0.069	0.008	T	0.08	0.01	L	8.2496	0.0011	0.014	250		8.22	8.28		C			1							
97970	6.191	0.003	6.143	0.003		0.043	0.004	T	0.06	0.00	L	6.1572	0.0005	0.005	121		6.15	6.17			19547+0708	I 1	1							S
97971	6.418	0.003	6.230	0.004		0.163	0.005	G	0.18	0.01	H	6.2643	0.0008	0.007	114		6.25	6.28		C			1							S
97972	8.384	0.008	8.064	0.009		0.307	0.013	T	0.35	0.02	L	8.1144	0.0013	0.012	123		8.10	8.14		C			1							S
97973	10.076	0.050	8.982	0.033		0.936	0.047	T	0.98	0.05	L	9.0147	0.0023	0.020	115		8.98	9.06					1							
97974	10.746	0.049	10.075	0.041		0.621	0.053	T	0.69	0.05	L	10.1266	0.0026	0.027	119		10.07	10.18		C			1							G
97975	8.095	0.006	8.041	0.007		0.049	0.008	T	0.06	0.01	L	8.0651	0.0012	0.017	224		8.04	8.10					1							S
97976	10.930	0.054	10.048	0.038		0.770	0.020	G	0.81	0.02	H	10.1346	0.0028	0.026	117		10.09	10.18		C			1							
97977	10.638	0.058	9.604	0.037		0.889	0.054	T	0.93	0.05	L	9.6618	0.0029	0.022	75		9.61	9.69		C			1 G							
97978	9.316	0.015	7.378	0.007		1.643	0.014	T	1.73	0.05	O	7.3031	0.0015	0.013	103		7.28	7.33		M			1							S
97979	8.724	0.010	6.902	0.005		1.508	0.020	G	1.45	0.03	C	6.8872	0.0011	0.011	144		6.87	6.91		C			1							S
97980	5.726	0.004	5.636	0.006		0.098	0.026	G	0.18	0.04	D	5.6547	0.0010	0.004	40		5.65	5.66		D			1							S
97981	10.535	0.047	9.832	0.040		0.560	0.015	G	0.63	0.01	H	9.9356	0.0022	0.018	82		9.89	9.97					1							
97982	7.942	0.008	7.943	0.010		0.004	0.012	T	0.02	0.01	L	7.9591	0.0015	0.016	162		7.93	7.98					1							S
97983	9.142	0.014	8.538	0.013		0.573	0.015	G	0.65	0.01	H	8.5831	0.0012	0.018	142		8.55	8.62		C			1							
97984	9.408	0.014	8.272	0.009		0.977	0.013	T	0.96	0.01	L	8.3174	0.0013	0.013	151		8.29	8.35		C			1 S							
97985	6.735	0.004	5.871	0.003		0.773	0.004	T	0.81	0.00	L	5.9345	0.0005	0.005	140		5.93	5.94		C			1							S
97986	9.549	0.023	8.580	0.017		0.838	0.022	T	0.86	0.02	L	8.6186	0.0020	0.016	106		8.59	8.65					1							
97987	9.428	0.017	8.646	0.014		0.700	0.015	G	0.76	0.01	H	8.6867	0.0016	0.021	143		8.65	8.72		C			1							
97988	8.412	0.012	7.044	0.007		1.158	0.011	T	1.12	0.01	L	7.0798	0.0008	0.009	88		7.07	7.10		C			1							S
97989	9.058	0.013	7.123	0.006		1.640	0.012	T	1.80	0.04	O	7.0385	0.0021	0.017	100		7.01	7.06		U 2			1							S
97990	8.336	0.007	7.146	0.005		1.019	0.007	T	0.99	0.01	L	7.2051	0.0007	0.009	173		7.19	7.22		C			1							S
97991	11.741	0.119	10.791	0.083		0.837	0.108	T	0.86	0.08	L	10.9424	0.0042	0.066	124		10.75	11.04					1 S							G
97992	9.257	0.016	8.706	0.015		0.500	0.015	G	0.57	0.02	H	8.7608	0.0018	0.016	114		8.73	8.79		C			1							
97993	9.374	0.016	8.091	0.010		1.100	0.015	G	1.06	0.02	H	8.1388	0.0014	0.013	119		8.11	8.16					1							
97994	8.207	0.007	8.237	0.009		−0.025	0.010	T	0.00	0.01	L	8.2492	0.0015	0.019	172		8.22	8.28					1							
97995	8.512	0.015	8.514	0.019		0.003	0.022	T	0.02	0.02	L	8.5275	0.0017	0.015	50		8.50	8.55		C			1							
97996	8.368	0.009	7.923	0.008		0.420	0.011	T	0.49	0.01	L	7.9687	0.0010	0.018	151		7.94	8.00		D			1							S
97997	7.852	0.007	7.813	0.008	*	0.041	0.010	T	0.06	0.01	L *	7.8309	0.0013	0.012	128	*	7.81	7.85		D	19549+5049	I 1	2 C S A	AB	5	0.145	0.005	0.09	0.27	S
97998	8.426	0.015	8.306	0.018		0.116	0.022	T	0.13	0.02	L	8.3165	0.0020	0.016	59		8.29	8.34					1							S
97999	8.544	0.009	8.412	0.011		0.127	0.013	T	0.14	0.01	L	8.4681	0.0016	0.014	113		8.45	8.49		C			1							
98000	10.089	0.027	9.688	0.030		0.410	0.015	G	0.48	0.02	H	9.8049	0.0027	0.034	127		9.75	9.86					1							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)											Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
98001 H	19 54 58.41	+41 52 15.0	7.41	G	298.743 382 77	+41.870 839 52 *		22.31	−52.76	284.44	2.24	1.30	0.78	2.11	1.35	+10	−10	−21	+41	+ 8	− 2	+10	−15	+13	+12		3	−0.40
98002	19 54 58.65	−42 38 39.6	10.14	G	298.744 381 66	−42.644 336 93		4.78	2.87	−435.99	1.79	0.91	2.11	2.44	2.17	+18	− 4	− 6	+14	− 1	− 8	− 5	−18	+33	+ 9		4	0.69
98003	19 54 59.93	−68 57 19.5	9.00	H	298.749 717 58	−68.955 416 04		4.62	7.13	−39.28	0.55	0.89	1.26	0.67	1.09	−38	+ 1	−24	+14	+15	−18	+12	−14	+14	−36		0	0.83
98004	19 55 00.14	+34 54 02.0	7.22	H	298.750 565 63	+34.900 556 80		2.73	3.35	19.30	0.47	0.51	0.69	0.52	0.55	−14	+ 0	− 3	+ 7	+ 2	−10	+ 2	−17	+15	−14		0	0.90
98005	19 55 00.76	−18 46 03.4	8.92	H	298.753 177 34	−18.767 598 59		4.31	−35.42	−15.43	1.23	0.73	1.36	1.35	0.73	+42	−33	−23	+ 5	+14	− 4	+13	−18	+ 7	+61		0	−0.72
98006	19 55 01.18	+66 44 54.3	7.16	H	298.754 911 71	+66.748 404 11		6.53	−17.00	−33.28	0.62	0.58	0.59	0.76	0.78	+ 4	− 1	+18	−20	+24	+30	+17	−18	−20	−13		1	0.32
98007	19 55 01.70	+04 03 45.9	9.42	H	298.757 099 11	+04.062 739 50		27.39	−276.62	−249.28	1.56	1.05	1.76	1.89	1.45	+ 7	−35	−23	+ 5	− 4	+ 5	+ 5	+22	−16	−14		0	1.82
98008 H	19 55 02.46	−36 12 06.2	7.16	H	298.760 266 24	−36.201 735 01 *		2.24	11.13	−12.83	0.85	0.54	0.96	1.12	0.97	+30	−12	+ 0	− 2	− 9	− 9	− 6	−18	−24	+37		0	−0.84
98009	19 55 03.17	−28 26 01.3	9.52	H	298.763 199 41	−28.433 700 14		6.84	−4.41	−33.70	1.35	0.88	1.54	1.91	1.09	+33	− 5	−17	+ 5	+ 8	+17	+ 9	+ 2	− 2	+12		2	0.87
98010	19 55 03.52	+63 19 50.3	8.47	H	298.764 679 84	+63.330 636 50		4.68	10.14	6.84	0.65	0.64	0.69	0.87	0.80	+19	−23	+ 3	+ 6	+14	+13	+ 8	+13	+16	+41		0	1.09
*98011	19 55 05.14	+30 41 15.1	7.00	H	298.771 421 10	+30.687 533 35		5.73	45.89	23.14	0.44	0.51	0.71	0.51	0.49	− 3	−11	+ 3	+14	− 1	−12	+ 1	−22	+17	+ 6		0	0.95
*98012	19 55 05.11	−33 02 46.5	6.47	H	298.771 299 73	−33.046 248 83		2.59	−12.62	−1.27	1.04	0.52	1.17	1.33	0.97	+12	−31	− 5	−14	+12	−31	+23	−13	−20	+ 2		0	1.10
98013	19 55 05.19	+47 32 27.5	6.72	H	298.771 616 10	+47.540 971 80		7.13	12.28	11.31	0.50	0.43	0.53	0.58	0.43	− 2	−11	+ 2	+ 8	+12	− 3	+10	− 3	+10	+ 3		0	0.52
98014	19 55 05.26	−13 47 00.1	8.29	H	298.771 904 08	−13.783 371 34		2.12	−2.46	−4.87	1.01	0.77	1.24	1.20	0.98	+14	− 4	−24	−16	+ 1	+37	+10	+14	− 4	+23		0	0.57
98015	19 55 05.88	+03 59 44.3	8.55	H	298.774 518 01	+03.995 638 48		12.13	−49.43	−76.48	1.19	0.88	1.36	1.49	1.12	+ 0	−16	−33	+ 1	− 1	+14	+ 9	+23	−15	−21		0	2.29
98016	19 55 05.92	+13 11 38.3	8.27	2 H	298.774 681 55	+13.193 970 22		1.77	−1.50	−14.58	0.83	0.66	1.14	1.26	0.97	+15	−17	− 1	+18	−10	+13	− 8	− 5	+11	+30		0	0.67
98017 H	19 55 06.50	+30 11 41.6	6.58	H	298.777 077 55	+30.194 895 79 A		4.39	5.42	0.73	0.51	0.60	0.74	0.60	0.57	− 9	− 4	+ 7	+13	+ 9	− 2	+ 9	+ 2	+16	+ 1		5	1.11
98018	19 55 06.56	+21 30 04.9	8.06	H	298.777 337 96	+21.501 358 46		1.34	−1.14	−3.23	0.65	0.59	0.93	0.75	0.65	−25	−12	− 2	−14	− 5	+15	− 5	−20	− 7	−45		1	0.26
98019	19 55 07.57	+15 26 49.8	8.16	H	298.781 544 39	+15.447 161 15		1.30	−1.34	0.15	0.70	0.64	1.03	0.80	0.84	+13	−23	− 3	− 7	+21	+21	+22	+ 7	− 2	+34		0	1.54
98020	19 55 09.70	+10 44 24.9	8.83	G	298.790 420 53	+10.740 237 56		25.32	−37.80	289.57	0.86	0.82	1.17	1.04	1.09	+43	−20	−28	− 7	−13	+26	− 5	+15	−13	+30		2	−0.15
98021	19 55 09.81	−25 48 26.6	9.67	2 T	298.790 855 07	−25.807 387 88		3.44	−6.91	20.59	1.39	0.97	1.56	1.48	1.10	+41	−34	−31	− 3	− 3	− 1	− 3	−16	+ 2	+41		0	−0.20
98022	19 55 10.32	−45 05 49.8	11.29	H	298.792 996 07	−45.097 166 77		2.54	49.35	−105.64	3.49	1.56	3.76	5.89	3.49	+ 2	−35	− 8	+14	+16	−24	+ 2	−24	+26	−34		0	1.94
98023	19 55 10.49	−46 47 33.3	7.70	H	298.793 689 95	−46.792 584 48		6.21	25.72	−24.02	1.00	0.50	1.06	1.77	0.86	−24	+ 3	+ 2	+29	+ 2	+ 1	+ 1	− 6	+ 2	−26		0	0.77
98024	19 55 10.81	−23 54 27.4	7.94	H	298.795 051 61	−23.907 603 32		2.62	25.65	−10.49	0.89	0.57	0.98	0.97	0.70	+19	−27	−12	− 8	+15	+17	+17	+ 1	+ 6	+29		2	0.46
98025	19 55 11.17	+62 35 52.8	8.08	G	298.796 541 19	+62.598 005 37		8.45	7.18	3.76	0.66	0.60	0.65	0.88	0.70	+10	+ 4	− 3	+ 1	+23	+ 6	+16	+26	+11	+33		0	0.44
98026	19 55 11.44	+11 57 34.1	7.77	H	298.797 684 14	+11.959 459 67		1.76	1.96	−2.13	0.69	0.52	0.98	0.91	0.74	− 3	− 3	−10	+17	−13	+28	−13	+17	+20	+17		0	1.55
98027 H	19 55 12.03	−00 50 33.2	8.32	H	298.800 134 52	−00.842 542 37 A		12.19	30.08	−21.82	2.06	1.59	1.98	2.40	2.02	+24	−18	−11	+ 4	+15	− 8	+15	+18	+21	+26		2	1.32
98028	19 55 12.05	+46 39 56.4	7.63	2 G	298.800 192 09	+46.665 665 27		6.93	4.36	−42.11	0.54	0.49	0.59	0.58	0.49	− 7	− 6	+ 6	+ 6	+12	+ 0	+11	+ 4	+10	+ 0		1	0.76
98029	19 55 13.16	−07 48 24.2	7.41	H	298.804 842 07	−07.806 714 71		5.17	10.54	−10.30	1.00	0.80	1.16	1.18	0.94	+ 7	−11	−47	−12	+18	+14	+32	+33	−22	− 1		0	−0.30
98030	19 55 13.56	−00 26 04.3	8.85	H	298.806 483 77	−00.434 523 63		4.74	8.63	−24.89	1.40	1.46	1.64	2.17	1.98	+39	−14	−47	+24	+39	−13	+41	+54	+ 4	+25		4	1.14
98031	19 55 13.95	−59 11 44.0	7.94	3 H	298.808 118 54	−59.195 542 40 *		2.91	16.61	−44.45	0.95	0.66	1.77	1.02	1.07	+14	+55	+ 7	+ 3	− 2	−14	+21	−15	+20	+39		0	1.88
98032	19 55 15.68	−41 52 06.3	4.12	G	298.815 329 54	−41.868 413 50		17.24	23.37	51.60	0.82	0.43	0.85	1.09	0.79	+13	−30	− 5	− 2	+ 0	+ 5	− 7	−18	+14	− 2		0	0.78
98033	19 55 17.47	−39 58 14.7	10.60	G	298.822 774 60	−39.970 742 35		7.27	−91.51	−103.46	1.97	1.08	2.26	3.14	2.19	− 1	−15	−25	+20	+ 2	−20	−14	−10	+36	−42		0	−0.13
98034	19 55 17.73	−44 00 38.5	8.52	2 H	298.823 882 82	−44.010 708 28		2.89	11.79	−37.57	1.23	0.59	1.21	1.61	1.37	+12	−30	+ 9	+ 5	−21	+10	−34	−37	− 2	+ 9		0	0.93
98035	19 55 18.43	+22 00 31.2	9.58	G	298.826 801 42	+22.008 667 95		9.06	−38.93	−173.94	0.96	0.84	1.31	1.11	0.90	−11	−21	+12	+ 3	−10	+ 5	−15	−22	+ 0	−32		1	−1.01
98036	19 55 18.77	+06 24 28.6	3.71	H	298.828 192 33	+06.407 933 34		72.95	46.35	−481.32	0.61	0.51	0.83	0.76	0.69	+34	− 8	−22	+39	− 4	+26	− 1	+41	−17	+21		0	−0.20
98037	19 55 19.42	+40 29 57.5	9.16	H	298.830 926 37	+40.499 295 92		1.70	0.04	−1.17	0.66	0.69	0.86	0.69	0.71	+ 1	+ 4	+ 6	+ 8	+ 8	+ 3	+10	− 8	+19	+11		0	−0.48
98038 H	19 55 19.49	−06 44 04.7	6.49	G	298.831 210 09	−06.734 637 69 *		11.67	16.21	−58.74	3.47	2.88	1.18	1.72	1.15	−50	+ 2	− 7	+ 9	−21	+19	−15	− 8	−26	+16		0	−0.27
98039	19 55 20.03	+29 59 20.8	7.88	1 H	298.833 439 57	+29.989 100 78		4.43	−0.89	−9.66	0.59	0.67	0.97	0.72	0.69	− 6	− 4	−18	+ 5	+12	−11	+ 9	−23	+25	− 3		2	0.63
98040	19 55 20.41	−48 16 55.9	8.13	2 G	298.835 038 03	−48.282 188 34		9.50	−14.98	−36.91	0.99	0.53	1.07	1.28	0.83	−20	−29	+14	+36	−13	+ 2	− 1	− 6	+16	+ 3		0	0.90
98041	19 55 20.84	+00 20 03.3	8.79	2 H	298.836 826 22	+00.334 247 16		4.35	2.24	3.11	1.54	1.63	1.77	2.47	2.10	+33	−19	−53	+44	+ 6	+13	+23	+64	−16	+ 7		4	−0.44
98042	19 55 21.00	−34 40 28.1	9.76	H	298.837 514 72	−34.674 471 53		6.18	15.56	−11.96	1.66	1.09	1.83	2.15	2.15	+40	−17	+ 7	− 7	−22	+ 4	−15	−38	−21	+53		0	1.76
98043	19 55 21.28	−46 08 02.9	8.18	H	298.838 679 81	−46.134 144 51		2.85	6.87	4.99	1.20	0.58	1.34	2.02	1.06	+ 3	− 9	−13	+42	+22	−16	+16	+ 2	+29	− 8		0	−2.16
98044	19 55 22.04	+58 15 01.4	6.10	H	298.841 848 72	+58.250 376 13		7.06	20.19	−75.18	0.47	0.47	0.51	0.53	0.59	+ 0	+ 5	−10	+ 8	+ 0	+ 4	+ 3	− 6	+12	+13		0	0.05
98045	19 55 23.99	−19 17 34.2	6.87	H	298.849 972 31	−19.292 841 98		12.28	62.34	−8.47	0.81	0.46	0.89	0.87	0.47	+31	−39	−12	+10	+23	+15	+19	− 8	+18	+58		0	0.64
98046	19 55 24.01	+29 21 30.3	8.74	H	298.850 051 93	+29.358 420 07		3.45	0.03	−15.83	0.64	0.89	1.12	0.78	0.97	−28	+18	−17	−13	+17	− 4	+21	−35	+21	−16		1	−1.00
98047	19 55 25.16	+26 42 47.5	8.21	H	298.854 837 53	+26.713 198 37		3.63	18.58	7.44	0.62	0.68	1.03	0.67	0.73	− 1	−10	− 1	+32	−10	− 4	−12	−13	+ 5	− 5		0	0.76
98048	19 55 28.73	−53 56 49.9	7.17	1 H	298.869 720 35	−53.947 202 94		4.25	−12.25	−10.15	0.61	0.43	0.84	0.91	0.64	+ 6	−31	+ 3	−20	+24	+ 9	+24	−23	−10	+ 3		0	−1.45
98049	19 55 29.84	−29 05 49.0	8.46	H	298.874 315 08	−29.096 957 51		18.84	−73.52	−16.45	1.09	0.71	1.28	1.42	0.85	+38	−28	−30	+ 3	− 9	+18	− 4	− 9	−17	+ 8		0	−1.77
98050	19 55 31.65	−21 30 30.3	8.66	H	298.881 862 06	−21.508 405 50		8.38	−7.91	−76.16	0.96	0.64	1.08	1.11	0.77	+40	−35	−10	− 4	+10	+26	+ 8	− 5	+16	+55		0	1.50
98051	19 55 33.41	−31 05 41.5	9.07	H	298.889 218 16	−31.094 852 75		4.82	−25.55	−6.16	1.23	0.75	1.25	1.36	0.99	+10	− 8	−12	−30	+18	− 7	+21	−16	+ 2	+17		0	0.14
98052	19 55 33.81	+59 44 26.4	8.87	H	298.890 860 93	+59.740 679 26		2.53	0.57	−0.12	0.80	0.72	0.78	0.97	0.82	+13	−11	− 1	+43	+12	−19	+18	− 3	− 5	+25		0	0.26
98053	19 55 34.65	+29 30 53.9	7.83	H	298.894 379 55	+29.514 972 69		6.18	6.96	−17.79	0.52	0.64	0.91	0.60	0.69	−16	+14	−25	− 5	+18	−11	+18	−17	+23	− 8		0	−2.03
98054	19 55 37.42	−17 33 38.8	9.20	H	298.905 930 15	−17.560 781 11		4.92	1.77	−35.49	1.16	0.63	1.32	1.64	0.77	+46	− 9	+ 9	+18	+26	+40	+25	+ 2	+35	+76		0	−2.13
98055 H	19 55 37.82	+52 26 20.5	4.91	H	298.907 592 82	+52.439 023 27 A		11.30	−36.62	−31.02	0.61	0.58	0.58	0.61	0.56	+ 1	+ 6	+ 5	−14	+ 9	+16	+ 8	+10	+18	+16		1	1.71
98056	19 55 38.11	+52 46 12.9	9.33	H	298.908 785 18	+52.770 249 52		1.04	−1.01	−8.93	0.74	0.73	0.81	0.88	0.85	− 6	−15	− 8	−12	+ 3	− 3	+ 2	+12	+ 5	− 9		0	−0.89
98057	19 55 40.08	+28 24 41.0	9.62	H	298.917 000 23	+28.411 384 02		−1.20	−3.16	−7.50	0.77	1.03	1.48	0.85	1.16	−11	−19	+16	+23	− 4	−11	− 1	+ 7	− 2	− 6		2	−0.38
98058	19 55 40.61	+40 10 22.4	6.59	H	298.919 195 02	+40.172 891 93		2.18	5.63	3.55	0.44	0.43	0.55	0.46	0.42	− 5	− 8	+15	+11	+ 3	+ 3	+ 3	− 6	+19	+ 5		1	−0.64
98059	19 55 41.29	−10 47 55.8	9.46	H	298.922 046 79	−10.798 838 67		−0.51	−1.12	−5.66	1.35	1.13	1.52	1.71	1.63	+37	−26	−16	+15	+21	+22	+26	+42	−12	+40		0	0.69
98060	19 55 42.93	+03 21 52.4	12.17	2 H	298.928 864 21	+03.364 551 82		−3.36	−17.44	−1.22	3.84	3.03	4.40	6.03	4.08	+ 7	−12	−38	+ 5	− 3	+ 1	+ 0	+16	+ 0	−25		0	0.35
98061	19 55 44.76	+40 23 30.3	7.37	H	298.936 518 96	+40.391 754 66		−0.18	−2.27	−7.23	0.45	0.46	0.58	0.48	0.45	− 6	− 6	+10	+12	+ 7	+ 5	+ 6	− 4	+20	+ 8		1	1.12
98062	19 55 44.80	−47 35 27.1	9.40	H	298.936 671 78	−47.590 862 70		6.29	26.06	−6.36	1.37	0.76	1.54	2.08	1.29	− 9	−15	+16	+34	+ 8	− 8	+15	+11	+ 3	+17		0	−1.96
98063	19 55 44.88	+32 29 14.9	9.79	H	298.937 015 85	+32.487 469 50		2.18	−4.81	−7.52	0.77	0.89	1.22	0.84	1.08	−10	−14	+12	+10	+ 5	−13	+ 9	− 5	−14	− 8		0	0.45
98064	19 55 49.56	+46 44 39.6	8.91	H	298.956 502 83	+46.744 340 45		0.52	13.74	2.25	0.72	0.68	0.82	0.78	0.67	− 7	− 2	+ 5	− 4	+15	+ 3	+14	−10	+16	+ 1		1	1.21
98065	19 55 49.88	−63 59 02.5	8.88	1 H	298.957 839 20	−63.984 025 09		0.50	26.52	−12.88	0.88	0.80	1.32	0.97	0.87	−12	−19	−23	+20	−19	−10	−26	+ 3	+22	−32		0	−1.55
98066	19 55 50.23	−26 17 58.9	4.70	G	298.959 271 01	−26.299 687 18		42.03	203.96	74.40	0.80	0.47	0.94	0.84	0.60	+34	−54	−24	+ 4	− 5	+26	− 2	− 8	− 1	+12		4	0.28
98067	19 55 50.38	+31 43 38.1	8.84	H	298.959 897 18	+31.727 252 11		4.82	25.30	20.74	0.67	0.74	1.01	0.77	0.77	−12	− 5	+ 1	+34	+ 1	−12	+ 2	+ 1	− 4	− 7		0	2.17
98068	19 55 51.76	+38 29 12.1	4.95	H	298.965 671 72	+38.486 703 92		2.71	1.46	0.60	0.42	0.43	0.54	0.44	0.42	− 4	− 2	+ 8	+16	+ 7	− 3	+ 7	−15	+17	− 3		0	2.48
98069	19 55 52.17	−26 33 00.6	7.71	G	298.967 371 92	−26.550 162 41		12.79	−22.18	23.17	0.84	0.53	0.92	0.99	0.65	+28	−32	−16	+11	− 6	+12	− 8	− 7	+ 1	+11		0	0.68
98070	19 55 52.37	+51 16 19.1	12.28	H	298.968 207 35	+51.271 964 06		36.42	469.84	342.96	2.08	2.25	2.40	2.42	2.43	−10	−15	− 6	−14	+11	− 9	+ 9	−19	+ 4	− 2		0	1.77
98071	19 55 54.06	+47 05 24.3	6.88	H	298.975 234 74	+47.090 076 51		6.06	19.01	− 8.95	0.85	0.79	0.93	0.96	0.79	−12	− 1	+ 5	−13	+13	− 7	+13	−19	+ 5	− 2		0	
98072 H	19 55 54.46	+49 11 43.7	8.09	G	298.976 901 48	+49.195 463 85 A		1.58	−3.83	−11.92	1.30	1.11	1.24	1.35	1.05	+ 1	−33	− 5	+ 5	− 4	+ 1	− 9	− 7	+15	+ 0		1	1.42
98073	19 55 55.39	+58 50 45.7	4.98	1 G	298.980 784 59	+58.846 019 82		3.55	−9.00	−20.86	0.46	0.46	0.50	0.50	0.56	+ 2	− 3	− 4	− 4	+ 2	+ 8	+ 6	−23	+17	+23		1	−0.13
98074	19 55 55.55	−01 53 42.9	8.61	H	298.981 452 73	−01.895 253 20		2.72	3.92	−4.88	1.17	0.88	1.32	1.53	1.15	+16	−16	−18	+16	− 5	+12	+ 0	+26	−16	− 4		0	−0.33
98075	19 55 56.13	−15 24 17.2	8.65	H	298.983 875 57	−15.404 768 58		2.24	−4.45	−5.34	1.11	0.83	1.22	1.29	1.13	+33	−35	−29	− 1	+12	+ 9	+20	+21	−11	+25		0	−1.29
98076	19 55 56.45	+29 13 34.3	8.49	G	298.985 188 17	+29.226 200 32		5.85	−1.08	0.93	0.60	0.76	1.02	0.71	0.89	−21	+ 6	−15	−12	+22	− 8	+23	−21	+17	−10		0	−1.50
98077	19 55 56.45	−29 11 24.1	8.60	3 T	298.985 190 25	−29.190 014 54		0.41	−19.92	−6.40	1.21	0.67	1.44	2.19	1.28	+13	+ 8	+ 5	+ 3	− 2	−19	− 7	− 9	−33	− 8		2	0.17
98078	19 55 56.78	−18 52 29.8	8.40	H	298.986 598 44	−18.874 945 17		13.35	32.25	−4.83	1.06	0.57	1.11	1.19	0.60	+48	−27	−10	+34	+37	+18	+36	+10	+23	+71		1	−0.05
98079	19 55 57.18	+10 12 25.8	6.81	H	298.988 246 53	+10.207 178 50		4.56	143.52	4.91	0.65	0.67	0.97	0.73	0.78	+39	−26	−43	+ 3	− 1	+26	+21	+47	−28	+14		2	−1.26
98080	19 55 57.77	+15 57 53.2	9.32	H	298.990 709 61	+15.964 791 58		2.36	0.31	−10.13	0.83	0.82	1.30	0.99	1.01	+30	−18	− 6	+ 6	+19	+14	+17	+12	+14	+41		3	0.43
98081	19 55 59.24	−41 21 09.1	9.46	G	298.996 845 86	−41.352 534 18		4.83	27.50	−26.16	1.34	0.73	1.38	1.85	1.34	+ 7	−15	− 4	+13	+ 0	+ 9	− 5	− 5	+11	− 6		2	0.32
98082	19 55 59.68	+30 52 39.7	9.09	H	298.998 654 31	+30.877 693 81		3.30	−7.10	−4.80	0.73	0.90	1.27	0.90	0.94	− 2	+ 3	+ 1	+16	+ 6	− 8	+ 8	−13	+29	+ 5		0	1.12
98083	19 55 59.93	+15 02 49.3	7.08	H	298.999 715 16	+15.047 037 05		3.85	15.15	−2.64	0.59	0.52	0.91	0.68	0.63	+11	−24	− 3	−14	+12	+30	+13	− 1	+ 0	+27		0	0.49
98084	19 56 01.18	−20 29 30.8	9.30	H	299.004 929 24	−20.491 901 12		1.99	17.66	0.13	1.15	0.75	1.25	1.42	0.88	+36	−12	+13	+18	+39	+28	+34	+18	+24	+66		0	−0.10
98085	19 56 01.26	+16 38 05.3	5.71	3 T	299.005 264 00	+16.634 815 90		0.76	1.00	−6.89	0.49	0.46	0.73	0.62	0.57	+ 4	− 6	−10	− 1	− 3	+12	+ 0	−16	+ 3	+20		0	0.80
98086	19 56 01.62	−81 20 59.4	6.39	H	299.006 752 49	−81.349 838 61		4.70	20.03	−0.71	0.45	0.43	0.56	0.49	0.47	− 2	−21	− 5	+ 0	+ 4	− 3	+ 6	− 4	− 8	−12		0	−1.01
98087 H	19 56 02.01	+17 53 12.6	8.35	G	299.008 394 06	+17.886 846 68 A		0.94	0.37	−4.32	1.24	1.18	1.65	1.43	1.15	+24	+ 3	−10	−22	−11	− 1	−14	−51	+ 8	+14		1	0.51
98088	19 56 02.71	−36 40 04.3	8.70	2 H	299.011 291 31	−36.667 868 27		−0.80	0.08	−10.56	1.17	0.69	1.24	1.42	1.18	+14	−24	+ 1	+ 4	+ 7	+ 7	+12	− 3	− 9	+22		0	−1.04
98089	19 56 03.81	−43 40 11.6	8.63	H	299.015 861 65	−43.669 890 54		3.30	3.90	−6.32	1.27	0.68	1.27	1.67	1.52	+27	−31	− 5	+ 6	−24	− 3	−36	−38	+11	+22		0	1.75
98090	19 56 05.23	−44 00 43.9	7.17	G	299.021 788 90	−44.012 194 89		2.02	6.44	−6.38	0.94	0.49	0.93	1.18	1.05	+18	−33	+ 5	+ 5	−24	+10	−33	−36	+ 4	+21		0	−0.26
98091	19 56 06.48	−38 15 24.2	8.84	H	299.026 979 54	−38.256 734 95		6.77	48.88	−8.82	1.15	0.67	1.28	1.47	1.22	+24	−18	+ 9	+ 8	− 3	− 4	− 6	− 9	+12	+23		0	−1.33
98092	19 56 07.76	+19 04 53.2	9.27	G	299.032 325 76	+19.081 455 90		8.49	34.58	−34.27	0.83	0.65	1.22	0.98	0.68	−16	−14	+ 9	+ 0	−16	+ 9	−20	−24	+ 3	−39		0	0.34
98093	19 56 07.76	+33 04 28.5	7.29	H	299.032 349 05	+33.074 588 73		3.53	4.83	−0.60	0.45	0.50	0.68	0.48	0.51	− 8	− 1	+ 4	+19	− 4	−10	− 2	− 7	+ 1	− 2		0	2.05
98094	19 56 08.79	+33 29 34.3	7.54	H	299.036 627 84	+33.492 866 83		0.97	2.03	−1.82	0.50	0.54	0.73	0.55	0.57	−12	−10	+10	+30	− 2	−10	+ 1	− 6	− 9	− 7		0	0.44
98095	19 56 08.86	+76 27 00.7	8.18	2 H	299.036 910 69	+76.450 195 92		1.65	−0.62	−8.50	0.64	0.58	0.66	0.74	0.62	− 8	−21	+24	+ 1	+ 8	+ 2	+ 8	+ 4	+ 4	+12		1	−0.62
98096	19 56 08.92	+04 18 17.7	9.44	G	299.037 164 45	+04.304 905 50		9.13	−128.99	−158.23	1.23	0.93	1.63	2.01	1.58	+29	−13	−26	+14	−15	+29	+ 5	+45	−31	−28		0	−0.78
98097

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
98001	8.427	0.010	7.523	0.008	*	0.796	0.005	G	0.83	0.00	H	*	7.5683	0.0009	0.010	125	*	7.55	7.59		D	19550+4152	I 1	2 C A	AB	26	0.221	0.006	0.69	0.11	S
98002						0.438	0.025	G	0.51	0.03	H		10.2397	0.0030	0.028	107		10.17	10.28		C			1							G
98003	9.453	0.010	9.035	0.010		0.409	0.012	T	0.48	0.01	L		9.0913	0.0017	0.025	278		9.05	9.14					1 S							
98004	8.684	0.011	7.339	0.007		1.140	0.010	T	1.10	0.01	L		7.3893	0.0008	0.009	147		7.37	7.41		C			1							S
98005	10.281	0.032	9.094	0.019		1.010	0.030	T	0.99	0.02	L		9.0648	0.0018	0.016	105		9.04	9.09		C			1							
98006	8.441	0.011	7.268	0.007		1.006	0.010	T	0.98	0.01	L		7.3310	0.0009	0.007	100		7.32	7.34		C			1 G							S
98007	10.738	0.063	9.543	0.037		0.978	0.003	G	1.02	0.00	I		9.5628	0.0028	0.021	49		9.53	9.60		C			1							
98008	7.390	0.006	7.174	0.007	*	0.200	0.009	T	0.22	0.01	L	*	7.2186	0.0014	0.010	87	*	7.20	7.24			19550−3612	H 1	2 C S B	AB	216	0.128	0.081	1.01	0.85	S
98009	10.443	0.045	9.610	0.034		0.734	0.043	T	0.78	0.03	L		9.6606	0.0027	0.021	78		9.63	9.70		C			1							
98010	9.224	0.016	8.539	0.013		0.633	0.017	T	0.70	0.01	L		8.6051	0.0011	0.011	101		8.58	8.63					1							
98011	8.280	0.007	7.099	0.006		1.005	0.007	T	0.98	0.01	L		7.1411	0.0007	0.011	165		7.13	7.16					1							S
98012	8.396	0.015	6.632	0.009		1.487	0.008	G	1.51	0.01	H		6.5974	0.0013	0.009	78		6.58	6.61					1							S
98013	8.074	0.008	6.833	0.005		1.059	0.007	T	1.03	0.01	L		6.8859	0.0008	0.008	113		6.87	6.90					1							S
98014	8.580	0.016	8.348	0.018		0.221	0.023	T	0.24	0.03	L		8.3616	0.0020	0.011	51		8.34	8.38		C			1							
98015	9.514	0.027	8.601	0.021		0.810	0.025	T	0.84	0.02	L		8.7042	0.0026	0.013	55		8.68	8.73		C			1							
98016	10.585	0.038	8.487	0.012		1.775	0.033	T	2.45	0.06	O		8.2984	0.0031	0.028	114		8.26	8.34		U 2			1							
98017	6.458	0.003	6.553	0.004	*	−0.081	0.004	T	−0.06	0.01	L	*	6.5606	0.0008	0.009	172	*	6.55	6.58		D	19551+3012	I 1	2 C A	AB	22	9.579	0.012	3.10	0.05	S
98018	9.731	0.015	8.228	0.008		1.264	0.013	T	1.22	0.01	L		8.2179	0.0015	0.017	155		8.19	8.24		C			1							
98019	10.130	0.026	8.296	0.011		1.530	0.020	G	1.57	0.04	H		8.2779	0.0013	0.015	121		8.25	8.31		C			1							
98020	9.534	0.021	8.920	0.020		0.599	0.023	G	0.67	0.02	H		8.9478	0.0015	0.011	79		8.93	8.97					1							
98021	10.021	0.035	9.702	0.039		0.306	0.057	T	0.35	0.08	L		9.7862	0.0392	0.220	73		9.39	9.93	0.13	P 1 A			1							
98022						0.659	0.126	G	0.72	0.10	R		11.4298	0.0079	0.069	106		11.30	11.53					1							G
98023	9.067	0.014	7.815	0.009		1.080	0.015	G	1.04	0.01	H		7.8659	0.0015	0.012	140		7.85	7.88		C			1							S
98024	9.548	0.020	8.084	0.011		1.234	0.018	T	1.19	0.02	L		8.0992	0.0012	0.013	89		8.08	8.12		C			1							
98025	8.548	0.011	8.117	0.011		0.402	0.015	G	0.47	0.02	H		8.1733	0.0015	0.017	98		8.15	8.20					1							S
98026	7.574	0.006	7.736	0.010		−0.141	0.010	T	−0.14	0.01	L		7.7219	0.0015	0.015	114		7.70	7.75					1							S
98027	9.099	0.021	8.393	0.018	A	0.300	0.495	G	0.59	0.04	L	*	8.4326	0.0034	0.021	51	*	8.40	8.47		D	19552−0051	I 1	2 C B	AB	111	2.399	0.045	3.31	0.28	
98028	8.026	0.007	7.650	0.009		0.367	0.010	T	0.43	0.01	L		7.7134	0.0010	0.012	129		7.70	7.79		U 2			1							S
98029	9.485	0.028	7.589	0.012		1.575	0.024	T	1.59	0.03	L		7.5301	0.0015	0.013	55		7.51	7.55					1							S
98030	9.044	0.021	8.850	0.025		0.186	0.031	T	0.20	0.04	L		8.9143	0.0020	0.015	44		8.89	8.94		D			1							
98031	9.511	0.017	8.069	0.010		1.234	0.016	T	4.94	0.19	O		6.8726	0.1182	0.565	134		6.20	7.63	386.80	P 1 B			1 V							P
98032	5.508	0.003	4.241	0.003		1.063	0.043	G	1.09	0.02	A		4.2773	0.0006	0.005	99		4.27	4.29					1							S
98033	11.593	0.114	10.672	0.076		0.730	0.020	G	0.78	0.02	H		10.7662	0.0038	0.039	98		10.69	10.85					1							G
98034	9.129	0.016	8.587	0.015		0.515	0.016	T	0.59	0.02	L		8.6372	0.0024	0.021	111		8.62	8.69		U 2			1							S
98035	10.274	0.026	9.664	0.024		0.578	0.015	G	0.65	0.01	H		9.6602	0.0033	0.030	140		9.60	9.71					1							G
98036	4.798	0.003	3.814	0.002		0.855	0.007	G	0.89	0.02	A		3.8668	0.0004	0.004	142		3.86	3.87			19553+0625	I 1	1							S
98037	9.208	0.017	9.170	0.023		0.040	0.026	T	0.06	0.02	L		9.1796	0.0018	0.019	127		9.14	9.21					1							
98038	6.965	0.008	6.543	0.007	*	0.391	0.002	G	0.46	0.00	H	*	6.5881	0.0013	0.007	53	*	6.57	6.60		D	19553−0644	I 1	2 C A	AB	112	0.272	0.009	1.04	0.05	S
98039	9.513	0.015	7.997	0.008		1.274	0.013	T	1.23	0.01	L		8.0373	0.0016	0.020	181		8.00	8.07		U			1							
98040	8.497	0.009	8.168	0.010		0.312	0.013	G	0.36	0.02	H		8.2256	0.0029	0.026	132		8.17	8.26		U 2			1							S
98041	11.385	0.136	9.073	0.030		1.907	0.112	T	1.94	0.12	L		8.8770	0.0076	0.045	41		8.80	8.93		U			1							
98042	10.280	0.039	9.760	0.039		0.498	0.042	T	0.57	0.04	L		9.8700	0.0032	0.023	73		9.84	9.91		C			1							
98043	9.860	0.021	8.317	0.011		1.296	0.019	T	1.26	0.02	L		8.3329	0.0014	0.013	137		8.30	8.36		C			1							
98044	7.405	0.006	6.213	0.004		1.021	0.006	T	0.99	0.01	L		6.2692	0.0008	0.008	91		6.26	6.28		C			1							S
98045	7.268	0.006	6.912	0.005		0.375	0.015	G	0.44	0.02	H		6.9541	0.0007	0.007	121		6.94	6.97		C			1							S
98046	10.414	0.031	8.867	0.014		1.299	0.027	T	1.26	0.03	L		8.9012	0.0018	0.024	175		8.85	8.94					1 S							
98047	8.428	0.008	8.238	0.009		0.182	0.011	T	0.20	0.01	L		8.2727	0.0020	0.021	150		8.24	8.31					1							
98048	9.233	0.011	7.348	0.005		1.599	0.010	T	1.67	0.04	O		7.2808	0.0009	0.014	210		7.26	7.31		M			1							S
98049	9.263	0.017	8.545	0.015		0.657	0.015	G	0.72	0.01	H		8.5919	0.0013	0.013	82		8.58	8.62		C			1							
98050	9.809	0.022	8.750	0.015		0.909	0.021	T	0.91	0.01	L		8.8078	0.0014	0.013	101		8.79	8.83		C			1							
98051	9.858	0.022	9.110	0.018		0.669	0.022	T	0.73	0.02	L		9.2056	0.0018	0.020	93		9.18	9.24		C			1							
98052	9.198	0.015	8.896	0.016		0.284	0.020	G	0.32	0.03	H		8.9453	0.0017	0.016	103		8.92	8.98		C			1 S							
98053	7.987	0.007	7.834	0.008		0.139	0.010	T	0.15	0.01	L		7.8828	0.0014	0.016	182		7.85	7.91					1							S
98054	9.866	0.017	9.250	0.016		0.571	0.017	T	0.64	0.02	L		9.3214	0.0015	0.016	151		9.29	9.36		C			1							
98055	5.033	0.005	4.879	0.007	*	0.124	0.006	G	0.12	0.03	C	*	4.9503	0.0006	0.005	95	*	4.94	4.96		D	19557+5227	I 1	2 C A	AB	177	3.009	0.006	2.56	0.04	S
98056	9.364	0.023	9.365	0.032		0.004	0.036	T	0.02	0.03	L		9.3407	0.0032	0.020	98		9.31	9.37					1							
98057	12.042	0.116	9.782	0.023		1.908	0.097	T	2.54	0.55	K		9.6343	0.0023	0.031	195		9.58	9.69					1							G
98058	8.471	0.011	6.746	0.006		1.439	0.010	T	1.43	0.02	L		6.7299	0.0008	0.008	133		6.71	6.75					1							S
98059	11.815	0.190	9.667	0.042		1.775	0.155	T	1.80	0.16	L		9.5550	0.0040	0.028	53		9.51	9.60					1							
98060						1.933	0.170	G	2.94	0.53	K		12.0946	0.0182	0.113	53		11.82	12.28		U 2			1							G
98061	7.297	0.005	7.364	0.008		−0.057	0.008	T	−0.04	0.01	L		7.3547	0.0010	0.009	127		7.34	7.37			19558+4024	I 1	1							S
98062	9.954	0.020	9.451	0.020		0.484	0.022	T	0.56	0.02	L		9.5069	0.0024	0.027	140		9.46	9.55					1							
98063	10.444	0.038	9.844	0.034		0.515	0.015	G	0.59	0.02	H		9.9050	0.0030	0.026	151		9.87	9.95					1							G
98064	10.835	0.043	9.072	0.016		1.469	0.036	T	1.48	0.05	L		9.0478	0.0027	0.021	124		9.01	9.08					1							
98065	10.357	0.028	9.015	0.016		1.138	0.025	T	1.10	0.03	L		9.0474	0.0022	0.023	132		9.00	9.09		U			1							
98066						0.748	0.015	G	0.79	0.00	A		4.8317	0.0007	0.005	82		4.82	4.84		C			1 G							S
98067	9.347	0.014	8.887	0.014		0.459	0.006	G	0.53	0.01	H		8.9368	0.0017	0.018	157		8.90	8.97		D			1							
98068	4.829	0.002	4.934	0.002		−0.086	0.009	G	−0.07	0.03	C		4.9250	0.0004	0.004	130		4.92	4.93		C			1							S
98069	8.230	0.010	7.762	0.009		0.470	0.015	G	0.54	0.02	H		7.7993	0.0012	0.011	92		7.79	7.82					1							S
98070						1.928	0.170	G	3.56	0.47	I		11.9736	0.0073	0.068	114		11.85	12.10					1							G
98071	7.061	0.005	6.890	0.006		0.164	0.007	T	0.18	0.01	L		6.9355	0.0008	0.008	122		6.92	6.95					1 X							S
98072	7.974	0.007	8.073	0.009	A	−0.080	0.015	G	−0.06	0.02	H	*	8.0580	0.0014	0.011	127	*	8.04	8.08			19559+4912	I 1	2 C C	AB	290	4.014	0.045	3.67	0.23	S
98073	7.051	0.005	5.153	0.003		1.584	0.011	G	1.56	0.03	C		5.0998	0.0010	0.008	98		5.08	5.11		M			1							S
98074	8.994	0.022	8.675	0.024		0.303	0.030	T	0.35	0.04	L		8.6892	0.0039	0.018	45		8.67	8.72					1							
98075	8.801	0.019	8.654	0.023		0.134	0.028	T	0.15	0.03	L		8.7020	0.0020	0.011	57		8.68	8.73		C			1							S
98076	8.807	0.009	8.497	0.010		0.297	0.015	G	0.34	0.02	H		8.5568	0.0021	0.019	169		8.52	8.59					1							
98077	9.991	0.057	8.716	0.029		1.086	0.050	T	1.05	0.04	L		8.9026	0.3765	1.767	86		7.07	10.93	345.00	P 1 B			1 S							G P
98078	8.928	0.012	8.459	0.012		0.471	0.015	G	0.54	0.02	H		8.5089	0.0015	0.013	130		8.49	8.53		C			1							
98079	7.951	0.007	6.913	0.005		0.903	0.006	T	0.90	0.00	L		6.9662	0.0009	0.009	101		6.95	6.98		C			1							S
98080	9.323	0.015	9.328	0.021		0.000	0.024	T	0.02	0.02	L		9.3306	0.0021	0.024	115		9.29	9.36		C			1							
98081	9.993	0.036	9.524	0.036		0.450	0.005	G	0.52	0.01	H		9.5562	0.0032	0.018	91		9.52	9.59					1							
98082	10.670	0.038	9.175	0.018		1.259	0.035	T	1.22	0.04	L		9.2146	0.0022	0.026	164		9.17	9.26					1							
98083	9.021	0.012	7.229	0.006		1.492	0.011	T	1.52	0.02	L		7.2078	0.0013	0.012	124		7.19	7.23					1							S
98084	9.675	0.019	9.351	0.022		0.308	0.027	T	0.35	0.04	L		9.3787	0.0019	0.017	100		9.35	9.40		C			1							
98085	6.850	0.050	5.811	0.032		0.903	0.045	T	0.90	0.03	L		5.8414	0.0616	0.320	107		5.42	6.19	8.38	P 1 A			1							S P
98086	8.235	0.009	6.546	0.004		1.402	0.004	G	1.38	0.01	H		6.5343	0.0008	0.008	149		6.52	6.55					1							S
98087	8.270	0.009	8.323	0.011	A	−0.070	0.015	G	−0.05	0.01	H	*	8.2783	0.0014	0.015	147	*	8.26	8.31		D	19560+1753	I 1	2 C B	AB	23	4.395	0.029	3.38	0.20	
98088	10.800	0.052	8.895	0.018		1.616	0.045	T	1.97	0.12	O		8.7838	0.0064	0.052	84		8.67	8.85		U 2			1							P
98089	9.976	0.024	8.737	0.015		1.057	0.022	T	1.02	0.02	L		8.8018	0.0018	0.017	108		8.78	8.83		C			1							
98090	7.082	0.005	7.147	0.006		−0.073	0.009	G	−0.05	0.02	A		7.1583	0.0009	0.007	105		7.15	7.17		C			1							S
98091	9.399	0.022	8.926	0.022		0.458	0.024	T	0.53	0.03	L		8.9443	0.0024	0.017	94		8.92	8.97					1							
98092	9.846	0.018	9.347	0.018		0.498	0.015	G	0.57	0.02	H		9.3557	0.0017	0.027	205		9.31	9.40		C			1							
98093	7.203	0.006	7.271	0.006		−0.071	0.010	G	−0.05	0.01	H		7.2721	0.0010	0.010	151		7.25	7.29		C			1							S
98094	7.415	0.006	7.508	0.006		−0.080	0.008	T	−0.06	0.01	L		7.5147	0.0012	0.011	142		7.50	7.54					1							S
98095	10.499	0.031	8.383	0.011		1.790	0.027	T	2.37	0.06	O		8.2163	0.0033	0.030	117		8.17	8.28		U 2			1							
98096	10.316	0.036	9.509	0.029		0.712	0.006	G	0.77	0.01	H		9.5817	0.0018	0.015	92		9.55	9.61					1							
98097	9.991	0.018	8.773	0.011		1.041	0.016	T	1.01	0.01	L		8.8542	0.0016	0.021	171		8.82	8.89		C			1							
98098	9.614	0.018	8.893	0.015		0.636	0.005	G	0.70	0.00	H		8.9617	0.0016	0.015	111		8.94	8.99		C			1							
98099	8.846	0.015	6.833	0.006		1.705	0.013	T	2.22	0.04	O		6.6819	0.0026	0.024	95		6.65	6.74		U 2	19562−3820	I 1	1							S
98100	8.088	0.008	7.869	0.010		0.216	0.015	G	0.24	0.02	H		7.9115	0.0010	0.011	111		7.89	7.94					1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ α*	μ_δ δ	μ_δ π	μ_δ α*	$\mu_{\alpha*}$ μ_δ	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
98101	19 56 12.36	−30 30 37.0	9.70	H	299.051 507 23	−30.510 291 32	5.86	12.05	10.95	1.45	0.84	1.61	1.70	1.15	+14	−27	+ 1	−14	+11	+19	+15	−11	− 9	+14	0	0.98
98102 H	19 56 13.95	−55 08 36.6	8.30	H	299.058 107 73	−55.143 489 66 A	6.41	−24.93	−12.35	2.26	2.06	3.03	3.22	3.17	+17	+ 1	+ 8	−12	+17	−19	+23	−14	+ 5	+30	1	2.25
98103	19 56 14.23	+11 25 25.4	5.28	H	299.059 302 85	+11.423 709 78	15.84	32.40	4.57	0.61	0.46	0.76	0.72	0.55	+ 3	−14	−28	+ 9	−10	+23	− 4	+16	− 2	− 2	0	1.58
98104 H	19 56 14.61	−30 59 49.5	10.09	H	299.060 864 29	−30.997 096 06 A	5.44	−27.31	0.59	4.92	2.74	4.53	5.86	3.53	+37	−12	+ 7	−18	+10	+17	+11	−12	+ 2	+26	2	0.56
98105	19 56 15.81	−52 58 15.6	10.58	G	299.065 873 27	−52.970 994 74	32.65	136.50	−76.11	1.42	0.98	1.95	2.00	1.44	− 6	−31	+ 0	−11	+23	+ 5	+23	−18	− 2	+ 5	0	2.59
98106	19 56 16.17	−72 21 48.8	8.40	H	299.067 392 56	−72.363 567 80	42.78	−12.34	−300.48	0.60	0.72	1.00	0.67	0.83	−22	−17	+ 1	+ 4	+10	− 3	+11	−10	−15	−29	1	−0.61
98107	19 56 16.46	−13 20 42.8	9.26	H	299.068 592 04	−13.345 215 78 A	−9.19	15.90	9.28	11.31	6.70	8.52	13.91	9.66	+15	+34	+11	−51	−13	−18	−18	−31	−21	+17	21	3.22
98108	19 56 16.69	−31 36 47.2	8.04	H	299.069 522 46	−31.613 100 91	15.67	−34.19	−170.67	1.21	0.76	1.06	1.89	1.25	−14	+ 2	−13	−58	+37	− 5	+42	−53	+ 5	−31	0	−1.19
98109	19 56 16.91	−13 20 53.1	9.82	H	299.070 473 45	−13.348 083 13 B	−27.84	13.50	18.06	15.38	11.79	17.61	21.69	20.51	+13	+ 9	− 4	−30	+ 6	−29	− 1	−13	−63	+21	21	3.22
98110	19 56 18.40	+35 05 00.6	3.89	G	299.076 650 69	+35.083 490 79	23.40	−34.00	−27.60	0.37	0.43	0.54	0.44	0.43	−18	+ 4	− 4	+ 4	+ 6	−12	+ 8	−36	+18	−15	1	−0.13
98111	19 56 19.02	+56 41 13.1	6.16	H	299.079 253 17	+56.686 975 32	11.67	29.32	17.06	0.45	0.42	0.48	0.53	0.45	− 4	−14	+ 8	+ 2	+ 8	− 2	+ 6	− 3	+10	+ 2	1	2.61
98112	19 56 21.30	−54 07 48.0	9.15	H	299.088 748 34	−54.129 999 39	3.86	−4.56	−11.69	0.96	0.66	1.33	1.50	0.97	+18	−30	− 8	−21	+21	− 4	+21	−25	−13	+ 1	0	−1.78
98113	19 56 22.56	−16 22 19.1	8.65	2 H	299.094 011 20	−16.371 974 29	0.25	−3.73	−10.45	1.21	0.67	1.30	1.66	0.99	+19	− 4	− 4	−16	+17	+26	+18	− 2	+18	+36	0	−0.21
98114	19 56 22.60	−47 44 15.4	8.79	H	299.094 160 71	−47.737 624 13	5.31	12.54	8.13	1.12	0.59	1.26	1.65	1.03	−16	−30	+15	+29	+ 4	− 8	+15	− 1	− 9	+13	0	−0.57
98115	19 56 23.52	+31 22 09.3	9.18	H	299.097 998 71	+31.369 239 08	2.17	1.83	2.19	0.60	0.72	0.98	0.73	0.76	− 6	+10	− 7	+20	+ 2	− 5	+ 3	− 2	+15	− 1	0	0.89
98116	19 56 24.63	+35 47 24.3	7.58	G	299.102 628 82	+35.790 078 77	2.90	7.31	3.95	0.51	0.56	0.72	0.59	0.55	−13	− 8	+17	+19	+ 2	−11	+ 5	−14	+ 1	− 6	0	−0.54
98117	19 56 26.98	−65 22 07.4	9.23	H	299.112 424 78	−65.368 733 10	1.93	−26.62	−64.82	1.02	0.89	1.33	1.15	1.12	+ 7	−15	+ 3	+22	− 8	+ 1	− 6	−11	+15	+22	2	1.37
98118	19 56 28.79	+73 36 57.6	9.13	3 H	299.119 950 99	+73.615 990 69	4.80	−7.95	−5.06	0.71	0.65	0.74	0.68	0.72	−11	−20	+ 5	−26	+13	− 4	+13	− 4	+ 1	− 5	0	−0.88
98119	19 56 28.87	+10 33 14.5	9.00	H	299.120 299 95	+10.554 021 08	−0.59	1.37	−4.63	0.92	0.82	1.31	1.03	0.99	+34	−23	−28	+ 4	+ 6	+29	+21	+26	−22	+19	0	0.08
98120	19 56 29.81	+19 11 14.5	7.61	H	299.124 206 72	+19.187 348 97	4.15	8.57	7.83	0.56	0.47	0.85	0.67	0.46	−24	− 9	+13	+ 1	−12	+ 9	−14	−28	− 1	−43	0	0.96
98121	19 56 31.49	+53 47 04.3	7.90	2 H	299.131 205 34	+53.784 516 54	2.43	−2.83	19.06	0.61	0.56	0.67	0.73	0.57	−15	−26	+11	+ 4	+ 2	−12	− 2	− 8	+20	− 6	4	0.36
98122	19 56 31.56	−42 09 38.0	10.11	H	299.131 496 22	−42.160 554 66	5.38	−2.99	11.51	1.76	0.91	1.87	2.19	1.72	+ 9	−37	− 2	+20	− 7	+ 6	−11	− 1	+ 0	+ 1	0	−0.53
*98123	19 56 34.46	+59 09 42.5	10.06	2 H	299.143 571 71	+59.161 809 40	33.43	−433.79	−103.64	5.36	5.18	5.38	5.76	5.78	+11	+ 6	+ 9	−28	− 9	+ 4	− 6	−38	+13	+28	0		
*98124	19 56 33.63	+08 15 21.4	7.48	H	299.140 129 67	+08.255 954 55	1.95	−0.54	−12.34	0.69	0.61	0.99	0.84	0.78	+27	−13	−31	+20	− 8	+24	+ 3	+38	−22	+ 2	2	0.55
*98125	19 56 34.27	−15 42 13.7	7.62	H	299.142 792 84	−15.703 805 67	5.23	13.32	5.51	0.99	0.75	1.08	1.15	1.02	+16	−10	−19	−12	+ 8	+19	+13	+ 7	− 7	+25	0	−2.76
98126	19 56 35.38	+36 19 12.0	7.90	H	299.147 422 36	+36.319 991 31	3.24	2.16	−0.36	0.48	0.52	0.66	0.50	0.51	− 2	+ 3	+15	+ 5	+ 6	+ 3	+ 7	−10	+ 5	+ 8	1	0.97
98127	19 56 35.70	−27 37 19.3	8.91	H	299.148 739 52	−27.622 024 17	1.52	3.31	−4.68	1.06	0.64	1.16	1.15	0.80	+18	−29	− 9	+ 1	+16	+23	+17	+ 8	+ 8	+30	0	0.22
98128	19 56 36.02	−35 30 07.1	9.13	H	299.150 088 20	−35.501 969 42	2.51	3.41	−8.41	1.17	0.82	1.31	1.52	1.49	+45	−20	−10	− 8	−23	+ 7	−17	−31	− 9	+59	2	−1.80
98129	19 56 36.55	−33 31 17.6	9.12	H	299.152 300 04	−33.521 551 12	2.06	−10.89	3.12	1.64	1.02	1.88	2.33	1.57	+42	− 8	+ 3	−31	−14	−31	−10	−34	−21	+38	2	0.41
98130	19 56 36.75	−31 20 07.4	8.42	G	299.153 111 66	−31.335 393 80	52.11	408.04	32.98	1.08	0.73	1.14	1.21	0.96	+22	+ 0	−20	−33	+ 7	−14	+ 8	−26	+ 8	+36	0	−0.60
98131	19 56 37.77	+23 53 18.8	6.97	H	299.157 391 76	+23.888 546 20	2.74	0.27	2.20	0.62	0.51	0.81	0.69	0.57	−16	−20	+ 0	−18	− 4	+ 8	− 5	−21	+ 2	−34	0	−1.31
98132	19 56 37.97	−49 45 45.8	8.47	H	299.158 200 26	−49.762 730 99	5.57	6.52	−9.52	1.10	0.58	1.15	1.64	0.93	−24	−16	+ 1	+39	−15	+ 5	−13	+ 1	− 7	−21	0	1.20
98133	19 56 38.44	−60 55 31.3	9.01	H	299.160 176 88	−60.925 374 40	3.38	30.13	−27.47	0.83	0.80	1.36	0.81	0.85	+21	−19	+ 8	+ 4	−23	− 6	−29	−40	−10	+ 4	0	0.65
98134	19 56 39.17	−22 42 49.8	8.65	H	299.163 206 64	−22.713 832 29	3.74	16.85	−15.58	0.96	0.63	1.06	0.99	0.71	+35	−42	−17	− 1	+13	+ 8	+12	− 3	+ 6	+47	0	−1.26
98135	19 56 40.09	−23 03 57.9	7.57	H	299.167 053 50	−23.066 075 88	6.17	6.22	−43.49	0.79	0.52	0.87	0.82	0.58	+33	−36	−12	− 1	+13	+14	+13	− 3	+ 8	+46	0	0.68
98136	19 56 40.48	−17 55 17.0	9.38	G	299.168 679 84	−17.921 381 99	−2.10	−3.24	−10.92	1.46	0.71	1.50	1.82	0.83	+55	−40	−18	+31	+26	+10	+28	+ 2	+12	+76	4	−0.35
98137	19 56 41.66	+32 01 43.9	8.30	H	299.173 576 07	+32.028 852 19	2.54	−10.11	2.69	0.53	0.61	0.84	0.62	0.66	−11	− 8	+ 2	+14	+ 0	− 8	+ 0	− 6	− 1	−13	0	0.41
98138	19 56 41.69	+30 56 49.7	6.80	H	299.173 728 13	+30.947 142 52	10.31	−18.91	35.67	0.43	0.59	0.69	0.50	0.66	− 1	− 8	− 1	+11	− 3	−23	− 8	−16	+ 8	+ 6	1	−0.04
98139	19 56 41.84	−65 31 56.2	8.56	H	299.174 323 31	−65.532 282 31	1.63	8.23	6.69	0.95	0.84	1.27	0.93	0.95	+ 0	−25	− 5	+12	−20	+ 2	−31	−22	+12	−23	0	−1.41
98140	19 56 42.69	−20 28 38.1	9.51	H	299.177 886 36	−20.477 238 91	2.98	−3.20	−7.53	1.48	0.95	1.61	1.74	1.07	+51	−27	− 4	+15	+21	+18	+18	− 1	+23	+73	3	2.33
98141	19 56 43.28	+72 56 18.0	8.40	G	299.180 319 79	+72.938 330 00	3.87	−3.17	−31.52	0.63	0.60	0.71	0.62	0.61	−10	−21	+15	−32	+ 6	+17	+ 4	+ 9	− 4	− 6	0	−0.71
98142	19 56 43.85	+24 48 15.6	8.92	H	299.182 714 79	+24.804 343 50	4.75	−0.29	9.62	0.63	0.74	1.22	0.68	0.79	+ 4	−12	− 2	+32	−13	+ 5	−10	−20	+12	+13	1	0.75
98143	19 56 44.14	+36 15 02.2	6.03	H	299.183 928 84	+36.250 599 28	2.93	1.21	−0.18	0.35	0.39	0.49	0.38	0.39	−10	− 4	+ 9	+ 7	+ 3	+ 4	+ 4	−16	+11	+ 1	0	0.38
98144	19 56 44.31	+12 26 32.2	8.78	H	299.184 632 19	+12.442 273 67	6.83	23.83	−5.76	1.33	0.98	1.36	2.07	1.46	−26	−36	− 3	−36	+19	+39	+16	−36	+ 8	+15	0	1.39
98145	19 56 44.53	+32 47 24.5	8.32	H	299.185 558 58	+32.790 125 79	2.41	1.95	−0.66	0.54	0.60	0.82	0.56	0.65	− 8	− 4	− 5	+ 5	− 3	−10	− 3	− 4	− 7	+ 1	0	−0.84
98146	19 56 45.16	+50 54 09.0	6.46	H	299.188 180 99	+50.902 496 91	9.31	10.01	10.63	0.43	0.45	0.49	0.48	0.42	−17	−11	+ 5	− 2	+16	−11	+15	−12	+ 7	−11	0	−0.47
98147	19 56 46.29	+01 06 06.8	11.82	H	299.192 859 21	+01.101 889 68	8.21	−16.56	−2.08	4.51	4.30	4.68	6.28	5.88	+50	−31	−36	+18	+48	−18	+49	+51	+ 5	+25	0	0.89
98148	19 56 47.01	−49 37 16.8	8.62	H	299.195 862 75	−49.621 344 34	11.28	−21.47	−66.45	1.16	0.57	1.16	1.52	0.94	−37	−38	+18	+15	− 4	+ 1	+ 4	− 4	−14	−18	0	−0.93
98149	19 56 47.87	+16 24 31.7	8.64	H	299.199 445 42	+16.408 796 63	0.82	2.91	1.41	0.66	0.63	1.14	0.85	0.77	+15	− 9	−18	+ 0	+ 3	+19	+ 6	− 9	+13	+29	0	1.09
98150	19 56 48.43	−16 36 55.1	8.32	H	299.201 810 08	−16.615 312 97	3.84	5.89	−5.75	1.08	0.62	1.19	1.28	0.86	+25	− 6	−26	−25	− 1	+23	+ 7	−11	+10	+37	0	0.58
98151	19 56 48.57	+29 31 51.3	8.03	H	299.202 382 29	+29.530 913 12	13.76	−89.75	−160.25	0.52	0.66	0.93	0.64	0.71	−15	+ 7	−13	− 2	+14	−13	+14	−24	+22	− 7	0	−0.15
98152	19 56 49.10	−30 34 12.6	6.55	H	299.204 564 53	−30.570 164 59	10.84	25.38	−7.40	0.78	0.52	0.92	1.07	0.70	+18	−22	−27	− 9	+ 7	+28	+14	−17	+ 2	− 8	0	0.85
98153	19 56 49.39	+06 16 35.2	8.97	H	299.205 791 71	+06.276 440 65	−0.66	13.93	−2.25	1.35	1.98	1.44	1.81	2.29	+73	− 6	−12	+56	+59	+21	+58	+83	− 1	+61	2	−0.12
98154	19 56 49.75	+23 46 36.1	6.79	H	299.207 285 97	+23.776 699 89	11.32	42.78	37.77	0.57	0.47	0.76	0.64	0.52	−10	−13	+ 1	−17	− 7	+ 7	− 8	−13	+ 6	−30	0	−0.26
98155	19 56 50.04	−63 28 24.7	7.97	2 H	299.208 519 95	−63.473 527 41	1.95	23.00	−36.36	0.73	0.64	1.04	0.73	0.71	−16	−22	− 9	+15	−25	+12	−31	− 2	+11	−36	0	0.28
98156	19 56 50.15	+44 16 16.0	7.91	2 H	299.208 967 59	+44.271 113 59	1.90	7.18	4.82	0.72	0.58	0.79	0.88	0.77	−15	−11	+ 6	−15	+22	−11	+22	−28	−12	−26	6	1.24
98157	19 56 53.34	+35 32 12.6	8.21	H	299.222 252 81	+35.536 836 95	6.76	15.14	37.23	0.54	0.60	0.78	0.60	0.59	−13	−11	+14	+15	+ 9	−11	+11	−15	+ 0	− 8	1	1.20
98158	19 56 54.49	+08 26 51.2	7.28	2 H	299.227 032 27	+08.447 553 68	1.26	−1.07	−18.87	0.68	0.60	0.98	0.83	0.82	+32	− 9	−20	+21	− 8	+19	− 4	+33	−21	+14	0	0.61
*98159	19 56 55.39	−59 17 03.1	10.90	G	299.230 787 87	−59.284 202 13	23.53	125.53	−177.61	1.44	1.44	2.24	1.66	1.82	+32	− 8	−13	+29	−11	+ 2	− 3	−22	− 9	+46	3	1.09
*98160	19 56 55.33	+44 20 30.6	9.16	G	299.230 521 72	+44.341 840 63	2.31	9.55	5.89	0.79	0.66	0.90	0.87	0.70	− 4	+ 7	+ 5	+ 8	+ 4	−29	+ 8	− 6	+ 4	+ 2	0	−1.40
98161	19 56 56.62	−01 12 29.2	8.63	H	299.235 928 81	−01.208 097 57	4.87	−20.75	−31.10	1.28	1.01	1.53	1.69	1.34	+25	−23	−21	+ 2	− 1	−19	− 2	+17	− 3	+ 3	0	0.29
98162	19 56 56.82	−27 10 11.5	4.54	G	299.236 770 38	−27.169 862 50	2.70	9.60	−14.95	0.69	0.45	0.75	0.78	0.59	+24	−27	+ 5	+16	+10	+ 8	+12	+ 7	− 3	+36	0	1.52
98163	19 56 57.70	−57 55 32.0	6.55	1 H	299.240 431 48	−57.925 546 82	2.18	−7.62	−38.61	0.57	0.48	0.74	0.80	0.59	+ 9	−23	−10	+ 1	+12	+ 1	+10	− 6	+ 1	+ 2	0	−0.12
98164	19 56 58.05	−45 48 59.6	8.81	G	299.241 880 77	−45.816 549 50	1.97	17.56	−33.13	1.16	0.59	1.45	1.81	1.46	+ 1	+ 4	+ 0	+16	+20	−24	+26	+ 8	+50	−13	0	−2.29
98165	19 56 58.31	+54 47 58.2	8.58	3 H	299.242 939 44	+54.799 500 70	2.89	2.03	8.82	0.61	0.55	0.65	0.73	0.56	+ 9	− 3	+19	+12	+ 2	−20	+ 5	− 1	+16	+ 7	0	1.22
98166	19 56 58.53	+75 42 49.9	7.28	H	299.243 865 05	+75.713 860 77	2.67	1.32	−27.18	0.50	0.46	0.51	0.56	0.51	−10	−11	+ 9	+ 7	+12	−14	+14	+ 0	− 7	+ 0	0	−0.93
98167	19 56 58.86	−37 28 03.5	9.67	H	299.245 247 94	−37.467 648 96	4.10	11.23	−11.35	1.49	0.82	1.57	1.82	1.28	+ 6	−28	+ 4	+ 0	+ 9	+19	+ 9	+ 5	+ 3	− 2	0	−1.15
98168	19 56 59.68	+27 48 58.7	7.88	H	299.248 661 46	+27.816 308 51	3.55	24.50	20.47	0.35	0.55	0.82	0.41	0.60	−18	+ 1	− 1	+12	− 7	−19	− 5	− 2	+12	−10	1	−0.31
98169	19 57 00.42	+20 59 54.0	6.62	H	299.251 745 71	+20.998 345 21	5.04	1.34	−20.89	0.54	0.43	0.77	0.84	0.70	−21	+ 3	− 6	−32	− 8	+28	− 9	−35	−12	− 6	0	1.80
98170	19 57 01.02	−59 17 27.0	10.32	1 G	299.254 269 06	−59.290 843 62	23.29	128.64	−190.92	1.41	1.38	2.17	1.66	1.80	+30	−11	− 3	+30	− 9	− 6	+ 3	−23	−15	+49	0	0.57
98171	19 57 01.37	−00 59 13.6	7.76	H	299.255 700 78	−00.987 116 47	2.28	−2.55	−0.89	1.06	0.82	1.19	1.52	1.13	+14	−19	−30	− 7	+18	− 7	+20	+19	− 2	− 6	0	−0.63
98172	19 57 02.02	−24 20 13.1	8.48	H	299.258 423 79	−24.336 971 45	6.19	17.53	−54.46	1.05	0.66	1.16	1.17	0.84	+30	−33	−10	− 2	+20	+20	+ 9	+ 6	+42	0	−0.28
98173	19 57 05.49	−61 37 28.9	8.39	H	299.272 883 16	−61.624 691 42	4.66	11.70	−55.67	0.73	0.65	1.15	0.70	0.64	+ 2	+ 0	−12	+ 5	−21	+21	−33	−32	− 1	−33	0	0.36
98174	19 57 06.28	−58 54 04.7	5.24	H	299.276 180 92	−58.901 315 41	10.81	23.55	−14.87	0.47	0.43	0.68	0.55	0.54	+21	− 9	− 2	+34	− 6	− 3	+ 1	−10	−11	+37	2	−1.85
98175	19 57 06.34	+19 33 50.7	8.51	H	299.276 398 94	+19.564 080 07	0.70	−0.08	−5.90	0.66	0.55	1.04	0.80	0.56	−24	− 7	+10	− 6	− 9	+ 1	−11	−28	+ 6	−45	0	2.01
98176	19 57 06.44	−12 33 54.5	9.05	H	299.276 828 62	−12.565 136 35	2.28	6.25	−0.43	1.33	0.96	1.58	1.61	1.39	+19	+ 6	−18	− 3	+ 7	+36	+14	+21	+ 1	+33	0	1.25
98177 H	19 57 06.78	+49 39 03.7	8.49	H	299.278 255 11	+49.651 025 39 A	3.92	−1.99	−9.69	1.40	0.97	1.04	1.23	0.81	− 8	−14	+14	+29	+ 2	−21	+ 0	− 2	+11	− 5	2	−0.83
98178	19 57 06.80	−25 05 21.8	8.59	H	299.278 340 22	−25.089 394 98	10.89	94.05	−33.42	1.02	0.65	1.16	1.30	0.82	+28	−31	−33	− 4	− 7	+ 5	− 8	−12	+ 6	+ 9	0	0.16
98179	19 57 07.50	−09 08 15.1	8.85	H	299.281 269 60	−09.137 517 61	−1.45	3.62	0.46	1.33	1.12	1.62	1.81	1.58	+36	−19	−18	+ 9	+29	+47	+42	+54	− 3	+38	3	1.55
98180	19 57 07.53	−46 44 05.0	8.94	H	299.281 360 34	−46.734 732 71	4.01	−30.39	−28.70	2.63	1.58	1.58	2.63	1.56	−43	− 8	−24	+ 7	− 6	−20	−16	+13	+20	−38	0	2.33
98181	19 57 07.87	+18 20 31.1	8.31	1 H	299.282 785 62	+18.341 985 85	3.56	24.71	11.04	0.70	0.61	1.03	0.78	0.73	+ 1	− 7	+ 3	−13	− 6	+ 8	− 7	−14	+ 2	+ 2	0	−0.46
98182	19 57 08.28	+30 46 38.9	6.96	H	299.284 516 66	+30.777 475 20	5.25	23.61	0.05	0.43	0.49	0.67	0.52	0.53	− 2	− 7	+ 1	+ 4	− 6	−12	− 3	−17	+11	+16	0	−0.61
98183	19 57 08.29	−72 06 49.6	7.77	H	299.284 541 59	−72.113 772 52	2.26	2.37	−5.09	0.48	0.59	0.79	0.54	0.69	−23	− 7	− 1	+ 4	+10	− 2	+ 9	−10	− 3	−33	0	−0.54
98184	19 57 08.67	−34 33 43.4	8.24	H	299.286 127 82	−34.562 054 23	4.85	−19.57	−6.07	1.22	0.71	1.36	1.34	1.07	+ 9	−38	+20	− 4	−11	− 7	+ 7	−35	−36	+29	0	1.84
98185	19 57 10.56	+29 55 37.0	8.65	H	299.293 989 27	+29.926 934 21	19.75	93.90	−203.45	0.66	0.79	1.15	0.83	0.85	−11	−12	− 7	+15	+17	−19	+14	−16	+21	− 1	0	−2.00
98186	19 57 10.65	+30 51 22.7	7.51	H	299.294 380 71	+30.856 319 37	3.23	3.76	0.48	0.46	0.53	0.72	0.53	0.55	− 8	−14	− 1	+13	− 2	−20	+ 0	−13	+11	+ 3	0	0.49
98187	19 57 11.66	−07 24 16.9	7.84	H	299.298 600 31	−07.404 690 95	6.04	−6.31	−1.05	0.98	0.85	1.14	1.16	1.00	+19	−15	−39	+ 3	+21	+22	+37	+45	−20	+11	3	0.68
98188	19 57 11.77	+25 29 19.7	7.75	H	299.299 045 66	+25.488 812 59	2.16	5.14	10.70	0.48	0.53	0.86	0.52	0.61	+ 1	−19	− 2	+30	− 8	+ 6	− 4	−13	+ 3	+13	0	−0.61
98189	19 57 12.05	−34 20 29.6	9.19	H	299.300 193 41	−34.341 543 54	13.07	44.75	−30.18	1.45	0.82	1.59	1.77	1.49	+27	−36	+ 8	−24	−19	−11	− 5	−42	−24	+43	0	2.89
98190	19 57 12.51	+44 15 40.2	8.02	2 H	299.302 128 11	+44.261 155 64 *	2.79	−2.17	−14.13	0.78	0.74	0.86	0.89	0.76	− 8	+ 0	+18	− 4	+11	−19	+12	− 7	+10	+10	0	2.65
98191	19 57 13.23	+00 21 07.4	6.97	G	299.305 116 71	+00.352 061 03	9.38	13.59	−1.04	0.87	0.64	0.93	1.37	0.93	+ 7	− 6	−35	+14	− 2	+14	+ 3	+19	+ 8	− 6	0	1.30
*98192	19 57 13.35	+29 49 24.4	7.91	G	299.305 611 23	+29.823 440 76	39.24	107.66	236.18	0.55	0.67	0.97	0.65	0.69	−15	− 5	− 2	+ 7	+13	−15	+12	−18	+21	− 9	0	−1.36
*98193 H	19 57 13.33	+35 01 53.2	7.26	H	299.305 527 85	+35.031 439 81 A	8.95	−12.08	−15.21	1.26	1.41	0.98	0.82	0.87	−44	− 1	− 5	− 5	+13	−20	+11	−14	+22	− 9	3	1.16
98194	19 57 13.86	+40 22 04.2	5.46	H	299.307 760 56	+40.367 825 05	2.13	7.08	−0.47	0.42	0.43	0.54	0.44	0.40	− 5	− 9	+17	+13	+ 6	+ 0	+ 6	− 8	+13	+ 4	1	0.04
98195	19 57 14.16	−30 11 59.4	8.00	H	299.308 987 06	−30.199 839 55	2.48	−4.34	20.52	0.94	0.60	1.14	1.29	0.75	+24	−15	−25	+15	− 2	+39	+ 7	+ 2	−12	+ 2	0	0.22
98196 H	19 57 15.41	−54 13 57.6	8.34	G	299.314 223 77	−54.232 659 27 A	0.69	10.39	−6.89	1.39	1.01	1.72	2.10	1.38	+10	− 2	+14	−20	+ 7	−25	+ 8	−30	−33	+24	1	0.04
98197	19 57 15.48	−26 13 03.3	8.10	H	299.314 515 08	−26.217 586 00	15.57	8.70	45.50	0.91	0.59	1.01	0.95	0.76	+32	−40	−23	+ 3	+ 0	+ 6	+ 0	− 2	+ 4	+28	0	0.04
98198 H	19 57 15.94	+62 52 36.3	7.50	G	299.316 408 78	+62.876 759 25 *	5.03	14.64	19.18	1.80	1.33	0.81	0.93	0.86	+ 7	+ 5	+27	− 6	+18	+19

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
98101	10.280	0.040	9.726	0.038		0.519	0.049	T	0.59	0.05	L	9.8144	0.0029	0.022	80		9.78	9.85		C			1							
98102	8.707	0.016	8.182	0.017	*	0.493	0.021	T	0.57	0.02	L *	8.4068	0.0017	0.014	149	*	8.38	8.43		D	19562−5509	I 1	2 C A	AB	199	1.890	0.002	0.35	0.01	S
98103	5.301	0.003	5.291	0.002		0.014	0.003	T	0.03	0.00	L	5.2938	0.0007	0.005	71		5.29	5.31		C			1							S
98104	11.661	0.141	10.630	0.087	B	0.400	0.495	G	0.92	0.07	B *	10.2493	0.0034	0.025	88	*	10.21	10.29		R	19562−3100	I 1	2 C A	AB	194	1.582	0.008	0.22	0.03	G
98105	12.557	0.208	10.830	0.073		1.340	0.002	G	1.55	0.03	I	10.6841	0.0036	0.040	147		10.59	10.76		R			1							G
98106	9.737	0.016	8.514	0.010		1.058	0.018	G	1.11	0.03	I	8.5413	0.0019	0.021	184		8.50	8.58					1							
98107	10.953	0.082	9.415	0.035	A	1.292	0.070	T	1.25	0.07	L	9.4341	0.0186	0.094	58	A	9.37	9.70		D	19563−1321	I 2	1 C P B							
98108	8.848	0.013	8.112	0.011		0.656	0.015	G	0.72	0.01	H	8.1790	0.0016	0.013	90		8.16	8.21		C			1 G							S
98109	9.880	0.034	9.844	0.048	B	0.033	0.052	T	0.05	0.04	L	9.8846	0.0187			B				D	19563−1321	I 2	1 C I B							
98110	5.207	0.003	4.016	0.002		1.019	0.004	G	0.98	0.03	C	4.0620	0.0005	0.004	144		4.06	4.07		C	19563+3505	I 1	1 S							S
98111	6.268	0.004	6.168	0.004		0.090	0.005	T	0.10	0.01	L	6.1974	0.0005	0.006	108		6.19	6.21		C			1							S
98112	10.573	0.025	9.269	0.014		1.108	0.022	T	1.07	0.02	L	9.3144	0.0021	0.022	187		9.28	9.36		C			1							
98113	10.914	0.069	8.914	0.021		1.694	0.059	T	2.73	0.07	O	8.6299	0.0083	0.060	80		8.58	8.76		U 2			1 S							
98114	9.345	0.015	8.854	0.015		0.474	0.016	T	0.55	0.02	L	8.8934	0.0018	0.016	127		8.86	8.92		C			1							
98115	9.171	0.014	9.210	0.019		−0.080	0.015	G	0.01	0.02	L	9.1812	0.0019	0.022	163		9.13	9.22					1							G
98116	8.613	0.010	7.674	0.007		0.830	0.015	G	0.85	0.01	H	7.7331	0.0012	0.011	140		7.71	7.77		C			1							S
98117	10.729	0.040	9.319	0.020		1.500	0.020	G	1.47	0.02	J	9.3580	0.0028	0.024	103		9.31	9.41		C	19565−6522	I 1	1							
98118	9.638	0.023	9.183	0.022		0.443	0.025	T	0.51	0.03	L	9.2320	0.0020	0.022	98		9.20	9.69		P 1 A			1							
98119	8.980	0.014	8.995	0.019		−0.009	0.022	T	0.01	0.02	L	9.0034	0.0020	0.016	83		8.98	9.05		C			1							
98120	7.632	0.005	7.609	0.007		0.026	0.008	T	0.04	0.01	L	7.6284	0.0010	0.012	206		7.61	7.65					1							S
98121	10.084	0.024	8.142	0.010		1.611	0.021	T	1.63	0.02	L	8.0152	0.0045	0.047	122		7.96	8.10	48.01	P 1 A			1 S							
98122	10.612	0.056	10.160	0.060		0.440	0.065	T	0.51	0.07	L	10.2050	0.0032	0.025	94		10.16	10.26		C			1							G
98123	11.457	0.089	10.095	0.040		1.600	0.495	G	2.60	1.23	I	10.0580	0.0053	0.129	89		10.00	11.10		U	19565+5910	I 1	1 X S							G D
98124	7.393	0.008	7.463	0.009		−0.058	0.002	G	−0.04	0.00	H	7.4664	0.0009	0.009	100		7.45	7.48		C			1							S
98125	9.051	0.022	7.760	0.014		1.098	0.020	T	1.06	0.02	L	7.7849	0.0015	0.010	54		7.77	7.80		C			1							S
98126	7.810	0.006	7.899	0.009		−0.050	0.015	G	−0.03	0.01	H	7.8932	0.0013	0.014	148		7.87	7.92					1 S							S
98127	9.124	0.016	8.908	0.019		0.200	0.024	T	0.22	0.03	L	8.9719	0.0020	0.013	80		8.94	8.99					1							
98128	9.261	0.020	9.146	0.025		0.111	0.030	T	0.12	0.03	L	9.1757	0.0019	0.017	82		9.15	9.21					1							
98129	10.675	0.059	9.271	0.029		1.187	0.052	T	1.15	0.05	L	9.2869	0.0018	0.014	72		9.26	9.32					1							
98130	9.689	0.020	8.547	0.013		1.025	0.003	G	1.07	0.00	I	8.5524	0.0015	0.015	94		8.53	8.58		C			1							
98131	8.845	0.011	7.116	0.006		1.442	0.010	T	1.44	0.02	L	7.1020	0.0012	0.010	123		7.09	7.12		C			1							S
98132	9.808	0.021	8.592	0.013		1.039	0.019	T	1.01	0.02	L	8.6348	0.0018	0.015	113		8.61	8.66					1							
98133	10.426	0.033	9.136	0.019		1.097	0.030	T	1.06	0.03	L	9.1819	0.0022	0.018	118		9.15	9.22					1							
98134	10.230	0.031	8.784	0.016		1.219	0.027	T	1.18	0.03	L	8.8118	0.0018	0.012	92		8.79	8.83		C			1							
98135	7.946	0.009	7.605	0.009		0.330	0.014	T	0.38	0.02	L	7.6485	0.0011	0.010	93		7.63	7.67		C			1							S
98136	9.487	0.014	9.396	0.018		0.102	0.004	G	0.12	0.00	H	9.4180	0.0016	0.018	143		9.39	9.45		C			1							
98137	10.032	0.022	8.423	0.010		1.348	0.019	T	1.31	0.02	L	8.4460	0.0012	0.017	175		8.42	8.47					1							
98138	7.575	0.005	6.874	0.005		0.646	0.006	T	0.71	0.01	L	6.9361	0.0010	0.010	166		6.92	6.95					1 G							S
98139	9.876	0.022	8.694	0.014		1.013	0.020	T	0.99	0.02	L	8.7274	0.0023	0.020	106		8.69	8.75					1							
98140	10.371	0.037	9.695	0.033		0.614	0.037	T	0.68	0.03	L	9.6445	0.0031	0.027	110		9.61	9.69		R	19567−2029	I 1	1							
98141	8.901	0.012	8.451	0.012		0.458	0.015	G	0.53	0.02	H	8.5044	0.0012	0.014	100		8.48	8.53		C			1							
98142	9.443	0.013	8.960	0.013		0.455	0.017	T	0.52	0.02	L	9.0232	0.0019	0.020	176		8.99	9.07		C			1							
98143	5.835	0.002	5.996	0.003		−0.140	0.003	T	−0.13	0.00	L	5.9773	0.0005	0.006	153		5.97	5.99		C			1							S
98144	9.139	0.015	8.831	0.016		0.345	0.015	G	0.40	0.02	H	8.8646	0.0017	0.016	108		8.83	8.90		C			1 G							
98145	8.225	0.009	8.289	0.012		−0.054	0.014	T	−0.03	0.01	L	8.3070	0.0013	0.015	153		8.28	8.33		C			1							
98146	6.458	0.003	6.456	0.005		0.003	0.005	T	0.02	0.01	L	6.4693	0.0008	0.006	134		6.46	6.48		C			1							S
98147						0.570	0.210	G	0.64	0.19	R	11.9444	0.0140	0.066	34		11.82	12.06					1							D Y
98148	9.406	0.016	8.694	0.014		0.642	0.016	T	0.71	0.01	L	8.7530	0.0018	0.012	107		8.73	8.78					1							
98149	8.573	0.013	8.655	0.018		−0.070	0.020	T	−0.05	0.02	L	8.6207	0.0019	0.017	111		8.60	8.66					1							
98150	8.408	0.012	8.338	0.014		0.063	0.017	T	0.07	0.02	L	8.3445	0.0018	0.016	85		8.32	8.37		C			1							
98151	8.547	0.008	8.075	0.008		0.443	0.017	G	0.51	0.02	H	8.1286	0.0011	0.015	179		8.10	8.16					1							
98152	6.780	0.005	6.588	0.005		0.184	0.007	T	0.20	0.01	L	6.6161	0.0010	0.008	90		6.61	6.63		C			1 G							S
98153	11.390	0.107	9.296	0.027		1.732	0.088	T	1.76	0.09	L	9.0820	0.0022	0.021	116		9.04	9.13		C			1 G							
98154	7.160	0.005	6.824	0.005		0.328	0.015	G	0.38	0.02	H	6.8695	0.0008	0.009	124		6.85	6.89					1							S
98155	9.971	0.020	8.158	0.009		1.509	0.017	T	1.54	0.03	L	8.0942	0.0021	0.020	140		8.05	8.13		U 2			1							
98156	7.870	0.009	7.900	0.010		−0.042	0.005	G	−0.02	0.01	H	7.8997	0.0023	0.020	114		7.86	7.94		U 2	19568+4416	I 1	1 G							S
98157	8.582	0.010	8.239	0.011		0.326	0.012	G	0.38	0.02	H	8.2915	0.0014	0.013	140		8.26	8.32		C			1							
98158	9.484	0.022	7.487	0.009		1.655	0.019	T	1.68	0.02	L	7.3910	0.0021	0.021	93		7.36	7.43		U 2			1							S
98159						1.310	0.015	G	1.53	0.02	A	11.0249	0.0050	0.042	137		10.97	11.10			19570−5917	I 2	1							G
98160	9.302	0.016	9.157	0.019		0.120	0.015	G	0.13	0.01	H	9.2331	0.0018	0.017	116		9.20	9.26		C			1							
98161	10.130	0.043	8.783	0.024		1.142	0.039	T	1.11	0.04	L	8.7988	0.0022	0.011	45		8.77	8.82					1							
98162	6.444	0.004	4.701	0.003		1.462	0.048	G	1.39	0.02	A	4.6951	0.0008	0.005	76		4.69	4.70					1							S
98163	8.549	0.016	6.722	0.008		1.535	0.006	G	1.58	0.01	H	6.6673	0.0015	0.013	118		6.64	6.69		M			1							S
98164	9.491	0.016	8.855	0.014		0.568	0.003	G	0.62	0.02	A	8.9433	0.0019	0.017	126		8.91	8.97					1							
98165	8.738	0.011	8.631	0.013		0.097	0.016	T	0.11	0.02	L	8.6168	0.0044	0.042	114		8.57	9.14		P 1 A			1							
98166	9.159	0.013	7.437	0.007		1.437	0.012	T	1.43	0.02	L	7.4187	0.0011	0.010	117		7.40	7.44					1							S
98167	10.192	0.038	9.760	0.039		0.422	0.044	T	0.49	0.05	L	9.7617	0.0026	0.020	81		9.73	9.80		C			1							
98168	7.901	0.005	7.880	0.006		0.024	0.007	T	0.04	0.01	L	7.8970	0.0007	0.014	257		7.87	7.93		C			1							S
98169	6.710	0.004	6.634	0.004		0.075	0.005	T	0.09	0.01	L	6.6533	0.0005	0.009	186		6.64	6.67					1 G							S
98170	12.053	0.129	10.506	0.052		1.200	0.015	G	1.37	0.02	A	10.4386	0.0036	0.038	145		10.38	10.49		U	19570−5917	I 2	1							G
98171	9.749	0.033	7.928	0.015		1.515	0.029	T	1.55	0.04	L	7.8811	0.0021	0.013	50		7.86	7.92		C			1							
98172	8.876	0.013	8.513	0.014		0.354	0.017	T	0.42	0.02	L	8.5622	0.0016	0.015	83		8.54	8.59		C			1							
98173	9.668	0.017	8.517	0.011		0.989	0.016	T	0.97	0.01	L	8.5575	0.0015	0.015	137		8.53	8.58		C			1							
98174	5.255	0.002	5.245	0.003		0.014	0.003	T	0.03	0.00	L	5.2572	0.0004	0.005	126		5.25	5.27					1							S
98175	8.365	0.010	8.493	0.014		−0.090	0.015	G	−0.07	0.02	H	8.4814	0.0014	0.017	203		8.45	8.51		C			1							
98176	10.476	0.051	9.186	0.029		1.097	0.046	T	1.06	0.05	L	9.2145	0.0028	0.017	56		9.19	9.25		C			1 S							
98177	8.496	0.009	8.498	0.011	*	0.003	0.013	T	0.02	0.01	L *	8.4956	0.0014	0.013	121	*	8.46	8.53		D	19571+4939	H 1	2 C A	AB	83	0.575	0.014	2.83	0.08	
98178	9.217	0.019	8.635	0.017		0.546	0.019	T	0.62	0.02	L	8.7086	0.0015	0.009	75		8.69	8.72					1							
98179	10.889	0.084	9.051	0.031		1.529	0.071	T	1.57	0.15	L	8.9702	0.0029	0.016	51		8.93	9.00		C			1							
98180	10.406	0.030	9.102	0.017		1.108	0.027	T	1.07	0.03	L	9.1089	0.0021	0.022	139		9.07	9.15					1 G							
98181	9.804	0.026	8.439	0.015		1.156	0.024	T	1.12	0.02	L	8.4746	0.0014	0.016	121		8.44	8.51		M			1							
98182	6.917	0.004	6.956	0.005		−0.031	0.006	T	−0.01	0.01	L	6.9560	0.0008	0.010	163		6.94	6.97		C			1							S
98183	9.018	0.010	7.889	0.006		0.972	0.009	T	0.96	0.01	L	7.9387	0.0010	0.014	189		7.91	7.96					1							S
98184	9.752	0.024	8.348	0.014		1.187	0.022	T	1.15	0.02	L	8.4075	0.0023	0.018	83		8.37	8.43					1							
98185	9.342	0.013	8.704	0.012		0.603	0.013	G	0.67	0.01	H	8.7762	0.0024	0.024	170		8.73	8.81					1							
98186	7.444	0.005	7.504	0.007		−0.051	0.007	T	−0.03	0.01	L	7.5038	0.0010	0.012	162		7.48	7.53					1							S
98187	8.084	0.012	7.888	0.013		0.187	0.017	T	0.21	0.02	L	7.8970	0.0013	0.011	56		7.88	7.92					1							S
98188	7.811	0.006	7.752	0.008		0.059	0.009	T	0.07	0.01	L	7.7750	0.0010	0.014	163		7.75	7.79		C			1							S
98189	9.989	0.028	9.281	0.024		0.639	0.028	T	0.70	0.03	L	9.3224	0.0018	0.013	79		9.30	9.35					1							
98190	12.726	0.306	8.523	0.012		3.440	0.450	G	2.80	0.63	P	7.9765	0.0168	0.206	116		7.58	8.18		U 2 C	19572+4416	I 1	1 V							
98191	7.068	0.006	6.999	0.010		0.069	0.002	G	0.08	0.00	H	7.0070	0.0011	0.008	49		7.00	7.02		C			1							S
98192	8.904	0.010	7.989	0.008		0.797	0.002	G	0.84	0.00	H	8.0289	0.0016	0.017	184		8.00	8.06					1							
98193	7.802	0.007	7.311	0.007	*	0.470	0.012	G	0.54	0.01	H *	7.3666	0.0011	0.010	142	*	7.35	7.38			19572+3502	H 1	2 C C	AB	111	0.417	0.046	3.78	0.21	S
98194	5.339	0.003	5.444	0.003		−0.090	0.004	T	−0.07	0.01	L	5.4366	0.0005	0.006	126		5.43	5.45			19572+4022	I 1	1							S
98195	9.249	0.017	8.142	0.012		0.955	0.016	T	0.94	0.01	L	8.1656	0.0014	0.011	83		8.15	8.19		C			1							
98196	8.798	0.009	8.413	0.009	A	0.362	0.003	G	0.42	0.00	H *	8.4080	0.0012	0.018	186	*	8.37	8.44		D	19573−5414	I 1	2 C A	AB	151	1.145	0.011	2.31	0.06	S
98197	8.725	0.016	8.170	0.015		0.524	0.015	G	0.60	0.02	H	8.2194	0.0016	0.013	83		8.20	8.24		C			1							S
98198	7.915	0.008	7.541	0.010	*	0.356	0.015	G	0.42	0.02	H *	7.5906	0.0020	0.014	97	*	7.57	7.62			19573+6253	H 1	2 C A	AB	8	0.263	0.022	2.79	0.29	S
98199	8.408	0.010	8.462	0.012		−0.054	0.015	G	−0.03	0.01	H	8.4723	0.0015	0.010	104		8.45	8.49		C			1							
98200	9.092	0.018	8.520	0.017		0.538	0.018	T	0.61	0.02	L	8.5700	0.0019	0.013	81		8.55	8.59		C			1							

$19^h\ 57^m\ 18^s$ - $19^h\ 58^m\ 22^s$ 1974

98201 - 98300

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	mas/yr 13	mas 14	15	mas 16	mas/yr 17	18	19	20	21	22	23	24	25	26	27	28	29	30
98201	19 57 18.67	+10 07 56.7	7.93	H	299.327 811 14	+10.132 404 28	1.92	0.86	−60.25	0.76	0.74	1.07	0.93	0.85	+31	−21	−36	+ 6	+ 8	+27	+23	+32	− 9	+16	0	0.35
98202	19 57 19.19	−68 17 32.8	9.73	H	299.329 958 14	−68.292 441 11	8.57	29.88	11.12	0.85	1.14	1.52	0.81	1.27	−27	−10	− 6	−53	+25	− 9	+25	−34	− 1	−27	2	0.08
98203 H	19 57 19.48	+05 12 45.1	8.51	H	299.331 153 96	+05.212 532 99 *	5.21	−10.70	−10.69	1.00	0.81	1.26	1.33	1.17	+42	− 2	− 9	+52	+ 8	+27	+ 5	+54	− 1	+29	0	0.17
98204	19 57 19.70	−12 34 00.3	9.29	G	299.332 077 34	−12.566 738 22	52.92	−94.45	−512.89	1.32	1.00	1.48	1.76	1.45	+21	−31	−13	− 8	+ 9	+17	+11	+20	+ 2	+18	0	0.38
98205	19 57 19.85	+39 39 32.4	8.65	H	299.332 711 03	+39.659 004 76	2.64	12.67	8.93	0.73	0.72	0.92	0.98	0.76	+ 1	− 8	+ 2	+14	− 6	+ 1	− 2	−20	+25	+17	1	1.87
98206	19 57 19.85	+24 05 18.5	7.19	H	299.332 720 84	+24.088 460 18	23.47	−114.60	−124.60	0.67	0.52	0.84	0.74	0.60	−12	− 5	+ 5	−37	− 3	− 7	+ 0	−20	+ 6	−26	0	−0.03
98207	19 57 20.64	+19 47 51.3	7.94	H	299.335 982 06	+19.797 569 84	3.05	−4.75	−5.80	0.67	0.53	1.00	0.80	0.54	−26	−11	+16	−13	− 7	− 5	− 8	−29	+ 9	−51	1	0.94
98208	19 57 20.76	−39 23 04.0	7.74	H	299.336 492 89	−39.384 451 81	5.38	41.80	−53.37	1.01	0.57	1.13	1.12	0.95	+ 9	−42	− 7	+17	+11	+ 7	+ 2	+13	+26	+10	2	0.62
98209	19 57 23.69	+28 41 38.1	6.78	H	299.348 690 96	+28.693 922 34	3.97	−8.18	−11.98	0.38	0.56	0.76	0.43	0.55	−19	+ 3	+ 3	+ 0	+15	− 7	+17	−33	+14	−12	1	−0.28
98210	19 57 24.72	−06 41 51.2	6.56	H	299.353 003 25	−06.697 544 83	10.67	18.14	−149.77	0.91	0.73	1.02	1.05	0.88	+19	−23	−41	+ 9	+18	+14	+31	+44	−16	+ 9	6	−0.22
98211	19 57 27.46	−55 45 39.4	9.47	G	299.364 415 32	−55.760 941 45	23.36	186.02	−33.35	0.96	0.77	1.31	1.36	1.07	+14	−17	− 3	−15	+13	+ 1	+14	−18	− 6	+17	0	1.85
98212	19 57 28.61	+26 33 23.3	8.87	3 T	299.369 192 30	+26.556 479 40	−0.33	−0.58	−3.84	0.67	0.74	1.10	0.73	0.96	− 5	−11	+ 5	+20	−10	− 7	−12	− 2	− 9	− 8	0	1.35
98213	19 57 29.03	+38 27 29.7	6.68	H	299.370 944 10	+38.458 246 71	2.72	3.31	4.68	0.43	0.46	0.58	0.46	0.44	− 5	− 6	+11	+15	+ 8	− 6	+ 8	−15	+18	− 1	1	1.08
98214	19 57 29.25	+21 45 24.9	7.58	H	299.371 873 57	+21.756 929 66	2.28	5.26	−3.65	0.63	0.51	0.90	0.69	0.54	−29	−28	− 2	+ 7	−23	+ 7	−26	− 7	+ 9	−53	1	−0.29
98215	19 57 30.58	−46 33 24.9	9.67	G	299.377 407 22	−46.556 905 83	1.56	−17.06	−13.39	1.38	0.74	1.51	2.53	1.58	−15	− 2	+ 1	+20	+ 2	−19	+ 4	+ 9	+ 8	−17	0	−0.67
98216 H	19 57 32.28	+20 17 40.1	8.46	H	299.384 500 06	+20.294 485 81 A	−2.12	−2.36	−2.88	3.95	2.99	5.81	4.63	2.91	−43	+17	− 2	+ 2	−11	+21	−12	−21	−13	−63	0	0.43
98217	19 57 33.02	+11 02 37.3	9.97	2 H	299.387 593 21	+11.043 688 97	1.61	−0.21	−6.31	1.35	1.05	1.71	1.53	1.25	+33	−29	−34	− 6	−10	+10	− 4	+12	− 8	+22	0	0.98
98218	19 57 33.88	−10 02 16.9	7.64	H	299.391 180 69	−10.038 023 18	1.92	0.08	− 7.87	1.03	0.76	1.09	1.17	0.97	+ 7	−16	−30	−17	+30	+27	+43	+34	+ 2	+ 7	0	1.50
98219	19 57 34.56	−15 27 15.2	8.13	H	299.394 013 52	−15.454 236 04	0.30	−14.97	−14.90	1.02	0.74	1.14	1.38	1.03	+16	−21	−24	−12	− 6	+22	+ 2	+ 0	−12	− 7	0	−0.84
98220	19 57 36.07	−01 53 10.9	10.82	H	299.400 309 67	−01.886 363 50	2.48	−24.01	−47.66	2.34	1.40	2.57	4.10	2.91	+15	+37	−19	+ 9	− 8	+29	+ 0	− 5	+ 8	+20	0	0.77
98221	19 57 37.05	+39 20 15.6	8.72	H	299.404 392 58	+39.337 679 96	6.49	−8.43	−46.99	0.69	0.71	0.89	0.92	0.73	+ 1	− 4	+ 6	+12	+ 4	+ 5	+ 3	−19	+18	+ 7	0	−0.64
98222	19 57 37.15	−37 44 42.5	7.34	G	299.404 775 72	−37.745 148 94	16.60	7.64	39.32	1.04	0.52	1.08	1.44	0.92	+ 1	−22	−11	+ 6	− 8	+ 8	−13	− 7	+ 1	−31	0	−0.50
98223	19 57 37.62	+00 14 30.3	9.36	H	299.406 767 68	+00.241 745 96	−0.25	−7.02	− 6.27	1.50	1.43	1.81	2.34	1.86	+25	− 7	−44	+ 5	+14	+ 6	+21	+33	−10	+ 9	0	−0.25
98224	19 57 38.85	−47 17 48.9	9.97	H	299.411 893 51	−47.296 927 19	3.79	−0.10	− 4.40	1.65	0.84	1.76	2.74	1.83	−16	− 8	+ 3	+26	− 1	−14	− 1	+ 8	+ 2	−25	2	−0.63
98225	19 57 40.12	−29 05 01.5	9.12	H	299.417 168 41	−29.083 763 49	11.21	−89.48	−35.34	1.09	0.73	1.32	1.39	0.94	+24	− 8	−22	+ 5	− 7	+29	+ 0	− 1	−15	+10	0	−0.21
98226	19 57 41.24	−38 03 31.0	6.55	H	299.421 832 33	−38.058 618 11	18.98	81.25	−95.97	1.06	0.68	1.14	1.30	0.82	+ 8	−39	−26	−21	− 5	+ 8	− 3	−17	− 2	−15	0	1.40
98227	19 57 41.50	+02 59 19.6	8.64	H	299.422 899 80	+02.988 765 26	0.37	−2.53	−11.41	1.22	0.89	1.47	1.59	1.26	+39	−40	−34	+ 2	+ 0	+20	+25	+44	−19	−16	0	−0.84
98228	19 57 41.93	−67 49 39.4	8.24	G	299.424 712 71	−67.827 598 57	11.82	−4.41	−21.43	0.57	0.67	0.95	0.55	0.83	−17	−11	− 3	−50	+22	− 4	+27	−35	− 2	−26	0	−2.38
98229	19 57 42.12	+51 17 55.5	8.08	H	299.425 482 71	+51.298 737 09	1.60	−1.85	1.73	0.56	0.54	0.63	0.65	0.53	−11	−14	+17	+ 8	+ 9	− 8	+ 9	− 6	+ 4	− 8	0	0.49
98230	19 57 44.06	+17 08 45.4	7.82	H	299.433 585 17	+17.145 937 52	1.84	1.08	−11.84	0.63	0.58	0.95	0.77	0.80	+12	−21	− 6	−12	+ 0	− 1	+ 0	− 4	− 6	+27	2	1.55
*98231	19 57 45.05	−56 44 47.7	8.64	H	299.437 702 75	−56.746 593 63	3.22	−7.16	−37.89	0.86	0.69	1.12	1.32	1.00	+18	− 5	− 4	−11	+17	+ 9	+16	−13	+ 8	+36	0	1.05
*98232	19 57 45.04	+14 33 46.1	8.72	H	299.437 647 91	+14.562 801 24	2.03	2.19	− 4.74	0.75	0.68	1.12	0.91	0.88	+27	− 6	− 9	−25	− 2	+27	− 2	−13	+14	+47	0	0.36
98233	19 57 45.21	−45 49 39.0	8.60	G	299.438 385 28	−45.827 489 38	2.84	43.39	−59.24	1.16	0.59	1.20	2.10	1.26	−25	−10	− 3	+24	+ 4	−22	+ 2	+11	+24	−43	0	−0.49
98234	19 57 45.44	+16 47 20.8	5.54	H	299.439 327 49	+16.789 115 37	8.06	11.52	19.66	0.46	0.43	0.69	0.57	0.58	+ 3	−15	− 6	+ 9	− 1	+ 5	+ 1	+ 2	− 2	+15	0	2.54
98235	19 57 46.34	−38 09 22.1	11.19	H	299.443 095 79	−38.156 127 56	−1.95	6.01	−22.71	3.10	1.53	3.42	3.83	2.64	+10	−37	− 8	− 5	+ 6	−18	+ 6	−10	+ 3	− 4	0	1.14
98236	19 57 47.39	+26 22 23.1	7.85	H	299.447 449 52	+26.373 083 27	1.01	−0.75	− 2.60	0.57	0.60	0.95	0.61	0.61	− 5	− 8	+ 0	+32	−14	+ 2	−16	− 9	+ 4	− 9	0	−0.50
98237	19 57 47.79	−21 31 34.5	10.80	G	299.449 114 59	−21.526 241 75	18.09	−238.08	−216.40	2.05	1.39	2.20	2.39	1.70	+40	+ 5	+ 8	−18	− 4	−17	+ 1	−25	−18	+71	11	2.34
98238	19 57 47.89	+26 17 38.6	7.63	H	299.449 555 85	+26.294 058 58	2.80	4.54	− 8.24	0.51	0.56	0.88	0.56	0.60	− 3	− 7	− 1	+21	−12	− 3	−14	−12	+ 8	− 9	1	0.54
98239	19 57 49.40	+34 14 48.0	7.90	H	299.455 820 83	+34.246 657 67	1.68	10.39	4.08	0.53	0.56	0.74	0.65	0.64	− 6	+ 1	− 1	− 1	+ 7	− 9	+ 6	−25	+10	− 8	0	−0.03
98240	19 57 50.63	−59 31 32.9	7.92	G	299.460 942 38	−59.525 818 74	5.29	−2.36	− 3.40	0.67	0.68	1.04	0.72	0.78	+34	−19	−16	+50	− 3	− 4	+ 7	− 7	+ 8	+48	2	−0.14
98241	19 57 51.51	+09 52 23.7	8.62	G	299.464 629 50	+09.873 237 44	9.22	47.51	124.08	0.86	0.77	1.20	1.11	1.01	+37	−12	−22	+12	− 1	+35	+ 8	+29	− 6	+26	4	−0.48
98242	19 57 51.66	+38 07 16.1	7.29	H	299.465 230 13	+38.121 138 76	1.34	2.26	− 4.21	0.48	0.51	0.66	0.52	0.47	−11	−12	+23	+23	+ 8	− 8	+ 6	−10	+17	−10	0	−0.52
98243	19 57 51.99	+37 22 35.0	8.96	H	299.466 623 32	+37.376 388 78	6.08	62.69	59.62	0.69	0.76	0.95	0.80	0.73	−17	−12	+10	+ 5	+13	− 8	+12	−24	+13	−10	0	0.88
98244 H	19 57 53.35	+74 14 39.8	9.18	G	299.472 277 85	+74.244 395 50 A	7.94	− 3.25	−19.78	1.30	1.20	1.22	1.25	1.28	−13	−16	+ 3	−12	+15	− 9	+19	− 4	− 3	− 1	2	1.60
*98245	19 57 53.81	+62 57 49.3	8.37	H	299.474 200 03	+62.963 705 23	17.34	125.25	135.19	0.70	0.63	0.69	0.86	0.75	+14	− 8	+14	+ 8	+23	+14	+16	+26	+10	+39	0	1.33
*98246	19 57 53.70	−09 03 30.3	7.56	H	299.473 753 36	−09.058 429 84 A	−1.33	−3.60	−14.32	2.64	1.81	2.40	3.18	2.32	+21	+31	− 6	+52	+ 7	+44	+15	+46	+18	+25	5	2.34
98247	19 57 53.83	+12 49 26.9	9.13	H	299.474 275 00	+12.824 141 89	0.68	−10.83	−11.62	0.89	0.75	1.35	1.30	1.02	+16	− 5	−11	+12	− 5	+29	− 2	+ 3	+11	+15	0	2.17
*98248 H	19 57 54.45	+27 15 07.3	7.56	H	299.476 889 73	+27.252 027 02 A	2.13	0.30	−10.99	1.10	1.51	1.55	0.95	1.23	+13	+ 7	− 9	+13	− 7	− 6	− 4	+ 6	+ 1	+19	1	−0.04
*98249	19 57 54.45	+28 52 27.1	7.29	1 H	299.476 887 66	+28.874 187 10	6.37	17.86	12.82	0.43	0.57	0.84	0.50	0.61	−20	+14	−12	+ 4	+18	− 6	+21	−34	+25	−14	3	−2.48
98250	19 57 54.78	+08 37 57.2	8.42	H	299.478 232 91	+08.632 547 24	0.04	1.78	− 6.63	0.81	0.71	1.23	1.02	0.95	+36	− 1	−14	+16	− 8	+29	− 5	+24	−28	+18	0	1.33
98251	19 57 55.78	+48 51 23.5	9.36	H	299.482 420 77	+48.856 525 43	2.07	2.33	− 5.89	0.86	0.70	0.89	0.98	0.65	− 3	−14	+12	+ 9	+ 6	− 3	+ 4	−16	+14	+ 2	1	−1.00
*98252	19 57 56.15	+11 24 53.0	7.53	H	299.483 938 28	+11.414 713 41	6.07	22.77	1.03	0.89	0.66	1.11	1.01	0.81	+23	−45	−48	+24	−15	+ 9	− 2	+37	−22	−20	2	0.68
*98253 H	19 57 56.12	+42 15 38.9	6.44	H	299.483 826 16	+42.260 795 38 A	2.57	− 5.25	−10.19	0.61	0.65	0.70	0.62	0.66	+ 9	− 2	−12	+ 7	+13	−11	+11	+ 0	+19	+16	1	0.43
98254	19 57 56.32	+56 13 20.4	8.18	H	299.484 671 69	+56.222 346 36	1.74	−20.42	−32.47	0.61	0.60	0.66	0.70	0.62	+ 7	+ 0	+ 5	+19	+ 9	−11	+ 9	+ 3	+16	+ 6	0	−0.31
98255 H	19 57 56.77	+20 32 27.2	8.16	H	299.486 523 28	+20.540 885 71 A	2.70	10.16	1.07	1.12	0.81	1.30	1.05	0.70	−25	+20	− 4	−50	+12	+11	+14	−39	− 4	−34	2	0.66
98256	19 57 56.82	+60 51 19.2	7.26	H	299.486 763 19	+60.855 333 72	7.05	4.30	68.22	0.56	0.50	0.58	0.60	0.57	+ 4	+10	+ 8	+18	+ 7	−23	+12	− 2	+ 1	+11	0	0.04
98257	19 57 56.96	−05 11 08.2	9.21	H	299.487 324 74	−05.185 619 01	6.07	13.80	4.23	1.25	1.00	1.63	1.51	1.39	+25	−13	−25	− 7	− 9	+25	+ 2	+18	−41	+13	0	−0.08
98258	19 57 57.02	−15 29 28.5	5.01	G	299.487 584 71	−15.491 262 55	11.18	17.83	−93.66	0.97	0.83	1.01	1.16	0.88	+23	−36	−40	−27	+ 3	+22	+15	− 1	− 5	− 5	0	−1.68
98259	19 57 57.48	−06 26 41.1	7.65	H	299.489 519 11	−06.444 740 35	6.18	19.67	− 2.96	1.14	0.84	1.16	1.44	1.11	+21	−36	−29	+29	+20	−	+ 4	+23	+50	− 4	+ 0	0	−0.19
98260	19 57 58.73	−48 20 27.8	9.75	H	299.494 694 38	−48.341 059 05	8.02	37.44	−62.84	1.34	0.77	1.51	1.90	1.58	+ 6	−29	+ 3	+30	− 3	+ 5	− 4	+ 0	+14	+23	0	2.09
98261	19 57 58.95	−24 26 01.6	8.69	H	299.495 608 07	−24.433 771 25	2.81	10.23	4.42	1.15	0.72	1.31	1.23	0.86	+41	−47	−35	− 8	+ 5	+ 6	+ 7	−11	+ 2	+46	0	−0.24
98262	19 57 59.29	+36 19 39.9	7.45	H	299.497 021 02	+36.327 757 59	2.73	9.29	19.11	0.43	0.47	0.59	0.46	0.47	− 9	−10	+17	+17	− 4	−10	+ 0	− 4	− 4	+ 2	0	0.54
98263	19 57 59.32	+27 14 00.2	7.98	H	299.497 161 30	+27.233 394 41	0.97	−0.28	−11.70	0.41	0.60	0.91	0.47	0.66	−10	+10	−14	+14	− 8	− 7	− 7	+ 2	+ 8	− 1	1	0.24
98264	19 57 59.96	−28 35 34.1	8.85	H	299.499 827 38	−28.592 798 28	7.44	32.74	−16.51	1.00	0.66	1.14	1.05	0.82	+25	−26	−25	− 7	+ 7	+11	+13	+ 4	− 7	+30	0	0.62
98265	19 58 00.18	−65 44 09.7	12.55	3 H	299.500 744 10	−65.736 022 96	−7.74	−25.48	−30.76	2.87	2.66	4.02	3.19	3.23	−11	−20	− 7	+43	− 6	+ 1	−16	+ 8	+ 1	−39	0	2.78
98266	19 58 00.79	+14 18 07.8	8.58	H	299.503 298 57	+14.302 175 09	5.38	−13.43	−39.90	0.73	0.59	1.12	0.87	0.76	+14	−16	−15	− 9	+ 6	+35	+10	− 3	+16	+38	0	0.32
98267	19 58 01.01	−60 35 22.6	8.15	2 H	299.504 198 76	−60.589 600 22	1.39	−1.36	3.09	0.68	0.74	1.07	0.64	0.71	+32	−17	− 8	+ 7	−24	+ 6	−32	−43	+ 3	+14	0	0.42
98268	19 58 01.30	+41 39 14.0	8.79	H	299.505 418 30	+41.653 876 42	0.70	5.84	4.90	0.58	0.67	0.76	0.58	0.69	−14	− 7	+11	− 9	+15	− 8	+15	− 2	− 1	− 6	0	−0.56
98269	19 58 02.38	+40 55 36.5	7.32	H	299.509 902 18	+40.926 803 99	5.22	7.43	15.63	0.48	0.52	0.61	0.48	0.57	−16	− 1	+ 6	− 5	+13	+ 9	+13	+ 0	+10	− 8	0	−1.14
98270	19 58 02.53	−09 13 28.2	10.34	3 H	299.510 521 05	−09.224 503 42	1.46	10.76	−28.53	1.79	1.31	2.14	2.47	1.96	+10	+ 0	−25	+14	− 1	+38	+ 9	+31	−10	+16	0	1.90
98271	19 58 02.71	+55 54 38.6	8.48	H	299.511 291 73	+55.910 729 89	4.70	13.76	7.69	0.64	0.59	0.71	0.78	0.60	+ 9	− 5	+ 5	+27	+12	−33	+12	+ 1	+16	+ 5	1	−0.46
98272 H	19 58 02.77	+04 56 08.8	8.62	G	299.511 523 84	+04.935 763 93 A	9.04	22.91	4.10	3.85	2.81	2.99	4.53	3.19	+65	+ 3	− 4	+22	+ 0	+14	+ 5	+31	− 9	+ 6	0	0.58
98273 H	19 58 04.00	+53 55 29.6	8.57	H	299.516 664 94	+53.924 885 10 A	6.93	26.57	23.63	1.37	1.24	1.28	1.55	1.23	− 2	−25	− 6	+23	+16	−13	+ 9	−15	+18	− 4	2	1.95
98274 H	19 58 04.28	−48 08 01.2	8.35	H	299.517 833 61	−48.133 668 85 *	21.52	51.71	15.62	2.25	2.21	1.53	2.18	1.41	−19	−10	+ 1	+32	− 5	− 4	− 9	+ 0	− 3	−36	0	−1.09
98275	19 58 05.00	+15 06 03.7	8.59	H	299.520 812 87	+15.101 016 61	2.20	−27.75	−11.85	0.75	0.67	1.17	0.86	0.83	+22	−20	− 5	−24	+12	+22	+ 8	− 6	+16	+44	0	1.42
98276	19 58 06.23	−36 46 50.4	9.54	H	299.525 945 53	−36.780 676 23	5.38	−4.99	− 3.68	1.36	0.77	1.45	1.66	1.10	+ 4	−24	− 6	− 3	− 2	+17	+ 2	−10	−16	− 3	2	−0.18
98277	19 58 07.33	−36 17 30.1	10.07	H	299.530 545 38	−36.291 701 46	3.96	11.86	4.89	1.39	0.95	1.56	1.70	1.34	+16	−12	− 6	− 9	+ 2	+11	+ 1	−12	+20	+35	2	−0.27
98278	19 58 07.54	−51 54 20.3	8.23	G	299.531 406 30	−51.905 652 04	8.96	46.31	−42.74	0.83	0.59	1.12	1.12	0.82	− 5	−15	− 7	−20	+33	− 7	+30	− 2	− 1	+ 9	2	0.13
*98279	19 58 09.20	−83 46 55.4	7.99	H	299.538 328 65	−83.782 065 66	3.03	3.81	13.47	0.64	0.66	0.78	0.72	0.71	− 4	−21	−11	+29	− 9	−11	−10	− 2	− 5	−12	0	−0.83
*98280	19 58 08.88	+19 40 06.5	8.00	H	299.536 998 71	+19.668 484 15	2.17	2.40	−22.40	0.65	0.53	0.97	0.79	0.54	−20	− 8	+10	− 8	−12	+ 1	−12	−24	+ 3	−39	0	0.81
98281	19 58 09.37	−14 58 37.2	8.14	H	299.539 040 31	−14.976 999 06	5.00	4.68	−30.03	0.97	0.71	1.13	1.16	0.92	+12	−10	−32	− 6	−12	+29	− 2	+ 9	−16	+ 7	0	−0.40
98282	19 58 10.04	−35 11 16.8	7.74	H	299.541 839 83	−35.188 007 93	9.09	−23.87	−26.36	1.03	0.58	1.19	1.08	0.85	+14	−45	+11	− 2	−11	+ 5	+ 9	−30	−39	+24	2	1.74
98283	19 58 10.55	+42 31 39.3	8.36	2 H	299.543 962 54	+42.527 569 54	2.17	1.97	− 9.55	0.66	0.65	0.79	0.69	0.74	− 2	− 3	+10	−16	+13	− 4	+12	− 7	+20	+16	1	−0.71
98284	19 58 11.14	−27 14 42.0	9.81	H	299.546 399 65	−27.245 003 04	8.32	14.98	− 6.97	1.25	0.83	1.38	1.58	1.30	+29	−29	+ 5	+16	+ 6	+ 6	+ 7	+12	−10	+25	0	0.45
98285	19 58 11.20	+39 24 31.7	8.99	H	299.546 647 12	+39.408 793 07	4.42	3.18	0.14	0.69	0.74	0.93	0.92	0.73	− 1	+ 0	+ 6	+11	+ 3	− 2	+ 4	−23	+20	+ 3	1	−0.09
98286	19 58 11.77	−15 58 10.5	7.65	2 H	299.549 037 82	−15.969 572 65	4.19	3.03	−42.94	0.93	0.71	1.05	1.13	0.97	+24	−26	−25	− 8	+11	+26	+17	+21	+ 5	+26	0	−0.80
98287	19 58 13.31	−36 41 12.5	6.95	H	299.555 449 04	−36.686 811 35	14.10	66.33	−46.92	0.78	0.50	0.86	0.95	0.65	+16	−21	−18	− 7	+ 3	+17	+ 6	−12	+ 5	+11	0	−1.79
98288	19 58 13.35	+69 08 24.2	9.27	H	299.555 642 92	+69.140 066 27	14.20	144.00	136.14	0.70	0.71	0.74	0.83	0.86	− 2	−16	+ 4	−10	+10	− 2	+11	−13	+ 0	+15	0	1.37
98289	19 58 13.67	+34 25 21.9	7.71	1 H	299.556 941 29	+34.422 756 47	3.64	5.16	− 0.05	0.52	0.56	0.74	0.57	0.57	−13	− 2	+14	+ 6	+ 4	−16	+ 8	−30	+ 4	− 9	0	1.35
98290 H	19 58 14.09	−06 21 02.2	8.23	H	299.558 712 33	−06.350 602 75 *	4.21	− 4.76	14.19	2.61	2.40	1.51	1.80	1.56	+53	−24	−25	+16	+39	+10	+41	+55	+12	+45	1	0.35
98291	19 58 14.29	+16 29 37.5	6.86	H	299.559 534 33	+16.493 747 96	3.64	1.45	− 6.09	0.53	0.49	0.81	0.65	0.65	+ 7	−19	−16	+ 7	+ 8	+16	+11	+ 8	+ 2	+13	0	1.77
98292	19 58 14.48	+10 43 40.6	7.79	H	299.560 326 39	+10.727 951 61	2.73	2.66	− 1.32	0.78	0.63	1.03	0.86	0.79	+20	−29	−38	− 8	− 5	+33	+16	+29	−24	+ 2	2	0.51
98293	19 58 14.66	−77 18 09.1	8.68	H	299.561 062 61	−77.302 527 51	3.35	24.68	−22.32	0.59	0.68	0.89	0.64	0.81	+ 2	−11	−13	+17	− 3	− 8	− 7	+21	− 6	− 7	0	−1.14
98294	19 58 15.25	−51 53 43.0	7.64	G	299.563 543 83	−51.895 264 65	11.10	47.03	−43.57	0.74	0.51	0.97	0.98	0.70	− 8	−13	−16	−23	+33	− 6	+32	−10	− 1	+ 5	2	1.37
98295 H	19 58 17.68	+22 08 17.8	9.15	H	299.573 656 14	+22.138 282 69 A	3.89	− 0.44	− 6.11	2.14	2.01	2.83	2.41	1.98	−25	+ 5	−30	+ 3	−27	+19	−20	+ 3	− 2	−48	2	1.02
98296	19 58 21.12	+28 36 39.1	7.83	H	299.587 982 52	+28.610 850 68	12.78	54.00	26.13	0.44	0.66	0.89	0.51	0.71	−15	+ 9	− 9	+ 2	+20	−11	+21	−23	+12	− 6	1	−0.26
98297	19 58 21.60	+66 47 25.8	8.37	2 H	299.589 999 02	+66.790 498 73	−1.05	−15.13	−1.00	1.94	2.01	2.10	1.78	2.43	+ 7	−13	+ 4	−39	+ 9	+ 9	+ 7	−10	+ 3	+28	0	
98298	19 58 21.68	+35 12 05.8	8.84	2 H	299.590 326 41	+35.201 622 71	0.58

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
98201	9.241	0.017	8.055	0.011		1.016	0.016	T	0.99	0.01	L	8.0979	0.0015	0.014	95		8.07	8.13		C			1							S
98202	10.439	0.022	9.782	0.020		0.600	0.022	T	0.67	0.02	L	9.8571	0.0024	0.033	236		9.79	9.91					1 S							
98203	9.190	0.012	8.583	0.011	*	0.565	0.005	G	0.64	0.01	H *	8.6311	0.0010	0.014	149	*	8.61	8.67			19573+0513	I 1	2 C S A	AB	70	0.188	0.016	0.80	0.63	
98204	10.955	0.078	9.462	0.036		1.318	0.007	G	1.51	0.00	A	9.3892	0.0033	0.018	51		9.35	9.42		C			1							
98205	10.127	0.024	8.788	0.014		1.136	0.022	T	1.10	0.02	L	8.8190	0.0015	0.014	113		8.80	8.85		C			1							
98206	7.959	0.006	7.264	0.007		0.641	0.008	T	0.71	0.01	L	7.3239	0.0009	0.009	122		7.31	7.34		C			1							S
98207	9.638	0.019	8.107	0.010		1.286	0.017	T	1.25	0.02	L	8.1005	0.0012	0.016	200		8.07	8.13					1							
98208	9.154	0.016	7.846	0.010		1.111	0.015	T	1.07	0.02	L	7.9046	0.0015	0.013	97		7.89	7.93		C			1							S
98209	7.930	0.006	6.876	0.004		0.915	0.005	T	0.91	0.00	L	6.9375	0.0009	0.009	198		6.92	6.95		C			1							S
98210	7.876	0.012	6.689	0.008		1.017	0.011	T	0.99	0.01	L	6.7309	0.0010	0.008	55		6.72	6.76					1							S
98211	10.609	0.031	9.542	0.020		0.917	0.003	G	0.96	0.00	I	9.6212	0.0019	0.021	144		9.58	9.66		C			1							
98212	10.528	0.035	9.008	0.016		1.278	0.030	T	1.24	0.03	L	8.9188	0.0339	0.317	152		8.59	9.33	6.32	P 1 A			1							
98213	6.699	0.004	6.677	0.005		0.025	0.006	T	0.04	0.01	L	6.6979	0.0007	0.008	144		6.69	6.71		C			1							S
98214	9.256	0.011	7.703	0.006		1.304	0.010	T	1.26	0.01	L	7.7333	0.0011	0.013	171		7.71	7.75					1							
98215	10.172	0.025	9.718	0.025		0.511	0.005	G	0.58	0.01	H	9.7804	0.0023	0.024	135		9.75	9.83		C			1							
98216	8.857	0.011	8.802	0.015	–	0.300	0.495	G	0.07	0.03	L *	8.4853	0.0017	0.019	215	–	8.45	8.52		D	19575+2018	I 1	3 C C							G
98217	11.210	0.079	10.180	0.055		0.897	0.072	T	0.90	0.05	L	10.1289	0.0165	0.142	78		9.91	10.36	6.18	P 1 A			1 S							G
98218	7.712	0.009	7.646	0.011		0.059	0.003	G	0.07	0.00	H	7.6703	0.0012	0.009	60		7.66	7.69					1							S
98219	9.457	0.036	8.259	0.023		1.025	0.033	T	1.00	0.03	L	8.2982	0.0018	0.011	58		8.28	8.32					1							
98220						1.500	0.510	G	4.99	0.96	Q	9.7300	0.1636	1.309	35		8.65	11.66					1 S							G
98221	9.216	0.015	8.754	0.015		0.435	0.019	T	0.50	0.02	L	8.8200	0.0014	0.014	108		8.79	8.85		C			1							
98222	8.116	0.011	7.412	0.008		0.626	0.014	G	0.69	0.01	H	7.4761	0.0008	0.007	83		7.46	7.49					1							S
98223	12.239	0.279	9.538	0.039		2.039	0.015	G	1.73	0.02	A	9.4627	0.0037	0.028	47		9.43	9.53					1							
98224	10.652	0.039	10.060	0.035		0.552	0.046	T	0.62	0.04	L	10.0931	0.0025	0.024	117		10.05	10.13		C			1							
98225	9.748	0.025	9.181	0.024		0.534	0.026	T	0.61	0.03	L	9.2316	0.0027	0.021	92		9.18	9.26		C			1							
98226	7.025	0.007	6.599	0.007		0.416	0.008	T	0.48	0.01	L	6.6497	0.0010	0.008	83		6.64	6.66		C			1 G							S
98227	10.679	0.064	8.812	0.023		1.552	0.054	T	1.57	0.06	L	8.7558	0.0018	0.017	62		8.73	8.79		R	19577+0259	I 1	1							
98228	9.035	0.009	8.286	0.007		0.686	0.015	G	0.74	0.01	H	8.3654	0.0013	0.020	231		8.33	8.40					1							S
98229	8.094	0.008	8.070	0.009		0.027	0.011	T	0.04	0.01	L	8.0959	0.0012	0.014	130		8.07	8.12		C	19577+5118	I 1	1							S
98230	7.791	0.007	7.816	0.011		–0.018	0.012	T	0.00	0.01	L	7.8211	0.0016	0.013	107		7.79	7.84		C			1							S
98231	9.909	0.021	8.731	0.013		1.010	0.019	T	0.99	0.01	L	8.8020	0.0019	0.015	119		8.78	8.83		C			1							
98232	10.680	0.033	8.884	0.014		1.495	0.028	T	1.52	0.04	L	8.8500	0.0015	0.018	129		8.82	8.88					1 S							
98233	9.073	0.013	8.682	0.013		0.400	0.015	G	0.47	0.02	H	8.7068	0.0020	0.016	121		8.68	8.73					1							
98234	5.471	0.003	5.528	0.004		–0.048	0.006	G	–0.03	0.01	H	5.5291	0.0006	0.006	105		5.52	5.54					1							S
98235											T	11.3312	0.0064	0.049	74		11.21	11.41					1							G
98236	7.914	0.009	7.863	0.008		0.052	0.011	T	0.06	0.01	L	7.8694	0.0016	0.018	156		7.84	7.89					1							S
98237						1.098	0.010	G	1.17	0.01	I	10.9266	0.0030	0.029	109		10.88	10.97		D			1 S							G
98238	7.596	0.006	7.634	0.008		–0.030	0.009	T	–0.01	0.01	L	7.6321	0.0012	0.015	152		7.61	7.66		C			1							S
98239	7.979	0.007	7.900	0.009		0.078	0.011	T	0.09	0.01	L	7.9305	0.0009	0.012	125		7.91	7.95					1							S
98240	9.151	0.012	8.037	0.008		0.965	0.020	G	0.95	0.02	A	8.0861	0.0010	0.016	158		8.07	8.11					1							
98241	9.258	0.017	8.703	0.016		0.568	0.015	G	0.64	0.01	H	8.7503	0.0022	0.015	88		8.72	8.77		C			1							
98242	9.211	0.014	7.402	0.007		1.545	0.004	G	2.09	0.03	C	7.3646	0.0013	0.013	142		7.34	7.39					1							S
98243	9.515	0.023	9.062	0.024		0.441	0.026	T	0.51	0.03	L	9.0597	0.0020	0.021	119		9.03	9.10		C			1							
98244	9.908	0.026	9.302	0.023	A	0.530	0.015	G	0.60	0.02	H *	9.3022	0.0022	0.016	95	*	9.27	9.33		D	19579+7415	I 1	2 C A	AB	294	4.000	0.022	2.70	0.10	
98245	9.064	0.014	8.426	0.012		0.593	0.016	T	0.66	0.01	L	8.4988	0.0016	0.013	101		8.47	8.53			19579+6258	I 1	1							
98246	9.731	0.043	7.760	0.018	A	1.304	0.218	G	1.71	0.08	M	7.6628	0.0085	0.019	48	A	7.64	7.72		D	19579–0904	I 1	2 C A	AB	113	10.414	0.012	1.85	0.05	S
98247	10.595	0.046	9.272	0.025		1.000	0.040	G	0.98	0.03	R	9.2934	0.0018	0.017	112		9.25	9.34					1							
98248	7.514	0.005	7.564	0.006	*	–0.041	0.007	T	–0.02	0.01	L *	7.5500	0.0012	0.014	225	*	7.53	7.57		D	19580+2715	I 2	2 C A	AB	234	0.414	0.002	0.17	0.01	
98249	7.489	0.005	7.314	0.007		0.160	0.008	T	0.18	0.01	L	7.3480	0.0013	0.017	188		7.32	7.37		U			1							S
98250	8.337	0.011	8.429	0.014		–0.058	0.015	G	–0.04	0.01	H	8.4119	0.0017	0.013	91		8.39	8.44		C			1							
98251	10.477	0.038	9.427	0.026		0.912	0.035	T	0.91	0.03	L	9.5228	0.0022	0.021	118		9.48	9.57		C			1							
98252	7.770	0.009	7.574	0.011		0.187	0.013	T	0.21	0.01	L	7.5948	0.0014	0.010	73		7.57	7.61		D	19579+1125	I 1	1 S							S
98253	6.533	0.005	6.428	0.005	*	0.095	0.006	T	0.11	0.01	L *	6.4829	0.0007	0.008	133	*	6.47	6.50		D	19579+4216	I 1	2 C A	AC	289	3.018	0.006	2.50	0.03	S D
98254	9.970	0.024	8.325	0.011		1.376	0.021	T	1.35	0.03	L	8.3274	0.0015	0.013	106		8.30	8.35					1							
98255	9.467	0.012	8.310	0.008	A	1.000	0.495	G	0.93	0.02	L *	8.3177	0.0013	0.019	228	*	8.29	8.35		D	19579+2032	I 1	2 C A	AB	109	3.251	0.017	3.02	0.07	
98256	8.586	0.010	7.375	0.007		1.036	0.010	T	1.01	0.01	L	7.4310	0.0013	0.010	98		7.41	7.45					1							S
98257	9.934	0.032	9.298	0.029		0.591	0.037	T	0.66	0.03	L	9.3316	0.0052	0.024	46		9.29	9.40					1							
98258	5.087	0.003	5.017	0.003		0.055	0.008	G	0.05	0.02	A	5.0318	0.0008	0.004	58		5.02	5.04		C			1 G							S
98259	7.956	0.009	7.674	0.013		0.268	0.015	T	0.30	0.02	L	7.7230	0.0020	0.011	52		7.70	7.74		C			1							S
98260	10.242	0.027	9.797	0.028		0.434	0.031	T	0.50	0.03	L	9.8495	0.0025	0.022	109		9.79	9.90		C			1							
98261	10.106	0.029	8.826	0.017		1.089	0.026	T	1.05	0.03	L	8.8631	0.0015	0.011	80		8.84	8.88					1							
98262	7.390	0.005	7.443	0.007		–0.040	0.015	G	–0.02	0.01	H	7.4406	0.0009	0.009	144		7.43	7.46		C			1							S
98263	7.933	0.006	7.959	0.007		–0.019	0.008	T	0.00	0.01	L	7.9869	0.0012	0.016	220		7.96	8.01			19580+2715	I 2	1							
98264	9.373	0.019	8.898	0.019		0.460	0.021	T	0.53	0.02	L	8.9572	0.0026	0.018	82		8.93	9.00					1							
98265											T	12.6313	0.0675	0.521	100		11.88	13.26	0.53	P 1 A			1							D
98266	9.776	0.019	8.696	0.013		0.934	0.018	T	0.93	0.01	L	8.7445	0.0017	0.020	136		8.71	8.77					1							
98267	10.307	0.030	8.328	0.011		1.677	0.026	T	1.84	0.08	O	8.2384	0.0024	0.026	137		8.18	8.29		U 2			1							
98268	8.839	0.010	8.806	0.012		0.035	0.014	T	0.05	0.01	L	8.8117	0.0016	0.017	134		8.78	8.84		C			1							
98269	8.403	0.011	7.403	0.007		0.874	0.010	T	0.88	0.01	L	7.4738	0.0011	0.010	113		7.46	7.49					1							S
98270						1.500	0.510	G	3.20	0.98	K	10.1884	0.0368	0.328	52		9.50	10.84		U 2			1 S							G
98271	8.643	0.010	8.489	0.012		0.148	0.015	T	0.16	0.01	L	8.5354	0.0014	0.012	107		8.51	8.56		C			1							
98272	9.596	0.016	8.770	0.013	*	0.740	0.014	G	0.79	0.01	H *	8.7607	0.0018	0.016	151	*	8.72	8.79		D	19580+0456	I 1	2 C A	AS	141	0.531	0.002	0.11	0.01	
98273	9.081	0.017	8.560	0.016	*	0.489	0.021	T	0.56	0.02	L *	8.6780	0.0019	0.021	127	*	8.65	8.72		R	19581+5355	I 1	2 C A	AB	227	7.356	0.005	0.96	0.02	
98274	9.100	0.013	8.425	0.012	*	0.614	0.014	T	0.68	0.01	L *	8.4757	0.0016	0.013	111	*	8.45	8.50		C	19581–4808	H 1	2 C B	AB	92	0.278	0.031	2.17	0.36	S
98275	9.670	0.018	8.695	0.013		0.883	0.015	G	0.89	0.01	H	8.7511	0.0015	0.018	137		8.72	8.78		C			1							
98276	10.385	0.042	9.591	0.032		0.704	0.040	T	0.76	0.03	L	9.6734	0.0027	0.023	84		9.64	9.71					1							
98277	10.620	0.046	10.107	0.044		0.492	0.048	T	0.56	0.05	L	10.1766	0.0039	0.030	96		10.13	10.24					1							G
98278	8.812	0.011	8.260	0.010		0.516	0.004	G	0.59	0.00	H	8.3348	0.0014	0.016	149		8.31	8.36		C	19582–5154	I 2	1							S
98279	9.905	0.021	8.160	0.010		1.455	0.018	T	1.46	0.03	L	8.1276	0.0014	0.016	135		8.10	8.15					1							
98280	8.197	0.011	8.030	0.013		0.188	0.015	G	0.21	0.02	H	8.0579	0.0013	0.015	181		8.03	8.09		C			1							
98281	9.835	0.033	8.273	0.017		1.311	0.029	T	1.27	0.03	L	8.2940	0.0012	0.013	53		8.27	8.32					1							
98282	8.831	0.018	7.859	0.014		0.841	0.018	T	0.86	0.01	L	7.8822	0.0011	0.010	84		7.86	7.90		C			1							S
98283	10.378	0.031	8.638	0.013		1.480	0.028	T	2.86	0.04	O	8.3130	0.0087	0.073	121		8.22	8.42		U 2			1 S							
98284	10.552	0.055	9.927	0.050		0.577	0.055	T	0.65	0.05	L	9.9295	0.0020	0.017	75		9.90	9.96					1							
98285	9.005	0.013	8.998	0.017		0.011	0.020	T	0.03	0.02	L	8.9996	0.0018	0.015	108		8.97	9.03		C			1							
98286	8.075	0.014	7.694	0.012		0.361	0.017	T	0.42	0.02	L	7.7388	0.0061	0.040	51		7.69	7.80		U 2			1							S P
98287	7.378	0.006	6.998	0.007		0.371	0.008	T	0.43	0.01	L	7.0333	0.0009	0.008	91		7.02	7.05					1							S
98288	10.012	0.025	9.337	0.022		0.630	0.020	G	0.70	0.02	H	9.4077	0.0015	0.015	107		9.38	9.43		C			1							
98289	7.588	0.006	7.670	0.009		–0.070	0.010	T	–0.05	0.01	L	7.6902	0.0022	0.020	136		7.66	7.73	1.03	P 1 A			1							S
98290	8.540	0.016	8.261	0.017	*	0.265	0.022	T	0.30	0.03	L *	8.3025	0.0025	0.017	56	*	8.27	8.33		D	19582–0621	H 1	2 C A	AB	180	0.299	0.013	2.05	0.13	
98291	6.824	0.005	6.852	0.006		–0.021	0.007	T	0.00	0.01	L	6.8607	0.0007	0.008	104		6.85	6.88		D	19582+1630	I 1	1							S
98292	8.142	0.009	7.828	0.011		0.347	0.001	G	0.41	0.00	H	7.8747	0.0020	0.016	90		7.85	7.90					1							S
98293	9.080	0.011	8.707	0.011		0.353	0.014	T	0.41	0.01	L	8.7673	0.0019	0.021	156		8.72	8.81					1							
98294						0.330	0.006	G	0.38	0.01	H	7.7147	0.0010	0.014	146		7.70	7.74			19582–5154	I 2	1							S
98295	8.984	0.026	8.693	0.026	*	0.277	0.035	T	0.31	0.04	L *	9.2297	0.0026	0.032	160	*	9.18	9.28		D	19583+2208	I 1	2 C A	AB	274	1.545	0.007	0.83	0.04	
98296	8.360	0.008	7.876	0.007		0.468	0.008	T	0.54	0.01	L	7.9324	0.0011	0.014	208		7.91	7.96		C			1							S
98297	9.859	0.023	8.545	0.013		1.116	0.021	T	1.08	0.02	L	8.5374	0.0057	0.037	104		8.48	8.60		U 2			1 X S							
98298	9.828	0.022	9.020	0.017		0.730	0.021	T	0.78	0.01	L	8.9879	0.0032	0.030	134		8.94	9.03		U 2			1 S							P
98299	9.227	0.015	8.852	0.016		0.392	0.015	G	0.46	0.02	H	8.8961	0.0019	0.015	95		8.87	8.93					1							
98300	8.110	0.009	8.097	0.011		0.025	0.003	G	0.04	0.00	H	8.1040	0.0011	0.011	97		8.09	8.13		C			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
98301 H	19 58 22.79	−02 13 54.7	7.08	G	299.594 975 33	−02.231 872 35	A	10.05	−9.57	26.08	1.72	1.65	1.67	2.03	1.75	+50	−10	−25	+ 9	− 3	+ 2	+14	+32	−24	+34	1	0.15
98302	19 58 23.39	+28 59 17.5	7.74	H	299.597 454 06	+28.988 182 45		1.91	−0.18	−9.35	0.45	0.63	0.87	0.51	0.65	−19	+ 2	+ 1	− 3	+17	− 8	+19	−30	+13	− 8	1	−2.60
98303	19 58 23.55	+13 04 25.0	9.43	H	299.598 132 76	+13.073 599 59		−2.22	−2.49	−2.87	0.93	0.78	1.34	1.41	1.06	+15	−16	−12	+16	− 6	+27	− 3	+ 1	+12	+20	0	−1.40
98304	19 58 25.58	−14 00 42.0	9.49	H	299.606 591 59	−14.011 674 65		7.99	6.29	−55.65	1.31	1.02	1.57	1.47	1.30	+13	− 9	−36	−10	+ 1	+22	+11	+11	−19	+20	0	1.02
98305	19 58 26.26	−42 40 58.6	7.91	H	299.609 399 29	−42.682 955 40		5.50	19.37	−34.77	1.13	0.64	1.12	1.60	1.30	+23	−14	− 7	+ 8	−22	− 1	−38	−35	+ 4	+ 1	0	0.41
98306	19 58 27.69	+45 24 20.5	8.51	H	299.615 358 57	+45.405 689 58		0.86	2.05	−5.06	0.65	0.62	0.76	0.77	0.62	− 6	− 8	+19	+19	+ 3	+ 1	+ 3	+ 5	+ 2	+ 0	1	0.01
98307 H	19 58 28.30	−30 04 18.4	8.71	H	299.617 925 11	−30.071 779 76	*	4.26	2.11	−14.11	4.17	1.90	1.61	2.02	1.34	+40	− 8	− 3	+36	+ 1	+21	−14	+ 3	− 7	+ 6	2	−0.17
98308	19 58 28.74	+63 32 03.1	6.15	H	299.619 740 56	+63.534 202 04		7.58	0.77	−27.64	0.51	0.50	0.53	0.71	0.65	+ 0	−15	+ 3	+18	+ 2	+16	+ 1	+26	− 4	+12	0	0.58
98309	19 58 30.42	+48 03 55.0	8.48	H	299.626 754 30	+48.065 279 99		2.20	−8.87	−19.26	0.69	0.59	0.75	0.74	0.55	− 6	−18	+21	+18	+ 4	−14	+ 8	− 2	+ 2	+ 5	0	1.07
98310	19 58 30.96	−32 25 36.7	7.92	H	299.628 999 91	−32.426 850 83		5.73	18.27	−30.80	1.05	0.62	1.15	1.42	0.89	+26	+ 9	+ 2	−43	−10	−39	−11	−35	−24	+40	0	−0.34
98311	19 58 32.26	+27 30 34.2	8.14	H	299.634 415 38	+27.509 494 47		0.14	−2.43	−23.74	0.42	0.69	1.06	0.49	0.71	−18	− 3	+ 2	+ 8	+ 1	−15	+ 2	− 8	+16	− 7	1	−0.77
98312	19 58 32.48	−63 07 40.7	7.88	H	299.635 351 47	−63.127 963 25		3.23	6.24	−10.49	0.64	0.55	0.88	0.66	0.57	−10	−18	−14	+22	−24	+ 2	−24	−10	+ 2	−15	0	−0.45
98313	19 58 32.54	−03 33 13.4	6.79	1 H	299.635 564 34	−03.553 717 67		2.02	−2.52	−3.21	0.81	0.62	0.91	0.92	0.81	+18	−23	−24	+ 0	+10	+18	+17	+35	−14	+18	0	2.92
98314	19 58 32.61	+07 55 14.3	6.77	H	299.635 854 33	+07.920 633 65		10.39	21.38	17.76	0.67	0.56	0.96	0.82	0.73	+30	−13	−27	+30	+ 0	+26	+ 7	+41	−14	+18	0	0.34
98315 H	19 58 32.66	+33 16 38.8	7.24	G	299.636 062 55	+33.277 442 15	A	14.19	59.21	50.13	0.98	1.12	1.21	0.85	0.98	−18	−17	+ 7	+21	−11	−15	− 8	− 7	−14	−16	3	1.45
98316	19 58 32.87	−54 56 11.7	8.54	H	299.636 975 48	−54.936 591 16		43.91	109.18	−122.03	0.85	0.64	1.17	1.42	0.96	+ 3	− 6	−10	−30	+36	−20	+32	−25	+ 1	− 5	0	−0.60
98317	19 58 33.29	−54 02 38.4	8.56	H	299.638 722 11	−54.044 009 99		1.78	−7.75	−18.95	0.87	0.68	1.18	1.20	1.02	+31	−19	+ 2	−28	− 7	−14	− 5	−34	− 9	+25	3	−2.16
98318	19 58 33.86	−22 15 06.7	8.11	H	299.641 098 54	−22.251 863 84		4.84	0.73	−27.74	0.92	0.58	1.00	0.94	0.61	+40	−39	−14	− 4	+14	+ 8	+13	− 9	+ 2	+52	2	−0.59
98319	19 58 33.99	−32 37 44.7	7.75	H	299.641 611 95	−32.629 096 60		4.86	−9.62	−10.84	1.12	0.65	1.20	1.45	0.95	+23	+13	+13	−43	− 9	−32	− 7	−34	−28	+42	0	−0.19
98320 H	19 58 34.35	+38 06 20.5	6.33	G	299.643 142 55	+38.105 691 03	A	1.85	3.63	0.83	0.61	0.66	0.73	0.63	0.60	− 6	−14	+ 4	+28	+14	− 5	+17	+ 3	− 3	+15	0	0.10
98321	19 58 34.98	+36 56 44.5	8.85	G	299.645 736 95	+36.945 681 14		3.96	1.96	−1.03	0.64	0.68	0.87	0.65	0.73	− 8	− 9	+17	− 2	− 1	− 6	+ 1	− 9	+ 6	+ 6	0	1.22
98322	19 58 35.51	+81 16 10.8	10.25	H	299.647 967 58	+81.269 673 72		17.16	−31.32	198.76	1.00	0.95	1.07	1.16	1.04	+13	−13	+22	− 1	+ 3	+ 5	+ 2	− 4	− 6	+28	0	−1.09
98323	19 58 36.60	+29 56 28.0	7.83	H	299.652 500 61	+29.941 114 29		3.62	−1.21	−1.18	0.50	0.64	0.93	0.60	0.65	−15	−14	+17	+ 6	+ 3	− 8	+ 4	−13	+15	− 2	0	0.11
98324	19 58 37.13	+68 24 43.0	7.63	H	299.654 688 29	+68.411 943 39		7.47	−3.00	29.55	0.57	0.54	0.58	0.69	0.62	+ 3	−10	+17	+10	+14	+ 0	+14	+ 3	+ 3	+17	1	0.48
98325	19 58 37.96	+30 59 01.2	5.51	H	299.658 161 65	+30.983 671 74		5.99	33.23	−2.60	0.35	0.41	0.58	0.41	0.41	− 5	− 1	+ 6	+ 8	− 9	−18	− 5	−16	+15	+ 3	0	−0.92
98326	19 58 38.50	−30 55 39.4	9.16	H	299.660 431 90	−30.927 617 07		4.22	12.09	−4.19	1.24	0.81	1.46	1.49	1.20	+25	−24	− 3	−10	− 4	+ 5	+ 6	−18	−30	+31	0	1.24
98327	19 58 39.80	−53 48 45.5	8.61	H	299.665 845 68	−53.812 628 32		3.10	−16.48	−5.44	0.84	0.60	1.16	1.12	0.94	+ 8	−36	+ 0	−19	+15	+ 3	+20	−15	−15	+16	0	−1.93
*98328	19 58 39.91	+55 09 50.1	8.39	H	299.666 278 75	+55.163 910 30		9.64	0.17	8.43	0.61	0.57	0.66	0.73	0.56	+ 2	−10	+18	+14	+ 0	−20	+ 1	−13	+13	+ 0	1	−0.24
*98329	19 58 39.89	−19 56 06.8	9.37	H	299.666 196 03	−19.935 220 70		18.92	34.35	−172.84	1.35	0.74	1.44	1.79	0.91	+55	−25	− 3	+25	+30	+17	+28	+ 8	+22	+81	2	0.88
98330	19 58 40.26	−47 59 41.5	9.19	G	299.667 735 22	−47.994 866 37		9.02	63.47	−99.55	1.25	0.70	1.43	1.93	1.35	− 3	−17	+ 0	+30	+ 4	−14	+ 2	+10	+18	− 9	0	0.60
98331	19 58 40.48	−33 14 41.1	9.69	H	299.668 661 69	−33.244 752 29		5.80	−16.53	−7.76	1.79	1.07	2.10	2.84	1.61	+32	− 9	− 9	−23	−12	−29	−12	−38	−26	+34	0	0.32
98332	19 58 41.18	−69 09 49.4	5.74	H	299.671 574 64	−69.163 712 51		14.08	69.18	−100.60	0.31	0.45	0.66	0.37	0.52	−39	− 6	− 8	+20	+ 7	− 6	+ 8	−13	+ 0	−34	0	0.40
98333	19 58 41.78	+70 22 00.5	6.32	H	299.674 095 75	+70.366 807 47		7.74	40.45	58.10	0.45	0.43	0.47	0.53	0.50	− 6	−13	+11	− 6	+ 5	−10	+ 4	+ 9	−10	+18	0	−0.26
98334	19 58 42.88	−41 50 57.4	7.61	3 H	299.678 670 85	−41.849 289 92		−0.69	−11.96	−56.55	1.63	0.72	1.56	2.89	1.82	+12	− 5	+14	+47	− 7	−21	−10	−11	− 8	+10	0	1.22
98335	19 58 43.47	−43 06 11.3	9.10	G	299.681 105 06	−43.103 144 74		7.79	34.51	−40.33	1.35	0.81	1.47	2.03	1.53	+21	−17	−17	+ 5	−16	−16	−33	−30	+17	− 8	0	0.66
98336	19 58 43.85	+01 39 59.6	6.75	H	299.682 727 97	+01.666 551 59		3.95	−33.81	−34.66	0.89	0.73	1.15	1.36	0.91	+18	−16	−38	+ 7	− 5	+50	+21	+38	+ 0	+ 0	0	−0.53
98337	19 58 45.39	+19 29 31.5	3.51	1 H	299.689 115 16	+19.492 092 87		11.90	64.37	22.58	0.48	0.40	0.71	0.59	0.42	−17	−11	+ 5	+10	−24	+13	−26	−17	− 1	−35	1	0.11
98338	19 58 45.63	−62 15 30.5	9.39	H	299.690 112 35	−62.258 460 78		2.06	−13.82	4.55	0.93	0.75	1.28	0.93	0.81	+ 1	−22	− 2	− 3	−20	− 7	−23	−32	+ 3	− 5	0	−1.43
98339	19 58 49.73	−18 12 10.3	9.28	H	299.707 208 88	−18.202 872 42		1.90	11.89	−91.80	1.24	0.71	1.44	1.71	0.86	+43	− 3	+10	+23	+41	+43	+35	+21	+36	+63	2	−1.36
98340	19 58 50.53	−41 08 58.3	8.29	H	299.710 549 48	−41.149 525 62		2.22	−2.73	−53.83	1.23	0.68	1.44	1.68	1.40	+29	−24	− 5	+11	+ 5	+15	+ 0	−11	+19	+15	0	−0.98
98341	19 58 50.96	−33 24 46.2	9.04	H	299.712 329 70	−33.412 839 21		2.66	−12.20	−8.51	1.59	0.95	1.80	2.52	1.47	+32	− 5	+ 2	−27	−15	−19	−13	−39	−19	+34	0	1.22
98342	19 58 51.25	+11 33 52.4	7.40	H	299.713 555 34	+11.564 558 29		7.39	−8.09	7.84	0.77	0.58	0.96	0.89	0.69	+24	−32	−28	+10	+ 0	+ 7	+ 3	+18	− 2	+ 7	4	−0.54
98343	19 58 51.62	+35 29 51.9	6.99	H	299.715 095 24	+35.497 736 54		3.80	26.51	8.19	0.42	0.48	0.60	0.48	0.47	−12	− 7	+11	+11	− 2	− 5	+ 1	−24	− 4	− 5	1	0.86
98344	19 58 51.66	−10 20 36.4	9.24	H	299.715 241 85	−10.343 453 35		1.54	−2.04	−11.50	1.43	1.10	1.56	1.60	1.42	+14	− 8	−30	−19	+30	+20	+41	+36	− 9	+17	0	0.32
98345 H	19 58 51.90	+47 21 48.3	7.63	H	299.716 263 16	+47.363 416 93	B	2.00	−9.18	−13.41	1.92	1.73	1.31	1.40	1.16	+ 7	−10	+ 2	+ 3	+11	−11	+13	− 5	+ 4	+15	3	2.21
98346	19 58 52.93	−68 45 44.7	6.38	H	299.720 526 43	−68.762 404 14		9.56	36.46	−73.83	0.33	0.50	0.71	0.40	0.60	−44	− 1	−14	+ 4	+ 9	− 7	+ 8	−11	+ 5	−46	0	−1.13
98347	19 58 53.38	+30 21 55.5	8.80	1 H	299.722 398 51	+30.365 422 52		0.86	7.61	4.16	0.62	0.78	1.08	0.78	0.82	−10	− 6	+10	+23	−10	−13	− 3	−11	+17	+ 6	1	1.13
98348	19 58 54.51	+06 35 28.4	8.18	H	299.727 130 11	+06.591 226 51		9.20	40.33	−3.17	0.70	0.71	1.25	0.87	0.88	+29	− 2	−50	+29	−18	+42	+ 2	+54	−42	+ 0	0	−1.07
98349	19 58 55.80	+59 31 08.9	8.21	H	299.732 504 47	+59.519 146 14		2.04	−7.73	−11.73	0.66	0.65	0.71	0.77	0.72	+20	− 1	− 1	+ 9	+10	−11	+11	− 7	+19	+28	0	0.19
98350 H	19 58 55.86	+83 24 52.5	8.45	H	299.732 743 14	+83.414 572 18	A	3.68	14.30	4.26	0.87	0.93	0.91	0.91	1.02	+ 3	− 9	+ 7	+ 5	+ 3	−25	+10	−12	−15	+19	1	0.80
98351	19 58 56.37	−30 32 17.7	6.27	H	299.734 867 67	−30.538 238 10		15.22	86.05	−59.89	0.82	0.60	0.94	1.08	0.83	+26	−15	−17	− 0	−10	+37	− 5	−29	−15	+ 8	0	1.88
98352	19 58 56.61	−13 17 57.0	9.47	H	299.735 888 96	−13.299 171 16		1.82	35.65	−1.09	1.47	1.04	1.55	1.88	1.55	+35	−37	−38	−33	−16	+ 9	−17	−27	+11	+27	0	1.73
98353	19 58 57.18	−26 11 45.0	4.84	H	299.738 234 70	−26.195 827 39		9.58	34.50	24.74	0.78	0.48	0.83	0.88	0.60	+16	−20	− 2	+ 4	+15	− 2	+15	+ 5	+ 3	+25	0	0.18
98354	19 58 57.88	−07 42 11.4	10.31	G	299.741 173 85	−07.703 155 06		11.74	−126.72	−277.45	1.88	1.61	2.08	2.40	2.22	+33	+25	+12	+26	+48	+50	+53	+53	+27	+47	0	−1.60
98355	19 58 58.47	−46 05 17.3	7.47	G	299.743 645 04	−46.088 133 09		17.82	79.26	36.38	0.89	0.50	1.05	1.64	1.02	−19	+ 0	− 2	+15	+ 2	−33	+ 1	+ 9	+31	−33	0	−1.08
98356 H	19 58 58.86	−51 05 47.5	8.91	H	299.745 251 90	−51.096 532 32	A	14.50	−74.28	−45.49	1.66	1.01	1.61	2.19	1.57	−21	−15	+ 0	+29	−16	−13	−22	+10	+ 8	−35	3	0.25
98357	19 58 59.53	+67 28 19.6	7.57	G	299.748 056 78	+67.472 099 18		6.65	25.96	−6.02	0.57	0.57	0.59	0.63	0.66	+11	−15	+11	+ 9	+21	− 5	+22	+14	− 4	+28	2	2.59
98358	19 59 00.38	+52 17 58.7	9.35	H	299.751 573 46	+52.299 643 90		0.64	−0.33	−11.13	0.76	0.67	0.80	0.92	0.72	− 9	− 3	− 4	−18	+ 3	+10	+ 2	−11	+15	− 2	3	−0.81
98359	19 59 00.63	−63 47 40.0	8.18	H	299.752 611 93	−63.794 444 99		5.55	21.89	−0.76	0.74	0.63	1.02	0.80	0.72	− 8	−20	−16	+12	−14	+11	−19	−10	+11	−27	0	0.91
98360	19 59 01.60	+57 48 34.1	7.32	H	299.756 686 05	+57.809 480 15		−0.01	−3.61	−5.08	0.49	0.52	0.55	0.55	0.56	− 5	+ 2	−12	+21	− 3	− 1	+ 2	−19	+24	+ 6	0	1.10
98361	19 59 02.94	−17 57 34.0	8.41	H	299.762 260 95	−17.959 434 68		7.30	24.48	−17.04	0.98	0.60	1.09	1.23	0.87	+26	−24	−13	+ 0	+16	+31	+25	+25	+ 2	+12	2	−0.62
98362	19 59 03.64	+25 59 18.4	8.23	H	299.765 159 30	+25.988 448 77		7.13	4.95	−28.19	4.47	5.09	7.31	4.80	5.52	+ 3	−14	− 6	− 6	−12	+ 0	−14	−26	+ 8	− 6	0		
98363	19 59 04.96	+01 35 50.6	9.10	H	299.770 687 26	+01.597 384 41		2.15	2.02	0.62	1.32	1.08	1.61	2.09	1.45	+21	−18	−42	− 6	−10	+43	+11	+21	− 2	+10	0	−1.95
98364	19 59 05.09	−57 26 25.3	8.92	H	299.771 196 33	−57.440 359 98		4.70	20.29	−56.32	0.96	0.80	1.23	1.58	0.98	+12	− 9	−16	− 6	+40	−20	+29	− 2	+14	− 1	0	0.45
98365	19 59 06.28	+70 22 19.5	7.95	H	299.776 156 96	+70.372 080 12		4.53	22.27	30.80	0.59	0.58	0.63	0.71	0.67	− 3	−15	+ 2	− 2	+ 5	− 9	+ 5	+14	−13	+13	0	0.29
98366	19 59 06.71	+10 00 04.4	9.09	G	299.777 947 74	+10.001 233 45		2.23	10.75	−17.84	0.94	0.79	1.17	1.29	1.10	+44	−10	−17	− 3	−18	+24	−15	+ 6	− 2	+39	0	−0.19
98367	19 59 07.10	+50 39 47.0	7.12	H	299.779 597 93	+50.663 056 94		4.06	−9.57	8.60	0.50	0.47	0.55	0.54	0.47	−11	−20	+10	−10	+ 9	− 9	+ 8	−12	+ 5	− 3	0	0.23
98368	19 59 07.29	−44 00 38.9	10.17	H	299.780 357 41	−44.010 797 37		1.99	5.54	−1.88	1.66	0.94	1.73	2.43	1.71	+ 8	−15	+ 3	+28	− 9	− 6	+10	+ 0	−11	+ 7	4	−1.44
98369 H	19 59 07.47	+35 32 10.1	8.11	H	299.781 106 69	+35.536 152 47	A	2.53	0.07	−5.10	2.37	2.84	3.05	2.32	2.33	− 4	− 7	+ 8	+12	+ 1	−14	+ 4	−10	− 6	−16	6	3.40
98370	19 59 08.46	+09 17 39.8	9.04	G	299.785 255 29	+09.294 388 58		3.38	3.91	−13.86	1.12	0.88	1.36	1.62	1.09	+26	− 5	−22	+28	−15	+ 7	−14	+20	−22	− 4	0	1.73
98371	19 59 09.08	+27 30 45.4	6.85	H	299.787 820 84	+27.512 622 24		4.05	8.71	6.48	0.32	0.51	0.76	0.37	0.52	−18	− 2	+ 0	+ 6	− 1	−14	+ 1	−17	+16	− 8	0	−0.92
98372	19 59 09.65	−70 16 07.6	8.73	H	299.790 187 90	−70.268 782 13		9.07	−36.93	−36.18	0.60	0.66	1.00	0.69	0.74	−25	+ 3	− 8	+ 0	+12	−11	+11	−13	− 5	−20	0	1.77
98373	19 59 09.92	−41 49 57.7	8.27	G	299.791 323 38	−41.832 696 12		6.05	13.54	−82.32	1.04	0.67	1.14	1.47	1.24	+20	−22	−15	+11	−14	+ 4	−23	−22	+18	+ 8	0	−0.83
98374	19 59 10.55	+03 59 33.1	9.15	H	299.793 940 16	+03.992 517 69		1.72	−0.29	−2.29	1.22	0.92	1.46	1.77	1.43	+51	−20	−32	+23	− 4	+32	+24	+61	−23	− 3	0	1.22
98375	19 59 10.58	+23 06 04.6	5.68	H	299.794 094 87	+23.101 273 81		20.66	−70.78	3.07	0.78	0.67	1.07	0.93	0.76	−26	− 6	− 5	−21	+ 4	+ 1	+ 3	−27	+ 7	−38	0		
98376	19 59 10.80	+29 27 02.7	10.06	3 H	299.794 996 88	+29.450 756 82		1.93	−2.31	−6.01	0.90	1.13	1.67	1.13	1.26	−10	+ 1	− 4	+ 6	+11	− 9	+11	−13	+25	− 2	0	−0.13
98377	19 59 12.05	+11 18 20.0	6.52	H	299.800 211 32	+11.305 564 46		1.56	6.76	1.04	0.73	0.52	0.90	0.85	0.61	+10	−31	−35	+24	− 6	+10	+ 0	+21	−10	−15	2	−0.02
98378	19 59 12.68	+38 52 49.4	7.77	G	299.802 839 31	+38.880 375 11		8.83	19.54	15.66	0.56	0.57	0.70	0.61	0.57	− 2	− 3	+10	+30	+12	− 1	+13	− 7	+14	+ 4	0	−1.45
98379	19 59 15.34	+52 03 20.5	6.14	2 G	299.813 907 45	+52.055 685 15		4.24	9.33	2.63	0.43	0.40	0.45	0.47	0.40	−17	−11	+ 5	−19	+12	− 7	+11	−20	+10	− 9	0	0.26
98380	19 59 16.99	−39 41 39.4	9.35	H	299.820 780 39	−39.694 280 16		−1.99	15.64	−6.19	1.31	0.78	1.47	1.53	1.37	+16	−37	−13	+12	− 1	+ 5	− 7	− 7	+20	+17	0	0.91
98381	19 59 19.33	+42 10 06.4	9.91	H	299.830 521 62	+42.168 447 20		24.44	175.21	160.43	0.92	0.86	1.08	0.93	0.96	−10	+ 0	+ 5	− 8	+ 9	− 8	+11	−12	+11	+ 3	0	−2.50
98382	19 59 20.08	+84 40 07.5	6.80	H	299.833 650 68	+84.668 746 74		11.11	−2.17	−42.41	0.49	0.46	0.53	0.59	0.56	− 1	−13	+ 5	+ 4	+ 6	− 1	+ 8	+ 5	−14	− 1	0	−0.48
98383 H	19 59 20.42	+45 46 21.3	5.92	H	299.835 062 55	+45.772 581 64	A	6.91	11.54	−16.72	1.12	1.35	0.62	0.61	0.51	+30	− 9	+ 7	+10	+ 5	+ 6	+ 8	− 2	− 9	+ 6	2	−0.68
98384	19 59 22.36	−74 07 48.9	7.53	H	299.843 179 55	−74.130 262 98		7.02	−14.89	−25.29	0.53	0.53	0.77	0.61	0.64	−10	− 4	−10	+19	− 6	− 7	− 8	− 2	− 8	−15	0	−2.07
98385	19 59 22.63	+01 22 39.1	6.17	G	299.844 308 59	+01.377 531 75		4.24	16.51	67.66	0.84	0.62	0.93	1.22	0.85	+11	−20	−31	− 1	− 5	+37	+ 7	+23	− 2	+ 6	0	0.60
98386	19 59 24.40	+28 14 29.7	9.48	H	299.851 661 23	+28.241 591 06		6.17	64.84	−17.33	0.63	0.88	1.28	0.74	0.99	− 7	− 1	− 1	+ 6	+ 8	−15	+10	−17	+10	+ 4	0	0.91
98387	19 59 24.53	−08 05 21.8	7.86	H	299.852 211 60	−08.089 391 37		2.86	1.21	2.64	1.19	0.95	1.29	1.43	1.38	+28	+11	−14	+ 8	+39	+37	+50	+50	+13	+42	0	0.97
98388	19 59 24.91	−34 23 36.1	9.59	H	299.853 802 25	−34.393 367 52		7.31	−5.28	4.62	1.62	0.96	1.80	1.76	1.33	+37	−46	−17	−12	−12	−15	− 3	−30	−21	+35	0	1.81
98389	19 59 24.94	−55 02 43.0	7.85	H	299.853 920 92	−55.045 288 80		9.90	65.94	−97.96	0.68	0.55	0.96	1.16	0.82	+ 2	− 2	− 9	−24	+32	−19	+27	−21	+17	−15	3	−1.25
98390 H	19 59 25.21	+26 35 32.2	9.44	G	299.855 025 33	+26.592 283 94	A	4.90	−1.25	3.68	1.68	1.66	2.35	1.54	1.70	−17	− 5	+ 8	+32	−20	− 7	−21	− 9	+ 6	−12	2	0.34
98391	19 59 26.25	+24 08 19.2	9.05	H	299.859 356 78	+24.138 655 21		2.92	−28.18	−62.54	0.80	0.74	1.20	0.83	0.78	− 3	+ 9	−10	−18	− 7	− 6	− 9	−26	+14	−22	2	1.35
98392	19 59 26.60	+25 41 15.8	8.28	G	299.860 818 05	+25.687 728 84		8.15	14.35	−16.85	0.58	0.62	0.98	0.67	0.72	− 4	−14	+ 8	+25	−10	+ 3	− 6	− 9	−10	+ 4	0	−2.41
98393	19 59 26.88	+20 57 11.3	9.36	2 H	299.862 008 83	+20.953 131 74		1.28	6.86	−1.24	0.85	0.66	1.16	1.05	0.69	−16	+10	− 8	− 9	−23	+ 9	−18	−14	+ 2	−46	0	2.76
98394	19 59 29.30	+05 53 21.5	8.51	H	299.872 085 89	+05.889 319 06		4.45	6.72	2.77	0.81	0.77	1.19	0.95	1.02	+46	−16	−28	+30	+ 6	+25	+12	+52	−13	+35	0	1.16
98395	19 59 30.39	+21 33 25.8	9.17	H	299.876 640 45	+21.557 167 26		6.82	57.16	8.57	0.83	0.69	1.17	0.93	0.68	−15	−17	− 1	− 9	−21	+ 9	−21	−20	+ 7	−52	0	0.73
98396	19 59 30.94	+29 20 09.9	10.11	H	299.878 930 70	+29.336 095 85		5.38	−0.97	−6.32	0.93	1.21	1.75	1.09	1.37	−12	− 2	+ 5	+ 7	+14	− 9	+15	−19	+11	− 9	0	2.53
98397	19 59 32.89	+24 43 24.0	8.31	1 G	299.887 058 66	+24.723 325 12	A	13.01	28.98	−26.72	0.85	1.04	1.37	0.79	0.99	+19	− 1	− 7	+25	−19	+16	−15	−23

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
98301	7.813	0.032	7.308	0.030	A	0.488	0.015	G	0.56	0.02	H *	7.1817	0.0017	0.007	47	*	7.17	7.19		D	19584−0214	I 1	2 C A	AB	302	1.445	0.005	0.84	0.03	S
98302	7.713	0.005	7.730	0.006		−0.014	0.007	T	0.01	0.01	L	7.7401	0.0017	0.013	184		7.72	7.76			19584+2859	I 1	1							S
98303	9.428	0.019	9.502	0.028		−0.063	0.031	T	−0.04	0.03	L	9.4131	0.0025	0.025	116		9.36	9.46		C			1							
98304	10.237	0.043	9.586	0.039		0.596	0.043	T	0.67	0.04	L	9.6201	0.0022	0.022	58		9.59	9.66		D			1							
98305	9.085	0.017	8.015	0.012		0.927	0.016	T	0.92	0.01	L	8.0661	0.0017	0.012	88		8.05	8.09					1							
98306	10.605	0.036	8.683	0.013		1.595	0.030	T	1.61	0.03	L	8.6259	0.0020	0.018	127		8.59	8.65					1							
98307	9.351	0.018	8.776	0.017	*	0.540	0.018	T	0.61	0.02	L *	8.8278	0.0023	0.015	82	*	8.80	8.85		D	19585−3004	H 1	2 C A	AB	194	0.211	0.016	1.54	0.31	
98308	6.192	0.003	6.153	0.004		0.035	0.004	T	0.05	0.00	L	6.1647	0.0004	0.006	100		6.15	6.18					1							S
98309	8.545	0.009	8.471	0.012		0.073	0.014	T	0.08	0.01	L	8.5058	0.0016	0.020	126		8.47	8.54					1							
98310	9.451	0.020	8.058	0.011		1.178	0.018	T	1.14	0.02	L	8.0817	0.0015	0.013	84		8.07	8.10					1							
98311	10.148	0.019	8.325	0.008		1.517	0.016	T	1.55	0.02	L	8.2627	0.0013	0.019	245		8.24	8.30					1							
98312	7.831	0.006	7.876	0.008		−0.038	0.009	T	−0.02	0.01	L	7.8782	0.0012	0.014	141		7.86	7.90		C			1							S
98313	9.350	0.026	7.082	0.010		1.925	0.020	G	1.94	0.09	H	6.8732	0.0041	0.022	45		6.85	6.91		U 2			1 S							S
98314	7.909	0.007	6.872	0.006		0.902	0.007	T	0.90	0.01	L	6.9257	0.0009	0.007	93		6.91	6.95		C			1							S
98315	7.770	0.010	7.334	0.010	*	0.424	0.020	G	0.49	0.02	H *	7.3269	0.0009	0.011	138	*	7.31	7.34		D	19585+3317	I 1	2 C A	AB	142	0.836	0.002	0.60	0.01	S
98316	9.891	0.019	8.651	0.011		1.050	0.021	G	1.10	0.03	I	8.6766	0.0013	0.016	158		8.65	8.71		C			1							
98317	9.859	0.016	8.682	0.010		1.009	0.015	T	0.98	0.01	L	8.7260	0.0015	0.019	164		8.69	8.76					1							
98318	9.600	0.018	8.263	0.011		1.134	0.017	T	1.10	0.02	L	8.2830	0.0015	0.012	116		8.26	8.31					1							
98319	9.041	0.018	7.879	0.012		0.997	0.017	T	0.98	0.01	L	7.9188	0.0016	0.011	80		7.90	7.94		C			1							S
98320	6.477	0.017	6.594	0.016	A	−0.090	0.006	G	−0.07	0.01	H *	6.3118	0.0007	0.007	133	*	6.30	6.32		D	19586+3806	I 1	2 C A	AB	23	1.974	0.002	0.98	0.01	S
98321	8.889	0.014	8.874	0.018		0.035	0.015	G	0.05	0.01	H	8.8643	0.0022	0.023	131		8.83	8.90					1							
98322	11.046	0.048	10.273	0.040		0.703	0.049	T	0.76	0.04	L	10.3953	0.0028	0.027	118		10.34	10.43					1							G
98323	8.214	0.008	7.862	0.008		0.330	0.013	G	0.38	0.02	H	7.9118	0.0012	0.016	180		7.89	7.94					1							S
98324	7.846	0.006	7.640	0.009		0.197	0.010	T	0.22	0.01	L	7.6912	0.0015	0.011	106		7.67	7.71		C			1							S
98325	5.430	0.003	5.500	0.003		−0.060	0.004	T	−0.04	0.00	L	5.4969	0.0005	0.007	152		5.49	5.51					1							S
98326	10.237	0.042	9.265	0.031		0.853	0.039	T	0.87	0.03	L	9.3213	0.0027	0.020	77		9.29	9.36					1							
98327	10.104	0.019	8.746	0.011		1.150	0.017	T	1.11	0.01	L	8.7815	0.0015	0.019	165		8.75	8.82					1							
98328	9.623	0.017	8.494	0.011		0.972	0.016	T	0.96	0.01	L	8.5491	0.0026	0.020	111		8.52	8.58		R			1							
98329	10.424	0.031	9.455	0.023		0.866	0.002	G	0.91	0.00	H	9.5119	0.0020	0.023	161		9.47	9.55					1							
98330	9.679	0.020	9.229	0.020		0.498	0.005	G	0.57	0.01	H	9.2935	0.0024	0.018	112		9.26	9.33		C			1							
98331	10.305	0.037	9.775	0.036		0.506	0.039	T	0.58	0.04	L	9.7964	0.0030	0.022	69		9.76	9.82					1							
98332	6.015	0.002	5.756	0.002		0.224	0.006	G	0.23	0.03	C	5.8009	0.0005	0.007	283		5.79	5.81					1							S
98333	7.413	0.005	6.421	0.004		0.868	0.005	T	0.88	0.00	L	6.4730	0.0009	0.006	102		6.46	6.48		C			1							S
98334	9.287	0.021	7.809	0.011		1.264	0.020	T	2.75	1.16	O	7.5860	0.4123	1.529	71		6.40	10.79	240.00	P 1 B			1							P
98335	9.471	0.020	9.124	0.021		0.402	0.005	G	0.47	0.01	H	9.1824	0.0023	0.018	84		9.15	9.22		C			1							
98336	8.342	0.013	6.899	0.009		1.217	0.012	T	1.18	0.01	L	6.9145	0.0012	0.007	43		6.90	6.93		C			1							S
98337	5.562	0.003	3.693	0.003		1.571	0.001	G	1.65	0.01	G	3.6215	0.0007	0.007	145		3.61	3.63		M			1							S
98338	11.009	0.050	9.571	0.024		1.213	0.044	T	1.17	0.04	L	9.5522	0.0026	0.022	129		9.51	9.59		C			1							
98339	10.227	0.031	9.418	0.026		0.715	0.031	T	0.76	0.03	L	9.4156	0.0020	0.019	119		9.38	9.45		C			1							
98340	10.078	0.028	8.465	0.014		1.351	0.025	T	1.32	0.03	L	8.4447	0.0013	0.011	83		8.42	8.46		D			1							
98341	11.220	0.083	9.222	0.023		1.656	0.069	T	1.68	0.07	L	9.1552	0.0020	0.021	66		9.13	9.19		C			1							
98342	7.718	0.009	7.437	0.009		0.266	0.013	T	0.30	0.02	L	7.4720	0.0014	0.008	74		7.45	7.48		C			1							S
98343	7.027	0.005	6.999	0.006		0.031	0.007	T	0.05	0.01	L	7.0121	0.0008	0.008	128		7.00	7.03					1 S							S
98344	10.856	0.065	9.386	0.031		1.238	0.057	T	1.20	0.06	L	9.3969	0.0029	0.024	58		9.35	9.44					1							
98345	9.815	0.035	8.477	0.020	A	1.077	0.197	G	1.04	0.16	R *	7.8003	0.0016	0.015	126	*	7.78	7.85		D	19589+4722	I 1	2 C A	BA	207	5.256	0.003	0.01	0.01	S
98346	6.577	0.002	6.398	0.002		0.164	0.003	T	0.18	0.00	L	6.4316	0.0006	0.009	290		6.42	6.45		C			1							S
98347	8.999	0.011	8.848	0.013		0.137	0.016	T	0.15	0.02	L	8.8522	0.0021	0.023	170		8.82	8.90		U			1 S							
98348	8.691	0.010	8.228	0.010		0.436	0.013	T	0.50	0.01	L	8.2756	0.0015	0.012	111		8.25	8.30					1							
98349	9.568	0.018	8.328	0.011		1.058	0.016	T	1.02	0.01	L	8.3763	0.0012	0.012	107		8.35	8.40		C			1							
98350	8.687	0.010	8.486	0.012	*	0.192	0.015	T	0.21	0.02	L *	8.5155	0.0012	0.014	118	*	8.49	8.54		D	19589+8325	H 1	2 C A	AB	187	0.729	0.018	3.21	0.08	
98351	7.640	0.008	6.392	0.005		1.051	0.002	G	1.02	0.00	H	6.4409	0.0008	0.006	80		6.43	6.45		C			1 G							S
98352	11.536	0.127	9.668	0.038		1.553	0.105	T	1.57	0.11	L	9.5860	0.0030	0.017	48		9.55	9.62		C	19589−1319	I 1	1							
98353	5.982	0.004	4.944	0.003		0.882	0.038	G	0.91	0.02	A	5.0045	0.0006	0.004	71		5.00	5.01		C			1							S
98354	11.520	0.141	10.455	0.090		0.857	0.002	G	0.90	0.00	H	10.4608	0.0043	0.029	50		10.38	10.51					1							G
98355	8.038	0.008	7.540	0.007		0.478	0.008	G	0.58	0.02	A	7.5817	0.0014	0.012	132		7.56	7.60					1							S
98356	9.705	0.022	9.030	0.019	A	0.900	0.495	G	0.71	0.04	L *	9.0412	0.0018	0.020	116	*	9.00	9.07		D	19590−5106	I 1	2 C D	AB	88	2.697	0.118	4.09	0.34	D
98357	7.893	0.007	7.586	0.009		0.249	0.007	G	0.28	0.01	H	7.6501	0.0011	0.011	107		7.63	7.67		C			1							S
98358	9.446	0.020	9.343	0.024		0.100	0.029	T	0.11	0.03	L	9.3900	0.0013	0.014	113		9.37	9.42		C			1							
98359	8.595	0.010	8.219	0.010		0.392	0.001	G	0.46	0.00	H	8.2687	0.0013	0.018	125		8.24	8.31					1							S
98360	7.104	0.005	7.285	0.007		−0.158	0.008	T	−0.16	0.01	L	7.2648	0.0009	0.009	111		7.25	7.28		C			1							S
98361	8.783	0.015	8.444	0.016		0.322	0.020	T	0.37	0.03	L	8.4912	0.0015	0.013	88		8.47	8.52		C			1							S
98362	9.960	0.022	8.361	0.011		1.340	0.019	T	1.30	0.02	L	8.3783	0.0018	0.017	140		8.34	8.41					1 X							
98363	10.403	0.050	9.195	0.031		1.033	0.046	T	1.01	0.04	L	9.2627	0.0028	0.015	42		9.24	9.28		C			1							
98364	9.528	0.019	8.962	0.017		0.534	0.019	T	0.61	0.02	L	9.0398	0.0018	0.024	112		9.00	9.08					1							
98365	8.979	0.013	8.041	0.010		0.828	0.012	T	0.85	0.01	L	8.1083	0.0012	0.012	104		8.09	8.13		C			1							S
98366	9.380	0.018	9.134	0.021		0.288	0.005	G	0.33	0.01	H	9.1426	0.0021	0.012	84		9.12	9.16		C			1							
98367	8.690	0.010	7.269	0.006		1.200	0.009	T	1.16	0.01	L	7.2886	0.0009	0.008	134		7.27	7.30		C	19591+5040	I 1	1							S
98368	10.652	0.041	10.285	0.046		0.358	0.054	T	0.42	0.06	L	10.2583	0.0037	0.031	100		10.21	10.31					1							G
98369	8.563	0.011	8.529	0.015	A						T *	8.1215	0.0024	0.020	129	−	8.09	8.15		D	19591+3533	I 1	3 C A							G
98370	9.475	0.020	9.098	0.022		0.368	0.015	G	0.43	0.02	H	9.1258	0.0019	0.018	88		9.10	9.17					1							
98371	8.518	0.008	6.988	0.004		1.285	0.007	T	1.24	0.01	L	7.0061	0.0007	0.010	248		6.99	7.02		C			1							S
98372	9.859	0.015	8.836	0.010		0.891	0.013	T	0.90	0.01	L	8.8936	0.0016	0.021	222		8.86	8.93					1							
98373	8.916	0.015	8.344	0.014		0.565	0.006	G	0.64	0.01	H	8.3958	0.0015	0.014	81		8.37	8.43		C			1							S
98374	9.162	0.015	9.152	0.020		0.052	0.006	G	0.06	0.01	H	9.1750	0.0020	0.018	116		9.15	9.22		C			1							
98375	6.081	0.003	5.717	0.003		0.345	0.004	T	0.40	0.01	L	5.7644	0.0006	0.005	161		5.75	5.77		C			1 X							S
98376	11.514	0.072	10.028	0.031		1.251	0.062	T	1.21	0.06	L	10.2168	0.0442	0.332	161		9.69	10.45	7.82	P 1 A			1							G
98377	7.898	0.009	6.633	0.005		1.078	0.008	T	1.04	0.01	L	6.6870	0.0009	0.009	81		6.67	6.70		C			1							S
98378	8.108	0.010	7.790	0.011		0.272	0.003	G	0.31	0.00	H	7.8489	0.0014	0.012	116		7.83	7.87		C			1							S
98379	5.915	0.003	6.098	0.005		−0.183	0.007	G	−0.19	0.01	H	6.0782	0.0026	0.022	119		6.05	6.11	2.61	P 1 A			1							S
98380	10.706	0.048	9.438	0.026		1.080	0.043	T	1.04	0.04	L	9.5200	0.0024	0.015	84		9.48	9.56					1							
98381	11.281	0.066	9.969	0.034		1.110	0.060	T	1.19	0.08	L	10.0338	0.0035	0.029	128		9.98	10.08					1							G
98382	7.000	0.005	6.825	0.006		0.168	0.007	T	0.18	0.01	L	6.8632	0.0008	0.008	120		6.84	6.87		C			1							S
98383	6.143	0.004	5.950	0.003	*	0.185	0.005	T	0.20	0.01	L *	5.9855	0.0011	0.007	106	*	5.97	6.00		D	19593+4546	H 1	2 C A	AB	207	0.324	0.012	2.66	0.09	S
98384	8.049	0.007	7.573	0.006		0.437	0.005	G	0.49	0.02	A	7.6272	0.0012	0.016	152		7.60	7.65					1							S
98385	7.609	0.011	6.297	0.007		1.129	0.006	G	1.09	0.01	H	6.3307	0.0007	0.006	48		6.32	6.34		D			1							S
98386	10.112	0.019	9.546	0.018		0.531	0.015	G	0.60	0.02	H	9.5954	0.0022	0.028	218		9.55	9.66					1							G
98387	9.258	0.023	7.973	0.014		1.093	0.021	T	1.05	0.02	L	8.0267	0.0009	0.010	54		8.01	8.05		D			1							
98388	9.978	0.040	9.677	0.046		0.287	0.065	T	0.33	0.08	L	9.6596	0.0032	0.022	84		9.62	9.69		C			1							
98389	8.320	0.009	7.894	0.008		0.443	0.001	G	0.51	0.00	H	7.9460	0.0010	0.012	157		7.92	7.97		C			1							S
98390	10.194	0.028	9.562	0.024	*	0.578	0.015	G	0.65	0.01	H *	9.5614	0.0031	0.027	152	*	9.50	9.62		D	19594+2636	I 1	2 C A	AB	333	1.012	0.017	2.16	0.07	G
98391	10.185	0.028	9.148	0.018		0.911	0.015	G	0.91	0.01	H	9.2086	0.0019	0.021	142		9.16	9.24		C			1							
98392	8.577	0.009	8.283	0.010		0.266	0.011	G	0.30	0.01	H	8.3448	0.0016	0.016	156		8.32	8.37		C			1							
98393	9.354	0.012	9.321	0.016		0.035	0.019	T	0.05	0.01	L	9.3768	0.0023	0.033	211		9.33	9.44		U			1 S							G
98394	9.003	0.012	8.550	0.012		0.427	0.016	T	0.49	0.02	L	8.6016	0.0014	0.014	115		8.58	8.63		C			1							
98395	9.792	0.018	9.258	0.018		0.546	0.015	G	0.62	0.01	H	9.2928	0.0019	0.024	202		9.25	9.33					1							
98396	10.275	0.025	10.140	0.034		0.130	0.040	T	0.14	0.04	L	10.1563	0.0034	0.039	167		10.10	10.23					1							G
98397	8.876	0.009	8.350	0.009	A	0.503	0.015	G	0.58	0.02	H	8.4042	0.0068	0.021	187	A	8.37	8.44		U	19595+2443	I 1	2 C A	AB	187	14.542	0.026	2.80	0.09	
98398	8.066	0.013	7.685	0.012		0.391	0.015	G	0.46	0.02	H	7.7104	0.0014	0.011	62		7.69	7.75		C			1 G							S
98399	7.064	0.004	6.806	0.005		0.246	0.006	T	0.28	0.01	L	6.8424	0.0009	0.008	123		6.83	6.85		C			1							S
98400	9.113	0.017	9.037	0.022		0.110	0.015	G	0.12	0.01	H	9.0659	0.0017	0.014	72		9.04	9.10			19596+1154	I 1	1							

$19^h\ 59^m\ 36^s$ - $20^h\ 00^m\ 40^s$ 1978

98401 - 98500

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)											Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ		F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas			mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
98401	19 59 36.69	+76 28 53.5	6.20	1	G	299.902 891 38	+76.481 537 07		6.21	−26.86	−59.51	0.48	0.46	0.50	0.54	0.50	− 7	−14	+10	+ 6	+ 8	− 8	+ 8	+15	− 5	+ 5		0	0.23
98402 H	19 59 39.13	+31 49 35.4	6.64		H	299.913 030 66	+31.826 487 93	A	5.40	7.34	6.66	0.51	0.60	0.73	0.56	0.59	− 9	−11	+ 7	+29	+ 0	− 4	− 4	+16	+16	−11		2	0.68
98403	19 59 39.20	+65 12 50.8	9.35		H	299.913 336 66	+65.214 120 55		9.25	5.68	−37.13	0.72	0.76	0.85	0.61	1.01	+15	+12	−10	−20	+22	+10	+25	+ 9	+27	+50		2	0.48
98404	19 59 41.18	−71 13 08.3	8.68		H	299.921 590 23	−71.218 962 94		0.17	−5.19	−33.66	0.68	0.84	1.22	0.70	0.91	−36	− 5	− 4	+ 5	+ 4	−12	+ 4	+ 5	− 5	−41		0	−0.38
98405	19 59 41.34	+69 24 32.6	7.45		H	299.922 257 84	+69.409 046 90		5.65	−17.43	−25.94	0.52	0.50	0.54	0.58	0.55	+ 5	−11	+ 5	+ 6	+14	− 6	+16	− 4	+ 0	+24		0	0.79
98406	19 59 41.52	−01 58 13.2	6.71		G	299.922 983 32	−01.970 328 91		10.34	3.40	−29.90	0.95	0.62	0.97	1.13	0.85	−12	−36	−10	+17	− 8	+ 3	− 8	+29	+ 0	−15		0	0.17
98407	19 59 41.74	+43 36 16.2	8.56		H	299.923 922 57	+43.604 500 70		2.32	3.89	0.26	0.57	0.59	0.71	0.63	0.63	− 5	− 6	− 3	+ 5	+ 1	− 6	+ 3	−17	+21	+12		3	−1.28
98408	19 59 41.79	−70 31 53.6	8.32		H	299.924 123 47	−70.531 565 93		1.80	30.25	−37.22	0.60	0.69	1.06	0.67	0.78	−24	− 6	+13	+12	+ 6	−12	+ 8	+ 4	− 8	−18		0	1.96
98409 H	19 59 41.80	+30 54 50.2	7.55		H	299.924 170 10	+30.913 937 98	A	1.78	−1.09	−3.22	0.74	0.84	1.08	0.83	0.83	−11	− 6	+12	+14	−18	−15	−14	− 2	+ 9	+ 3		2	1.01
98410	19 59 42.27	−01 01 38.4	8.88		H	299.926 105 35	−01.027 327 04		15.62	24.25	−93.15	1.39	1.30	1.68	2.18	1.82	+34	− 6	−40	+23	+17	+ 6	+31	+53	−16	+ 5		0	−1.70
98411	19 59 42.58	+33 59 28.0	11.44	3	H	299.927 398 76	+33.991 109 45		−8.96	−4.84	−12.21	2.66	3.35	3.81	3.06	4.25	− 8	−27	− 4	−34	+10	−15	+17	−69	−24	− 7		5	2.99
98412	19 59 44.17	−35 16 34.5	4.37		G	299.934 059 65	−35.276 244 33		5.28	6.02	−25.15	0.83	0.47	0.90	0.90	0.60	+ 6	−46	− 3	+ 9	− 9	+23	− 6	−10	− 2	+11		0	−0.99
98413	19 59 45.94	−20 12 37.1	9.20		H	299.941 430 10	−20.210 309 80		27.79	−19.65	−41.27	1.36	0.68	1.47	1.65	0.84	+58	−42	−13	+12	+14	− 8	+16	− 5	− 5	+77		2	1.27
98414	19 59 46.60	−71 10 08.2	8.86		H	299.944 181 68	−71.168 943 02		10.90	11.11	−76.35	0.67	0.81	1.18	0.70	0.89	−35	+ 0	+ 6	+ 4	+ 2	− 4	+ 2	+ 3	− 6	−41		1	1.84
98415	19 59 47.17	−50 51 20.9	7.73		H	299.946 533 76	−50.855 810 54		3.49	−13.97	−4.41	0.97	0.55	1.02	1.36	0.96	−22	−20	− 1	+29	− 9	−11	−11	+17	+10	−24		0	−0.19
98416 H	19 59 47.49	−09 57 26.2	5.87		H	299.947 872 55	−09.957 284 08	*	40.75	−246.73	−392.36	2.03	1.37	1.35	2.31	1.63	− 7	+ 0	−28	+45	−15	+12	− 9	+49	− 5	−36	17	1.19
98417	19 59 47.85	+04 00 43.4	8.52		H	299.949 375 69	+04.012 050 34		2.70	5.82	2.58	1.27	0.99	1.39	1.75	1.55	+55	−20	−28	+38	+14	+23	+36	+69	−19	+14		4	1.08
98418	19 59 49.11	+35 18 33.6	9.02		H	299.954 612 39	+35.309 340 17		1.40	−6.00	−10.75	0.72	0.83	1.04	0.83	0.83	− 2	− 8	+11	+ 6	− 2	− 3	+ 1	−25	−13	+ 5		0	−0.54
98419	19 59 49.54	+63 46 21.1	7.89		H	299.956 413 02	+63.772 520 62		3.54	−50.97	−36.05	0.64	0.63	0.70	0.73	0.83	+16	−14	−12	+ 2	+16	+ 9	+16	+ 2	+18	+32		3	−0.30
98420	19 59 50.72	−42 58 34.2	8.10		H	299.961 318 11	−42.976 167 89		2.83	16.04	−34.23	1.09	0.69	1.14	1.59	1.24	+17	− 6	− 7	+10	−25	+ 5	−35	−25	+ 3	− 1		0	0.37
98421	19 59 51.28	−34 41 51.5	5.30		G	299.963 666 59	−34.697 631 03		20.81	108.71	−69.13	0.80	0.46	0.88	0.86	0.63	+12	−45	+ 6	+ 0	− 9	+17	− 1	−18	−16	+20		0	1.26
98422	19 59 52.49	+31 50 49.2	8.15	2	H	299.968 716 88	+31.847 004 10		0.30	8.24	13.28	0.52	0.63	0.83	0.61	0.65	− 7	− 3	+ 4	+26	+ 3	− 2	+ 2	+ 4	+ 6	− 9		0	−0.66
98423	19 59 53.13	+18 20 24.1	8.61		H	299.971 377 17	+18.340 017 43		0.61	−0.80	−5.59	0.84	0.75	1.15	1.10	1.23	+11	+10	− 5	−14	−27	− 4	−33	− 9	−29	+30		0	−0.29
98424	19 59 53.78	+52 08 59.3	7.12	2	H	299.974 095 68	+52.149 815 65		2.45	4.02	7.47	0.53	0.51	0.56	0.59	0.51	−19	− 6	+ 3	−22	+12	− 6	+11	−18	+10	−10		1	−0.59
98425	19 59 55.20	+37 02 34.4	5.15	1	H	299.979 979 79	+37.042 886 02		2.07	0.41	−0.24	0.35	0.43	0.50	0.36	0.38	−11	− 5	+14	−10	+ 2	− 9	+ 4	−35	+ 8	− 6		1	−1.22
98426	19 59 55.36	−60 01 16.8	7.52		H	299.980 648 26	−60.021 331 22		4.08	17.72	−7.14	0.71	0.63	0.99	0.79	0.83	+28	−24	− 4	+53	+ 3	−13	+20	− 8	−20	+50		0	1.99
98427	19 59 55.42	−52 10 46.6	9.50		G	299.980 901 65	−52.179 609 68		11.00	−70.69	19.88	1.11	0.76	1.45	1.50	1.33	− 5	−16	−14	−26	+30	− 1	+31	− 2	+15	+ 5		0	0.81
98428	19 59 55.78	+19 53 22.2	7.66		H	299.982 403 27	+19.889 512 30		0.68	−0.46	−5.38	0.61	0.50	0.85	0.71	0.56	−13	+ 0	+ 0	−19	− 3	+19	− 3	−24	− 7	−21		0	−0.47
98429	19 59 57.69	+00 38 49.0	8.87		H	299.990 361 89	+00.646 954 15		4.78	14.81	−17.21	4.45	3.27	4.83	5.94	4.32	+ 3	−27	−22	− 3	+ 3	− 5	+ 2	+ 4	+ 4	−12		0	
98430	19 59 58.04	+19 10 44.7	11.13	2	H	299.991 818 44	+19.179 081 32		2.57	−0.64	−1.96	2.91	2.85	4.14	3.59	3.95	+17	− 4	−13	−26	− 3	− 5	− 6	− 5	−11	+32		0	
98431	19 59 58.35	−48 58 31.2	8.55		H	299.993 115 70	−48.975 341 53		14.06	−57.63	19.99	1.16	0.67	1.18	1.55	1.21	+ 4	−28	+ 6	+39	+ 8	+ 9	+10	+27	+ 4	+24		0	0.09
98432	19 59 59.41	−40 48 20.8	8.46		H	299.997 536 22	−40.805 770 08		7.41	23.63	−0.26	1.18	0.69	1.34	1.87	1.32	+ 5	−10	+ 2	+ 0	+ 0	−14	− 4	−13	+14	−14		0	1.46
98433	19 59 59.62	+06 56 34.4	8.07		H	299.998 405 56	+06.942 885 00		8.68	15.64	16.23	0.80	0.66	1.15	1.04	0.84	+37	+ 4	−26	+45	+ 5	+36	+13	+44	−18	+21		0	0.37
98434	20 00 00.34	+28 44 06.2	9.82		H	300.001 403 46	+28.735 042 06		2.03	5.07	−1.54	0.80	1.18	1.64	0.91	1.19	−11	+ 7	− 6	+11	+19	− 8	+20	−18	+ 1	+ 4		2	1.70
98435	20 00 01.71	+50 39 30.8	9.13		H	300.007 124 34	+50.658 564 37		6.80	−8.96	−17.08	0.71	0.70	0.80	0.77	0.79	− 6	−13	+ 4	−11	+ 4	− 3	+ 4	− 7	+ 2	− 4		0	1.23
98436	20 00 01.94	+25 10 32.4	7.94		H	300.008 100 78	+25.175 669 54		3.06	4.87	8.85	0.47	0.55	0.86	0.52	0.65	+ 6	−11	+ 1	+26	− 9	+ 8	− 5	−10	− 3	+17		2	−1.24
98437	20 00 02.83	+32 51 06.2	8.31		H	300.011 786 50	+32.851 708 91		1.90	−49.04	−5.28	0.56	0.65	0.88	0.61	0.69	−20	+ 6	+ 2	+ 6	− 6	−22	− 4	− 8	+12	−17		0	−0.80
98438	20 00 03.31	+17 30 59.5	5.33	2	H	300.013 780 61	+17.516 540 77		4.37	1.73	−12.22	0.49	0.47	0.73	0.62	0.69	− 7	− 9	− 5	+ 6	+ 8	+ 1	+ 7	+ 7	+ 2	+ 7		0	0.36
98439	20 00 03.98	+68 26 12.2	8.02		H	300.016 566 93	+68.436 721 83		4.44	6.63	18.28	0.57	0.58	0.61	0.73	0.71	+ 2	−12	+16	+ 9	+16	+ 5	+15	+ 9	− 1	+14		1	0.72
98440	20 00 06.10	+22 42 17.9	8.94		G	300.025 424 63	+22.704 985 95		8.98	62.08	−43.13	0.89	0.74	1.17	1.05	0.83	−34	−19	− 4	+ 3	−17	+ 9	−18	− 6	+ 3	−56		0	−1.11
98441	20 00 07.06	+32 47 22.9	7.29		H	300.029 404 65	+32.789 682 31		1.76	0.53	−3.00	0.44	0.49	0.66	0.44	0.49	−14	+ 3	+ 9	+ 6	− 1	− 9	+ 0	− 8	+ 5	−10		0	−0.13
98442	20 00 08.16	+07 45 38.2	7.24		H	300.034 007 80	+07.760 611 45		19.79	33.39	1.96	0.74	0.59	1.04	0.89	0.73	+35	−21	−33	+22	+ 1	+26	+15	+39	−24	+17		0	0.26
98443	20 00 08.29	+17 36 38.6	6.98	1	H	300.034 536 42	+17.610 725 14		2.56	4.10	11.46	0.55	0.56	0.85	0.71	0.80	+ 2	− 6	+ 1	− 3	+ 7	+ 3	+ 6	+16	+ 0	+13		0	0.47
98444	20 00 08.33	−50 13 00.2	6.67		H	300.034 722 41	−50.216 731 89		26.01	46.99	10.54	0.82	0.47	0.91	1.12	0.77	−14	−35	−15	+28	+ 2	−23	− 3	+10	+ 7	−26		0	1.08
98445	20 00 10.39	+38 46 39.6	8.71		H	300.043 307 97	+38.777 665 67		5.79	10.17	−9.60	0.67	0.71	0.89	0.73	0.72	− 8	+ 1	+ 9	+13	+11	−12	+13	− 6	+18	− 3		0	−0.79
98446	20 00 10.60	+36 24 55.4	10.21		H	300.044 160 12	+36.415 385 22	B	−1.05	18.27	10.53	20.21	19.58	8.72	7.41	8.27	− 2	− 4	+16	+ 1	+ 8	−14	+11	− 6	+ 7	+ 1		1	0.51
98447	20 00 11.06	−69 52 54.6	10.51	3	H	300.046 063 59	−69.881 825 51		−1.41	−2.97	−6.58	0.85	1.11	1.79	1.10	1.25	−33	−22	+18	+30	+20	−24	+25	−24	− 4	−25		2	0.05
98448	20 00 11.43	+36 24 50.8	7.01		G	300.047 628 21	+36.414 117 72	A	6.15	15.58	6.40	0.81	0.94	0.88	0.78	0.87	− 2	− 5	+17	+ 5	+ 9	−13	+12	− 4	+ 3	+ 3		1	0.51
98449	20 00 11.72	−48 44 54.1	7.67		H	300.048 824 71	−48.748 360 21		12.08	82.30	−28.95	0.97	0.55	0.96	1.27	0.95	−26	−21	+ 4	+41	−26	+ 9	−27	+21	− 2	−15		2	0.94
98450	20 00 12.50	+47 55 57.7	8.34		H	300.052 100 16	+47.932 690 54		1.35	4.50	−1.71	0.66	0.56	0.71	0.77	0.61	− 1	−11	+ 1	+23	+13	−19	+14	+ 2	+ 6	+ 8		1	1.25
98451	20 00 12.55	−46 58 58.2	8.81		H	300.052 309 80	−46.982 846 17		17.10	14.79	−154.40	1.19	0.65	1.47	2.12	1.36	−14	−10	+ 0	+31	− 4	−27	−10	+ 8	+23	−33		0	−0.27
98452 H	20 00 12.79	+14 54 10.5	8.62		G	300.053 275 22	+14.902 921 43	A	6.03	−19.77	−12.95	2.05	1.54	1.62	1.47	1.44	+41	− 4	−11	−18	− 6	+ 8	− 4	−14	+ 9	+40		0	1.54
98453 H	20 00 12.83	−56 16 36.7	9.04		H	300.053 449 91	−56.276 854 87	A	6.29	45.57	−112.11	1.71	1.38	2.06	2.32	1.92	+24	−16	+15	−13	+20	+ 5	+18	+ 2	−11	+47		0	0.66
98454	20 00 13.22	−30 40 38.9	9.50		H	300.055 089 43	−30.677 462 97		3.09	1.01	−20.61	1.44	0.94	1.85	2.02	1.86	+27	−16	+ 4	+ 6	− 1	+21	+ 4	− 3	−40	+19		0	0.40
98455	20 00 13.48	+07 17 16.5	7.72	1	H	300.056 158 52	+07.287 926 75		1.28	7.24	2.71	0.87	0.63	1.03	1.11	0.80	+31	−19	−24	+55	+ 6	+ 9	+ 9	+42	−16	+16		0	0.09
98456	20 00 13.65	+37 29 23.2	9.11		H	300.056 859 73	+37.489 789 75		1.63	−9.99	16.40	0.76	0.83	1.06	0.92	0.86	− 8	−10	+18	− 4	+ 2	+ 2	+ 4	−24	+ 5	+ 5		0	0.03
98457 H	20 00 14.74	−55 22 25.0	9.07		H	300.061 403 47	−55.373 611 40	A	12.30	−12.11	−0.65	3.18	2.40	2.03	2.36	1.72	+72	− 6	− 5	−14	+10	−14	+ 6	−14	− 1	−25		0	2.63
98458	20 00 15.36	+26 11 16.5	6.49		H	300.063 993 27	+26.187 904 38		2.21	1.42	−7.01	0.43	0.46	0.70	0.51	0.52	− 2	− 6	− 5	+13	−10	− 1	−10	−14	+ 3	− 2		1	0.92
98459	20 00 15.47	+42 13 04.4	7.12		H	300.064 441 78	+42.217 879 28		2.49	3.37	−6.32	0.47	0.47	0.59	0.50	0.48	− 2	− 2	+ 6	− 4	+11	−10	+11	− 7	+22	+ 2		1	1.39
98460 H	20 00 15.54	+29 55 14.3	7.42		G	300.064 742 84	+29.920 639 03	A	5.38	6.98	−5.67	0.73	0.90	1.21	0.82	0.89	−16	−10	+25	+16	+ 7	+16	+ 7	+ 3	+ 8	+ 0		3	0.03
98461	20 00 15.92	−37 42 06.2	5.95		H	300.066 327 39	−37.701 716 69		10.33	19.54	−1.15	0.73	0.46	0.81	0.91	0.57	+ 7	−20	−21	− 6	− 4	+20	− 1	−20	+ 9	+ 4		0	0.29
98462	20 00 16.40	−52 41 12.5	7.73		H	300.068 335 93	−52.686 808 04		3.30	1.36	−14.29	0.86	0.62	1.13	1.14	1.00	−13	− 3	−22	−39	+36	−12	+33	−16	+34	− 7		0	2.17
98463	20 00 16.63	−12 59 40.9	9.07		H	300.069 305 72	−12.994 703 87		6.89	37.15	−95.05	1.22	0.99	1.56	1.41	1.20	+26	−29	−51	−20	−15	+23	+ 3	+ 9	−26	+12		0	2.34
98464	20 00 17.58	−08 40 07.7	8.52		H	300.073 251 58	−08.668 811 42		2.58	−12.89	−44.39	1.16	0.95	1.40	1.43	1.28	+26	−19	−35	−10	+20	+31	+37	+42	−18	+21		0	0.96
98465 H	20 00 19.03	+35 21 30.2	7.66		G	300.079 298 23	+35.358 378 61	*	0.41	−1.12	−7.85	0.51	0.63	0.77	0.62	0.63	− 9	−12	+13	+ 8	− 8	+11	− 2	− 2	+21	− 9	+ 4	1	2.41
98466	20 00 19.12	+33 15 51.1	12.08		G	300.079 684 95	+33.264 206 11		−0.24	−4.76	−1.25	1.95	2.42	2.97	2.34	2.55	−17	+ 6	− 5	+15	+18	−10	+16	−28	+ 5	−17		0	0.27
98467	20 00 19.24	+29 49 17.5	7.78		H	300.080 151 31	+29.821 517 36		3.92	3.09	−0.41	0.47	0.60	0.92	0.55	0.62	−17	−18	+26	+17	+ 3	− 6	+ 7	−12	− 1	− 2		0	0.40
98468 H	20 00 19.64	+13 06 03.0	7.49		G	300.081 822 21	+13.100 844 12	A	5.33	−4.40	2.27	1.20	0.91	1.16	1.20	0.80	+23	− 1	− 1	+44	+19	+11	+15	+15	− 6	+24		2	0.04
98469	20 00 20.10	+71 54 00.7	7.80		H	300.083 762 31	+71.900 190 22		1.71	−6.42	−11.59	0.61	0.58	0.64	0.70	0.65	+ 4	−35	+ 9	−25	+11	+ 6	− 2	+ 6	+ 5	+40		2	1.40
98470	20 00 20.16	−33 42 09.9	5.65		G	300.083 995 17	−33.702 748 70		47.90	130.79	−289.30	1.05	0.52	1.06	1.35	0.69	+14	−22	−25	−39	+ 9	−11	+11	−25	−10	+ 0		0	2.00
98471 H	20 00 20.32	−23 57 22.2	8.20		G	300.084 684 82	−23.956 169 36	A	4.70	19.34	−27.67	1.85	1.23	1.79	1.72	1.14	+65	−20	−25	− 1	+ 5	+ 4	+ 3	− 9	+19	+44		1	1.02
98472	20 00 20.70	−44 40 50.0	9.13		G	300.086 233 21	−44.680 565 27		2.57	16.85	−12.27	1.28	0.63	1.30	1.85	1.17	−13	−29	+ 7	+31	+ 8	+21	+13	+21	− 6	−12		0	−2.20
98473	20 00 20.91	+22 26 24.2	8.10		H	300.087 136 11	+22.440 055 32		5.55	3.72	−6.13	0.66	0.53	0.90	0.75	0.59	−30	− 7	−12	− 2	−15	+10	−18	−14	+ 3	−58		0	1.10
98474	20 00 21.26	+03 19 55.1	6.70		H	300.088 564 67	+03.331 974 13		1.51	0.74	−15.56	0.90	0.58	1.07	1.18	0.91	+36	−33	−17	+16	− 3	+22	+14	+52	+ 5	−15		0	−0.20
98475	20 00 21.68	−36 04 50.4	9.05		H	300.090 325 97	−36.080 668 23		7.40	81.44	−47.28	1.23	0.75	1.37	1.43	0.99	+31	−30	− 8	+13	+ 6	+23	+11	− 2	− 8	+28		0	−0.78
98476	20 00 22.05	+01 41 53.6	7.43		H	300.091 879 97	+01.698 216 71		−0.73	−4.90	−3.59	0.89	0.60	1.10	1.56	1.00	+26	−14	−31	+ 3	−21	+48	− 3	+36	−15	− 2		0	−0.89
98477	20 00 22.77	−20 51 25.3	8.97		H	300.094 882 50	−20.857 029 82		2.82	5.42	−9.68	1.16	0.62	1.26	1.20	0.63	+50	−38	−10	+13	+20	− 2	+20	− 8	+ 2	+71		3	−0.55
98478	20 00 23.11	−66 56 56.0	5.75		G	300.096 277 12	−66.948 887 73		15.09	−3.67	−194.28	0.51	0.49	0.74	0.63	0.57	−14	− 4	−18	+20	+16	−11	+18	−18	+12	−40		1	−0.40
98479	20 00 24.69	−25 53 51.3	8.90		H	300.102 887 73	−25.897 589 39		2.43	−0.30	−26.10	1.09	0.70	1.22	1.29	0.86	+33	−17	+ 1	− 1	+12	+ 9	+11	+ 8	+42		0	−0.42
98480 H	20 00 25.08	−33 01 20.6	9.61		H	300.104 508 75	−33.022 390 02	*	5.83	11.01	−6.31	1.54	0.84	1.54	2.23	1.47	+18	− 2	− 6	−42	+ 0	−17	+ 3	−28	−18	+12		0	0.87
98481	20 00 25.29	−37 43 51.1	9.43	2	H	300.105 375 05	−37.730 870 78		2.01	8.23	2.87	1.47	0.87	1.57	1.71	1.09	+20	−34	−23	− 2	+ 0	+ 6	+ 5	−15	− 8	+15		0	−0.90
98482	20 00 25.40	−49 21 03.4	6.18		H	300.105 822 08	−49.350 939 32		10.80	−76.61	−2.94	0.79	0.42	0.80	0.95	0.70	−21	−38	+ 5	+37	−18	+15	−14	+18	− 9	−11		2	−0.23
98483	20 00 25.85	+61 04 33.4	8.16		H	300.107 725 15	+61.075 955 42		5.45	12.62	12.13	0.58	0.53	0.59	0.59	0.56	+ 8	+10	+ 4	+25	+ 5	−10	+ 6	+ 3	+ 6	+ 8		0	0.04
98484	20 00 26.12	−55 34 59.2	8.48		H	300.108 832 82	−55.583 101 03		2.25	9.26	−8.50	0.76	0.65	1.14	1.28	1.00	+15	− 7	−12	−15	+21	−16	+18	−19	+ 7	+14		1	1.52
98485	20 00 26.47	−43 02 36.0	6.11	2	H	300.110 282 67	−43.043 331 51		2.96	22.07	12.32	0.85	0.49	0.90	1.31	0.92	+ 2	− 7	− 3	+21	−18	+ 0	−24	− 5	− 4	− 9		0	0.22
98486	20 00 28.03	+46 39 56.5	9.59		H	300.116 801 75	+46.665 701 82		0.61	10.00	−0.35	0.80	0.77	0.92	0.87	0.82	+ 4	−18	+ 6	+ 4	+18	+ 2	+19	+ 0	− 6	+10		1	−0.32
98487 H	20 00 29.34	+08 43 32.2	9.22		G	300.122 236 52	+08.725 609 18	A	0.71	5.59	4.32	2.04	1.70	2.26	2.57	2.30	+45	+ 1	−10	+30	+12	+23	+17	+23	+ 5	+50		5	−0.17
98488	20 00 29.89	−15 53 12.8	7.20		G	300.124 550 71	−15.886 885 24		13.13	−31.36	−26.22	0.89	0.67	0.99	1.07	0.86	+29	−31	−39	+ 6	+16	+ 9	+27	+40	− 8	+10		0	−0.99
98489	20 00 30.96	−19 51 25.4	7.74		H	300.128 997 14	−19.857 060 19		3.01	−7.98	0.14	0.93	0.56	1.03	1.13	0.63	+44	−24	− 5	− 2	+ 2	+15	+ 4	−23	+14	+66		0	0.65
98490	20 00 32.98	+39 12 26.6	7.21		H	300.137 411 63	+39.207 377 98		3.14	3.49	−0.75	0.53	0.51	0.69	0.59	0.62	− 7	+ 4	+ 4	+17	+ 7	+ 4	+ 7	− 6	+ 0	− 8		1	−0.10
98491	20 00 33.33	+52 45 11.4	8.71		H	300.138 888 42	+52.753 166 46		2.34	9.67	7.96	0.71	0.63	0.76	0.93	0.69	+ 0	− 8	− 4	− 6	+ 2	+11	+ 0	−11	+23	+14		1	−0.58
98492	20 00 33.83	+09 21 14.4	11.59		G	300.140 950 94	+09.354 010 58		9.09	−193.99	−196.69	2.48	1.91	3.16	3.49	2.41	+42	− 5	−15	+32	+13	+13	+15	+25	+ 2	+35		0	1.71
98493	20 00 34.11	+50 39 22.9	8.24		H	300.142 132 44	+50.656 348 52		2.05	−11.42	−22.90	0.60	0.61	0.69	0.66	0.66	− 6	− 9	+ 0	−13	+11	− 6	+10	−13	+13	− 4		0	0.88
98494	20 00 34.30	−43 41 51.4	10.11		H	300.142 932 25	−43.697 611 14		3.36	38.65	−48.17	1.83	0.96	2.04	2.43	1.84	+ 3	−37	+ 1	+23	+ 5	−15	+ 7	+ 6	− 1	+ 3		0	−0.31
98495	20 00 35.39	−72 54 36.7	3.97		H	300.147 472 26	−72.910 184 43		30.73	80.54	−131.34	0.36	0.42	0.55	0.40	0.47	−19	−21	− 6	− 7	+ 9	− 2	+10	−17	− 8	−27		1	1.26
98496	20 00 35.90	−28 35 11.2	7.00		H	300.149 592 62	−28.586 431 39		6

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
98401						1.610	0.001	G	2.09	0.30	K	6.2864	0.0019	0.018	98		6.26	6.32		U	19594+7629	I 1	1							S
98402	6.648	0.004	6.647	0.004	A	0.000	0.495	G	0.01	0.00	L *	6.6449	0.0007	0.007	161	*	6.63	6.66		D	19597+3150	I 1	2 C A	AB	342	1.119	0.015	3.20	0.06	S
98403	9.984	0.028	9.423	0.027		0.525	0.035	T	0.60	0.04	L	9.4698	0.0020	0.015	91		9.43	9.50		C			1							
98404	10.618	0.030	8.853	0.012		1.471	0.026	T	1.48	0.04	L	8.8065	0.0019	0.025	180		8.77	8.86					1							
98405	7.538	0.006	7.460	0.007		0.077	0.009	T	0.09	0.01	L	7.4836	0.0010	0.011	117		7.46	7.51					1							S
98406	6.810	0.007	6.729	0.008		0.066	0.004	G	0.08	0.00	H	6.7460	0.0010	0.005	45		6.73	6.76					1							S
98407	8.559	0.009	8.573	0.012		−0.008	0.014	T	0.01	0.01	L	8.5686	0.0017	0.017	133		8.54	8.61					1							
98408	9.759	0.014	8.441	0.009		1.119	0.013	T	1.08	0.01	L	8.4908	0.0015	0.017	208		8.46	8.52		C			1							
98409	7.594	0.007	7.565	0.008	A	−0.200	0.495	G	0.03	0.01	L *	7.5613	0.0012	0.014	159	*	7.54	7.59			19597+3055	I 1	2 C B	AB	227	2.635	0.027	3.47	0.13	
98410	9.584	0.029	8.960	0.027		0.581	0.035	T	0.65	0.03	L	9.0073	0.0040	0.022	44		8.97	9.05		C			1							
98411						1.750	0.510	G	3.46	0.98	K	11.1816	0.0448	0.381	104		10.94	12.77		U 2 B			1 G							D
98412	4.174	0.003	4.339	0.003		−0.150	0.003	G	−0.15	0.02	A	4.3114	0.0005	0.004	79		4.30	4.32		C			1							S
98413	10.378	0.028	9.323	0.018		0.920	0.015	G	0.96	0.01	I	9.3434	0.0015	0.016	162		9.31	9.38		C			1							
98414	9.506	0.013	8.912	0.012		0.555	0.013	T	0.63	0.01	L	8.9800	0.0018	0.024	180		8.94	9.02					1							
98415	9.321	0.018	7.876	0.010		1.219	0.016	T	1.18	0.02	L	7.8920	0.0017	0.015	107		7.86	7.92					1							S
98416	6.582	0.008	5.928	0.006	*	0.598	0.007	T	0.67	0.01	L *	5.9969	0.0007	0.006	56	*	5.98	6.00		D	19598−0957	I 1	2 C A	AB	137	0.204	0.012	1.61	0.16	S
98417	9.931	0.026	8.615	0.015		1.118	0.023	T	1.08	0.02	L	8.6900	0.0019	0.016	104		8.66	8.72					1							
98418	9.397	0.015	9.040	0.016		0.338	0.020	T	0.39	0.03	L	9.0969	0.0019	0.019	122		9.07	9.13					1							
98419	9.154	0.015	7.986	0.010		1.002	0.014	T	0.98	0.01	L	8.0566	0.0015	0.013	105		8.04	8.08		C			1							S
98420	10.010	0.031	8.302	0.014		1.426	0.027	T	1.41	0.04	L	8.2418	0.0015	0.014	80		8.22	8.26		C			1							
98421	5.516	0.003	5.326	0.003		0.170	0.000	G	0.19	0.00	H	5.3595	0.0007	0.005	89		5.35	5.37		C	19599−3442	I 1	1							S
98422	10.315	0.028	8.378	0.011		1.642	0.025	T	2.37	0.06	O	8.1924	0.0052	0.045	160		8.13	8.28	26.80	P 1 A			1							
98423	8.596	0.014	8.614	0.018		−0.012	0.021	T	0.01	0.02	L	8.6155	0.0023	0.017	86		8.59	8.65		C			1							S
98424	9.038	0.013	7.385	0.007		1.408	0.012	T	3.41	0.04	O	6.8684	0.0138	0.119	107		6.73	7.06		U 2 C			1 S							S
98425	4.972	0.002	5.125	0.003		−0.133	0.003	T	−0.12	0.00	L	5.1062	0.0008	0.009	141		5.09	5.12		M			1							S
98426	9.449	0.015	7.681	0.007		1.473	0.013	T	1.49	0.02	L	7.6531	0.0015	0.013	141		7.63	7.67		C			1							S
98427	10.241	0.024	9.560	0.021		0.561	0.002	G	0.63	0.00	H	9.6404	0.0019	0.022	138		9.60	9.68		C			1							
98428	7.561	0.006	7.644	0.008		−0.060	0.015	G	−0.04	0.01	H	7.6425	0.0013	0.014	140		7.62	7.67					1							S
98429	10.559	0.064	8.979	0.027		1.250	0.015	G	1.21	0.01	K	9.0297	0.0024	0.018	47		8.99	9.05					1 X							
98430											T	11.2204	0.0220	0.166	86		11.08	11.50	0.66	P 1 A			1 X S							G
98431	9.186	0.014	8.617	0.013		0.532	0.017	T	0.60	0.02	L	8.6683	0.0022	0.020	111		8.63	8.71		C			1							
98432	8.801	0.015	8.488	0.016		0.296	0.003	G	0.34	0.00	H	8.5327	0.0023	0.018	78		8.50	8.56					1							S
98433	8.528	0.010	8.117	0.010		0.403	0.007	G	0.47	0.01	H	8.1613	0.0011	0.011	101		8.14	8.19		C			1							S
98434	9.883	0.016	9.798	0.022		0.020	0.015	G	0.04	0.01	H	9.8377	0.0028	0.033	195		9.78	9.91					1 S							G
98435	9.625	0.020	9.155	0.019		0.443	0.025	T	0.51	0.03	L	9.2272	0.0023	0.015	117		9.20	9.25					1							
98436	7.883	0.006	7.940	0.008		−0.047	0.009	T	−0.03	0.01	L	7.9311	0.0011	0.013	181		7.91	7.95					1							S
98437	9.984	0.021	8.468	0.011		1.274	0.019	T	1.23	0.02	L	8.4685	0.0015	0.015	157		8.44	8.49					1							
98438	7.431	0.009	5.574	0.009		1.576	0.010	T	2.61	0.04	O	5.3258	0.0064	0.066	110		5.25	5.46		U 2	20001+1731	I 1	1 S							S
98439	8.049	0.009	8.019	0.011		0.032	0.013	T	0.05	0.01	L	8.0420	0.0011	0.012	108		8.03	8.07		C			1							S
98440	9.628	0.016	8.987	0.015		0.614	0.015	G	0.68	0.01	H	9.0688	0.0016	0.021	167		9.04	9.11		C			1							
98441	7.204	0.005	7.276	0.007		−0.051	0.007	G	−0.03	0.01	H	7.2801	0.0009	0.009	150		7.26	7.30					1							S
98442	7.831	0.009	7.291	0.005		0.506	0.009	T	0.58	0.01	L	7.3483	0.0010	0.009	92		7.33	7.37		C			1							S
98443	8.966	0.013	7.135	0.006		1.523	0.011	T	1.56	0.02	L	7.1019	0.0011	0.014	113		7.08	7.13		M	20001+1737	I 1	1							S
98444	7.136	0.005	6.708	0.006		0.404	0.007	T	0.47	0.01	L	6.7584	0.0010	0.008	103		6.75	6.78					1							S
98445	9.097	0.013	8.764	0.014		0.321	0.021	T	0.37	0.03	L	8.7877	0.0016	0.018	124		8.75	8.82					1							
98446	10.772	0.055	10.275	0.060	B	0.467	0.074	T	0.54	0.08	L	10.3709	0.0580			B				D	20002+3625	I 2	1 C I A							
98447						1.500	0.510	G	1.53	0.76	R	10.6392	0.0991	0.892	200		9.91	12.85	109.70	P 1 A			1							D
98448	8.422	0.009	7.140	0.005	A	1.090	0.015	G	1.05	0.02	H	7.1967	0.0033	0.013	144	A	7.18	7.22		D	20002+3625	I 2	1 C P A							S
98449	8.214	0.008	7.718	0.008		0.473	0.018	G	0.54	0.02	H	7.7732	0.0014	0.013	114		7.75	7.80		C			1							S
98450	9.611	0.017	8.471	0.012		0.980	0.016	T	0.96	0.01	L	8.5066	0.0012	0.014	127		8.48	8.53		C			1							
98451	9.532	0.019	8.857	0.017		0.614	0.019	T	0.68	0.02	L	8.9350	0.0020	0.017	103		8.90	8.96		C			1							
98452	9.057	0.012	8.678	0.012	*	0.399	0.015	G	0.46	0.02	H *	8.7014	0.0028	0.027	143	*	8.66	8.75		D	20002+1454	H 1	2 C A	AB	55	0.370	0.017	2.29	0.09	
98453	9.688	0.018	9.100	0.016	A	0.700	0.495	G	0.57	0.07	L *	9.1489	0.0019	0.024	135	*	9.11	9.20			20002−5617	I 1	2 C B	AB	283	4.806	0.047	3.37	0.23	
98454	10.166	0.035	9.525	0.031		0.589	0.035	T	0.66	0.03	L	9.6255	0.0036	0.022	74		9.58	9.65		C			1							
98455	7.615	0.008	7.717	0.010		−0.088	0.011	T	−0.07	0.01	L	7.7008	0.0014	0.016	93		7.68	7.72		M			1							S
98456	10.670	0.047	9.268	0.024		1.185	0.041	T	1.15	0.04	L	9.2783	0.0025	0.021	134		9.24	9.31		C			1							
98457	10.382	0.028	9.403	0.019	A	1.000	0.495	G	0.84	0.05	L *	9.2254	0.0016	0.022	165	–	9.19	9.27		D	20002−5522	I 1	3 C C							G
98458	7.957	0.007	6.623	0.004		1.132	0.006	T	1.03	0.03	C	6.6556	0.0009	0.009	156		6.64	6.67			20003+2611	I 1	1							S
98459	8.787	0.010	7.239	0.006		1.300	0.009	T	1.26	0.01	L	7.2775	0.0008	0.012	129		7.26	7.30					1							S
98460	7.492	0.005	7.456	0.006	A	0.040	0.015	G	0.06	0.01	H *	7.4465	0.0011	0.012	172	*	7.43	7.47		D	20003+2955	I 1	2 C A	AB	145	1.424	0.024	3.13	0.09	S
98461	7.213	0.006	6.062	0.004		0.989	0.006	T	0.97	0.01	L	6.1170	0.0007	0.006	86		6.11	6.13		C	20003−3742	I 1	1							S
98462	9.610	0.020	7.881	0.009		1.442	0.017	T	1.44	0.03	L	7.8626	0.0016	0.014	122		7.84	7.89					1							S
98463	9.819	0.035	9.166	0.031		0.597	0.035	T	0.67	0.03	L	9.2022	0.0026	0.017	49		9.18	9.23		C			1							
98464	9.669	0.026	8.618	0.019		0.912	0.024	T	0.91	0.02	L	8.6757	0.0018	0.016	58		8.65	8.71		C			1							S
98465	9.803	0.023	7.863	0.009	*	1.700	0.020	G	1.68	0.02	J *	7.7713	0.0011	0.012	131	*	7.75	7.80		D	20003+3522	H 1	2 C S A	AB	202	0.193	0.018	1.83	0.32	
98466						0.970	0.015	G	0.95	0.01	K	12.1623	0.0073	0.081	130		12.05	12.32					1 S							G
98467	7.671	0.006	7.766	0.007		−0.081	0.008	T	−0.06	0.01	L	7.7536	0.0012	0.014	175		7.73	7.77		C			1							S
98468	7.951	0.010	7.528	0.007	*	0.397	0.015	G	0.46	0.02	H *	7.5743	0.0017	0.010	88	*	7.56	7.60			20003+1306	H 1	2 C A	AB	292	0.483	0.025	3.62	0.12	S
98469	9.675	0.018	7.953	0.009		1.437	0.016	T	1.43	0.03	L	7.9370	0.0012	0.012	106		7.92	7.96					1							
98470	6.232	0.008	5.707	0.007		0.498	0.016	G	0.57	0.02	A	5.7572	0.0011	0.007	71		5.75	5.77					1							S
98471	8.753	0.013	8.359	0.014	A	0.400	0.015	G	0.47	0.02	H *	8.2837	0.0017	0.012	93	*	8.27	8.31		D	20003−2357	I 1	2 C A	AB	27	1.132	0.011	1.35	0.02	S
98472	9.665	0.018	9.206	0.019		0.444	0.006	G	0.51	0.01	H	9.2418	0.0021	0.018	112		9.21	9.28		C			1							
98473	8.145	0.006	8.102	0.007		0.044	0.009	T	0.06	0.01	L	8.1264	0.0011	0.017	179		8.10	8.15					1							
98474	8.365	0.010	6.841	0.006		1.281	0.009	T	1.24	0.01	L	6.8615	0.0009	0.010	115		6.85	6.88					1							S
98475	9.710	0.024	9.123	0.022		0.549	0.024	T	0.62	0.02	L	9.1677	0.0021	0.017	94		9.14	9.21		C			1							
98476	8.841	0.013	7.557	0.008		1.093	0.012	T	1.05	0.01	L	7.6014	0.0009	0.007	84		7.59	7.61		C			1							S
98477	9.331	0.012	8.985	0.013		0.328	0.017	T	0.38	0.02	L	9.0584	0.0017	0.019	176		9.03	9.10					1							
98478	7.070	0.005	5.869	0.003		1.033	0.000	G	1.03	0.07	F	5.9109	0.0007	0.008	137		5.90	5.93		C			1 G							S
98479	10.491	0.042	9.011	0.021		1.246	0.037	T	1.20	0.04	L	9.0614	0.0024	0.015	74		9.04	9.08		C			1							
98480	10.356	0.044	9.726	0.041	*	0.581	0.044	T	0.65	0.04	L *	9.7385	0.0033	0.023	63	*	9.70	9.77			20004−3301	I 1	2 C S A	AB	10	0.138	0.020	1.27	0.57	
98481	11.789	0.126	9.633	0.032		1.823	0.107	T	2.06	0.21	K	9.5065	0.0053	0.036	81		9.45	9.56		U			1							
98482	7.539	0.006	6.295	0.004		1.056	0.001	G	1.02	0.00	H	6.3479	0.0006	0.006	117		6.34	6.36		C			1							S
98483	8.296	0.009	8.164	0.010		0.127	0.013	T	0.14	0.01	L	8.2115	0.0011	0.013	108		8.19	8.24		C			1							S
98484	10.558	0.032	8.686	0.012		1.589	0.028	T	2.15	0.07	O	8.5444	0.0016	0.018	162		8.51	8.58					1							
98485	8.221	0.010	6.294	0.005		1.634	0.009	T	1.82	0.04	O	6.2056	0.0024	0.016	89		6.17	6.23		U 2			1							S
98486	9.762	0.019	9.620	0.025		0.137	0.029	T	0.15	0.03	L	9.6427	0.0021	0.020	123		9.61	9.68		C			1							G
98487	9.598	0.023	9.318	0.025	A	0.347	0.004	G	0.41	0.01	H *	9.2821	0.0029	0.019	93	*	9.24	9.32		C	20005+0844	H 1	2 C B	AB	113	1.868	0.028	2.77	0.14	
98488	7.731	0.011	7.261	0.010		0.443	0.014	T	0.51	0.01	L	7.3039	0.0012	0.006	53		7.29	7.32					1							S
98489	9.527	0.016	7.879	0.008		1.378	0.014	T	1.35	0.02	L	7.8827	0.0014	0.013	136		7.86	7.90		C			1							
98490	7.233	0.005	7.216	0.008		0.020	0.009	T	0.04	0.01	L	7.2241	0.0011	0.009	110		7.21	7.24					1 G							S
98491	10.022	0.023	8.837	0.014		1.015	0.021	T	0.99	0.02	L	8.8787	0.0016	0.013	116		8.85	8.90					1							
98492						0.673	0.039	G	0.73	0.03	H	11.7331	0.0085	0.056	81		11.65	11.83					1							G
98493	9.833	0.024	8.393	0.013		1.215	0.021	T	1.17	0.02	L	8.4013	0.0018	0.015	127		8.38	8.43					1							
98494	10.629	0.042	10.159	0.043		0.456	0.047	T	0.53	0.05	L	10.2075	0.0031	0.028	92		10.16	10.25		C			1							G
98495	3.943	0.002	3.949	0.002		−0.032	0.013	G	−0.04	0.02	A	3.9531	0.0004	0.004	170		3.95	3.96					1							S
98496	8.185	0.012	7.101	0.008		0.937	0.011	T	0.93	0.01	L	7.1595	0.0009	0.008	86		7.15	7.17		C			1							S
98497	8.299	0.007	8.233	0.009		0.090	0.010	G	0.06	0.01	L	8.2622	0.0015	0.018	172		8.23	8.29					1							
98498	8.749	0.009	7.641	0.006		0.955	0.008	T	0.94	0.01	L	7.7037	0.0012	0.012	156		7.68	7.72		C			1							S
98499	7.654	0.007	7.456	0.008		0.189	0.010	T	0.21	0.01	L	7.4922	0.0012	0.010	88		7.48	7.51		C			1							S
98500	8.628	0.011	7.002	0.006		1.386	0.010	T	2.93	0.02	O	6.6730	0.0029	0.031	111		6.62	6.72		U 2			1 S							S

$20^h\ 00^m\ 41^s$ - $20^h\ 01^m\ 39^s$ 1980

98501 - 98600

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
98501	20 00 41.66	−40 12 00.6	8.03	H	300.173 588 58	−40.200 178 33		2.16	−3.25	−13.98	1.07	0.65	1.23	1.31	0.94	+16 −26 + 4 − 2 − 9 − 6 − 7 −28 − 5 +21	0	−0.29
98502	20 00 42.24	−18 17 22.4	8.38	2 H	300.176 016 99	−18.289 555 47		3.45	−5.25	−27.02	1.06	0.82	1.15	1.36	1.17	+31 + 0 + 7 +15 +35 +32 +37 +46 + 5 +35	3	0.65
98503	20 00 42.49	+16 48 07.9	9.88	H	300.177 032 92	+16.802 206 77		0.41	2.48	−2.19	2.27	2.25	3.40	2.88	3.48	+16 −10 − 5 −15 +14 +18 +12 + 9 + 5 +40	0	
98504	20 00 43.42	+23 47 56.0	7.48	2 H	300.180 917 03	+23.798 887 59		3.18	4.10	−2.63	0.58	0.49	0.81	0.65	0.50	−23 −12 −11 −23 + 6 + 5 + 4 −32 +13 −38	0	0.19
98505	20 00 43.71	+22 42 41.3	7.67	1 H	300.182 145 19	+22.711 462 27		51.94	−2.49	−250.81	0.62	0.50	0.87	0.68	0.53	−29 −16 − 9 −14 − 8 +15 − 9 −20 + 3 −55	0	−0.60
98506	20 00 44.05	−39 53 20.9	9.97	H	300.183 530 13	−39.889 148 89		7.18	18.23	1.48	2.73	1.66	2.99	2.90	2.14	+17 −33 −15 −10 + 5 − 2 + 5 −18 + 4 +20	0	
98507	20 00 44.33	+09 27 47.4	8.19	H	300.184 707 11	+09.463 171 35		8.80	−8.28	−38.62	0.85	0.71	1.10	1.03	0.89	+41 − 5 −15 + 7 +12 +18 +16 +23 − 3 +40	2	0.43
98508	20 00 44.54	+11 01 54.8	8.59	H	300.185 593 66	+11.031 887 91		1.87	−4.06	−11.58	0.92	0.73	1.10	1.19	0.87	+13 −17 −27 +19 − 5 +18 − 1 +14 − 2 − 2	0	0.69
*98509	20 00 44.82	−84 23 01.8	9.21	H	300.186 748 64	−84.383 840 35		1.70	29.51	−6.94	0.84	0.84	1.01	0.98	1.00	−20 −23 + 8 +13 −13 − 2 −10 + 0 −15 −25	0	−0.40
*98510 H	20 00 44.81	+36 35 23.0	6.72	H	300.186 694 90	+36.589 734 55	*	3.33	4.11	−1.01	2.19	0.98	0.69	0.53	0.61	−44 − 3 +10 − 8 + 7 − 4 + 9 − 8 + 2 + 2	3	−0.04
98511	20 00 47.87	+54 12 38.4	8.96	H	300.199 445 31	+54.210 661 47		3.33	−11.03	−6.87	0.75	0.68	0.80	1.01	0.67	+ 3 − 4 +12 +24 + 9 + 2 + 8 + 0 +20 + 9	0	1.99
98512	20 00 48.32	−45 06 46.6	5.80	1 G	300.201 348 46	−45.112 932 50		9.07	3.39	5.82	0.92	0.41	0.87	1.15	0.72	−15 −44 − 4 +34 + 2 + 5 +13 +20 −17 −18	4	−0.51
98513	20 00 48.61	−04 18 41.4	7.54	H	300.202 526 62	−04.311 487 30		4.52	6.44	−38.50	0.92	0.68	1.03	1.03	0.81	− 6 −13 −36 −19 +11 + 7 +18 +15 −20 −10	0	0.98
98514	20 00 50.13	−24 11 07.2	9.28	G	300.208 855 03	−24.185 322 32		14.70	167.63	8.70	1.20	0.76	1.34	1.22	0.88	+40 −39 −21 −17 + 0 +18 + 3 −13 + 6 +54	0	1.33
98515	20 00 50.67	+07 58 53.3	7.53	H	300.211 110 38	+07.981 471 00		2.48	0.87	−2.06	0.70	0.58	0.97	0.86	0.72	+30 −19 −26 +20 − 1 +27 + 8 +32 −14 +18	0	0.34
98516	20 00 51.01	−43 58 53.9	7.66	H	300.212 537 16	−43.981 636 59		12.66	44.38	−124.68	0.95	0.52	1.04	1.41	1.01	+ 1 −28 +13 +35 + 5 + 8 + 1 +15 + 8 + 3	0	−0.92
98517	20 00 51.87	+13 22 47.1	7.22	H	300.216 124 51	+13.379 751 92		5.04	10.61	−6.59	0.70	0.57	0.90	0.83	0.68	+22 −19 −26 + 5 − 2 +17 + 6 +14 −18 +14	0	0.70
98518 H	20 00 52.97	−27 10 53.0	8.36	H	300.220 692 84	−27.181 385 85	A	5.41	21.02	−4.52	3.02	2.16	3.16	2.74	1.96	+34 −30 −18 −12 − 1 −12 + 1 −13 −10 +51	8	1.27
98519	20 00 54.48	+33 00 45.0	8.41	G	300.227 002 76	+33.012 489 93		1.30	2.31	0.25	0.56	0.64	0.87	0.61	0.70	−13 +17 − 9 + 9 +11 −17 +14 −19 +13 − 5	0	−1.57
98520	20 00 54.55	−31 18 43.6	9.45	H	300.227 302 49	−31.312 110 38		8.48	20.20	7.03	1.39	0.94	1.81	1.73	1.76	+44 −13 − 2 −13 −11 − 9 − 3 −15 −44 +51	0	0.21
98521	20 00 54.92	−26 13 25.3	7.95	H	300.228 842 05	−26.223 683 81		5.18	15.77	5.36	0.90	0.57	1.01	0.98	0.63	+35 −31 −19 + 6 +16 + 7 +14 + 1 + 9 +42	0	0.87
98522	20 00 55.95	−74 00 45.0	6.58	G	300.233 118 31	−74.012 502 38		6.34	25.72	−24.77	0.45	0.47	0.67	0.50	0.58	− 9 − 7 − 4 + 8 − 5 −11 − 6 − 6 −11 −10	0	−0.19
98523	20 00 56.94	+22 50 49.1	8.09	H	300.237 262 45	+22.846 975 16		4.16	14.31	3.22	0.74	0.56	1.00	0.83	0.63	−31 −23 − 3 − 2 −14 − 1 −18 − 9 +13 −55	0	0.80
98524	20 00 57.07	+50 14 51.6	8.66	H	300.237 780 88	+50.247 671 11		−0.39	5.73	1.62	0.77	0.70	0.82	0.85	0.80	−20 − 6 − 2 − 9 +11 − 3 +11 −11 − 3 −13	0	0.41
98525	20 00 58.74	+31 13 49.7	6.93	H	300.244 751 71	+31.230 465 14		2.63	4.13	−1.49	0.40	0.47	0.65	0.49	0.57	−11 + 6 + 4 +12 −10 −22 − 8 + 6 + 7 − 4	0	0.32
98526	20 00 58.97	+08 33 28.0	5.90	1 H	300.245 712 81	+08.557 768 80		3.63	11.14	−13.96	0.64	0.59	0.87	0.83	0.78	+25 −17 −39 +22 − 4 +18 +10 +50 −29 + 6	2	−1.18
98527	20 00 59.14	−66 50 42.9	8.83	H	300.246 397 09	−66.845 256 34		0.73	25.73	−11.16	0.86	0.71	1.20	0.95	0.84	− 2 − 7 −12 +41 +14 −17 + 0 −11 +14 −30	0	0.18
98528	20 00 59.61	+37 41 56.1	7.99	G	300.248 373 00	+37.698 921 89	A	−0.36	−1.58	−5.97	2.36	2.79	2.47	2.42	2.77	−10 −16 + 7 − 3 + 5 −19 + 7 −22 + 7 − 1	6	5.47
98529	20 00 59.94	−03 47 46.1	9.04	G	300.249 740 11	−03.796 143 72		2.54	3.62	−16.17	1.10	0.88	1.35	1.31	1.13	+19 −12 −33 + 1 + 6 +21 +18 +35 −30 + 8	0	0.39
98530	20 01 00.01	+42 00 30.9	7.80	H	300.250 030 37	+42.008 570 88		−0.70	−3.50	−3.53	0.46	0.50	0.60	0.48	0.50	− 8 + 2 + 3 −10 +13 −18 +14 −16 +19 − 1	1	0.11
98531 H	20 01 00.18	−81 34 05.8	8.47	H	300.250 753 05	−81.568 264 63	A	4.76	6.75	−26.76	0.83	0.85	0.98	0.86	0.79	−17 − 6 −16 −11 +13 −33 + 5 −26 − 5 −23	0	−0.97
98532	20 01 00.43	−12 15 17.1	7.72	H	300.251 791 01	−12.254 762 53		14.76	−309.16	−365.29	0.92	0.69	1.10	1.10	1.03	+21 −24 −24 − 7 + 3 +23 +12 +17 −23 +31	0	0.96
98533	20 01 00.61	−64 48 26.3	6.83	H	300.252 540 60	−64.807 292 22		23.42	168.78	−243.57	0.60	0.53	0.83	0.78	0.71	+10 −10 −23 −19 −15 + 5 −18 −26 +27 +26	0	−0.39
98534	20 01 01.42	+37 41 56.5	9.78	H	300.255 936 15	+37.699 016 23	C	−3.54	−7.16	33.03	45.71	46.20	27.52	27.09	27.90	− 3 −22 + 7 − 1 + 2 −17 + 2 −16 +11 + 5	6	5.47
*98535 H	20 01 01.69	+48 15 28.5	8.00	G	300.257 040 80	+48.257 912 06	A	16.52	−113.23	−93.11	1.77	1.55	1.64	1.76	1.46	+ 3 +14 − 7 +17 +14 − 2 +15 + 2 +13 +13	3	3.32
*98536	20 01 01.44	−58 23 15.2	7.49	H	300.256 019 21	−58.387 569 01		3.16	4.88	−30.89	0.65	0.56	0.84	1.01	0.74	+13 −11 + 0 + 1 + 9 − 2 + 7 − 7 − 1 +13	0	−0.41
98537	20 01 03.41	+38 43 12.4	8.70	H	300.264 194 58	+38.720 116 94		2.20	1.62	−6.61	0.71	0.76	0.94	0.76	0.82	− 9 + 2 + 7 +17 +13 −12 +16 − 5 + 7 − 2	1	−1.31
98538	20 01 03.80	+09 30 51.3	8.50	2 H	300.265 820 16	+09.514 261 73		1.74	−13.02	−22.64	0.99	0.82	1.23	1.17	1.13	+33 + 3 −16 +10 +15 +21 +20 +21 − 2 +40	4	0.28
98539	20 01 04.73	−42 10 11.5	8.20	2 H	300.269 716 31	−42.169 852 84		5.49	22.47	4.39	1.15	0.71	1.15	1.78	1.21	+14 −18 − 6 +26 −12 − 2 −16 + 0 − 3 − 4	0	0.14
*98540	20 01 04.97	−76 13 55.9	7.42	H	300.270 714 25	−76.232 180 97		3.88	10.41	−10.76	0.52	0.54	0.76	0.57	0.66	+ 6 − 4 + 2 − 2 − 9 + 3 −13 −15 − 7 −12	0	−0.90
*98541	20 01 04.95	+29 08 25.8	8.24	1 H	300.270 637 33	+29.140 500 54		5.45	3.13	−1.84	0.54	0.69	1.12	0.63	0.92	− 8 −12 + 6 +20 + 1 −16 + 2 −10 − 5 − 3	0	−0.22
98542	20 01 05.19	−07 21 51.9	10.27	2 H	300.271 609 17	−07.364 403 00		−0.10	0.52	−11.16	2.03	1.48	2.19	2.93	2.25	+22 + 8 + 3 +36 +16 +32 +18 +45 +18 +22	0	1.26
98543	20 01 06.01	+27 45 12.8	4.66	H	300.275 042 17	+27.753 563 92		14.67	57.99	3.76	0.28	0.45	0.64	0.33	0.48	−17 + 4 −13 − 3 + 6 −19 + 7 −31 +19 − 7	0	0.52
98544	20 01 06.37	−13 56 27.9	7.09	H	300.276 528 84	−13.941 083 76		6.80	−0.63	−24.09	0.87	0.63	0.96	1.03	0.89	+18 −14 −26 −13 + 7 +21 +13 +13 + 6 +24	0	1.62
98545	20 01 07.64	+39 32 26.6	8.59	H	300.281 834 19	+39.540 731 38		3.57	21.78	26.05	0.64	0.65	0.81	0.84	0.79	+ 0 − 3 +10 +18 + 2 − 2 + 2 + 7 + 5 + 2	0	0.54
98546	20 01 07.99	−30 30 38.9	10.58	2 H	300.283 289 88	−30.510 796 02		2.34	−9.43	−1.26	2.11	1.31	2.38	2.95	2.55	+36 −20 − 8 +19 −19 + 8 −27 −17 −32 + 2	0	−1.32
98547	20 01 08.13	+14 31 23.5	7.15	H	300.283 892 05	+14.523 191 84		6.22	0.95	−5.20	0.58	0.48	0.87	0.70	0.73	+ 0 − 8 −18 −28 + 7 +20 + 5 − 4 +12 +32	0	1.32
98548	20 01 08.82	+14 48 05.6	7.48	H	300.286 747 79	+14.801 552 03		1.76	1.97	−1.02	0.66	0.54	0.94	0.81	0.84	+ 0 −19 − 7 −28 + 6 +20 − 1 − 3 +13 +32	1	1.28
98549	20 01 09.11	+15 28 47.8	7.91	H	300.287 969 26	+15.479 951 80		1.82	10.55	−28.83	0.71	0.60	1.03	0.92	0.93	− 1 − 7 − 1 − 2 + 2 + 9 − 1 + 7 +20 +17	4	−0.16
98550	20 01 09.59	−21 27 46.5	8.29	G	300.289 970 34	−21.462 923 60		8.44	97.20	27.70	0.98	0.55	1.14	1.09	0.60	+48 −29 − 8 + 5 +20 +32 +14 − 6 +35 +73	0	−2.22
98551	20 01 09.63	+42 47 59.6	10.37	H	300.290 129 28	+42.799 881 14		1.34	−4.79	−9.32	1.03	1.01	1.26	1.26	1.08	− 2 −13 +15 + 2 + 9 + 3 + 7 − 7 +15 +14	0	−0.50
98552	20 01 09.80	+41 05 31.0	8.54	H	300.290 812 90	+41.091 956 93		1.62	2.68	−6.59	0.61	0.65	0.78	0.69	0.72	− 5 − 4 − 6 − 7 +18 +11 +18 − 7 +16 + 5	0	−0.28
98553	20 01 09.82	+15 48 12.7	10.23	3 H	300.290 914 45	+15.803 536 14		−2.37	−3.16	−7.08	1.05	1.09	1.69	1.31	1.59	+20 − 8 −13 − 8 + 7 + 8 + 6 +11 +11 +31	0	1.36
98554	20 01 11.16	−11 51 05.2	8.62	H	300.296 484 92	−11.851 435 20		1.39	12.65	2.47	1.15	0.94	1.32	1.45	1.42	+42 −29 −26 −17 −15 +15 − 6 − 4 −22 +40	0	−0.55
98555	20 01 12.43	−16 34 03.4	9.09	H	300.301 806 27	−16.567 605 33		10.79	−45.71	−73.41	1.42	1.32	1.42	1.73	1.51	+46 −33 −36 + 7 +42 +12 +55 +63 −22 +23	0	−0.09
98556 H	20 01 12.72	−38 35 12.2	7.70	G	300.302 992 19	−38.586 733 37	A	13.07	17.68	−68.29	1.96	1.05	1.79	2.32	1.34	+23 −30 − 9 − 5 + 8 + 6 + 8 − 8 +13 +13	1	0.16
98557	20 01 13.01	+62 23 30.4	7.54	2 H	300.304 187 60	+62.391 788 51		2.77	−9.66	−3.14	0.57	0.52	0.58	0.68	0.59	+ 1 − 3 + 8 + 4 +17 − 4 +16 + 8 − 2 + 9	0	0.41
98558	20 01 13.19	+43 02 37.6	7.53	G	300.304 962 75	+43.043 778 99		1.83	0.71	0.79	0.51	0.47	0.60	0.55	0.46	− 8 − 1 +12 − 3 + 8 + 3 + 9 −14 +16 + 5	1	−0.03
98559	20 01 13.49	−21 33 33.3	9.24	G	300.306 202 55	−21.559 258 10		16.86	104.52	−132.53	1.23	0.72	1.37	1.28	0.71	+54 −34 −23 + 7 +17 +18 +13 −12 +25 +71	0	−1.22
98560	20 01 13.84	−38 40 43.6	7.72	H	300.307 649 08	−38.678 778 58		16.18	26.14	−162.28	1.04	0.61	1.10	1.33	0.82	− 7 −17 −16 − 2 +15 +10 +14 −18 +18 − 6	0	0.78
98561	20 01 14.67	−77 26 13.0	8.64	H	300.311 142 73	−77.436 937 01		2.95	2.15	−5.38	0.66	0.65	0.97	0.72	0.84	− 3 − 7 + 7 +22 + 0 − 3 + 1 −11 −29 − 8	0	−1.24
98562	20 01 15.01	+27 11 22.6	7.23	H	300.312 558 40	+27.189 613 98		2.81	8.50	4.93	0.38	0.55	0.82	0.42	0.58	−11 + 8 − 7 + 6 − 7 −17 − 5 −21 +21 −10	0	0.94
98563	20 01 15.28	+37 05 55.9	6.23	H	300.313 658 59	+37.098 872 83		3.25	40.81	50.92	0.40	0.47	0.57	0.43	0.48	−10 − 1 +11 + 0 + 5 − 8 + 7 −17 + 1 + 0	2	−0.39
98564	20 01 15.40	−10 46 52.0	7.75	H	300.314 164 37	−10.781 119 07		3.67	5.85	−8.90	1.03	0.71	1.12	1.16	0.93	+ 5 + 0 −29 −30 +15 +17 +23 +15 − 1 +10	0	−0.04
98565	20 01 15.91	+05 38 53.9	7.46	H	300.316 310 57	+05.648 302 70		12.41	−32.26	−22.33	0.70	0.58	0.98	0.84	0.74	+34 −14 −25 +22 + 1 +30 + 8 +37 − 5 +27	0	1.23
98566	20 01 16.26	+43 26 34.4	8.52	G	300.317 737 21	+43.442 896 66		6.11	37.66	39.57	0.60	0.58	0.72	0.65	0.58	− 4 − 4 +10 + 4 − 1 + 3 + 0 −18 +19 + 9	0	0.09
98567	20 01 16.33	+25 40 48.8	8.29	H	300.318 056 20	+25.680 232 71		5.35	22.57	5.26	0.59	0.60	0.93	0.66	0.69	− 2 −14 − 2 +22 − 7 + 1 − 6 −10 + 0 + 3	1	−0.59
98568	20 01 16.84	−76 38 35.2	8.55	H	300.320 169 98	−76.643 117 93		4.59	7.90	−35.19	0.61	0.66	0.89	0.65	0.83	+ 6 − 2 + 3 − 4 −15 + 4 −17 −12 −19 − 9	2	−0.80
98569	20 01 18.43	−10 19 49.6	10.72	G	300.326 793 00	−10.330 447 02		5.02	−114.42	−143.13	2.04	1.54	2.50	2.34	2.26	+18 +18 −14 − 9 +15 +25 +14 +19 −17 +34	0	1.85
98570	20 01 19.79	−14 44 35.4	7.99	2 H	300.332 457 27	−14.743 152 86		3.55	6.90	−23.82	0.95	0.86	1.21	1.40	0.95	+14 −15 −48 − 7 − 8 +34 +14 +26 −22 −22	0	1.33
98571	20 01 21.55	+50 06 16.8	5.06	H	300.339 785 31	+50.104 679 98		7.60	16.31	6.14	0.45	0.38	0.47	0.49	0.42	−11 −18 − 6 + 0 +10 − 8 + 8 − 3 + 9 −11	0	1.97
98572	20 01 21.85	+43 13 39.3	7.70	2 H	300.341 037 26	+43.227 584 57		1.33	4.03	−1.52	0.54	0.53	0.67	0.64	0.55	+ 3 −13 − 2 + 2 − 3 − 2 − 5 −20 +27 +10	1	0.98
98573	20 01 23.61	−09 29 14.7	7.66	H	300.348 368 60	−09.487 426 54		5.01	11.52	−4.80	1.02	0.76	1.22	1.18	0.97	+ 7 −10 −30 + 2 +11 +38 +26 +41 −12 +10	0	1.50
*98574	20 01 24.02	−57 24 36.0	9.38	1 H	300.350 083 88	−57.410 003 80		5.88	12.49	−126.06	2.62	1.96	3.08	3.55	2.60	+10 −18 −10 −22 +16 + 6 +17 −21 − 8 +16	3	
*98575	20 01 23.84	−22 44 14.2	6.01	H	300.349 338 30	−22.737 278 99		10.42	9.86	−11.60	0.70	0.42	0.78	0.70	0.43	+38 −42 −25 − 6 +19 +18 +15 − 4 +17 +54	0	−0.47
98576	20 01 24.30	−60 44 09.7	7.60	H	300.351 259 07	−60.736 040 79		1.81	5.57	−7.50	0.54	0.58	0.89	0.49	0.54	+23 −27 −19 + 9 −27 +12 −40 −39 +18 − 6	0	2.08
98577 H	20 01 25.20	−47 23 50.4	6.96	H	300.355 015 67	−47.397 327 22	A	11.86	11.97	−7.18	1.07	0.62	1.12	1.60	0.99	− 7 + 1 + 6 +39 −10 −12 − 6 − 1 + 1 −11	1	−0.61
98578 H	20 01 26.66	+10 44 54.8	6.97	H	300.361 063 06	+10.748 557 92	A	12.56	83.48	25.30	1.49	1.12	1.60	1.51	1.05	+47 − 2 − 1 +16 − 4 +12 − 1 − 1 − 7 +45	3	−0.02
98579	20 01 26.76	−40 48 51.3	6.31	H	300.361 494 09	−40.814 239 65		11.65	27.68	−39.78	0.82	0.54	0.96	1.37	0.70	+14 − 8 −24 +11 − 5 −18 −15 −27 +13 − 9	0	−0.19
98580	20 01 27.27	+40 17 58.4	10.74	H	300.363 631 15	+40.299 555 36	B	0.55	8.96	−4.66	21.39	23.00	10.04	9.34	12.46	− 7 −18 + 7 − 1 + 0 −13 − 2 − 6 +18 + 9	1	0.76
98581	20 01 28.29	+53 23 55.7	10.19	H	300.367 887 18	+53.398 817 96		−1.69	11.06	−8.54	1.29	1.12	1.33	1.80	1.25	+ 9 − 8 +11 +10 − 5 + 1 − 3 − 9 +12 +20	1	−0.03
98582	20 01 28.29	+40 17 56.1	7.87	H	300.367 888 57	+40.298 904 77	A	0.78	2.34	−2.42	1.07	1.09	1.04	1.05	1.14	− 5 −18 + 5 + 6 + 0 −12 − 4 + 7 +18 +12	1	0.76
98583	20 01 28.53	+64 49 15.6	5.22	1 H	300.368 882 21	+64.821 004 57		5.78	10.01	−12.45	0.42	0.45	0.49	0.39	0.57	+ 8 − 5 − 3 −18 +25 +13 +22 + 9 +22 +45	0	0.70
98584	20 01 29.65	−60 04 14.1	8.68	H	300.373 540 51	−60.070 590 36		5.39	−39.32	19.27	0.74	0.78	1.17	0.65	0.75	+35 −18 −11 +15 −21 + 7 −34 −42 + 1 +11	0	0.02
98585	20 01 30.71	−34 07 21.5	8.53	H	300.377 939 18	−34.122 629 21		3.34	−0.87	3.30	1.33	0.71	1.38	1.65	0.98	+10 − 4 −22 −38 + 9 −16 + 9 −18 − 1 + 3	0	2.20
98586	20 01 31.71	−52 58 55.7	8.43	H	300.382 133 29	−52.982 130 90		3.63	9.80	−36.03	1.00	0.81	1.44	1.43	1.16	−19 + 7 −42 −43 +35 −41 +23 −38 +19 −10	4	−0.01
98587	20 01 31.77	+30 13 05.2	7.74	H	300.382 358 14	+30.218 113 13		1.55	3.12	−26.52	0.47	0.61	0.85	0.56	0.66	− 7 − 3 +18 +24 − 3 −11 + 2 − 7 − 3 + 4	0	0.18
98588	20 01 31.87	−24 50 44.6	9.59	H	300.382 787 18	−24.845 727 20		−0.45	4.49	−4.78	1.43	0.87	1.61	1.54	1.00	+35 −34 −17 − 5 +16 +15 +13 + 1 +13 +46	2	−0.25
98589	20 01 32.71	−16 52 07.7	7.34	H	300.386 294 01	−16.868 813 47		29.20	147.97	−75.59	0.88	0.64	0.94	1.07	0.84	+ 9 −15 −17 − 1 +22 +19 +27 +34 + 9 + 7	0	0.37
98590	20 01 33.15	−38 54 14.1	9.44	H	300.388 134 44	−38.903 909 48		7.28	33.50	−47.70	1.48	0.83	1.63	2.05	1.24	+10 −34 −17 + 4 + 9 − 1 + 5 −16 + 7 − 2	0	0.15
98591	20 01 33.30	−36 40 44.2	7.63	H	300.388 762 13	−36.678 945 98		3.55	−15.72	−3.22	0.89	0.59	1.00	1.01	0.73	+38 −32 −24 − 4 − 6 +15 − 2 −16 + 2 +34	0	0.00
*98592	20 01 33.87	−78 01 39.0	9.61	H	300.391 128 04	−78.027 510 17		5.91	8.77	−22.75	0.82	0.78	1.19	0.96	1.05	− 3 −13 +20 +13 + 5 − 9 +12 −16 −35 + 4	2	−0.73
*98593 H	20 01 33.86	+34 34 59.1	8.54	G	300.391 091 11	+34.583 095 09	*	1.87	7.66	−2.63	1.44	1.44	1.04	0.88	0.78	− 1 + 4 − 1 + 8 + 2 − 9 + 7 −20 + 8 + 7	1	0.20
98594 H	20 01 33.97	+70 27 16.1	8.07	H	300.391 552 52	+70.454 468 32	A	5.65	7.94	10.77	1.04	0.97	0.96	1.12	0.99	− 5 −13 − 6 + 1 + 4 −11 + 1 +17 − 1 +18	1	−0.37
98595	20 01 35.20	−29 47 19.0	8.72	H	300.396 674 89	−29.788 623 67		3.51	−13.82	−28.94	1.06	0.76	1.30	1.39	0.96	+26 − 1 −26 −10 −12 +24 − 6 −21 −10 +24	0	−0.40
98596	20 01 35.77	−06 22 29.2	8.69	H	300.399 051 73	−06.374 765 92		1.22	13.26	−9.70	1.33	0.99	1.32	1.60	1.46	+17 − 7 − 2 − 3 +43 +25 +47 +47 +22 +22	0	0.72
98597	20 01 36.98	−01 40 16.4	8.86	H	300.404 089 56	−01.671 222 45		8.57	−3.71	−16.74	1.25	0.98	1.42	1.78	1.39	+10 −13 −35 −11 +27 −12 +28 +18 + 7 − 6	0	0.59
98598	20 01 37.53	−38 25 02.3	8.30	H	300.406 374 36	−38.417 294 48		3.04	−12.92	−18.50	1.20	0.71	1.41	1.61	0.96	+ 4 −23 −26 + 3 + 1 +29 + 6 −17 +14 + 3	0	−0.34
98599	20 01 38.19	−22 06 38.7	8.11	G	300.409 129 60	−22.110 758 36		14.56	−9.31	−44.58	0.89	0.53	0.97	0.92	0.56	+42 −37 −11 − 4 +15 +19 +13 −11 +16 +68	0	−0.53
98600 H	20 01 39.17	−00 11 56.5	7.22	G	300.413 189 20	−00.199 026 51	A	4.97	4.51	1.10	1.92	1.60	2.18	2.60	1.92	+25 − 9 −44 −10 + 7 − 2 +22 +29 −19 −27	0	0.25

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
98501	10.188	0.034	8.243	0.014		1.649	0.030	T	2.12	0.08	O	8.1075	0.0030	0.017	71		8.08	8.13					1							
98502	10.726	0.063	8.625	0.019		1.777	0.054	T	2.69	0.06	O	8.3663	0.0056	0.024	57		8.33	8.41		U 2			1							
98503	11.769	0.118	10.048	0.040		1.436	0.098	T	1.43	0.16	L	10.0212	0.0028	0.029	103		9.97	10.07					1 X S							G
98504	7.304	0.005	7.451	0.007		−0.128	0.008	T	−0.12	0.01	L	7.4425	0.0023	0.029	156		7.39	7.47	5.52	P 1 A			1							S
98505	8.865	0.009	7.788	0.006		0.932	0.008	T	0.93	0.01	L	7.8274	0.0013	0.014	176		7.80	7.86		M			1							S
98506	10.443	0.038	10.024	0.042		0.409	0.046	T	0.48	0.05	L	10.0581	0.0030	0.023	79		10.01	10.09					1 X S							
98507	8.765	0.014	8.226	0.013		0.505	0.017	T	0.58	0.02	L	8.3014	0.0016	0.014	87		8.28	8.33		C			1							
98508	8.537	0.013	8.577	0.017		−0.054	0.007	G	−0.03	0.01	H	8.5825	0.0019	0.016	80		8.56	8.62		C			1							
98509	10.749	0.039	9.377	0.021		1.161	0.035	T	1.12	0.03	L	9.3762	0.0015	0.016	111		9.34	9.40					1							
98510	6.609	0.004	6.699	0.005	*	−0.077	0.005	T	−0.06	0.01	L *	6.6963	0.0008	0.008	150	*	6.68	6.71		D	20007+3635	I 1	2 C B	AE	332	0.245	0.034	2.99	0.27	S
98511	10.463	0.031	9.095	0.017		1.158	0.028	T	1.12	0.03	L	9.1311	0.0016	0.018	129		9.10	9.17		C			1							
98512	6.142	0.003	5.829	0.003		0.295	0.013	G	0.35	0.02	A	5.8732	0.0008	0.008	116		5.86	5.89		M			1							S
98513	9.791	0.037	7.762	0.015		1.680	0.032	T	1.70	0.03	L	7.6404	0.0016	0.009	50		7.62	7.66		C			1							
98514	10.064	0.028	9.378	0.026		0.653	0.003	G	0.72	0.00	H	9.4006	0.0017	0.017	89		9.37	9.43		D			1 S							
98515	7.693	0.007	7.538	0.008		0.149	0.010	T	0.16	0.01	L	7.5778	0.0012	0.011	98		7.56	7.60		C			1							S
98516	8.164	0.010	7.709	0.008		0.442	0.008	G	0.51	0.00	A	7.7544	0.0016	0.012	108		7.74	7.78		C			1							S
98517	7.171	0.007	7.217	0.008		−0.037	0.010	T	−0.01	0.01	L	7.2194	0.0015	0.010	83		7.20	7.24					1							S
98518	8.966	0.022	8.479	0.022	*	0.470	0.024	T	0.54	0.03	L *	8.4648	0.0017	0.015	81	*	8.43	8.57		D	20009−2711	I 1	2 C A	AB	122	9.240	0.006	0.33	0.02	S
98519	8.316	0.008	8.348	0.011		−0.027	0.012	T	−0.01	0.01	L	8.3942	0.0012	0.014	147		8.37	8.43					1							
98520	9.979	0.032	9.464	0.032		0.493	0.034	T	0.57	0.04	L	9.5592	0.0030	0.022	65		9.53	9.61		C			1							
98521	8.345	0.012	7.978	0.013		0.358	0.015	T	0.42	0.02	L	8.0339	0.0016	0.010	76		8.02	8.05		C			1							S
98522	7.909	0.006	6.695	0.004		1.038	0.006	T	1.01	0.02	A	6.7497	0.0009	0.009	158		6.74	6.77		C			1							S
98523	9.461	0.012	8.194	0.008		1.079	0.011	T	1.04	0.01	L	8.2555	0.0012	0.013	179		8.23	8.28					1							
98524	10.648	0.040	8.799	0.015		1.537	0.034	T	1.59	0.07	L	8.7717	0.0022	0.020	109		8.74	8.81					1							
98525	6.787	0.004	6.911	0.004		−0.106	0.005	T	−0.09	0.01	L	6.9004	0.0012	0.010	158		6.88	6.92					1							S
98526	7.915	0.009	6.077	0.004		1.529	0.008	T	1.57	0.02	L	6.0223	0.0011	0.009	90		6.01	6.04		M			1							S
98527	8.883	0.011	8.843	0.013		0.036	0.015	T	0.05	0.01	L	8.8503	0.0022	0.021	132		8.81	8.90					1							
98528	8.053	0.009	8.106	0.012	A	−0.020	0.015	G	0.00	0.01	H	8.0997	0.0682	0.037	129	A	8.01	8.13		D	20010+3741	I 2	1 C P B							D
98529	9.398	0.027	9.062	0.030		0.313	0.020	G	0.36	0.03	H	9.1375	0.0028	0.018	53		9.10	9.16					1							
98530	7.769	0.007	7.795	0.008		−0.019	0.010	T	0.00	0.01	L	7.8070	0.0009	0.011	137		7.79	7.83		C			1							S
98531	8.819	0.010	8.524	0.011	A	0.068	0.100	G	0.30	0.04	L *	8.5394	0.0010	0.015	136	*	8.52	8.57		D	20010−8134	H 1	2 C A	AB	40	1.948	0.011	3.04	0.07	
98532	8.392	0.015	7.775	0.011		0.571	0.014	T	0.64	0.01	L	7.8411	0.0019	0.010	58		7.83	7.86		C	20010−1215	I 1	1							S
98533	7.306	0.005	6.870	0.005		0.412	0.007	T	0.48	0.01	L	6.9239	0.0011	0.010	122		6.91	6.94		C			1 G							S
98534	9.627	0.025	9.606	0.036	C	0.024	0.041	T	0.04	0.03	L	9.6540	0.2323			C				D	20010+3741	I 2	1 C I B							D
98535	8.891	0.021	8.033	0.016	*	0.768	0.020	T	0.81	0.01	L *	8.1633	0.0027	0.029	125	*	8.11	8.20		R	20010+4815	I 1	2 C A	AB	240	4.174	0.004	0.03	0.01	
98536	8.927	0.012	7.638	0.007		1.096	0.011	T	1.06	0.01	L	7.6635	0.0010	0.011	114		7.64	7.68		C			1							S
98537	8.819	0.011	8.704	0.013		0.111	0.016	T	0.12	0.02	L	8.7430	0.0024	0.018	126		8.71	8.77		C			1							
98538	11.314	0.083	8.656	0.016		2.130	0.062	T	2.17	0.06	L	8.5606	0.0099	0.059	84		8.48	8.66		U 2			1 S							
98539	8.739	0.013	8.263	0.013		0.461	0.014	T	0.53	0.01	L	8.3067	0.0031	0.021	74		8.27	8.47	2.78	P 1 A			1							S
98540	9.203	0.012	7.572	0.006		1.373	0.005	G	1.34	0.01	H	7.5697	0.0011	0.013	150		7.55	7.59					1							S
98541	8.131	0.006	8.208	0.008		−0.066	0.009	T	−0.04	0.01	L	8.2267	0.0023	0.024	171		8.19	8.27		U			1 G							
98542	12.160	0.265	10.726	0.126		1.210	0.230	T	1.17	0.23	L	10.4346	0.0284	0.111	52		10.31	10.63		U 2			1 S							G
98543	4.886	0.001	4.681	0.001		0.184	0.002	G	0.19	0.03	C	4.7148	0.0004	0.005	261		4.71	4.72					1							S
98544	8.961	0.017	7.237	0.008		1.438	0.015	T	1.43	0.02	L	7.2269	0.0011	0.007	58		7.21	7.24					1							S
98545	8.868	0.011	8.627	0.013		0.225	0.017	T	0.25	0.02	L	8.6607	0.0013	0.015	121		8.64	8.68		C			1							
98546	11.460	0.110	10.672	0.077		0.580	0.020	G	0.75	0.02	A	10.7202	0.0178	0.229	76		10.53	11.10	15.05	P 1 A			1							G P
98547	7.269	0.005	7.163	0.006		0.103	0.007	T	0.12	0.01	L	7.1940	0.0011	0.012	146		7.18	7.22					1							S
98548	9.062	0.013	7.591	0.008		1.239	0.012	T	1.20	0.01	L	7.6385	0.0014	0.014	142		7.61	7.66		C			1							S
98549	9.710	0.019	8.053	0.009		1.386	0.017	T	1.36	0.02	L	8.0546	0.0014	0.014	122		8.02	8.09		C			1							
98550	8.727	0.009	8.343	0.009		0.360	0.015	G	0.42	0.02	H	8.3795	0.0013	0.014	161		8.36	8.40					1							S
98551	10.538	0.040	10.371	0.054		0.160	0.063	T	0.18	0.07	L	10.4248	0.0032	0.029	118		10.36	10.48					1							G
98552	9.998	0.023	8.677	0.013		1.122	0.021	T	1.08	0.02	L	8.7094	0.0017	0.015	118		8.69	8.74		C			1							
98553	11.173	0.067	10.228	0.045		0.833	0.060	T	0.85	0.04	L	10.3872	0.0311	0.283	112		9.98	10.72	6.11	P 1 A			1							G
98554	10.124	0.045	8.738	0.024		1.172	0.040	T	1.13	0.04	L	8.7875	0.0015	0.012	53		8.76	8.82		C			1							
98555	9.831	0.036	9.192	0.033		0.587	0.036	T	0.66	0.03	L	9.2201	0.0016	0.014	55		9.19	9.24		C			1 G							
98556	8.298	0.014	7.851	0.014	*	0.413	0.022	G	0.48	0.02	H *	7.7868	0.0012	0.009	78	*	7.77	7.80		D	20012−3835	I 1	2 C A	AB	24	1.053	0.006	1.08	0.02	S
98557	9.707	0.022	7.746	0.009		1.662	0.020	T	2.17	0.05	O	7.6018	0.0026	0.025	112		7.56	7.64		U 2			1							S
98558	7.416	0.006	7.529	0.007		−0.076	0.005	G	−0.06	0.01	H	7.5139	0.0011	0.010	127		7.50	7.53		C			1							S
98559	10.127	0.025	9.334	0.020		0.702	0.003	G	0.75	0.00	H	9.3787	0.0015	0.017	164		9.35	9.41					1							
98560	8.286	0.012	7.778	0.011		0.505	0.015	G	0.58	0.02	H	7.8340	0.0015	0.012	81		7.81	7.86		C			1							S
98561	10.162	0.022	8.763	0.012		1.183	0.020	T	1.14	0.02	L	8.7998	0.0021	0.023	154		8.76	8.86					1							
98562	8.835	0.010	7.344	0.006		1.255	0.009	T	1.21	0.01	L	7.3883	0.0010	0.012	205		7.37	7.41					1							S
98563	7.941	0.007	6.375	0.004		1.314	0.006	T	1.28	0.01	L	6.3832	0.0009	0.008	139		6.37	6.40					1							S
98564	8.005	0.011	7.758	0.013		0.235	0.016	T	0.26	0.02	L	7.8246	0.0015	0.011	64		7.80	7.85					1							S
98565	7.977	0.007	7.512	0.007		0.438	0.009	T	0.51	0.01	L	7.5555	0.0013	0.013	109		7.53	7.58					1							S
98566	8.905	0.010	8.571	0.011		0.374	0.004	G	0.44	0.00	H	8.5995	0.0015	0.014	137		8.57	8.64					1							
98567	8.558	0.009	8.306	0.010		0.230	0.020	G	0.26	0.03	H	8.3551	0.0016	0.016	151		8.33	8.38		C			1							
98568	8.758	0.009	8.573	0.010		0.170	0.013	T	0.19	0.01	L	8.6082	0.0016	0.019	165		8.57	8.65					1							
98569	11.750	0.155	10.738	0.101		0.727	0.015	G	0.78	0.01	H	10.8907	0.0084	0.047	49		10.79	10.96					1							G
98570	8.405	0.013	8.030	0.014		0.355	0.018	T	0.42	0.02	L	8.0793	0.0043	0.021	54		8.05	8.11		U 2			1 G							S
98571	6.499	0.004	5.180	0.002		1.122	0.011	G	1.14	0.03	C	5.2243	0.0005	0.005	109		5.22	5.23			20014+5006	I 1	1							S
98572	9.837	0.019	7.912	0.008		1.632	0.017	T	2.26	0.04	O	7.7486	0.0026	0.028	136		7.71	7.79		U 2			1							S
98573	8.069	0.013	7.708	0.012		0.342	0.016	T	0.40	0.02	L	7.7367	0.0020	0.010	51		7.72	7.76		C			1							S
98574	10.319	0.029	9.407	0.021		0.809	0.027	T	0.85	0.03	L	9.5200	0.0025	0.027	109		9.48	9.57		U	20014−5725	I 1	1 X							
98575	7.262	0.005	6.121	0.004		0.981	0.005	T	0.95	0.02	A	6.1742	0.0005	0.005	121		6.16	6.18		C			1							S
98576	7.574	0.005	7.601	0.007		−0.020	0.008	T	0.00	0.01	L	7.6039	0.0010	0.013	160		7.59	7.62		C			1							S
98577	7.403	0.007	7.026	0.006	*	0.356	0.006	G	0.40	0.02	A *	7.0440	0.0013	0.009	102	*	7.03	7.07		C	20014−4724	I 1	2 C A	AB	188	0.832	0.005	2.46	0.02	S
98578	7.418	0.013	6.951	0.012	*	0.440	0.016	T	0.51	0.02	L *	7.0681	0.0010	0.009	65	*	7.05	7.09		D	20014+1045	I 1	2 C A	AB	354	3.764	0.003	0.51	0.02	S
98579	6.450	0.005	6.333	0.004		0.113	0.006	G	0.13	0.01	H	6.3521	0.0007	0.005	72		6.34	6.36					1							S
98580	11.413	0.101	10.363	0.062	B	0.912	0.090	T	0.91	0.07	L	10.9957	0.0708			B				D	20015+4018	I 2	1 C I A							
98581	11.372	0.073	10.302	0.045		1.480	0.015	G	1.50	0.02	H	10.3216	0.0029	0.036	114		10.25	10.38					1							S G
98582	7.852	0.007	7.889	0.010	A	0.020	0.015	G	0.04	0.01	H	7.8874	0.0043	0.018	122	A	7.86	7.93		D	20015+4018	I 2	1 C P A							S
98583	7.298	0.006	5.415	0.003		1.598	0.006	T	1.91	0.02	O	5.3131	0.0017	0.013	98		5.29	5.33		U 2	20015+6448	I 1	1 S							S
98584	10.204	0.026	8.803	0.014		1.184	0.023	T	1.14	0.02	L	8.8446	0.0016	0.016	146		8.82	8.88		C			1							
98585	10.035	0.032	8.652	0.018		1.170	0.029	T	1.13	0.03	L	8.6970	0.0016	0.013	71		8.67	8.72		C			1							
98586	9.753	0.020	8.534	0.012		1.042	0.018	T	1.01	0.01	L	8.5988	0.0016	0.017	116		8.57	8.63					1							
98587	8.774	0.010	7.851	0.007		0.817	0.009	T	0.84	0.01	L	7.8960	0.0020	0.017	179		7.87	7.92					1							S
98588	11.916	0.146	9.807	0.037		1.744	0.120	T	1.77	0.12	L	9.6963	0.0023	0.023	88		9.65	9.72		C			1 S							
98589	8.144	0.011	7.415	0.010		0.654	0.011	T	0.72	0.01	L	7.4728	0.0009	0.008	58		7.46	7.49		C			1							S
98590	10.000	0.027	9.474	0.026		0.502	0.028	T	0.57	0.03	L	9.5502	0.0027	0.021	72		9.52	9.59		C			1							
98591	9.554	0.019	7.788	0.009		1.503	0.134	G	1.45	0.02	A	7.7687	0.0012	0.012	96		7.74	7.79					1							S
98592	10.096	0.021	9.650	0.022		0.434	0.024	T	0.50	0.03	L	9.7128	0.0023	0.027	142		9.67	9.76					1 S							
98593	8.575	0.009	8.545	0.012	*	0.010	0.015	G	0.03	0.01	H *	8.5452	0.0015	0.015	143	*	8.51	8.57		D	20016+3435	M 1	2 C A	AB	93	0.269	0.006	1.20	0.10	
98594	8.206	0.013	7.981	0.013	*	0.215	0.017	T	0.24	0.02	L *	8.1348	0.0012	0.014	107	*	8.11	8.16		R	20016+7027	I 1	2 C A	AB	88	2.602	0.011	2.07	0.04	S
98595	10.473	0.043	8.885	0.020		1.331	0.037	T	1.29	0.04	L	8.8698	0.0015	0.015	79		8.84	8.89		C			1							
98596	10.462	0.057	8.892	0.026		1.317	0.049	T	1.28	0.06	L	8.8418	0.0026	0.013	49		8.83	8.87		C			1							
98597	9.566	0.029	8.958	0.027		0.567	0.035	T	0.64	0.03	L	8.9813	0.0033	0.019	52		8.93	9.01					1							
98598	9.901	0.025	8.424	0.014		1.244	0.023	T	1.20	0.02	L	8.4627	0.0020	0.015	78		8.43	8.48					1							
98599	8.773	0.010	8.171	0.009		0.556	0.015	G	0.63	0.01	H	8.2294	0.0012	0.011	140		8.21	8.25		C			1							S
98600	7.585	0.036	7.569	0.037	A	0.172	0.015	G	0.19	0.01	H *	7.2358	0.0015	0.009	40	*	7.22	7.26		D	20017−0012	I 1	2 C A	AB	298	1.879	0.004	0.78	0.01	S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
98601	20 01 39.61	−74 45 49.7	7.52	2 H	300.415 043 44	−74.763 811 03		0.54	6.07	−8.32	0.56	0.52	0.81	0.69	0.63	− 3	−12	−11	+25	+ 4	−13	+ 4	− 2	− 9	− 3	1	0.60
*98602	20 01 40.20	+62 09 11.3	7.74	H	300.417 485 57	+62.153 137 52		5.52	16.22	−8.32	0.59	0.55	0.60	0.64	0.61	− 1	+ 3	+12	+23	+ 8	−10	+10	+19	− 4	+11	0	0.25
*98603	20 01 40.17	+40 01 44.5	10.09	2 H	300.417 390 41	+40.029 026 39		−0.68	−0.68	−4.47	1.08	1.20	1.43	1.25	1.42	+ 5	− 1	+ 4	+ 1	+ 7	+ 3	+ 6	+ 5	+10	+16	3	−1.46
98604	20 01 40.63	+03 15 06.9	8.73	H	300.419 276 65	+03.251 925 06		−0.74	4.47	−5.07	1.14	0.77	1.35	1.71	1.20	+44	−23	−30	+10	−10	+37	+12	+46	− 9	− 1	0	−0.02
98605	20 01 41.92	−44 28 10.2	9.41	H	300.424 668 16	−44.469 489 97		3.97	4.22	−21.71	1.36	0.73	1.37	2.01	1.36	+ 2	−19	+ 5	+36	+13	+ 6	+13	+23	+11	+ 2	0	−0.27
98606	20 01 43.43	+33 04 01.0	7.98	H	300.430 972 25	+33.066 951 03		2.05	−4.68	−8.85	0.52	0.59	0.82	0.58	0.65	−11	+ 9	+ 1	+16	+10	−23	+14	−10	+14	− 7	0	0.45
98607	20 01 44.20	+41 48 59.2	7.39	H	300.434 148 69	+41.816 443 70		6.84	15.31	−10.14	0.43	0.49	0.56	0.44	0.50	− 4	+ 0	+ 1	− 6	+13	−10	+13	−10	+14	+ 5	1	0.34
*98608	20 01 44.72	−59 22 33.0	4.95	2 H	300.436 342 74	−59.375 828 04		7.52	19.73	−26.89	0.53	0.50	0.79	0.57	0.61	+30	−17	−18	+42	− 5	+ 0	+ 3	− 8	− 7	+41	0	1.37
*98609	20 01 44.71	+24 48 01.5	5.88	1 H	300.436 277 99	+24.800 425 35		4.85	6.72	−0.78	0.37	0.40	0.66	0.40	0.56	+ 3	− 7	−10	+11	−19	+ 9	−15	−22	− 1	+19	1	0.60
98610	20 01 45.24	+44 07 08.7	6.95	2 H	300.438 482 68	+44.119 079 82		2.93	−11.26	−13.72	0.51	0.47	0.60	0.57	0.47	− 1	+ 1	+ 8	+11	− 4	− 8	− 2	−14	+27	+ 3	1	0.08
*98611	20 01 45.54	+57 39 06.5	7.71	2 H	300.439 729 23	+57.651 792 96		1.62	2.72	5.84	0.51	0.51	0.55	0.56	0.51	− 5	+ 3	− 7	+20	+ 2	− 2	+ 6	−21	+20	+ 5	0	0.54
*98612	20 01 45.46	+38 44 06.9	7.87	H	300.439 402 59	+38.735 261 21		2.19	2.09	0.28	0.56	0.63	0.76	0.60	0.68	−13	+ 3	+11	+12	+ 9	−12	+13	−10	+ 7	− 4	0	−1.08
98613	20 01 45.87	+63 32 40.7	10.03	G	300.441 141 41	+63.544 626 15		15.30	169.31	240.35	1.01	0.95	1.09	1.27	1.24	+ 1	−15	− 2	+ 2	+ 5	+15	+ 3	− 7	+24	+18	0	0.53
98614	20 01 46.69	+45 28 35.8	7.52	G	300.444 531 95	+45.476 599 73		8.99	38.41	13.48	0.55	0.50	0.62	0.69	0.46	−10	+ 3	+23	+27	+ 4	+ 4	+ 3	−17	+ 9	− 9	4	0.46
98615	20 01 47.00	+04 42 56.0	7.67	H	300.445 821 45	+04.715 547 34		4.63	−24.17	−64.50	0.87	0.77	1.04	1.13	1.06	+51	−13	− 8	+55	+24	+25	+22	+65	+16	+45	1	1.06
98616	20 01 47.11	−53 17 24.5	8.70	H	300.446 311 39	−53.290 132 94		12.57	67.31	−51.24	0.93	0.67	1.24	1.23	1.21	− 2	−26	+ 6	−24	+ 7	− 8	+11	−18	− 6	+19	0	1.10
98617	20 01 48.67	+16 30 45.4	7.54	1 H	300.452 774 64	+16.512 611 28		5.73	10.54	−45.68	0.57	0.53	0.89	0.70	0.74	− 2	−18	− 9	+ 0	+ 8	+20	+ 9	+ 6	+ 9	+ 3	2	1.22
98618	20 01 50.99	−69 01 23.0	10.12	H	300.462 451 91	−69.023 066 89		0.67	−3.39	12.39	0.77	1.21	1.75	0.89	1.41	−42	− 8	− 5	+ 7	+19	−11	+19	−21	+ 6	−41	1	1.29
98619	20 01 51.36	+14 07 29.6	8.88	G	300.463 988 87	+14.124 900 33		5.93	46.68	−17.22	0.82	0.78	1.28	0.95	1.12	+26	−14	−14	−19	+12	+15	+12	+18	−14	+42	0	0.97
98620	20 01 51.44	+40 51 31.7	7.34	H	300.464 349 56	+40.858 807 69		2.13	21.83	−2.10	0.51	0.48	0.63	0.53	0.54	+ 3	−14	−14	−13	+ 8	+10	+ 6	−15	+29	+17	0	1.22
*98621	20 01 51.68	−69 11 15.4	8.12	H	300.465 339 77	−69.187 608 59		26.62	223.92	−137.99	0.49	0.70	1.04	0.58	0.81	−40	− 8	− 2	+19	+15	− 2	+18	−18	− 9	−33	0	−0.50
*98622	20 01 51.63	−51 33 54.0	9.64	H	300.465 113 22	−51.564 994 06		2.24	69.31	11.58	1.10	0.81	1.39	1.51	1.38	− 4	−12	− 3	+ 6	+ 6	+ 2	+ 6	− 1	+17	+11	4	1.94
98623	20 01 51.78	−17 33 00.3	7.93	H	300.465 756 62	−17.550 078 54		4.96	8.87	−8.19	1.19	0.76	1.25	1.33	0.95	−14	+15	−25	−18	+21	+28	+35	+14	+14	− 5	0	−0.04
98624	20 01 52.40	−66 56 37.7	5.32	H	300.468 350 33	−66.943 792 23		13.91	38.48	−71.53	0.46	0.43	0.66	0.56	0.47	− 9	− 7	−21	+30	+18	−17	+ 7	−10	+ 7	−27	0	−1.48
98625	20 01 52.56	−17 33 11.3	8.20	H																							
98626	20 01 54.93	+12 08 47.6	8.87	H	300.478 893 85	+12.146 551 22		2.27	−2.21	4.19	1.07	0.79	1.31	1.38	0.92	+21	−25	−28	+33	− 4	+ 9	− 3	+ 8	− 7	+ 3	0	−0.54
98627	20 01 55.05	+27 05 32.7	9.20	H	300.479 395 74	+27.092 409 93		−0.15	−1.53	−6.09	0.65	0.87	1.26	0.67	0.81	− 6	+ 2	−18	+27	+ 0	−10	+ 1	−29	+17	− 1	1	1.38
*98628	20 01 55.46	+28 32 40.9	8.64	H	300.481 101 14	+28.544 687 48		1.31	2.88	3.49	0.48	0.75	1.06	0.55	0.79	−15	+ 6	−15	+ 7	+12	− 6	+15	−31	+15	− 3	0	−0.96
*98629	20 01 55.45	−59 26 52.3	7.77	H	300.481 028 26	−59.447 874 51		4.79	−2.61	−30.06	0.66	0.64	1.00	0.76	0.89	+36	− 9	−19	+49	+ 4	+ 4	+17	− 1	+ 7	+57	0	0.58
98630	20 01 55.54	+31 07 03.2	6.61	1 H	300.481 432 63	+31.117 558 60		1.53	4.39	3.76	0.39	0.46	0.64	0.49	0.53	−10	+ 1	− 1	+ 9	−11	−21	− 9	− 5	+10	− 3	0	0.55
98631 H	20 01 58.02	−64 04 35.4	9.23	H	300.491 762 00	−64.076 506 52	A	0.69	30.64	−49.50	3.72	2.57	2.62	2.32	1.68	− 6	− 8	− 5	− 6	−12	+ 4	− 9	−25	+ 1	−21	2	0.02
98632	20 01 58.11	+65 53 26.7	8.33	G	300.492 145 35	+65.890 751 34		11.81	−45.14	−51.71	0.56	0.60	0.64	0.54	0.74	+16	− 5	−10	−11	+18	+ 2	+15	+16	+ 8	+39	0	−0.80
98633	20 01 58.58	−13 38 14.1	5.69	H	300.494 071 71	−13.637 242 41		10.54	38.87	10.41	0.78	0.60	0.87	0.98	0.82	+21	−19	−30	−16	+ 4	+13	+ 9	+ 9	+ 5	+17	3	1.41
98634	20 02 01.19	−19 05 56.9	7.79	G	300.504 951 95	−19.099 148 47		12.10	28.31	−6.03	0.95	0.69	1.13	1.30	0.95	+10	−19	−31	+15	−18	+38	− 3	+20	−22	− 5	0	0.49
98635	20 02 01.30	+29 35 09.2	9.13	2 H	300.505 435 35	+29.585 893 43		2.80	0.08	−4.22	0.68	0.89	1.27	0.85	1.00	−16	−15	+19	+16	+ 4	+ 0	+ 6	−10	− 4	− 5	0	−0.84
98636 H	20 02 01.37	+24 56 16.3	5.23	H	300.505 725 21	+24.937 873 65	A	15.43	89.69	69.73	0.66	0.77	0.97	0.58	0.63	+ 8	− 8	+10	+14	−20	+ 5	−21	−24	−12	+ 1	1	−0.02
98637	20 02 01.82	+35 19 56.9	7.42	G	300.507 567 35	+35.332 478 26		2.24	1.95	−1.79	0.45	0.51	0.65	0.52	0.51	− 8	− 7	+ 9	+13	− 7	− 5	− 4	−17	− 6	− 2	0	0.90
98638	20 02 02.86	+35 38 28.1	7.88	H	300.511 900 19	+35.641 132 79		1.28	−4.13	−8.00	0.57	0.60	0.80	0.67	0.61	− 9	−19	+10	+10	− 1	− 2	+ 0	−21	− 4	− 6	0	−1.07
98639	20 02 04.07	+34 28 22.6	8.48	1 H	300.516 957 27	+34.472 942 72		3.32	−10.60	−4.97	0.67	0.72	0.98	0.72	0.74	− 8	− 7	+ 7	− 5	− 3	−22	+ 1	−28	− 1	+ 0	0	1.97
98640	20 02 04.94	+12 19 19.5	9.38	G	300.520 565 95	+12.322 095 57		0.42	3.78	0.90	1.01	0.88	1.33	1.31	1.10	+28	−20	−24	+21	+ 1	+21	+ 8	+31	− 6	+10	0	−2.18
98641	20 02 10.32	+10 44 20.3	7.00	H	300.543 016 60	+10.738 973 62		3.07	−2.00	−10.45	0.74	0.53	0.88	0.96	0.67	+22	− 6	−12	+26	+ 2	+17	+ 4	+15	− 2	+18	0	−0.15
98642	20 02 10.42	−04 49 21.2	8.88	H	300.543 401 76	−04.822 563 71		0.52	3.49	−4.77	1.22	0.99	1.30	1.35	1.27	+24	−32	−29	+ 5	+31	+ 8	+36	+53	−12	+24	0	0.84
98643	20 02 10.55	−04 59 23.2	6.70	H	300.543 970 52	−04.989 782 12		8.28	15.26	−5.41	0.99	0.75	1.01	1.07	0.98	+23	−36	−26	+ 9	+32	+11	+39	+54	−11	+20	0	1.33
98644	20 02 11.20	+55 37 55.2	8.51	G	300.546 672 79	+55.631 986 64		3.28	2.34	8.68	0.68	0.66	0.77	0.78	0.66	+ 1	−10	+25	+29	− 1	−30	+ 4	− 2	+12	− 5	0	−0.25
98645 H	20 02 12.56	+57 07 11.3	9.60	G	300.552 331 95	+57.119 793 19	A	10.46	107.56	223.73	1.20	1.34	1.24	1.28	1.24	− 5	− 7	+ 1	+12	+ 2	−12	− 1	−21	+20	− 5	0	0.21
98646	20 02 12.80	+17 30 54.9	8.08	H	300.553 337 07	+17.515 250 09		5.63	35.64	−25.16	0.82	1.05	1.21	1.02	1.21	+21	−31	−17	+ 1	+31	+12	+31	+50	−12	+ 8	0	−0.71
*98647	20 02 13.24	+64 39 31.8	7.95	H	300.555 151 41	+64.658 823 24		4.62	−9.60	2.86	0.61	0.61	0.64	0.68	0.77	+ 3	− 2	+ 1	− 4	+14	+21	+10	− 3	+ 6	+16	0	0.66
*98648 H	20 02 13.16	−45 56 24.0	7.93	H	300.554 842 89	−45.940 006 66	*	1.65	−3.29	−2.27	1.12	0.60	1.22	2.11	1.16	−17	+ 2	− 5	+ 8	+ 9	−28	+ 9	+ 8	+ 1	−26	0	0.07
98649	20 02 13.44	+39 20 43.3	9.07	H	300.556 015 84	+39.345 369 92		10.16	111.85	70.49	0.78	0.81	1.01	1.04	0.97	+ 0	− 1	+11	+18	+ 6	+ 5	+ 5	+ 0	− 4	+ 0	0	−0.11
98650	20 02 13.79	−21 05 18.0	8.84	H	300.557 445 44	−21.088 327 26		2.41	4.99	−2.39	1.05	0.58	1.21	1.25	0.65	+40	−33	− 3	+ 5	+26	+26	+18	+ 2	+25	+63	0	−0.52
98651	20 02 14.41	+28 48 50.4	9.03	G	300.560 038 52	+28.813 987 34		10.45	−51.12	−90.51	0.60	0.91	1.27	0.70	0.92	−15	− 7	+11	+11	+ 6	−15	+ 9	−22	+ 1	− 8	1	0.75
98652	20 02 14.71	+37 23 37.7	10.82	H	300.561 300 47	+37.393 806 26		−1.95	0.46	−6.40	1.27	1.41	1.78	1.54	1.62	−10	−11	+ 8	+ 2	+ 6	− 7	+ 6	−16	+ 9	− 5	1	1.53
98653	20 02 15.57	−55 45 59.1	10.06	H	300.564 892 11	−55.766 425 54		12.64	56.95	−80.24	1.21	0.99	1.77	1.98	1.76	+25	− 5	−10	−12	+16	−16	+16	−16	+13	+16	0	2.13
98654	20 02 16.33	−43 29 18.8	8.88	H	300.568 035 88	−43.488 544 63		2.15	−6.55	−28.74	1.26	0.67	1.39	1.77	1.26	− 5	−25	+ 8	+27	+15	+ 0	+18	+26	+ 6	+ 3	0	−0.29
98655	20 02 17.06	+45 46 58.0	10.43	H	300.571 098 32	+45.782 772 19		8.76	139.71	129.68	1.18	1.09	1.35	1.26	1.04	− 1	+ 8	+22	+ 5	+10	+ 1	+11	−18	+ 7	+ 7	3	0.50
98656	20 02 17.86	+20 55 35.4	8.40	H	300.574 436 15	+20.926 493 40		2.42	−0.37	−5.60	0.76	0.59	1.05	0.89	0.81	−15	+17	− 2	−16	− 7	+17	−13	+ 3	−12	− 1	1	2.23
98657	20 02 19.88	+13 54 34.1	6.66	H	300.582 845 18	+13.909 466 78		5.02	−23.75	−33.71	0.62	0.57	0.83	0.65	0.70	+32	−25	−31	−14	+13	+ 9	+21	+27	−19	+30	0	1.29
98658	20 02 20.16	+64 38 03.8	6.27	H	300.583 999 22	+64.634 391 79		9.72	41.93	11.18	0.48	0.49	0.53	0.42	0.59	+ 3	− 9	−12	−22	+23	+ 8	+22	+ 1	+16	+38	1	0.41
98659	20 02 20.80	−66 05 38.4	8.33	H	300.586 684 40	−66.094 013 16		4.05	19.47	−58.36	0.77	0.70	1.16	0.85	0.72	−16	+ 2	− 4	+26	+12	− 3	− 1	−25	− 7	−40	0	−1.90
98660	20 02 21.28	+19 43 25.7	8.50	H	300.588 679 93	+19.723 809 03		3.09	11.26	8.51	0.86	0.82	1.16	1.06	1.15	+17	−14	− 6	− 3	+ 0	− 2	+ 1	+20	−16	+20	0	−0.47
98661	20 02 22.11	+22 09 05.4	6.50	1 H	300.592 108 22	+22.151 486 34		0.89	−5.10	−11.44	0.51	0.39	0.73	0.58	0.44	−37	+ 8	− 6	−11	−12	+ 6	−13	−15	− 1	−65	0	−0.82
98662 H	20 02 23.08	+21 05 24.9	9.14	2 H	300.596 167 42	+21.090 246 06	*	−0.01	−0.90	−5.56	0.99	0.83	1.34	1.30	0.96	− 9	− 5	− 6	− 7	−20	− 5	−19	−11	+11	−30	0	0.00
98663	20 02 23.33	−07 14 05.5	8.42	H	300.597 211 56	−07.234 858 03		2.60	−12.29	−20.13	1.39	1.06	1.50	1.87	1.55	+31	−23	−10	+24	+27	+ 5	+30	+50	+ 0	+19	0	−2.41
98664	20 02 24.00	−35 16 28.8	9.07	H	300.600 009 20	−35.274 659 08		1.40	11.18	−8.17	1.32	0.79	1.46	1.47	1.17	+10	−39	+14	−15	+12	+15	+ 8	+ 0	+11	+23	0	0.15
98665	20 02 25.31	−00 50 40.9	9.00	H	300.605 465 84	−00.844 683 36		8.12	−70.70	−41.75	1.39	1.14	1.59	2.32	1.64	+ 2	+ 0	−39	+32	−13	+24	− 3	+42	−13	+19	0	−1.57
*98666	20 02 26.52	+79 40 51.7	6.70	H	300.610 490 05	+79.681 027 93		4.07	7.06	−7.23	0.51	0.47	0.53	0.53	0.57	+ 1	−15	− 1	+17	− 4	− 9	− 4	+ 9	− 2	+ 8	0	0.87
*98667	20 02 26.44	−38 04 14.4	9.63	H	300.610 186 42	−38.070 668 05		12.74	14.33	−0.46	1.53	0.87	1.64	2.01	1.27	+12	−30	−13	+ 6	+12	+16	+14	− 8	+ 2	+10	0	1.30
98668	20 02 27.26	+53 22 35.3	9.19	H	300.613 589 82	+53.376 463 95		24.12	166.83	144.85	0.80	0.71	0.85	1.10	0.75	+ 7	−13	+ 6	+ 4	− 3	+ 7	− 4	− 1	+16	+22	0	−0.93
98669 H	20 02 27.56	−52 53 12.1	8.43	G	300.614 812 64	−52.886 685 15	A	7.97	−19.27	−52.53	1.59	1.02	1.63	1.73	1.41	− 9	+ 3	−22	−50	+36	−28	+34	−17	+ 2	− 2	3	−0.79
98670	20 02 28.66	−29 16 59.2	9.35	2 H	300.619 437 50	−29.283 118 51		2.60	−6.86	−13.35	1.24	0.85	1.39	1.34	1.06	+18	−15	− 4	−16	+ 3	+ 4	+ 8	−19	−13	+45	0	1.80
98671	20 02 28.91	+55 53 21.1	9.43	H	300.620 456 41	+55.889 184 70		6.70	29.83	−9.25	0.84	0.75	0.94	1.04	0.77	− 8	+ 2	+18	+ 7	+ 2	−35	+ 8	− 6	+15	−14	1	0.61
98672	20 02 30.55	−41 31 38.5	8.73	H	300.627 289 87	−41.527 355 81		1.43	20.85	−15.42	1.16	0.83	1.41	1.75	1.05	+32	−10	−27	+ 3	− 2	−30	−13	−27	− 1	+20	0	0.79
98673	20 02 30.61	+77 54 20.0	8.55	H	300.627 553 87	+77.905 558 01		3.97	−21.91	−19.07	0.67	0.62	0.73	0.70	0.76	− 1	−34	+ 2	+15	+ 6	−24	+12	+12	−16	+12	0	0.49
98674	20 02 31.74	+30 39 12.0	10.99	H	300.632 235 59	+30.653 322 23		3.08	0.49	−3.85	1.74	2.19	3.10	2.10	2.37	−22	+18	+14	+30	−26	−23	−20	− 7	+ 6	−23	0	1.88
98675	20 02 32.69	+00 42 50.1	11.14	2 H	300.636 203 00	+00.713 919 09		−4.67	−6.37	−7.84	2.73	1.68	3.04	3.61	3.04	+53	−29	−13	+22	+11	+17	+24	+58	−15	+19	0	−0.94
98676	20 02 33.21	−15 52 27.5	7.91	H	300.638 361 68	−15.874 302 76		1.67	−11.14	1.01	0.98	0.76	1.08	1.21	1.00	+24	−21	−28	+ 9	+21	+25	+33	+48	− 8	+16	0	0.42
98677	20 02 34.25	+15 35 36.6	7.15	H	300.642 719 83	+15.593 489 89		51.71	−160.07	−582.07	0.56	0.48	0.83	0.73	0.74	−11	− 9	− 5	− 7	+ 0	+ 2	− 1	− 6	+17	+13	0	0.77
98678	20 02 34.42	−44 13 19.3	8.90	H	300.643 415 77	−44.222 024 32		3.07	14.32	4.28	1.27	0.66	1.35	2.01	1.27	− 6	−26	+ 2	+41	+ 1	+ 6	− 3	+23	+10	−13	0	−1.44
98679	20 02 34.83	−50 03 06.4	8.69	G	300.645 110 32	−50.051 781 20	A	84.75	402.98	−344.41	11.00	8.53	11.17	14.71	13.93	+16	+ 6	+47	+12	−33	−29	−37	−46	−53	+ 0	36	5.73
98680	20 02 34.91	−12 42 27.3	8.66	H	300.645 454 02	−12.707 575 54		1.55	0.29	−8.32	1.01	0.81	1.20	1.19	1.10	+28	−25	−25	− 5	+ 7	+31	+19	+23	−17	+30	0	1.19
98681	20 02 35.85	−50 02 57.8	9.92	H	300.649 392 43	−50.049 377 22	B	84.75	334.48	−311.41	59.03	32.87	11.17	86.48	60.32	−22	+ 1	+12	+ 0	− 1	− 5	− 2	− 3	−12	−67	36	5.73
98682	20 02 36.23	−45 11 45.7	6.56	H	300.650 953 58	−45.196 017 80		4.11	−9.39	0.17	0.85	0.43	0.86	1.26	0.82	−20	−19	+19	+30	+ 3	+25	+ 2	+20	− 2	− 7	0	0.38
98683	20 02 36.44	+01 58 27.0	9.06	H	300.651 816 03	+01.974 166 35		1.62	−0.72	2.31	1.32	0.81	1.45	2.06	1.51	+35	−16	−12	+12	−12	+27	−10	+37	− 8	+16	0	−0.16
98684	20 02 36.77	−63 21 01.6	8.15	H	300.653 207 71	−63.350 454 19		3.66	34.18	−51.94	0.74	0.68	1.09	0.76	0.69	− 8	−15	−24	+28	−24	+16	−24	−11	+13	−15	0	0.16
98685	20 02 37.89	−03 20 32.5	8.25	H	300.657 869 12	−03.342 357 17		5.52	−5.07	−20.45	1.07	0.82	1.30	1.56	1.13	+ 7	+ 0	−43	+26	−28	+36	−15	+37	−36	−16	0	0.28
98687	20 02 38.72	+15 21 38.2	8.25	H	300.661 340 79	+15.360 620 92		2.46	5.72	6.00	0.74	0.61	1.02	0.97	0.89	− 6	− 9	− 9	+ 4	− 8	+12	− 5	− 4	− 8	+ 3	0	1.67
98688	20 02 39.46	−27 42 35.6	4.43	2 H	300.664 413 67	−27.709 879 72		7.28	32.28	14.35	0.68	0.45	0.74	0.77	0.55	+19	−37	+ 4	+15	+ 1	+ 5	+10	−14	−12	+37	0	0.77
98689	20 02 40.80	−41 25 04.0	7.55	2 G	300.669 992 29	−41.417 778 47		10.85	3.98	6.84	0.96	0.62	1.09	1.50	0.84	+12	+ 6	− 8	−13	−14	−22	−15	−30	+11	+ 7	0	−0.77
98690	20 02 41.28	+12 21 31.5	6.73	H	300.671 982 34	+12.358 745 36		2.06	16.91	−2.68	0.75	0.54	0.90	0.89	0.62	+13	−29	−16	+25	+13	+15	+13	+20	+ 3	+ 3	0	−0.97
98691	20 02 41.70	+38 23 36.1	9.56	H	300.673 769 33	+38.393 364 17		1.66	−2.17	−11.45	0.93	1.08	1.31	1.00	1.18	− 7	− 2	+ 9	+11	+ 9	−16	+14	−16	+ 9	+ 3	0	0.40
98692	20 02 41.98	+53 53 22.8	8.32	G	300.674 932 12	+53.889 661 28		16.25	−93.64	−117.86	0.68	0.58	0.70	0.88	0.62	+ 2	− 9	+ 9	+16	− 5	− 9	− 4	− 1	+18	+ 4	0	−0.71
98693	20 02 44.18	−28 22 47.3	9.19	H	300.684 082 99	−28.379 793 59		13.67	−7.14	−71.22	0.99	0.67	1.13	1.30	0.93	+19	−25	+12	+18	+ 4	+21	+ 5	− 5	−15	+18	2	0.57
98694	20 02 44.88	−00 36 23.7	8.39	H	300.687 000 06	−00.606 591 28		0.71	−13.02	−13.74	1.11	0.84	1.29	1.60	1.24	+13	+ 1	−30	+ 7	+ 3	+ 6	+10	+27	+ 0	− 6	0	2.51
98695 H	20 02 46.03	+14 34 57.7	6.67	H	300.691 796 80	+14.582 686 12	A	2.51	2.07	1.70	0.81	0.67	1.01	0.86	0.86	+17	+ 3	− 9	−23	+13	− 5	+11	+ 7	−16	+33	2	1.14
98696	20 02 46.42	+21 51 16.0	8.29	G	300.693 436 19	+21.854 434 75		0.86	5.06	−3.84	0.67	0.51	0.92	0.78	0.58	−27	+ 2	− 6	+ 0	−22	+ 2	−23	− 9	+ 6	−58	0	0.06
98697	20 02 46.61	+37 48 46.0	6.92	H	300.694 194 11	+37.812 780 47		3.61	6.60	5.09	0.46	0.51	0.63	0.51	0.55	− 8	−14	+ 6	+ 4	+ 0	−15	+ 2	−15	+ 4	+ 0	0	0.80
98698	20 02 47.10	+03 19 33.2	7.46	G	300.696 244 14	+03.325 894 86		76.26	−92.28	120.76	0.87	0.58	1.03	1.27	0.81	+35	−18	−25	+17	− 6	+32	+ 4	+30	+ 2	+11	0	1.60
98699	20 02 47.31	+28 30 53.5	6.93	H	300.697 104 42	+28.514 847 27		3.07	3.74	−8.48	0.34	0.50	0.72	0

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
98601	9.761	0.016	7.725	0.006		1.724	0.014	T	2.16	0.04	O	7.5888	0.0018	0.023	161		7.55	7.62		U 2			1							S
98602	9.025	0.014	7.862	0.009		0.998	0.013	T	0.98	0.01	L	7.9091	0.0011	0.011	107		7.89	7.93					1							
98603	12.327	0.237	10.566	0.071		2.577	0.400	G	2.58	0.41	J	10.0913	0.0209	0.135	120		9.94	10.49		U 2 C			1 S							G
98604	10.546	0.043	8.858	0.018		1.410	0.037	T	1.39	0.04	L	8.8703	0.0014	0.014	96		8.84	8.89					1							
98605	10.452	0.031	9.513	0.022		0.885	0.004	G	0.89	0.00	H	9.5502	0.0023	0.020	112		9.51	9.59		C			1							
98606	7.877	0.008	7.981	0.010		−0.070	0.010	G	−0.05	0.01	H	7.9600	0.0014	0.014	154		7.94	7.99		C			1							S
98607	7.440	0.006	7.393	0.007		0.048	0.009	T	0.06	0.01	L	7.4176	0.0008	0.010	146		7.40	7.44		C			1							S
98608	6.793	0.011	5.203	0.008		1.356	0.011	T	3.25	0.03	O	4.7635	0.0068	0.087	117		4.67	4.95		U 2 C			1 S							S
98609	5.702	0.002	5.858	0.002		−0.134	0.002	T	−0.13	0.00	L	5.8396	0.0007	0.008	208		5.83	5.86		M			1 G							S
98610	9.085	0.012	7.129	0.005		1.620	0.014	G	1.98	0.03	C	7.0314	0.0023	0.020	115		7.00	7.06		U 2			1							S
98611	7.631	0.009	7.696	0.010		−0.080	0.015	G	−0.06	0.02	H	7.6885	0.0076	0.046	123		7.63	7.76		U 2 C			1							S
98612	7.794	0.007	7.850	0.009		−0.060	0.015	G	−0.04	0.01	H	7.8547	0.0013	0.014	124		7.84	7.88		C			1							S
98613	11.250	0.075	10.091	0.042		0.900	0.020	G	0.94	0.02	I	10.1999	0.0034	0.028	107		10.15	10.24					1							G
98614	7.885	0.007	7.535	0.007		0.313	0.004	G	0.36	0.01	H	7.5916	0.0012	0.011	116		7.57	7.61		C			1							S
98615	9.247	0.015	7.811	0.009		1.212	0.014	T	1.17	0.01	L	7.8307	0.0011	0.009	137		7.82	7.85					1							S
98616	9.371	0.015	8.768	0.014		0.561	0.015	T	0.63	0.01	L	8.8219	0.0015	0.016	110		8.79	8.85					1 S							
98617	7.862	0.008	7.579	0.008		0.269	0.011	T	0.30	0.01	L	7.6102	0.0018	0.017	119		7.58	7.64		M			1							S
98618	10.505	0.019	10.148	0.021		0.347	0.025	T	0.41	0.03	L	10.1984	0.0025	0.034	292		10.13	10.27					1 S							G
98619	9.446	0.016	8.869	0.015		0.508	0.015	G	0.58	0.02	H	8.9653	0.0020	0.018	117		8.93	9.00					1							
98620	7.288	0.005	7.319	0.008		−0.024	0.009	T	0.00	0.01	L	7.3399	0.0015	0.009	109		7.32	7.35			20019+4051	I 1	1							S
98621	8.957	0.008	8.202	0.006		0.674	0.008	T	0.73	0.01	L	8.2530	0.0013	0.019	289		8.22	8.29					1							S
98622	10.286	0.030	9.714	0.029		0.563	0.003	G	0.64	0.00	H	9.7640	0.0028	0.025	119		9.73	9.81		C			1							
98623	8.189	0.013	7.980	0.016		0.197	0.100	G	0.26	0.04	L	8.0018	0.0011	0.009	51		7.98	8.02		D	20019−1733	I 2	1							S
98624	6.901	0.005	5.464	0.003		1.218	0.006	G	1.14	0.06	F	5.4905	0.0007	0.006	133		5.48	5.50		C			1							S
98625											T	8.3404	0.0660	0.363	50		8.04	9.09		D	20019−1733	I 2								G
98626	10.325	0.035	9.008	0.020		1.118	0.032	T	1.08	0.03	L	9.0337	0.0019	0.017	88		9.01	9.06		C			1							
98627	9.354	0.016	9.214	0.019		0.135	0.023	T	0.15	0.02	L	9.2552	0.0019	0.024	185		9.21	9.29					1 S							
98628	8.593	0.007	8.621	0.009		−0.021	0.010	T	0.00	0.01	L	8.6400	0.0013	0.021	223		8.60	8.67		C			1							
98629	8.991	0.012	7.876	0.008		0.961	0.011	T	0.95	0.01	L	7.9330	0.0013	0.013	138		7.91	7.96					1							S
98630	6.511	0.003	6.600	0.005		−0.076	0.005	T	−0.06	0.01	L	6.5910	0.0010	0.012	156		6.57	6.61		M			1							S
98631	9.833	0.021	9.328	0.021	*	0.485	0.023	T	0.56	0.02	L	* 9.3370	0.0023	0.025	113	*	9.29	9.39		D	20020−6405	H 1	2 C A	AB	96	0.353	0.007	0.81	0.08	
98632	8.902	0.012	8.406	0.011		0.466	0.015	T	0.54	0.02	L	8.4412	0.0014	0.010	109		8.42	8.46		C			1							
98633	5.785	0.004	5.705	0.005		0.079	0.006	T	0.09	0.01	L	5.7222	0.0009	0.006	55		5.71	5.73		C			1							S
98634	8.270	0.013	7.842	0.011		0.445	0.015	G	0.51	0.02	H	7.8802	0.0017	0.010	58		7.87	7.90		C			1 S							S
98635	9.175	0.012	9.154	0.015		0.020	0.017	T	0.04	0.02	L	9.1466	0.0037	0.040	164		9.09	9.21		U 2 C			1 S							
98636	5.707	0.004	5.303	0.005	*	0.374	0.006	G	0.41	0.03	C	* 5.3147	0.0005	0.006	198	*	5.31	5.33		D	20020+2456	I 1	2 C A	AB	122	0.853	0.002	0.29	0.01	S
98637	7.308	0.006	7.400	0.007		−0.075	0.009	G	−0.05	0.01	H	7.3997	0.0009	0.011	138		7.38	7.42		C			1							S
98638	9.678	0.017	8.012	0.008		1.401	0.016	T	1.38	0.02	L	7.9972	0.0012	0.014	135		7.98	8.02					1							
98639	10.563	0.034	8.683	0.013		1.550	0.015	G	1.56	0.09	H	8.6045	0.0023	0.020	144		8.58	8.66		U			1 S							
98640	9.479	0.019	9.439	0.025		0.100	0.017	G	0.11	0.02	H	9.4223	0.0019	0.020	95		9.39	9.45		C			1							
98641	6.868	0.005	6.976	0.007		−0.093	0.011	G	−0.07	0.01	H	6.9721	0.0009	0.008	69		6.95	6.99		C			1							S
98642	9.117	0.022	8.959	0.026		0.530	0.020	G	0.60	0.02	H	8.9984	0.0020	0.015	49		8.97	9.02					1							
98643	6.881	0.006	6.733	0.006		0.162	0.026	G	0.20	0.02	A	6.7576	0.0013	0.008	50		6.75	6.77		C			1							S
98644	9.018	0.012	8.515	0.012		0.473	0.015	T	0.54	0.02	L	8.6004	0.0016	0.013	104		8.58	8.63		C			1 S							
98645	10.600	0.038	9.777	0.029	A	0.765	0.015	G	0.81	0.01	H	* 9.7301	0.0020	0.019	116	*	9.69	9.76		D	20022+5707	H 1	2 C A	AB	181	1.531	0.014	2.22	0.07	G
98646	9.619	0.021	8.206	0.012		1.194	0.019	T	1.15	0.02	L	8.2463	0.0019	0.014	108		8.22	8.28					1 G							
98647	9.186	0.015	8.044	0.010		0.982	0.014	T	0.96	0.01	L	8.1111	0.0012	0.011	101		8.09	8.12			20023+6438	I 2	1 G							S
98648	9.974	0.025	8.132	0.011	*	1.564	0.120	G	1.35	0.04	L	* 8.0797	0.0022	0.018	104	*	8.05	8.11			20022−4556	H 1	2 C S A	AB	339	0.144	0.010	0.79	0.41	
98649	9.807	0.024	9.171	0.022		0.591	0.028	T	0.66	0.03	L	9.1993	0.0023	0.019	110		9.17	9.23					1							
98650	9.205	0.011	8.899	0.012		0.291	0.015	T	0.33	0.02	L	8.9174	0.0014	0.015	158		8.89	8.94		C			1							S
98651	9.732	0.017	9.057	0.015		0.626	0.015	G	0.69	0.01	H	9.1478	0.0017	0.020	188		9.11	9.19					1							
98652	12.227	0.217	10.913	0.116		1.350	0.044	G	1.32	0.05	H	10.9763	0.0041	0.045	130		10.89	11.05					1							G
98653	11.040	0.048	10.125	0.034		0.797	0.045	T	0.83	0.03	L	10.2025	0.0036	0.038	148		10.14	10.26					1							
98654	10.387	0.032	8.980	0.017		1.189	0.028	T	1.15	0.03	L	9.0453	0.0015	0.014	96		9.02	9.07					1							
98655	11.590	0.115	10.447	0.062		0.975	0.103	T	1.02	0.09	L	10.5705	0.0052	0.038	111		10.51	10.64					1							G
98656	8.379	0.011	8.387	0.014		−0.003	0.016	T	0.02	0.01	L	8.4115	0.0016	0.015	133		8.38	8.44		C			1							
98657	8.285	0.010	6.791	0.004		1.257	0.008	T	1.22	0.01	L	6.8163	0.0009	0.009	110		6.80	6.83		C			1							S
98658	7.431	0.006	6.360	0.005		0.927	0.006	T	0.92	0.00	L	6.4277	0.0007	0.005	106		6.42	6.44		C	20023+6438	I 2	1							S
98659	9.758	0.018	8.464	0.011		1.100	0.016	T	1.06	0.02	L	8.5010	0.0018	0.019	150		8.47	8.53					1							
98660	8.728	0.012	8.527	0.014		0.192	0.017	T	0.21	0.02	L	8.5609	0.0024	0.022	93		8.53	8.60					1							
98661	6.659	0.003	6.527	0.004		0.127	0.005	T	0.19	0.03	C	6.5582	0.0014	0.017	227		6.52	6.58		U 2			1							S
98662	12.767	0.321	9.623	0.026	*	1.600	0.510	G	1.57	0.52	J	* 9.2613	0.0069	0.083	147	*	9.11	9.37		U 2	20024+2105	H 1	2 C S A	AB	246	0.177	0.010	0.33	0.54	D
98663	10.832	0.065	8.728	0.020		1.500	0.040	G	1.50	0.10	R	8.5472	0.0039	0.019	49		8.50	8.57					1							
98664	10.740	0.042	9.236	0.021		1.265	0.037	T	1.22	0.04	L	9.2349	0.0021	0.017	80		9.20	9.27		C			1							
98665	10.214	0.043	9.110	0.029		0.952	0.040	T	0.94	0.03	L	9.1603	0.0031	0.017	45		9.13	9.19					1							
98666	7.851	0.007	6.802	0.006		0.911	0.007	T	0.91	0.01	L	6.8610	0.0008	0.008	101		6.85	6.87		C			1							S
98667	10.384	0.046	9.706	0.039		0.616	0.045	T	0.68	0.04	L	9.7580	0.0039	0.022	74		9.72	9.80					1							
98668	10.392	0.034	9.294	0.022		0.948	0.031	T	0.94	0.02	L	9.3474	0.0022	0.019	121		9.31	9.38		C			1							
98669	9.130	0.013	8.477	0.012	*	0.580	0.015	G	0.65	0.01	H	* 8.5415	0.0024	0.019	119	*	8.51	8.57		C	20025−5253	H 1	2 C A	AB	92	0.603	0.029	3.35	0.12	S
98670	11.400	0.096	9.647	0.032		1.490	0.083	T	2.98	0.09	O	9.2756	0.0046	0.064	80		9.15	9.45		U 2			1 S							
98671	10.116	0.027	9.494	0.025		0.570	0.015	G	0.64	0.01	H	9.5505	0.0023	0.020	104		9.51	9.58		C			1							
98672	10.023	0.028	8.879	0.018		0.983	0.026	T	0.96	0.02	L	8.8964	0.0020	0.017	85		8.87	8.93		C			1							
98673	9.940	0.029	8.669	0.017		1.082	0.026	T	1.04	0.02	L	8.7180	0.0016	0.013	112		8.70	8.74		C			1							
98674						2.892	0.400	G	2.90	0.41	J	10.9247	0.0061	0.057	144		10.81	11.00					1							G
98675											T	11.2919	0.0408	0.206	76		11.10	11.57	3.77	P 1 A			1							G
98676	9.775	0.029	8.069	0.014		1.424	0.025	T	1.41	0.04	L	8.0493	0.0016	0.010	55		8.03	8.07		C			1							
98677	8.061	0.008	7.242	0.006		0.714	0.003	G	0.76	0.00	H	7.2853	0.0009	0.010	133		7.27	7.30		D			1							S
98678	10.049	0.024	9.008	0.017		0.928	0.048	G	0.95	0.02	A	9.0645	0.0021	0.017	119		9.03	9.10					1							
98679	10.135	0.037	8.785	0.020	A	1.124	0.007	G	1.21	0.02	A	8.7577	0.0331	0.049	96	A	8.70	8.86		D	20026−5003	I 2	1 C P D							D
98680	8.733	0.015	8.665	0.018		0.068	0.022	T	0.08	0.02	L	8.6849	0.0016	0.012	60		8.66	8.71		C			1							
98681											T	10.0408	0.1054			B				D	20026−5003	I 2	1 C L D							D
98682	8.156	0.010	6.699	0.005		1.228	0.009	T	1.21	0.02	A	6.7254	0.0009	0.006	102		6.71	6.74		C			1							S
98683	9.311	0.015	9.095	0.018		0.206	0.022	T	0.23	0.03	L	9.1238	0.0023	0.020	121		9.09	9.16		C			1							
98684	9.560	0.016	8.268	0.010		1.099	0.015	T	1.06	0.02	L	8.3162	0.0020	0.019	132		8.28	8.35					1							
98685	9.897	0.033	8.366	0.018		1.280	0.015	G	1.24	0.02	I	8.3737	0.0037	0.016	50		8.35	8.40			20026−0321	I 1	1							S
98687	8.232	0.009	8.246	0.011		−0.011	0.012	T	0.01	0.01	L	8.2542	0.0016	0.019	114		8.22	8.29					1							
98688	6.534	0.007	4.675	0.006		1.640	0.008	G	2.50	0.02	A	4.4512	0.0073	0.049	83		4.37	4.52		U 2			1 S							S
98689	7.920	0.011	7.571	0.009		0.308	0.011	G	0.35	0.01	H	7.6288	0.0023	0.022	87		7.60	7.66		U 2			1							S
98690	8.717	0.012	6.905	0.006		1.505	0.006	G	1.47	0.01	L	6.8662	0.0011	0.010	100		6.85	6.88					1							S
98691	9.419	0.015	9.455	0.021		0.280	0.015	G	−0.24	0.13	S	9.4799	0.0034	0.028	132		9.43	9.53		R			1							S
98692	9.177	0.014	8.410	0.011		0.680	0.015	G	0.74	0.01	H	8.4567	0.0010	0.012	120		8.43	8.48		D			1							
98693	9.947	0.031	9.268	0.026		0.617	0.030	T	0.69	0.03	L	9.3179	0.0022	0.016	84		9.30	9.35		C			1							
98694	9.752	0.036	8.520	0.022		1.052	0.033	T	1.02	0.03	L	8.5576	0.0025	0.014	53		8.54	8.58		C	20027−0036	I 1	1							
98695	7.909	0.011	6.761	0.007	*	0.986	0.010	T	0.97	0.01	L	* 6.8344	0.0016	0.012	116	*	6.82	6.86		D	20028+1435	I 1	2 C A	AB	266	3.538	0.010	2.86	0.05	S
98696	8.244	0.007	8.284	0.008		−0.036	0.005	G	−0.01	0.01	H	8.2728	0.0012	0.017	200		8.24	8.30					1							
98697	7.228	0.006	6.956	0.006		0.259	0.008	T	0.29	0.01	L	6.9883	0.0012	0.012	126		6.97	7.01					1							S
98698	8.923	0.014	7.595	0.009		1.128	0.015	G	1.21	0.02	A	7.5947	0.0013	0.009	99		7.58	7.61		C			1							S
98699	6.916	0.003	6.934	0.004		−0.015	0.004	T	0.01	0.00	L	6.9367	0.0007	0.010	229		6.92	6.95					1							S
98700	9.787	0.020	9.439	0.022	A	0.406	0.015	G	0.47	0.02	H	* 9.3959	0.0029	0.031	137	*	9.34	9.44			20028+3142	H 1	2 C A	AB	197	7.999	0.025	2.50	0.09	G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
98701	20 02 48.81	+31 57 31.7	6.39	H	300.703 358 46	+31.958 800 63		2.89	11.37	12.76	0.41	0.47	0.65	0.50	0.48	−14	−	9	+14	+12	+	2	+	2	+	3	−	8	+	5	−	2	0	0.48
98702	20 02 49.05	+67 52 24.4	4.51	G	300.704 363 40	+67.873 448 72		8.02	16.43	47.80	0.49	0.47	0.50	0.57	0.56	−	1	−16	+15	+	9	+15	−	2	+18	−	2	−	2	+22		1	1.01
98703	20 02 49.22	+38 54 42.6	8.64	H	300.705 082 68	+38.911 821 25		15.23	89.72	−90.57	0.73	0.74	0.92	0.85	0.86	−	9	+13	+	0	+27	+	3	+	8	+	5	−	2	−	3	−	3	1	−1.37
98704	20 02 50.20	−75 20 57.6	8.23	H	300.709 180 67	−75.349 338 60		12.05	−28.30	13.16	0.69	0.63	0.98	0.99	0.79	−	3	−23	+	1	−21	+	4	+	3	+	1	−14	+	9	−	2	0	1.18
98705	20 02 52.14	+10 54 42.2	6.92	H	300.717 233 83	+10.911 710 30		11.47	53.66	−3.45	0.70	0.56	0.86	0.80	0.61	+31	−16	−17	+10	+	7	+10	+10	+	8	−	6	+27		2	0.35
98706	20 02 52.38	+32 34 38.7	8.53	H	300.718 232 96	+32.577 418 85		2.57	1.77	−1.26	0.58	0.64	0.87	0.61	0.70	−	7	+13	−	7	+20	+12	−15	+13	+	3	+	5	+	2	0	−0.35
98707	20 02 54.87	−18 32 46.0	7.63	G	300.728 618 22	−18.546 110 21		11.55	49.97	−69.12	0.85	0.62	0.94	1.13	0.91	+10	−11	−15	−10	+	4	+26	+10	+	6	−	9	+11		0	2.42
98708 H	20 02 55.31	−84 55 10.9	9.21	H	300.730 471 39	−84.919 701 77	*	2.34	11.92	−19.22	1.47	1.85	1.84	1.68	1.75	+	0	−13	+	7	+25	−	2	−	4	−	3	−	6	−24	−25	0	−0.30
98709	20 02 55.55	+45 59 12.9	8.35	G	300.731 448 04	+45.986 918 63		−0.85	−2.90	−2.78	0.61	0.60	0.73	0.70	0.56	−	5	−	9	+22	+	2	+10	+10	+	8	−18	+	6	+	6	0	0.35
98710	20 02 56.59	+12 23 34.6	8.72	H	300.735 790 92	+12.392 941 52		7.16	32.45	1.79	1.01	0.84	1.21	1.31	1.14	+20	−24	+	0	+41	+11	+13	+	7	+45	+13	+16		0	−1.25
98711	20 02 56.60	−08 48 43.7	8.54	H	300.735 820 17	−08.812 129 62		3.91	3.13	−3.96	1.25	1.05	1.51	1.49	1.32	+19	−	6	−35	−	9	+22	+33	+40	+40	−	9	+19		0	1.52
98712	20 02 58.07	+57 05 04.4	7.77	H	300.741 945 57	+57.084 566 08		6.51	10.17	11.29	0.53	0.49	0.55	0.58	0.49	−	7	+	8	−	1	+16	+	6	−	2	+	8	−23	+18	−	3	0	−0.15
98713	20 02 59.89	−76 07 59.1	10.33	G																												
98714	20 03 00.70	+28 18 25.3	7.30	H	300.752 931 26	+28.307 026 60		16.10	104.91	−69.85	0.37	0.57	0.81	0.44	0.62	−24	+	3	−	7	+	2	+15	+	2	+19	−37	+13	−12		0	0.23
120148	20 03 00.82	+20 05 49.8	10.57	G	300.753 399 69	+20.097 160 77		36.47	175.25	−13.65	1.63	1.59	2.32	2.04	2.30	+	6	+14	−19	−	8	+	5	+23	+	7	+19	−	6	+21		8	5.07
98715	20 03 00.92	−26 02 29.7	8.26	H	300.753 848 94	−26.041 596 93		5.86	17.20	−3.76	1.05	0.66	1.17	1.17	0.80	+42	−35	−19	+	8	+18	−	9	+19	+	8	−10	+47		0	2.21
98716	20 03 01.17	−09 02 33.3	7.65	H	300.754 894 50	−09.042 593 58		16.28	−17.16	−142.91	0.98	0.76	1.21	1.19	0.93	+	8	+	6	−39	−15	+10	+26	+27	+24	−	7	+	2		0	0.94
98717	20 03 02.06	+40 10 23.5	7.59	H	300.758 577 47	+40.173 189 89		5.42	−13.91	−8.36	0.52	0.53	0.67	0.54	0.60	+	1	−	3	−	1	−	5	+	6	−	5	+	6	−	7	+20	+13	0	1.20
*98718	20 03 02.55	+18 17 43.9	6.84	H	300.760 644 00	+18.295 528 62		15.62	50.05	−26.82	0.57	0.51	0.78	0.72	0.73	−12	−12	−11	+	5	+	1	+12	+	1	+15	−	2	+	3	0	−0.81
*98719	20 03 02.51	+05 44 16.7	7.84	1 H	300.760 456 14	+05.737 984 74		0.20	0.77	−7.95	0.71	0.73	1.13	0.91	0.94	+39	−	6	−36	+31	+	2	+44	+20	+61	−16	+27		2	1.41
*98720	20 03 03.70	−07 41 50.1	8.44	H	300.765 434 43	−07.697 243 84		13.98	0.63	−89.36	1.16	1.00	1.49	1.30	1.21	+27	−22	−46	−	1	+12	+25	+31	+46	−25	+18		0	1.29
*98721	20 03 04.00	+13 02 41.0	9.12	H	300.766 670 76	+13.044 710 89		3.86	−1.35	−12.88	0.91	0.86	1.23	1.14	1.11	+21	−23	−28	+16	−	7	+18	+	1	+37	−	6	+	1		0	0.75
*98722	20 03 04.86	−35 19 15.6	8.21	H	300.770 241 04	−35.321 004 43		5.11	−2.57	−24.53	1.07	0.60	1.17	1.18	0.94	+	8	−41	+	2	−	8	+	4	+21	+	0	+	5	+11	+10	0	0.22
*98723	20 03 05.22	−06 17 15.8	9.59	H	300.771 770 30	−06.287 735 93		25.09	73.75	−114.58	1.48	1.12	1.72	2.02	1.69	+26	+	0	−	2	+	2	+29	+44	+36	+43	+16	+33		0	0.85
*98724	20 03 05.65	−17 20 53.6	7.55	H	300.773 531 09	−17.348 214 64		3.83	−26.81	−32.65	0.94	0.68	1.01	1.14	0.97	+13	−	3	+	0	+	0	+27	+29	+28	+33	+	7	+27		0	1.15
*98725	20 03 03.44	+20 10 21.7	10.46	G	300.764 339 32	+20.172 696 22		4.55	−0.12	−17.39	1.31	1.34	1.94	1.75	1.90	+	7	+18	−20	−	2	+	1	+16	+	1	+17	−	2	+21		0	0.75
98726	20 03 05.76	+26 53 31.3	7.87	H	300.773 988 48	+26.892 015 45		0.31	3.30	1.27	0.48	0.57	0.84	0.50	0.58	−	6	+	1	−27	+29	−	2	−14	−	3	−29	+25	−	3	0	−1.14
98727	20 03 06.14	+23 42 55.7	9.42	1 H	300.775 580 54	+23.715 468 31		0.64	1.70	−10.39	0.97	0.78	1.39	1.10	0.88	−27	+	3	−	5	−22	−	1	+	3	+	0	−18	+	2	−36	2	0.15
98728	20 03 09.08	+41 28 27.8	7.00	1 G	300.787 826 12	+41.474 379 65		9.30	19.95	31.85	0.43	0.46	0.56	0.47	0.48	−	2	−	2	+	1	+	0	+11	+	1	+11	−11	+22	+	7	0	−0.41
98729	20 03 11.62	+31 55 10.1	8.01	2 H	300.798 435 70	+31.919 458 72		−0.15	−2.10	−5.45	0.61	0.70	0.97	0.73	0.88	−	6	−	4	+10	+19	+	7	+	6	+	6	−	0	−	2	+	2	0	−1.39
98730 H	20 03 12.58	+04 43 48.9	6.56	G	300.802 436 73	+04.730 246 14	*	2.67	13.93	5.56	0.74	0.53	0.92	0.97	0.67	+31	−18	−25	+47	−	1	+24	+	3	+41	+	6	+16		0	0.17
98731	20 03 12.86	+50 18 32.3	7.18	H	300.803 602 20	+50.308 968 65		3.72	24.06	28.37	0.55	0.49	0.59	0.60	0.51	−11	−19	−	5	−15	+17	−	9	+13	−17	+15	−	4		0	1.70
98732	20 03 12.98	−18 14 31.8	7.88	G	300.804 099 01	−18.242 170 30		11.40	−13.49	6.08	1.03	0.69	1.07	1.25	1.02	−	2	−	5	−13	−18	+10	+13	+11	+	6	−12	+11		0	1.22
98733	20 03 13.10	+52 34 31.2	7.78	G	300.804 566 13	+52.575 330 53		6.61	30.81	13.84	0.58	0.50	0.60	0.66	0.54	−	4	−	3	−	1	+	4	+	4	+	8	+	3	+	5	+11	+	6	3	−1.68
98734 H	20 03 13.50	+50 27 53.9	7.53	H	300.806 247 17	+50.464 980 54	A	4.57	8.66	−19.05	0.79	0.74	0.78	0.79	0.72	−	4	−17	+10	−14	+17	+	5	+16	−19	+	3	+12		2	0.15
98735	20 03 14.93	+27 48 23.6	8.69	H	300.812 216 45	+27.806 564 92		1.47	0.20	−4.25	0.49	0.83	1.12	0.57	0.87	−25	+	6	−15	−	2	+15	−12	+16	−33	+16	−16		2	−0.53
98736	20 03 15.28	−05 46 57.4	9.34	H	300.813 683 81	−05.782 607 55		4.79	6.10	−3.80	1.41	1.18	1.68	1.90	1.66	+34	+	5	−	1	+31	+34	+50	+39	+65	+13	+41		0	−1.26
98737	20 03 15.65	+58 57 16.5	12.04	3 H	300.815 208 27	+58.954 572 89		1.48	−5.60	6.02	1.90	1.77	2.00	2.06	1.84	+13	−17	+11	−	9	−	2	+	8	−	5	−22	+20	+21		1	−2.15
98738	20 03 16.39	+18 30 03.7	5.99	H	300.818 303 16	+18.501 040 63		3.84	11.41	−19.67	0.50	0.48	0.73	0.62	0.69	+	1	−21	−13	−	6	−	1	+	8	−	3	+10	+	2	+13	0	−1.19
98739 H	20 03 16.66	−42 55 24.7	7.59	H	300.819 423 03	−42.923 521 43	A	6.83	−15.21	−6.88	1.49	0.88	1.55	1.96	1.30	+	9	−26	+13	+28	+	5	−	8	+	9	+	9	+	2	+36	2	0.19
98740	20 03 18.68	+33 26 59.8	8.60	2 H	300.827 826 34	+33.449 932 04		−0.69	−3.21	−6.57	0.65	0.75	0.97	0.76	0.80	−18	−	3	+12	+15	+18	−	8	+20	−22	+	9	−11		0	−0.65
98741	20 03 19.74	−65 17 22.9	8.14	H	300.832 270 03	−65.289 693 00		8.85	6.75	−29.98	0.74	0.65	1.07	0.76	0.66	+	1	−23	−29	+21	+10	−	7	+	3	−17	+	2	−19		0	0.57
98742	20 03 19.97	+18 43 22.4	8.25	H	300.833 223 68	+18.722 887 91		3.04	−0.38	−5.75	0.75	0.74	1.08	0.97	1.16	+13	−10	−	4	−20	+	7	−	6	−	1	+15	−11	+42		0	−0.53
98743	20 03 20.12	−54 32 14.4	8.88	H	300.833 838 26	−54.537 345 83		3.84	5.98	−4.88	0.76	0.61	1.12	1.07	1.00	+12	−27	+	1	−15	+16	+11	+14	−	1	+17	+	3		0	0.54
98744	20 03 21.99	+07 29 56.2	9.25	H	300.841 640 15	+07.498 944 74		3.60	−11.25	−2.84	1.05	0.80	1.36	1.29	1.02	+36	−	9	−13	+20	−	9	+24	−	6	+14	−14	+28		0	−0.99
98745	20 03 23.30	−52 25 09.5	8.82	H	300.847 082 04	−52.419 301 57		4.80	12.82	−18.81	0.94	0.71	1.17	1.23	1.10	−	2	−	7	−	7	−18	+29	−	2	+30	+	0	+10	+	8	0	−0.45
98746	20 03 24.09	+29 57 28.2	8.24	H	300.850 364 94	+29.957 840 38		3.16	15.70	−0.05	0.56	0.72	1.00	0.66	0.77	−	4	+	8	+14	+29	+	2	+	9	+	0	−	2	−12	−	3	0	−0.35
98747	20 03 25.28	+51 44 18.1	7.82	H	300.855 342 27	+51.738 355 79		2.24	1.20	5.10	0.58	0.52	0.61	0.60	0.58	−	9	−12	+	1	+	4	+13	−	8	+13	−	3	+	8	+	4	1	−1.45
98748	20 03 25.86	+57 48 28.4	8.77	H	300.857 767 91	+57.807 895 59		3.03	11.36	−6.78	0.66	0.64	0.72	0.72	0.61	−	2	+	7	+14	+15	+	1	−	8	+	5	−12	+17	+	4	1	0.35
98749	20 03 26.63	+39 03 00.0	8.56	H	300.860 940 57	+39.050 006 79		2.99	7.99	−4.63	0.75	0.73	0.92	0.94	0.82	−	4	+	4	−	5	+27	+	2	+	0	+	3	−	4	+	1	+	0	0	−0.07
98750	20 03 26.77	+00 05 20.4	8.03	G	300.861 541 90	+00.089 000 67		8.89	32.23	−29.91	1.00	0.63	1.12	1.23	1.00	+34	−42	−18	+	9	+	5	+12	+10	+45	+10	+	6		2	1.64
98751	20 03 28.48	−56 43 08.6	9.04	H	300.868 662 47	−56.719 050 72		11.69	−15.28	−109.43	0.87	0.79	1.20	1.21	1.17	+34	−22	−19	+	8	+23	+	9	+24	+10	+	8	+20		0	−0.05
98752	20 03 29.29	−22 57 21.3	7.96	1 H	300.872 049 58	−22.955 907 63		5.62	4.45	1.81	0.85	0.51	0.94	0.86	0.51	+45	−43	−24	−	8	+12	+16	+	8	−14	+16	+65		0	0.07
98753 H	20 03 29.40	+36 01 30.6	6.62	G	300.872 506 05	+36.025 159 49	A	0.03	−3.27	−8.03	0.79	0.97	1.02	0.79	0.96	−	3	−10	−	4	−	2	+	5	−12	+	2	−23	+	9	−	7	7	1.55
98754	20 03 30.01	+16 01 52.6	5.73	H	300.875 053 00	+16.031 273 37		5.12	5.05	−7.73	0.48	0.41	0.70	0.61	0.58	−15	−10	−16	−	5	−	6	+14	−	4	−	9	+	5	+	3	1	0.27
98755	20 03 30.63	+37 24 38.1	8.78	H	300.877 623 69	+37.410 571 20		1.91	0.93	−5.72	0.65	0.76	0.90	0.77	0.88	−25	−	9	−	4	+	5	+10	−	8	+10	−19	+10	−22		0	−0.97
98756 H	20 03 31.64	−36 35 46.7	7.03	G	300.881 829 31	−36.596 304 03	A	7.53	6.69	−25.33	1.28	0.90	1.20	1.38	1.01	+71	−10	−12	−	9	+	4	−22	−10	−20	+22	+23		3	0.37
*98757	20 03 31.74	−78 49 50.6	8.01	1 H	300.882 244 97	−78.830 732 41		5.29	2.17	−7.82	0.64	0.59	0.87	0.73	0.76	+	3	−32	+	2	+	4	+16	−	7	+20	−17	−21	−	3	0	−0.02
*98758	20 03 31.65	+07 51 15.0	8.28	H	300.881 892 68	+07.854 166 99		9.51	−3.32	13.56	0.84	0.65	1.16	1.09	0.78	+23	+	2	−17	+29	−	2	+38	+	4	+24	−14	+	9		0	0.89
98759	20 03 32.42	−14 23 57.2	9.74	H	300.885 075 40	−14.399 228 72		−0.23	6.13	−1.43	1.48	1.18	1.59	1.91	1.64	+28	−27	−23	+	0	+28	+10	+30	+41	+	3	+24		0	−0.05
98760	20 03 33.38	−15 24 48.0	7.24	G	300.889 077 74	−15.413 337 53		7.29	20.29	−7.43	0.92	0.73	1.10	1.09	0.91	+19	−16	−39	−	2	+18	+32	+37	+45	−17	+15		0	−0.73
98761	20 03 33.41	−37 56 25.8	4.77	H	300.889 214 06	−37.940 491 03		8.05	64.71	−85.44	0.73	0.48	0.83	0.91	0.60	+11	−21	−25	+	4	+	3	+26	+	8	−	7	+14	+15		0	0.34
98762	20 03 34.17	+61 01 51.8	8.09	1 H	300.892 382 06	+61.031 062 99		0.45	−15.64	−9.33	0.62	0.59	0.65	0.64	0.56	+	10	+18	+23	+25	+	5	+	1	+	6	−	6	+	5	+	9	0	0.25
98763	20 03 35.19	−38 51 08.6	6.91	G	300.896 633 68	−38.852 383 40		4.33	36.79	−62.76	0.94	0.54	1.01	1.23	0.75	+10	−29	−	8	−	4	+	1	+14	−	1	−20	+	6	+	2	0	2.23
98764	20 03 35.34	−73 45 11.7	9.56	G	300.897 256 30	−73.753 248 70		27.72	−1.92	−217.44	0.86	1.02	1.34	0.93	1.18	−21	−	7	+12	−	6	−	1	−13	+	1	−	4	−	4	−30	0	0.73
98765	20 03 35.42	−24 34 40.6	9.76	H	300.897 587 00	−24.577 954 03		1.08	7.33	−17.25	1.41	0.84	1.69	1.62	1.00	+36	−23	+	4	−	4	+23	+36	+16	+	8	+26	+56		0	0.46
98766	20 03 35.99	−37 31 41.9	6.85	1 H	300.899 960 01	−37.528 313 11		5.79	25.32	−95.04	0.81	0.52	0.91	1.00	0.69	+19	−26	−21	+	2	+	8	+23	+12	−	3	+10	+17		0	−0.47
98767	20 03 36.95	+29 53 53.1	5.73	H	300.903 940 52	+29.898 079 32		62.92	683.32	−524.06	0.36	0.44	0.62	0.42	0.51	−13	−	1	+	6	+24	−	9	−	5	−	7	+	1	−	1	−	6	0	0.39
98768	20 03 37.12	−61 23 40.0	9.70	H	300.904 655 91	−61.394 449 38		2.59	34.62	−113.16	0.88	0.79	1.38	0.98	1.16	+	12	−35	−18	−	5	−35	+21	−30	−40	+24	+23		0	1.70
98769	20 03 38.31	−62 14 33.6	8.77	H	300.909 611 65	−62.242 653 73		5.21	39.36	21.88	0.85	0.66	1.15	0.91	0.76	−	5	−20	−23	+22	−13	+	3	−16	−17	+10	−12		0	−1.12
*98770	20 03 38.65	+38 20 05.7	9.57	H	300.911 053 07	+38.334 909 34	B	3.30	−3.96	−0.82	10.67	11.53	7.55	7.09	8.04	−	7	−	2	+	0	+	3	+	0	−13	+	1	−	6	+	3	−	1	3	1.58
*98771	20 03 38.59	−80 55 35.0	10.00	H	300.910 784 08	−80.926 387 08		4.80	−6.75	2.91	0.87	0.85	1.12	0.97	0.97	−	2	−20	−	2	−	2	+13	−10	+13	−13	−	4	−	9	0	−1.00
98772	20 03 38.81	+22 56 27.9	6.45	H	300.911 708 02	+22.941 096 32		6.35	−18.84	−15.74	0.51	0.41	0.75	0.59	0.47	−44	−11	+	7	−13	−	3	+10	−	5	−20	−	2	−69		1	0.59
*98773	20 03 39.51	+38 19 38.4	7.15	G	300.914 618 71	+38.327 330 66	A	−0.18	−15.01	−11.78	1.37	1.57	1.44	1.32	1.50	−10	−	6	+	3	−	3	+	1	−13	+	3	−15	+	1	−	2	3	1.58
*98774	20 03 39.44	−39 58 28.4	8.20	H	300.914 313 25	−39.974 563 83		0.66	11.54	5.57	1.04	0.71	1.15	1.23	0.88	+18	−29	−	9	+	5	−13	+	0	−11	−23	−	3	+17		0	1.40
98775	20 03 39.91	−31 30 12.5	10.67	H	300.916 312 21	−31.503 471 51		2.22	1.09	−4.55	2.28	1.44	2.68	2.74	1.95	+49	−49	−28	−20	−21	+26	−	8	−24	−11	+35		0	−0.19
98776	20 03 40.05	−71 52 07.0	9.34	H	300.916 859 95	−71.868 597 77		5.52	28.51	−16.04	0.74	1.00	1.29	0.87	1.23	−24	−	8	+	0	+	4	+	4	−13	+	4	+	5	+	5	−37	0	−0.23
98777	20 03 40.55	+10 12 14.8	8.16	1 H	300.918 969 06	+10.204 105 98		2.90	9.83	0.66	0.84	0.71	1.17	0.99	0.78	+28	−20	−35	+16	+	0	+	24	+12	+	22	−14	+	24		0	−0.68
98778	20 03 41.60	+36 25 32.2	8.15	2 G	300.923 323 82	+36.425 613 64		1.30	−0.01	−6.26	0.51	0.58	0.72	0.54	0.58	−	7	−	3	+	3	+	7	+	5	−10	+	7	−13	+	1	+	1	0	−1.65
98779	20 03 41.76	−46 59 05.6	8.19	H	300.923 993 04	−46.984 882 68		10.93	43.05	−49.71	0.99	0.60	1.27	1.75	1.09	−10	−12	−11	+18	+	4	−36	−	4	+10	+36	−34		0	−1.67
98780	20 03 42.23	+21 29 47.3	6.62	1 H	300.925 950 05	+21.496 478 96		2.48	17.22	9.05	0.57	0.46	0.77	0.75	0.66	−19	−	1	+	0	+	5	−16	+	4	−17	+	2	−	4	−18	0	−1.86
98781	20 03 42.34	−36 03 34.8	7.09	H	300.926 401 47	−36.059 679 54		3.79	7.16	−11.15	0.89	0.52	0.99	1.02	0.79	+	8	−45	+	8	+	5	−10	+17	−10	−	6	−11	−	2	0	0.32
98782	20 03 43.01	−32 05 16.9	9.98	H	300.929 209 57	−32.088 030 09		8.45	32.32	−34.74	1.56	1.11	1.61	1.79	1.50	+45	−16	−18	−36	−16	+	1	−13	−30	−	1	+58		0	1.50
98783	20 03 43.49	+29 59 22.1	6.80	H	300.931 199 79	+29.989 465 38		1.54	1.69	−3.01	0.42	0.50	0.73	0.48	0.57	−	8	−	2	+	7	+25	−	7	−	2	−	6	+	1	−	4	−	3	0	0.83
98784	20 03 44.18	+20 19 24.0	9.49	G	300.934 086 59	+20.323 331 44		6.37	21.74	30.34	1.21	1.02	1.64	1.47	1.51	−	3	+	9	−21	−24	+	2	+16	−	2	+19	−12	+16		4	−1.41
98785	20 03 44.33	−22 35 44.3	6.44	H	300.934 725 79	−22.595 651 92		17.38	−38.45	23.36	0.68	0.41	0.76	0.72	0.44	+47	−43	−14	−	7	+	6	+20	+	5	−18	+15	+68		0	0.28
98786	20 03 46.00	+34 52 11.5	8.25	G	300.941 674 02	+34.869 855 57		8.61	0.15	−27.02	0.57	0.66	0.84	0.63	0.72	−	8	+	6	+	6	+14	−	5	−13	−	3	−	4	−	6	+	0	0	−0.33
98787	20 03 46.43	+53 26 06.1	8.15	H	300.943 458 45	+53.435 036 71		1.73	3.08	−12.18	0.68	0.57	0.70	0.90	0.66	+	7	−19	+	1	+10	−	8	+	3	−	9	+	0	+15	+15	0	−0.42
98788	20 03 49.62	+14 58 58.8	6.83	G	300.956 732 65	+14.982 996 11		−1.23	−2.93	−3.86	0.65	0.59	0.96	0.81	0.79	+	1	−17	−22	−	7	+	4	−	2	+	6	−	3	−11	+	8	0	1.38
98789	20 03 49.64	−78 15 46.1	8.35	H	300.956 822 04	−78.262 799 42		3.63	30.02	7.53	0.64	0.67	0.93	0.72	0.81	+	9	−20	−	2	+	7	−	3	+	0	−	2	−12	−	8	+	7	0	−0.24
98790	20 03 49.97	+14 58 30.5	11.29	H																												
98791	20 03 51.84	+21 03 01.6	7.16	H	300.965 991 97	+21.050 437 67		0.82	−1.98	−5.45	0.72	0.66	0.94	1.02	1.00	−	1	−12	−15	+22	−	9	+	1	−	7	+20	−16	+	2	0	1.37
98792	20 03 52.76	+23 20 34.5	7.28	H	300.969 853 75	+23.342 904 32		64.17	−1002.84	−912.55	0.58	0.50	0.85	0.64	0.52	−27	−16	−	3	−16	−11	+21	−10	−19	−	5	−60		1	−0.16
98793	20 03 55.17	+44 08 24.2	11.64	2 G	300.979 865 82	+44.140 062 63		1.29	−0.70	−8.92	1.96	2.08	2.48	2.40	2.26	+	1	−14	+	9	+	3	−	8	−	3	−	7	−15	+15	+14	4	2.20
98794	20 03 55.27	−49 14 08.5	9.82	H	300.980 301 62	−49.235 693

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
98701	7.941	0.007	6.513	0.005		1.205	0.007	T	1.16	0.01	L	6.5568	0.0009	0.007	143		6.55	6.57				1							S
98702	6.253	0.004	4.661	0.002		1.313	0.008	G	1.23	0.03	C	4.6768	0.0005	0.005	100		4.67	4.68		C		1							S
98703	9.280	0.014	8.682	0.013		0.558	0.017	T	0.63	0.02	L	8.7564	0.0018	0.018	125		8.73	8.78		C		1							
98704	8.885	0.010	8.292	0.009		0.535	0.008	G	0.58	0.02	A	8.3449	0.0017	0.017	152		8.31	8.38				1 G							S
98705	7.090	0.007	6.944	0.007		0.140	0.009	T	0.15	0.01	L	6.9733	0.0011	0.008	71		6.95	6.99		C		1							S
98706	8.438	0.007	8.505	0.010		−0.061	0.018	G	−0.04	0.02	H	8.5130	0.0016	0.017	162		8.48	8.54				1							
98707	8.371	0.016	7.713	0.011		0.601	0.014	T	0.67	0.01	L	7.7596	0.0010	0.007	57		7.75	7.77		D		1							S
98708	10.709	0.037	9.358	0.020	*	1.145	0.033	T	1.11	0.03	L *	9.3810	0.0024	0.025	127	*	9.34	9.42		C	20029−8455	H 1	2 C C	AB	309	0.221	0.121	2.66	1.91	
98709	8.504	0.009	8.380	0.011		0.120	0.013	T	0.13	0.01	L	8.4020	0.0016	0.014	124		8.38	8.43		C			1							
98710	9.396	0.018	8.791	0.017		0.581	0.015	G	0.65	0.01	H	8.8493	0.0023	0.015	95		8.83	8.88					1							
98711	10.339	0.043	8.697	0.020		1.374	0.037	T	1.34	0.04	L	8.6861	0.0023	0.014	53		8.66	8.70		C			1							
98712	7.827	0.008	7.775	0.008		0.053	0.011	T	0.07	0.01	L	7.7922	0.0011	0.011	118		7.77	7.81		C			1						S	
98713						0.914	0.015	G	0.96	0.02	I	10.4849	0.0031	0.043	155		10.43	10.57					S						G	G
98714	8.278	0.007	7.387	0.005		0.793	0.006	T	0.82	0.00	L	7.4520	0.0008	0.012	250		7.43	7.47					1						S	
120148	12.480	0.301	10.725	0.096		1.375	0.020	G	1.62	0.04	I	10.5992	0.0074	0.052	89		10.53	10.67					1	S					G	
98715	8.435	0.010	8.277	0.011		0.144	0.014	T	0.16	0.01	L	8.3082	0.0014	0.012	89		8.28	8.33					1						S	
98716	8.191	0.015	7.702	0.012		0.486	0.015	G	0.56	0.02	H	7.7563	0.0017	0.010	57		7.74	7.78					1						S	
98717	7.779	0.007	7.627	0.009		0.146	0.011	T	0.16	0.01	L	7.6477	0.0011	0.011	120		7.63	7.67		C			1						S	
98718	7.575	0.008	6.902	0.008		0.616	0.003	G	0.68	0.00	H	6.9690	0.0012	0.012	112		6.95	6.99					1						S	
98719	7.949	0.008	7.832	0.011		0.113	0.013	T	0.13	0.01	L	7.8822	0.0024	0.017	100		7.85	7.90		U			1						S	
98720	9.066	0.019	8.499	0.018		0.530	0.023	T	0.60	0.02	L	8.5526	0.0020	0.013	55		8.53	8.57		C			1							
98721	9.121	0.016	9.150	0.022		−0.022	0.025	T	0.00	0.03	L	9.1223	0.0027	0.019	80		9.09	9.15					1							
98722	9.515	0.019	8.326	0.012		1.018	0.018	T	0.99	0.01	L	8.3794	0.0011	0.015	85		8.36	8.40		D			1							
98723	11.038	0.096	9.701	0.045		1.040	0.015	G	1.09	0.02	I	9.7301	0.0031	0.019	46		9.69	9.76		C			1							
98724	9.221	0.023	7.723	0.013		1.260	0.021	T	1.22	0.02	L	7.7153	0.0013	0.014	47		7.70	7.75		D			1	S					S	
98725	10.953	0.055	10.403	0.055		0.508	0.020	G	0.58	0.02	H	10.5467	0.0037	0.031	89		10.46	10.60		C			1						G	
98726	7.774	0.006	7.855	0.008		−0.069	0.009	T	−0.05	0.01	L	7.8539	0.0014	0.016	166		7.83	7.88					1						S	
98727	9.419	0.015	9.417	0.020		0.007	0.023	T	0.03	0.02	L	9.4251	0.0030	0.034	164		9.36	9.49		U			1						G	
98728	7.405	0.005	7.028	0.005		0.350	0.002	G	0.41	0.00	H	7.0782	0.0016	0.013	132		7.06	7.10		U 2			1						S	
98729	9.920	0.023	8.211	0.010		1.514	0.021	G	1.55	0.03	H	8.1341	0.0055	0.060	146		8.04	8.24	4.72	P 1 A			1 G							
98730	8.575	0.010	6.745	0.005	*	1.540	0.015	G	1.54	0.09	H *	6.6582	0.0011	0.010	114	*	6.64	6.67			20032+0444	H 1	2 C S A	AB	340	0.161	0.031	2.18	0.49	S
98731	9.044	0.013	7.335	0.007		1.427	0.012	T	1.41	0.02	L	7.3185	0.0012	0.011	122		7.30	7.33					1						S	
98732	8.391	0.013	7.942	0.015		0.451	0.015	G	0.52	0.02	H	7.9800	0.0016	0.010	51		7.96	8.00		C	20032−1815	I 1	1 S						S	
98733	8.126	0.009	7.812	0.008		0.301	0.019	G	0.34	0.03	H	7.8595	0.0012	0.013	142		7.84	7.88					1						S	
98734	7.628	0.006	7.539	0.008	A	0.200	0.495	G	0.06	0.01	L *	7.5515	0.0012	0.011	130	*	7.53	7.57			20032+5028	I 1	2 C C	AB	54	5.969	0.037	3.78	0.12	S
98735	10.608	0.026	8.886	0.011		1.437	0.022	T	1.43	0.04	L	8.8242	0.0017	0.022	266		8.78	8.86					1							
98736	9.728	0.031	9.360	0.033		0.557	0.020	G	0.63	0.02	H	9.4559	0.0039	0.023	52		9.41	9.49		C			1							
98737	11.917	0.150	11.571	0.192							T	12.1255	0.0350	0.322	101		11.45	12.37	0.13	P 1 A			1						G	P
98738	7.798	0.008	6.140	0.004		1.420	0.015	G	1.37	0.03	C	6.1300	0.0009	0.009	109		6.12	6.14			20033+1830	I 1	1						S	
98739	8.080	0.010	7.698	0.009	*	0.352	0.002	G	0.43	0.02	A *	7.6724	0.0012	0.011	113	*	7.65	7.69		D	20033−4255	I 1	2 C A	AB	152	0.884	0.003	1.34	0.02	S
98740	8.702	0.010	8.624	0.012		0.100	0.015	G	0.11	0.02	H	8.6396	0.0043	0.035	142		8.58	8.69		U 2			1							
98741	8.641	0.009	8.196	0.009		0.434	0.010	T	0.50	0.01	L	8.2362	0.0018	0.018	137		8.21	8.27					1						S	
98742	10.259	0.031	8.426	0.013		1.525	0.027	T	1.56	0.04	L	8.3714	0.0023	0.024	108		8.34	8.41					1							
98743	9.119	0.010	8.915	0.012		0.188	0.015	T	0.21	0.02	L	8.9419	0.0013	0.019	144		8.91	8.98		D			1							
98744	10.409	0.033	9.345	0.022		0.922	0.030	T	0.92	0.02	L	9.4130	0.0028	0.020	97		9.38	9.44					1							
98745	9.029	0.011	8.874	0.013		0.141	0.016	T	0.16	0.02	L	8.8738	0.0027	0.024	134		8.84	8.92					1							
98746	10.099	0.021	8.365	0.009		1.458	0.019	T	1.46	0.03	L	8.3523	0.0015	0.016	179		8.32	8.39					1							
98747	8.969	0.011	7.915	0.008		0.915	0.010	T	0.91	0.01	L	7.9840	0.0013	0.012	129		7.96	8.01					1							
98748	9.846	0.019	8.833	0.014		0.884	0.018	T	0.89	0.01	L	8.9240	0.0019	0.019	123		8.90	8.95		C			1							
98749	10.237	0.033	8.700	0.016		1.291	0.029	T	1.25	0.03	L	8.7189	0.0022	0.018	118		8.69	8.76					1							
98750	8.641	0.013	8.097	0.012		0.523	0.015	G	0.60	0.02	H	8.1403	0.0012	0.009	92		8.12	8.16		C			1						S	
98751	9.766	0.019	9.067	0.016		0.632	0.019	T	0.70	0.02	L	9.1732	0.0021	0.018	129		9.15	9.20					1							
98752	9.331	0.013	8.069	0.008		1.075	0.012	T	1.04	0.01	L	8.1241	0.0013	0.014	151		8.10	8.15		M			1							
98753	7.752	0.022	7.605	0.022	B	0.148	0.010	G	0.16	0.01	R *	6.6554	0.0011	0.012	158	*	6.63	6.67		D	20035+3602	I 1	2 C A	AB	174	1.961	0.002	0.61	0.01	S
98754	5.527	0.002	5.653	0.003		−0.095	0.007	G	−0.25	0.03	C	5.6412	0.0008	0.007	136		5.63	5.66					1						S	
98755	8.818	0.011	8.774	0.014		0.040	0.016	T	0.06	0.01	L	8.7964	0.0016	0.018	133		8.76	8.82		C			1							
98756	7.152	0.006	7.083	0.008	A	0.075	0.002	G	0.09	0.00	H *	7.0698	0.0012	0.010	76	*	7.05	7.09		D	20035−3636	I 1	2 C B	AB	199	1.173	0.047	3.32	0.07	S
98757	8.621	0.010	8.042	0.009		0.541	0.012	T	0.61	0.01	L	8.1285	0.0028	0.028	134		8.09	8.16	0.12	P 1 A			1						S	P
98758	8.784	0.011	8.331	0.011		0.427	0.014	T	0.49	0.01	L	8.3747	0.0018	0.014	102		8.35	8.40		C			1							
98759	10.005	0.038	9.746	0.045		0.247	0.055	T	0.28	0.07	L	9.8130	0.0039	0.021	48		9.78	9.85		C			1							
98760	7.788	0.008	7.291	0.009		0.495	0.015	G	0.57	0.02	H	7.3397	0.0015	0.009	53		7.32	7.36		C			1						S	
98761	6.621	0.005	4.924	0.003		1.417	0.005	T	1.40	0.02	A	4.9128	0.0008	0.005	67		4.91	4.92		C			1						S	
98762	10.227	0.028	8.282	0.011		1.614	0.024	T	1.64	0.03	L	8.2044	0.0022	0.022	110		8.17	8.24		U			1							
98763	7.219	0.008	6.938	0.006		0.252	0.002	G	0.28	0.00	H	6.9877	0.0010	0.007	70		6.98	7.00		C			1						S	P
98764	10.780	0.039	9.624	0.023		0.952	0.005	G	1.00	0.01	I	9.6849	0.0025	0.027	134		9.63	9.75					1							
98765	10.123	0.031	9.750	0.034		0.353	0.043	T	0.41	0.05	L	9.8432	0.0031	0.026	95		9.81	9.87					1							
98766	8.208	0.011	7.003	0.006		1.031	0.010	T	1.00	0.01	L	7.0196	0.0019	0.018	83		6.99	7.05		U 2			1						S	
98767	6.672	0.003	5.816	0.003		0.749	0.001	G	0.83	0.07	F	5.8775	0.0006	0.007	186		5.87	5.89		C			1						S	
98768	10.250	0.025	9.695	0.024		0.520	0.031	T	0.59	0.03	L	9.8159	0.0024	0.022	139		9.78	9.84					1 G							
98769	9.324	0.014	8.829	0.014		0.477	0.015	T	0.55	0.02	L	8.8800	0.0020	0.020	127		8.84	8.91		C			1							
98770	9.799	0.029	9.449	0.033	B	0.332	0.041	T	0.39	0.06	L	9.6891	0.0455			B				D	20037+3820	I 2	1 C I D							D
98771	10.617	0.033	10.045	0.031		0.535	0.040	T	0.61	0.04	L	10.1115	0.0026	0.030	140		10.05	10.17					1							
98772	7.769	0.005	6.567	0.003		1.028	0.004	G	1.00	0.00	H	6.6196	0.0008	0.009	213		6.61	6.64					1						S	
98773	9.384	0.018	7.398	0.007	A	1.745	0.019	G	2.16	0.03	C	7.2639	0.0078	0.037	135	A	7.21	7.31		D	20037+3820	I 2	1 C P D						S	D
98774	9.895	0.024	8.338	0.013		1.307	0.021	T	1.27	0.02	L	8.3548	0.0012	0.016	78		8.33	8.38		D			1							
98775	11.392	0.091	10.817	0.093		0.537	0.115	T	0.61	0.12	L	10.7900	0.0050	0.027	61		10.73	10.83		C			1						G	
98776	10.256	0.021	9.416	0.016		0.739	0.020	T	0.79	0.01	L	9.4801	0.0025	0.030	172		9.43	9.55					1							
98777	10.342	0.037	8.383	0.014		1.625	0.031	T	1.65	0.03	L	8.2680	0.0022	0.014	72		8.23	8.30		U			1							
98778	8.299	0.008	8.193	0.009		0.167	0.012	G	0.18	0.01	H	8.2038	0.0038	0.036	149		8.15	8.27		U 2	20037+3626	I 1	1							P
98779	8.714	0.012	8.225	0.011		0.462	0.014	G	0.53	0.01	H	8.2878	0.0016	0.014	110		8.26	8.32		C			1						S	
98780	8.755	0.011	6.814	0.005		1.645	0.010	T	1.92	0.03	O	6.7116	0.0018	0.016	139		6.68	6.73		U 2			1						S	
98781	8.694	0.014	7.236	0.008		1.229	0.013	T	1.19	0.01	L	7.2519	0.0010	0.007	84		7.23	7.27		C			1						S	
98782	10.739	0.058	10.035	0.050		0.636	0.058	T	0.70	0.05	L	10.1138	0.0034	0.022	68		10.05	10.16		C			1							G
98783	8.236	0.008	6.916	0.005		1.165	0.022	G	1.07	0.03	C	6.9681	0.0008	0.009	181		6.95	6.98					1						S	
98784	10.039	0.031	9.490	0.029		0.491	0.015	G	0.56	0.02	H	9.6132	0.0029	0.021	83		9.58	9.65		C			1							G
98785	7.040	0.004	6.493	0.004		0.503	0.006	G	0.58	0.01	H	6.5506	0.0005	0.007	189		6.54	6.56		C			1						S	
98786	8.559	0.009	8.262	0.009		0.266	0.019	G	0.30	0.02	H	8.3211	0.0019	0.018	148		8.29	8.35					1							
98787	9.379	0.015	8.279	0.010		0.950	0.014	T	0.94	0.01	L	8.3159	0.0013	0.013	116		8.29	8.34		C			1							
98788	7.962	0.009	6.953	0.006		0.874	0.027	G	0.89	0.03	C	7.0049	0.0016	0.014	103		6.99	7.03		D	20038+1459	I 2	1						S	
98789	9.750	0.017	8.479	0.010		1.082	0.015	T	1.04	0.01	L	8.5156	0.0018	0.022	143		8.48	8.55					1							
98790											T	11.4263	0.0371	0.310	92		10.42	11.76		D	20038+1459	I 2	S							G
98791	8.896	0.015	7.420	0.008		1.243	0.013	T	1.20	0.01	L	7.3202	0.0024	0.018	98		7.29	7.35					1 S						S	
98792	8.333	0.009	7.372	0.007		0.815	0.003	G	0.86	0.00	H	7.4182	0.0009	0.011	151		7.40	7.44		C			1						S	
98793	12.149	0.219	11.424	0.189		1.000	0.015	G	0.98	0.01	I	11.7571	0.0088	0.069	104		11.56	11.88		U 2			1 S						D	
98794	10.382	0.033	9.865	0.032		0.495	0.035	T	0.57	0.04	L	9.9274	0.0018	0.021	105		9.89	9.98		D			1							
98795	8.829	0.011	8.469	0.011		0.375	0.015	G	0.44	0.02	H	8.5221	0.0028	0.026	129		8.48	8.56		U 2			1						S	
98796	7.744	0.006	7.819	0.009		−0.050	0.015	G	−0.03	0.01	H	7.8334	0.0013	0.014	152		7.81	7.86					1						S	
98797	11.385	0.094	10.891	0.098		0.210	0.015	G	0.23	0.02	H	11.3468	0.0047	0.039	101		11.28	11.40		C			1							D
98798	9.699	0.019	8.452	0.012		1.050	0.045	G	1.06	0.02	A	8.5020	0.0021	0.016	115		8.48	8.53		C			1							
98799	8.655	0.008	8.499	0.009		0.150	0.011	T	0.17	0.01	L	8.5403	0.0013	0.018	225		8.50	8.57					1							
98800	10.990	0.036	9.415	0.015		1.321	0.031	T	1.28	0.04	L	9.4658	0.0022	0.029	199		9.42	9.53					1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
98801	20 03 59.38	+17 07 22.6	6.91	H	300.997 399 87	+17.122 943 27	5.65	22.94	18.41	0.61	0.56	0.91	0.77	0.78	– 6	–14	–16	+ 7	+ 4	+12	+ 5	+17	+15	– 5	2	0.91
98802	20 03 59.46	+40 39 23.6	7.91	H	300.997 734 66	+40.656 544 77	3.91	9.84	–3.91	0.56	0.53	0.68	0.60	0.59	+ 3	– 9	– 5	–17	+ 6	+ 6	+ 3	–14	+24	+18	3	–0.39
98803	20 03 59.98	+62 55 25.4	8.63	H	300.999 911 42	+62.923 735 49	5.99	21.87	1.77	0.68	0.62	0.70	0.92	0.69	+ 1	+ 1	+ 2	+ 2	+16	– 5	+13	– 3	+12	+ 0	0	0.25
98804	20 04 00.20	–09 07 36.2	7.58	H	301.000 828 05	–09.126 725 01	8.12	8.44	–43.92	1.05	0.81	1.24	1.27	1.01	+12	– 1	–25	–10	+17	+31	+30	+29	– 1	+ 7	0	2.31
98805	20 04 00.26	+10 40 51.8	8.02	G	301.001 074 71	+10.681 052 59	3.91	–7.67	–10.62	0.86	0.69	1.08	1.03	0.84	+29	–20	–16	+15	+14	+ 1	+15	+22	– 6	+21	0	–0.36
98806	20 04 00.68	–78 46 45.6	8.22	G	301.002 837 87	–78.779 321 40	5.30	3.15	–16.66	0.68	0.65	0.97	0.83	0.84	+ 1	–30	+ 3	+13	+11	– 8	+16	–16	–24	– 4	0	2.88
98807	20 04 00.75	+26 16 16.8	8.94	1 G	301.003 111 17	+26.271 331 53	0.09	–2.26	–3.51	0.72	0.76	1.21	0.83	0.74	–13	– 2	–12	+27	–13	+ 2	– 4	–29	+17	+ 2	4	0.23
98808	20 04 01.09	–09 11 50.0	8.73	H	301.004 523 98	–09.197 215 66	9.73	–51.10	–47.55	1.21	0.84	1.35	1.52	1.18	+ 3	+ 1	–21	–38	+ 8	+26	+15	– 5	–15	+ 4	3	1.12
98809	20 04 01.19	–07 28 09.8	6.68	G	301.004 971 84	–07.469 378 56	15.39	14.10	–39.19	1.03	0.84	1.12	1.34	1.09	+26	–26	–36	+11	+30	+ 0	+38	+48	–12	+ 7	10	0.70
98810	20 04 01.73	–56 48 26.7	8.63	H	301.007 199 58	–56.807 404 25	3.28	7.46	–27.24	0.83	0.77	1.14	1.18	1.16	+34	–15	–15	+ 0	+11	+13	+11	– 2	+19	+22	0	–0.98
98811	20 04 01.91	–65 35 50.7	11.35	3 G																						
98812	20 04 02.46	–24 21 11.2	9.14	H	301.010 258 92	–24.353 100 77	1.36	3.82	–22.84	1.21	0.80	1.33	1.34	0.90	+48	–25	– 3	+ 5	+20	+21	+17	+ 4	+16	+66	0	–0.42
98813	20 04 02.62	–37 52 32.0	6.91	H	301.010 915 85	–37.875 546 93	35.88	78.19	–388.18	0.76	0.55	0.89	1.01	0.79	+21	–21	–19	+ 4	– 1	+22	+ 1	–14	+13	+22	0	1.30
98814	20 04 02.71	+41 35 16.5	10.03	3 H	301.011 296 56	+41.587 919 75	1.36	1.00	–4.89	0.79	0.88	1.02	0.84	0.98	– 1	–15	– 6	– 9	+12	+ 5	+10	– 2	+12	+16	1	–0.12
98815	20 04 03.26	–51 12 44.8	9.14	2 H	301.013 594 57	–51.212 457 24	2.72	–1.68	–0.71	1.10	0.66	1.18	1.68	1.21	– 8	–17	– 8	+28	– 3	– 5	– 6	+ 7	+11	–12	2	0.75
98816	20 04 04.20	+74 20 46.6	8.48	H	301.017 501 53	+74.346 267 58	4.76	21.87	30.06	0.70	0.64	0.71	0.71	0.75	+ 8	–33	–13	+ 6	+22	– 4	+23	+ 3	– 1	+ 6	3	–1.92
98817	20 04 04.88	+34 18 53.6	7.70	H	301.020 318 16	+34.314 882 18	3.20	–36.16	–54.49	0.54	0.55	0.75	0.58	0.61	–12	–10	+ 8	+32	+ 0	– 8	+ 1	+ 4	+ 5	– 7	0	–1.24
98818	20 04 05.64	+38 11 56.5	10.07	G	301.023 487 75	+38.199 031 01	1.73	–1.04	0.90	0.99	1.14	1.39	1.16	1.33	– 3	– 5	+ 4	– 8	+ 1	– 7	+ 3	–18	–13	+ 8	1	0.49
98819	20 04 06.47	+17 04 16.2	5.80	H	301.026 937 96	+17.071 161 05	56.60	–394.07	–406.42	0.52	0.46	0.76	0.63	0.64	– 6	–17	–18	– 4	+ 3	+ 7	+ 1	+ 8	+14	– 2	2	0.02
98820	20 04 06.48	–78 47 13.0	9.62	H	301.027 011 99	–78.786 938 14	4.39	3.80	–17.55	1.11	1.06	1.57	1.36	1.40	+ 5	–18	+ 2	+ 4	+ 8	– 1	+10	–17	–27	– 7	0	0.90
98821	20 04 06.59	+37 10 55.6	8.16	H	301.027 452 22	+37.182 105 59	2.61	3.18	1.88	0.55	0.64	0.78	0.66	0.67	–17	–12	– 1	+ 2	+16	–17	+13	–26	+10	–20	0	–0.25
98822	20 04 07.76	–54 10 19.5	8.40	H	301.032 346 39	–54.172 093 99	4.61	7.47	–15.68	0.84	0.67	1.11	1.10	1.03	+15	–22	–14	+ 2	+10	+ 4	+10	+ 4	+ 8	+ 8	0	2.31
98823	20 04 08.31	+07 16 40.6	5.51	1 G	301.034 611 72	+07.277 934 27	6.19	14.24	12.97	0.61	0.45	0.79	0.74	0.53	+20	–17	–27	+19	–14	+19	– 8	+12	–12	+10	0	0.97
98824	20 04 08.60	–38 53 09.4	9.91	H	301.035 818 36	–38.885 942 35	1.55	–3.35	–20.38	1.80	1.15	1.99	2.20	1.55	+22	–28	– 1	–13	–10	+ 9	–10	–27	– 5	+14	5	0.17
98825 H	20 04 08.99	+17 00 02.9	8.38	H	301.037 443 47	+17.000 796 69 A	3.85	0.82	0.65	1.61	1.58	2.17	1.80	2.04	+18	– 6	– 2	– 4	+ 1	+ 6	+ 0	+16	+ 9	+20	4	2.97
98826 H	20 04 09.25	+11 47 40.3	7.86	2 G	301.038 546 81	+11.794 519 37 A	2.23	2.06	–4.09	1.61	1.28	1.72	1.96	1.62	+32	– 4	–16	+37	–12	+33	–11	+24	+ 0	+20	0	1.65
98827	20 04 09.90	+46 44 30.5	9.65	H	301.041 262 81	+46.741 809 82 A	2.45	–3.74	–4.76	1.67	1.61	1.74	1.79	1.61	+ 5	+ 3	+19	– 9	+ 7	+ 6	+ 5	–15	+ 6	+ 4	6	0.80
98828	20 04 10.09	+25 47 25.2	7.82	H	301.042 060 99	+25.790 324 48	46.28	–76.31	–39.04	0.61	0.56	0.91	0.72	0.57	– 4	– 6	– 2	+16	–11	– 1	–10	–24	+10	– 2	0	0.24
98829	20 04 10.58	+42 30 43.6	9.68	H	301.044 095 93	+42.512 118 92	14.48	49.52	–217.86	0.89	0.99	1.11	1.04	1.09	+15	– 6	+ 9	– 1	+15	–19	+16	– 4	–21	+10	0	1.48
98830	20 04 11.31	+08 05 09.1	11.20	G	301.047 113 88	+08.085 859 36	1.01	3.84	–18.37	4.38	3.25	5.57	5.61	3.78	+29	+ 1	–20	+ 9	– 3	+20	+ 1	+ 3	– 3	+24	0	
98831	20 04 12.95	+31 14 35.4	6.88	H	301.053 960 04	+31.243 166 59	9.23	43.07	20.96	0.42	0.51	0.72	0.53	0.57	– 5	– 4	+18	+ 8	–15	–19	– 8	–10	– 6	+15	4	0.73
98832	20 04 13.31	–75 26 21.6	9.69	2 H	301.055 464 00	–75.439 321 43	5.71	–2.98	13.34	0.86	0.82	1.24	1.04	0.99	+ 0	– 9	+ 7	+10	– 5	+ 6	– 4	– 8	–12	+ 1	0	–0.62
98833	20 04 13.57	–01 40 44.6	10.42	H	301.056 531 14	–01.679 042 75	4.12	–12.41	–11.14	1.83	1.42	2.20	2.98	1.98	+29	– 7	–35	+15	– 9	+30	+ 8	+36	–22	–18	0	1.81
98834	20 04 13.57	–48 47 12.2	8.67	H	301.056 552 86	–48.786 727 50	3.81	–10.62	–47.22	1.08	0.69	1.22	1.53	1.10	– 8	–25	–13	+37	– 7	– 5	– 8	+ 7	– 1	–15	0	1.79
98835	20 04 14.11	+17 44 05.5	6.87	H	301.058 809 90	+17.734 874 14	1.85	–0.13	–5.96	0.57	0.50	0.81	0.69	0.72	+ 0	–15	–13	+ 3	+ 2	+17	+ 2	+16	+16	+ 9	2	1.99
98836	20 04 14.75	+51 17 16.7	7.01	H	301.061 447 82	+51.287 979 81	6.57	–5.37	–26.75	0.51	0.48	0.57	0.58	0.47	–18	–23	+14	+ 6	+ 5	–19	+ 5	–21	+15	–12	0	–0.51
98837 H	20 04 15.55	–47 23 45.3	9.34	H	301.064 801 75	–47.395 903 97 A	6.27	17.13	–8.31	3.45	2.41	4.13	5.35	4.22	–21	–25	+ 9	+24	– 7	–16	– 9	+11	– 1	+11	1	1.12
98838	20 04 17.89	+31 56 09.5	7.67	H	301.074 556 77	+31.935 975 04	1.36	4.33	–0.88	0.48	0.57	0.78	0.59	0.60	– 7	+ 5	+20	+25	+ 8	+ 6	+12	–10	– 2	+ 9	0	–0.21
98839	20 04 18.08	–26 19 45.7	8.16	H	301.075 328 50	–26.329 352 47	21.56	30.16	–78.12	0.95	0.59	1.08	1.03	0.66	+32	–39	–20	– 3	+ 5	– 5	+ 9	–21	– 5	+49	0	1.54
98840	20 04 19.28	+06 43 57.5	9.04	H	301.080 322 20	+06.732 647 19	3.36	10.12	–5.40	1.21	0.88	1.38	1.64	1.04	+52	– 8	– 9	+51	+35	+26	+36	+49	+13	+45	0	–1.11
98841	20 04 19.33	–62 19 20.0	9.06	H	301.080 552 36	–62.322 227 09	1.65	–4.21	24.56	0.90	0.81	1.36	0.90	0.85	– 9	–11	–33	+14	–21	+10	–28	–20	+15	–28	0	–0.96
98842	20 04 19.56	–32 03 22.6	4.99	G	301.081 512 39	–32.056 269 41	10.05	43.01	–10.78	0.76	0.53	0.84	0.86	0.68	+36	–30	–16	–20	– 7	+ 3	– 3	–18	– 6	+42	0	1.57
98843	20 04 22.14	–49 38 27.9	10.26	H	301.092 237 99	–49.641 078 56	3.41	–11.35	–26.27	1.78	1.02	1.86	2.27	1.70	–14	–30	+ 3	+16	– 2	– 6	– 2	+11	– 6	– 4	5	1.05
98844	20 04 23.15	–00 42 32.5	5.67	G	301.096 471 11	–00.709 021 14	5.60	–2.21	–118.27	0.76	0.48	0.84	1.19	0.75	– 3	–21	–28	+31	–31	+25	–18	+48	–21	–46	4	–0.97
98845	20 04 23.55	+33 33 02.0	7.47	H	301.098 139 31	+33.550 567 64	10.33	19.29	–29.67	0.49	0.53	0.73	0.56	0.57	–10	–13	+ 9	+12	+ 9	– 6	+ 9	–15	+ 4	– 5	0	–0.40
98846	20 04 23.87	+58 50 04.5	8.88	G	301.099 442 75	+58.834 588 83	4.58	13.15	6.77	0.67	0.64	0.71	0.74	0.69	+10	– 7	– 2	–20	– 3	+17	– 4	–28	+24	+22	0	0.14
98847	20 04 24.33	–30 09 57.8	7.57	H	301.101 367 47	–30.166 048 59	1.24	1.74	–13.14	0.89	0.68	0.99	1.06	0.87	+41	+ 1	+ 8	–28	–24	– 8	–19	–42	–23	+59	0	0.67
98848	20 04 25.22	+38 19 56.7	8.44	H	301.105 082 30	+38.332 426 95	1.29	3.32	6.04	0.61	0.66	0.82	0.66	0.75	– 8	– 3	– 4	+ 8	+ 0	–10	+ 1	– 4	– 3	+ 4	0	–0.40
98849	20 04 25.56	–27 44 51.0	7.49	H	301.106 489 52	–27.747 510 10	3.47	–13.38	–51.15	0.86	0.60	0.95	0.96	0.75	+31	–28	–13	+ 4	+ 7	+12	+ 9	– 7	+10	+43	0	0.75
98850	20 04 25.79	+42 11 54.3	8.33	1 G	301.107 467 43	+42.198 404 52	2.99	1.87	0.00	0.55	0.59	0.69	0.58	0.65	+ 0	– 3	– 4	– 4	+18	–10	+15	+14	+12	+14	0	0.15
98851	20 04 26.38	–22 11 27.5	7.51	H	301.109 919 61	–22.190 978 82	11.65	–6.08	–86.65	0.81	0.45	0.91	0.88	0.49	+43	–38	–17	– 1	+ 9	+12	+ 9	–17	+12	+66	0	0.48
98852	20 04 26.56	+34 06 44.2	9.02	3 T	301.110 678 31	+34.112 288 28	0.46	–0.32	–7.01	0.74	0.73	1.00	0.86	0.85	–18	– 2	– 5	+22	+ 3	– 9	+ 5	– 7	– 9	– 9	0	1.27
98853	20 04 26.72	+73 54 33.9	6.91	H	301.111 345 92	+73.909 409 54	6.43	12.40	18.89	0.54	0.53	0.58	0.52	0.58	– 3	–29	– 7	– 5	+21	– 5	+21	– 6	– 1	+ 1	0	–0.25
98854	20 04 27.27	–23 58 57.6	8.58	G	301.113 618 20	–23.982 653 42	11.28	22.30	–21.89	0.91	0.54	1.04	0.97	0.58	+43	–39	– 7	+ 1	+22	+21	+16	+ 1	+16	+61	0	0.87
98855	20 04 27.55	–50 44 57.0	9.49	H	301.114 805 21	–50.749 161 34	3.78	10.60	–21.89	1.30	0.81	1.61	2.04	1.52	–21	–19	+ 2	+13	– 1	–23	– 6	+11	+31	–32	4	0.28
98856	20 04 27.61	+36 49 00.5	8.16	3 H	301.115 043 65	+36.816 805 74	0.86	–6.86	–4.11	0.62	0.70	0.88	0.68	0.73	–17	+14	–17	– 4	+ 1	–17	+ 3	–34	+18	–13	1	0.19
98857	20 04 27.68	–09 26 29.5	8.30	H	301.115 339 73	–09.441 529 52	4.03	–76.09	–55.44	1.19	0.95	1.44	1.46	1.31	+23	– 5	–25	–19	+ 8	+25	+15	+22	–22	+25	0	–0.38
98858 H	20 04 28.79	+48 13 46.8	6.16	G	301.119 943 93	+48.229 663 26 A	5.63	10.92	0.51	0.70	0.68	0.54	0.59	0.45	+13	–13	+ 0	+18	+10	–31	+11	–17	+17	– 7	1	–0.44
98859 H	20 04 29.77	–44 56 48.8	7.83	G	301.124 040 19	–44.946 902 58 *	5.18	16.93	–8.80	1.69	0.80	1.27	1.88	1.16	+ 2	–10	+ 2	+53	– 6	+11	+ 2	+16	– 9	+20	0	–0.46
98860	20 04 30.14	+05 10 30.2	8.70	H	301.125 598 92	+05.175 049 96	5.38	12.66	–10.50	1.01	0.82	1.41	1.46	1.06	+46	– 1	–23	+36	+14	+43	+25	+41	+ 1	+17	0	–0.10
98861	20 04 30.73	+24 55 57.1	8.28	H	301.128 032 76	+24.932 531 12	4.51	2.15	–12.11	0.48	0.56	0.93	0.50	0.56	– 6	– 8	– 9	+22	–16	+ 6	–19	–18	+ 9	–18	0	1.11
98862 H	20 04 34.52	+09 14 24.3	7.78	H	301.143 840 26	+09.240 084 96 A	–0.81	–3.55	–15.01	1.77	1.50	1.87	1.85	1.78	+46	+ 8	+ 0	+24	+22	+20	+25	+37	+ 3	+47	6	1.40
98863	20 04 36.18	+32 13 07.0	5.62	2 G	301.150 736 31	+32.218 624 67	0.24	–2.80	–11.12	0.36	0.42	0.56	0.39	0.45	–14	+ 5	+ 0	+14	+ 9	–13	+12	– 6	+ 4	– 3	0	–0.14
98864	20 04 36.56	–35 12 50.5	8.87	H	301.152 345 00	–35.214 039 70	13.06	12.85	–65.31	1.28	0.75	1.43	1.35	1.11	+17	–40	–15	–11	– 9	+ 9	–10	–16	+ 2	+ 9	4	2.00
98865	20 04 37.62	+71 24 28.7	8.65	H	301.156 765 50	+71.407 974 30	5.73	9.45	12.70	0.69	0.62	0.72	0.80	0.69	– 1	–29	+25	–12	+ 6	– 6	+ 6	+ 2	–10	+30	0	–0.29
98866	20 04 38.05	–14 36 37.2	9.13	H	301.158 545 65	–14.610 319 99	5.10	6.13	–14.72	1.29	0.95	1.39	1.41	1.21	+14	–22	–25	–10	+25	+12	+30	+37	–14	+18	0	–0.45
98867	20 04 38.14	+46 49 45.5	7.92	H	301.158 918 86	+46.829 301 10	2.80	20.81	–17.89	0.66	0.56	0.73	0.70	0.53	– 3	+ 7	+21	– 2	+ 5	+ 7	+ 5	– 7	+12	+ 1	1	0.32
98868	20 04 38.22	–55 07 27.1	8.77	H	301.159 270 29	–55.124 203 26	12.07	80.05	12.29	0.82	0.63	1.13	1.33	1.12	+27	–14	– 8	–13	+21	– 6	+23	+ 4	+12	+ 9	0	0.13
98869	20 04 39.32	+30 43 52.9	8.63	H	301.163 848 16	+30.731 363 50	3.81	4.30	–1.17	0.59	0.71	1.03	0.73	0.76	– 4	+ 8	+20	+35	–10	–21	– 2	– 7	– 3	+ 5	0	–0.09
98870	20 04 40.18	–36 00 21.0	8.39	H	301.167 427 71	–36.005 830 47	2.36	22.37	–11.48	1.33	0.74	1.43	1.30	1.14	+37	–57	–23	– 4	–13	+ 4	– 9	–18	– 8	+24	0	1.68
98871	20 04 43.20	+18 55 05.7	9.16	H	301.179 985 12	+18.918 239 71	0.75	–0.77	–2.45	0.80	0.80	1.16	1.14	1.22	+10	–16	– 7	–10	– 4	+ 3	– 6	+ 5	+ 1	+25	0	0.42
98872 H	20 04 44.51	+63 53 24.4	6.24	H	301.185 478 23	+63.890 116 46 A	12.74	2.98	37.47	0.56	0.52	0.53	0.53	0.50	– 1	– 7	–12	–33	+14	+ 4	+ 8	–12	+22	+26	1	–0.16
98873	20 04 45.62	+26 56 53.3	8.87	H	301.190 096 04	+26.948 147 84	7.38	45.64	–13.40	0.65	0.75	1.11	0.67	0.72	–11	+ 2	–11	+27	– 6	–13	– 6	–33	+18	–12	1	0.34
98874 H	20 04 45.81	+72 59 46.5	8.51	H	301.190 858 81	+72.996 240 20 A	18.44	129.99	169.57	1.09	1.01	0.98	0.92	0.94	–21	–22	– 4	–49	+ 7	+ 9	– 1	– 5	+ 3	– 5	3	0.13
98875	20 04 45.95	–20 32 02.9	9.25	H	301.191 450 60	–20.534 145 17	3.55	7.61	–3.06	1.26	0.93	1.50	1.60	1.25	+26	–26	–28	+ 7	+ 1	+34	+ 9	+24	+13	+19	6	–2.59
98876	20 04 46.51	+32 02 30.5	8.90	G	301.193 803 25	+32.041 799 44	11.01	194.68	–63.87	0.67	0.82	1.07	0.76	0.81	– 6	+ 0	+17	+16	+15	+ 6	+18	–20	– 6	+11	1	0.97
98877	20 04 46.52	–48 09 38.4	8.43	H	301.193 814 25	–48.160 667 32	2.15	9.35	–25.52	1.22	0.72	1.23	2.00	1.33	–34	–12	+ 2	+46	–31	+ 1	–35	+24	+12	–41	0	0.01
98878	20 04 46.61	+01 09 22.0	7.69	H	301.194 196 32	+01.156 099 18	30.13	9.07	–41.27	1.41	0.69	1.37	1.57	0.96	+16	–34	–16	+31	+10	+25	+31	+30	–23	– 3	0	1.65
98879	20 04 46.84	+15 54 10.9	7.33	H	301.195 172 46	+15.903 021 19	22.93	27.37	52.61	0.60	0.55	0.94	0.72	0.77	– 2	–25	– 8	– 8	+ 9	+21	+10	+11	+ 1	+13	0	–0.38
98880	20 04 47.75	–49 45 18.1	8.57	H	301.198 976 58	–49.755 032 54	5.60	–19.89	–10.49	1.15	0.61	1.20	1.43	1.08	–18	–36	+ 3	+26	–14	+ 2	– 9	+ 7	–14	– 9	2	1.10
*98881	20 04 48.29	+26 29 00.4	8.50	H	301.201 211 46	+26.483 451 61	11.21	–8.68	24.49	0.64	0.69	1.05	0.71	0.65	– 5	+ 7	–16	+31	–10	– 7	– 7	–33	+22	– 4	0	0.55
*98882	20 04 48.29	+39 20 39.7	8.57	H	301.201 198 67	+39.344 365 39	2.24	–5.70	–37.42	0.75	0.74	0.93	0.92	0.78	– 6	–12	+ 8	+24	+ 6	– 9	+ 7	–21	+ 4	+ 0	0	–0.04
98883	20 04 49.47	–28 16 25.6	9.51	G	301.206 115 48	–28.273 766 46	5.79	–0.78	44.58	1.20	0.87	1.33	1.40	1.15	+44	–39	–14	– 3	– 2	+12	– 2	–14	+10	+52	0	1.33
*98884	20 04 50.44	–64 20 00.9	11.68	H	301.210 160 80	–64.333 570 71	15.75	–174.28	–197.38	2.16	2.00	3.00	2.35	1.98	+ 9	– 5	–26	– 7	–26	+12	–27	–26	+12	–17	0	–0.68
*98885	20 04 50.42	+69 08 27.9	8.89	H	301.210 080 80	+69.141 096 78	5.32	–6.64	–6.64	0.71	0.74	0.77	0.82	0.82	+ 8	+ 6	+17	+ 0	+18	–12	+19	– 9	–17	+21	0	0.64
98886	20 04 50.59	+29 27 49.5	9.39	G	301.210 771 62	+29.463 752 87	14.55	–62.54	22.08	0.73	0.88	1.27	0.88	1.03	– 8	–13	+20	+12	– 7	– 6	– 3	–10	–16	+ 0	0	–1.22
98887	20 04 50.61	+24 33 14.6	9.65	H	301.210 860 93	+24.554 043 36	3.69	–0.75	–8.07	0.72	0.79	1.33	0.71	0.79	– 8	– 6	– 6	+27	–20	+20	–20	–13	+ 0	–10	1	1.68
98888 H	20 04 52.86	+69 25 36.9	10.05	H	301.220 247 13	+69.426 908 19 A	2.99	–19.09	–37.16	1.41	1.57	1.43	1.58	1.66	+ 6	+ 1	+11	– 4	+ 4	+ 4	+ 6	– 6	–14	+21	1	–0.05
98889	20 04 53.20	+72 46 56.8	7.55	H	301.221 675 64	+72.782 450 87	4.35	16.99	26.94	0.61	0.56	0.64	0.60	0.61	– 9	–32	+ 0	–31	+16	+ 7	+12	– 7	+ 2	+ 6	0	–1.35
98890	20 04 53.41	+68 01 37.9	6.32	2 H	301.222 552 55	+68.027 182 93	2.92	–12.12	–9.82	0.51	0.53	0.55	0.63	0.65	+ 4	–17	+13	+16	+17	+ 4	+18	+11	– 6	+18	1	2.25
98891	20 04 54.15	–65 21 42.3	8.19	H	301.225 619 04	–65.361 754 03	14.78	217.39	–267.07	0.70	0.59	1.01	0.71	0.61	–17	– 9	–10	+25	+ 5	+ 1	– 3	–15	–12	–39	1	–0.41
98892	20 04 54.77	+13 44 11.4	8.75	H	301.228 200 23	+13.736 492 67	1.48	1.17	–5.27	0.87	0.85	1.25	0.93	1.12	+36	–30	–22	– 4	+26	+16	+32	+33	– 7	+42	0	1.81
98893	20 04 54.89	+02 26 30.8	8.37	2 H	301.228 716 74	+02.441 888 42	1.01	6.58	–13.92	1.10	0.73	1.31	1.65	1.09	+40	– 6	+ 6	+ 8	+14	+15	+14	+23	– 7	+38	0	0.06
98894	20 04 55.11	+26 03 18.5	7.69	H	301.229 630 36	+26.055 150 08	22.49	51.35	–381.21	0.59	0.54	0.88	0.68	0.53	– 3	+ 2	–18	+11	– 6	+ 1	– 2	–32	+20	+ 4	0	0.22
98895	20 04 57.76	–45 58 52.3	9.63	G	301.240 645 92	–45.981 194 40	14.15	58.33	–33.73	1.54	0.74	1.63	2.52	1.37	–23	–22	+ 0	+20	– 7	+14	– 4	+11	–16	–34	0	0.15
98896	20 04 58.01	–21 18 50.4	7.11	G	301.241 704 36	–21.314 002 04	3.93	54.35	–37.98	0.82	0.56	0.90	1.08	0.78	+36	–31	–30	+24	+ 0	+ 9	+ 1	+27	+ 6	– 2	0	0.53
98897	20 04 58.58	+23 12 37.3	6.54	H	301.244 092 17	+23.210 366 53	8.74	4.49	5.19	0.50	0.40	0.75	0.58	0.44	–41	– 6	+ 5	– 3	–16	+13	–17	– 8	– 3	–66	1	0.34
98898	20 04 59.99	–33 45 07.4	8.46	H	301.249 949 04	–33.752 050 89	6.52	31.12	–4.25	1.15	0.64	1.24	1.49	0.96	+ 2	–17	–15	–25	+ 2	– 8	+ 1	–10	+16	–19	0	–1.31
98899	20 05 00.41	–10 34 51.9	8.82	H	301.251 715 29	–10.581 081 04	2.72	5.25	–7.64	1.16	0.90	1.39	1.52	1.25	+16	–30	–25	–13	–12	+38	+ 1	+ 7	–16	+16	0	–0.03
98900	20 05

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
98801	7.049	0.005	6.931	0.006		0.114	0.007	T	0.13	0.01	L	6.9580	0.0008	0.008	113		6.95	6.98					1							S
98802	7.895	0.009	7.912	0.010		−0.011	0.012	T	0.01	0.01	L	7.9168	0.0013	0.011	109		7.89	7.93		C			1							S
98803	9.997	0.025	8.754	0.015		1.061	0.023	T	1.03	0.02	L	8.7963	0.0013	0.014	104		8.77	8.82		C			1							
98804	7.764	0.012	7.613	0.014		0.145	0.017	T	0.16	0.02	L	7.6319	0.0017	0.011	57		7.61	7.66		C			1							S
98805	8.173	0.012	8.084	0.014		0.112	0.012	G	0.13	0.01	H	8.0850	0.0012	0.009	65		8.07	8.10		C			1							S
98806	8.362	0.010	8.195	0.012		0.175	0.015	G	0.19	0.02	H	8.2552	0.0019	0.018	141		8.23	8.29		D	20041−7847	I 2	1							S
98807	9.642	0.016	9.039	0.015		0.630	0.015	G	0.70	0.01	H	9.0823	0.0035	0.030	170		9.04	9.13		U			1							
98808	9.420	0.024	8.833	0.022		0.548	0.029	T	0.62	0.03	L	8.8436	0.0018	0.016	54		8.82	8.87		C			1							
98809	7.114	0.007	6.721	0.007		0.347	0.012	G	0.40	0.02	A	6.7785	0.0011	0.009	57		6.76	6.79		C			1							S
98810	9.964	0.021	8.745	0.013		1.042	0.019	T	1.01	0.02	L	8.8015	0.0020	0.019	127		8.77	8.83					1							
98811						1.480	0.010	G	1.95	0.06	I	11.4147	0.0300	0.350	121		11.17	12.23		U 2	20040−6536	I 1	S							D G
98812	10.901	0.049	9.304	0.021		1.338	0.042	T	1.30	0.05	L	9.2977	0.0024	0.021	111		9.27	9.33		C			1							
98813	7.659	0.007	6.983	0.006		0.614	0.007	T	0.68	0.01	L	7.0367	0.0014	0.009	80		7.02	7.05					1							S
98814	10.251	0.028	10.091	0.037		0.146	0.044	T	0.16	0.04	L	10.0713	0.0044	0.055	128		10.01	11.04		P 1 A			1							G
98815	10.777	0.043	9.346	0.022		1.225	0.040	T	3.70	0.07	O	8.7726	0.0110	0.081	96		8.62	8.91	1.67	P 1 A			1	S						
98816	9.101	0.016	8.515	0.014		0.547	0.019	T	0.62	0.02	L	8.5988	0.0014	0.014	104		8.58	8.62		C			1							S
98817	9.011	0.014	7.802	0.009		1.037	0.009	G	1.01	0.01	H	7.8630	0.0013	0.015	138		7.84	7.90			20041+3419	I 1	1							S
98818	11.546	0.092	10.043	0.037		1.110	0.007	G	1.07	0.01	H	10.2000	0.0027	0.025	130		10.16	10.25					1							G
98819	6.530	0.003	5.857	0.004		0.600	0.005	G	0.64	0.07	F	5.9202	0.0006	0.007	120		5.91	5.93			20040+1705	I 2	1							S
98820	10.007	0.023	9.567	0.023		0.349	0.107	G	0.41	0.13	L	9.7008	0.0037	0.039	135		9.61	9.76		D	20041−7847	I 2	1							
98821	8.132	0.007	8.154	0.009		−0.018	0.010	T	0.00	0.01	L	8.1637	0.0015	0.016	137		8.13	8.19					1							
98822	9.900	0.020	8.539	0.012		1.153	0.018	T	1.12	0.02	L	8.5710	0.0026	0.020	116		8.54	8.61					1							
98823	6.865	0.005	5.632	0.004		1.063	0.002	G	1.03	0.00	H	5.6799	0.0009	0.009	99		5.67	5.69		M			1							S
98824	10.382	0.042	10.016	0.047		0.357	0.055	T	0.42	0.06	L	9.9971	0.0042	0.027	56		9.96	10.06					1							
98825	8.766	0.014	8.358	0.015	*	0.386	0.019	T	0.45	0.02	L *	8.4729	0.0018	0.018	123	*	8.44	8.50		D	20041+1700	I 1	2 C	A	AB	193	5.881	0.005	0.86	0.02	
98826	7.680	0.011	7.739	0.014	*	−0.070	0.015	G	−0.05	0.01	H *	7.8562	0.0025	0.023	76	*	7.83	7.92	0.84	P 1 A	20042+1148	I 1	2 C	A	AB	288	1.860	0.004	1.09	0.02	S W
98827	9.647	0.019	9.601	0.026	A	0.047	0.030	T	0.06	0.02	L	9.6783	0.0193	0.085	123	A	9.59	9.84		D	20042+4645	H 1	2 C	A	AB	109	16.688	0.010	1.05	0.06	G
98828	9.013	0.011	7.920	0.008		0.924	0.014	G	0.97	0.01	I	7.9661	0.0018	0.018	157		7.94	8.00					1							
98829	10.573	0.037	9.791	0.031		0.695	0.037	T	0.75	0.03	L	9.8168	0.0034	0.026	122		9.77	9.86					1 G							G
98830						1.276	0.002	G	1.33	0.14	K	11.3854	0.0052	0.047	93		11.32	11.48					1 X	S						G
98831	7.200	0.005	6.901	0.004		0.271	0.002	G	0.31	0.00	H	6.9479	0.0007	0.008	149		6.93	6.96					1							S
98832	10.187	0.022	9.713	0.022		0.459	0.024	T	0.53	0.03	L	9.7972	0.0034	0.045	153		9.72	9.94		U 2 C	20042−7526	I 1	1							P
98833	11.564	0.128	10.605	0.085		0.844	0.114	T	0.86	0.08	L	10.5677	0.0042	0.030	57		10.51	10.63		C			1							G
98834	10.113	0.028	8.816	0.016		1.103	0.025	T	1.07	0.03	L	8.8346	0.0020	0.019	113		8.81	8.86		C			1							
98835	7.480	0.007	6.933	0.005		0.512	0.008	T	0.58	0.01	L	6.9858	0.0011	0.010	102		6.97	7.00					1							S
98836	8.451	0.011	7.133	0.007		1.119	0.010	T	1.08	0.01	L	7.1781	0.0011	0.008	122		7.16	7.19		C			1							S
98837	10.145	0.031	9.512	0.027	*	0.564	0.005	G	0.64	0.01	R *	9.4613	0.0025	0.022	105	*	9.42	9.49		D	20043−4724	I 1	2 C	A	AB	41	0.659	0.005	0.59	0.02	
98838	7.584	0.006	7.652	0.009		−0.057	0.010	T	−0.04	0.01	L	7.6604	0.0013	0.012	146		7.64	7.68		C			1							S
98839	8.936	0.012	8.233	0.010		0.626	0.015	G	0.69	0.01	H	8.2961	0.0021	0.018	96		8.27	8.32					1							S
98840	9.554	0.022	9.081	0.022		0.446	0.028	T	0.52	0.03	L	9.1385	0.0021	0.019	88		9.11	9.17		C			1							
98841	10.080	0.023	9.147	0.018		0.824	0.022	T	0.85	0.02	L	9.2087	0.0022	0.021	123		9.17	9.25					1							
98842	6.594	0.011	5.135	0.009		1.208	0.003	G	1.17	0.00	H	5.1365	0.0010	0.006	72		5.13	5.15			20043−3203	I 1	1							S
98843	11.712	0.114	10.243	0.049		1.238	0.097	T	1.20	0.10	L	10.4294	0.0042	0.032	97		10.38	10.48					1							G
98844	7.369	0.007	5.826	0.003		1.301	0.005	G	1.26	0.01	H	5.8221	0.0006	0.006	97		5.81	5.83		C			1							S
98845	8.569	0.010	7.568	0.007		0.869	0.006	G	0.88	0.00	H	7.6163	0.0014	0.013	142		7.60	7.64					1							
98846	9.072	0.012	8.900	0.014		0.159	0.015	G	0.18	0.01	H	8.9366	0.0011	0.012	122		8.92	8.96		D			1							
98847	9.511	0.021	7.720	0.010		1.491	0.018	T	1.51	0.03	L	7.6984	0.0016	0.012	73		7.68	7.71					1							S
98848	8.400	0.009	8.429	0.011		−0.022	0.013	T	0.00	0.01	L	8.4415	0.0014	0.019	125		8.40	8.47					1							
98849	9.465	0.021	7.656	0.010		1.513	0.020	G	1.55	0.03	H	7.6103	0.0017	0.014	80		7.59	7.63					1							S
98850	8.193	0.009	8.326	0.012		−0.110	0.015	G	−0.09	0.02	H	8.3009	0.0020	0.018	129		8.27	8.33		U			1							
98851	7.991	0.006	7.551	0.006		0.429	0.007	T	0.50	0.01	L	7.6046	0.0006	0.008	159		7.59	7.62		C			1							S
98852	10.623	0.042	9.154	0.019		1.238	0.036	T	1.20	0.04	L	9.2552	0.0657	0.443	134		8.57	9.63	17.07	P 1 A			1							G
98853	8.058	0.009	7.011	0.006		0.909	0.008	T	0.91	0.01	L	7.0645	0.0008	0.007	97		7.05	7.07		C			1							S
98854	9.177	0.013	8.610	0.012		0.528	0.015	G	0.60	0.02	H	8.6813	0.0014	0.013	134		8.66	8.71		C			1							
98855	10.056	0.028	9.529	0.028		0.503	0.030	T	0.58	0.03	L	9.6035	0.0027	0.025	92		9.56	9.64					1							
98856	11.673	0.104	9.101	0.018		2.165	0.087	T	2.63	0.57	K	8.1592	0.0376	0.328	140		7.82	8.83	209.00	P 1 A			1	S						
98857	9.554	0.027	8.418	0.018		0.977	0.025	T	0.96	0.02	L	8.4611	0.0033	0.019	56		8.43	8.48					1							
98858	6.205	0.003	6.149	0.003	*	0.037	0.003	G	0.05	0.00	H *	6.1674	0.0007	0.006	121	*	6.16	6.18		D	20045+4814	M 1	2 C	A	AB	207	0.371	0.015	3.49	0.08	S
98859	8.180	0.008	7.860	0.009	*	0.294	0.006	G	0.34	0.02	A *	7.9026	0.0015	0.013	109	*	7.88	7.93		D	20045−4457	H 1	2 C	A	AB	1	0.296	0.002	0.39	0.03	S
98860	10.115	0.026	8.833	0.016		1.091	0.024	T	1.05	0.03	L	8.8707	0.0021	0.013	97		8.85	8.90					1 G							
98861	8.274	0.006	8.261	0.008		0.017	0.009	T	0.04	0.01	L	8.2944	0.0012	0.019	230		8.27	8.33					1							
98862	7.676	0.011	7.693	0.015	*	−0.011	0.017	T	0.01	0.02	L *	7.7888	0.0016	0.010	90	*	7.77	7.81		D	20046+0914	I 1	2 C	A	AB	223	5.697	0.004	0.26	0.01	S
98863	6.221	0.004	5.705	0.003		0.760	0.015	G	0.72	0.03	C	5.7397	0.0025	0.021	153		5.71	5.77		U 2	20046+3213	I 1	1							S
98864	9.472	0.020	8.935	0.019		0.511	0.021	T	0.58	0.02	L	8.9850	0.0023	0.018	78		8.95	9.01			20046−3513	I 1	1	S						
98865	8.914	0.011	8.665	0.012		0.237	0.015	T	0.26	0.02	L	8.7199	0.0018	0.016	116		8.69	8.76		C			1							
98866	9.392	0.026	9.140	0.030		0.236	0.040	T	0.26	0.05	L	9.2007	0.0031	0.018	51		9.17	9.24		C			1							
98867	9.660	0.018	8.059	0.009		1.341	0.016	T	1.31	0.02	L	8.0716	0.0010	0.013	116		8.05	8.10		C			1							
98868	9.340	0.012	8.823	0.011		0.495	0.012	T	0.57	0.01	L	8.8834	0.0019	0.021	161		8.84	8.92					1							
98869	8.558	0.008	8.611	0.011		−0.045	0.012	T	−0.02	0.01	L	8.6228	0.0017	0.017	151		8.59	8.65		C			1							
98870	9.823	0.025	8.518	0.015		1.109	0.023	T	1.07	0.02	L	8.5544	0.0016	0.014	71		8.53	8.58		C			1							
98871	9.347	0.018	9.204	0.022		0.138	0.027	T	0.15	0.03	L	9.2152	0.0020	0.020	109		9.18	9.25		C			1							
98872	6.336	0.004	6.233	0.004	*	0.100	0.006	T	0.11	0.01	L *	6.2757	0.0006	0.007	114	*	6.27	6.29		D	20048+6353	I 1	2 C	A	AB	16	5.595	0.015	3.56	0.06	S
98873	9.380	0.015	8.919	0.015		0.446	0.015	G	0.52	0.02	H	8.9728	0.0025	0.021	168		8.94	9.02					1							
98874	9.372	0.019	8.616	0.016	A	1.100	0.495	G	0.73	0.03	L *	8.6476	0.0020	0.015	96	*	8.62	8.68		D	20048+7300	I 1	2 C	D	AB	147	1.392	0.031	3.25	0.11	S D
98875	9.708	0.031	9.287	0.033		0.398	0.042	T	0.46	0.05	L	9.3368	0.0024	0.016	50		9.30	9.38		C			1							
98876	9.586	0.019	8.990	0.018		0.578	0.015	G	0.65	0.01	H	9.0036	0.0018	0.020	141		8.97	9.04		C			1							
98877	10.210	0.032	8.589	0.015		1.357	0.028	T	1.32	0.03	L	8.5758	0.0018	0.016	102		8.54	8.61					1							
98878	8.553	0.011	7.757	0.009		0.705	0.011	T	0.76	0.01	L	7.8266	0.0012	0.009	102		7.81	7.84		C			1 G							S
98879	7.962	0.009	7.382	0.008		0.544	0.009	T	0.62	0.01	L	7.4475	0.0013	0.012	125		7.43	7.47			20048+1554	I 1	1							S
98880	8.980	0.016	8.585	0.016		0.386	0.019	T	0.45	0.02	L	8.6552	0.0025	0.020	100		8.62	8.68					1	S						S
98881	9.175	0.011	8.562	0.010		0.569	0.011	T	0.64	0.01	L	8.6235	0.0017	0.020	170		8.59	8.65					1							
98882	9.883	0.020	8.698	0.013		1.015	0.019	T	0.99	0.01	L	8.7390	0.0018	0.016	125		8.71	8.77		C			1							
98883	10.137	0.026	9.667	0.027		0.507	0.007	G	0.58	0.01	H	9.6397	0.0022	0.015	91		9.61	9.67					1							
98884						1.613	0.082	G	2.63	0.20	I	11.6732	0.0064	0.062	106		11.57	11.77					1							D
98885	9.292	0.016	8.923	0.017		0.350	0.022	T	0.41	0.03	L	8.9738	0.0026	0.018	98		8.94	9.00					1							
98886	10.145	0.022	9.444	0.019		0.659	0.015	G	0.72	0.01	H	9.5258	0.0028	0.025	170		9.48	9.58		C			1							G
98887	9.788	0.015	9.709	0.021		0.078	0.024	T	0.09	0.03	L	9.6829	0.0016	0.028	246		9.63	9.73		C			1	S						G
98888	10.595	0.042	10.153	0.042	*	0.417	0.054	T	0.48	0.06	L *	10.1517	0.0029	0.028	100	*	10.10	10.19			20049+6926	H 1	2 C	A	AB	1	0.845	0.023	2.51	0.08	G
98889	7.560	0.007	7.542	0.008		0.021	0.010	T	0.04	0.01	L	7.5597	0.0011	0.008	101		7.54	7.58		C			1							S
98890	8.470	0.011	6.523	0.004		1.649	0.000	G	2.16	0.05	F	6.3799	0.0033	0.023	94		6.35	6.43		U 2			1							S
98891	9.015	0.011	8.256	0.009		0.671	0.010	G	0.73	0.01	H	8.3242	0.0013	0.015	146		8.30	8.35					1							S
98892	10.110	0.026	8.869	0.016		1.059	0.024	T	1.03	0.02	L	8.9207	0.0021	0.016	104		8.89	8.94		C			1							
98893	8.626	0.013	8.415	0.014		0.202	0.018	T	0.22	0.02	L	8.4357	0.0029	0.026	84		8.40	8.55	1.11	P 1 A			1							
98894	8.496	0.008	7.748	0.007		0.669	0.008	T	0.73	0.01	L	7.8231	0.0012	0.014	163		7.80	7.85					1							S
98895	10.542	0.043	9.691	0.031		0.740	0.020	G	0.79	0.02	H	9.7861	0.0030	0.023	94		9.74	9.82		C			1							
98896	8.401	0.016	7.240	0.008		1.037	0.005	G	1.01	0.00	H	7.2785	0.0008	0.008	85		7.26	7.29		D			1							S
98897	6.744	0.003	6.561	0.003		0.168	0.004	T	0.18	0.00	L	6.5941	0.0007	0.009	218		6.58	6.61					1							S
98898	9.666	0.024	8.596	0.017		0.927	0.022	T	0.92	0.02	L	8.6232	0.0013	0.009	70		8.60	8.65					1							
98899	8.958	0.024	8.849	0.030		0.106	0.036	T	0.12	0.04	L	8.8665	0.0029	0.015	36		8.83	8.88					1							
98900	10.842	0.041	9.934	0.030		0.830	0.020	G	0.87	0.02	H	9.9999	0.0026	0.021	110		9.96	10.04		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
98901	20 05 02.10	−18 46 16.6	8.20	H	301.258 770 42	−18.771 267 32		4.31	8.89	0.72	0.95	0.76	1.18	1.12	0.90	+19	−22	−45	−10	− 6	+31	+13	+19	−17	+10	0	0.14
98902	20 05 02.30	+52 17 20.8	8.49	2 H	301.259 574 08	+52.289 124 67		2.34	−4.30	−10.40	0.65	0.59	0.69	0.74	0.64	− 5	−11	+11	− 7	+10	+ 5	+ 8	+ 1	+ 5	+ 7	3	−0.78
98903	20 05 02.74	−11 57 50.2	8.38	H	301.261 423 11	−11.963 932 42		4.87	12.45	−0.92	1.11	0.84	1.21	1.32	1.09	+ 9	−20	−26	−11	+12	+23	+20	+27	− 6	+ 9	0	−0.14
98904	20 05 03.15	−10 43 33.6	9.20	H	301.263 135 45	−10.726 011 62		2.92	1.26	−6.13	1.30	1.15	1.71	1.54	1.61	+23	−16	−32	−15	− 1	+27	+10	+17	−36	+31	0	−0.77
∗98905	20 05 03.80	−83 26 24.1	9.31	H	301.265 840 67	−83.440 029 49		3.86	35.52	−20.80	0.75	0.74	0.91	0.85	0.82	−11	− 9	− 3	+20	−10	− 6	−11	+ 1	− 5	−15	0	1.32
∗98906	20 05 03.36	+54 26 11.1	11.98	G	301.263 984 77	+54.436 428 95		63.23	−1165.35	−899.95	5.79	5.72	6.44	8.06	6.18	− 9	− 7	+17	− 7	+ 7	−10	+ 7	−17	+ 8	− 7	0	
98907	20 05 04.14	+08 28 08.7	9.36	H	301.267 264 09	+08.469 096 45		1.17	5.60	−9.51	1.36	0.86	1.54	1.80	1.05	+24	− 9	− 9	+30	+10	+ 1	+ 8	+20	+ 9	+12	2	−0.20
98908	20 05 05.24	−13 26 54.3	10.85	G	301.271 817 83	−13.448 430 27		20.24	134.63	5.95	2.13	1.80	2.55	2.80	2.55	+38	− 4	−13	+12	+30	+41	+38	+50	+ 0	+44	0	0.70
∗98909	20 05 05.43	+20 38 48.5	8.22	2 H																							
∗98910	20 05 05.42	−11 35 57.8	6.38	2 T	301.272 562 90	−11.599 377 04		2.56	−0.57	−14.98	0.83	0.65	0.97	0.94	0.83	+19	−32	−32	−21	− 3	+35	+12	+14	−16	+19	3	0.87
98911	20 05 05.50	+13 45 51.0	7.19	H	301.272 897 60	+13.764 180 08		6.66	67.98	−18.04	0.69	0.64	0.92	0.70	0.77	+13	−28	−15	−16	+35	+13	+39	+20	− 7	+18	0	1.20
98912	20 05 06.15	+17 52 43.3	7.93	H	301.275 632 47	+17.878 688 71		4.41	9.51	13.30	0.66	0.56	0.93	0.86	0.78	− 4	− 6	−21	+26	− 8	+26	− 3	+20	+ 2	− 1	0	0.06
98913	20 05 06.33	+86 15 57.3	8.57	H	301.276 355 10	+86.265 920 12		7.35	−16.64	−31.86	0.70	0.79	0.82	0.88	0.92	+ 5	−13	− 7	+ 7	− 6	− 3	− 5	−26	+ 7	+11	0	−0.07
98914	20 05 06.64	+36 40 11.8	9.44	G	301.277 654 31	+36.669 958 01		1.88	4.90	−0.09	0.78	0.91	1.13	0.91	1.04	−20	+12	−11	− 7	+13	−21	+13	−20	+12	−18	1	−0.44
98915	20 05 06.72	+51 50 21.6	6.14	1 H	301.278 020 72	+51.839 321 91		4.40	34.34	31.21	0.45	0.41	0.48	0.48	0.41	−16	−17	+12	− 4	+ 7	+ 5	+ 6	− 8	+ 6	− 3	3	0.81
98916 H	20 05 07.23	−04 18 29.5	7.61	G	301.280 114 73	−04.308 194 52	A	13.49	68.40	52.99	2.27	1.86	2.24	2.77	2.10	+35	+24	−20	+42	− 2	+46	+11	+48	− 6	−12	1	0.18
98917	20 05 07.78	+47 32 54.8	8.93	H	301.282 396 97	+47.548 556 89		2.08	7.59	2.35	0.82	0.68	0.89	0.95	0.77	− 9	− 7	− 3	+13	+12	−24	+10	−10	+17	−11	0	−1.07
98918	20 05 07.91	−46 05 49.1	6.96	H	301.282 943 52	−46.096 962 18		3.65	−13.68	−15.25	0.94	0.50	0.99	1.54	0.80	−17	− 2	− 4	− 5	+18	−17	+17	− 1	+11	−26	0	−0.91
98919 H	20 05 08.80	−63 03 41.3	7.28	H	301.286 649 97	−63.061 474 73	A	5.59	5.48	−40.05	1.03	0.93	1.31	0.97	0.92	+12	−13	−22	− 2	−15	+15	−16	−15	+23	−37	1	−0.21
98920	20 05 09.47	+19 59 27.2	5.09	G	301.289 477 57	+19.990 877 04		20.17	30.61	79.65	0.54	0.47	0.71	0.73	0.70	− 2	+ 3	−13	− 4	− 8	+16	−10	+15	− 9	+11	2	0.29
98921	20 05 09.59	+38 28 41.5	6.18	2 H	301.289 945 67	+38.478 185 76		52.99	263.35	111.57	0.43	0.46	0.55	0.46	0.46	− 4	− 2	+ 3	+13	− 4	− 5	− 1	−21	+ 4	+ 5	2	0.84
98922	20 05 10.13	+02 07 08.6	6.77	H	301.292 210 34	+02.119 057 80		13.19	11.44	−108.36	0.92	0.55	1.11	1.21	0.81	+21	−29	− 4	+13	+ 8	+ 3	+13	+31	− 6	+ 2	0	−0.31
98923	20 05 10.34	+40 48 50.1	7.22	1 H	301.293 062 87	+40.813 912 06		13.10	4.85	−34.34	0.49	0.47	0.60	0.52	0.52	+ 6	− 9	−11	−21	+ 2	+12	+ 0	−20	+26	+22	0	1.37
98924	20 05 10.49	+16 40 34.1	8.77	H	301.293 710 47	+16.676 136 93		6.74	1.25	−5.44	0.89	0.75	1.30	1.20	1.16	+ 0	−22	−14	− 4	−14	− 2	−21	+ 2	+19	+12	0	−0.60
98925	20 05 11.79	+48 20 03.8	8.16	G	301.299 107 92	+48.334 394 27		6.77	1.77	−10.97	0.61	0.53	0.67	0.73	0.54	−10	− 3	+ 1	+14	+13	−18	+10	−14	+19	−14	0	−0.59
98926	20 05 12.00	−26 48 47.7	7.24	H	301.300 009 94	−26.813 243 81		6.07	9.13	−9.28	0.76	0.49	0.85	0.86	0.56	+20	−25	−11	− 2	+ 3	+ 9	+10	−24	+ 2	+44	0	0.71
98927 H	20 05 12.62	−48 33 54.7	9.92	2 H	301.302 568 31	−48.565 187 78	∗	16.33	75.63	−102.60	1.59	1.01	1.79	2.51	1.63	−24	−10	−26	+31	− 1	−21	− 8	+12	+16	−31	0	0.87
98928	20 05 13.59	+78 02 43.2	10.58	H	301.306 620 45	+78.045 334 32		3.62	15.88	24.23	1.19	1.16	1.31	1.26	1.43	+ 0	−34	+ 6	+20	+12	−18	+18	+ 7	−12	+14	0	0.97
98929	20 05 13.62	+25 27 54.6	8.15	H	301.306 752 60	+25.465 165 58		4.05	−14.79	−9.89	0.60	0.62	1.01	0.61	0.62	+ 3	−12	− 3	+18	−12	− 9	−16	−24	+18	− 7	1	−0.41
98930	20 05 13.98	−08 06 20.8	8.06	H	301.308 229 62	−08.105 770 26		7.49	3.52	−34.66	1.00	0.78	1.17	1.19	1.02	+14	− 3	−12	− 6	+16	+34	+20	+30	+ 5	+24	3	0.60
98931	20 05 14.04	−25 03 28.9	8.80	H	301.308 492 58	−25.058 024 44		1.50	3.69	10.39	1.10	0.67	1.24	1.18	0.79	+44	−40	−20	−17	− 8	+ 6	− 2	−26	− 4	+60	2	−1.27
98932	20 05 17.41	+73 27 26.8	8.14	2 H	301.322 521 87	+73.457 436 94		1.87	−0.78	−16.11	0.66	0.64	0.70	0.63	0.71	−18	−11	− 2	−48	+18	+ 3	+15	−12	+12	−12	0	1.95
98933	20 05 17.66	−27 48 41.7	7.66	H	301.323 573 49	−27.811 575 68		3.89	22.73	9.56	0.85	0.57	0.95	0.99	0.70	+24	−24	− 2	+ 4	+10	+13	+11	− 5	+ 5	+39	0	1.45
98934	20 05 18.21	+17 55 18.9	9.83	G	301.325 893 85	+17.921 905 10		2.78	9.70	−24.28	1.01	1.02	1.51	1.20	1.36	− 5	−11	+13	− 6	+20	+27	+12	+27	+16	+20	0	0.94
98935	20 05 18.65	+10 16 50.8	10.93	G	301.327 691 37	+10.280 771 11		−0.64	−3.37	−13.64	1.89	1.51	2.31	2.12	2.00	+19	−14	−17	+ 7	+11	+13	+17	+28	−12	+14	0	−0.40
∗98936	20 05 18.77	+21 24 13.0	9.35	G	301.328 189 13	+21.403 606 46		8.24	−2.68	68.80	1.02	1.08	1.41	1.38	1.60	+24	−13	−26	+21	+ 5	+ 6	+ 9	+22	−23	+31	0	0.73
∗98937	20 05 18.73	−12 51 37.2	8.73	H	301.328 033 57	−12.860 331 59		1.63	−6.11	−9.95	1.16	0.91	1.39	1.34	1.13	+24	−31	−34	+ 0	− 1	+26	+13	+31	−15	+14	0	1.68
∗98938	20 05 18.76	−36 58 00.4	9.53	H	301.328 180 53	−36.966 786 68		1.43	11.98	−2.75	1.32	0.91	1.46	1.63	1.39	+26	−30	−18	− 7	+ 8	+15	+14	− 1	− 3	+24	3	−1.13
98939	20 05 18.80	+39 26 55.0	9.04	H	301.328 345 53	+39.448 614 23		1.00	18.03	−14.06	0.74	0.74	0.94	0.97	0.85	− 5	+ 1	− 4	+17	+ 5	−13	+ 5	−17	+ 8	− 3	0	0.27
98940	20 05 18.95	+50 26 55.1	7.96	H	301.328 943 45	+50.448 628 36		2.25	0.33	−1.23	0.56	0.54	0.63	0.60	0.52	−12	−21	− 5	− 4	+15	+ 1	+10	−18	+17	− 7	0	1.88
98941	20 05 19.44	−59 32 25.9	8.24	H	301.331 013 72	−59.540 540 91		0.96	25.43	−18.83	0.66	0.67	1.09	0.58	0.70	+25	− 9	− 5	+22	−30	+12	−48	−36	+11	− 5	0	0.29
98942	20 05 19.53	−29 04 45.6	7.48	H	301.331 382 03	−29.079 331 12		11.49	44.61	−112.77	0.86	0.61	0.99	1.03	0.71	+37	−31	− 4	+ 2	−16	+ 2	− 6	−33	−14	+48	0	−0.35
98943	20 05 19.86	+47 32 25.6	9.94	H	301.332 769 46	+47.540 441 11		8.10	−28.30	−55.48	1.07	0.91	1.16	1.21	1.02	− 5	− 5	− 2	+18	+14	−19	+12	− 5	+22	− 9	0	0.44
98944	20 05 20.19	−06 35 05.7	8.92	H	301.334 112 68	−06.584 903 09		4.97	12.77	−8.27	1.36	1.17	1.59	1.47	1.40	+38	−27	−33	+ 6	+24	+24	+41	+61	−17	+23	0	0.87
98945	20 05 20.34	+00 27 16.2	6.93	G	301.334 742 84	+00.454 511 97		0.16	2.58	−5.93	0.76	0.46	0.99	1.23	0.71	+24	−23	−31	+ 8	−23	+46	+ 2	+39	−28	−30	0	−0.02
98946	20 05 21.50	+56 20 28.4	6.19	H	301.339 596 13	+56.341 226 69		19.14	−0.37	80.22	0.48	0.51	0.49	0.55	0.61	−16	− 7	− 5	− 6	+18	− 8	+14	−30	− 6	−20	0	0.81
98947	20 05 21.81	−16 22 23.9	7.57	1 H	301.340 888 49	−16.373 295 09		4.60	−24.10	−16.86	0.87	0.64	0.95	1.10	0.90	+13	−16	−15	− 4	+ 3	+23	+ 7	+16	− 1	+13	0	−0.23
98948	20 05 22.27	−22 37 55.6	9.08	H	301.342 775 16	−22.632 104 67		4.22	11.15	11.01	1.05	0.57	1.16	1.44	0.87	+34	−34	−12	−18	+15	+21	+17	−20	− 2	−11	0	−1.01
98949	20 05 24.65	−15 39 34.6	9.01	H	301.352 702 90	−15.659 608 92		0.28	3.90	−4.66	1.30	1.01	1.54	1.62	1.33	+22	+ 0	−22	+ 3	+22	+40	+35	+41	+ 4	+28	0	1.05
98950	20 05 25.67	+46 40 18.6	8.35	1 G	301.356 938 33	+46.671 826 79		0.86	−2.78	−3.77	0.65	0.57	0.71	0.71	0.60	+ 0	+ 6	+ 4	+ 2	+ 7	+ 3	+ 8	− 9	+ 7	+ 4	0	−1.17
98951	20 05 25.85	−34 40 00.5	6.99	H	301.357 706 41	−34.666 809 79		6.37	20.04	−33.38	1.00	0.55	1.00	1.26	0.83	− 9	−19	−15	−35	+20	+ 1	+22	−12	+20	−26	0	0.77
98952	20 05 25.90	+27 25 27.6	7.90	H	301.357 916 70	+27.424 346 71		8.30	42.69	26.63	0.42	0.62	0.88	0.46	0.62	−22	+11	−28	−16	+ 9	−15	+ 8	−39	+24	−22	0	−1.47
98953	20 05 26.33	−12 39 54.2	6.53	G	301.359 710 82	−12.665 045 90		8.10	8.20	−48.21	0.78	0.59	0.89	0.95	0.74	+13	−16	−24	+ 0	+10	+32	+20	+34	− 1	+ 9	0	−0.55
98954	20 05 26.53	+15 30 01.3	6.37	2 H	301.360 525 02	+15.500 369 19		4.35	34.33	17.62	0.89	0.70	0.99	1.73	1.78	−13	−44	−19	−60	+17	+40	+32	−34	−13	+ 6	5	1.73
98955	20 05 27.69	+31 58 18.1	8.51	2 H	301.365 355 16	+31.971 700 38	∗	5.22	5.62	−1.30	0.77	0.84	1.05	0.79	0.88	+10	+14	+ 6	− 1	+ 8	+ 1	+ 6	−28	− 4	+17	0	−1.04
98956	20 05 28.40	+39 21 10.4	8.44	H	301.368 323 48	+39.352 883 40		3.85	9.18	−5.00	0.75	0.75	0.95	0.91	0.80	− 3	−10	+ 3	+26	+ 8	−18	+ 8	−18	+ 4	− 2	0	−1.33
98957	20 05 28.93	−70 11 04.2	8.42	H	301.370 559 83	−70.184 505 49		3.26	8.10	−43.35	0.54	0.64	0.95	0.60	0.67	−20	− 8	− 8	+18	+14	−10	+14	+ 2	+ 0	−12	0	−1.10
98958	20 05 31.11	−52 41 35.6	8.06	H	301.379 609 69	−52.693 232 19		2.32	6.70	−36.43	0.89	0.66	1.16	1.23	0.96	+ 5	+ 1	− 6	−44	+21	−29	+19	−11	−10	+14	0	−0.15
98959	20 05 31.49	−67 19 09.3	6.07	H	301.381 195 20	−67.319 257 24		56.45	844.55	−674.69	0.41	0.50	0.74	0.45	0.50	−12	− 3	−28	− 5	+15	−18	+10	−15	− 3	−18	0	−0.97
98960 H	20 05 32.02	−32 59 59.3	6.53	H	301.383 431 50	−32.999 818 77	A	3.48	7.48	−7.45	1.61	1.10	1.30	1.44	0.99	+32	− 6	−13	−33	+13	−13	+14	−10	+ 6	+16	0	0.04
98961	20 05 32.51	−33 54 08.0	9.17	H	301.385 466 42	−33.902 235 74		0.97	−7.64	0.27	1.45	0.81	1.42	1.66	1.10	+ 5	−22	−17	−30	+28	+ 1	+32	+ 1	+ 1	− 1	0	−1.17
98962	20 05 32.73	+61 59 42.9	5.40	H	301.386 354 75	+61.995 248 22		18.78	123.82	70.60	0.44	0.38	0.44	0.49	0.38	− 1	− 1	+15	+22	+ 7	−10	+10	+ 2	+ 3	+ 9	0	1.20
98963	20 05 33.43	+37 44 05.7	9.05	H	301.389 287 82	+37.734 916 58		2.10	2.26	−1.41	0.70	0.75	0.98	0.73	0.78	−19	−26	+ 9	+ 6	+ 4	− 6	+ 6	−15	+ 0	−11	0	−0.31
98964	20 05 33.55	+03 30 11.2	8.35	G	301.389 804 94	+03.503 100 35		23.22	137.43	−136.95	1.05	0.78	1.24	1.65	1.30	+39	− 8	−17	+39	− 3	+21	− 2	+31	+ 1	+51	2	1.23
98965	20 05 33.84	+07 23 10.2	8.62	H	301.390 993 35	+07.386 167 57		22.51	47.59	62.68	1.00	0.77	1.44	1.34	0.92	+34	+ 2	−15	+33	+ 8	+46	+17	+34	− 3	+31	4	−0.73
98966	20 05 34.94	+13 06 50.2	8.26	H	301.395 597 10	+13.113 950 58		4.00	−2.09	14.08	0.86	0.84	1.24	0.91	1.04	+25	−10	−30	−14	+19	+16	+28	+27	− 9	+28	0	−0.71
98967 H	20 05 35.00	+63 42 17.7	8.57	H	301.395 835 12	+63.704 916 74	A	14.04	204.38	149.64	1.88	2.23	1.84	2.09	2.64	+17	− 6	+ 1	+12	+26	+20	+24	− 9	+17	+26	4	2.01
98968	20 05 35.77	+08 11 36.6	11.13	G	301.399 058 23	+08.193 506 44		−5.81	−1.45	−12.89	2.13	1.72	2.62	3.02	2.28	+35	− 9	−15	+14	+10	− 4	+11	+32	+ 1	+28	0	−0.01
98969	20 05 35.94	+19 15 38.1	8.27	H	301.399 766 52	+19.260 570 65		2.03	0.61	−2.61	0.82	0.72	1.05	1.08	1.12	− 1	−14	−10	−10	− 7	+10	−13	+20	+ 0	+16	0	−0.72
98970	20 05 36.91	−17 42 01.2	8.77	H	301.403 777 30	−17.700 339 00		2.65	6.00	−12.97	1.18	0.88	1.33	1.53	1.27	+16	−12	−34	+ 9	+15	− 2	+18	+35	−23	+17	0	1.22
98971	20 05 37.01	+34 54 53.1	8.10	H	301.404 189 86	+34.914 750 73		0.02	−1.25	−6.85	0.55	0.58	0.76	0.61	0.67	− 2	+ 5	− 1	+ 4	− 3	−12	− 3	+ 6	+ 4	+ 7	0	−0.17
98972	20 05 37.53	−42 15 27.7	9.66	G	301.406 384 67	−42.257 691 29		17.56	−9.34	29.62	1.89	1.01	1.74	3.69	1.84	− 8	− 3	−31	−29	+38	−32	+30	−39	+28	−52	4	1.11
98973	20 05 38.05	−59 13 51.0	9.03	H	301.408 535 35	−59.230 835 71		1.43	24.64	−34.19	0.90	0.83	1.27	1.08	1.14	+30	−18	− 7	+22	+ 5	− 3	+ 2	+ 3	+ 6	+20	1	0.12
98974	20 05 38.29	−34 55 10.5	8.53	G	301.409 547 65	−34.919 580 89		7.12	−36.32	−165.27	1.31	0.86	1.50	1.72	1.04	+ 5	−40	−30	−40	+ 6	+19	+16	−14	− 6	−28	2	1.80
98975	20 05 38.60	+41 16 47.5	7.60	2 H	301.410 844 25	+41.279 861 88		−0.18	−1.19	−5.72	0.48	0.53	0.64	0.53	0.61	+ 3	− 6	− 5	− 5	+ 8	+14	+ 7	−10	+26	+18	3	0.79
98976	20 05 39.80	+35 36 28.1	7.78	H	301.415 851 97	+35.607 791 77		0.67	−3.02	−7.27	0.54	0.59	0.76	0.65	0.67	− 8	− 5	+ 9	− 2	+ 1	− 6	+ 2	−18	+ 0	+ 1	0	0.20
98977	20 05 40.46	−32 42 45.0	9.52	H	301.418 565 04	−32.712 503 64		6.70	20.79	−28.65	1.39	1.04	1.52	1.65	1.35	+38	−10	−28	−31	+ 5	−15	+ 1	−13	+ 1	+52	0	−0.06
98978	20 05 40.51	+48 34 00.5	7.44	G	301.418 783 07	+48.566 803 05		20.09	−85.08	3.83	0.56	0.49	0.61	0.65	0.48	−15	−12	+ 3	+ 9	+ 8	−20	+ 5	−18	+22	−19	0	0.24
98979 H	20 05 41.20	−37 42 53.2	7.94	G	301.421 646 51	−37.714 775 43	∗	7.87	16.80	−7.05	0.96	0.74	1.12	1.27	1.15	+40	−20	−20	+ 6	+ 8	+25	+11	+ 4	+21	+42	0	−0.42
98980	20 05 42.04	+14 45 59.0	10.42	G	301.425 158 52	+14.766 396 46		6.86	−64.36	−174.31	1.51	1.38	2.00	1.84	1.73	+40	−10	−27	+ 1	+15	−12	+15	+28	− 1	+33	0	1.25
98981	20 05 42.33	+30 19 40.3	8.18	H	301.426 358 54	+30.327 849 12		11.70	−20.36	−103.90	0.48	0.65	0.86	0.57	0.72	−14	+ 8	− 4	+18	+ 1	−19	+ 2	−20	+13	−12	0	1.02
98982	20 05 42.64	+39 59 51.3	9.50	H	301.427 670 22	+39.997 592 30		0.29	−3.43	−6.59	0.73	0.84	0.99	0.82	0.88	+ 1	+ 2	+ 7	− 2	+ 0	−14	+ 3	−25	+ 2	+11	0	0.17
∗98983	20 05 42.77	−57 37 02.8	8.77	H	301.428 226 53	−57.617 431 09		4.58	−0.54	9.05	0.87	0.72	1.12	1.33	1.15	+23	− 1	+ 0	−16	+21	+ 1	+21	+ 4	− 1	+31	3	−1.02
∗98984	20 05 42.77	+03 40 21.5	8.00	H	301.428 207 23	+03.672 635 57		0.64	1.70	−15.39	0.96	0.68	1.16	1.48	1.01	+45	−13	−20	+32	−14	+24	− 6	+ 8	+ 7	+55	2	1.98
98985	20 05 42.84	+51 01 49.4	8.86	H	301.428 488 00	+51.030 401 00		2.84	7.28	6.04	0.68	0.64	0.78	0.76	0.67	−13	−13	− 7	+ 0	+14	+ 7	+ 9	− 8	+30	+ 0	0	−0.73
98986	20 05 43.26	−15 25 23.7	8.55	H	301.430 267 81	−15.423 249 62		3.72	−10.22	−3.76	1.17	0.90	1.42	1.35	1.09	+13	−13	−36	− 5	+ 6	+33	+22	+34	−13	+11	0	−1.73
∗98987	20 05 44.30	+22 47 50.0	6.91	H	301.434 602 12	+22.797 218 93		2.13	4.44	−9.42	0.52	0.42	0.75	0.62	0.48	−30	− 3	+ 3	−10	−15	+11	−15	−12	− 6	−56	0	0.26
∗98988	20 05 44.28	−13 32 31.7	9.13	H	301.434 494 25	−13.542 127 08		−0.86	5.54	−7.52	1.44	1.29	1.78	1.72	1.67	+43	−11	−30	+14	+29	+29	+42	+59	−23	+38	0	1.39
98989	20 05 44.40	+04 02 54.3	10.46	G	301.434 979 90	+04.048 410 56		5.31	−133.27	−171.24	1.58	1.23	1.83	2.39	2.00	+53	−12	− 6	+28	+ 0	+15	− 2	+21	+ 8	+62	2	0.15
98990	20 05 46.10	−36 29 58.1	7.68	G	301.442 072 65	−36.499 475 32		7.09	1.00	−11.11	1.04	0.59	1.15	1.28	0.98	+23	−54	−18	+12	−11	+19	−15	−10	− 2	−10	0	0.86
98991	20 05 47.14	+11 36 31.7	8.73	H	301.446 425 72	+11.608 803 93		−0.76	2.64	11.27	1.03	0.88	1.23	1.24	1.11	+30	−30	−18	+36	+ 7	+ 4	+13	+47	−17	+10	2	0.43
98992	20 05 48.54	+28 56 35.2	9.13	H	301.452 258 77	+28.943 111 36		4.06	−7.13	−26.51	0.61	0.78	1.16	0.74	0.91	−17	−13	+13	+16	−10	− 4	− 6	−10	−14	−13	0	−0.67
98993	20 05 48.59	−15 45 21.6	8.44	G	301.452 457 04	−15.755 988 37		17.93	177.47	−97.43	1.10	0.78	1.26	1.37	1.09	+ 7	+13	− 4	+ 2	+19	+42	+24	+29	+12	+23	0	−0.22
98994	20 05 53.56	−58 31 29.4	9.36	H	301.473 146 36	−58.524 825 68		6.47	2.00	1.59	0.95	0.96	1.35	1.47	1.57	+36	−16	−16	+12	+28	−13	+24	+11	+14	+30	0	2.27
98995	20 05 54.86	+29 29 24.2	8.37	H	301.478 576 32	+29.490 059 43		2.78	−9.36	−4.45	0.52	0.69	0.98	0.62	0.78	− 3	−10	+ 6	+ 5	+ 3	− 1	+ 4	−16	− 9	− 2	0	−1.55
98996	20 05 55.01	+18 14 40.3	7.86	H	301.479 200 77	+18.244 524 64		1.18	−14.68	−39.00	0.65	0.63	0.93	0.83	0.86	+10	−13	−11	+14	+13	+23	+16	+28	+ 8	+13	0	0.11
98997	20 05 55.92	+24 27 36.9	8.23	H	301.482 979 83	+24.460 241 84		1.06	3.31	3.15	0.50	0.53	0.97	0.52	0.54	−12	− 9	− 7	+16	−18	+17	−16	−14	+ 7	−10	0	0.64
98998	20 05 56.00	+04 46 32.0	6.96	H	301.483 333 80	+04.775 564 19		7.47	14.74	−6.40	0.72	0

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
98901	8.660	0.015	8.241	0.015		0.382	0.015	G	0.45	0.02	H		8.2911	0.0017	0.011	56		8.27	8.31		C			1							S
98902	10.652	0.039	8.704	0.014		1.651	0.034	T	2.37	0.07	O		8.5195	0.0045	0.060	123		8.42	8.61		U 2			1							
98903	8.782	0.017	8.406	0.017		0.367	0.021	T	0.43	0.02	L		8.4664	0.0033	0.023	51		8.44	8.51					1							S
98904	9.336	0.029	9.211	0.036		0.121	0.043	T	0.14	0.04	L		9.2428	0.0018	0.011	38		9.22	9.27		D			1							
98905	9.799	0.018	9.326	0.018		0.446	0.023	T	0.52	0.02	L		9.4069	0.0021	0.024	139		9.36	9.45					1							
98906						1.524	0.006	G	2.25	0.04	I		11.9703	0.0074	0.064	103		11.85	12.08		D			1 X S							D
98907	9.659	0.021	9.408	0.024		0.239	0.030	T	0.27	0.04	L		9.4331	0.0023	0.020	86		9.40	9.46		C			1							
98908						1.310	0.020	G	1.52	0.02	A		10.9677	0.0027	0.033	54		10.91	11.02		D			1							G
98909						2.450	0.510	G	2.45	0.52	J		8.2491	0.0219	0.142	82		8.10	8.44		U 2 C	20051+2039	I 1	S							G
98910	7.024	0.022	6.443	0.013		0.543	0.023	T	0.62	0.02	L		6.4965	0.0131	0.087	50		6.35	6.56		U 2			1 S							S P
98911	8.597	0.009	7.317	0.006		1.089	0.008	T	1.05	0.01	L		7.3605	0.0012	0.011	113		7.34	7.38		C			1							S
98912	8.144	0.009	7.952	0.011		0.184	0.013	T	0.20	0.01	L		7.9944	0.0017	0.015	110		7.97	8.01					1							S
98913	9.566	0.020	8.687	0.015		0.784	0.019	T	0.82	0.01	L		8.7246	0.0020	0.018	104		8.69	8.77					1							
98914	10.765	0.049	9.561	0.028		1.112	0.015	G	1.07	0.02	I		9.6008	0.0024	0.027	133		9.56	9.64					1							G
98915	8.209	0.011	6.322	0.005		1.601	0.010	T	1.86	0.03	O		6.2281	0.0011	0.013	122		6.21	6.25		M			1							S
98916	8.357	0.024	7.867	0.021	A	0.506	0.015	G	0.58	0.02	H	*	7.7176	0.0015	0.011	57	*	7.70	7.74		D	20051−0418	I 1	2 C A	AB	183	1.423	0.011	1.07	0.03	S
98917	10.135	0.026	9.032	0.017		0.951	0.024	T	0.94	0.02	L		9.0909	0.0026	0.019	114		9.05	9.12					1							
98918	8.926	0.014	7.129	0.007		1.478	0.062	G	1.54	0.02	A		7.0864	0.0016	0.011	99		7.07	7.11					1							S
98919	7.609	0.018	7.484	0.020	A	0.000	0.495	G	0.13	0.03	L	*	7.3292	0.0013	0.011	121	*	7.31	7.35		D	20051−6304	I 1	2 C A	AB	249	1.286	0.004	0.75	0.01	S
98920	6.452	0.004	5.208	0.003		1.058	0.002	G	1.10	0.06	F		5.2513	0.0008	0.006	84		5.24	5.26		C			1							S
98921	7.000	0.005	6.268	0.004		0.654	0.004	G	0.72	0.00	H		6.3173	0.0017	0.014	135		6.29	6.35		U 2 C	20052+3829	I 1	1							S
98922	7.326	0.006	6.816	0.006		0.479	0.008	T	0.55	0.01	L		6.8744	0.0011	0.007	78		6.86	6.89		C			1							S
98923	7.605	0.007	7.265	0.007		0.323	0.009	T	0.37	0.01	L		7.3005	0.0020	0.016	112		7.28	7.32		U			1							S
98924	8.928	0.014	8.808	0.017		0.104	0.015	G	0.12	0.02	H		8.8136	0.0025	0.024	136		8.78	8.86			20052+1641	I 1	1 S							S
98925	8.585	0.010	8.183	0.010		0.360	0.015	G	0.42	0.02	H		8.2457	0.0010	0.012	136		8.23	8.28					1							
98926	7.336	0.006	7.240	0.007		0.087	0.008	T	0.10	0.01	L		7.2756	0.0010	0.008	98		7.26	7.29					1							S
98927	11.155	0.077	9.992	0.043	*	0.991	0.070	T	1.03	0.06	L	*	10.0659	0.0037	0.034	102	*	9.97	10.12		U	20052−4834	H 1	2 C S D	AB	270	0.161	0.043	0.62	1.05	D
98928	11.327	0.084	10.555	0.064		0.703	0.082	T	0.76	0.07	L		10.7210	0.0030	0.031	113		10.68	10.78		C			1							G
98929	9.791	0.018	8.266	0.010		1.282	0.016	T	1.24	0.02	L		8.3040	0.0015	0.017	173		8.28	8.34					1							
98930	8.379	0.015	8.123	0.017		0.244	0.021	T	0.27	0.03	L		8.1356	0.0019	0.017	49		8.11	8.16					1							S
98931	10.402	0.037	8.918	0.018		1.249	0.032	T	1.21	0.03	L		8.9561	0.0016	0.014	101		8.93	8.99		C			1							
98932	10.504	0.045	8.357	0.014		1.815	0.039	T	2.61	0.06	O		8.1339	0.0058	0.033	87		8.08	8.18		U 2			1							
98933	8.964	0.014	7.776	0.009		1.018	0.013	T	0.99	0.01	L		7.8236	0.0015	0.012	89		7.81	7.84		C			1							S
98934	10.580	0.044	9.900	0.039		0.591	0.015	G	0.66	0.01	H		9.9158	0.0036	0.032	108		9.86	9.96					1							G
98935						1.532	0.020	G	1.60	0.14	K		11.0923	0.0053	0.036	73		11.01	11.15		C			1							G
98936	9.873	0.026	9.430	0.026		0.506	0.015	G	0.58	0.02	H		9.4571	0.0030	0.025	89		9.40	9.50		C			1							
98937	10.777	0.077	8.924	0.027		1.541	0.065	T	1.60	0.14	L		8.8497	0.0022	0.012	50		8.83	8.87		C			1							
98938	10.129	0.033	9.631	0.033		0.480	0.036	T	0.55	0.04	L		9.6382	0.0017	0.016	72		9.61	9.68		D			1							
98939	10.487	0.031	9.181	0.017		1.110	0.028	T	1.07	0.03	L		9.2109	0.0017	0.019	126		9.18	9.24		C			1							
98940	7.880	0.007	7.947	0.009		−0.056	0.010	T	−0.03	0.01	L		7.9476	0.0009	0.010	130		7.93	7.97		D			1							S
98941	10.091	0.022	8.399	0.010		1.413	0.019	T	1.39	0.03	L		8.3803	0.0016	0.014	147		8.36	8.40					1							
98942	8.002	0.010	7.539	0.008		0.465	0.015	G	0.54	0.02	H		7.5829	0.0012	0.009	85		7.57	7.60		C			1							S
98943	10.550	0.043	9.871	0.037		0.628	0.047	T	0.70	0.04	L		10.0728	0.0032	0.026	110		10.02	10.12		C			1							G
98944	9.266	0.023	8.947	0.026		0.303	0.032	T	0.35	0.04	L		8.9952	0.0027	0.015	46		8.96	9.03		C			1							
98945	6.988	0.004	6.947	0.006		0.049	0.001	G	0.06	0.00	H		6.9582	0.0007	0.007	113		6.95	6.97		C	20053+0027	I 1	1							S
98946	6.682	0.004	6.233	0.004		0.437	0.004	T	0.51	0.00	L		6.2857	0.0007	0.007	115		6.27	6.30		C			1 G							S
98947	9.922	0.033	7.836	0.013		1.726	0.028	T	1.75	0.03	L		7.6710	0.0030	0.019	51		7.65	7.70		U			1							S
98948	9.522	0.015	9.146	0.016		0.356	0.020	T	0.42	0.02	L		9.1634	0.0017	0.018	153		9.13	9.19					1 G							
98949	9.212	0.022	9.057	0.026		0.141	0.032	T	0.16	0.03	L		9.0632	0.0027	0.022	56		9.02	9.09					1							S
98950	8.596	0.010	8.376	0.011		0.221	0.010	G	0.24	0.01	H		8.3945	0.0018	0.019	130		8.37	8.45		U			1							
98951	7.004	0.005	6.997	0.006		0.008	0.002	G	0.03	0.00	H		7.0061	0.0014	0.010	76		6.99	7.02		C			1							S
98952	8.589	0.007	7.956	0.006		0.588	0.008	T	0.66	0.01	L		8.0260	0.0009	0.014	223		8.00	8.05					1							S
98953	6.576	0.005	6.535	0.008		0.050	0.008	G	0.06	0.01	H		6.5471	0.0013	0.007	50		6.53	6.56		C			1							S
98954	8.561	0.012	6.584	0.005		1.615	0.029	G	1.95	0.05	F		6.4552	0.0138	0.072	107		6.37	6.55	100.10	P 1 A	20054+1530	I 1	1 G							S
98955	8.751	0.011	8.568	0.012		0.168	0.016	T	0.18	0.02	L		8.5704	0.0022	0.027	141		8.54	8.78	2.35	P 1 A			1 V							
98956	9.736	0.018	8.562	0.012		1.007	0.017	T	0.98	0.01	L		8.6016	0.0017	0.018	124		8.58	8.63		C			1							
98957	8.703	0.008	8.434	0.008		0.253	0.012	T	0.28	0.01	L		8.4873	0.0014	0.021	218		8.45	8.53					1							S
98958	9.383	0.015	8.155	0.009		1.066	0.002	G	1.03	0.00	K		8.2249	0.0011	0.013	121		8.20	8.24		D			1							
98959	6.863	0.003	6.145	0.003		0.648	0.006	G	0.72	0.02	A		6.2045	0.0007	0.008	163		6.19	6.22					1							S
98960	6.449	0.003	6.530	0.005	*	−0.069	0.005	T	−0.05	0.01	L	*	6.5153	0.0010	0.009	81	*	6.49	6.53		D	20055−3300	I 1	2 C A	AB	106	0.506	0.007	1.59	0.02	S
98961	11.221	0.080	9.346	0.027		1.558	0.067	T	1.58	0.07	L		9.2965	0.0028	0.016	67		9.26	9.33		C			1							
98962	6.956	0.007	5.542	0.003		1.191	0.001	G	1.15	0.00	H		5.5683	0.0008	0.006	99		5.56	5.58		C			1							S
98963	9.129	0.013	9.064	0.017		0.059	0.019	T	0.07	0.01	L		9.0759	0.0019	0.025	141		9.04	9.12					1							
98964	9.328	0.015	8.429	0.012		0.776	0.005	G	0.82	0.01	H		8.4920	0.0011	0.011	121		8.47	8.51		C			1							
98965	9.526	0.019	8.714	0.015		0.717	0.018	T	0.77	0.01	L		8.7564	0.0023	0.014	96		8.73	8.79		C			1							
98966	9.617	0.022	8.357	0.014		1.074	0.020	T	1.04	0.02	L		8.4223	0.0017	0.014	88		8.38	8.45		C			1							
98967	9.104	0.027	8.414	0.023	*	0.637	0.029	T	0.70	0.03	L	*	8.7073	0.0020	0.016	114	*	8.68	8.73		D	20056+6343	I 1	2 C A	AB	186	1.901	0.002	0.08	0.01	
98968						1.523	0.020	G	1.65	0.15	K		11.2697	0.0056	0.045	85		11.21	11.34		C			1							G
98969	9.424	0.020	8.379	0.014		0.908	0.018	T	0.91	0.01	L		8.4346	0.0018	0.017	97		8.41	8.46		C			1							
98970	9.106	0.020	8.819	0.023		0.272	0.032	T	0.31	0.04	L		8.8424	0.0029	0.018	61		8.81	8.90		C	20056−1742	I 1	1 S							S
98971	8.943	0.011	8.202	0.009		0.663	0.011	T	0.72	0.01	L		8.2321	0.0016	0.016	166		8.20	8.26					1							
98972	10.692	0.038	9.722	0.026		0.800	0.020	G	0.84	0.02	H		9.8378	0.0024	0.023	105		9.80	9.88		C			1 G							
98973	10.415	0.033	9.150	0.019		1.078	0.030	T	1.04	0.03	L		9.1942	0.0022	0.020	118		9.16	9.23		C			1							
98974	9.431	0.022	8.609	0.017		0.753	0.019	G	0.80	0.01	H		8.6791	0.0014	0.013	73		8.65	8.70		C			1 G							
98975	8.049	0.009	7.648	0.008		0.401	0.009	G	0.47	0.01	H		7.6912	0.0017	0.018	126		7.66	7.72		U 2			1							S
98976	7.949	0.009	7.806	0.009		0.138	0.012	T	0.15	0.01	L		7.8257	0.0015	0.015	145		7.80	7.85			20056+3537	I 1	1							S
98977	10.184	0.032	9.544	0.029		0.588	0.032	T	0.66	0.03	L		9.6436	0.0026	0.016	74		9.61	9.68		C			1							
98978	8.231	0.009	7.517	0.007		0.661	0.015	G	0.72	0.01	H		7.5676	0.0010	0.011	133		7.55	7.59		C			1							S
98979	8.409	0.012	7.985	0.011	*	0.427	0.015	G	0.49	0.02	H	*	8.0244	0.0014	0.013	78	*	8.00	8.06		D	20057−3743	H 1	2 C S A	AB	51	0.182	0.012	0.58	0.39	S
98980	11.312	0.077	10.579	0.069		0.690	0.015	G	0.75	0.01	H		10.5885	0.0039	0.029	82		10.53	10.65		C			1							G
98981	8.783	0.009	8.251	0.009		0.480	0.018	G	0.55	0.02	H		8.2814	0.0012	0.015	175		8.26	8.31		C	20057+3020	I 1	1							
98982	9.564	0.017	9.527	0.023		0.039	0.026	T	0.05	0.02	L		9.5193	0.0019	0.019	127		9.49	9.56					1							G
98983	9.153	0.015	8.783	0.016		0.361	0.019	T	0.42	0.02	L		8.8555	0.0021	0.021	114		8.83	8.91					1							
98984	9.827	0.018	8.152	0.009		1.400	0.016	T	1.38	0.02	L		8.1423	0.0010	0.011	126		8.12	8.16					1							
98985	8.908	0.012	8.847	0.015		0.061	0.018	T	0.07	0.01	L		8.8839	0.0016	0.018	119		8.85	8.92		C			1							
98986	10.364	0.050	8.727	0.022		1.000	0.040	G	0.98	0.03	R		8.7198	0.0038	0.018	55		8.69	8.75					1							
98987	6.950	0.003	6.913	0.005		0.039	0.005	T	0.05	0.00	L		6.9337	0.0007	0.009	181		6.92	6.95		C			1							S
98988	11.249	0.089	9.309	0.028		1.610	0.074	T	1.63	0.08	L		9.2408	0.0041	0.021	53		9.20	9.27					1							
98989	11.159	0.059	10.435	0.049		0.510	0.046	G	0.58	0.05	H		10.5793	0.0018	0.022	111		10.53	10.61		D			1							G
98990	8.230	0.012	7.719	0.014		0.490	0.015	G	0.56	0.02	H		7.7850	0.0015	0.012	67		7.77	7.80		C			1							S
98991	10.128	0.038	8.820	0.021		1.111	0.034	T	1.07	0.04	L		8.9035	0.0015	0.015	77		8.88	8.93		C			1							
98992	9.721	0.016	9.159	0.016		0.530	0.017	T	0.60	0.02	L		9.2463	0.0020	0.021	183		9.21	9.28					1							
98993	9.230	0.022	8.506	0.019		0.613	0.002	G	0.68	0.00	H		8.5764	0.0019	0.015	57		8.55	8.60		C			1							
98994	10.040	0.022	9.399	0.020		0.589	0.022	T	0.66	0.02	L		9.4915	0.0025	0.023	117		9.45	9.54					1							
98995	9.711	0.015	8.472	0.010		1.057	0.014	T	1.02	0.01	L		8.5374	0.0017	0.017	182		8.51	8.57					1							
98996	9.468	0.016	7.991	0.009		1.244	0.014	T	1.20	0.01	L		8.0202	0.0016	0.014	117		7.99	8.04		C			1							
98997	8.391	0.006	8.249	0.007		0.137	0.009	T	0.15	0.01	L		8.2776	0.0013	0.016	245		8.25	8.31		C			1							
98998	7.074	0.006	6.972	0.005		0.099	0.007	T	0.11	0.01	L		7.0010	0.0009	0.007	102		6.99	7.01		C			1							S
98999	7.521	0.006	7.307	0.008		0.204	0.009	T	0.22	0.01	L		7.3568	0.0013	0.014	150		7.34	7.38		M			1							S
99000	9.812	0.026	8.365	0.014		1.220	0.023	T	1.18	0.02	L		8.4025	0.0016	0.017	111		8.37	8.42		C			1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																	Soln	
HIP	RA		Dec	V		α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	F1	F2
	h m s		±° ′ ″	mag		deg		deg	mas	mas/yr		mas		mas	mas/yr		α*	α*	δ	α*	δ	π	α*	δ	π	$\mu_{\alpha*}$	%	
1 2	3		4	5	6 7	8		9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
*99001	20 05 56.52	+35 47 23.9	9.58	H	301.485 518 67	+35.789 967 69	D	−2.98	3.13	−6.21	15.99	17.97	13.46	11.96	13.93	+ 7	−21	+ 3	+16	+ 6	−19	+12	− 1	+ 0	+ 8	6	−0.66
99002	20 05 57.33	+35 47 18.2	6.77	H	301.488 861 08	+35.788 390 95	A	−0.96	−3.43	−7.66	0.87	0.93	0.92	0.89	0.93	+ 6	−17	+ 3	+11	+ 5	−18	+ 9	− 1	+ 4	+ 5	6	−0.66
99003	20 05 58.40	−39 58 33.9	9.08	G	301.493 319 65	−39.976 075 55		6.63	103.40	6.61	1.16	0.75	1.37	1.56	1.12	+12	−29	− 4	+12	− 3	−11	− 3	− 4	− 2	+13	0	−1.72
99004	20 05 58.61	+19 34 51.3	7.60	H	301.494 217 20	+19.580 906 86		3.50	23.57	−16.09	0.73	0.59	0.90	0.97	0.96	+ 4	− 1	−13	−22	−10	+13	−18	+ 9	+ 2	+29	5	−0.09
99005	20 05 58.71	+35 47 49.9	7.36	H	301.494 639 41	+35.797 205 48		0.30	−4.01	−6.86	0.54	0.58	0.75	0.61	0.64	− 6	− 7	+ 4	+11	+ 4	− 7	+ 4	−11	+ 9	− 3	1	−1.98
99006	20 05 59.58	+01 46 53.9	8.98	G	301.498 248 72	+01.781 630 93		−0.41	−10.92	−11.24	1.27	0.81	1.55	1.79	1.10	+31	−21	− 2	+19	+15	+ 0	+16	+24	− 6	+17	5	0.35
99007	20 05 59.73	−55 53 34.7	8.58	H	301.498 857 51	−55.892 977 21		11.10	59.60	−32.58	0.78	0.70	1.20	1.14	1.12	+43	−23	−32	− 3	+29	−14	+26	− 5	+17	+18	0	1.91
99008	20 06 00.71	+40 03 54.0	8.21	H	301.502 964 66	+40.064 991 69		0.14	−3.44	−6.26	0.55	0.58	0.72	0.58	0.61	+ 1	− 1	+ 6	− 2	− 1	−17	+ 2	−19	+10	+ 9	0	1.31
99009	20 06 00.99	+32 28 47.0	8.58	H	301.504 119 92	+32.479 735 00		1.55	−8.36	−16.67	0.67	0.73	1.07	0.72	0.82	−14	+ 7	− 6	+15	+14	−20	+18	−16	+16	− 9	0	1.62
99010	20 06 01.97	+09 05 36.2	7.40	H	301.508 204 05	+09.093 399 20		2.35	−5.36	−17.22	0.68	0.58	1.00	0.80	0.65	+20	−14	−32	+ 5	+ 0	+36	+15	+27	−13	+12	0	0.40
99011	20 06 02.67	−18 42 15.8	8.46	H	301.511 128 66	−18.704 376 40		3.55	−3.99	0.02	1.20	0.78	1.25	1.55	1.07	− 2	−22	−24	−13	+10	+16	+18	+16	− 7	−16	0	0.92
99012	20 06 02.99	−44 58 48.6	8.07	H	301.512 477 89	−44.980 161 60		6.14	−26.19	−9.27	0.95	0.54	1.01	1.35	0.82	+ 3	−26	+ 2	+33	+ 0	+ 5	+ 4	+ 6	− 4	+15	0	−1.32
99013	20 06 04.76	−79 25 23.5	8.01	H	301.519 822 10	−79.423 197 69		7.76	26.52	−32.03	0.56	0.53	0.78	0.65	0.66	−12	−28	+11	− 7	+22	+ 7	+22	−28	−16	−22	0	−0.38
99014	20 06 04.94	+05 15 14.0	9.61	G	301.520 567 36	+05.253 891 72		27.99	−75.70	−363.86	1.14	0.96	1.78	1.51	1.04	+38	+ 6	−39	+33	− 6	+48	+16	+25	+ 5	+39	0	0.36
99015	20 06 07.66	+29 56 32.1	9.90	H	301.531 936 92	+29.942 241 06		7.18	41.27	−57.81	0.82	1.08	1.48	1.04	1.34	−14	+ 2	+ 5	+20	+ 6	+ 7	+ 7	−13	+ 2	−10	1	2.70
99016	20 06 07.69	−21 00 00.5	8.61	H	301.532 032 41	−21.000 131 38		1.83	4.12	0.80	1.09	0.74	1.22	1.42	0.97	+15	−35	−36	+ 8	−16	+18	− 7	+15	−10	−15	0	−0.15
99017	20 06 07.98	+28 55 02.1	8.73	H	301.533 235 99	+28.917 253 22		12.93	−12.53	−40.38	0.53	0.70	1.02	0.64	0.77	−17	−10	+15	+17	− 6	− 4	− 4	−12	− 8	−16	0	0.64
*99018	20 06 08.11	+28 07 33.3	7.91	H	301.533 785 99	+28.125 921 15		4.21	28.39	−1.49	0.38	0.56	0.84	0.45	0.60	−19	− 5	− 4	+ 3	+ 4	+ 7	+ 6	−15	− 5	−13	0	−0.72
*99019	20 06 08.08	−53 48 16.5	8.61	H	301.533 672 84	−53.804 597 04		2.78	−19.09	−28.88	0.95	0.71	1.20	1.25	1.19	− 8	−17	+ 3	−22	+29	+ 3	+26	+11	+16	+ 8	2	1.13
99020	20 06 08.33	+15 12 20.6	9.42	G	301.534 709 36	+15.205 728 69		1.55	5.39	−13.37	1.03	0.97	1.52	1.22	1.16	+20	− 5	−30	− 4	+ 7	− 6	+ 8	+17	−14	+15	2	0.05
99021	20 06 09.95	+35 23 09.7	8.16	3 T	301.541 461 14	+35.386 020 17		0.28	−3.74	−7.25	0.59	0.63	0.82	0.69	0.76	− 7	+ 0	+ 4	+ 8	+ 5	− 3	+ 6	− 6	+ 7	− 3	0	1.47
99022	20 06 11.03	−44 20 29.1	7.89	H	301.545 967 05	−44.341 428 21		2.44	8.73	−41.11	1.10	0.58	1.06	1.61	0.85	−23	+ 0	− 6	+40	−13	+15	− 5	+10	− 3	− 3	0	−0.59
99023	20 06 11.29	+25 27 30.2	8.15	G	301.547 060 52	+25.458 389 86		3.41	3.55	−2.94	0.54	0.57	0.89	0.53	0.57	− 6	− 7	−12	+16	− 9	− 1	−14	−31	+14	−16	1	0.47
99024	20 06 12.19	−04 04 41.2	6.47	G	301.550 808 82	−04.078 124 91		9.57	51.59	−34.88	0.90	0.72	0.96	1.39	0.97	+ 7	+10	−11	+44	+ 4	+44	+11	+61	− 4	− 2	0	1.29
99025	20 06 12.44	−01 43 07.4	8.03	G	301.551 849 65	−01.718 730 28		10.20	−35.30	−75.34	1.12	0.77	1.29	1.78	1.17	+25	−14	−41	+32	−24	+26	+ 0	+60	−23	−37	0	0.81
99026	20 06 13.64	+53 09 54.2	5.81	H	301.556 828 54	+53.165 067 46		27.43	212.85	255.21	0.42	0.39	0.46	0.51	0.39	− 9	− 7	+11	+ 9	+ 6	− 5	+ 5	−10	+12	− 3	1	−0.45
99027	20 06 13.85	+65 41 52.6	8.65	H	301.557 699 93	+65.697 935 57		11.85	18.51	10.66	0.60	0.67	0.71	0.59	0.84	+12	+ 2	− 7	−12	+20	+ 8	+17	+20	+18	+36	0	0.36
99028	20 06 14.60	+20 31 08.6	7.77	H	301.560 826 78	+20.519 042 71		6.85	35.67	16.00	0.68	0.67	0.94	0.96	0.97	+ 5	+ 5	−27	− 2	− 2	+ 7	− 2	+23	− 8	+ 9	0	−0.65
99029 H	20 06 17.80	−43 12 55.3	9.23	G	301.574 159 72	−43.215 364 48	A	11.92	−39.26	−245.82	2.17	1.14	2.13	3.19	1.82	− 3	−26	+ 8	+25	+18	− 5	+31	+12	−17	+20	1	−0.30
99030	20 06 18.15	−29 08 43.3	8.65	H	301.575 640 27	−29.145 355 21		4.00	0.48	−21.68	1.17	0.74	1.37	1.40	1.00	+42	−40	−18	+ 8	− 9	+ 1	+ 0	−15	−25	+32	0	−0.84
99031	20 06 21.93	+35 58 24.7	5.38	1 H	301.591 372 34	+35.973 538 94		41.34	−224.43	−440.57	0.38	0.44	0.54	0.40	0.46	− 5	− 5	+ 2	− 6	− 1	− 1	− 1	−12	+ 5	+ 1	1	−1.83
99032	20 06 23.44	−52 31 17.7	7.76	H	301.597 647 84	−52.521 589 48		9.41	−1.07	13.40	0.75	0.55	1.02	1.03	0.88	+ 5	− 5	− 1	−29	+13	−17	+13	− 7	−11	+16	2	−0.26
99033	20 06 23.62	+77 32 16.1	8.20	1 H	301.598 403 41	+77.537 802 65		1.98	7.19	0.16	0.60	0.57	0.63	0.68	0.69	− 7	−18	+15	− 7	+ 9	− 6	+11	+ 5	− 3	+ 1	0	0.86
99034	20 06 23.92	−14 54 42.6	8.12	H	301.599 659 04	−14.911 820 54		18.70	−42.57	−129.25	1.05	0.78	1.13	1.29	1.05	+ 8	− 3	− 4	+ 0	+26	+35	+29	+38	+16	+21	0	0.25
99035	20 06 25.00	+39 05 55.0	6.86	H	301.604 176 04	+39.098 599 75		2.56	23.61	30.81	0.49	0.48	0.61	0.55	0.47	− 6	− 2	+ 7	+26	+ 3	− 9	+ 5	−24	+ 4	− 1	0	0.74
99036	20 06 25.74	+68 17 27.9	8.84	H	301.607 242 76	+68.291 086 15		2.64	−4.80	−10.60	0.71	0.72	0.76	0.90	0.89	+13	−23	+ 6	+ 7	+22	+ 0	+24	+ 9	−21	+27	0	0.32
99037	20 06 27.66	+70 39 35.4	7.99	1 H	301.615 252 33	+70.659 833 93		5.47	10.75	−20.95	0.59	0.55	0.61	0.70	0.59	− 9	−23	+15	− 7	+12	− 1	+ 8	+ 6	+ 0	+19	0	0.33
99038	20 06 28.02	−31 34 07.8	8.09	H	301.616 735 17	−31.568 825 44		9.88	25.04	−130.74	1.02	0.73	1.23	1.36	0.84	+31	− 6	−16	+ 4	−20	+31	−13	−28	−15	+27	0	−0.44
*99039	20 06 28.49	−20 08 32.3	8.65	1 H	301.618 698 23	−20.142 298 68		1.20	12.81	−18.96	1.34	1.06	1.67	1.82	1.35	+31	− 9	−31	+22	+ 2	+46	+19	+34	+ 3	+24	0	−1.61
*99040	20 06 28.49	−70 20 54.1	8.78	H	301.618 693 19	−70.348 360 12		0.13	3.53	−9.31	0.65	0.78	1.18	0.72	0.81	−12	− 3	− 9	+11	+19	−14	+18	+ 5	+ 4	− 3	0	−0.88
99041	20 06 29.02	+36 13 36.8	7.01	H	301.620 933 61	+36.226 886 26		2.40	−48.82	−100.13	0.45	0.51	0.63	0.49	0.59	−10	+ 4	− 6	− 9	+ 5	− 5	+ 6	−20	+ 7	− 4	0	−1.25
99042	20 06 29.41	−18 18 28.4	8.09	2 H	301.622 528 79	−18.307 901 74		4.48	−0.97	−11.29	1.16	0.80	1.33	1.26	0.93	−10	+ 8	−48	−22	+10	+15	+19	+19	−13	+ 1	0	−0.78
99043	20 06 29.87	−64 50 21.1	8.10	H	301.624 437 57	−64.839 204 50		3.52	18.13	−5.26	0.77	0.61	1.00	0.91	0.72	− 7	− 1	−17	+ 4	+ 9	−11	+ 4	−16	− 4	−23	0	0.91
99044	20 06 31.64	−54 05 04.7	8.26	H	301.631 834 05	−54.084 640 78		5.04	3.01	−26.74	0.79	0.63	1.01	1.03	0.95	+ 5	−10	− 1	−12	+19	+ 6	+17	+ 8	+21	+15	2	2.83
*99045	20 06 32.74	+12 40 59.7	12.65	H	301.636 396 86	+12.683 249 33	B	0.74	17.52	−8.84	254.46	241.06	1.78	2.05	1.91	+20	+13	+ 1	− 6	−14	+16	−14	−12	− 7	+28	1	0.36
*99046	20 06 32.73	−21 40 35.7	7.99	G	301.636 359 72	−21.676 578 17		21.16	−202.56	−96.09	0.92	0.61	1.03	1.17	0.77	+12	−34	−35	+12	−16	+21	− 6	+20	− 8	−18	0	−0.54
99047	20 06 33.40	−68 25 38.6	9.28	H	301.639 154 75	−68.427 393 34		4.82	11.55	−32.37	0.63	0.96	1.36	0.69	1.04	−56	−21	+17	−30	+34	+ 3	+37	−41	−21	−50	0	−1.07
99048	20 06 33.85	+12 40 53.9	7.34	H	301.641 049 07	+12.681 649 72	A	0.74	17.52	−8.84	1.96	1.74	1.78	2.05	1.91	+28	− 6	− 8	+41	+14	+16	+14	+48	− 7	+28	1	0.36
99049	20 06 35.40	+35 07 55.4	7.88	H	301.647 485 11	+35.132 062 33		2.17	2.89	−10.36	0.53	0.61	0.79	0.64	0.70	− 6	+ 0	− 2	− 2	+ 7	−13	+ 7	−11	+10	− 3	0	−0.79
99050	20 06 36.24	−04 25 02.6	7.12	H	301.650 993 54	−04.417 401 71		5.48	−1.90	−17.67	0.90	0.85	1.05	1.30	1.10	+33	+ 8	+ 1	+35	+36	+52	+41	+70	+11	+36	0	2.26
99051	20 06 36.43	−25 34 35.7	8.71	H	301.651 803 53	−25.576 582 76		1.50	28.03	−4.84	1.04	0.62	1.15	1.15	0.78	+23	−21	+ 8	−21	+ 3	− 5	+ 9	−23	−14	+61	0	−0.08
99052	20 06 37.43	+49 57 32.8	9.13	H	301.655 977 88	+49.959 124 60		9.13	33.64	40.33	0.77	0.63	0.81	0.80	0.61	− 7	−14	− 3	− 9	+ 8	−12	+ 3	−23	+27	− 7	0	0.63
99053	20 06 37.58	−50 40 30.9	8.45	H	301.656 562 87	−50.675 262 61		0.85	11.14	1.91	1.26	0.71	1.26	1.88	1.25	−21	−32	− 2	+55	−19	− 1	−26	+32	+11	−35	0	−0.80
99054	20 06 38.34	+07 33 29.4	7.57	H	301.659 729 68	+07.558 171 65		7.94	4.12	−17.69	0.74	0.63	1.03	0.92	0.72	+35	−16	−31	+20	+ 5	+30	+18	+39	−11	+25	0	1.23
99055	20 06 38.76	+07 34 34.2	7.12	H	301.661 490 96	+07.576 155 36		7.51	1.03	−20.48	0.74	0.58	0.95	0.95	0.70	+31	−10	−24	+24	+ 9	+30	+18	+38	− 6	+24	2	2.47
*99056	20 06 39.79	+12 13 50.9	8.24	H	301.665 788 37	+12.230 795 84		1.69	7.25	−3.27	0.83	0.80	1.05	1.07	1.04	+37	−20	−21	+30	+13	+14	+19	+44	− 7	+20	0	0.35
*99057 H	20 06 39.78	−28 22 16.9	8.15	H	301.665 752 91	−28.371 360 82	A	6.60	44.51	−13.05	3.51	2.16	2.42	2.61	1.75	+59	−26	−24	− 6	−15	−18	−15	−29	− 1	+63	3	0.30
99058	20 06 40.19	+22 42 43.2	7.89	H	301.667 470 27	+22.711 986 39		1.15	−1.29	−8.09	0.61	0.53	0.91	0.69	0.60	−21	−14	+ 9	−16	− 9	+11	− 9	−15	− 8	−35	0	1.36
99059	20 06 40.26	−41 51 04.7	9.72	G	301.667 731 44	−41.851 312 96		6.06	16.16	−17.60	1.34	0.83	1.72	2.14	1.30	− 3	− 3	−13	+ 9	+ 9	−22	+ 6	+ 7	+17	− 5	0	−0.50
99060	20 06 40.92	+38 10 56.3	9.57	H	301.670 481 27	+38.182 312 66		3.92	21.63	−4.67	0.86	0.94	1.17	0.93	1.02	−10	+ 8	+ 0	+ 6	+ 4	− 4	+ 7	−18	+ 6	+ 1	1	−0.81
99061 H	20 06 41.01	+34 54 40.3	8.59	G	301.670 890 36	+34.911 202 42	A	−1.70	−1.29	−8.47	0.89	0.92	1.13	0.92	0.94	− 8	− 1	−15	+ 4	+10	− 4	+11	− 5	+19	+ 4	2	−0.16
99062	20 06 42.21	−37 05 21.0	8.62	H	301.675 889 81	−37.089 178 72		0.91	−5.35	−2.70	1.03	0.75	1.19	1.34	1.21	+28	−20	− 9	+ 6	+15	+18	+12	+ 9	+29	+28	0	0.71
99063	20 06 42.71	−45 49 15.9	9.20	G	301.677 970 28	−45.821 083 96		6.28	−5.47	−62.81	1.32	0.66	1.42	1.84	1.04	−17	−27	+ 8	+20	+ 1	+ 5	+ 8	− 1	−17	− 5	0	1.53
99064	20 06 43.03	+59 27 50.7	8.84	H	301.679 296 68	+59.464 088 92		1.90	0.18	1.29	0.82	0.65	0.78	1.00	0.72	+ 4	− 7	+ 3	+25	− 6	+ 3	− 4	−13	+14	+10	0	0.89
99065	20 06 43.37	−49 42 25.0	8.94	H	301.680 702 28	−49.706 949 66		2.62	15.37	13.52	1.20	0.76	1.29	1.59	1.24	−14	−32	+ 8	+22	−14	− 2	−13	+10	− 3	− 7	6	2.78
99066	20 06 45.78	−12 55 37.2	7.64	H	301.690 769 76	−12.926 992 54	A	3.62	5.10	−10.22	1.47	1.17	1.47	1.61	1.36	+36	−28	−30	+15	+27	+ 2	+30	+49	− 5	+27	1	0.82
99067	20 06 45.84	+25 41 06.8	8.17	G	301.691 008 03	+25.685 219 45		1.83	−1.38	0.61	0.62	0.66	1.04	0.62	0.63	− 4	+ 0	− 1	+17	−13	− 4	−14	−33	+17	− 9	0	−0.80
99068	20 06 46.03	+33 28 35.9	8.38	H	301.691 780 05	+33.476 632 86		4.75	5.77	−1.46	0.59	0.61	0.87	0.66	0.67	− 7	−12	+14	+19	+ 2	− 1	+ 3	+ 2	− 7	+ 4	0	0.23
99069	20 06 46.26	+63 42 24.5	7.65	H	301.692 736 78	+63.706 810 56		2.70	−4.50	−12.57	0.52	0.49	0.55	0.54	0.50	+ 3	− 2	+ 3	− 7	+19	+ 7	+18	− 7	+14	+20	0	1.45
99070	20 06 46.69	−26 26 05.4	8.02	H	301.694 557 45	−26.434 836 49		0.98	7.74	−1.83	0.85	0.54	0.96	0.98	0.68	+23	−27	+ 0	−14	+11	+ 8	+10	−14	+ 9	+53	0	−0.62
99071	20 06 46.72	−47 53 36.5	10.20	H	301.694 656 04	−47.893 469 61		4.77	17.06	−4.68	1.46	0.99	1.77	2.28	1.27	− 8	−13	−38	+24	+15	−21	+ 7	− 6	+ 9	−13	0	−1.58
99072	20 06 47.60	−60 21 38.9	8.07	H	301.698 330 86	−60.360 803 93		3.64	4.13	−4.86	0.63	0.65	1.05	0.59	0.66	+11	−18	−21	+29	−31	+17	−46	−27	+19	−18	0	0.09
99073	20 06 49.21	−37 54 44.2	10.25	H	301.705 054 50	−37.912 273 37		4.55	−5.84	−35.28	1.52	1.18	1.72	1.94	1.80	+43	−15	−18	− 9	+ 6	+ 9	− 3	−15	+17	+49	0	0.25
99074	20 06 49.85	+16 52 14.6	7.88	H	301.707 689 33	+16.870 708 36		2.17	−5.33	18.70	0.65	0.59	0.99	0.84	0.83	+ 0	−12	−19	− 4	−11	+ 0	−13	+ 8	− 1	+ 3	0	−2.63
*99075	20 06 50.21	−80 36 00.3	8.21	H	301.709 226 18	−80.600 070 59		3.92	33.21	−33.88	0.57	0.57	0.78	0.64	0.68	− 9	−26	− 1	+11	+11	−13	+11	− 9	− 7	−20	1	−0.61
*99076 H	20 06 50.14	−56 15 17.4	8.67	H	301.708 930 98	−56.254 841 85	A	11.13	−134.47	−110.69	1.76	1.38	2.21	2.35	2.33	+22	− 8	− 4	−35	+14	− 4	+19	−11	+28	+ 2	2	0.74
99077	20 06 50.30	−12 26 23.5	7.70	H	301.709 564 54	−12.439 851 78		12.17	−4.55	−4.94	0.97	0.74	1.03	1.17	0.97	+16	−21	−15	−12	+29	+23	+33	+40	+ 1	+16	0	−0.29
99078	20 06 50.39	−00 08 00.6	8.23	H	301.709 950 38	−00.133 491 24		1.78	−18.58	−41.45	1.00	0.55	1.12	1.42	0.87	+26	−25	− 6	+ 3	− 4	+ 8	+ 4	+23	−12	− 2	0	0.64
99079	20 06 52.09	+57 22 23.6	9.23	H	301.717 023 29	+57.373 221 93		1.05	−1.66	−3.84	0.72	0.62	0.73	0.78	0.69	− 4	+ 6	+ 6	+26	+ 4	−12	+ 9	+ 4	+10	+ 7	0	−0.81
99080	20 06 53.40	+23 36 51.9	5.08	H	301.722 491 22	+23.614 424 09		6.68	15.18	0.45	0.46	0.39	0.71	0.46	0.39	−37	+ 5	− 5	−12	−10	+ 4	−12	−21	+ 3	−57	1	1.61
99081	20 06 54.44	−29 24 56.1	7.80	H	301.726 849 81	−29.415 571 49		4.04	5.71	−56.23	0.89	0.59	1.01	1.13	0.88	+34	−23	+ 1	+11	− 7	− 1	+ 0	−15	−16	+50	0	−0.73
99082	20 06 55.23	−27 13 29.4	8.05	3 H	301.730 115 98	−27.224 825 01	*	1.82	24.07	−45.22	1.02	0.77	1.82	1.39	1.05	+45	+20	+31	+ 3	+12	+40	− 4	−15	−26	− 2	0	1.91
99083	20 06 55.24	−44 18 10.7	8.10	G	301.730 166 62	−44.302 975 24		−0.11	9.77	−6.11	1.13	0.58	1.21	1.75	0.92	−11	−18	+ 1	+20	+ 2	+ 0	+ 4	+ 8	− 8	− 6	2	2.62
99084	20 06 55.70	+38 50 39.0	8.92	G	301.732 088 16	+38.844 167 08		2.65	5.17	−0.07	0.72	0.70	0.88	0.87	0.73	+ 0	− 4	− 8	+34	+ 2	− 2	+ 3	−21	+12	+ 4	0	−1.32
99085 H	20 06 55.85	−08 54 51.3	7.76	H	301.732 719 89	−08.914 257 43	A	6.40	8.38	−11.78	1.39	1.04	1.49	1.62	1.35	+13	+17	−22	+ 9	−17	+21	−16	+13	−21	+18	0	1.01
99086	20 06 56.64	+54 39 09.8	8.22	H	301.735 999 16	+54.652 712 09		4.34	22.48	25.66	0.60	0.54	0.65	0.77	0.60	+ 0	−10	+ 0	+ 8	− 3	−23	− 4	−13	+20	− 4	1	0.08
99087	20 06 56.99	+00 52 55.8	8.95	H	301.737 466 67	+00.882 168 92		2.98	−25.48	−28.94	1.16	0.73	1.41	1.84	1.02	+18	−13	−19	+21	− 5	+36	+ 4	+29	−17	− 9	0	−0.03
99088	20 06 57.61	+36 23 47.8	7.97	G	301.740 054 55	+36.396 599 24		0.05	−2.93	−6.83	0.52	0.61	0.77	0.59	0.71	−15	+ 9	−10	+ 1	+ 9	−15	+10	−20	+21	−13	2	−1.14
99089	20 06 57.93	+46 17 58.2	9.31	3 H	301.741 395 43	+46.299 505 16	*	0.81	−4.92	−6.06	0.92	0.79	0.96	1.10	0.90	+ 3	+16	+17	−11	+17	+ 0	+15	− 1	+14	+ 9	3	1.21
99090	20 07 00.00	+66 18 29.0	6.97	H	301.750 017 63	+66.308 050 78		6.03	−3.88	−22.58	0.50	0.47	0.54	0.57	0.67	+ 4	−12	− 3	+ 6	+11	+13	+10	− 1	+ 3	+12	0	0.99
99091	20 07 01.08	+85 05 26.6	7.76	H	301.754 506 77	+85.090 730 06		3.08	−1.85	7.11	0.58	0.56	0.63	0.65	0.66	− 6	−14	− 1	− 7	+ 4	− 4	+ 5	−16	− 4	− 3	1	−0.29
99092	20 07 01.48	+29 43 14.8	8.55	1 H	301.756 171 49	+29.720 768 82		3.30	−3.89	−14.94	0.55	0.76	1.04	0.67	0.82	− 8	− 2	+ 1	+12	+ 5	−11	+ 4	−24	+17	−11	1	−0.49
99093	20 07 01.85	+13 19 27.5	7.14	2 H	301.757 725 44	+13.324 301 21		−0.34	−3.19	−1.57	0.64	0.59	0.93	0.66	0.74	+26	−32	−17	−14	+22	+17	+27	+23	− 7	+29	3	3.47
99094	20 07 03.64	−08 10 53.8	7.76	G	301.765 159 06	−08.181 615 61		4.66	15.20	−8.75	0.98	0.70	1.11	1.16	0.94	+17	− 5	−11	−14	+ 6	+13	+ 8	+19	+ 0	+17	0	0.28
99095	20 07 03.69	−17 11 42.2	7.86	1 G	301.765 376 79	−17.195 059 28		9.61	23.58	−12.29	0.94	0.61	0.98	1.19	0.84	+ 0	−29	−20	−11	+ 6	+11	+11	+13	− 7	−10	0	1.28
99096	20 07 05.16	−19 25 22.7	11.54	G	301.771 519 76	−19.422 984 24		26.40	−402.74	−625.16	2.90	2.15	3.79	4.11	2.76	+17	−12	−38	− 2	−13	+48	+ 8	+19	+ 1	+ 6	3	1.13
99097	20 07 06.19	+36 49 36.0	6.96	H	301.775 780 26	+36.826 670 05		10.96	10.76	−3.38	0.44

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
99001	9.618	0.053	9.494	0.080	D	0.120	0.090	T	0.13	0.09	L	9.7099	0.0498			D				D	20060+3547	I 3	1 C I A							
99002	6.885	0.006	6.789	0.007	A	0.127	0.005	G	0.14	0.01	H	6.8194	0.0038	0.016	144	A	6.79	6.85		D	20060+3547	I 3	1 C P A							S
99003	9.961	0.024	9.171	0.019		0.725	0.005	G	0.78	0.00	H	9.2226	0.0023	0.024	95		9.18	9.26		C			1							
99004	9.046	0.017	7.723	0.010		1.150	0.015	G	1.11	0.01	H	7.7681	0.0017	0.014	98		7.75	7.80					1							S
99005	7.547	0.008	7.349	0.010		0.189	0.012	T	0.21	0.01	L	7.4241	0.0016	0.015	146		7.40	7.45			20060+3547	I 3	1 S							S
99006	9.266	0.019	9.024	0.022		0.257	0.006	G	0.29	0.01	H	9.0519	0.0027	0.020	76		9.02	9.09		C			1							
99007	9.230	0.014	8.637	0.013		0.568	0.015	G	0.64	0.01	H	8.7016	0.0015	0.015	153		8.67	8.73		C			1							
99008	8.325	0.008	8.231	0.009		0.092	0.011	T	0.10	0.01	L	8.2453	0.0015	0.012	130		8.22	8.26		C			1							
99009	10.547	0.034	8.734	0.012		1.509	0.029	T	1.54	0.04	L	8.7038	0.0018	0.019	152		8.67	8.74					1							
99010	9.478	0.020	7.581	0.009		1.576	0.017	T	1.59	0.02	L	7.5149	0.0016	0.011	82		7.50	7.53					1							S
99011	9.956	0.034	8.595	0.019		1.201	0.020	G	1.16	0.02	H	8.5913	0.0038	0.020	62		8.56	8.63					1							
99012	8.649	0.010	8.121	0.010		0.474	0.009	G	0.53	0.02	A	8.1766	0.0019	0.017	115		8.15	8.20					1							S
99013	8.281	0.008	8.038	0.008		0.228	0.009	G	0.25	0.01	H	8.0774	0.0012	0.015	151		8.05	8.10					1 G							S P
99014	10.982	0.052	9.731	0.029		1.052	0.010	G	1.11	0.01	I	9.7395	0.0020	0.019	97		9.70	9.77		C			1							G
99015	10.522	0.030	9.957	0.028		0.571	0.015	G	0.64	0.01	H	10.0198	0.0030	0.031	169		9.96	10.08					1							G
99016	10.047	0.039	8.798	0.024		1.065	0.036	T	1.03	0.03	L	8.7743	0.0020	0.012	61		8.75	8.80		C			1 S							
99017	9.474	0.014	8.806	0.012		0.610	0.015	G	0.68	0.01	H	8.8566	0.0013	0.018	189		8.83	8.90		C			1							
99018	9.717	0.013	8.052	0.006		1.392	0.011	T	1.37	0.01	L	8.0578	0.0011	0.016	254		8.03	8.09		C			1							
99019	10.392	0.027	8.759	0.013		1.367	0.024	T	1.34	0.03	L	8.7560	0.0017	0.017	111		8.72	8.79		C			1							
99020	9.982	0.028	9.427	0.027		0.478	0.015	G	0.55	0.02	H	9.5094	0.0031	0.024	86		9.48	9.56					1							
99021	8.536	0.009	8.194	0.010		0.324	0.013	T	0.38	0.02	L	8.1868	0.0176	0.211	150		8.02	8.65	6.52	P 1 A			1 S							
99022	9.370	0.015	8.024	0.009		1.141	0.014	T	1.05	0.02	A	8.0630	0.0013	0.014	118		8.04	8.09		C			1							S
99023	8.152	0.007	8.154	0.009		0.004	0.006	G	0.02	0.01	H	8.1587	0.0016	0.017	169		8.13	8.18					1 S							
99024	7.946	0.013	6.597	0.006		1.156	0.005	G	1.12	0.01	H	6.6343	0.0008	0.006	56		6.63	6.65		C			1 S							S
99025	8.659	0.012	8.099	0.011		0.544	0.015	G	0.62	0.01	H	8.1459	0.0017	0.013	87		8.13	8.18					1							S
99026	6.321	0.004	5.863	0.004		0.445	0.004	T	0.51	0.00	L	5.9128	0.0006	0.005	129		5.90	5.92		C	20063+5309	I 1	1							S
99027	9.203	0.014	8.684	0.014		0.487	0.018	T	0.56	0.02	L	8.7521	0.0014	0.015	95		8.73	8.78		C			1							
99028	8.089	0.009	7.787	0.010		0.276	0.015	G	0.31	0.02	H	7.8450	0.0014	0.012	90		7.83	7.86		C			1							S
99029	10.181	0.025	9.451	0.021	A	0.689	0.015	G	0.75	0.01	H	* 9.3608	0.0013	0.014	114	*	9.33	9.39		D	20063−4313	I 1	2 C A	AB	292	1.883	0.007	1.32	0.03	
99030	9.153	0.015	8.700	0.015		0.441	0.017	T	0.51	0.02	L	8.7516	0.0017	0.013	82		8.73	8.78		C			1							S
99031	6.482	0.004	5.489	0.003		0.850	0.000	G	0.86	0.00	H	5.5394	0.0014	0.014	143		5.52	5.56	29.68	P 1 A	20064+3558	I 1	1 S							S P
99032	8.144	0.009	7.795	0.009		0.331	0.012	T	0.39	0.02	L	7.8383	0.0014	0.013	120		7.82	7.86					1							S
99033	10.404	0.064	8.443	0.026		1.662	0.057	T	2.51	0.10	O	8.2249	0.0020	0.020	117		8.19	8.25		U			1							
99034	8.934	0.019	8.195	0.016		0.629	0.015	G	0.70	0.01	H	8.2576	0.0018	0.013	55		8.23	8.28		C			1							S
99035	8.882	0.011	7.037	0.005		1.546	0.005	G	1.55	0.04	L	6.9877	0.0011	0.011	133		6.97	7.01					1							S
99036	9.011	0.013	8.833	0.016		0.171	0.019	T	0.19	0.02	L	8.8951	0.0016	0.014	98		8.87	8.92					1							
99037	8.356	0.010	8.036	0.010		0.337	0.004	G	0.39	0.01	H	8.0761	0.0021	0.018	113		8.04	8.10	0.14	P 1 A			1							S
99038	8.853	0.013	8.135	0.011		0.646	0.013	T	0.71	0.01	L	8.2242	0.0022	0.015	73		8.20	8.25		C			1							S
99039	10.888	0.078	8.880	0.025		1.701	0.067	T	2.45	0.11	O	8.6794	0.0035	0.028	42		8.65	8.74		U			1							
99040	10.981	0.039	8.970	0.012		1.666	0.032	T	1.69	0.03	L	8.8883	0.0018	0.026	205		8.85	8.94					1							
99041	8.493	0.012	7.145	0.007		1.150	0.014	G	1.04	0.04	E	7.1768	0.0009	0.010	141		7.16	7.20					1							S
99042	9.348	0.023	8.184	0.015		0.992	0.022	T	0.97	0.02	L	8.2395	0.0088	0.081	62		8.12	8.33	50.34	P 1 A			1							S P
99043	9.337	0.015	8.201	0.010		0.977	0.014	T	0.96	0.01	L	8.2699	0.0015	0.016	127		8.25	8.30		C			1							
99044	8.406	0.009	8.285	0.010		0.109	0.012	T	0.12	0.01	L	8.3054	0.0014	0.015	119		8.28	8.34		C			1							S
99045											T	11.8192	0.9317			B				D	20066+1241	I 2	1 C F D							D
99046	8.687	0.015	8.059	0.013		0.572	0.014	G	0.64	0.01	H	8.1171	0.0015	0.009	66		8.10	8.13		C			1							S
99047	9.941	0.017	9.350	0.016		0.552	0.017	T	0.62	0.02	L	9.4041	0.0017	0.029	326		9.35	9.47			20066−6826	I 1	1							
99048	9.201	0.039	7.501	0.019	A	1.420	0.034	T	1.40	0.05	L	7.4838	0.0190	0.009	75	A	7.47	7.51		D	20066+1241	I 2	1 C P D							S D
99049	9.149	0.012	7.993	0.008		1.000	0.003	G	0.98	0.00	H	8.0434	0.0010	0.014	161		8.02	8.06		C			1							S
99050	7.283	0.008	7.135	0.009		0.153	0.002	G	0.17	0.00	H	7.1728	0.0014	0.009	55		7.16	7.19		C			1							S
99051	10.908	0.049	8.904	0.016		1.661	0.041	T	1.68	0.04	L	8.8202	0.0018	0.018	104		8.78	8.85					1							
99052	9.660	0.020	9.184	0.020		0.448	0.026	T	0.52	0.03	L	9.2330	0.0016	0.018	124		9.20	9.26		C			1							
99053	10.004	0.026	8.574	0.014		1.207	0.023	T	1.17	0.02	L	8.6201	0.0015	0.012	87		8.59	8.65					1							
99054	7.754	0.008	7.576	0.009		0.163	0.012	T	0.18	0.01	L	7.6234	0.0014	0.011	91		7.61	7.65		C	20066+0734	I 2	1							S
99055	7.250	0.005	7.132	0.007		0.114	0.008	T	0.13	0.01	L	7.1621	0.0011	0.012	85		7.14	7.18		C	20066+0734	I 2	1							S
99056	8.334	0.011	8.247	0.013		0.085	0.016	T	0.10	0.02	L	8.2739	0.0012	0.010	71		8.26	8.29		C			1							S
99057	8.692	0.013	8.213	0.012	*	0.463	0.014	T	0.53	0.01	L	* 8.2544	0.0012	0.011	83	*	8.24	8.28		D	20067−2822	I 1	2 C A	AB	237	0.389	0.007	0.72	0.04	S
99058	7.814	0.007	7.883	0.010		−0.058	0.011	T	−0.04	0.01	L	7.8823	0.0012	0.015	150		7.86	7.91		C			1							
99059	10.286	0.030	9.761	0.029		0.521	0.020	G	0.59	0.02	H	9.8626	0.0029	0.027	113		9.82	9.91					1							
99060	11.316	0.074	9.745	0.029		1.318	0.063	T	1.28	0.07	L	9.7299	0.0027	0.025	144		9.70	9.78					1							G
99061	9.018	0.011	8.730	0.012	A	0.308	0.009	G	0.35	0.01	H	* 8.6932	0.0016	0.019	167	*	8.66	8.73		D	20067+3455	I 1	2 C A	AB	295	1.707	0.011	2.52	0.05	
99062	10.542	0.044	8.778	0.019		1.470	0.038	T	1.48	0.06	L	8.7561	0.0017	0.014	68		8.73	8.78					1							
99063	9.961	0.026	9.273	0.022		0.676	0.005	G	0.74	0.00	H	9.3386	0.0019	0.019	98		9.30	9.37					1							
99064	10.798	0.049	9.024	0.019		1.478	0.042	T	1.49	0.06	L	8.9664	0.0022	0.016	89		8.94	8.99					1							
99065	10.369	0.035	9.072	0.020		1.103	0.032	T	1.07	0.03	L	9.1065	0.0022	0.017	95		9.08	9.13					1 S							
99066	9.360	0.026	7.790	0.013	A	1.317	0.023	T	1.28	0.03	L	7.7907	0.0082	0.018	53	A	7.77	7.83			20068−1256	I 1	2 C A	AB	6	12.298	0.019	2.85	0.11	S
99067	9.408	0.015	8.269	0.010		0.994	0.006	G	0.97	0.01	H	8.3343	0.0016	0.018	158		8.31	8.37		C			1							
99068	8.339	0.009	8.375	0.011		−0.028	0.013	T	−0.01	0.01	L	8.3814	0.0011	0.016	149		8.36	8.41		C	20068+3329	I 1	1							
99069	7.643	0.006	7.638	0.010		0.009	0.011	T	0.03	0.01	L	7.6572	0.0011	0.012	125		7.64	7.68					1							S
99070	10.116	0.025	8.210	0.010		1.604	0.023	T	1.62	0.02	L	8.1184	0.0021	0.014	98		8.09	8.14					1							
99071	10.612	0.043	10.229	0.047		0.374	0.054	T	0.44	0.06	L	10.2917	0.0033	0.028	108		10.23	10.36					1							G
99072	9.367	0.013	8.168	0.008		1.026	0.012	T	1.00	0.01	L	8.2347	0.0015	0.016	181		8.20	8.27		C			1							
99073	10.861	0.052	10.283	0.048		0.543	0.052	T	0.62	0.05	L	10.3699	0.0028	0.022	69		10.33	10.42		C			1							G
99074	9.178	0.015	7.986	0.010		1.021	0.014	T	0.99	0.01	L	8.0497	0.0014	0.015	120		8.03	8.07					1							
99075	9.743	0.017	8.357	0.010		1.172	0.015	T	1.13	0.01	L	8.3766	0.0013	0.015	154		8.35	8.41					1							
99076	9.386	0.019	8.650	0.015	*	0.660	0.018	T	0.72	0.01	L	* 8.8011	0.0016	0.018	144	*	8.77	8.84		D	20068−5615	I 1	2 C A	AB	127	6.895	0.004	1.04	0.02	S
99077	8.091	0.012	7.720	0.012		0.362	0.015	T	0.42	0.02	L	7.7814	0.0014	0.011	50		7.76	7.80					1							S
99078	9.865	0.023	8.375	0.012		1.254	0.020	T	1.21	0.02	L	8.3938	0.0016	0.010	97		8.38	8.41		C			1							
99079	9.123	0.013	9.212	0.018		−0.080	0.015	G	−0.06	0.02	H	9.2074	0.0018	0.021	126		9.17	9.25		C			1							
99080	4.859	0.001	5.047	0.002		−0.162	0.002	T	−0.17	0.00	L	5.0230	0.0005	0.006	232		5.01	5.03					1							S
99081	9.502	0.019	7.934	0.010		1.315	0.017	T	1.28	0.02	L	7.9499	0.0015	0.012	90		7.93	7.98					1							S
99082	9.595	0.018	8.172	0.010		1.219	0.017	T	4.87	0.05	O	7.0246	0.0297	0.182	95		6.79	7.44		U 2 C			1 V							
99083	9.941	0.022	8.238	0.010		1.396	0.032	G	1.43	0.00	A	8.2539	0.0011	0.010	105		8.24	8.28		D			1							
99084	8.984	0.012	8.952	0.015		0.050	0.015	G	0.06	0.01	H	8.9431	0.0017	0.022	132		8.91	8.98					1							
99085	8.131	0.017	7.758	0.019	*	0.353	0.023	T	0.41	0.03	L	* 7.8420	0.0020	0.011	47	*	7.82	7.87		D	20069−0855	I 1	2 C A	AB	89	6.605	0.013	2.64	0.06	S
99086	8.712	0.010	8.280	0.010		0.445	0.015	G	0.51	0.02	H	8.3169	0.0012	0.012	122		8.30	8.34		C			1							
99087	10.398	0.039	9.100	0.022		1.104	0.035	T	1.07	0.04	L	9.1189	0.0020	0.016	90		9.09	9.15		C			1							
99088	8.207	0.008	8.037	0.009		0.219	0.005	G	0.24	0.01	H	8.0488	0.0013	0.014	139		8.02	8.07		C			1							
99089	9.598	0.019	9.402	0.024		0.187	0.029	T	0.21	0.03	L	9.3656	0.0029	0.033	118		9.33	9.76		P 1 A			1 V							G
99090	7.044	0.005	6.973	0.006		0.070	0.007	T	0.08	0.01	L	6.9967	0.0009	0.009	98		6.97	7.01			20070+6618	I 1	1 G							S
99091	9.148	0.014	7.888	0.009		1.074	0.013	T	1.04	0.01	L	7.9265	0.0013	0.012	122		7.91	7.96					1							S
99092	9.857	0.017	8.626	0.011		1.045	0.016	T	1.02	0.01	L	8.6949	0.0023	0.020	166		8.66	8.73		U			1							
99093	9.429	0.016	7.383	0.007		1.694	0.014	T	1.72	0.01	L	7.2413	0.0036	0.029	105		7.20	7.28		U 2			1							S
99094	8.147	0.017	7.815	0.017		0.368	0.015	G	0.43	0.02	H	7.8455	0.0014	0.010	56		7.83	7.87		C			1							S
99095	8.262	0.014	7.878	0.013		0.359	0.015	G	0.42	0.02	H	7.9382	0.0018	0.017	67		7.91	7.97		U			1							S
99096						1.208	0.006	G	1.35	0.01	I	11.6486	0.0068	0.050	46		11.53	11.71					1							G
99097	7.172	0.005	6.979	0.005		0.173	0.005	G	0.19	0.01	H	7.0222	0.0009	0.010	141		7.01	7.04		C			1							S
99098	10.117	0.024	9.526	0.022		0.552	0.024	T	0.62	0.02	L	9.6118	0.0016	0.022	137		9.58	9.65					1							
99099	11.280	0.047	9.964	0.025		1.118	0.042	T	1.08	0.04	L	9.9835	0.0025	0.038	279		9.91	10.04					1 S							G
99100	9.174	0.015	8.341	0.012		0.734	0.015	T	0.78	0.01	L	8.3964	0.0018	0.014	99		8.36	8.43					1 S							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	29	30
	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18												
99101	20 07 09.34	+15 16 01.5	7.88	2 H	301.788 932 87	+15.267 092 90	−0.40	−0.25	0.80	0.75	0.75	1.10	0.89	0.99	+29	−13	−11	+13	+16	+10	+17	+24	− 2	+34	0	0.49
99102	20 07 11.45	+50 13 46.6	6.53	1 H	301.797 693 98	+50.229 617 21	5.00	12.98	−8.98	0.49	0.43	0.52	0.52	0.41	−14	−18	− 2	− 9	+16	− 4	+11	−23	+21	−11	0	3.79
∗99103 H	20 07 13.84	+21 06 13.3	7.71	H	301.807 648 19	+21.103 691 84 A	2.23	4.41	6.58	1.34	1.38	1.71	1.55	1.84	+16	−13	− 6	− 5	+15	− 9	+16	+ 7	+10	+28	3	0.86
∗99104 H	20 07 13.82	−69 33 19.6	7.45	H	301.807 597 72	−69.555 450 14 ∗	5.18	8.99	−29.02	0.81	0.96	0.87	0.59	0.63	−28	− 4	+ 6	+ 8	+22	+ 0	+24	−25	−15	−22	1	−0.01
99105	20 07 14.38	+63 27 36.3	8.06	H	301.809 932 68	+63.460 093 11	3.52	5.96	9.88	0.60	0.55	0.62	0.67	0.56	− 4	+ 2	+ 5	+ 5	+16	+ 1	+16	− 6	+ 7	+11	0	0.88
99106 H	20 07 14.57	+26 10 47.4	8.32	G	301.810 711 35	+26.179 833 79 A	11.07	−4.49	−79.50	1.09	1.19	1.59	1.15	1.11	+ 2	+15	−16	+ 5	+ 1	+ 0	+ 4	−33	+19	+ 8	2	1.02
99107	20 07 15.98	+82 12 59.3	7.46	H	301.816 583 53	+82.216 465 02	11.73	21.01	20.56	0.54	0.50	0.58	0.63	0.60	− 1	−23	+ 2	−10	− 3	− 6	+ 1	−11	−14	+ 6	0	−0.52
99108	20 07 16.65	+60 17 25.5	9.36	H	301.819 393 30	+60.290 414 62	6.99	3.00	43.23	0.81	0.71	0.82	0.85	0.74	+10	−11	+ 5	+10	− 3	+ 8	− 3	− 5	+10	+18	0	−0.51
99109	20 07 17.13	−39 21 09.4	8.63	H	301.821 363 96	−39.352 623 39	1.46	−8.42	−7.33	1.24	0.63	1.34	1.58	1.09	−10	−32	− 9	+ 4	− 8	+ 8	− 2	+ 8	−17	−19	0	−0.20
99110	20 07 17.52	−34 56 30.3	9.16	H	301.823 019 74	−34.941 750 89	13.76	32.35	−51.98	1.63	1.06	1.72	2.56	1.34	+24	−10	−10	−40	− 8	−19	− 8	−39	−16	+ 4	0	1.28
99111	20 07 17.90	+11 03 14.1	7.12	H	301.824 590 20	+11.053 928 28	10.86	−36.04	−47.94	0.76	0.56	0.90	0.90	0.73	+ 5	−26	−17	+28	− 2	+13	+ 5	+38	−17	− 9	0	0.89
99112 H	20 07 18.37	+48 11 26.5	7.69	G	301.826 521 45	+48.190 705 74 A	6.24	−16.32	−7.50	1.50	1.26	0.98	1.12	0.85	− 9	− 1	− 4	+21	+19	−21	+ 9	− 3	+19	− 8	1	−0.63
99113	20 07 18.75	+06 48 35.1	8.57	H	301.828 141 45	+06.809 762 95	3.64	17.82	0.16	0.94	0.67	1.22	1.26	0.88	+32	−14	−14	+30	− 2	+40	+ 1	+25	+19	+39	0	−0.40
99114 H	20 07 19.23	−51 27 01.3	8.13	H	301.830 119 18	−51.450 364 46 ∗	4.04	16.16	−11.94	1.02	0.64	1.07	1.34	0.97	− 7	−37	− 5	+32	+ 1	− 8	− 1	+23	+ 6	−10	0	−0.30
99115	20 07 19.69	−35 32 17.3	7.78	H	301.832 036 86	−35.538 130 00	18.44	−26.76	−206.97	0.98	0.67	1.10	1.07	0.87	+31	−51	−16	− 7	−14	+18	− 8	−26	− 6	+22	2	1.06
99116	20 07 19.84	+32 47 54.1	8.83	G	301.832 676 48	+32.798 368 35	1.83	9.30	9.85	0.62	0.71	1.00	0.69	0.71	− 9	+ 0	+ 0	+26	+ 3	−24	+ 3	− 5	+14	−10	0	0.15
99117 H	20 07 20.78	+16 04 34.7	7.57	H	301.836 581 01	+16.076 307 38 A	2.16	−1.81	−7.48	0.88	0.81	1.09	1.05	1.00	+17	−15	−38	+13	−12	+ 0	− 8	+22	−17	− 9	2	0.37
99118	20 07 20.91	−19 34 21.0	8.32	H	301.837 120 47	−19.572 513 35	2.34	−9.34	−0.13	1.15	0.79	1.31	1.32	1.00	+11	−24	−27	−14	+ 7	+35	+19	+26	− 4	+11	0	−0.42
99119	20 07 21.71	−00 17 27.7	8.44	H	301.840 469 03	−00.291 015 45	0.25	2.10	−6.03	1.00	0.57	1.12	1.37	0.82	+29	−23	− 2	+17	+ 2	+ 7	+ 6	+27	− 5	+ 1	0	0.94
99120	20 07 23.17	−52 52 50.9	4.93	1 H	301.846 535 76	−52.880 809 72	2.60	−12.72	6.88	0.59	0.42	0.72	0.78	0.62	− 9	−10	−21	−34	+27	−19	+24	−13	+12	−11	3	0.67
∗99121	20 07 23.81	−29 43 15.2	6.69	1 H	301.849 224 82	−29.720 883 80	4.78	−6.09	27.20	0.73	0.50	0.83	0.87	0.67	+36	−20	− 5	− 8	− 5	+ 5	+ 0	−15	−11	+49	0	2.78
∗99122 H	20 07 23.69	+35 43 05.9	7.26	H	301.848 697 66	+35.718 311 96 A	1.33	−2.80	−6.65	0.93	0.98	1.17	0.97	1.06	− 8	− 7	−10	− 1	+10	−19	+ 3	−13	+24	−11	11	0.15
99123	20 07 24.35	−61 28 39.1	8.50	H	301.851 449 24	−61.477 517 68	2.08	−15.42	−2.56	0.69	0.59	1.05	0.73	0.74	+ 4	−35	−17	+ 2	−12	+ 7	−17	−23	+11	− 7	0	0.97
99124	20 07 26.54	+36 34 04.0	7.28	2 H	301.860 567 13	+36.567 771 21	0.39	0.14	−2.81	0.50	0.57	0.71	0.54	0.67	−18	+10	− 4	+ 0	+ 6	− 9	+ 7	−10	+ 6	−14	0	0.25
99125	20 07 26.75	+65 11 14.6	7.69	G	301.861 473 83	+65.187 390 85	8.76	21.18	50.89	0.49	0.50	0.58	0.45	0.57	+ 7	+ 4	− 1	−15	+17	+16	+19	− 2	+30	+35	0	0.32
99126	20 07 27.27	−43 49 09.7	13.15	H	301.863 604 39	−43.819 366 04	10.00	27.36	−0.98	7.48	4.82	8.73	8.29	7.70	+ 1	−27	− 7	+13	+15	+ 0	+ 6	+31	+20	+27	2	2.92
99127	20 07 28.03	−62 43 15.4	9.05	H	301.866 776 35	−62.720 934 82	0.80	7.54	−11.17	0.85	0.71	1.24	0.94	0.88	+ 2	−11	−37	− 1	− 7	+ 4	−13	−27	+26	−18	0	−0.83
99128	20 07 28.92	+17 01 14.0	7.62	H	301.870 510 01	+17.020 558 14	0.24	−2.30	−7.51	0.60	0.54	0.90	0.75	0.77	− 2	−13	−16	−13	− 8	+ 5	− 9	− 6	− 6	+12	0	−0.99
99129	20 07 30.01	−38 31 49.0	9.36	2 H	301.875 057 72	−38.530 280 93	0.45	−9.42	−12.12	1.28	0.80	1.48	1.63	1.27	+17	−27	− 9	− 4	+ 3	+16	+ 7	+ 1	− 7	+18	0	0.62
99130	20 07 30.99	−46 50 49.7	8.70	H	301.879 125 44	−46.847 145 57	3.74	31.06	−9.69	1.09	0.70	1.38	1.91	1.07	− 9	+ 0	−10	+13	+ 5	−28	+ 3	− 1	+22	− 7	0	−1.64
99131	20 07 31.34	+16 38 50.3	7.17	H	301.880 589 40	+16.647 307 62	1.00	−1.34	−2.99	0.62	0.54	0.88	0.78	0.76	+ 2	−20	−20	− 7	−13	− 1	−16	− 1	+ 1	+11	2	−0.58
99132	20 07 32.04	−34 42 29.0	9.16	H	301.883 493 11	−34.708 063 74	16.49	47.82	−137.74	1.47	0.94	1.57	2.00	1.19	+17	−22	−12	−35	− 4	− 4	− 2	−36	− 9	− 1	0	1.26
99133	20 07 32.76	+56 40 52.5	8.24	H	301.886 508 58	+56.681 237 82	1.44	−4.50	−0.17	0.60	0.59	0.64	0.71	0.67	+ 5	− 1	+ 1	+18	+12	+ 3	+13	+ 3	+ 3	+12	0	0.10
99134	20 07 33.16	+47 08 40.7	8.73	H	301.888 151 34	+47.144 640 03	3.41	6.00	8.24	0.79	0.66	0.84	0.88	0.77	−14	+14	+ 2	− 9	+21	−10	+24	− 7	+21	− 4	1	−0.70
99135	20 07 33.27	−42 00 14.8	9.94	G	301.888 624 28	−42.004 119 28	6.47	25.12	−46.85	2.95	1.63	3.30	3.80	2.41	− 4	− 9	−25	−14	+25	−21	+22	− 1	+ 8	+ 4	2	
99136	20 07 34.41	+45 09 12.3	7.42	H	301.893 377 41	+45.153 425 14	3.09	−2.74	−11.33	0.56	0.50	0.63	0.76	0.56	+ 2	+ 5	+13	+21	+ 3	+10	+ 6	− 4	+15	+19	0	1.17
99137	20 07 35.07	−55 00 58.0	6.26	H	301.896 133 13	−55.016 100 30	43.08	19.16	36.22	0.62	0.46	0.79	0.80	0.70	+22	−34	−16	−16	+22	+ 9	+23	+15	+13	+ 8	2	2.14
99138	20 07 35.46	+44 00 26.9	8.28	G	301.897 734 26	+44.007 460 19	3.41	4.46	1.92	0.57	0.57	0.69	0.63	0.57	− 9	−17	+14	+13	+ 6	− 8	+ 7	− 3	+12	+10	0	−0.19
99139	20 07 36.95	−41 01 07.1	8.83	G	301.903 940 42	−41.018 649 71	14.34	−39.35	−279.60	1.05	0.62	1.34	1.35	1.14	− 2	−29	+ 8	+ 5	+ 6	−13	+ 1	+21	+12	+20	0	0.74
99140	20 07 39.35	−20 49 58.1	8.30	G	301.913 942 49	−20.832 806 07	9.92	50.11	−9.72	1.01	0.70	1.17	1.21	0.85	+13	−24	−39	+ 6	−15	+21	− 4	+18	−14	− 6	0	−1.55
∗99141	20 07 39.48	−52 16 12.2	8.20	H	301.914 504 99	−52.270 056 16	15.10	81.91	22.80	0.86	0.67	1.08	1.15	1.05	+25	−17	− 7	− 9	+12	− 8	+11	+ 7	− 3	+36	0	1.55
∗99142	20 07 39.47	+49 12 56.7	9.05	H	301.914 476 49	+49.215 745 39	1.11	4.39	−1.75	0.81	0.65	0.82	0.98	0.64	−12	−15	− 5	+24	+ 4	−13	+ 0	−24	+24	−13	0	0.56
99143	20 07 40.32	−23 52 57.5	7.55	H	301.917 980 95	−23.882 644 68	1.07	1.32	−27.67	0.90	0.56	0.96	1.06	0.65	+51	−33	− 6	−19	− 7	+11	− 6	−28	+ 7	+79	0	−0.29
99144	20 07 40.89	−78 51 57.5	8.97	H	301.920 364 58	−78.865 968 28	3.92	10.13	13.31	0.74	0.70	1.02	0.91	0.89	− 3	−21	− 6	− 5	+15	− 9	+15	−18	−10	−15	0	0.17
99145	20 07 41.44	+34 25 22.5	6.12	G	301.922 669 44	+34.422 920 25	1.62	1.21	−6.07	0.40	0.41	0.56	0.44	0.45	−10	+ 1	+ 3	+15	− 1	− 8	+ 0	+ 1	+ 6	− 4	0	1.06
99146	20 07 43.43	−53 06 31.2	8.77	H	301.930 944 06	−53.108 677 91	5.72	3.50	−14.88	0.96	0.72	1.26	1.31	1.18	− 3	+ 0	− 1	−28	+34	− 1	+33	+ 8	+29	+ 4	5	2.28
99147	20 07 43.56	+65 10 04.9	8.01	G	301.931 492 52	+65.168 014 40	8.98	19.83	51.13	0.52	0.53	0.63	0.47	0.59	+ 5	+ 5	+ 3	−17	+16	+18	+17	− 6	+34	+34	0	1.20
99148	20 07 43.66	−32 36 23.6	8.78	H	301.931 896 22	−32.606 549 16	2.17	0.45	0.51	1.20	0.78	1.28	1.49	1.15	+26	−14	− 1	−31	− 6	+ 0	− 4	−23	− 9	+43	2	2.06
99149	20 07 43.88	+02 26 34.8	7.16	H	301.932 838 28	+02.443 010 12	10.55	44.09	−0.18	1.30	0.60	1.31	1.43	0.83	+42	−20	−16	+62	+20	+23	+38	+40	− 6	+37	2	−0.93
99150	20 07 44.78	−31 45 07.8	12.19	G	301.936 585 22	−31.752 159 70	68.49	290.03	−753.34	4.37	2.68	5.17	7.00	4.59	+34	−23	− 9	+20	+ 4	+19	+ 9	+11	−19	+23	0	0.04
99151 H	20 07 45.27	+13 25 14.3	9.05	G	301.938 616 74	+13.420 631 55 A	7.67	−62.82	−196.03	1.69	1.74	2.13	1.66	2.10	+51	− 9	−10	+19	+42	+21	+38	+54	+ 5	+68	1	−0.35
99152	20 07 45.50	+57 47 59.8	7.18	H	301.939 588 22	+57.799 951 90	4.21	2.27	−15.70	0.46	0.44	0.49	0.48	0.47	− 5	− 7	+ 7	+17	+ 7	− 6	+ 9	− 3	+11	+ 4	1	−0.99
99153	20 07 45.78	−19 46 38.3	8.55	H	301.940 746 64	−19.777 318 63	6.31	3.49	−39.04	1.18	0.80	1.34	1.50	1.08	+25	−37	−32	− 9	+ 0	+19	+14	+18	−12	− 1	0	−0.94
99154	20 07 46.02	−30 51 07.0	8.69	H	301.941 729 54	−30.851 933 70	10.76	98.28	22.11	1.07	0.76	1.22	1.36	0.99	+39	− 7	− 9	+ 0	+ 4	+25	+ 7	− 3	+ 9	+51	5	0.91
99155	20 07 46.32	−32 51 07.8	9.26	H	301.943 010 28	−32.852 167 44	3.29	8.18	−8.26	1.29	0.90	1.40	1.45	1.14	+32	−16	−17	−29	+ 1	+10	+ 2	−14	+ 7	+43	0	0.15
99156	20 07 48.93	+43 55 46.9	8.24	H	301.953 886 75	+43.929 684 12	1.60	−1.05	3.70	0.60	0.60	0.74	0.66	0.62	− 4	−11	+11	+13	+ 2	−10	+ 3	+ 1	+14	+ 8	0	−0.32
99157	20 07 49.14	−43 36 58.8	8.68	H	301.954 764 23	−43.616 319 75	3.27	18.24	−18.48	1.14	0.61	1.21	1.68	1.04	− 3	−20	− 3	+17	+10	+ 1	+13	+11	− 2	+13	2	0.68
99158 H	20 07 50.34	+09 23 59.1	6.43	G	301.959 750 60	+09.399 763 75 A	23.12	46.58	28.37	0.90	0.92	1.04	1.02	1.11	+41	+11	+16	+23	+43	+39	+40	+63	+18	+50	7	1.64
99159 H	20 07 53.18	+45 59 54.7	8.14	G	301.971 600 01	+45.998 521 33 A	0.58	12.93	18.38	1.15	1.17	1.25	1.17	1.12	+ 5	+ 7	+23	−10	+14	+12	+11	− 6	+14	+21	0	0.35
99160	20 07 53.41	+30 49 29.6	8.27	H	301.972 552 21	+30.824 896 33	0.82	5.37	−3.30	0.59	0.74	1.03	0.71	0.77	−11	+ 3	+ 4	+33	− 5	−22	+ 0	−17	+14	− 5	1	0.44
99161	20 07 54.65	+31 27 43.8	10.37	H	301.977 727 15	+31.462 170 45	2.44	−2.98	0.99	0.98	1.38	1.74	1.18	1.40	+ 1	+ 4	+13	− 9	− 7	−11	− 4	−24	− 6	+15	2	2.82
∗99162 H	20 07 56.07	−70 48 54.2	7.70	H	301.983 636 92	−70.815 065 59 A	3.70	8.34	3.13	0.86	0.94	1.24	0.84	0.93	−13	+ 0	− 8	+ 5	+ 3	− 1	+ 3	+ 3	+ 0	−15	2	0.93
∗99163	20 07 55.20	+53 59 23.5	9.33	H	301.979 992 40	+53.989 864 70	1.30	−4.89	−7.29	0.76	0.73	0.83	1.05	0.74	− 1	−16	+ 9	− 1	− 6	+10	− 7	−28	+14	+ 3	3	1.01
∗99164	20 07 55.51	+35 06 17.4	8.12	H	301.981 309 36	+35.104 846 30	2.22	2.42	−4.25	0.53	0.61	0.79	0.62	0.67	−13	+ 1	+ 5	+ 2	+ 9	− 5	+ 9	−14	+18	−11	0	−1.41
99165	20 07 56.22	+07 26 31.1	11.28	G	301.984 237 30	+07.441 976 57	22.19	−307.56	−354.10	2.12	2.03	2.95	2.85	2.64	+40	−13	−40	+13	+ 3	+25	+19	+51	−21	+23	2	−0.02
99166	20 07 57.77	+35 43 05.5	9.30	T	301.990 713 91	+35.718 198 73	0.50	5.81	1.61	0.84	0.96	1.21	1.00	1.12	−17	− 7	+ 4	− 6	+11	− 5	+11	−24	+10	−13	0	−0.13
99167	20 07 57.82	+44 35 23.0	8.31	H	301.990 935 55	+44.589 715 71	1.82	−8.49	−14.03	0.64	0.58	0.75	0.75	0.59	+ 3	−16	+14	+12	+ 0	+ 6	− 1	− 2	+19	+20	1	−1.65
99168	20 07 57.93	+32 35 10.8	7.96	H	301.991 389 13	+32.586 345 43 A	0.95	−0.58	−3.05	0.75	0.85	1.09	0.78	0.80	− 7	+ 7	− 4	+19	+ 0	−21	+ 1	− 9	+18	− 4	0	−0.58
99169	20 07 58.80	+77 49 28.2	6.99	H	301.994 989 65	+77.824 503 74	10.95	22.84	−26.69	0.50	0.48	0.54	0.54	0.53	− 1	−21	+10	+14	+15	−22	+18	+ 4	+ 1	+12	0	1.82
99170 H	20 08 01.16	+42 23 06.0	6.98	H	302.004 825 77	+42.384 996 28 A	5.36	2.05	3.94	0.66	0.67	0.73	0.69	0.64	− 7	− 9	+ 3	−10	+ 0	−18	+ 6	−16	+ 1	+ 9	2	−0.25
99171	20 08 01.75	−00 40 40.9	5.97	H	302.007 312 44	−00.678 020 26	20.89	116.60	−67.94	0.79	0.49	0.89	0.99	0.66	+37	−29	−17	+ 7	+ 0	+13	+11	+30	−10	+ 4	4	0.26
99172	20 08 01.99	+18 50 13.0	8.30	H	302.008 271 57	+18.836 931 03	2.37	1.99	−7.19	0.66	0.66	0.95	0.90	0.92	+ 2	−12	−20	+18	+ 4	+ 2	+ 4	+26	+ 8	− 7	2	−0.89
99173	20 08 02.33	−55 50 29.7	7.75	G	302.009 699 73	−55.841 579 86	2.33	7.45	−30.84	0.66	0.59	1.08	1.06	1.01	+16	−13	−29	−28	+31	−31	+27	−24	+30	−25	1	1.34
99174	20 08 03.19	−67 44 49.3	8.93	H	302.013 275 62	−67.747 031 85	11.76	4.20	−7.07	0.58	0.93	1.36	0.61	0.93	−25	+ 6	−12	−43	+12	−10	+10	−41	−10	−22	0	−2.02
99175	20 08 05.53	+66 51 02.6	8.97	H	302.023 048 48	+66.850 732 11	18.60	152.19	−64.43	0.73	0.77	0.82	0.78	0.94	+ 3	−17	+ 1	− 6	+15	+19	+16	− 7	+14	+26	0	−0.06
99176	20 08 06.50	+16 39 51.7	6.39	2 H	302.027 082 54	+16.664 373 17	0.77	4.33	7.14	0.60	0.50	0.80	0.73	0.69	+ 2	−20	−16	−22	− 5	− 5	−11	+ 0	+ 4	+14	0	−0.76
99177	20 08 07.12	+42 36 22.0	8.03	G	302.029 657 74	+42.606 109 58	0.46	−5.42	−3.80	0.54	0.55	0.66	0.61	0.59	−10	− 7	+10	− 6	+10	− 1	+10	−11	+ 3	+ 2	0	0.00
99178	20 08 07.36	+23 15 51.5	8.55	H	302.030 670 09	+23.264 316 36	2.54	1.11	14.22	0.79	0.70	1.17	0.83	0.70	−24	−15	+ 7	−31	+ 6	+13	+ 6	−33	− 5	−25	0	−0.34
99179	20 08 07.57	−06 45 40.5	7.05	H	302.031 552 12	−06.761 244 32	3.69	4.76	−19.45	0.91	0.68	1.15	1.19	0.87	+10	− 6	−26	+ 4	+ 2	+43	+19	+45	−10	− 1	0	−0.68
99180	20 08 07.71	+61 07 36.0	9.03	H	302.032 111 78	+61.126 658 21	1.18	6.67	4.44	0.77	0.73	0.82	0.85	0.83	+11	+11	− 2	+17	− 1	− 1	+ 3	−12	+24	+17	0	−1.05
99181	20 08 07.79	+39 45 02.9	8.46	H	302.032 463 34	+39.750 809 89	0.62	−5.43	−6.52	0.61	0.61	0.77	0.60	0.62	− 4	+ 6	+12	+ 8	+ 2	− 7	+ 5	−22	− 4	+ 6	0	−1.18
99182	20 08 08.33	+45 32 35.6	7.95	H	302.034 719 41	+45.543 217 42	3.61	−9.22	−30.71	0.59	0.53	0.67	0.72	0.59	+ 3	+ 0	+18	− 1	+ 3	+ 2	+ 4	−12	+12	+16	0	0.12
∗99183	20 08 08.91	+28 13 14.3	8.23	H	302.037 109 01	+28.220 641 87	7.03	18.47	22.81	0.39	0.57	0.86	0.45	0.58	−19	− 4	− 1	+ 8	− 2	+ 7	− 2	− 8	+ 0	−20	0	−0.31
∗99184	20 08 08.94	−02 22 57.5	9.29	G	302.037 269 74	−02.382 640 19	17.59	231.26	11.43	2.42	1.02	1.57	2.64	1.47	+31	−14	− 9	+49	+32	+26	+47	+37	− 4	+21	0	0.13
∗99185 H	20 08 08.89	−39 29 29.6	9.81	H	302.037 040 56	−39.491 551 92 ∗	4.02	−10.82	9.79	1.74	0.85	1.81	2.41	1.53	−20	−30	− 6	+ 3	−12	+ 3	−13	+10	+ 1	−34	0	−0.20
99186	20 08 09.30	+27 48 58.9	8.56	H	302.038 760 45	+27.816 352 37	3.61	6.48	−1.45	0.42	0.62	0.91	0.46	0.61	−12	− 5	− 7	− 7	− 6	+ 4	− 5	− 3	− 2	−14	0	−0.34
99187	20 08 09.40	+71 31 35.8	8.48	H	302.039 162 65	+71.526 600 08	3.57	32.60	−2.69	0.73	0.66	0.75	0.81	0.70	+ 3	−31	+12	−16	+13	+ 4	+ 8	+ 2	− 2	+27	3	−0.21
99188	20 08 09.57	−52 34 39.9	6.47	G	302.039 883 88	−52.577 748 40	17.30	−23.62	−19.32	0.62	0.48	0.79	0.85	0.73	+ 4	−11	− 5	−15	+19	−10	+18	+ 2	+ 7	+11	0	1.14
99189	20 08 09.94	−40 22 49.2	8.51	H	302.041 421 92	−40.380 338 44	0.47	−26.53	−0.90	0.98	0.60	1.22	1.28	1.08	+ 5	−29	− 1	+10	− 1	−23	− 1	+ 9	− 9	+24	0	0.96
99190	20 08 12.00	−05 45 28.8	10.37	G	302.049 981 51	−05.758 010 42	4.54	12.12	−37.52	1.81	1.44	2.00	2.05	1.89	+24	−25	−25	+ 0	+26	+16	+31	+50	− 9	+26	0	−1.00
99191 H	20 08 12.47	+21 06 11.4	9.66	G	302.051 939 41	+21.103 177 06 A	3.82	−8.26	10.23	2.55	3.30	3.16	2.99	4.89	+27	−12	+ 1	+ 8	+13	+16	+ 7	+ 2	+ 6	+31	6	0.11
99192	20 08 12.70	+33 24 32.4	8.11	G	302.052 924 83	+33.409 003 61	3.86	10.36	0.16	0.58	0.66	0.96	0.68	0.64	− 7	− 9	+20	+12	− 2	− 5	+ 0	−10	− 3	+ 0	0	−1.07
99193	20 08 13.00	−18 48 13.8	7.03	H	302.054 159 03	−18.803 826 75	3.79	2.02	−10.49	0.96	0.64	1.08	1.13	0.79	− 3	+10	−37	−13	+17	+26	+36	+12	+ 2	+ 6	0	−0.37
99194	20 08 14.92	+37 58 10.3	7.67	G	302.062 178 34	+37.969 536 22	5.92	19.54	35.82	0.51	0.54	0.67	0.52	0.59	−11	− 4	+ 1	+12	+ 2	− 9	+ 5	−13	+ 3	+ 0	1	−0.73
99195	20 08 18.65	+05 53 01.7	9.19	H	302.077 688 60	+05.883 794 12	3.34	13.03	3.92	1.04	0.87	1.37	1.37	1.14	+43	− 4	− 6	+23	+16	+42	+19	+38	+ 9	+44	0	1.39
∗99196	20 08 21.92	+38 08 20.0	8.02	H	302.091 335 54	+38.138 879 49	1.18	1.50	−2.00	0.55	0.53	0.70	0.57	0.59	− 7	− 1	− 2	+ 7	+ 1	− 6	+ 3	−10	+10	+ 6	2	−2.23
∗99197	20 08 19.28	+27 12 18.9	7.87	H	302.080 317 89	+27.205 258 34	1.59	3.73	0.72	0.43	0.56	0.81	0.48	0.62	−12	+ 0	−15	+10	− 2	− 9	− 3	− 1	+ 6	−10	0	0

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
99101	10.153	0.030	8.122	0.011		1.682	0.025	T	1.71	0.03	L	7.9854	0.0031	0.021	88		7.95	8.03		U 2			1								
99102	6.698	0.004	6.555	0.004		0.130	0.005	T	0.14	0.01	L	6.5785	0.0009	0.011	131		6.56	6.59		M			1								S
99103	8.628	0.018	7.769	0.015	*	0.769	0.017	T	0.81	0.01	L *	7.8516	0.0018	0.015	83	*	7.82	7.89		D	20072+2106	I 1	2 C	A	AB	338	4.606	0.005	1.10	0.02	S
99104	7.564	0.004	7.468	0.005	*	0.094	0.006	T	0.11	0.01	L *	7.4878	0.0011	0.014	217	*	7.47	7.51		D	20072−6933	H 1	2 C	A	AB	245	0.223	0.004	1.24	0.08	S
99105	9.380	0.015	8.176	0.009		1.030	0.014	T	1.00	0.01	L	8.2254	0.0015	0.015	123		8.20	8.25		C			1								S
99106	8.942	0.011	8.401	0.010	A	0.280	0.351	G	0.55	0.03	L *	8.4186	0.0019	0.018	147	*	8.39	8.45			20072+2611	I 1	2 C	A	AB	250	3.048	0.031	3.27	0.12	
99107	8.066	0.008	7.522	0.007		0.539	0.015	G	0.61	0.02	H	7.5779	0.0011	0.009	111		7.56	7.59		C			1								S
99108	9.938	0.023	9.414	0.023		0.492	0.029	T	0.56	0.03	L	9.4733	0.0019	0.016	106		9.44	9.51					1								
99109	9.931	0.026	8.730	0.016		1.028	0.024	T	1.00	0.02	L	8.8026	0.0015	0.013	89		8.78	8.82		C			1								
99110	9.940	0.026	9.249	0.023		0.626	0.026	T	0.69	0.02	L	9.2886	0.0024	0.016	56		9.25	9.32		C			1								
99111	7.532	0.008	7.149	0.006		0.363	0.009	T	0.42	0.01	L	7.2019	0.0010	0.009	84		7.19	7.21		C			1								S
99112	8.282	0.008	7.762	0.007	*	0.515	0.015	G	0.59	0.02	H *	7.7961	0.0010	0.012	130	*	7.77	7.81		D	20073+4811	H 1	2 C	A	AB	104	0.368	0.003	1.08	0.03	S
99113	8.791	0.012	8.596	0.014		0.187	0.017	T	0.21	0.02	L	8.6369	0.0021	0.014	89		8.61	8.66		C			1								
99114	8.461	0.011	8.146	0.011	*	0.299	0.015	T	0.34	0.02	L *	8.2038	0.0018	0.014	93	*	8.18	8.23		D	20073−5127	I 1	2 C S	A	AS	134	0.151	0.009	0.14	0.40	S
99115	8.726	0.013	7.861	0.011		0.743	0.002	G	0.79	0.00	H	7.9214	0.0017	0.011	66		7.90	7.94		C			1								S
99116	9.274	0.014	8.870	0.014		0.350	0.015	G	0.41	0.02	H	8.8965	0.0016	0.021	151		8.86	8.94					1								
99117	7.543	0.008	7.556	0.012	*	−0.007	0.013	T	0.01	0.01	L *	7.5745	0.0016	0.013	100	*	7.55	7.60		D	20073+1605	I 1	2 C	A	AB	188	8.953	0.015	3.01	0.07	S
99118	9.765	0.031	8.447	0.019		1.119	0.028	T	1.08	0.03	L	8.4846	0.0025	0.016	59		8.46	8.51		C	20073−1934	I 1	1								
99119	8.428	0.011	8.423	0.014		0.091	0.015	G	0.00	0.01	L	8.4433	0.0011	0.012	92		8.42	8.47		D			1	S							
99120	7.026	0.004	5.111	0.003		1.591	0.070	G	1.83	0.02	A	5.0218	0.0013	0.010	110		5.00	5.04		U 2			1								S
99121	8.420	0.012	6.859	0.007		1.310	0.011	T	1.27	0.01	L	6.8412	0.0014	0.012	90		6.82	6.86		M	20074−2943	I 1	1	S							S
99122	7.449	0.008	7.352	0.009	*	0.095	0.011	T	0.11	0.01	L *	7.2991	0.0011	0.010	138	*	7.28	7.32		D	20074+3543	I 1	2 C	A	AB	83	0.977	0.006	1.69	0.04	S
99123	10.254	0.025	8.655	0.012		1.340	0.022	T	1.30	0.03	L	8.6564	0.0014	0.017	138		8.63	8.69					1								
99124	9.677	0.019	7.525	0.007		1.779	0.016	T	1.81	0.02	L	7.3741	0.0020	0.022	131		7.34	7.41		U 2			1								S
99125	7.947	0.010	7.722	0.009		0.230	0.015	G	0.26	0.02	H	7.7525	0.0013	0.009	102		7.74	7.77		C			1								S
99126											T	13.2333	0.0889	0.338	35		12.67	14.25					1								G P
99127	9.106	0.013	9.046	0.017		0.054	0.019	T	0.07	0.01	L	9.0728	0.0020	0.022	115		9.04	9.11					1								
99128	8.572	0.011	7.727	0.008		0.759	0.010	T	0.80	0.01	L	7.7632	0.0010	0.013	125		7.74	7.78		D			1								S
99129	11.412	0.097	9.658	0.032		1.491	0.084	T	3.08	0.10	O	9.2513	0.0094	0.097	85		9.06	9.35		U 2			1	S							
99130	9.173	0.016	8.758	0.016		0.406	0.019	T	0.47	0.02	L	8.7950	0.0026	0.019	102		8.76	8.84					1								S
99131	8.495	0.010	7.282	0.006		1.037	0.009	T	1.01	0.01	L	7.3381	0.0013	0.010	110		7.32	7.35		C			1								S
99132	9.904	0.029	9.217	0.026		0.623	0.029	T	0.69	0.03	L	9.2939	0.0023	0.018	60		9.27	9.33		C			1								
99133	10.414	0.029	8.451	0.011		1.628	0.025	T	1.65	0.03	L	8.3547	0.0017	0.017	120		8.33	8.38					1								
99134	8.886	0.013	8.735	0.015		0.140	0.015	G	0.15	0.01	H	8.7863	0.0017	0.019	108		8.75	8.82					1								
99135	10.471	0.034	9.973	0.034		0.510	0.020	G	0.58	0.02	H	10.0755	0.0028	0.023	101		10.03	10.12		C			1 X								
99136	8.613	0.010	7.519	0.007		0.945	0.009	T	0.94	0.01	L	7.5804	0.0010	0.012	120		7.56	7.60		C			1								S
99137	6.885	0.005	6.316	0.004		0.530	0.005	G	0.60	0.01	H	6.3720	0.0010	0.009	129		6.36	6.39					1								S
99138	8.170	0.007	8.237	0.009		−0.080	0.015	G	−0.06	0.02	H	8.2566	0.0014	0.013	122		8.24	8.28					1								
99139	9.628	0.017	8.889	0.015		0.639	0.012	G	0.70	0.01	H	8.9662	0.0014	0.012	109		8.95	8.99		C			1								
99140	9.115	0.017	8.355	0.014		0.664	0.015	G	0.73	0.01	H	8.4304	0.0014	0.009	62		8.41	8.45					1								S
99141	8.890	0.015	8.260	0.013		0.581	0.015	T	0.65	0.01	L	8.3293	0.0018	0.018	107		8.30	8.36					1								S
99142	10.256	0.025	9.158	0.017		0.948	0.023	T	0.94	0.02	L	9.2122	0.0020	0.017	119		9.19	9.25					1								
99143	9.789	0.015	7.762	0.006		1.679	0.013	T	1.70	0.01	L	7.6602	0.0012	0.012	161		7.64	7.68					1								S
99144	9.431	0.014	9.004	0.014		0.398	0.015	G	0.46	0.02	H	9.0573	0.0022	0.022	141		9.02	9.10		C			1								
99145	6.284	0.003	6.163	0.003		0.117	0.004	T	0.25	0.03	C	6.1828	0.0008	0.008	149		6.17	6.20					1								S
99146	9.458	0.015	8.840	0.014		0.572	0.015	T	0.64	0.01	L	8.8941	0.0021	0.020	112		8.86	8.93					1								
99147	8.343	0.009	8.020	0.010		0.303	0.015	G	0.35	0.02	H	8.0803	0.0014	0.012	103		8.06	8.11		C			1								S
99148	11.195	0.079	8.951	0.021		1.852	0.065	T	1.88	0.07	L	8.8771	0.0027	0.016	72		8.84	8.91					1								
99149	7.479	0.007	7.190	0.007		0.275	0.009	T	0.31	0.01	L	7.2301	0.0009	0.009	99		7.22	7.24					1 G								S
99150						1.560	0.023	G	2.48	0.10	I	12.4830	0.0128	0.093	63		12.26	12.62			20078−3145	I 1	1								G
99151	9.722	0.019	9.142	0.018	*	0.607	0.015	G	0.68	0.01	H *	9.1664	0.0025	0.019	116	*	9.13	9.20		D	20078+1325	H 1	2 C	A	AB	201	0.693	0.020	2.53	0.09	
99152	7.189	0.004	7.178	0.006		0.015	0.007	T	0.03	0.01	L	7.1971	0.0008	0.008	128		7.18	7.22					1								S
99153	10.054	0.031	8.662	0.018		1.177	0.028	T	1.14	0.03	L	8.7185	0.0018	0.012	60		8.70	8.74		C			1								
99154	9.407	0.017	8.734	0.015		0.612	0.017	T	0.68	0.01	L	8.8243	0.0020	0.014	72		8.80	8.85					1								
99155	10.540	0.040	9.352	0.024		1.018	0.036	T	0.99	0.03	L	9.4205	0.0026	0.015	73		9.39	9.45		C			1								
99156	9.189	0.013	8.308	0.010		0.786	0.012	T	0.82	0.01	L	8.3852	0.0014	0.015	129		8.36	8.41		C			1								S
99157	9.956	0.022	8.779	0.014		1.009	0.020	T	0.98	0.02	L	8.8421	0.0016	0.014	113		8.82	8.87		C			1								
99158	6.945	0.010	6.416	0.012	*	0.463	0.008	G	0.53	0.01	H *	6.5215	0.0009	0.006	73	*	6.51	6.53		D	20078+0924	I 1	2 C	A	AB	340	3.267	0.006	2.46	0.03	S
99159	8.596	0.009	8.195	0.009	A	0.357	0.004	G	0.42	0.00	H *	8.2230	0.0010	0.011	121	*	8.20	8.24		D	20079+4600	H 1	2 C	B	AB	5	2.912	0.049	3.61	0.18	
99160	9.651	0.016	8.343	0.010		1.107	0.015	T	1.07	0.02	L	8.4103	0.0016	0.019	165		8.37	8.44					1								
99161	11.763	0.100	10.536	0.053		1.048	0.088	T	1.02	0.07	L	10.5353	0.0036	0.035	143		10.48	10.59		C			1	S							G
99162	8.918	0.013	7.759	0.008	*	0.995	0.012	T	0.97	0.01	L *	7.8624	0.0015	0.016	190	*	7.84	7.90		D	20079−7049	I 1	2 C	A	AB	291	6.619	0.008	2.11	0.03	S
99163	11.803	0.117	9.582	0.024		1.876	0.098	T	1.90	0.25	K	9.4227	0.0026	0.022	111		9.39	9.45					1								
99164	8.044	0.007	8.110	0.009		−0.066	0.014	G	−0.04	0.01	H	8.1094	0.0014	0.014	161		8.08	8.14		C			1								
99165						1.380	0.000	G	1.63	0.00	I	11.3874	0.0050	0.046	83		11.31	11.48		C			1								G
99166	11.234	0.087	9.465	0.028		1.460	0.035	G	1.47	0.06	I	9.3897	0.0025	0.021	138		9.35	9.43					1								
99167	8.377	0.009	8.336	0.011		0.043	0.013	T	0.06	0.01	L	8.3312	0.0014	0.013	121		8.30	8.36		C			1								
99168	7.964	0.008	7.951	0.009	A	0.030	0.000	G	0.05	0.00	H	7.9775	0.0058	0.012	149	A	7.96	8.00		C	20080+3235	I 1	2 C	A	AB	101	11.632	0.017	3.03	0.10	S
99169	7.562	0.008	7.045	0.006		0.486	0.009	T	0.56	0.01	L	7.0936	0.0009	0.007	117		7.08	7.11					1								S
99170	8.334	0.013	7.166	0.007	A	0.700	0.495	G	0.97	0.02	L *	7.1449	0.0009	0.009	137	*	7.13	7.16		D	20080+4223	I 1	2 C	A	AB	95	1.654	0.006	2.23	0.02	S
99171	7.288	0.007	6.086	0.005		1.023	0.003	G	1.00	0.00	H	6.1319	0.0007	0.005	83		6.12	6.14		C			1								S
99172	8.322	0.010	8.300	0.012		0.025	0.014	T	0.04	0.01	L	8.3109	0.0014	0.014	111		8.29	8.33		C			1								
99173	9.461	0.013	7.905	0.007		1.319	0.004	G	1.28	0.01	H	7.9075	0.0014	0.013	150		7.89	7.94					1								S
99174	9.775	0.013	8.976	0.010		0.708	0.013	T	0.76	0.01	L	9.0661	0.0018	0.023	251		9.02	9.10					1	S							
99175	9.899	0.027	9.027	0.021		0.763	0.026	T	0.80	0.02	L	9.1133	0.0021	0.016	90		9.08	9.14		C			1								
99176	8.633	0.011	6.602	0.005		1.720	0.010	T	2.31	0.04	O	6.4361	0.0076	0.061	102		6.35	6.52		U 2			1	S							S
99177	8.166	0.008	8.079	0.009		0.153	0.008	G	0.17	0.01	H	8.0820	0.0011	0.014	128		8.06	8.11		C			1								
99178	10.326	0.038	8.696	0.017		1.364	0.033	T	1.33	0.04	L	8.6946	0.0018	0.019	158		8.66	8.73		C			1								
99179	6.981	0.009	7.045	0.008		−0.043	0.002	G	−0.02	0.00	H	7.0450	0.0010	0.008	52		7.03	7.06					1								S
99180	10.173	0.026	9.138	0.019		0.900	0.024	T	0.90	0.02	L	9.1852	0.0022	0.019	105		9.14	9.22					1								
99181	8.493	0.009	8.460	0.011		0.030	0.013	T	0.05	0.01	L	8.4785	0.0015	0.014	137		8.45	8.50		C			1								
99182	9.245	0.013	8.059	0.009		1.016	0.012	T	0.99	0.01	L	8.1116	0.0012	0.013	119		8.09	8.13		C			1								S
99183	8.507	0.007	8.257	0.007		0.238	0.009	T	0.27	0.01	L	8.2993	0.0013	0.016	259		8.28	8.33					1								
99184	10.300	0.028	9.380	0.020		0.751	0.003	G	0.80	0.00	H	9.4275	0.0018	0.018	112		9.39	9.46		C			1 G								
99185	10.417	0.031	9.856	0.030	*	0.530	0.032	T	0.60	0.03	L *	9.9220	0.0030	0.023	101	*	9.88	9.97		C	20081−3930	I 1	2 C S	B	AB	136	0.150	0.022	0.42	0.82	
99186	8.544	0.006	8.559	0.008		−0.009	0.009	T	0.01	0.01	L	8.5667	0.0015	0.020	257		8.54	8.60					1								
99187	9.951	0.024	8.599	0.013		1.146	0.021	T	1.11	0.02	L	8.6454	0.0017	0.014	111		8.62	8.68					1								
99188	7.328	0.005	6.541	0.004		0.682	0.004	G	0.74	0.00	H	6.6134	0.0010	0.008	109		6.60	6.63		C			1								S
99189	9.745	0.019	8.594	0.013		0.989	0.018	T	0.97	0.01	L	8.6710	0.0021	0.019	119		8.64	8.71					1								
99190	11.490	0.120	10.505	0.084		0.760	0.020	G	0.80	0.01	H	10.5323	0.0037	0.020	48		10.49	10.57					1								G
99191	10.403	0.045	9.857	0.043	*	0.476	0.015	G	0.55	0.02	H *	9.7814	0.0034	0.029	88	*	9.74	9.86		D	20082+2106	I 1	2 C	A	AB	193	0.897	0.006	0.51	0.03	G
99192	9.455	0.015	8.209	0.009		1.063	0.014	T	1.03	0.01	L	8.2813	0.0016	0.017	147		8.26	8.31		C			1								
99193	6.993	0.006	7.030	0.011		−0.018	0.002	G	0.00	0.00	H	7.0337	0.0015	0.007	55		7.01	7.04					1								S
99194	8.235	0.009	7.731	0.008		0.475	0.011	G	0.55	0.01	H	7.7734	0.0013	0.013	150		7.75	7.80					1								S
99195	9.674	0.023	9.249	0.024		0.463	0.015	G	0.53	0.02	H	9.2944	0.0020	0.019	91		9.25	9.32		C			1								
99196	8.008	0.008	7.999	0.011		0.009	0.012	T	0.03	0.01	L	8.0280	0.0011	0.012	150		8.01	8.05		D	20083+3808	I 2	1	S							
99197	7.829	0.007	7.872	0.010		−0.035	0.011	T	−0.01	0.01	L	7.8680	0.0010	0.015	188		7.84	7.89					1								
99198	8.130	0.010	8.160	0.013		−0.023	0.015	T	0.00	0.01	L	8.1661	0.0015	0.014	88		8.14	8.19		C			1								S
99199	8.458	0.012	8.457	0.015		0.031	0.015	G	0.05	0.01	H	8.4776	0.0024	0.019	89		8.44	8.51		C			1								
99200	8.522	0.018	6.629	0.009		1.587	0.010	G	1.59	0.09	H	6.5675	0.0010	0.011	128		6.55	6.59					1								S

33958 | 13470

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
*99201	20 08 21.00	+20 13 11.6	7.33	H	302.087 485 31	+20.219 892 84	6.77	36.08	5.94	0.72	0.56	0.85	0.97	0.86	− 2	+16	−14	−30	− 1	+ 6	−10	+10	− 1	+24	0	−0.85
*99202	20 08 19.14	+38 07 50.5	8.13	G	302.079 760 37	+38.130 687 29	0.68	−3.50	−6.37	0.56	0.59	0.74	0.59	0.63	− 5	− 1	−10	+ 6	+ 1	− 7	+ 2	−11	+ 9	+ 5	2	−0.87
99203 H	20 08 22.84	+18 36 57.2	8.21	H	302.095 153 72	+18.615 892 72 *	3.78	−5.14	−18.18	0.70	0.64	0.97	0.91	0.90	− 8	− 3	−19	+10	− 1	+11	+ 2	+22	− 3	− 8	0	0.27
99204 H	20 08 23.00	−66 39 00.9	9.39	H	302.095 816 99	−66.650 250 59 A	4.66	−5.37	6.72	1.62	1.48	1.92	1.69	1.57	−17	− 9	+ 2	+32	+12	− 4	+ 8	+ 6	+ 5	−25	1	0.27
99205	20 08 24.27	+06 40 42.0	9.81	G	302.101 110 45	+06.678 325 82	36.49	169.57	170.73	1.45	1.22	2.01	1.98	1.54	+34	−12	−36	+26	− 5	+47	+16	+53	− 8	+18	0	0.53
99206	20 08 24.55	+30 17 49.0	8.13	H	302.102 275 09	+30.296 939 31	1.24	−0.10	−2.58	0.54	0.67	0.94	0.65	0.65	−11	− 2	− 3	+24	− 4	−11	− 2	−26	+14	− 9	0	0.38
99207	20 08 25.46	+58 47 14.3	7.89	H	302.106 082 82	+58.787 310 84	2.00	−2.72	−9.65	0.57	0.56	0.61	0.66	0.64	+ 2	−14	+ 6	+15	+ 7	+ 2	+ 8	+ 4	+ 5	+15	4	2.11
99208	20 08 26.08	−28 53 55.6	9.63	2 H	302.108 683 45	−28.898 789 82	15.97	108.93	−114.27	1.54	1.00	1.72	1.71	1.22	+57	−52	−37	+ 4	−12	+ 4	− 6	−20	− 5	+50	2	0.98
99209 H	20 08 26.56	+81 27 23.9	8.98	H	302.110 673 55	+81.456 650 06 A	6.40	13.20	8.18	1.25	1.13	1.21	1.39	1.35	+ 6	− 7	+ 4	− 5	− 7	+13	− 3	− 3	−34	+ 7	1	−0.27
99210	20 08 27.01	+15 40 30.7	7.90	1 H	302.112 537 96	+15.675 190 64	17.93	−82.12	−94.02	0.82	0.75	1.07	0.92	0.95	+12	−15	−20	−15	+15	− 1	+18	+28	− 6	+ 9	0	−0.46
99211 H	20 08 27.14	+46 22 29.6	8.38	G	302.113 072 79	+46.374 877 93 A	3.30	15.14	7.06	0.90	0.85	0.96	0.99	0.92	+ 4	+16	+28	+21	+ 7	+ 9	+ 5	+19	+11	− 9	1	−0.69
99212	20 08 27.40	−54 19 02.6	8.95	H	302.114 154 66	−54.317 393 36	11.34	2.45	−17.39	0.99	0.69	1.19	1.21	1.11	− 6	−37	+ 9	−30	+14	+ 5	+16	−10	−11	+17	0	1.31
99213	20 08 27.84	+45 11 47.6	7.74	H	302.116 004 15	+45.196 546 22	3.51	−4.39	4.63	0.60	0.56	0.70	0.85	0.59	− 3	+ 1	+ 9	+22	− 5	+18	− 3	− 2	+ 8	+ 9	3	−0.61
99214	20 08 28.85	−77 05 31.6	8.26	H	302.120 227 14	−77.092 114 60	2.28	37.71	−35.72	0.56	0.64	0.86	0.61	0.79	− 1	− 5	+ 4	+16	−10	− 1	−13	− 7	−12	−11	1	−1.25
99215	20 08 28.96	+10 21 28.4	10.44	H	302.120 652 01	+10.357 885 08	1.59	0.17	−1.69	1.40	1.13	1.63	1.84	1.67	+32	+ 5	+ 8	+18	+20	+23	+18	+42	+ 6	+37	2	−2.41
99216	20 08 29.19	−15 01 54.0	6.52	H	302.121 617 06	−15.031 657 98	8.50	29.48	−134.34	0.80	0.53	0.83	0.91	0.72	− 4	− 6	−18	−23	+15	+17	+19	+13	−11	+ 4	0	1.17
99217 H	20 08 29.28	−03 39 41.2	9.52	H	302.121 983 11	−03.661 444 64 A	5.69	7.17	6.14	3.23	1.92	3.25	3.87	3.16	+26	−13	+19	+18	+ 6	+11	+ 2	+48	+44	+ 7	0	0.70
99218	20 08 29.90	−10 18 47.3	7.05	H	302.124 584 69	−10.313 147 80	6.91	58.28	11.85	0.87	0.66	1.05	1.16	0.86	+11	−15	−30	−10	+ 5	+42	+23	+29	−10	+ 1	0	0.49
99219	20 08 30.37	−74 45 26.3	7.24	H	302.126 542 09	−74.757 293 47	5.19	−26.90	−49.59	0.53	0.53	0.75	0.66	0.66	−13	−10	+ 0	+27	− 4	− 3	− 2	+ 7	−10	−11	0	−0.51
99220	20 08 30.56	−34 30 48.1	7.63	H	302.127 351 07	−34.513 349 62	7.79	19.15	−29.25	1.15	0.73	1.18	1.35	0.88	+32	−23	− 6	−45	−17	−15	−15	−45	−15	+38	2	−0.20
99221	20 08 31.27	−10 03 45.0	6.18	H	302.130 283 61	−10.062 511 98	6.22	6.13	−34.03	0.93	0.63	1.05	1.12	0.78	− 4	−25	−37	−39	+10	+43	+34	+17	−17	−14	0	−0.01
99222	20 08 32.67	−51 22 20.2	9.03	H	302.136 126 83	−51.372 268 95	5.33	4.85	−105.77	1.28	0.81	1.41	1.97	1.26	−19	−27	−13	+ 7	+17	−33	+10	+ 5	+16	−34	0	1.04
99223	20 08 33.06	+10 03 13.9	7.44	H	302.137 747 38	+10.053 856 05	4.79	−5.33	5.25	0.77	0.66	0.89	1.01	0.89	+19	−10	−10	+33	+10	+ 7	+13	+51	− 3	+ 9	2	1.28
99224	20 08 33.81	−15 43 43.7	8.12	G	302.140 895 42	−15.728 792 74	16.61	147.92	−394.50	1.03	0.69	1.14	1.19	0.93	− 1	+ 1	−16	− 9	+ 9	+31	+13	+19	− 4	+14	0	0.55
99225	20 08 33.83	−05 06 01.7	9.00	H	302.140 958 77	−05.100 477 89	4.64	14.26	−3.88	1.32	1.18	1.72	1.72	1.69	+53	−27	−46	+13	+ 9	+39	+40	+70	−30	+26	0	−0.70
99226	20 08 34.65	−71 40 08.4	8.76	H	302.144 395 24	−71.668 988 10	1.29	22.51	−22.48	0.69	0.80	1.16	0.75	0.91	−21	− 8	− 7	+ 7	− 1	− 8	− 3	− 1	+ 3	−29	1	0.28
99227 H	20 08 35.44	−71 33 09.1	7.89	H	302.147 647 91	−71.552 514 92 A	4.02	3.82	11.34	0.99	1.06	1.41	1.05	1.08	−15	− 9	− 5	+13	− 2	− 4	− 2	− 6	− 1	−21	1	0.32
99228	20 08 35.71	−14 15 14.3	7.48	H	302.148 771 44	−14.253 974 13	5.39	40.31	−3.94	0.84	0.62	0.93	1.03	0.84	+13	− 9	−10	− 3	+23	+35	+28	+37	+ 3	+21	0	0.13
99229	20 08 35.93	−23 35 25.0	7.54	H	302.149 688 68	−23.590 283 29	19.32	−51.17	−105.67	0.88	0.63	0.93	1.09	0.76	+52	−22	+ 8	−27	−24	+ 2	−16	−44	−11	+76	0	1.07
99230	20 08 35.95	−30 28 10.5	9.55	H	302.149 792 70	−30.469 592 76	5.87	53.81	−2.73	1.40	0.84	1.51	1.64	1.16	+24	+ 0	− 3	−12	+17	+ 2	+17	+ 5	− 1	+45	0	0.99
99231	20 08 36.00	+36 40 19.3	7.43	H	302.150 006 29	+36.672 036 16	−0.47	−3.10	−6.78	0.48	0.52	0.68	0.54	0.61	− 9	+ 7	+ 0	+12	+ 3	−13	+ 4	+ 3	+10	− 7	1	−0.45
99232	20 08 36.40	+85 07 27.4	7.13	H	302.151 685 77	+85.124 269 60	24.70	−68.66	−20.57	0.52	0.49	0.56	0.59	0.63	− 6	−11	− 3	− 7	+ 4	− 5	+ 4	− 8	− 3	− 4	1	−0.88
99233	20 08 37.87	−46 18 04.2	8.23	G	302.157 809 96	−46.301 172 01	8.80	55.59	−86.57	1.10	0.57	1.15	1.65	0.91	−11	−27	+ 1	+20	− 3	+ 6	+ 2	− 1	−12	− 5	0	−0.46
99234	20 08 38.28	+10 43 33.1	6.34	H	302.159 488 37	+10.725 871 20	1.77	3.83	−1.81	0.69	0.51	0.76	0.87	0.66	+ 3	−16	−17	+34	−11	+ 9	− 8	+29	−12	− 7	0	−0.12
99235	20 08 39.09	+31 32 36.8	7.98	H	302.162 855 94	+31.543 548 24	5.40	23.94	13.79	0.54	0.72	0.89	0.67	0.79	− 2	+ 9	− 1	− 7	+ 3	− 4	+ 6	−34	+ 4	+ 8	0	1.85
99236	20 08 39.94	+24 45 30.3	7.85	H	302.166 397 17	+24.758 421 84	2.61	−30.19	−46.61	0.42	0.50	0.91	0.44	0.45	−27	− 6	+11	+ 7	−12	+ 0	−15	−32	+ 7	−41	0	−0.10
99237	20 08 40.05	−68 58 04.2	9.71	H	302.166 886 40	−68.967 839 11	3.58	9.35	3.80	0.69	1.00	1.37	0.81	1.21	−33	−26	+15	+10	+31	− 2	+34	−31	− 8	−27	1	0.00
99238 H	20 08 40.57	+53 20 11.7	7.92	H	302.169 055 04	+53.336 571 29 A	3.55	10.10	−40.64	0.87	0.83	0.84	0.98	0.75	− 5	−17	+14	+33	+ 2	+10	+ 0	− 9	+12	+ 1	1	−0.97
99239	20 08 41.13	+24 39 04.3	8.14	H	302.171 391 80	+24.651 183 89	9.58	22.62	26.16	0.46	0.53	0.99	0.48	0.48	−27	− 5	+10	+ 6	−13	+ 3	−14	−32	+ 5	−37	1	−0.70
99240	20 08 41.86	−66 10 45.6	3.55	G	302.174 417 13	−66.179 321 01	163.73	1210.29	−1130.34	0.49	0.43	0.65	0.55	0.47	− 5	− 7	−15	+29	+ 7	− 1	+ 2	− 5	− 7	−22	0	−0.15
99241	20 08 42.85	+50 35 10.1	7.40	H	302.178 558 15	+50.586 129 05	22.43	62.16	77.78	0.51	0.45	0.55	0.58	0.45	−11	−22	+ 3	+10	+ 6	− 3	+ 2	− 2	+14	−13	0	2.96
*99242	20 08 42.98	−07 01 13.8	7.95	H	302.179 082 70	−07.020 503 42	6.25	1.96	−13.42	0.98	0.72	1.16	1.23	0.98	+18	−13	−23	− 7	+ 4	+35	+14	+34	− 6	+17	0	−0.20
*99243	20 08 42.97	+22 09 12.7	7.03	H	302.179 062 46	+22.153 516 25	9.57	−43.15	−64.06	0.65	0.53	0.86	0.84	0.72	+ 8	−17	−11	−16	− 2	+ 6	− 3	− 1	− 9	+29	4	0.03
99244	20 08 43.18	+26 16 29.5	7.64	H	302.179 924 86	+26.274 863 68	−0.24	−0.17	−3.54	0.52	0.58	0.83	0.55	0.60	−12	+ 6	− 2	+16	− 8	−14	− 6	−26	+10	−10	3	0.25
99245	20 08 43.46	−46 18 16.0	8.94	G	302.181 086 25	−46.304 452 72	16.31	−12.22	−70.81	1.83	0.84	1.50	1.97	1.24	+14	−43	−22	+10	+ 2	+ 6	− 7	−27	+ 5	−11	2	0.90
99246	20 08 45.77	+37 14 13.4	8.55	2 H	302.190 721 28	+37.237 057 67	0.57	−2.07	−6.88	0.57	0.60	0.79	0.67	0.66	− 7	−13	+ 7	+ 4	+ 5	− 4	+ 4	−12	+ 4	− 7	0	−0.70
99247	20 08 47.97	−18 01 40.0	9.21	H	302.199 893 93	−18.027 772 22	9.54	−27.96	−63.44	1.23	0.86	1.38	1.61	1.13	+ 9	−21	−26	− 8	+ 5	+27	+14	+21	+ 6	− 3	0	1.20
99248	20 08 48.51	+39 47 54.0	7.22	H	302.202 114 04	+39.798 339 65	1.96	1.03	−1.73	0.44	0.48	0.59	0.47	0.49	− 3	+ 3	+12	+ 8	+ 5	−15	+ 9	−16	− 2	+ 6	0	−1.62
99249	20 08 49.54	−15 24 43.7	8.30	2 H	302.206 399 35	−15.412 135 54	2.19	−1.98	8.57	1.22	0.94	1.25	1.46	1.42	+30	− 6	− 3	+ 7	+40	+22	+40	+49	+ 5	+45	0	−0.28
99250	20 08 49.68	+12 13 42.3	7.18	1 G	302.206 982 81	+12.228 410 32	1.75	1.56	−17.40	0.68	0.60	0.86	0.85	0.77	+16	−14	−26	+ 3	+ 8	+ 7	+15	+29	−10	+ 0	0	−0.52
99251 H	20 08 50.24	−60 01 14.7	8.70	H	302.209 318 32	−60.020 737 77 A	8.69	74.94	−59.22	1.10	1.26	1.72	0.93	1.09	+28	− 9	−16	+23	−34	+19	−51	−40	+ 6	− 3	0	1.31
99252	20 08 50.41	+48 54 39.3	7.51	2 T	302.210 062 22	+48.910 909 51	4.88	5.02	16.96	0.57	0.48	0.60	0.70	0.47	−13	−13	+ 3	+12	+11	−12	+ 8	−21	+19	−12	2	−1.14
99253	20 08 50.88	−00 09 15.2	8.15	H	302.212 006 39	−00.154 219 24	−0.76	2.56	4.09	0.93	0.60	1.25	1.43	0.88	+31	− 3	−12	+17	− 3	+43	+ 6	+32	−33	−11	4	−0.64
99254	20 08 51.48	−25 55 57.7	8.75	H	302.214 493 59	−25.932 702 12	1.77	−17.71	−73.33	0.99	0.59	1.18	1.17	0.75	+40	−34	−12	−14	+ 7	+30	+ 5	−13	+24	+65	0	−0.49
99255 H	20 08 53.32	+77 42 40.9	4.38	G	302.222 151 74	+77.711 361 78 A	9.97	11.11	23.72	0.49	0.47	0.47	0.49	0.49	+ 2	−24	+ 4	+ 0	+15	−17	+14	+ 2	− 1	+12	0	0.65
99256	20 08 54.17	−56 03 39.9	8.40	H	302.225 724 35	−56.061 075 80	2.10	13.35	4.89	0.82	0.78	1.40	1.27	1.18	+42	−18	−38	−10	+41	−32	+32	− 4	+35	− 6	2	3.22
99257 H	20 08 56.80	+62 04 36.0	6.74	H	302.236 653 41	+62.076 668 50 A	4.05	9.23	−16.05	1.57	1.70	0.62	0.67	0.58	+49	+ 9	+ 3	− 2	+ 6	−17	+ 6	− 5	+28	+21	1	0.49
99258	20 08 57.14	+28 41 03.7	7.91	H	302.238 092 60	+28.684 354 10	2.56	−14.55	−22.01	0.46	0.68	1.03	0.55	0.61	−22	−13	− 3	+20	+ 2	− 5	+ 1	−19	+ 9	−21	4	1.32
99259	20 08 57.31	+23 24 53.7	7.94	H	302.238 808 31	+23.414 921 91	2.27	5.93	−2.41	0.59	0.52	0.95	0.57	0.53	−12	+13	−20	−12	−14	+ 4	−14	−18	+ 4	−12	0	0.62
99260	20 08 57.85	−49 04 41.9	8.84	H	302.241 041 75	−49.078 305 08	7.57	23.89	−27.91	1.10	0.73	1.28	1.69	1.02	−17	+ 1	−19	+20	− 5	−13	− 7	− 7	+ 4	−14	0	2.10
*99261	20 08 58.09	+28 41 03.7	8.01	H																						
*99262	20 08 57.99	−33 00 46.4	9.55	H	302.241 632 14	−33.012 881 84	13.92	3.35	−60.38	1.38	0.90	1.46	1.54	1.09	+24	−17	− 6	−34	− 2	+10	+ 0	−22	− 5	+30	0	−1.02
99263	20 08 59.83	+05 53 14.4	9.21	H	302.249 276 46	+05.887 325 48	1.79	−6.44	−8.52	1.11	0.95	1.37	1.65	1.37	+46	− 4	− 5	+24	+12	+38	+13	+38	+15	+51	4	0.90
*99264 H	20 09 01.07	−38 43 24.6	8.80	H	302.254 458 34	−38.723 505 39 A	1.68	15.51	−25.79	2.56	1.49	2.48	3.02	2.30	+ 0	−22	− 6	+ 4	+ 6	+24	+13	+ 9	− 4	+25	5	−0.31
*99265	20 09 00.71	+13 00 57.2	7.94	H	302.252 972 83	+13.015 888 65	−0.46	−1.87	−8.64	0.75	0.76	1.03	0.74	0.89	+48	−30	−32	− 2	+24	+12	+34	+36	−12	+43	0	1.97
99266	20 09 01.21	+01 38 58.8	8.33	H	302.255 023 08	+01.649 661 24	2.60	25.77	−0.42	1.08	0.69	1.30	1.41	0.86	+30	−29	− 9	+12	+11	+19	+10	+24	+ 7	+22	0	0.56
99267	20 09 01.32	+42 51 52.0	10.11	G	302.255 492 07	+42.864 431 85	12.04	119.35	340.57	0.94	0.91	1.13	1.09	0.99	−11	+ 2	+ 4	+ 0	+11	−15	+12	−11	+ 9	− 3	0	−1.07
99268 H	20 09 01.77	−44 51 45.8	9.46	G	302.257 380 11	−44.862 735 13 A	4.71	14.56	−38.44	2.91	1.63	3.02	4.24	2.26	+ 1	−20	−12	+26	− 3	−27	−11	− 6	+ 8	−10	1	0.17
99269	20 09 02.71	+58 19 05.8	8.42	H	302.261 305 90	+58.318 287 01	0.50	−10.96	−16.94	0.60	0.58	0.65	0.64	0.64	− 4	−16	+16	+15	+ 2	− 9	+ 5	+ 0	+ 3	+10	0	0.66
99270	20 09 03.81	−47 04 04.0	6.46	H	302.265 884 49	−47.067 772 65	6.12	41.75	−64.67	0.79	0.47	0.90	1.29	0.69	− 8	−11	−14	+11	+12	−22	+ 6	− 7	+12	−16	0	−1.25
99271	20 09 04.28	−74 13 09.1	7.59	G	302.267 832 16	−74.219 199 10	14.33	−47.23	−151.39	0.53	0.57	0.80	0.62	0.63	−20	−19	+ 1	+12	+ 8	−16	+11	−16	−17	−17	0	0.37
99272	20 09 04.75	−54 18 41.9	8.09	H	302.269 809 58	−54.311 644 07	5.90	12.27	−43.83	0.88	0.70	1.07	1.16	1.04	+18	−18	−15	− 9	+ 9	− 1	+ 7	− 3	+ 9	+22	0	2.57
99273	20 09 05.19	−26 13 25.9	7.18	G	302.271 622 69	−26.223 869 13	18.69	38.45	−68.54	0.79	0.50	0.90	0.86	0.61	+37	−34	− 3	− 2	+17	+22	+17	− 4	+14	+68	0	−0.59
99274	20 09 06.60	+27 12 38.9	8.54	H	302.277 518 46	+27.210 804 42	0.69	3.06	3.35	0.51	0.71	0.98	0.58	0.80	−15	− 4	− 7	+20	−13	− 7	−14	+14	+ 1	−14	0	−3.51
99275	20 09 07.11	−48 55 34.5	10.14	H	302.279 614 41	−48.926 254 90	6.77	19.72	14.18	1.74	1.18	2.07	2.87	1.65	+13	−13	−19	+26	+ 3	−17	− 1	− 4	− 7	+ 7	2	3.18
99276	20 09 07.76	+37 09 07.1	9.95	2 H	302.282 340 13	+37.151 978 32	1.19	−1.44	−4.69	0.85	0.88	1.18	1.01	1.06	− 5	− 8	+ 5	+ 2	+ 5	− 7	+ 4	+ 9	+10	+ 2	0	−0.30
99277	20 09 08.13	+16 54 25.5	6.91	H	302.283 878 13	+16.907 089 17	3.64	−3.05	−56.03	0.60	0.53	0.84	0.68	0.68	− 2	−12	−21	−14	+ 3	+ 9	+ 3	+10	− 7	+ 9	0	−2.05
99278	20 09 09.10	+31 23 22.2	7.87	H	302.287 936 09	+31.389 511 82	2.66	15.00	6.56	0.50	0.67	0.83	0.61	0.71	−10	+11	− 5	− 5	+ 8	− 1	+ 8	−33	+ 1	− 7	0	0.55
99279	20 09 11.77	+33 55 11.8	7.88	2 H	302.299 060 58	+33.919 948 62	1.32	2.76	−2.51	0.53	0.53	0.76	0.59	0.55	− 3	−12	+ 8	+28	+ 1	−16	+ 2	+ 0	+ 8	+ 0	0	0.69
99280	20 09 12.18	+42 13 49.0	8.09	G	302.300 740 75	+42.230 284 64	3.79	4.15	0.64	0.55	0.53	0.66	0.60	0.56	− 3	−17	+ 4	−12	+ 4	− 2	+ 2	−16	+10	+ 7	0	−1.86
99281	20 09 13.39	+19 04 23.3	6.95	H	302.305 792 08	+19.073 149 59	8.12	5.20	−2.68	0.60	0.52	0.82	0.70	0.71	−12	+ 2	−21	− 9	+ 5	+16	+ 7	+15	+ 4	+ 4	0	0.86
99282	20 09 13.67	+07 15 27.6	9.00	H	302.306 953 21	+07.257 677 03	6.59	−0.52	−8.78	1.06	0.95	1.27	1.37	1.29	+39	−10	−12	+ 9	+18	+25	+32	+50	+ 5	+15	7	2.97
99283 H	20 09 14.32	+35 29 01.9	7.38	H	302.309 674 88	+35.483 867 03 A	1.50	−3.46	−6.06	1.02	1.16	1.34	1.14	1.33	−17	− 8	+ 2	−12	+ 4	−14	+ 3	−22	+ 5	−22	5	3.58
99284	20 09 14.84	+35 57 29.4	10.55	H	302.311 830 80	+35.958 163 81	−0.32	−12.24	−3.98	1.19	1.31	1.72	1.35	1.43	− 7	+ 1	+ 9	+ 3	+ 6	− 5	+ 7	− 7	+13	− 3	2	−0.16
99285	20 09 15.31	+74 25 32.6	8.91	G	302.313 791 43	+74.425 731 50	6.09	−16.31	−34.27	0.70	0.68	0.73	0.71	0.85	+11	−30	−10	+13	+22	− 2	+27	+14	−12	+15	4	−0.53
99286 H	20 09 15.34	−33 21 59.0	8.06	G	302.313 912 70	−33.366 395 04 A	4.88	4.09	−15.84	1.45	0.95	1.33	1.40	0.90	+23	−10	− 9	−39	+ 2	− 4	+ 2	−33	− 4	+34	0	0.31
99287	20 09 17.86	+43 15 48.7	8.58	H	302.324 416 18	+43.263 541 58	2.37	8.44	2.95	0.64	0.59	0.75	0.65	0.63	− 7	−13	+14	+11	+ 4	−14	+ 7	− 2	+ 6	− 1	0	−1.60
99288	20 09 18.37	−28 26 24.3	7.12	H	302.326 558 36	−28.440 097 21	4.78	8.08	−38.92	0.79	0.54	0.89	0.96	0.72	+35	−25	+ 3	− 1	+ 6	− 1	+ 9	− 4	+ 4	+58	0	0.97
99289	20 09 20.22	−02 36 02.1	8.26	1 H	302.334 245 69	−02.600 574 27	8.07	−19.00	−5.79	1.85	0.78	1.40	2.04	1.11	+26	−22	−15	+45	+24	+24	+41	+34	− 1	+13	0	−0.46
99290	20 09 20.38	−27 57 20.2	8.47	G	302.334 910 00	−27.955 611 97	7.18	−9.94	−16.75	1.03	0.66	1.21	1.13	0.84	+35	−35	− 6	+ 6	− 4	−14	+10	−18	−31	+53	0	1.35
99291	20 09 20.58	+68 35 58.7	6.97	H	302.335 760 30	+68.599 628 39	4.42	−13.74	−31.22	0.52	0.53	0.56	0.60	0.52	+ 3	− 5	+16	− 8	+12	+ 2	+ 9	− 3	+ 5	+17	1	1.09
99292	20 09 21.27	+25 22 23.1	9.87	H	302.338 616 53	+25.373 090 81	−0.61	−1.31	−2.55	0.81	0.89	1.47	0.80	0.85	−24	−18	+13	+25	−18	− 4	−20	−23	+ 6	−26	1	0.54
99293	20 09 22.30	+26 12 04.3	9.31	G	302.342 929 41	+26.201 206 85	7.08	15.18	−21.53	0.86	0.90	1.30	0.90	0.90	− 5	+ 8	+ 3	− 1	−10	− 6	−11	−29	+ 4	−12	0	0.27
99294	20 09 22.37	+56 01 36.7	6.49	H	302.343 205 42	+56.026 873 02	2.63	−10.73	−18.39	0.48	0.42	0.50	0.55	0.43	− 2	+ 2	+ 1	+20	+ 6	−21	+ 6	− 9	+14	− 4	1	1.44
99295	20 09 22.69	+10 47 10.0	7.57	H	302.344 532 28	+10.786 097 79	2.34	−0.66	−13.83	0.82	0.63	0.95	1.04	0.84	+17	−12	− 2	+35	+ 8	+23	+ 8	+39	+ 0	+16	0	−0.32
99296	20 09 23.05	−36 30 15.8	8.26	H	302.346 049 67	−36.504 384 77	14.71	8.96	−129.72	1.09	0.66	1.25	1.18	0.84	+22	−51	− 8	− 5	+ 8	+25	+10	−10	+ 2	+31	0	1.38
99297	20 09 23.21	−02 57 13.7	8.53	H	302.346 703 19	−02.953 793 32	2.89	0.50	−21.44	2.16	0.86	1.35	2.42	1.21	+32	− 3	+ 4	+55	+40	+30	+48	+37	+ 6	+22	0	−0.27
99298	20 09 23.27	−01 16 26.5	7.85	H	302.346 958 51	−01.274 033 26	1.39	4.67	−2.90	1.07	0.66	1.14	1.35	0.98	+36	−34	− 9	+27	+19	+ 4	+20	+51	+ 7	+20	0	1.17
99299	20 09 23.85	+33 23 15.7	8.69	G

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
99201	7.787	0.008	7.380	0.008		0.406	0.015	G	0.47	0.02	H	7.4270	0.0014	0.012	95		7.40	7.45					1							S
99202	8.345	0.009	8.139	0.010		0.246	0.005	G	0.28	0.01	H	8.1962	0.0013	0.015	151		8.17	8.22			20083+3808	I 2	1								
99203	8.402	0.010	8.250	0.012	*	0.146	0.015	T	0.16	0.01	L *	8.2621	0.0022	0.020	117	*	8.22	8.30			20084+1837	H 1	2 C S C	AB	161	0.146	0.142	3.55	2.20	
99204	9.895	0.023	9.455	0.023	A	0.500	0.495	G	0.43	0.08	L *	9.4800	0.0028	0.027	135	*	9.44	9.55			20084−6639	I 1	2 C D	AB	87	5.160	0.076	3.68	0.33	D
99205	11.318	0.073	9.974	0.038		1.169	0.012	G	1.28	0.02	I	9.9368	0.0021	0.025	89		9.90	10.00					1							G
99206	10.269	0.026	8.294	0.010		1.670	0.015	G	1.68	0.09	H	8.2393	0.0015	0.016	175		8.21	8.27					1							
99207	9.239	0.014	8.029	0.009		1.035	0.013	T	1.01	0.01	L	8.0609	0.0013	0.013	120		8.04	8.08					1							S
99208	10.593	0.043	9.726	0.032		0.760	0.041	T	0.80	0.03	L	9.7698	0.0044	0.030	76		9.72	9.83		U			1							
99209	9.427	0.018	9.055	0.019	A	0.332	0.072	G	0.31	0.09	L *	9.0528	0.0017	0.017	104	*	9.02	9.08		D	20084+8127	I 1	2 C A	AB	143	4.977	0.019	2.74	0.09	
99210	8.756	0.012	7.977	0.010		0.708	0.012	T	0.76	0.01	L	8.0416	0.0019	0.019	99		8.01	8.07		M			1							S
99211	8.650	0.011	8.405	0.012	A	0.197	0.004	G	0.22	0.01	H *	8.4234	0.0012	0.013	109	*	8.40	8.45		D	20085+4622	I 1	2 C A	AB	43	4.167	0.016	3.03	0.08	
99212	9.604	0.017	8.997	0.016		0.564	0.017	T	0.64	0.02	L	9.0780	0.0019	0.017	101		9.05	9.11		C			1							
99213	9.163	0.014	7.866	0.008		1.103	0.013	T	1.07	0.01	L	7.9111	0.0014	0.011	122		7.89	7.94					1							S
99214	10.049	0.019	8.412	0.009		1.370	0.017	T	1.34	0.02	L	8.4094	0.0016	0.016	161		8.38	8.44		C			1							
99215	10.890	0.072	10.349	0.067		1.630	0.020	G	0.07	0.17	S	10.4692	0.0050	0.041	75		10.40	10.54		R			1							G
99216	8.042	0.017	6.660	0.008		1.169	0.015	T	1.13	0.01	L	6.6882	0.0018	0.011	52		6.67	6.71					1							S
99217	10.132	0.032	9.709	0.035	A	−0.030	0.042	G	0.59	0.07	B *	9.6309	0.0034	0.026	85	*	9.56	9.69		R	20085−0340	I 1	2 C A	AB	307	3.245	0.023	2.16	0.09	S
99218	8.494	0.013	7.206	0.009		1.096	0.012	T	1.06	0.01	L	7.2206	0.0012	0.008	61		7.21	7.23		C			1							S
99219	8.617	0.009	7.361	0.006		1.071	0.008	T	1.04	0.02	A	7.4110	0.0008	0.010	148		7.39	7.43		C			1							S
99220	8.863	0.016	7.747	0.011		0.962	0.015	T	0.95	0.01	L	7.7973	0.0011	0.010	66		7.78	7.82		C			1							S
99221	6.216	0.004	6.187	0.006		0.031	0.007	T	0.05	0.01	L	6.1954	0.0008	0.005	55		6.19	6.20		C			1							S
99222	9.500	0.019	9.026	0.019		0.459	0.021	T	0.53	0.02	L	9.1307	0.0023	0.019	82		9.10	9.16		D			1							
99223	8.641	0.013	7.541	0.009		0.950	0.012	T	0.94	0.01	L	7.6058	0.0012	0.011	76		7.58	7.62		C			1							S
99224	8.942	0.017	8.191	0.015		0.673	0.003	G	0.73	0.00	H	8.2511	0.0019	0.012	62		8.23	8.27		C			1							S
99225	10.271	0.038	9.079	0.023		1.021	0.035	T	0.99	0.03	L	9.1631	0.0018	0.012	72		9.14	9.19		C			1							
99226	10.064	0.019	8.853	0.012		1.036	0.018	T	1.01	0.01	L	8.9239	0.0019	0.021	170		8.90	8.97					1							
99227	8.146	0.008	7.978	0.008	*	0.153	0.010	T	0.17	0.01	L *	7.9493	0.0015	0.017	179	*	7.92	7.98		D	20086−7133	I 1	2 C A	AB	92	0.759	0.003	1.12	0.01	S
99228	8.983	0.020	7.633	0.012		1.144	0.018	T	1.11	0.02	L	7.6486	0.0016	0.012	63		7.63	7.67		C			1							S
99229	8.140	0.009	7.582	0.007		0.524	0.015	G	0.60	0.02	H	7.6507	0.0012	0.010	128		7.63	7.67		C			1							S
99230	10.334	0.035	9.631	0.030		0.635	0.035	T	0.70	0.03	L	9.6861	0.0025	0.021	72		9.64	9.72					1							
99231	7.478	0.006	7.442	0.008		0.056	0.006	G	0.07	0.01	H	7.4558	0.0010	0.009	142		7.44	7.47		C			1 S							S
99232	7.809	0.007	7.195	0.006		0.572	0.008	T	0.64	0.01	L	7.2512	0.0007	0.008	119		7.23	7.26					1							S
99233	8.730	0.014	8.278	0.014		0.438	0.015	G	0.51	0.02	H	8.3556	0.0018	0.014	90		8.34	8.38			20087−4618	I 2	1							S
99234	6.162	0.004	6.318	0.005		−0.136	0.006	T	−0.13	0.01	L	6.3001	0.0007	0.007	87		6.29	6.31		C			1							S
99235	9.305	0.013	8.091	0.008		1.038	0.012	T	1.01	0.01	L	8.1508	0.0017	0.019	152		8.12	8.18					1							
99236	9.032	0.009	7.949	0.006		0.937	0.008	T	0.93	0.01	L	8.0165	0.0010	0.015	284		7.99	8.04		C			1							S
99237	10.134	0.016	9.754	0.017		0.371	0.020	T	0.43	0.02	L	9.7944	0.0021	0.030	289		9.74	9.85					1							
99238	9.129	0.013	8.033	0.009	*	0.947	0.012	T	0.94	0.01	L *	8.0840	0.0012	0.014	125	*	8.07	8.11		D	20087+5320	I 1	2 C A	AB	171	0.652	0.010	2.78	0.04	
99239	8.627	0.007	8.170	0.007		0.431	0.009	T	0.50	0.01	L	8.2321	0.0011	0.017	286		8.21	8.26					1							S
99240						0.751	0.021	G	0.76	0.02	A	3.6876	0.0005	0.005	123		3.68	3.71					1							S
99241	8.062	0.008	7.452	0.007		0.568	0.009	T	0.64	0.01	L	7.5190	0.0009	0.010	125		7.50	7.54		C			1							S
99242	8.338	0.016	7.972	0.022		0.347	0.025	T	0.41	0.03	L	8.0381	0.0018	0.011	60		8.02	8.06		C			1							S
99243	8.271	0.012	7.152	0.007		0.964	0.011	T	0.95	0.01	L	7.1958	0.0011	0.010	91		7.18	7.22		C			1							S
99244	7.670	0.006	7.634	0.007		0.038	0.009	T	0.05	0.01	L	7.6597	0.0013	0.016	148		7.64	7.68					1							S
99245	9.850	0.037	9.005	0.029		0.810	0.015	G	0.85	0.01	H	9.0952	0.0021	0.018	82		9.06	9.13		C	20087−4618	I 2	1 G							
99246	8.662	0.011	8.586	0.014		0.115	0.009	G	0.13	0.01	H	8.5907	0.0020	0.028	145		8.56	8.70	4.29	P 1 A			1							P
99247	10.030	0.034	9.321	0.031		0.639	0.035	T	0.70	0.03	L	9.3431	0.0017	0.019	53		9.32	9.39		C			1							
99248	7.060	0.005	7.190	0.006		−0.113	0.007	T	−0.10	0.01	L	7.1844	0.0011	0.012	139		7.17	7.21					1							S
99249	10.786	0.058	8.552	0.018		1.887	0.050	T	2.89	0.08	O	8.2520	0.0130	0.073	46		8.13	8.37		U 2			1 S							P
99250	7.092	0.006	7.173	0.007		−0.049	0.011	G	−0.03	0.01	H	7.1704	0.0020	0.015	84		7.15	7.21		U 2			1							S P
99251	9.268	0.015	8.680	0.014	*	0.586	0.005	G	0.66	0.01	R *	8.8269	0.0013	0.016	182	*	8.80	8.86		D	20088−6001	I 1	2 C A	AB	69	6.023	0.006	1.65	0.03	
99252	7.912	0.012	7.549	0.011		0.348	0.015	G	0.41	0.02	H	7.5830	0.0125	0.082	127		7.48	7.67	0.19	P 1 A			1							S
99253	8.083	0.010	8.143	0.013		−0.024	0.030	G	0.00	0.03	H	8.1478	0.0013	0.011	71		8.13	8.17		C			1							S
99254	9.966	0.023	8.885	0.016		0.926	0.022	T	0.92	0.02	L	8.8978	0.0010	0.013	119		8.87	8.91					1							
99255	4.344	0.002	4.391	0.002	A	−0.046	0.003	G	−0.06	0.03	C *	4.3714	0.0004	0.004	108	*	4.37	4.38		D	20088+7743	I 1	2 C A	AB	120	7.383	0.018	3.94	0.09	S
99256	9.868	0.016	8.521	0.009		1.142	0.014	T	1.11	0.01	L	8.5701	0.0012	0.015	152		8.54	8.60		C			1 S							
99257	6.768	0.006	6.736	0.005	*	0.034	0.007	T	0.05	0.01	L *	6.7551	0.0009	0.007	98	*	6.74	6.77		D	20089+6205	I 1	2 C A	AB	218	0.305	0.002	0.49	0.04	S
99258	9.839	0.015	8.081	0.007		1.537	0.134	G	1.47	0.04	L	8.0443	0.0011	0.016	243		8.02	8.07		D	20090+2841	I 2	1 S							
99259	7.824	0.007	7.928	0.009		−0.090	0.010	T	−0.07	0.01	L	7.9110	0.0012	0.013	152		7.89	7.94					1							
99260	9.280	0.019	8.872	0.020		0.399	0.023	T	0.46	0.03	L	8.9279	0.0028	0.021	91		8.89	8.97					1							
99261											T	8.1510	0.0116	0.168	229		8.07	8.72		D	20090+2841	I 2	S							G
99262	10.505	0.045	9.626	0.033		0.769	0.043	T	0.81	0.03	L	9.6917	0.0027	0.019	82		9.64	9.74		C			1							
99263	9.199	0.016	9.204	0.021		0.000	0.024	T	0.02	0.02	L	9.2162	0.0028	0.018	87		9.19	9.25					1							
99264	9.796	0.027	9.271	0.026	A						T *	8.9145	0.0024	0.019	106	*	8.89	8.96		D	20090−3843	I 1	2 C A	AB	259	3.291	0.008	0.47	0.03	
99265	7.839	0.007	7.929	0.010		−0.077	0.011	T	−0.06	0.01	L	7.9222	0.0015	0.013	100		7.90	7.95		C			1							S
99266	9.192	0.016	8.410	0.013		0.752	0.015	G	0.80	0.01	H	8.4790	0.0026	0.020	89		8.45	8.51					1							
99267	10.693	0.041	10.147	0.040		0.510	0.020	G	0.58	0.02	H	10.2176	0.0033	0.028	122		10.18	10.26		C			1							G
99268	9.455	0.035	8.983	0.032	*	0.530	0.015	G	0.60	0.02	H *	9.5885	0.0028	0.021	109	*	9.54	9.63		D	20090−4452	I 1	2 C A	AB	106	2.101	0.008	0.91	0.03	
99269	10.539	0.030	8.611	0.012		1.635	0.027	T	1.88	0.08	O	8.5133	0.0017	0.016	131		8.49	8.54		C			1							
99270	8.414	0.013	6.633	0.005		1.463	0.020	G	1.44	0.06	F	6.5969	0.0012	0.009	98		6.58	6.61					1							S
99271	8.209	0.008	7.649	0.007		0.511	0.004	G	0.59	0.02	A	7.7142	0.0009	0.012	152		7.69	7.74					1							S
99272	9.659	0.018	8.199	0.010		1.230	0.016	T	1.19	0.02	L	8.2506	0.0011	0.016	110		8.22	8.28		D			1							
99273	7.702	0.006	7.234	0.006		0.480	0.015	G	0.55	0.02	H	7.2828	0.0010	0.009	118		7.27	7.30		C			1							S
99274	8.575	0.009	8.537	0.012		0.040	0.014	T	0.06	0.01	L	8.5623	0.0016	0.019	183		8.53	8.59					1							
99275	10.977	0.069	10.153	0.051		0.727	0.066	T	0.78	0.05	L	10.2667	0.0045	0.033	86		10.19	10.32			20091−4856	I 1	1 S							G
99276	11.240	0.112	9.982	0.053		1.072	0.097	T	1.04	0.08	L	10.1156	0.0350	0.251	145		9.70	10.28	4.36	P 1 A			1 S							G
99277	8.554	0.011	7.047	0.006		1.267	0.010	T	1.23	0.01	L	7.0712	0.0011	0.010	102		7.05	7.09					1							S
99278	9.642	0.016	7.986	0.008		1.392	0.015	T	1.37	0.02	L	7.9904	0.0015	0.015	159		7.96	8.02					1							
99279	7.886	0.007	7.895	0.011		0.010	0.010	G	0.03	0.01	H	7.8935	0.0047	0.045	144		7.85	8.00	2.56	P 1 A			1							
99280	8.070	0.007	8.079	0.009		−0.003	0.004	G	0.02	0.00	H	8.0910	0.0013	0.012	128		8.07	8.12		C			1							
99281	8.018	0.009	7.048	0.007		0.852	0.008	T	0.87	0.01	L	7.1105	0.0011	0.011	112		7.09	7.13					1							S
99282	9.095	0.016	9.026	0.021		0.069	0.025	T	0.08	0.03	L	9.0273	0.0025	0.020	84		9.00	9.08		D			1 S							
99283	7.480	0.007	7.349	0.009	*	0.126	0.010	T	0.14	0.01	L *	7.4214	0.0013	0.014	140	*	7.40	7.45		D	20092+3529	I 1	2 C A	AB	301	5.746	0.004	0.95	0.02	S
99284	11.796	0.153	10.892	0.112		1.250	0.049	G	1.21	0.05	H	10.7065	0.0043	0.039	137		10.63	10.77					1							G
99285	9.384	0.018	8.943	0.018		0.413	0.014	G	0.48	0.01	H	8.9983	0.0015	0.016	103		8.98	9.02					1							
99286	8.158	0.009	8.053	0.010	A	0.071	0.003	G	0.08	0.00	H *	8.0928	0.0013	0.010	86	*	8.07	8.11		C	20093−3322	I 1	2 C C	AB	124	7.073	0.043	4.01	0.26	S
99287	10.303	0.026	8.720	0.013		1.327	0.023	T	1.29	0.03	L	8.7328	0.0016	0.013	134		8.71	8.76		C			1							
99288	8.452	0.011	7.233	0.008		1.042	0.011	T	1.01	0.01	L	7.2917	0.0009	0.009	91		7.28	7.31		C			1							S
99289	8.702	0.012	8.310	0.012		0.413	0.015	G	0.48	0.02	H	8.3486	0.0019	0.021	112		8.32	8.38		U			1 G							
99290	8.854	0.012	8.489	0.013		0.356	0.015	T	0.42	0.02	L	8.5503	0.0013	0.013	87		8.52	8.58					1							
99291	8.639	0.010	7.117	0.006		1.279	0.009	T	1.24	0.01	L	7.1302	0.0010	0.011	115		7.12	7.15		C			1							S
99292	10.253	0.024	9.922	0.029		0.314	0.035	T	0.36	0.05	L	9.9540	0.0025	0.032	203		9.90	10.00					1 S							G
99293	9.926	0.021	9.360	0.020		0.518	0.015	G	0.59	0.02	H	9.4301	0.0026	0.026	155		9.38	9.47					1							G
99294	7.684	0.006	6.599	0.004		0.938	0.006	T	0.93	0.00	L	6.6558	0.0008	0.007	106		6.64	6.67		C			1							S
99295	7.427	0.007	7.557	0.012		−0.088	0.009	G	−0.07	0.01	H	7.5410	0.0013	0.011	78		7.52	7.56		C			1							S
99296	9.326	0.019	8.351	0.014		0.843	0.018	T	0.86	0.01	L	8.4030	0.0022	0.014	73		8.38	8.43					1							
99297	8.937	0.013	8.561	0.014		0.356	0.018	T	0.42	0.02	L	8.6142	0.0018	0.017	117		8.59	8.64		C			1 G							
99298	9.879	0.024	7.997	0.011		1.564	0.021	T	1.58	0.02	L	7.9654	0.0014	0.012	91		7.94	7.98					1							S
99299	8.660	0.009	8.681	0.012		−0.020	0.015	G	0.00	0.01	H	8.6935	0.0017	0.018	149		8.66	8.72					1							
99300	10.327	0.032	8.946	0.017		1.169	0.028	T	1.13	0.03	L	8.9739	0.0017	0.017	98		8.95	9.02		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
99301	20 09 24.41	+34 42 59.5	8.22	2 H	302.351 707 07	+34.716 526 68		3.79	29.29	−28.91	0.62	0.66	0.93	0.68	0.75	− 7	+13	+ 3	+12	+ 7	−19	+11	− 2	+24	−13	0	−0.32
99302	20 09 24.94	−33 52 27.4	7.27	H	302.353 897 12	−33.874 269 70		6.09	17.35	−4.40	0.93	0.62	0.94	1.04	0.66	+13	− 3	−20	−45	+ 3	+ 0	+ 2	−36	+ 0	+26	0	−0.07
99303	20 09 25.62	+36 50 22.5	4.93	2 H	302.356 736 42	+36.839 590 03		3.79	3.15	12.96	0.36	0.41	0.53	0.40	0.45	−10	− 6	+ 5	− 3	+ 8	−12	+ 8	− 4	+13	− 9	0	−0.43
99304	20 09 25.85	−32 03 37.6	8.80	H	302.357 692 56	−32.060 452 16		0.45	6.26	−0.88	1.21	0.87	1.47	1.85	1.13	+41	−23	−17	− 7	−23	+38	−19	−29	+ 2	+30	0	−0.22
99305	20 09 26.86	−43 55 01.6	7.84	G	302.361 935 37	−43.917 119 08		3.49	5.40	−26.87	0.94	0.57	1.07	1.37	0.93	− 2	−13	+ 1	+12	+ 5	− 6	+ 6	+ 5	+ 1	+10	0	0.63
99306	20 09 28.20	+52 16 34.0	8.09	H	302.367 504 18	+52.276 112 10		13.61	114.13	89.61	0.58	0.52	0.63	0.65	0.49	−10	−12	+15	+ 1	+ 4	− 1	+ 3	− 8	+15	+ 0	1	0.41
99307 H	20 09 28.52	+51 40 27.7	7.99	H	302.368 851 11	+51.674 369 69	A	2.05	2.37	1.62	1.27	1.17	1.19	1.22	1.10	− 8	− 7	+11	−16	+ 3	+ 6	+ 3	− 4	− 1	+ 3	0	1.51
99308	20 09 28.61	+35 44 01.3	7.81	1 G	302.369 216 82	+35.733 708 15		0.11	−2.52	−6.53	0.50	0.58	0.74	0.59	0.61	−15	− 1	+ 9	− 4	+ 4	− 4	+ 6	−15	+17	− 5	0	1.05
99309	20 09 28.83	+15 18 44.7	11.03	3 H	302.370 131 22	+15.312 428 80		−1.42	−3.94	−2.09	1.79	1.73	2.56	1.98	2.15	+35	−29	−22	+ 1	+16	+21	+19	+23	+ 3	+42	4	0.23
99310	20 09 30.09	+47 52 17.2	8.65	2 H	302.375 377 54	+47.871 454 14		1.60	−1.83	−5.39	0.79	0.73	0.88	0.91	0.88	+ 6	− 8	− 3	+15	+19	−18	+20	+ 9	+ 9	+16	0	−0.32
99311	20 09 32.42	−08 24 52.0	8.99	H	302.385 064 73	−08.414 436 32		1.51	2.24	−7.64	1.38	1.07	1.55	1.99	1.61	+40	−33	−41	−15	− 7	+ 0	− 8	+ 3	+ 3	+30	0	2.36
99312	20 09 32.98	+33 40 53.8	7.26	1 G	302.387 425 32	+33.681 622 67		2.25	7.43	1.11	0.49	0.53	0.77	0.54	0.52	− 9	−11	+18	+17	+ 0	− 7	+ 2	−11	+ 1	− 4	0	−1.34
99313	20 09 33.01	−27 42 44.2	9.04	H	302.387 558 07	−27.712 278 96		5.95	27.40	−22.11	1.31	0.84	1.50	1.42	1.01	+41	−33	−11	−13	− 4	−12	+ 2	−24	−14	+61	0	0.97
99314	20 09 33.45	−20 35 36.5	7.45	H	302.389 373 10	−20.593 461 31		13.60	20.27	−74.94	0.86	0.62	1.04	1.10	0.77	+ 9	−14	−38	+ 7	−13	+29	+ 2	+26	−30	−12	0	−2.44
99315	20 09 33.61	+30 12 58.0	9.15	G	302.390 038 84	+30.216 109 53		7.86	−11.14	−34.43	0.70	0.85	1.24	0.84	0.78	− 4	− 1	+13	+22	− 9	+ 7	− 7	−24	− 2	− 2	2	−0.02
99316 H	20 09 34.30	+16 48 19.2	7.56	G	302.392 922 63	+16.805 338 65	A	41.07	3.79	175.79	0.93	0.89	1.18	1.00	1.02	+27	−10	−24	−18	+ 4	− 9	+ 4	+18	−10	+31	0	0.19
99317	20 09 34.39	+18 46 57.1	7.65	H	302.393 283 43	+18.782 516 21		4.15	−1.48	−0.58	0.61	0.57	0.89	0.79	0.78	− 6	−16	−18	+12	+ 2	+ 7	+ 3	+25	+ 7	−10	0	0.38
*99318	20 09 34.78	−82 48 18.0	8.15	H	302.394 924 11	−82.805 001 36		11.06	43.12	−70.90	0.62	0.55	0.72	0.72	0.66	+ 0	−12	− 5	+ 5	− 2	− 9	− 3	+ 2	+ 1	− 6	0	−0.47
*99319	20 09 34.59	−23 52 36.2	10.15	G	302.394 142 83	−23.876 726 08		11.29	189.28	−99.92	1.61	1.16	1.64	1.96	1.39	+57	−21	−12	−40	−39	+ 2	−31	−56	− 7	+75	0	−0.05
99320	20 09 35.23	−02 23 28.7	8.52	2 H	302.396 803 93	−02.391 296 06		5.39	13.31	−5.17	1.38	0.74	1.36	2.29	1.12	+41	+10	+ 1	+54	+20	+33	+22	+51	+20	+10	0	1.58
99321	20 09 35.40	+60 24 16.4	8.05	G	302.397 489 83	+60.404 557 28		8.08	42.09	64.58	0.59	0.53	0.63	0.67	0.66	+ 8	− 3	+ 1	+ 8	− 4	+ 8	− 6	− 6	− 2	+16	1	0.06
99322	20 09 36.42	−14 17 12.1	9.75	G	302.401 751 68	−14.286 688 93		31.49	78.71	−91.71	1.38	1.08	1.58	1.75	1.52	+20	− 6	+ 5	− 3	+31	+42	+30	+36	+ 6	+34	0	0.56
99323	20 09 36.64	+30 43 02.4	8.51	G	302.402 678 48	+30.717 322 66		5.17	−0.95	−11.45	0.63	0.75	1.06	0.72	0.74	−17	− 7	+14	+35	− 7	−13	− 3	−18	+ 2	−12	0	−0.32
*99324 H	20 09 37.19	+33 24 39.1	7.82	H	302.404 964 06	+33.410 856 72	A	4.19	5.60	0.43	1.18	1.29	1.66	1.18	1.20	− 3	−12	+31	+24	+ 6	+ 5	+ 8	− 6	− 7	+ 5	6	0.71
*99325	20 09 37.01	+04 59 51.3	8.76	H	302.404 200 53	+04.997 594 89		3.26	0.25	−13.58	1.13	1.02	1.61	1.70	1.67	+55	+21	−10	+23	+16	+40	+11	+40	+ 1	+68	0	−0.41
99326	20 09 37.35	−34 31 58.0	8.57	H	302.405 627 80	−34.532 765 49		4.02	−1.54	−16.61	1.47	0.87	1.55	1.68	0.99	+18	−28	−15	−35	− 2	−10	+ 2	−35	−20	+21	0	−0.02
99327	20 09 39.60	+21 04 43.7	8.35	2 H	302.414 984 01	+21.078 810 08		0.55	−4.09	−10.92	0.78	0.71	1.01	1.03	0.98	+ 8	−13	−16	+ 5	+ 5	+ 8	+ 6	+10	− 2	+19	0	−0.50
99328	20 09 39.71	+17 49 23.3	9.41	H	302.415 477 35	+17.823 135 10		−0.02	−3.76	−6.46	0.78	0.75	1.18	1.00	1.09	− 6	− 6	− 2	+ 8	+ 2	+22	+ 2	+15	− 7	+ 5	0	−0.11
99329	20 09 39.93	−42 30 03.1	9.50	G	302.416 389 63	−42.500 872 03		2.85	−1.37	−0.44	1.27	0.82	1.58	2.06	1.35	+ 3	− 9	−29	+29	+12	−28	+ 3	+23	+18	−16	0	0.50
99330	20 09 40.06	+76 14 42.5	8.16	H	302.416 922 22	+76.245 151 03		4.95	−37.39	−77.61	0.59	0.61	0.64	0.70	0.72	− 2	−22	+16	+ 8	+12	+ 0	+10	+30	+ 0	+11	0	−1.60
99331	20 09 40.57	+40 25 42.3	8.54	H	302.419 030 14	+40.428 411 05		1.84	14.34	15.44	0.66	0.67	0.86	0.75	0.72	− 1	+ 3	+15	+ 0	− 3	−18	+ 1	−21	−14	+13	0	−0.41
99332	20 09 41.13	−03 07 44.1	9.56	G	302.421 360 42	−03.128 907 65		31.32	−195.79	−38.89	1.55	0.85	1.74	2.40	1.44	+46	− 6	+16	+18	+27	+38	+32	+55	+ 8	+27	0	−0.35
99333	20 09 41.98	−18 20 47.9	8.21	2 T	302.424 931 59	−18.346 631 38		2.35	0.91	−17.57	1.07	0.75	1.24	1.23	0.89	+ 3	−10	−36	−10	+ 5	+31	+19	+25	− 2	+ 3	0	1.06
99334	20 09 42.02	+32 02 03.9	9.15	H	302.425 069 51	+32.034 415 88		2.82	−20.01	−9.61	0.69	0.79	1.08	0.89	0.95	− 2	+10	− 4	−15	− 5	−19	− 4	−26	− 1	+12	0	−1.39
99335	20 09 42.84	−45 22 01.3	7.93	H	302.428 512 77	−45.367 033 23		12.89	−20.96	−47.97	1.07	0.64	1.15	1.39	0.91	+13	−36	− 5	+31	+ 6	− 1	+ 9	+ 9	− 6	+14	0	−0.57
99336 H	20 09 44.23	+41 29 36.5	9.93	2 H	302.434 278 97	+41.493 469 70	*	−1.79	2.63	−4.62	1.36	1.38	1.31	1.18	1.25	+31	− 8	+ 7	− 2	− 2	+12	− 1	−21	+ 6	+15	0	0.99
99337	20 09 45.16	−22 08 42.1	9.68	H	302.438 173 46	−22.145 029 31		6.40	17.09	−16.41	1.43	0.95	1.56	2.05	1.44	+ 6	+10	+ 4	+31	−11	+27	−15	+24	−18	− 7	0	−2.03
99338	20 09 45.33	−72 45 45.3	8.73	H	302.438 867 59	−72.762 577 51		3.25	5.58	−11.87	0.62	0.76	0.98	0.68	0.88	−24	−20	+11	− 6	+15	− 2	+16	− 9	− 6	−25	0	−0.99
99339	20 09 46.15	−45 22 26.0	9.13	G	302.442 300 67	−45.373 888 26		18.21	101.85	−224.10	1.48	0.93	1.62	1.97	1.43	+12	−33	− 6	+30	+ 5	+ 2	+ 5	+17	− 2	+12	0	1.10
99340	20 09 47.03	+42 32 28.8	8.14	G	302.445 971 05	+42.541 342 59		2.81	8.84	−1.47	0.58	0.60	0.71	0.67	0.60	− 4	− 7	− 4	−11	+ 3	− 3	+ 3	−19	+10	+ 3	2	0.02
99341	20 09 47.05	−58 00 25.1	8.01	H	302.446 046 11	−58.006 962 60		1.92	−17.27	1.33	0.81	0.76	1.05	1.18	1.18	+38	−14	−14	+ 4	+28	− 4	+28	+ 8	+ 6	+39	0	−0.24
99342	20 09 47.79	+27 19 53.4	7.91	1 H	302.449 129 30	+27.331 508 00		3.33	−9.03	−17.39	0.47	0.63	0.94	0.52	0.68	− 8	+ 2	− 5	− 1	−11	− 7	−11	+ 1	− 1	− 7	1	0.12
*99343	20 09 48.90	+06 32 07.7	10.84	G	302.453 744 17	+06.535 463 46		10.19	−16.25	−19.49	5.73	5.98	4.48	7.44	8.85	+30	−16	− 8	−79	−36	+39	−28	−84	− 5	+41	0	2.03
*99344	20 09 48.27	−51 43 05.2	8.38	H	302.451 116 62	−51.718 110 59		25.96	−111.42	−52.97	1.04	0.70	1.19	1.56	1.09	−11	−18	− 3	+26	− 8	−19	−11	+ 6	+ 9	−15	0	−0.46
99345 H	20 09 49.15	−36 02 01.8	9.90	H	302.454 794 99	−36.033 821 37	A	1.89	11.64	2.58	5.11	3.40	3.56	4.59	3.01	+30	−32	−11	−12	+ 6	+ 4	+ 4	−12	+ 8	+16	1	0.86
99346	20 09 50.41	+39 08 13.0	7.12	G	302.460 023 36	+39.136 941 27		4.57	6.84	−20.54	0.52	0.49	0.65	0.60	0.52	− 7	−22	+11	+16	+ 3	− 7	+ 4	−13	+ 5	+ 0	0	−1.03
99347	20 09 50.58	+45 24 10.5	9.51	2 H	302.460 769 38	+45.402 923 95		1.19	−2.57	−3.46	0.83	0.89	1.05	0.98	0.97	+ 6	+ 7	+18	−12	+ 5	+10	+ 3	− 1	+19	+17	0	0.12
99348	20 09 50.89	−37 31 50.4	9.82	H	302.462 053 14	−37.530 675 95		3.32	−9.35	−16.92	1.41	0.86	1.66	1.76	1.19	+ 1	−17	+ 5	− 2	+ 4	+12	+ 6	− 1	−13	+21	4	3.97
99349	20 09 52.97	−17 06 26.2	9.01	H	302.470 726 19	−17.107 290 36		1.80	−1.55	1.26	1.10	0.81	1.27	1.48	1.01	+18	−24	−35	+ 9	− 1	+27	+14	+37	− 9	+ 8	0	−1.29
99350 H	20 09 53.60	−29 37 59.1	8.55	H	302.473 314 32	−29.633 081 52	A	11.04	181.22	11.03	1.99	1.34	2.04	2.00	1.42	+52	−44	−20	− 2	− 7	+ 5	− 3	−18	+ 0	+63	4	1.03
99351	20 09 56.20	+20 55 03.3	8.82	H	302.484 166 32	+20.917 593 55	B	18.75	64.05	101.67	14.29	11.67	7.38	10.96	9.82	+ 1	−14	−23	−16	−10	− 2	−17	+ 7	− 4	+28	5	1.56
99352	20 09 56.61	+20 54 53.2	6.51	H	302.485 875 88	+20.914 788 80	A	22.22	58.82	98.38	1.15	1.01	1.15	1.35	1.24	− 2	− 9	−21	− 9	−13	+ 0	−16	+10	− 6	+22	5	1.56
99353	20 09 57.38	+25 32 11.3	7.80	G	302.489 104 16	+25.536 467 90		2.03	5.96	39.01	0.53	0.58	0.93	0.53	0.56	−27	− 8	+ 7	+14	−10	− 3	−12	−30	+10	−33	0	0.87
99354	20 09 59.19	−41 50 46.9	8.00	2 H	302.496 636 35	−41.846 347 28		2.14	17.45	0.54	1.20	0.61	1.17	2.33	1.33	− 1	− 8	+ 0	+41	+ 8	− 1	+10	+42	+14	−28	0	−0.55
99355	20 09 59.66	+61 28 25.4	8.73	H	302.498 598 73	+61.473 714 49		35.71	−139.06	192.86	0.75	0.69	0.81	0.84	0.78	+10	+ 6	+11	+28	+ 0	−11	+ 6	−10	+29	+14	0	1.46
99356	20 10 00.16	−35 20 11.0	8.02	H	302.500 680 91	−35.336 382 72		6.15	11.31	−17.54	1.14	0.71	1.23	1.48	0.81	+ 7	−28	−23	−22	+22	+12	+19	−20	+ 9	+ 8	0	0.37
99357	20 10 00.94	−13 02 46.9	8.36	H	302.503 923 51	−13.046 353 34		5.33	14.88	−2.04	1.08	0.84	1.16	1.27	1.18	+20	−19	−23	− 4	+24	+15	+27	+39	−11	+30	0	0.99
99358	20 10 01.32	−63 39 31.5	7.81	2 H	302.505 484 09	−63.658 737 26		1.24	6.72	−3.03	0.67	0.61	0.95	0.68	0.76	+ 8	−12	+ 3	+13	−10	+ 2	−16	−16	+15	+ 1	0	−2.35
99359	20 10 01.64	+36 58 42.4	7.79	G	302.506 827 78	+36.978 448 77		2.98	14.76	6.20	0.50	0.55	0.73	0.57	0.60	− 8	− 8	+ 6	− 2	+ 5	−10	+ 5	− 4	+12	− 6	0	0.92
99360	20 10 02.30	−33 25 54.4	9.26	H	302.509 593 82	−33.431 788 21		2.34	2.24	−10.69	1.31	0.99	1.40	1.46	1.12	+41	− 2	−20	−43	−15	−16	−18	−39	+ 0	+45	0	0.50
99361	20 10 02.37	+28 16 08.8	7.50	H	302.509 890 07	+28.269 113 31		1.28	0.11	−3.53	0.34	0.49	0.73	0.40	0.52	−15	− 7	− 4	+ 7	+ 4	+ 0	+ 4	− 4	+ 7	− 8	2	−1.22
99362	20 10 04.26	+26 17 07.5	9.11	3 H	302.517 770 82	+26.285 421 58		1.47	−0.35	−10.77	1.75	1.87	2.79	1.85	1.90	− 9	− 3	+ 0	+ 2	−15	− 6	−16	−21	+ 5	−14	0		
99363	20 10 05.27	−27 41 47.9	8.98	H	302.521 940 58	−27.696 641 84		3.94	29.02	0.68	1.20	0.82	1.39	1.37	1.04	+54	−41	−33	+ 1	+ 5	−12	+ 6	−10	+ 4	+69	0	−0.52
99364	20 10 05.86	−43 53 39.1	6.93	G	302.524 419 08	−43.894 195 23		5.40	16.99	−19.11	0.87	0.49	0.94	1.20	0.86	−11	−24	+ 0	+11	− 1	− 1	+ 0	+14	− 1	−10	0	0.42
99365	20 10 06.74	−25 17 02.4	7.45	1 H	302.528 087 21	−25.283 990 88		4.93	23.48	−10.35	0.75	0.46	0.88	0.92	0.56	+50	−32	−10	− 1	+11	+28	+ 9	−11	+27	+79	0	0.08
99366	20 10 07.68	−11 21 24.8	9.06	H	302.532 008 62	−11.356 875 73		5.04	−3.93	9.50	1.31	1.06	1.66	1.49	1.39	+32	−26	−30	− 5	+23	+39	+40	+54	−25	+27	0	0.60
99367 H	20 10 07.83	+08 26 37.8	6.57	H	302.532 608 44	+08.443 821 10	A	17.19	−61.39	−172.53	0.98	0.82	1.10	1.05	0.94	+ 7	− 6	−16	+ 7	+ 5	+19	+10	+36	− 7	+17	0	0.54
99368	20 10 08.82	−36 39 17.3	8.22	H	302.536 733 22	−36.654 816 11		3.38	0.82	−12.97	1.07	0.59	1.25	1.19	0.80	− 2	−48	+16	−10	+ 3	+21	+ 5	−13	− 6	+23	0	0.13
99369	20 10 09.33	−38 33 58.8	8.02	H	302.538 891 93	−38.566 341 33		2.93	37.91	−25.91	0.93	0.61	1.07	1.23	1.03	+19	−23	− 9	+ 3	+11	+ 3	+13	+16	− 9	+28	0	−1.21
99370	20 10 09.35	+45 01 00.2	7.79	2 G	302.538 973 33	+45.016 723 09		3.35	3.17	1.62	0.57	0.55	0.69	0.77	0.58	+ 3	−11	+15	+17	+ 3	+ 9	+ 1	− 2	+21	+17	0	0.53
99371	20 10 10.13	−63 37 22.6	7.01	H	302.542 205 47	−63.622 952 96		6.98	14.74	−38.08	0.55	0.54	0.83	0.58	0.64	+ 5	−12	−20	+21	−15	+ 4	−21	−13	+30	− 8	0	−0.45
99372	20 10 11.66	+36 11 28.8	8.63	G	302.548 596 55	+36.191 336 13		1.79	1.86	−1.26	0.60	0.66	0.86	0.63	0.70	− 5	+ 3	+ 9	− 1	+ 4	− 9	+ 5	− 2	+14	+ 3	0	−0.88
99373	20 10 11.74	−45 22 22.1	8.74	H	302.548 917 03	−45.372 814 81		2.12	9.81	−40.55	1.13	0.71	1.24	1.52	1.10	+ 8	−30	+ 0	+28	+ 2	+ 7	+ 1	+16	+ 5	+11	0	1.15
99374	20 10 12.19	−31 09 58.0	8.10	G	302.550 782 77	−31.166 124 22		4.55	13.94	−51.88	0.97	0.72	1.09	1.09	0.79	+43	−12	−24	−17	− 3	+10	+ 0	−18	+ 0	+57	0	2.55
99375	20 10 12.46	+03 39 48.6	8.75	H	302.551 896 53	+03.663 497 90		−0.05	2.49	1.77	1.09	0.83	1.43	1.41	0.98	+48	− 9	− 4	+44	+ 9	+11	+12	+32	− 6	+40	4	−0.99
99376 H	20 10 13.31	+43 56 43.4	7.41	H	302.555 478 63	+43.945 381 33	A	19.45	14.35	78.88	1.27	1.68	0.80	1.34	0.91	− 1	−16	+ 5	+ 5	− 8	− 8	− 7	+ 9	+15	+ 0	1	−0.54
99377	20 10 14.20	+36 10 35.1	8.07	2 G	302.559 151 72	+36.176 428 81		−0.37	−4.97	−8.69	0.54	0.58	0.77	0.58	0.63	− 5	+ 4	+ 3	+ 8	+ 3	−10	+ 4	+ 2	+10	+ 3	0	−0.65
99378	20 10 15.06	+68 17 54.2	7.53	G	302.562 740 15	+68.298 385 67		5.75	31.50	29.19	0.54	0.53	0.57	0.66	0.53	+ 6	−13	+13	+ 6	+11	+ 9	+10	− 5	+ 2	+21	0	1.46
99379	20 10 15.49	−79 06 38.2	7.26	H	302.564 560 75	−79.110 624 92		5.43	−39.56	36.10	0.53	0.49	0.72	0.62	0.57	− 5	−29	+ 0	− 5	+10	+ 6	+12	−15	−15	−23	0	−0.05
99380	20 10 15.90	−47 19 54.7	8.79	H	302.566 229 89	−47.331 872 88		9.21	2.38	6.83	1.08	0.74	1.34	1.72	0.94	− 4	− 9	−34	+16	+22	−28	+12	−10	+11	− 8	0	1.79
99381	20 10 16.06	+61 20 45.0	7.59	2 H	302.566 932 52	+61.345 830 82		2.56	22.36	25.27	0.61	0.56	0.65	0.67	0.62	+ 1	+ 6	− 3	+23	+ 3	−12	+10	−23	+27	+11	2	0.08
99382	20 10 17.19	+26 34 10.9	9.42	G	302.571 643 61	+26.569 692 43		1.25	8.68	2.94	0.84	0.89	1.29	0.96	0.98	−19	+ 1	− 4	+20	−16	− 6	−16	− 9	+ 7	−22	0	1.19
99383	20 10 18.43	−41 08 46.8	8.20	H	302.576 809 70	−41.146 331 30		6.33	25.99	3.77	0.98	0.58	1.09	1.21	1.05	+ 8	−27	+ 6	+28	+20	+ 2	+18	+42	+11	+22	0	0.28
99384	20 10 18.98	−31 31 16.5	8.86	H	302.579 065 17	−31.521 256 37		3.76	−6.10	−16.16	1.10	0.80	1.28	1.39	0.94	+36	−20	−16	−12	− 7	+28	− 3	−21	+ 7	+43	2	0.81
99385	20 10 19.86	−20 29 33.1	8.91	G	302.582 750 51	−20.492 515 54		63.82	−457.40	−376.53	1.27	0.86	1.49	1.66	1.18	+14	−21	−29	+20	−13	+29	+ 0	+29	−26	− 7	0	−0.22
99386	20 10 21.32	+21 14 21.7	8.01	G	302.588 850 59	+21.239 361 88		14.44	41.89	17.97	0.75	0.68	0.96	0.90	0.97	+ 9	− 9	− 3	+ 1	+15	+ 9	+15	+18	− 4	+25	0	−1.11
99387	20 10 22.27	+55 16 25.0	9.01	H	302.592 789 37	+55.273 612 26		6.81	40.00	−50.44	0.71	0.62	0.73	0.87	0.62	+ 2	− 8	− 7	+31	+ 6	−26	+ 2	−16	+13	− 5	1	1.67
99388 H	20 10 23.10	+49 49 15.7	7.84	H	302.596 249 32	+49.821 025 28	A	10.79	10.18	42.21	0.83	0.79	0.85	0.85	0.77	− 2	−16	+16	+ 6	+ 4	− 9	+ 5	− 9	+10	+ 7	0	0.67
99389	20 10 24.22	+51 29 44.4	12.48	2 H	302.600 923 64	+51.495 659 95		−4.85	14.63	−11.77	2.41	2.40	2.92	2.96	3.00	− 9	− 4	+ 4	−20	+12	+ 5	+12	−23	−25	− 8	4	2.07
99390	20 10 25.16	+16 01 14.5	8.24	H	302.604 840 72	+16.020 688 01		1.65	7.25	−13.94	0.86	0.80	1.13	0.95	1.02	+16	−17	−17	− 2	+ 7	− 1	+11	+37	− 8	+ 8	4	−1.19
99391 H	20 10 25.46	−19 22 59.4	7.28	H	302.606 086 64	−19.383 152 86	*	15.93	−3.66	−127.42	4.52	1.80	1.71	1.63	1.23	+46	−10	−45	−26	+ 8	− 4	+16	+10	−15	+ 0	3	−0.81
99392	20 10 25.78	+05 35 02.7	7.88	H	302.607 405 88	+05.584 092 33		13.19	53.85	37.91	0.93	0.88	1.16	1.48	1.61	+44	− 1	− 1	+15	+30	+33	+15	+56	+ 7	+66	0	−0.19
99393 H	20 10 27.15	+25 31 09.9	9.36	G	302.613 139 09	+25.519 419 92	A	3.99	−28.66	−54.05	1.42	1.59	2.38	1.28	1.46	−19	− 9	−11	+ 1	− 6	+ 0	− 5	−33	− 1	−19	1	0.69
99394 H	20 10 28.04	+25 02 56.6	7.10	H	302.616 819 23	+25.049 047 01	A	6.80	16.98	−2.02	0.59	0.70	1.00	0.57	0.57	−27	+ 5	+ 5	+21	−14	+ 9	−21	−23	−14	−34	1	0.39
99395	20 10 28.85	+44 37 00.7	7.48	H	302.620 194 05	+44.616 855 84		1.59	−12.58	−39.16	0.56	0.52	0.67	0.69	0.54	− 1	−13	+15	+ 9	+ 2	+ 3	+ 2	−11	+18	+21	1	1.25
99396	20 10 29.65	−06 09 48.5	7.94	G	302.623 548 14	−06.163 476 34		1.79	−42.12	−14.18	1.08	0.63	1.19	1.35	1.06	+24	−20	+10	− 9	+ 6	+18	+ 6	+42	+13	+19	0	1.26
99397	20 10 30.54	−53 35 28.4	9.80

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
99301	9.747	0.022	8.366	0.012		1.170	0.020	G	1.13	0.02	H	8.3858	0.0039	0.032	150		8.34	8.48		U 2			1							
99302	7.226	0.006	7.261	0.007		−0.032	0.001	G	−0.01	0.00	H	7.2697	0.0012	0.008	79		7.25	7.29		C			1							S
99303	4.754	0.003	4.915	0.003		−0.139	0.004	T	−0.13	0.01	L	4.8843	0.0021	0.021	152		4.82	4.92		U 2			1							S
99304	10.458	0.039	8.979	0.020		1.245	0.034	T	1.20	0.03	L	8.9590	0.0026	0.015	67		8.94	8.99		C			1							
99305	9.385	0.017	7.989	0.010		1.155	0.063	G	1.13	0.02	A	8.0122	0.0016	0.014	109		7.99	8.04					1							S
99306	8.858	0.011	8.164	0.010		0.640	0.012	T	0.70	0.01	L	8.2198	0.0010	0.012	119		8.20	8.25					1							
99307	7.905	0.015	7.842	0.016	*	0.063	0.020	T	0.07	0.02	L	*	8.0205	0.0014	0.012	116	*	8.00	8.04		D	20095+5140	I 1	2 C	A	AB	138	1.611	0.003	0.50	0.01	S
99308	8.066	0.009	7.860	0.009		0.197	0.012	T	0.22	0.01	L		7.8748	0.0020	0.018	148		7.85	7.90		U			1							S
99309	11.601	0.128	11.477	0.177		0.120	0.204	T	0.13	0.21	L		11.0755	0.0132	0.573	73		11.00	13.32		P 1 A			1							G
99310	12.857	0.311	9.022	0.016		2.990	0.227	T	3.07	0.23	L		8.5160	0.0150	0.172	116		8.19	8.72	223.00	P 1 A	20096+4751	I 1	1	S						
99311	10.905	0.085	9.096	0.029		1.506	0.071	T	1.54	0.11	L		9.1225	0.0018	0.010	47		9.11	9.14					1	S						
99312	9.246	0.013	7.439	0.006		1.520	0.015	G	1.53	0.09	H		7.3682	0.0017	0.019	154		7.34	7.40		U 2			1							S
99313	9.674	0.021	9.060	0.019		0.569	0.021	T	0.64	0.02	L		9.1615	0.0027	0.024	97		9.12	9.21					1							S
99314	7.880	0.010	7.496	0.009		0.380	0.015	G	0.44	0.02	H		7.5411	0.0012	0.008	65		7.52	7.55		C			1							S
99315	9.910	0.022	9.167	0.018		0.672	0.015	G	0.73	0.01	H		9.2779	0.0020	0.022	171		9.23	9.31		C			1							
99316	8.698	0.013	7.746	0.009	A	0.810	0.018	G	0.85	0.02	H	*	7.6742	0.0009	0.010	88	*	7.66	7.69		D	20096+1649	I 1	2 C	A	AB	14	4.449	0.006	2.10	0.03	S
99317	7.844	0.008	7.674	0.009		0.163	0.011	T	0.18	0.01	L		7.7023	0.0015	0.014	114		7.68	7.73		C			1							S
99318	8.703	0.010	8.212	0.009		0.471	0.015	G	0.54	0.02	H		8.2508	0.0012	0.014	139		8.22	8.28		C			1							S
99319	11.181	0.069	10.289	0.051		0.850	0.004	G	0.89	0.00	H		10.2916	0.0026	0.025	120		10.25	10.33		C			1							G
99320	8.966	0.013	8.560	0.013		0.384	0.017	T	0.45	0.02	L		8.6041	0.0043	0.028	102		8.56	8.64		U 2			1							S
99321	8.464	0.010	8.106	0.010		0.354	0.017	G	0.42	0.02	H		8.1385	0.0016	0.014	116		8.12	8.16					1	G						S
99322	11.402	0.107	9.930	0.049		1.137	0.001	G	1.25	0.02	A		9.8885	0.0027	0.018	54		9.85	9.92		C			1							
99323	9.661	0.015	8.627	0.011		0.895	0.015	G	0.90	0.01	H		8.6780	0.0018	0.021	179		8.64	8.71					1							
99324	7.788	0.011	7.751	0.014	*	0.034	0.016	T	0.05	0.01	L	*	7.8411	0.0011	0.012	149	*	7.82	7.86		D	20096+3325	I 1	2 C	A	AB	276	4.725	0.004	0.83	0.02	S
99325	10.688	0.041	8.903	0.017		1.487	0.035	T	1.51	0.05	L		8.8817	0.0034	0.019	85		8.85	8.91					1							
99326	9.868	0.029	8.680	0.019		1.018	0.027	T	0.99	0.02	L		8.7365	0.0031	0.017	59		8.70	8.77					1							
99327	8.256	0.010	8.334	0.014		−0.066	0.016	T	−0.04	0.02	L		8.3390	0.0035	0.028	97		8.30	8.39		U 2			1							
99328	9.543	0.018	9.472	0.025		0.070	0.029	T	0.08	0.03	L		9.4365	0.0020	0.026	120		9.38	9.48					1							
99329	9.984	0.022	9.526	0.023		0.408	0.005	G	0.47	0.01	H		9.6007	0.0030	0.022	98		9.55	9.64		C			1							
99330	9.081	0.013	8.246	0.011		0.751	0.013	T	0.79	0.01	L		8.3107	0.0015	0.014	111		8.29	8.33		C			1							S
99331	9.661	0.017	8.661	0.012		0.874	0.016	T	0.88	0.01	L		8.6986	0.0018	0.015	124		8.67	8.72					1							
99332	11.372	0.084	9.678	0.030		1.184	0.004	G	1.31	0.01	I		9.6968	0.0023	0.020	112		9.66	9.73		C			1	S						
99333	8.287	0.011	8.217	0.014		0.061	0.015	G	0.07	0.01	H		8.2491	0.0176	0.072	59		8.14	8.31	1.62	P 1 A			1							S
99334	9.929	0.023	9.235	0.020		0.661	0.015	G	0.72	0.01	H		9.2842	0.0024	0.021	143		9.24	9.33		C			1							
99335	9.212	0.017	8.041	0.011		1.004	0.016	T	0.98	0.01	L		8.1012	0.0017	0.015	100		8.07	8.13		C	20097−4522	I 2	1							
99336	13.156	0.450	10.547	0.063	*	1.600	0.510	G	1.57	0.52	J	*	10.0504	0.0113	0.097	124	*	9.79	10.22		U 2 C	20097+4130	H 1	2 C	D	AB	228	0.216	0.019	0.61	0.22	G D
99337	10.309	0.044	9.769	0.046		0.513	0.048	T	0.59	0.05	L		9.7944	0.0037	0.019	53		9.76	9.84		C			1							
99338	10.115	0.018	8.834	0.011		1.090	0.016	T	1.05	0.02	L		8.9007	0.0015	0.020	182		8.86	8.94					1							
99339	10.086	0.030	9.177	0.023		0.769	0.002	G	0.81	0.00	H		9.2758	0.0035	0.022	91		9.24	9.32		C	20097−4522	I 2	1							
99340	8.416	0.009	8.185	0.010		0.224	0.005	G	0.25	0.01	H		8.2083	0.0014	0.013	123		8.18	8.23		C			1							
99341	10.003	0.021	8.194	0.009		1.506	0.018	T	1.54	0.03	L		8.1362	0.0020	0.018	123		8.10	8.17					1							
99342	10.081	0.023	8.130	0.009		1.660	0.015	G	1.67	0.09	H		8.0232	0.0016	0.020	202		7.99	8.06		U			1							
99343						1.668	0.020	G	1.65	0.02	J		10.9562	0.0100	0.064	19		10.84	11.08					1							G
99344	9.260	0.017	8.461	0.014		0.708	0.017	T	0.76	0.01	L		8.5188	0.0018	0.014	79		8.49	8.56		C			1							
99345	10.339	0.035	9.985	0.041	*	0.344	0.048	T	0.40	0.07	L	*	9.9780	0.0014	0.016	70	*	9.93	10.00		D	20098−3602	H 1	2 C	A	AB	205	0.401	0.010	0.81	0.05	
99346	7.483	0.006	7.139	0.008		0.306	0.005	G	0.35	0.01	H		7.1947	0.0008	0.009	129		7.18	7.21		C			1							S
99347	10.207	0.027	9.586	0.025		0.578	0.032	T	0.65	0.03	L		9.6315	0.0029	0.031	110		9.57	9.69		U			1							G
99348	10.505	0.039	9.897	0.036		0.565	0.039	T	0.64	0.04	L		9.9379	0.0024	0.023	99		9.90	9.98		D	20098−3732	I 1	1	S						
99349	8.912	0.017	8.998	0.023		−0.074	0.026	T	−0.05	0.03	L		8.9890	0.0023	0.013	58		8.96	9.01		C			1							
99350	9.373	0.021	8.677	0.018	A	0.200	0.495	G	0.69	0.03	L	*	8.6791	0.0016	0.013	87	*	8.66	8.70		C	20099−2938	I 1	2 C	D	AB	101	5.695	0.051	3.40	0.18	D
99351	9.672	0.029	8.852	0.023	B	0.740	0.028	T	0.79	0.02	L		9.0549	0.0474			B				D	20099+2054	I 2	1 C I A							
99352	6.950	0.004	6.533	0.005	A	0.394	0.006	T	0.46	0.01	L		6.6016	0.0053	0.017	102	A	6.58	6.64		D	20099+2054	I 2	1 C P A							S
99353	9.073	0.011	7.915	0.007		0.994	0.010	T	0.97	0.01	L		7.9593	0.0010	0.014	189		7.94	7.98		C			1							
99354	10.089	0.026	8.212	0.011		1.535	0.064	G	2.01	0.00	A		8.0833	0.0020	0.021	98		8.05	8.12		U 2			1	S						
99355	9.900	0.025	8.857	0.017		0.906	0.023	T	0.91	0.02	L		8.8919	0.0020	0.017	97		8.86	8.92		C			1							
99356	8.325	0.011	8.072	0.012		0.237	0.017	T	0.26	0.02	L		8.0919	0.0014	0.011	58		8.07	8.12					1							S
99357	9.016	0.021	8.432	0.020		0.616	0.015	G	0.68	0.01	H		8.4918	0.0026	0.016	58		8.46	8.53		C			1							
99358	10.028	0.020	8.007	0.008		1.711	0.018	T	2.09	0.05	O		7.8814	0.0043	0.044	121		7.82	7.94		U 2			1							S
99359	7.827	0.007	7.791	0.009		0.030	0.015	G	0.05	0.01	H		7.8040	0.0011	0.012	146		7.78	7.83		C			1							S
99360	10.690	0.041	9.378	0.023		1.114	0.037	T	1.08	0.04	L		9.4307	0.0025	0.013	81		9.40	9.45		C			1							
99361	7.447	0.004	7.484	0.005		−0.029	0.006	T	−0.01	0.01	L		7.4995	0.0010	0.012	242		7.48	7.52					1							S
99362	11.096	0.050	9.396	0.019		1.447	0.044	T	3.59	0.07	O		8.7963	0.0229	0.255	162		8.32	9.13		U 2			1 X	S						G G
99363	9.369	0.016	9.020	0.017		0.331	0.022	T	0.39	0.03	L		9.0603	0.0022	0.017	92		9.03	9.09		C			1	S						
99364	8.217	0.011	7.026	0.006		1.016	0.031	G	1.00	0.02	A		7.0908	0.0011	0.009	104		7.07	7.11		C			1							S
99365	7.953	0.006	7.498	0.006		0.429	0.008	T	0.50	0.01	L		7.5452	0.0021	0.029	177		7.50	7.59	0.16	P 1 A			1							S
99366	9.521	0.028	9.223	0.031		0.283	0.039	T	0.32	0.05	L		9.1502	0.0018	0.016	46		9.13	9.19					1							
99367	7.171	0.008	6.620	0.007	*	0.524	0.009	G	0.59	0.01	L	*	6.6844	0.0007	0.005	66	*	6.68	6.70		D	20101+0827	I 1	2 C	B	AB	79	7.619	0.052	3.94	0.22	S
99368	9.828	0.023	8.375	0.013		1.225	0.021	T	1.18	0.02	L		8.3828	0.0016	0.013	94		8.36	8.40		C			1							
99369	9.730	0.018	8.166	0.009		1.312	0.016	T	1.27	0.02	L		8.1798	0.0014	0.014	121		8.16	8.20		C			1							
99370	7.618	0.009	7.740	0.010		−0.106	0.012	T	−0.09	0.01	L		7.7420	0.0033	0.028	114		7.70	7.78	2.60	P 1 A			1							S
99371	7.191	0.005	7.026	0.006		0.158	0.007	T	0.17	0.01	L		7.0638	0.0009	0.008	127		7.05	7.08		C			1							S
99372	8.588	0.010	8.600	0.013		0.001	0.015	G	0.02	0.01	H		8.6333	0.0015	0.018	155		8.61	8.66		C			1							
99373	10.170	0.028	8.840	0.016		1.129	0.025	T	1.09	0.03	L		8.9038	0.0023	0.016	94		8.88	8.93		C			1							
99374	8.482	0.010	8.123	0.011		0.335	0.015	G	0.39	0.02	H		8.1797	0.0017	0.014	92		8.16	8.21		C			1							S
99375	9.130	0.013	8.786	0.014		0.348	0.015	G	0.41	0.02	H		8.8352	0.0016	0.012	94		8.81	8.85					1							
99376	8.225	0.008	7.494	0.007	*	0.669	0.001	G	0.73	0.00	H	*	7.5424	0.0010	0.012	136	*	7.53	7.56		D	20102+4357	I 1	2 C	A	AB	2	0.328	0.002	0.54	0.03	S
99377	8.261	0.008	8.042	0.009		0.033	0.037	G	0.03	0.04	H		7.9635	0.0017	0.022	157		7.93	8.00		U 2			1							
99378	7.946	0.009	7.570	0.009		0.385	0.015	G	0.45	0.02	H		7.6199	0.0008	0.008	109		7.61	7.64					1							S
99379	8.535	0.009	7.366	0.006		1.003	0.008	T	0.98	0.01	L		7.4249	0.0011	0.012	147		7.41	7.45			20103−7907	I 1	1							S
99380	9.474	0.020	8.883	0.018		0.552	0.020	T	0.62	0.02	L		8.9135	0.0027	0.022	99		8.88	8.94		C			1							
99381	9.761	0.021	7.803	0.009		1.659	0.019	T	2.21	0.09	O		7.6500	0.0138	0.119	103		7.45	7.82		U 2			1	S						
99382	9.823	0.020	9.431	0.022		0.360	0.015	G	0.42	0.02	H		9.5114	0.0022	0.027	152		9.46	9.55					1							G
99383	8.807	0.011	8.268	0.011		0.506	0.002	G	0.58	0.00	H		8.3160	0.0017	0.013	110		8.29	8.34					1							S
99384	10.355	0.034	8.965	0.018		1.176	0.030	T	1.14	0.03	L		9.0221	0.0019	0.016	71		9.00	9.05					1							
99385	10.551	0.054	9.093	0.028		1.296	0.021	G	1.50	0.01	A		9.0097	0.0024	0.016	62		8.98	9.04		C			1							
99386	8.628	0.012	8.058	0.011		0.544	0.021	G	0.62	0.02	H		8.1247	0.0019	0.014	99		8.10	8.15		C			1							S
99387	9.558	0.017	9.062	0.017		0.466	0.022	T	0.54	0.02	L		9.1155	0.0018	0.015	108		9.08	9.14		C			1							
99388	8.349	0.011	7.835	0.011	*	0.483	0.014	T	0.55	0.01	L	*	7.9473	0.0009	0.012	120	*	7.93	7.97		D	20104+4949	I 1	2 C	A	AB	117	6.640	0.005	1.67	0.02	S
99389											T		12.4747	0.0138	0.119	100		12.22	12.62		U 2			1 G							D
99390	8.535	0.013	8.274	0.014		0.215	0.002	G	0.24	0.00	H		8.3109	0.0019	0.018	79		8.28	8.33		C			1							
99391	7.967	0.008	7.339	0.008	*	0.579	0.008	T	0.65	0.01	L	*	7.4062	0.0012	0.008	65	*	7.39	7.42		D	20104−1923	H 1	2 C	B	AB	204	0.209	0.047	2.73	0.41	S
99392	8.361	0.010	7.926	0.011		0.435	0.015	G	0.50	0.02	H		7.9818	0.0014	0.013	87		7.96	8.02					1							S
99393	10.168	0.023	9.662	0.024	A	0.040	0.351	G	0.49	0.07	L	*	9.5130	0.0021	0.027	197	*	9.46	9.57		D	20105+2531	I 1	2 C	A	AB	11	5.570	0.006	1.48	0.03	G
99394	7.264	0.004	7.128	0.004	*	0.131	0.006	T	0.15	0.01	L	*	7.1503	0.0008	0.010	272	*	7.13	7.17		D	20105+2503	I 1	2 C	A	AB	348	0.574	0.008	2.67	0.03	S
99395	9.302	0.013	7.629	0.007		1.398	0.012	T	1.37	0.01	L		7.6217	0.0014	0.012	124		7.60	7.64					1							S
99396	8.985	0.014	8.047	0.010		0.828	0.013	T	0.85	0.01	L		8.0711	0.0014	0.011	91		8.05	8.09		C			1							S
99397	10.898	0.043	9.896	0.030		1.123	0.005	G	1.21	0.01	I		9.9290	0.0022	0.024	117		9.89	9.97					1							
99398	9.837	0.021	7.926	0.009		1.580	0.015	G	1.59	0.09	H		7.8618	0.0019	0.017	88		7.83	7.90					1							
99399	9.579	0.018	8.036	0.010		1.296	0.016	T	1.26	0.02	L		8.0550	0.0020	0.013	90		8.03	8.08					1							S
99400	7.175	0.003	7.190	0.004		−0.009	0.005	T	0.01	0.01	L		7.1982	0.0008	0.010	239		7.18	7.22					1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
99401	20 10 32.10	+30 16 25.3	7.81	H	302.633 729 81	+30.273 692 20		5.19	−0.58	−9.69	0.48	0.56	0.79	0.57	0.53	− 7	− 3	+ 4	+20	−14	− 5	−10	−24	+ 5	− 3	0	1.26
99402 H	20 10 32.24	+29 21 49.7	7.61	2 H	302.634 313 82	+29.363 812 21	A	2.96	3.58	−2.54	1.30	1.95	0.94	0.64	0.67	− 2	− 4	− 4	+ 0	+ 9	− 3	+ 6	−22	+12	−18	1	−0.54
99403	20 10 32.85	+52 23 06.0	7.43	2 H	302.636 862 24	+52.385 012 66		0.93	7.53	25.50	0.55	0.52	0.60	0.63	0.47	−12	− 1	+14	− 4	+ 5	+ 6	+ 4	−19	+ 7	− 8	0	1.53
99404	20 10 33.52	+26 54 14.9	5.51	H	302.639 686 95	+26.904 137 36		7.77	18.29	12.92	0.42	0.44	0.65	0.46	0.45	−20	+ 9	+ 0	+37	−20	−10	−20	−13	+ 9	−23	0	0.12
99405	20 10 33.70	+48 13 52.2	6.61	H	302.640 416 61	+48.231 180 19		4.72	4.47	−1.52	0.49	0.47	0.57	0.59	0.50	− 6	− 3	+ 0	+10	+16	−12	+14	−11	+25	− 4	3	0.11
99406	20 10 34.71	−46 12 15.7	8.35	2 H	302.644 641 73	−46.204 354 35		0.98	2.46	−5.63	1.10	0.59	1.13	1.54	0.96	−14	−33	+ 0	− 1	+ 1	+ 4	+ 4	+ 1	−10	−11	0	1.89
99407	20 10 34.77	−71 38 32.3	7.57	H	302.644 863 95	−71.642 304 84		3.50	−33.91	22.34	0.48	0.58	0.81	0.55	0.62	−23	− 6	− 7	+ 7	+ 3	− 3	+ 2	−11	−10	−28	0	−0.42
99408	20 10 34.81	−39 12 45.0	8.98	2 H	302.645 035 71	−39.212 508 81		0.32	−4.46	−25.36	1.16	0.66	1.30	1.51	1.14	− 7	−15	+ 1	−10	+ 1	+ 6	− 2	+10	− 4	+11	0	−0.02
99409	20 10 35.13	+33 38 02.7	7.71	G	302.646 366 07	+33.634 089 28		3.68	−9.10	−17.22	0.55	0.65	0.88	0.63	0.73	− 9	+ 0	+15	+21	+ 2	− 7	+ 5	− 5	− 4	− 2	0	0.51
99410	20 10 36.00	+09 23 24.9	9.00	G	302.650 013 74	+09.390 238 88		5.33	−9.92	−6.22	0.95	0.99	1.27	1.08	1.20	+36	− 8	−26	+19	+18	+23	+25	+61	−13	+35	4	3.44
∗99411 H	20 10 36.83	+34 52 04.0	8.33	H	302.653 442 30	+34.867 778 11	B	4.81	25.97	−31.24	2.36	3.01	2.98	2.28	2.30	+ 5	+ 7	+ 3	+ 3	+ 3	+ 1	+ 1	− 4	+ 3	−13	0	0.16
∗99412	20 10 36.69	+37 27 30.7	8.47	1 H	302.652 887 22	+37.458 523 92		0.54	−0.27	−4.90	0.56	0.60	0.77	0.66	0.69	−11	− 8	+ 6	+ 9	+ 4	− 6	+ 4	− 5	+ 9	− 7	0	−0.07
99414	20 10 37.81	+57 23 12.0	7.51	H	302.657 524 56	+57.386 653 96		14.43	59.48	23.03	0.51	0.48	0.55	0.57	0.50	− 3	+ 1	+ 4	+17	+10	−17	+11	− 6	+11	− 4	3	−0.93
99415	20 10 38.23	+33 51 20.6	7.65	1 H	302.659 281 09	+33.855 709 11		1.95	2.90	−1.88	0.52	0.58	0.77	0.60	0.62	−10	+ 0	+11	+34	+ 0	−15	+ 2	− 7	+ 9	− 8	0	−1.03
99416 H	20 10 38.34	+33 37 50.7	8.19	H	302.659 756 88	+33.630 753 91	B	2.83	−0.02	−2.04	1.02	1.23	1.42	1.09	1.24	− 9	− 2	− 9	+11	− 1	− 4	+ 3	−23	− 6	+ 3	3	−0.53
99417	20 10 39.07	−46 44 06.0	6.81	G	302.662 787 43	−46.735 005 59		5.51	42.51	−48.19	0.90	0.47	0.91	1.62	0.73	−22	− 2	−23	+18	+ 3	− 5	− 1	+ 3	+ 5	−38	0	0.23
99418	20 10 42.68	+48 55 08.9	9.89	H	302.677 825 34	+48.919 152 30		1.39	0.82	1.51	2.32	2.19	2.61	2.92	2.73	−11	−16	+ 3	+13	+10	−16	+ 8	+15	+ 8	−18	− 6	0	
99419	20 10 43.56	+37 27 55.2	8.96	H	302.681 480 46	+37.465 345 41		0.65	−1.55	−2.90	0.64	0.69	0.89	0.75	0.78	−12	−10	+ 7	+ 9	+ 4	− 6	+ 4	− 6	+ 9	− 9	1	−0.97
99420	20 10 44.26	+41 14 49.3	6.97	H	302.684 431 48	+41.247 020 79		8.51	43.24	1.48	0.47	0.49	0.61	0.55	0.67	− 0	+ 6	+15	− 1	+ 2	+ 8	− 3	−28	−12	− 5	4	1.74
99421 H	20 10 45.15	+20 29 12.7	7.45	H	302.688 120 06	+20.486 863 22	∗	0.75	−2.45	−7.71	1.30	1.14	1.03	1.13	0.94	+33	+ 9	−26	− 8	+ 2	+ 2	+ 6	+ 7	+ 7	+40	3	1.21
99422	20 10 46.46	+52 42 52.1	8.92	H	302.693 602 52	+52.714 477 43		0.94	1.08	−4.83	0.75	0.68	0.81	0.89	0.66	− 6	− 6	+13	+11	+ 5	+13	+ 2	−10	+15	− 1	0	1.07
99423	20 10 48.27	+23 57 54.0	8.89	H	302.701 131 38	+23.964 988 74		9.38	−171.58	62.85	0.62	0.75	1.24	0.64	0.73	− 4	− 9	+13	+17	−20	− 2	−13	−30	− 1	+12	0	0.46
99424	20 10 49.59	+47 48 47.2	8.22	2 H	302.706 631 57	+47.813 114 13		0.37	−4.31	−1.84	0.65	0.58	0.73	0.75	0.64	+ 1	+ 5	+ 0	+17	+17	−19	+19	− 5	+22	+ 3	0	−0.43
99425	20 10 50.05	+23 31 38.3	7.64	H	302.708 546 44	+23.527 305 53		3.12	14.29	12.44	0.58	0.58	0.89	0.67	0.70	+ 3	+ 2	− 9	+16	− 3	− 7	+ 8	−16	− 4	+39	0	1.04
99426	20 10 50.21	−43 36 10.6	7.83	G	302.709 198 48	−43.602 951 64		6.94	30.58	−14.69	0.95	0.57	1.00	1.48	1.02	+ 0	−20	− 4	+28	− 1	− 4	− 2	+26	+ 5	− 9	0	0.12
99427	20 10 52.27	+77 14 15.8	8.88	G	302.717 774 49	+77.237 726 18		59.53	56.81	512.01	0.69	0.66	0.72	0.79	0.81	+ 2	−18	+ 2	−23	+ 8	+ 0	+ 8	+ 6	+ 0	+ 5	0	0.90
99428	20 10 53.47	+43 05 50.4	7.80	H	302.722 785 08	+43.097 328 62		2.13	3.83	3.30	0.51	0.50	0.62	0.55	0.51	−11	− 7	+12	+10	− 1	−12	+ 1	− 1	+ 6	− 3	0	−0.29
∗99429	20 10 54.32	−38 10 56.6	10.07	H	302.726 340 98	−38.182 383 88		5.68	32.01	−80.77	1.44	0.83	1.69	1.94	1.43	+11	−24	− 6	+ 5	+15	−19	+19	+ 3	−22	+36	0	1.16
∗99430	20 10 54.31	−32 19 24.3	7.60	H	302.726 311 42	−32.323 412 17		5.51	1.25	−28.44	0.84	0.62	1.04	1.12	0.72	+31	−13	−19	+ 6	−21	+38	−16	−21	− 5	+20	0	−0.08
99431 H	20 10 54.39	+30 47 22.9	6.96	H	302.726 619 99	+30.789 689 66	A	1.34	5.78	−1.45	0.86	0.92	0.84	0.62	0.60	+17	− 8	− 3	+14	+ 3	−22	+ 2	−18	+12	−12	1	0.59
99432	20 10 54.62	+04 28 59.6	8.23	H	302.727 570 97	+04.483 230 74		3.83	−9.72	−30.25	0.92	0.84	1.45	1.21	1.26	+30	+25	−27	+35	+ 1	+42	− 2	+52	−28	+30	0	0.29
99433	20 10 55.60	+84 32 39.9	7.16	H	302.731 678 64	+84.544 416 55		6.04	32.60	43.05	0.55	0.50	0.58	0.64	0.62	− 3	−21	+ 1	+ 6	+13	− 5	+15	− 8	− 8	− 3	0	−0.26
99434 H	20 10 56.20	+22 37 18.6	9.89	H	302.734 171 79	+22.621 845 79	A	1.93	2.64	−0.76	1.71	1.91	1.96	1.89	1.80	+13	+ 3	− 3	+ 6	+ 3	− 2	− 1	+17	−13	+32	2	−0.41
99435	20 10 56.92	+68 16 20.0	6.84	H	302.737 186 62	+68.272 223 48		1.54	−8.14	−3.01	0.49	0.47	0.51	0.61	0.47	+ 6	− 8	+18	+ 7	+11	+ 9	+10	− 6	+ 0	+21	0	0.70
∗99436	20 10 57.04	−53 54 37.4	12.00	G	302.737 653 51	−53.910 380 54		4.55	176.44	−156.19	3.10	2.16	3.83	4.48	3.71	− 9	− 5	−16	−41	+27	−19	+25	−10	+ 7	+ 1	2	−1.25
∗99437	20 10 57.02	+35 57 11.5	7.79	H	302.737 600 42	+35.953 183 68		0.86	−2.89	−6.53	0.51	0.55	0.72	0.55	0.60	− 9	+ 4	+ 3	+ 9	− 3	− 6	− 2	+ 3	+ 9	+ 1	1	−0.96
99438	20 10 57.08	−30 13 04.4	12.18	G	302.737 827 69	−30.217 902 02		65.06	−345.60	−250.49	3.39	2.33	3.85	4.17	3.00	+46	−26	−13	+ 7	+11	+ 0	+13	+ 7	−12	+48	4	1.59
99439	20 10 58.28	+41 21 10.0	8.03	G	302.742 853 02	+41.352 766 41		−0.23	−5.24	−4.46	0.54	0.61	0.69	0.61	0.65	+ 8	− 8	+14	− 8	− 6	+ 2	− 4	−33	+ 0	+21	0	−0.63
99440	20 11 00.44	+32 50 44.3	9.31	H	302.751 851 57	+32.845 639 83		4.86	−7.90	5.76	0.74	0.84	1.17	0.85	0.88	− 7	−12	− 1	+11	− 6	−21	− 6	+ 8	+ 3	− 2	2	−0.55
∗99441	20 11 01.18	+36 42 02.1	9.16	H	302.754 919 88	+36.700 592 95	A	3.56	18.10	12.26	2.09	2.31	2.75	2.19	2.27	− 3	− 4	+ 3	+ 3	+ 3	+ 7	−11	+ 6	+ 0	+17	− 9	5	1.44
∗99442	20 11 01.06	−64 18 58.2	8.65	H	302.754 427 81	−64.316 166 71		0.40	2.18	−13.63	0.90	0.75	1.24	0.99	1.02	+ 7	−25	−12	+11	− 4	− 5	−12	− 5	+21	− 6	0	−2.36
99443	20 11 01.71	+42 07 36.4	8.28	H	302.757 126 89	+42.126 789 99		0.01	−4.24	−3.55	0.60	0.58	0.73	0.66	0.62	+ 2	−14	− 3	−10	− 1	+ 3	− 2	−26	+15	+12	1	−0.05
99444	20 11 03.27	+40 56 41.7	8.48	H	302.763 636 39	+40.944 911 51		1.11	−0.34	−2.47	0.61	0.68	0.81	0.76	0.73	− 1	− 9	+18	− 6	−10	−10	− 6	−18	− 7	+13	0	−0.11
99445	20 11 03.53	+21 08 04.2	6.24	H	302.764 696 64	+21.134 502 74		6.34	23.15	31.20	0.57	0.49	0.72	0.73	0.64	− 8	− 7	−20	− 5	− 4	+ 8	− 4	+ 7	− 4	+ 6	0	0.35
99446	20 11 03.58	+17 09 54.1	8.57	H	302.764 916 79	+17.165 026 02		2.63	−3.67	−13.78	0.84	0.85	1.13	1.03	1.15	+22	− 9	−15	−17	+ 2	+ 1	+ 1	+14	− 9	+29	0	−0.11
99447	20 11 04.28	−03 34 26.1	8.14	H	302.767 825 70	−03.573 927 35		1.38	16.32	19.83	1.20	0.69	1.29	1.56	1.01	+40	−27	−10	+19	+23	+14	+31	+49	− 6	+20	2	−0.05
99448	20 11 04.73	−43 28 27.9	7.69	G	302.769 708 96	−43.474 413 89		4.35	7.71	7.69	0.98	0.55	0.99	1.75	1.06	−19	− 9	− 2	+39	−18	− 7	−20	+32	− 2	−32	0	0.77
99449	20 11 05.07	+32 17 12.6	7.29	H	302.771 113 78	+32.286 834 94		2.05	6.58	9.30	0.46	0.50	0.72	0.53	0.51	− 3	+ 9	+ 8	+ 6	−11	−14	− 7	−12	− 6	+ 9	0	0.21
99450	20 11 05.95	−06 05 15.7	6.87	H	302.774 799 46	−06.087 689 56		3.05	6.53	3.34	0.93	0.48	1.04	1.06	0.91	+28	−28	−20	−25	−16	+18	−13	+16	−32	+25	2	1.10
99451	20 11 06.14	−49 06 17.9	8.76	G	302.775 591 38	−49.104 976 05		10.54	1.15	11.88	1.17	0.73	1.23	1.77	0.94	− 7	−23	−17	+26	−10	− 3	−11	+ 0	− 3	−18	6	−0.48
99452	20 11 06.33	+16 11 13.3	7.34	H	302.776 358 47	+16.187 029 43		48.83	−414.22	399.16	0.68	0.61	0.91	0.71	0.75	+13	−25	− 9	−13	+15	+ 3	+14	+25	+ 0	+17	0	−2.05
99453 H	20 11 07.41	−57 31 27.0	6.36	1 G	302.780 894 26	−57.524 154 76	A	7.21	12.17	−34.76	0.97	0.80	1.00	1.04	0.95	+49	−27	−21	+ 9	+26	− 4	+20	+ 6	+13	+33	0	0.03
99454	20 11 08.36	+39 43 50.2	8.82	H	302.784 818 76	+39.730 605 18		12.01	−47.60	−93.58	0.66	0.72	0.90	0.66	0.76	− 6	− 1	+25	+ 6	+ 6	− 3	+10	−14	−10	+ 7	2	−1.44
99455	20 11 08.93	−16 58 06.2	8.37	H	302.787 211 10	−16.968 400 27		1.44	−10.98	−13.02	1.05	0.77	1.26	1.33	0.96	+11	− 9	−30	+ 2	+ 8	+41	+24	+39	+ 0	+11	0	−0.59
99456	20 11 09.64	+06 20 54.9	7.49	2 H	302.790 159 87	+06.348 578 25		2.81	−0.85	9.27	0.98	0.89	1.34	1.62	1.50	+31	+18	− 8	+42	+11	+52	+11	+50	+10	+47	5	0.65
99457	20 11 10.08	−08 50 32.4	6.39	2 H	302.791 985 47	−08.842 339 32		0.03	1.39	−2.07	0.86	0.62	0.95	1.03	0.80	+ 5	−14	−35	−17	+16	+22	+28	+26	+ 0	+ 3	0	0.36
99458	20 11 10.27	−04 33 41.3	9.38	H	302.792 785 40	−04.561 468 27		2.41	4.79	1.78	1.45	0.82	1.56	2.14	1.40	+29	−24	−15	+16	+10	+12	+17	+42	− 8	+15	0	1.04
99459	20 11 10.76	+00 33 39.2	8.55	H	302.794 831 04	+00.560 880 76		0.10	−3.82	−6.53	1.13	0.68	1.31	1.56	0.79	+29	−15	− 4	+26	+35	+15	+32	+27	− 3	+22	0	1.50
99460	20 11 11.24	−20 15 54.3	7.78	H	302.796 842 30	−20.265 085 99		3.83	28.34	−5.52	0.96	0.65	1.17	1.12	0.83	+ 8	−17	−42	−18	−14	+32	+ 2	+15	−27	+ 1	0	−0.52
99461	20 11 11.61	−36 05 50.6	5.32	G	302.798 367 63	−36.097 384 23		165.24	456.89	−1574.91	0.74	0.43	0.90	0.89	0.61	+10	−43	+ 1	+ 2	+ 7	+34	+ 6	+ 3	+ 5	+23	0	1.20
99462	20 11 12.97	+19 21 54.5	7.52	H	302.804 026 87	+19.365 138 32		14.59	−9.83	−28.07	0.59	0.54	0.86	0.73	0.76	−16	+ 4	−20	− 9	+ 5	+14	+ 6	+14	+ 1	− 3	0	0.24
99463 H	20 11 13.78	−39 25 43.7	10.40	H	302.807 415 05	−39.428 812 25	∗	4.54	−0.41	−20.60	5.97	2.83	2.66	2.86	2.44	−54	−16	+ 5	− 1	+ 5	+ 2	+ 8	+ 5	−24	+40	2	−0.86
99464	20 11 15.39	+16 51 10.8	7.57	H	302.814 135 80	+16.852 990 73		13.35	74.92	−9.69	0.67	0.62	0.89	0.81	0.77	+16	− 9	−16	− 9	+ 3	+11	+ 5	+12	−15	+17	0	−1.08
99465	20 11 15.79	−43 39 44.2	6.54	G	302.815 782 07	−43.662 282 71		4.80	6.89	−4.26	0.82	0.48	0.87	1.28	0.87	− 8	−18	− 6	+25	−11	− 1	−13	+20	+ 1	−21	0	1.11
99466	20 11 16.22	−76 36 54.0	8.83	H	302.817 588 86	−76.614 999 51		2.43	17.61	−40.40	2.32	2.67	3.53	2.62	3.11	− 7	− 5	− 3	+ 1	− 2	− 3	− 4	−22	−13	−14	0	
99467	20 11 16.30	+26 08 20.1	8.79	H	302.817 896 76	+26.138 917 54		9.29	18.11	−66.34	0.79	0.74	1.17	0.85	0.86	−33	+ 3	+ 6	+15	−21	+ 5	−25	− 4	− 8	−42	1	0.32
99468	20 11 16.61	−17 49 20.1	9.45	H	302.819 199 25	−17.822 243 98		3.94	20.89	−51.05	1.32	0.89	1.46	1.84	1.20	+16	−27	−26	−22	+ 5	+19	+14	+13	+ 7	−10	0	1.40
99469	20 11 16.93	+41 57 33.0	8.75	G	302.820 556 88	+41.959 154 48		0.97	−3.37	−3.60	0.62	0.70	0.82	0.70	0.76	+ 7	+ 3	+ 3	− 5	− 3	+10	+ 0	−30	+ 5	+21	0	−1.84
∗99470	20 11 17.04	−00 08 23.3	7.94	G	302.820 981 07	−00.139 802 81		1.75	−17.14	−9.07	1.04	0.61	1.25	1.61	0.77	+39	−10	−15	+30	+16	+44	+25	+32	− 4	+27	0	0.87
∗99471	20 11 17.01	+12 24 12.8	8.81	H	302.820 862 36	+12.403 566 34		0.49	−0.01	−10.20	0.95	0.88	1.23	1.02	1.12	+31	+ 4	−16	+ 0	+38	+10	+40	+48	+ 1	+41	0	1.26
99472	20 11 17.43	+21 21 07.3	7.95	H	302.822 612 61	+21.352 030 22		2.51	14.88	4.99	0.74	0.61	0.94	0.90	0.79	+ 4	−23	−10	− 8	+ 6	+ 7	− 2	+14	+14	+26	0	0.82
∗99473	20 11 18.26	−00 49 17.3	3.24	G	302.826 103 27	−00.821 475 69	+	11.36	35.48	6.05	1.33	0.51	0.92	1.03	0.60	+45	+ 9	+ 9	+32	+23	+26	− 5	+15	−11	+ 1	0	0.82
∗99474	20 11 18.25	−15 29 49.3	9.49	H	302.826 056 60	−15.497 020 18		4.69	21.73	−33.32	1.44	0.98	1.55	2.13	1.50	+ 9	−19	−17	−16	+ 9	+20	+15	+18	+ 1	+ 0	0	−0.78
99475	20 11 18.27	+69 51 16.4	9.87	H	302.826 126 13	+69.854 543 25		2.54	2.03	−6.82	0.84	0.81	0.91	1.06	0.85	+ 5	+ 4	+20	− 7	− 2	−22	+ 1	+ 5	− 4	+19	1	0.89
99476	20 11 18.84	−00 07 35.0	7.10	H	302.828 514 14	−00.126 396 86		6.75	25.96	−26.54	0.92	0.55	1.13	1.41	0.70	+32	−13	−12	+25	+18	+44	+25	+31	−10	+19	5	2.62
99477	20 11 20.59	+08 43 01.8	7.01	1 H	302.835 795 05	+08.717 167 87		2.23	4.56	−8.53	0.70	0.76	1.00	0.78	0.85	+35	−19	−41	+ 9	+13	+36	+37	+64	−19	+20	0	1.69
99478	20 11 20.94	−28 37 46.3	9.50	H	302.837 235 79	−28.629 529 82		8.41	15.32	−35.58	1.36	0.88	1.49	1.59	1.25	+37	−15	+ 4	− 5	+19	− 1	+17	+12	+ 3	+62	0	0.80
99479	20 11 21.02	+21 52 29.9	6.24	H	302.837 583 69	+21.874 965 44		0.11	−4.71	−11.81	0.58	0.47	0.75	0.70	0.58	− 5	−20	− 9	−12	+10	+11	+ 7	+ 1	+ 8	+19	0	1.04
99480	20 11 22.79	−63 56 25.8	8.17	H	302.844 954 54	−63.940 498 56		12.73	78.37	22.16	0.68	0.60	0.95	0.75	0.81	+11	−16	− 4	+11	− 3	+ 0	− 6	−12	+ 9	+ 7	0	−1.78
99481	20 11 23.29	−68 37 33.6	8.55	H	302.847 052 44	−68.626 010 83		4.57	−2.84	18.49	0.47	0.70	1.02	0.55	0.85	−45	− 5	− 1	− 4	+25	− 7	+25	−18	+ 7	−43	1	−1.31
99482	20 11 23.58	−07 12 55.2	8.08	H	302.848 259 50	−07.215 333 69		2.68	13.32	−4.52	1.17	0.63	1.48	1.47	1.46	+27	− 5	−15	−26	−10	+11	−17	+21	−50	+31	0	−0.72
99483	20 11 24.07	+05 36 19.9	11.11	G	302.850 279 43	+05.605 537 89		13.49	1.30	0.26	7.81	6.44	6.66	21.36	25.13	+37	−65	−59	−76	−51	+61	−43	−73	+53	+81	0	0.70
99484	20 11 24.95	−21 57 02.3	8.34	G	302.853 959 73	−21.950 640 51		8.93	37.24	20.85	1.01	0.77	1.19	1.38	1.42	+30	− 4	+ 5	− 4	−18	− 1	−17	−14	−37	+40	0	1.31
99485	20 11 25.36	−46 53 28.9	10.06	G	302.855 653 71	−46.891 352 34		7.81	−25.92	−48.14	1.80	0.95	1.84	3.54	1.88	−27	−17	−15	+20	+ 0	−12	− 6	+ 6	− 3	−58	2	0.46
99486	20 11 25.71	+38 49 03.3	7.88	H	302.857 124 03	+38.817 577 91		2.94	10.45	−3.36	0.60	0.59	0.75	0.76	0.64	−16	−13	+14	+21	+ 0	+ 2	+ 5	−21	− 2	− 2	0	−1.00
99487	20 11 25.87	+29 10 00.9	7.20	1 H	302.857 795 16	+29.166 924 50		1.52	−3.02	−7.58	0.38	0.50	0.75	0.46	0.53	−15	−13	+ 3	+13	+ 6	− 1	+ 8	−17	− 4	− 5	0	0.75
99488	20 11 26.68	+06 04 18.7	7.41	H	302.861 160 24	+06.071 862 69		5.11	−18.96	−30.53	0.97	0.92	1.34	1.61	1.58	+37	+10	−19	+38	+10	+45	+12	+52	− 4	+49	0	−0.45
99489	20 11 26.76	−28 41 41.1	7.49	H	302.861 494 88	−28.694 754 61		2.39	−1.95	−49.65	0.87	0.61	0.98	1.02	0.79	+45	−27	−17	− 6	− 1	− 3	+ 0	−12	+ 2	+58	2	−0.31
99490	20 11 26.85	+46 55 06.3	7.88	H	302.861 856 64	+46.918 429 72		2.27	22.59	18.40	0.66	0.58	0.75	0.75	0.62	− 5	+13	+11	−14	+15	− 6	+17	−14	+24	− 3	0	1.67
99491 H	20 11 26.91	−15 51 54.5	10.47	H	302.862 107 35	−15.865 131 94	A	3.92	6.60	−21.74	6.43	6.98	5.45	5.44	4.40	+21	−25	−27	+ 3	+ 6	+19	+16	+30	−14	+16	2	0.06
99492	20 11 28.02	+01 39 34.0	11.52	G	302.866 763 65	+01.659 437 89		−2.70	5.50	5.78	2.74	1.69	3.51	4.17	2.44	+46	+19	− 2	+45	− 2	+31	+ 3	+11	− 7	+52	2	1.53
99493	20 11 28.69	−24 13 36.6	8.36	H	302.869 544 39	−24.226 831 63		2.58	14.73	−27.21	0.88	0.68	1.06	1.10	1.00	+35	−22	−18	+ 4	+ 4	+ 4	+37	+12	+21	− 4	+40	0	−0.07
99494	20 11 30.11	+18 28 49.5	8.28	G	302.875 477 33	+18.480 424 00		10.44	10.93	−50.41	0.69	0.66	1.02	0.90	0.95	−15	−13	+10	+ 5	− 2	+ 3	− 4	+15	+ 1	− 3	0	0.53
99495	20 11 30.17	+01 04 07.8	7.83	H	302.875 692 67	+01.068 828 68		1.82	26.55	2.07	1.03	0.61	1.22	1.30	0.73	+36	−22	− 8	+38	+19	+ 4	+21	+27	− 8	+35	0	0.25
99496	20 11 30.72	−64 37 14.1	8.76	G	302.877 979 84	−64.620 578 72		5.28	1.04	44.50	0.82	0.77	1.25	0.90	0.95	−17	−10	− 7	+16	− 5	− 7	− 6	+16	+11	−45	0	−1.57
99497	20 11 32.72	+21 47 45.8	8.65	H	302.886 344 37	+21.796 048 52		3.33	−1.08	−11.88	1.09	0.80	1.25	1.33	1.02	+ 7	−15	+ 9	+15	+23	− 6	+21	+19	+ 8	+35	0	−0.06
99498	20 11 32.86	+33 58 33.8	7.75	H	302.886 902 61	+33.976 051 21		15.06	−31.64	41.64	0.58	0.62	0.83	0.67	0.71	−17	+ 3	− 2	+31	+ 3	−21	+ 4	−13	+15	−17	0	1.43
99499	20 11 34.22	−27 19 41.6	9.21	H	302.892 566 55	−27.328 232

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
99401	8.123	0.006	7.839	0.008		0.270	0.009	T	0.30	0.01	L	7.8797	0.0014	0.014	180		7.86	7.91					1							S
99402	7.473	0.005	7.584	0.006	*	−0.096	0.007	T	−0.08	0.01	L *	7.5802	0.0018	0.027	229	*	7.54	7.62		U 2	20105+2922	H 1	2 C C	AB	275	0.349	0.037	3.88	0.19	S Y
99403	9.520	0.017	7.661	0.008		1.578	0.015	T	2.37	0.06	O	7.4756	0.0112	0.085	111		7.34	7.61		U 2			1 S							S
99404	5.616	0.002	5.527	0.002		0.087	0.003	T	0.10	0.00	L	5.5511	0.0005	0.006	165		5.54	5.56		C			1							S P
99405	8.143	0.009	6.746	0.005		1.181	0.008	T	1.12	0.04	D	6.7791	0.0010	0.009	118		6.76	6.80		C			1							S
99406	10.541	0.045	8.557	0.016		1.681	0.039	T	2.17	0.09	O	8.4146	0.0033	0.022	80		8.38	8.46		U	20106−4612	I 1	1 S							
99407	9.228	0.012	7.709	0.006		1.277	0.011	T	1.24	0.01	L	7.7289	0.0014	0.015	180		7.71	7.76					1							S
99408	11.123	0.057	9.181	0.018		1.646	0.049	T	2.06	0.17	O	9.0551	0.0233	0.141	112		8.86	9.18		U 2 C			1							
99409	7.843	0.007	7.750	0.008		0.075	0.009	G	0.06	0.01	L	7.7920	0.0015	0.016	147		7.77	7.81		D	20106+3338	I 2	1							S
99410	9.497	0.022	9.065	0.023		0.498	0.015	G	0.57	0.02	H	9.1030	0.0017	0.020	77		9.07	9.14		C			1							
99411	8.998	0.019	8.321	0.017	*	0.626	0.021	T	0.69	0.02	L *	8.4623	0.0021	0.020	135	*	8.43	8.50		D	20106+3452	I 1	2 C B	BC	172	4.127	0.007	0.51	0.02	G
99412	8.536	0.010	8.490	0.012		0.070	0.015	G	0.08	0.02	H	8.4967	0.0014	0.019	134		8.47	8.52		U			1							
99414	8.010	0.008	7.557	0.007		0.453	0.015	G	0.52	0.02	H	7.6091	0.0007	0.010	116		7.59	7.63					1							S
99415	7.565	0.008	7.628	0.009		−0.045	0.009	G	−0.02	0.01	H	7.6389	0.0022	0.018	145		7.61	7.67	1.44	P 1 A			1							S
99416	8.033	0.015	7.967	0.021	*	−0.007	0.009	G	0.01	0.01	R *	8.1927	0.0016	0.017	146	*	8.16	8.22		D	20106+3338	I 2	2 C A	BC	184	1.769	0.006	1.39	0.03	
99417	8.309	0.013	6.953	0.008		1.170	0.015	G	1.13	0.01	H	6.9830	0.0011	0.007	85		6.97	6.99		C	20107−4644	I 1	1 S							S
99418	10.151	0.028	9.958	0.036		0.185	0.043	T	0.20	0.05	L	9.9522	0.0029	0.023	101		9.91	10.00		D			1 X S							G
99419	9.065	0.013	8.998	0.016		0.067	0.019	T	0.08	0.02	L	8.9867	0.0018	0.017	137		8.96	9.01		C			1							
99420	7.226	0.005	6.993	0.006		0.222	0.007	T	0.24	0.01	L	7.0331	0.0008	0.007	127		7.02	7.05					1 G							S
99421	7.352	0.006	7.445	0.008	*	−0.080	0.009	T	−0.06	0.01	L *	7.4279	0.0013	0.011	108	*	7.41	7.45		D	20108+2029	H 1	2 C A	AB	231	0.266	0.013	1.86	0.14	S
99422	11.081	0.062	9.155	0.019		1.599	0.052	T	1.62	0.05	L	9.0315	0.0022	0.024	118		8.99	9.07					1							
99423	9.479	0.017	8.972	0.017		0.487	0.018	T	0.56	0.02	L	8.9980	0.0016	0.019	174		8.96	9.04					1							
99424	8.270	0.008	8.228	0.010		0.058	0.010	G	0.07	0.01	H	8.2420	0.0020	0.021	117		8.21	8.29		U 2 C			1							
99425	7.797	0.008	7.668	0.008		0.125	0.011	T	0.14	0.01	L	7.6931	0.0011	0.010	122		7.67	7.71					1							S
99426	8.139	0.010	7.871	0.009		0.261	0.003	G	0.27	0.02	A	7.9029	0.0019	0.013	96		7.88	7.92					1							S
99427	10.640	0.047	9.088	0.022		1.320	0.001	G	1.53	0.00	I	8.9668	0.0019	0.014	107		8.94	8.99		C			1							
99428	7.767	0.006	7.806	0.008		0.000	0.015	G	0.02	0.01	H	7.8094	0.0011	0.012	137		7.79	7.83					1							S
99429	10.955	0.046	10.098	0.034		0.752	0.044	T	0.80	0.03	L	10.2094	0.0025	0.030	109		10.16	10.27					1							G
99430	7.725	0.007	7.619	0.009		0.096	0.010	T	0.11	0.01	L	7.6387	0.0015	0.011	74		7.62	7.66		C	20109−3219	I 1	1							S
99431	6.817	0.003	6.937	0.005	*	−0.104	0.005	T	−0.09	0.01	L *	6.9256	0.0009	0.010	179	*	6.91	6.94		D	20109+3047	H 1	2 C A	AB	72	0.341	0.013	3.04	0.07	S
99432	9.870	0.023	8.350	0.012		1.278	0.020	T	1.24	0.02	L	8.3874	0.0017	0.013	88		8.37	8.42		C			1							
99433	7.592	0.007	7.203	0.007		0.385	0.015	G	0.45	0.02	H	7.2536	0.0010	0.009	110		7.24	7.27					1							S
99434	10.088	0.031	9.902	0.039	*	0.178	0.047	T	0.20	0.05	L *	9.9468	0.0025	0.023	89	*	9.90	9.98		D	20109+2237	H 1	2 C A	AB	192	0.491	0.019	2.44	0.09	G
99435	6.993	0.005	6.853	0.005		0.127	0.007	T	0.14	0.01	L	6.8888	0.0007	0.007	113		6.88	6.90		C			1							S
99436						1.150	0.020	G	1.25	0.04	I	12.1860	0.0046	0.053	96		12.08	12.29					1							G
99437	7.882	0.008	7.796	0.008		0.084	0.011	T	0.10	0.01	L	7.8210	0.0010	0.012	152		7.80	7.84		C			1							S
99438						0.070	0.040	G	0.08	0.04	R	12.3134	0.0089	0.074	69		12.19	12.42					1							D
99439	8.156	0.008	8.054	0.009		0.135	0.006	G	0.15	0.01	H	8.0761	0.0013	0.013	128		8.06	8.10					1							
99440	9.794	0.018	9.366	0.019		0.418	0.021	T	0.48	0.02	L	9.4084	0.0029	0.029	156		9.36	9.47					1							G
99441	10.991	0.078	9.271	0.027	A	1.390	0.065	G	1.36	0.08	I	9.3077	0.0847	0.052	145	A	9.22	9.37		D	20110+3642	I 1	2 C B	AB	290	22.974	0.045	0.38	0.16	
99442	9.907	0.020	8.738	0.013		1.003	0.019	T	0.98	0.01	L	8.8116	0.0023	0.022	116		8.77	8.85		C			1							
99443	8.580	0.010	8.316	0.010		0.307	0.008	G	0.35	0.01	H	8.3540	0.0014	0.012	120		8.34	8.38		C			1							
99444	10.469	0.035	8.634	0.014		1.526	0.030	T	1.57	0.04	L	8.6001	0.0012	0.015	114		8.57	8.62		C			1							
99445	7.364	0.006	6.337	0.004		0.894	0.005	T	0.90	0.00	L	6.3950	0.0006	0.007	102		6.38	6.41		D			1							S
99446	10.223	0.036	8.730	0.018		1.256	0.032	T	1.21	0.03	L	8.7356	0.0017	0.016	86		8.71	8.76		C			1							
99447	9.762	0.021	8.268	0.012		1.257	0.019	T	1.22	0.02	L	8.2960	0.0011	0.012	95		8.27	8.32		C			1							
99448	7.971	0.009	7.733	0.011		0.242	0.012	G	0.29	0.02	A	7.7639	0.0014	0.011	95		7.74	7.78		C			1							S
99449	7.310	0.005	7.290	0.006		0.023	0.007	T	0.04	0.01	L	7.3030	0.0012	0.011	148		7.28	7.32					1							S
99450	6.905	0.004	6.875	0.006		0.031	0.001	G	0.05	0.00	H	6.8871	0.0008	0.007	100		6.87	6.90		C			1							S
99451	9.290	0.017	8.817	0.017		0.485	0.015	G	0.56	0.02	H	8.8643	0.0025	0.021	101		8.83	8.89					1							
99452	8.393	0.012	7.426	0.009		0.830	0.010	G	0.87	0.01	H	7.4826	0.0009	0.011	95		7.46	7.51			20111+1610	I 1	1							S
99453	6.451	0.004	6.393	0.004	*	0.057	0.003	G	0.07	0.00	H *	6.3935	0.0014	0.012	124	*	6.38	6.41	0.58	P 1 A	20111−5731	I 1	2 C A	AB	269	0.568	0.003	1.20	0.01	S
99454	9.495	0.016	8.880	0.015		0.570	0.016	T	0.64	0.01	L	8.9408	0.0012	0.014	130		8.92	8.97		C			1							
99455	10.026	0.033	8.498	0.017		1.284	0.029	T	1.24	0.03	L	8.5275	0.0016	0.010	59		8.51	8.55		C			1							
99456	9.637	0.022	7.732	0.009		1.616	0.020	T	2.56	0.05	O	7.4986	0.0116	0.058	68		7.39	7.65		U 2			1 S							
99457	6.244	0.005	6.428	0.006		−0.135	0.054	G	0.06	0.06	A	6.4075	0.0024	0.025	61		6.35	6.43		U 2			1							S
99458	10.740	0.050	9.494	0.028		1.063	0.045	T	1.03	0.04	L	9.5448	0.0022	0.023	112		9.50	9.59		C			1							
99459	8.690	0.014	8.548	0.017		0.137	0.021	T	0.15	0.02	L	8.5964	0.0023	0.014	67		8.58	8.62		C			1							
99460	9.220	0.023	7.904	0.014		1.118	0.021	T	1.08	0.02	L	7.9500	0.0016	0.010	58		7.93	7.97					1							S
99461						0.868	0.018	G	0.98	0.02	A	5.4432	0.0005	0.004	97		5.43	5.45		C	20112−3605	I 1	1							S
99462	8.010	0.009	7.568	0.008		0.441	0.015	G	0.51	0.02	H	7.6165	0.0011	0.011	116		7.60	7.64					1							S
99463	10.984	0.052	10.521	0.055	*	0.450	0.060	T	0.52	0.06	L *	10.4981	0.0033	0.031	95	*	10.44	10.55		D	20112−3926	H 1	2 C A	AB	34	0.250	0.014	0.20	0.13	G
99464	8.051	0.008	7.620	0.008		0.417	0.004	G	0.48	0.00	H	7.6682	0.0014	0.010	93		7.65	7.69		C			1							S
99465	7.649	0.008	6.640	0.005		0.860	0.036	G	0.89	0.00	A	6.6985	0.0007	0.008	103		6.68	6.71					1							S
99466	10.470	0.028	8.943	0.014		1.283	0.025	T	1.24	0.03	L	8.9846	0.0025	0.021	144		8.95	9.03					1 X							
99467	9.505	0.014	8.844	0.013		0.584	0.015	G	0.66	0.01	H	8.9118	0.0015	0.021	180		8.88	8.94					1							G
99468	11.010	0.068	9.582	0.033		1.205	0.059	T	1.16	0.06	L	9.6179	0.0021	0.020	56		9.57	9.65		C			1							
99469	8.990	0.011	8.806	0.013		0.220	0.015	G	0.24	0.02	H	8.8287	0.0015	0.017	126		8.80	8.86		C			1							
99470	8.233	0.012	7.973	0.014		0.260	0.007	G	0.29	0.01	H	8.0083	0.0014	0.009	73		7.99	8.03		C	20113−0008	I 2	1							S
99471	8.774	0.011	8.794	0.015		−0.014	0.017	T	0.01	0.02	L	8.8110	0.0026	0.019	99		8.78	8.84					1							
99472	7.929	0.008	7.968	0.013		−0.031	0.014	T	−0.01	0.01	L	7.9523	0.0017	0.013	99		7.93	7.99			20113+2121	I 1	1 S							
99473	3.185	0.002	3.237	0.002		−0.066	0.008	G	−0.06	0.02	A	3.2245	0.0004	0.004	81		3.22	3.23			20113−0049	I 1	1 O							S
99474	10.128	0.034	9.559	0.033		0.536	0.035	T	0.61	0.04	L	9.6109	0.0033	0.019	58		9.58	9.65		C	20113−1530	I 1	1							
99475	12.076	0.153	10.078	0.039		0.552	0.072	G	1.85	0.12	S	9.9591	0.0048	0.042	96		9.90	10.02		R			1 S							G
99476	7.632	0.008	7.155	0.009		0.449	0.011	T	0.52	0.01	L	7.2012	0.0012	0.008	76		7.19	7.22			20113−0008	I 2	1 S							S
99477	9.143	0.017	7.197	0.007		1.650	0.015	T	1.92	0.05	O	7.0942	0.0016	0.012	78		7.07	7.12		M			1							S
99478	10.088	0.027	9.567	0.026		0.498	0.028	T	0.57	0.03	L	9.6079	0.0028	0.019	86		9.57	9.65		C			1							
99479	6.206	0.004	6.264	0.004		−0.048	0.005	T	0.05	0.03	C	6.2625	0.0016	0.010	94		6.24	6.28					1							S
99480	8.670	0.010	8.221	0.010		0.475	0.001	G	0.55	0.00	H	8.2786	0.0015	0.016	124		8.25	8.30					1							S
99481	8.542	0.006	8.545	0.007		−0.001	0.008	T	0.02	0.01	L	8.5546	0.0012	0.019	319		8.52	8.59					1							
99482	9.535	0.020	8.214	0.012		1.122	0.018	T	1.08	0.02	L	8.2480	0.0016	0.011	88		8.23	8.27		C			1							
99483						1.602	0.020	G	1.58	0.02	J	11.2439	0.0120	0.047	20		11.16	11.32					1							G
99484	8.830	0.019	8.373	0.018		0.446	0.015	G	0.52	0.02	H	8.4325	0.0019	0.012	55		8.41	8.45					1							S
99485	10.807	0.054	10.056	0.044		0.590	0.020	G	0.66	0.02	H	10.2020	0.0027	0.024	78		10.17	10.25		C			1							
99486	9.789	0.021	8.030	0.010		1.450	0.020	G	1.45	0.03	H	8.0130	0.0011	0.015	130		7.99	8.04					1							
99487	9.316	0.011	7.385	0.005		1.637	0.010	T	1.85	0.03	O	7.2922	0.0011	0.015	222		7.27	7.32		U	20114+2910	I 1	1							S
99488	9.339	0.020	7.565	0.009		1.478	0.017	T	1.49	0.03	L	7.5397	0.0022	0.010	71		7.52	7.55					1							S
99489	9.217	0.015	7.609	0.008		1.347	0.013	T	1.31	0.01	L	7.6398	0.0015	0.011	92		7.62	7.66		C			1							S
99490	9.130	0.017	8.027	0.012		0.951	0.016	T	0.94	0.01	L	8.0424	0.0018	0.013	112		8.02	8.06		C			1							S
99491	11.250	0.086	10.683	0.087	*	0.473	0.071	G	0.54	0.07	R *	10.5744	0.0045	0.024	51	*	10.54	10.62		D	20114−1552	H 1	2 C B	AB	16	0.442	0.033	1.92	0.20	G
99492						1.588	0.020	G	1.87	0.17	K	11.6794	0.0040	0.036	106		11.60	11.74					1							D
99493	8.732	0.016	8.393	0.016		0.322	0.021	T	0.37	0.03	L	8.4408	0.0019	0.018	71		8.41	8.47					1							S
99494	8.866	0.014	8.325	0.013		0.486	0.020	G	0.56	0.02	H	8.3842	0.0015	0.015	111		8.35	8.41		C			1							
99495	9.271	0.020	7.950	0.012		1.122	0.018	T	1.08	0.02	L	7.9990	0.0013	0.010	81		7.98	8.01		C			1							
99496	9.416	0.014	8.789	0.013		0.579	0.014	T	0.65	0.01	L	8.8795	0.0021	0.021	121		8.85	8.92					1							
99497	10.107	0.032	8.797	0.018		1.113	0.029	T	1.08	0.03	L	8.8139	0.0029	0.020	88		8.77	8.85					1							
99498	8.334	0.010	7.810	0.009		0.501	0.010	T	0.57	0.01	L	7.8576	0.0012	0.014	143		7.83	7.88		C			1 S							S
99499	10.028	0.026	9.307	0.022		0.648	0.026	T	0.71	0.02	L	9.3425	0.0014	0.015	108		9.32	9.37		C			1							
99500	6.327	0.004	5.766	0.004		0.530	0.004	T	0.60	0.00	L	5.8187	0.0007	0.006	103		5.81	5.83		C	20115+6205	I 1	1 G							S

$20^h\ 11^m\ 35^s$ - $20^h\ 12^m\ 45^s$ 2000

99501 - 99600

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
99501	20 11 35.33	−20 12 59.8	8.55	H	302.897 227 54	−20.216 606 84		1.43	−7.52	−18.23	1.13	0.76	1.22	1.47	1.13	+ 8	−15	−19	− 4	+ 5	+19	+ 9	+22	− 5	+12		0	0.30
99502	20 11 35.94	+47 07 06.3	8.98	H	302.899 737 18	+47.118 426 38		2.20	11.89	−0.48	0.84	0.73	0.95	0.92	0.74	− 9	+ 5	+19	−12	+14	− 8	+16	− 9	+25	− 2		0	0.22
99503	20 11 37.47	+15 37 14.6	10.20	3 H	302.906 104 47	+15.620 718 88		−3.25	9.39	−0.07	1.51	1.39	2.09	1.98	1.84	+26	−27	− 9	− 1	− 3	− 8	+ 0	+11	− 7	+17		0	2.77
99504 H	20 11 37.68	+38 52 47.1	7.52	H	302.906 982 98	+38.879 754 50	A	0.09	−2.00	−6.77	0.83	0.87	0.98	0.98	0.88	− 9	−14	+14	+16	+ 1	+ 3	+ 1	+10	+ 6	+ 4		2	0.42
99505	20 11 38.16	+14 38 56.1	7.57	H	302.909 012 77	+14.648 906 24		7.41	38.81	−8.67	0.70	0.69	1.06	0.76	0.79	+27	−30	−40	+13	+12	+ 2	+19	+34	−15	+12		0	−1.28
99506	20 11 39.35	+63 31 38.7	7.71	H	302.913 972 07	+63.527 420 41		3.91	2.27	−6.58	0.53	0.48	0.55	0.53	0.50	− 1	+ 2	+ 4	− 6	+23	+ 1	+24	− 6	+ 9	+16		3	1.44
99507	20 11 39.66	−04 35 35.8	10.23	H	302.915 250 03	−04.593 287 08	B	0.76	42.14	−33.72	15.39	6.90	10.22	19.15	10.64	+31	−27	+ 2	+16	+14	+ 9	+13	+19	+ 2	+32		16	1.91
99508	20 11 39.99	−04 35 24.3	9.36	H	302.916 606 83	−04.590 083 77	A	−0.14	−4.64	−17.19	5.45	2.88	4.65	7.56	4.78	+38	−21	+ 2	+22	+15	+ 9	+14	+28	+ 2	+33		16	1.91
99509	20 11 43.50	−66 49 49.3	9.46	H	302.931 248 83	−66.830 360 77		13.85	−48.92	−64.14	1.10	1.09	1.53	1.28	1.19	+ 8	−25	−12	+44	+19	−17	+10	+17	+ 5	−11		0	0.96
99510	20 11 44.94	+19 21 21.8	8.22	H	302.937 255 81	+19.356 048 12		4.22	9.17	14.96	0.71	0.62	1.06	0.89	0.84	−16	+ 1	− 7	− 7	+10	+36	+12	+ 7	+ 3	+ 2		0	−0.55
*99511	20 11 46.32	−80 04 35.7	12.06	G	302.942 988 76	−80.076 570 37		7.13	11.78	−276.06	1.68	1.77	2.38	1.94	2.15	− 8	−17	− 3	+ 4	+11	+ 3	+ 8	−21	− 5	−23		0	0.24
*99512	20 11 45.83	−59 56 12.7	8.42	3 H	302.940 956 68	−59.936 869 45		1.64	28.50	−9.77	0.72	0.74	1.19	0.67	0.84	+18	−22	−26	+39	−29	+ 9	−44	−25	+23	− 2		0	1.19
99513	20 11 46.40	+38 40 58.2	8.29	H	302.943 316 95	+38.682 825 04		2.90	−2.37	−3.03	0.60	0.59	0.77	0.71	0.65	− 2	− 8	+ 6	+ 9	+ 5	+ 0	+ 6	−11	+11	+11		0	−0.54
99514	20 11 46.96	−12 04 34.6	8.15	H	302.945 657 28	−12.076 285 43		5.75	−5.23	7.45	1.11	0.83	1.38	1.24	1.12	+ 7	−16	−32	− 9	+ 9	+42	+23	+38	−23	+21		0	0.07
99515	20 11 47.38	+40 19 48.0	7.11	H	302.947 435 83	+40.329 998 40		2.26	2.06	0.47	0.46	0.47	0.60	0.47	0.48	− 1	+ 2	+17	− 5	+ 2	−11	+ 5	−15	− 7	+14		0	1.52
99516	20 11 47.55	+03 26 26.4	8.60	H	302.948 119 89	+03.440 680 26		1.95	0.89	−6.76	1.03	0.68	1.26	1.36	0.90	+22	−10	+ 0	+50	− 4	+18	− 5	+37	+ 5	+19		0	1.31
99517	20 11 47.89	−52 14 46.8	8.00	H	302.949 523 63	−52.246 320 07		0.87	−14.45	−3.71	0.99	0.64	1.05	1.49	0.90	− 1	−16	− 6	+44	− 3	− 2	+ 0	+ 0	+ 1	+ 7		0	0.56
99518	20 11 47.97	+26 48 32.5	5.51	H	302.949 890 08	+26.809 015 61		2.02	1.41	−10.37	0.40	0.42	0.63	0.41	0.40	−17	+ 6	+ 1	+25	−16	− 8	−14	−19	+12	−17		0	0.22
99519	20 11 48.76	−20 13 51.7	8.64	H	302.953 170 27	−20.231 026 87		2.64	−11.30	−10.75	1.13	0.86	1.27	1.52	1.25	+17	− 6	− 8	− 1	+ 6	+25	+ 8	+21	− 6	+21		0	0.86
99520	20 11 50.66	+26 53 45.5	7.29	H	302.961 087 80	+26.895 958 96		1.50	1.87	−9.06	0.49	0.51	0.79	0.48	0.49	−17	+ 4	+ 6	+27	−19	−10	−16	−18	+ 4	−13		0	−0.67
99521 H	20 11 50.69	−63 37 01.1	7.95	H	302.961 225 07	−63.616 983 46	*	−0.50	8.04	−10.07	2.76	3.66	1.90	1.34	1.44	−56	+ 7	− 8	+12	− 9	+25	−15	+ 0	+ 2	−20		40	1.51
*99522	20 11 52.60	+03 48 05.5	8.17	2 H	302.969 158 35	+03.801 535 92		5.59	−1.91	−9.50	0.98	0.90	1.15	1.30	0.99	+ 4	− 3	−38	+11	− 4	+30	+ 6	+41	−17	− 8		0	3.11
*99523 H	20 11 52.59	+26 24 49.1	9.26	G	302.969 119 45	+26.413 645 23	A	2.67	4.43	8.66	2.72	5.72	1.72	1.08	1.22	−53	−11	+ 6	+10	−11	−10	−19	− 4	+ 8	−35		2	0.80
99524	20 11 53.05	+29 06 47.0	8.43	H	302.971 041 15	+29.113 042 81		4.72	−2.26	−0.60	0.47	0.61	0.93	0.57	0.66	−12	−15	− 7	+17	+10	+ 2	+ 9	− 1	+ 7	− 6		0	−0.98
*99525	20 11 53.53	+36 11 50.6	8.12	G	302.973 038 98	+36.197 383 15		0.46	−3.02	−5.74	0.52	0.61	0.76	0.56	0.62	− 4	+ 3	+ 1	+ 1	+ 2	−14	+ 4	−10	+12	+ 2		0	0.99
*99526	20 11 53.49	−40 04 38.3	9.57	G	302.972 885 51	−40.077 314 21		6.12	3.85	8.53	1.40	0.72	1.55	2.12	1.32	−21	−22	+ 4	−13	+ 4	+ 8	+ 8	+10	−13	−23		0	−0.81
99527	20 11 56.06	+20 20 04.4	9.24	2 H	302.983 580 39	+20.334 567 44		4.60	0.09	−8.49	2.03	1.77	2.78	2.91	2.46	− 6	− 7	−17	−11	+ 5	+12	+ 5	+ 2	+ 2	+11		0	
99528	20 11 57.13	+26 44 37.4	7.59	G	302.988 034 96	+26.743 729 99		2.51	1.94	−9.81	0.53	0.50	0.81	0.53	0.52	−21	+ 2	+ 9	+29	−19	−11	−17	−10	+12	−20		0	0.14
99529	20 11 57.90	−12 23 32.5	6.34	G	302.991 262 70	−12.392 357 79		6.75	−6.85	−18.60	0.89	0.64	1.07	1.08	0.84	+ 3	−16	−23	−10	+10	+51	+23	+34	− 5	+16		0	−0.28
99530	20 11 59.02	+59 41 28.9	7.09	H	302.995 904 07	+59.691 350 64		16.25	42.22	86.71	0.55	0.46	0.53	0.60	0.47	+ 8	− 9	+ 9	+14	− 9	+ 0	− 8	− 5	+ 7	+15		1	0.05
99531	20 12 00.70	+26 28 43.8	5.91	H	303.002 910 76	+26.478 831 04		2.86	4.48	−10.08	0.41	0.43	0.65	0.43	0.44	−26	+ 4	− 1	+23	−24	− 9	−27	−11	+10	−40		1	−0.73
99532	20 12 01.92	+34 28 44.2	7.24	H	303.007 995 35	+34.478 938 50		6.67	18.72	−12.77	0.49	0.53	0.73	0.56	0.61	− 7	− 3	− 8	+10	+ 7	−28	+ 6	− 9	+18	− 6		0	1.10
99533	20 12 01.99	+07 41 04.0	7.18	2 H	303.008 298 58	+07.684 456 06		3.77	3.08	−2.07	0.84	0.70	1.02	1.05	0.94	+21	− 9	− 2	+16	+15	+27	+19	+50	+10	+15		0	−0.54
99534	20 12 02.22	+23 55 08.8	7.82	H	303.009 241 82	+23.919 121 72		1.42	2.27	−5.70	0.55	0.68	0.98	0.64	0.84	+13	−13	+ 0	+19	−11	− 4	+ 0	−15	− 1	+45		0	1.57
99535	20 12 02.49	−21 18 02.8	9.84	H	303.010 386 57	−21.300 788 98		5.20	14.35	1.21	1.50	1.09	1.95	1.84	1.99	+36	+17	+ 6	+ 0	−23	+12	−32	−20	−52	+30		0	2.79
99536	20 12 02.55	−26 21 45.4	9.49	H	303.010 624 54	−26.362 609 70		12.18	−10.47	−40.20	1.29	0.72	1.44	1.31	0.80	+64	−52	−33	−30	−17	+16	−16	−32	+12	+78		1	−0.03
99537	20 12 02.87	−50 43 22.6	8.53	G	303.011 948 71	−50.722 950 63		9.59	−12.12	−52.69	1.11	0.65	1.12	1.41	0.84	− 7	−33	−17	+41	−13	+11	− 2	+22	−20	−10		4	−1.39
99538	20 12 03.52	+60 08 55.7	7.89	H	303.014 654 14	+60.148 806 43		2.21	5.61	7.68	0.57	0.52	0.58	0.62	0.63	+ 9	− 6	− 1	+13	+ 5	+ 4	+ 5	+12	+ 6	+25		1	−0.31
99539	20 12 03.74	+47 44 13.3	6.92	1 H	303.015 587 49	+47.737 039 99		3.92	5.06	1.28	0.55	0.46	0.60	0.61	0.49	− 8	+ 9	+ 9	+12	+17	−17	+21	− 9	+28	− 9		0	−0.09
99540	20 12 03.85	+15 21 28.1	7.91	1 H	303.016 022 83	+15.357 813 42		1.01	4.26	−2.38	0.71	0.71	1.02	0.79	0.85	+32	−27	−35	+10	+ 9	+ 3	+17	+42	−21	+18		0	−1.01
99541	20 12 04.26	+09 59 45.1	10.10	H	303.017 758 55	+09.995 860 89		−1.27	4.30	2.05	1.32	1.16	1.61	1.59	1.50	+35	−26	−19	+17	+17	+ 5	+22	+54	− 4	+24		2	0.10
99542	20 12 05.48	+46 17 59.3	9.06	G	303.022 832 48	+46.299 792 21		24.28	225.10	291.98	0.75	0.72	0.89	0.92	0.75	− 1	+14	+ 8	− 6	+ 8	+10	+10	−18	+21	+ 9		0	−0.80
99543	20 12 05.55	−10 42 57.1	7.82	H	303.023 135 54	−10.715 873 96		4.66	−12.91	−10.63	1.09	0.90	1.31	1.32	1.21	+30	−18	−40	−12	+25	+24	+43	+54	−29	+22		0	−1.22
99544	20 12 05.64	−69 12 30.4	8.53	H	303.023 486 91	−69.208 444 90		2.66	9.08	−1.47	0.58	0.71	1.05	0.70	0.90	−37	− 5	+ 2	+ 5	+17	− 1	+18	+ 1	− 9	−37		0	−1.34
99545	20 12 05.77	+21 04 05.4	7.59	G	303.024 025 36	+21.068 166 34		4.40	−18.29	−6.98	0.66	0.55	0.84	0.84	0.71	− 4	−16	−14	−16	+ 4	+ 2	+ 1	− 3	− 4	+29		0	−0.62
99546	20 12 06.55	+38 21 17.8	7.50	G	303.027 282 33	+38.354 956 48		0.61	−7.54	−7.38	0.47	0.48	0.63	0.49	0.53	−10	+ 2	+ 1	+ 7	+ 6	− 9	+ 8	− 5	+17	+ 1		0	0.00
*99547	20 12 06.96	+07 47 08.5	11.75	2 G	303.029 004 71	+07.785 681 09		4.45	−6.59	−5.64	2.81	2.22	3.24	3.78	3.26	+25	−10	+ 2	+24	+13	+24	+14	+49	+13	+18		0	−0.19
*99548	20 12 06.94	−47 28 05.9	9.41	G	303.028 915 83	−47.468 300 14		9.82	−25.79	−10.65	1.42	0.82	1.69	2.28	1.26	− 6	−28	−25	+18	+15	−30	+ 5	+ 1	+ 7	−27		2	0.99
99549	20 12 07.02	+06 19 45.5	11.11	G	303.029 242 98	+06.329 315 64		3.72	0.25	−14.53	2.31	2.40	3.08	3.89	4.87	+52	+ 9	− 6	+23	+32	+19	+17	+52	−18	+68		5	−0.41
99550	20 12 09.34	−12 53 33.7	11.30	G	303.038 910 89	−12.892 690 70		37.94	195.17	−192.07	2.58	1.84	2.75	3.23	2.78	+ 9	+ 0	− 9	−15	+25	+30	+28	+26	+ 8	+28		0	2.26
99551	20 12 09.68	−77 00 06.1	8.78	H	303.040 343 19	−77.001 687 27		11.47	70.08	−159.37	0.62	0.69	0.94	0.70	0.88	−10	−15	+ 1	+23	− 8	−16	− 8	− 1	−12	−11		0	−1.18
99552	20 12 11.22	+02 18 26.0	7.93	H	303.046 747 60	+02.307 221 07		2.31	−5.23	−18.14	0.97	0.63	1.14	1.31	0.81	+27	− 5	−10	+62	+ 3	+15	+ 6	+44	− 3	+26		0	0.68
99553	20 12 12.26	−29 33 10.7	8.49	2 H	303.051 072 68	−29.552 969 29		−0.81	−1.00	−11.75	1.06	0.75	1.17	1.22	0.98	+53	−42	−16	− 4	− 6	+12	− 6	− 9	+ 5	+50		0	−0.45
99554	20 12 13.03	+12 25 51.7	8.92	H	303.054 272 81	+12.431 019 53		2.71	9.16	−5.52	0.94	0.89	1.27	1.01	1.18	+38	− 5	− 6	+ 1	+43	+22	+43	+47	+11	+53		0	1.04
99555	20 12 13.35	+17 24 53.9	9.45	H	303.055 640 89	+17.414 979 58		0.32	1.01	−4.18	0.94	1.03	1.28	1.22	1.35	+26	− 5	− 3	+ 7	+ 6	+17	+ 6	+34	− 2	+28		0	1.77
99556	20 12 14.17	+37 56 47.0	10.20	H	303.059 030 78	+37.946 401 66		−1.06	2.92	−2.26	0.93	1.06	1.34	0.97	1.15	−10	+ 7	+ 9	+ 3	+ 6	− 6	+ 8	− 9	+10	− 7		1	2.32
99557	20 12 15.00	−18 08 44.6	8.08	H	303.062 495 18	−18.145 723 47		2.64	−19.54	−68.27	1.05	0.78	1.22	1.27	0.90	+18	−24	−38	+ 1	− 1	+16	+11	+33	−11	− 5		6	−1.16
99558	20 12 15.32	−08 05 32.1	7.32	H	303.063 846 01	−08.092 240 64		12.22	2.55	−36.04	0.94	0.54	1.11	1.25	0.87	+25	−30	−23	− 7	− 6	+47	+21	+53	−17	−10		0	1.40
99559	20 12 16.49	−80 51 11.9	9.17	H	303.068 691 17	−80.853 316 42		9.46	−6.89	13.03	0.75	0.69	1.03	0.82	0.80	+ 2	−32	− 9	+ 5	+ 4	−12	+ 3	−22	−11	−12		0	−0.38
99560	20 12 16.55	+80 28 04.6	7.62	H	303.068 965 68	+80.467 950 12		10.15	54.50	81.88	0.55	0.52	0.58	0.62	0.63	+12	−18	+ 1	− 6	− 3	− 3	− 2	− 5	− 5	+26		0	0.69
99561	20 12 17.02	+57 23 14.0	7.98	H	303.070 899 99	+57.387 219 73		3.53	2.38	0.19	0.55	0.51	0.58	0.60	0.53	− 2	+ 3	+ 9	+17	+ 1	−12	+ 2	+ 9	+10	− 4		1	−0.29
99562	20 12 18.30	+34 51 10.8	7.81	G	303.076 231 31	+34.852 989 05		1.89	15.93	−7.58	0.56	0.66	0.86	0.64	0.75	−11	+ 0	+ 5	+10	+14	−15	+15	−12	+17	−11		2	0.72
99563	20 12 18.44	+16 13 01.6	7.29	H	303.076 833 93	+16.217 103 69		4.37	4.56	−2.46	0.67	0.58	0.88	0.77	0.70	+ 6	−25	−17	+ 1	+ 1	+ 2	+ 6	+20	−20	+ 4		2	−0.22
99564	20 12 18.61	+32 04 51.8	7.85	H	303.077 541 10	+32.081 060 74	A	9.50	16.08	−22.66	1.28	1.42	1.47	1.31	1.26	+ 5	+ 9	+13	− 6	−17	− 5	−13	−21	−10	+18		1	0.76
99565	20 12 18.93	−44 51 21.6	9.51	G	303.078 865 95	−44.856 012 99		2.59	2.56	−4.26	1.46	0.84	1.60	2.04	1.47	−12	−10	+ 1	+ 8	+ 5	−11	+ 7	+27	+13	−14		0	−0.07
99566	20 12 19.45	+32 04 32.7	10.05	H	303.081 039 51	+32.075 763 51	B	0.02	−27.89	−22.91	26.51	31.20	8.10	19.31	20.16	+ 1	+ 6	+12	− 9	−15	−15	−11	−23	− 6	+15		1	0.76
99567	20 12 22.83	+32 52 17.9	9.47	3 H	303.095 132 63	+32.871 635 41		−1.63	−5.35	−5.66	0.89	0.87	1.30	1.02	0.91	−13	− 2	+11	+24	− 6	+ 0	− 6	− 5	− 1	−14		0	2.57
99568	20 12 23.64	−35 46 58.1	8.27	2 H	303.098 519 07	−35.782 797 67		2.62	6.29	2.16	1.09	0.55	1.22	1.66	0.75	− 2	−24	− 2	− 2	+14	+29	+16	− 2	− 9	+ 1		0	−0.42
99569	20 12 23.76	+30 53 38.2	9.03	H	303.098 980 38	+30.893 933 70		0.29	1.28	−3.98	0.62	0.77	1.04	0.68	0.75	−12	− 5	− 1	+15	+ 9	−10	+ 7	−26	+10	−14		0	1.14
99570	20 12 23.86	−42 46 47.3	6.20	H	303.099 403 97	−42.779 818 08		9.48	−18.07	−100.81	0.79	0.46	0.89	1.30	0.86	− 9	− 3	−13	+12	+ 7	−16	+ 7	+17	+20	−25		0	−0.35
99571	20 12 24.79	+39 43 55.9	8.78	H	303.103 278 32	+39.732 183 08		2.13	6.98	5.63	0.61	0.73	0.85	0.64	0.75	− 5	− 9	+22	+15	+12	+ 0	+17	−16	− 7	+11		1	−1.63
99572	20 12 25.76	−12 37 01.3	5.84	H	303.107 313 66	−12.617 022 14		35.65	193.25	−195.60	0.90	0.63	0.92	1.05	0.85	− 6	− 7	− 7	−13	+28	+35	+29	+33	− 2	+13		0	−0.81
99573 H	20 12 26.39	+53 54 18.4	7.99	H	303.109 978 56	+53.905 119 38	*	1.79	10.92	9.38	0.62	0.58	0.71	0.76	0.57	− 7	−17	− 1	+ 7	+10	−16	+ 3	−19	+29	−10		0	0.29
99574	20 12 26.48	+34 54 55.7	8.51	H	303.110 353 46	+34.915 478 50		3.05	0.66	−19.61	0.63	0.78	1.00	0.73	0.83	− 5	+ 1	+ 9	+ 7	+ 7	−20	+ 8	−13	+15	− 9		2	−0.25
99575	20 12 26.81	+11 15 27.7	8.42	H	303.111 718 98	+11.257 687 26		0.64	4.41	−20.77	0.99	0.94	1.19	1.33	1.28	+37	− 8	−17	+19	+24	+ 1	+28	+49	+ 6	+27		0	1.02
99576	20 12 27.94	−62 54 26.6	9.05	H	303.116 409 04	−62.907 376 37		2.83	−27.20	−84.72	1.00	0.78	1.29	1.26	1.10	+ 1	− 7	−16	−11	− 7	−11	−12	−20	+15	−13		0	0.77
99577	20 12 30.23	+11 22 14.4	10.68	H	303.125 972 49	+11.370 662 30		18.80	116.23	70.43	17.28	16.74	21.66	24.00	23.23	+26	−11	+10	+23	+22	+ 3	+21	+45	+15	+22		4	
99578	20 12 31.62	+11 22 17.4	9.25	H	303.131 757 24	+11.371 511 06		0.62	−6.23	−7.64	3.27	3.10	3.97	4.55	4.35	+30	− 7	+ 0	+27	+24	+ 7	+25	+48	+10	+22		0	
99579 H	20 12 31.73	+51 27 49.0	6.01	G	303.132 213 51	+51.463 602 34	A	7.91	−14.99	−15.31	0.63	0.57	0.62	0.62	0.53	−10	−26	+ 4	− 5	+ 6	− 6	+ 7	− 5	+ 0	+ 9		2	−0.04
99580	20 12 33.13	+40 16 05.5	7.55	H	303.138 025 37	+40.268 185 31		1.85	−7.76	−2.54	0.51	0.53	0.67	0.53	0.56	− 4	+ 0	+17	− 6	+ 3	−18	+ 8	−15	− 5	+13		0	−0.84
99581	20 12 33.25	+25 39 11.3	7.44	H	303.138 551 61	+25.653 140 27		12.33	36.69	121.01	0.51	0.50	0.88	0.56	0.55	−48	+ 9	− 6	+22	−24	+14	−30	− 1	− 9	−69		2	0.30
99582	20 12 33.93	−09 42 13.1	9.23	H	303.141 394 49	−09.703 651 33		6.29	6.75	−3.09	1.28	0.88	1.50	1.51	1.25	+26	− 1	−14	+ 4	+14	+37	+26	+50	+ 3	+21		0	−0.61
99583	20 12 34.23	−58 06 59.2	7.65	H	303.142 608 83	−58.116 453 49		5.24	64.56	−51.18	0.68	0.65	0.98	0.83	0.71	+24	−12	−20	−40	− 1	− 3	− 1	−38	+ 7	−23		0	−0.76
99584	20 12 34.79	+13 58 53.4	9.62	H	303.144 946 90	+13.981 509 40		2.81	1.44	−7.39	1.24	1.17	1.65	1.41	1.46	+42	−21	−12	+23	+31	+ 0	+31	+40	+ 3	+38		0	0.05
*99585 H	20 12 35.12	+00 52 01.6	6.25	G	303.146 346 66	+00.867 102 30	A	5.41	2.10	−19.81	1.50	0.96	1.55	1.83	1.17	+52	−23	− 9	+24	+10	−26	+11	+26	−21	+64		1	0.45
*99586	20 12 35.10	+66 27 41.5	7.68	H	303.146 232 01	+66.461 533 79		4.05	−43.81	−57.09	0.58	0.58	0.67	0.58	0.64	− 3	−25	+ 6	−18	+17	+24	+ 8	−12	+32	+24		1	−0.87
99587	20 12 37.87	−09 04 07.8	10.61	H	303.157 791 09	−09.068 820 28		19.53	−21.11	−20.10	1.97	1.31	2.16	2.95	2.11	+23	−11	− 2	+ 9	+ 6	+16	+17	+48	+15	− 6		4	0.78
99588	20 12 38.61	−06 21 57.9	6.92	H	303.160 875 67	−06.366 093 94		5.29	−1.11	−19.16	1.20	0.94	1.08	1.55	1.55	+66	+ 4	+24	−55	−57	−20	−54	−67	−44	+66		0	0.26
99589	20 12 38.81	+13 44 39.8	8.65	H	303.161 705 44	+13.744 377 38		5.52	8.77	12.75	0.88	0.89	1.26	1.10	1.04	+32	−23	−32	+13	+ 7	+ 5	+11	+32	+ 0	+14		0	−0.22
99590	20 12 39.82	+33 29 44.2	8.03	2 G	303.165 926 12	+33.495 613 23		0.37	2.62	−1.23	0.85	0.99	1.30	0.98	1.03	−18	+ 0	+ 2	+ 5	+ 3	−18	+ 5	−29	+12	−14		2	
99591	20 12 40.22	−34 21 23.7	9.07	G	303.167 602 20	−34.356 577 38		20.02	−161.59	−18.62	1.10	0.66	1.17	1.28	0.96	+ 9	−16	−11	−24	+29	+ 8	+25	+10	+13	+33		0	−0.92
99592	20 12 40.51	−23 26 26.5	8.28	H	303.168 809 24	−23.440 706 33		4.14	1.44	−33.29	0.97	0.68	1.04	1.38	1.00	− 3	+ 0	−25	+33	−26	+33	−22	+18	−18	−12		0	−1.07
99593	20 12 41.64	−13 12 04.0	9.88	G	303.173 503 70	−13.201 123 61		20.87	169.23	−219.31	1.74	1.22	1.83	2.18	1.77	+16	+ 2	− 7	−16	+29	+32	+36	+34	+ 8	+22		0	1.97
99594	20 12 43.11	+28 04 27.6	8.92	H	303.179 621 92	+28.074 347 09		1.14	6.33	1.72	0.49	0.69	1.08	0.53	0.69	−15	−14	+ 3	− 8	+ 3	+ 3	+ 2	−14	+13	−14		0	−0.96
99595	20 12 43.23	−50 18 40.6	7.90	H	303.180 131 20	−50.311 275 50		8.20	10.47	−45.03	0.97	0.58	0.99	1.16	0.74	+11	−43	−14	+34	+ 5	+ 6	+12	+13	− 7	+15		0	1.85
99596	20 12 43.35	+35 10 40.8	7.53	H	303.180 605 71	+35.178 004 57		6.06	−31.88	17.02	0.50	0.58	0.76	0.56	0.62	− 9	− 5	+11	+ 6	+ 8	− 6	+ 9	− 9	+ 5	− 5		0	1.55
99597	20 12 44.88	−10 50 22.8	7.84	H	303.186 999 56	−10.839

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
99501	10.514	0.064	8.770	0.026		1.454	0.055	T	1.46	0.09	L	8.6850	0.0031	0.019	52		8.66	8.71				1							
99502	9.266	0.017	9.003	0.019		0.195	0.007	G	0.21	0.01	H	9.0462	0.0021	0.018	107		9.01	9.08				1							
99503	11.878	0.180	10.117	0.058		1.497	0.156	T	2.65	0.60	Q	10.1888	0.0916	0.681	85		9.30	11.20	146.10	P 1 B		1 S							G P
99504	9.079	0.026	7.602	0.015	*	1.530	0.015	G	1.49	0.03	C *	7.6495	0.0016	0.015	130	*	7.62	7.67			20116+3853	I 1	2 C A	AB	324	3.076	0.023	3.31	0.09	S
99505	7.719	0.006	7.585	0.008		0.129	0.009	T	0.14	0.01	L	7.6134	0.0009	0.009	87		7.60	7.63				1								S
99506	7.749	0.007	7.711	0.009		0.040	0.011	T	0.06	0.01	L	7.7330	0.0013	0.012	119		7.72	7.76				1								S
99507											T	10.4088	0.0200			B				D	20117−0435	I 2	1 C I A							
99508	9.800	0.029	9.431	0.031	A	0.350	0.039	T	0.41	0.05	L	9.4444	0.0100	0.059	96	A	9.39	9.62		D	20117−0435	I 2	1 C P A							
99509	10.442	0.027	9.549	0.021		0.800	0.020	G	0.84	0.02	H	9.6009	0.0022	0.028	137		9.55	9.67				1								
99510	8.325	0.009	8.227	0.011		0.096	0.013	T	0.11	0.01	L	8.2631	0.0017	0.018	118		8.24	8.30				1								
99511						0.693	0.020	G	0.75	0.02	H	12.2445	0.0053	0.067	142		12.12	12.35				1								G
99512	10.079	0.020	8.545	0.010		1.310	0.018	T	4.84	0.05	O	7.3732	0.0261	0.280	154		7.10	7.77		U 2		1 S								G
99513	8.262	0.009	8.273	0.011		−0.005	0.013	T	0.02	0.01	L	8.2984	0.0014	0.015	131		8.27	8.33				1								
99514	9.377	0.026	8.290	0.017		0.940	0.024	T	0.93	0.02	L	8.3168	0.0029	0.013	56		8.30	8.34		C	20117−1205	I 1	1							
99515	6.992	0.005	7.085	0.006		−0.080	0.007	T	−0.06	0.01	L	7.0836	0.0009	0.008	129		7.07	7.10				1								S
99516	10.008	0.023	8.708	0.014		1.105	0.021	T	1.07	0.02	L	8.7671	0.0015	0.014	106		8.74	8.79		C		1								
99517	10.028	0.025	8.179	0.011		1.537	0.022	T	1.59	0.05	L	8.1155	0.0023	0.020	95		8.09	8.15		R		1								
99518	7.306	0.006	5.651	0.003		1.397	0.001	G	1.30	0.03	C	5.6616	0.0007	0.007	161		5.65	5.67				1								S
99519	10.037	0.039	8.761	0.023		1.086	0.035	T	1.05	0.03	L	8.8110	0.0020	0.015	47		8.79	8.83		D		1 S								
99520	7.161	0.005	7.264	0.006		−0.089	0.007	T	−0.07	0.01	L	7.2655	0.0009	0.011	160		7.25	7.29				1								S
99521	7.922	0.009	7.878	0.011	*						T *	7.9248	0.0019	0.017	123	−	7.88	7.95		D	20118−6337	I 1	3 C B							S G
99522	8.467	0.013	8.195	0.015		0.259	0.019	T	0.29	0.02	L	8.2401	0.0028	0.026	94		8.20	8.28		U 2	20119+0348	I 1	1 G							S
99523	9.606	0.016	9.321	0.019	*	0.280	0.015	G	0.32	0.02	H *	9.3333	0.0022	0.027	174	*	9.29	9.38		D	20119+2625	H 1	2 C A	AB	161	0.327	0.013	1.45	0.17	G
99524	8.863	0.009	8.476	0.009		0.391	0.022	G	0.46	0.02	H	8.5226	0.0013	0.016	227		8.50	8.56				1								
99525	8.320	0.008	8.124	0.009		0.023	0.009	G	0.04	0.01	H	8.0339	0.0016	0.016	158		8.01	8.06			20119+3612	I 1	1							
99526	9.968	0.027	9.598	0.030		0.396	0.004	G	0.46	0.00	H	9.6598	0.0027	0.023	89		9.63	9.70		C		1								
99527	11.777	0.117	9.461	0.024		1.910	0.096	T	1.94	0.10	L	9.3389	0.0119	0.174	108		9.16	9.73		U 2 B		1 X S								G P
99528	7.477	0.006	7.566	0.007		−0.086	0.004	G	−0.07	0.01	H	7.5733	0.0010	0.014	162		7.55	7.60				1								S
99529	7.910	0.010	6.485	0.007		1.209	0.001	G	1.17	0.00	H	6.5042	0.0012	0.005	55		6.50	6.52		C		1								S
99530	7.621	0.006	7.145	0.007		0.448	0.008	T	0.52	0.01	L	7.1937	0.0008	0.006	94		7.18	7.21				1								S
99531	5.767	0.002	5.892	0.003		−0.107	0.003	T	−0.09	0.00	L	5.8807	0.0005	0.007	188		5.87	5.89		C		1								S
99532	7.541	0.005	7.261	0.006		0.266	0.007	T	0.30	0.01	L	7.3152	0.0009	0.012	143		7.30	7.34			20120+3429	I 1	1 S							S
99533	9.249	0.021	7.416	0.010		1.556	0.019	T	2.54	0.05	O	7.1903	0.0084	0.056	66		7.11	7.26		U 2		1 S								S
99534	8.061	0.009	7.846	0.009		0.205	0.012	T	0.23	0.01	L	7.8899	0.0013	0.018	141		7.86	7.92				1								S
99535	10.295	0.039	9.905	0.042		0.432	0.003	G	0.50	0.00	H	9.9399	0.0042	0.018	54		9.90	9.97		C		1								
99536	10.282	0.024	9.590	0.021		0.626	0.024	T	0.69	0.02	L	9.6262	0.0017	0.016	172		9.60	9.65				1								
99537	9.202	0.015	8.588	0.013		0.568	0.012	G	0.64	0.01	H	8.6566	0.0021	0.018	89		8.62	8.69		C		1								
99538	7.887	0.008	7.896	0.010		−0.004	0.012	T	0.02	0.01	L	7.8939	0.0012	0.013	108		7.87	7.92		C		1								S
99539	6.770	0.005	6.897	0.006		−0.110	0.005	G	−0.09	0.01	H	6.8845	0.0022	0.022	110		6.86	6.91		U 2		1								S
99540	7.723	0.008	7.876	0.011		−0.143	0.003	G	−0.14	0.00	H	7.8627	0.0030	0.021	87		7.83	7.89	20.17	P 1 A		1								S
99541	10.262	0.040	10.180	0.056		0.081	0.064	T	0.09	0.07	L	10.1300	0.0031	0.024	72		10.08	10.17				1								G
99542	10.093	0.034	9.129	0.024		0.810	0.020	G	0.85	0.02	H	9.2115	0.0017	0.015	103		9.18	9.24		C		1								
99543	8.034	0.010	7.842	0.014		0.184	0.016	T	0.20	0.02	L	7.8844	0.0014	0.009	54		7.87	7.90		C		1								S
99544	9.690	0.014	8.645	0.010		0.908	0.013	T	0.91	0.01	L	8.6876	0.0013	0.021	226		8.65	8.73				1								
99545	7.938	0.008	7.621	0.008		0.330	0.015	G	0.38	0.02	H	7.6738	0.0014	0.012	109		7.65	7.70				1								S
99546	7.661	0.006	7.459	0.007		0.009	0.047	G	0.03	0.04	H	7.3721	0.0011	0.013	141		7.35	7.39				1								
99547						1.764	0.020	G	1.90	0.15	K	11.8770	0.0082	0.065	65		11.68	11.98		U 2		1								G
99548	10.424	0.032	9.530	0.025		0.830	0.020	G	0.87	0.02	H	9.5615	0.0027	0.021	85		9.53	9.60				1								
99549						1.694	0.020	G	1.76	0.14	K	11.2427	0.0053	0.041	66		11.15	11.31		C		1								G
99550						1.424	0.018	G	1.73	0.05	I	11.3816	0.0070	0.044	62		11.26	11.46		C		1								G
99551	9.496	0.014	8.822	0.012		0.613	0.014	T	0.68	0.01	L	8.9057	0.0020	0.022	151		8.87	8.93		C		1								
99552	9.582	0.017	8.051	0.009		1.286	0.015	T	1.25	0.02	L	8.0880	0.0012	0.011	117		8.07	8.10		C		1								
99553	10.698	0.041	8.696	0.015		1.659	0.035	T	1.68	0.04	L	8.6034	0.0081	0.051	77		8.54	8.67		U 2		1 S								P
99554	10.376	0.030	9.055	0.017		1.122	0.027	T	1.08	0.03	L	9.0825	0.0021	0.017	102		9.05	9.11		C		1								
99555	9.387	0.018	9.445	0.026		−0.048	0.029	T	−0.03	0.03	L	9.4466	0.0023	0.021	85		9.40	9.48		C		1 S								G
99556	11.837	0.119	10.445	0.054		1.260	0.047	G	1.26	0.10	H	10.3540	0.0028	0.032	142		10.30	10.41		C		1								G
99557	9.584	0.024	8.212	0.014		1.161	0.022	T	1.12	0.02	L	8.2434	0.0014	0.012	58		8.22	8.27		C		1								S
99558	7.831	0.007	7.369	0.007		0.435	0.009	T	0.50	0.01	L	7.4225	0.0010	0.008	92		7.41	7.44		C	20123−0806	I 1	1 S							S
99559	9.676	0.016	9.201	0.016		0.460	0.018	T	0.53	0.02	L	9.2704	0.0014	0.016	139		9.24	9.31		D		1								
99560	8.064	0.008	7.664	0.009		0.407	0.015	G	0.47	0.02	H	7.7121	0.0013	0.012	124		7.69	7.73				1								S
99561	8.189	0.008	7.990	0.009		0.190	0.011	T	0.21	0.01	L	8.0444	0.0017	0.012	120		8.02	8.07				1								S
99562	9.714	0.020	7.958	0.009		1.500	0.015	G	1.53	0.02	H	7.9344	0.0012	0.015	135		7.91	7.96			20123+3451	I 1	1							
99563	8.314	0.010	7.393	0.007		0.815	0.009	T	0.84	0.01	L	7.4405	0.0010	0.010	92		7.43	7.46		C		1								S
99564	8.120	0.009	7.847	0.009	A	0.260	0.012	T	0.29	0.01	L	7.9251	0.0216	0.035	158	A	7.85	7.97		D	20123+3205	I 2	1 C P A							
99565	11.142	0.069	9.629	0.030		1.222	0.008	G	1.18	0.01	H	9.6845	0.0023	0.020	88		9.65	9.72		C		1								
99566	9.847	0.027	9.598	0.033	B	0.237	0.040	T	0.26	0.05	L	9.5942	0.0801			B				D	20123+3205	I 2	1 C I A							
99567	11.066	0.050	9.585	0.022		1.247	0.043	T	1.21	0.04	L	9.6278	0.0208	0.221	146		9.29	9.95	5.95	P 1 A		1								G
99568	10.405	0.032	8.506	0.012		1.611	0.028	T	2.43	0.05	O	8.3065	0.0025	0.034	111		8.23	8.35		U 2		1								
99569	8.914	0.009	8.995	0.013		−0.069	0.014	T	−0.05	0.01	L	9.0097	0.0017	0.024	183		8.97	9.05		C		1								
99570	7.812	0.008	6.343	0.004		1.228	0.001	G	1.13	0.06	F	6.3711	0.0007	0.007	99		6.36	6.38		C		1								S
99571	8.866	0.011	8.791	0.014		0.068	0.016	T	0.08	0.02	L	8.8108	0.0021	0.018	129		8.78	8.84				1								
99572	6.396	0.005	5.894	0.004		0.476	0.005	G	0.55	0.01	H	5.9464	0.0006	0.005	61		5.94	5.95		C	20124−1237	I 1	1							S
99573	9.303	0.013	8.103	0.009	*	1.027	0.012	T	1.00	0.01	L *	8.1617	0.0015	0.013	129	*	8.14	8.18			20124+5354	H 1	2 C S A	AB	276	0.148	0.018	0.89	0.54	
99574	10.249	0.031	8.680	0.015		1.350	0.047	G	1.32	0.06	H	8.6626	0.0020	0.019	142		8.63	8.69		C		1								
99575	9.908	0.028	8.548	0.016		1.152	0.025	T	1.11	0.02	L	8.5887	0.0024	0.018	77		8.56	8.62		C		1								
99576	10.383	0.033	9.099	0.019		1.093	0.030	T	1.17	0.04	L	9.1801	0.0019	0.018	99		9.14	9.21				1								
99577											T	10.8122	0.0484	0.351	74		9.95	11.11		D	20125+1122	I 2	1 X S							
99578	9.314	0.020	9.304	0.027		0.069	0.140	G	−0.04	0.05	L	9.2362	0.0037	0.042	80		9.15	9.28		D	20125+1122	I 2	1 X S							
99579	7.531	0.006	6.170	0.004	A	1.139	0.015	G	1.10	0.01	L *	6.1980	0.0006	0.007	131	*	6.19	6.21		D	20126+5128	I 1	2 C D	AB	82	4.313	0.044	4.33	0.18	S D
99580	7.914	0.007	7.589	0.008		0.309	0.010	T	0.35	0.01	L	7.6252	0.0011	0.012	126		7.60	7.64				1								S
99581	7.928	0.005	7.479	0.005		0.424	0.006	T	0.49	0.01	L	7.5342	0.0008	0.011	237		7.51	7.56			20125+2540	I 1	1							S
99582	9.738	0.028	9.253	0.030		0.456	0.037	T	0.53	0.04	L	9.3322	0.0027	0.019	72		9.28	9.37				1								
99583	8.985	0.013	7.775	0.009		1.035	0.012	T	1.01	0.01	L	7.8222	0.0014	0.014	123		7.80	7.84				1								S
99584	9.570	0.020	9.606	0.028		−0.030	0.030	T	−0.01	0.03	L	9.6214	0.0029	0.022	77		9.59	9.67		C		1								G
99585						0.042	0.003	G	0.06	0.00	H *	6.2593	0.0007	0.008	85	*	6.25	6.28		D	20126+0052	I 1	2 C A	AB	207	2.734	0.003	0.11	0.01	S
99586	9.172	0.014	7.801	0.008		1.161	0.013	T	1.12	0.01	L	7.8509	0.0013	0.010	105		7.83	7.87				1								
99587	12.339	0.233	10.858	0.097		1.352	0.020	G	1.41	0.14	K	10.7243	0.0055	0.033	94		10.67	10.79		C		1 S								G
99588	6.988	0.005	6.930	0.005		0.058	0.007	T	0.07	0.01	L	6.9475	0.0010	0.009	104		6.93	6.96		C		1 G								S
99589	10.306	0.033	8.812	0.017		1.250	0.015	G	1.21	0.01	H	8.8104	0.0018	0.018	85		8.78	8.85				1								
99590	7.995	0.009	8.028	0.011		−0.028	0.012	G	−0.01	0.01	H	8.0181	0.0032	0.029	144		7.95	8.06		U 2		1 X S								
99591	9.986	0.025	9.141	0.019		0.750	0.020	G	0.79	0.02	H	9.2198	0.0025	0.020	111		9.19	9.26		C		1								
99592	8.445	0.014	8.293	0.016		0.138	0.020	T	0.15	0.02	L	8.3354	0.0014	0.011	65		8.32	8.36		C		1								S
99593	11.445	0.106	10.030	0.048		1.038	0.006	G	1.09	0.01	I	9.9902	0.0048	0.025	58		9.96	10.03				1								G
99594	9.019	0.009	8.939	0.011		0.079	0.013	T	0.09	0.01	L	8.9555	0.0017	0.022	239		8.92	8.99				1								
99595	8.370	0.011	7.957	0.009		0.412	0.015	G	0.48	0.02	H	7.9963	0.0020	0.017	91		7.97	8.02			20127−5019	I 1	1							S
99596	8.950	0.012	7.646	0.007		1.093	0.009	G	1.05	0.01	H	7.6947	0.0012	0.013	147		7.67	7.72		C		1								
99597	9.604	0.026	8.000	0.013		1.344	0.023	T	1.31	0.03	L	7.9891	0.0017	0.012	52		7.97	8.01		C		1								S
99598	10.482	0.026	9.803	0.024		0.639	0.015	G	0.70	0.01	H	9.8285	0.0023	0.024	182		9.79	9.87		C		1								G
99599	11.605	0.135	11.392	0.190							T	11.0514	0.0095	0.114	98		10.94	11.39		P 1 A		1								D
99600	8.740	0.012	8.738	0.015		0.007	0.018	T	0.03	0.02	L	8.7388	0.0018	0.016	95		8.72	8.77		C		1								

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s	±° ′ ″	mag	6 7	deg	deg	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	29	30
	3	4	5		8	9	11	12	13	14	15	16	17	18												
99601	20 12 46.23	+32 18 48.7	8.39	G	303.192 633 51	+32.313 521 76	0.65	5.61	−10.29	0.59	0.65	0.92	0.73	0.65	+ 4	+10	+ 3	− 8	−15	−16	−12	−21	+ 0	+ 7	0	−1.29
99602	20 12 47.14	+15 19 47.4	8.32	H	303.196 420 93	+15.329 844 99	1.95	1.95	−8.84	0.85	0.84	1.25	0.91	0.99	+21	−34	−29	+ 0	+10	+12	+20	+39	−21	+12	0	−0.25
99603	20 12 47.31	−24 48 15.9	8.43	H	303.197 110 45	−24.804 409 44	1.10	2.38	−0.83	0.98	0.78	1.11	1.20	1.19	+31	−22	+12	+ 0	+24	+29	+16	+34	+20	+48	0	0.16
99604 H	20 12 47.32	−02 59 45.4	6.91	H	303.197 174 75	−02.995 953 43	A 6.13	−14.74	0.02	1.44	0.90	1.36	2.04	1.01	+54	+ 4	− 9	+43	+29	+22	+38	+52	+ 4	+20	2	1.08
99605	20 12 49.86	−34 54 23.0	10.02	H	303.207 758 94	−34.906 398 80	A 5.41	−8.60	−5.74	6.05	3.13	5.09	6.29	4.42	+ 9	−13	− 2	−15	+25	+ 9	+21	+14	+23	+34	0	−1.06
99606	20 12 50.17	−34 54 07.5	10.74	3 H	303.209 037 72	−34.902 074 20	B 18.51	−25.49	−17.64	22.95	11.10	12.53	15.33	10.31	− 1	−16	− 4	−18	+28	+13	+23	+11	+22	+32	0	−1.06
99607	20 12 50.93	+16 05 43.7	7.73	H	303.212 194 26	+16.095 483 95	12.65	−31.80	−8.22	0.70	0.65	1.02	0.74	0.80	+17	−36	−20	+ 5	+12	− 3	+17	+30	−16	+14	0	0.00
99608	20 12 53.09	−05 50 19.6	9.18	H	303.221 189 58	−05.838 769 29	4.43	20.00	−20.25	1.40	1.03	1.58	1.87	1.60	+57	+13	+13	−25	−22	+32	−34	−42	−28	+38	0	0.21
99609	20 12 53.70	−22 59 25.8	7.93	H	303.223 768 81	−22.990 496 99	11.60	−27.46	−167.27	0.91	0.63	0.99	1.20	0.94	+14	−26	−20	+13	−18	+13	−15	+ 8	−13	+ 2	0	0.83
99610	20 12 53.92	+19 32 39.5	7.83	H	303.224 651 20	+19.544 306 67	2.16	−6.79	1.98	0.71	0.61	1.08	1.00	0.84	−19	+ 3	− 7	− 8	+ 9	+29	+10	− 1	+ 3	− 4	5	−0.80
99611	20 12 54.49	−07 27 29.2	7.64	H	303.227 024 59	−07.458 104 58	2.89	−0.31	−6.70	1.49	1.06	1.37	2.21	1.33	+ 4	−32	−31	−53	− 3	+48	+ 7	−38	+25	+25	0	0.39
99612	20 12 55.33	−39 32 52.4	9.06	H	303.230 523 66	−39.547 884 54	3.47	−0.45	−30.86	1.10	0.68	1.33	1.53	1.06	+14	−15	+ 0	+ 2	+ 1	+ 3	+ 5	− 5	−15	+28	0	−0.07
99613	20 12 55.98	−26 11 26.6	9.04	H	303.233 248 96	−26.190 718 79	1.85	4.30	−4.23	1.20	0.78	1.35	1.23	0.78	+53	−44	−31	−12	− 3	+ 9	− 1	−28	+10	+74	0	0.20
99614	20 12 56.90	+40 43 16.3	7.97	H	303.237 073 04	+40.721 189 00	4.35	−3.80	−9.71	0.52	0.56	0.69	0.58	0.58	+ 3	+ 5	+16	− 6	+ 6	− 6	+ 7	−16	− 6	+15	1	−0.61
99615	20 12 57.62	−58 46 44.3	8.88	1 H	303.240 090 28	−58.778 978 43	4.63	4.71	−12.61	0.89	0.86	1.35	1.04	0.86	+29	− 8	−39	−52	− 4	−14	− 6	−56	+42	−39	0	−0.08
120416	20 12 58.08	−56 50 47.9	8.71	H																						
99616	20 12 58.19	−48 58 47.0	9.62	H	303.242 463 98	−48.979 724 92	3.29	35.31	−50.54	1.44	0.89	1.55	2.30	1.28	−14	− 5	− 4	+11	− 6	− 6	− 7	+ 2	+ 8	−23	0	0.46
99617	20 12 58.53	+27 17 03.9	7.80	2 H	303.243 890 65	+27.284 427 55	1.94	2.08	−8.79	0.43	0.53	0.85	0.47	0.55	−11	+ 9	− 3	+ 1	− 9	−10	− 5	−14	+15	− 2	1	−0.39
99618	20 12 59.88	+20 56 54.5	8.85	H	303.249 510 85	+20.948 474 67	1.65	−4.39	−13.57	0.72	0.66	0.99	0.93	0.81	− 5	− 5	− 7	+ 0	+ 2	+ 2	+ 2	− 2	+ 4	+20	0	−0.63
99619	20 13 00.12	+42 50 06.3	8.02	H	303.250 493 78	+42.835 084 13	3.86	13.76	11.12	0.55	0.56	0.69	0.66	0.56	− 3	−16	+ 8	+ 2	−10	−12	− 7	−11	+ 1	+ 9	0	−0.83
99620	20 13 00.21	−32 44 42.1	8.55	H	303.250 867 50	−32.745 028 85	2.40	−16.86	−73.29	1.02	0.68	1.25	1.29	0.83	+38	−21	−12	− 3	−15	+ 9	− 5	−27	−19	+45	0	−1.62
99621	20 13 01.23	−30 33 16.0	9.74	H	303.255 122 28	−30.554 437 07	10.93	−33.59	−88.78	1.51	1.07	1.69	2.03	1.45	+46	−28	−15	+ 4	−11	+ 2	− 6	−21	+ 0	+57	0	−0.40
99622	20 13 02.49	+30 28 38.7	8.07	H	303.260 363 30	+30.477 403 30	3.34	9.32	−36.71	0.55	0.67	0.96	0.67	0.67	− 2	− 9	− 9	+20	+ 2	−19	+ 0	−27	+16	− 2	1	0.60
99623	20 13 03.17	+11 51 03.6	6.51	H	303.263 193 58	+11.851 002 25	6.61	−48.87	−60.92	0.67	0.64	0.87	0.76	0.82	+29	− 8	−19	+ 8	+35	+14	+41	+46	+ 1	+30	0	1.69
99624	20 13 04.43	−00 19 50.9	6.47	1 G	303.268 438 03	−00.330 798 48	2.08	−13.81	1.05	0.86	0.50	0.99	1.38	0.66	+17	+ 9	− 8	+26	+23	+43	+28	+28	+ 4	+15	0	0.14
99625	20 13 07.25	+49 11 18.6	8.03	H	303.280 196 63	+49.188 487 44	A 3.93	8.50	10.94	0.93	0.85	0.98	1.03	0.86	− 5	− 8	+ 9	+19	+ 4	−23	+ 5	−13	+26	− 2	5	0.23
99626	20 13 07.84	−57 28 41.9	8.54	H	303.282 674 72	−57.478 298 94	17.39	61.74	−64.29	0.80	0.73	1.17	1.12	1.11	+37	−31	−30	− 3	+15	−10	+14	− 3	− 4	+16	0	−1.77
99627	20 13 08.91	−24 52 03.2	8.99	H	303.287 113 85	−24.867 567 92	2.72	1.87	−17.63	0.93	0.71	1.12	1.15	0.88	+29	−32	−38	−17	−19	+35	− 5	− 6	− 5	+12	0	0.15
99628	20 13 10.85	+36 43 31.8	8.52	H	303.295 216 30	+36.725 491 06	2.40	0.37	−2.48	0.61	0.67	0.87	0.74	0.71	−12	− 8	− 2	+ 0	+ 5	+ 4	+ 4	− 6	+11	− 6	0	1.57
99629	20 13 10.96	+02 56 20.0	10.31	H	303.295 663 45	+02.938 881 74	27.36	104.71	21.83	1.49	1.21	1.79	2.11	1.81	+23	−16	−20	+39	−10	+11	−10	+45	− 2	+19	0	0.29
99631	20 13 13.87	−01 00 33.4	5.44	1 H	303.307 780 95	−01.009 266 21	3.67	24.87	−30.06	1.41	0.51	0.96	1.63	0.73	+30	−25	− 8	+52	+42	+18	+46	+28	−11	+ 8	0	0.25
99632	20 13 14.72	−21 26 27.8	8.77	H	303.311 342 95	−21.441 052 58	5.62	38.29	−11.31	1.19	0.86	1.60	1.49	1.62	+26	+ 5	+ 2	+ 5	−24	+ 5	−25	−16	−59	+21	0	−0.57
99633	20 13 14.86	+04 06 21.3	8.89	H	303.311 908 66	+04.105 920 31	1.26	12.81	4.86	0.99	0.76	1.33	1.31	1.05	+16	+19	−23	+44	−13	+46	−11	+46	−19	+ 9	0	−1.43
*99634	20 13 16.07	−82 01 41.1	8.46	H	303.316 956 79	−82.028 095 45	32.10	85.72	−19.63	0.64	0.58	0.77	0.77	0.70	− 1	−18	− 9	+ 4	+10	− 9	+10	− 9	− 3	+ 0	1	−1.02
*99635	20 13 15.70	+25 31 16.7	8.58	1 H	303.315 398 86	+25.521 295 13	0.17	−4.95	−27.96	0.62	0.67	1.18	0.63	0.70	−31	+ 6	− 5	+12	−20	+ 8	−25	−11	− 7	−50	2	0.11
99636	20 13 17.26	−22 03 34.7	9.16	H	303.321 921 41	−22.059 641 31	0.50	7.15	10.58	1.17	0.85	1.49	1.56	1.47	+23	− 7	−16	− 8	− 8	−14	− 7	+ 1	−50	+29	0	−0.55
99637	20 13 17.34	−48 19 48.5	8.38	H	303.322 254 75	−48.330 145 63	3.67	−0.65	8.24	1.01	0.63	1.16	1.70	0.98	−20	− 2	−18	+15	− 3	−21	− 9	− 2	− 6	−26	0	−0.25
99638	20 13 17.60	+25 14 29.6	7.45	2 H	303.323 331 31	+25.241 545 97	0.97	8.63	2.85	0.47	0.52	0.93	0.48	0.52	−33	− 6	+ 2	+16	−24	+ 4	−29	− 9	+ 3	−51	0	−1.45
99639	20 13 18.04	+46 48 56.4	4.80	H	303.325 174 96	+46.815 670 38	4.55	13.39	1.93	0.50	0.42	0.53	0.54	0.44	−15	+ 2	+ 8	−27	+13	− 2	+13	−20	+25	− 9	0	−0.42
99640	20 13 18.45	+71 06 30.0	7.81	1 H	303.326 887 73	+71.108 338 86	4.96	15.77	27.51	0.59	0.57	0.63	0.70	0.56	−11	−21	+26	− 8	+18	+ 4	+14	− 7	+ 4	+15	2	0.19
99641	20 13 19.32	+79 39 05.7	6.78	H	303.330 506 55	+79.651 577 44	2.60	−17.52	−22.99	0.47	0.44	0.50	0.51	0.49	+ 2	− 7	+ 6	+15	+ 6	−15	+ 9	+ 3	− 3	+13	0	1.14
99642	20 13 19.57	−36 18 08.9	9.48	H	303.331 543 41	−36.302 478 53	23.29	−4.05	30.26	1.38	0.70	1.64	1.85	1.34	+ 6	−22	+ 8	−16	+10	−12	+15	+ 6	−24	+29	0	2.97
99643	20 13 19.77	+50 37 47.4	8.61	H	303.332 380 64	+50.629 839 53	1.93	−23.64	−13.96	0.68	0.65	0.78	0.75	0.69	− 2	−27	+ 7	− 3	+10	+18	+ 8	+ 4	+ 0	+ 7	3	−0.81
99644 H	20 13 19.82	+10 47 14.1	9.35	H	303.332 594 88	+10.787 246 49	A −0.61	4.69	−12.96	3.16	2.63	3.42	3.68	3.03	+21	−35	−20	+50	− 8	−14	− 9	+56	+ 6	−14	1	0.50
99645	20 13 20.20	+19 56 35.9	9.72	G	303.334 147 77	+19.943 305 05	1.49	23.93	−1.25	0.98	0.88	1.45	1.38	1.17	−15	+22	−17	+11	+ 1	+17	+ 3	+21	+ 6	− 2	0	0.67
99646	20 13 20.41	+35 35 59.6	7.09	H	303.335 037 25	+35.599 891 90	0.92	5.32	0.10	0.45	0.52	0.65	0.51	0.57	− 4	− 1	+ 0	+ 9	+ 2	− 3	+ 4	− 4	+ 7	+ 9	0	−0.29
99647	20 13 20.80	+72 53 49.5	7.17	G	303.336 669 72	+72.897 069 66	10.71	−22.88	4.81	0.57	0.51	0.59	0.59	0.59	− 5	−23	− 4	−40	+ 6	+15	− 1	−12	+17	+10	0	0.64
99648	20 13 21.48	+37 44 43.8	10.18	2 H	303.339 495 44	+37.745 513 86	1.59	3.50	−11.49	0.83	1.06	1.24	0.92	1.09	− 3	+ 5	+15	+ 6	+ 3	− 7	+ 5	− 7	+ 8	+ 3	0	0.77
99649	20 13 22.48	+38 45 55.5	7.08	1 H	303.343 680 58	+38.765 427 23	1.17	−3.05	−5.81	0.48	0.49	0.64	0.53	0.54	−11	−19	+ 8	+ 5	+ 8	− 2	+ 6	− 7	+13	− 5	0	−0.34
99650	20 13 22.64	+05 18 34.0	7.67	H	303.344 330 94	+05.309 457 74	7.87	−11.01	−13.40	0.83	0.69	1.04	1.09	0.94	+22	−12	−20	+30	+ 2	+20	+10	+49	−21	+ 6	0	0.26
99651	20 13 22.78	−15 25 53.3	8.67	G	303.344 916 02	−15.431 460 74	27.33	−322.12	−266.44	1.09	0.82	1.21	1.27	0.96	+ 1	− 8	−38	−20	+16	+22	+27	+21	− 3	+ 2	0	0.33
99652	20 13 23.04	−67 15 16.8	8.42	H	303.346 019 95	−67.254 661 11	1.79	3.99	−17.25	0.66	0.83	1.24	0.77	1.10	−10	− 4	−15	− 8	+ 3	−17	− 1	−12	+11	−27	0	0.86
99653	20 13 23.66	+38 43 44.5	7.61	3 H	303.348 564 46	+38.729 016 01	* 1.81	8.07	1.53	0.62	0.63	0.84	0.86	0.75	− 9	+ 4	+ 1	+ 6	+ 3	+ 1	+ 4	−16	+20	− 2	2	2.32
99654	20 13 23.79	+43 48 40.3	7.76	H	303.349 132 96	+43.811 203 04	2.92	6.05	−0.22	0.52	0.49	0.64	0.58	0.50	− 8	− 9	+17	+18	− 1	−26	+ 4	+ 3	+ 5	+ 3	0	1.27
99655	20 13 23.80	+56 34 03.1	4.28	H	303.349 171 42	+56.567 522 23	21.41	60.85	82.26	0.45	0.39	0.45	0.48	0.38	−16	− 4	+ 7	+13	+ 3	−15	+ 4	−19	+14	−15	1	1.36
99656	20 13 24.18	−41 44 12.5	9.30	G	303.350 735 03	−41.736 799 68	3.39	7.53	−7.34	1.23	0.79	1.41	1.53	1.36	−10	−26	+15	+17	+16	+11	+ 7	+45	+25	+13	0	−0.28
99657	20 13 24.29	+35 08 44.0	8.78	G	303.351 191 51	+35.145 563 67	2.26	−39.56	−29.30	0.70	0.82	1.05	0.80	0.85	− 6	− 8	+ 5	+ 9	+14	−12	+15	−15	+ 3	+ 0	0	−1.65
99658	20 13 25.69	+23 27 13.0	8.16	H	303.357 040 15	+23.453 617 61	3.74	13.67	4.97	0.66	0.67	1.04	0.76	0.85	+11	+11	+11	+25	− 6	+ 5	+ 7	− 8	+ 5	+49	0	−0.81
99659	20 13 25.80	+14 24 37.3	7.44	H	303.357 499 09	+14.410 365 03	5.77	20.16	−9.33	0.78	0.70	1.03	0.92	0.85	+33	−15	−29	+18	+10	+10	+17	+45	− 8	+21	0	−0.94
99660 H	20 13 26.38	−38 21 22.7	9.20	H	303.359 916 14	−38.356 304 93	A 5.03	6.53	8.00	2.14	1.21	2.08	2.39	1.62	+26	−17	− 1	+ 0	− 6	−18	− 5	+ 3	−10	+20	0	0.53
99661	20 13 26.75	−46 12 03.2	8.26	H	303.361 454 95	−46.200 876 35	11.77	−2.25	−62.49	0.95	0.53	0.98	1.31	0.92	−10	−33	− 3	+21	− 3	+ 4	− 2	+15	− 1	−11	0	1.41
99662	20 13 27.38	+55 07 52.9	6.66	H	303.364 090 13	+55.131 359 51	4.03	−3.37	−15.87	0.49	0.45	0.53	0.59	0.44	+ 4	− 1	− 5	+ 7	− 6	−12	− 6	−20	+22	− 1	1	0.61
99663	20 13 27.57	+60 38 25.6	5.81	H	303.364 871 80	+60.640 433 20	5.49	39.03	55.82	0.48	0.41	0.49	0.54	0.44	+ 4	+ 7	− 6	+16	+ 0	+ 0	+ 2	−24	+27	+ 3	0	1.63
99664	20 13 28.05	+36 49 20.1	10.14	H	303.366 867 94	+36.822 254 88	−0.73	0.89	−6.72	1.00	1.16	1.49	1.13	1.16	−14	−17	+ 5	− 3	+11	− 2	+ 7	−12	+16	−12	0	0.08
99665	20 13 30.22	−01 12 41.5	8.53	H	303.375 903 39	−01.211 537 62	17.20	61.64	−55.75	1.12	0.65	1.18	1.74	1.00	+23	− 8	− 1	+ 3	+29	+22	+33	+33	+ 1	+10	0	1.42
99666	20 13 32.38	−47 42 47.3	6.47	H	303.384 920 57	−47.713 129 80	7.26	−5.87	−42.80	0.80	0.50	0.94	1.35	0.81	− 3	−17	−27	+ 9	+10	−30	+ 0	+ 2	+17	−40	0	2.74
99667	20 13 32.99	+36 19 42.2	7.10	2 H	303.387 452 63	+36.328 387 51	0.56	2.12	−2.42	0.44	0.48	0.64	0.52	0.53	− 7	+ 8	+ 2	+ 7	− 2	−17	+ 0	+ 4	+12	− 3	0	−0.58
99668	20 13 33.86	−38 26 51.5	6.90	H	303.391 071 52	−38.447 644 54	+ 17.68	13.42	−168.02	0.89	0.52	0.87	1.15	0.86	−15	−21	+ 4	−34	+11	+ 7	+17	−31	−12	+ 5	0	1.25
99669	20 13 34.12	+24 31 32.4	8.14	H	303.392 156 02	+24.525 674 96	1.88	4.20	−3.46	0.50	0.65	0.96	0.64	0.81	+10	−13	− 7	+20	− 2	+ 3	+ 3	+ 2	− 7	+28	1	−1.03
*99670	20 13 34.77	+16 15 54.8	6.85	2 H	303.394 873 58	+16.265 231 87	0.65	1.81	−3.98	0.61	0.58	0.88	0.70	0.71	+18	−27	−29	+ 9	+12	− 2	+19	+29	−24	+ 8	0	−0.75
*99671	20 13 34.76	−45 35 26.0	7.79	G	303.394 818 77	−45.590 567 91	3.23	10.32	−9.13	0.92	0.55	0.96	1.20	0.88	− 8	−33	− 1	+28	−15	+ 2	−17	+18	+ 4	− 8	0	−0.88
99672	20 13 36.35	+53 39 33.8	7.33	H	303.401 477 94	+53.659 376 91	4.34	−29.54	−23.52	0.48	0.44	0.51	0.63	0.45	−14	− 7	+ 5	+10	+ 7	− 7	+ 4	−15	+14	−16	1	−0.93
99673	20 13 36.37	+27 57 47.2	8.46	H	303.401 541 17	+27.963 121 57	3.77	12.03	14.33	0.46	0.63	0.98	0.51	0.60	−14	−10	+ 5	−29	+ 5	+ 8	+ 4	−20	+ 7	−13	1	−1.60
99674	20 13 37.74	+48 09 17.0	8.63	H	303.407 249 93	+48.154 722 89	4.29	1.23	−4.08	0.70	0.62	0.78	0.78	0.67	−10	− 6	+ 8	+13	+ 8	−12	+ 8	− 4	+19	−10	0	−0.35
99675	20 13 37.90	+46 44 28.8	3.80	2 G	303.407 927 82	+46.741 324 17	+ 2.41	4.20	1.87	1.75	1.40	0.57	0.68	0.60	−22	− 4	+19	−55	+38	+ 5	+28	−66	+ 8	−36	0	−0.48
99676	20 13 39.20	+46 42 42.7	7.01	H	303.413 318 44	+46.711 855 52	1.90	3.53	2.67	0.51	0.46	0.59	0.58	0.49	−13	+ 9	+ 4	−19	+10	− 7	+12	−21	+28	− 7	0	1.53
99677 H	20 13 39.86	+27 32 06.5	8.14	H	303.416 086 66	+27.535 144 95	* 8.30	33.52	16.34	0.46	0.64	1.00	0.51	0.65	−11	+ 4	+ 5	−11	+ 0	− 3	+ 1	−16	+ 7	− 4	1	−0.67
99678	20 13 40.38	−44 36 31.2	9.24	H	303.418 258 02	−44.608 665 18	5.29	−10.47	−16.85	1.19	0.82	1.39	1.76	1.35	+ 6	−23	−18	+30	+ 4	−14	+ 0	+20	+ 7	+ 5	0	0.16
99679 H	20 13 40.52	+24 14 20.2	6.58	G	303.418 843 45	+24.238 931 04	A 9.75	48.37	37.21	0.55	0.64	0.83	0.64	0.72	+24	−10	− 5	+18	−12	− 1	− 6	−11	− 8	+48	3	1.11
99680 H	20 13 40.70	+53 07 28.8	7.02	G	303.419 569 85	+53.124 676 32	A 21.64	42.97	168.59	0.61	0.60	0.63	0.73	0.57	+ 8	+ 0	− 1	+18	+ 8	+ 0	+ 7	−11	+18	+10	2	0.54
99681 H	20 13 41.59	−34 07 06.4	6.66	H	303.423 299 02	−34.118 441 21	A 7.51	23.75	−10.99	1.12	0.66	1.09	1.19	0.84	+10	+ 6	−22	−10	+27	−14	+22	+16	+16	+40	1	−0.70
99682	20 13 42.26	+18 10 26.9	8.08	G	303.426 078 27	+18.174 127 70	2.08	−12.08	−19.00	0.77	0.83	1.04	1.00	1.15	+17	−14	− 5	+12	− 2	+ 7	− 3	+40	− 2	+20	0	1.20
99683	20 13 42.52	−61 32 59.9	7.08	H	303.427 152 66	−61.549 972 19	2.85	7.05	−11.40	0.48	0.50	0.83	0.47	0.51	+ 7	−20	−30	+21	−21	+21	−24	−21	+17	− 5	1	0.61
99684	20 13 42.65	−52 13 35.5	8.35	H	303.427 698 10	−52.226 539 92	2.37	23.13	−7.39	0.96	0.66	1.09	1.44	0.97	− 3	−18	+ 3	+25	+ 2	+ 6	+ 4	+ 0	+ 8	+13	0	0.08
99685	20 13 42.82	+43 22 44.4	6.13	H	303.428 399 88	+43.379 003 32	4.42	−3.11	3.96	0.44	0.41	0.52	0.49	0.43	−10	−11	+12	+ 8	+ 1	−16	+ 4	− 8	+ 3	+ 2	0	1.28
99686	20 13 43.16	+09 41 15.6	9.35	G	303.429 840 08	+09.687 654 99	10.19	−114.83	−179.40	1.18	0.95	1.43	1.36	1.21	+30	−24	−31	+ 8	+10	+20	+22	+51	−15	+19	0	0.17
99687	20 13 43.88	−87 49 21.7	8.44	H	303.432 833 38	−87.822 694 34	12.24	80.18	−121.93	0.66	0.60	0.71	0.79	0.63	−21	+ 6	−10	+13	−14	+ 1	−13	+21	− 1	−27	1	0.76
99688 H	20 13 44.69	+40 50 19.5	9.36	H	303.436 209 67	+40.838 753 55	A 0.98	−0.79	−8.34	1.95	1.95	2.10	1.91	1.96	− 3	− 7	+ 1	+ 1	+ 5	− 5	+ 6	−13	+12	+12	1	−0.18
*99689 H	20 13 44.94	+16 09 28.6	7.65	H	303.437 241 17	+16.157 944 96	A 14.21	−8.50	−0.41	1.84	2.16	2.18	2.11	2.98	+37	− 4	− 1	+ 3	+14	−15	+ 8	+25	−18	+65	9	1.83
*99690	20 13 44.91	−14 11 46.9	8.94	H	303.437 114 75	−14.196 373 53	−0.99	38.54	−5.89	1.26	0.99	1.51	1.41	1.17	+12	−15	−40	+ 6	+ 4	+22	+18	+43	−29	+ 6	0	1.01
99691	20 13 47.34	+51 14 22.7	7.54	H	303.447 232 82	+51.239 626 68	6.13	21.35	45.33	0.51	0.47	0.56	0.54	0.52	− 7	−21	+ 5	− 4	+11	+ 1	+ 9	− 3	+ 8	+ 3	1	1.48
99692 H	20 13 49.02	−67 27 30.3	9.18	H	303.454 265 80	−67.458 427 87	A 4.12	1.20	−11.91	1.48	2.10	2.79	1.42	2.43	−17	+ 7	−16	−32	+ 0	−15	− 4	−14	+ 7	−26	1	0.86
99693	20 13 49.37	−55 10 10.9	8.62	G	303.455 702 06	−55.169 684 83	2.54	18.35	−27.77	0.90	0.72	1.09	1.06	1.01	+ 1	−38	+10	− 4	+15	+12	+10	+24	+13	+ 6	0	1.24
99694 H	20 13 49.76	−36 02 29.4	8.46	H	303.457 320 42	−36.041 498 07	A 3.79	10.45	6.73	3.35	2.39	3.51	5.08	2.97	+10	+ 3	+ 5	+ 2	+10	+27	+ 5	+ 7	−18	+17	2	0.91
99695	20 13 49.80	−47 36 55.2	9.50	H	303.457 512 48	−47.615 336 21	21.24	−10.88	54.06	1.38	0.89	1.61	2.56	1.51	− 2	−14	−25	+24	− 5	−28	−18	+ 9	+20	−49	0	0.45
99696	20 13 51.11	+48 55 26.3	8.72	H	303.462 954 65	+48.923 984 79	3.26	3.42	2.37	0.70	0.63	0.78	0.89	0.65	−15	−11	+13	+21	+ 5	−18	+ 4	− 8	+20	−16	0	−2.03
99697	20 13 51.19	+74 33 30.9	9.03	H	303.463 307 55	+74.558 572 28	7.43	−23.24	22.36	0.87	0.88	0.89	0.90	1.10	+10	−30	− 4	+20	+20	+ 4	+23	+45	−13	+14	2	−0.97
99698	20 13 51.37	+44 50 25.6	9.77	H	303.464 028 61	+44.840 444 11	14.44	172.74	84.91	0.85	0.83	1.03	1.20	0.89	−13	− 9	+ 8	+17	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
99601	9.615	0.016	8.503	0.010		0.982	0.015	G	0.96	0.01	H	8.5533	0.0015	0.015	147		8.52	8.59		C			1							
99602	9.701	0.029	8.458	0.018		0.990	0.015	G	0.97	0.01	H	8.4854	0.0025	0.019	87		8.46	8.52					1							
99603	10.329	0.042	8.627	0.019		1.421	0.036	T	1.41	0.06	L	8.5673	0.0023	0.015	68		8.55	8.59					1							
99604	7.136	0.008	6.883	0.009	*	0.241	0.011	T	0.27	0.01	L *	6.9856	0.0009	0.008	90	*	6.97	7.01		D	20128−0300	I 1	2 C A	AB	79	3.074	0.010	2.39	0.04	S
99605	11.440	0.082	10.050	0.037	A	1.176	0.071	T	1.14	0.06	L	10.1878	0.0234	0.064	111	A	10.09	10.33		D	20128−3454	H 2	1 C P D							D
99606	11.472	0.085	10.567	0.058	B	0.804	0.077	T	0.83	0.06	L	10.8141	0.0391			B				U 2	20128−3454	H 2	1 C I D							D
99607	8.373	0.011	7.793	0.011		0.573	0.004	G	0.65	0.00	H	7.8585	0.0015	0.011	91		7.83	7.88		C			1							S
99608	10.465	0.037	9.297	0.023		1.002	0.034	T	0.98	0.03	L	9.3428	0.0020	0.017	104		9.31	9.37		C			1 G							
99609	9.057	0.021	8.026	0.015		0.897	0.019	T	0.90	0.01	L	8.0879	0.0015	0.008	56		8.07	8.10					1							
99610	9.569	0.021	7.956	0.011		1.351	0.019	T	1.32	0.02	L	7.9791	0.0012	0.014	121		7.96	8.01					1							S
99611	8.895	0.012	7.726	0.008		1.003	0.011	T	0.98	0.01	L	7.8021	0.0012	0.010	114		7.79	7.82		C			1 G							S
99612	9.650	0.021	9.115	0.020		0.509	0.022	T	0.58	0.02	L	9.1711	0.0025	0.019	101		9.14	9.20					1							
99613	10.505	0.026	9.141	0.014		1.155	0.023	T	1.12	0.02	L	9.2039	0.0018	0.018	149		9.17	9.24		C			1							
99614	8.050	0.008	7.975	0.010		0.074	0.012	T	0.09	0.01	L	8.0001	0.0012	0.013	138		7.97	8.02					1							S
99615	8.906	0.011	8.851	0.014		0.056	0.017	T	0.07	0.01	L	8.9034	0.0021	0.025	139		8.87	8.96	1.63	P 1 A			1							
120416									−0.11	0.03	L	8.6701	0.0137	0.000	1		8.67	8.67												G
99616	10.246	0.027	9.610	0.025		0.585	0.027	T	0.66	0.03	L	9.7415	0.0037	0.028	87		9.70	9.78					1							
99617	7.712	0.006	7.785	0.007		−0.062	0.008	T	−0.04	0.01	L	7.7857	0.0021	0.020	205		7.75	7.82		U 2			1							S
99618	8.715	0.012	8.867	0.017		−0.132	0.018	T	−0.12	0.03	L	8.8117	0.0014	0.019	113		8.78	8.84					1							
99619	8.151	0.008	8.030	0.009		0.117	0.011	T	0.13	0.01	L	8.0634	0.0014	0.015	125		8.04	8.08		C			1							S
99620	9.736	0.024	8.652	0.016		0.937	0.022	T	0.93	0.02	L	8.7104	0.0025	0.018	96		8.69	8.75		C			1							
99621	10.579	0.049	9.825	0.041		0.673	0.048	T	0.73	0.04	L	9.8807	0.0032	0.024	81		9.84	9.92		C			1							
99622	9.291	0.013	8.184	0.009		0.955	0.012	T	0.94	0.01	L	8.2363	0.0016	0.019	161		8.20	8.26					1							
99623	8.056	0.009	6.645	0.005		1.192	0.008	T	1.15	0.01	L	6.6781	0.0009	0.008	89		6.66	6.69		C			1							S
99624	8.615	0.024	6.683	0.011		1.532	0.015	G	1.54	0.09	H	6.5973	0.0016	0.016	80		6.58	6.62		U 2			1							S
99625	8.065	0.008	8.026	0.009	A	0.041	0.011	T	0.06	0.01	L	8.0531	0.0073	0.014	106	A	8.03	8.08			20131+4911	I 1	2 C B	AB	221	13.263	0.026	3.20	0.14	S
99626	9.322	0.014	8.593	0.012		0.654	0.014	T	0.72	0.01	L	8.6763	0.0019	0.018	133		8.65	8.71		C			1							S
99627	9.150	0.021	9.017	0.025		0.121	0.030	T	0.14	0.03	L	9.0335	0.0017	0.012	63		9.01	9.06		C			1							
99628	8.712	0.016	8.573	0.020		0.126	0.024	T	0.14	0.03	L	8.5628	0.0018	0.015	142		8.54	8.59					1							
99629	11.941	0.128	10.428	0.056		1.260	0.020	G	1.32	0.14	K	10.4337	0.0027	0.030	101		10.36	10.47					1							G
99631	7.300	0.007	5.626	0.004		1.430	0.001	G	1.36	0.01	L	5.5818	0.0012	0.008	73		5.56	5.60		M			1 G							S
99632	9.224	0.020	8.825	0.021		0.377	0.027	T	0.44	0.03	L	8.8527	0.0028	0.015	58		8.83	8.89		C			1							S
99633	11.001	0.059	9.011	0.019		1.649	0.049	T	1.67	0.05	L	8.9989	0.0019	0.014	97		8.97	9.02		C			1							
99634	9.580	0.016	8.537	0.011		0.896	0.015	T	0.90	0.01	L	8.6060	0.0015	0.015	131		8.58	8.64					1							
99635	9.975	0.019	8.743	0.011		1.052	0.017	T	1.02	0.01	L	8.7462	0.0016	0.021	225		8.71	8.79		U			1 S							D
99636	9.778	0.027	9.213	0.025		0.529	0.033	T	0.60	0.04	L	9.2816	0.0031	0.019	63		9.26	9.32					1							
99637	9.740	0.021	8.494	0.013		1.063	0.019	T	1.03	0.02	L	8.5442	0.0015	0.012	93		8.52	8.56		C			1							
99638	9.517	0.013	7.684	0.006		1.556	0.012	T	2.51	0.03	O	7.4653	0.0027	0.029	211		7.42	7.52		U 2			1 S							
99639	4.954	0.003	4.843	0.003		0.100	0.006	G	0.19	0.03	C	4.8640	0.0004	0.004	100		4.86	4.87			20135+4646	I 3	1							S
99640	8.250	0.011	7.843	0.008		0.367	0.006	G	0.43	0.01	H	7.8929	0.0021	0.021	115		7.86	7.92		U 2			1							S P
99641	8.799	0.011	6.940	0.005		1.545	0.010	T	1.61	0.02	L	6.8969	0.0013	0.011	116		6.88	6.92					1							S
99642	10.585	0.035	9.572	0.024		0.873	0.033	T	0.92	0.03	L	9.6211	0.0017	0.020	113		9.59	9.66					1							
99643	10.018	0.022	8.756	0.014		1.075	0.020	T	1.04	0.02	L	8.7777	0.0016	0.016	121		8.74	8.81		C			1							
99644	9.533	0.021	9.494	0.029	*	0.041	0.033	T	0.06	0.03	L *	9.3666	0.0035	0.018	74	*	9.35	9.40		D	20133+1047	I 1	2 C A	AB	123	0.777	0.004	0.41	0.02	
99645	10.349	0.032	9.844	0.032		0.521	0.015	G	0.59	0.02	H	9.8425	0.0028	0.030	114		9.77	9.89					1							G
99646	8.555	0.008	7.209	0.005		1.141	0.007	T	1.07	0.03	C	7.2600	0.0009	0.010	156		7.24	7.28		C			1							S
99647	7.530	0.007	7.198	0.006		0.334	0.015	G	0.39	0.02	H	7.2470	0.0006	0.009	91		7.23	7.26		D			1							S
99648	11.598	0.104	10.069	0.040		1.306	0.092	T	4.23	0.96	K	9.5185	0.0102	0.131	142		9.26	9.76		U 2			1 S							G
99649	7.606	0.007	7.162	0.008		0.500	0.010	G	0.57	0.01	H	7.1912	0.0016	0.014	133		7.17	7.21		M	20134+3844	I 2	1							S
99650	7.798	0.009	7.676	0.010		0.118	0.013	T	0.13	0.01	L	7.7104	0.0014	0.010	87		7.69	7.74		C			1							S
99651						0.732	0.015	G	0.78	0.01	H	8.7997	0.0024	0.015	53		8.77	8.83		C	20134−1526	I 1	1							
99652	10.421	0.025	8.608	0.011		1.540	0.023	T	1.87	0.07	O	8.5150	0.0020	0.022	171		8.48	8.55					1							
99653	11.650	0.117	8.064	0.010		2.860	0.510	G	2.87	0.52	J	7.5547	0.0916	0.578	125		7.03	8.49	434.10	P 1 B	20134+3844	I 2	1 V							P
99654	7.784	0.006	7.767	0.008		0.020	0.009	T	0.04	0.01	L	7.7763	0.0012	0.012	130		7.76	7.80					1							S
99655	4.429	0.002	4.294	0.002		0.114	0.001	G	0.14	0.03	C	4.3218	0.0007	0.005	122		4.31	4.33					1							S
99656	9.628	0.020	9.326	0.022		0.272	0.003	G	0.31	0.00	H	9.3883	0.0022	0.022	93		9.35	9.42		C			1							
99657	10.552	0.044	8.939	0.018		1.350	0.012	G	1.32	0.01	H	8.9441	0.0021	0.019	138		8.90	8.97					1							
99658	8.137	0.009	8.163	0.011		−0.019	0.013	T	0.00	0.01	L	8.1596	0.0013	0.012	120		8.14	8.18		C			1							S
99659	8.688	0.014	7.549	0.010		0.979	0.013	T	0.96	0.01	L	7.6036	0.0013	0.012	82		7.58	7.63					1							S
99660	10.604	0.042	9.402	0.023	*	1.029	0.037	T	1.00	0.03	L *	9.3639	0.0026	0.018	102	*	9.34	9.39			20134−3821	I 1	2 C A	AB	19	0.971	0.013	2.18	0.09	
99661	9.062	0.013	8.334	0.011		0.668	0.014	T	0.73	0.01	L	8.3989	0.0015	0.011	97		8.38	8.42		C			1							S
99662	7.896	0.008	6.777	0.005		0.964	0.007	T	0.95	0.01	L	6.8267	0.0009	0.008	119		6.81	6.84		C			1							S
99663	7.746	0.008	5.975	0.004		1.476	0.007	T	1.49	0.01	L	5.9392	0.0010	0.007	108		5.92	5.95					1							S
99664	12.297	0.318	10.523	0.106		1.508	0.276	T	1.81	0.15	K	10.2301	0.0031	0.032	141		10.18	10.28		C			1							G
99665	9.415	0.021	8.609	0.017		0.713	0.021	T	0.77	0.02	L	8.6663	0.0015	0.011	74		8.65	8.69		D			1							
99666	8.097	0.008	6.614	0.005		1.249	0.007	T	1.21	0.01	L	6.6314	0.0010	0.008	92		6.61	6.65		C			1							S
99667	7.029	0.006	7.088	0.007		−0.086	0.001	G	−0.07	0.00	H	7.0747	0.0027	0.026	146		7.04	7.13		U 2 C			1							S
99668	7.424	0.005	6.951	0.005		0.458	0.006	T	0.53	0.01	L	6.9981	0.0009	0.009	110		6.99	7.02					1 O							S
99669	8.041	0.007	8.115	0.010		−0.063	0.011	T	−0.04	0.01	L	8.1230	0.0011	0.014	149		8.10	8.15		C			1							
99670	9.127	0.014	7.067	0.006		1.705	0.012	T	1.73	0.01	L	6.9546	0.0020	0.022	91		6.91	6.99		U 2			1							S
99671	7.788	0.007	7.785	0.008		−0.015	0.017	G	0.01	0.02	A	7.7882	0.0016	0.012	94		7.77	7.81		C			1							S
99672	7.351	0.005	7.340	0.007		0.011	0.008	T	0.03	0.01	L	7.3405	0.0008	0.008	133		7.33	7.36		C			1							S
99673	8.706	0.007	8.480	0.008		0.216	0.010	T	0.24	0.01	L	8.5264	0.0013	0.020	259		8.49	8.56					1							
99674	8.723	0.013	8.637	0.015		0.084	0.019	T	0.10	0.02	L	8.6680	0.0012	0.012	100		8.64	8.70		C			1							
99675	5.349	0.003	3.941	0.002		1.270	0.042	G	1.15	0.00	L	3.9123	0.0009	0.007	98		3.90	4.02		P 1	20135+4646	I 3	1 O							S
99676	6.827	0.006	6.956	0.008		−0.133	0.010	G	−0.12	0.01	H	6.9609	0.0006	0.008	103		6.95	6.97		C	20135+4646	I 3	1							S
99677	8.762	0.008	8.190	0.007	*	0.538	0.008	T	0.61	0.01	L *	8.2554	0.0012	0.016	226	*	8.23	8.29		C	20137+2732	H 1	2 C S A	AB	337	0.144	0.012	0.88	0.45	
99678	9.751	0.023	9.289	0.023		0.449	0.026	T	0.52	0.03	L	9.3362	0.0032	0.022	92		9.29	9.38					1							
99679	6.950	0.005	6.604	0.005	*	0.304	0.010	G	0.35	0.01	H *	6.6695	0.0008	0.009	144	*	6.66	6.68		D	20137+2414	I 1	2 C A	AB	273	2.838	0.008	2.93	0.03	S
99680	7.582	0.008	7.047	0.007	*	0.504	0.012	G	0.58	0.01	H *	7.1361	0.0008	0.009	132	*	7.12	7.16		D	20137+5307	I 1	2 C A	AB	109	5.357	0.006	2.43	0.02	S
99681	7.600	0.006	6.711	0.004	*	0.792	0.005	T	0.82	0.00	L *	6.8054	0.0009	0.008	131	*	6.79	6.82		D	20137−3407	I 1	2 C A	AB	9	2.775	0.003	1.23	0.01	S
99682	9.934	0.029	8.219	0.013		1.390	0.020	G	1.36	0.02	H	8.2450	0.0024	0.016	80		8.21	8.27		C			1							
99683	6.987	0.004	7.059	0.005		−0.068	0.002	G	−0.05	0.00	H	7.0593	0.0007	0.010	143		7.04	7.08					1							S
99684	10.289	0.031	8.490	0.014		1.498	0.027	T	1.52	0.04	L	8.4794	0.0025	0.017	95		8.45	8.52					1							
99685	8.086	0.007	6.298	0.004		1.489	0.006	T	1.51	0.01	L	6.2602	0.0008	0.008	128		6.25	6.27			20137+4323	I 1	1							S
99686	10.305	0.035	9.490	0.028		0.691	0.002	G	0.75	0.00	H	9.5043	0.0028	0.019	81		9.46	9.54		C			1							
99687	9.105	0.012	8.498	0.011		0.564	0.012	T	0.64	0.01	L	8.5578	0.0017	0.019	147		8.53	8.60					1							S
99688	9.260	0.018	8.964	0.023	*	0.281	0.027	T	0.32	0.03	L *	9.4365	0.0019	0.020	139	*	9.39	9.48		D	20137+4050	I 1	2 C A	AB	258	2.923	0.005	0.27	0.02	G
99689	8.308	0.019	7.784	0.016	*	0.492	0.023	T	0.56	0.02	L *	7.7602	0.0010	0.008	91	*	7.74	7.77		D	20137+1609	I 1	2 C A	AB	279	1.166	0.004	0.05	0.01	S
99690	11.021	0.080	9.152	0.029		1.553	0.068	T	1.57	0.07	L	9.0600	0.0042	0.017	49		9.03	9.08					1							
99691	7.876	0.007	7.560	0.008		0.284	0.002	G	0.32	0.00	H	7.6142	0.0009	0.010	128		7.60	7.63		C			1							S
99692	9.599	0.018	9.118	0.018	*	0.453	0.023	T	0.52	0.02	L *	9.2821	0.0018	0.029	223	*	9.23	9.33		D	20138−6728	I 1	2 C A	AB	168	3.110	0.007	1.18	0.03	
99693	9.236	0.014	8.676	0.013		0.546	0.015	G	0.62	0.01	H	8.7411	0.0022	0.019	95		8.71	8.77		C			1							
99694	9.035	0.013	8.562	0.013	*	0.446	0.016	T	0.52	0.02	L *	8.5622	0.0019	0.015	114	*	8.54	8.59		D	20138−3602	I 1	2 C A	AB	27	0.570	0.003	0.47	0.02	S
99695	10.616	0.040	9.560	0.026		0.906	0.037	T	0.91	0.03	L	9.6463	0.0029	0.027	79		9.60	9.69		C			1							
99696	8.712	0.011	8.728	0.014		−0.010	0.016	T	0.01	0.01	L	8.7249	0.0014	0.013	97		8.70	8.75		C			1							
99697	10.289	0.027	9.132	0.017		0.993	0.025	T	0.97	0.02	L	9.1976	0.0019	0.019	104		9.16	9.24					1 S							
99698	10.753	0.044	9.845	0.032		0.791	0.042	T	0.82	0.03	L	9.9067	0.0018	0.023	120		9.87	9.96		C			1							G
99699						1.365	0.133	G	1.60	0.25	I	11.4069	0.0057	0.052	99		11.32	11.47					1							G
99700	9.137	0.015	8.728	0.015		0.387	0.020	T	0.45	0.02	L	8.7683	0.0016	0.013	110		8.74	8.79		C			1							

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Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas			mas/yr												%	
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
99701	20 13 52.75	−45 09 49.1	7.97	G	303.469 802 02	−45.163 631 53	161.17	778.18	−159.55	0.95	0.63	1.08	1.34	1.07	−11	−27	+ 4	+26	−16	+ 5	−20	+24	+12	− 9	0	0.38
99702	20 13 54.72	+16 55 29.6	9.43	H	303.477 993 43	+16.924 895 43	9.06	−3.59	1.68	1.00	1.02	1.42	1.12	1.32	+30	−21	−22	+ 4	+ 8	+18	+17	+42	−25	+22	0	−0.32
99703 H	20 13 54.86	−50 19 14.9	8.35	H	303.478 597 05	−50.320 818 78 A	3.68	4.16	−16.37	3.13	2.11	2.58	3.15	2.27	+18	−26	−16	+29	+ 7	− 6	+ 1	+ 3	+12	+14	3	0.53
99704	20 13 55.44	+39 09 32.3	7.09	G	303.481 004 49	+39.158 968 36	6.91	38.77	19.01	0.46	0.50	0.61	0.53	0.52	− 9	− 9	+14	+15	+ 9	+10	+10	−18	+ 9	+ 5	0	0.80
99705	20 13 56.07	+23 58 07.6	8.93	H	303.483 628 28	+23.968 780 75	−0.49	−3.08	−10.58	0.82	0.98	1.46	0.96	1.13	+ 5	−28	+12	+23	−19	−12	− 8	− 9	− 5	+34	0	0.87
99706	20 13 57.57	−04 19 19.4	9.35	H	303.489 893 71	−04.322 064 82	2.03	9.95	−19.80	1.42	0.73	1.53	1.94	1.13	+33	−18	+ 0	− 2	+ 5	+10	+ 8	+21	− 6	+26	2	0.22
99707	20 13 58.78	+75 24 13.8	8.15	H	303.494 902 52	+75.403 831 59	2.41	23.30	−20.99	0.60	0.59	0.64	0.65	0.72	+ 2	−16	+11	+10	+12	−14	+16	+21	− 9	+12	0	1.73
99708	20 13 58.99	−16 40 08.3	8.46	G	303.495 812 25	−16.668 977 42	13.23	43.99	−50.97	1.16	0.97	1.46	1.71	1.12	+15	−15	−39	− 4	+ 6	+40	+28	+45	−12	−12	0	1.04
99709	20 13 59.26	−63 51 54.9	9.08	H	303.496 926 51	−63.865 248 99	7.82	95.51	−116.67	0.95	0.77	1.24	0.98	1.08	+12	−22	−12	+21	− 6	+ 2	−14	− 7	+15	− 3	0	−0.79
99710	20 13 59.63	−17 40 34.1	8.28	H	303.498 457 17	−17.676 132 22	7.63	105.31	−9.56	1.05	0.72	1.26	1.30	0.88	+12	−31	−46	−11	− 7	+24	+16	+29	−28	−17	0	0.44
99711	20 13 59.88	−00 52 03.1	7.79	H	303.499 508 90	−00.867 514 41	50.27	−63.37	262.26	1.08	0.58	1.13	1.68	0.74	+17	+ 6	− 4	+40	+23	+39	+24	+31	+ 4	+11	0	2.68
99712	20 14 00.20	−34 41 30.9	9.08	H	303.500 833 87	−34.691 911 42	5.23	−5.72	2.68	1.21	0.67	1.24	1.35	1.04	+ 6	+ 1	+ 4	−21	+37	+14	+33	+27	+22	+35	0	−2.26
99713	20 14 00.39	+16 51 29.1	8.19	H	303.501 613 54	+16.858 090 29	3.46	2.65	−8.66	0.74	0.70	0.96	0.86	0.88	+10	−15	−27	− 2	+14	+ 3	+19	+37	−20	+ 5	0	−0.72
99714	20 14 00.44	−09 37 04.6	7.35	H	303.501 819 52	−09.617 953 09	6.14	27.11	−5.98	1.04	0.86	1.14	1.47	1.08	+39	−16	−28	− 9	+34	+ 6	+40	+47	−11	+ 9	0	1.47
99715	20 14 00.63	+55 57 11.2	8.85	G	303.502 640 43	+55.953 104 52	3.77	11.85	17.06	0.73	0.60	0.73	0.83	0.62	− 5	+ 8	−12	+10	+ 0	−17	− 1	−13	+14	− 7	4	−0.75
99716	20 14 03.07	−75 52 04.3	8.39	1 G	303.512 783 12	−75.867 865 96	6.67	25.90	2.05	0.62	0.69	0.92	0.72	0.80	− 1	− 3	− 2	+ 5	−15	+11	−14	−12	−18	− 5	0	−0.42
99717 H	20 14 04.52	+22 13 21.5	7.25	H	303.518 846 08	+22.222 638 05 A	1.21	6.79	5.39	1.66	1.54	1.83	1.99	1.65	+ 1	−15	+ 8	+ 8	+10	+ 5	+12	− 9	−17	+ 8	9	1.70
99718	20 14 04.52	−36 36 54.3	9.05	H	303.518 852 22	−36.615 077 95	0.28	−9.84	−14.07	1.20	0.66	1.42	1.44	1.06	+ 9	−30	− 3	− 9	+ 8	+12	+ 5	+13	+ 2	+27	0	−1.15
99719	20 14 04.87	+36 36 17.6	6.47	H	303.520 300 39	+36.604 894 39	3.23	10.39	−5.60	0.41	0.45	0.58	0.47	0.47	− 4	− 4	− 1	+14	+ 4	−10	+ 3	+ 0	+ 8	− 2	0	0.93
99720 H	20 14 05.35	−04 50 16.3	9.52	2 H	303.522 291 83	−04.837 874 56 A	−4.76	38.47	2.35	5.84	5.56	5.83	8.85	3.92	+73	+18	+18	− 8	− 5	−46	− 2	+ 6	− 7	+45	13	1.52
99721	20 14 06.11	−48 20 40.7	9.82	H	303.525 477 62	−48.344 627 01	9.36	15.54	−119.83	6.07	4.03	7.08	9.11	5.48	+ 3	−21	−22	+20	+ 6	−11	+ 3	− 6	+ 1	− 2	0	
99722	20 14 06.42	−44 10 23.7	8.39	G	303.526 736 66	−44.173 253 20	9.77	47.36	−44.46	1.05	0.73	1.25	1.53	1.28	+ 1	−20	− 6	+30	− 2	+ 5	− 8	+32	+31	+ 2	0	0.72
99723	20 14 06.61	−62 29 22.3	7.13	H	303.527 531 69	−62.489 540 25	5.29	−27.72	28.67	0.59	0.52	0.86	0.58	0.62	+ 1	−15	−23	+12	−17	+15	−25	−17	+20	−18	0	0.04
*99724	20 14 07.75	−65 00 17.0	9.07	H	303.532 284 06	−65.004 724 94	4.84	29.06	−30.31	0.88	0.78	1.22	0.98	1.06	+ 1	− 7	+ 2	+22	+10	−17	+16	+28	+11	−30	0	−1.20
*99725	20 14 07.74	+58 06 19.4	9.75	H	303.532 260 54	+58.105 384 03	0.62	7.51	5.47	0.79	0.81	0.87	0.93	0.85	+ 0	− 8	+ 6	− 5	+ 7	− 3	+ 6	− 6	+ 1	+ 3	0	0.30
99726	20 14 08.56	+67 04 26.4	8.53	H	303.535 684 46	+67.074 001 15	2.29	4.12	−16.41	0.71	0.66	0.78	0.82	0.70	+ 8	−25	− 9	− 3	+ 2	+29	+ 1	−21	+25	+25	0	1.75
99727	20 14 09.25	+06 34 38.5	8.01	H	303.538 562 23	+06.577 359 61	15.19	−130.02	−61.72	1.11	1.21	1.32	1.74	2.06	+57	− 9	−26	+31	+43	+ 5	+38	+68	−24	+67	0	0.69
99728	20 14 09.31	+33 41 10.6	8.60	H	303.538 793 68	+33.686 268 66	2.06	3.22	−1.67	0.62	0.64	0.89	0.70	0.65	− 7	+ 9	+ 1	+34	+ 3	−11	+ 3	−19	+14	−10	0	−0.42
99729	20 14 09.85	+06 35 20.8	7.71	G	303.541 038 40	+06.589 120 20	15.89	−132.91	−60.63	1.04	1.12	1.24	1.57	1.84	+56	− 9	−27	+34	+41	+ 8	+39	+69	−25	+63	3	0.40
99730	20 14 10.21	−20 14 25.0	8.79	H	303.542 528 09	−20.240 269 60	3.78	−9.99	−17.92	1.40	1.04	1.73	1.68	1.83	+37	+12	+ 7	−30	−11	− 7	−16	−15	−50	+47	0	−0.42
99731	20 14 10.65	+64 45 54.5	7.26	H	303.544 376 76	+64.765 147 27	15.95	−41.29	45.80	0.54	0.53	0.59	0.55	0.72	−12	+ 1	− 3	+ 8	+10	+ 4	+11	−10	+ 3	− 5	0	0.37
99732 H	20 14 10.67	+54 44 39.7	8.93	G	303.544 461 35	+54.744 372 38 A	2.02	−2.65	−4.50	1.05	1.04	1.05	1.19	1.00	− 5	+ 1	− 6	+ 6	−12	+ 7	− 8	+ 4	+ 4	+ 4	0	−0.23
99733	20 14 11.31	−13 29 21.6	8.81	H	303.547 129 60	−13.489 339 76	2.29	5.86	−5.20	1.39	0.99	1.44	1.65	1.26	+ 4	−19	−31	−28	+21	+15	+29	+24	−15	+ 1	0	0.97
99734	20 14 11.72	−38 12 03.1	9.02	H	303.548 848 75	−38.200 873 13	7.96	24.27	−30.12	1.15	0.65	1.29	1.54	1.00	− 2	− 5	− 1	−18	− 2	− 8	− 4	− 7	−11	+13	0	1.45
99735	20 14 12.17	−48 32 23.0	10.19	H	303.550 692 19	−48.539 729 30	7.30	−11.32	−9.28	1.64	1.13	1.90	2.70	1.85	+ 3	−10	−17	+16	+ 8	−20	+ 3	+ 6	+21	− 3	0	−1.08
99736	20 14 12.19	+29 39 11.0	9.53	H	303.550 799 76	+29.653 043 41	2.38	1.75	−0.71	1.13	1.39	2.07	1.32	1.56	−14	− 2	+ 2	+13	+ 0	− 5	+ 1	− 2	+ 4	− 7	1	
99737	20 14 13.90	+35 21 42.8	7.56	1 H	303.557 902 44	+35.361 877 39	16.11	46.85	−84.53	0.45	0.51	0.65	0.48	0.57	− 6	+ 5	+12	+ 6	+ 4	− 1	+ 6	− 8	+ 2	+ 5	0	−0.99
99738	20 14 14.52	+28 41 41.5	5.19	1 H	303.560 504 49	+28.694 863 53	9.97	12.18	−19.01	0.29	0.38	0.58	0.34	0.36	−17	−11	+ 6	+ 4	− 1	+ 2	− 1	−22	+ 8	−16	0	0.42
99739	20 14 15.35	−31 28 47.0	9.37	H	303.563 962 16	−31.479 719 81	13.54	62.41	−68.23	1.06	0.67	1.24	1.26	0.95	+23	−12	+ 1	−10	+12	+24	+14	+ 0	+ 0	+51	0	3.39
99740 H	20 14 15.84	+08 03 16.4	8.65	H	303.565 986 88	+08.054 566 61 A	0.68	7.49	−2.35	1.56	1.49	1.83	1.83	1.94	+28	− 6	− 7	− 4	+13	+39	+10	+40	+ 5	+54	2	0.69
99741	20 14 16.10	+31 59 52.0	7.29	H	303.567 075 16	+31.997 787 21	0.22	−1.19	−3.80	0.42	0.49	0.68	0.51	0.47	− 4	+ 4	+ 0	− 1	−17	− 5	−13	−18	+ 2	+ 1	0	−0.98
99742	20 14 16.59	+15 11 50.9	4.94	H	303.569 106 67	+15.197 467 67	21.24	55.69	57.98	0.55	0.49	0.78	0.62	0.55	+ 9	−31	−34	+12	+ 5	+ 9	+13	+26	−15	−13	0	0.21
99743	20 14 16.80	+07 26 40.4	8.50	H	303.569 984 28	+07.444 563 31	7.78	38.04	14.43	1.10	0.96	1.20	1.78	1.75	+43	−18	−24	+ 8	+18	+ 7	+ 5	+47	−11	+66	0	0.28
99744	20 14 18.56	−47 27 48.0	9.65	G	303.577 313 04	−47.463 326 51	2.36	0.37	11.95	1.62	0.96	1.67	3.35	1.87	−22	− 8	−21	+36	−18	−18	−26	+27	+ 9	−62	2	1.07
*99745	20 14 18.61	−22 02 20.7	8.21	G	303.577 540 57	−22.039 080 31	4.93	43.09	−14.93	0.95	0.69	1.05	1.24	1.04	+16	−19	−20	+17	−16	+14	−11	+ 8	−23	+12	3	1.32
*99746	20 14 18.58	+30 10 38.2	7.12	H	303.577 431 04	+30.177 270 39	2.42	2.94	0.10	0.40	0.49	0.69	0.47	0.52	−11	+ 1	− 6	+20	+ 0	−18	+ 2	−20	+10	− 5	0	−0.16
99747	20 14 19.01	−52 26 44.3	5.65	H	303.579 198 47	−52.445 641 71	3.56	20.80	−52.67	0.64	0.44	0.70	0.84	0.56	− 3	−25	−12	+27	− 5	+ 5	− 5	+ 5	+ 7	− 1	0	−0.32
99748 H	20 14 19.96	+00 08 39.9	8.15	G	303.583 147 98	+00.144 413 12 *	5.47	23.17	6.17	1.12	0.68	1.28	1.46	0.85	+28	−29	−20	+21	+18	+24	+21	+35	+ 7	+23	0	1.88
99749 H	20 14 21.53	+42 06 15.6	6.67	G	303.589 728 15	+42.104 345 33 A	2.76	4.34	−1.51	2.51	2.76	3.00	2.69	2.65	+ 7	+ 4	− 5	+20	− 3	+13	+ 1	− 5	− 2	+13	2	−1.42
99750	20 14 22.00	−29 13 38.6	9.62	H	303.591 668 16	−29.227 396 44	2.55	−4.23	−3.35	1.39	1.05	1.48	1.60	1.20	+63	−33	−25	− 5	− 6	− 3	− 3	−20	− 2	+71	0	0.85
99751	20 14 22.46	+43 17 03.0	8.97	H	303.593 577 33	+43.284 180 28	2.90	−3.97	−0.41	0.73	0.65	0.86	0.80	0.74	− 7	−16	+ 7	+ 1	− 2	−16	+ 1	− 5	−12	+10	0	−1.39
99752	20 14 23.02	−43 03 12.0	8.71	H	303.595 922 40	−43.053 346 72	0.12	1.87	−17.48	1.06	0.70	1.45	1.74	1.32	+ 8	− 2	− 3	+ 6	+ 4	−37	+ 4	+ 7	+17	− 5	0	−1.77
99753	20 14 24.34	−06 02 50.6	7.43	G	303.601 400 49	−06.047 387 63 A	5.97	29.54	0.13	3.07	1.88	3.05	3.51	3.32	+29	+15	−18	− 3	+ 9	+27	+ 1	+40	−36	+32	5	3.57
99754	20 14 24.34	+11 57 25.6	11.39	2 G	303.601 417 78	+11.957 112 09	−1.00	1.99	6.18	2.10	2.09	2.63	2.46	3.09	+52	− 5	−10	+17	+47	+23	+49	+56	+14	+64	4	1.35
99755	20 14 24.93	−00 00 19.5	9.56	2 H	303.603 874 87	−00.005 429 39	−0.41	0.59	3.65	1.63	0.94	1.64	2.28	1.46	+ 8	−27	− 9	+25	+ 7	+16	+ 7	+42	+ 8	+ 4	0	0.48
99756	20 14 25.17	−06 02 36.2	9.25	H	303.604 891 56	−06.043 394 92 B	5.97	47.54	15.62	27.25	13.97	3.05	26.17	16.33	+40	+ 2	− 2	+ 0	+ 0	+ 4	+ 0	+ 1	− 7	+49	5	3.57
99757	20 14 25.24	+35 37 20.3	8.71	H	303.605 150 82	+35.622 318 02	3.27	6.78	−0.40	0.57	0.64	0.83	0.63	0.73	− 6	− 2	+ 7	+ 9	+ 5	− 2	+ 6	− 5	− 6	+ 1	1	−0.15
99758	20 14 25.80	−62 16 45.1	6.74	2 H	303.607 505 16	−62.279 184 56	1.18	−3.62	−7.23	0.56	0.50	0.81	0.56	0.59	+ 2	−14	−15	+17	−14	+15	−20	−11	+14	−11	0	−0.68
99759 H	20 14 26.07	+80 31 54.7	6.80	H	303.608 644 26	+80.531 865 40 A	8.11	14.84	−21.15	0.65	0.57	0.61	0.72	0.64	+ 6	−31	− 3	−10	+ 1	+10	+ 3	− 7	− 8	+21	0	−0.63
99760	20 14 26.08	+40 19 45.1	7.53	1 H	303.608 682 79	+40.329 195 00	2.02	−3.64	−5.10	0.55	0.53	0.71	0.54	0.56	− 5	+ 4	+15	− 5	+ 4	−19	+10	−14	+ 2	+ 7	0	−1.00
99761	20 14 26.92	−37 20 06.5	9.30	H	303.612 173 55	−37.335 145 47	9.04	6.58	−70.82	1.24	0.65	1.48	1.46	1.12	+ 9	−41	− 4	+ 6	+ 5	+12	+ 8	+19	− 7	+23	0	0.30
99762	20 14 26.96	−63 24 57.1	6.09	H	303.612 322 54	−63.415 864 05	13.88	−39.21	30.80	0.56	0.51	0.78	0.60	0.61	− 4	+ 4	−19	+25	−16	+ 5	−25	−12	+ 4	−25	0	−0.10
99763	20 14 27.86	−18 05 38.4	8.14	H	303.616 092 43	−18.093 987 80	7.41	8.59	27.23	0.97	0.66	1.06	1.26	0.91	+ 8	−21	−25	− 4	+ 5	+14	+15	+27	−22	− 6	0	0.20
99764	20 14 28.18	−07 16 52.8	10.19	G	303.617 437 02	−07.281 321 98	49.03	10.64	−268.66	1.64	0.89	1.74	2.08	1.45	+21	−28	− 1	− 7	+18	+22	+18	+31	+ 0	+30	2	0.51
99765	20 14 28.42	−13 50 07.8	10.43	3 H	303.618 410 17	−13.835 492 55	−1.61	−3.21	−13.52	1.84	1.41	2.06	2.05	1.70	+20	−27	−35	−19	+14	+ 9	+25	+24	−26	+ 9	0	2.10
99766	20 14 29.01	+20 39 08.5	8.87	H	303.620 889 51	+20.652 363 28	3.49	−5.10	−10.39	0.81	0.70	1.17	1.04	0.89	−13	− 2	− 3	+10	+ 6	+16	+ 9	+ 1	+10	+16	0	−0.94
*99767	20 14 30.52	+24 50 41.2	7.47	H	303.627 155 56	+24.844 782 03 A	−0.10	−1.75	−9.76	0.70	0.83	1.08	0.74	1.06	+ 5	− 7	− 1	+22	− 9	− 7	− 9	+20	−13	+24	3	−0.46
*99768	20 14 30.43	+37 21 13.8	7.12	1 H	303.626 794 61	+37.353 839 72	1.22	−3.22	−2.34	0.45	0.51	0.64	0.48	0.54	−12	− 5	+ 3	+ 2	+ 6	− 4	+ 6	− 3	+12	− 6	1	−0.31
99769	20 14 31.77	+36 39 39.6	7.92	G	303.632 371 88	+36.661 013 34	−0.39	−2.88	−5.34	0.57	0.60	0.79	0.68	0.71	−13	− 2	− 4	+ 5	+ 8	− 3	+ 8	− 5	+ 6	−11	0	1.91
99770	20 14 31.98	+36 48 22.1	4.93	1 H	303.633 260 32	+36.806 135 40	24.37	69.22	68.67	0.40	0.41	0.55	0.46	0.45	− 8	−14	+ 1	−14	+ 2	+ 0	− 1	− 4	+13	+ 5	0	−0.90
99771	20 14 33.92	+09 51 44.9	9.01	H	303.641 319 99	+09.862 460 19	1.17	−9.00	−23.76	1.13	0.88	1.39	1.41	1.18	+22	−24	−28	+21	+10	+ 2	+15	+48	+ 0	+ 4	0	0.84
*99772	20 14 34.92	−64 25 46.9	6.92	H	303.645 506 92	−64.429 700 45 A	6.18	14.77	−30.18	0.77	0.71	1.03	0.75	0.78	+ 4	−17	+ 1	+21	+19	− 9	+18	+13	+ 2	−17	2	1.68
*99773	20 14 34.81	−15 20 05.5	8.62	G	303.645 054 37	−15.334 852 75	10.44	54.00	−12.37	1.06	0.74	1.19	1.31	0.94	+14	−32	−33	−18	+ 4	+28	+18	+18	− 7	− 2	0	0.51
99774	20 14 35.00	+70 50 34.6	9.15	H	303.645 813 12	+70.842 940 55	17.78	43.23	−217.14	0.77	0.72	0.79	0.96	0.80	−12	−24	+19	−22	+16	− 2	+15	−16	−10	+10	0	0.77
99775	20 14 35.07	+54 31 08.2	8.29	G	303.646 104 48	+54.518 948 74	4.22	16.36	58.12	0.59	0.56	0.64	0.74	0.61	− 8	−16	− 4	+ 1	− 1	− 7	− 2	+ 2	+ 2	− 7	0	0.61
99776	20 14 35.16	−70 39 47.0	8.99	H	303.646 519 61	−70.663 057 05	5.48	9.53	−42.70	0.67	0.79	1.22	0.71	0.90	−16	− 5	−11	+ 8	+ 8	− 6	+ 8	+ 9	− 4	−22	0	1.82
99777	20 14 39.62	+36 45 07.5	6.57	H	303.665 073 34	+36.752 080 74	0.98	0.63	−4.57	0.44	0.48	0.61	0.50	0.51	− 8	− 7	+ 3	− 7	+ 7	+ 0	+ 6	−10	+ 7	+ 0	0	−0.46
99778	20 14 39.90	+58 56 21.1	7.11	H	303.666 260 17	+58.939 193 21	4.74	−3.21	1.85	0.51	0.45	0.52	0.58	0.43	− 8	+ 1	+ 8	+25	+ 3	− 1	+ 3	− 4	+ 9	− 7	0	0.53
99779	20 14 41.35	+80 34 32.6	7.90	H	303.672 287 54	+80.575 718 41	5.73	21.71	34.19	0.61	0.57	0.65	0.74	0.71	+12	−26	+ 2	−11	− 1	+ 8	+ 1	− 6	− 7	+26	0	−0.93
99780	20 14 42.36	+33 01 15.0	8.14	G	303.676 493 69	+33.020 831 45	3.95	13.58	15.30	0.57	0.68	0.95	0.71	0.67	−16	+ 4	+ 1	+ 2	+ 9	−23	+10	−39	+27	−20	0	−0.22
99781	20 14 42.50	+47 42 34.7	7.67	H	303.677 076 62	+47.709 632 90	3.81	8.86	15.29	0.66	0.53	0.72	0.73	0.58	+ 3	+10	+ 4	+12	+11	−16	+14	+ 1	+27	− 1	0	−0.72
99782	20 14 42.79	−19 12 25.7	7.64	H	303.678 308 54	−19.207 136 09	2.61	−0.92	−3.66	0.91	0.62	0.99	1.12	0.98	+10	+12	−13	−19	− 1	+12	− 5	+ 3	−17	+29	0	−0.20
99783	20 14 44.18	+22 49 42.9	8.85	H	303.684 092 18	+22.828 588 59	6.17	6.47	−4.30	0.92	0.82	1.31	1.01	0.96	− 5	+ 7	−12	+23	+ 8	+22	+19	+ 0	+17	+28	0	−1.56
99784	20 14 44.83	−57 38 51.5	8.98	H	303.686 795 34	−57.647 647 38	2.98	8.11	4.60	0.85	0.81	1.32	1.06	0.96	+35	−28	−24	−24	− 1	− 5	− 7	−30	+17	−16	0	1.18
99785	20 14 45.57	+47 26 26.1	7.28	H	303.689 855 53	+47.440 590 20	3.38	7.74	5.52	0.57	0.48	0.62	0.66	0.55	− 1	+16	+ 2	+ 8	+ 9	−11	+12	+ 5	+19	− 3	0	−0.38
99786	20 14 45.65	+22 48 59.0	9.40	H	303.690 189 43	+22.816 400 51	1.71	9.37	−7.94	1.20	1.06	1.64	1.28	1.15	− 9	− 4	−25	+23	− 1	+ 8	+11	−11	+ 0	+16	0	−0.58
99787	20 14 46.66	+49 43 32.1	9.49	H	303.694 406 73	+49.725 575 22	1.46	−2.62	−5.90	0.75	0.80	0.90	0.82	0.75	+ 6	− 8	+28	+ 1	+12	+ 0	+11	+ 5	+ 4	+17	1	−0.25
99788 H	20 14 46.73	+21 58 31.5	7.13	H	303.694 712 75	+21.975 422 80 A	3.58	19.50	−2.34	1.11	0.89	1.20	1.28	0.97	− 4	− 1	−15	−22	+ 8	−12	+ 6	−11	+ 5	+23	1	0.75
99789	20 14 46.98	+26 47 32.7	8.34	H	303.695 763 81	+26.792 424 26	1.21	−1.01	−20.83	0.56	0.64	1.05	0.55	0.60	−17	+ 9	− 4	+ 6	−15	− 7	−14	−21	+ 7	−18	1	−1.08
99790	20 14 48.47	−10 53 24.8	7.40	H	303.701 956 95	−10.890 228 78	4.98	20.05	−2.88	0.96	0.57	1.09	1.22	0.98	+29	−11	−12	− 9	+13	+44	+28	+54	− 4	+18	0	0.71
99791	20 14 49.08	+67 46 00.6	9.53	H	303.704 505 26	+67.766 830 91	2.89	12.97	13.55	0.83	0.75	0.86	1.00	0.76	+13	−21	+ 5	+ 4	+ 4	+21	+ 1	+ 0	+14	+27	0	−0.81
99792	20 14 50.03	+18 27 56.5	10.46	H	303.708 466 20	+18.465 693 45	23.91	−120.84	−693.04	1.37	1.25	1.78	1.68	1.78	+16	+11	− 6	−26	+14	−22	+ 7	+17	−16	+34	0	2.45
99793	20 14 50.16	+08 55 32.7	11.51	G	303.709 019 54	+08.925 744 43	0.43	1.39	−3.28	2.13	1.92	2.54	2.71	2.70	+41	− 6	− 1	+ 8	+25	+32	+27	+52	+11	+43	0	1.16
99794	20 14 51.23	−64 11 28.8	8.24	H	303.713 469 35	−64.191 321 47	0.78	1.22	7.79	0.71	0.63	1.05	0.76	0.75	+ 3	−14	−10	+24	+ 9	− 9	+ 5	+ 6	+ 6	−19	0	−0.93
99795	20 14 51.39	−11 38 11.7	8.08	H	303.714 105 27	−11.636 572 68	1.99	−1.43	−10.31	0.89	0.56	1.10	1.09	0.85	+19	− 6	−12	−10	+13	+51	+23	+42	− 6	+21	0	−0.62
*99796	20 14 51.72	+10 28 20.4	7.03	H	303.715 483 52	+10.472 339 74	5.64	9.59	5.37	0.87	0.60	0.91	1.10	0.83	− 5	−25	−14	+45	− 4	+ 2	− 7	+43	+13	−19	0	−0.49
*99797	20 14 51.71	−01 08 30.9	8.56	H	303.715 459 59	−01.141 923 14	1.06	1.98	−5.79	1.42	0.85	1.67	2.34	1.08	+47	+15	+25	+49	+43	+47	+38	+52	+16	+38	0	−0.79
*99798	20 14 53.43	+03 24 24.6	7.00	H	303.722

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
99701						1.431	0.006	G	1.83	0.00	A	8.0444	0.0022	0.015	84		8.02	8.07					1							
99702	10.164	0.032	9.486	0.028		0.556	0.015	G	0.63	0.01	H	9.5548	0.0029	0.024	86		9.51	9.59		C			1							
99703	8.573	0.011	8.435	0.013	*	0.125	0.016	T	0.14	0.02	L *	8.4013	0.0018	0.014	88	*	8.37	8.43		D	20139−5019	I 1	2 C A	AB	139	0.724	0.004	0.33	0.01	S
99704	7.310	0.005	7.127	0.005		0.179	0.000	G	0.20	0.00	H	7.1550	0.0009	0.009	136		7.14	7.17		C			1							S
99705	10.448	0.034	9.094	0.018		1.147	0.030	T	1.11	0.03	L	9.1001	0.0020	0.020	126		9.06	9.14		C			1							
99706	9.858	0.026	9.371	0.026		0.458	0.033	T	0.53	0.04	L	9.4546	0.0026	0.020	87		9.42	9.48		C			1							
99707	10.431	0.038	8.361	0.013		1.752	0.033	T	2.38	0.07	O	8.1851	0.0022	0.017	96		8.16	8.21					1							
99708	9.103	0.021	8.475	0.019		0.566	0.015	G	0.64	0.01	H	8.5644	0.0022	0.012	61		8.54	8.61					1 G							
99709	9.982	0.022	9.157	0.017		0.743	0.021	T	0.79	0.01	L	9.2268	0.0031	0.025	121		9.19	9.28					1							
99710	9.354	0.021	8.367	0.016		0.852	0.021	T	0.87	0.01	L	8.4210	0.0017	0.012	62		8.40	8.44		C			1							
99711	8.978	0.015	7.882	0.011		0.938	0.015	T	0.93	0.01	L	7.9310	0.0020	0.013	74		7.90	7.95		C	20140−0052	I 1	1							
99712	11.095	0.052	9.240	0.017		1.542	0.043	T	1.60	0.09	L	9.1982	0.0022	0.019	131		9.17	9.23		C			1							
99713	8.321	0.011	8.191	0.013		0.126	0.016	T	0.14	0.02	L	8.2330	0.0016	0.016	94		8.20	8.26		C			1							
99714	7.471	0.006	7.368	0.007		0.100	0.009	T	0.11	0.01	L	7.3935	0.0009	0.008	102		7.38	7.41		C			1 G							S
99715	9.224	0.017	8.855	0.018		0.310	0.015	G	0.36	0.02	H	8.9232	0.0019	0.015	112		8.90	8.95		C			1							
99716	8.740	0.009	8.401	0.009		0.315	0.015	G	0.36	0.02	H	8.4593	0.0018	0.022	160		8.43	8.50		U			1							S
99717	7.239	0.008	7.202	0.011	*	0.039	0.013	T	0.05	0.01	L *	7.2689	0.0015	0.013	92	*	7.25	7.30		D	20141+2213	I 1	2 C A	AB	2	6.183	0.004	0.04	0.01	S
99718	10.605	0.034	9.171	0.016		1.210	0.029	T	1.17	0.03	L	9.2133	0.0020	0.019	121		9.19	9.25		C			1							
99719	6.454	0.004	6.471	0.005		−0.014	0.006	T	0.01	0.01	L	6.4732	0.0007	0.007	142		6.46	6.49					1							S
99720	10.450	0.048	9.672	0.038	A	0.585	0.107	G	0.66	0.10	R *	9.6448	0.0094	0.116	81	*	9.32	9.76		U 2	20141−0450	H 1	2 C C	AB	1	1.293	0.179	2.84	0.58	P
99721	10.634	0.040	9.881	0.034		0.673	0.040	T	0.73	0.03	L	9.9575	0.0030	0.025	90		9.92	10.00		C			1 X S							
99722	8.933	0.013	8.462	0.013		0.434	0.007	G	0.50	0.01	H	8.4999	0.0017	0.015	90		8.47	8.53		C			1							S
99723	8.561	0.010	7.256	0.006		1.109	0.009	T	1.07	0.01	L	7.2975	0.0010	0.010	118		7.28	7.31					1							S
99724	9.518	0.014	9.087	0.015		0.407	0.019	T	0.47	0.02	L	9.1580	0.0017	0.022	148		9.12	9.20					1							
99725	11.805	0.103	9.859	0.028		1.611	0.078	T	1.63	0.08	L	9.8593	0.0019	0.021	120		9.82	9.90		C			1							G
99726	9.984	0.021	8.640	0.012		1.140	0.019	T	1.10	0.02	L	8.6993	0.0012	0.014	113		8.67	8.72		C			1							
99727	8.845	0.014	8.086	0.012		0.680	0.015	G	0.74	0.01	H	8.1485	0.0018	0.013	81		8.13	8.19			20142+0635	I 2	1							S
99728	8.627	0.009	8.599	0.012		0.031	0.014	T	0.05	0.01	L	8.6169	0.0014	0.017	151		8.59	8.65		C			1							
99729	8.566	0.013	7.770	0.011		0.704	0.003	G	0.76	0.00	H	7.8599	0.0018	0.013	80		7.84	7.89		C	20142+0635	I 2	1							S
99730	10.332	0.041	8.932	0.022		1.183	0.036	T	1.14	0.03	L	8.9542	0.0029	0.017	50		8.92	8.99					1							
99731	8.316	0.008	7.356	0.007		0.844	0.008	T	0.86	0.01	L	7.4199	0.0012	0.010	96		7.40	7.44					1 G							S
99732	8.892	0.011	8.940	0.015	A	−0.010	0.015	G	0.01	0.01	H *	8.9345	0.0018	0.019	123	*	8.90	8.96			20142+5445	I 1	2 C B	AB	350	2.765	0.040	3.54	0.19	
99733	10.070	0.038	8.939	0.025		0.973	0.035	T	0.96	0.03	L	8.9799	0.0030	0.017	57		8.96	9.01		C			1							
99734	9.560	0.019	9.060	0.019		0.481	0.020	T	0.55	0.02	L	9.1253	0.0017	0.018	104		9.10	9.15		C			1							
99735	10.620	0.036	10.181	0.040		0.428	0.043	T	0.50	0.05	L	10.2895	0.0042	0.030	88		10.21	10.33		C			1							G
99736	9.827	0.016	9.549	0.019		0.264	0.023	T	0.30	0.03	L	9.6067	0.0021	0.027	201		9.56	9.66					1 X S							G
99737	8.212	0.010	7.643	0.008		0.536	0.009	T	0.61	0.01	L	7.6799	0.0011	0.013	151		7.66	7.71		M	20142+3522	I 1	1							S
99738	5.419	0.002	5.219	0.002		0.191	0.003	T	0.21	0.00	L	5.2523	0.0007	0.008	239		5.24	5.26	0.19	P 1 A			1							S P
99739	10.283	0.029	9.418	0.023		0.758	0.028	T	0.80	0.02	L	9.5063	0.0023	0.019	111		9.47	9.54		C			1							
99740	8.943	0.015	8.667	0.017	*	0.263	0.022	T	0.30	0.03	L *	8.7256	0.0020	0.015	68	*	8.70	8.75		D	20143+0803	H 1	2 C D	AB	130	0.460	0.033	3.27	0.17	D
99741	7.407	0.005	7.293	0.006		0.111	0.007	T	0.12	0.01	L	7.3290	0.0011	0.012	161		7.31	7.35		C			1							S
99742	5.032	0.002	4.954	0.003		0.072	0.005	G	0.09	0.04	D	4.9747	0.0006	0.005	85		4.97	4.98		C			1							S
99743	9.464	0.024	8.596	0.019		0.776	0.023	T	0.81	0.02	L	8.6445	0.0016	0.013	57		8.63	8.67		D			1							
99744	10.039	0.025	9.724	0.029		0.409	0.004	G	0.48	0.00	H	9.7464	0.0020	0.020	79		9.71	9.78		D			1							
99745	8.692	0.015	8.234	0.015		0.423	0.015	G	0.49	0.02	H	8.2965	0.0015	0.009	56		8.28	8.32		C			1							S
99746	6.945	0.004	7.091	0.005		−0.126	0.006	T	−0.12	0.01	L	7.0775	0.0009	0.009	183		7.06	7.10		C			1							S
99747	7.618	0.009	5.820	0.003		1.497	0.008	T	1.52	0.01	L	5.7763	0.0012	0.010	98		5.76	5.79					1							S
99748	8.549	0.012	8.149	0.012	*	0.396	0.012	G	0.46	0.01	H *	8.2225	0.0015	0.012	82	*	8.20	8.26		D	20143+0009	H 1	2 C S B	AB	124	0.199	0.045	2.51	0.80	S
99749	6.673	0.008	6.720	0.009	*	−0.038	0.002	G	−0.02	0.00	R *	6.6915	0.0016	0.013	112	−	6.67	6.71		D	20144+4206	I 1	3 C A							S G
99750	11.418	0.080	9.793	0.031		1.385	0.071	T	2.03	0.22	O	9.7025	0.0026	0.021	93		9.67	9.74		C			1							
99751	10.244	0.027	9.078	0.016		1.000	0.024	T	0.98	0.02	L	9.1368	0.0017	0.015	121		9.10	9.16		C			1							
99752	10.166	0.028	8.834	0.016		1.130	0.025	T	1.09	0.03	L	8.8796	0.0018	0.016	90		8.85	8.91		C			1							
99753	7.867	0.008	7.444	0.012	A	0.394	0.015	G	0.46	0.02	H	7.5299	0.0242	0.048	87	A	7.43	7.57		D	20144−0603	I 2	1 C P D							S D
99754						1.948	0.020	G	2.02	0.14	K	11.4230	0.0092	0.070	91		11.29	11.53		U 2 C			1							G
99755	11.249	0.078	9.733	0.035		1.295	0.070	T	4.11	0.12	O	8.9506	0.0333	0.140	78		8.78	9.17		U 2			1 S							G
99756	11.219	0.090	9.278	0.027	B			T				9.7706	0.1624			B				D	20144−0603	I 2	1 C L D							D
99757	8.675	0.009	8.708	0.012		−0.028	0.013	T	−0.01	0.01	L	8.7108	0.0017	0.019	149		8.67	8.74					1							
99758	9.020	0.016	6.967	0.007		1.738	0.014	T	2.51	0.03	O	6.7577	0.0046	0.041	121		6.67	6.82		U 2			1 S							S P
99759	6.759	0.006	6.757	0.007	*	0.007	0.008	T	0.03	0.01	L *	6.8110	0.0009	0.007	117	*	6.80	6.83		D	20144+8032	I 1	2 C A	AB	345	4.197	0.013	3.44	0.06	S
99760	8.209	0.009	7.615	0.008		0.554	0.011	T	0.63	0.01	L	7.6547	0.0019	0.019	124		7.63	7.68		U			1							S
99761	9.813	0.022	9.329	0.022		0.468	0.024	T	0.54	0.03	L	9.3994	0.0021	0.017	111		9.37	9.43					1							
99762	6.450	0.003	6.126	0.003		0.308	0.004	T	0.35	0.01	L	6.1689	0.0010	0.008	109		6.15	6.18					1							S
99763	9.410	0.026	8.272	0.017		0.979	0.024	T	0.96	0.02	L	8.3067	0.0017	0.010	60		8.29	8.32		C			1							
99764	11.817	0.121	10.275	0.053		1.351	0.002	G	1.57	0.00	I	10.2688	0.0027	0.024	104		10.22	10.31		C			1							G
99765	11.134	0.098	10.743	0.107		0.370	0.135	T	0.43	0.15	L	10.5098	0.0433	0.526	52		10.04	11.44	28.57	P 1 A			1 S							G
99766	10.039	0.028	8.985	0.019		0.915	0.026	T	0.91	0.02	L	9.0309	0.0018	0.020	111		9.00	9.07		C			1							
99767	7.393	0.006	7.458	0.007	A	−0.055	0.008	T	−0.03	0.01	L	7.4611	0.0061	0.016	145	A	7.44	7.49			20145+2451	I 1	2 C D	AB	33	15.304	0.035	3.42	0.14	S D
99768	7.452	0.006	7.159	0.007		0.279	0.009	T	0.32	0.01	L	7.1973	0.0012	0.015	141		7.17	7.22		M			1							S
99769	8.301	0.012	7.979	0.012		0.306	0.016	T	0.35	0.02	L	7.9500	0.0017	0.014	129		7.93	7.97			20146+3639	I 1	1							
99770	5.136	0.003	4.970	0.003		0.151	0.018	G	0.21	0.03	C	4.9931	0.0013	0.012	136		4.98	5.01		U 2	20146+3647	I 2	1							S P
99771	9.584	0.022	9.066	0.021		0.486	0.027	T	0.56	0.03	L	9.1213	0.0023	0.020	77		9.09	9.15		C			1							
99772	7.088	0.005	6.923	0.005	A	0.158	0.007	T	0.17	0.01	L	6.9797	0.0089	0.020	133	A	6.95	7.01		D	20146−6426	I 1	2 C B	AB	305	17.321	0.030	3.01	0.13	S
99773	9.232	0.023	8.645	0.021		0.539	0.015	G	0.61	0.02	H	8.7238	0.0021	0.011	51		8.71	8.74		C			1							
99774	9.869	0.023	9.204	0.020		0.616	0.026	T	0.68	0.02	L	9.2787	0.0014	0.015	106		9.25	9.31					1							
99775	8.483	0.009	8.312	0.011		0.155	0.005	G	0.17	0.01	H	8.3307	0.0014	0.012	119		8.31	8.36		C			1							
99776	10.318	0.024	9.096	0.014		1.044	0.022	T	1.01	0.02	L	9.1567	0.0022	0.026	195		9.11	9.20					1							
99777	8.283	0.012	6.715	0.006		1.315	0.011	T	1.28	0.01	L	6.7261	0.0011	0.009	134		6.71	6.74		C	20146+3647	I 2	1							S
99778	8.869	0.012	7.250	0.006		1.356	0.011	T	1.32	0.01	L	7.2658	0.0010	0.009	117		7.25	7.28					1							S
99779	8.256	0.009	7.931	0.010		0.309	0.013	T	0.35	0.02	L	7.9756	0.0012	0.012	114		7.96	8.00					1							S
99780	9.390	0.015	8.227	0.010		0.980	0.015	G	0.96	0.01	H	8.2747	0.0016	0.018	157		8.24	8.30		C			1							
99781	8.959	0.019	7.748	0.012		1.036	0.018	T	1.01	0.01	L	7.8336	0.0013	0.014	107		7.81	7.86					1							
99782	9.842	0.031	7.836	0.013		1.662	0.027	T	1.69	0.03	L	7.7493	0.0023	0.011	48		7.73	7.77					1							S
99783	9.306	0.015	8.875	0.016		0.407	0.020	T	0.47	0.02	L	8.9461	0.0023	0.021	100		8.92	8.99		C			1							
99784	10.196	0.025	9.074	0.016		0.966	0.023	T	0.95	0.02	L	9.1406	0.0019	0.020	132		9.11	9.17		C			1							
99785	7.169	0.005	7.272	0.008		−0.089	0.008	T	−0.07	0.01	L	7.2528	0.0012	0.010	109		7.24	7.27		C			1							S
99786	10.847	0.053	9.499	0.027		1.143	0.047	T	1.11	0.04	L	9.5566	0.0029	0.029	99		9.52	9.61					1							G
99787	9.528	0.018	9.494	0.024		0.036	0.028	T	0.05	0.02	L	9.5068	0.0027	0.021	113		9.48	9.54		C			1							G
99788	8.955	0.013	7.296	0.007	*	1.387	0.012	T	1.36	0.01	L *	7.2747	0.0014	0.010	103	*	7.26	7.30		D	20148+2159	H 1	2 C A	AB	63	1.006	0.025	3.16	0.09	S
99789	9.436	0.015	8.444	0.011		0.868	0.014	T	0.88	0.01	L	8.4929	0.0016	0.022	182		8.46	8.53					1							
99790	9.035	0.014	7.541	0.008		1.257	0.013	T	1.22	0.01	L	7.5647	0.0009	0.010	106		7.55	7.58		C			1							S
99791	9.954	0.024	9.493	0.024		0.435	0.031	T	0.50	0.03	L	9.6314	0.0022	0.017	105		9.60	9.67		C			1							
99792											T	10.6295	0.0042	0.028	73		10.58	10.70		C			1							G
99793						1.986	0.020	G	2.28	0.17	K	11.6167	0.0069	0.051	78		11.49	11.69					1							G
99794	9.883	0.022	8.387	0.011		1.259	0.019	T	1.22	0.02	L	8.4034	0.0016	0.017	127		8.38	8.43					1							
99795	8.101	0.010	8.087	0.012		0.018	0.014	T	0.04	0.01	L	8.0926	0.0014	0.013	112		8.07	8.12		C			1							S
99796	7.038	0.005	7.044	0.007		−0.001	0.008	T	0.02	0.01	L	7.0438	0.0012	0.008	81		7.03	7.06		C			1							S
99797	10.029	0.031	8.675	0.018		1.147	0.028	T	1.11	0.03	L	8.7290	0.0022	0.014	69		8.70	8.75		C			1							
99798	8.209	0.008	7.104	0.006		0.953	0.008	T	0.94	0.01	L	7.1673	0.0010	0.008	89		7.15	7.19		C			1							S
99799	9.149	0.015	8.446	0.013		0.630	0.015	G	0.70	0.01	H	8.5276	0.0014	0.013	89		8.50	8.55		C			1							S
99800	10.375	0.045	8.884	0.022		1.255	0.039	T	1.21	0.04	L	8.8931	0.0026	0.015	58		8.87	8.92		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr														%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
99801	20 14 54.15	+32 52 07.2	6.87	H	303.725 609 63	+32.868 671 22		4.70	21.45	21.00	0.42	0.49	0.71	0.52	0.48	−13	− 3	+ 4	+ 5	+ 4	−18	+ 2	−32	+16	−23		0	−1.69
99802	20 14 55.14	+09 05 21.2	10.13	3 H	303.729 765 40	+09.089 220 86		4.01	−9.50	−20.08	2.87	1.97	3.13	2.89	2.67	+55	−64	−53	−43	−25	+17	−23	−17	+ 8	+40		0	−1.31
99803 H	20 14 56.13	−56 58 34.5	7.24	H	303.733 877 83	−56.976 246 09	A	15.32	38.22	−96.11	1.75	1.46	2.20	2.43	2.00	+46	−37	−26	−29	+17	− 9	+22	−20	− 5	− 9		6	2.73
99804	20 14 56.30	+31 13 18.4	8.73	H	303.734 582 22	+31.221 771 72		1.21	−4.98	−8.81	0.54	0.67	0.91	0.62	0.68	− 5	− 3	−13	+19	− 4	+ 6	− 2	− 2	− 5	− 3		0	1.01
99805	20 14 56.37	+72 36 19.9	7.14	2 H	303.734 894 62	+72.605 515 20		3.20	25.02	5.53	0.58	0.55	0.60	0.65	0.60	+ 1	−21	+ 2	−26	+ 0	+ 4	− 2	−20	+ 7	+17		0	0.93
99806	20 14 59.72	−43 40 41.6	8.18	H	303.748 843 68	−43.678 210 44		1.04	25.87	−12.21	0.96	0.63	1.07	1.65	1.10	− 7	− 8	+ 6	+27	−11	− 4	−11	+37	+24	−25		0	1.41
99807	20 15 01.97	+13 05 15.3	7.62	H	303.758 207 74	+13.087 589 64		7.26	42.93	32.18	0.76	0.76	0.95	0.92	1.04	+42	−11	− 2	+22	+44	+23	+42	+53	+15	+53		0	−0.59
99808	20 15 03.51	−50 47 47.0	9.92	H	303.764 613 62	−50.796 388 06		4.47	−22.22	−11.56	1.46	0.92	1.64	1.78	1.32	+ 7	−40	+ 2	+ 7	−11	− 7	+ 1	−17	−23	+19		0	−1.39
99809	20 15 04.48	−54 30 00.5	9.07	H	303.768 678 04	−54.500 128 33		9.00	63.63	−36.69	0.98	0.73	1.22	1.14	1.01	+13	−34	− 7	−33	+24	+11	+23	+ 6	+ 9	+12		0	1.01
99810	20 15 04.57	−19 59 20.7	10.09	H	303.769 028 50	−19.989 096 21		8.03	21.34	−11.53	2.47	1.27	2.35	2.55	2.19	+29	+50	+10	−59	−22	−21	−39	−32	−36	+52		0	−0.42
99811	20 15 06.91	−13 23 01.9	6.91	H	303.778 809 24	−13.383 852 17		3.27	−12.58	−29.34	0.87	0.50	0.96	0.97	0.72	+12	−23	−20	−15	+ 6	+39	+20	+43	−10	+ 5		0	0.14
99812	20 15 07.91	+30 37 12.0	8.74	H	303.782 953 84	+30.620 006 79		1.63	5.82	−0.26	0.61	0.71	1.01	0.72	0.77	− 5	− 7	+ 8	+16	+ 1	− 7	+ 3	+ 4	− 1	+ 6		1	0.05
99813 H	20 15 08.10	+41 17 55.4	7.87	G	303.783 765 01	+41.298 730 06	A	1.41	0.49	−4.50	0.74	0.80	0.87	0.74	0.80	+ 8	− 9	+ 6	+15	+ 4	− 5	+ 6	+ 3	+ 7	+11		2	0.71
99814	20 15 08.40	+58 20 04.7	8.01	H	303.785 012 59	+58.334 625 20		2.64	11.07	−1.25	0.57	0.53	0.61	0.62	0.49	− 6	− 8	+25	+16	+ 5	+ 0	+ 4	− 2	+ 7	− 1		2	0.85
99815	20 15 09.89	−03 30 21.0	7.98	H	303.791 205 32	−03.505 825 02	B	17.15	−42.70	−68.33	13.86	7.30	6.00	14.39	6.74	+26	+ 7	+ 2	+ 2	− 2	+13	− 4	+ 0	−10	+11		13	1.19
99816	20 15 10.66	−03 30 12.3	6.93	G	303.794 396 46	−03.503 428 56	A	14.15	−38.51	−62.53	2.98	1.66	2.56	4.35	2.22	+21	+ 3	+ 0	+ 2	− 6	+15	− 8	+ 2	−14	+ 9		13	1.19
99817	20 15 10.80	−24 26 49.5	9.18	H	303.795 011 91	−24.447 085 75		2.95	2.44	−2.12	1.25	1.03	1.49	1.40	1.18	+29	−23	−28	− 5	+ 3	+36	+16	+25	− 9	+27		6	−0.11
99818	20 15 10.97	+55 39 23.4	6.56	H	303.795 708 60	+55.656 511 78		4.47	−21.89	−19.47	0.80	0.75	0.86	0.92	0.79	+ 1	+ 3	+ 6	+ 1	+ 4	−14	+ 5	−19	+ 8	+ 2		1	
∗99819	20 15 13.29	+06 19 15.2	11.00	G	303.805 390 90	+06.320 899 97		0.50	1.40	−3.79	5.04	4.42	3.93	6.24	6.93	+31	−34	−34	−81	−39	+41	−20	−72	+ 6	+47		0	1.23
∗99820	20 15 12.28	+34 30 48.3	10.26	2 H	303.801 167 83	+34.513 425 11		1.63	7.26	−1.84	0.94	0.94	1.34	1.05	1.02	−13	− 7	+ 3	+15	− 1	−23	+ 0	− 7	+15	− 9		5	0.54
∗99821	20 15 12.42	+38 36 31.6	8.01	H	303.801 749 13	+38.608 789 50		1.86	−1.10	1.86	0.54	0.58	0.73	0.60	0.60	−10	− 6	+ 5	+15	+ 9	+ 0	+ 8	− 8	+ 9	− 7		0	−0.54
∗99822	20 15 13.62	+54 08 48.0	7.26	1 H	303.806 735 32	+54.146 658 96		2.38	−12.75	−32.35	0.50	0.48	0.55	0.63	0.50	−15	−15	+ 1	+ 3	+ 1	−12	+ 0	+ 1	+ 3	−19		0	−0.98
∗99823	20 15 13.57	−16 51 03.2	7.54	H	303.806 554 66	−16.850 893 87		3.43	35.44	−25.87	0.98	0.72	1.18	1.09	0.78	+ 7	−23	−50	−22	−11	+28	+ 7	+11	−20	− 7		0	−0.10
99824 H	20 15 15.89	+25 35 31.1	4.79	2 G	303.816 212 26	+25.591 969 24	A	2.72	6.90	−5.02	0.49	0.55	0.77	0.46	0.48	−30	− 9	+13	+14	−22	−15	−24	−10	+16	−35		1	2.22
∗99825	20 15 16.58	−27 01 57.1	5.73	G	303.819 074 70	−27.032 535 76		113.33	1241.35	−181.46	0.78	0.51	0.89	0.92	0.60	+56	−39	−12	− 6	+ 5	+25	+ 5	−12	+19	+81		2	0.87
∗99826	20 15 16.50	+45 35 39.6	8.57	H	303.818 764 40	+45.594 334 18		2.11	2.76	2.27	0.63	0.62	0.77	0.73	0.66	− 4	+ 4	+ 1	−12	+ 5	+16	+ 7	−23	+25	+13		0	−0.61
99827	20 15 17.20	+45 44 27.7	7.11	H	303.821 646 14	+45.741 029 98		2.91	3.62	2.45	0.49	0.47	0.59	0.58	0.50	− 5	− 4	− 2	−10	+ 4	+14	+ 4	−23	+27	+10		0	−1.61
99828	20 15 18.31	−60 35 33.0	9.04	H	303.826 273 03	−60.592 493 39		0.86	−3.48	−25.52	0.77	0.89	1.37	0.72	0.96	+20	−25	−24	+45	−32	+ 3	−37	−32	+ 9	+15		0	−1.49
99829	20 15 18.53	−08 55 25.6	9.49	H	303.827 207 52	−08.923 780 02		1.37	−1.53	−0.78	1.57	0.68	1.69	1.99	1.17	+43	−39	−10	+ 7	+10	+ 9	+18	+41	−16	+29		2	0.09
99830	20 15 20.42	+30 01 13.5	7.84	H	303.835 081 95	+30.020 428 27		5.08	−12.11	−1.65	0.48	0.61	0.86	0.57	0.62	−14	− 2	+ 1	+29	− 2	−17	+ 2	−18	+10	− 7		0	1.21
99831	20 15 21.00	−64 49 09.9	7.43	H	303.837 502 34	−64.819 410 46		3.83	25.85	−13.67	0.62	0.56	0.88	0.71	0.64	−13	− 3	− 7	+24	+11	−11	+ 6	+ 8	+ 4	−38		0	−0.20
99832	20 15 21.26	+64 11 53.6	8.44	H	303.838 589 86	+64.198 212 74		14.79	180.92	230.31	0.60	0.62	0.64	0.51	0.69	−17	−10	+10	−36	+23	+ 6	+27	−26	− 2	+20		0	−0.77
∗99833	20 15 21.91	+18 27 57.6	7.86	H	303.841 285 24	+18.465 998 27		13.02	−5.14	−71.30	0.70	0.70	0.96	0.82	0.86	+ 7	− 6	−26	− 2	+10	+ 6	+14	+27	−12	+ 3		2	1.04
∗99834	20 15 22.14	−14 47 17.3	8.23	G	303.842 270 79	−14.788 132 29		15.52	−105.10	−217.37	1.05	0.65	1.20	1.22	0.93	+12	−20	−10	− 1	+12	+46	+17	+45	+ 9	+21		0	0.16
∗99835	20 15 22.36	−02 43 46.7	8.98	1 H	303.843 173 23	−02.729 648 18		3.20	6.39	0.56	1.34	0.73	1.42	1.98	0.97	+27	−13	− 3	+30	+14	+14	+13	+19	+ 7	+28		0	−0.37
∗99836	20 15 22.92	+27 31 59.9	9.18	G	303.845 514 37	+27.533 295 20		4.87	−0.82	−14.43	0.62	0.82	1.27	0.66	0.77	− 4	− 8	+15	−15	− 8	− 3	− 6	−19	− 3	− 1		0	−0.02
∗99837 H	20 15 23.18	−20 29 43.6	9.28	H	303.846 599 19	−20.495 432 00	A	5.10	23.86	−27.71	3.46	2.50	3.75	3.66	3.75	+45	− 1	−24	−23	− 8	+ 1	− 3	+ 9	−54	+20		1	−1.02
∗99838	20 15 23.46	−05 32 12.1	7.05	H	303.847 759 18	−05.536 689 07		5.13	35.43	−3.44	0.91	0.52	0.99	1.29	0.76	+29	−21	− 9	+21	+14	+ 4	+17	+27	−12	+30		0	−0.07
∗99839	20 15 23.52	+42 24 03.6	8.62	G	303.847 999 33	+42.401 001 20		0.65	−3.66	−6.08	0.69	0.65	0.82	0.81	0.78	+ 7	−11	− 3	− 2	− 8	+ 5	− 7	− 4	− 3	+24		0	−0.65
∗99840	20 15 23.74	+44 00 02.4	7.16	H	303.848 918 02	+44.000 657 15		0.94	2.27	−4.65	0.50	0.44	0.59	0.57	0.48	−14	−12	+ 2	+18	+ 6	−26	+ 6	−12	+15	−10		0	1.26
∗99841	20 15 23.79	+33 43 45.7	5.70	H	303.849 130 91	+33.729 370 20		10.86	−31.88	−117.82	0.38	0.43	0.58	0.45	0.42	−19	+ 3	+ 8	+15	+ 1	−27	+ 3	−31	+19	−25		0	−0.32
∗99842	20 15 21.85	−60 51 09.3	10.71	G	303.841 029 28	−60.852 572 49		9.72	63.57	−194.86	1.22	1.38	2.12	1.18	1.42	+24	−27	−27	+19	−20	+ 4	−32	−33	+19	+ 1		1	2.13
99843	20 15 24.12	+10 09 12.3	7.32	H	303.850 517 93	+10.153 410 45		16.91	81.06	47.67	0.85	0.61	0.94	1.04	0.81	+ 2	−20	−17	+26	+ 2	+ 4	+ 3	+38	+ 8	−11		0	−0.77
99844	20 15 25.79	−28 28 49.6	8.57	H	303.857 449 52	−28.480 443 67		3.33	−16.15	−16.55	0.99	0.59	1.20	1.20	0.76	+49	−33	− 8	− 2	+ 1	− 8	+ 7	−15	− 7	+77		0	−1.12
99845	20 15 26.51	+56 52 26.7	8.77	H	303.860 463 53	+56.874 093 77		2.43	3.91	5.12	0.65	0.57	0.68	0.75	0.58	− 2	−16	+13	+28	+ 0	−20	− 1	− 5	+14	− 7		0	−1.21
99846	20 15 26.91	+44 08 19.8	7.22	H	303.862 143 80	+44.138 836 95		3.24	−4.93	−19.58	0.51	0.48	0.63	0.60	0.50	−10	−11	+ 5	+22	+ 9	−25	+ 9	−12	+17	− 9		0	−0.24
99847	20 15 28.07	+13 38 53.4	7.83	H	303.866 971 94	+13.648 160 71		1.95	0.09	−5.74	0.78	0.70	1.04	0.89	0.89	+25	−31	−12	+20	+18	+ 5	+20	+46	− 4	+24		0	1.05
99848	20 15 28.32	+47 42 51.1	3.96	1 H	303.867 992 70	+47.714 205 30	+	2.94	3.88	1.20	0.60	0.46	0.60	0.78	0.53	− 9	+ 7	+14	+36	+ 1	− 5	+ 0	+ 3	+17	−16		0	−1.75
99849	20 15 28.38	−07 31 53.0	6.85	H	303.868 253 46	−07.531 381 67		4.73	1.75	2.97	0.94	0.56	1.08	1.11	0.78	+28	−29	+ 7	+ 8	+25	+43	+21	+53	+18	+32		4	−0.01
99850	20 15 29.20	−68 25 57.0	8.28	2 H	303.871 659 89	−68.432 489 20		2.67	−1.40	−20.90	0.46	0.67	1.06	0.55	0.88	−41	− 2	− 6	+ 0	+15	−14	+16	+ 4	+20	−42		1	0.04
99851	20 15 29.59	−40 01 55.4	8.79	H	303.873 287 73	−40.032 060 19		7.79	32.54	−22.96	1.12	0.62	1.24	1.55	0.95	− 1	−20	+ 7	+ 2	+28	+24	+28	+17	− 4	+20		0	0.55
99852	20 15 29.99	+23 44 31.3	7.18	H	303.874 969 12	+23.742 015 55		2.11	−0.65	−10.82	0.53	0.55	0.82	0.60	0.69	+ 6	−13	−11	+22	− 9	+ 9	− 7	+10	+ 6	+31		0	−1.09
99853	20 15 30.24	+23 30 32.1	5.18	1 H	303.875 988 46	+23.508 922 42		0.75	2.66	−6.89	0.45	0.43	0.65	0.51	0.52	+ 7	− 5	−11	+19	−10	+11	− 5	− 1	+ 1	+30		2	−0.22
99854	20 15 30.62	−15 51 20.1	8.27	G	303.877 585 89	−15.855 590 36		9.62	16.04	23.67	1.09	0.73	1.17	1.16	0.94	+19	−22	−25	−17	+20	+29	+31	+38	− 1	+18		0	−0.93
99855	20 15 30.68	+70 03 25.6	9.05	H	303.877 824 80	+70.057 104 96		10.40	14.36	−2.78	0.71	0.74	0.78	0.88	0.71	+ 0	+ 1	+28	−18	+ 7	−14	+ 9	−25	−10	+13		3	0.69
99856	20 15 32.52	+02 50 47.7	6.82	H	303.885 484 86	+02.846 569 94		7.53	49.03	−3.50	0.85	0.74	1.02	1.15	1.02	+36	−12	−25	+52	+14	+19	+22	+69	−12	+25		0	1.56
99857 H	20 15 33.68	+15 26 12.9	8.83	G	303.890 340 30	+15.436 915 87	A	−1.58	−0.66	−11.17	1.27	1.11	1.48	1.42	1.27	+26	−20	−23	+ 5	+ 3	+ 5	+ 7	+32	− 3	+20		0	0.18
99858	20 15 34.32	+55 37 08.9	7.67	H	303.893 000 09	+55.619 148 49		2.22	12.68	18.88	0.63	0.54	0.64	0.67	0.57	+ 4	+ 2	+ 3	+ 7	− 5	−10	− 5	−10	+ 8	− 1		4	0.54
99859	20 15 36.34	+42 21 43.4	7.80	H	303.901 425 43	+42.362 049 36		8.93	−1.82	−0.61	0.60	0.57	0.73	0.67	0.62	+ 0	−20	+10	+ 8	−12	+ 5	− 8	−16	+ 0	+18		0	0.13
99860 H	20 15 37.12	+07 48 32.3	7.29	H	303.904 648 63	+07.808 963 97	A	8.73	32.69	9.46	1.04	1.00	1.22	1.43	1.61	+49	−14	−28	+10	+25	+28	+17	+55	−11	+69		1	0.36
99861	20 15 38.53	+43 38 54.0	9.53	H																								
99862 T	20 15 40.26	+43 38 59.6	8.36	H	303.917 734 82	+43.649 888 40		−2.35	1.68	−9.38	4.28	4.13	5.15	4.67	4.52	− 1	− 7	− 8	−11	+ 3	−18	+ 2	−23	+ 9	+ 9		0	
99863	20 15 41.56	+65 51 13.1	7.76	1 H	303.923 154 16	+65.853 635 87		8.27	16.55	−5.76	0.51	0.54	0.58	0.54	0.80	− 3	+ 5	+ 2	+ 3	+ 7	+ 6	+ 8	−19	+18	+ 6		1	0.16
99864	20 15 41.57	+30 44 30.8	8.57	1 H	303.923 193 23	+30.741 885 44		1.45	−0.05	−1.66	0.57	0.68	0.95	0.64	0.74	− 8	+ 2	− 1	+15	+ 6	+ 0	+ 8	+ 3	− 6	+ 7		0	0.80
99865	20 15 41.62	−42 19 58.8	8.66	H	303.923 398 32	−42.332 989 39		4.95	−7.45	−34.75	1.12	0.64	1.25	1.61	0.96	−19	−17	+ 7	+13	− 2	−10	− 3	+14	+ 4	− 6		0	−1.23
99866	20 15 42.39	+13 50 56.9	9.23	G	303.926 623 11	+13.849 144 37		1.06	−1.18	−2.51	1.05	0.85	1.37	1.18	1.09	+15	−33	−21	+25	+11	+ 2	+15	+43	−12	+12		0	0.93
99867 H	20 15 42.41	+04 39 42.6	8.75	H	303.926 727 36	+04.661 833 74	A	9.59	−8.52	1.46	1.62	1.47	1.90	1.89	1.78	+51	+ 0	+ 1	+35	+28	+38	+33	+63	+ 1	+45		2	−0.25
99868	20 15 42.48	+31 14 32.2	7.68	H	303.927 009 03	+31.242 266 53		13.62	−77.73	−54.42	0.45	0.54	0.76	0.50	0.52	− 8	−10	+ 0	+12	+ 3	+ 5	+ 3	− 6	+ 4	+ 1		0	1.12
99869	20 15 43.06	−02 33 51.8	7.81	H	303.929 435 00	−02.564 380 96		7.58	−0.24	9.34	0.90	0.56	1.02	1.27	0.71	+31	−18	−10	+20	+17	+11	+16	+22	+ 9	+28		2	0.24
99870	20 15 43.24	+50 13 58.3	6.36	H	303.930 153 11	+50.232 866 26		9.19	15.52	15.09	0.45	0.41	0.49	0.52	0.41	− 9	− 6	+ 9	+ 6	+18	− 3	+15	+ 1	+12	− 7		3	1.02
99871	20 15 43.24	+78 01 22.8	7.46	H	303.930 170 90	+78.022 999 45		4.46	−9.57	−20.71	0.52	0.49	0.55	0.57	0.57	− 2	−20	+ 2	+20	+15	−20	+16	+19	+ 0	+12		0	0.98
99872	20 15 43.78	+02 01 09.4	11.03	G	303.932 427 04	+02.019 276 20		−5.18	−10.51	0.29	2.80	2.34	3.30	4.06	3.57	+38	− 4	−17	+47	+12	+21	+12	+61	− 9	+39		4	1.12
99873	20 15 45.70	+15 19 01.7	6.86	G	303.940 407 22	+15.317 141 15		13.01	51.47	−2.55	0.59	0.53	0.79	0.66	0.64	+21	−31	−20	+14	+ 9	+10	+15	+34	−11	+11		2	1.25
99874 H	20 15 46.16	+27 48 51.2	4.50	H	303.942 322 58	+27.814 228 50	∗	9.94	−34.37	5.77	0.66	0.81	0.64	0.39	0.43	−44	− 8	+13	−42	+ 6	+ 0	+ 6	−30	− 5	−10		1	0.78
99875	20 15 49.33	+52 30 08.2	7.40	G	303.955 561 81	+52.502 280 25	A	3.84	5.10	−4.74	1.16	1.21	1.02	1.27	1.14	− 3	− 4	+ 0	+12	+ 5	− 2	+ 5	− 9	+11	+ 0		1	−0.17
99876	20 15 49.37	−35 33 37.0	10.06	H	303.955 720 17	−35.560 279 39		6.96	20.48	−32.72	1.70	0.87	1.93	2.19	1.31	+10	− 4	− 3	−29	+ 7	−24	+ 4	− 1	−19	+30		0	0.10
99877	20 15 49.75	−46 24 54.1	8.99	H	303.957 310 81	−46.415 027 24		2.24	−10.16	−27.57	1.19	0.73	1.22	1.57	1.22	+ 8	−38	− 1	+33	+15	− 4	+17	+37	− 3	+10		0	−1.21
99878	20 15 50.59	−30 00 19.1	6.30	G	303.960 774 38	−30.005 296 60		2.84	33.81	7.70	0.69	0.40	0.81	0.75	0.53	+29	−40	−11	− 7	+ 1	+ 8	+ 4	−11	+ 3	+50		0	1.14
99879	20 15 52.19	+52 29 56.1	9.90	H	303.967 439 77	+52.498 916 91	B	4.04	−9.24	−7.27	10.65	10.14	6.02	7.97	6.90	+ 1	− 2	− 4	+10	+ 4	− 1	+ 3	− 8	+11	+ 0		1	−0.17
99880	20 15 52.63	+42 58 45.1	9.98	G	303.969 272 28	+42.979 203 00		40.97	8.48	−59.80	1.04	0.96	1.21	1.17	1.13	+ 6	−24	+10	−26	−13	− 6	−13	−24	− 2	+24		0	1.18
99881	20 15 52.98	−30 41 15.1	8.89	1 H	303.970 756 50	−30.687 517 18		0.56	−6.08	−1.21	1.07	0.53	1.32	1.24	0.78	+23	−41	− 4	− 2	+ 5	+ 9	+ 7	+ 3	− 3	+37		0	−0.15
99882	20 15 53.54	−37 58 40.1	10.71	G	303.973 088 89	−37.977 815 09		11.49	0.62	−27.78	1.82	0.98	2.14	2.44	1.52	+ 1	−31	+ 3	− 2	− 2	− 2	+ 3	− 2	−19	+ 9		0	0.56
99883	20 15 55.19	−11 41 46.3	9.05	H	303.979 944 69	−11.696 186 22		1.98	4.82	−4.46	1.23	0.67	1.40	1.88	1.28	+37	− 9	+ 9	−13	+16	+51	+34	+61	+ 4	+12		2	−0.12
99884	20 15 55.26	−26 47 00.0	9.27	H	303.980 241 38	−26.783 340 15		−0.03	13.40	2.93	1.25	0.81	1.49	1.72	1.08	+50	− 2	+14	+ 8	+25	+34	+20	+12	+29	+80		0	0.48
∗99885	20 15 57.03	+48 27 05.2	8.44	H	303.987 608 67	+48.451 440 94		4.91	−5.16	−12.25	0.73	0.63	0.80	0.94	0.60	−14	+ 2	+29	+31	+12	+19	+ 5	− 1	+11	−12		0	−0.07
∗99886	20 15 56.93	−39 29 23.7	7.79	H	303.987 221 86	−39.489 925 11		12.63	99.08	−217.71	0.88	0.56	1.01	1.18	0.76	+22	−17	− 4	+15	+22	+12	+24	+14	− 4	+39		0	1.29
99887	20 15 58.33	+35 00 53.1	10.51	2 H	303.993 037 53	+35.014 737 42		−0.95	−3.02	−5.27	0.89	1.01	1.32	1.01	1.03	− 7	− 5	+14	+ 1	+ 3	+ 2	+ 4	−20	+ 4	− 1		4	1.87
99888	20 15 58.78	−42 47 30.1	9.40	H	303.994 915 79	−42.791 682 29		8.12	53.48	−85.57	1.17	0.80	1.56	1.76	1.11	− 6	+ 1	−13	+ 5	+ 6	−25	+ 2	+ 7	+12	− 7		2	−2.18
99889	20 16 00.61	+45 34 46.8	5.87	H	304.002 529 71	+45.579 658 67		28.97	9.25	−54.94	0.45	0.41	0.52	0.54	0.47	− 8	− 8	− 4	− 9	+ 6	+10	+ 5	−24	+23	+ 7		0	−1.24
99890	20 16 00.89	+02 06 41.5	12.28	3 G	304.003 717 22	+02.111 518 48		−0.08	0.31	−2.84	4.30	3.57	5.03	5.43	4.86	+42	−29	−14	+51	+17	+13	+16	+66	+ 9	+35		0	2.46
99891	20 16 02.27	−33 15 22.7	9.10	H	304.009 451 74	−33.256 307 35		6.74	9.28	−29.96	1.15	0.56	1.41	1.65	0.92	+15	−27	− 6	+11	+21	+19	+21	+26	+ 0	+34		5	0.62
99892	20 16 02.78	−16 17 44.0	7.34	H	304.011 580 15	−16.295 565 61		11.38	17.06	−48.18	0.91	0.50	0.95	1.17	0.75	+15	−35	−22	−22	− 1	+15	+14	+26	− 8	−13		0	1.27
99893	20 16 03.43	+38 53 53.1	6.28	H	304.014 293 31	+38.898 086 34		7.96	−1.07	−30.71	0.46	0.49	0.59	0.60	0.53	− 5	−11	+15	− 4	+18	+22	+ 9	−15	−15	−15		0	−0.16
99894	20 16 06.03	+04 34 51.3	6.44	H	304.025 116 95	+04.580 919 65		14.84	−40.72	−51.16	0.67	0.56	0.91	0.83	0.70	+14	−14	−28	+23	− 5	+30	+ 7	+48	−20	+ 2		0	0.15
99895	20 16 06.45	−56 30 23.7	8.93	H	304.026 883 38	−56.506 591 54		4.33	3.70	−7.26	0.86	0.90	1.50	1.47	1.17	+39	−19	−44	− 8	+38	−39	+23	− 7	+14	+ 0		3	1.57
99896 H	20 16 06.58	−62 09 56.8	8.20	G	304.027 400 12	−62.165 777 29	A	3.81	44.15	−75.08	1.22	1.03	1.52	1.20	1.19	+ 6	−12	−13	+ 9	−12	+12	−14	−13	+ 1	+ 3		1	0.70
99897	20 16 08.43	−07 43 55.8	7

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
99801	6.886	0.004	6.872	0.004		0.018	0.005	T	0.04	0.01	L	6.8812	0.0006	0.008	155		6.87	6.89		C			1							S
99802						1.500	0.510	G	3.56	0.98	Q	9.8275	0.2657	1.230	43		8.22	11.48	288.40	P 1 A			1 S							G
99803	7.766	0.008	7.240	0.007	*	0.494	0.010	T	0.57	0.01	L *	7.3459	0.0011	0.013	161	*	7.33	7.38		D	20149−5659	I 1	2 C A	AB	29	7.224	0.005	0.13	0.01	S
99804	8.847	0.009	8.731	0.011		0.112	0.013	T	0.13	0.01	L	8.7701	0.0022	0.022	180		8.73	8.81					1							
99805	9.266	0.016	7.363	0.007		1.614	0.014	T	2.34	0.03	O	7.1827	0.0023	0.020	98		7.14	7.22		U 2			1 S							S
99806	8.441	0.010	8.214	0.012		0.211	0.006	G	0.22	0.02	A	8.2403	0.0012	0.019	87		8.21	8.27					1							S
99807	7.934	0.008	7.655	0.007		0.248	0.008	G	0.28	0.01	H	7.6934	0.0010	0.011	91		7.68	7.72		C			1							S
99808	10.482	0.040	9.996	0.042		0.520	0.020	G	0.59	0.02	H	10.0377	0.0023	0.021	81		9.99	10.07		C	20151−5048	I 1	1							
99809	9.682	0.020	9.144	0.019		0.512	0.021	T	0.58	0.02	L	9.1831	0.0020	0.017	90		9.15	9.21					1							
99810	10.639	0.070	10.139	0.071		0.440	0.071	G	0.51	0.07	R	10.1889	0.0041	0.029	44		10.15	10.23					1							G
99811	8.723	0.014	7.050	0.008		1.398	0.013	T	1.37	0.02	L	7.0530	0.0009	0.008	88		7.04	7.07		C			1							S
99812	8.657	0.009	8.719	0.013		−0.060	0.020	G	−0.04	0.02	H	8.7262	0.0021	0.021	171		8.69	8.76					1							
99813	7.902	0.007	7.891	0.010	A	0.030	0.015	G	0.02	0.01	L *	7.8763	0.0015	0.013	147	*	7.85	7.90			20151+4118	I 1	2 C D	AB	151	5.188	0.025	3.57	0.14	S D
99814	9.328	0.014	8.120	0.009		1.033	0.013	T	1.01	0.01	L	8.1808	0.0011	0.011	126		8.16	8.20		C			1							
99815	8.521	0.021	8.071	0.021	B	0.449	0.002	G	0.52	0.03	L	7.9375	0.0278			B				D	20152−0330	I 2	1 C I A							S
99816	7.339	0.009	6.944	0.007	A	0.369	0.001	G	0.43	0.00	H	7.0381	0.0128	0.057	81	A	7.00	7.19		D	20152−0330	I 2	1 C P A							S
99817	10.424	0.044	9.268	0.028		0.993	0.041	T	0.97	0.03	L	9.3457	0.0020	0.012	55		9.33	9.39					1							
99818	7.890	0.008	6.672	0.005		1.041	0.007	T	1.01	0.01	L	6.7299	0.0008	0.007	107		6.72	6.74		C			1 X							S
99819						1.869	0.020	G	3.37	0.07	I	11.1064	0.0103	0.039	30		11.04	11.18					1 S							G
99820	10.700	0.046	10.385	0.055		0.299	0.067	T	0.34	0.09	L	10.3353	0.0030	0.036	156		10.28	10.41		P 1 A			1							G
99821	7.993	0.008	7.996	0.011		0.002	0.013	T	0.02	0.01	L	8.0141	0.0017	0.015	130		7.99	8.04					1							S
99822	9.298	0.015	7.443	0.007		1.575	0.014	T	1.82	0.05	O	7.3551	0.0015	0.016	121		7.33	7.38		M	20152+5409	I 1	1							S
99823	9.576	0.025	7.717	0.011		1.545	0.022	T	1.61	0.05	L	7.6565	0.0018	0.011	61		7.64	7.67		C			1							S
99824	4.545	0.002	4.741	0.002	*	−0.181	0.004	G	−0.22	0.03	C *	4.7129	0.0028	0.028	188	*	4.67	4.74		U 2	20153+2536	I 1	2 C A	AB	177	0.552	0.005	2.75	0.03	S
99825						0.878	0.018	G	0.93	0.02	A	5.8779	0.0004	0.005	157		5.87	5.89		C			1							S
99826	8.530	0.009	8.568	0.012		−0.030	0.014	T	−0.01	0.01	L	8.5719	0.0017	0.018	135		8.54	8.59					1							
99827	6.983	0.005	7.082	0.007		−0.085	0.008	T	−0.07	0.01	L	7.0840	0.0012	0.011	135		7.07	7.11					1							S
99828	10.453	0.028	9.154	0.016		1.104	0.025	T	1.07	0.03	L	9.2037	0.0020	0.022	163		9.17	9.24					1 S							
99829	11.234	0.068	9.609	0.027		1.360	0.058	T	1.33	0.07	L	9.6467	0.0017	0.016	111		9.62	9.67					1							
99830	9.130	0.010	7.950	0.007		1.011	0.010	T	0.99	0.01	L	8.0036	0.0017	0.016	193		7.98	8.04					1							
99831	8.631	0.009	7.539	0.007		0.944	0.009	T	0.93	0.01	L	7.5910	0.0013	0.012	154		7.57	7.61					1							S
99832	9.458	0.018	8.549	0.014		0.807	0.017	T	0.83	0.01	L	8.5946	0.0014	0.010	99		8.58	8.61		C	20154+6412	I 1	1							
99833	8.444	0.011	7.919	0.011		0.517	0.012	G	0.59	0.01	H	7.9709	0.0015	0.015	79		7.95	8.00		C			1							S
99834	8.905	0.017	8.302	0.015		0.527	0.002	G	0.60	0.00	H	8.3497	0.0014	0.012	69		8.32	8.38		D			1							S
99835	11.261	0.084	9.220	0.024		1.690	0.070	T	1.71	0.07	L	9.0919	0.0035	0.026	77		9.03	9.12		U			1 S							
99836	9.726	0.024	9.228	0.024		0.534	0.015	G	0.61	0.02	H	9.2918	0.0020	0.026	225		9.25	9.34					1							
99837	9.786	0.027	9.393	0.030	A	0.500	0.495	G	0.47	0.07	L *	9.3740	0.0022	0.013	54	*	9.35	9.41		D	20154−2030	I 1	2 C B	AB	3	2.519	0.053	2.73	0.23	
99838	7.253	0.007	7.064	0.007		0.181	0.009	T	0.20	0.01	L	7.1065	0.0011	0.008	81		7.09	7.13		C			1							S
99839	9.569	0.017	8.720	0.014		0.890	0.020	G	0.90	0.01	H	8.7262	0.0023	0.020	113		8.69	8.76					1							
99840	7.624	0.005	7.203	0.006		0.398	0.007	T	0.46	0.01	L	7.2548	0.0011	0.012	122		7.24	7.27					1							S
99841	6.876	0.005	5.807	0.003		0.926	0.004	T	0.92	0.00	L	5.8604	0.0004	0.005	162		5.85	5.87			20154+3344	I 1	1							S
99842	11.677	0.086	10.790	0.061		0.762	0.005	G	0.80	0.00	H	10.8722	0.0033	0.035	152		10.80	10.92					1 S							G
99843	7.849	0.008	7.358	0.009		0.463	0.015	G	0.53	0.02	H	7.4263	0.0009	0.009	77		7.41	7.44		C			1							S
99844	9.966	0.024	8.693	0.014		1.084	0.022	T	1.05	0.02	L	8.7373	0.0014	0.013	134		8.72	8.76		C			1							
99845	8.750	0.012	8.762	0.015		−0.006	0.018	T	0.01	0.02	L	8.7762	0.0014	0.013	120		8.75	8.81		C			1							
99846	9.297	0.013	7.397	0.006		1.612	0.012	T	1.71	0.04	O	7.3244	0.0010	0.011	131		7.31	7.34		C			1							S
99847	8.983	0.014	7.948	0.010		0.900	0.013	T	0.90	0.01	L	7.9845	0.0014	0.012	89		7.96	8.01		C			1							S
99848	5.913	0.004	4.173	0.003		1.451	0.004	T	1.45	0.01	L	4.0955	0.0023	0.018	97		4.07	4.12		P 1 C	20155+4742	I 1	1 O							S
99849	7.115	0.005	6.887	0.005		0.218	0.007	T	0.24	0.01	L	6.9136	0.0009	0.010	89		6.90	6.93					1							S
99850	10.356	0.016	8.464	0.006		1.605	0.014	T	1.80	0.04	O	8.3791	0.0014	0.022	317		8.34	8.42		U 2			1							
99851	9.531	0.019	8.856	0.016		0.614	0.019	T	0.68	0.02	L	8.9241	0.0015	0.014	95		8.90	8.95		C			1							
99852	8.419	0.011	7.289	0.007		0.972	0.010	T	0.96	0.01	L	7.3444	0.0010	0.010	131		7.33	7.37		C			1							S
99853	6.477	0.003	5.291	0.002		1.016	0.003	T	0.99	0.00	L	5.3413	0.0007	0.007	128		5.33	5.35		M			1							S
99854	8.762	0.015	8.322	0.015		0.423	0.015	G	0.49	0.02	H	8.3615	0.0019	0.013	65		8.32	8.39		C			1							S
99855	9.767	0.021	9.094	0.019		0.623	0.024	T	0.69	0.02	L	9.1775	0.0018	0.014	93		9.15	9.20		C			1							
99856	7.345	0.007	6.865	0.006		0.452	0.008	T	0.52	0.01	L	6.9166	0.0009	0.008	82		6.91	6.93		C	20155+0251	I 1	1							S
99857	8.812	0.015	8.878	0.020	A	−0.036	0.014	G	−0.01	0.01	H *	8.8150	0.0025	0.019	91	*	8.78	8.84			20156+1526	H 1	2 C D	AB	244	4.738	0.102	4.34	0.37	D
99858	8.734	0.013	7.779	0.010		0.841	0.012	T	0.86	0.01	L	7.8287	0.0012	0.010	105		7.81	7.85		C			1							
99859	8.479	0.010	7.869	0.008		0.568	0.011	T	0.64	0.01	L	7.9255	0.0015	0.013	114		7.91	7.94		C			1							S
99860	7.533	0.010	7.337	0.012	A	0.400	0.495	G	0.18	0.02	L *	7.3491	0.0010	0.007	62	*	7.34	7.36		D	20156+0749	I 1	2 C C	AB	234	9.664	0.049	3.92	0.15	S
99861											T	9.6708	0.0671	0.627	116		8.58	10.38		D	20157+4339	I 2	S							G
99862	8.931	0.012	8.554	0.014		0.392	0.400	G	0.40	0.06	L	8.4467	0.0039	0.036	120		8.37	8.49		D	20157+4339	I 2	1 X S							
99863	8.384	0.010	7.812	0.009		0.535	0.012	T	0.61	0.01	L	7.8718	0.0035	0.025	108		7.83	7.90	1.72	P 1 A			1 G							S
99864	8.450	0.008	8.521	0.011		−0.060	0.015	G	−0.04	0.01	H	8.5535	0.0021	0.027	180		8.51	8.59		U			1							
99865	9.964	0.029	8.792	0.018		1.005	0.027	T	0.98	0.02	L	8.8330	0.0023	0.017	80		8.81	8.87		C			1							
99866	9.251	0.016	9.249	0.022		0.006	0.009	G	0.03	0.01	H	9.2462	0.0029	0.026	84		9.20	9.28					1							
99867	9.339	0.018	8.863	0.018	A	0.100	0.495	G	0.59	0.03	L *	8.8671	0.0018	0.017	92	*	8.83	8.90		D	20157+0440	I 1	2 C B	AB	83	2.852	0.034	3.05	0.12	
99868	8.352	0.008	7.723	0.007		0.580	0.008	T	0.65	0.01	L	7.8004	0.0010	0.013	171		7.77	7.82					1							S
99869	8.129	0.010	7.851	0.009		0.264	0.013	T	0.30	0.02	L	7.8791	0.0013	0.010	82		7.86	7.90		C			1							S
99870	6.477	0.003	6.380	0.004		0.096	0.003	G	0.11	0.00	H	6.4027	0.0006	0.007	120		6.39	6.41		C			1							S
99871	8.602	0.012	7.579	0.009		0.891	0.011	T	0.90	0.01	L	7.6210	0.0010	0.011	122		7.60	7.64		C			1							S
99872						1.640	0.020	G	1.77	0.15	K	11.3376	0.0064	0.049	90		11.25	11.44		C			1							G
99873	7.164	0.005	6.894	0.005		0.259	0.010	G	0.29	0.01	H	6.9268	0.0008	0.007	92		6.91	6.94					1							S
99874	6.137	0.002	4.657	0.002	*	1.258	0.001	G	1.30	0.03	C *	4.6540	0.0005	0.006	243	*	4.64	4.66		D	20158+2749	M 1	2 C A	AC	142	0.261	0.009	2.15	0.07	S
99875	9.360	0.016	7.570	0.007	A	1.570	0.134	G	1.46	0.04	L	7.5393	0.0057	0.013	124	A	7.52	7.56		D	20158+5230	I 2	1 C P D							S D
99876	10.745	0.046	10.086	0.039		0.602	0.045	T	0.67	0.04	L	10.1849	0.0027	0.023	95		10.14	10.23		C			1							G
99877	10.907	0.052	9.178	0.019		1.442	0.044	T	1.44	0.07	L	9.1300	0.0029	0.021	85		9.10	9.16		C			1							
99878	8.276	0.009	6.467	0.004		1.513	0.004	G	1.55	0.01	H	6.4304	0.0008	0.009	138		6.42	6.45					1							S
99879	10.436	0.040	9.799	0.036	B	0.592	0.047	T	0.66	0.04	L	9.9566	0.0374			B				D	20158+5230	I 2	1 C I D							D
99880	11.688	0.100	10.179	0.038		1.266	0.020	G	1.44	0.03	I	10.0672	0.0025	0.025	117		10.02	10.11					1							G
99881	11.265	0.059	9.109	0.015		1.782	0.049	T	1.81	0.05	L	8.9898	0.0031	0.023	126		8.95	9.03		U			1 S							
99882	11.498	0.098	10.808	0.084		0.609	0.015	G	0.68	0.01	H	10.8501	0.0034	0.035	111		10.79	10.90		C			1							G
99883	10.445	0.035	9.171	0.020		1.085	0.032	T	1.05	0.03	L	9.2212	0.0013	0.011	109		9.20	9.24		C			1							
99884	10.511	0.035	9.394	0.021		0.962	0.032	T	0.95	0.03	L	9.4353	0.0020	0.024	141		9.40	9.47		C			1							
99885	8.607	0.011	8.448	0.012		0.153	0.015	T	0.17	0.01	L	8.4888	0.0013	0.013	94		8.47	8.52		C			1							
99886	8.960	0.012	7.890	0.009		0.945	0.002	G	0.99	0.00	I	7.9338	0.0011	0.011	109		7.91	7.95		C			1							S
99887	12.189	0.219	10.851	0.103		1.135	0.189	T	1.10	0.20	L	10.6824	0.0289	0.190	149		10.50	10.96	6.72	P 1 A			1 S							G P
99888	10.248	0.033	9.484	0.028		0.681	0.033	T	0.74	0.03	L	9.5335	0.0024	0.018	80		9.50	9.56		C			1 S							
99889	6.379	0.003	5.919	0.004		0.447	0.004	T	0.52	0.00	L	5.9701	0.0004	0.006	134		5.96	5.98		C			1							S
99890						1.690	0.015	G	2.34	0.30	K	12.3347	0.0244	0.206	82		12.05	12.69		U 2			1							D
99891	9.921	0.021	9.201	0.018		0.648	0.021	T	0.71	0.02	L	9.2306	0.0013	0.015	121		9.21	9.26		C			1 S							
99892	7.606	0.008	7.368	0.009		0.227	0.011	T	0.25	0.01	L	7.4034	0.0006	0.007	78		7.39	7.42		C			1							S
99893	6.290	0.003	6.284	0.004		0.006	0.003	G	0.03	0.00	H	6.2953	0.0006	0.007	133		6.28	6.31		C			1 G							S
99894	7.528	0.007	6.538	0.005		0.867	0.006	T	0.88	0.00	L	6.5982	0.0008	0.007	90		6.58	6.61		C			1							S
99895	8.950	0.010	8.917	0.013		0.030	0.014	T	0.05	0.01	L	8.9423	0.0017	0.020	128		8.91	8.98					1							
99896	8.996	0.012	8.327	0.010	*	0.621	0.015	G	0.69	0.01	H *	8.3178	0.0011	0.013	124	*	8.29	8.34		D	20161−6210	I 1	2 C A	AB	274	0.859	0.004	1.23	0.02	S
99897	7.779	0.008	7.794	0.012		−0.009	0.013	T	0.01	0.01	L	7.8102	0.0011	0.011	83		7.79	7.83		C	20161−0744	I 1	1							S
99898	10.480	0.037	10.261	0.053		0.350	0.022	G	0.41	0.03	H	10.2909	0.0029	0.030	148		10.24	10.35					1							D
99899	11.382	0.071	10.467	0.049		0.811	0.064	T	0.84	0.05	L	10.6440	0.0044	0.033	104		10.58	10.72					1							G
99900	10.419	0.037	8.518	0.014		1.579	0.031	T	1.60	0.03	L	8.3918	0.0023	0.022	106		8.37	8.43		U			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s	±° ′ ″	mag	6 7	deg	deg	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	% 29	30
99901	20 16 11.38	−23 50 05.0	8.53	H	304.047 418 39	−23.834 720 78	3.33	10.75	−1.96	1.06	0.78	1.08	1.48	1.09	+10	−10	− 5	+32	− 2	+14	+ 1	+47	+ 2	− 2	0	0.85
99902	20 16 11.48	−84 05 26.1	9.72	H	304.047 847 50	−84.090 586 88	15.99	−72.71	−56.05	0.92	0.79	1.09	1.09	0.87	−12	−27	+20	+12	− 6	−15	+ 3	−11	−20	− 4	0	−0.27
99903	20 16 11.69	−23 30 36.5	7.83	1 H	304.048 727 78	−23.510 138 25	4.39	21.62	−7.50	0.88	0.65	0.94	1.16	0.86	+ 7	−16	− 5	+16	+ 2	+25	+ 4	+36	+ 2	+ 0	0	1.14
99904	20 16 12.04	−40 59 16.8	9.15	G	304.050 170 87	−40.988 006 61	5.05	20.83	−24.50	1.21	0.72	1.39	2.03	1.11	+10	−11	− 9	+39	+14	+23	+17	+23	− 1	+12	0	−1.41
99905	20 16 13.82	+40 57 48.1	7.84	G	304.057 592 01	+40.963 365 34	2.46	−3.38	−6.89	0.52	0.54	0.67	0.53	0.54	− 1	+ 9	+24	− 9	+ 6	+ 0	+ 6	−12	− 8	+ 9	1	0.33
99906	20 16 13.97	−53 45 23.8	9.30	H	304.058 209 02	−53.756 602 21	1.44	7.22	−6.96	1.12	1.04	1.59	1.57	1.09	+17	− 5	−40	−23	+38	−26	+26	− 7	+10	+14	0	1.04
99907	20 16 14.84	−41 28 42.6	6.99	H	304.061 846 87	−41.478 496 00	0.58	16.41	−13.76	0.78	0.50	0.88	1.04	0.70	+ 6	−22	− 3	+17	+ 5	+ 2	+ 9	+ 0	+ 0	+26	0	−0.03
99908	20 16 15.29	+57 45 01.0	9.60	H	304.063 709 50	+57.750 272 60	2.20	−5.74	−7.59	0.79	0.75	0.85	0.78	0.74	+ 6	+ 3	+16	+ 0	+ 5	− 3	+ 6	+ 2	+ 7	+10	0	−0.80
99909	20 16 15.97	+51 59 55.6	7.47	H	304.066 545 11	+51.998 774 48	1.88	−0.15	−1.27	0.51	0.47	0.54	0.57	0.50	−16	− 9	− 3	+ 5	+10	− 2	+ 9	− 2	+10	− 9	0	−0.22
99910	20 16 17.12	−58 03 38.4	8.83	H	304.071 336 06	−58.060 677 20	−0.45	8.66	5.56	0.91	0.93	1.32	1.07	0.94	+47	−17	−17	−42	−19	−11	−28	−56	+25	−26	0	0.77
99911	20 16 17.58	−37 36 02.6	9.01	H	304.073 256 44	−37.600 713 09	4.93	15.06	0.10	1.12	0.62	1.30	1.30	0.94	+ 8	−37	+ 0	− 1	+ 3	+ 3	+ 8	+ 1	−12	+31	0	−1.66
99912	20 16 17.79	+10 47 27.8	8.54	H	304.074 115 16	+10.791 045 15	13.18	−73.27	−92.22	0.99	0.94	1.10	1.37	1.23	+34	− 7	−17	+28	+30	+ 7	+38	+60	+ 9	+12	0	−0.63
99913	20 16 19.78	+21 35 55.5	6.11	H	304.082 427 95	+21.598 762 79	10.95	8.10	−25.73	0.58	0.50	0.75	0.71	0.61	−22	−11	−16	−24	+17	− 3	+15	−24	+12	− 2	0	−0.75
99914 H	20 16 19.96	+20 33 01.7	8.27	H	304.083 157 92	+20.550 483 89	1.74	2.73	−1.89	1.86	1.62	2.32	2.17	1.85	−25	−15	+ 5	+ 6	− 5	+21	+ 0	− 8	− 3	+ 8	1	−0.11
99915	20 16 20.71	+22 17 14.1	6.83	H	304.086 273 49	+22.287 239 08	5.80	9.77	3.55	0.63	0.54	0.79	0.83	0.66	−23	− 3	−26	−20	+11	− 8	+10	−24	+ 4	+ 4	2	1.03
99916	20 16 21.84	−02 04 07.9	11.16	G	304.090 987 07	−02.068 869 21	37.15	290.66	−33.85	2.34	1.51	2.65	3.72	2.34	+34	−13	−14	+16	+10	+18	+15	+35	− 6	+23	2	−0.68
99917	20 16 22.39	+26 29 25.2	7.20	H	304.093 294 88	+26.490 326 86	6.05	19.78	15.38	0.42	0.45	0.79	0.40	0.43	−36	+ 8	− 5	+13	−21	− 9	−23	−13	+14	−47	1	−0.94
99918	20 16 22.80	−12 20 13.5	6.30	H	304.095 006 16	−12.337 077 16	6.19	6.75	−17.13	0.80	0.43	0.94	0.98	0.67	+16	−15	−17	−16	+ 2	+50	+22	+46	−17	− 4	0	−1.00
99919	20 16 23.48	−50 55 09.1	10.41	G	304.097 848 25	−50.919 188 83	17.29	173.98	−94.36	1.68	1.04	1.85	2.18	1.64	− 7	−38	+12	+ 9	− 6	− 1	− 4	+ 0	− 4	+11	0	0.00
99920	20 16 23.61	−36 27 12.7	6.30	2 H	304.098 373 60	−36.453 536 10	3.83	1.66	−15.90	0.87	0.48	1.00	1.13	0.68	+12	−34	− 7	+ 1	− 2	+26	+ 3	+ 2	− 8	+15	2	−1.33
99921	20 16 24.74	+12 04 14.7	11.32	G	304.103 099 22	+12.070 756 06	3.52	1.51	−2.43	2.11	1.93	2.82	2.29	2.60	+43	−23	−22	− 9	+35	+ 0	+32	+40	−13	+59	0	−0.13
99922	20 16 25.26	+69 13 46.8	9.20	H	304.105 257 68	+69.229 668 88	12.48	8.26	−41.78	0.75	0.73	0.81	0.87	0.71	+ 3	−14	+27	+17	+ 9	− 9	+12	+ 3	+ 1	+17	0	1.14
99923	20 16 25.64	+22 23 47.4	7.17	2 H	304.106 829 80	+22.396 492 09	5.06	−0.73	−13.53	0.69	0.57	0.83	0.82	0.66	−32	−11	−22	−22	+19	+ 4	+21	−24	+ 0	− 3	2	0.45
99924	20 16 25.82	+29 07 55.6	8.55	H	304.107 575 68	+29.132 107 80	2.99	13.89	11.61	0.45	0.63	0.98	0.54	0.63	−21	− 6	+ 2	+21	+ 2	− 8	+ 1	−13	+22	−20	0	1.07
99925	20 16 26.00	−01 29 59.0	7.22	G	304.108 321 55	−01.499 728 62	4.38	−6.32	−24.71	0.89	0.56	1.12	1.43	0.77	+18	− 6	−14	+16	+ 5	+45	+14	+32	−11	+ 7	3	2.36
99926	20 16 26.45	−35 11 55.0	6.55	H	304.110 199 28	−35.198 597 39	23.48	−0.20	53.05	0.80	0.44	0.84	0.92	0.56	+11	− 7	− 9	−40	+14	− 5	+ 7	− 9	+ 0	+38	0	1.11
99927 H	20 16 27.20	+27 46 33.8	6.65	1 G	304.113 317 31	+27.776 066 55	* 2.31	9.05	2.27	0.61	1.12	0.80	0.49	0.53	−10	− 8	+10	−46	+ 0	+ 3	+ 0	−21	− 7	− 2	1	0.58
99928	20 16 27.53	+25 52 25.4	7.73	H	304.114 719 10	+25.873 710 17	6.37	6.80	0.35	0.50	0.51	0.89	0.49	0.49	−33	− 2	+11	+ 9	−22	−15	−23	−13	+15	−45	1	1.89
99929	20 16 28.15	+37 03 23.0	6.47	H	304.117 303 19	+37.056 397 10	2.86	2.56	−0.81	0.40	0.47	0.58	0.46	0.52	−12	−10	+ 7	+ 1	+ 6	− 6	+ 7	−12	+10	+ 0	0	−1.32
99930	20 16 28.33	−39 31 57.4	9.19	H	304.118 038 09	−39.532 612 97	3.59	4.06	0.06	1.21	0.74	1.34	1.57	1.23	+10	−18	− 2	+15	+24	+11	+26	+29	− 9	+35	0	0.29
99931	20 16 30.08	−79 00 24.2	7.88	H	304.125 325 38	−79.006 726 42	12.50	4.41	35.77	0.56	0.52	0.75	0.65	0.61	+ 4	−28	− 4	+ 2	+ 9	− 4	+ 7	−18	− 2	− 7	0	−0.06
99932	20 16 34.10	−27 36 12.9	8.68	2 H	304.142 064 72	−27.603 594 86	1.57	13.43	−3.58	1.00	0.55	1.22	1.31	0.79	+46	−18	+ 8	−13	+15	+11	+ 8	+ 3	+ 9	+81	0	−0.71
99933	20 16 34.55	+21 24 16.9	7.09	H	304.143 966 76	+21.404 685 28	4.65	−9.62	−14.07	0.61	0.53	0.83	0.76	0.65	−27	−11	−11	−16	+19	+ 5	+19	−23	+14	− 3	3	0.31
99934	20 16 35.12	+52 23 50.3	8.05	H	304.146 341 16	+52.397 317 11	1.53	−0.33	−1.15	0.57	0.54	0.62	0.68	0.62	−14	−10	− 2	+ 7	+11	− 3	+ 9	−10	+19	−10	0	−0.69
99935 H	20 16 35.18	−45 54 28.9	8.38	H	304.146 577 31	−45.908 029 61	A 6.37	−0.49	−3.47	1.79	1.11	1.74	2.21	1.56	+11	−24	+ 1	+14	+ 3	− 9	+13	+26	+ 1	− 2	1	−0.15
99936	20 16 35.98	+45 20 20.8	7.11	H	304.149 921 72	+45.339 109 31	2.47	−0.13	8.47	0.56	0.48	0.64	0.65	0.54	− 8	− 4	− 7	−13	+ 2	+17	+ 3	−23	+31	+ 8	0	−1.76
*99937	20 16 37.93	−25 44 19.9	9.72	H	304.158 059 18	−25.738 860 26	5.96	23.23	−42.82	1.36	0.89	1.69	1.62	1.33	+28	−21	−31	− 3	− 1	+16	+11	+35	−36	+17	0	−2.06
*99938	20 16 37.90	−07 26 36.7	8.39	G	304.157 914 67	−07.443 529 84	17.28	313.17	−129.31	1.10	0.59	1.22	1.20	0.78	+19	−33	− 7	−21	+14	+39	+19	+28	− 2	+20	8	0.33
99939	20 16 38.18	−39 38 05.1	8.92	H	304.159 068 47	−39.634 758 52	3.08	2.37	−20.84	1.21	0.75	1.37	1.60	1.24	+17	−17	−12	+18	+23	+ 4	+25	+29	− 9	+35	0	0.77
99940	20 16 38.47	−35 02 28.1	8.46	H	304.160 305 86	−35.041 131 82	22.56	−37.75	70.30	1.03	0.58	1.17	1.21	0.85	+19	+ 0	− 4	−27	+15	+ 3	+11	+ 6	+10	+43	0	−0.24
99941	20 16 38.95	+10 02 08.5	10.44	H	304.162 291 69	+10.035 700 51	−1.11	4.71	−1.07	1.73	1.40	2.10	2.08	1.80	+22	−16	−31	+17	+ 7	+13	+16	+42	+ 1	+ 7	0	−0.25
99942	20 16 39.45	+28 31 22.5	7.19	H	304.164 393 04	+28.522 924 70	3.53	−3.05	−9.45	0.35	0.46	0.75	0.41	0.50	−20	−10	+ 8	+ 6	+ 0	+ 1	+ 0	− 5	− 2	−14	1	1.11
99943	20 16 39.75	+35 28 06.5	7.12	H	304.165 639 95	+35.468 458 98	1.65	4.29	6.52	0.42	0.48	0.62	0.44	0.47	−10	+ 5	+17	+13	+ 1	− 3	+ 3	−21	− 1	− 5	1	−1.19
99944	20 16 40.40	+38 53 57.5	8.33	G	304.168 349 29	+38.899 305 74	1.66	−2.30	−4.16	0.60	0.63	0.82	0.71	0.71	−12	−17	+12	+ 9	+ 7	+13	+ 5	+ 0	+ 4	− 7	0	−0.68
99945	20 16 40.57	−59 07 02.5	9.12	H	304.169 061 52	−59.117 373 54	20.98	78.36	−114.44	0.89	0.87	1.33	1.14	0.93	+13	−20	−20	−43	+ 0	+ 5	− 2	−48	+21	−42	3	1.64
99946	20 16 40.95	−59 40 51.4	10.56	H	304.170 645 45	−59.680 934 25	5.63	19.55	15.19	1.39	1.34	2.07	1.76	1.50	+31	−23	−13	−33	− 2	− 5	−14	−50	+20	−26	0	−0.27
99947	20 16 45.93	−15 10 52.9	7.65	H	304.191 389 80	−15.181 349 94	4.34	25.06	−3.10	0.97	0.55	1.14	1.13	0.82	+19	−24	−11	− 3	+ 6	+49	+18	+50	− 7	+ 9	0	−1.25
99948 H	20 16 45.99	+01 10 43.5	8.59	G	304.191 635 37	+01.178 737 00	* 3.04	7.12	−15.77	4.96	1.77	2.16	2.62	2.07	+35	+14	−12	+29	+28	+45	+18	+73	− 6	+51	0	−0.07
99949	20 16 46.20	−37 33 25.3	8.87	H	304.192 500 49	−37.557 026 48	3.83	−0.48	−13.09	1.13	0.63	1.35	1.26	0.93	− 1	−37	+18	− 5	+ 1	− 7	+ 6	− 3	+16	+31	0	−0.99
99950	20 16 46.53	+06 34 15.5	10.86	H	304.193 868 33	+06.570 974 42	2.74	−3.35	−4.16	1.91	1.49	2.29	2.61	2.12	+26	+12	− 9	− 2	+ 3	− 2	+ 6	+35	− 4	+19	0	0.89
99951	20 16 47.08	+24 40 16.1	5.30	H	304.196 152 46	+24.671 142 27	6.91	14.41	−16.71	0.39	0.42	0.64	0.48	0.52	+ 5	−10	−18	+23	− 2	− 5	− 1	+ 3	+ 3	+18	0	−0.01
99952	20 16 47.45	−20 56 00.3	9.11	H	304.197 725 18	−20.933 409 02	4.04	−5.95	−11.84	1.17	0.82	1.47	1.46	1.21	+16	− 5	−34	−21	−13	+24	− 5	+12	−39	+ 8	0	−0.78
99953	20 16 48.19	+32 22 47.5	7.18	2 H	304.200 774 87	+32.379 855 86	0.62	−5.40	−9.84	0.46	0.50	0.75	0.60	0.53	− 8	+ 3	− 7	− 4	− 3	−19	− 1	−20	+18	+ 0	0	−0.57
99954 H	20 16 48.53	+39 41 50.4	7.72	H	304.202 207 39	+39.697 327 03	A 2.91	2.75	−3.31	1.26	1.27	1.47	1.16	1.24	− 6	+ 0	+ 7	+ 9	+ 4	− 4	+ 6	+ 0	+11	+11	4	2.19
99955	20 16 49.03	+56 02 25.1	6.65	H	304.204 272 11	+56.040 315 74	4.79	14.07	−0.75	0.50	0.44	0.52	0.57	0.49	− 4	− 3	+ 0	+13	+ 1	−10	+ 2	− 2	+ 0	+ 3	3	−0.67
99956 H	20 16 50.26	−03 29 29.1	6.93	G	304.209 434 91	−03.491 428 92	A 16.51	−4.24	−103.71	1.19	0.73	1.21	1.67	0.93	+31	− 3	+ 8	+24	− 6	− 6	− 4	+10	−31	+17	1	−0.04
99957	20 16 50.39	−40 54 19.7	7.03	H	304.209 947 01	−40.905 458 96	18.90	74.77	−42.66	0.84	0.47	0.93	1.19	0.68	−10	−25	+16	+ 9	+19	+32	+19	+ 9	− 7	+12	0	0.10
99958	20 16 50.79	+17 49 45.2	8.36	H	304.211 628 78	+17.829 217 72	3.94	5.23	−5.21	0.73	0.78	1.06	0.90	0.98	+21	−24	−28	+19	+ 7	− 5	+13	+35	−25	+11	0	0.25
99959 H	20 16 51.49	−74 49 18.5	9.09	G	304.214 551 51	−74.821 814 28	A 5.25	15.11	0.84	1.51	1.74	1.98	1.77	1.79	− 5	−12	+ 9	+27	−11	+10	− 3	−27	−33	− 2	2	−0.41
99960	20 16 51.78	+43 40 59.9	7.95	H	304.215 738 33	+43.683 313 06	3.07	7.21	1.29	0.57	0.54	0.69	0.68	0.62	− 4	+ 2	+ 1	+ 5	+ 2	−24	+ 4	− 8	+ 7	+ 2	0	0.30
99961	20 16 51.90	+27 03 16.8	7.80	H	304.216 242 15	+27.054 668 69	5.67	25.30	19.99	0.46	0.51	0.87	0.43	0.49	−28	+15	− 6	+13	−20	+ 2	−22	−16	− 2	−34	0	−2.20
99962	20 16 53.14	−06 50 15.3	8.39	H	304.221 405 86	−06.837 585 64	1.56	−3.72	−4.02	1.05	0.60	1.25	1.36	0.84	+29	− 2	− 1	+10	+19	+50	+24	+37	+12	+33	0	0.84
99963	20 16 53.77	+33 06 33.4	9.26	H	304.224 051 71	+33.109 283 47	13.41	−127.87	−256.86	0.78	0.79	1.14	0.90	0.81	− 7	− 8	+ 9	− 8	− 1	−13	− 1	−27	+12	−11	0	0.27
99964	20 16 54.59	+26 23 03.4	8.82	1 H	304.227 460 41	+26.384 274 77	3.15	13.55	0.58	0.60	0.67	1.10	0.58	0.64	−23	+ 1	+ 1	+ 1	−15	− 7	−16	−19	+16	−36	1	0.54
*99965	20 16 54.74	+50 16 45.4	8.15	H	304.228 085 00	+50.279 271 08	+ 32.33	−221.75	−216.78	1.88	1.74	1.78	0.79	0.68	−80	−22	− 4	+26	−21	−31	+ 0	+ 9	−19	+13	0	0.32
*99966 H	20 16 54.72	−32 36 27.0	7.51	G	304.228 010 13	−32.607 510 54	A 21.45	4.79	52.71	2.51	1.23	2.14	2.56	1.62	+24	−29	−14	+ 5	+25	+18	+30	+43	−13	+36	2	0.72
99967	20 16 54.99	+31 30 18.9	6.92	H	304.229 127 83	+31.505 241 35	4.65	−7.51	−11.68	0.38	0.45	0.63	0.42	0.46	−11	− 7	+ 8	+ 7	− 5	+ 1	− 4	+ 1	+ 3	+ 0	0	−0.66
99968	20 16 55.28	+40 21 54.3	5.27	1 H	304.230 349 99	+40.365 079 60	3.26	2.01	−1.89	0.41	0.40	0.52	0.41	0.42	− 6	+10	+17	− 8	+ 8	− 8	+13	−18	+ 7	+ 7	0	−0.22
99969	20 16 55.32	+06 55 18.3	9.72	G	304.230 514 20	+06.921 739 32	21.23	174.23	3.64	1.49	1.10	1.76	2.23	1.50	+13	−15	−28	+13	−15	− 7	−12	+32	−16	+ 3	0	0.04
*99970	20 16 55.75	−59 38 35.3	7.72	H	304.232 303 10	−59.643 150 69	2.87	17.31	−67.51	0.72	0.60	1.00	0.90	0.68	+ 8	−30	− 7	−32	− 4	+15	− 4	−31	+ 5	−36	0	0.93
*99971	20 16 55.74	−10 58 53.7	8.64	G	304.232 265 48	−10.981 571 82	22.79	−150.23	−312.42	1.10	0.54	1.25	1.33	0.89	+32	−12	+ 2	− 9	+15	+43	+20	+48	+ 1	+25	0	0.04
99972	20 16 56.51	+16 45 57.9	7.29	H	304.235 456 81	+16.766 080 59	0.73	3.18	−0.16	0.67	0.69	0.93	0.73	0.86	+29	−36	−28	+ 8	+11	+15	+21	+41	−15	+16	0	0.53
99973	20 16 56.67	−72 11 03.9	8.10	H	304.236 136 40	−72.184 416 36	2.84	−4.40	11.47	0.56	0.61	0.86	0.67	0.73	−19	−17	− 1	+17	+ 3	+ 1	+ 4	−15	−14	−22	0	−0.96
99974	20 16 56.75	+34 08 22.9	7.82	H	304.236 467 31	+34.139 689 04	1.95	3.74	−2.06	0.50	0.51	0.71	0.58	0.48	− 8	+ 2	+18	+31	− 9	−20	− 6	−14	+ 5	−12	0	1.55
99975	20 16 56.99	+30 12 16.8	9.27	H	304.237 470 31	+30.204 652 97	11.78	−55.63	−8.60	0.71	0.79	1.11	0.85	0.88	−13	+ 0	+ 6	+30	− 6	−12	− 3	− 8	+ 2	−10	0	1.04
99976	20 16 57.45	+41 49 17.2	7.91	H	304.239 371 67	+41.821 443 07	7.12	15.45	16.84	0.55	0.55	0.69	0.58	0.56	+ 8	− 1	+19	+12	− 2	− 3	− 1	− 1	− 2	+14	0	1.10
99977 H	20 16 57.69	−58 39 19.2	9.22	H	304.240 370 58	−58.655 329 00	* 8.54	−16.24	−28.50	1.74	1.80	1.77	2.06	2.05	+45	−23	−31	−27	+ 3	+ 1	+ 1	−22	+32	−22	0	−0.88
99978	20 16 57.76	+18 21 13.6	8.04	H	304.240 681 84	+18.353 764 46	6.76	10.61	13.85	0.77	0.72	1.00	0.86	0.90	+16	− 6	−25	−14	+16	− 5	+16	+32	−20	+20	0	−0.64
99979	20 16 58.31	−01 12 42.2	8.01	G	304.242 941 79	−01.211 723 45	4.01	25.49	−17.39	0.98	0.74	1.34	1.65	1.08	+18	− 2	−34	+17	−16	+48	+ 8	+ 4	− 2	+15	0	1.94
99980	20 16 58.89	+37 40 53.2	7.64	1 H	304.245 356 53	+37.681 431 35	−0.29	−2.16	−5.21	0.48	0.53	0.66	0.50	0.58	− 9	+ 1	+ 6	+ 1	+10	− 6	+11	− 6	+ 6	+ 2	1	−0.63
99981	20 16 59.94	−31 12 28.4	7.74	H	304.249 769 06	−31.207 891 39	3.89	−40.39	−64.06	0.82	0.44	0.98	1.07	0.65	+16	−20	+ 1	+ 4	− 1	+19	+ 2	− 1	− 6	+29	0	0.70
99982 H	20 17 00.03	+37 25 23.8	7.99	H	304.250 119 75	+37.423 286 61	A 3.89	−1.88	−6.67	1.21	1.47	1.56	1.21	1.46	− 1	−11	+ 9	+ 6	+15	− 5	+16	− 8	+ 2	+ 0	4	2.98
99983	20 17 00.30	+07 04 18.2	7.37	2 H	304.251 244 54	+07.071 722 14	2.81	9.71	−1.68	0.82	0.64	1.04	0.96	0.88	+19	−14	−27	− 2	− 5	+17	− 1	+33	−24	+19	0	1.73
99984	20 17 00.30	−18 25 53.2	7.42	H	304.251 267 80	−18.431 432 69	7.64	18.57	8.58	0.83	0.47	0.93	1.12	0.87	+16	−13	− 8	−15	−16	+14	−14	+ 7	−29	+10	0	0.58
99985	20 17 00.45	+08 57 47.5	6.51	H	304.251 885 01	+08.963 201 44	14.94	8.50	−2.14	0.74	0.64	0.85	0.92	0.86	+28	−10	−19	+17	+21	+14	+26	+51	− 3	+26	0	0.48
99986	20 17 00.54	+35 57 26.7	7.70	H	304.252 241 30	+35.957 420 12	2.26	−2.90	−6.18	0.48	0.56	0.71	0.51	0.59	− 2	+ 9	+13	+ 1	− 4	− 5	− 3	−15	−11	+ 4	0	0.30
99987	20 17 00.58	+56 54 17.0	8.07	H	304.252 429 87	+56.904 722 17	7.09	−36.57	−54.84	0.60	0.54	0.63	0.64	0.56	+ 2	− 5	+ 8	+18	+ 4	− 8	+ 4	− 1	+ 4	+ 2	1	−1.82
99988	20 17 02.57	+03 46 33.0	9.13	G	304.260 699 63	+03.775 837 29	2.92	1.17	−11.59	1.04	1.00	1.39	1.28	1.39	+47	+ 1	−20	+35	+24	+28	+28	+64	−21	+42	0	0.27
99989	20 17 04.75	+72 52 50.8	8.55	G	304.269 800 69	+72.880 773 59	5.49	26.40	−33.55	0.71	0.64	0.73	0.74	0.74	− 9	−22	+ 9	−41	+ 0	+12	− 8	+ 0	+13	+ 5	0	0.87
99990	20 17 06.53	−21 19 04.4	6.97	2 H	304.277 188 89	−21.317 879 00	* 1.78	7.26	−13.69	1.17	0.73	1.48	1.61	1.10	+ 2	+15	−30	+ 9	−14	+47	− 1	+14	+ 9	+ 1	0	0.59
99991	20 17 08.18	+30 06 43.1	9.13	H	304.284 069 88	+30.111 982 84	3.15	−1.23	−3.19	0.64	0.72	1.03	0.76	0.80	−12	− 7	+ 2	+24	− 3	−16	− 4	− 4	+ 7	−17	0	2.39
99992	20 17 08.96	+21 34 00.8	7.86	H	304.287 322 45	+21.566 882 24	1.84	0.07	−8.04	0.76	0.61	0.98	0.92	0.71	−30	+ 3	−26	−32	+25	−11	+18	−22	+18	+ 0	0	−0.18
99993	20 17 09.16	−60 55 12.9	8.74	H	304.288 172 93	−60.920 254 52	0.33	2.52	−4.20	0.72	0.75	1.23	0.71	0.80	+ 8	−11	−16	+25	−20	+16	−30	−29	+ 8	−12	0	0.30
99994	20 17 09.50	−67 27 18.4	6.72	H	304.289 600 98	−67.455 111 05	13.89	39.74	−80.56	0.38	0.51	0.74	0.40	0.64	−10	− 1	−15	−26	− 9	− 9	−12	−11	+10	−18	1	−0.70
99995	20 17 09.78	+15 52 21.7	7.48	2 H	304.290 746 43	+15.872 695 33	2.76	−4.83	−10.75	0.64	0.58	0.85	0.77	0.70	+ 7	−22	−29	+ 3	− 5	+13	+ 4	+24	−17	− 9	0	−1.10
99996	20 17 11.43	+19 24 04.3	8.57	H	304.297 638 35	+19.401 185 90	3.40	11.77	−10.44	0.79	0.70	0.99	1.02	0.79	+16	+ 1	−16	− 3	+19	− 2	+16	+13	− 1	+28	0	−1.41
99997	20 17 12.53	+40 35 29.0	7.14	H	304.302 193 76	+40.591 394 24	3.10	0.21	0.47	0.46	0.45	0.59	0.53	0.47	+ 3	+ 8	+21	− 9	+ 4	− 3	+ 4	− 9	+ 0	+11	0	−1.59
99998 H	20 17 13.12	+24 15 07.1	8.99	H	304.304 650 84	+24.251 976 94	* 1.81	−12.14	−18.53	2.42	3.25	1.49	1.18

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
99901	10.242	0.042	8.695	0.021		1.299	0.037	T	1.26	0.04	L	8.6905	0.0015	0.011	48		8.67	8.71		D			1							
99902	10.821	0.041	9.811	0.026		0.870	0.038	T	0.88	0.03	L	9.8644	0.0022	0.026	134		9.83	9.91					1							
99903	9.082	0.020	7.943	0.014		0.979	0.019	T	0.96	0.01	L	7.9950	0.0036	0.022	54		7.95	8.02		U			1							S
99904	9.699	0.021	9.225	0.021		0.495	0.003	G	0.57	0.00	H	9.2447	0.0018	0.017	98		9.21	9.27		C			1							
99905	7.793	0.005	7.853	0.008		−0.027	0.015	G	−0.01	0.01	H	7.8470	0.0017	0.014	152		7.83	7.87					1							S
99906	10.658	0.034	9.406	0.020		1.068	0.031	T	1.03	0.03	L	9.4704	0.0029	0.025	108		9.44	9.52		C			1							
99907	8.884	0.013	7.176	0.006		1.426	0.011	T	1.41	0.02	L	7.1290	0.0015	0.011	103		7.11	7.15		C			1							S
99908	10.919	0.057	9.717	0.028		1.029	0.050	T	1.00	0.04	L	9.7624	0.0023	0.021	126		9.73	9.80		C			1							G
99909	7.416	0.006	7.452	0.009		−0.028	0.010	T	−0.01	0.01	L	7.4726	0.0012	0.010	118		7.46	7.49		C			1							S
99910	10.114	0.024	8.939	0.015		1.008	0.022	T	0.98	0.02	L	8.9935	0.0021	0.019	131		8.96	9.03					1							
99911	9.411	0.015	9.008	0.015		0.394	0.018	T	0.46	0.02	L	9.0994	0.0018	0.016	115		9.07	9.13		C			1							
99912	9.182	0.018	8.591	0.016		0.566	0.015	G	0.64	0.01	H	8.6581	0.0019	0.016	86		8.63	8.68		C			1							
99913	7.461	0.006	6.237	0.004		1.039	0.000	G	1.01	0.03	C	6.2827	0.0008	0.007	112		6.27	6.29		C			1							S
99914	8.172	0.009	8.260	0.012	*	−0.075	0.014	T	−0.05	0.02	L *	8.2540	0.0017	0.016	129	*	8.23	8.29			20163+2033	H 1	2 C	B	AB	283	0.687	0.032	3.37	0.38	
99915	8.423	0.012	6.981	0.006		1.216	0.011	T	1.18	0.01	L	6.9960	0.0012	0.010	108		6.98	7.02					1							S
99916						1.417	0.012	G	1.71	0.03	I	11.2706	0.0063	0.042	71		11.22	11.32					1							G
99917	8.467	0.007	7.305	0.005		0.997	0.007	T	0.98	0.01	L	7.3628	0.0010	0.012	252		7.35	7.38					1							S
99918	6.301	0.003	6.301	0.004		0.005	0.005	T	0.03	0.01	L	6.3107	0.0005	0.006	118		6.30	6.32		C	20164−1220	I 1	1							S
99919	11.447	0.095	10.313	0.053		0.954	0.005	G	1.00	0.01	I	10.5664	0.0040	0.031	83		10.51	10.62		C			1							G
99920	8.284	0.013	6.560	0.009		1.467	0.013	T	2.84	0.03	O	6.2460	0.0051	0.055	91		6.16	6.33		U 2	20164−3627	I 1	1	S						S
99921						1.938	0.020	G	2.08	0.15	K	11.3981	0.0058	0.052	93		11.32	11.47					1							G
99922	9.894	0.019	9.261	0.017		0.588	0.022	T	0.66	0.02	L	9.3292	0.0016	0.020	106		9.30	9.36					1							
99923	7.552	0.007	7.199	0.007		0.331	0.009	G	0.39	0.01	H	7.2478	0.0029	0.024	102		7.22	7.28		U 2			1							S
99924	8.707	0.008	8.571	0.009		0.131	0.011	T	0.15	0.01	L	8.6010	0.0014	0.018	231		8.57	8.63					1							
99925	9.096	0.016	7.386	0.008		1.427	0.014	T	1.41	0.02	L	7.3795	0.0010	0.008	73		7.37	7.39		C			1							S
99926	6.994	0.003	6.587	0.005		0.381	0.005	G	0.45	0.01	H	6.6350	0.0008	0.007	112		6.62	6.65					1							S
99927	6.572	0.003	6.637	0.003	*	−0.066	0.005	G	−0.04	0.01	H *	6.6379	0.0015	0.020	259	*	6.60	6.66	16.83	P 1 A	20165+2747	H 1	2 C	A	AB	137	0.211	0.018	2.52	0.28	S P
99928	8.127	0.007	7.763	0.007		0.345	0.009	T	0.40	0.01	L	7.8164	0.0012	0.014	213		7.79	7.84					1							S
99929	6.337	0.003	6.449	0.004		−0.097	0.004	T	−0.08	0.01	L	6.4380	0.0008	0.007	131		6.43	6.45		C			1							S
99930	9.656	0.019	9.224	0.019		0.408	0.025	T	0.47	0.03	L	9.2796	0.0023	0.019	104		9.25	9.31		C			1							
99931	8.427	0.008	7.916	0.008		0.475	0.012	G	0.55	0.01	H	7.9822	0.0013	0.011	147		7.96	8.00					1							S
99932	9.430	0.012	8.772	0.011		0.601	0.012	T	0.67	0.01	L	8.8076	0.0023	0.024	188		8.77	8.84		U 2			1							
99933	7.169	0.006	7.098	0.007		0.070	0.009	T	0.08	0.01	L	7.1247	0.0009	0.011	115		7.11	7.14					1							S
99934	8.008	0.007	8.032	0.008		−0.017	0.010	T	0.01	0.01	L	8.0508	0.0018	0.014	121		8.03	8.08					1							S
99935	8.724	0.022	8.180	0.025	*	0.517	0.025	T	0.59	0.03	L *	8.4939	0.0017	0.016	97	*	8.47	8.52		D	20166−4554	I 1	2 C	A	AB	44	1.537	0.005	0.80	0.02	S
99936	9.104	0.023	7.288	0.011		1.500	0.015	G	1.49	0.02	L	7.2370	0.0010	0.009	131		7.22	7.25		C			1							S
99937	10.439	0.044	9.770	0.040		0.609	0.045	T	0.68	0.04	L	9.8497	0.0022	0.020	81		9.81	9.89		C			1							
99938	9.087	0.019	8.455	0.017		0.580	0.012	G	0.65	0.01	H	8.5130	0.0013	0.009	86		8.49	8.53					1							
99939	10.375	0.031	9.041	0.017		1.132	0.028	T	1.10	0.03	L	9.0852	0.0018	0.017	104		9.05	9.12		C			1							
99940	9.316	0.015	8.534	0.012		0.685	0.002	G	0.74	0.00	H	8.5924	0.0012	0.012	109		8.57	8.61		D			1							S
99941	12.043	0.198	10.815	0.112		1.496	0.020	G	1.56	0.14	K	10.5575	0.0031	0.028	67		10.51	10.61		C			1							G
99942	7.139	0.004	7.186	0.005		−0.038	0.006	T	−0.02	0.01	L	7.1875	0.0007	0.010	225		7.17	7.21		C			1							S
99943	7.090	0.004	7.111	0.006		−0.015	0.007	T	0.01	0.01	L	7.1261	0.0007	0.009	152		7.11	7.15					1							S
99944	8.692	0.010	8.377	0.011		0.331	0.011	G	0.39	0.01	H	8.4105	0.0015	0.014	123		8.39	8.44		C			1							
99945	10.061	0.022	9.193	0.017		0.760	0.021	T	0.80	0.01	L	9.2588	0.0020	0.023	146		9.22	9.30		C			1							
99946	10.925	0.042	10.427	0.044		0.480	0.046	T	0.55	0.05	L	10.6472	0.0034	0.042	139		10.57	10.73					1							G
99947	9.262	0.017	7.767	0.009		1.258	0.015	T	1.22	0.02	L	7.8123	0.0012	0.010	104		7.79	7.83		C			1							S
99948	10.813	0.046	8.827	0.015	*	1.500	0.040	G	1.50	0.10	R *	8.7247	0.0017	0.017	114	*	8.70	8.76			20168+0111	H 1	2 C	B	AB	357	0.262	0.046	2.93	0.39	
99949	9.413	0.015	8.913	0.015		0.481	0.016	T	0.55	0.02	L	8.9764	0.0020	0.018	115		8.94	9.01		C	20168−3733	I 1	1							
99950	11.986	0.175	10.979	0.117		0.876	0.173	T	2.03	0.17	K	10.9429	0.0050	0.043	81		10.87	11.00					1							G
99951	6.498	0.003	5.404	0.003		0.951	0.001	G	0.94	0.00	H	5.4647	0.0006	0.006	143		5.45	5.47					1							S
99952	9.599	0.024	9.150	0.025		0.437	0.028	T	0.51	0.03	L	9.2081	0.0023	0.019	72		9.18	9.25		C			1							
99953	7.262	0.006	7.189	0.008		0.066	0.009	T	0.08	0.01	L	7.2034	0.0065	0.051	145		7.08	7.26		U 2			1							S
99954	7.555	0.010	7.625	0.013	*	−0.060	0.014	T	−0.04	0.01	L *	7.7100	0.0015	0.017	141	*	7.69	7.75		D	20168+3942	I 1	2 C	A	AB	322	5.396	0.003	0.57	0.01	S
99955	8.199	0.009	6.779	0.006		1.199	0.008	T	1.16	0.01	L	6.8164	0.0009	0.008	103		6.80	6.83		C			1							S
99956	7.671	0.009	7.108	0.010	A	0.526	0.006	G	0.60	0.01	H *	7.0664	0.0010	0.007	73	*	7.05	7.08		D	20168−0330	I 1	2 C	A	AB	5	1.709	0.005	2.12	0.02	S
99957	7.520	0.006	7.067	0.007		0.441	0.007	T	0.51	0.01	L	7.1240	0.0008	0.007	100		7.11	7.13		C			1							S
99958	9.894	0.027	8.472	0.015		1.201	0.024	T	1.16	0.02	L	8.5239	0.0021	0.013	80		8.50	8.54					1							
99959	9.725	0.019	9.247	0.019	A	0.468	0.006	G	0.54	0.01	H *	9.1705	0.0025	0.027	131	*	9.13	9.21		D	20169−7449	I 1	2 C	A	AB	286	1.097	0.009	1.32	0.03	
99960	8.194	0.008	7.969	0.010		0.215	0.012	T	0.24	0.01	L	8.0114	0.0017	0.013	117		7.99	8.04					1							S
99961	7.988	0.006	7.817	0.007		0.140	0.015	G	0.15	0.01	H	7.8473	0.0010	0.015	227		7.82	7.87					1							S
99962	10.378	0.037	8.538	0.015		1.530	0.032	T	1.57	0.07	L	8.5119	0.0016	0.011	90		8.49	8.53		C			1							
99963	9.984	0.021	9.325	0.019		0.585	0.020	G	0.66	0.02	H	9.3882	0.0016	0.022	158		9.35	9.43		C			1							G
99964	10.226	0.018	8.951	0.010		1.086	0.016	T	1.05	0.01	L	8.9843	0.0026	0.029	239		8.94	9.03		U			1							
99965	9.083	0.013	8.232	0.011		0.747	0.013	T	0.79	0.01	L	8.2908	0.0012	0.011	115		8.27	8.31		C	20170+5017	I 1	1 O							
99966	8.230	0.014	7.444	0.014	*	0.689	0.004	G	0.75	0.00	H *	7.6498	0.0012	0.009	135	*	7.64	7.68		D	20169−3236	I 1	2 C	A	AB	297	1.889	0.004	0.42	0.01	S
99967	6.904	0.004	6.910	0.005		−0.001	0.006	T	0.02	0.01	L	6.9258	0.0008	0.009	168		6.91	6.94		C	20169+3130	I 1	1							S
99968	7.409	0.007	5.442	0.003		1.650	0.007	G	1.66	0.09	H	5.3839	0.0010	0.009	128		5.37	5.40		M	20169+4021	I 1	1							S
99969	11.380	0.104	9.765	0.038		1.140	0.015	G	1.23	0.02	I	9.8072	0.0026	0.024	62		9.76	9.84		C			1							G
99970	9.403	0.014	7.856	0.008		1.299	0.013	T	1.26	0.01	L	7.8725	0.0011	0.015	141		7.85	7.90					1							S
99971	9.544	0.022	8.675	0.017		0.723	0.002	G	0.77	0.00	H	8.7855	0.0009	0.011	120		8.76	8.80					1							
99972	8.800	0.013	7.414	0.008		1.172	0.012	T	1.13	0.01	L	7.4515	0.0010	0.008	87		7.43	7.47		C			1							S
99973	9.455	0.013	8.211	0.008		1.061	0.012	T	1.03	0.01	L	8.2719	0.0015	0.018	175		8.24	8.30					1							
99974	7.732	0.007	7.798	0.009		−0.070	0.015	G	−0.05	0.01	H	7.8035	0.0011	0.012	145		7.78	7.82					1							S
99975	9.997	0.020	9.325	0.018		0.622	0.022	T	0.69	0.02	L	9.4009	0.0019	0.022	193		9.36	9.45		C			1							
99976	9.345	0.015	8.031	0.009		1.116	0.014	T	1.08	0.01	L	8.0732	0.0014	0.014	130		8.05	8.10					1							
99977	10.054	0.021	9.287	0.018	*	0.683	0.021	T	0.74	0.02	L *	9.3562	0.0019	0.020	148	*	9.33	9.39		D	20170−5839	H 1	2 C	A	AB	311	0.224	0.004	0.41	0.11	
99978	8.168	0.010	8.057	0.012		0.108	0.015	T	0.12	0.02	L	8.0842	0.0013	0.012	80		8.06	8.11		C			1							S
99979	8.136	0.013	7.988	0.015		0.110	0.015	G	0.12	0.01	H	8.0395	0.0012	0.011	70		8.02	8.06		C			1							S
99980	7.942	0.009	7.670	0.010		0.259	0.013	T	0.29	0.02	L	7.7130	0.0016	0.017	148		7.69	7.74		U			1							S
99981	9.137	0.013	7.854	0.008		1.092	0.012	T	1.05	0.01	L	7.9047	0.0012	0.011	143		7.89	7.92					1							S
99982	8.423	0.009	8.090	0.009	*	0.294	0.015	G	0.34	0.02	H *	8.0663	0.0015	0.020	141	*	8.03	8.10		D	20170+3725	I 1	2 C	A	AC	50	0.865	0.028	2.87	0.11	
99983	9.461	0.026	7.608	0.012		1.573	0.024	T	2.54	0.06	O	7.3807	0.0101	0.095	61		7.24	7.56		U 2			1	S						S
99984	7.659	0.007	7.443	0.009		0.206	0.011	T	0.23	0.01	L	7.4821	0.0009	0.007	87		7.47	7.50					1							S
99985	6.853	0.005	6.526	0.005		0.310	0.007	T	0.36	0.01	L	6.5888	0.0013	0.009	72		6.58	6.61					1							S
99986	7.647	0.007	7.692	0.008		−0.032	0.004	G	−0.01	0.00	H	7.6971	0.0013	0.012	146		7.68	7.72		C			1							S
99987	9.349	0.016	8.187	0.011		0.997	0.015	T	0.98	0.01	L	8.2352	0.0011	0.012	111		8.21	8.26		C			1							
99988	9.203	0.017	9.169	0.022		0.072	0.006	G	0.08	0.01	H	9.1537	0.0021	0.015	80		9.13	9.18		C			1							
99989	9.088	0.014	8.632	0.014		0.480	0.015	G	0.55	0.02	H	8.6533	0.0017	0.014	100		8.62	8.68					1							
99990	12.268	0.216	7.596	0.009		2.450	0.510	G	2.45	0.52	J	6.9925	0.0573	0.240	79		6.83	7.35		U 2	20171−2119	I 1	1 V							P
99991	9.530	0.014	9.185	0.015		0.380	0.015	G	0.44	0.02	H	9.2140	0.0017	0.024	193		9.17	9.25					1							
99992	7.781	0.007	7.861	0.011		−0.068	0.012	T	−0.05	0.01	L	7.8446	0.0018	0.017	112		7.82	7.88					1							S
99993	10.263	0.022	8.861	0.012		1.185	0.020	T	1.15	0.02	L	8.9033	0.0016	0.020	162		8.86	8.94		C			1							
99994	6.992	0.003	6.751	0.003		0.230	0.004	T	0.26	0.01	L	6.7921	0.0008	0.010	245		6.78	6.82					1							S
99995	7.366	0.008	7.469	0.010		−0.089	0.011	T	−0.07	0.01	L	7.4522	0.0026	0.077	91		7.43	7.63		U 2 C			1							S
99996	8.840	0.013	8.601	0.015		0.228	0.019	T	0.25	0.02	L	8.6421	0.0023	0.019	89		8.61	8.68					1							
99997	7.105	0.005	7.133	0.005		−0.021	0.006	T	0.00	0.01	L	7.1392	0.0010	0.009	138		7.12	7.16		C			1							S
99998	9.278	0.014	9.001	0.016	*	0.264	0.020	T	0.30	0.03	L *	9.0664	0.0026	0.027	148	*	9.03	9.11			20172+2415	H 1	2 C	A	AB	164	0.283	0.027	2.29	0.30	
99999	8.278	0.006	8.110	0.007		0.161	0.009	T	0.18	0.01	L	8.1404	0.0010	0.014	220		8.12	8.16					1							
100000	9.297	0.022	8.001	0.013		1.102	0.020	T	1.06	0.02	L	8.0262	0.0015	0.011	83		8.01	8.06		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	π	$\mu_{\alpha*}$										F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$										%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28										29	30
100001	20 17 16.70	−32 50 38.8	9.38	H	304.319 573 41	−32.844 124 72		9.25	−6.50	−44.09	1.13	0.70	1.38	1.60	1.15	+21	−13	+ 4	+12	+23	+39	+22	+34	+12	+38										0	−1.12
100002	20 17 17.18	+01 18 54.2	8.33	H	304.321 564 43	+01.315 044 78		8.12	28.20	−5.64	1.06	0.77	1.14	1.55	1.14	+13	+ 1	− 5	+58	+ 3	+30	+ 4	+64	+ 8	+13										0	0.00
100003	20 17 18.38	−71 04 01.7	8.65	H	304.326 590 56	−71.067 141 79		4.03	7.73	−10.42	0.61	0.70	1.03	0.66	0.80	−21	− 5	+ 5	− 7	+ 3	− 9	+ 3	− 9	+ 1	−30										0	−0.33
100004	20 17 18.57	−62 57 35.7	8.46	H	304.327 372 10	−62.959 905 53		1.66	9.21	−16.90	0.98	0.66	1.07	1.22	0.98	+ 0	−10	− 9	−12	+ 6	−12	+ 5	−16	+11	−15										0	−1.80
100005	20 17 19.01	−36 37 45.4	8.69	H	304.329 197 54	−36.629 286 96		6.02	−12.19	−28.61	1.07	0.63	1.25	1.68	0.92	+ 2	−17	+11	+ 7	+ 1	+19	+ 1	+14	− 9	− 1										4	−1.47
100006	20 17 20.28	−36 38 01.4	10.51	H																																	
100007	20 17 20.60	+62 08 17.4	7.78	H	304.335 841 56	+62.138 169 18		3.89	−12.86	4.20	0.60	0.52	0.61	0.68	0.57	− 2	+ 1	−10	+ 9	+ 1	− 5	+ 4	−22	+23	+11										1	0.17
100008	20 17 21.69	−54 20 48.5	8.38	H	304.340 376 89	−54.346 814 38		3.73	10.70	−67.14	1.02	0.73	1.18	1.27	0.89	− 1	−18	−22	−35	+33	− 2	+30	− 9	+17	− 9										0	0.49
100009	20 17 22.76	+38 14 08.5	6.99	1 G	304.344 850 15	+38.235 686 91		0.61	−2.44	−5.63	0.46	0.49	0.63	0.50	0.53	− 5	− 2	+ 7	+10	+ 7	−11	+ 8	+ 5	+ 7	+ 2										0	0.01
100010	20 17 22.77	+12 13 04.7	8.45	H	304.344 882 84	+12.217 983 32		3.67	4.06	−11.55	0.76	0.70	1.05	0.94	0.92	+23	−11	−12	+16	+12	+25	+14	+32	+10	+28										0	0.00
100011	20 17 23.64	+14 49 26.6	8.88	H	304.348 515 51	+14.824 042 67		1.01	−0.30	4.67	0.84	0.87	1.13	1.01	1.16	+30	−23	+ 2	+17	+26	+ 8	+23	+46	− 4	+42										0	−1.42
100012	20 17 24.78	−02 03 47.5	7.69	H	304.353 229 84	−02.063 188 83		4.87	16.69	−10.92	1.02	0.66	1.12	1.60	1.06	+12	−11	−21	+ 8	− 4	+12	+ 7	+37	−12	−14										2	1.13
100013	20 17 25.17	+39 35 36.7	6.57	2 H	304.354 890 78	+39.593 539 09		3.51	3.95	−0.01	0.42	0.45	0.57	0.44	0.48	− 7	−13	+ 7	+ 4	+ 8	+ 0	+ 8	− 7	+10	+ 8										0	0.19
100014 H	20 17 26.80	−15 49 39.5	7.43	H	304.361 649 36	−15.827 631 44	A	7.49	14.20	−50.96	1.20	0.66	1.14	1.32	0.91	+24	−13	− 9	− 7	−13	+34	− 8	+28	−23	−16										1	0.49
100015	20 17 28.95	−13 57 38.5	8.74	H	304.370 645 29	−13.960 704 24		1.57	16.05	5.56	1.16	0.60	1.22	1.35	1.00	+29	−22	−12	−17	+ 9	+39	+32	+58	− 5	+ 6										0	0.52
100016	20 17 29.05	+42 43 19.4	6.32	H	304.371 062 33	+42.722 063 21		1.73	2.72	−1.33	0.49	0.48	0.59	0.55	0.51	+10	− 9	+ 6	−17	−17	−13	−15	−26	+11	+22										1	−0.06
100017	20 17 30.63	+66 51 10.7	5.91	H	304.377 635 42	+66.852 965 87		56.92	468.52	296.81	0.49	0.43	0.52	0.55	0.41	+ 1	−28	+12	−10	+ 8	+28	− 1	−11	+18	+22										0	−0.46
100018 T	20 17 31.54	+29 08 51.0	6.24	H	304.381 402 02	+29.147 509 41		8.88	−9.15	22.10	0.32	0.42	0.64	0.38	0.43	−20	+ 4	− 3	+19	− 3	− 3	− 2	−14	+ 9	−19										2	1.51
100019	20 17 31.57	+44 53 42.7	8.81	H	304.381 555 70	+44.895 194 54		7.70	−26.36	−77.64	0.69	0.65	0.78	0.86	0.73	−13	−12	+ 4	+14	+15	+ 1	+14	−16	+ 9	− 7										2	0.81
100020	20 17 35.03	+28 06 41.9	9.32	H	304.395 977 38	+28.111 642 44		2.99	1.91	−2.79	0.67	0.87	1.41	0.78	0.95	−11	−16	+15	−20	− 2	− 5	− 1	− 6	− 2	− 4										0	−0.88
*100021	20 17 35.68	+28 31 03.1	9.13	H	304.398 659 69	+28.517 531 96		3.27	−3.56	4.78	0.59	0.80	1.33	0.66	0.80	−23	−21	+20	+ 5	− 4	− 5	− 3	−11	− 2	−23										0	−0.44
*100022	20 17 35.67	+51 09 08.4	7.70	H	304.398 635 13	+51.152 325 01		11.18	102.67	22.66	0.57	0.53	0.64	0.62	0.57	− 5	−15	+ 6	+ 6	+ 6	− 1	+ 3	− 5	+23	− 3										0	−1.05
*100023	20 17 36.11	−50 33 31.8	8.53	H	304.400 469 07	−50.558 828 35	A	0.27	−1.70	−12.32	1.72	1.25	1.87	2.57	1.81	+ 0	− 7	− 5	+27	−16	− 9	−18	− 5	− 2	−13										3	0.47
*100024	20 17 36.10	−29 23 38.6	8.78	2 H	304.400 422 73	−29.394 056 45		0.48	−5.41	−5.11	1.02	0.54	1.25	1.15	0.75	+33	−26	− 9	−14	+ 9	−11	+10	− 6	− 9	+65										0	1.96
100025	20 17 37.11	−06 24 15.0	8.16	H	304.404 610 01	−06.404 171 03		2.72	17.89	7.48	1.01	0.60	1.25	1.53	0.78	+26	+ 4	− 6	+19	+20	+52	+27	+27	+19	+36										0	0.60
100026	20 17 38.65	+23 10 01.9	8.45	H	304.411 047 91	+23.167 200 89		3.45	32.94	22.85	0.75	0.78	1.20	0.78	0.96	− 7	− 2	−37	+32	−17	+13	−17	+31	−10	+18										0	1.03
100027 H	20 17 38.86	−12 30 29.6	4.30	G	304.411 900 45	−12.508 214 03	A	4.75	22.24	0.75	0.85	0.55	0.96	0.96	0.76	+31	−24	−16	−13	− 3	+23	+11	+30	−34	+12										2	−0.72
100028	20 17 38.87	+60 18 23.5	8.74	H	304.411 949 48	+60.306 520 89		1.76	11.59	−10.74	0.74	0.64	0.75	0.85	0.67	+15	+ 2	− 9	+ 5	− 6	+11	− 8	−32	+26	+ 7										1	0.25
100029	20 17 39.51	+38 56 02.6	8.36	H	304.414 607 55	+38.934 051 25		2.09	−5.08	−15.64	0.67	0.68	0.88	0.80	0.77	− 7	−17	+10	+16	+11	+ 1	+ 9	− 1	+ 7	− 2										0	−1.81
100030	20 17 40.27	−45 13 43.5	8.56	G	304.417 774 34	−45.228 752 38		2.47	−15.51	−25.29	1.15	0.71	1.20	1.75	1.10	−18	−23	−10	+30	−17	− 9	−18	+29	+ 3	−37										0	0.31
100031	20 17 42.53	−08 51 40.3	8.94	H	304.427 229 07	−08.861 188 08		3.07	20.66	0.65	1.18	0.67	1.42	1.68	1.05	+20	−33	−16	−11	+ 0	+44	+13	+36	−11	+ 6										0	0.10
100032	20 17 43.39	+07 54 03.3	8.76	H	304.430 793 23	+07.900 917 83		1.52	−5.43	−16.30	0.90	0.86	1.13	1.21	1.26	+46	−14	−29	+ 2	+11	+20	+12	+42	−13	+54										0	−1.27
100033	20 17 43.65	−39 06 45.9	9.40	3 H	304.431 871 89	−39.112 749 24	*	7.52	−4.14	−14.46	2.27	0.94	3.36	3.19	1.75	− 3	+63	− 4	+36	+17	+49	+34	+20	+33	+38										0	−0.24
100034	20 17 43.81	+19 14 52.6	8.23	G	304.432 543 83	+19.247 947 67		8.91	16.51	−19.86	0.81	0.70	0.97	1.02	0.81	+18	+ 2	−13	+ 0	+28	+12	+25	+22	+ 2	+33										0	0.31
100035	20 17 43.84	−51 55 00.7	6.68	H	304.432 659 46	−51.916 849 51		16.24	0.74	−38.45	0.77	0.49	0.83	0.98	0.69	−16	−36	− 7	+16	−16	+ 4	−14	+ 3	− 6	−27										0	0.68
100036 H	20 17 44.40	−45 57 25.9	8.30	H	304.435 002 30	−45.957 201 45	A	6.30	92.61	−90.81	1.78	1.04	1.63	2.06	1.35	+ 7	−28	−28	+49	−18	− 3	−23	+30	− 1	−33										2	0.13
100037 H	20 17 44.44	+40 30 24.7	8.23	H	304.435 185 32	+40.506 865 77	A	4.44	10.83	0.77	5.33	2.25	1.18	1.02	0.95	+34	+ 4	+22	− 4	+ 3	− 2	+ 4	−15	− 5	+16										1	0.41
100038	20 17 44.47	−25 58 09.6	9.27	H	304.435 274 33	−25.969 336 53		0.70	−2.80	−18.14	1.31	0.83	1.47	1.70	1.51	+35	−25	−14	+ 0	+23	+10	+24	+48	−17	+43										0	−1.33
100039	20 17 45.06	+71 45 46.1	8.53	H	304.437 738 90	+71.762 798 16		5.86	9.42	23.46	0.70	0.69	0.74	0.85	0.72	−20	−16	+17	+ 1	+11	+ 6	+ 7	− 6	+13	− 9										1	2.48
100040	20 17 45.48	+46 26 09.8	8.37	H	304.439 517 79	+46.436 068 54		11.61	−73.91	19.89	1.01	0.89	0.83	1.37	1.10	− 1	−12	+ 1	−56	− 3	+17	− 6	+50	+12	− 1										0	1.76
100041	20 17 45.88	+32 08 07.1	8.21	H	304.441 156 66	+32.135 293 89		3.72	18.38	11.68	0.55	0.64	0.93	0.66	0.86	−10	+ 7	−14	+ 4	+ 8	−12	+ 5	−12	+ 8	− 3										0	−2.03
100042	20 17 45.97	−33 58 30.1	8.86	H	304.441 523 96	−33.975 041 58		10.39	5.87	−47.27	0.98	0.56	1.15	1.35	0.78	+14	− 7	− 8	−10	+10	+16	+ 9	+ 8	+ 6	+25										0	−0.86
100043	20 17 46.23	+71 08 40.0	8.68	H	304.442 611 30	+71.144 455 67		7.11	−27.32	−17.90	0.74	0.67	0.81	0.96	0.85	− 9	−22	+ 3	−24	+ 7	+ 4	+16	+ 1	−24	−15										0	0.16
100044	20 17 47.20	+38 01 58.6	4.77	2 H	304.446 685 19	+38.032 947 10		0.52	−3.53	−6.88	0.36	0.39	0.50	0.39	0.42	− 6	− 3	+11	+14	+ 7	− 3	+ 8	+ 5	+ 7	+ 1										0	−0.80
100045 H	20 17 49.64	−40 11 05.2	6.72	H	304.456 849 02	−40.184 784 74	A	17.25	41.69	11.81	1.78	1.28	1.77	1.86	1.73	− 5	−12	− 6	+ 3	+ 6	−28	+11	+ 6	−51	+43										17	1.34
100046	20 17 50.19	+54 19 20.4	6.73	H	304.459 115 74	+54.322 342 72		18.42	38.56	50.95	0.45	0.48	0.50	0.56	0.58	−18	− 4	− 6	+ 9	+ 6	− 8	+ 7	+26	−12	−22										0	−0.76
100047	20 17 52.40	−17 17 06.2	11.03	G	304.468 339 70	−17.285 057 38		28.72	−29.63	−312.87	2.08	1.21	2.36	2.69	2.60	+13	+ 0	− 2	−11	+16	+14	+ 5	+35	−29	+35										2	0.89
*100048	20 17 53.64	+59 47 33.4	9.98	3 H	304.473 506 06	+59.792 615 04	*	−1.63	2.96	24.68	1.31	1.23	1.34	1.47	1.27	+ 8	−25	+ 7	−24	+ 3	+11	+ 7	−29	−18	+17										4	1.07
*100049	20 17 52.77	+53 30 16.4	8.69	H	304.469 854 79	+53.504 553 36		7.19	−0.88	−50.99	0.66	0.60	0.70	0.87	0.67	− 6	− 6	+ 9	+ 5	− 6	− 3	− 5	+ 3	+ 0	− 8										0	−2.18
100050	20 17 54.21	+05 35 11.0	8.52	H	304.475 862 89	+05.586 394 33		9.47	8.68	29.51	0.87	0.79	1.19	1.09	1.03	+27	+ 3	−29	+22	+ 9	+28	+19	+52	−18	+20										4	0.30
100051	20 17 54.50	+34 05 25.3	7.23	2 H	304.477 069 76	+34.090 347 26		3.74	4.15	−3.92	0.49	0.53	0.72	0.57	0.48	−16	+ 0	+17	+23	−10	−18	− 6	−22	+ 7	−18										0	−0.17
100052	20 17 54.97	+54 01 53.9	8.42	H	304.479 031 04	+54.031 634 15		2.54	5.82	28.75	0.64	0.62	0.71	0.81	0.71	−11	− 9	+ 4	+16	+ 2	+ 0	+ 3	+ 4	−11	−11										0	−0.37
100053	20 17 55.24	−22 36 06.0	10.26	H	304.480 180 92	−22.601 653 40		2.45	−32.17	−59.27	1.57	1.11	1.74	2.04	1.62	+24	− 1	− 3	+18	+ 9	+24	+12	+43	+ 8	+18										0	0.32
100054	20 17 56.68	−08 03 57.8	7.28	H	304.486 147 07	−08.066 053 36		4.64	−1.75	−23.31	1.04	0.59	1.32	1.24	0.74	+27	−31	−13	+ 3	+15	+46	+26	+35	−13	+24										5	0.64
100055	20 17 56.98	+56 12 58.8	8.97	H	304.487 411 52	+56.216 331 26		9.84	52.05	2.25	0.77	0.71	0.81	0.85	0.84	+ 9	− 6	+ 3	− 6	+ 0	− 3	+ 0	+ 0	+ 1	+13										0	0.91
100056	20 17 57.28	+16 00 33.6	8.25	H	304.488 648 58	+16.009 341 44		1.67	−6.03	−14.85	0.80	0.90	1.07	0.89	1.16	+35	−12	+ 3	+ 3	+32	+16	+31	+50	+15	+39										0	−0.54
100057	20 17 58.99	−52 44 25.7	8.47	H	304.495 796 70	−52.740 471 68		6.46	3.69	31.63	1.47	0.89	1.32	1.61	1.20	+28	−39	−25	+16	− 8	+ 7	−11	−12	+11	+17										2	1.19
100058 H	20 17 59.91	+33 11 29.1	7.57	H	304.499 626 57	+33.191 409 84	A	2.26	4.38	−1.71	0.87	1.28	1.16	0.79	0.87	+23	−10	+ 8	+ 5	− 5	−34	− 3	−13	+ 8	− 3										1	−0.17
100059	20 18 00.33	+64 06 06.3	8.05	H	304.501 362 14	+64.101 739 93		3.49	12.63	10.33	0.58	0.58	0.63	0.53	0.71	−11	− 7	+11	−27	+32	+10	+31	− 3	+ 2	+29										2	0.15
100060	20 18 00.58	−18 15 50.1	7.68	H	304.502 435 75	−18.263 910 63		6.11	7.60	−9.21	0.92	0.57	1.01	1.21	1.08	+21	− 9	+18	−14	+26	+28	+17	+41	+ 1	+39										0	1.27
100061	20 18 01.00	−00 06 27.4	9.10	H	304.504 152 19	−00.107 611 46		0.34	7.84	−10.56	1.56	1.35	1.65	2.05	1.83	+56	−18	−19	+70	+40	+ 9	+43	+81	−10	+52										0	1.43
100062	20 18 01.38	−21 48 35.6	5.86	G	304.505 730 17	−21.809 900 13		9.55	35.39	−24.74	0.82	0.49	0.87	1.11	0.77	− 2	− 7	− 3	+27	− 6	+37	− 4	+48	− 9	− 9										0	−0.58
100063	20 18 03.14	−68 29 22.2	8.69	H	304.513 099 33	−68.489 499 82		14.27	−71.81	12.15	0.50	0.75	1.16	0.57	1.02	−38	−10	+ 7	− 2	+14	−17	+17	+21	+22	−38										0	−0.48
100064	20 18 03.22	−12 32 41.5	3.58	H	304.513 410 30	−12.544 858 77		30.01	61.78	2.85	0.78	0.44	0.91	0.99	0.70	+24	−18	−22	− 7	+ 3	+50	+27	+54	−10	+ 3										4	−0.54
100065 H	20 18 03.28	−10 35 50.8	7.60	H	304.513 684 20	−10.597 447 43	*	2.77	24.54	−17.44	6.29	1.16	1.80	2.10	1.47	−10	+ 5	− 2	+13	+ 0	+34	+ 4	+19	+10	+29										1	1.24
100066 H	20 18 04.84	+27 30 19.6	9.16	G	304.520 182 03	+27.505 458 17	*	5.29	−7.33	−10.11	0.64	0.78	1.27	0.68	0.80	−16	−12	+17	−15	−14	+ 6	−12	−12	−14	−27										0	−0.58
100067	20 18 05.78	−21 59 54.0	7.76	H	304.524 095 68	−21.998 330 22		7.07	22.40	−23.60	0.93	0.58	1.03	1.23	0.91	+12	− 8	− 9	+18	+ 2	+31	+ 7	+45	−14	+ 1										0	1.42
100068	20 18 06.79	−24 16 07.7	8.97	H	304.528 270 96	−24.268 816 89		0.85	13.15	−18.79	1.43	0.73	1.39	1.98	1.31	−13	−10	−22	+48	−30	+13	−28	+51	−30	−27										0	1.65
100069 H	20 18 06.99	+40 43 55.6	5.83	H	304.529 125 05	+40.732 098 17	A	2.10	−2.51	−6.53	0.52	0.54	0.61	0.55	0.52	+ 8	− 8	+17	+ 4	+13	+12	+12	− 1	+ 0	+12										4	0.97
100070	20 18 07.29	−55 13 39.6	9.29	H	304.530 379 12	−55.227 662 67		7.21	15.59	3.87	1.10	0.81	1.33	1.36	1.12	+ 9	−33	+ 5	−30	+19	+12	+11	+ 2	+ 8	+28										0	−1.48
100071	20 18 09.56	−28 22 03.5	10.28	H	304.539 844 96	−28.367 645 54		4.40	14.93	−1.87	1.64	0.88	2.11	2.30	1.43	+53	−36	− 7	+ 3	+16	− 9	+17	+ 7	−11	+86										0	1.26
100072	20 18 10.02	−04 43 43.0	7.27	H	304.541 757 50	−04.728 613 47		27.30	−26.44	−21.70	0.92	0.54	1.03	1.31	0.72	+20	−14	−17	+12	+20	+19	+24	+31	− 2	+14										4	−1.06
*100073	20 18 10.57	+70 47 11.8	7.25	G	304.544 033 65	+70.786 621 06		10.66	−17.68	−54.91	0.57	0.51	0.57	0.66	0.51	−10	−18	+24	−24	+12	+ 1	+ 8	−11	+ 1	+ 9										4	1.34
*100074	20 18 10.56	−48 49 48.6	8.05	H	304.543 982 42	−48.830 158 35		6.24	−25.85	−16.98	0.93	0.67	1.17	1.60	1.25	+ 7	−13	− 9	+31	+10	−26	+ 3	+17	+34	−20										0	1.88
100075	20 18 10.58	−41 30 13.8	9.26	H	304.544 080 78	−41.503 836 02		2.68	51.85	−26.11	1.13	0.75	1.36	1.50	1.14	+11	−10	+ 6	+ 6	+ 9	− 8	+ 9	+10	+ 7	+30										0	−0.01
100076	20 18 11.13	+49 02 36.0	7.99	H	304.546 372 48	+49.043 321 89		0.58	−2.99	−7.15	0.55	0.53	0.65	0.63	0.50	− 7	− 6	+20	+ 4	+ 3	− 7	+ 4	− 5	+16	− 2										1	−0.07
100077	20 18 13.00	+40 07 18.6	8.35	H	304.554 157 17	+40.121 846 07		3.47	−2.96	−13.02	0.62	0.59	0.78	0.66	0.63	− 1	− 6	+16	+ 9	+ 9	− 6	+12	− 1	+12	+15										0	−1.84
100078	20 18 13.24	−67 24 21.7	8.79	H	304.555 165 96	−67.406 015 24		0.89	1.76	−9.93	0.61	0.89	1.28	0.72	1.17	−22	+ 2	− 6	−13	−10	−13	−11	+ 2	+17	−27										1	0.50
100079 H	20 18 13.43	+29 12 15.7	8.66	H	304.555 965 05	+29.204 370 36	A	28.04	−8.14	−85.01	1.31	1.77	2.25	1.17	1.66	−19	+ 0	− 1	+ 6	+ 7	−10	− 1	− 4	+ 4	−15										1	0.49
100080	20 18 13.83	+24 30 05.2	8.00	G	304.557 619 17	+24.501 432 03		0.41	−0.57	−6.11	0.55	0.64	0.92	0.71	0.74	+11	− 7	− 9	+22	+ 5	+ 1	+ 7	+ 5	+ 3	+26										0	−0.57
100081	20 18 13.91	+58 48 33.2	7.62	H	304.557 942 99	+58.809 233 79		2.29	1.54	0.46	0.49	0.47	0.55	0.54	0.55	− 7	− 3	+ 2	+11	+ 7	− 8	+ 7	+ 8	−10	− 7										0	1.78
100082	20 18 14.03	−06 18 44.3	7.95	H	304.558 448 12	−06.312 310 67		2.04	17.22	8.42	1.02	0.62	1.25	1.54	0.78	+36	+ 3	− 2	+28	+27	+48	+30	+33	+20	+40										0	2.32
100083	20 18 14.36	+25 30 34.6	7.69	G	304.559 847 35	+25.509 600 82		6.60	−25.87	−29.34	0.64	0.61	0.92	0.70	0.71	− 9	−15	−12	+15	− 6	− 4	− 2	− 8	+ 1	+13										0	−1.57
100084 H	20 18 14.40	+18 19 41.5	7.92	G	304.560 018 27	+18.328 190 41	A	3.93	16.07	4.90	1.01	0.91	1.24	0.99	0.98	+21	− 5	−37	−23	+ 1	+ 2	+ 4	+18	−34	+25										1	0.11
100085	20 18 15.65	+39 53 05.8	8.72	H	304.565 218 24	+39.884 943 82		3.07	−1.41	−6.80	0.64	0.68	0.87	0.69	0.73	− 1	− 2	+14	+ 2	+ 6	− 5	+ 8	− 8	+16	+12										1	1.18
100086	20 18 16.93	+25 39 15.2	9.25	H																																	
100087 H	20 18 17.03	+51 52 01.1	8.08	H	304.570 946 01	+51.866 975 64	*	1.07	4.14	−1.52	0.63	0.57	0.68	0.72	0.64	−18	+ 0	−11	− 2	+ 7	+ 1	+ 6	− 5	+18	−15										0	−0.70
100088	20 18 17.06	+25 38 53.7	6.98	G	304.571 063 82	+25.648 243 51		2.97	2.42	4.22	0.53	0.51	0.76	0.58	0.59	+ 1	−13	− 6	+33	− 8	−17	− 3	+ 0	− 1	+20										0	2.62
100089	20 18 18.00	−54 09 43.6	8.51	1 H	304.574 993 82	−54.162 106 43		−1.18	−1.10	−6.74	0.93	0.84	1.34	1.18	0.95	+22	−16	−40	−26	+35	−21	+27	− 7	+21	+ 5										0	0.00
100090	20 18 19.33	−51 05 12.4	7.56	1 G	304.580 530 35	−51.086 783 00		6.17	−2.18	−26.03	0.87	0.60	0.89	1.16	0.90	−20	−22	− 9	+41	−28	+15	−29	+25	+ 4	−22										0	0.89
100091	20 18 19.44	−63 09 38.3	7.56	H	304.580 989 95	−63.160 640 38		5.76	37.47	−31.54	0.69	0.60	0.91	0.74	0.71	− 1	−10	−23	− 7	− 8	+ 1	−15	−22	+23	−35										0	−1.82
100092	20 18 19.78	+03 40 50.6	7.34	1 H	304.582 425 43	+03.680 732 38		3.89	82.31	−39.67	0.77	0.73	1.12	0.97	1.01	+36	− 8	−27	+26	+ 8	+24	+14	+56	−28	+29										0	1.12
100093	20 18 21.43	+25 37 06.1	8

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
100001	10.148	0.024	9.427	0.020		0.648	0.024	T	0.71	0.02	L	9.5159	0.0022	0.019	118		9.48	9.55		C			1							
100002	8.869	0.012	8.381	0.012		0.459	0.015	T	0.53	0.02	L	8.4345	0.0016	0.016	105		8.41	8.46		C			1							
100003	10.110	0.019	8.743	0.011		1.158	0.017	T	1.12	0.01	L	8.8151	0.0019	0.024	194		8.78	8.85					1							
100004	10.301	0.029	8.591	0.013		1.427	0.025	T	1.41	0.04	L	8.6022	0.0022	0.016	97		8.57	8.64		C			1							
100005	8.745	0.011	8.671	0.014		0.042	0.100	G	0.01	0.02	L	8.6903	0.0023	0.018	103		8.65	8.73		D	20173−3638	I 2	1							
100006											T	10.6524	0.0771	0.642	95		9.27	11.34		D	20173−3638	I 2	S							G
100007	9.326	0.015	7.897	0.009		1.206	0.014	T	1.17	0.01	L	7.9438	0.0011	0.012	121		7.92	7.97		C			1							
100008	8.844	0.012	8.443	0.012		0.379	0.016	T	0.44	0.02	L	8.4713	0.0018	0.016	90		8.44	8.51		C			1							S
100009	7.476	0.006	7.057	0.005		0.441	0.007	G	0.51	0.01	H	7.0905	0.0019	0.014	132		7.06	7.11		U 2			1							S
100010	8.397	0.010	8.445	0.013		−0.039	0.015	T	−0.02	0.01	L	8.4417	0.0023	0.015	100		8.42	8.47		C			1							
100011	11.002	0.054	9.053	0.018		1.652	0.047	T	1.73	0.13	O	8.9794	0.0030	0.021	92		8.93	9.01					1							
100012	8.735	0.016	7.786	0.012		0.861	0.015	G	0.87	0.01	H	7.8457	0.0019	0.012	75		7.82	7.87					1							S
100013	6.469	0.004	6.547	0.004		−0.066	0.005	T	−0.04	0.01	L	6.5499	0.0018	0.021	136		6.52	6.58		U 2 C			1							S
100014	7.702	0.006	7.470	0.006	*	0.221	0.008	T	0.24	0.01	L *	7.5028	0.0011	0.009	108	*	7.49	7.52		C	20174−1550	H 1	2 C	C	AB	60	0.625	0.048	4.09	0.18	S
100015	9.077	0.014	8.768	0.016		0.295	0.023	T	0.34	0.03	L	8.8140	0.0010	0.012	123		8.80	8.84					1							
100016	8.447	0.011	6.479	0.005		1.632	0.010	T	1.65	0.01	L	6.4264	0.0007	0.009	123		6.41	6.44					1							S
100017	6.640	0.004	5.981	0.003		0.602	0.004	T	0.67	0.00	L	6.0407	0.0006	0.006	117		6.03	6.05					1							S
100018	7.545	0.004	6.367	0.003		1.010	0.004	T	0.99	0.00	L	6.4093	0.0005	0.007	237		6.40	6.42		C	20175+2909	I 1	1							S
100019	9.320	0.014	8.874	0.014		0.421	0.018	T	0.49	0.02	L	8.9030	0.0016	0.014	136		8.87	8.93					1							
100020	9.383	0.013	9.307	0.016		0.075	0.019	T	0.09	0.02	L	9.3491	0.0021	0.026	225		9.31	9.40		C			1							G
100021	9.459	0.013	9.165	0.015		0.280	0.019	T	0.32	0.02	L	9.2072	0.0019	0.027	223		9.17	9.26					1							
100022	9.002	0.013	7.807	0.009		1.023	0.012	T	1.00	0.01	L	7.8648	0.0015	0.011	113		7.85	7.89		C			1							
100023	10.188	0.029	8.649	0.015	A	1.293	0.026	T	1.25	0.03	L	8.6895	0.0085	0.022	87	A	8.66	8.73			20176−5034	I 1	2 C	D	AB	71	12.811	0.050	3.27	0.17	D
100024	10.929	0.037	9.047	0.013		1.597	0.032	T	2.82	0.04	O	8.7255	0.0048	0.072	179		8.66	8.86		U 2			1	S						S
100025	9.388	0.019	8.259	0.012		0.972	0.017	T	0.96	0.01	L	8.3275	0.0017	0.012	85		8.31	8.35					1							S
100026	8.959	0.012	8.489	0.012		0.443	0.016	T	0.51	0.02	L	8.5519	0.0015	0.017	128		8.53	8.59		D			1	S						
100027	5.588	0.002	4.360	0.002	*	0.928	0.015	G	1.05	0.02	A *	4.4114	0.0004	0.004	124	*	4.40	4.42		C	20176−1231	I 1	2 C	B	AE	355	0.649	0.013	4.17	0.09	S
100028	10.542	0.038	8.922	0.017		1.356	0.033	T	1.32	0.04	L	8.8879	0.0019	0.016	101		8.85	8.92					1							
100029	9.816	0.020	8.464	0.012		1.146	0.018	T	1.11	0.02	L	8.5267	0.0015	0.016	119		8.50	8.55					1							
100030	9.924	0.026	8.658	0.016		1.054	0.058	G	1.05	0.02	A	8.7349	0.0020	0.018	85		8.71	8.77		C			1							
100031	10.247	0.035	9.043	0.022		1.030	0.032	T	1.00	0.03	L	9.1115	0.0021	0.015	75		9.08	9.13		C			1							
100032	10.355	0.033	8.899	0.018		1.227	0.030	T	1.19	0.03	L	8.9140	0.0021	0.015	79		8.89	8.94		C			1							
100033	9.783	0.029	8.402	0.015		1.500	0.510	G	3.00	1.20	K	9.3059	0.2939	1.696	104		7.26	11.06	307.40	P 1 B			1 V							G P
100034	8.730	0.013	8.245	0.012		0.473	0.015	G	0.54	0.02	H	8.3166	0.0017	0.019	93		8.29	8.35					1							
100035	7.243	0.006	6.739	0.004		0.474	0.007	T	0.55	0.01	L	6.7809	0.0010	0.008	86		6.77	6.80		C			1							S
100036	9.728	0.021	8.466	0.013	A	0.700	0.495	G	1.03	0.03	L *	8.4704	0.0015	0.012	91	*	8.44	8.49		D	20177−4557	I 1	2 C	D	AB	282	9.125	0.034	3.20	0.14	D
100037	8.811	0.011	8.302	0.011	*	0.478	0.014	T	0.55	0.01	L *	8.3380	0.0015	0.013	128	*	8.31	8.36		D	20177+4030	H 1	2 C	A	AB	256	0.310	0.018	2.30	0.23	
100038	10.838	0.056	9.414	0.024		1.202	0.048	T	1.16	0.05	L	9.4396	0.0030	0.019	101		9.41	9.48		C			1							
100039	8.799	0.013	8.549	0.015		0.238	0.019	T	0.27	0.02	L	8.6039	0.0018	0.017	95		8.57	8.63					1							
100040	9.341	0.015	8.468	0.012		0.780	0.014	T	0.82	0.01	L	8.5202	0.0018	0.018	110		8.48	8.54					1 G							S
100041	9.439	0.015	8.319	0.010		0.965	0.014	T	0.95	0.01	L	8.3740	0.0016	0.017	151		8.35	8.40		C			1 G							
100042	9.590	0.019	8.919	0.017		0.611	0.019	T	0.68	0.02	L	8.9879	0.0014	0.014	108		8.96	9.01		C			1							
100043	9.381	0.017	8.736	0.015		0.599	0.020	T	0.67	0.02	L	8.8055	0.0019	0.015	100		8.78	8.84		C			1 G							
100044	5.230	0.005	4.831	0.005		0.377	0.007	T	0.44	0.01	L	4.8623	0.0041	0.058	151		4.78	4.96		U 2 C			1							S
100045	7.323	0.007	6.770	0.006	*	0.518	0.008	T	0.59	0.01	L *	6.8321	0.0010	0.013	100	*	6.81	6.89		D	20178−4011	I 1	2 C	A	AB	117	9.709	0.006	0.22	0.02	S
100046	7.253	0.005	6.774	0.004		0.451	0.006	T	0.52	0.01	L	6.8297	0.0009	0.008	119		6.82	6.84					1							S
100047						1.301	0.009	G	1.50	0.01	I	11.1242	0.0054	0.046	96		11.02	11.18					1							G
100048	11.585	0.134	10.070	0.050		1.294	0.118	T	2.82	0.91	Q	9.9364	0.2875	1.252	68		8.97	11.82	199.59	P 1 B			1 V							G P
100049	9.278	0.017	8.748	0.016		0.497	0.021	T	0.57	0.02	L	8.7982	0.0011	0.012	116		8.78	8.82					1							
100050	8.952	0.014	8.568	0.014		0.403	0.015	G	0.47	0.02	H	8.6154	0.0018	0.017	92		8.59	8.64					1							
100051	9.021	0.012	7.472	0.006		1.322	0.011	T	3.27	0.02	O	7.0345	0.0059	0.090	151		6.92	7.19		U 2			1	S						S
100052	10.551	0.037	8.604	0.013		1.650	0.032	T	1.80	0.09	O	8.5193	0.0021	0.018	118		8.49	8.55					1							
100053	11.391	0.083	10.326	0.049		0.923	0.073	T	0.92	0.05	L	10.4250	0.0031	0.043	88		10.33	10.48					1							G
100054	8.651	0.013	7.390	0.008		1.075	0.012	T	1.04	0.01	L	7.4473	0.0013	0.009	71		7.43	7.48		C			1							S
100055	9.672	0.021	9.064	0.019		0.567	0.025	T	0.64	0.02	L	9.0871	0.0022	0.020	104		9.05	9.12		C			1							
100056	10.370	0.037	8.383	0.013		1.610	0.015	G	1.62	0.09	H	8.3638	0.0024	0.017	88		8.34	8.38					1							
100057	9.226	0.017	8.534	0.015		0.626	0.017	T	0.69	0.01	L	8.6066	0.0022	0.016	78		8.58	8.63		C			1 G							S
100058	7.557	0.005	7.593	0.008	−	−0.020	0.400	G	−0.01	0.01	L *	7.5724	0.0011	0.013	149	−	7.55	7.60		D	20180+3311	I 1	3 C	C						S G
100059	9.250	0.015	8.169	0.010		0.935	0.014	T	0.93	0.01	L	8.2152	0.0013	0.012	110		8.19	8.24		C			1							S
100060	7.799	0.007	7.689	0.008		0.099	0.010	T	0.11	0.01	L	7.7184	0.0010	0.010	96		7.70	7.74		C			1							S
100061	11.267	0.060	9.273	0.019		1.689	0.052	T	1.70	0.14	O	9.2056	0.0019	0.017	103		9.18	9.24		C			1							
100062	7.129	0.004	5.967	0.003		1.002	0.002	G	0.98	0.00	H	6.0178	0.0005	0.005	92		6.01	6.03		C			1							S
100063	9.309	0.009	8.758	0.008		0.522	0.009	T	0.59	0.01	L	8.8088	0.0015	0.020	303		8.78	8.85					1							
100064	4.785	0.002	3.684	0.002		0.883	0.055	G	0.92	0.02	A	3.7388	0.0005	0.004	113		3.73	3.74			20181−1233	I 1	1							S
100065	9.514	0.021	7.767	0.010	*	1.457	0.018	T	1.46	0.03	L *	7.7310	0.0015	0.011	96	*	7.71	7.76			20181−1036	H 1	2 C	B	AB	195	0.200	0.036	2.41	0.44	S
100066	9.608	0.013	9.164	0.013	*	0.413	0.015	G	0.48	0.02	H *	9.2399	0.0020	0.029	265	*	9.19	9.29			20181+2730	H 1	2 C S	A	AB	138	0.170	0.027	1.08	0.62	
100067	8.298	0.010	7.821	0.009		0.462	0.010	T	0.53	0.01	L	7.8600	0.0012	0.011	94		7.84	7.88		C			1							S
100068	10.960	0.052	9.142	0.019		1.513	0.044	T	1.55	0.07	L	9.0910	0.0019	0.020	103		9.06	9.13					1							
100069	5.898	0.005	5.817	0.004	*	0.073	0.005	T	0.08	0.01	L *	5.8637	0.0008	0.007	132	*	5.85	5.87		D	20181+4044	I 1	2 C	A	AB	245	2.744	0.005	2.27	0.02	S
100070	9.835	0.021	9.317	0.021		0.496	0.022	T	0.57	0.02	L	9.3967	0.0024	0.018	85		9.36	9.43		C			1							
100071	11.713	0.067	10.381	0.033		1.130	0.058	T	1.09	0.06	L	10.4525	0.0024	0.031	217		10.40	10.51		R			1							G
100072	7.937	0.008	7.328	0.008		0.567	0.010	T	0.64	0.01	L	7.3915	0.0014	0.010	72		7.37	7.41		C			1							S
100073	7.633	0.007	7.289	0.008		0.326	0.010	T	0.38	0.01	L	7.3283	0.0010	0.009	98		7.31	7.34					1							S
100074	9.538	0.020	8.172	0.012		1.157	0.018	T	1.12	0.02	L	8.2148	0.0015	0.015	85		8.18	8.24					1							S
100075	9.888	0.024	9.338	0.023		0.521	0.025	T	0.59	0.03	L	9.3736	0.0022	0.025	92		9.34	9.41					1							
100076	8.003	0.007	7.985	0.009		0.021	0.011	T	0.04	0.01	L	8.0007	0.0011	0.012	133		7.98	8.02					1							S
100077	8.511	0.009	8.365	0.011		0.140	0.013	T	0.15	0.01	L	8.4009	0.0019	0.016	128		8.37	8.43					1							
100078	10.342	0.019	8.928	0.010		1.194	0.017	T	1.15	0.01	L	8.9573	0.0017	0.021	230		8.92	8.99					1							
100079	10.123	0.020	8.947	0.012	*	1.008	0.018	T	0.98	0.01	L *	8.8263	0.0016	0.022	231	*	8.79	8.86		D	20182+2912	I 1	2 C	A	AB	100	0.940	0.004	0.91	0.02	
100080	9.011	0.011	8.115	0.009		0.854	0.005	G	0.87	0.00	H	8.1486	0.0014	0.015	155		8.12	8.18		C			1							S
100081	7.745	0.007	7.646	0.007		0.097	0.009	T	0.11	0.01	L	7.6642	0.0010	0.009	121		7.65	7.69		C			1 G							S
100082	8.335	0.012	7.978	0.013		0.348	0.015	G	0.41	0.02	H	8.0320	0.0016	0.012	82		8.00	8.05		C			1							S P
100083	9.118	0.016	7.798	0.010		1.110	0.015	G	1.07	0.02	H	7.8610	0.0015	0.013	113		7.84	7.89		C			1							
100084	8.130	0.009	7.985	0.012	A	0.133	0.013	G	0.15	0.01	H *	7.9742	0.0013	0.012	86	*	7.96	8.00		D	20182+1820	I 1	2 C	A	AB	194	1.801	0.013	2.87	0.06	S
100085	8.891	0.012	8.791	0.015		0.097	0.018	T	0.11	0.02	L	8.7586	0.0018	0.017	132		8.73	8.78		C			1	S						
100086						0.131	0.100	G	0.15	0.10	R	9.3036	0.1128	0.860	112		7.79	10.39		D	20183+2539	I 2		S						G
100087	9.508	0.017	8.222	0.010	*	1.094	0.016	T	1.06	0.02	L *	8.2534	0.0012	0.013	119	*	8.23	8.29		D	20183+5152	H 1	2 C S	A	AB	112	0.141	0.006	0.26	0.43	S
100088	6.791	0.004	6.959	0.006		−0.143	0.005	G	−0.14	0.01	H	6.9370	0.0013	0.011	130		6.92	6.96		D	20183+2539	I 2	1							S
100089	10.575	0.034	8.687	0.014		1.568	0.029	T	1.59	0.03	L	8.6264	0.0022	0.020	120		8.60	8.66		U			1							
100090	7.487	0.006	7.559	0.008		−0.062	0.004	G	−0.04	0.00	H	7.5519	0.0018	0.015	93		7.53	7.58		M			1							S
100091	7.790	0.007	7.593	0.008		0.188	0.010	T	0.21	0.01	L	7.6229	0.0013	0.012	103		7.60	7.65					1							S
100092	8.918	0.016	7.490	0.009		1.205	0.014	T	1.16	0.01	L	7.5039	0.0019	0.017	79		7.48	7.53		U 2			1							
100093	8.097	0.009	8.173	0.011		−0.060	0.015	G	−0.04	0.01	H	8.1715	0.0013	0.014	121		8.15	8.20					1							
100094	9.588	0.024	8.227	0.014		1.153	0.022	T	1.12	0.02	L	8.2652	0.0014	0.014	59		8.23	8.29		C			1							
100095	7.572	0.006	7.265	0.006		0.267	0.017	G	0.30	0.02	H	7.3083	0.0008	0.010	165		7.29	7.32					1							S
100096	9.829	0.024	8.396	0.013		1.209	0.021	T	1.17	0.02	L	8.4533	0.0020	0.016	94		8.43	8.48					1							S
100097						0.118	0.003	G	0.15	0.03	C *	5.7816	0.0007	0.007	99	*	5.77	5.79		D	20185+5524	I 1	2 C	A	AB	337	3.648	0.003	1.49	0.01	S
100098	8.691	0.009	8.599	0.010		0.080	0.015	G	0.09	0.02	H	8.6066	0.0014	0.020	187		8.57	8.64					1	S						
100099	9.169	0.011	8.403	0.009		0.733	0.019	G	0.78	0.01	H	8.4400	0.0016	0.018	186		8.41	8.47					1							
100100	10.713	0.043	8.989	0.018		1.438	0.037	T	1.43	0.06	L	8.9487	0.0027	0.019	102		8.91	8.98					1	S						

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Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ	α*	π	α*	δ	α*	δ	π	δ	π	$\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		α*	δ	α*	δ	π	δ	π	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ		%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
100101	20 18 26.78	+64 52 04.7	7.66	1	H	304.611 587 08	+64.867 965 14		4.05	4.55	−7.14	0.54	0.55	0.60	0.49	0.63	− 7	+ 2	+ 0	−12	+17	+ 4	+24	−19	+ 6	+23		0	0.77
100102	20 18 26.83	+49 44 53.1	9.03		H	304.611 802 89	+49.748 086 90		6.32	30.12	20.21	0.75	0.68	0.81	0.81	0.74	+ 5	− 3	+10	− 4	+20	+ 4	+18	+ 8	+15	+16		0	0.20
100103	20 18 26.95	−72 58 45.3	6.57		H	304.612 280 10	−72.979 242 51		4.71	6.94	−37.51	0.41	0.48	0.64	0.47	0.55	−19	−12	+ 2	− 7	+ 7	− 2	+ 8	−14	− 9	−26		0	−0.99
100104	20 18 27.56	+36 15 15.8	7.60	1	G	304.614 850 14	+36.254 384 41		1.66	−1.69	−17.78	0.48	0.56	0.73	0.57	0.56	− 8	+ 4	+25	− 1	− 8	−14	− 3	−24	+ 0	− 6		1	1.55
100105	20 18 27.77	−73 32 30.6	9.08		H	304.615 727 57	−73.541 843 23		5.77	50.53	−13.35	0.75	0.81	1.16	0.84	0.90	−17	−19	+13	− 5	+11	+ 2	+14	−18	−24	−18		0	−0.47
100106	20 18 28.26	−70 31 56.4	8.78		H	304.617 733 38	−70.532 336 35		2.42	10.58	−19.85	0.64	0.78	1.15	0.68	1.01	−18	+ 9	+ 0	− 9	+17	−14	+21	− 4	+15	−33		2	0.19
100107	20 18 28.56	−19 17 28.7	8.88	2	G	304.618 999 69	−19.291 299 08		7.39	6.68	−87.33	1.19	0.68	1.40	1.53	1.30	+24	− 3	+ 6	−22	− 5	− 8	− 6	+17	−38	+29		0	−0.40
100108	20 18 28.63	+36 59 59.1	5.58		H	304.619 274 85	+36.999 753 90		16.76	40.35	20.06	0.36	0.41	0.52	0.40	0.42	−12	− 6	+15	− 1	− 3	−10	+ 0	−15	+ 5	− 5		0	−0.79
100109	20 18 29.92	+23 17 53.1	10.38		G																								
100110	20 18 30.07	−72 48 29.4	6.93		G	304.625 289 15	−72.808 157 55		4.45	−26.20	11.20	0.44	0.51	0.69	0.50	0.60	−19	−14	+ 1	+ 1	+ 6	+ 2	+ 6	− 9	−12	−28		1	−1.23
100111	20 18 30.60	+19 01 51.8	11.54		H	304.627 513 29	+19.031 056 53		39.57	−10.01	7.42	27.93	24.68	32.67	34.04	27.00	+31	+ 3	− 6	−15	+10	+ 1	+ 7	−12	+ 5	+48		0	
100112	20 18 31.97	+33 09 18.8	10.30		H	304.633 223 66	+33.155 210 51		2.14	6.80	−11.43	1.21	1.50	2.12	1.45	1.55	− 9	−13	+ 1	+ 2	− 5	−24	− 4	−17	+ 2	− 8		2	3.39
100113	20 18 33.28	+37 26 59.1	10.16	3	H	304.638 646 34	+37.449 757 98		−1.41	−1.01	−8.31	1.24	1.59	1.98	1.34	1.67	−11	+16	+ 7	− 3	+ 3	− 3	+31	+11	−27	+ 6	+ 0		1	2.89
100114	20 18 33.47	+39 36 24.4	8.43		H	304.639 474 28	+39.606 775 60		3.23	0.97	−4.68	0.65	0.69	0.89	0.69	0.82	− 1	−14	− 3	+ 1	+ 6	− 2	+ 3	− 1	+20	+14		0	−0.66
100115	20 18 33.91	+16 28 00.5	9.34		H	304.641 309 45	+16.466 794 01		3.88	8.55	5.81	1.11	1.14	1.31	1.20	1.49	+33	− 6	− 3	− 2	+40	+14	+47	+54	+11	+29		0	−1.60
100116	20 18 35.07	+17 21 43.8	6.86		H	304.646 140 29	+17.362 165 55		2.64	−3.43	−1.14	0.60	0.61	0.87	0.74	0.72	+13	−27	−30	+15	+ 9	− 1	+13	+34	− 8	− 6		0	0.42
100117	20 18 35.10	−65 51 26.1	9.19	2	H	304.646 261 16	−65.857 263 62		8.88	−7.86	−103.12	1.10	0.86	1.41	1.23	1.03	−10	−22	− 8	+38	− 1	−10	− 9	+ 6	+ 6	−31		0	0.98
100118	20 18 36.02	+21 31 14.4	7.50		H	304.650 063 97	+21.520 665 41		10.16	0.48	18.62	0.68	0.58	0.95	0.84	0.73	−29	− 8	− 4	−20	+21	− 1	+20	−21	+16	− 4		0	−0.47
100119	20 18 36.84	−38 05 31.2	8.92	2	H	304.653 514 58	−38.091 990 50		0.53	2.46	−21.35	1.18	0.69	1.39	1.54	1.07	+ 9	−22	+10	+ 8	+10	+11	+10	+ 6	+ 3	+37		0	0.89
100120	20 18 37.29	+27 33 01.0	9.57	1	H	304.655 389 47	+27.550 279 38		6.84	−50.57	−108.04	0.69	0.77	1.48	0.74	0.81	−24	− 1	+11	−24	− 5	+ 3	− 5	−15	− 8	−29		0	−1.20
100121	20 18 37.46	+00 38 27.9	6.92		H	304.656 075 60	+00.641 073 78		9.99	72.58	−1.24	0.94	0.76	1.16	1.47	1.09	+33	+21	−13	+61	+14	+47	+24	+71	− 2	+27		0	0.57
100122	20 18 39.07	+34 58 58.0	5.14		H	304.662 791 04	+34.982 784 31		1.63	0.10	−3.81	0.36	0.42	0.54	0.39	0.38	−13	+ 4	+21	+ 0	+ 1	+ 0	+ 1	−29	− 5	−17		2	0.19
100123	20 18 39.13	−42 37 12.2	7.46		G	304.663 033 54	−42.620 047 14		10.94	46.73	−126.36	0.88	0.53	1.01	1.17	0.69	+ 6	−33	− 6	+ 2	+ 8	− 8	+ 8	− 4	− 2	+11		0	−0.89
100124	20 18 39.75	+40 13 36.9	7.73	2	G	304.665 630 96	+40.226 927 02		1.38	−2.84	−5.01	0.56	0.59	0.74	0.60	0.60	− 2	− 2	+14	− 2	+ 9	− 2	+ 9	− 8	+ 7	+13		0	−0.72
100125	20 18 40.30	+49 29 52.0	7.84		H	304.667 931 58	+49.497 766 70		0.43	−3.48	−6.37	0.56	0.50	0.63	0.64	0.52	− 3	− 6	+ 8	+ 0	+ 6	−13	+ 5	+ 0	+19	+ 1		3	0.40
100126	20 18 42.51	−51 30 22.2	7.68		G	304.677 142 29	−51.506 166 77		13.46	37.64	241.38	0.86	0.63	0.95	1.14	0.95	−15	−27	+ 2	+29	−14	+ 1	−19	+22	+19	−17		0	0.05
100127	H 20 18 43.40	+33 15 01.0	7.82		H	304.680 845 29	+33.250 272 93	A	0.08	0.48	−7.43	0.83	1.00	1.27	0.88	0.94	− 5	−13	+ 6	+ 2	− 1	−15	− 1	−18	+16	−10		1	−0.08
100128	20 18 43.62	−61 54 23.8	6.60		H	304.681 751 91	−61.906 602 84		8.30	12.59	−44.89	0.47	0.47	0.72	0.48	0.53	+ 9	−18	−21	+18	−12	+14	−15	−21	+ 7	− 1		0	−0.10
100129	20 18 44.64	−17 51 19.2	7.78		H	304.686 004 80	−17.855 337 89		11.10	77.84	47.20	1.16	1.11	1.36	1.58	1.30	+45	−13	−25	−19	−18	+26	−10	− 9	−22	+17		0	1.77
∗100130	H 20 18 44.89	+20 00 59.1	9.75		G	304.687 044 72	+20.016 412 94	∗	−0.11	−2.32	−2.31	3.50	3.00	2.03	2.32	1.70	−11	− 3	− 3	+ 5	+15	− 5	+11	+ 4	− 1	+49		1	−0.15
∗100131	20 18 44.89	+46 32 36.9	7.53		H	304.687 032 48	+46.543 572 50		3.27	2.15	−18.70	0.61	0.50	0.65	0.75	0.56	− 6	+ 0	+ 5	−18	+ 4	− 1	+ 3	−17	+19	+ 8		0	−0.11
100132	20 18 45.11	−48 35 16.3	8.31	3	G	304.687 973 69	−48.587 851 75		9.82	−49.77	−2.09	1.02	0.75	1.25	1.74	1.38	+ 6	− 7	−13	+32	+19	−26	+13	+22	+38	−13		0	1.72
100133	20 18 45.92	−00 39 25.6	11.01		G	304.691 348 66	−00.657 122 14		34.77	−207.76	−67.78	2.19	1.79	2.71	3.10	2.62	+28	− 6	−13	+46	+ 4	+19	+ 4	+61	− 8	+28		4	2.74
100134	20 18 46.03	−34 52 59.1	9.31		H	304.691 797 01	−34.883 071 57		6.95	33.04	−65.37	1.19	0.77	1.42	1.38	1.02	+23	− 2	−33	−29	+18	−12	+11	+ 9	− 1	+45		0	0.56
∗100135	20 18 47.22	+36 20 26.2	8.65	3	T	304.696 760 35	+36.340 598 11		−0.28	−3.45	−8.10	0.66	0.80	1.02	0.78	0.79	− 9	+ 0	+22	− 6	− 3	−19	+ 1	−21	+ 0	−10		3	−0.28
∗100136	20 18 47.19	−27 04 32.7	8.40		H	304.696 615 78	−27.075 741 54		1.39	9.14	−17.21	1.11	0.59	1.45	1.45	1.32	+ 8	−11	− 6	− 1	+ 1	+30	− 7	+29	−34	+24		0	−0.86
∗100137	20 18 47.18	−52 37 04.2	11.96	3	H	304.696 590 50	−52.617 842 73		13.59	−6.85	2.54	8.30	4.31	9.05	8.57	7.61	+26	−78	−13	+ 4	−18	−23	+ 0	−53	−19	+22		5	0.79
100138	20 18 48.02	−09 53 07.9	8.02		H	304.700 079 26	−09.885 520 76		6.29	11.05	−35.30	0.91	0.54	0.97	1.29	0.79	+13	−15	− 6	+11	+ 9	+26	+13	+40	+ 4	+ 6		0	0.72
100139	20 18 48.24	+22 56 23.3	7.78		H	304.700 995 38	+22.939 803 35		2.08	3.49	2.82	0.62	0.57	0.93	0.69	0.75	− 3	+ 1	−18	+18	−12	+ 9	− 7	+ 3	− 3	+34		0	0.19
100140	20 18 48.55	+50 53 49.5	8.46	2	H	304.702 288 71	+50.897 069 91		2.41	6.71	3.28	0.70	0.68	0.81	0.75	0.72	+ 0	−16	+ 5	−10	+11	− 5	+ 7	− 8	+25	+ 0		3	1.95
100141	H 20 18 49.22	+31 02 27.0	11.32		G	304.705 064 94	+31.040 828 75	A	−0.57	−2.31	−5.48	2.35	2.90	3.39	2.46	2.55	− 4	+ 3	− 7	+16	+ 3	+ 4	+ 6	− 9	+11	+ 2		0	0.43
100142	20 18 49.67	+46 19 20.0	6.46	1	H	304.706 967 44	+46.322 213 45		1.23	−4.42	−7.89	0.49	0.49	0.62	0.65	0.70	−12	−19	− 7	−18	+ 6	+20	+ 6	−32	+ 4	−19		2	−0.15
100143	20 18 49.88	−55 04 01.0	8.85		H	304.707 842 82	−55.066 944 95		8.45	18.45	1.39	1.06	0.74	1.24	1.39	1.02	+11	−29	− 4	−28	+25	+ 8	+21	+ 3	+ 1	+21		0	−0.34
100144	20 18 50.38	+45 55 32.4	8.71		H	304.709 917 77	+45.925 678 67		2.19	−18.98	14.34	0.74	0.74	0.86	0.83	0.83	−21	− 3	+ 3	−10	+13	+10	+15	−23	+12	− 1		0	0.25
100145	20 18 50.67	+26 59 28.6	6.61	1	H	304.711 118 75	+26.991 274 87		3.96	1.60	−15.64	0.38	0.41	0.69	0.38	0.40	−37	+13	−11	+ 9	−15	+ 5	−19	−15	+ 2	−52		0	1.01
100146	H 20 18 51.71	+38 16 46.5	7.26		H	304.715 463 21	+38.279 596 72	∗	1.23	−4.69	−5.48	0.48	0.50	0.65	0.52	0.56	− 7	+ 2	+ 5	+12	+ 6	−15	+ 8	− 3	+14	− 1		0	1.17
100147	20 18 52.02	+21 12 36.4	7.11		H	304.716 760 33	+21.210 098 63		7.04	19.11	−2.49	0.63	0.51	0.82	0.75	0.64	−33	− 8	− 8	−33	+26	− 3	+21	−25	+22	− 3		0	0.26
100148	20 18 54.64	−23 53 38.7	7.75		H	304.727 650 25	−23.894 082 63		4.08	−5.33	13.58	0.93	0.51	1.06	1.21	0.93	+13	−27	−17	+ 7	− 3	+ 9	+ 6	+38	−30	+ 6		2	1.02
100149	20 18 54.74	+55 32 43.6	7.86		G	304.728 078 93	+55.545 450 53		7.75	−5.00	43.14	0.59	0.57	0.63	0.70	0.69	+11	− 1	+ 4	+14	+ 6	− 4	+ 6	+22	− 7	+25		0	−0.74
100150	20 18 54.91	+60 37 04.6	8.00		H	304.728 777 81	+60.617 947 19		0.33	−2.79	−2.73	0.58	0.48	0.58	0.62	0.49	+ 9	+ 8	− 5	+ 8	− 4	+ 3	− 3	−27	+29	+ 4		1	2.25
100151	20 18 55.97	−47 42 38.8	6.28	1	H	304.733 192 65	−47.710 769 25		4.83	12.31	−2.00	0.85	0.55	0.91	1.62	0.95	−18	− 9	−23	+26	− 9	−16	−15	+18	+20	−52		0	0.58
∗100152	20 18 56.55	−44 31 28.0	7.54		H	304.735 608 21	−44.524 454 36		4.61	7.60	6.59	0.90	0.56	0.93	1.32	0.79	− 1	−16	− 7	+26	+ 2	+ 5	+ 3	+13	− 1	+ 4		0	1.43
∗100153	20 18 56.53	−06 38 18.5	7.46		H	304.735 521 41	−06.638 476 32		5.68	−16.71	−71.90	0.90	0.53	1.09	1.19	0.66	+22	− 8	−20	+ 5	+ 0	+38	+ 9	+13	− 6	+18		0	1.50
100154	20 18 57.18	−15 51 27.9	8.27	2	H	304.738 230 96	−15.857 755 06		0.81	43.89	−13.08	1.03	0.51	1.30	1.21	1.16	+16	−19	− 9	−14	+ 2	+25	+ 0	+37	−44	+19		0	−0.18
100155	20 18 57.54	+39 00 15.1	6.35	1	H	304.739 746 71	+39.004 203 42		1.36	−2.12	−8.08	0.47	0.47	0.62	0.52	0.52	−12	−16	+ 7	+19	+ 9	+ 5	+ 9	+ 1	+ 5	− 2		1	2.74
100156	20 18 58.11	+00 35 50.9	8.73		H	304.742 108 75	+00.597 464 42		1.12	−7.13	−7.54	1.17	0.95	1.52	1.81	1.41	+36	+24	−10	+63	+17	+46	+19	+69	− 6	+34		2	0.34
100157	20 18 58.91	−61 54 09.2	8.72		H	304.745 450 41	−61.902 555 80		1.62	10.43	1.82	0.74	0.68	1.08	0.78	0.86	+12	−21	−18	+18	−11	+ 8	−15	−19	+10	+ 3		0	−1.28
100158	20 19 00.15	−28 56 43.0	9.82		H	304.750 635 70	−28.945 274 47		−0.10	−2.92	2.45	1.39	0.74	1.76	1.81	1.14	+48	−34	− 8	+ 9	+29	− 5	+27	+18	− 5	+81		1	−1.07
100159	20 19 00.69	+02 14 00.3	7.35		H	304.752 875 51	+02.233 418 24		11.14	17.70	−1.98	0.84	0.69	0.98	1.18	0.93	+22	− 9	−10	+52	+ 9	+29	+14	+68	+ 2	+14		0	−1.08
100160	20 19 00.96	+20 27 51.0	7.53	1	H	304.753 982 01	+20.464 165 04		3.75	−7.36	−25.31	0.67	0.57	0.88	0.80	0.66	−26	− 3	−12	−11	+29	− 6	+27	−14	+18	− 6		2	1.51
100161	20 19 01.44	+03 12 46.1	8.52		H	304.755 984 82	+03.212 791 71		1.70	2.06	−2.51	1.02	1.03	1.50	1.45	1.33	+35	+ 5	−40	+46	+ 1	+48	+20	+69	−25	+23		0	1.29
100162	20 19 01.58	+51 58 37.5	7.58		H	304.756 573 93	+51.977 070 77		7.75	−2.64	−10.99	0.51	0.48	0.57	0.61	0.55	−14	−10	+ 1	+ 0	+ 9	+ 2	+ 6	− 5	+15	−19		0	0.52
100163	20 19 02.08	+44 52 38.7	7.73		H	304.758 665 34	+44.877 413 82		3.88	10.63	−26.94	0.54	0.53	0.63	0.64	0.56	−13	− 7	+ 5	+ 5	+17	− 9	+17	−22	+ 8	− 9		0	−0.46
100164	H 20 19 02.31	−14 17 27.6	7.45		G	304.759 604 38	−14.290 999 46	A	2.69	16.29	8.41	1.24	0.70	1.29	1.43	0.98	+36	− 8	+10	−11	+15	+33	+22	+53	+13	+21		4	−0.60
100165	20 19 03.01	−63 13 50.0	6.27		G	304.762 544 22	−63.230 563 12		7.32	−8.78	−74.36	0.59	0.50	0.76	0.66	0.68	−10	− 8	− 4	+ 2	−14	+ 4	−18	+ 0	+12	−42		0	−1.12
100166	20 19 04.10	−40 13 29.3	9.61		G	304.767 094 15	−40.224 801 68		9.11	−23.44	−59.59	1.40	0.83	1.54	1.94	1.36	+ 4	− 8	+ 0	+ 1	+17	+ 2	+14	+17	−10	+35		4	0.04
100167	20 19 04.65	−75 40 19.4	8.33		H	304.769 382 97	−75.672 059 91		2.97	10.33	−32.07	0.65	0.75	0.97	0.74	0.86	−17	− 6	− 9	+ 3	−15	+12	−12	− 5	−26	−16		0	0.46
100168	20 19 04.94	−10 48 00.1	8.02		H	304.770 597 27	−10.800 025 92		4.60	13.78	1.65	0.97	0.56	1.08	1.16	0.76	+ 7	− 5	−12	−10	+ 7	+34	+14	+34	− 2	+ 6		0	−0.91
100169	20 19 06.27	−42 17 11.3	8.54		H	304.776 118 19	−42.286 481 87		4.26	4.44	14.55	0.98	0.69	1.20	1.24	0.97	+17	−14	− 9	+ 1	+10	−10	+ 7	+ 8	+14	+23		2	−1.51
100170	20 19 06.33	−69 26 06.5	8.84		G	304.776 357 86	−69.435 126 05		0.44	9.35	1.49	0.62	0.73	1.13	0.69	0.99	−34	−28	+20	+ 6	+14	− 3	+21	+ 5	− 7	−42		1	0.30
100171	20 19 06.76	+26 06 28.1	7.92		G	304.778 179 55	+26.107 807 77		10.98	14.49	−10.74	0.55	0.56	0.83	0.60	0.64	− 6	+ 2	−13	+13	− 8	− 2	− 6	− 1	+ 0	+12		0	−0.06
∗100172	20 19 08.52	+38 09 40.4	7.58		H	304.785 484 90	+38.161 221 30		6.26	45.62	−22.73	0.51	0.59	0.74	0.56	0.59	− 9	− 6	+15	+12	+ 2	−13	+ 4	− 8	+13	− 4		0	−0.72
∗100173	20 19 08.50	+39 16 24.3	7.42		H	304.785 419 38	+39.273 414 24		0.41	−2.48	−4.45	0.50	0.54	0.69	0.52	0.56	− 8	−16	+ 9	+ 4	+11	− 7	+11	−10	+12	+ 9		1	−1.45
100174	20 19 09.18	+14 23 03.0	7.20		H	304.788 230 96	+14.384 173 80		4.47	2.11	0.45	0.73	0.73	0.91	0.89	0.93	+34	−23	− 8	+25	+38	+ 6	+35	+58	− 4	+42		0	0.34
100175	20 19 10.07	−53 20 09.2	9.98		H	304.791 952 58	−53.335 881 12	A	2.83	3.81	9.73	3.70	2.97	3.55	4.23	4.18	+35	−32	−13	−17	+23	+ 9	+24	+15	+ 4	+41		1	0.47
100176	20 19 10.48	+29 29 56.6	7.22		H	304.793 682 30	+29.499 064 67		2.69	7.23	−0.26	0.37	0.48	0.71	0.43	0.52	−15	+ 3	+ 5	+29	− 1	−11	+ 3	− 5	+ 7	− 5		0	0.44
100177	H 20 19 10.54	−47 56 33.9	9.68		H	304.793 902 43	−47.942 759 53	A	6.63	12.89	−2.77	3.38	2.58	3.26	5.08	3.42	− 8	−13	−24	+32	− 2	−26	−17	+ 8	+ 7	−41		0	0.28
100178	20 19 10.69	−56 20 15.3	8.85		H	304.794 527 45	−56.337 572 45		3.25	18.02	−33.94	0.91	0.87	1.27	1.17	1.01	+22	−26	−31	− 3	+17	− 6	+11	− 1	+ 8	+20		0	4.00
100179	20 19 11.21	−53 20 33.9	11.56		H	304.796 727 49	−53.342 748 09	B	13.63	−5.44	7.22	18.96	15.26	11.88	14.51	13.86	+35	−28	−11	−18	+20	+ 5	+22	+15	+ 6	+34		1	0.47
100180	H 20 19 11.24	+50 52 49.6	8.14	2	H	304.796 836 85	+50.880 444 95	∗	1.37	−0.54	24.99	0.64	0.60	0.73	0.67	0.66	− 4	−23	+ 3	− 8	+10	−10	+ 5	− 6	+21	− 2		0	−0.97
100181	20 19 11.73	−22 07 39.4	8.78		H	304.798 883 93	−22.127 615 39		1.80	−17.20	−11.26	1.17	0.65	1.29	1.62	1.10	− 2	+19	−12	+27	−11	+40	−11	+41	−17	− 9		0	0.31
∗100182	H 20 19 14.33	−26 10 03.6	10.00		H	304.809 690 32	−26.167 661 05	A	8.90	79.93	−28.61	2.47	1.24	2.52	3.09	2.49	+ 3	−10	+ 7	−30	+16	+ 2	+ 9	+40	−27	+21		1	−0.29
∗100183	H 20 19 14.12	−54 32 40.9	9.47		H	304.808 844 26	−54.544 692 80	B	6.81	157.99	−100.95	4.43	3.55	3.54	4.53	3.27	+16	+13	− 9	−25	+20	−27	+21	−13	+11	−23		0	1.59
100184	20 19 17.68	−47 34 47.4	6.13		H	304.823 687 20	−47.579 845 41		33.91	190.87	−182.50	0.77	0.53	0.87	1.32	0.82	−11	− 5	−29	+10	+ 6	−23	− 1	+ 6	+22	−37		0	−0.66
100185	20 19 18.40	−43 20 03.6	10.20		G	304.826 672 34	−43.334 334 02		1.46	10.75	−18.35	1.52	1.03	1.93	2.44	1.53	− 1	− 7	−12	+10	+ 2	−29	− 2	+ 2	+13	+ 6		2	0.05
100186	20 19 19.13	−30 12 34.1	8.54		H	304.829 697 92	−30.209 485 24		2.45	8.69	−21.60	0.92	0.55	1.11	0.97	0.65	+41	−36	−13	−11	+ 2	+ 0	+ 6	−16	− 3	+66		0	−0.49
100187	20 19 19.18	−76 07 35.3	9.15	2	H	304.829 931 87	−76.126 459 68		4.39	−9.76	−33.07	0.72	0.77	1.03	0.77	0.82	− 7	− 5	− 7	+ 5	− 8	+12	− 6	− 7	−12	− 8		1	0.58
100188	20 19 19.49	−03 45 14.9	8.29		H	304.831 217 84	−03.754 141 82		9.24	−15.36	−8.33	1.21	0.88	1.30	1.61	1.34	+39	−30	−23	+33	+16	+ 2	+22	+61	−14	+26		0	0.17
100189	20 19 19.59	−52 59 16.0	9.03		H	304.831 605 23	−52.987 784 51		−1.22	7.11	−7.18	1.29	0.95	1.39	1.83	1.34	+26	−20	− 8	+35	+20	− 5	+17	+15	+10	+24		0	1.38
100190	20 19 19.86	+61 17 18.4	8.99		H	304.832 757 42	+61.288 438 17		4.00	2.46	8.93	0.75	0.66	0.78	0.80	0.64	− 2	− 6	+ 5	+31	− 2	−17	+ 2	−24	+28	+ 2		0	1.05
100191	20 19 20.69	+41 23 29.0	7.79		H	304.836 187 87	+41.391 393 01		2.86	4.32	1.32	0.49	0.52	0.64	0.48	0.50	− 3	+ 6	+16	− 1	+ 7	+ 1	+ 8	− 8	+ 2	+10		0	−0.54
100192	H 20 19 21.16	+14 22 14.5	6.74		G	304.838 165 96	+14.370 703 27	A	4.72	14.49	10.84	0.76	0.72	0.87	0.87	0.80	+25	− 9	−11	+41	+22	+ 5	+24	+54	− 7	+17		1	−0.17
100193	20 19 21.71	+40 53 16.5	8.48	1	H	304.840 476 62	+40.887 920 42		1.97	−2.45	−5.90	0.62	0.69	0.86	0.68	0.71	+ 1	+14	+28	+ 4	+ 8	+ 3	+ 8	− 7	− 9	+12		0	−0.45
100194	20 19 22.67	+04 29 08.1	10.52		H	304.844 462 43	+04.485 580 04		−0.28	8.37	−4.90	1.60	1.56	2.30	2.34	2.30	+36	− 4	−36	+29	+ 1	+26	+12	+59	−28	+24		0	1.70
∗100195	20 19 23.60	−19 07 06.6	5.28		G	304.848 330 16	−19.118 506 80		4.68	7.96	−10.90	0.86	0.42	0.91	1.20	0.78	+11	−14	− 2	−19	−10	− 3	− 2	+31	−24	− 2		0	−1.06
∗100196	20 19 23.54	−29 37 26.1	7.61		H	304.848 066 44	−29.623 918 96		3.23	9.63	−2.91	0.73	0.42	0.89	0.79

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
100101	9.933	0.024	7.883	0.009		1.697	0.020	T	1.72	0.02	L	7.7644	0.0012	0.014	100		7.74	7.79		M			1							
100102	9.603	0.018	9.075	0.017		0.495	0.022	T	0.57	0.02	L	9.1358	0.0019	0.017	122		9.11	9.16		C			1							
100103	8.416	0.008	6.727	0.003		1.411	0.007	T	1.38	0.02	A	6.7140	0.0008	0.009	190		6.70	6.73					1							S
100104	7.545	0.006	7.605	0.007		−0.041	0.005	G	−0.02	0.01	H	7.5967	0.0016	0.017	147		7.57	7.62		U			1							S
100105	9.808	0.016	9.136	0.014		0.611	0.016	T	0.68	0.01	L	9.2065	0.0020	0.027	162		9.17	9.27					1							
100106	10.050	0.019	8.887	0.012		0.998	0.018	T	0.98	0.01	L	8.9444	0.0019	0.022	181		8.90	8.99					1							
100107	9.446	0.017	9.022	0.018		0.453	0.015	G	0.52	0.02	H	9.0196	0.0173	0.125	105		8.92	9.26	0.53	P 1 A			1							
100108	5.641	0.002	5.579	0.003		0.056	0.003	T	0.07	0.00	L	5.6041	0.0005	0.006	139		5.59	5.61		C			1							S
100109						0.290	0.015	G	0.33	0.02	H	10.3939	0.0032	0.031	128		10.33	10.46		C										G G
100110	8.262	0.007	7.053	0.005		1.034	0.007	T	1.00	0.02	A	7.1022	0.0008	0.010	184		7.08	7.12		C			1							S
100111						0.448	0.015	G	0.52	0.02	H	11.6384	0.0078	0.061	85		11.51	11.76		D			1 X S							G
100112	11.252	0.061	10.278	0.040		0.842	0.057	T	0.86	0.04	L	10.4525	0.0050	0.036	138		10.37	10.51					1 S							G
100113						3.000	0.510	G	3.01	0.52	J	10.0686	0.0382	0.465	129		9.65	11.17	399.00	P 1 A			1							G
100114	10.334	0.028	8.555	0.012		1.482	0.024	T	1.50	0.04	L	8.5527	0.0014	0.014	134		8.53	8.57		C			1							
100115	9.411	0.019	9.284	0.024		0.123	0.029	T	0.14	0.03	L	9.3893	0.0031	0.018	83		9.36	9.43		C			1							
100116	8.625	0.012	6.997	0.006		1.363	0.011	T	1.33	0.01	L	7.0061	0.0011	0.009	92		6.99	7.03					1							S
100117	10.197	0.025	9.281	0.019		0.812	0.023	T	0.84	0.02	L	9.3384	0.0034	0.035	120		9.28	9.41		U			1							
100118	7.863	0.007	7.532	0.008		0.314	0.010	T	0.36	0.01	L	7.5815	0.0020	0.016	116		7.56	7.60					1							S
100119	11.120	0.062	9.125	0.019		1.690	0.053	T	2.18	0.11	O	8.9816	0.0047	0.053	105		8.91	9.06		U 2			1							
100120	10.294	0.020	9.650	0.018		0.616	0.015	G	0.68	0.01	H	9.6972	0.0025	0.033	283		9.64	9.75		U			1 S							G
100121	7.154	0.004	6.950	0.005		0.195	0.006	T	0.21	0.01	L	6.9837	0.0010	0.008	97		6.97	7.00					1							S
100122	5.972	0.002	5.246	0.002		0.660	0.035	G	0.77	0.03	C	5.2876	0.0004	0.005	169		5.28	5.30		C			1							S
100123	8.159	0.010	7.501	0.008		0.581	0.020	G	0.63	0.02	A	7.5775	0.0009	0.009	81		7.56	7.59		C			1							S
100124	9.099	0.014	7.915	0.009		1.015	0.013	T	0.99	0.01	L	7.8502	0.0019	0.021	124		7.82	7.89		U 2			1 S							S
100125	7.985	0.008	7.866	0.009		0.140	0.015	G	0.15	0.01	H	7.8966	0.0014	0.012	135		7.87	7.91		C			1							S
100126	8.170	0.010	7.735	0.010		0.419	0.007	G	0.49	0.01	H	7.7740	0.0014	0.013	90		7.75	7.80		C			1							S
100127	7.832	0.009	7.848	0.012	*	−0.010	0.014	T	0.01	0.01	L *	7.8210	0.0014	0.013	151	*	7.80	7.85		D	20187+3315	I 1	2 C A	AB	149	0.802	0.003	1.13	0.01	
100128	6.615	0.003	6.599	0.004		0.015	0.004	T	0.03	0.00	L	6.6134	0.0007	0.007	141		6.60	6.63		C			1							S
100129	8.351	0.010	7.832	0.008		0.497	0.010	T	0.57	0.01	L	7.8865	0.0016	0.013	103		7.86	7.91					1 G							S
100130	10.297	0.034	9.770	0.036	*	0.463	0.015	G	0.53	0.02	H *	9.8512	0.0027	0.035	96	*	9.79	9.92			20187+2001	H 1	2 C D	AB	47	0.226	0.082	2.25	0.65	G D
100131	8.845	0.011	7.648	0.007		1.025	0.010	T	1.00	0.01	L	7.6971	0.0013	0.011	113		7.68	7.72		C			1							
100132	8.873	0.013	8.394	0.013		0.455	0.002	G	0.52	0.00	H	8.4187	0.0020	0.016	82		8.39	8.46		U			1							S
100133						1.430	0.012	G	1.75	0.03	I	11.0908	0.0045	0.038	97		11.00	11.14					1 S							G
100134	10.521	0.038	9.438	0.023		0.937	0.034	T	0.93	0.03	L	9.4710	0.0020	0.018	112		9.44	9.51		C			1							
100135	9.345	0.014	8.709	0.012		0.591	0.016	T	0.66	0.01	L	8.6817	0.0420	0.318	146		8.46	9.21	1.89	P 1 A	20188+3620	I 1	1 S							
100136	9.964	0.023	8.522	0.013		1.216	0.021	T	1.18	0.02	L	8.5628	0.0018	0.013	104		8.54	8.59		C			1							
100137						1.500	0.510	G	3.20	0.98	K	11.8071	0.2403	0.958	43		10.94	13.50		U 2			1 S							D
100138	8.348	0.011	8.055	0.011		0.279	0.015	T	0.32	0.02	L	8.0974	0.0014	0.010	89		8.08	8.12		C			1							S
100139	8.498	0.009	7.849	0.008		0.602	0.010	T	0.67	0.01	L	7.9053	0.0012	0.014	124		7.89	7.94					1							S
100140	11.056	0.056	8.863	0.016		1.811	0.047	T	1.84	0.05	L	8.5736	0.0035	0.032	109		8.52	8.63		U 2			1 S							
100141	11.939	0.130	11.305	0.126	A	0.500	0.040	G	0.57	0.04	R *	11.4415	0.0051	0.049	169	*	11.35	11.52		D	20188+3102	H 1	2 C D	AB	294	1.687	0.049	2.19	0.24	G D
100142	6.292	0.004	6.435	0.005		−0.123	0.006	T	−0.11	0.01	L	6.4235	0.0025	0.021	101		6.39	6.45	2.98	P 1 A			1 G							S P
100143	9.373	0.016	8.886	0.016		0.470	0.017	T	0.54	0.02	L	8.9525	0.0022	0.014	91		8.93	8.97		C			1							
100144	10.401	0.031	8.867	0.015		1.289	0.027	T	1.25	0.03	L	8.8640	0.0025	0.019	110		8.84	8.90					1							
100145	8.752	0.007	6.802	0.003		1.653	0.006	T	1.93	0.02	O	6.6982	0.0015	0.019	260		6.67	6.73		U 2			1							S
100146	7.655	0.007	7.307	0.007	*	0.330	0.009	T	0.38	0.01	L *	7.3342	0.0010	0.010	137	*	7.32	7.35		D	20189+3817	I 1	2 C S A	AS	78	0.150	0.004	0.30	0.19	S
100147	7.086	0.005	7.106	0.006		−0.014	0.007	T	0.01	0.01	L	7.1131	0.0009	0.010	128		7.10	7.13		C			1							S
100148	9.340	0.015	7.890	0.008		1.223	0.013	T	1.18	0.01	L	7.9159	0.0010	0.009	111		7.90	7.93		C			1							S
100149	8.337	0.010	7.881	0.009		0.423	0.015	G	0.49	0.02	H	7.9455	0.0012	0.011	101		7.92	7.97		C			1							S
100150	7.950	0.009	7.988	0.012		−0.030	0.014	T	−0.01	0.01	L	7.9986	0.0009	0.011	108		7.98	8.02					1							S
100151	8.439	0.011	6.484	0.006		1.657	0.010	T	2.04	0.04	O	6.3619	0.0038	0.021	74		6.34	6.40		U 2			1							S
100152	8.754	0.012	7.651	0.008		0.944	0.018	G	0.99	0.02	A	7.7069	0.0015	0.014	93		7.68	7.73		C			1							S
100153	8.924	0.015	7.588	0.009		1.133	0.014	T	1.10	0.01	L	7.6320	0.0010	0.007	72		7.61	7.65					1							S
100154	10.433	0.036	8.588	0.014		1.566	0.032	T	3.37	0.04	O	8.0623	0.0028	0.129	122		7.90	8.43		U 2 C			1 S							P
100155	8.881	0.012	6.596	0.004		1.871	0.005	G	1.89	0.09	H	6.4435	0.0013	0.013	121		6.42	6.47		U 2	20190+3900	I 1	1 S							S
100156	10.975	0.048	8.955	0.017		1.710	0.042	T	2.33	0.08	O	8.7832	0.0017	0.015	100		8.76	8.80					1							
100157	10.031	0.023	8.834	0.014		1.025	0.021	T	1.00	0.02	L	8.8903	0.0018	0.015	137		8.86	8.92					1 S							
100158	11.831	0.084	9.983	0.024		1.537	0.069	T	1.59	0.15	L	9.9352	0.0020	0.026	220		9.89	9.98					1 S							
100159	7.686	0.007	7.384	0.008		0.287	0.010	T	0.33	0.01	L	7.4231	0.0009	0.009	96		7.41	7.44					1							S
100160	7.315	0.005	7.486	0.006		−0.169	0.015	G	−0.17	0.02	H	7.4650	0.0018	0.016	116		7.44	7.50		U			1							S
100161	10.585	0.038	8.705	0.015		1.562	0.032	T	1.58	0.03	L	8.6329	0.0021	0.016	92		8.61	8.66					1							
100162	7.832	0.009	7.601	0.008		0.226	0.004	G	0.25	0.01	H	7.6443	0.0012	0.009	125		7.63	7.67		C			1							S
100163	9.244	0.013	7.865	0.008		1.167	0.012	T	1.13	0.01	L	7.9002	0.0013	0.012	142		7.88	7.92					1							S
100164	8.855	0.015	7.593	0.009	A	1.047	0.003	G	1.02	0.00	H *	7.6120	0.0012	0.009	113	*	7.59	7.62		D	20190−1417	I 1	2 C A	AB	255	1.276	0.015	2.88	0.05	S
100165	7.619	0.006	6.397	0.004		1.045	0.005	G	1.02	0.00	H	6.4523	0.0007	0.008	99		6.44	6.47		C			1							S
100166	10.554	0.037	9.731	0.029		0.780	0.020	G	0.82	0.02	H	9.7681	0.0030	0.024	100		9.73	9.80		C			1							
100167	9.808	0.017	8.459	0.010		1.143	0.015	T	1.11	0.01	L	8.4992	0.0018	0.020	148		8.47	8.54					1							
100168	8.252	0.009	8.056	0.010		0.187	0.013	T	0.21	0.01	L	8.0872	0.0014	0.012	91		8.07	8.11					1							S
100169	9.637	0.021	8.619	0.015		0.888	0.019	T	0.89	0.01	L	8.6990	0.0028	0.017	85		8.68	8.73					1							
100170	8.588	0.007	8.795	0.010		−0.179	0.011	T	−0.19	0.02	A	8.7846	0.0017	0.022	208		8.74	8.83					1							
100171	8.449	0.009	7.968	0.009		0.453	0.012	T	0.52	0.01	L	8.0228	0.0011	0.014	155		8.00	8.05					1							S
100172	8.917	0.013	7.700	0.008		1.040	0.012	T	1.01	0.01	L	7.7469	0.0011	0.012	138		7.73	7.77					1							
100173	7.894	0.009	7.479	0.007		0.392	0.011	T	0.46	0.01	L	7.5069	0.0014	0.013	137		7.48	7.53					1							S
100174	8.356	0.011	7.298	0.008		0.918	0.010	T	0.92	0.01	L	7.3562	0.0010	0.010	89		7.34	7.38					1							S
100175	10.635	0.045	10.055	0.040	A	0.544	0.044	T	0.62	0.04	L	10.1035	0.0138	0.033	88	A	10.03	10.16		D	20192−5320	I 2	1 C P B							
100176	8.013	0.005	7.325	0.005		0.635	0.006	T	0.70	0.01	L	7.3518	0.0008	0.010	222		7.34	7.37					1							S
100177	10.279	0.031	9.803	0.032	*	0.461	0.035	T	0.53	0.04	L *	9.7858	0.0030	0.020	76	*	9.74	9.81		D	20192−4757	I 1	2 C A	AB	199	0.605	0.005	0.90	0.03	
100178	10.516	0.037	8.964	0.018		1.303	0.032	T	1.26	0.03	L	9.0020	0.0018	0.018	79		8.96	9.03					1							
100179	11.900	0.168	11.389	0.172	B	0.480	0.217	T	0.55	0.23	L	11.6044	0.0406			B				D	20192−5320	I 2	1 C I B							
100180	10.618	0.044	8.486	0.014	*	1.616	0.218	G	1.62	0.24	R *	8.2573	0.0032	0.028	110	*	8.22	8.31		U 2	20192+5053	H 1	2 C S B	AB	320	0.115	0.017	0.85	0.92	
100181	10.199	0.028	8.923	0.017		1.086	0.026	T	1.05	0.02	L	8.9511	0.0019	0.016	108		8.93	8.98		C			1							
100182	10.839	0.047	10.144	0.041	A	0.720	0.133	G	0.77	0.11	R *	10.1417	0.0025	0.022	116	*	10.11	10.17		D	20192−2610	I 1	2 C A	AB	278	4.993	0.028	2.43	0.09	
100183	9.525	0.040	8.906	0.027	*	0.573	0.035	T	0.65	0.03	L *	9.5883	0.0027	0.020	92	*	9.55	9.62		D	20192−5433	I 1	2 C A	BA	3	1.685	0.006	0.12	0.02	
100184	6.687	0.004	6.177	0.004		0.469	0.010	G	0.53	0.00	A	6.2305	0.0007	0.007	75		6.22	6.24		C			1							S
100185	10.745	0.045	10.241	0.046		0.493	0.005	G	0.57	0.01	H	10.3155	0.0031	0.028	86		10.26	10.36		C			1							G
100186	10.153	0.023	8.679	0.012		1.241	0.020	T	1.20	0.02	L	8.7038	0.0011	0.015	163		8.68	8.73					1							
100187	9.543	0.015	9.181	0.016		0.343	0.020	T	0.40	0.03	L	9.2312	0.0034	0.039	141		9.17	9.29	0.28	P 1 A	20194−7608	I 1	1							
100188	8.817	0.015	8.313	0.015		0.474	0.019	T	0.55	0.02	L	8.3980	0.0019	0.013	69		8.38	8.43		C			1							
100189	10.684	0.050	9.190	0.024		1.257	0.044	T	1.22	0.05	L	9.1953	0.0026	0.021	68		9.17	9.23		C			1							
100190	9.109	0.015	9.017	0.019		0.090	0.023	T	0.10	0.03	L	9.0302	0.0020	0.019	108		8.99	9.06		C			1							
100191	7.782	0.007	7.785	0.008		0.002	0.010	T	0.02	0.01	L	7.7993	0.0010	0.010	137		7.78	7.82		C			1							S
100192	7.211	0.006	6.825	0.007	A	0.362	0.021	G	0.36	0.02	L *	6.7963	0.0012	0.009	91	*	6.78	6.81		D	20194+1422	I 1	2 C A	AB	13	3.298	0.006	2.66	0.03	S D
100193	8.813	0.010	8.515	0.011		0.283	0.014	T	0.32	0.02	L	8.5507	0.0019	0.018	136		8.52	8.58	1.87	P 1 A			1							
100194	12.644	0.291	10.731	0.086		1.622	0.250	T	1.90	0.17	K	10.6123	0.0027	0.022	75		10.57	10.66		C			1							G
100195	7.102	0.004	5.434	0.002		1.394	0.004	T	1.35	0.03	C	5.4364	0.0006	0.005	113		5.43	5.44			20194−1908	I 1	1							S
100196	7.506	0.005	7.604	0.006		−0.084	0.007	T	−0.06	0.01	L	7.5922	0.0008	0.010	177		7.58	7.61					1							S
100197	9.034	0.011	8.139	0.009		0.796	0.011	T	0.83	0.01	L	8.1630	0.0018	0.020	120		8.13	8.19		U 2			1							
100198											T	11.7021	0.0084	0.075	142		11.57	11.83		P 1 A			1 V							D
100199	9.871	0.021	9.406	0.022		0.438	0.028	T	0.51	0.03	L	9.4961	0.0030	0.021	127		9.46	9.53					1							
100200	10.720	0.040	10.639	0.063		0.080	0.070	T	0.09	0.08	L	10.6565	0.0034	0.036	158		10.59	10.72		C			1							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
100201	20 19 25.79	−20 57 02.8	6.84	H	304.857 477 64	−20.950 766 53	8.21	8.58	3.12	1.21	0.92	1.11	1.83	1.06	− 6	+ 8	−37	−53	+43	− 2	+55	+18	+15	−31	4	−0.05
100202	20 19 26.16	−12 48 13.7	7.79	G	304.859 013 17	−12.803 792 41	9.70	43.69	−2.33	0.95	0.56	1.11	1.16	0.77	+17	− 8	−22	− 6	+ 9	+43	+25	+43	− 5	+12	4	0.30
100203	20 19 26.76	+45 12 54.1	7.70	H	304.861 520 67	+45.215 017 31	5.29	4.97	9.34	0.54	0.50	0.63	0.64	0.56	− 9	− 3	+ 1	+ 1	+10	− 1	+10	− 8	+ 8	+ 2	0	−0.29
100204	20 19 27.07	+12 08 12.4	8.51	H	304.862 808 91	+12.136 789 59	4.27	−9.22	−9.21	0.86	0.83	1.18	0.97	1.00	+18	− 7	−11	− 5	+30	+17	+29	+31	− 3	+31	0	−2.10
100205	20 19 27.29	−32 17 11.1	8.17	H	304.863 708 94	−32.286 420 58	3.83	22.19	−28.19	0.98	0.59	1.14	1.23	0.87	+30	− 3	−15	+11	+31	+23	+34	+28	+17	+56	0	0.47
100206	20 19 27.74	+22 59 46.3	7.66	H	304.865 571 75	+22.996 201 83	7.43	9.02	−12.19	0.60	0.53	0.88	0.66	0.69	+ 1	−12	−17	+17	−19	+ 8	−18	+ 6	+ 9	+35	0	1.24
100207	20 19 27.91	−52 10 36.5	8.77	H	304.866 293 40	−52.176 799 66	10.70	−14.10	16.17	1.18	0.79	1.34	1.89	1.32	− 6	−27	− 4	+19	− 6	−21	−11	+15	+14	−31	0	0.83
100208	20 19 29.31	+13 13 00.5	6.20	H	304.872 105 64	+13.216 810 49	4.12	−14.89	−18.28	0.71	0.62	0.87	0.81	0.75	+24	−32	−20	+38	+22	+ 3	+26	+53	−10	+15	0	0.14
100209	20 19 30.24	−44 45 10.2	8.27	H	304.875 985 38	−44.752 845 97	3.59	−37.54	−163.65	1.02	0.65	1.10	1.43	0.86	+ 2	−25	−20	+29	− 2	− 1	− 2	+ 9	+ 0	− 2	0	−1.19
100210	20 19 30.46	+05 50 20.4	8.45	G	304.876 907 96	+05.839 005 98	8.06	−7.77	−1.05	0.91	0.81	1.13	1.22	1.11	+31	− 1	−14	+22	+18	+19	+23	+55	− 4	+26	4	1.48
100211	20 19 31.10	+32 02 50.1	7.32	H	304.879 592 43	+32.047 248 75	7.45	35.81	−13.21	0.42	0.52	0.78	0.50	0.57	−17	+ 0	− 8	+ 7	+ 6	−25	+ 5	−15	+31	−19	0	0.48
100212 H	20 19 31.49	+15 32 42.3	7.57	H	304.881 223 07	+15.545 089 93 *	2.43	−2.96	−11.66	1.08	1.35	1.17	1.04	1.16	+18	−22	− 7	+17	+11	− 8	+10	+46	− 2	+23	1	−0.24
100213	20 19 31.92	+37 11 26.9	10.50	G	304.883 017 83	+37.190 805 47	−0.78	−8.85	−6.71	1.11	1.26	1.60	1.26	1.28	− 6	− 6	+27	+ 6	+ 3	− 2	+ 5	−15	− 1	+ 1	1	1.04
100214	20 19 32.42	+38 43 54.0	7.93	2 H	304.885 102 17	+38.731 664 36	2.92	−3.67	−3.49	0.58	0.63	0.81	0.69	0.69	− 6	−13	+12	+11	+ 8	+ 8	+ 6	+ 8	+ 2	− 4	0	0.18
*100215	20 19 33.20	−66 52 58.1	10.80	H	304.888 335 00	−66.882 796 79	5.42	37.92	−245.19	1.15	1.26	1.80	1.35	1.57	− 8	−21	− 5	+22	− 9	−15	+11	+ 4	+ 0	−16	0	0.15
*100216	20 19 33.19	−19 54 45.9	7.72	H	304.888 301 01	−19.912 761 07	3.71	−21.58	−30.17	0.99	0.52	1.08	1.17	0.93	+12	− 4	−12	−19	+ 5	+14	+ 4	+37	−27	+17	0	−1.61
*100217	20 19 34.39	+43 29 45.2	7.56	G	304.893 271 29	+43.495 887 32	15.42	16.61	109.05	0.56	0.54	0.69	0.66	0.63	+ 1	− 7	− 2	−13	−10	−21	−10	−28	+19	+10	0	0.32
*100218	20 19 34.38	+56 40 38.8	8.06	H	304.893 262 28	+56.677 443 30	4.27	−4.46	−14.64	0.60	0.52	0.59	0.65	0.57	+ 9	− 8	+ 6	+33	+ 8	− 9	+ 8	+22	+ 3	+11	0	2.20
*100219	20 19 36.60	+47 53 39.1	8.25	3 H	304.902 487 31	+47.894 186 86	1.11	−1.53	0.99	0.64	0.60	0.77	0.73	0.59	− 7	+ 8	+40	− 8	− 1	− 9	+ 4	−12	+10	− 5	4	2.74
*100220 H	20 19 36.37	+21 53 53.9	9.35	H	304.901 555 67	+21.898 296 18 A	2.74	−7.61	−9.65	2.01	1.51	2.21	2.38	1.95	−35	− 5	− 2	−31	+ 8	+ 5	+ 1	−25	+ 6	− 8	3	−1.20
100221	20 19 36.70	+62 15 26.7	5.71	H	304.902 906 98	+62.257 413 51	8.62	16.74	24.16	0.51	0.45	0.52	0.72	0.44	− 9	+ 0	+10	+ 0	+ 4	+21	+ 2	−31	+17	− 6	2	0.70
*100222	20 19 37.30	+13 00 38.9	8.23	H	304.905 428 73	+13.010 807 12 B	6.68	10.53	−13.56	3.79	3.39	2.43	2.73	2.67	+34	−13	− 5	+ 0	+23	+14	+21	+36	+ 5	+44	3	0.38
*100223	20 19 37.25	−46 25 40.3	8.73	G	304.905 224 91	−46.427 866 62	55.73	−379.36	−103.54	1.20	0.78	1.29	1.71	1.27	+ 9	−34	− 9	+31	− 4	− 9	− 7	+20	+ 5	+ 0	0	−0.01
100224	20 19 37.50	−31 43 46.0	7.35	H	304.906 269 23	−31.729 457 24	13.40	−23.65	−6.01	0.84	0.46	0.95	1.09	0.62	+30	−25	−14	+24	+26	+24	+29	+22	+11	+48	0	−0.60
100225	20 19 37.95	−69 00 54.2	8.20	H	304.908 141 98	−69.015 053 30	21.00	23.08	−46.11	0.52	0.67	1.01	0.60	0.89	−24	−13	+ 4	− 1	+18	−12	+22	+10	+ 4	−28	0	−0.79
100226	20 19 38.48	+13 00 17.3	7.97	H	304.910 314 22	+13.004 809 58 A	3.03	10.50	−11.35	2.08	1.95	2.03	2.39	2.21	+43	− 8	− 4	+18	+24	+14	+22	+44	+13	+50	3	0.38
100227	20 19 38.75	+38 20 09.2	8.68	2 H	304.911 460 12	+38.335 902 66	0.00	−3.67	−5.25	0.64	0.74	0.92	0.73	0.82	− 7	− 4	+ 9	+14	+ 3	−16	+ 4	+ 4	+ 5	− 8	0	0.23
100228	20 19 39.57	+01 59 36.4	7.93	H	304.914 893 33	+01.993 451 71	2.50	6.58	−5.11	0.93	0.78	1.10	1.26	1.05	+27	− 9	−12	+50	+13	+22	+18	+68	+ 0	+18	0	−1.33
100229	20 19 39.72	−40 38 51.6	8.04	H	304.915 518 92	−40.647 652 80	2.83	23.34	−33.98	0.91	0.55	1.07	1.23	0.80	+ 6	− 5	− 8	− 3	+10	+15	+10	+11	+ 6	+21	0	0.31
100230	20 19 41.64	+47 54 19.8	7.87	G	304.923 515 00	+47.905 507 09	3.64	13.10	5.53	0.71	0.52	0.72	0.77	0.54	− 2	+ 1	+22	+25	+ 6	−12	+11	+ 2	+18	+ 4	0	1.07
100231	20 19 43.05	−17 29 16.9	8.41	H	304.929 359 72	−17.488 029 01	1.05	−9.04	−0.69	1.09	0.60	1.15	1.31	1.10	+14	+ 3	+ 7	−15	+12	+14	+ 8	+36	−15	+20	2	0.30
100232	20 19 43.24	−01 04 42.9	6.05	G	304.930 168 68	−01.078 592 55	8.04	41.59	32.39	0.78	0.52	0.91	1.09	0.80	+ 5	−16	−12	+31	−15	+10	−13	+41	−14	+ 6	0	2.11
100233	20 19 45.26	−25 13 41.7	7.20	G	304.938 597 56	−25.228 243 12	23.07	−121.79	−146.70	0.78	0.51	0.96	1.09	1.05	+25	− 7	+ 5	+10	+26	+31	+ 9	+47	− 5	+53	0	−1.57
100234	20 19 45.34	−13 27 08.7	8.84	2 H	304.938 916 51	−13.452 416 16	3.41	2.56	8.05	1.25	0.73	1.55	1.57	1.15	+20	− 9	−11	− 6	+ 9	+55	+15	+44	+11	+30	2	0.55
100235	20 19 45.87	−08 27 10.5	8.98	H	304.941 142 46	−08.452 908 85	16.68	−25.97	−177.88	1.18	0.66	1.38	1.49	0.83	+21	−22	+ 5	− 1	+28	+44	+26	+28	+10	+35	0	−1.17
100236	20 19 46.72	−38 56 08.6	9.32	H	304.944 647 26	−38.935 708 89	4.96	6.22	−40.11	1.38	0.77	1.43	1.80	1.19	+20	−32	−19	+30	+24	+ 6	+29	+35	− 8	+27	0	1.36
100237	20 19 47.46	−00 54 25.5	7.48	H	304.947 769 55	−00.907 096 52	7.06	−5.80	−20.75	0.88	0.60	1.05	1.22	0.89	+ 8	− 2	−11	+38	−14	+20	−14	+46	−13	+ 5	0	1.10
100238	20 19 48.05	−39 57 11.5	9.87	H	304.950 207 76	−39.953 187 07	11.13	−10.77	−31.78	1.36	0.84	1.55	1.85	1.34	+17	−19	− 5	+13	+18	+ 7	+21	+16	− 7	+42	0	−0.11
100239	20 19 48.31	+37 07 57.1	6.60	H	304.951 302 81	+37.132 531 76	5.25	12.32	−7.58	0.40	0.43	0.56	0.44	0.44	−10	− 3	+17	+ 1	− 6	− 9	− 3	−18	− 1	− 3	0	−0.01
100240	20 19 49.18	+38 20 33.8	7.40	G	304.954 934 01	+38.342 733 81	1.33	−2.35	−7.75	0.47	0.51	0.67	0.53	0.52	− 7	− 5	+13	+12	+ 5	+15	+ 6	−10	+15	− 6	0	0.58
100241 H	20 19 49.67	+45 21 50.0	6.98	H	304.956 942 38	+45.363 880 89 A	9.69	21.30	−31.19	1.13	1.06	0.93	0.89	0.85	−20	− 8	− 1	−12	+14	+16	+13	−12	+14	− 1	0	0.27
100242	20 19 49.81	+29 43 36.7	6.78	1 H	304.957 550 95	+29.726 857 72	3.14	4.05	−2.08	0.35	0.44	0.66	0.40	0.47	−13	+ 3	+ 4	+32	− 3	−13	+ 0	+ 0	+ 6	− 5	1	−0.35
100243	20 19 51.21	+20 26 48.2	8.70	H	304.963 356 81	+20.446 708 60	10.23	66.15	31.62	0.89	0.78	1.18	1.14	0.93	+ 9	−23	−24	+ 2	+ 7	−15	+ 5	−10	+ 2	+26	0	−0.18
100244	20 19 52.07	−15 01 03.9	8.26	G	304.966 966 89	−15.017 751 67	9.45	−64.20	−37.64	1.60	1.02	1.38	2.60	1.66	+ 5	−49	−25	−67	−10	+47	− 7	−58	+20	+30	0	2.01
100245	20 19 52.22	−02 14 29.5	9.00	H																						
100246	20 19 52.67	−02 14 51.0	7.87	H	304.969 474 93	−02.247 506 95	3.93	6.91	5.17	1.25	0.73	1.42	2.10	1.52	+17	+ 6	−15	+ 2	−35	+19	−36	+ 9	−45	+ 1	0	0.40
100247	20 19 52.76	−00 38 44.1	7.38	H	304.969 814 18	−00.645 579 05	3.68	−1.24	3.74	0.86	0.62	1.07	1.18	0.91	+13	−10	−18	+41	−16	+10	−14	+47	−22	+12	0	−0.14
100248	20 19 54.31	−19 54 45.7	9.15	G	304.976 278 71	−19.912 699 25	2.18	−20.64	−97.64	1.26	0.70	1.36	1.58	1.27	+19	−20	−11	−13	+ 6	+14	+10	+43	−19	+18	0	−0.66
100249	20 19 54.35	+41 36 08.6	8.14	H	304.976 452 45	+41.602 390 27	2.22	3.54	−3.52	0.52	0.56	0.68	0.57	0.56	+ 3	+ 9	+12	+10	+ 4	− 3	+ 7	−15	+ 6	+11	0	−0.21
100250	20 19 56.04	+46 50 14.3	6.49	1 H	304.983 515 14	+46.837 305 38	2.67	−1.61	5.78	0.52	0.42	0.55	0.65	0.46	−10	− 4	+ 4	−15	− 3	+ 1	− 3	−14	+17	+ 3	0	0.11
100251	20 19 57.19	+32 27 50.4	9.07	H	304.988 286 00	+32.464 001 68	11.12	−52.29	−239.49	0.75	0.83	1.18	1.04	0.94	− 3	+ 3	+ 1	+12	− 5	+ 0	− 2	− 3	+10	+12	0	0.18
100252	20 19 58.06	+49 26 25.0	8.24	H	304.991 931 14	+49.440 282 31	2.05	16.49	7.32	0.58	0.55	0.66	0.63	0.57	− 5	+ 0	+ 8	− 6	+11	− 8	+11	− 3	+18	+ 1	0	1.00
100253	20 19 58.17	−32 36 59.4	7.24	2 H	304.992 388 95	−32.616 510 20	7.51	−15.98	−3.15	0.74	0.48	0.88	0.94	0.66	+25	−12	− 7	− 2	+19	+35	+20	+12	+17	+45	0	−1.14
*100254	20 19 58.84	+39 37 49.0	8.92	H	304.995 178 22	+39.630 270 67	1.58	−0.30	−1.40	0.66	0.74	0.92	0.70	0.84	− 4	−16	+ 2	+ 6	+ 7	− 7	+ 6	+ 5	+ 9	+12	0	−0.70
*100255	20 19 58.66	+51 34 44.7	9.89	H	304.994 409 74	+51.579 087 58	1.10	0.06	0.28	0.94	0.79	0.96	1.04	0.93	− 8	+ 0	− 5	−13	+14	+ 7	+15	− 2	+ 8	− 6	1	−3.07
100256	20 20 00.19	+13 32 53.2	5.96	H	305.000 796 70	+13.548 101 09	11.09	−2.65	−4.03	0.68	0.55	0.80	0.80	0.67	+ 0	−17	−17	+32	+ 8	+18	+13	+48	− 8	− 3	0	−0.14
100257	20 20 01.92	−22 07 29.6	10.09	H	305.007 980 68	−22.124 887 78	6.84	72.70	11.04	1.69	0.91	1.74	2.32	1.51	− 1	− 9	−16	+37	−19	+24	−16	+50	−17	−18	0	−0.05
100258	20 20 03.38	+33 56 35.0	8.31	3 H	305.014 071 16	+33.943 051 83	3.79	17.64	4.03	0.59	0.62	0.87	0.64	0.64	− 7	− 5	+11	+36	− 4	−25	− 2	+ 1	+ 0	− 8	0	1.48
100259	20 20 03.65	+23 38 17.2	8.27	H	305.015 227 26	+23.638 114 00 +	19.43	−12.10	−4.25	3.45	1.79	1.18	2.52	0.87	− 5	+39	+ 1	+23	−49	+21	− 2	+22	+11	+ 3	0	−0.99
120415	20 20 04.64	−67 22 23.4	10.86	H																						
100260	20 20 04.72	−51 39 28.9	8.46	H	305.019 670 23	−51.658 031 38	5.21	25.16	−14.77	1.04	0.78	1.14	1.53	1.18	− 9	−10	− 8	+40	− 7	+ 6	− 8	+25	+16	− 7	0	0.23
100261	20 20 05.98	+68 52 48.9	5.59	2 H	305.024 932 12	+68.880 253 20	4.79	18.02	26.44	0.50	0.46	0.52	0.59	0.42	− 1	− 4	+29	−11	+ 8	+ 5	+ 5	− 7	+ 8	+13	0	0.97
100262 H	20 20 09.94	+11 28 09.9	6.63	H	305.041 421 21	+11.469 409 38 A	3.70	1.68	−12.71	1.02	0.86	1.02	0.95	1.00	+39	−14	− 8	− 4	+41	+14	+38	+39	+ 4	+64	2	0.08
100263 H	20 20 11.70	−27 50 17.8	9.22	H	305.048 735 07	−27.838 268 02 A	2.07	7.72	−31.59	4.30	2.46	4.79	6.59	4.32	+50	−34	−29	−13	−10	+ 6	+26	+20	+ 3	+60	3	1.92
100264	20 20 12.46	+05 22 32.2	8.60	H	305.051 919 56	+05.375 598 29	4.15	−0.81	−13.03	0.88	0.84	1.22	1.11	1.15	+38	− 8	−29	+22	+16	+20	+23	+59	−20	+34	0	−0.14
100265	20 20 13.62	+00 44 27.2	8.00	H	305.056 746 91	+00.740 888 13	8.02	16.58	−36.03	1.17	1.15	1.35	1.70	1.63	+59	+18	+15	+64	+48	+39	+47	+80	+17	+60	0	1.27
100266 H	20 20 14.47	−34 35 06.6	6.62	H	305.060 284 59	−34.585 162 43 *	15.87	44.15	−55.75	1.52	0.94	0.90	1.52	0.94	−25	+ 0	+ 0	− 7	+ 1	−16	+ 7	+23	−13	−12	1	−0.58
100267	20 20 14.76	−29 07 51.7	7.72	H	305.061 480 39	−29.131 034 33	0.95	7.01	−2.36	0.78	0.45	0.94	0.90	0.57	+41	−25	− 9	−14	+ 7	+ 3	+ 6	−11	+ 5	+72	0	−0.60
100268 H	20 20 15.22	+39 24 11.8	6.22	G	305.063 426 26	+39.403 281 72 A	9.18	−5.11	−22.79	1.78	1.58	0.83	0.65	0.74	−32	+ 0	− 7	+ 3	+11	− 3	+ 7	+ 5	+ 3	+ 6	19	3.30
100269	20 20 15.33	+15 32 34.1	6.77	H	305.063 891 00	+15.542 811 15	12.47	69.63	31.79	0.59	0.54	0.78	0.69	0.69	+ 8	−21	−25	+ 3	+ 9	+10	+16	+31	−10	− 1	0	−0.44
100270	20 20 16.68	−42 40 47.4	8.50	H	305.069 509 48	−42.679 832 44	1.77	30.71	−7.35	1.02	0.60	1.17	1.41	0.82	+ 7	−30	−16	+10	+ 8	− 2	+10	+ 0	− 3	+18	0	−3.04
100271	20 20 19.08	+52 13 47.8	9.96	G	305.079 493 42	+52.229 932 50	24.00	38.53	260.80	1.01	0.90	1.07	1.35	1.05	− 7	− 5	− 6	+14	+ 8	+13	+ 7	− 2	− 7	−14	4	0.23
100272	20 20 19.14	−10 22 30.6	8.77	1 H	305.079 757 75	−10.375 175 21	4.69	0.33	−22.34	1.20	0.77	1.27	1.63	1.07	+28	−18	+ 5	+12	+28	+ 4	+30	+50	+ 6	+19	0	0.75
100273	20 20 20.40	−32 57 33.7	8.32	H	305.085 012 77	−32.959 357 79	9.76	21.20	−1.45	1.88	1.14	2.21	2.19	1.63	+27	−19	−12	−17	+11	+17	+12	+ 5	− 2	+48	0		
100274	20 20 20.53	+14 34 09.3	6.17	H	305.085 524 82	+14.569 242 14	5.93	−3.19	6.18	0.60	0.56	0.80	0.70	0.71	+22	−31	−19	+11	+14	+ 2	+19	+40	−19	+21	0	−0.08
100275	20 20 21.16	+28 04 53.0	9.13	G	305.088 149 25	+28.081 396 48	9.91	−25.32	−16.33	0.61	0.71	1.30	0.66	0.79	−30	− 9	+15	−19	− 5	+ 0	− 5	− 8	− 7	−29	1	0.80
100276	20 20 21.40	+17 47 34.8	5.82	H	305.089 152 40	+17.793 002 61	6.83	16.32	−30.88	0.55	0.48	0.72	0.59	0.55	+10	−18	−24	− 8	+19	+ 7	+20	+16	− 2	+14	0	0.45
100277	20 20 22.41	+29 51 56.0	8.86	H	305.093 365 33	+29.865 551 73	2.17	−0.41	−15.62	0.61	0.77	1.15	0.69	0.81	−12	+ 3	+ 0	+33	+ 2	−15	+ 5	− 1	+ 9	− 5	2	1.03
100278	20 20 22.67	−42 54 04.3	7.76	G	305.094 451 60	−42.901 200 41	2.62	−25.38	10.60	0.97	0.55	1.06	1.58	0.73	− 6	−14	−13	+ 6	+13	−15	+10	− 1	− 2	+ 4	0	−0.66
100279	20 20 24.54	+06 01 56.0	10.14	H	305.102 247 52	+06.032 224 52	10.19	32.21	−364.62	1.47	1.17	1.72	2.10	1.82	+25	+ 1	−19	− 3	+ 5	+ 2	− 1	+45	− 7	+36	0	−0.46
100280	20 20 24.58	−75 34 41.7	8.41	G	305.102 411 80	−75.578 236 47	25.78	−171.12	148.89	0.61	0.77	0.95	0.73	0.85	−16	− 5	−10	+ 8	−24	+10	−21	+ 0	−12	−13	1	0.91
100281	20 20 25.69	+07 36 53.3	7.25	H	305.107 032 50	+07.614 806 80	3.96	−11.43	−10.44	0.72	0.64	0.93	0.83	0.82	+31	− 5	−12	+ 4	+20	+34	+26	+53	− 4	+31	0	−0.39
100282	20 20 26.07	+10 48 39.3	8.21	H	305.108 612 27	+10.810 909 16	4.44	−7.80	−12.25	0.86	0.81	1.06	0.99	1.08	+40	−11	− 9	+ 1	+43	+13	+42	+47	+ 5	+50	0	−0.26
100283	20 20 26.19	−06 21 41.4	6.63	G	305.109 143 84	−06.361 513 78	5.41	−82.27	−90.20	0.90	0.55	1.02	1.23	0.72	+29	−23	−14	+21	+18	+16	+22	+39	− 1	+16	0	2.55
*100284	20 20 26.65	+83 59 58.2	9.95	H	305.111 037 32	+83.999 499 82	20.47	145.07	286.99	0.85	0.85	0.93	1.05	1.17	− 1	− 5	− 4	+ 5	+12	− 9	+14	−10	+ 0	+ 3	0	1.44
*100285	20 20 26.54	+03 59 01.3	8.38	H	305.110 567 21	+03.983 691 31	1.13	10.37	2.30	0.92	0.92	1.18	1.25	1.25	+44	− 2	− 9	+31	+29	+32	+33	+71	+ 0	+42	0	0.86
*100286	20 20 26.55	−29 11 27.6	7.72	G	305.110 636 50	−29.190 986 91 C	4.58	−4.32	−0.75	7.87	4.22	1.59	1.54	1.07	+71	+ 0	+ 4	+ 5	+10	− 3	+12	+10	+ 1	+78	12	15.54
*100287	20 20 27.98	+43 51 16.3	6.78	G	305.116 584 14	+43.854 526 38	0.62	−5.36	−2.37	0.50	0.46	0.62	0.58	0.49	− 5	+ 7	− 2	+ 1	+ 4	−32	+ 7	−26	+22	− 6	0	2.06
*100288 H	20 20 27.88	−29 11 50.0	6.56	G	305.116 168 74	−29.197 215 86 A	4.58	−4.32	−0.75	1.44	0.92	1.59	1.54	1.07	+49	−18	+ 9	− 5	+12	− 3	+10	+ 4	+ 1	+78	12	15.54
100289	20 20 28.24	+41 21 51.6	10.63	2 G	305.117 680 74	+41.364 330 66 *	9.25	5.03	−0.45	1.67	1.69	2.23	1.64	1.70	+ 7	+25	+24	+ 5	+ 5	−14	+ 6	−19	+10	+ 2	18	0.97
100290	20 20 28.45	−19 38 49.5	6.93	H	305.118 552 49	−19.647 082 94	5.68	15.47	−41.47	0.89	0.50	0.94	1.10	0.87	+18	−19	−12	−12	+11	+20	+18	+46	−14	+14	0	−0.74
100291	20 20 29.34	+06 47 19.2	11.33	G	305.122 270 31	+06.788 672 15	22.91	−45.09	−19.21	2.34	1.82	2.73	3.19	2.63	+19	− 1	−11	+22	+ 8	+30	+11	+56	+ 3	+22	0	−0.99
100292	20 20 29.49	−30 59 58.7	8.61	H	305.122 881 88	−30.999 631 15	3.55	16.34	−19.59	1.03	0.56	1.26	1.18	0.77	+34	−40	− 4	+ 4	+15	+ 1	+20	+ 1	− 9	+67	0	0.71
100293	20 20 30.42	−39 57 25.9	10.12	H	305.126 763 86	−39.957 199 53	5.18	0.14	9.50	1.42	0.90	1.60	1.96	1.38	+23	−17	−11	+13	+16	+11	+17	+17	+ 4	+39	0	0.56
100294	20 20 30.52	+33 49 04.3	8.42	G	305.127 153 72	+33.817 859 49	6.27	32.02	−5.73	0.61	0.65	0.92	0.69	0.67	−11	− 8	+14	+34	− 3	−24	+ 1	− 1	+ 6	− 7	0	−0.97
100295	20 20 30.64	+53 35 44.5	6.23	H	305.127 660 31	+53.595 689 83	2.00	2.17	−2.02	0.43	0.40	0.46	0.56	0.42	−14	+ 4	+ 3	+13	+ 3	−13	+ 1	− 4	+ 7	−24	0	−1.01
100296	20 20 30.78	+32 01 24.4	7.53	H	305.128 264 73	+32.023 453 31	1.56	1.97	0.59	0.44	0.52	0.79	0.52	0.57	−17	− 1	−13	+ 7	+ 9	−25	+ 6	−25	+33	−20	0	−0.41
100297	20 20 30.95	−02 22 33.2	9.88	H	305.128 976 64	−02.375 894 33	2.50	−27.88	−20.21	1.80	1.16	2.15	3.09	2.34	+15	+ 9	−12	+12	−29	+ 5	−29	+23	−46	− 3	0	0.35
100298 H	20 20 31.84	−47 12 38.9	9.18	H	305.132 662 63	−47.210 799 48 A	13.38	143.97	−26.05	3.53	2.14

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
100201	7.224	0.005	6.883	0.004		0.330	0.007	T	0.38	0.01	L	6.9235	0.0008	0.007	116		6.91	6.94					1 G							S
100202	8.261	0.011	7.852	0.011		0.417	0.015	G	0.48	0.02	H	7.8788	0.0014	0.011	92		7.85	7.90		C			1							S
100203	9.088	0.012	7.842	0.008		1.063	0.011	T	1.03	0.01	L	7.8732	0.0010	0.009	138		7.85	7.89		C			1							
100204	10.462	0.036	8.680	0.015		1.484	0.031	T	1.50	0.05	L	8.6389	0.0023	0.019	93		8.61	8.67					1							
100205	9.607	0.018	8.300	0.011		1.111	0.016	T	1.07	0.02	L	8.3358	0.0016	0.015	127		8.31	8.36					1							
100206	7.885	0.007	7.682	0.007		0.194	0.009	T	0.21	0.01	L	7.7257	0.0015	0.013	146		7.70	7.74		C			1							S
100207	9.280	0.021	8.846	0.021		0.424	0.024	T	0.49	0.03	L	8.8628	0.0024	0.016	65		8.84	8.91		C			1							
100208	8.338	0.011	6.394	0.006		1.648	0.010	T	1.91	0.04	O	6.2924	0.0015	0.010	75		6.28	6.31					1							S
100209	9.404	0.018	8.350	0.012		0.915	0.016	T	0.91	0.01	L	8.4284	0.0014	0.015	96		8.40	8.45					1							
100210	8.886	0.013	8.496	0.014		0.371	0.015	G	0.43	0.02	H	8.5391	0.0021	0.019	87		8.51	8.59		C			1							
100211	7.764	0.006	7.349	0.005		0.392	0.007	T	0.46	0.01	L	7.4085	0.0010	0.011	171		7.39	7.43		C			1							S
100212	8.196	0.009	7.620	0.009	*	0.538	0.012	T	0.61	0.01	L *	7.6829	0.0012	0.010	88	*	7.66	7.69		C	20195+1533	H 1	2 C C	AB	312	0.293	0.045	3.72	0.37	S
100213						1.580	0.027	G	1.55	0.03	J	10.6402	0.0040	0.036	143		10.57	10.69					1							G
100214	8.581	0.010	8.064	0.009		0.486	0.012	T	0.56	0.01	L	8.0427	0.0044	0.058	116		7.98	8.28	4.21	P 1 A			1							
100215	11.290	0.067	10.755	0.066		0.502	0.084	T	0.57	0.09	L	10.9088	0.0039	0.038	132		10.85	10.98					1							G
100216	9.126	0.015	7.835	0.009		1.098	0.014	T	1.06	0.01	L	7.8907	0.0012	0.011	115		7.88	7.91		C			1							S
100217	8.100	0.009	7.621	0.008		0.451	0.011	T	0.52	0.01	L	7.6603	0.0010	0.011	118		7.65	7.68		C			1							S
100218	8.043	0.007	8.052	0.009		−0.004	0.010	T	0.02	0.01	L	8.0683	0.0014	0.012	114		8.05	8.10					1							
100219	12.017	0.167	8.328	0.012		3.310	0.510	G	2.57	0.81	P	8.2579	0.0838	0.835	113		6.95	9.16	460.00	P 1 B	20197+4754	I 2	1 S							P
100220	10.634	0.051	9.537	0.030	A						T *	9.5102	0.0029	0.027	98	*	9.45	9.56		D	20196+2154	I 1	2 C A	AB	119	1.890	0.034	2.73	0.10	
100221	5.655	0.003	5.707	0.003		−0.043	0.007	G	−0.02	0.01	H	5.7055	0.0005	0.006	107		5.70	5.72					1							S
100222	9.417	0.024	8.290	0.016	B	0.970	0.023	T	0.95	0.02	L	8.4059	0.0098			B				D	20196+1300	I 2	1 C I D							D
100223	10.279	0.033	8.877	0.018		1.167	0.011	G	1.30	0.00	A	8.8438	0.0022	0.019	82		8.81	8.87		C			1							
100224	7.816	0.006	7.386	0.006		0.420	0.007	T	0.49	0.01	L	7.4472	0.0007	0.007	127		7.43	7.46					1							S
100225	9.034	0.008	8.266	0.007		0.684	0.008	T	0.74	0.01	L	8.3331	0.0013	0.019	227		8.30	8.37					1							S
100226	9.068	0.021	8.029	0.015	A	0.903	0.020	T	0.90	0.01	L	8.1272	0.0085	0.014	88	A	8.10	8.15		D	20196+1300	I 2	1 C P D							D
100227	9.243	0.017	8.773	0.017		0.456	0.019	T	0.53	0.02	L	8.7754	0.0026	0.063	135		8.74	9.08	2.88	P 1 A	20196+3820	I 1	1 S							
100228	9.015	0.014	8.037	0.011		0.858	0.013	T	0.87	0.01	L	8.0876	0.0018	0.013	89		8.06	8.12					1							S
100229	9.299	0.017	8.142	0.011		0.993	0.016	T	0.97	0.01	L	8.2047	0.0016	0.013	102		8.19	8.22					1 S							
100230	8.882	0.013	7.948	0.010		0.800	0.015	G	0.83	0.01	H	8.0251	0.0012	0.014	115		8.00	8.04		C	20197+4754	I 2	1							S
100231	10.222	0.032	8.516	0.014		1.424	0.028	T	1.41	0.04	L	8.5495	0.0014	0.014	112		8.53	8.57		C			1							
100232	7.451	0.006	6.170	0.004		1.093	0.004	G	1.05	0.00	H	6.2191	0.0007	0.007	95		6.21	6.23		C			1							S
100233	7.904	0.008	7.257	0.007		0.594	0.008	G	0.66	0.01	H	7.3267	0.0009	0.008	111		7.32	7.34					1							S
100234	11.123	0.063	9.032	0.018		1.730	0.052	T	1.76	0.05	L	8.9473	0.0049	0.048	97		8.91	9.06	3.20	P 1 A			1							P
100235	9.706	0.024	9.041	0.021		0.616	0.027	T	0.68	0.02	L	9.1136	0.0020	0.015	84		9.08	9.14		C	20198−0827	I 1	1 S							
100236	10.021	0.025	9.383	0.023		0.587	0.025	T	0.66	0.02	L	9.4505	0.0017	0.016	99		9.41	9.49					1							
100237	7.618	0.005	7.489	0.007		0.125	0.008	T	0.14	0.01	L	7.5246	0.0012	0.010	96		7.51	7.54		C			1							S
100238	10.618	0.038	9.957	0.034		0.603	0.038	T	0.67	0.03	L	9.9951	0.0023	0.027	103		9.95	10.04					1							
100239	6.582	0.003	6.592	0.004		−0.004	0.005	T	0.02	0.01	L	6.6041	0.0007	0.007	141		6.59	6.61		C			1							S
100240	7.727	0.007	7.448	0.006		0.310	0.002	G	0.36	0.00	H	7.4831	0.0010	0.010	137		7.47	7.50		C			1							S
100241	7.546	0.006	7.047	0.007	*	0.462	0.007	G	0.53	0.01	R *	7.0803	0.0011	0.009	120	*	7.07	7.10		D	20198+4522	I 1	2 C A	AB	113	0.525	0.003	0.87	0.01	S
100242	6.590	0.003	6.750	0.004		−0.140	0.004	T	−0.13	0.01	L	6.7371	0.0020	0.020	203		6.70	6.76	6.82	P 1 A			1							S
100243	9.499	0.019	8.758	0.016		0.678	0.020	T	0.74	0.02	L	8.8380	0.0026	0.021	94		8.80	8.87		C			1							
100244	8.869	0.019	8.320	0.018		0.516	0.015	G	0.59	0.02	H	8.3655	0.0010	0.012	100		8.34	8.39					1 G							S
100245											T	9.1300	0.0262	0.157	63		8.63	9.30		D	20199−0215	I 2	S							G
100246	7.902	0.013	7.829	0.012		0.051	0.140	G	0.06	0.01	L	7.8935	0.0014	0.016	63		7.83	7.91		D	20199−0215	I 2	1 S							S
100247	9.098	0.014	7.513	0.007		1.329	0.012	T	1.29	0.01	L	7.5314	0.0011	0.008	103		7.52	7.55		C			1							S
100248	10.104	0.029	9.264	0.023		0.762	0.010	G	0.80	0.01	H	9.2945	0.0024	0.019	113		9.26	9.32					1							
100249	8.111	0.007	8.129	0.009		−0.012	0.010	T	0.01	0.01	L	8.1445	0.0012	0.012	130		8.13	8.16		C			1							
100250	6.374	0.004	6.471	0.004		−0.084	0.005	T	−0.06	0.01	L	6.4666	0.0023	0.021	127		6.42	6.49	8.53	P 1 A			1							S
100251	9.798	0.020	9.122	0.017		0.625	0.022	T	0.69	0.02	L	9.1984	0.0021	0.025	149		9.15	9.24					1							
100252	8.381	0.008	8.244	0.010		0.132	0.012	T	0.15	0.01	L	8.2945	0.0013	0.014	138		8.27	8.32					1							
100253	7.544	0.009	7.271	0.009		0.260	0.012	T	0.29	0.01	L	7.3079	0.0084	0.067	119		7.24	7.49	1.14	P 1 A			1							S
100254	9.060	0.014	8.954	0.017		0.096	0.020	T	0.11	0.02	L	8.9600	0.0022	0.018	127		8.93	8.99		C	20200+3938	I 1	1							
100255	10.016	0.029	9.857	0.039		0.153	0.046	T	0.17	0.05	L	9.9437	0.0027	0.021	102		9.91	9.98		C			1							G
100256	6.321	0.004	5.988	0.004		0.299	0.001	G	0.32	0.03	C	6.0327	0.0007	0.007	72		6.02	6.04		C			1							S
100257	10.960	0.054	10.216	0.042		0.632	0.002	G	0.70	0.00	H	10.2186	0.0028	0.027	131		10.17	10.26		C			1							G
100258	8.779	0.010	8.380	0.011		0.377	0.014	T	0.44	0.01	L	8.4003	0.0019	0.021	137		8.38	8.94	4.01	P 1 A			1							
100259	9.039	0.013	8.356	0.011		0.631	0.014	T	0.70	0.01	L	8.3996	0.0018	0.019	147		8.37	8.43		C			1 O							
120415									−0.16	0.03	L	10.8062	0.0179	0.056	19		10.71	10.92												G
100260	9.790	0.023	8.586	0.015		1.030	0.021	T	1.00	0.02	L	8.6240	0.0019	0.016	82		8.60	8.65		C			1							
100261	7.581	0.011	5.851	0.009		1.472	0.012	T	2.80	0.04	O	5.5486	0.0084	0.072	96		5.46	5.67		U 2			1 S							S
100262	8.438	0.009	6.776	0.006	*	1.389	0.009	T	1.36	0.01	L *	6.7762	0.0009	0.008	109	*	6.76	6.79		C	20202+1128	H 1	2 C B	AB	317	0.497	0.021	3.92	0.11	S
100263	10.149	0.039	9.500	0.036	*	0.595	0.039	T	0.67	0.04	L *	9.3432	0.0020	0.017	110	*	9.31	9.37		D	20202−2750	I 1	2 C A	AB	248	1.113	0.004	0.17	0.01	
100264	8.766	0.013	8.613	0.015		0.147	0.019	T	0.16	0.02	L	8.6531	0.0016	0.013	90		8.63	8.68		C			1							
100265	8.547	0.011	8.048	0.011		0.469	0.014	T	0.54	0.01	L	8.1062	0.0009	0.009	88		8.09	8.12					1							S
100266	7.336	0.006	6.691	0.005	*	0.592	0.006	T	0.66	0.01	L *	6.7507	0.0010	0.009	112	*	6.74	6.77		D	20202−3435	I 1	2 C A	AB	303	0.242	0.005	1.10	0.06	S
100267	9.274	0.011	7.853	0.006		1.200	0.010	T	1.16	0.01	L	7.8894	0.0008	0.010	205		7.87	7.91		C	20202−2908	I 1	1							
100268	6.297	0.005	6.207	0.005	*	0.060	0.042	G	0.04	0.01	L *	6.2445	0.0007	0.006	132	–	6.23	6.26		D	20203+3924	I 1	3 C A							S G
100269	7.443	0.006	6.831	0.005		0.568	0.006	T	0.64	0.01	L	6.8915	0.0008	0.008	96		6.88	6.90		C			1							S
100270	9.673	0.022	8.620	0.016		0.914	0.021	T	0.91	0.01	L	8.6638	0.0014	0.013	90		8.64	8.69		C			1							
100271	11.498	0.079	10.091	0.036		1.081	0.020	G	1.15	0.03	I	10.1417	0.0020	0.022	123		10.08	10.18		D			1 S							G
100272	9.194	0.017	8.797	0.018		0.376	0.023	T	0.44	0.03	L	8.8608	0.0036	0.021	76		8.83	8.89		U			1							
100273	9.593	0.019	8.448	0.013		0.984	0.018	T	0.96	0.01	L	8.4902	0.0016	0.013	116		8.46	8.51					1 X							
100274	7.325	0.008	6.268	0.005		0.926	0.002	G	0.89	0.03	C	6.3322	0.0009	0.006	89		6.32	6.34		C			1							S
100275	9.891	0.016	9.235	0.015		0.621	0.015	G	0.69	0.01	H	9.2698	0.0016	0.024	243		9.23	9.31					1							
100276	7.798	0.008	5.996	0.004		1.500	0.007	T	1.53	0.01	L	5.9444	0.0008	0.008	99		5.93	5.96		C			1							S
100277	9.550	0.014	8.909	0.013		0.595	0.017	T	0.67	0.02	L	8.9865	0.0022	0.024	195		8.95	9.04					1							
100278	9.019	0.016	7.887	0.011		0.989	0.041	G	1.01	0.02	A	7.9278	0.0014	0.009	82		7.91	7.95		C			1							S
100279	10.787	0.056	10.211	0.054		0.621	0.016	G	0.69	0.01	H	10.2739	0.0022	0.020	82		10.23	10.31					1							G
100280	9.338	0.012	8.486	0.010		0.740	0.003	G	0.79	0.00	H	8.5642	0.0017	0.016	147		8.53	8.60					1							
100281	8.920	0.013	7.383	0.007		1.291	0.012	T	1.25	0.01	L	7.4069	0.0009	0.009	85		7.39	7.43					1							S
100282	8.468	0.010	8.236	0.012		0.208	0.002	G	0.23	0.00	H	8.2789	0.0010	0.010	93		8.26	8.30					1							
100283	8.704	0.014	6.832	0.007		1.552	0.004	G	1.56	0.09	H	6.7612	0.0011	0.010	69		6.74	6.78					1							S
100284	11.187	0.059	10.164	0.040		0.891	0.053	T	0.90	0.04	L	10.1053	0.0040	0.029	117		10.06	10.16		R			1							G
100285	8.647	0.013	8.416	0.015		0.265	0.015	G	0.30	0.02	H	8.4554	0.0019	0.013	92		8.44	8.48		C			1							
100286	7.892	0.005	7.664	0.006	C	0.213	0.006	G	0.24	0.01	H	7.7503	0.0016	0.019	199	–	7.70	7.77		D	20205−2911	I 2	1 C F D							S X
100287	7.392	0.006	6.929	0.005		0.461	0.002	G	0.53	0.00	H	6.8898	0.0013	0.010	116		6.87	6.91			20205+4351	I 1	1							S
100288	6.806	0.003	6.651	0.004	A	0.179	0.021	G	0.20	0.02	H	6.6690	0.0007	0.010	200	–	6.65	6.68		D	20205−2911	I 2	2 C P D	AB	44	3.841	0.042	3.41	0.16	S X
100289	11.484	0.081	10.885	0.073		0.760	0.021	G	0.80	0.02	H	10.6185	0.0088	0.082	129		10.47	10.73		U 2			1 V							D
100290	8.567	0.011	7.073	0.006		1.257	0.010	T	1.22	0.01	L	7.0920	0.0011	0.010	111		7.08	7.11					1							S
100291						1.229	0.020	G	1.19	0.02	H	11.4692	0.0069	0.044	66		11.39	11.55		C			1							G
100292	10.385	0.029	8.745	0.013		1.372	0.025	T	1.34	0.03	L	8.7623	0.0017	0.017	151		8.74	8.79		C			1							
100293	10.805	0.048	10.235	0.047		0.537	0.050	T	0.61	0.05	L	10.2371	0.0035	0.027	98		10.19	10.27					1							
100294	8.843	0.010	8.475	0.011		0.350	0.015	G	0.41	0.02	H	8.5108	0.0017	0.016	147		8.48	8.54		C			1							
100295	8.244	0.011	6.383	0.004		1.547	0.009	T	1.61	0.02	L	6.3445	0.0009	0.008	116		6.33	6.36		C	20205+5336	I 1	1							S
100296	7.415	0.005	7.508	0.007		−0.080	0.008	T	−0.06	0.01	L	7.5107	0.0012	0.012	168		7.50	7.53					1							S
100297	10.319	0.044	9.891	0.048		0.404	0.060	T	0.47	0.07	L	9.9679	0.0034	0.025	55		9.92	10.00		C			1							G
100298	9.585	0.052	8.802	0.029	*	0.695	0.046	T	0.75	0.04	L *	9.3079	0.0027	0.019	75	*	9.27	9.33		D	20205−4713	I 1	2 C A	AB	40	1.641	0.006	0.05	0.02	
100299	11.805	0.115	10.404	0.051		1.184	0.099	T	1.14	0.09	L	10.4919	0.0027	0.028	101		10.44	10.54		C			1 S							G
100300	8.361	0.012	6.455	0.006		1.617	0.011	T	1.83	0.04	O	6.3655	0.0025	0.019	95		6.33	6.39		U 2			1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
100301	20 20 33.63	+82 50 51.1	8.30		H	305.140 123 97	+82.847 517 09		5.65	9.82	9.98	0.59	0.57	0.64	0.66	0.69	+ 8	−10	− 9	+ 3	− 4	− 5	− 4	− 2	− 2	+16	0	0.39
100302	20 20 34.86	−62 10 41.3	10.08		H	305.145 257 46	−62.178 139 29		0.65	−1.34	−17.06	1.07	0.97	1.53	1.11	1.31	+13	−19	− 5	+22	− 9	− 2	−13	−14	+ 9	+13	0	−0.09
100303	20 20 35.84	−79 04 16.0	8.47		H	305.149 316 23	−79.071 114 86		10.02	3.70	−73.28	0.62	0.59	0.85	0.72	0.65	− 6	−20	− 6	− 3	+10	− 3	+10	−17	− 7	−15	0	−1.79
100304	20 20 36.05	+08 27 34.5	11.41		G																								
100305	20 20 38.24	−58 43 46.1	7.21		G	305.159 318 47	−58.729 486 07		10.39	23.11	−9.63	0.60	0.54	0.86	0.80	0.60	+ 9	−17	− 4	−35	+ 2	+ 3	+ 1	−37	+ 8	−36	0	0.10
100306	20 20 38.62	+10 45 14.6	8.71		H	305.160 936 66	+10.754 057 24		5.09	−2.97	−2.12	1.06	1.07	1.25	1.28	1.43	+52	− 6	+ 2	+21	+55	+17	+54	+62	+12	+61	0	−0.57
100307	20 20 39.07	+35 15 08.2	7.98		H	305.162 795 37	+35.252 286 65		2.07	1.72	−2.08	0.46	0.55	0.71	0.49	0.53	− 9	+ 4	+13	+ 7	− 4	− 8	− 2	−24	+ 7	−10	0	−0.32
100308	20 20 39.19	+43 07 37.3	8.96	2	H	305.163 308 00	+43.127 015 39		1.30	−6.22	−9.66	0.73	0.78	0.94	0.82	0.95	+ 4	− 7	− 1	−20	− 4	−12	− 4	−37	+31	+12	0	−1.83
100309	20 20 39.23	+16 00 55.6	7.95		H	305.163 475 98	+16.015 446 69		12.20	67.32	26.51	0.72	0.81	0.99	0.85	1.06	+28	−14	−13	+ 9	+25	+10	+29	+47	+ 2	+24	2	2.03
100310	20 20 39.81	−12 45 32.6	4.77		H	305.165 861 45	−12.759 044 03		11.98	15.71	−14.63	0.78	0.47	0.97	0.96	0.61	+13	−23	−33	−22	− 8	+50	+15	+ 7	+27	−18	− 1	0	1.93
100311	20 20 40.69	−26 08 55.9	7.89		H	305.169 548 68	−26.148 872 36		2.23	−20.28	−7.74	0.89	0.53	1.05	1.13	0.97	+24	−23	−15	−11	− 8	+23	− 6	+15	−22	+27	0	0.49
100312	20 20 41.86	−05 32 00.3	8.69		H	305.174 398 12	−05.533 405 84		3.77	2.65	−3.65	1.22	0.84	1.30	1.65	1.33	+34	−13	−16	+16	+19	+18	+30	+56	+ 7	+20	0	1.36
100313	20 20 42.11	+22 16 36.4	7.07		H	305.175 457 76	+22.276 786 20		3.00	1.70	−4.59	0.52	0.45	0.78	0.60	0.57	−12	− 6	− 7	+14	−14	+12	−10	+ 0	+10	+23	0	2.35
*100314	20 20 42.32	+66 41 37.5	9.29		H	305.176 319 93	+66.693 753 07		2.78	3.23	−10.81	0.77	0.69	0.83	0.95	0.73	+ 3	−26	+13	+ 7	+12	+30	+ 8	+ 4	+10	+26	0	−1.07
*100315	20 20 42.26	−27 02 51.7	9.27		H	305.176 070 88	−27.047 690 77		6.54	−40.93	−155.07	1.25	0.75	1.55	1.69	1.33	+16	−11	−30	+11	−24	+31	−19	+22	−32	+ 6	0	−0.97
100316	20 20 42.32	+27 45 42.5	7.75		H	305.176 335 99	+27.761 792 49		7.10	8.94	−5.06	0.38	0.47	0.86	0.42	0.46	−25	− 3	+13	−22	− 8	+ 1	− 5	−18	− 2	−44	1	−1.06
100317	20 20 42.37	−47 01 11.1	9.76		H	305.176 540 83	−47.019 748 56		5.27	15.79	4.00	1.35	0.86	1.43	1.86	1.43	− 5	−31	− 1	+ 4	− 9	− 1	− 8	+ 2	− 2	− 5	0	−0.11
100318	20 20 42.68	−66 28 15.4	8.36		H	305.177 852 39	−66.470 955 79		4.27	−2.02	14.73	0.81	0.79	1.15	0.94	0.95	+ 2	−20	− 5	+37	+ 5	−16	− 1	+ 3	+ 2	−16	0	−0.21
100319	20 20 42.84	+42 34 18.9	8.64		H	305.178 498 92	+42.571 906 07		2.44	5.81	0.81	0.63	0.69	0.87	0.69	0.74	+ 7	−13	+15	− 7	− 4	− 9	− 5	−25	+29	+14	0	−1.14
100320	20 20 43.32	+01 23 19.0	8.18		G	305.180 494 58	+01.388 597 32		2.76	4.06	−10.57	1.20	1.07	1.26	1.61	1.52	+46	−14	+ 9	+68	+41	+12	+36	+82	+13	+50	0	−0.69
100321	20 20 43.67	+82 22 05.4	7.03		H	305.181 943 42	+82.368 154 07		18.38	9.76	−43.89	0.54	0.49	0.57	0.64	0.60	+ 6	−20	− 3	−10	+ 5	− 5	+ 6	− 9	−10	+19	0	−1.03
100322	20 20 45.14	−24 47 53.1	8.04		H	305.188 095 37	−24.798 073 04		2.38	2.98	−1.47	1.02	0.59	1.13	1.54	1.30	+ 8	+ 5	+ 8	+28	+ 2	+26	−12	+39	−12	+26	0	−0.35
100323	20 20 45.59	+37 03 43.7	9.18		H	305.189 962 37	+37.062 145 07		2.11	11.25	10.32	0.76	0.86	1.09	0.86	0.92	−11	+ 5	+21	− 1	+ 1	− 7	+ 3	−27	− 5	−11	3	1.37
100324 H	20 20 46.03	−27 20 13.0	8.69		H	305.191 771 95	−27.336 950 86	A	0.98	18.91	−2.21	2.54	1.53	2.79	3.35	2.80	+22	−18	−28	+ 8	+ 4	+ 8	+ 0	+39	−24	+44	1	0.85
100325 H	20 20 46.52	−14 47 05.6	6.09		G	305.193 844 49	−14.784 893 27	B	10.40	42.64	0.37	1.04	0.65	1.04	1.12	0.98	+38	+11	−14	−30	+18	− 6	+10	+33	−22	+46	2	0.42
100326 H	20 20 47.27	−07 44 38.3	8.15		H	305.196 944 33	−07.743 982 01	A	3.47	6.28	−3.39	2.01	1.29	1.97	2.26	1.75	+23	− 6	−12	+ 3	+12	+15	+16	+20	−11	+42	1	0.99
100327	20 20 48.02	−34 46 35.8	9.21		H	305.200 074 83	−34.776 624 53		3.11	−15.21	−13.16	1.15	0.69	1.33	1.53	1.06	+ 8	− 3	−25	−27	+15	− 5	+13	+12	−12	+22	0	1.42
100328	20 20 48.34	+38 15 23.2	7.64		H	305.201 410 22	+38.256 442 13		3.92	4.65	1.12	0.49	0.52	0.66	0.55	0.53	−12	− 3	+11	+11	− 1	−14	+ 1	−11	+14	− 9	0	2.07
100329	20 20 48.83	+16 54 34.9	9.70		H	305.203 476 30	+16.909 693 03		4.73	8.34	−7.37	1.09	1.12	1.49	1.40	1.26	+33	−20	−31	+20	+33	− 6	+30	+34	+ 2	+28	2	1.53
100330	20 20 49.51	−46 25 27.5	9.89		H	305.206 301 01	−46.424 295 29		11.58	21.09	−88.89	1.48	1.01	1.68	2.18	1.62	+12	−34	− 4	+25	− 5	−13	− 5	+ 6	− 2	+12	0	1.06
100331	20 20 49.99	−43 36 14.5	9.89		H	305.208 303 73	−43.604 036 79		3.22	−7.89	−36.47	1.44	0.93	1.67	2.19	1.26	− 3	−14	−17	+10	+ 8	−26	+ 3	+11	+ 3	+ 5	0	0.78
100332	20 20 51.87	−35 40 25.4	6.46		G	305.216 128 05	−35.673 722 99		7.35	36.35	19.26	0.80	0.44	0.88	0.92	0.62	+ 6	+ 7	− 8	−38	+12	−18	+ 3	− 4	− 9	+41	0	1.07
100333	20 20 53.49	−59 02 08.4	7.88		H	305.222 867 07	−59.035 664 98		6.48	8.41	−27.64	0.68	0.60	0.93	0.81	0.62	+12	−18	−12	−42	+ 3	+ 9	+ 3	−43	+ 1	−21	3	1.93
100334	20 20 53.52	−18 09 22.0	7.80		H	305.223 013 20	−18.156 109 80		12.17	56.25	−35.48	1.01	0.56	1.28	1.13	1.01	+16	− 8	−20	−14	− 9	+15	− 7	+27	−50	+11	0	0.30
100335	20 20 53.78	−37 42 52.3	8.72		H	305.224 079 20	−37.714 525 63		6.77	−43.86	−50.68	1.05	0.60	1.18	1.17	0.90	+ 8	−40	+14	+16	+16	+10	+20	+18	−10	+39	0	−0.51
100336	20 20 53.99	−45 32 43.1	7.32		H	305.224 947 92	−45.545 307 37		13.97	20.29	−70.95	0.86	0.53	0.92	1.22	0.66	+10	−29	−16	+17	+22	− 7	+18	+12	+ 2	+10	0	1.91
100337	20 20 55.15	−16 49 47.1	7.72		H	305.229 803 58	−16.829 760 43		3.85	25.80	−24.02	0.98	0.60	1.04	1.22	1.11	+22	− 6	+ 6	−21	+18	+20	+11	+34	− 7	+39	4	−2.43
100338	20 20 55.33	−13 40 42.6	11.98		G	305.230 553 58	−13.678 486 75		15.63	−76.11	−203.39	3.35	2.01	4.00	4.41	3.16	+23	+ 6	+10	+11	+18	+43	+12	+36	+ 4	+35	4	1.74
100339	20 20 56.33	−31 09 50.5	10.18		H	305.234 697 01	−31.164 038 17		3.04	12.02	−20.42	1.53	0.86	1.80	1.69	1.12	+45	−48	−17	+15	+27	+ 8	+26	+16	+ 2	+67	3	−0.60
100340	20 20 57.30	+00 05 38.5	8.69		G	305.238 753 71	+00.094 039 00		3.73	19.61	−2.21	1.04	0.81	1.47	1.53	1.17	+15	+ 4	−40	+43	−23	+34	−14	+54	−35	+ 4	0	−0.15
100341 H	20 20 57.88	+44 36 29.7	8.87		H	305.241 178 84	+44.608 237 35	A	20.44	−157.02	41.08	2.33	2.92	1.87	2.14	1.94	−20	−12	+12	+ 0	+ 4	− 3	− 1	−10	− 4	−15	1	−0.58
100342	20 20 59.33	−15 25 42.9	7.76		H	305.247 201 85	−15.428 588 12		5.49	11.43	−12.89	1.01	0.55	1.18	1.17	1.00	+21	−23	−12	−13	− 3	+10	+ 4	+28	−38	+18	4	0.27
100343	20 20 59.47	+27 24 46.3	8.17		H	305.247 771 64	+27.412 868 20		1.74	−2.62	−0.98	0.47	0.56	1.03	0.47	0.51	−27	−15	+18	−20	− 8	− 1	− 7	−21	+ 6	−42	0	−0.58
100344	20 20 59.51	+14 36 36.8	9.08		H	305.247 959 95	+14.610 210 44		1.55	5.86	−3.02	1.05	1.05	1.36	1.24	1.37	+39	−24	−24	+11	+28	− 4	+30	+50	−15	+39	0	1.10
100345	20 21 00.65	−14 46 53.0	3.05		H	305.252 693 47	−14.781 401 19	+	9.48	48.42	14.00	1.34	1.47	0.95	1.80	1.49	+65	− 6	+ 2	+66	+74	+25	+53	+82	+ 6	+73	4	1.45
100346	20 21 01.08	+21 31 03.2	7.87		H	305.254 496 52	+21.517 560 20		2.85	−7.70	−18.64	0.75	0.58	0.97	0.93	0.71	−22	−11	−15	− 4	+ 8	+ 7	+ 8	− 3	+ 3	− 3	0	0.68
100347	20 21 01.13	−10 58 57.9	6.83		H	305.254 707 46	−10.982 759 25		3.32	5.27	5.35	0.87	0.47	0.90	0.99	0.61	− 3	− 1	−13	−18	+15	+26	+17	+16	+ 1	+11	0	1.90
100348	20 21 01.23	−18 19 26.1	7.27		H	305.255 109 36	−18.323 905 48		1.99	5.96	−13.62	0.93	0.52	1.05	1.05	0.87	+15	− 6	− 6	−18	+ 0	+13	− 4	+28	−29	+21	0	−0.69
100349	20 21 02.19	−50 01 01.7	7.30		H	305.259 131 20	−50.017 132 00		6.74	23.88	−19.90	0.88	0.57	0.95	1.34	0.95	− 9	−14	− 9	+24	−10	− 3	−13	+17	+10	−21	0	0.99
100350	20 21 06.34	+25 37 47.7	8.56		H	305.276 410 73	+25.629 928 15		2.83	−2.43	−33.61	0.77	0.74	1.01	0.89	0.85	+ 6	− 8	−19	+34	− 8	−17	− 4	− 4	− 1	+26	1	1.50
100351	20 21 07.54	+39 01 53.7	7.75		G	305.281 429 72	+39.031 593 98		0.56	−2.91	−7.88	0.54	0.56	0.73	0.57	0.57	− 7	− 7	+ 7	+12	+12	− 1	+12	−10	+16	+ 2	1	−0.97
100352	20 21 08.81	−06 21 19.4	7.62		H	305.286 696 01	−06.355 399 85		7.61	3.33	−92.17	1.07	0.68	1.21	1.53	0.95	+28	−28	−30	+15	+17	−14	+17	+37	− 1	+ 7	0	1.88
100353	20 21 10.24	+12 50 34.8	8.12		H	305.292 648 68	+12.843 010 27		1.73	1.39	−10.69	0.76	0.63	0.94	0.96	0.78	+ 8	−17	−14	+12	+12	+14	+14	+37	+ 0	+ 4	0	−0.94
100354	20 21 10.67	+27 31 01.8	8.64	1	H	305.294 452 32	+27.517 172 19		2.99	0.47	−7.15	0.49	0.59	1.10	0.53	0.58	−30	−12	+13	−13	−15	+13	−13	− 7	− 8	−48	0	−0.04
100355	20 21 10.69	+02 49 05.8	10.18		H	305.294 547 74	+02.818 269 61		1.33	5.10	−23.75	1.62	1.44	2.22	2.34	2.06	+32	+16	−22	+51	+12	+50	+22	+71	−20	+22	2	0.50
100356 H	20 21 10.95	−51 47 28.6	10.21		H	305.295 641 38	−51.791 290 12	*	43.57	−40.15	93.92	3.98	2.85	2.85	3.52	3.44	+ 3	−20	−14	+14	+ 3	−15	+ 4	− 9	− 1	+48	1	0.07
100357	20 21 11.52	+63 58 48.3	5.69	1	G	305.297 986 54	+63.980 087 27		4.45	6.14	14.52	0.47	0.47	0.51	0.40	0.42	−21	+ 2	+20	−37	+26	+ 9	+26	−35	+17	+ 4	0	1.63
100358	20 21 12.12	−32 44 21.5	7.68		H	305.300 484 60	−32.739 307 05		10.31	−1.94	−50.76	0.80	0.49	0.94	0.95	0.69	+27	−14	−10	−17	+ 9	+20	+10	+ 3	+ 6	+47	0	−0.83
100359	20 21 12.81	−81 36 55.8	8.65		H	305.303 378 99	−81.615 503 81		13.91	106.98	−172.31	0.61	0.62	0.80	0.69	0.73	+ 6	−26	−13	− 5	+ 5	+ 8	− 5	−21	− 6	−15	1	−0.30
100360	20 21 14.01	+43 35 21.2	7.86		G	305.308 388 29	+43.589 227 46		4.57	6.42	1.26	0.61	0.57	0.74	0.74	0.62	+ 6	+ 1	+ 5	− 8	−11	−16	− 8	−19	+15	+13	1	0.69
100361	20 21 14.12	+52 24 38.0	7.61		H	305.308 842 59	+52.410 566 60		2.06	2.45	−8.70	0.56	0.54	0.62	0.69	0.64	−17	−19	+ 5	+18	− 1	− 6	− 4	+16	+11	−25	0	−0.29
100362	20 21 14.34	−73 58 38.9	7.82		H	305.309 738 82	−73.977 477 00		3.90	12.28	−10.41	0.60	0.64	0.88	0.71	0.72	−14	−19	+ 3	+ 2	+18	−14	+19	−25	− 8	−12	0	−1.07
100363	20 21 15.28	+28 06 26.0	8.50		G	305.313 666 50	+28.107 234 99		14.02	−75.14	−163.79	0.53	0.66	1.10	0.57	0.63	−23	− 8	+13	−23	− 3	−10	− 1	−32	+ 6	−34	2	−1.43
*100364	20 21 15.49	+43 35 15.8	8.40		H																								
*100365	20 21 15.48	+15 06 15.5	6.59		H	305.314 490 51	+15.104 316 88		8.23	7.75	−12.76	0.62	0.56	0.83	0.77	0.72	+12	−31	−27	+23	− 2	− 3	+ 3	+35	−16	− 5	0	−0.12
100366	20 21 15.82	+39 36 36.5	8.63		H	305.315 920 49	+39.610 131 12		9.48	−7.57	−8.54	0.62	0.67	0.84	0.67	0.73	+ 2	−14	− 5	+ 5	+ 8	− 4	+ 6	− 2	+16	+16	0	−0.99
100367	20 21 17.37	+35 53 01.6	8.48		H	305.322 368 55	+35.883 774 46		3.73	−19.29	−26.82	0.62	0.67	0.90	0.71	0.65	−11	+ 4	+15	+16	− 8	−14	− 4	−18	+ 1	−11	0	1.84
100368	20 21 17.68	−55 46 03.5	9.14		H	305.323 683 31	−55.767 652 20		4.70	7.05	−0.33	1.05	0.79	1.31	1.19	1.13	+17	−46	+ 1	−19	+12	+ 5	+22	−13	−22	+26	0	1.20
*100369 H	20 21 19.55	+30 36 03.5	8.52		H	305.331 457 73	+30.600 983 52	*	3.47	8.05	10.32	1.13	1.30	1.26	0.79	0.98	−15	− 6	+ 3	+13	+ 2	−22	+ 6	−10	+ 5	+ 5	0	0.51
*100370	20 21 19.53	+03 33 57.2	11.03		H	305.331 395 23	+03.565 886 11		−1.29	10.33	3.93	1.69	1.47	2.25	2.22	2.09	+28	+ 8	−15	+22	+10	+36	+14	+54	− 1	+32	0	0.76
100371	20 21 19.90	+30 12 16.9	8.08		H	305.332 905 36	+30.204 704 23		2.30	0.00	0.97	0.45	0.59	0.87	0.50	0.61	−10	+ 9	− 4	+21	+ 2	− 4	+ 5	− 7	+ 5	+ 1	1	0.36
100372	20 21 21.46	+63 25 53.9	6.94	1	H	305.339 420 91	+63.431 650 68		2.58	14.08	17.78	0.52	0.55	0.59	0.46	0.48	−13	+ 7	+16	−32	+13	+ 1	+18	−42	+15	+10	1	1.27
100373	20 21 23.54	−17 12 32.9	8.91		H	305.348 069 42	−17.209 148 25		−1.96	−7.35	−21.56	1.22	0.69	1.47	1.54	1.24	+26	+13	+ 9	−22	+ 1	+11	− 4	+19	−38	+18	2	0.23
100374	20 21 23.69	+23 15 21.5	10.74		G	305.348 716 98	+23.255 980 83		13.73	−183.29	−193.15	1.37	1.26	1.86	1.73	1.66	+13	−14	−10	+ 8	−30	+ 2	−19	−27	+ 4	+45	0	1.33
100375	20 21 24.13	−02 00 47.3	8.84		H	305.350 525 68	−02.013 140 05		7.93	−16.12	−10.07	1.25	0.83	1.58	1.94	1.42	− 3	+ 6	−21	+13	−24	+25	−20	+29	−45	−20	0	1.00
100376	20 21 24.21	−22 46 46.7	9.46		H	305.350 885 94	−22.779 648 61		9.53	43.59	10.74	1.15	0.72	1.43	1.43	1.29	+16	− 7	−28	+20	− 6	+23	− 3	+43	−40	+13	0	1.40
100377	20 21 24.25	+30 51 51.4	7.64	2	G	305.351 037 57	+30.864 277 35		1.24	−7.01	−10.72	0.50	0.63	0.84	0.61	0.65	−13	+ 2	−11	−12	+ 5	− 2	+ 6	−28	+11	− 2	0	−0.75
100378	20 21 26.51	−20 27 55.8	10.41		H	305.360 444 76	−20.465 497 40		2.04	−1.66	−8.85	1.87	1.05	2.04	2.16	1.62	+11	− 5	− 6	−18	+ 8	+34	+10	+33	+10	+19	2	−0.89
100379	20 21 28.46	−66 44 58.9	6.49		H	305.368 588 07	−66.749 697 42		22.72	−140.22	3.15	0.54	0.51	0.76	0.63	0.65	− 2	−15	− 1	+26	− 1	−16	− 4	− 8	−11	−13	1	−0.22
100380	20 21 28.92	+64 41 35.3	7.59		H	305.370 509 57	+64.693 139 20		3.51	−13.97	−1.44	0.53	0.56	0.63	0.47	0.52	+ 2	+10	+25	−15	+17	+ 7	+17	−11	+ 7	+20	1	0.37
100381	20 21 29.05	+19 39 43.3	7.66	1	H	305.371 039 74	+19.662 039 02		2.02	1.96	−7.77	0.80	0.68	1.03	1.08	0.77	+12	+11	−14	+ 5	+21	−11	+18	+ 0	+ 4	+24	0	0.69
100382	20 21 29.31	+09 26 08.7	10.67		H	305.372 120 94	+09.435 737 29		0.54	1.10	−4.46	1.64	1.46	1.95	2.09	2.01	+44	−22	−25	+30	+19	+ 5	+21	+49	−14	+45	2	0.08
100383	20 21 29.54	+12 09 35.7	11.46	2	H	305.373 097 28	+12.159 919 91		−0.62	−3.17	−2.44	1.84	1.70	2.41	2.25	2.22	+27	−14	−14	+ 0	+28	+16	+29	+32	+ 3	+37	0	−1.55
100384	20 21 29.55	+30 35 24.8	6.77		H	305.373 139 60	+30.590 218 44		8.48	11.43	21.65	0.38	0.45	0.64	0.43	0.48	−14	+ 7	− 3	+18	+ 1	− 5	+ 4	−12	+10	− 3	0	−0.44
100385	20 21 29.67	−10 08 39.1	7.30		G	305.373 616 01	−10.144 189 91		5.74	10.91	−9.08	0.95	0.53	1.02	1.33	0.61	+10	−20	−19	+11	+13	+20	+14	+11	+ 5	+ 5	0	2.26
100386	20 21 29.96	−23 28 33.7	7.75		H	305.374 853 45	−23.476 018 33		4.40	−4.35	24.31	0.88	0.55	1.11	1.15	1.14	+27	−17	−21	+ 5	− 1	− 3	− 1	+27	−45	+34	0	0.29
100387	20 21 30.18	+53 06 46.6	8.47		H	305.375 766 89	+53.112 947 86		1.58	3.61	1.85	0.60	0.56	0.65	0.76	0.60	−12	− 9	+ 6	+18	+ 1	+ 3	− 1	+ 0	+11	−13	0	−1.40
100388	20 21 30.98	−32 24 16.2	9.85		H	305.379 097 54	−32.404 492 03		5.17	63.44	−57.70	1.33	0.83	1.63	1.56	1.02	+36	−27	−27	+ 4	+ 7	+17	+12	+ 0	+ 8	+50	2	0.20
120155	20 21 31.73	+36 55 12.8	9.72		H	305.382 211 91	+36.920 228 27		−0.79	−4.19	−5.16	0.88	1.05	1.29	1.03	1.07	− 7	− 2	+ 8	−10	+ 2	−11	+ 2	−29	− 8	−11	2	−1.03
100389	20 21 31.77	−73 29 07.1	8.88	2	H	305.382 366 94	−73.485 303 44		2.51	10.40	−5.88	0.76	0.82	1.12	0.84	0.96	−13	−18	+ 3	− 8	+ 6	− 4	+ 7	−12	− 5	−14	0	−0.14
100390	20 21 32.05	+22 50 56.0	6.55		H	305.383 521 61	+22.848 885 01		1.53	2.64	−13.59	0.52	0.46	0.78	0.57	0.56	− 2	− 9	− 4	+18	−17	+ 7	−11	− 4	+ 7	+34	0	0.49
*100391	20 21 32.73	+39 49 45.6	8.92	2	G	305.386 357 62	+39.829 342 38	A	3.37	−3.84	−4.24	1.37	1.55	1.68	1.43	1.58	+ 3	− 8	− 2	+ 9	+ 8	+ 0	+ 7	+ 8	+ 3	+15	4	1.86
*100392	20 21 32.60	+50 48 53.7	9.30		H	305.385 827 40	+50.814 917 81		2.44	−1.05	−3.18	0.78	0.73	0.88	0.85	0.83	− 2	−25	− 6	+ 2	+13	−11	+10	+ 5	+ 8	+ 1	2	−1.10
*100393	20 21 32.68	−19 04 31.3	9.06		H	305.386 159 38	−19.075 364 71		3.98	−3.66	−11.77	1.19	0.66	1.26	1.69	1.18	+ 9	−16	−12	+ 3	− 2	+14	+ 6	+43	−18	− 4	0	−0.92
100394	20 21 32.88	−21 25 07.2	7.79		H	305.387 001 07	−21.418 672 75		9.82	−148.41	−121.30	0.97	0.51	1.00	1.13	0.84	+ 9	−17	− 8	−23	+15	+36	+22	+39	+ 3	+12	0	0.60
100395	20 21 34.78	−44 59 12.0	9.21		G	305.394 898 68	−44.986 677 53		5.52	−9.37	−43.69	1.22	0.79	1.37	1.58	1.03	+20	−33	−32	+27	+13	− 3	+15	+19	− 9	+ 9	0	−0.52
100396	20 21 35.50	−67 18 46.4	6.91		G	305.397 912 16	−67.312 881 80		18.84	110.64	16.92	0.38	0.50	0.74	0.43	0.65	−29	− 8	− 3	−10	− 5	− 9	− 7	+ 3	+11	−34	0	−0.13
100397 H	20 21 35.69	+19 29 40.1	8.34		H	305.398 704 45	+19.494 473 34	A	4.55	9.30	3.51

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
100301	8.411	0.009	8.295	0.011		0.112	0.013	T	0.13	0.01	L	8.3396	0.0020	0.015	123		8.32	8.37				1							S
100302	10.460	0.033	10.105	0.036		0.337	0.046	T	0.39	0.06	L	10.1629	0.0031	0.032	121		10.12	10.23				1							
100303	9.067	0.011	8.517	0.010		0.505	0.013	G	0.58	0.01	H	8.5788	0.0018	0.019	160		8.55	8.61				1							
100304						1.412	0.020	G	1.54	0.15	K											S							G
100305	7.438	0.005	7.235	0.006		0.177	0.002	G	0.19	0.00	H	7.2700	0.0012	0.011	148		7.25	7.29			20206−5844	I 1	1						S
100306	8.994	0.015	8.751	0.016		0.232	0.021	T	0.26	0.03	L	8.7820	0.0018	0.016	95		8.75	8.81					1						S
100307	7.879	0.007	7.958	0.009		−0.070	0.015	G	−0.05	0.01	H	7.9613	0.0012	0.014	173		7.93	7.99					1						
100308	9.337	0.014	9.014	0.015		0.307	0.019	T	0.35	0.03	L	9.0339	0.0105	0.076	112		8.94	9.15	0.83	P 1 A			1						
100309	8.427	0.011	7.984	0.012		0.423	0.003	G	0.49	0.00	H	8.0407	0.0012	0.009	85		8.02	8.06		C			1	S					S
100310	4.705	0.002	4.750	0.002		−0.047	0.005	G	−0.06	0.02	A	4.7498	0.0005	0.004	83		4.74	4.76		C	20207−1246	I 1	1						S
100311	9.461	0.018	8.029	0.010		1.208	0.016	T	1.17	0.02	L	8.0503	0.0011	0.009	104		8.03	8.07		C			1						
100312	10.195	0.035	8.822	0.019		1.162	0.031	T	1.12	0.03	L	8.8571	0.0018	0.014	69		8.82	8.88					1						
100313	6.974	0.005	7.054	0.006		−0.068	0.007	T	−0.05	0.01	L	7.0551	0.0010	0.008	131		7.04	7.07					1						S
100314	9.457	0.017	9.311	0.020		0.140	0.025	T	0.15	0.03	L	9.3423	0.0023	0.018	119		9.31	9.37					1						
100315	10.204	0.039	9.364	0.030		0.810	0.020	G	0.84	0.01	H	9.4205	0.0019	0.015	91		9.40	9.45					1						
100316	7.927	0.004	7.771	0.005		0.150	0.006	T	0.17	0.01	L	7.8029	0.0009	0.014	334		7.78	7.82					1						S
100317	10.210	0.031	9.791	0.033		0.409	0.037	T	0.48	0.04	L	9.8558	0.0025	0.021	77		9.81	9.89		C			1						
100318	8.691	0.010	8.387	0.011		0.289	0.014	T	0.33	0.02	L	8.4379	0.0019	0.019	112		8.40	8.47					1						S
100319	8.605	0.010	8.617	0.013		−0.030	0.015	G	−0.01	0.01	H	8.6425	0.0018	0.014	109		8.62	8.67					1						
100320	8.218	0.010	8.176	0.012		0.033	0.002	G	0.05	0.00	H	8.1983	0.0009	0.008	79		8.18	8.21		D			1						S
100321	7.573	0.007	7.085	0.007		0.459	0.009	T	0.53	0.01	L	7.1341	0.0011	0.010	119		7.12	7.15					1						S
100322	9.600	0.021	8.153	0.012		1.229	0.020	G	1.19	0.02	H	8.1993	0.0014	0.010	92		8.18	8.22		C			1						
100323	10.562	0.041	9.263	0.022		1.104	0.036	T	1.07	0.04	L	9.3509	0.0022	0.023	136		9.31	9.38					1						
100324	8.879	0.025	8.452	0.022	*	0.403	0.030	T	0.47	0.03	L	*	8.7808	0.0026	0.019	81	*	8.75	8.81		R	20208−2720	I 1	2	C	A	AB	53	2.241	0.006	0.75	0.02	S
100325	6.065	0.004	6.084	0.006	*	−0.016	0.003	G	0.01	0.00	H	*	6.0919	0.0009	0.005	84	*	6.08	6.10		D	20210−1447	I 2	2	C	A	BC	75	0.680	0.013	2.98	0.05	S
100326	8.939	0.025	8.102	0.015	*	0.753	0.022	T	0.80	0.02	L	*	8.2897	0.0013	0.011	80	*	8.27	8.31		D	20208−0745	I 1	2	C	A	AB	216	2.780	0.006	0.85	0.02	S
100327	9.781	0.023	9.228	0.022		0.524	0.024	T	0.60	0.03	L		9.3209	0.0023	0.016	102		9.29	9.35					1						
100328	7.533	0.006	7.627	0.007		−0.070	0.008	G	−0.05	0.01	H		7.6184	0.0012	0.014	145		7.60	7.64					1						S
100329	10.147	0.034	9.752	0.036		0.374	0.046	T	0.44	0.05	L		9.7892	0.0043	0.025	82		9.74	9.83					1						G
100330	10.829	0.052	9.920	0.036		0.760	0.020	G	0.80	0.02	H		10.0271	0.0040	0.027	82		9.99	10.07		C			1						
100331	10.579	0.040	9.926	0.036		0.597	0.040	T	0.67	0.04	L		10.0163	0.0045	0.029	86		9.97	10.08		C			1						
100332	8.190	0.009	6.619	0.005		1.311	0.001	G	1.27	0.00	H		6.6184	0.0009	0.008	113		6.61	6.63		C			1						S
100333	7.895	0.006	7.876	0.008		0.018	0.009	T	0.04	0.01	L		7.8894	0.0014	0.014	138		7.87	7.91					1						S
100334	8.404	0.012	7.871	0.012		0.523	0.015	G	0.60	0.02	H		7.9133	0.0012	0.011	95		7.90	7.93		C			1						S
100335	9.242	0.016	8.781	0.016		0.448	0.018	T	0.52	0.02	L		8.8212	0.0020	0.018	99		8.79	8.86		C			1						
100336	7.954	0.009	7.383	0.009		0.519	0.015	G	0.59	0.02	A		7.4376	0.0016	0.010	87		7.42	7.46			20209−4533	I 1	1	S					S
100337	8.974	0.016	7.839	0.011		0.976	0.015	T	0.96	0.01	L		7.8815	0.0015	0.013	95		7.86	7.91					1						S
100338						1.046	0.021	G	1.10	0.03	I		12.1473	0.0071	0.071	75		11.87	12.25					1						G
100339	11.022	0.048	10.253	0.040		0.700	0.049	T	0.76	0.04	L		10.3245	0.0023	0.028	137		10.28	10.38					1						G
100340	9.102	0.014	8.706	0.014		0.370	0.015	G	0.43	0.02	H		8.7649	0.0019	0.015	104		8.74	8.79		C			1						
100341	9.996	0.026	9.010	0.018	*	0.864	0.024	T	0.88	0.02	L	*	9.0239	0.0023	0.017	130	*	9.00	9.06		D	20210+4437	I 1	2	C	A	AB	350	0.364	0.005	0.76	0.04	
100342	9.152	0.017	7.869	0.011		1.092	0.016	T	1.05	0.02	L		7.9298	0.0011	0.011	91		7.91	7.95		C			1						
100343	10.133	0.015	8.334	0.006		1.498	0.013	T	1.52	0.02	L		8.2948	0.0011	0.019	310		8.26	8.33					1	S					
100344	10.541	0.046	9.172	0.024		1.159	0.041	T	1.12	0.04	L		9.2437	0.0021	0.019	86		9.22	9.28					1						
100345	4.041	0.003	3.169	0.002		0.790	0.040	G	0.90	0.02	A		3.2104	0.0005	0.004	85		3.20	3.22			20210−1447	I 2	1	O					S
100346	10.014	0.028	8.077	0.011		1.604	0.022	T	1.62	0.02	L		7.9776	0.0020	0.020	104		7.95	8.02					1						
100347	8.647	0.013	6.985	0.007		1.389	0.012	T	1.36	0.01	L		6.9772	0.0010	0.008	81		6.96	6.99		C			1						S
100348	9.180	0.016	7.415	0.008		1.471	0.014	T	1.48	0.02	L		7.3979	0.0015	0.010	92		7.39	7.42		C			1						S
100349	7.463	0.007	7.321	0.009		0.129	0.011	T	0.14	0.01	L		7.3476	0.0014	0.011	78		7.33	7.37					1						S
100350	9.839	0.022	8.660	0.014		1.011	0.020	T	0.99	0.02	L		8.7286	0.0029	0.028	117		8.69	8.78		R			1						
100351	8.020	0.010	7.789	0.011		0.256	0.009	G	0.29	0.01	H		7.8152	0.0015	0.016	133		7.79	7.84					1						S
100352	8.915	0.016	7.746	0.010		1.003	0.015	T	0.98	0.01	L		7.7852	0.0014	0.011	64		7.76	7.80		C			1						S
100353	8.061	0.009	8.111	0.012		−0.041	0.014	T	−0.02	0.01	L		8.1194	0.0014	0.012	93		8.10	8.14					1						S
100354	8.601	0.006	8.635	0.007		−0.040	0.015	G	−0.02	0.01	H		8.6343	0.0016	0.024	321		8.60	8.67		U			1						
100355	11.240	0.067	10.266	0.046		0.855	0.060	T	0.87	0.04	L		10.3367	0.0039	0.027	86		10.28	10.39		C	20212+0249	I 1	1						G
100356	12.048	0.178	10.555	0.077	*	1.594	0.082	G	1.73	0.17	K	*	10.3146	0.0028	0.023	68	*	10.27	10.35		D	20212−5147	H 1	2	C	A	AB	31	0.299	0.010	0.46	0.11	G
100357	7.767	0.010	5.873	0.003		1.561	0.015	G	1.57	0.09	H		5.8162	0.0012	0.010	106		5.80	5.84		U 2	20212+6359	I 1	1	S					S
100358	8.176	0.009	7.722	0.009		0.442	0.010	T	0.51	0.01	L		7.7849	0.0008	0.010	119		7.77	7.80					1						S
100359	9.456	0.015	8.711	0.013		0.643	0.015	G	0.71	0.01	H		8.7856	0.0014	0.016	143		8.75	8.81					1						
100360	7.840	0.008	7.841	0.010		−0.040	0.015	G	0.00	0.01	L		7.8530	0.0021	0.018	118		7.83	7.88		D	20212+4335	I 2	1						S
100361	8.972	0.011	7.731	0.007		1.059	0.010	T	1.03	0.01	L		7.7786	0.0014	0.012	130		7.76	7.80					1						S
100362	9.501	0.014	7.947	0.008		1.304	0.013	T	1.26	0.01	L		7.9775	0.0012	0.015	143		7.95	8.01					1						S
100363	9.316	0.011	8.569	0.009		0.683	0.011	T	0.74	0.01	L		8.6285	0.0012	0.021	253		8.60	8.66					1						
100364											T		8.5355	0.0772	0.575	105		7.94	9.92		D	20212+4335	I 2		S					G
100365	6.629	0.005	6.601	0.005		0.031	0.007	T	0.05	0.01	L		6.6061	0.0006	0.007	92		6.59	6.62					1						S
100366	9.167	0.015	8.676	0.014		0.462	0.019	T	0.53	0.02	L		8.7298	0.0018	0.017	138		8.70	8.76					1						
100367	9.967	0.022	8.603	0.012		1.155	0.020	T	1.12	0.02	L		8.6434	0.0015	0.019	149		8.61	8.67					1						
100368	9.593	0.020	9.184	0.021		0.387	0.027	T	0.45	0.03	L		9.2278	0.0022	0.018	79		9.20	9.26		C			1						
100369	8.815	0.010	8.543	0.011	*	0.259	0.014	T	0.29	0.02	L	*	8.5926	0.0016	0.020	173	*	8.56	8.63		D	20213+3036	I 1	2	C	A	AB	191	0.228	0.005	0.55	0.13	
100370						1.421	0.020	G	1.72	0.05	I		11.1224	0.0047	0.041	96		11.06	11.19		C			1						G
100371	8.100	0.007	8.084	0.009		0.019	0.011	T	0.04	0.01	L		8.0935	0.0011	0.016	191		8.07	8.12					1						
100372	9.148	0.015	7.122	0.006		1.715	0.013	T	1.89	0.04	O		7.0302	0.0021	0.015	96		7.01	7.06		M			1						S
100373	10.730	0.052	9.046	0.020		1.407	0.044	T	1.39	0.05	L		9.0550	0.0019	0.017	91		9.02	9.09		C			1						
100374						0.990	0.020	G	1.03	0.02	I		10.9327	0.0046	0.039	124		10.86	11.01		C			1						G
100375	9.318	0.023	8.894	0.023		0.401	0.030	T	0.47	0.03	L		8.9303	0.0028	0.015	53		8.91	8.95		C			1						
100376	9.964	0.026	9.478	0.026		0.469	0.028	T	0.54	0.03	L		9.5604	0.0016	0.016	97		9.53	9.59		C			1						
100377	9.820	0.017	7.832	0.007		1.648	0.015	T	1.67	0.01	L		7.6771	0.0027	0.028	182		7.63	7.72		U 2			1						
100378	12.262	0.219	10.540	0.075							T		10.5523	0.0046	0.035	93		10.50	10.61		C			1	S					G
100379	7.056	0.005	6.554	0.004		0.505	0.003	G	0.58	0.00	H		6.6034	0.0010	0.009	117		6.59	6.62		C			1						S
100380	9.498	0.017	7.759	0.008		1.450	0.015	T	1.45	0.02	L		7.7316	0.0015	0.013	106		7.71	7.75		C			1						S
100381	8.973	0.015	7.785	0.010		1.018	0.014	T	0.99	0.01	L		7.8274	0.0033	0.019	84		7.80	7.85		U			1						S
100382	10.817	0.059	10.763	0.092		−0.012	0.100	G	0.01	0.09	R		10.6760	0.0057	0.036	61		10.61	10.73					1						G
100383						0.814	0.020	G	0.84	0.01	H		11.6105	0.0073	0.072	94		11.44	11.70		U 2			1	S					G
100384	7.079	0.004	6.792	0.005		0.261	0.011	G	0.22	0.03	C		6.8373	0.0008	0.009	175		6.82	6.85					1						S
100385	7.319	0.007	7.321	0.008		0.027	0.002	G	0.04	0.00	H		7.3241	0.0012	0.010	79		7.30	7.34		C			1						S
100386	9.046	0.015	7.853	0.010		1.022	0.014	T	1.00	0.01	L		7.9146	0.0012	0.010	94		7.90	7.93		C			1						S
100387	8.480	0.009	8.466	0.011		0.018	0.013	T	0.04	0.01	L		8.4819	0.0016	0.016	121		8.45	8.51					1						
100388	10.650	0.040	9.996	0.036		0.607	0.046	T	0.68	0.04	L		9.9817	0.0026	0.024	118		9.94	10.02		C			1						
120155	10.927	0.045	9.843	0.028		0.792	0.025	G	0.82	0.02	H		9.8658	0.0031	0.034	131		9.81	9.93			20215+3656	I 1	1	S					G
100389	11.070	0.043	9.074	0.013		1.691	0.037	T	1.99	0.09	O		8.9636	0.0042	0.036	154		8.92	9.02		U 2			1						
100390	8.545	0.009	6.720	0.004		1.518	0.008	T	1.55	0.01	L		6.6772	0.0014	0.012	143		6.66	6.69					1						S
100391	10.069	0.031	9.121	0.022	A	0.920	0.015	G	0.92	0.01	H		9.0830	0.0158	0.039	131	A	9.03	9.15		U 2	20215+3950	I 1	2	C	A	AB	223	17.087	0.023	1.96	0.10	
100392	9.344	0.017	9.311	0.022		0.035	0.026	T	0.05	0.02	L		9.3177	0.0022	0.018	115		9.29	9.36		C			1						
100393	10.892	0.057	9.197	0.023		1.416	0.049	T	1.40	0.08	L		9.1978	0.0014	0.015	90		9.17	9.23					1						
100394	8.279	0.009	7.851	0.010		0.418	0.011	T	0.48	0.01	L		7.8893	0.0010	0.009	105		7.88	7.90		C			1						S
100395	9.677	0.022	9.263	0.023		0.481	0.005	G	0.55	0.01	H		9.3269	0.0021	0.016	86		9.30	9.37					1						
100396	7.567	0.004	6.974	0.004		0.558	0.001	G	0.63	0.00	H		7.0339	0.0008	0.012	248		7.02	7.06					1						S
100397	8.887	0.014	8.426	0.014	A	0.451	0.400	G	0.53	0.03	L	*	8.4457	0.0018	0.017	86	*	8.42	8.47		D	20216+1930	I 1	2	C	B	AC	128	4.135	0.050	3.48	0.24	
100398	9.738	0.020	7.797	0.009		1.610	0.017	T	1.63	0.02	L		7.6951	0.0014	0.012	89		7.67	7.72					1						
100399	7.628	0.007	7.527	0.009		0.098	0.011	T	0.11	0.01	L		7.5391	0.0011	0.009	84		7.52	7.55		C			1						S
100400	8.364	0.010	8.318	0.012		0.047	0.014	T	0.06	0.01	L		8.3401	0.0015	0.017	160		8.32	8.37					1						S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr											%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
100401	20 21 37.47	−34 28 39.5	8.11		G	305.406 111 29	−34.477 641 29		8.51	−6.18	16.37	0.91	0.58	1.07	1.30	0.93	+15	+ 6	−15	−13	− 2	+ 3	+ 1	+18	− 4	+ 5	0	−0.45
100402	20 21 37.91	+28 22 48.7	8.94		H	305.407 939 79	+28.380 186 13		6.96	16.10	−2.93	0.61	0.71	1.26	0.71	0.78	−22	+ 7	+ 0	−21	+ 5	−18	+ 6	−18	+14	−22	1	−1.37
*100403	20 21 38.36	+55 13 35.4	9.02		H	305.409 845 36	+55.226 490 92		1.51	0.67	−7.80	0.76	0.72	0.83	0.91	0.81	+ 3	+ 6	+ 1	+12	+ 2	−16	+ 3	+ 0	+12	+ 2	0	−0.84
*100404	20 21 38.55	+37 31 59.0	8.42	3	H	305.410 626 82	+37.533 049 65	*	2.84	−4.50	−5.36	0.60	0.65	0.87	0.68	0.74	− 6	− 1	+ 7	− 8	+ 1	−16	+ 3	−24	− 3	+ 1	2	2.80
*100405 H	20 21 38.59	−54 48 43.8	8.39		G	305.410 803 81	−54.812 165 01	A	18.92	−231.40	−149.99	1.90	1.48	2.05	2.42	1.97	+15	−14	−18	−35	+22	−26	+14	− 8	+ 4	+25	0	−0.80
*100406	20 21 38.09	+13 34 57.8	10.36		H	305.408 706 75	+13.582 715 31		−0.33	−3.15	−1.44	6.07	3.78	3.79	6.08	5.24	+ 4	−45	−32	−87	−10	+32	−10	−77	+20	+32	0	−1.27
100407	20 21 39.78	−04 48 19.9	7.87		G	305.415 738 93	−04.805 538 71		8.28	−5.92	−14.69	1.02	0.72	1.14	1.69	1.03	− 4	+ 4	−35	+37	−23	+39	− 9	+54	−15	−26	0	0.72
100408	20 21 39.96	+42 14 05.6	8.31		H	305.416 503 90	+42.234 890 80		3.52	5.33	0.34	0.61	0.65	0.81	0.69	0.70	+ 1	− 1	+12	+20	+ 6	−13	+ 8	−12	+25	+ 2	1	0.37
100409	20 21 40.33	+44 48 51.3	7.47	2	H	305.418 024 31	+44.814 239 06		0.76	−3.01	−2.28	0.50	0.51	0.61	0.58	0.53	−10	+ 0	+ 8	+ 9	+11	− 6	+11	−15	+10	− 5	0	−2.19
100411	20 21 41.18	−50 46 34.9	7.74	1	H	305.421 563 81	−50.776 365 52		3.32	17.51	−51.75	0.95	0.67	1.03	1.37	1.11	− 5	−25	+ 8	+29	+ 1	+ 6	− 5	+36	+22	− 3	0	−0.27
100412	20 21 41.36	−49 59 55.7	6.26		H	305.422 337 11	−49.998 807 46		30.84	−359.84	−250.36	0.78	0.50	0.88	1.32	0.85	− 6	−12	−16	+ 3	+ 1	−20	− 2	+ 6	+22	−34	0	0.59
100413	20 21 42.54	−36 28 16.5	8.68	2	H	305.427 244 95	−36.471 257 12		2.49	−22.11	−7.38	1.16	0.68	1.41	1.64	1.01	+13	+ 4	+15	−35	− 7	−23	− 7	−21	−28	+33	0	−0.16
100414	20 21 42.69	−49 48 55.4	9.73	3	H	305.427 863 70	−49.815 397 45		2.61	14.35	1.93	1.37	0.94	1.65	2.40	1.58	+13	−16	−14	+ 8	+ 3	−25	− 1	+ 9	+16	−12	0	−2.15
100415	20 21 42.91	+25 45 02.8	8.39		H	305.428 801 33	+25.750 767 87		4.40	7.78	−4.46	0.74	0.68	0.96	0.82	0.78	+ 1	− 6	−14	+37	− 5	− 9	− 2	+12	− 5	+20	0	0.26
*100416	20 21 43.17	−79 35 51.5	7.61		H	305.429 855 97	−79.597 631 96		6.78	13.71	−9.24	0.49	0.48	0.66	0.57	0.55	−12	−16	+ 2	− 3	+12	+ 0	+10	−17	− 6	−27	0	−3.47
*100417 H	20 21 43.04	−36 36 35.9	7.49		G	305.429 333 69	−36.609 971 25	*	16.53	67.87	−44.49	0.95	0.53	1.14	1.58	0.78	+12	− 3	+ 1	−25	+ 2	− 7	+ 1	−11	−20	+20	0	0.54
100418	20 21 44.42	+35 03 42.6	9.79		H	305.435 072 32	+35.061 846 38		2.24	−0.25	−2.54	0.80	0.94	1.17	0.80	0.98	− 2	+ 9	− 8	+15	+ 4	+ 4	+ 4	−12	− 9	+ 1	0	−0.20
100419	20 21 46.05	+13 49 32.8	9.56		G	305.441 868 80	+13.825 789 36		6.14	129.41	−128.26	1.02	1.08	1.45	1.25	1.38	+33	−24	−18	+11	+17	+ 4	+18	+30	− 7	+37	0	−0.23
100420 H	20 21 47.57	−36 54 05.3	8.30	2	H	305.448 195 39	−36.901 466 49	A	5.82	4.28	−15.50	2.85	1.55	2.99	3.65	2.08	− 1	+17	+ 0	−20	+ 0	−36	− 6	+ 0	−30	+27	4	1.74
100421	20 21 48.00	+08 31 10.0	8.28		H	305.450 008 55	+08.519 445 16		3.88	7.44	4.38	0.95	0.79	1.13	1.11	1.06	+21	+ 5	−17	+10	+24	+10	+27	+48	+ 4	+26	0	2.03
*100422	20 21 48.06	−40 45 20.2	7.04	2	H	305.450 230 91	−40.755 614 43		3.33	0.34	6.08	0.83	0.50	0.93	1.05	0.69	+10	−12	+ 3	−16	+ 8	+ 4	+ 7	+ 1	− 6	+24	0	−0.67
*100423	20 21 48.05	−21 35 26.8	9.28		G	305.450 212 53	−21.590 765 70		15.37	85.96	−191.12	1.30	0.64	1.42	1.85	1.13	+ 2	−17	−25	−18	−15	+30	+ 5	+33	−36	−28	0	0.22
100424	20 21 48.32	+33 16 25.6	10.05		H	305.451 316 77	+33.273 764 09		−0.13	20.89	18.88	0.98	1.17	1.60	1.12	1.17	− 3	− 6	+17	+ 5	−15	−16	−10	−11	− 3	+ 6	0	−1.31
100425	20 21 50.55	+21 24 10.7	8.22		H	305.460 630 33	+21.402 982 55		2.13	2.38	5.97	0.77	0.62	1.00	0.93	0.70	−24	− 6	−22	+ 0	+14	− 7	+12	− 4	+ 6	−10	0	0.73
100426 H	20 21 53.27	+73 47 07.2	9.67		H	305.471 957 46	+73.785 336 04	A	1.90	2.26	2.34	1.77	1.47	1.57	1.58	1.55	+ 8	−15	+ 8	−30	−11	+ 2	−12	− 2	+ 2	+ 9	0	0.45
100427	20 21 54.24	−06 34 00.3	8.05		G	305.476 009 72	−06.566 748 24		9.77	−1.15	−28.19	1.14	0.76	1.27	1.74	1.21	+25	−23	−27	+20	+ 5	− 8	+14	+53	− 1	− 8	0	1.23
100428	20 21 54.79	−03 13 01.7	10.26		H	305.478 275 10	−03.217 144 55		14.39	−42.00	−244.22	1.91	1.46	2.01	2.71	2.32	+48	−11	− 7	+25	+25	+ 7	+36	+64	+ 6	+26	0	0.72
100429	20 21 55.89	+13 35 33.2	7.49		H	305.482 878 95	+13.592 544 71		2.65	−0.13	−8.55	0.75	0.65	0.93	0.89	0.84	+10	−10	+ 8	+12	+25	+27	+21	+45	+18	+22	2	1.58
100430	20 21 56.47	+29 05 04.6	9.05		H	305.485 274 88	+29.084 602 30		6.63	−2.91	3.27	0.55	0.77	1.22	0.64	0.76	−19	− 6	+ 8	+20	− 2	− 7	+ 0	−13	+ 8	−14	1	1.88
100431	20 21 57.10	+07 10 17.9	7.43		H	305.487 915 47	+07.171 647 97		5.38	6.72	13.10	0.72	0.70	0.95	0.90	0.97	+32	− 3	−23	+12	+25	+23	+27	+57	−11	+42	0	0.83
100432	20 21 57.35	+47 11 25.7	9.66		H	305.488 963 66	+47.190 473 14		4.18	15.06	14.10	0.85	0.74	0.95	1.03	0.83	+ 5	+ 1	+16	+ 6	− 6	+ 0	− 5	+ 3	+16	+17	0	−0.50
100433	20 22 01.94	−38 04 45.8	9.77		H	305.508 098 05	−38.079 375 05		4.70	16.93	1.73	1.60	0.90	1.80	1.44	1.10	+37	−60	−38	+15	+21	− 3	+27	+22	−14	+39	0	0.31
100434	20 22 03.06	+41 07 55.7	6.38		H	305.512 729 43	+41.132 146 00		2.10	2.44	−3.67	0.44	0.45	0.56	0.45	0.49	− 5	+14	+15	− 9	+ 9	− 6	+ 9	+ 0	+ 5	+13	1	−0.16
100435	20 22 03.43	+24 26 46.0	5.50		H	305.514 289 68	+24.446 116 03		1.81	1.92	−6.89	0.42	0.41	0.64	0.54	0.51	− 2	−12	−18	+10	− 4	+ 2	− 2	+ 1	+ 1	+14	0	2.25
100436	20 22 03.59	+66 12 38.5	9.55		H	305.514 967 64	+66.210 682 16		1.50	0.48	2.82	0.76	0.72	0.80	0.79	0.80	+11	−13	+ 7	−20	+12	+14	+ 6	+ 6	+ 3	+34	1	−0.99
100437	20 22 05.35	+45 47 41.6	5.58	1	H	305.522 277 75	+45.794 897 37		7.86	25.06	39.70	0.47	0.46	0.53	0.57	0.53	−15	−16	+ 4	−21	+ 6	+ 8	+ 6	−17	−11	−15	1	1.22
100438	20 22 05.44	+40 59 08.2	8.27		H	305.522 685 55	+40.985 619 24		0.75	−1.80	−6.79	0.57	0.61	0.75	0.62	0.67	− 6	+ 8	+10	− 7	+ 9	+ 2	+ 8	+ 1	+ 4	+11	0	1.68
100439	20 22 07.92	+28 50 28.8	7.99		H	305.532 984 98	+28.841 334 46		7.99	39.20	17.76	0.41	0.52	0.84	0.49	0.55	−19	+ 0	+ 3	+ 1	− 2	−12	+ 1	−19	+ 6	−12	0	−0.32
*100440	20 22 09.07	+44 11 28.2	9.05		H	305.537 774 92	+44.191 166 03		4.16	6.99	−7.56	0.76	0.82	1.03	0.97	0.89	+ 0	−13	+15	+20	+ 0	+17	− 2	−26	+21	− 5	0	−0.45
*100441	20 22 09.04	+26 20 17.8	8.05		H	305.537 673 93	+26.338 274 19		4.26	2.03	−0.33	0.56	0.59	0.80	0.61	0.67	+ 4	+ 4	−26	+23	+ 9	+ 2	+ 1	+22	− 3	+20	0	−1.06
100442	20 22 09.93	+70 08 46.3	8.73		H	305.541 383 46	+70.146 201 28		5.36	18.01	15.44	0.67	0.72	0.76	0.75	0.70	− 5	− 2	+30	− 7	+14	−13	+17	− 1	+ 4	+ 9	0	−0.43
100443 H	20 22 10.19	+31 15 11.6	8.63	2	H	305.542 451 26	+31.253 213 75	*	0.68	2.33	−8.37	1.03	1.25	1.27	0.85	1.06	−14	+18	−12	+15	+ 0	− 8	+ 4	−16	+ 9	−11	0	1.11
100444	20 22 10.57	−31 08 14.8	9.38		H	305.544 059 77	−31.137 453 27		7.01	−3.27	−36.56	1.07	0.65	1.30	1.35	0.88	+42	−30	−13	+ 7	+19	+23	+18	+ 7	+18	+70	2	0.87
100445 H	20 22 11.79	−16 46 47.8	7.75		H	305.549 139 15	−16.779 931 76	A	5.83	−9.07	−38.23	2.02	1.19	2.09	2.29	1.90	+29	+ 7	+37	−13	+19	+23	+ 3	+35	+ 5	+46	2	0.74
100446	20 22 12.38	+16 22 49.4	8.74		G	305.551 603 14	+16.380 381 69		2.56	10.12	−1.08	0.93	0.93	1.30	1.05	1.10	+18	−20	−24	− 7	+14	+12	+19	+26	−17	+16	0	0.95
100447	20 22 12.61	+50 32 28.0	7.01		H	305.552 521 78	+50.541 120 17		4.96	8.70	6.09	0.52	0.47	0.58	0.61	0.51	−11	− 4	+ 1	− 1	+12	−14	+11	− 1	+19	− 9	0	−0.59
100448	20 22 12.80	−15 37 32.2	8.00		H	305.553 340 40	−15.625 619 60		5.60	−0.25	−26.64	0.93	0.60	1.06	1.19	1.02	+18	− 9	+ 3	+ 0	+12	+22	+ 8	+36	−17	+26	2	0.45
100449	20 22 13.17	−35 40 33.4	8.78		H	305.554 874 64	−35.675 932 44	A	19.61	66.23	−182.23	2.15	1.14	1.97	1.88	1.54	+ 4	+17	− 4	−45	+ 4	−47	−14	− 2	−44	+52	2	1.11
100450	20 22 13.28	+11 41 08.1	10.07		H	305.555 350 90	+11.685 580 90		19.62	−145.03	−221.58	1.38	1.43	1.98	1.66	1.99	+44	−15	− 9	+ 0	+17	+22	+21	+24	−14	+51	4	0.96
100451	20 22 13.33	+16 22 22.8	9.20		G	305.555 549 17	+16.372 990 99	B	5.61	0.49	2.33	2.71	2.49	3.17	2.82	2.69	+12	−17	−32	− 2	+11	− 4	+ 7	+34	− 8	+ 8	0	2.44
*100452	20 22 13.70	+69 30 45.2	7.27		H	305.557 070 69	+69.512 556 49		4.66	13.90	−17.00	0.52	0.50	0.56	0.58	0.48	+ 1	+ 4	+28	− 3	+10	−13	+14	− 5	+ 4	+13	0	0.26
*100453	20 22 13.70	+40 15 24.1	2.23	1	H	305.557 083 46	+40.256 681 50		2.14	2.43	−0.93	0.39	0.40	0.51	0.40	0.45	− 2	−12	+ 5	− 1	+11	− 1	+11	− 4	+14	+15	0	−2.04
*100454	20 22 13.65	−03 38 05.7	8.70		H	305.556 855 39	−03.634 909 57		1.43	5.96	3.83	1.15	0.83	1.25	1.77	1.25	+14	− 2	−18	+35	+ 0	+29	+ 8	+53	+ 2	+ 5	0	0.34
100455	20 22 13.77	−49 44 19.0	10.14		H	305.557 368 80	−49.738 599 34		26.24	−16.68	45.50	1.67	1.20	1.97	3.14	1.94	−18	−10	−28	+32	−19	−18	−28	+10	+18	−41	2	0.35
100456 H	20 22 15.85	−36 31 22.3	9.35		H	305.566 022 24	−36.522 856 57	A	4.48	6.81	7.47	3.05	1.45	2.82	3.28	2.03	+ 0	+25	+ 5	−35	− 2	−39	− 8	− 7	−22	+26	1	0.05
100457	20 22 16.28	−72 14 18.6	9.43		H	305.567 850 43	−72.238 500 18		6.26	−2.72	−14.50	0.78	0.92	1.28	0.83	1.18	−19	−18	+ 2	+14	− 4	+ 3	− 2	+16	− 1	−35	0	0.76
100458	20 22 18.81	+73 13 48.5	8.45		H	305.578 359 88	+73.230 128 97		6.99	18.71	25.54	0.66	0.56	0.66	0.67	0.60	+ 7	−15	+ 7	−36	−10	+ 2	−13	− 9	+11	+ 9	0	−0.33
100459	20 22 19.40	+04 56 11.6	8.73		H	305.580 846 85	+04.936 564 05		8.26	−27.79	−19.91	0.92	0.85	1.18	1.16	1.11	+39	− 1	−24	+24	+16	+27	+27	+58	− 7	+31	0	0.50
100460	20 22 19.45	−32 42 30.6	9.24		H	305.581 055 18	−32.708 500 74		3.54	−0.28	−12.03	1.10	0.66	1.35	1.47	0.92	+27	− 9	+ 2	−14	+ 4	+19	+ 3	− 9	+ 1	+48	0	0.90
100461	20 22 20.40	+29 05 26.6	8.26		G	305.585 017 17	+29.090 722 31		7.61	31.67	27.15	0.43	0.56	0.88	0.49	0.57	−19	+ 0	+ 2	+18	− 5	− 9	− 2	−13	+ 5	−11	0	−0.77
100462	20 22 21.03	−56 30 03.4	8.43		H	305.587 608 86	−56.500 950 46		0.48	10.47	−12.20	0.80	0.72	1.10	0.88	0.65	+ 3	−18	− 2	−29	−12	+ 8	−12	−37	+ 7	−33	5	0.63
100463	20 22 22.06	−15 49 39.1	8.02		G	305.591 897 82	−15.827 532 46		2.40	17.94	2.89	1.03	0.78	1.15	1.44	1.11	+37	+ 3	− 2	−14	− 4	+38	−10	−16	− 3	+20	0	2.52
100464	20 22 22.80	+73 09 03.4	8.20		H	305.595 015 79	+73.150 956 19		8.30	13.98	15.16	0.61	0.53	0.62	0.63	0.57	+ 1	−15	+10	−33	− 6	+ 2	− 7	−11	+ 4	+ 7	0	−1.15
100465	20 22 23.58	+32 19 28.7	8.41		H	305.598 238 76	+32.324 632 51		9.75	46.52	257.91	0.58	0.69	1.00	0.70	0.70	−16	− 9	− 4	+10	− 4	− 4	− 4	−18	+16	−14	0	−0.53
100466 H	20 22 24.92	−71 11 45.7	8.97		H	305.603 826 93	−71.196 032 36	A	12.92	25.99	12.58	2.09	3.27	2.96	1.58	2.90	− 2	−12	− 2	− 4	+11	−13	+13	− 4	− 1	− 4	0	0.33
100467	20 22 26.27	−46 26 58.1	9.37		G	305.609 465 36	−46.449 463 22		4.37	8.04	−11.65	1.20	0.88	1.40	1.70	1.14	+ 3	−25	−10	+19	−10	− 2	−10	− 2	+ 3	+ 1	0	−0.52
100468	20 22 26.67	+16 55 00.3	7.36		H	305.611 130 53	+16.916 736 16		4.92	−18.97	−20.83	0.75	0.63	0.96	0.90	0.70	+26	−28	−24	+32	+16	+ 1	+17	+18	− 5	+22	4	−0.10
100469	20 22 27.48	−42 02 57.7	5.60		H	305.614 497 49	−42.049 348 95		13.35	32.94	−81.98	0.73	0.45	0.81	0.93	0.61	+ 6	−24	−12	+ 7	+ 6	− 7	+ 7	+ 1	− 3	+17	0	−1.17
100470	20 22 27.72	−19 46 52.3	8.51		H	305.615 491 86	−19.781 186 71		12.12	93.48	−49.31	1.03	0.61	1.05	1.34	1.02	+12	− 8	+ 1	+ 1	+15	+14	+20	+47	− 2	+ 6	0	−1.15
100471	20 22 27.79	−17 28 31.7	10.00		H	305.615 807 14	−17.475 470 46		7.40	19.91	7.40	1.54	0.89	1.67	1.91	1.49	+23	+ 4	−11	−31	+ 8	− 8	+ 5	+27	−29	+31	2	−0.22
100472	20 22 30.40	+22 20 39.2	8.91		H	305.626 659 99	+22.344 215 56		0.68	10.62	−0.12	0.72	0.68	1.15	0.79	0.78	−10	− 5	+ 4	+34	−12	+21	− 3	+ 2	+ 6	+25	4	2.13
100473	20 22 30.82	+54 55 56.0	7.47		H	305.628 401 52	+54.932 211 66		1.56	−5.28	−6.91	0.50	0.46	0.53	0.59	0.46	− 5	+ 2	+11	+13	+ 6	−17	+ 7	+ 3	+10	− 8	0	−2.13
100474	20 22 31.31	−26 09 35.3	9.37		H	305.630 443 08	−26.159 802 06		15.62	56.82	−36.06	1.24	0.78	1.45	1.37	1.31	+40	−33	−28	−23	+ 3	+17	+10	+28	−26	+45	2	−0.95
100475	20 22 32.20	+34 59 26.8	6.86		H	305.634 169 27	+34.990 777 94		9.25	21.44	−22.54	0.39	0.45	0.59	0.43	0.49	− 4	+ 7	+14	+15	+ 3	− 8	+ 5	− 9	+ 7	+ 0	0	−0.15
100476	20 22 32.59	+26 17 53.1	7.03		H	305.635 787 22	+26.298 081 47		3.76	8.38	−16.73	0.49	0.49	0.69	0.53	0.55	− 1	+ 2	−24	+21	+ 1	+ 2	+ 2	+18	− 4	+17	0	−0.12
100477	20 22 33.20	−16 31 16.4	8.06		H	305.638 349 05	−16.521 224 99		3.67	−8.83	−19.07	0.97	0.59	1.17	1.12	0.94	+16	− 5	+ 4	− 9	+ 5	+24	+ 0	+26	−28	+20	2	1.60
100478	20 22 33.37	−20 24 10.2	10.94		H	305.639 022 30	−20.402 829 30		6.93	15.06	6.32	2.20	1.21	2.36	3.25	2.11	+ 9	−19	− 8	− 4	− 4	+27	+ 5	+38	− 4	− 9	0	1.01
100479	20 22 34.38	−47 28 45.5	9.84		H	305.643 255 81	−47.479 310 66		3.60	6.15	−28.90	1.52	0.93	1.53	2.13	1.29	− 1	−26	−11	+ 9	+18	− 1	+17	+12	− 2	+ 3	0	−1.66
100480	20 22 34.56	+07 45 21.5	8.16		H	305.644 008 56	+07.755 964 25		−0.24	−9.25	−6.80	0.88	0.79	1.08	1.06	1.07	+28	+ 1	−12	+ 4	+22	+17	+26	+42	+ 3	+31	0	1.23
100481	20 22 34.99	−08 49 30.8	8.09		H	305.645 799 58	−08.825 225 89		6.69	15.57	−2.78	0.92	0.57	1.07	1.21	0.75	+22	−20	+ 1	− 1	+19	+34	+21	+38	+ 8	+16	0	0.02
100482	20 22 35.18	−09 00 52.6	8.51		H	305.646 575 28	−09.014 607 46		5.77	3.45	−13.47	1.01	0.59	1.23	1.23	0.75	+25	−19	− 1	− 8	+13	+41	+15	+27	+ 0	+23	0	−0.17
*100483 H	20 22 35.69	−12 22 54.8	8.37		H	305.648 696 55	−12.381 900 21	*	0.54	−3.33	2.43	3.41	2.52	2.05	2.32	1.39	+38	− 9	+ 2	− 4	+18	+40	+14	+42	+14	+40	1	0.86
*100484	20 22 35.57	+38 07 45.8	8.53	1	G	305.648 216 53	+38.129 379 43		2.41	−3.43	−3.80	0.64	0.68	0.89	0.72	0.70	−11	− 9	+ 4	+ 5	− 3	−17	− 2	−30	+22	− 8	0	1.94
100485	20 22 36.29	−48 51 55.6	7.72		H	305.651 208 36	−48.865 449 59		5.23	7.74	2.44	0.92	0.72	1.24	1.61	1.06	+11	− 9	−32	+21	+20	−37	+ 7	+13	+14	− 9	0	1.52
100486	20 22 37.31	+31 15 54.1	6.09		H	305.655 471 04	+31.265 020 64		5.37	−8.47	−22.64	0.37	0.43	0.60	0.44	0.46	− 9	+ 5	+ 1	+ 3	+ 1	−10	+ 4	−22	+ 7	− 2	0	−0.22
100487	20 22 38.11	−44 35 13.9	7.95		G	305.658 772 61	−44.587 207 96		4.07	2.90	14.29	0.97	0.64	1.09	1.43	0.73	+20	−27	−36	+48	+ 9	− 8	+ 5	+ 4	− 4	+ 6	0	−0.72
100488	20 22 38.41	−54 15 49.0	7.96		H	305.660 023 26	−54.263 613 20		1.83	25.97	−37.58	0.81	0.72	1.09	1.09	1.16	+15	+ 6	+ 4	−29	+28	− 9	+29	+16	+23	+22	0	−0.35
100489	20 22 40.11	−05 04 52.1	7.69		H	305.667 136 56	−05.081 145 97		3.00	12.00	5.48	1.13	0.77	1.22	1.94	1.27	+14	+ 8	+ 1	+33	+ 6	+36	+13	+59	− 3	− 7	0	0.36
100490	20 22 41.11	−58 17 04.6	10.60		G	305.671 277 84	−58.284 603 93		50.36	757.90	−434.81	1.22	1.13	1.84	1.56	1.20	+24	−30	−19	−37	− 3	+13	− 7	−44	+15	−33	1	1.94
100491	20 22 41.15	−78 57 38.9	6.64		H	305.671 439 45	−78.960 804 66		8.80	31.04	−44.74	0.42	0.39	0.57	0.48	0.43	+ 1	−21	− 2	+ 2	+ 3	− 7	+ 4	−12	−11	−11	0	−0.52
100492	20 22 41.75	−10 18 06.1	9.24		G	305.673 939 80	−10.301 698 77		27.48	219.19	−67.48	1.44	0.75	1.56	1.93	0.92	+18	−35	−18	− 2	+15	+ 1	+17	+14	−12	+13	0	0.91
100493	20 22 41.84	+10 32 13.5	11.73		G	305.674 318 08	+10.537 072 47		−0.64	−4.05	−7.00	2.52	2.27	3.18	3.44	3.70	+46	− 9	−11	−15	+22	− 1	+11	+27	− 9	+70	0	0.76
100494 H	20 22 42.45	−64 11 10.5	8.60		H	305.676 873 11	−64.186 249 17	A	6.88	9.71	2.05	1.24	1.06	1.59	1.26	1.17	−29	+ 4	−16	+49	−14	+ 5	−29	+17	− 6	−58	1	−0.16
100495	20 22 43.33	−42 57 20.6	8.59		H	305.680 541 07	−42.955 718 27		6.64	25.16	−8.56	1.02	0.66	1.22	1.41	1.00	+18	−26	− 5	+11	+16	+ 0	+13	+15	+ 7	+29	0	−0.60
100496 H	20 22 44.16	+00 14 22.0	8.95		H	305.683 980 93	+00.239 447 22	A	3.35	7.61	−8.77	1.86	1.40	2.00	2.52	1.99	+32	+16	−11	+23	+ 5	+ 2	− 3	+48	−18	+44	1	0.99
100497	20 22 44.76	+40 42 52.7	8.13		H	305.686 504 00	+40.714 640 94		−0.27	−1.11	−8.23	0.56	0.59	0.74	0.65	0.65	− 5	− 1	+18	− 1	+ 9	+ 5	+ 8	+ 1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
100401	8.612	0.013	8.169	0.013		0.424	0.009	G	0.49	0.01	H	8.2115	0.0013	0.013	105		8.18	8.24		C			1							S
100402	9.467	0.013	8.976	0.013		0.462	0.017	T	0.53	0.02	L	9.0481	0.0014	0.021	233		9.01	9.09		C			1							
100403	10.648	0.043	9.145	0.019		1.264	0.037	T	1.22	0.04	L	9.1746	0.0026	0.020	116		9.14	9.21		C			1							
100404	13.185	0.415	9.553	0.024		3.039	0.343	T	2.32	0.64	K	8.4642	0.0174	0.253	142		8.21	8.82		U 2 C			1 V							P
100405	9.449	0.019	8.681	0.016	A	0.732	0.002	G	0.78	0.00	H *	8.5287	0.0023	0.015	88	*	8.51	8.56		D	20216−5449	I 1	2 C	A	AB	349	4.516	0.006	1.42	0.04	S
100406	12.100	0.191	10.517	0.075		1.350	0.169	T	2.14	0.02	J	10.4256	0.0109	0.036	29		10.36	10.52					1	S						G
100407	8.452	0.014	7.921	0.014		0.493	0.015	G	0.57	0.02	H	7.9836	0.0009	0.011	76		7.97	8.00		C			1							S
100408	8.311	0.008	8.316	0.011		0.000	0.012	T	0.02	0.01	L	8.3211	0.0014	0.013	110		8.29	8.34					1							
100409	8.396	0.010	7.590	0.007		0.729	0.009	T	0.78	0.01	L	7.6101	0.0025	0.022	135		7.58	7.64		U 2			1							S
100411	9.779	0.023	7.957	0.010		1.547	0.021	T	2.29	0.05	O	7.7896	0.0024	0.022	87		7.76	7.82		U			1							S
100412	6.934	0.006	6.317	0.005		0.549	0.008	G	0.66	0.07	F	6.3829	0.0011	0.007	82		6.37	6.40					1							S
100413	10.833	0.051	8.904	0.017		1.635	0.044	T	2.38	0.19	O	8.7161	0.0389	0.168	103		8.48	8.92		U 2 C			1							P
100414	10.450	0.041	9.804	0.037		0.592	0.041	T	0.66	0.04	L	9.8587	0.0052	0.049	81		9.80	10.28	1.15	P 1 A			1							
100415	10.401	0.030	8.561	0.012		1.530	0.026	T	1.57	0.06	L	8.5033	0.0018	0.018	134		8.47	8.55		R			1							
100416	7.624	0.005	7.602	0.006		0.015	0.002	G	0.03	0.00	H	7.6193	0.0015	0.012	164		7.60	7.64					1							S
100417	8.129	0.011	7.540	0.009	*	0.586	0.015	G	0.66	0.01	H *	7.5925	0.0016	0.014	106	*	7.57	7.61			20217−3637	H 1	2 C	S A	AB	108	0.139	0.016	0.21	0.45	S
100418	9.839	0.021	9.769	0.028		0.069	0.033	T	0.08	0.04	L	9.8208	0.0027	0.030	156		9.77	9.87		C			1							G
100419	10.191	0.031	9.573	0.029		0.631	0.015	G	0.70	0.01	H	9.6638	0.0026	0.021	82		9.63	9.70		C			1							
100420	8.893	0.018	8.247	0.016	*	0.592	0.018	T	0.66	0.02	L *	8.4238	0.0023	0.019	95	*	8.40	8.47		U 2	20218−3654	I 1	2 C	A	AB	294	7.527	0.010	0.94	0.03	S
100421	8.546	0.012	8.306	0.013		0.229	0.017	T	0.25	0.02	L	8.3497	0.0019	0.014	77		8.33	8.37		C			1							
100422	9.182	0.017	7.272	0.007		1.620	0.015	T	2.48	0.04	O	7.0588	0.0054	0.036	89		6.99	7.10		U 2			1	S						S
100423	10.064	0.027	9.395	0.025		0.652	0.003	G	0.72	0.00	H	9.4180	0.0015	0.016	102		9.39	9.44		C			1							
100424	11.859	0.101	10.145	0.033		1.431	0.084	T	1.42	0.13	L	10.1884	0.0031	0.037	147		10.10	10.25					1							G
100425	8.070	0.009	8.200	0.012		−0.103	0.005	G	−0.09	0.01	H	8.1853	0.0021	0.019	112		8.16	8.22					1							
100426	11.998	0.127	9.939	0.031	*	1.046	0.197	G	1.02	0.16	R *	9.8355	0.0020	0.021	106	*	9.81	9.87		D	20219+7347	H 1	2 C	A	AB	238	0.675	0.004	1.05	0.03	
100427	8.422	0.012	8.077	0.012		0.337	0.015	G	0.39	0.02	H	8.1336	0.0024	0.015	66		8.11	8.17					1							S
100428	11.295	0.077	10.323	0.053		0.814	0.020	G	0.85	0.02	H	10.4028	0.0053	0.027	68		10.36	10.45		C			1							G
100429	7.433	0.006	7.499	0.010		−0.050	0.015	G	−0.03	0.01	H	7.4798	0.0018	0.012	84		7.46	7.50			20219+1336	I 1	1	S						S
100430	10.817	0.033	9.179	0.014		1.371	0.028	T	1.34	0.03	L	9.1953	0.0016	0.023	251		9.16	9.23		C			1							
100431	8.648	0.012	7.543	0.008		0.953	0.011	T	0.94	0.01	L	7.5945	0.0012	0.009	80		7.58	7.61		C			1							S
100432	10.163	0.026	9.686	0.028		0.449	0.035	T	0.52	0.04	L	9.7594	0.0019	0.022	120		9.73	9.79		C			1							G
100433	10.616	0.036	9.821	0.029		0.705	0.035	T	0.76	0.03	L	9.9079	0.0026	0.021	95		9.86	9.95					1							
100434	7.695	0.007	6.509	0.004		1.016	0.006	T	0.99	0.01	L	6.5479	0.0009	0.009	131		6.53	6.56					1							S
100435	5.406	0.003	5.510	0.003		−0.090	0.020	G	−0.01	0.03	C	5.5015	0.0007	0.007	146		5.49	5.51					1							S
100436	10.780	0.045	9.641	0.026		0.979	0.040	T	0.96	0.03	L	9.7141	0.0041	0.031	117		9.65	9.76		R			1	S						
100437	6.971	0.005	5.699	0.003		1.077	0.004	G	1.04	0.00	H	5.7513	0.0010	0.009	122		5.74	5.77		M			1	G						S
100438	8.396	0.008	8.292	0.010		0.130	0.015	G	0.14	0.01	H	8.3174	0.0013	0.014	134		8.30	8.34					1							
100439	8.303	0.007	8.008	0.007		0.278	0.015	G	0.32	0.02	H	8.0638	0.0011	0.013	251		8.05	8.09		C			1							
100440	9.179	0.014	9.070	0.017		0.106	0.021	T	0.12	0.02	L	9.0915	0.0018	0.018	101		9.06	9.12		C			1							
100441	7.926	0.007	8.023	0.009		−0.084	0.010	T	−0.06	0.01	L	8.0270	0.0011	0.013	136		8.01	8.05		C			1	G						
100442	9.024	0.013	8.757	0.014		0.254	0.018	T	0.29	0.02	L	8.8028	0.0021	0.017	103		8.77	8.83					1							
100443	8.736	0.010	8.652	0.012	*	0.083	0.015	T	0.10	0.02	L *	8.6634	0.0016	0.020	180	*	8.64	8.76		U 2	20222+3115	I 1	2 C	A	BA	338	0.282	0.004	0.50	0.07	
100444	10.223	0.025	9.477	0.020		0.667	0.024	T	0.73	0.02	L	9.5138	0.0017	0.020	145		9.49	9.54					1							
100445	8.795	0.019	7.746	0.012	*	0.911	0.017	T	0.91	0.01	L *	7.9102	0.0017	0.013	90	*	7.89	7.94		R	20222−1647	I 1	2 C	A	AB	328	3.155	0.003	0.96	0.01	
100446	10.978	0.067	8.934	0.022		1.873	0.015	G	2.01	0.15	K	8.6771	0.0088	0.105	89		8.50	8.80		D	20222+1623	I 2	1	S						
100447	7.191	0.006	7.035	0.005		0.150	0.007	T	0.17	0.01	L	7.0641	0.0011	0.008	115		7.05	7.08		C			1							S
100448	8.069	0.010	7.998	0.011		0.050	0.002	G	0.06	0.00	H	8.0259	0.0016	0.013	86		8.00	8.05					1							S
100449						0.788	0.096	G	0.78	0.04	L	8.9214	0.0082	0.032	113	A	8.88	8.99		D	20222−3541	I 1	2 C	A	AB	347	15.295	0.013	2.23	0.06	
100450	11.232	0.068	10.248	0.046		0.850	0.064	T	0.89	0.06	L	10.2052	0.0042	0.025	77		10.14	10.25					1	S						G
100451	9.425	0.024	9.114	0.027	B	0.249	0.015	G	0.28	0.02	H	9.2602	0.0218	0.057	90	B	9.20	9.37		D	20222+1623	I 2	2 C	A	BC	77	15.742	0.030	1.53	0.10	
100452	7.472	0.005	7.294	0.006		0.171	0.007	T	0.19	0.01	L	7.3297	0.0009	0.008	104		7.32	7.35					1							S
100453	3.084	0.003	2.307	0.003		0.673	0.012	G	0.65	0.03	C	2.3549	0.0011	0.008	118		2.34	2.37		U 2 C	20222+4015	I 1	1							S
100454	10.791	0.053	8.921	0.019		1.160	0.040	G	1.49	0.07	L	8.8284	0.0019	0.019	81		8.80	8.86					1							
100455	11.395	0.089	10.259	0.053		1.088	0.008	G	1.05	0.01	K	10.2834	0.0036	0.033	75		10.22	10.34					1							
100456	10.120	0.028	9.597	0.028	A	0.600	0.495	G	0.57	0.13	L *	9.4566	0.0019	0.021	102	*	9.41	9.49		D	20223−3631	I 1	2 C	A	AB	257	1.646	0.009	0.72	0.02	
100457	9.874	0.016	9.431	0.017		0.432	0.019	T	0.50	0.02	L	9.5229	0.0022	0.024	178		9.48	9.58		C			1	S						
100458	8.741	0.012	8.498	0.013		0.288	0.001	G	0.33	0.00	H	8.5227	0.0013	0.011	107		8.51	8.55		C			1							
100459	9.258	0.017	8.772	0.017		0.457	0.022	T	0.53	0.02	L	8.8299	0.0019	0.013	85		8.80	8.85					1							
100460	9.792	0.022	9.331	0.021		0.435	0.028	T	0.50	0.03	L	9.3371	0.0017	0.016	117		9.31	9.36		C	20223−3243	I 1	1							
100461	8.715	0.008	8.294	0.008		0.408	0.015	G	0.47	0.02	H	8.3539	0.0013	0.017	258		8.33	8.38					1							
100462	10.244	0.036	8.555	0.016		1.411	0.031	T	1.39	0.04	L	8.5755	0.0015	0.019	107		8.54	8.61		C	20224−5630	I 1	1							
100463	8.886	0.015	8.103	0.013		0.735	0.015	G	0.78	0.01	H	8.1497	0.0017	0.012	78		8.13	8.17					1	G						
100464	8.575	0.011	8.228	0.011		0.342	0.004	G	0.40	0.01	H	8.2809	0.0016	0.010	108		8.26	8.30		C			1							S
100465	9.489	0.021	8.488	0.015		0.875	0.019	T	0.88	0.01	L	8.5645	0.0015	0.018	162		8.54	8.60		C			1							
100466	9.689	0.016	9.031	0.014	*	0.601	0.016	T	0.67	0.01	L *	9.0986	0.0026	0.025	166	*	9.06	9.15		D	20224−7112	M 1	2 C	A	AB	5	0.498	0.004	0.05	0.02	
100467	9.769	0.022	9.426	0.024		0.389	0.004	G	0.45	0.00	H	9.4642	0.0028	0.021	85		9.43	9.50		C			1							
100468	9.290	0.018	7.638	0.009		1.407	0.017	T	2.91	0.04	O	7.3108	0.0123	0.073	94		7.17	7.37		R 2 C			1	S						S P
100469	5.593	0.003	5.581	0.003		0.002	0.003	G	−0.01	0.00	A	5.5916	0.0006	0.005	108		5.58	5.60		C	20224−4203	I 1	1							S
100470	9.443	0.020	8.584	0.015		0.753	0.019	T	0.80	0.01	L	8.6473	0.0014	0.012	93		8.62	8.67		C			1							
100471	10.842	0.055	10.096	0.044		0.667	0.053	T	0.73	0.04	L	10.1345	0.0027	0.023	85		10.09	10.17		C			1							G
100472	9.065	0.012	8.914	0.015		0.145	0.018	T	0.16	0.02	L	8.9616	0.0018	0.020	145		8.92	9.01					1							
100473	7.583	0.005	7.484	0.007		0.097	0.008	T	0.11	0.01	L	7.5058	0.0012	0.011	130		7.49	7.52		C			1							S
100474	10.300	0.040	9.451	0.031		0.790	0.020	G	0.83	0.02	H	9.5098	0.0018	0.016	88		9.49	9.54		C			1							
100475	6.934	0.004	6.870	0.005		0.064	0.006	T	0.07	0.01	L	6.8861	0.0009	0.009	157		6.87	6.90		C			1							S
100476	8.576	0.010	7.146	0.006		1.207	0.009	T	1.17	0.01	L	7.1930	0.0010	0.010	137		7.18	7.21		C	20225+2618	I 1	1							S
100477	9.648	0.023	8.186	0.013		1.232	0.021	T	1.19	0.02	L	8.2265	0.0019	0.012	88		8.20	8.25		C			1							
100478	11.584	0.102	10.867	0.095		0.645	0.105	T	0.71	0.09	L	11.0703	0.0045	0.032	88		11.01	11.14		C			1							G
100479	10.380	0.039	9.858	0.040		0.499	0.042	T	0.57	0.04	L	9.9522	0.0028	0.025	78		9.92	9.99		C			1							
100480	10.308	0.035	8.336	0.013		1.635	0.030	T	1.66	0.03	L	8.2742	0.0022	0.018	82		8.24	8.30					1							
100481	8.421	0.011	8.112	0.011		0.294	0.015	T	0.34	0.02	L	8.1616	0.0012	0.011	83		8.14	8.18		C			1							S
100482	8.578	0.012	8.528	0.015		0.051	0.018	T	0.06	0.01	L	8.5303	0.0021	0.014	73		8.51	8.55		C			1							
100483	10.114	0.034	8.521	0.016	*	1.335	0.030	T	1.30	0.04	L *	8.5202	0.0021	0.013	69	*	8.49	8.55		C	20226−1223	I 1	2 C	C	AC	166	0.228	0.058	2.91	0.85	
100484	9.695	0.015	8.667	0.011		1.060	0.020	G	1.03	0.02	H	8.6354	0.0021	0.025	155		8.58	8.67		U			1							
100485	9.048	0.016	7.835	0.010		1.037	0.015	T	1.01	0.01	L	7.8832	0.0023	0.014	77		7.86	7.91					1							S
100486	7.871	0.006	6.242	0.003		1.363	0.005	T	1.33	0.01	L	6.2385	0.0006	0.008	183		6.22	6.25					1							S
100487	8.343	0.012	7.975	0.011		0.319	0.002	G	0.37	0.00	H	8.0379	0.0019	0.015	85		8.01	8.06					1							S
100488	9.227	0.013	8.074	0.009		0.985	0.020	G	0.96	0.02	A	8.1211	0.0017	0.014	112		8.10	8.15		C	20226−5416	I 1	1							S
100489	9.688	0.025	7.855	0.011		1.525	0.022	T	1.56	0.03	L	7.8085	0.0015	0.010	69		7.79	7.83		C			1							S
100490	11.994	0.124	10.643	0.053		1.455	0.019	G	1.75	0.02	A	10.6876	0.0031	0.032	161		10.63	10.74		C			1							G
100491	6.655	0.004	6.632	0.004		0.021	0.005	T	0.04	0.00	L	6.6523	0.0006	0.008	165		6.64	6.67					1							S
100492	10.315	0.042	9.326	0.029		0.888	0.002	G	0.93	0.00	H	9.3854	0.0013	0.014	65		9.36	9.41					1							
100493						1.737	0.020	G	1.81	0.14	K	11.8794	0.0079	0.067	89		11.67	11.97					1							G
100494	8.937	0.011	8.641	0.012	A	0.300	0.495	G	0.31	0.04	L *	8.6754	0.0020	0.018	144	*	8.64	8.71			20227−6411	I 1	2 C	B	AB	66	1.798	0.047	3.95	0.27	S
100495	8.975	0.014	8.606	0.015		0.360	0.018	T	0.42	0.02	L	8.6780	0.0025	0.017	92		8.65	8.70					1							S
100496	9.138	0.015	9.063	0.019	A	0.069	0.140	G	0.06	0.01	L *	8.9732	0.0025	0.021	102	*	8.95	9.01		D	20227+0014	I 1	2 C	A	AB	95	7.069	0.020	2.41	0.07	
100497	8.166	0.008	8.137	0.010		0.031	0.012	T	0.05	0.01	L	8.1509	0.0015	0.014	131		8.13	8.17					1							
100498	8.314	0.011	6.870	0.005		1.218	0.009	T	1.18	0.01	L	6.9082	0.0013	0.011	95		6.89	6.92		C			1							S
100499	10.404	0.035	10.008	0.039		0.490	0.020	G	0.56	0.02	H	10.0084	0.0031	0.025	80		9.96	10.04		C			1							
100500	8.018	0.010	7.216	0.007		0.726	0.009	T	0.78	0.01	L	7.2733	0.0012	0.009	72		7.26	7.29		C			1							S

$20^h\ 22^m\ 45^s$ - $20^h\ 23^m\ 55^s$ 2020

100501 - 100600

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	29	30
	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18											
100501	20 22 45.29	+41 01 34.1	5.95	1 H	305.688 728 91	+41.026 132 88		3.81	1.26	−49.66	0.42	0.44	0.54	0.44	0.48	− 8	+ 8	+ 8	− 9	+11	− 6	+11	+ 1	+ 7	+10	0	−0.26
100502	20 22 46.46	−37 15 43.3	8.58	H	305.693 601 55	−37.262 021 35		4.95	25.97	−44.65	1.05	0.59	1.21	1.40	0.90	+17	−23	+ 1	+11	+14	+10	+16	+15	− 9	+35	0	0.34
100503	20 22 47.03	+31 32 58.4	7.21	H	305.695 957 91	+31.549 549 47		11.08	88.48	21.38	0.42	0.50	0.71	0.50	0.51	−16	+ 1	− 1	+17	+ 0	−10	+ 2	−16	+13	−11	0	−0.29
100504	20 22 47.28	+76 02 36.3	7.79	H	305.697 010 98	+76.043 403 39		1.76	−2.79	0.83	0.57	0.55	0.59	0.68	0.68	− 2	−15	+10	+19	+16	− 8	+15	+25	+14	+ 3	0	−2.05
100505	20 22 48.10	+53 24 26.3	8.92	1 H	305.700 434 92	+53.407 312 78		6.94	30.17	31.43	0.86	0.84	0.96	1.07	0.92	−10	−13	+ 6	+14	+ 0	− 9	− 2	− 2	+12	−16	2	0.60
100506	20 22 48.91	+13 20 12.2	8.46	2 H	305.703 799 94	+13.336 711 41		5.44	7.79	10.43	2.10	1.69	2.63	2.31	2.04	+10	−18	−19	−13	+12	+ 2	+11	+18	− 3	+16	0	
100507 H	20 22 49.54	+53 25 02.8	7.92	H	305.706 416 33	+53.417 457 78	A	2.52	10.90	17.32	0.82	0.81	0.85	0.99	0.81	+ 2	−22	+11	+10	− 2	−12	− 8	− 8	+16	−13	1	0.78
100508	20 22 49.58	−50 29 34.7	7.99	H	305.706 576 55	−50.492 966 73		1.96	4.38	8.40	1.01	0.72	1.12	1.70	1.26	−25	−17	− 3	+33	−25	−20	−30	+26	+30	−51	0	−0.67
100509	20 22 51.36	+07 54 53.5	8.14	H	305.713 988 44	+07.914 848 44		8.13	−20.11	1.94	0.89	0.78	1.07	1.03	1.03	+29	+ 4	− 8	+ 9	+25	+20	+30	+55	+ 8	+30	0	1.53
100510 H	20 22 51.38	+27 07 54.0	8.00	H	305.714 068 60	+27.131 671 30	A	5.56	46.18	47.36	0.83	0.92	1.39	0.83	0.90	−11	−20	+10	− 6	− 4	+19	− 6	+ 6	−12	− 9	1	−0.75
100511	20 22 52.32	+14 33 04.0	6.16	H	305.718 007 50	+14.551 114 52		38.27	79.02	−6.87	0.57	0.53	0.72	0.72	0.70	+ 8	− 9	− 9	+16	+17	+ 9	+19	+42	+ 8	+ 3	0	−0.33
100512	20 22 53.88	+06 10 57.5	9.78	H	305.724 492 01	+06.182 634 00		7.54	28.27	18.40	1.63	1.34	1.69	2.24	1.80	+25	−19	−19	+37	+ 9	+ 4	+13	+68	− 9	+20	0	−0.08
*100513 H	20 22 54.31	+64 10 58.6	8.77	H	305.726 307 13	+64.182 931 25	A	1.62	5.12	1.71	1.54	1.59	1.45	1.15	1.45	− 8	+12	+18	−43	+22	− 7	+15	−21	− 7	+20	1	−0.19
*100514	20 22 54.27	+18 20 24.4	8.70	H	305.726 108 32	+18.340 122 70		3.67	2.36	−12.09	0.78	0.67	1.01	0.91	0.75	+ 4	− 1	−18	− 8	+32	− 2	+29	+ 8	+15	+16	0	0.17
100515 H	20 22 55.49	+42 59 00.4	6.20	G	305.731 200 17	+42.983 439 05	A	9.86	55.72	42.82	0.70	0.69	0.74	0.75	0.70	+11	+ 0	+ 0	−20	− 1	− 5	+ 0	−28	+23	+21	3	−0.91
100516	20 22 56.36	+03 23 16.2	8.60	H	305.734 833 86	+03.387 823 64		1.86	−4.64	−2.92	1.12	1.18	1.37	1.44	1.53	+51	+ 6	− 6	+39	+41	+36	+49	+78	+ 4	+46	0	0.51
100517	20 22 56.61	−29 09 07.5	8.74	H	305.735 867 99	−29.152 086 88		3.86	7.89	−7.40	0.95	0.57	1.21	1.19	0.80	+41	−21	+ 9	− 7	+12	+10	+ 8	+ 2	+12	+72	0	0.64
100518	20 22 57.65	+39 12 39.7	6.74	G	305.740 216 39	+39.211 036 29		1.73	2.44	−0.99	0.42	0.43	0.56	0.41	0.42	−12	−13	+13	+ 7	+ 6	− 1	+ 8	−17	+ 4	− 3	0	−1.39
100519 H	20 22 58.67	+20 19 44.1	7.86	H	305.744 469 85	+20.328 927 20	A	6.56	28.36	13.39	2.01	2.49	1.55	1.45	1.25	− 4	− 5	+ 0	+19	+16	+25	+26	+23	− 4	+26	1	0.09
100520	20 22 59.52	−05 40 31.9	8.01	H	305.748 001 35	−05.675 540 03		6.00	12.21	9.00	1.07	0.70	1.17	1.43	1.14	+25	−30	−27	− 5	+16	+ 9	+28	+49	−24	+13	0	0.56
100521	20 22 59.57	−59 29 53.1	8.47	H	305.748 188 47	−59.498 080 90		5.45	11.50	2.04	0.76	0.75	1.15	1.06	0.80	+14	− 8	−24	−34	+12	−16	+ 5	−37	+18	−17	0	0.12
100522	20 23 00.00	+17 31 49.2	9.09	H	305.749 996 77	+17.530 329 62		2.02	−1.43	14.37	0.91	0.85	1.21	1.02	0.93	+35	−17	−25	− 7	+23	− 1	+20	+14	+ 6	+43	0	−0.65
100523	20 23 00.30	−35 22 38.5	7.01	H	305.751 270 12	−35.377 363 34		17.30	37.14	−16.84	0.81	0.46	0.89	1.00	0.80	+16	+13	− 8	−46	+ 4	−26	− 4	− 3	−23	+40	0	1.05
100524	20 23 00.78	−09 39 16.8	6.29	G	305.753 229 75	−09.654 670 53		7.49	27.04	−16.28	0.88	0.47	0.99	1.09	0.59	+ 4	−23	−14	−11	+ 9	+42	+18	+71	− 4	− 1	2	−0.13
100525	20 23 01.22	−69 25 42.2	9.02	H	305.755 091 62	−69.428 402 40	A	2.12	4.13	7.12	2.18	2.42	2.78	2.30	2.98	−26	−31	+21	+18	+13	+ 5	+15	+ 3	−13	−39	1	0.38
100526	20 23 01.33	+54 40 22.4	6.67	H	305.755 531 17	+54.672 891 20		14.44	34.37	−7.28	0.42	0.39	0.45	0.49	0.40	−13	− 8	+15	+16	+ 4	−14	+ 5	+ 3	+ 5	−13	0	−1.41
100527	20 23 01.66	+61 34 49.0	9.24	H	305.756 924 01	+61.580 267 30		3.07	12.00	11.53	0.82	0.78	0.87	0.95	0.87	+ 8	− 1	+ 0	+22	+ 2	+ 0	+ 2	−18	+19	+10	0	−1.09
100528	20 23 02.10	−43 40 14.2	8.39	H	305.758 748 00	−43.670 623 24		2.75	27.10	0.27	0.95	0.68	1.27	1.44	0.82	+ 0	− 6	−34	+16	+ 5	−24	− 4	− 6	− 1	− 4	0	0.04
100529	20 23 02.67	+42 59 38.4	8.00	H	305.761 144 09	+42.994 012 26		2.17	−2.39	−16.49	0.59	0.59	0.72	0.68	0.72	+10	+ 3	+ 6	−20	−11	−14	− 7	−31	+17	+23	4	−0.56
100530	20 23 03.44	+02 57 56.6	11.14	G	305.764 330 60	+02.965 716 31		5.96	0.05	−13.43	2.26	2.09	2.86	3.34	3.76	+48	+20	− 6	+25	+30	+20	+11	+55	−11	+68	8	−1.33
100531	20 23 04.10	−69 25 57.9	11.67	H	305.767 088 73	−69.432 755 01	B	10.68	27.43	12.25	40.60	46.44	36.52	30.57	40.66	−28	−25	+10	+10	+10	+ 2	+11	− 1	− 4	−42	1	0.38
100532	20 23 05.52	+32 26 31.0	8.07	H	305.772 990 97	+32.441 946 15		8.49	−49.77	−89.22	0.54	0.59	0.90	0.65	0.58	−20	−19	+ 4	+ 1	− 7	+ 6	− 7	−11	+11	−20	0	−1.64
100533	20 23 07.82	−18 20 32.7	7.89	H	305.782 571 30	−18.342 421 51		4.88	−16.24	−33.18	0.95	0.57	1.11	1.19	0.89	+10	−10	−15	− 7	+ 6	+37	+11	+38	−19	+14	2	−1.51
100534	20 23 07.98	+48 48 45.3	7.88	2 H	305.783 248 32	+48.812 595 95		1.79	−21.15	4.34	0.62	0.56	0.72	0.72	0.63	− 5	− 2	+ 6	+ 0	+ 6	−20	+ 6	− 6	+23	−11	0	2.01
100535	20 23 08.33	−03 48 42.7	7.67	H	305.784 707 34	−03.811 853 57		3.76	11.37	−3.36	0.91	0.70	1.01	1.18	0.97	+26	−23	−12	+21	+13	+ 6	+16	+51	− 2	+16	0	0.44
100536 H	20 23 08.98	+20 51 51.1	8.02	G	305.787 419 39	+20.864 199 85	*	4.00	10.16	−6.12	0.84	0.75	1.04	0.94	0.88	+18	−32	−14	− 3	+29	− 8	+27	+27	− 9	+21	0	−2.21
100537	20 23 09.84	−65 54 53.0	9.06	H	305.791 009 56	−65.914 720 74		2.41	15.14	−27.58	1.04	0.95	1.46	1.18	1.17	+ 3	−14	−19	+32	+12	−13	+ 8	− 9	+ 5	− 6	0	1.71
100538	20 23 10.07	+57 31 33.6	8.61	H	305.791 949 48	+57.526 012 42		1.77	5.39	−1.93	0.65	0.66	0.71	0.67	0.74	+ 5	+ 3	− 4	+18	+12	− 8	+13	+15	+ 1	+19	3	0.53
100539	20 23 10.25	−75 33 06.2	8.43	H	305.792 689 78	−75.551 712 26		11.37	177.47	−215.96	0.60	0.71	0.91	0.70	0.83	−14	− 5	+ 1	+ 3	−10	+ 1	−10	+ 7	− 7	−12	3	−0.19
100540 H	20 23 10.43	+35 41 35.0	8.03	H	305.793 455 95	+35.693 061 63	A	11.52	15.96	11.70	1.04	1.19	1.40	1.11	1.15	− 5	− 7	+12	+23	− 5	−20	− 3	+ 6	− 3	+ 1	1	2.31
100541	20 23 10.71	+05 20 35.1	5.30	H	305.794 622 51	+05.343 077 47		13.23	−26.89	−37.12	0.66	0.56	0.80	0.86	0.77	+20	+ 2	−11	+21	+15	+26	+19	+57	− 2	+19	0	1.32
100542	20 23 10.79	+40 52 29.9	8.50	H	305.794 947 73	+40.874 969 20		−0.02	−4.55	−4.54	0.66	0.68	0.85	0.72	0.77	− 2	+ 3	+ 5	−10	+ 8	+ 6	+ 6	+ 2	+11	+16	4	−1.58
100543	20 23 12.05	+24 02 12.7	7.39	H	305.800 203 31	+24.036 850 70		2.45	−0.67	−12.94	0.49	0.53	0.83	0.70	0.66	+ 7	−15	−14	− 1	− 6	+ 5	− 6	− 5	+12	+24	0	0.41
100544	20 23 12.07	−10 52 59.8	8.77	H	305.800 283 60	−10.883 270 85		6.59	−0.95	−5.27	1.30	0.81	1.40	1.85	0.89	+25	−17	−19	+15	+29	+ 8	+23	+16	+12	+22	0	1.68
100545 H	20 23 13.96	+59 46 39.7	8.68	H	305.808 149 01	+59.777 685 96	*	4.81	3.02	−26.13	0.71	0.66	0.73	0.80	0.68	− 3	+ 7	+ 1	+23	+17	+ 0	+16	−16	+14	− 4	0	−1.40
100546	20 23 15.52	−33 41 27.2	9.13	H	305.814 662 99	−33.690 887 52		5.72	10.46	12.59	1.11	0.63	1.30	1.43	1.00	+20	− 6	+ 2	+ 1	+18	+12	+18	+13	− 8	+50	2	−1.01
100547	20 23 15.74	+11 05 06.5	7.56	H	305.815 600 49	+11.085 130 55		8.47	17.23	−21.20	0.85	0.68	1.07	0.99	1.02	+28	−11	+ 7	−30	+ 8	+ 0	+ 3	+ 1	−19	+58	0	1.27
*100548	20 23 18.17	+40 45 32.6	7.03	2 G	305.825 697 40	+40.759 068 68		0.08	−3.23	−5.74	0.49	0.50	0.63	0.55	0.57	− 7	+ 6	+ 6	− 3	+11	+ 6	+11	− 3	+ 9	+14	0	−0.64
*100549	20 23 18.14	−72 39 06.6	8.20	H	305.825 593 35	−72.651 826 73		10.25	18.90	−57.53	0.57	0.69	0.93	0.65	0.88	−19	− 1	− 5	+ 4	− 2	−10	− 1	+10	+ 9	−33	1	−1.21
100550	20 23 19.22	−00 27 08.3	7.00	2 H	305.830 072 21	−00.452 294 12		4.22	−1.21	−5.09	0.92	0.65	1.18	1.36	1.07	+10	+16	−30	+35	−29	+22	−32	+38	−39	+16	0	−0.50
100551	20 23 19.33	+15 21 43.5	7.25	H	305.830 547 43	+15.362 079 05		8.20	6.54	−10.36	0.62	0.61	0.81	0.70	0.77	+17	−14	−13	+ 8	+20	+13	+24	+46	+ 0	+15	0	−1.70
100552 H	20 23 19.55	+05 34 14.0	8.99	G	305.831 445 43	+05.570 542 83	A	5.09	18.37	3.06	1.66	1.60	1.69	1.94	1.85	+48	+19	+ 5	+24	+32	+22	+33	+67	+15	+49	1	0.04
100553	20 23 23.71	+64 11 28.2	7.91	H	305.848 800 24	+64.191 179 97		4.47	−1.08	10.50	0.56	0.58	0.62	0.50	0.54	− 7	+ 4	+14	−34	+15	+ 7	+16	−31	+ 8	+17	2	2.49
100554	20 23 24.45	+33 29 23.6	11.54	2 G	305.851 859 38	+33.489 893 65		14.09	−133.30	−208.62	1.43	1.68	2.26	1.69	1.76	− 9	− 1	+11	+13	− 9	−23	− 3	−21	+ 3	− 3	2	−0.21
100555	20 23 24.90	+23 40 11.0	7.97	H	305.853 763 53	+23.669 712 69		−0.22	4.46	1.34	0.53	0.57	0.87	0.73	0.74	+10	−12	+ 0	−10	−17	− 5	−16	−11	+ 1	+35	0	−0.71
100556	20 23 26.25	−14 15 23.2	6.76	G	305.859 376 42	−14.256 433 18		2.68	10.47	−0.82	0.87	0.50	1.03	1.00	0.74	+12	−10	−12	−17	+ 4	+29	+ 6	+14	−30	+20	2	0.32
100557	20 23 26.31	+38 56 21.1	8.39	G	305.859 642 81	+38.939 189 42		0.12	−3.55	−6.72	0.60	0.62	0.81	0.64	0.61	− 8	− 2	+18	+ 6	+ 0	− 2	+ 2	−20	+ 1	− 1	0	1.23
*100558 H	20 23 27.71	−28 26 45.2	9.85	3 H	305.865 442 05	−28.445 876 97	A	10.33	113.85	−52.04	12.98	5.98	7.09	7.97	6.42	−48	+ 3	− 6	− 7	+ 0	+29	+ 0	+ 6	− 9	+42	10	1.92
*100559	20 23 26.99	+10 21 47.3	6.70	H	305.862 472 05	+10.363 132 99		6.38	52.04	8.08	0.67	0.60	0.90	0.78	0.77	+34	−24	−16	− 6	+21	+ 6	+22	+19	− 6	+42	0	0.89
*100560	20 23 27.45	+48 33 06.3	10.33	H	305.864 378 62	+48.551 748 44		2.63	−0.78	−19.97	1.05	0.97	1.21	1.24	1.11	− 1	+ 4	+17	+14	+ 9	−13	+12	− 5	+18	− 3	0	1.48
100561	20 23 27.71	+50 47 38.1	8.58	G	305.865 459 68	+50.793 905 65		4.33	5.68	7.57	0.67	0.65	0.76	0.75	0.74	−13	−12	+ 8	+ 6	+ 2	− 4	+ 1	+11	+ 6	−14	1	−0.31
100562	20 23 28.47	+46 23 45.7	8.98	H	305.868 643 05	+46.396 037 07		1.91	0.51	−5.38	0.80	0.66	0.88	0.94	0.70	−12	−11	+ 7	−15	− 1	+11	− 4	− 5	+19	+ 4	0	0.61
100563	20 23 30.17	−20 31 46.2	8.36	H	305.875 690 61	−20.529 487 20		1.61	−18.04	−13.01	1.07	0.66	1.21	1.23	0.97	+14	−18	−28	−13	+ 0	+29	+13	+32	−21	+ 7	0	−0.54
100564	20 23 30.36	+58 29 32.9	9.06	H	305.876 506 62	+58.492 473 68		1.64	14.15	1.63	0.74	0.70	0.79	0.84	0.84	+ 2	− 3	+ 3	+11	+ 5	− 8	+ 6	+ 1	+ 8	+13	0	0.71
100565	20 23 32.08	+62 16 16.0	8.60	H	305.883 682 51	+62.271 115 60		7.06	38.10	105.75	0.81	0.69	0.81	0.96	0.71	−10	+ 9	−15	−25	+ 8	+ 5	+10	−32	+30	+ 2	1	0.98
100566	20 23 33.41	−26 44 05.9	7.45	H	305.889 224 51	−26.734 982 86		4.86	−16.60	−8.56	0.79	0.54	0.89	0.94	0.82	+23	−20	−11	− 9	− 6	+17	− 5	+12	− 9	+28	0	0.96
100567	20 23 33.47	+34 22 39.1	8.32	H	305.889 472 95	+34.377 538 89		3.99	6.90	0.05	0.56	0.59	0.79	0.64	0.70	− 1	+ 5	− 3	+29	+12	− 7	+13	+ 9	+ 3	+ 3	0	0.04
100568	20 23 35.51	−21 22 05.0	8.65	G	305.897 953 40	−21.368 050 62		22.88	539.73	−1055.93	1.29	0.66	1.24	1.51	1.14	+12	−15	−18	−41	+12	+12	+12	+31	−11	+23	0	−0.60
100569 H	20 23 35.78	−51 11 19.2	8.66	H	305.899 084 28	−51.188 672 60	A	7.00	−7.63	4.75	1.99	1.41	1.87	2.64	1.92	− 8	−17	− 1	+29	− 7	−10	− 6	+27	−10	−21	1	0.40
100570	20 23 38.23	−05 15 58.2	6.75	H	305.909 297 41	−05.266 171 64		24.12	175.79	−9.95	0.95	0.71	1.15	1.51	1.03	+14	−18	−38	+23	−12	+32	+11	+60	−31	−20	0	−0.09
*100571	20 23 39.36	+46 31 40.6	8.43	G	305.914 012 22	+46.527 936 33	A	1.41	−0.80	−7.74	0.95	0.79	0.95	1.11	0.79	− 1	−22	+12	−16	+ 1	− 2	− 6	−12	+17	+10	2	0.89
*100572 H	20 23 39.19	−01 04 10.8	8.29	H	305.913 287 65	−01.069 672 02	A	4.04	1.81	−7.22	1.22	0.98	1.38	1.54	1.28	+45	+ 3	− 7	+37	+11	+ 7	+ 2	+47	−15	+59	0	−0.66
100573	20 23 40.98	+31 40 38.3	8.06	H	305.920 751 46	+31.677 296 83		0.93	0.67	−5.11	0.48	0.57	0.83	0.54	0.59	−19	− 2	− 2	+15	+ 0	−10	+ 2	−13	+ 3	− 9	0	0.14
100574	20 23 44.37	+37 28 35.2	5.87	2 H	305.934 855 40	+37.476 448 22		3.65	5.09	0.17	0.37	0.42	0.53	0.38	0.39	−11	+ 5	+ 4	+ 0	− 2	−17	+ 0	−30	+12	−12	0	1.68
100575	20 23 44.64	−35 07 45.6	7.59	H	305.936 019 30	−35.129 323 21		4.52	−13.52	2.90	0.87	0.51	0.97	1.15	0.69	+16	+19	−14	−34	+ 3	−10	− 2	− 5	− 1	+30	0	−0.11
100576	20 23 45.14	−59 20 28.5	8.68	2 H	305.938 077 86	−59.341 246 02		0.64	−2.40	0.31	0.86	0.73	1.14	1.16	0.78	+17	−17	−16	−29	+ 0	+ 3	+ 2	−25	− 6	−12	0	2.62
100577	20 23 47.09	+37 58 57.9	8.60	H	305.946 209 35	+37.982 740 35		3.58	5.26	0.67	0.60	0.64	0.86	0.68	0.63	− 4	+ 1	+ 8	+ 8	− 4	− 6	+ 4	−20	− 1	−22	+18	− 5	0	0.63
100578	20 23 47.63	−41 32 55.5	10.42	H	305.948 476 12	−41.548 760 80		1.45	−2.05	10.72	1.80	0.94	2.03	2.40	1.43	+ 8	−28	−23	− 8	+ 1	+10	+ 9	+ 4	−20	+ 4	4	−0.80
100579	20 23 48.04	+37 01 34.1	6.81	H	305.950 149 56	+37.026 138 40		2.28	2.69	−0.60	0.41	0.46	0.58	0.45	0.45	− 3	+ 1	+ 9	− 1	− 2	−11	+ 0	−34	+ 6	+ 0	1	−0.69
100580	20 23 48.38	−50 50 16.5	7.94	H	305.951 563 34	−50.837 913 17		5.21	6.12	−33.42	0.93	0.65	0.99	1.28	0.97	− 8	−28	−12	+19	−15	− 5	−18	+13	+ 8	−29	0	−0.05
100581	20 23 48.50	+06 37 22.3	7.60	G	305.952 082 99	+06.622 854 84		17.40	−12.87	−57.96	0.79	0.72	1.04	0.91	0.97	+34	−13	−23	+10	+26	+31	+36	+61	−18	+33	2	1.26
*100582	20 23 55.45	+56 14 52.2	10.27	2 H	305.981 039 39	+56.247 833 18	*	2.62	−3.39	−6.05	4.47	3.67	2.26	4.18	3.65	+33	−32	−49	−88	−23	+18	−31	−89	+51	+25	0	2.22
*100583 H	20 23 50.09	+41 46 30.2	9.33	G	305.958 728 43	+41.775 056 03	B	8.94	12.68	−54.97	3.10	3.50	3.20	2.72	3.13	−44	+ 1	− 7	+ 2	+ 1	−12	− 1	−20	+30	− 8	0	2.24
*100584	20 23 50.52	−37 30 00.7	8.27	H	305.960 496 92	−37.500 201 66		0.80	15.08	−18.60	0.95	0.58	1.08	1.20	0.89	+18	−32	− 5	+17	+20	+10	+22	+27	− 4	+34	0	1.26
*100585	20 23 50.79	−36 20 26.9	8.32	H	305.961 638 33	−36.340 819 28		5.21	−24.10	−11.18	1.04	0.59	1.14	1.11	0.90	+ 3	+ 1	− 9	−33	+16	−10	+ 8	+12	+ 1	+32	0	1.11
*100586	20 23 51.02	+38 29 34.4	8.58	2 G	305.962 563 03	+38.492 885 97		3.01	−13.10	−12.48	0.63	0.69	0.88	0.76	0.64	−12	− 5	+23	+ 5	+ 2	− 3	+ 3	−27	+ 1	− 8	0	1.49
*100587	20 23 51.60	+32 11 24.7	4.43	H	305.964 983 35	+32.190 186 07		12.77	35.71	−5.81	0.37	0.43	0.62	0.44	0.43	−23	− 3	− 4	+15	−12	−10	−12	−18	+13	−29	0	−0.24
*100588 H	20 23 51.70	+52 31 52.4	8.24	H	305.965 416 69	+52.531 231 02	A	0.11	−4.64	−7.20	1.82	2.57	0.81	0.86	0.78	+37	−10	+ 8	+13	+ 5	+21	+ 3	+ 0	+14	+ 5	1	0.97
*100589	20 23 52.53	−60 36 34.3	7.98	H	305.968 876 89	−60.609 528 00		3.40	−0.90	−16.47	0.56	0.55	0.88	0.57	0.67	+15	−21	− 6	+39	−12	+ 7	−19	−16	+11	+10	0	1.51
*100590	20 23 52.80	+00 31 21.1	8.16	H	305.969 980 03	+00.522 531 81		0.15	−5.05	4.79	1.03	0.74	1.31	1.43	1.26	+17	−11	−19	+30	−15	− 5	+19	+36	−30	+34	0	−1.51
*100591 H	20 23 53.19	−42 25 22.5	5.64	G	305.971 612 25	−42.422 904 63	A	8.80	−11.08	14.99	1.43	0.82	0.95	1.17	0.80	+21	− 8	+ 2	+ 0	+ 3	+ 0	− 3	+ 7	− 1	+31	1	0.83
*100592 H	20 23 53.36	+54 20 09.1	8.84	H	305.972 318 27	+54.335 871 13	*	2.05	−2.12	−5.21	0.65	0.60	0.71	0.78	0.60	− 3	−12	+18	+ 9	+ 1	+ 0	− 1	− 4	+12	− 3	0	0.42
*100593	20 23 53.51	−24 09 54.4	8.89	H	305.972 970 18	−24.165 111 53		5.55	21.08	−51.14	1.22	0.80	1.36	1.71	1.41	+33	−19	−15	−11	− 2	+ 9	− 3	+20	− 4	+38	3	0.75
*100594	20 23 54.24	−79 03 03.1	7.56	1 H	305.976 009 23	−79.050 852 37		8.18	46.93	−47.35	0.50	0.47	0.66	0.57	0.51	+ 6	−24	− 8	+ 3	+ 6	− 4	+ 4	−14	− 2	− 6	0	−1.31
*100595	20 23 54.13	+50 54 04.1	8.86	H	305.975 528 36	+50.901 145 45		4.04	25.47	60.75	0.76	0.68	0.83	0.88	0.79	− 9	−14	− 6	+ 1	+ 7	+ 0	+ 4	+ 1	+14	− 5	1	−0.39
*100596	20 23 54.31	−07 35 46.9	8.19	H	305.976 285 06	−07.596 364 48		2.21	6.97	7.41	0.92	0.66	1.18	1.24	0.97	+21	− 1	−22	+ 9	+ 4	+43	+18	+53	−20	+ 8	0	−0.61
*100597	20 23 54.31	−66 10 44.0	7.99	H	305.976 308 21	−66.178 879 68		10.85	−67.94	−11.36	0.72	0.72	1.08	0.94	0.92	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
100501	8.056	0.008	6.131	0.004		1.632	0.007	T	1.78	0.03	O	6.0486	0.0015	0.014	127		6.02	6.06		U 2			1							S
100502	9.053	0.014	8.625	0.015		0.418	0.017	T	0.48	0.02	L	8.6744	0.0015	0.012	90		8.65	8.69		C			1							S
100503	8.290	0.007	7.310	0.006		0.859	0.007	T	0.87	0.01	L	7.3635	0.0010	0.011	181		7.34	7.38		C			1							S
100504	9.757	0.019	7.939	0.009		1.513	0.017	T	1.55	0.03	L	7.9149	0.0013	0.012	116		7.89	7.93		C			1							
100505	9.293	0.023	8.931	0.024		0.343	0.031	T	0.40	0.04	L	9.0009	0.0026	0.026	105		8.95	9.03		U	20228+5325	I 2	1							
100506	10.192	0.030	8.610	0.014		1.326	0.026	T	1.29	0.03	L	8.6117	0.0033	0.028	89		8.57	8.65		U 2	20228+1320	I 1	1 X S							
100507	7.901	0.011	7.871	0.012	*	0.032	0.015	T	0.05	0.01	L *	7.9372	0.0016	0.013	105	*	7.92	7.96		D	20228+5325	I 2	2 C A	AB	39	6.812	0.018	3.13	0.08	S
100508	10.029	0.027	8.188	0.012		1.531	0.023	T	1.58	0.05	L	8.1112	0.0018	0.013	80		8.09	8.14					1							S
100509	8.487	0.011	8.156	0.012		0.314	0.015	T	0.36	0.02	L	8.2115	0.0018	0.015	78		8.19	8.23		C			1							S
100510	8.280	0.010	7.894	0.010	*	0.365	0.013	T	0.43	0.01	L *	8.0841	0.0016	0.020	219	*	8.05	8.12		D	20229+2708	I 1	2 C A	AB	170	2.859	0.006	1.65	0.02	
100511	6.747	0.005	6.215	0.004		0.498	0.014	G	0.55	0.03	C	6.2706	0.0006	0.006	97		6.26	6.28		C			1							S
100512	10.421	0.046	9.847	0.042		0.593	0.002	G	0.66	0.00	H	9.9027	0.0038	0.024	54		9.86	9.94		C			1							G
100513	8.903	0.017	8.700	0.021	*	0.187	0.026	T	0.21	0.03	L *	8.8326	0.0022	0.018	110	*	8.81	8.87		R	20229+6411	I 1	2 C A	AB	348	4.205	0.005	0.75	0.02	
100514	8.977	0.014	8.721	0.016		0.244	0.020	T	0.27	0.03	L	8.7722	0.0020	0.016	106		8.74	8.80		C			1							
100515	7.502	0.010	6.355	0.005	A	0.957	0.009	G	0.94	0.01	H *	6.3686	0.0007	0.007	111	*	6.36	6.38		D	20230+4259	I 2	2 C A	AB	3	1.354	0.011	2.47	0.04	S
100516	10.548	0.038	8.780	0.015		1.473	0.032	T	1.49	0.05	L	8.7274	0.0019	0.018	93		8.69	8.76		C			1							
100517	9.209	0.015	8.803	0.015		0.408	0.015	G	0.47	0.02	H	8.8348	0.0014	0.016	151		8.81	8.86					1							
100518	6.610	0.004	6.714	0.006		−0.103	0.005	G	−0.09	0.01	H	6.7185	0.0009	0.009	147		6.70	6.73			20229+3913	I 1	1							S
100519	8.496	0.011	7.946	0.012	*	0.515	0.014	T	0.59	0.01	L *	7.9736	0.0021	0.013	85	*	7.96	8.00			20230+2020	H 1	2 C C	AB	338	0.339	0.039	3.51	0.32	S
100520	8.320	0.011	8.035	0.012		0.271	0.015	T	0.31	0.02	L	8.0836	0.0013	0.007	65		8.07	8.10		C			1							S
100521	8.745	0.012	8.498	0.013		0.231	0.018	T	0.26	0.02	L	8.5370	0.0020	0.019	127		8.51	8.57		C			1							S
100522	10.438	0.038	9.186	0.022		1.068	0.034	T	1.03	0.03	L	9.2588	0.0021	0.018	94		9.23	9.29		C			1							
100523	7.442	0.006	7.059	0.007		0.374	0.008	T	0.44	0.01	L	7.1015	0.0010	0.008	114		7.09	7.12		C			1							S
100524	7.424	0.007	6.393	0.005		0.913	0.003	G	0.91	0.00	H	6.4486	0.0007	0.007	71		6.44	6.46		C			1							S
100525	10.303	0.028	9.141	0.018	A	0.997	0.026	T	0.98	0.02	L	9.1794	0.0269	0.037	177	A	9.12	9.24		D	20230−6926	I 2	1 C P D							D
100526	6.942	0.004	6.701	0.005		0.230	0.006	T	0.26	0.01	L	6.7363	0.0007	0.007	136		6.73	6.75		C			1							S
100527	9.546	0.019	9.277	0.021		0.256	0.027	T	0.29	0.03	L	9.3087	0.0023	0.019	100		9.28	9.34		C			1							
100528	8.669	0.013	8.418	0.014		0.239	0.018	T	0.27	0.02	L	8.4579	0.0017	0.017	85		8.43	8.49		C			1							S
100529	8.149	0.010	7.997	0.011		0.146	0.014	T	0.16	0.01	L	8.0501	0.0012	0.010	108		8.03	8.07		C	20230+4259	I 2	1							
100530						1.839	0.020	G	1.98	0.15	K	11.2715	0.0051	0.036	83		11.17	11.34		C			1							G
100531	11.671	0.090	11.196	0.094	B	0.447	0.119	T	0.52	0.13	L	11.3514	0.1574			B				D	20230−6926	I 2	1 C I D							D
100532	8.776	0.011	8.136	0.010		0.594	0.013	T	0.66	0.01	L	8.1943	0.0012	0.016	166		8.17	8.22					1							
100533	9.338	0.018	8.023	0.011		1.117	0.017	T	1.08	0.02	L	8.0537	0.0015	0.012	86		8.04	8.07					1							
100534	10.299	0.030	8.134	0.010		1.880	0.015	G	1.89	0.09	H	7.9691	0.0034	0.026	105		7.92	8.01		U 2			1							
100535	9.190	0.017	7.804	0.010		1.172	0.015	T	1.13	0.01	L	7.8399	0.0014	0.011	75		7.82	7.86		C			1							S
100536	8.374	0.012	8.049	0.012	*	0.334	0.015	G	0.39	0.02	H *	8.0866	0.0018	0.018	86	*	8.06	8.11			20231+2052	I 1	2 C S A	AB	239	0.128	0.009	0.26	0.62	S
100537	10.598	0.036	9.163	0.018		1.211	0.032	T	1.17	0.03	L	9.2263	0.0029	0.024	115		9.18	9.27					1							
100538	10.633	0.036	8.779	0.014		1.541	0.031	T	1.60	0.07	L	8.7313	0.0017	0.019	107		8.71	8.77					1							
100539	9.093	0.011	8.482	0.010		0.547	0.003	G	0.62	0.00	H	8.5446	0.0015	0.017	148		8.51	8.58		C			1							S
100540	8.560	0.012	8.042	0.011	*	0.465	0.015	G	0.54	0.02	H *	8.1349	0.0016	0.016	154	*	8.11	8.16		D	20232+3542	I 1	2 C A	AB	203	9.234	0.023	2.81	0.10	
100541	6.552	0.005	5.408	0.003		0.983	0.005	T	0.96	0.00	L	5.4700	0.0006	0.005	77		5.46	5.48		C			1							S
100542	9.531	0.016	8.665	0.013		0.774	0.015	T	0.81	0.01	L	8.6441	0.0017	0.020	128		8.61	8.68					1							G
100543	9.514	0.016	7.597	0.007		1.591	0.014	T	1.61	0.01	L	7.5097	0.0012	0.013	159		7.49	7.53					1							S
100544	10.263	0.035	8.906	0.020		1.150	0.032	T	1.11	0.03	L	8.9381	0.0029	0.015	69		8.91	8.97		C			1							
100545	9.138	0.015	8.736	0.015	*	0.380	0.019	T	0.44	0.02	L *	8.7705	0.0019	0.016	119	*	8.74	8.80			20232+5947	M 1	2 C S A	AB	317	0.154	0.007	0.51	0.35	
100546	9.521	0.018	9.163	0.020		0.348	0.024	T	0.41	0.03	L	9.2127	0.0023	0.020	107		9.18	9.24					1							
100547	7.769	0.007	7.598	0.010		0.164	0.011	T	0.18	0.01	L	7.6162	0.0020	0.015	88		7.59	7.64					1							S
100548	8.158	0.009	7.181	0.007		0.857	0.008	T	1.42	0.03	C	7.1557	0.0027	0.024	129		7.12	7.20		U 2			1							S
100549	9.252	0.011	8.291	0.008		0.845	0.010	T	0.86	0.01	L	8.3571	0.0017	0.018	177		8.33	8.39					1							
100550	9.110	0.015	7.220	0.007		1.603	0.014	T	2.39	0.04	O	7.0296	0.0043	0.039	102		6.96	7.09		U 2			1 S							S P
100551	7.264	0.005	7.256	0.008		0.012	0.009	T	0.03	0.01	L	7.2666	0.0011	0.011	94		7.25	7.29		C			1							S
100552	9.568	0.022	9.046	0.021	A	0.524	0.015	G	0.60	0.02	H *	9.0637	0.0018	0.013	72	*	9.04	9.09		C	20233+0534	I 1	2 C D	AB	351	9.181	0.055	3.75	0.24	D
100553	9.331	0.015	8.021	0.009		1.113	0.014	T	1.08	0.01	L	8.0751	0.0011	0.012	113		8.06	8.09		C			1							S
100554						0.948	0.020	G	1.00	0.02	I	11.7948	0.0061	0.064	157		11.63	11.90		U			1							G
100555	7.917	0.008	7.955	0.009		−0.030	0.011	T	−0.01	0.01	L	7.9660	0.0014	0.015	161		7.94	7.99					1							S
100556	6.637	0.005	6.756	0.006		−0.100	0.001	G	−0.08	0.00	H	6.7376	0.0009	0.008	73		6.73	6.75		C			1							S
100557	9.202	0.013	8.502	0.012		0.737	0.023	G	0.78	0.02	H	8.5129	0.0017	0.016	132		8.49	8.54					1							
100558	9.723	0.064	9.006	0.046	*	0.645	0.060	T	0.71	0.05	L *	9.9778	0.0138	0.185	92	*	9.85	10.78		R 2 C	20234−2827	I 1	2 C A	AB	294	2.633	0.029	0.20	0.05	G P
100559	8.038	0.009	6.818	0.005		1.043	0.008	T	1.01	0.01	L	6.8678	0.0007	0.007	90		6.86	6.88		C			1							S
100560	12.129	0.168	10.565	0.068		1.312	0.143	T	1.27	0.17	L	10.4842	0.0028	0.028	112		10.42	10.53		C			1 S							G
100561	8.731	0.010	8.607	0.012		0.120	0.015	G	0.13	0.01	H	8.6310	0.0020	0.016	111		8.61	8.66		C			1							
100562	10.367	0.032	9.087	0.018		1.089	0.029	T	1.05	0.03	L	9.1443	0.0024	0.019	123		9.11	9.18		C			1							
100563	10.515	0.042	8.581	0.015		1.605	0.035	T	1.62	0.04	L	8.4731	0.0021	0.017	93		8.44	8.51					1							
100564	10.442	0.035	9.178	0.019		1.077	0.031	T	1.04	0.03	L	9.2345	0.0019	0.020	115		9.21	9.27		C			1							
100565	9.351	0.018	8.685	0.016		0.617	0.020	T	0.69	0.02	L	8.7332	0.0021	0.018	106		8.70	8.76					1							
100566	8.874	0.014	7.578	0.009		1.102	0.013	T	1.06	0.01	L	7.6150	0.0015	0.013	91		7.60	7.64			20236−2644	I 1	1 S							S
100567	8.266	0.008	8.298	0.010		−0.025	0.012	T	0.00	0.01	L	8.3208	0.0016	0.016	148		8.30	8.35					1							
100568	9.298	0.020	8.718	0.019		0.554	0.023	G	0.63	0.02	H	8.7623	0.0011	0.012	81		8.73	8.79					1							
100569	9.069	0.016	8.727	0.017	*	0.331	0.025	T	0.39	0.03	L *	8.7391	0.0022	0.020	69	*	8.71	8.77		D	20236−5111	I 1	2 C A	AB	312	0.779	0.020	2.35	0.06	S
100570	7.253	0.010	6.801	0.010		0.426	0.013	T	0.49	0.01	L	6.8440	0.0009	0.006	61		6.83	6.86					1							S
100571	8.370	0.008	8.449	0.010	A	−0.040	0.015	G	−0.02	0.01	H	8.4597	0.0054	0.018	129	A	8.43	8.50			20237+4632	I 1	2 C A	AB	325	13.820	0.023	3.04	0.09	
100572	8.243	0.009	8.280	0.012	*	−0.029	0.014	T	−0.01	0.01	L *	8.2896	0.0013	0.010	115	*	8.27	8.31		C	20237−0104	H 1	2 C A	AB	356	0.610	0.024	3.81	0.10	S
100573	7.962	0.007	8.029	0.010		−0.070	0.015	G	−0.05	0.01	H	8.0382	0.0013	0.016	172		8.01	8.07		C			1							
100574	5.641	0.003	5.841	0.004		−0.173	0.004	T	−0.18	0.01	L	5.8061	0.0025	0.024	143		5.75	5.85		U 2 C			1							S
100575	8.810	0.012	7.696	0.008		0.960	0.011	T	0.95	0.01	L	7.7514	0.0011	0.013	114		7.73	7.77					1							S
100576	10.869	0.044	8.904	0.015		1.665	0.038	T	2.36	0.07	O	8.7209	0.0034	0.034	129		8.67	8.77		U 2			1							
100577	8.654	0.009	8.596	0.011		0.055	0.005	G	0.07	0.00	H	8.6264	0.0019	0.021	162		8.59	8.66					1							
100578	10.993	0.070	10.499	0.073		0.476	0.077	T	0.55	0.08	L	10.5247	0.0037	0.022	86		10.48	10.57		C			1							G
100579	6.923	0.004	6.829	0.005		0.124	0.005	G	0.14	0.01	H	6.8551	0.0008	0.008	153		6.84	6.87		C			1							S
100580	9.501	0.021	8.073	0.012		1.205	0.019	T	1.16	0.02	L	8.1014	0.0015	0.013	70		8.08	8.13		C			1							S
100581	8.142	0.009	7.660	0.009		0.454	0.012	T	0.52	0.01	L	7.7021	0.0014	0.010	71		7.68	7.72		C			1							S
100582	12.470	0.269	10.914	0.104		1.306	0.227	T	1.27	0.24	L	10.3878	0.0232	0.133	53		10.22	10.57		U 2			1 V							G
100583	10.203	0.027	9.563	0.024	*	0.598	0.015	G	0.67	0.01	H *	9.4440	0.0024	0.022	120	*	9.41	9.49		D	20238+4146	M 1	2 C A	BA	283	0.960	0.006	0.06	0.01	G
100584	9.473	0.020	8.398	0.014		0.931	0.019	T	0.93	0.01	L	8.4323	0.0014	0.013	99		8.41	8.46		C			1							
100585	9.716	0.021	8.401	0.012		1.117	0.019	T	1.08	0.02	L	8.4878	0.0016	0.016	100		8.46	8.52					1							
100586	9.084	0.012	8.615	0.012		0.421	0.010	G	0.49	0.01	H	8.6980	0.0024	0.029	149		8.66	8.76		U 2	20238+3830	I 1	1							G
100587	6.176	0.003	4.580	0.002		1.331	0.003	G	1.31	0.03	C	4.5795	0.0005	0.005	154		4.57	4.59					1							S
100588	8.144	0.008	8.245	0.011	*	−0.087	0.013	T	−0.07	0.01	L *	8.2165	0.0014	0.014	127	*	8.19	8.24		D	20239+5232	I 1	2 C A	AB	207	0.319	0.003	0.70	0.05	
100589	9.435	0.013	8.081	0.008		1.147	0.012	T	1.11	0.01	L	8.1464	0.0011	0.012	173		8.12	8.17		C			1							
100590	9.846	0.025	8.293	0.012		1.304	0.022	T	1.26	0.02	L	8.3155	0.0010	0.011	92		8.30	8.34		C			1							
100591	5.885	0.003	5.664	0.003	*	0.201	0.009	G	0.24	0.00	A *	5.6990	0.0010	0.008	101	*	5.68	5.71		D	20239−4225	I 1	2 C A	AB	265	0.381	0.003	1.08	0.02	S
100592	8.793	0.011	8.834	0.014	*	−0.033	0.016	T	−0.01	0.02	L *	8.8331	0.0021	0.016	123	*	8.80	8.87			20239+5420	H 1	2 C S A	AB	204	0.184	0.018	1.65	0.33	
100593	9.929	0.029	8.968	0.021		0.845	0.027	T	0.86	0.02	L	9.0493	0.0020	0.019	76		9.02	9.08					1							
100594	7.816	0.006	7.582	0.007		0.218	0.009	T	0.24	0.01	L	7.6251	0.0017	0.016	160		7.60	7.66		U			1							S
100595	10.236	0.031	8.956	0.018		1.089	0.028	T	1.05	0.03	L	9.0298	0.0016	0.019	117		9.00	9.06					1							
100596	9.987	0.027	8.342	0.013		1.376	0.024	T	1.35	0.03	L	8.3423	0.0018	0.013	82		8.32	8.37		C			1							
100597	8.745	0.012	8.071	0.010		0.613	0.012	T	0.68	0.01	L	8.1247	0.0015	0.019	113		8.09	8.16					1							S
100598	6.760	0.005	6.777	0.006		−0.011	0.007	T	0.01	0.01	L	6.7858	0.0010	0.009	99		6.77	6.80		C			1							S
100599	12.448	0.239	10.530	0.069		1.626	0.205	T	4.28	0.96	Q	9.6426	0.1346	0.851	87		9.10	11.00	366.00	P 1 A			1 S							G
100600	10.152	0.028	9.426	0.025		0.666	0.030	T	0.73	0.03	L	9.5073	0.0018	0.024	144		9.47	9.55					1							G

$20^h\ 23^m\ 59^s$ - $20^h\ 24^m\ 56^s$ 2022

100601 - 100700

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)											Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
100601	20 23 59.41	−10 39 40.2	10.39		G	305.997 527 77	−10.661 153 16		10.11	143.82	−18.68	1.91	1.09	2.02	2.65	1.46	+18	−24	−	9	+	5	+16	+15	+17	+28	−	1	+14	0	0.57
100602	20 24 01.66	−61 18 29.7	9.13		H	306.006 925 38	−61.308 258 59		−1.50	16.28	−9.30	0.89	0.90	1.32	0.92	1.13	+32	−30	−21	+31	−	5	−	6	−12	−19	+11	+25	1	0.76
100603	20 24 02.81	+39 32 29.5	7.85		H	306.011 704 74	+39.541 518 90		0.89	1.75	−2.07	0.48	0.51	0.65	0.50	0.52	−	1	−	3	+	3	+	0	+	4	−	5	+	4	−10	+	9	+	4	0	0.18
100604	20 24 03.31	−40 50 00.9	7.87		H	306.013 789 85	−40.833 577 37		3.72	41.71	−50.50	0.86	0.53	0.94	1.08	0.76	+14	−18	−	6	−11	+	7	+	9	+	8	+	0	−	7	+26	0	0.99
100605	20 24 03.58	+75 15 13.4	9.32	2	H	306.014 896 89	+75.253 730 35	*	2.26	−6.14	17.22	0.78	0.71	0.87	0.82	0.83	+	1	−14	+	2	−12	+	2	+	4	+	1	−11	+21	+	9	0	2.36
100606	20 24 03.80	+40 20 23.1	8.69		H	306.015 813 85	+40.339 750 78		4.95	6.68	3.70	0.69	0.72	0.93	0.75	0.75	−	5	−20	+	6	−	7	+	9	+14	+	6	−	8	+10	+10	0	−2.22
100607	H 20 24 05.36	+21 56 27.8	10.25		H	306.022 338 23	+21.941 069 41	A	1.39	−0.28	−6.71	1.53	1.40	2.05	1.48	1.64	−	3	−15	−	2	+20	−14	+12	−13	+10	+	4	+36	1	−0.11
*100608	20 24 05.65	−21 10 17.8	8.58	1	H	306.023 531 71	−21.171 612 71		2.93	−4.46	−1.56	1.35	0.84	1.45	1.43	1.12	+24	−15	−37	−40	−	3	+	4	+	3	+11	−22	+21	0	−0.18
*100609	20 24 05.62	+44 42 03.5	7.45		H	306.023 404 72	+44.700 984 92		6.73	−13.58	40.00	0.49	0.51	0.62	0.60	0.52	−	8	−	7	+	8	+12	+	2	−11	+	4	−13	+	6	−	1	0	−1.87
100610	20 24 05.90	−27 34 28.8	9.21		H	306.024 586 43	−27.574 672 03		8.95	21.19	−78.92	1.30	0.80	1.46	1.74	1.21	+	9	−25	−14	+24	−16	+29	−10	+37	−14	−12	0	0.27
100611	20 24 06.30	−25 14 01.6	9.32		H	306.026 237 58	−25.233 764 91		−0.86	9.38	−4.88	1.26	0.79	1.42	1.87	1.28	+	8	−	1	−28	+32	−24	+27	−20	+33	−31	−10	0	−1.02
100612	20 24 06.55	+38 29 33.2	8.99		H	306.027 287 85	+38.492 562 72		0.08	−1.28	−5.32	0.75	0.77	1.00	0.92	0.77	−10	−16	+	5	−	4	+	0	−	5	+	0	−22	+	6	−	7	1	1.13
100613	20 24 06.68	−13 23 54.3	7.71		H	306.027 817 16	−13.398 421 40		10.84	25.33	−79.92	0.91	0.52	1.02	1.15	0.69	+12	−	1	−16	−19	+	2	+23	+	4	+	4	−21	+16	0	−0.95
100614	20 24 06.91	−64 35 23.9	8.78		H	306.028 807 14	−64.589 973 43		2.60	14.61	−17.53	0.90	0.77	1.19	1.03	0.95	−10	−12	+	2	+35	−	4	−	6	−	6	+24	+	0	−30	0	1.77
100615	20 24 08.66	+61 28 46.4	9.18		H	306.036 085 59	+61.479 558 83		3.01	12.27	9.98	0.82	0.78	0.84	0.96	0.86	+	2	+10	−11	+32	+	2	+	3	+	7	−37	+25	+	7	0	−0.96
100616	20 24 09.01	+29 00 07.6	7.27		H	306.037 533 29	+29.002 105 60		8.00	10.41	41.19	0.36	0.46	0.70	0.41	0.47	−23	+	4	−	4	+12	−11	−	7	−10	−17	+	4	−24	2	0.49
100617	20 24 09.05	−54 32 34.9	7.60		H	306.037 701 79	−54.543 021 96		6.37	12.84	−22.37	0.80	0.67	1.06	1.09	1.02	+17	+13	−17	−37	+34	−28	+35	+22	+23	+13	2	1.10
100618	20 24 09.15	−00 34 02.5	7.68		H	306.038 119 65	−00.567 351 43		2.23	39.18	−16.80	0.90	0.74	1.36	1.31	0.97	+12	−	2	−50	+40	−36	+35	−20	+55	−41	−	8	0	−0.53
100619	20 24 09.31	−28 00 18.2	9.37		H	306.038 811 44	−28.005 048 70		4.56	14.77	−14.88	1.24	0.76	1.42	1.64	1.16	−	2	+	3	−	6	+13	−15	+37	−18	+25	−15	−	6	0	−0.82
100620	H 20 24 10.74	+29 58 00.7	9.39		H	306.044 731 33	+29.966 855 74	*	4.91	23.32	3.92	0.68	0.95	1.34	0.79	1.00	−17	+	7	−	2	+27	+	1	−15	+	6	−14	+	6	−	6	0	0.48
100621	20 24 10.80	−30 29 22.6	8.10		G	306.044 980 37	−30.489 622 89		9.82	20.59	−21.49	0.81	0.46	0.97	0.88	0.61	+43	−40	−15	−	6	+22	+20	+16	+	7	+18	+75	0	0.33
100622	20 24 11.80	−65 34 49.9	8.77		H	306.049 169 75	−65.580 530 53		2.49	41.54	−16.25	0.91	0.79	1.19	1.02	0.98	+	1	−21	+	2	+27	+11	−	9	+12	+	1	−	8	−	4	0	1.38
100623	20 24 13.92	−14 06 50.1	6.97		H	306.057 982 87	−14.113 905 45		4.51	−23.35	−20.65	0.92	0.49	1.07	1.02	0.72	+10	−	3	−	8	−21	+	3	+22	+	1	+	6	−30	+26	0	2.45
100624	20 24 14.40	−67 35 50.6	8.60		H	306.059 988 15	−67.597 375 64		2.32	6.33	−16.44	0.44	0.66	1.04	0.51	0.83	−50	−	6	+	2	−	8	+	8	−14	+	8	+	9	+15	−51	0	−2.59
100625	20 24 14.88	−39 44 34.2	12.14		H	306.061 987 38	−39.742 836 42	B	12.54	5.86	−35.31	38.35	23.04	24.37	36.00	21.27	+25	−	6	−	7	−	7	+14	−37	+11	+	2	−30	+57	4	2.03
*100626	20 24 15.29	−39 44 21.5	10.29		H	306.063 702 44	−39.739 310 48	A	2.44	35.17	−59.80	4.61	2.57	3.83	6.06	3.45	+20	−	3	−	7	−	8	+14	−27	+11	+	7	−21	+49	4	2.03
*100627	20 24 15.13	−53 02 06.0	8.96		H	306.063 045 65	−53.034 987 96		1.67	−1.74	18.21	1.25	0.84	1.32	1.99	1.41	−	2	−12	−27	+41	−11	+10	−17	+17	+	4	−37	0	−0.87
100628	20 24 15.72	+42 18 01.4	9.90		H	306.065 491 09	+42.300 398 67		0.41	−2.97	−6.65	0.87	0.98	1.15	0.97	1.13	−14	+	0	+	7	+	1	+15	−	5	+20	−34	+10	−	3	3	−0.91
100629	20 24 15.91	−63 53 24.7	8.18		H	306.066 276 91	−63.890 191 74		2.77	16.41	−3.61	0.72	0.64	1.02	0.77	0.76	−21	+	4	−	3	+44	−10	−	7	−12	+29	+16	−43	0	1.54
100630	20 24 17.89	−27 59 56.4	9.04		H	306.074 539 53	−27.998 999 07		4.02	28.95	−12.46	1.22	0.80	1.47	1.51	1.09	+18	−20	−29	+10	−20	+28	−	9	+22	−28	−	8	0	−0.37
100631	20 24 18.06	+37 34 31.6	8.06		H	306.075 250 01	+37.575 456 18		3.44	6.31	−9.25	0.51	0.57	0.73	0.53	0.53	−	4	−	1	+	8	+13	−	9	−20	−	8	−22	+16	−	9	2	−1.28
100632	20 24 19.56	+34 13 20.1	8.21		H	306.081 519 51	+34.222 242 06		0.47	0.19	−1.88	0.52	0.54	0.74	0.59	0.55	−	7	+10	+	0	+22	+	7	−	9	+	8	−13	+12	−	4	0	0.59
100633	20 24 19.59	−23 28 32.8	7.71		H	306.081 644 07	−23.475 773 69		14.50	−9.26	−14.45	0.94	0.64	1.07	1.27	1.09	+35	−18	−14	−	1	−11	+29	−15	+15	+	8	+42	5	1.45
100634	20 24 20.36	+55 48 58.0	8.35		H	306.084 841 25	+55.816 105 39		1.62	3.97	−0.60	0.62	0.53	0.62	0.70	0.55	+	0	+	2	+	6	+17	−	2	−	4	+	0	−	1	+	2	+	6	0	−0.48
100635	20 24 20.46	−32 42 01.3	9.51		H	306.085 256 71	−32.700 362 08		10.02	42.48	26.17	1.30	0.83	1.62	1.68	1.10	+42	−	1	−11	−11	+	1	−	1	+	1	−11	+	1	+68	0	−0.48
100636	20 24 20.98	+16 52 41.1	7.89		H	306.087 417 45	+16.878 082 16		7.02	11.88	−5.37	0.73	0.62	0.97	0.85	0.68	+16	−29	−25	+	9	+32	−	9	+28	+24	−	3	+18	2	0.23
100637	20 24 21.26	−22 02 57.3	8.55		H	306.088 578 41	−22.049 252 84		5.86	−3.65	4.31	1.12	0.84	1.41	1.49	1.58	+46	−23	−39	−	6	+13	+13	+15	+44	−31	+55	0	−0.06
100638	20 24 22.59	+19 34 30.0	7.86		H	306.094 137 07	+19.574 999 71	A	4.45	−8.76	−13.18	2.22	1.69	2.07	2.53	1.76	−	2	+15	−20	+	9	+29	−	1	+27	+16	+	8	+16	3	0.49
100639	H 20 24 23.10	+13 00 35.5	8.34		H	306.096 242 88	+13.009 851 08	A	2.66	0.98	−7.87	1.95	1.71	1.97	2.05	1.89	+24	−12	−11	+24	+29	−18	+18	+42	+	9	+45	1	0.42
100640	20 24 24.25	+19 34 35.2	9.99		H	306.101 049 73	+19.576 455 82	B	−23.92	20.88	−4.89	28.76	21.75	17.83	22.57	15.67	+	6	−	2	−23	+	4	+24	+	9	+25	+	3	+10	+21	3	0.49
100641	H 20 24 24.97	+28 01 30.6	9.68		H	306.104 037 66	+28.025 152 98	*	1.55	−0.18	−3.43	0.67	0.84	1.48	0.69	0.78	−29	−16	+23	−19	−	2	−	1	−	1	−21	+	5	−38	1	0.52
100642	20 24 25.35	−41 40 08.6	8.25		H	306.105 633 75	−41.669 056 42		0.71	32.40	−1.22	1.02	0.68	1.17	1.44	0.87	+15	−	8	−26	+12	+	2	+16	+	6	+	3	+	5	+20	2	1.83
100643	H 20 24 25.78	+24 16 39.4	6.95		H	306.107 413 80	+24.277 609 43	A	3.77	16.17	5.76	1.02	1.09	1.03	0.85	0.79	−14	−14	+	6	+	0	−11	−	4	−	8	+	0	+	2	+17	1	0.02
100644	20 24 26.00	+38 57 54.1	7.99		H	306.108 315 73	+38.965 021 85		0.88	2.90	−1.59	0.52	0.53	0.69	0.54	0.53	−	7	−	1	+12	+	7	+	0	+	0	+	2	−19	+	2	−	2	0	−0.80
100645	20 24 28.42	+68 21 51.7	8.69		H	306.118 427 83	+68.364 356 69		2.52	10.00	24.69	0.73	0.67	0.77	0.89	0.70	−	3	−27	+20	−17	+10	+17	+	3	−	2	+	1	+23	0	0.01
100646	20 24 29.42	+76 39 02.9	9.02		H	306.122 586 63	+76.650 797 11		4.10	−5.47	−15.62	0.72	0.70	0.76	0.85	0.78	−	5	−13	+18	−	6	+12	+	3	+	8	+17	−	7	+11	3	−2.10
100647	20 24 29.91	−33 36 50.5	8.63		H	306.124 639 44	−33.614 015 37		8.12	15.27	−86.79	0.93	0.62	1.18	1.17	0.86	+35	−	5	−	1	+	1	+10	+13	+14	−	2	−	7	+62	0	0.51
100648	20 24 29.98	+15 43 38.0	7.95		H	306.124 926 14	+15.727 213 06		4.37	3.78	−15.71	0.66	0.61	0.87	0.79	0.72	+21	−12	−	6	+	7	+27	+12	+26	+30	+	6	+27	0	0.69
100649	20 24 30.56	−34 42 57.4	8.51		H	306.127 331 88	−34.715 940 14		10.78	−39.29	−151.45	0.98	0.55	1.14	1.40	0.80	+12	−13	+	5	−20	+	8	+16	+	5	+	3	−12	+26	0	−0.29
100650	20 24 31.68	−17 00 39.0	8.13	2	H	306.132 001 80	−17.010 828 16		1.24	7.67	−6.49	1.07	0.61	1.27	1.11	0.93	+20	−33	−27	−21	−	3	+19	+10	+29	−38	+17	2	0.30
100651	20 24 32.36	+53 33 06.9	6.49		H	306.134 817 58	+53.551 902 98		2.23	8.31	12.62	0.45	0.40	0.48	0.58	0.41	−	9	−	3	+17	+	9	−	2	+	8	−	3	+13	+	8	−	6	0	−0.49
100652	20 24 32.63	+45 38 01.4	9.38		H	306.135 954 41	+45.633 710 89		1.02	1.36	−4.26	0.66	0.72	0.84	0.78	0.68	−11	+	5	+13	+	8	+	6	+	7	+	7	−17	+	1	−	1	0	−1.82
100653	20 24 33.00	−48 18 51.3	8.51		H	306.137 520 23	−48.314 245 76		5.59	−1.08	−16.26	1.08	0.86	1.46	1.94	1.06	−	3	−	7	−38	+20	+	6	−24	−	7	+	0	+	2	−26	5	0.07
100654	20 24 33.24	+05 30 34.1	7.24		H	306.138 491 98	+05.509 480 86		3.50	2.38	−4.36	0.79	0.67	0.90	1.07	0.92	+19	−11	−	7	+17	+20	+25	+21	+62	+	9	+22	0	0.01
100655	20 24 33.77	+34 39 05.8	9.64		H	306.140 704 97	+34.651 614 62		1.15	0.86	−6.83	0.79	0.90	1.16	0.80	1.11	−	2	+	8	−13	+16	+14	+	1	+17	+	7	−	7	+	2	0	0.68
100656	20 24 35.04	−53 19 07.1	8.93		H	306.145 983 38	−53.318 627 98		0.82	5.14	−21.99	1.14	0.90	1.31	1.57	1.41	−	3	−19	−16	+32	−	7	−10	−12	+13	+	9	−	9	0	0.49
100657	20 24 35.32	+48 41 34.1	7.71		G	306.147 179 35	+48.692 797 31		5.27	4.26	1.49	0.57	0.57	0.68	0.67	0.65	−10	−	2	+	3	−	4	+	6	−19	+	7	+	7	+11	−13	3	1.13
100658	20 24 35.71	+16 08 37.4	7.03		H	306.148 789 57	+16.143 716 82		3.26	0.79	−9.93	0.62	0.53	0.80	0.73	0.59	+17	−18	−	9	+10	+19	+	8	+19	+10	+	0	+33	0	0.61
100659	20 24 36.01	−43 08 29.0	8.82		H	306.150 037 14	−43.141 395 45		0.60	4.02	5.44	1.08	0.68	1.25	1.41	0.97	+14	−34	−11	+12	+23	−	8	+23	+16	−	8	+30	0	2.05
100660	20 24 36.17	+41 30 03.8	9.05		H	306.150 721 99	+41.501 046 50		1.87	−95.58	−134.58	0.72	0.77	0.97	0.81	0.88	−	1	+	9	+14	+	2	+	5	−17	+	9	+	3	+13	+	7	1	1.31
100661	20 24 36.38	+25 54 59.4	8.01		H	306.151 598 00	+25.916 512 96		2.19	4.82	−0.02	0.66	0.65	0.92	0.72	0.79	+	4	+11	−	4	+28	+	1	−	4	+	1	+23	−	3	+27	0	−1.48
100662	20 24 36.94	+21 06 18.5	8.81		H	306.153 934 27	+21.105 148 77		−0.18	0.85	−1.40	1.11	0.84	1.35	1.52	1.01	+17	−	7	−13	−15	+17	−25	+	7	+	9	−14	+42	0	−2.96
100663	20 24 37.10	−25 50 01.4	7.04		H	306.154 578 91	−25.833 734 91		2.06	31.78	−22.34	0.77	0.53	0.89	0.92	0.81	+22	−14	−12	+	4	−	7	+25	−	8	+20	−13	+29	0	0.88
100664	20 24 37.49	+01 04 06.2	6.14		H	306.156 223 23	+01.068 392 46		3.88	7.93	5.49	0.77	0.54	0.92	1.08	0.84	+	5	−	8	−17	+32	−32	+	8	−28	+23	−29	+11	0	−0.58
100665	20 24 37.50	−49 53 34.9	8.46	2	H	306.156 239 28	−49.893 034 46		−0.41	−8.44	0.28	1.06	0.81	1.32	1.61	1.31	−14	−	4	−	7	+	5	+11	−26	+	7	+16	+44	−27	0	−0.65
100666	20 24 38.30	+08 35 51.0	6.77		H	306.159 573 04	+08.597 503 75		4.50	5.59	−7.06	0.77	0.53	0.88	0.96	0.72	−	1	−10	−13	+	6	+14	−	5	+15	+35	+	5	−	7	0	−0.16
100667	H 20 24 38.74	+55 26 35.1	7.30		H	306.161 414 39	+55.443 096 51	*	4.62	3.21	−20.54	0.72	0.70	0.57	0.63	0.50	−	1	−	1	+	9	+13	−	1	+	0	−	1	+	6	+10	+11	1	−1.06
100668	20 24 38.81	+30 57 41.0	8.80		H	306.161 728 78	+30.961 386 33		0.79	−2.76	−10.54	0.59	0.82	1.09	0.68	0.87	−10	+11	+	8	+17	+	9	+	9	+13	−20	+	1	+	4	0	0.37
100669	20 24 41.05	−04 35 03.4	8.22		H	306.171 059 72	−04.584 290 15		4.32	0.56	−5.89	1.29	1.08	1.26	1.75	1.55	+47	−24	−	6	+50	+32	+	3	+35	+74	+	0	+36	0	0.59
100670	20 24 41.57	+79 05 38.5	8.37		H	306.173 190 83	+79.094 034 48		7.23	45.53	54.97	0.58	0.60	0.63	0.66	0.71	−11	−10	+	3	+	6	+14	−	3	+15	+	6	−	6	+	5	0	2.43
100671	20 24 41.68	−01 32 28.5	7.91		H	306.173 653 89	−01.541 255 68		3.84	5.31	2.68	0.87	0.71	1.22	1.14	0.93	+31	−19	−34	+33	−	6	+20	+	3	+57	−19	+22	0	−0.41
100672	20 24 41.75	+01 22 07.0	6.41	2	H	306.173 975 08	+01.368 612 12		3.77	5.66	−20.10	0.85	0.62	1.07	1.26	0.96	−	3	+	8	−32	+38	−37	+24	−33	+37	−44	−	6	0	−1.04
100673	20 24 42.19	+19 17 44.0	8.02		H	306.175 786 90	+19.295 551 32		3.81	−5.98	−17.06	0.79	0.66	0.98	1.06	0.77	+	4	+	5	−	9	+17	+33	+	5	+30	+19	+14	+	7	0	−1.60
100674	20 24 42.69	−29 04 39.8	6.97		H	306.177 868 28	−29.077 711 10		4.65	13.25	−53.82	0.87	0.52	0.94	1.09	0.78	+12	−25	−	7	−20	+	6	+28	+11	+26	−10	+	9	0	−0.57
100675	20 24 42.96	−24 15 19.9	9.03		H	306.179 010 83	−24.255 540 43		2.46	22.68	0.57	1.10	0.70	1.24	1.43	1.14	+26	−27	−	9	−	2	−	7	+10	−	4	+18	−13	+22	2	−0.12
100676	20 24 43.02	−06 46 57.4	8.66		G	306.179 262 21	−06.782 614 10		2.90	−6.27	−1.23	1.15	0.81	1.24	1.56	1.18	+17	−23	+	0	+	9	+12	−	5	+16	+50	+10	+	2	0	−0.94
100677	20 24 43.48	+75 06 31.5	9.18		H	306.181 152 83	+75.108 752 04		1.83	−0.83	−6.37	0.70	0.66	0.75	0.74	0.76	−	5	−15	−	4	+	8	+	9	−13	+	6	−	5	+20	−	2	0	1.54
100678	20 24 43.59	+27 06 58.1	8.32		H	306.181 633 93	+27.116 145 57		6.72	−17.52	−27.45	0.50	0.62	0.93	0.60	0.68	−	3	−19	+	1	−	5	+10	+	0	+	6	+	6	+	9	0	−0.88
100679	20 24 44.15	−71 39 32.9	7.72		H	306.183 974 48	−71.659 126 75		4.89	45.69	−24.16	0.49	0.59	0.81	0.56	0.73	−20	−14	−	5	+15	−	2	−	5	−	3	+	6	−	2	−	5	0	0.73
100680	H 20 24 44.50	−08 46 10.0	7.10		H	306.185 423 30	−08.769 439 98	*	4.41	−3.77	−0.51	2.04	1.08	1.12	1.18	0.95	+37	+	3	−15	+	9	+18	+29	+20	+56	−	5	+35	1	0.66
100681	20 24 45.23	+28 31 29.1	7.82		G	306.188 473 17	+28.524 760 14		3.93	8.43	−23.52	0.39	0.46	0.79	0.42	0.47	−29	+	8	+	4	−14	−	9	−	4	−	8	−19	−	1	−43	0	0.17
100682	20 24 45.36	+25 03 09.2	10.83		G	306.188 980 08	+25.052 565 30		7.49	88.40	−246.07	1.15	1.18	1.73	1.34	1.41	+	8	−11	−14	+26	−	8	−	5	−	4	−	6	+	2	+23	0	1.37
100683	20 24 45.40	−07 36 23.1	8.35		H	306.189 164 07	−07.606 405 50		4.36	42.03	31.48	1.05	0.65	1.16	1.69	1.01	−	4	−	1	−	8	−	2	−	5	+35	+	5	+37	−13	−24	0	−1.75
100684	20 24 46.13	+55 00 40.5	7.50		G	306.192 219 72	+55.011 242 28		6.36	90.17	55.06	0.51	0.44	0.52	0.60	0.47	−	8	+	2	+	4	+18	+	0	−17	+	1	+	9	+	7	0	−0.97
100685	H 20 24 46.66	−19 42 35.9	9.40		G	306.194 417 21	−19.709 970 27	A	19.46	43.34	−10.74	4.53	2.43	3.00	3.46	2.33	+69	−	1	+	0	+	1	+	4	+34	+	4	+17	−	3	+30	4	0.17
100686	H 20 24 46.67	+25 10 46.1	7.46		H	306.194 477 53	+25.179 464 13	A	2.97	−1.30	−2.68	0.92	0.69	0.85	0.70	0.66	+12	−25	−	1	+34	+	4	−19	+	7	+	4	+	8	+37	1	−0.66
100687	20 24 47.49	+14 52 10.7	9.48		H	306.197 885 95	+14.869 630 84	B	6.31	−9.23	−34.66	13.57	10.74	7.22	10.25	8.82	+	2	−15	−14	−12	+11	−13	+10	+15	+	1	+	2	17	1.36
100688	20 24 47.96	+57 18 19.3	8.60		H	306.199 821 21	+57.305 354 86		8.16	4.92	−19.92	0.62	0.63	0.70	0.60	0.71	+	5	−11	+	7	+	7	+	7	−14	+	8	+	8	+	7	+13	0	1.40
100689	20 24 48.12	+26 07 37.8	7.14		H	306.200 515 91	+26.127 155 59		5.35	−9.48	−16.77	0.55	0.50	0.77	0.66	0.57	+	1	+	3	−	4	+	7	+	5	+14	+	5	+10	+	5	+23	3	−0.41
100690	20 24 48.56	+14 52 05.7	9.27		H	306.202 315 39	+14.868 250 86	A	7.48	−1.25	−30.97	6.34	4.89	5.46	5.57	5.11	+12	−16	−13	−14	+10	−11	+	9	+21	−	2	+12	17	1.36
100691	20 24 48.79	+40 09 13.0	6.73		H	306.203 304 95	+40.153 602 84		5.00	5.16	5.42	0.45	0.44	0.59	0.47	0.46	−	7	−13	−	5	−	4	+	1	+	5	−	1	−12	+17	−	1	0	−1.03
100692	20 24 49.10	−36 59 46.5	7.95		H	306.204 565 08	−36.996 262 88		3.12	−20.71	−19.73	0.98	0.58	1.09	1.53	1.00	+	5	−14	−	8	−	6	+16	+	2	+19	+28	+10	−	7	0	2.03
100693	20 24 49.65	−59 57 52.9	8.46		H	306.206 857 54	−59.964 691 37		3.45	24.02	−34.02	0.76	0.63	1.01	0.92	0.67	−	4	−20	−	1	−42	+	8	+21	+11	−36	−	4	−32	0	−1.30
100694	20 24 50.81	+18 57 42.0	8.41		H	306.211 722 12	+18.961 658 00		6.15	5.58

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
100601	11.305	0.087	10.462	0.066		0.793	0.004	G	0.83	0.00	H	10.5473	0.0060	0.031	71		10.50	10.59				1							G
100602	10.857	0.040	9.268	0.018		1.380	0.015	G	1.35	0.02	H	9.2775	0.0022	0.025	140		9.24	9.33		C		1							
100603	7.771	0.006	7.823	0.011		−0.040	0.015	G	−0.02	0.01	H	7.8427	0.0012	0.013	146		7.82	7.86				1							S
100604	9.370	0.017	8.001	0.010		1.159	0.015	T	1.12	0.01	L	8.0404	0.0012	0.011	100		8.02	8.06		C		1							
100605	10.974	0.054	9.465	0.024		1.289	0.049	T	4.49	0.07	O	8.4996	0.0205	0.133	93		8.31	8.66		U 2		1 V							G
100606	9.311	0.018	8.768	0.017		0.509	0.022	T	0.58	0.02	L	8.7988	0.0025	0.018	121		8.77	8.82		C		1							
100607	11.450	0.086	10.202	0.046	A	0.579	0.107	G	0.65	0.10	R *	10.3714	0.0028	0.031	123	*	10.30	10.42		D	20241+2156	H 1	2 C D	AB	343	1.323	0.048	3.07	0.17	G D
100608	8.929	0.017	8.635	0.019		0.280	0.024	T	0.32	0.03	L	8.6501	0.0045	0.030	71		8.60	8.70		U		1							S
100609	8.861	0.011	7.569	0.007		1.080	0.015	G	1.04	0.01	H	7.6159	0.0009	0.010	120		7.60	7.63		C		1							
100610	9.809	0.027	9.229	0.026		0.544	0.028	T	0.62	0.03	L	9.3249	0.0020	0.023	89		9.29	9.38		C		1							
100611	11.038	0.074	9.419	0.030		1.356	0.063	T	1.32	0.07	L	9.4707	0.0028	0.016	72		9.43	9.49				1							
100612	9.928	0.024	9.118	0.019		0.732	0.023	T	0.78	0.02	L	9.1302	0.0019	0.020	142		9.09	9.16				1							G
100613	8.336	0.011	7.776	0.010		0.529	0.011	T	0.60	0.01	L	7.8278	0.0012	0.009	77		7.80	7.84		C		1							S
100614	10.228	0.025	8.910	0.015		1.119	0.023	T	1.08	0.02	L	8.9471	0.0025	0.021	126		8.90	8.99				1							
100615	9.757	0.024	9.215	0.022		0.508	0.029	T	0.58	0.03	L	9.2889	0.0018	0.015	101		9.27	9.32				1							
100616	7.569	0.004	7.302	0.005		0.254	0.006	T	0.29	0.01	L	7.3376	0.0008	0.011	251		7.32	7.35		C	20242+2900	I 1	1						S
100617	7.809	0.006	7.632	0.007		0.162	0.009	T	0.18	0.01	L	7.6602	0.0019	0.016	105		7.63	7.68					1						S
100618	9.373	0.017	7.821	0.009		1.303	0.015	T	1.26	0.02	L	7.8379	0.0012	0.009	97		7.82	7.86		C			1						
100619	9.977	0.029	9.492	0.031		0.469	0.033	T	0.54	0.04	L	9.4740	0.0026	0.023	93		9.43	9.50		C			1						
100620	9.890	0.017	9.449	0.017	*	0.416	0.022	T	0.48	0.02	L *	9.4836	0.0023	0.028	206	*	9.44	9.54			20242+2958	H 1	2 C S B	AB	223	0.158	0.043	0.84	0.85	G
100621	8.482	0.007	8.120	0.007		0.366	0.015	G	0.43	0.02	H	8.1762	0.0009	0.011	188		8.16	8.19		C			1						S
100622	10.758	0.038	8.940	0.014		1.513	0.032	T	1.55	0.05	L	8.9021	0.0024	0.027	132		8.86	8.95					1						
100623	8.454	0.014	7.111	0.007		1.139	0.012	T	1.10	0.01	L	7.1435	0.0016	0.008	69		7.13	7.16		C			1						S
100624	8.672	0.005	8.598	0.007		0.067	0.008	T	0.08	0.01	L	8.6263	0.0013	0.020	372		8.59	8.67					1						S
100625											T	12.3916	0.0812			B				D	20243−3944	I 2	1 C I A						
100626	10.922	0.054	10.373	0.052	A	0.520	0.056	T	0.59	0.06	L	10.4008	0.0146	0.050	86	A	10.33	10.54		D	20243−3944	I 2	1 C P A						G
100627	10.506	0.043	9.088	0.022		1.198	0.038	T	1.16	0.04	L	9.1238	0.0024	0.015	65		9.10	9.15		C			1						
100628	9.900	0.027	9.849	0.039		0.052	0.044	T	0.06	0.03	L	9.9190	0.0031	0.027	112		9.87	9.96					1						G
100629	8.334	0.008	8.200	0.009		0.121	0.011	T	0.14	0.01	L	8.2292	0.0013	0.017	143		8.20	8.26					1						S
100630	9.465	0.020	9.084	0.022		0.372	0.025	T	0.43	0.03	L	9.1261	0.0031	0.024	95		9.09	9.17					1						S
100631	8.029	0.007	8.041	0.008		−0.012	0.012	G	0.01	0.01	H	8.0638	0.0014	0.015	151		8.04	8.10					1						
100632	8.233	0.007	8.205	0.009		0.031	0.011	T	0.05	0.01	L	8.2273	0.0013	0.013	167		8.20	8.25		C			1						
100633	8.271	0.015	7.773	0.013		0.496	0.015	G	0.57	0.02	H	7.8237	0.0016	0.010	74		7.81	7.85		C			1						S
100634	8.376	0.009	8.333	0.011		0.030	0.015	G	0.05	0.01	H	8.3633	0.0016	0.013	111		8.34	8.39		C			1						
100635	10.227	0.030	9.593	0.027		0.584	0.030	T	0.66	0.03	L	9.6342	0.0030	0.026	119		9.59	9.68					1						
100636	8.067	0.008	7.899	0.010		0.161	0.012	T	0.18	0.01	L	7.9429	0.0010	0.013	107		7.92	7.97		D			1						S
100637	9.112	0.019	8.613	0.018		0.483	0.015	G	0.55	0.02	H	8.6599	0.0014	0.012	72		8.64	8.69		D			1						
100638	7.999	0.008	7.863	0.011	A	0.131	0.013	T	0.15	0.01	L	7.9053	0.0228	0.024	84	A	7.84	7.93		D	20244+1934	I 2	1 C P D						S D
100639	8.301	0.010	8.381	0.013	*	−0.068	0.014	T	−0.05	0.01	L *	8.3249	0.0016	0.011	76	*	8.29	8.35		D	20244+1301	I 1	2 C A	AB	31	0.571	0.004	0.99	0.02	
100640	10.116	0.045	9.689	0.049	B	0.378	0.015	G	0.44	0.02	H	9.7573	0.0948			B				D	20244+1934	I 2	1 C I D							D
100641	10.022	0.016	9.720	0.018	*	0.287	0.022	T	0.33	0.03	L *	9.7612	0.0022	0.032	299	*	9.71	9.81			20244+2802	H 1	2 C S A	AB	218	0.161	0.010	0.45	0.42	G
100642	10.092	0.033	8.405	0.016		1.409	0.029	T	1.39	0.04	L	8.3907	0.0020	0.014	91		8.36	8.41		C			1						
100643	7.840	0.008	7.054	0.006	*	0.714	0.008	T	0.77	0.01	L *	7.0970	0.0011	0.010	147	*	7.08	7.11		D	20244+2417	I 1	2 C A	AB	116	0.351	0.003	1.39	0.02	S
100644	7.816	0.008	7.954	0.011		−0.120	0.012	T	−0.11	0.02	L	7.9518	0.0013	0.015	147		7.92	7.97					1						
100645	10.598	0.049	8.828	0.020		1.475	0.042	T	1.49	0.06	L	8.8135	0.0022	0.017	95		8.79	8.83		C			1						
100646	9.274	0.016	9.028	0.018		0.234	0.023	T	0.26	0.03	L	9.0937	0.0014	0.018	117		9.06	9.12					1						
100647	9.148	0.014	8.673	0.013		0.460	0.015	T	0.53	0.02	L	8.7317	0.0014	0.017	128		8.70	8.76					1						
100648	9.200	0.018	8.093	0.012		0.955	0.017	T	0.94	0.01	L	8.1109	0.0011	0.012	101		8.09	8.14					1						
100649	9.389	0.016	8.579	0.013		0.716	0.016	T	0.77	0.01	L	8.6461	0.0014	0.015	102		8.62	8.67		C			1						
100650	10.380	0.039	8.310	0.013		1.752	0.034	T	1.88	0.09	O	8.2242	0.0020	0.018	84		8.18	8.25		U 2			1						
100651	6.461	0.004	6.493	0.004		−0.025	0.005	T	0.00	0.01	L	6.4959	0.0006	0.005	109		6.48	6.51					1						S
100652	9.616	0.018	9.395	0.022		0.211	0.027	T	0.23	0.03	L	9.4475	0.0020	0.016	120		9.42	9.48		C			1						G
100653	9.714	0.023	8.624	0.016		0.942	0.021	T	0.93	0.01	L	8.6692	0.0019	0.020	74		8.64	8.70		C			1						
100654	7.126	0.006	7.220	0.009		−0.081	0.010	T	−0.06	0.01	L	7.2160	0.0010	0.009	71		7.20	7.23		C	20246+0531	I 1	1						S
100655	9.647	0.018	9.627	0.023		0.023	0.027	T	0.04	0.02	L	9.6536	0.0025	0.030	148		9.60	9.71					1						G
100656	10.385	0.034	9.046	0.019		1.136	0.030	T	1.10	0.03	L	9.0942	0.0030	0.019	65		9.06	9.13					1						
100657	7.677	0.007	7.731	0.008		−0.040	0.015	G	−0.02	0.01	H	7.7129	0.0011	0.011	112		7.69	7.74		C	20246+4842	I 1	1 S						S
100658	9.169	0.016	7.234	0.007		1.606	0.014	T	1.63	0.01	L	7.1481	0.0016	0.013	103		7.12	7.17					1						S
100659	10.039	0.029	8.926	0.019		0.959	0.027	T	0.95	0.02	L	8.9870	0.0025	0.016	90		8.96	9.02		C			1						
100660	9.791	0.019	9.119	0.017		0.622	0.021	T	0.69	0.02	L	9.1768	0.0021	0.023	125		9.14	9.21		C			1						
100661	9.627	0.018	8.134	0.010		1.256	0.016	T	1.21	0.02	L	8.1695	0.0014	0.015	133		8.14	8.20		C			1						
100662	10.491	0.039	8.951	0.019		1.293	0.034	T	1.25	0.04	L	8.9650	0.0022	0.024	78		8.93	9.00		C			1						
100663	8.719	0.014	7.177	0.008		1.295	0.013	T	1.25	0.01	L	7.1929	0.0013	0.009	80		7.18	7.21					1						S
100664	6.097	0.004	6.140	0.004		−0.036	0.005	T	−0.01	0.01	L	6.1408	0.0006	0.006	92		6.13	6.15		C	20246+0104	I 1	1						S
100665	10.566	0.040	8.681	0.016		1.599	0.035	T	2.40	0.09	O	8.4890	0.0131	0.092	82		8.36	8.67		U 2			1 S						S
100666	6.787	0.005	6.765	0.007		0.025	0.008	T	0.04	0.01	L	6.7837	0.0008	0.006	63		6.77	6.80		C			1						S
100667	7.381	0.005	7.304	0.007	*	0.076	0.008	T	0.09	0.01	L *	7.3265	0.0009	0.010	125	*	7.31	7.35		D	20246+5527	M 1	2 C A	AB	237	0.229	0.002	0.43	0.06	S
100668	11.050	0.046	8.992	0.014		1.742	0.040	T	2.06	0.09	O	8.8748	0.0018	0.021	179		8.84	8.92					1						
100669	9.854	0.028	8.331	0.015		1.280	0.025	T	1.24	0.03	L	8.3825	0.0020	0.013	59		8.37	8.40		C			1						
100670	9.089	0.013	8.424	0.012		0.616	0.015	T	0.68	0.01	L	8.4972	0.0012	0.013	118		8.47	8.52		C			1						
100671	9.293	0.014	8.033	0.009		1.074	0.013	T	1.04	0.01	L	8.0736	0.0011	0.012	127		8.05	8.09		C			1						
100672	8.555	0.010	6.621	0.005		1.605	0.009	T	1.62	0.01	L	6.5280	0.0021	0.029	87		6.50	6.58		U 2			1 S						S
100673	8.080	0.009	8.012	0.011		0.068	0.013	T	0.08	0.01	L	8.0535	0.0022	0.017	86		8.03	8.08					1						
100674	8.609	0.012	7.089	0.007		1.278	0.011	T	1.24	0.01	L	7.1309	0.0008	0.007	82		7.12	7.14		C			1						S
100675	9.369	0.020	9.037	0.022		0.320	0.032	T	0.37	0.04	L	9.1046	0.0020	0.013	79		9.07	9.13		C			1						
100676	9.773	0.026	8.751	0.018		0.920	0.015	G	0.92	0.01	H	8.8190	0.0022	0.017	77		8.79	8.85		C			1						
100677	9.426	0.019	9.202	0.021		0.214	0.027	T	0.24	0.03	L	9.2456	0.0016	0.015	107		9.21	9.28					1						
100678	8.718	0.010	8.349	0.010		0.350	0.013	T	0.41	0.02	L	8.4061	0.0011	0.016	173		8.38	8.44		C			1						
100679	8.966	0.010	7.832	0.006		0.976	0.009	T	0.96	0.01	L	7.8848	0.0011	0.014	187		7.86	7.91					1						S
100680	7.433	0.008	7.126	0.009	*	0.292	0.011	T	0.33	0.01	L *	7.1731	0.0016	0.009	81	*	7.15	7.19			20247−0846	I 1	2 C A	AB	1	0.220	0.007	1.85	0.13	S
100681	8.308	0.006	7.862	0.006		0.423	0.006	G	0.49	0.01	H	7.9182	0.0009	0.013	307		7.89	7.94		C			1						S
100682	11.210	0.065	10.975	0.094		0.427	0.043	G	0.49	0.05	H	10.9228	0.0041	0.035	118		10.86	10.98		C			1						G
100683	9.669	0.021	8.461	0.014		1.033	0.020	T	1.01	0.02	L	8.5213	0.0021	0.014	75		8.50	8.55					1						
100684	8.915	0.011	7.614	0.007		1.107	0.005	G	1.07	0.01	H	7.6622	0.0007	0.010	137		7.65	7.68		C			1						
100685	10.758	0.061	9.544	0.034	*	0.940	0.015	G	0.98	0.01	I *	9.5005	0.0026	0.019	79	*	9.45	9.54		D	20248−1943	H 1	2 C A	AB	66	0.389	0.010	0.79	0.09	
100686	7.404	0.006	7.450	0.007	*	−0.037	0.008	T	−0.01	0.01	L *	7.4601	0.0012	0.010	132	*	7.44	7.48		D	20248+2511	I 1	2 C A	AB	280	0.517	0.010	3.07	0.06	S
100687	9.886	0.030	9.483	0.033	B	0.381	0.042	T	0.45	0.05	L	9.6572	0.0355			B				D	20248+1452	I 2	1 C I A							
100688	9.901	0.023	8.695	0.014		1.032	0.021	T	1.00	0.02	L	8.7660	0.0013	0.013	114		8.74	8.80		C			1						
100689	8.658	0.010	7.270	0.006		1.174	0.009	T	1.14	0.01	L	7.3067	0.0011	0.010	129		7.29	7.33		C			1						S
100690	9.301	0.037	9.230	0.050	A	0.070	0.058	T	0.08	0.06	L	9.3038	0.0293	0.147	84	A	9.14	9.63		D	20248+1452	I 2	1 C P A						
100691	8.378	0.011	6.876	0.005		1.263	0.009	T	1.22	0.01	L	6.8933	0.0007	0.009	135		6.88	6.91			20248+4009	I 1	1						S
100692	9.356	0.016	8.075	0.010		1.090	0.015	T	1.05	0.02	L	8.1195	0.0020	0.012	99		8.10	8.14		C			1						S
100693	8.723	0.010	8.475	0.011		0.232	0.015	T	0.26	0.02	L	8.5240	0.0022	0.022	137		8.49	8.56					1						S
100694	8.619	0.011	8.445	0.012		0.167	0.015	T	0.18	0.01	L	8.4718	0.0016	0.013	83		8.45	8.50		C			1						
100695	11.152	0.066	10.609	0.064	*	0.529	0.020	G	0.60	0.02	H *	10.6656	0.0052	0.036	74	*	10.62	10.74			20248−4719	M 1	2 C D	AC	265	0.186	0.182	1.64	2.00	G D
100696	8.206	0.010	7.923	0.010		0.269	0.013	T	0.30	0.02	L	7.9887	0.0015	0.013	106		7.97	8.01					1						S
100697	6.407	0.002	6.172	0.003		0.203	0.006	G	0.22	0.01	H	6.2140	0.0007	0.006	150		6.20	6.23		C			1						S
100698	10.099	0.029	9.405	0.025	*	0.638	0.002	G	0.70	0.00	H *	9.4356	0.0022	0.020	75	*	9.39	9.47		D	20249−0648	I 1	2 C A	AB	338	0.494	0.006	1.61	0.03	
100699	9.252	0.016	8.168	0.011		0.937	0.015	T	0.93	0.01	L	8.2087	0.0016	0.014	114		8.17	8.24			20249−5556	I 1	1						
100700	10.980	0.060	9.057	0.019		1.631	0.052	T	1.88	0.12	O	8.9601	0.0020	0.014	72		8.94	8.99		C			1						

$20^h\ 24^m\ 57^s$ - $20^h\ 26^m\ 17^s$ 2024

100701 - 100800

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ mas/yr	Standard Errors α* mas	δ mas	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ mas/yr	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5 6	7	8	9 10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
100701	20 24 57.50	+59 09 54.6	8.75	H	306.239 582 11	+59.165 165 27	2.97	−3.59	−16.11	0.71	0.68	0.78	0.83	0.80	− 9 − 3 −13 +17 +16 −32 +14 + 8 −11 − 1	1	0.06
*100702	20 24 58.79	+39 50 21.7	8.67	H	306.244 944 61	+39.839 374 42	1.76	2.26	−3.35	0.60	0.61	0.79	0.62	0.65	− 2 −10 − 1 + 4 + 0 − 1 − 1 − 3 +12 − 2	0	0.69
*100703	20 24 58.77	−17 50 50.4	9.35	H	306.244 876 02	−17.847 323 17	1.25	−7.09	3.88	1.26	0.81	1.41	1.60	1.14	+31 − 6 −14 − 8 +17 +22 +18 +30 + 0 +39	0	0.13
100704	20 24 58.96	+09 11 41.8	7.61	H	306.245 682 68	+09.194 955 62	13.16	68.79	1.53	0.92	0.73	1.03	1.23	0.95	+13 − 9 + 0 +48 + 9 +11 + 9 +55 + 6 − 3	0	−0.72
100705 H	20 25 01.64	+61 17 53.5	7.95	H	306.256 847 67	+61.298 188 48 *	1.88	6.81	6.24	0.71	0.69	0.74	0.77	0.76	+11 + 4 − 9 +29 +12 − 7 +15 −27 +25 +16	0	−0.74
100706	20 25 01.94	−40 58 25.1	9.44	G	306.258 097 95	−40.973 631 06	14.03	50.64	−32.66	1.27	0.77	1.44	1.60	1.09	+19 −26 −22 − 5 +17 − 3 +18 +12 −10 +32	0	0.18
100707	20 25 02.24	+08 17 35.9	9.46	H	306.259 317 49	+08.293 292 94	0.15	1.17	−6.79	1.31	1.13	1.59	1.83	1.69	+31 − 4 − 5 +18 +25 + 4 +24 +53 − 3 +35	0	−0.83
100708 H	20 25 02.54	+30 34 05.4	7.94	G	306.260 593 76	+30.568 167 51 A	1.73	3.46	−6.44	0.69	0.91	1.15	0.75	0.90	−17 +13 − 3 +14 + 7 − 2 + 9 −15 +11 −13	0	−0.18
100709	20 25 02.78	+13 23 10.3	7.43	H	306.261 578 56	+13.386 188 21	7.13	73.51	2.55	0.67	0.61	0.89	0.77	0.77	+19 −30 −19 + 8 +17 +13 +20 +41 − 3 +19	0	0.22
100710	20 25 03.57	+83 10 58.1	6.73	H	306.264 864 64	+83.182 797 74	5.84	−13.83	3.83	0.48	0.53	0.56	0.56	0.61	+ 7 − 7 − 3 + 3 + 0 −15 + 2 −20 − 2 +14	0	0.33
100711	20 25 04.02	+32 28 06.7	7.51	H	306.266 745 79	+32.468 530 59	8.51	29.71	−6.49	0.44	0.51	0.74	0.55	0.54	−17 −11 − 1 + 2 + 1 − 7 + 0 −20 + 9 −20	0	0.53
100712	20 25 04.05	+07 28 23.9	7.77	H	306.266 884 54	+07.473 306 33	5.87	−31.38	−39.15	0.75	0.73	0.99	0.88	0.92	+28 − 5 −22 + 8 +26 +21 +34 +54 −13 +24	0	1.30
100713	20 25 04.41	−19 26 01.3	6.83	H	306.268 357 07	−19.433 705 08	6.60	21.02	4.51	0.89	0.54	0.97	1.02	0.76	+12 −25 −13 −17 + 9 +34 +15 +29 + 2 +14	2	−0.45
100714 H	20 25 05.00	+59 36 00.4	6.44	H	306.270 846 38	+59.600 121 11 *	3.44	1.95	−9.68	0.71	0.63	0.53	0.60	0.57	− 2 − 1 − 7 +30 +13 − 7 +20 + 3 + 4 + 8	2	−0.10
100715	20 25 05.08	−41 39 10.9	9.66	G	306.271 171 27	−41.653 015 02	5.04	6.20	−43.87	1.42	0.87	1.67	2.07	1.30	+17 −16 − 7 +10 +13 +13 +15 +13 − 8 +27	0	0.85
100716	20 25 08.06	−11 42 16.6	7.42	H	306.283 564 34	−11.704 597 96	6.89	8.63	−5.11	0.87	0.55	0.98	1.07	0.70	+17 − 2 − 2 − 5 +14 +31 +15 +16 − 6 +22	0	−1.06
100717	20 25 08.50	−64 18 01.1	10.40	H	306.285 433 29	−64.300 296 64	9.42	9.96	−68.93	1.27	1.07	1.71	1.43	1.37	− 3 − 3 + 1 +39 + 6 − 3 + 2 +17 + 1 −31	1	1.29
100718	20 25 09.51	−23 10 58.5	8.66	H	306.289 644 50	−23.182 915 23	4.71	−3.60	−17.40	1.19	0.85	1.48	1.64	1.42	+31 + 3 −20 +14 + 3 +34 + 4 +36 −15 +36	3	−1.89
100719	20 25 10.80	+21 29 18.9	7.07	2 H	306.295 014 92	+21.488 572 28	0.29	−0.48	−2.59	0.74	0.54	0.84	0.84	0.60	+15 −14 − 7 −10 + 4 −12 + 3 −10 − 4 +33	0	0.06
100720	20 25 11.02	−03 25 31.0	8.48	H	306.295 898 52	−03.425 279 31	10.16	−11.39	−48.37	1.06	0.74	1.25	1.71	1.11	+ 9 − 8 −19 +14 − 8 +37 + 5 +46 −21 −17	0	−1.45
100721	20 25 13.18	+03 59 20.3	7.61	H	306.304 924 41	+03.988 962 35	6.71	116.84	47.85	0.81	0.78	1.07	1.11	1.06	+39 − 4 −19 +40 +21 +34 +27 +69 −10 +39	2	0.10
100722	20 25 14.03	+29 45 32.1	9.17	H	306.308 441 67	+29.758 925 78	3.60	−2.26	4.19	0.55	0.76	1.09	0.63	0.82	−23 + 2 − 1 +25 − 4 −14 + 0 − 7 + 8 −13	0	0.87
100723	20 25 14.49	+23 26 42.2	7.63	H	306.310 369 84	+23.445 064 87	3.14	−1.42	−0.38	0.50	0.49	0.83	0.64	0.62	− 7 −10 −10 + 2 −12 − 2 −13 − 1 +12 +16	0	0.78
*100724	20 25 15.19	+42 10 46.2	7.84	H	306.313 307 71	+42.179 509 31	5.09	23.54	−5.42	0.53	0.55	0.70	0.59	0.64	+ 0 + 0 − 6 +14 +17 −14 +17 −14 +27 + 2	0	−1.67
*100725	20 25 15.17	−58 05 37.5	8.55	H	306.313 205 69	−58.093 751 34	1.39	6.07	−13.78	0.72	0.60	1.08	1.08	0.77	+28 −33 −14 −46 +10 +12 +14 −27 + 7 −19	0	0.32
100726	20 25 15.36	+28 54 53.7	9.53	H	306.314 008 08	+28.914 920 79	3.42	−18.08	−40.05	0.65	0.86	1.38	0.75	0.89	−25 − 2 +12 + 9 −14 − 3 −13 − 5 − 1 −26	0	−0.74
100727 H	20 25 16.64	+60 00 43.1	7.47	H	306.319 340 62	+60.011 973 97 *	1.32	−5.13	−13.90	1.09	1.18	0.71	0.76	0.80	+13 + 3 + 4 +16 +14 +17 +16 +10 + 0 + 6	1	0.01
100728	20 25 17.42	−33 21 52.7	9.15	H	306.322 599 65	−33.364 651 04	1.26	6.85	−0.68	1.13	0.70	1.37	1.43	0.99	+26 −12 − 1 − 5 +22 + 9 +19 +10 − 5 +59	0	0.01
100729	20 25 18.06	−52 20 09.9	8.95	H	306.325 244 46	−52.336 070 93	8.73	22.16	−16.92	1.12	0.88	1.29	1.58	1.37	+ 4 −19 −13 +39 − 6 +17 −11 +23 +24 − 4	0	0.90
100730	20 25 19.30	−16 22 01.7	9.27	H	306.330 412 70	−16.367 132 18	8.46	8.30	−21.29	1.21	0.70	1.43	1.37	0.91	+12 − 2 −25 −16 − 8 +24 − 4 +12 −27 +17	0	3.03
100731	20 25 19.44	+52 51 48.8	8.12	H	306.330 998 09	+52.863 569 25	3.00	8.31	9.30	0.54	0.50	0.59	0.69	0.54	− 9 −15 +12 +20 + 9 − 1 + 5 + 2 +16 − 7	0	−1.07
100732	20 25 20.90	−29 59 04.5	7.45	2 H	306.337 097 96	−29.984 577 58	2.49	15.22	0.37	0.80	0.48	0.98	0.98	0.65	+43 −28 −16 + 3 +24 +20 +19 + 9 +25 +73	0	−0.94
100733	20 25 24.66	+07 52 30.0	7.91	H	306.352 748 97	+07.875 007 97	4.88	5.31	−6.72	0.86	0.74	1.03	1.05	0.94	+25 −21 −31 +13 +22 + 3 +28 +55 − 7 +17	0	−0.25
100734	20 25 25.43	+06 38 30.5	6.75	H	306.355 939 36	+06.641 813 21	5.92	3.31	−1.93	0.67	0.60	0.82	0.81	0.80	+30 − 9 − 7 + 5 +27 +36 +28 +52 + 8 +39	0	1.03
100735	20 25 25.43	+17 54 24.8	10.46	2 H	306.355 951 37	+17.906 901 14	−1.05	−2.58	−4.37	1.20	1.13	1.54	1.35	1.30	+15 − 6 −27 −20 +20 + 0 +19 + 1 + 5 +24	0	−0.51
100736	20 25 25.69	+42 36 17.9	6.89	H	306.357 036 08	+42.604 985 93	9.84	46.86	28.08	0.46	0.47	0.60	0.49	0.54	− 6 + 0 + 0 + 8 + 9 −12 +12 −16 +25 + 4	0	−0.03
100737	20 25 26.35	+41 54 37.5	7.11	H	306.359 771 63	+41.910 407 26	9.15	3.24	−2.25	0.46	0.48	0.60	0.52	0.55	− 9 + 2 − 2 + 5 +14 − 8 +16 −10 +22 + 1	0	−0.44
100738	20 25 26.82	−28 39 47.8	5.86	H	306.361 751 61	−28.663 279 32	6.03	11.73	4.05	0.77	0.47	0.86	0.95	0.67	+ 9 −15 −21 −12 − 4 +29 + 4 +26 −16 + 3	0	0.51
100739	20 25 27.17	−10 25 39.9	8.67	H	306.363 207 43	−10.427 751 88	4.94	8.52	−7.47	1.24	0.80	1.47	1.55	1.16	+18 −25 −23 −20 − 9 +34 + 3 +26 −20 + 5	0	−1.22
100740	20 25 27.76	−21 09 26.3	8.99	H	306.365 659 77	−21.157 318 49	4.40	3.63	1.10	1.17	0.82	1.31	1.53	1.33	+26 −16 −21 −13 +11 +14 +13 +28 −18 +35	2	1.34
100741	20 25 28.58	+39 47 36.7	7.56	G	306.369 064 24	+39.793 517 84	3.21	6.31	1.12	0.48	0.49	0.62	0.49	0.50	− 7 − 6 + 0 + 1 + 0 − 3 + 0 −12 + 9 − 5	0	−1.01
100742	20 25 29.36	−34 18 35.9	9.17	H	306.372 313 37	−34.309 968 45	5.21	39.65	−44.35	1.08	0.57	1.29	1.31	0.80	+15 −30 + 2 −15 + 0 +14 + 6 −11 −19 +35	2	−0.01
100743	20 25 31.83	−39 19 46.1	8.74	2 H	306.382 628 16	−39.329 485 83	1.12	−12.74	−13.40	1.09	0.65	1.22	1.53	0.95	+11 −17 + 9 + 4 +18 + 6 +17 +12 − 5 +28	0	1.35
100744	20 25 32.81	+54 41 03.2	7.27	2 T	306.386 722 98	+54.684 213 17	1.30	−2.93	−5.11	0.45	0.44	0.50	0.53	0.44	− 5 − 1 +17 +12 − 2 −10 + 0 +10 + 8 − 4	0	−1.54
100745	20 25 33.25	+21 02 17.9	9.82	3 H	306.388 523 00	+21.038 303 36	1.03	3.62	9.24	1.38	0.99	1.51	1.77	1.21	+15 + 6 − 8 −20 +14 −19 + 7 +12 − 3 +33	0	−1.73
100746	20 25 33.52	+80 13 12.4	7.56	1 H	306.389 664 84	+80.220 116 21	2.81	6.54	18.37	0.51	0.51	0.55	0.56	0.62	+ 1 − 9 + 0 + 9 +11 −10 +12 + 7 + 1 + 8	0	−0.28
100747	20 25 34.09	−29 26 17.1	8.34	H	306.392 038 25	−29.438 077 90	4.62	−7.19	12.11	1.03	0.61	1.15	1.50	0.95	+13 −24 −25 − 4 − 3 +32 +12 +31 −14 − 5	0	0.04
100748	20 25 34.37	−12 02 24.7	11.18	G	306.393 206 45	−12.040 189 99	9.58	−215.52	−162.77	4.36	2.77	5.08	5.88	3.76	+20 − 2 − 3 − 9 + 8 +35 + 7 +11 + 2 +31	0	
100749	20 25 36.25	+43 40 40.2	9.43	H	306.401 055 52	+43.677 825 70	2.28	5.78	4.21	0.76	0.80	1.05	0.96	1.02	+12 −11 + 5 − 6 −12 −32 −12 −20 +24 +15	0	−0.47
100750	20 25 38.10	+26 42 16.9	8.28	G	306.408 733 32	+26.704 693 41	7.00	13.79	11.52	0.70	0.64	1.00	0.84	0.73	− 5 −14 − 2 +35 + 8 + 3 + 9 +13 +17 +12	0	−1.03
100751	20 25 38.85	−56 44 05.6	1.94	1 G	306.411 873 47	−56.734 880 71	17.80	7.71	−86.15	0.51	0.46	0.70	0.58	0.45	+11 −16 −11 −37 − 4 − 4 − 7 −45 + 9 −30	3	0.35
100752	20 25 39.20	−53 06 33.7	8.59	H	306.413 314 47	−53.109 362 93	7.27	34.24	−88.52	1.08	0.78	1.19	1.90	1.29	−17 − 6 −13 +39 −20 −14 −26 +26 +18 −49	0	−0.07
100753	20 25 39.62	+43 58 03.3	9.61	H	306.415 071 78	+43.967 572 46	1.11	−7.76	−9.99	0.88	0.86	1.13	1.11	1.01	+ 7 −14 +20 + 0 −12 −20 − 9 − 5 +16 +15	0	−0.69
100754	20 25 40.52	+21 24 34.8	5.68	H	306.418 849 50	+21.409 662 74	6.00	8.88	−8.67	0.64	0.45	0.73	0.70	0.49	+ 4 −20 −12 − 3 + 9 − 9 + 8 − 5 − 3 +18	0	−1.27
100755 H	20 25 40.70	+55 08 20.3	8.19	H	306.419 597 32	+55.138 977 03 A	2.69	5.66	1.95	1.10	1.27	1.15	1.05	1.28	+ 1 + 9 + 8 +15 − 4 −20 − 2 + 7 + 7 + 9	1	1.44
100756	20 25 41.04	+33 04 41.0	8.81	H	306.421 019 77	+33.078 047 95	7.17	17.80	−7.10	0.61	0.63	0.94	0.73	0.67	− 9 −14 + 5 +11 −18 − 9 −18 − 2 +11 −15	0	0.20
100757	20 25 42.09	+37 08 42.6	8.38	H	306.425 388 09	+37.145 176 40	3.30	−1.39	7.58	0.56	0.63	0.80	0.62	0.64	− 8 + 2 + 9 +12 − 5 −23 + 0 −16 + 4 + 0	0	0.28
100758	20 25 42.53	−02 48 01.0	6.10	G	306.427 199 25	−02.800 280 34	4.57	−4.95	−40.00	0.74	0.54	0.96	1.12	0.73	+ 1 − 2 −33 +39 −26 +41 −13 +59 −20 −12	0	−0.90
100759 H	20 25 42.78	+60 10 39.3	7.48	H	306.428 248 80	+60.177 577 97 A	4.72	27.57	12.78	0.79	0.78	0.76	0.78	0.83	+ 7 + 1 + 3 +11 +12 −15 +16 + 7 + 1 +24	1	−0.53
100760 H	20 25 43.41	+26 42 39.0	9.53	H	306.430 883 59	+26.710 825 29 B	1.51	2.98	−1.58	1.89	1.93	2.54	1.97	1.82	−13 − 9 −10 + 9 +10 +16 +13 − 5 + 6 +17	0	−0.18
100761	20 25 43.49	−62 39 33.7	8.34	G	306.431 201 30	−62.659 373 80	9.90	61.38	−61.82	0.75	0.65	1.01	0.75	0.81	+13 − 6 − 7 +25 − 1 + 8 − 3 − 4 + 5 + 6	0	−0.14
100762	20 25 44.10	+10 03 21.9	6.32	G	306.433 761 34	+10.056 093 72	3.72	20.98	−38.88	0.65	0.63	0.88	0.78	0.80	+40 −17 + 2 +13 +44 +21 +39 +52 + 9 +52	0	−2.11
100763	20 25 45.84	+67 08 28.7	7.74	H	306.440 986 29	+67.141 305 73	3.03	10.24	22.93	0.62	0.51	0.64	0.73	0.56	− 4 −37 +16 +13 +10 +19 + 6 + 7 + 7 +18	0	−0.06
100764	20 25 48.01	−40 47 45.5	6.08	H	306.450 035 66	−40.795 973 02	9.25	−105.35	−86.76	0.69	0.44	0.78	0.92	0.57	+ 8 −22 −18 − 1 + 8 + 7 +11 + 2 −11 +21	0	1.33
100765	20 25 48.62	−26 33 23.2	7.60	H	306.452 571 91	−26.556 452 49	5.64	13.64	−11.97	0.76	0.51	0.88	0.87	0.75	+19 −28 −11 −11 + 1 +32 + 3 +22 − 6 +27	0	0.76
100766	20 25 49.56	−72 35 06.7	8.64	H	306.456 508 36	−72.585 199 22	3.37	−0.22	7.21	0.66	0.79	1.09	0.75	1.00	−19 −12 + 6 +13 − 9 − 8 −10 +14 +10 −38	1	−1.39
100767	20 25 50.94	+39 37 52.8	8.80	H	306.462 261 82	+39.631 337 40	9.82	182.23	19.94	0.68	0.73	0.94	0.73	0.75	− 4 − 2 + 9 + 6 − 5 −16 − 4 −13 + 6 − 4	2	−0.19
*100768	20 25 52.17	+08 59 02.2	8.80	H	306.467 361 35	+08.983 955 65	2.78	8.52	2.82	1.06	0.85	1.31	1.45	1.13	+10 − 9 −26 +36 − 6 + 9 − 2 +43 −16 − 5	0	0.07
*100769	20 25 52.12	−22 35 32.5	9.45	H	306.467 178 05	−22.592 354 30	4.16	−32.50	0.31	1.32	0.94	1.69	1.90	1.63	+41 −10 −26 + 7 + 2 +37 + 9 +41 −15 +39	3	−0.52
100770	20 25 53.97	−18 28 57.7	8.24	H	306.474 890 09	−18.482 692 83	5.79	11.08	8.96	0.99	0.60	1.12	1.18	0.80	+18 −18 −19 −11 + 5 +31 +11 +23 − 2 +20	0	0.18
100771	20 25 55.08	+41 20 11.8	7.77	2 G	306.479 487 85	+41.336 600 07	0.50	−0.05	−3.49	0.48	0.55	0.65	0.55	0.61	−13 +10 + 2 − 2 +10 −13 +14 −23 +20 − 5	0	−2.42
100772	20 25 55.13	−60 46 12.4	9.40	H	306.479 691 05	−60.770 119 37	4.00	6.67	−36.14	0.80	0.83	1.19	0.83	1.04	+30 −14 + 0 +52 + 1 + 7 − 3 − 5 +10 +31	1	0.36
100773	20 25 56.48	−33 38 09.4	8.01	H	306.485 342 86	−33.635 936 80	3.62	7.74	−12.91	0.81	0.49	0.94	0.88	0.60	+29 −19 −11 −20 + 8 +12 + 7 − 4 − 3 +52	0	−1.56
100774	20 25 57.32	+26 02 09.8	8.30	G	306.488 824 49	+26.036 067 77	6.89	15.36	6.76	0.65	0.65	0.89	0.70	0.73	+12 + 9 − 7 +23 + 9 + 5 + 9 +25 + 0 +32	3	−2.28
100775	20 25 57.95	+47 58 06.2	7.81	H	306.491 439 26	+47.968 391 27	5.79	29.89	1.09	0.63	0.50	0.66	0.81	0.57	−11 + 5 + 8 +14 − 8 −14 − 6 + 2 +13 −18	6	0.03
100776	20 25 59.42	+14 56 35.0	7.39	H	306.497 577 86	+14.943 058 18	2.20	18.67	14.22	0.65	0.59	0.83	0.74	0.69	+22 −12 −10 +10 +34 + 5 +32 +35 + 9 +31	0	1.02
100777 H	20 26 00.95	+35 48 40.5	7.61	H	306.503 962 63	+35.811 254 38 A	10.23	−8.87	−13.30	0.72	0.80	0.87	0.71	0.80	−17 + 3 + 3 +13 + 9 − 8 +10 + 3 + 8 − 3	2	−0.08
100778	20 26 00.99	−07 44 04.5	8.99	H	306.504 128 91	−07.734 590 06	4.20	16.93	−4.08	1.24	1.02	1.57	1.65	1.33	+38 − 2 −28 + 6 + 4 +35 +27 +58 −18 +11	0	0.66
100779	20 26 01.15	+19 51 55.6	6.45	H	306.504 785 20	+19.865 448 04	4.83	31.26	18.93	0.60	0.51	0.79	0.73	0.57	+ 5 −17 −12 +13 +24 + 5 +22 +15 + 5 +12	0	−0.32
100780	20 26 01.22	+20 34 56.0	7.88	H	306.505 092 41	+20.582 208 83	5.15	3.89	−3.73	0.74	0.65	0.96	0.86	0.74	+15 −30 − 4 + 7 +22 − 2 +16 +14 +10 +30	0	−1.22
100781	20 26 01.58	+13 54 42.0	6.35	1 H	306.506 594 36	+13.911 679 33	4.00	25.12	−27.49	0.61	0.60	0.79	0.73	0.73	+25 −21 −20 +12 +21 +12 +27 +51 − 5 +17	0	−0.02
100782 H	20 26 01.81	+22 57 10.4	9.48	H	306.507 561 48	+22.952 878 37 A	0.79	−0.08	−4.61	1.54	1.32	1.94	1.63	1.47	+24 −20 −19 +30 − 3 − 7 − 1 + 0 +13 +45	0	0.14
100783	20 26 02.21	−03 51 53.0	7.48	H	306.509 204 90	−03.864 723 76	11.04	35.84	−1.80	0.93	0.81	0.99	1.22	1.09	+44 −18 −13 +25 +30 +13 +37 +65 − 9 +36	0	−1.45
100784	20 26 03.85	+40 24 06.1	6.65	H	306.516 054 35	+40.401 703 86	3.13	6.39	3.34	0.44	0.44	0.57	0.47	0.45	−14 −10 + 1 − 7 + 5 +14 + 4 −18 +17 − 9	0	−2.20
100785	20 26 04.44	−14 58 48.6	7.32	H	306.518 513 55	−14.980 175 43	1.80	18.52	−2.67	0.97	0.55	1.13	1.16	0.69	+23 + 0 − 1 −15 + 0 +30 − 1 + 4 − 5 +31	0	−0.09
100786	20 26 04.61	+04 11 17.3	8.95	G	306.519 199 90	+04.188 142 70	6.28	−9.75	8.84	0.98	0.93	1.28	1.30	1.31	+33 − 3 −29 +35 +22 +22 +26 +65 −26 +35	2	−1.13
100787	20 26 04.75	−46 39 35.8	6.74	H	306.519 795 25	−46.659 956 09	16.52	20.24	−20.44	0.81	0.51	0.87	1.14	0.67	+11 −24 −19 +33 + 3 +15 + 5 +12 + 1 + 6	0	−1.81
100788	20 26 07.07	+29 28 01.2	8.87	H	306.529 472 22	+29.467 008 51	10.07	47.15	56.32	0.49	0.72	1.07	0.58	0.74	−29 − 1 + 2 +26 −10 −15 − 8 −16 + 8 −27	0	−0.01
100789	20 26 08.47	+69 19 36.1	7.33	H	306.535 279 12	+69.326 704 95	4.87	11.63	1.11	0.56	0.53	0.59	0.64	0.59	+ 4 + 1 +10 + 3 +10 −18 +11 +12 − 1 +17	0	1.04
100790	20 26 10.12	+38 51 41.1	7.98	H	306.542 180 33	+38.861 424 74	1.82	1.57	−3.64	0.54	0.54	0.70	0.56	0.53	− 6 − 4 + 5 + 9 − 5 − 2 − 4 −18 + 2 + 6	0	0.11
100791 H	20 26 11.30	+35 47 17.1	8.56	H	306.547 079 87	+35.788 071 38 *	3.34	2.70	−1.00	0.62	0.63	0.86	0.71	0.74	− 2 + 1 + 5 + 6 + 8 −12 +10 − 7 + 8 + 8	0	0.88
100792	20 26 11.85	+09 27 05.2	8.33	H	306.549 371 77	+09.451 451 79	17.94	117.90	−549.71	0.98	0.91	1.24	1.10	1.11	+40 −21 −11 +14 +49 + 5 +49 +55 + 2 +43	0	−0.95
100793	20 26 12.41	−86 06 17.3	7.57	H	306.551 691 82	−86.104 801 06	3.87	1.00	6.20	0.57	0.48	0.62	0.65	0.53	− 5 −19 −13 + 2 + 4 − 2 + 5 + 8 − 6 −25	0	0.24
100794	20 26 12.99	+57 15 24.2	8.72	H	306.554 139 67	+57.256 721 73	0.81	−1.73	−5.29	0.63	0.64	0.70	0.63	0.68	+ 3 −10 − 5 + 1 + 6 −15 + 6 −17 + 7 + 8	0	1.72
100795	20 26 14.55	+59 07 03.9	8.70	H	306.560 632 05	+59.117 760 54	2.19	−11.90	7.29	0.69	0.70	0.76	0.81	0.80	+ 0 − 2 − 3 + 6 +19 −17 +18 − 1 + 8 + 4	0	−0.53
100796	20 26 15.14	−24 56 49.3	8.15	H	306.563 075 80	−24.947 017 06	3.77	6.56	−21.04	0.95	0.60	1.08	1.33	0.91	+13 −15 −17 + 8 −11 +22 − 5 +30 −18 + 2	0	0.72
100797	20 26 15.31	+02 57 25.8	6.64	H	306.563 804 11	+02.957 178 81	6.56	34.05	−6.00	0.72	0.66	1.15	0.96	0.85	+21 − 1 −45 +21 −18 +44 + 0 +52 −36 + 5	4	−0.60
100798	20 26 16.55	−13 33 03.6	8.07	H	306.568 978 76	−13.550 999 79	1.17	4.55	−12.41	1.06	0.59	1.18	1.32	0.79	+ 9 +16 + 8 − 9 +13 +23 +19 − 3 +32	0	0.50
100799	20 26 16.63	−62 57 59.3	9.28	H	306.569 297 69	−62.966 469 32	7.47	19.84	−10.96	0.91	0.76	1.25	0.88	0.89	+ 5 −16 − 8 +12 +12 + 1 +15 + 0 −12 − 7	0	0.42
100800	20 26 17.24	−13 51 47.0	7.85	G	306.571 824 36	−13.863 067 60	10.59	49.31	−0.25	0.97	0.55	1.11	1.27	0.71	+ 8 +16 +10 − 3 +29 +40 +22 +15 + 2 +33	0	1.12

61829 37452

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
100701	8.927	0.013	8.756	0.015		0.164	0.019	T	0.18	0.02	L	8.8084	0.0018	0.017	120		8.78	8.85					1							
100702	8.609	0.009	8.660	0.012		−0.042	0.014	T	−0.02	0.01	L	8.6614	0.0014	0.015	144		8.64	8.69		C			1							
100703	11.364	0.090	9.526	0.029		1.529	0.075	T	1.57	0.16	L	9.4795	0.0019	0.020	84		9.44	9.51		C			1 S							
100704	8.244	0.010	7.679	0.011		0.554	0.015	G	0.63	0.01	H	7.7256	0.0014	0.008	79		7.71	7.75		C			1							S
100705	8.257	0.009	7.982	0.012	*	0.262	0.014	T	0.29	0.02	L *	8.0250	0.0015	0.012	91	*	8.00	8.05		D	20250+6118	M 1	2 C S A	AB	25	0.174	0.011	0.74	0.33	S
100706	10.280	0.033	9.475	0.026		0.707	0.005	G	0.76	0.01	H	9.6035	0.0027	0.024	97		9.57	9.64					1							
100707	11.069	0.077	9.615	0.035		1.226	0.066	T	1.18	0.07	L	9.6234	0.0034	0.017	55		9.58	9.64		C			1							
100708	9.002	0.011	8.098	0.009	*	0.800	0.015	G	0.83	0.01	H *	8.1312	0.0011	0.015	197	*	8.11	8.16		D	20250+3034	H 1	2 C A	AB	356	0.815	0.018	3.09	0.07	S
100709	7.545	0.006	7.444	0.009		0.098	0.010	T	0.11	0.01	L	7.4655	0.0012	0.009	82		7.44	7.48		C			1							S
100710	7.914	0.008	6.823	0.005		0.943	0.007	T	0.93	0.01	L	6.8889	0.0011	0.010	124		6.87	6.91					1							S
100711	8.841	0.013	7.614	0.008		1.048	0.012	T	1.02	0.01	L	7.6778	0.0012	0.012	170		7.66	7.70		C			1							
100712	8.195	0.011	7.806	0.010		0.382	0.009	G	0.45	0.01	H	7.8548	0.0014	0.009	76		7.84	7.87		C			1							S
100713	8.112	0.010	6.938	0.005		1.007	0.009	T	0.98	0.01	L	6.9918	0.0012	0.009	77		6.98	7.01		C			1							S
100714	6.547	0.004	6.451	0.004	*	0.094	0.006	T	0.11	0.01	L *	6.4743	0.0007	0.007	120	*	6.46	6.48		D	20251+5936	I 1	2 C A	AB	317	0.209	0.003	0.69	0.08	S
100715	10.213	0.034	9.817	0.037		0.531	0.020	G	0.60	0.02	H	9.7923	0.0026	0.022	77		9.75	9.83					1							
100716	7.755	0.009	7.457	0.011		0.283	0.015	T	0.32	0.02	L	7.4930	0.0016	0.014	73		7.47	7.51					1							S
100717	11.473	0.072	10.492	0.050		0.944	0.020	G	0.99	0.02	I	10.5399	0.0036	0.034	126		10.47	10.61					1							G
100718	10.507	0.046	8.804	0.019		1.422	0.039	T	1.41	0.06	L	8.8057	0.0023	0.019	70		8.78	8.84		C			1							
100719	6.940	0.008	7.062	0.010		−0.106	0.011	T	−0.09	0.01	L	7.0341	0.0034	0.034	76		7.01	7.14	4.90	P 1 A			1							S
100720	8.996	0.018	8.520	0.018		0.448	0.023	T	0.52	0.02	L	8.5784	0.0020	0.012	61		8.56	8.60		C			1							
100721	8.897	0.013	7.723	0.009		1.007	0.012	T	0.98	0.01	L	7.7778	0.0011	0.010	86		7.76	7.80		C			1							S
100722	9.214	0.011	9.163	0.014		0.052	0.017	T	0.06	0.01	L	9.1923	0.0016	0.020	215		9.15	9.23		C			1							
100723	8.830	0.011	7.730	0.008		0.950	0.010	T	0.94	0.01	L	7.7932	0.0010	0.012	173		7.77	7.81					1							
100724	8.271	0.011	7.874	0.011		0.376	0.014	T	0.44	0.01	L	7.9229	0.0013	0.012	123		7.90	7.94		C			1							S
100725	10.348	0.021	8.674	0.010		1.399	0.018	T	1.38	0.02	L	8.6898	0.0012	0.014	186		8.66	8.71		C			1							
100726	9.848	0.015	9.566	0.018		0.268	0.022	T	0.30	0.03	L	9.5984	0.0021	0.026	249		9.55	9.64					1 S							G
100727	7.688	0.007	7.497	0.007	*	0.183	0.009	T	0.20	0.01	L *	7.5356	0.0013	0.011	116	*	7.52	7.56		D	20253+6001	M 1	2 C A	AB	151	0.240	0.003	0.04	0.07	S
100728	10.481	0.034	9.301	0.020		1.011	0.031	T	0.99	0.03	L	9.3138	0.0021	0.020	123		9.28	9.36		C			1							
100729	9.516	0.021	9.000	0.020		0.494	0.022	T	0.57	0.02	L	9.0571	0.0025	0.013	62		9.03	9.09		C			1							
100730	9.800	0.026	9.349	0.026		0.439	0.029	T	0.51	0.03	L	9.3716	0.0026	0.018	72		9.35	9.40		C			1							
100731	8.080	0.008	8.113	0.010		−0.026	0.012	T	0.00	0.01	L	8.1226	0.0011	0.011	119		8.11	8.14					1							
100732	9.456	0.016	7.675	0.007		1.514	0.014	T	2.47	0.03	O	7.4720	0.0040	0.033	137		7.42	7.53		U 2			1 S							S
100733	8.126	0.012	7.943	0.013		0.175	0.017	T	0.19	0.02	L	7.9700	0.0015	0.012	66		7.95	7.99		C			1							S
100734	6.740	0.006	6.752	0.006		−0.006	0.008	T	0.01	0.01	L	6.7587	0.0009	0.007	78		6.75	6.78		C			1							S
100735						2.100	0.510	G	2.09	0.52	J	10.5375	0.0155	0.097	87		10.41	10.75		U 2			1							G
100736	7.441	0.006	6.935	0.005		0.457	0.010	G	0.53	0.01	H	6.9925	0.0010	0.008	116		6.98	7.00					1							S
100737	7.388	0.005	7.139	0.006		0.237	0.007	T	0.26	0.01	L	7.1762	0.0009	0.010	126		7.16	7.19					1							S
100738	7.266	0.005	5.975	0.003		1.101	0.002	G	1.06	0.00	H	6.0227	0.0007	0.006	83		6.01	6.04		C			1							S
100739	10.564	0.050	8.872	0.021		1.160	0.040	G	1.12	0.04	R	8.8348	0.0026	0.017	58		8.81	8.87					1							
100740	10.606	0.056	9.104	0.027		1.160	0.040	G	1.12	0.04	J	9.1537	0.0022	0.016	69		9.12	9.22					1							
100741	7.440	0.005	7.529	0.007		−0.090	0.015	G	−0.07	0.02	H	7.5303	0.0014	0.011	140		7.51	7.55					1							S
100742	10.365	0.031	9.265	0.020		0.950	0.028	T	0.94	0.02	L	9.3385	0.0022	0.018	114		9.31	9.36		C			1							
100743	10.771	0.060	8.948	0.022		1.548	0.053	T	2.18	0.12	O	8.8022	0.0063	0.047	87		8.75	8.88		U 2			1							
100744	7.245	0.006	7.265	0.008		−0.016	0.009	T	0.01	0.01	L	7.2820	0.0091	0.067	131		7.13	7.34		U 2 C	20255+5441	I 1	1							S
100745	10.236	0.033	9.965	0.040		0.258	0.049	T	0.29	0.06	L	9.8953	0.0071	0.102	71		9.84	10.49		P 1 A			1							G
100746	7.541	0.006	7.563	0.008		−0.015	0.009	T	0.01	0.01	L	7.5619	0.0019	0.016	108		7.54	7.60	0.98	P 1 A			1							S
100747	9.852	0.026	8.461	0.015		1.176	0.024	T	1.14	0.02	L	8.5072	0.0020	0.011	83		8.49	8.52		C			1							
100748	11.821	0.199	10.995	0.140		0.634	0.006	G	0.70	0.01	H	11.3320	0.0077	0.047	64		11.26	11.42		C			1 X							G P
100749	9.387	0.016	9.389	0.021		0.003	0.024	T	0.02	0.02	L	9.4381	0.0018	0.021	110		9.41	9.48					1							G
100750	8.711	0.014	8.307	0.015		0.360	0.015	G	0.42	0.02	H	8.3657	0.0019	0.017	122		8.34	8.40		D	20257+2642	I 2	1							
100751	1.762	0.007	1.898	0.006		−0.118	0.008	T	−0.10	0.01	L	1.8583	0.0006	0.006	109		1.85	1.87		M	20257−5644	I 1	1							S
100752	9.126	0.018	8.639	0.017		0.470	0.019	T	0.54	0.02	L	8.6965	0.0019	0.012	71		8.67	8.72		C			1							
100753	9.620	0.018	9.592	0.025		0.031	0.028	T	0.05	0.02	L	9.6232	0.0031	0.020	102		9.59	9.66					1							G
100754	6.850	0.005	5.787	0.004		0.921	0.005	T	0.92	0.00	L	5.8456	0.0007	0.006	77		5.84	5.85		C			1							S
100755	8.267	0.008	8.232	0.009	*	0.037	0.011	T	0.05	0.01	L *	8.2086	0.0017	0.014	135	*	8.18	8.23		D	20257+5508	I 1	2 C A	AB	189	0.664	0.002	0.62	0.01	S
100756	9.419	0.014	8.872	0.014		0.512	0.018	T	0.58	0.02	L	8.9181	0.0016	0.019	155		8.88	8.95		C			1							
100757	9.714	0.017	8.508	0.011		1.032	0.016	T	1.00	0.01	L	8.5420	0.0015	0.016	149		8.51	8.57					1							
100758	7.653	0.007	6.236	0.004		1.193	0.004	G	1.15	0.00	H	6.2629	0.0005	0.005	100		6.25	6.27		C			1							S
100759	7.860	0.007	7.540	0.008	A	0.400	0.495	G	0.35	0.03	L *	7.5527	0.0012	0.010	119	*	7.54	7.58		D	20257+6011	I 1	2 C A	AB	217	2.298	0.017	3.13	0.08	S
100760	9.707	0.029	9.615	0.040	B	0.100	0.495	G	0.24	0.07	L *	9.5959	0.0030	0.022	119	*	9.56	9.65		D	20257+2642	I 2	2 C B	BC	357	2.590	0.049	2.92	0.20	G
100761	8.825	0.012	8.374	0.012		0.450	0.001	G	0.52	0.00	H	8.4314	0.0016	0.018	113		8.41	8.49		C			1							S
100762	8.365	0.010	6.502	0.004		1.571	0.009	G	1.60	0.05	F	6.4353	0.0014	0.010	98		6.42	6.45					1							S
100763	8.943	0.014	7.840	0.009		0.951	0.013	T	0.94	0.01	L	7.9023	0.0016	0.012	103		7.88	7.92					1							
100764	7.877	0.008	6.247	0.004		1.364	0.007	T	1.33	0.01	L	6.2319	0.0014	0.011	96		6.22	6.25					1							S
100765	7.526	0.008	7.591	0.007		−0.056	0.002	G	−0.03	0.00	H	7.5902	0.0009	0.008	93		7.58	7.60					1							S
100766	9.972	0.017	8.749	0.011		1.045	0.016	T	1.02	0.01	L	8.8069	0.0019	0.021	167		8.77	8.84					1							
100767	9.523	0.015	8.878	0.013		0.599	0.017	T	0.67	0.01	L	8.9232	0.0017	0.017	140		8.90	8.95		C			1							
100768	10.782	0.052	8.941	0.020		1.531	0.044	T	1.58	0.10	L	8.9149	0.0021	0.014	75		8.89	8.94		C			1							
100769	10.878	0.065	9.586	0.035		1.099	0.058	T	1.06	0.06	L	9.6212	0.0023	0.016	70		9.58	9.65		C			1							
100770	8.482	0.014	8.263	0.016		0.203	0.021	T	0.22	0.02	L	8.3032	0.0017	0.011	82		8.28	8.32		C			1							S
100771	8.026	0.007	7.816	0.009		0.230	0.015	G	0.26	0.02	H	7.8431	0.0025	0.021	131		7.77	7.87		U 2			1							S
100772	9.689	0.015	9.396	0.017		0.278	0.024	T	0.32	0.03	L	9.4707	0.0017	0.027	158		9.44	9.52					1							
100773	8.003	0.007	7.998	0.010		0.006	0.011	T	0.03	0.01	L	8.0214	0.0011	0.011	132		8.00	8.04		C			1							S
100774	8.843	0.010	8.353	0.010		0.456	0.025	G	0.53	0.03	H	8.4149	0.0017	0.018	127		8.39	8.45					1							
100775	8.018	0.009	7.833	0.010		0.177	0.013	T	0.19	0.01	L	7.8687	0.0009	0.010	109		7.85	7.89					1							S
100776	9.276	0.019	7.539	0.010		1.449	0.017	T	1.45	0.03	L	7.5222	0.0013	0.013	103		7.50	7.55					1							S
100777	8.115	0.007	7.675	0.008	*	0.415	0.010	T	0.48	0.01	L *	7.7030	0.0009	0.012	160	*	7.68	7.72		D	20260+3549	H 1	2 C A	AB	137	0.606	0.019	3.41	0.09	S
100778	10.882	0.060	9.115	0.023		1.472	0.051	T	1.49	0.08	L	9.1233	0.0026	0.018	65		9.09	9.16		C			1							
100779	7.772	0.007	6.559	0.005		1.037	0.007	T	1.01	0.01	L	6.6157	0.0011	0.009	105		6.60	6.63					1							S
100780	8.028	0.008	7.887	0.010		0.136	0.012	T	0.15	0.01	L	7.9285	0.0016	0.016	97		7.90	7.95		C			1							S
100781	8.261	0.008	6.518	0.005		1.453	0.007	T	1.46	0.01	L	6.4800	0.0013	0.014	96		6.46	6.50		U 2			1							S
100782	9.499	0.016	9.497	0.022	A	0.028	0.100	G	0.01	0.03	L *	9.4814	0.0023	0.025	131	*	9.44	9.52			20260+2257	I 1	2 C C	AB	280	4.944	0.046	3.27	0.20	G
100783	8.037	0.009	7.522	0.010		0.484	0.012	T	0.56	0.01	L	7.5870	0.0012	0.011	63		7.57	7.60		C			1							S
100784	6.518	0.004	6.633	0.005		−0.100	0.006	T	−0.08	0.01	L	6.6231	0.0006	0.007	123		6.61	6.64		C			1							S
100785	9.298	0.017	7.480	0.008		1.513	0.015	T	1.55	0.02	L	7.4446	0.0013	0.010	69		7.43	7.46		C			1							S
100786	9.309	0.019	8.968	0.020		0.334	0.004	G	0.39	0.01	H	9.0253	0.0014	0.011	80		9.00	9.05					1							
100787	7.064	0.005	6.756	0.006		0.274	0.003	G	0.28	0.02	A	6.8073	0.0009	0.007	87		6.79	6.83		C			1							S
100788	9.642	0.013	8.958	0.011		0.661	0.015	G	0.72	0.01	H	9.0102	0.0013	0.019	245		8.97	9.05					1							
100789	8.421	0.010	7.422	0.007		0.873	0.009	T	0.88	0.01	L	7.4853	0.0014	0.011	91		7.47	7.51					1							S
100790	8.245	0.007	8.013	0.008		0.221	0.010	T	0.24	0.01	L	8.0479	0.0014	0.014	154		8.03	8.07		C			1 S							
100791	8.539	0.009	8.554	0.011	*	−0.009	0.013	T	0.01	0.01	L *	8.5647	0.0018	0.018	156	*	8.53	8.60		D	20262+3547	I 1	2 C S A	AP	58	0.163	0.008	0.89	0.25	
100792	8.912	0.015	8.387	0.014		0.503	0.031	G	0.62	0.02	A	8.4495	0.0018	0.015	89		8.43	8.48		C			1							
100793	8.906	0.012	7.687	0.008		1.042	0.011	T	1.01	0.01	L	7.7387	0.0010	0.009	132		7.72	7.76					1							S
100794	8.964	0.013	8.753	0.014		0.202	0.018	T	0.22	0.02	L	8.7829	0.0015	0.013	110		8.76	8.81		C			1							
100795	10.015	0.027	8.821	0.016		1.022	0.024	T	1.00	0.02	L	8.8703	0.0021	0.016	118		8.84	8.90					1							
100796	8.489	0.012	8.171	0.013		0.305	0.019	T	0.35	0.03	L	8.2269	0.0020	0.011	80		8.21	8.25		C			1							S
100797	7.796	0.006	6.736	0.005		0.919	0.006	T	0.92	0.00	L	6.7996	0.0012	0.008	91		6.79	6.81		C			1							S
100798	10.111	0.030	8.241	0.013		1.554	0.026	T	1.57	0.03	L	8.1882	0.0020	0.014	70		8.16	8.22					1							
100799	10.005	0.025	9.374	0.022		0.582	0.025	T	0.65	0.02	L	9.4059	0.0028	0.026	124		9.36	9.44					1							
100800	8.281	0.014	7.893	0.013		0.393	0.015	G	0.46	0.02	H	7.9362	0.0011	0.010	69		7.92	7.95		D			1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ mas/yr	Standard Errors α* mas	δ mas	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ mas/yr	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
100801	20 26 20.24	+47 15 23.6	8.33	H	306.584 342 08	+47.256 560 49	3.57	−0.62	−0.18	0.67	0.59	0.76	0.82	0.66	−10	−20	− 5	+ 1	− 6	− 2	− 8	− 3	+17	− 5	1	−0.14
100802	20 26 20.35	+10 50 17.8	11.08	2 H	306.584 804 55	+10.838 272 38	16.20	117.20	80.97	2.13	2.39	2.61	3.19	2.79	+61	+13	+17	+25	+47	+42	+45	+64	+24	+53	6	3.33
100803	20 26 20.56	+53 47 23.9	8.11	H	306.585 655 09	+53.789 984 26	3.72	11.33	−6.38	0.58	0.52	0.64	0.75	0.55	− 2	−11	+20	+ 8	− 3	+ 7	− 5	+ 9	+16	+ 4	0	−1.36
100804	20 26 21.55	+41 22 45.7	7.47	2 H	306.589 777 80	+41.379 357 59	−0.36	−1.67	−4.28	0.47	0.52	0.64	0.53	0.54	− 8	+12	+ 0	− 1	+ 8	−10	+11	−21	+26	− 7	0	−0.95
100805	20 26 21.95	−19 09 07.6	7.55	H	306.591 461 39	−19.152 098 21	8.04	5.28	0.31	0.92	0.55	1.08	1.10	0.70	+19	−26	−36	− 9	−15	+38	− 1	+13	− 3	+11	0	0.68
100806	20 26 22.75	−06 09 28.4	8.01	H	306.594 781 35	−06.157 892 54	5.05	−13.17	−11.08	1.01	0.66	1.11	1.55	0.92	−13	− 2	−27	+21	−17	+38	− 3	+53	−27	−34	0	1.24
100807	20 26 23.15	+17 18 56.1	6.23	H	306.596 464 87	+17.315 571 89	4.01	4.49	−5.45	0.56	0.48	0.70	0.62	0.56	+ 4	− 7	−17	− 1	+30	+ 2	+30	+ 6	+11	+13	0	0.29
100808	20 26 23.46	+56 38 19.2	6.38	H	306.597 765 00	+56.638 677 85	A 5.96	10.00	8.35	1.06	1.03	0.90	0.97	0.89	+13	−24	− 3	+11	+ 0	− 6	− 5	−16	+19	+12	3	0.31
100809	20 26 24.67	−60 01 19.9	8.86	H	306.602 782 62	−60.022 187 84	6.22	59.51	−40.46	0.86	0.71	1.17	1.14	0.85	+ 3	−21	+ 5	−41	+ 2	+23	+ 6	−24	+ 0	−24	0	−0.28
100810	20 26 25.86	−46 03 12.3	8.91	H	306.607 743 53	−46.053 414 74	7.04	22.35	−74.77	1.03	0.77	1.22	1.59	1.15	+ 4	−17	−22	+28	+ 2	−17	− 4	+25	+16	−13	0	0.85
100811	20 26 25.89	−32 19 44.0	7.40	H	306.607 879 63	−32.328 881 47	3.24	40.46	0.46	0.78	0.44	0.93	0.87	0.58	+26	−30	− 2	− 2	+14	+ 4	+16	+ 2	− 5	+58	1	0.56
*100812	20 26 26.30	+56 38 07.4	8.40	G	306.609 586 59	+56.635 375 46	B 12.26	11.73	3.77	12.09	11.74	6.66	7.11	7.10	+ 7	−24	− 2	− 3	− 2	−10	− 7	−20	+21	+ 7	3	0.31
*100813	20 26 26.13	−37 06 32.9	8.61	2 H	306.608 860 05	−37.109 150 85	2.10	21.80	−4.99	1.08	0.69	1.24	1.61	1.21	+18	−18	−13	+ 7	+23	− 4	+26	+39	+10	+ 6	0	1.53
*100814	20 26 26.24	−33 18 22.3	8.89	H	306.609 335 13	−33.306 194 11	0.75	0.35	5.53	1.06	0.61	1.31	1.27	0.81	+26	−13	−13	−17	+10	− 7	+ 9	− 4	−17	+52	0	0.09
100815	20 26 26.94	−34 32 26.4	9.61	H	306.612 233 46	−34.540 671 67	5.56	12.02	−18.76	1.26	0.68	1.54	1.53	0.94	+11	−21	+10	−12	+ 8	+15	+ 8	− 3	−14	+38	0	−0.41
100816	20 26 28.64	+63 26 42.4	10.19	H	306.619 353 71	+63.445 098 97	1.27	−5.56	−3.87	0.85	0.77	0.88	0.78	0.77	− 5	−14	+ 8	−42	+10	+17	+ 5	−29	+11	+29	1	0.93
100817	20 26 31.66	−17 22 39.6	7.33	G	306.631 935 11	−17.377 664 46	10.26	−4.58	−19.54	0.85	0.52	0.97	0.97	0.70	+23	−26	−21	−15	+ 2	+27	+ 7	+20	− 8	+30	2	0.75
100818	20 26 32.09	−44 45 14.2	11.58	G	306.633 715 66	−44.753 936 26	19.00	−3.39	48.56	2.63	1.82	3.04	4.31	2.59	+26	−28	−23	+35	+ 5	−15	+ 3	+ 7	− 1	+22	0	−0.46
100819	20 26 32.74	−29 04 25.7	7.16	H	306.636 433 34	−29.073 795 87	3.97	3.05	−44.94	0.86	0.53	0.97	1.11	0.81	+19	−26	−20	−16	+ 5	+35	+14	+27	− 1	+16	0	−0.05
100820	20 26 32.81	+35 41 00.1	8.16	H	306.636 729 13	+35.683 373 80	0.77	−6.91	−12.59	0.60	0.66	0.87	0.71	0.75	− 4	− 1	+ 9	+15	+ 8	− 9	+ 9	− 7	+ 7	− 2	1	0.72
100821	20 26 34.82	−30 03 22.2	9.90	H	306.645 087 34	−30.056 158 27	1.00	−5.10	−14.65	1.36	0.80	1.57	2.12	1.39	+11	−18	+ 4	+19	+ 6	+28	+ 4	+31	+10	+ 5	2	1.22
100822	20 26 36.57	−53 49 21.4	8.38	H	306.652 361 37	−53.822 618 09	3.48	61.04	−49.99	1.08	0.89	1.19	1.70	1.50	+23	−14	+ 9	+39	+11	−22	+13	+32	+ 0	+30	0	−2.07
100823 H	20 26 36.93	+47 24 14.6	9.78	G	306.653 867 63	+47.404 055 07	A 0.01	−5.01	−6.13	1.46	1.22	1.44	1.66	1.29	+ 0	− 8	− 3	+ 7	−10	−12	−10	− 4	+18	+ 3	2	−0.38
100824 H	20 26 37.74	+51 06 21.1	7.71	G	306.657 237 49	+51.105 851 26	* 3.52	−19.63	−31.23	0.59	0.57	0.66	0.67	0.61	−15	−11	+ 7	− 3	+15	+11	+13	− 4	+ 2	− 8	0	−0.84
100825	20 26 38.30	−47 57 42.0	8.37	H	306.659 594 04	−47.961 670 19	7.13	31.41	−16.70	1.11	0.65	1.19	1.50	0.80	+ 6	−33	−11	− 1	+10	− 6	+12	+ 0	−13	+13	2	−0.32
100826	20 26 38.32	+36 35 16.4	8.40	H	306.659 653 49	+36.587 886 96	2.64	2.44	−0.83	0.51	0.61	0.76	0.55	0.63	−15	− 4	+13	+ 3	+ 6	−10	+11	−23	+ 0	− 1	0	−0.01
100827	20 26 38.62	+35 01 52.7	8.78	H	306.660 934 93	+35.031 299 30	1.80	−0.78	−7.11	0.59	0.68	0.88	0.63	0.72	− 8	+ 1	+ 7	+21	+ 1	−15	+ 3	− 8	+12	− 8	1	−0.93
100828	20 26 38.65	+11 15 09.4	8.70	H	306.661 058 84	+11.252 600 62	1.33	12.99	−0.61	0.89	0.85	1.18	1.11	1.09	+37	−19	−17	+15	+19	+14	+20	+44	− 1	+41	0	2.32
100829	20 26 39.59	−30 40 32.8	7.79	G	306.664 946 30	−30.675 777 48	6.03	5.99	−25.84	0.80	0.52	0.99	0.99	0.70	+44	−20	− 3	+ 0	+22	+16	+17	+ 8	+20	+75	0	0.17
100830	20 26 40.01	−42 03 19.8	7.88	H	306.666 692 66	−42.055 494 98	3.12	8.85	14.34	0.89	0.60	1.03	1.24	0.78	+ 6	−16	−25	+19	−16	+25	− 8	+ 5	− 9	+ 1	0	0.58
100831	20 26 40.63	+01 54 58.1	7.73	H	306.669 305 81	+01.916 133 55	1.87	5.05	−12.28	1.01	0.70	1.20	1.38	1.10	− 2	+ 6	−23	+43	−36	+12	−35	+31	−42	+ 2	0	1.02
100832	20 26 43.39	+25 29 18.2	8.16	H	306.680 779 94	+25.488 383 07	5.74	−0.07	−5.72	0.64	0.60	0.87	0.71	0.68	+ 4	+ 6	−18	+21	− 3	+ 8	+ 3	+ 2	+ 4	+28	0	−0.61
100833	20 26 43.76	+40 20 50.0	7.73	H	306.682 342 53	+40.347 223 13	4.22	5.62	1.03	0.53	0.52	0.68	0.53	0.52	−20	−19	+ 6	−11	+10	+14	+ 7	−26	+11	−12	0	−1.53
100834	20 26 43.76	+39 29 45.3	7.09	H	306.682 351 69	+39.495 919 29	3.98	4.59	2.17	0.42	0.45	0.57	0.44	0.45	−10	− 5	+ 1	+ 1	+ 4	− 4	+ 4	−25	+10	−10	0	0.50
100835	20 26 43.82	−40 42 46.3	8.45	H	306.682 574 34	−40.712 872 10	1.87	−2.61	−4.63	1.01	0.70	1.12	1.29	0.89	+26	−23	−23	+ 4	+12	+ 2	+12	+ 7	− 2	+33	0	0.07
100836 H	20 26 44.38	−43 33 56.4	8.60	H	306.684 907 27	−43.565 656 47	A 20.00	123.24	−125.05	4.18	3.53	2.05	3.94	1.80	−15	− 2	− 6	+ 0	+13	−13	+ 7	+ 8	−17	+ 2	0	−0.73
100837	20 26 45.13	+04 57 17.8	10.22	H	306.688 036 53	+04.954 939 34	3.39	18.26	−10.81	1.34	1.37	1.61	1.77	1.78	+35	−12	−11	+17	+34	+18	+33	+66	− 6	+39	0	0.94
100838	20 26 46.24	+39 27 44.1	7.75	H	306.692 651 43	+39.462 249 19	2.57	7.00	1.58	0.48	0.52	0.65	0.51	0.53	− 9	− 5	+ 2	− 1	+ 3	− 6	+ 3	−23	+ 7	− 9	0	0.33
100839 H	20 26 46.32	+28 04 04.4	8.80	H	306.692 987 44	+28.067 883 34	A 2.91	1.43	5.64	1.36	1.68	2.02	1.14	1.36	−10	− 9	+ 8	−17	+ 1	+ 6	+ 2	−12	−10	−17	1	−0.77
100840	20 26 46.37	−40 24 47.1	8.16	H	306.693 220 96	−40.413 070 58	3.84	21.24	−6.82	0.98	0.66	1.11	1.40	0.81	+26	−19	−27	+14	+11	− 4	+11	+ 1	− 6	+28	0	0.60
100841	20 26 47.13	+72 49 54.6	8.90	H	306.696 382 32	+72.831 840 46	4.94	7.96	5.68	0.74	0.62	0.74	0.80	0.62	− 9	−17	+20	−19	+ 2	+ 5	− 5	+10	+14	+ 6	0	1.16
100842	20 26 47.42	−31 20 56.6	10.02	H	306.697 576 68	−31.349 065 78	1.41	16.54	3.80	1.29	0.83	1.58	1.60	1.17	+52	−27	+ 6	+16	+30	+ 8	+30	+19	+ 3	+82	0	1.40
*100843	20 26 48.39	+81 26 02.8	6.55	H	306.701 628 78	+81.434 097 80	5.58	45.39	19.93	0.53	0.48	0.55	0.62	0.60	+14	−26	− 9	−19	−11	+10	−11	−19	+ 4	+25	0	−2.39
*100844	20 26 48.10	−78 11 40.6	8.52	H	306.700 405 08	−78.194 621 83	5.79	23.89	−48.02	0.67	0.59	0.91	0.77	0.58	− 1	−20	−19	+17	+ 6	+ 0	+ 5	−10	−10	−12	0	0.72
*100845	20 26 49.49	+56 26 35.1	8.08	H	306.706 208 33	+56.443 072 99	7.93	−1.15	−30.62	0.61	0.56	0.67	0.66	0.64	+ 4	−22	− 5	+ 3	− 4	−14	−10	−20	+24	+ 1	0	2.44
*100846	20 26 49.55	+16 56 17.9	8.40	H	306.706 453 43	+16.938 298 31	1.55	6.87	−2.91	0.85	0.73	1.08	1.05	0.86	+13	+ 4	−17	+ 9	+29	+ 8	+30	+ 9	+19	+27	2	1.11
*100847 H	20 26 49.49	−18 50 47.1	9.12	H	306.706 207 90	−18.846 412 08	A 0.29	−2.05	−0.68	2.26	1.31	2.30	2.57	1.67	+21	− 5	− 2	−16	− 4	+40	− 6	+ 5	+ 2	+27	1	0.70
100848	20 26 50.24	+24 36 25.4	10.40	H	306.709 320 33	+24.607 069 36	4.01	0.72	−19.02	1.10	1.03	1.72	1.37	1.25	+ 7	−16	−14	+ 3	−17	−12	−14	−15	− 2	+27	8	1.61
100849	20 26 51.07	+12 28 32.4	8.11	H	306.712 771 99	+12.475 654 22	5.17	−6.00	−13.39	0.84	0.70	1.11	1.07	0.99	+30	−34	−15	+16	+ 3	−14	+ 4	+18	−13	+44	2	1.38
100850	20 26 52.38	−47 49 53.8	9.88	H	306.718 268 94	−47.831 613 99	5.72	55.87	−37.44	1.60	1.03	1.83	2.13	1.45	+ 8	−36	−13	+11	− 3	−10	− 3	− 3	− 6	+ 1	0	1.55
100851	20 26 52.93	+03 37 14.0	11.04	H	306.720 562 40	+03.620 563 87	3.87	1.88	0.48	2.17	1.97	2.64	3.17	2.78	+46	− 4	−12	+45	+26	+27	+31	+65	−10	+41	4	0.47
100852 H	20 26 53.14	−37 24 09.5	6.24	G	306.721 402 99	−37.402 627 00	A 25.21	−255.06	−114.25	1.33	0.77	1.31	1.67	1.15	+ 4	− 9	−12	+ 2	+18	− 6	+17	+33	− 2	+24	0	0.33
100853	20 26 54.32	−45 35 36.6	8.15	H	306.726 325 29	−45.593 512 97	3.99	15.84	−7.07	0.95	0.70	1.07	1.33	1.06	+14	−24	−17	+26	− 2	− 4	− 6	+21	+10	+ 0	0	0.99
100854	20 26 56.93	+58 31 42.1	9.71	H	306.737 212 72	+58.528 368 32	0.67	2.77	4.93	0.77	0.83	0.87	0.91	0.92	− 3	− 9	− 7	+11	+ 7	− 6	+ 9	−13	+ 1	+10	2	1.70
100855	20 26 57.67	−15 54 29.3	8.21	H	306.740 310 29	−15.908 134 24	13.63	16.53	40.67	1.03	0.55	1.13	1.27	0.71	+14	+ 1	− 9	−16	+13	+ 8	+10	+13	−16	+27	0	2.15
100856	20 26 57.83	−01 11 32.3	10.12	H	306.740 962 86	−01.192 293 56	2.58	0.11	−5.02	1.50	1.22	1.94	2.45	1.82	+22	−10	−24	+36	−10	+42	− 1	+56	− 3	+22	0	−0.63
100857	20 26 58.11	+30 22 10.7	7.38	H	306.742 126 65	+30.369 651 66	4.46	8.50	−1.17	0.38	0.49	0.70	0.44	0.54	−20	+ 2	+ 3	+ 7	+ 5	− 1	+ 7	−17	+ 1	− 9	0	−0.05
100858	20 27 02.13	+09 05 31.8	7.54	G	306.758 889 12	+09.092 159 28	0.86	6.27	−1.37	0.94	0.77	1.04	1.30	1.04	+17	−21	−22	+53	+10	− 5	+12	+62	−12	+ 9	0	1.14
100859	20 27 02.21	+49 22 59.6	5.73	2 H	306.759 190 90	+49.383 224 49	26.56	68.79	58.48	0.43	0.41	0.48	0.49	0.45	− 3	+ 4	+ 4	− 1	+ 8	− 2	+ 8	− 2	+12	− 3	0	0.48
100860	20 27 02.98	−59 14 02.5	8.52	H	306.762 403 68	−59.234 032 44	4.84	−13.70	−9.93	0.79	0.70	1.13	1.10	0.81	+13	−26	− 7	−31	+ 9	+ 9	+ 8	−28	+ 2	−27	0	0.53
100861	20 27 04.36	+47 55 23.3	7.81	H	306.768 180 27	+47.923 150 50	4.14	22.35	−16.44	0.62	0.53	0.68	0.83	0.62	−12	+ 0	+13	+16	− 9	− 7	− 9	+ 1	+ 2	−19	0	−0.74
100862	20 27 04.45	−14 47 08.1	7.89	G	306.768 559 68	−14.785 581 84	13.42	61.93	−59.25	1.06	0.53	1.24	1.18	0.65	+10	+11	+ 4	−15	+10	+37	+ 5	+ 0	− 8	+28	0	−1.23
100863	20 27 04.88	+46 17 39.1	8.89	H	306.770 354 02	+46.294 187 06	3.47	3.32	4.43	0.80	0.65	0.87	0.98	0.78	− 9	− 2	− 5	+ 0	+ 5	− 1	+ 4	+ 1	+11	+ 2	0	−0.06
100864 H	20 27 05.96	−24 37 33.0	8.78	H	306.774 846 91	−24.625 843 70	A −1.68	10.56	3.31	1.66	1.09	1.71	2.22	1.65	+12	− 6	−16	+11	−12	+ 9	−14	+33	−30	+14	2	0.15
100865	20 27 06.70	+44 04 45.1	8.28	G	306.777 925 35	+44.079 184 58	2.93	2.37	3.10	0.65	0.59	0.79	0.80	0.72	+ 3	−20	+ 7	−11	−11	− 8	−16	− 3	+27	+12	0	−0.78
100866	20 27 07.77	+34 19 44.7	6.39	H	306.782 388 06	+34.329 073 95	1.32	1.47	−1.80	0.41	0.44	0.60	0.45	0.44	−11	+12	+ 8	+11	+ 0	− 6	+ 1	−15	+ 8	−14	0	1.17
*100867	20 27 07.95	+31 19 14.7	9.03	H	306.783 127 06	+31.320 748 33	0.65	1.38	−2.19	0.59	0.76	1.12	0.72	0.81	−15	− 4	+16	+12	− 4	− 9	+ 1	−12	− 3	− 1	0	−0.98
*100868	20 27 07.94	−38 59 34.9	7.82	2 H	306.783 094 74	−38.993 019 15	1.39	−1.12	−0.38	0.93	0.53	1.08	1.05	0.75	+11	−40	+ 3	+ 5	+ 2	+17	+ 4	+ 9	− 4	+26	0	0.79
100869	20 27 08.49	−11 32 50.5	8.00	2 H	306.785 359 93	−11.547 348 17	4.17	11.99	−1.56	1.03	0.64	1.16	1.26	1.04	+11	+ 8	−14	−19	− 3	+19	− 5	+16	−28	+14	0	−1.70
100870	20 27 09.41	+45 41 02.5	8.17	H	306.789 222 03	+45.684 026 92	2.60	8.12	3.01	0.60	0.62	0.74	0.70	0.67	+ 0	+ 3	+ 9	+11	+ 8	− 3	+ 9	+ 5	+ 6	+11	1	1.03
100871	20 27 10.92	−46 51 43.4	9.28	H	306.795 498 77	−46.862 047 65	8.76	−64.60	−16.52	1.32	0.84	1.48	1.96	1.36	+10	−39	−18	+35	+ 1	− 8	− 3	+27	+ 3	− 4	0	−2.04
100872	20 27 11.08	−48 35 35.3	7.85	G	306.796 152 33	−48.593 137 07	6.65	−8.52	25.01	0.97	0.62	1.06	1.56	0.79	− 6	− 2	−11	+ 3	+11	− 7	+ 9	+ 0	+ 2	+ 1	0	0.82
100873	20 27 11.46	+38 52 54.3	8.45	H	306.797 741 58	+38.881 752 43	2.55	8.95	2.53	0.64	0.66	0.87	0.72	0.68	−13	−11	+14	+ 3	+ 2	+10	+ 3	−23	− 8	− 7	0	0.89
100874 H	20 27 13.59	−39 13 22.7	9.77	G	306.806 622 15	−39.222 960 94	A 8.80	122.72	−125.52	2.16	1.24	2.27	2.68	1.75	+26	−21	+ 1	+ 5	− 1	− 6	+ 3	+ 7	−15	+34	2	−0.21
100875	20 27 13.86	+51 01 21.7	8.91	1 H	306.807 765 86	+51.022 706 85	1.16	−9.86	−12.81	0.77	0.74	0.86	0.89	0.83	−17	−11	+12	− 8	+17	+14	+15	− 9	+ 0	− 6	0	0.97
100876	20 27 14.19	+20 28 35.4	6.44	H	306.809 122 44	+20.476 505 39	1.97	0.51	−8.32	0.59	0.48	0.74	0.69	0.52	+ 1	−16	− 8	+ 2	+24	− 4	+19	+ 8	+ 7	+15	0	−3.20
100877	20 27 14.28	+43 08 50.8	7.66	H	306.809 487 12	+43.147 452 74	2.31	4.26	2.01	0.51	0.52	0.65	0.63	0.60	− 1	+11	+ 2	+ 3	+ 6	−15	+11	−16	+22	+11	0	−0.45
100878	20 27 14.92	−68 54 29.2	8.45	H	306.812 177 70	−68.908 101 92	4.14	6.89	−27.42	0.56	0.75	1.17	0.65	0.94	−30	−15	− 3	+ 2	+12	−11	+14	+ 8	− 4	−34	0	−0.11
100879	20 27 15.24	−21 58 47.5	9.12	H	306.813 492 14	−21.979 851 09	3.41	5.49	−16.68	1.73	0.93	1.75	1.84	1.26	+11	+ 5	−30	−44	+ 9	− 1	+ 2	+ 9	−16	+35	3	1.84
100880	20 27 15.65	+16 42 39.9	7.57	H	306.815 215 92	+16.711 082 27	4.61	−13.77	−19.16	0.66	0.59	0.88	0.85	0.67	+14	−11	−12	+22	+31	+ 8	+28	+14	+13	+17	0	0.49
100881 H	20 27 19.20	−18 12 42.1	5.08	H	306.830 014 54	−18.211 694 33	A 4.90	10.32	−10.87	0.77	0.50	0.79	0.81	0.58	+11	+11	−30	− 4	−10	+27	− 4	+20	−15	+15	4	0.12
100882	20 27 19.56	+51 47 24.3	10.22	H	306.831 516 87	+51.790 072 83	0.29	−3.47	−5.00	1.05	1.01	1.18	1.29	1.01	− 5	−11	+ 3	+ 4	+10	− 1	+ 7	−12	+ 5	− 7	1	0.79
100883	20 27 19.96	−27 26 44.0	9.26	H	306.833 146 66	−27.445 557 64	7.05	53.87	−20.40	1.22	0.74	1.41	1.49	1.22	+14	−17	− 8	− 9	− 4	+22	− 2	+21	−24	+16	0	−1.01
100884 H	20 27 20.09	+68 46 02.5	7.15	H	306.833 691 57	+68.767 363 34	A 6.29	12.78	−2.56	0.76	0.69	0.69	0.78	0.77	− 2	− 7	−11	−30	+18	+10	+ 7	+25	− 7	+21	2	0.37
100885 H	20 27 20.25	+42 54 57.9	7.89	H	306.834 376 75	+42.916 084 22	* 1.94	14.39	7.92	0.54	0.56	0.69	0.60	0.67	− 8	+ 2	+ 2	+ 0	+12	−13	+16	−15	+15	+ 8	0	−2.16
100886	20 27 20.87	+23 47 25.8	6.88	H	306.836 961 07	+23.790 506 54	7.26	0.36	17.92	0.43	0.41	0.72	0.56	0.47	− 6	−16	− 2	− 1	−13	− 3	−11	− 4	+ 5	+18	1	0.63
100887	20 27 22.42	+23 40 04.6	8.47	H	306.843 414 11	+23.667 953 56	8.33	57.88	59.31	0.57	0.57	1.00	0.77	0.68	− 4	−14	− 7	+ 9	−12	+ 9	− 9	+ 3	+ 6	+20	0	0.14
100888	20 27 24.78	−26 57 30.1	8.76	H	306.853 263 76	−26.958 374 44	−0.13	15.89	−4.42	1.09	0.74	1.20	1.21	1.13	+32	−28	−12	−12	+16	+21	+18	+37	− 7	+40	0	1.19
100889	20 27 25.19	−01 33 30.7	7.11	H	306.854 947 80	−01.558 526 45	12.91	−60.64	−55.53	0.88	0.71	1.12	1.41	0.97	+13	+ 3	−21	+48	−10	+44	+ 1	+67	− 2	+ 9	0	0.29
100890	20 27 25.27	−04 43 51.0	9.65	H	306.855 285 26	−04.730 839 34	3.67	1.75	−5.26	1.62	1.40	1.77	2.52	2.15	+38	−15	− 5	+31	+30	−16	+32	+67	+20	+18	0	−1.07
100891	20 27 25.55	−78 45 20.5	7.93	H	306.856 474 54	−78.755 701 99	15.31	19.09	−9.29	0.57	0.50	0.74	0.69	0.55	+ 0	−10	−10	+ 4	+ 7	− 3	+ 6	− 1	−10	− 9	1	1.51
*100892	20 27 26.00	+13 38 38.8	8.58	H	306.858 336 61	+13.644 110 27	1.34	−3.69	−8.28	0.82	0.79	1.06	1.03	0.91	+40	−17	−10	+18	+17	+15	+18	+28	+ 0	+41	0	0.60
*100893	20 27 25.99	−28 29 56.6	9.45	G	306.858 286 14	−28.499 052 65	13.23	25.95	19.30	1.35	0.87	1.61	1.80	1.36	+26	−26	−33	− 7	− 6	+34	+ 6	+27	−12	+19	0	1.17
100894	20 27 26.51	+01 21 20.7	9.51	H	306.860 467 79	+01.355 757 23	−0.83	−2.25	−2.01	1.41	1.26	1.91	2.22	1.93	+17	+15	−32	+50	− 7	+31	− 3	+63	−34	+19	0	0.42
100895	20 27 26.97	−02 07 09.7	7.49	G	306.862 372 60	−02.119 350 82	21.49	−60.05	−69.61	0.81	0.70	1.02	1.16	0.98	+36	−17	−12	+32	+10	+32	+11	+63	+ 7	+37	0	2.02
100896	20 27 27.56	−02 06 10.5	6.71	H	306.864 843 23	−02.102 909 22	20.70	−66.02	−71.31	0.72	0.56	0.94	0.98	0.73	+19	−18	−27	+28	−20	+28	−11	+50	−11	+ 9	0	2.09
100897	20 27 28.55	−28 48 50.6	7.54	H	306.868 971 76	−28.814 050 21	4.71	−3.94	−3.92	0.88	0.56	1.06	1.16	0.86	+17	−24	−23	− 4	+ 1	+44	+13	+31	− 5	+17	0	0.42
100898	20 27 29.73	+15 12 37.2	9.49	H	306.873 873 59	+15.210 346 13	1.61	−4.97	7.53	1.02	0.94	1.37	1.18	0.98	+20	− 6

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
100801	9.522	0.017	8.431	0.012		0.943	0.016	T	0.93	0.01	L	8.4953	0.0017	0.015	118		8.47	8.52		C			1							
100802						1.382	0.218	G	1.63	0.41	I	11.1765	0.0090	0.076	85		11.04	11.27		U 2			1 G							G
100803	9.492	0.016	8.216	0.010		1.086	0.015	T	1.05	0.01	L	8.2748	0.0014	0.012	120		8.25	8.30		C			1							
100804	8.583	0.009	7.616	0.007		0.850	0.008	T	0.86	0.01	L	7.6270	0.0022	0.025	135		7.59	7.66		U 2			1							S
100805	8.128	0.012	7.600	0.010		0.495	0.014	T	0.57	0.01	L	7.6540	0.0010	0.011	77		7.64	7.67		C			1							S
100806	8.278	0.010	8.028	0.011		0.238	0.014	T	0.27	0.02	L	8.0800	0.0018	0.016	76		8.06	8.11					1							S
100807	7.508	0.006	6.336	0.005		1.005	0.006	T	0.98	0.01	L	6.3977	0.0008	0.008	97		6.38	6.41					1							S
100808	6.395	0.004	6.376	0.005	A	0.018	0.005	T	0.04	0.01	L	6.3954	0.0093	0.009	106	A	6.37	6.41		D	20264+5638	I 2	1 C P B							S
100809	9.532	0.016	8.935	0.014		0.557	0.016	T	0.63	0.01	L	8.9831	0.0022	0.023	133		8.95	9.03					1							
100810	9.585	0.020	8.966	0.018		0.573	0.020	T	0.65	0.02	L	9.0363	0.0018	0.018	85		9.01	9.07		C			1							
100811	8.755	0.010	7.511	0.007		1.061	0.010	T	1.03	0.01	L	7.5699	0.0012	0.010	140		7.55	7.59		C			1							S
100812	8.472	0.015	8.309	0.017	B	0.100	0.015	G	0.11	0.02	H	8.4459	0.0452			B				D	20264+5638	I 2	1 C I B							
100813	10.477	0.033	8.868	0.015		1.372	0.030	T	2.93	0.05	O	8.5422	0.0048	0.032	91		8.47	8.59		U 2			1 S							
100814	10.116	0.023	8.999	0.015		0.962	0.021	T	0.95	0.02	L	9.0519	0.0022	0.018	123		9.02	9.08		C			1							
100815	10.210	0.030	9.646	0.029		0.532	0.031	T	0.60	0.03	L	9.7305	0.0016	0.018	110		9.70	9.76		C			1 S							
100816	10.232	0.034	10.162	0.048		0.069	0.055	T	0.08	0.06	L	10.2175	0.0024	0.020	107		10.18	10.25		C			1							G
100817	7.999	0.011	7.395	0.008		0.583	0.015	G	0.65	0.01	H	7.4519	0.0010	0.010	76		7.43	7.46		C			1							S
100818						1.260	0.015	G	1.40	0.02	A	11.7303	0.0066	0.051	76		11.62	11.84					1							D
100819	8.603	0.014	7.279	0.009		1.124	0.013	T	1.09	0.01	L	7.3321	0.0011	0.007	79		7.32	7.35		C			1							S
100820	10.001	0.019	8.310	0.009		1.412	0.017	T	1.39	0.02	L	8.3064	0.0016	0.014	155		8.28	8.34		C			1							
100821	10.488	0.047	9.969	0.046		0.497	0.050	T	0.57	0.05	L	10.0129	0.0031	0.025	99		9.97	10.05		C			1							
100822	9.782	0.025	8.461	0.015		1.122	0.023	T	1.08	0.02	L	8.5446	0.0022	0.018	69		8.51	8.58		C			1							
100823	10.143	0.030	9.982	0.043	A	0.109	0.139	G	0.12	0.11	L *	9.8579	0.0025	0.021	106	*	9.82	9.89		D	20266+4724	H 1	2 C A	AB	209	1.485	0.010	1.79	0.05	G
100824	8.005	0.008	7.747	0.009	*	0.250	0.015	G	0.28	0.02	H *	7.7875	0.0011	0.011	118	*	7.77	7.80		D	20266+5106	H 1	2 C S A	AB	199	0.160	0.004	0.63	0.20	S
100825	8.698	0.015	8.413	0.016		0.271	0.021	T	0.31	0.03	L	8.4448	0.0015	0.013	72		8.42	8.47		D	20267−4758	I 1	1							S
100826	8.334	0.008	8.381	0.011		−0.050	0.015	G	−0.03	0.01	H	8.3929	0.0013	0.015	149		8.37	8.42		C			1							
100827	8.793	0.010	8.764	0.012		0.031	0.014	T	0.05	0.01	L	8.7993	0.0018	0.018	150		8.76	8.83					1							
100828	10.578	0.038	8.867	0.015		1.428	0.032	T	1.42	0.05	L	8.8373	0.0023	0.018	91		8.80	8.87					1							
100829	8.392	0.009	7.853	0.007		0.524	0.015	G	0.60	0.02	H	7.8928	0.0010	0.011	158		7.87	7.91		C			1							S
100830	8.104	0.011	7.900	0.011		0.188	0.015	T	0.21	0.02	L	7.9373	0.0015	0.012	87		7.91	7.96		C			1							S
100831	9.450	0.020	7.865	0.010		1.329	0.018	T	1.29	0.02	L	7.8839	0.0013	0.010	81		7.86	7.91		C	20267+0155	I 1	1							
100832	8.378	0.008	8.184	0.009		0.200	0.015	G	0.22	0.02	H	8.2292	0.0017	0.016	131		8.20	8.25					1							
100833	7.625	0.007	7.699	0.010		−0.063	0.011	T	−0.04	0.01	L	7.7195	0.0012	0.012	124		7.70	7.74					1							S
100834	7.004	0.005	7.073	0.005		−0.058	0.006	T	−0.04	0.01	L	7.0827	0.0007	0.010	152		7.07	7.10		C			1							S
100835	9.832	0.022	8.559	0.014		1.084	0.020	T	1.05	0.02	L	8.6155	0.0022	0.016	91		8.59	8.64		C			1							
100836	9.750	0.023	8.726	0.016	*	0.881	0.022	T	0.89	0.02	L *	8.7385	0.0021	0.017	86	*	8.70	8.77		D	20267−4334	I 1	2 C A	AB	332	0.317	0.005	0.23	0.06	
100837	11.269	0.073	10.303	0.050		0.849	0.066	T	0.86	0.05	L	10.3764	0.0032	0.025	72		10.33	10.42		C			1							G
100838	7.748	0.007	7.747	0.008		0.006	0.010	T	0.03	0.01	L	7.7650	0.0012	0.012	144		7.75	7.78		C			1							S
100839	9.022	0.008	8.846	0.010	*	0.169	0.012	T	0.18	0.01	L *	8.8533	0.0017	0.022	243	*	8.82	8.89		D	20268+2804	I 1	2 C A	AB	216	0.451	0.003	0.70	0.02	
100840	10.063	0.028	8.352	0.013		1.428	0.024	T	1.42	0.04	L	8.3033	0.0016	0.015	96		8.28	8.34					1							
100841	9.113	0.013	8.911	0.015		0.193	0.019	T	0.21	0.02	L	8.9579	0.0020	0.018	112		8.92	8.98		C			1							
100842	10.610	0.028	10.076	0.027		0.501	0.035	T	0.57	0.04	L	10.1235	0.0025	0.027	194		10.08	10.16		C			1							
100843	7.798	0.008	6.652	0.005		0.985	0.007	T	0.97	0.01	L	6.7200	0.0005	0.008	112		6.71	6.73			20282+8126	I 2	1							S
100844	8.900	0.011	8.547	0.011		0.343	0.014	T	0.40	0.02	L	8.6020	0.0019	0.018	145		8.56	8.63		C			1							
100845	8.321	0.010	8.086	0.011		0.224	0.014	T	0.25	0.02	L	8.1451	0.0013	0.012	103		8.13	8.16		C			1							S
100846	9.701	0.026	8.500	0.016		1.028	0.024	T	1.00	0.02	L	8.5718	0.0016	0.014	95		8.54	8.60		C	20268+1656	I 1	1 S							
100847	9.478	0.023	9.218	0.026	*	0.244	0.036	T	0.27	0.04	L *	9.1882	0.0027	0.021	75	*	9.15	9.22		D	20268−1851	I 1	2 C A	AB	129	0.871	0.010	1.57	0.04	
100848	11.823	0.110	10.479	0.051		1.140	0.095	T	1.10	0.10	L	10.5747	0.0029	0.028	145		10.52	10.63					1							G
100849	8.131	0.010	8.100	0.012		0.033	0.014	T	0.05	0.01	L	8.1284	0.0016	0.010	64		8.11	8.14		C			1							
100850	10.872	0.065	9.928	0.044		0.930	0.020	G	0.92	0.01	K	10.0436	0.0050	0.028	68		9.99	10.10					1							
100851						1.640	0.218	G	1.71	0.26	K	11.1494	0.0040	0.040	77		11.07	11.22					1							G
100852	7.638	0.014	6.474	0.009	A	0.961	0.003	G	0.95	0.00	H *	6.3968	0.0007	0.006	91	*	6.39	6.41		D	20269−3724	I 1	2 C A	AB	138	1.366	0.007	1.52	0.02	S
100853	9.701	0.020	8.265	0.011		1.212	0.018	T	1.17	0.02	L	8.3134	0.0015	0.017	91		8.29	8.34					1							S
100854	10.147	0.028	9.746	0.029		0.379	0.037	T	0.44	0.04	L	9.7998	0.0023	0.023	110		9.75	9.83					1							G
100855	9.247	0.018	8.296	0.013		0.824	0.017	T	0.85	0.01	L	8.3567	0.0014	0.010	75		8.34	8.37		C			1							
100856	12.458	0.188	10.311	0.045		1.775	0.154	T	1.80	0.16	L	10.2256	0.0029	0.023	94		10.17	10.27		C			1							G
100857	7.370	0.004	7.373	0.005		0.002	0.006	T	0.02	0.01	L	7.3847	0.0011	0.011	215		7.37	7.40					1							S
100858	7.392	0.006	7.511	0.009		−0.111	0.002	G	−0.10	0.00	H	7.5081	0.0010	0.008	76		7.49	7.52		C			1							S
100859	6.116	0.006	5.767	0.005		0.339	0.007	T	0.40	0.01	L	5.8132	0.0040	0.036	115		5.74	5.85	0.80	P 1 A			1							S P
100860	10.050	0.020	8.650	0.011		1.183	0.018	T	1.14	0.02	L	8.6813	0.0018	0.020	150		8.64	8.72		C			1							
100861	9.288	0.015	7.940	0.009		1.143	0.014	T	1.11	0.01	L	7.9767	0.0016	0.013	109		7.96	8.00					1							S
100862	8.791	0.013	7.956	0.011		0.735	0.015	G	0.78	0.01	H	8.0242	0.0013	0.009	70		8.01	8.04					1							S
100863	8.891	0.011	8.879	0.014		0.016	0.016	T	0.04	0.01	L	8.9066	0.0021	0.019	117		8.87	8.94					1							
100864	10.045	0.035	8.902	0.022	A	0.900	0.495	G	0.96	0.03	L *	8.9443	0.0019	0.014	85	*	8.93	8.97		C	20271−2438	I 1	2 C D	AB	58	4.475	0.052	3.48	0.16	D
100865	8.225	0.008	8.250	0.010		−0.018	0.012	T	0.00	0.01	L	8.2746	0.0015	0.015	103		8.25	8.30					1							
100866	6.965	0.004	6.454	0.004		0.480	0.005	T	0.55	0.01	L	6.4971	0.0006	0.008	163		6.48	6.51		C			1							S
100867	8.956	0.011	9.003	0.014		−0.038	0.016	T	−0.02	0.02	L	9.0295	0.0019	0.020	172		8.99	9.07					1							
100868	9.871	0.024	8.057	0.011		1.541	0.022	T	2.56	0.04	O	7.8266	0.0044	0.048	94		7.78	7.91		U 2			1 S							S
100869	8.463	0.012	8.041	0.012		0.393	0.015	G	0.46	0.02	H	8.0943	0.0077	0.055	81		8.02	8.16	1.08	P 1 A			1							S P
100870	10.017	0.022	8.305	0.010		1.429	0.019	T	1.42	0.03	L	8.3043	0.0013	0.013	131		8.28	8.33		C			1							
100871	10.013	0.028	9.349	0.024		0.605	0.028	T	0.67	0.03	L	9.4072	0.0025	0.016	80		9.38	9.44		C			1							
100872	8.341	0.012	7.888	0.013		0.408	0.015	G	0.47	0.02	H	7.9410	0.0011	0.011	73		7.92	7.96		C			1							S
100873	9.889	0.018	8.570	0.011		1.120	0.017	T	1.08	0.02	L	8.6137	0.0017	0.018	151		8.59	8.65		C			1							
100874	10.688	0.046	9.901	0.037	A	0.733	0.002	G	0.78	0.00	H *	9.9225	0.0030	0.021	88	*	9.88	9.95		C	20272−3913	I 1	2 C C	AB	47	1.791	0.069	3.49	0.25	
100875	10.754	0.036	9.061	0.015		1.414	0.031	T	1.39	0.05	L	9.0466	0.0028	0.028	114		9.00	9.08		U			1							
100876	7.749	0.007	6.545	0.005		1.030	0.007	T	1.00	0.01	L	6.6070	0.0011	0.008	97		6.59	6.62		C			1							S
100877	7.581	0.007	7.643	0.008		−0.060	0.015	G	−0.04	0.01	H	7.6450	0.0012	0.009	115		7.63	7.67					1							S
100878	9.730	0.015	8.564	0.009		1.000	0.014	T	0.98	0.01	L	8.6131	0.0013	0.019	208		8.58	8.65					1							
100879	9.362	0.025	9.116	0.029		0.234	0.036	T	0.26	0.04	L	9.1907	0.0031	0.020	61		9.16	9.21		C			1							S P
100880	7.994	0.010	7.597	0.009		0.388	0.011	T	0.45	0.01	L	7.6630	0.0015	0.011	95		7.65	7.68					1							S
100881	5.042	0.005	5.100	0.005	*	−0.049	0.006	T	−0.03	0.01	L *	5.0747	0.0005	0.005	80	*	5.07	5.09		D	20273−1813	I 1	2 C A	AB	147	3.416	0.009	3.21	0.05	S
100882	10.141	0.029	10.246	0.050		−0.091	0.052	T	−0.07	0.06	L	10.1823	0.0040	0.036	95		10.12	10.24					1							G
100883	10.032	0.030	9.304	0.026		0.654	0.030	T	0.72	0.03	L	9.3946	0.0018	0.018	83		9.36	9.42		C			1							
100884	8.278	0.010	7.257	0.008	*	0.890	0.010	T	0.90	0.01	L *	7.3105	0.0013	0.009	92	*	7.30	7.33		D	20273+6846	H 1	2 C A	AB	99	0.733	0.010	3.06	0.05	S
100885	9.422	0.016	8.016	0.009	*	1.188	0.014	T	1.15	0.01	L *	8.0528	0.0011	0.011	125	*	8.03	8.07		C	20273+4255	H 1	2 C S A	AB	351	0.122	0.005	0.56	0.42	
100886	7.110	0.004	6.900	0.004		0.201	0.005	T	0.22	0.01	L	6.9436	0.0008	0.008	178		6.93	6.96		C			1							S
100887	9.043	0.010	8.525	0.010		0.486	0.013	T	0.56	0.01	L	8.5727	0.0011	0.015	170		8.55	8.60		C			1 S							
100888	10.121	0.031	8.887	0.019		1.054	0.028	T	1.02	0.02	L	8.9236	0.0022	0.016	85		8.89	8.95		C			1							
100889	7.940	0.008	7.194	0.006		0.682	0.008	T	0.74	0.01	L	7.2473	0.0011	0.010	106		7.23	7.26					1							S
100890	12.009	0.156	9.827	0.035		1.844	0.132	T	1.98	0.22	K	9.7309	0.0042	0.028	69		9.67	9.78					1							
100891	8.514	0.008	7.984	0.008		0.510	0.001	G	0.58	0.00	H	8.0379	0.0011	0.015	153		8.01	8.06		C			1							S
100892	10.681	0.048	8.728	0.017		1.620	0.040	T	1.64	0.04	L	8.6906	0.0023	0.018	94		8.65	8.72					1							
100893	10.373	0.046	9.536	0.035		0.740	0.002	G	0.79	0.00	H	9.5833	0.0029	0.019	70		9.55	9.63		C			1							
100894	11.451	0.084	9.676	0.029		1.509	0.073	T	1.79	0.21	O	9.5988	0.0036	0.020	83		9.56	9.64		C			1							
100895	8.092	0.009	7.533	0.009		0.520	0.010	G	0.59	0.01	H	7.6062	0.0008	0.009	116		7.59	7.62		C	20274−0206	I 2	1							S
100896	7.307	0.006	6.753	0.005		0.519	0.007	T	0.59	0.01	L	6.8195	0.0007	0.006	116		6.81	6.83		C	20274−0206	I 2	1							S
100897	8.149	0.012	7.599	0.010		0.523	0.015	G	0.60	0.02	H	7.6560	0.0015	0.010	77		7.64	7.67					1							S
100898	10.723	0.051	9.619	0.031		0.952	0.046	T	0.94	0.03	L	9.6503	0.0026	0.028	107		9.59	9.69					1							
100899	9.289	0.021	8.153	0.013		0.977	0.019	T	0.96	0.01	L	8.2550	0.0018	0.009	66		8.23	8.27		C			1							
100900	9.987	0.026	8.462	0.014		1.282	0.023	T	1.24	0.02	L	8.4724	0.0021	0.010	83		8.45	8.49					1							

$20^h\ 27^m\ 30^s$ - $20^h\ 28^m\ 37^s$ 2028

100901 - 101000

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
100901 H	20 27 30.99	−48 38 08.8	8.92	H	306.879 124 87	−48.635 766 26	A	7.49	1.54	1.62	2.15	1.55	2.31	3.45	1.93	+12	−13	−10	+18	+ 3	−18	− 1	− 2	+ 6	+ 3	3	−0.33
100902	20 27 33.08	+28 03 27.4	9.15	H	306.887 836 28	+28.057 601 22	A	1.41	4.51	−1.73	1.88	2.30	2.93	1.85	2.17	−23	− 9	+11	−15	+ 1	− 3	+ 2	−10	− 8	−20	7	2.63
100903	20 27 33.57	−74 17 06.1	7.96	H	306.889 881 32	−74.285 037 26		2.51	29.05	−15.18	0.64	0.69	0.91	0.80	1.06	−11	−18	+ 6	+ 5	+12	−14	+17	−19	+ 7	+ 2	0	0.19
100904	20 27 33.59	−39 31 55.7	8.00	G	306.889 942 07	−39.532 147 04		5.09	28.16	−15.21	0.99	0.57	1.14	1.19	0.76	+19	−42	−27	− 9	+ 3	− 3	+ 6	+ 0	−11	+11	0	−0.06
100905	20 27 33.67	−32 19 16.8	8.69	H	306.890 286 90	−32.321 334 05		3.13	10.22	2.35	0.93	0.56	1.18	1.12	0.80	+35	−29	+ 0	+ 0	+22	+11	+20	+ 9	+ 7	+75	0	0.59
100906	20 27 34.02	+19 37 05.4	7.96	H	306.891 753 84	+19.618 154 13		10.73	−12.37	16.04	0.81	0.64	1.04	0.94	0.68	+13	−29	−11	+18	+22	+ 4	+21	+14	− 2	+21	0	0.35
100907	20 27 34.27	+38 26 25.9	5.63	H	306.892 812 13	+38.440 522 75		12.07	−22.98	−78.60	0.39	0.41	0.53	0.45	0.40	− 6	−10	+ 6	− 5	+ 3	+ 7	+ 3	−23	+ 7	+ 3	2	0.75
*100908	20 27 34.73	+28 03 35.6	10.07	H	306.894 725 27	+28.059 898 62	B	−2.03	−0.34	1.57	6.17	7.65	8.01	5.18	5.88	−24	− 9	+ 5	−12	+ 2	− 3	+ 2	− 4	− 7	−20	7	2.63
*100909	20 27 34.73	−26 12 11.6	8.71	H	306.894 700 21	−26.203 224 19		4.43	12.36	−14.87	1.04	0.65	1.13	1.28	0.95	+ 3	−10	−17	+13	−14	+20	−11	+24	−22	+ 1	0	−0.03
100910 H	20 27 34.90	+43 03 23.4	7.55	H	306.895 436 73	+43.056 510 12	*	3.05	−14.08	−20.47	0.53	0.53	0.66	0.60	0.61	− 4	+ 3	+ 3	+ 9	+10	−12	+13	− 5	+18	+11	0	0.53
100911	20 27 36.23	−65 19 55.5	9.77	H	306.900 952 78	−65.332 075 72		6.16	13.72	21.64	1.16	1.04	1.54	1.25	1.36	− 7	−31	+ 1	+39	+ 0	−20	+ 9	+14	−20	+ 7	5	0.03
100912 H	20 27 36.77	+42 02 07.6	7.31	G	306.903 227 76	+42.035 432 95	*	0.43	−2.94	−6.31	0.48	0.52	0.64	0.52	0.53	−13	− 3	+15	+ 6	+ 9	−12	+11	−22	+19	−10	1	−1.27
100913	20 27 36.98	−79 23 36.0	8.32	H	306.904 103 81	−79.393 345 08		2.61	0.36	−39.48	0.57	0.59	0.78	0.63	0.64	+ 0	−19	+ 7	+ 1	+ 7	− 2	+ 4	−21	− 1	−10	0	−0.88
100914 H	20 27 37.55	+32 24 06.7	9.03	2 G	306.906 469 58	+32.401 851 37	A	1.33	−0.09	−8.20	0.98	1.19	1.56	1.16	1.25	−12	− 5	− 4	+22	+ 0	− 8	+ 0	+ 5	+10	− 8	1	0.96
100915	20 27 37.71	−40 38 15.9	8.73	H	306.907 140 59	−40.637 757 06		8.13	18.70	−57.49	1.03	0.69	1.18	1.44	0.87	+24	−20	−28	+ 8	+ 4	+14	+ 8	+ 3	+ 0	+24	0	0.77
100916	20 27 39.46	+50 58 51.9	9.37	H	306.914 424 42	+50.981 071 76		−0.14	−3.75	−7.42	0.80	0.79	0.90	0.95	0.91	−14	− 5	+ 7	− 7	+13	+11	+12	−10	− 3	− 5	0	−0.47
100917	20 27 40.52	+21 28 16.4	8.90	H	306.918 831 30	+21.471 229 76		2.82	−21.77	−15.38	0.95	0.88	1.35	1.01	1.06	+17	−16	+17	+18	− 2	+ 6	− 2	+ 8	+ 6	+49	0	0.69
100918	20 27 40.64	−58 37 54.9	9.86	H	306.919 338 01	−58.631 904 02		4.95	18.97	0.34	1.02	0.85	1.40	1.46	1.09	+28	−24	−16	−34	+ 3	− 1	+ 4	−23	+ 1	− 4	1	2.13
100919	20 27 40.71	+49 56 19.3	8.45	H	306.919 624 20	+49.938 682 18		9.89	−11.35	72.04	0.69	0.61	0.75	0.72	0.67	− 7	− 5	+12	−12	+10	+ 3	+ 7	+ 7	+ 4	+ 8	1	−0.56
100920 H	20 27 40.93	+82 57 26.3	9.49	H	306.920 526 21	+82.957 319 34	A	3.23	18.13	23.14	3.37	2.27	2.51	3.39	2.24	− 3	−13	− 4	+ 4	+ 2	−11	+ 7	−24	− 3	+ 7	0	2.52
100921	20 27 41.20	−49 46 01.3	8.54	2 H	306.921 653 11	−49.767 027 11		1.74	4.16	−5.01	1.11	0.84	1.28	1.65	1.05	+17	−13	−11	+21	+25	−15	+18	+ 5	+16	+14	0	−0.22
100922	20 27 41.23	+17 31 24.1	10.62	H	306.921 805 33	+17.523 370 31		0.40	−2.33	−8.54	1.64	1.44	2.08	1.72	1.60	+ 9	− 4	−26	−25	+32	−10	+26	+13	+ 7	+24	0	1.50
100923	20 27 41.79	−27 44 44.1	11.41	G	306.924 127 65	−27.745 575 38		64.93	−202.72	−876.94	14.19	9.40	15.66	17.55	13.97	+22	−17	−25	−26	− 3	+15	+ 2	+ 7	−13	+21	0	
100924	20 27 43.36	+14 27 21.5	7.73	G	306.930 672 22	+14.455 974 47		1.76	7.72	4.15	0.71	0.59	0.93	0.90	0.62	+23	−19	−20	+14	+33	−13	+25	+21	+ 8	+27	0	−0.22
100925	20 27 44.25	−30 51 59.7	6.61	G	306.934 386 73	−30.866 577 93		51.50	−14.88	−521.53	0.68	0.43	0.82	0.80	0.55	+38	−18	− 1	+ 0	+26	+17	+20	+13	+20	+69	0	0.60
100926	20 27 46.13	−05 39 15.2	6.98	2 H	306.942 223 18	−05.654 210 65		3.90	7.20	−9.26	0.97	0.67	0.99	1.57	0.94	− 9	− 3	− 9	+39	−16	+35	−11	+59	− 5	−23	0	0.49
100927	20 27 47.52	+26 08 48.1	7.49	H	306.948 010 33	+26.146 707 54		5.74	−2.67	−19.09	0.52	0.50	0.76	0.61	0.60	− 9	+ 5	−15	+13	+ 0	+ 5	+ 4	+ 1	+ 5	+15	0	−0.58
100928	20 27 47.84	−37 44 53.2	9.94	H	306.949 342 71	−37.748 100 25		3.51	18.23	−46.80	1.33	0.88	1.57	2.01	1.68	+12	−14	+ 9	+ 7	+15	+ 5	+13	+39	+ 9	+21	0	1.08
100929	20 27 49.96	+14 56 40.2	7.90	H	306.958 168 28	+14.944 503 19		2.47	10.60	1.65	0.70	0.58	0.90	0.76	0.60	+17	−19	−17	− 5	+39	+ 5	+33	+25	+ 8	+28	0	−0.68
100930	20 27 50.80	−06 40 25.4	8.01	H	306.961 656 01	−06.673 715 61		7.11	26.84	−12.83	1.11	0.70	1.20	1.63	0.99	+ 1	+ 6	+13	− 7	+13	+29	+21	+42	+11	−16	0	0.61
100931	20 27 51.25	−18 03 17.8	9.30	H	306.963 561 00	−18.054 954 43		1.69	−6.78	−9.45	1.29	0.79	1.38	1.71	1.12	+20	−25	−23	−18	− 2	+13	+ 0	+ 9	+ 6	+13	2	1.62
100932	20 27 51.31	+30 07 10.9	9.53	H	306.963 785 63	+30.119 689 92		3.07	−4.71	−17.23	0.68	0.90	1.26	0.77	0.96	−27	+ 1	− 7	+12	+ 4	− 5	+ 5	−21	−11	−24	2	−0.18
100933	20 27 51.78	+65 45 21.0	6.56	H	306.965 746 03	+65.755 829 04		11.80	12.64	−21.64	0.44	0.45	0.49	0.43	0.40	− 2	− 1	+28	+ 2	+10	+ 5	+10	−13	+ 4	+12	1	0.57
100934	20 27 54.23	−57 38 40.4	8.82	H	306.975 973 37	−57.644 547 22		19.18	−91.19	−118.59	1.37	1.09	1.39	1.63	1.29	−52	+17	−47	−67	+48	−26	+37	−56	+39	−33	0	−0.57
100935	20 27 55.19	−28 15 39.9	7.62	3 H	306.979 974 33	−28.261 086 04		3.44	−4.59	13.33	1.09	0.67	1.19	1.58	1.00	− 5	−14	−18	+26	−23	+40	−21	+28	+ 9	− 7	0	−0.37
100936	20 27 56.21	+67 52 38.9	8.08	H	306.984 223 69	+67.877 481 76		3.36	−23.07	8.80	0.73	0.59	0.74	0.82	0.69	+ 4	−38	− 2	+ 3	+15	+18	+ 8	+18	+10	+25	0	−0.53
100937	20 27 56.58	−42 37 11.4	8.69	G	306.985 730 85	−42.619 838 87		10.36	95.56	−125.35	1.20	0.82	1.41	1.40	1.07	+11	−36	−22	+ 2	+ 2	+ 4	+ 6	+ 1	− 7	+13	0	0.42
100938	20 27 57.92	−36 21 31.2	9.26	H	306.991 336 69	−36.358 665 28		2.94	16.21	−18.99	1.17	0.78	1.35	1.34	1.05	+21	− 8	−32	− 5	+38	+ 0	+34	+29	+ 5	+50	0	−0.09
100939 H	20 27 58.19	−31 14 47.7	8.56	H	306.992 468 60	−31.246 579 21	A	4.82	9.82	−23.16	1.75	1.10	1.97	2.04	1.46	+44	−20	− 6	−11	+ 7	+ 2	+ 4	− 2	+ 6	+78	1	−0.70
100940	20 27 58.92	−00 09 05.2	10.75	H	306.995 488 35	−00.151 438 06	B	1.16	4.89	−47.48	56.28	47.13	4.47	61.73	57.96	+57	− 1	− 1	+ 0	+ 0	+ 2	+ 0	+ 0	+ 0	+68	8	5.00
100941	20 27 59.79	−42 37 09.5	8.18	G	306.999 117 73	−42.619 302 38		8.69	97.66	−122.06	1.04	0.70	1.22	1.18	0.92	+11	−38	−14	+ 0	+ 9	+ 5	+10	+ 8	+ 0	+20	0	−0.40
100942	20 27 59.89	−51 39 51.9	8.99	G	306.999 558 95	−51.664 427 06		12.04	−145.19	−2.79	1.29	0.86	1.33	1.62	1.26	+ 5	−38	+ 2	+24	+ 2	+17	− 3	+24	+12	+ 3	0	0.41
100943	20 28 00.09	−00 09 04.9	9.05	G	307.000 380 29	−00.151 355 15	A	1.16	1.09	−5.08	4.93	4.26	4.47	6.14	5.32	+38	−11	− 8	+34	+12	+17	+13	+56	+ 3	+37	8	5.00
100944	20 28 00.22	+59 44 04.1	7.98	H	307.000 933 12	+59.734 479 50		3.21	5.39	13.42	0.59	0.58	0.62	0.70	0.66	− 5	+ 6	− 1	+15	+16	− 8	+17	−12	+ 3	− 1	0	−0.17
100945	20 28 00.50	−46 55 04.2	8.91	H	307.002 078 43	−46.917 836 19		3.77	7.18	0.80	1.28	0.89	1.50	1.86	1.34	+24	−34	−31	+33	+ 0	− 9	− 7	+11	+ 4	− 2	0	−1.32
100946	20 28 00.61	−48 46 28.1	9.24	H	307.002 536 88	−48.774 468 60		5.85	1.53	−3.66	1.28	0.98	1.61	2.43	1.45	+ 4	− 6	−24	+32	+ 8	−16	+ 0	+ 4	+11	−12	0	−1.33
100947	20 28 01.27	−25 36 23.4	6.78	H	307.005 280 61	−25.606 513 79		11.06	26.57	24.48	0.80	0.49	0.85	1.11	0.71	− 1	−11	−21	+17	−21	+28	−15	+30	−16	−19	0	1.30
100948	20 28 03.05	−13 59 49.6	7.44	H	307.012 720 96	−13.997 111 51		4.08	7.98	3.08	0.99	0.53	1.11	1.27	0.69	+ 8	+19	− 5	−20	+ 6	+24	+ 3	+ 6	−14	+12	0	0.75
100949 H	20 28 03.89	+33 53 16.6	7.00	H	307.016 198 49	+33.887 944 36	A	2.84	6.69	−0.29	1.14	1.14	0.75	0.67	0.73	+30	+ 8	− 1	+ 4	− 1	−13	+ 0	−12	+11	− 8	2	−0.57
100950	20 28 04.18	−20 18 17.5	9.02	H	307.017 431 29	−20.304 859 52		7.36	27.94	−25.21	1.37	0.89	1.51	1.83	1.41	+42	−33	−31	−15	+13	+ 1	+18	+37	−22	+40	0	0.76
100951	20 28 05.30	−22 01 23.7	8.16	H	307.022 072 55	−22.023 249 05		4.59	12.57	−35.71	1.13	0.60	1.12	1.53	0.87	+ 9	+ 8	− 7	−32	+ 6	− 7	+ 5	+22	+ 4	+14	2	−1.13
100952	20 28 05.92	−29 22 26.4	7.34	H	307.024 663 24	−29.373 988 34		7.02	−6.80	−18.95	0.84	0.54	1.00	1.12	0.86	+12	−19	−15	− 7	+ 3	+40	+ 9	+25	+ 0	+18	0	0.75
100953	20 28 07.52	+08 26 14.7	6.23	H	307.031 315 29	+08.437 406 68		9.99	40.75	16.94	0.75	0.56	0.88	0.96	0.72	+ 0	−20	−26	+21	+ 2	+12	+ 8	+45	− 7	−13	0	1.27
100954	20 28 07.65	+19 45 46.1	7.89	H	307.031 878 08	+19.762 809 26		1.38	5.24	4.19	0.80	0.65	1.00	0.97	0.66	+23	−26	− 4	+28	+33	+ 5	+28	+17	+ 6	+28	2	1.62
100955	20 28 07.83	+24 07 40.8	9.18	H	307.032 642 19	+24.127 996 28		3.10	−6.80	−28.81	0.72	0.69	1.13	0.95	0.81	+ 5	−10	− 3	+10	−18	+ 7	− 9	−16	− 6	+33	1	0.48
100956	20 28 08.56	−48 24 14.3	8.65	H	307.035 686 51	−48.403 977 75		5.06	19.55	−10.02	1.16	0.76	1.29	1.78	0.98	− 4	−14	− 9	+ 5	+ 3	− 2	+ 5	−12	− 4	+ 8	0	0.33
100957	20 28 08.82	+03 01 06.3	9.84	H	307.036 737 44	+03.018 423 44		−1.79	−1.76	−2.68	1.37	1.11	1.81	1.94	1.80	+23	+14	− 9	+ 9	− 6	+18	−13	+26	−27	+34	0	−0.11
100958	20 28 08.83	−23 00 51.5	7.93	H	307.036 777 87	−23.014 305 49		0.97	13.57	−7.84	0.91	0.60	1.05	1.16	0.88	+22	−11	−18	− 4	−10	+18	− 6	+20	−21	+16	4	−1.59
100959	20 28 10.01	−07 28 38.1	8.44	H	307.041 727 38	−07.477 239 97		3.06	−8.69	−14.21	1.23	0.84	1.29	1.95	1.34	+ 8	+ 3	+ 7	+26	− 1	+ 9	+ 3	+55	+ 5	− 6	0	0.94
100960	20 28 10.24	−33 17 54.3	10.52	H	307.042 645 97	−33.298 423 90		4.17	16.24	−42.06	1.48	0.94	1.80	1.86	1.23	+30	− 8	+ 1	−19	− 1	+ 0	− 1	−14	− 9	+56	0	1.37
100961	20 28 10.41	+27 24 43.0	8.93	H	307.043 366 15	+27.411 931 36		3.11	−5.09	−12.86	0.50	0.74	1.01	0.59	0.85	+ 0	− 5	+ 1	−12	+12	−11	+11	+ 3	+ 3	+ 6	0	0.77
100962	20 28 11.46	+02 06 09.2	8.91	H	307.047 735 50	+02.102 565 16		1.58	5.10	−1.55	0.98	0.77	1.25	1.30	1.22	+25	+ 9	−11	+18	+ 1	+24	− 7	+38	−13	+41	0	−1.05
100963	20 28 11.83	+22 07 46.5	7.09	H	307.049 290 63	+22.129 585 35		35.41	−23.55	−243.67	0.60	0.52	0.80	0.65	0.58	+27	−13	+ 0	+35	+ 0	+ 3	+ 6	+ 5	+ 6	+48	0	1.09
100964	20 28 13.65	+56 08 22.4	8.91	H	307.056 863 43	+56.139 551 57		1.91	−3.23	−10.42	0.83	0.69	0.84	0.95	0.75	− 1	+ 3	+ 7	+ 5	+ 4	− 5	+ 4	−14	+12	− 6	0	2.21
100965	20 28 14.45	+81 25 21.6	5.38	H	307.060 226 97	+81.422 669 25		7.15	33.72	16.19	0.51	0.48	0.54	0.59	0.57	+17	−27	−11	−14	−10	+ 5	− 8	−26	− 1	+25	0	−1.35
100966	20 28 14.84	+78 19 13.4	9.00	H	307.061 836 43	+78.320 375 17		9.84	63.15	18.95	0.74	0.67	0.76	0.79	0.80	− 2	−27	− 6	+20	+13	− 6	+16	+11	− 8	+ 8	0	0.68
100967	20 28 16.02	−51 25 50.3	9.65	H	307.066 747 92	−51.430 632 67		13.09	−15.20	−73.41	1.47	0.98	1.46	2.06	1.44	+ 9	−21	−14	+34	− 7	+11	−10	+15	+ 2	−13	5	2.25
100968	20 28 16.49	−87 28 19.4	8.10	H	307.068 728 86	−87.472 066 07		12.81	169.74	−57.85	0.61	0.55	0.67	0.74	0.58	−20	+ 3	−13	+ 2	− 5	+ 5	− 3	+ 9	− 9	−33	3	−2.01
100969	20 28 16.77	+02 56 13.7	6.20	G	307.069 869 82	+02.937 152 02		7.15	38.93	3.70	0.74	0.54	0.92	0.97	0.86	+12	+10	−18	− 4	−10	+13	−16	+23	−34	+21	0	0.02
100970	20 28 18.42	+18 46 10.7	6.87	H	307.076 753 95	+18.769 634 84		26.77	349.47	−56.85	0.65	0.58	0.89	0.87	0.57	+ 9	+ 2	−32	+ 5	+26	− 7	+20	+ 9	+ 6	+ 6	2	0.59
100971	20 28 20.84	+20 06 46.2	6.88	H	307.086 845 98	+20.112 827 65		6.48	18.36	17.59	0.64	0.51	0.81	0.70	0.52	+ 5	−31	−10	+17	+28	+ 1	+24	+15	+ 4	+10	0	−1.37
100972	20 28 21.73	+25 04 20.0	8.66	H	307.090 552 71	+25.072 218 39		2.83	4.02	2.74	0.72	0.65	1.00	0.79	0.73	+ 1	+ 3	−22	+34	−12	−10	−10	+ 3	+ 3	+20	1	−0.63
100973	20 28 22.36	+51 41 17.3	9.12	H	307.093 150 15	+51.688 140 90		1.54	4.02	2.64	0.77	0.69	0.86	0.85	0.76	− 7	−19	+22	+13	+12	+ 5	+ 7	+ 6	+19	+ 1	1	−1.43
100974	20 28 23.67	−63 05 50.5	8.89	H	307.098 644 88	−63.097 352 67		20.22	−51.72	114.03	0.82	0.70	1.15	0.85	0.78	− 7	−10	− 8	+15	+ 9	− 4	+ 9	+ 3	−10	−16	1	0.88
100975	20 28 23.88	−17 20 01.0	8.30	H	307.099 505 87	−17.333 618 82		4.38	−17.62	−48.15	1.02	0.60	1.17	1.22	0.73	+17	−27	−10	−16	+ 5	+42	+ 6	− 1	+12	+36	0	1.22
100976	20 28 23.91	+20 30 44.9	7.93	G	307.099 628 23	+20.512 481 24		3.90	13.02	−3.85	0.81	0.64	0.98	0.99	0.74	+ 1	− 7	− 6	+12	+24	− 3	+21	+21	+12	+ 5	0	1.15
100977	20 28 24.89	−03 21 27.9	6.12	H	307.103 705 67	−03.357 742 31		5.85	27.29	−21.22	0.76	0.63	1.06	1.12	0.76	+15	−12	−41	+38	−23	+43	+ 1	+70	−26	−11	2	−1.49
100978	20 28 25.22	+32 13 24.5	8.84	H	307.105 072 21	+32.223 467 09		2.49	5.95	−10.45	0.56	0.67	0.99	0.72	0.78	−16	− 6	+ 5	+22	− 3	−12	− 1	+ 3	+ 2	− 8	0	0.69
100979	20 28 25.78	+39 19 44.1	6.98	H	307.107 419 93	+39.328 920 09		3.43	14.10	15.70	0.44	0.48	0.61	0.46	0.49	−11	− 2	+ 9	+ 1	− 2	−14	− 1	−14	+ 5	− 9	0	−0.40
100980	20 28 26.08	−55 10 38.9	7.88	H	307.108 647 64	−55.177 466 76		3.56	21.83	−6.87	0.77	0.65	1.10	0.98	0.71	− 2	+ 9	−21	−42	+ 7	−19	+12	−34	+30	−41	5	−0.39
100981	20 28 26.56	+11 43 14.4	7.56	2 H	307.110 677 86	+11.720 660 31		6.09	12.05	16.43	0.83	0.72	0.99	1.10	0.98	+36	−11	− 8	+30	+35	+12	+33	+58	+10	+42	2	0.87
100982	20 28 26.60	−09 22 13.4	6.82	H	307.110 840 36	−09.370 396 47		6.11	22.31	6.80	0.83	0.53	0.93	0.97	0.79	+17	−30	−17	−10	+ 1	+26	+ 7	+29	−13	+17	0	−0.95
100983	20 28 27.56	+28 57 15.0	8.73	H	307.114 839 50	+28.954 158 60		2.50	−0.72	−28.51	0.52	0.68	1.13	0.58	0.70	−37	+ 6	− 9	− 7	+ 1	−18	+ 0	−28	+24	−49	0	1.31
100984	20 28 28.20	+62 00 53.6	11.47	G	307.117 496 06	+62.014 891 93		4.49	−207.52	−146.35	1.76	1.68	1.92	2.05	1.97	+ 1	+12	− 1	−10	+ 8	+ 0	+11	−13	+21	+23	0	−1.93
100985	20 28 29.27	−24 09 46.7	7.08	H	307.121 968 18	−24.162 981 83		6.39	37.82	−105.85	0.84	0.55	0.98	1.05	0.83	+17	−14	−13	+ 7	−10	+27	− 8	+24	−20	+16	4	0.18
100986	20 28 30.07	+31 01 23.2	8.81	H	307.125 292 85	+31.023 119 46		2.59	7.49	4.65	0.59	0.72	1.05	0.72	0.77	−12	− 3	+ 6	+14	− 1	− 2	+ 1	−10	− 1	− 4	0	−0.84
100987	20 28 30.23	+42 00 35.3	7.66	G	307.125 975 03	+42.009 815 41		0.33	0.14	−2.89	0.48	0.52	0.63	0.52	0.51	−19	+ 0	+11	+ 6	+ 9	−14	+12	−29	+22	−16	0	−0.81
100988	20 28 30.69	+48 55 08.2	6.65	1 H	307.127 865 07	+48.918 939 67		4.89	−3.88	−13.41	0.49	0.46	0.56	0.54	0.50	− 7	+ 6	+11	− 8	+ 7	−13	+ 9	−12	+ 4	− 4	1	1.44
100989	20 28 30.74	+43 31 23.4	7.69	H	307.128 081 26	+43.523 180 21		4.79	9.55	4.24	0.54	0.51	0.69	0.71	0.63	+ 4	−15	+ 5	− 5	+ 1	−14	− 6	+10	+25	+18	0	−1.55
100990	20 28 32.36	−36 11 39.7	7.83	H	307.134 821 14	−36.194 348 87		3.86	20.60	−27.67	0.92	0.59	1.04	1.12	0.88	+20	+ 2	−10	+ 0	+40	+ 8	+37	+31	+16	+49	0	0.77
100991	20 28 32.77	−34 24 34.9	6.74	H	307.136 542 79	−34.409 706 24		3.40	38.29	−14.23	0.72	0.49	0.88	0.87	0.62	+38	− 6	+ 0	−14	+ 2	+15	+ 2	−11	+ 3	+63	2	0.17
100992	20 28 33.17	−11 47 46.2	7.15	H	307.138 205 43	−11.796 165 30		3.77	1.52	−19.10	0.90	0.55	1.03	1.33	0.85	+10	−19	−27	+ 2	− 6	− 2	+ 3	+37	−21	−12	0	−0.69
100993	20 28 33.48	+40 54 06.7	7.95	G	307.139 496 06	+40.901 863 63		2.97	4.01	4.33	0.53	0.52	0.67	0.51	0.52	− 2	− 5	+ 0	−14	+ 6	+ 0	+ 5	−27	+25	− 1	0	−1.29
*100994	20 28 34.85	−46 54 45.9	9.47	G	307.145 221 97	−46.912 741 33		3.16	−11.57	−18.47	1.36	0.95	1.57	2.04	1.53	+ 4	−20	−13	+28	−13	− 3	−17	+12	+ 1	−13	0	−0.37
*100995	20 28 34.83	+08 15 23.9	7.40	H	307.145 105 34	+08.256 635 91		6.38	6.58	−59.50	0.89	0.68	1.00	1.15	0.91	+22	−11	−15	+10	+24	− 6	+23	+51	+11	+18	0	−1.30
100996	20 28 35.97	+00 53 00.7	7.43	H	307.149 875 93	+00.883 515 02		2.35	−13.49	−16.66	0.91	0.85	1.12	1.37	1.15	+32	+ 2	−25	+52	+11	+32	+22	+77	−21	+20	0	−0.53
100997	20 28 36.94	−11 05 17.8	8.54	H	307.153 933 70	−11.088 274 55		7.07	10.04	3.02	1.24	0.74	1.45	1.66	1.17	+16	−29	−25	+ 6	− 7	− 5	+ 3	+38	−31	+ 1	0	−1.10
100998	20 28 37.12	−04 25 40.4	7.75	H	307.154 655 32	−04.427 893 33		16.36	−10.02	29.30	0.87	0.68	0.96	1.29	0.96	+22	−14	+ 0	+10	+20	+25	+24	+59	+ 2	+14	0	−2.68

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
100901	9.415	0.021	9.011	0.021	*	0.395	0.025	T	0.46	0.03	L *		9.0147	0.0029	0.020	72	*	8.98	9.04		D	20275−4838	I 1	2 C A	AB	72	0.776	0.007	1.33	0.02	
100902	10.317	0.028	9.181	0.016	A	0.977	0.025	T	0.96	0.02	L		9.3149	0.0084	0.039	220	A	9.19	9.36		D	20276+2803	I 2	1 C P A							
100903	9.475	0.015	8.085	0.009		1.176	0.014	T	1.13	0.02	A		8.1288	0.0016	0.016	138		8.10	8.16		C			1							
100904	8.371	0.011	8.015	0.011		0.321	0.002	G	0.37	0.00	H		8.0788	0.0014	0.012	85		8.06	8.10		C			1							S
100905	10.111	0.022	8.822	0.013		1.096	0.020	T	1.06	0.02	L		8.8612	0.0016	0.018	156		8.83	8.89					1							
100906	8.818	0.015	8.043	0.012		0.705	0.015	T	0.76	0.01	L		8.1058	0.0015	0.013	92		8.08	8.13					1							
100907	5.723	0.003	5.643	0.003		0.072	0.004	T	0.08	0.00	L		5.6639	0.0005	0.006	141		5.65	5.68					1							S
100908	10.035	0.022	9.869	0.029	B	0.159	0.034	T	0.18	0.04	L		10.1020	0.0135			B				D	20276+2803	I 2	1 C I A							
100909	9.183	0.017	8.748	0.017		0.424	0.019	T	0.49	0.02	L		8.8069	0.0020	0.017	78		8.78	8.84		C			1							
100910	8.707	0.010	7.641	0.007	*	0.924	0.009	T	0.92	0.01	L *		7.7147	0.0015	0.011	120	*	7.70	7.74			20276+4303	H 1	2 C S B	AB	275	0.190	0.028	2.26	0.48	S
100911	10.352	0.027	9.756	0.025		0.556	0.027	T	0.63	0.03	L		9.8887	0.0021	0.033	118		9.84	9.97					1							
100912	7.291	0.005	7.330	0.007	*	−0.013	0.005	G	0.01	0.01	H *		7.3235	0.0011	0.010	130	*	7.31	7.34		D	20276+4202	H 1	2 C S A	AB	24	0.178	0.004	0.41	0.17	S
100913	10.192	0.022	8.493	0.010		1.410	0.015	G	1.39	0.02	H		8.4618	0.0013	0.017	170		8.43	8.50					1							
100914	9.180	0.012	9.020	0.014	A	0.215	0.180	G	0.10	0.03	L *		9.0387	0.0018	0.024	163	*	8.99	9.08		U	20276+3224	H 1	2 C D	AB	205	4.226	0.072	4.02	0.29	D
100915	9.361	0.017	8.798	0.016		0.531	0.017	T	0.60	0.02	L		8.8422	0.0013	0.017	95		8.81	8.87		D			1							
100916	9.397	0.015	9.322	0.020		0.074	0.023	T	0.09	0.03	L		9.4012	0.0024	0.019	111		9.37	9.43					1							
100917	10.320	0.034	9.024	0.019		1.102	0.030	T	1.06	0.03	L		9.0720	0.0020	0.018	101		9.04	9.11		C			1							
100918	10.480	0.028	9.879	0.026		0.560	0.028	T	0.63	0.03	L		9.9830	0.0026	0.025	166		9.93	10.03		C			1							
100919	8.967	0.013	8.500	0.012		0.440	0.016	T	0.51	0.02	L		8.5483	0.0015	0.014	104		8.53	8.58					1							
100920	10.199	0.030	9.660	0.029	*	0.505	0.038	T	0.58	0.04	L *		9.5982	0.0022	0.022	115	*	9.56	9.65		D	20277+8257	I 1	2 C A	AB	96	0.626	0.003	0.20	0.01	
100921	10.569	0.042	8.774	0.017		1.525	0.037	T	2.54	0.07	O		8.5510	0.0047	0.031	69		8.50	8.64		U 2			1 S							
100922	11.595	0.141	10.560	0.095		0.900	0.128	T	0.90	0.09	L		10.7779	0.0035	0.032	79		10.69	10.82		C			1							G
100923	13.208	0.789	11.413	0.224		1.504	0.014	G	2.43	0.02	A		11.4395	0.0057	0.048	76		11.34	11.50					1 X							G G
100924	7.671	0.007	7.744	0.013		−0.042	0.015	G	−0.02	0.01	H		7.7272	0.0016	0.011	100		7.70	7.75					1							S
100925	7.523	0.005	6.706	0.004		0.724	0.014	G	0.76	0.02	A		6.7565	0.0005	0.006	151		6.74	6.77					1							S
100926	8.975	0.016	7.242	0.008		1.474	0.015	T	2.87	0.04	O		6.9170	0.0134	0.070	68		6.80	7.02	2.91	P 1 A			1 S							S P
100927	7.759	0.007	7.508	0.008		0.235	0.011	T	0.26	0.01	L		7.5584	0.0013	0.012	136		7.54	7.58		C			1							S
100928	10.657	0.044	9.977	0.038		0.617	0.044	T	0.69	0.04	L		10.0691	0.0021	0.023	95		10.03	10.11		C			1							
100929	7.860	0.007	7.884	0.012		−0.030	0.002	G	−0.01	0.00	H		7.8961	0.0011	0.009	109		7.88	7.92		C			1							S
100930	8.345	0.013	8.037	0.014		0.293	0.018	T	0.33	0.02	L		8.0886	0.0027	0.014	61		8.07	8.13					1							S
100931	10.836	0.099	9.371	0.048		1.234	0.086	T	1.19	0.08	L		9.4645	0.0017	0.018	71		9.42	9.50		C			1							
100932	9.614	0.017	9.533	0.023		0.080	0.027	T	0.09	0.03	L		9.5618	0.0022	0.030	226		9.50	9.60					1							G
100933	6.729	0.004	6.576	0.004		0.147	0.005	T	0.16	0.01	L		6.6087	0.0008	0.006	109		6.60	6.62		C			1							S
100934	9.762	0.019	8.886	0.015		0.767	0.019	T	0.81	0.01	L		8.9658	0.0020	0.021	151		8.93	9.02		C			1 G							
100935	9.058	0.020	7.677	0.012		1.184	0.019	T	4.35	0.07	O		6.8258	0.0294	0.345	60		6.09	6.99	368.00	P 1 A			1 S							S G
100936	9.407	0.016	8.181	0.011		1.047	0.015	T	1.02	0.01	L		8.2436	0.0011	0.011	98		8.22	8.26		C			1							
100937	9.300	0.027	8.687	0.025		0.511	0.001	G	0.58	0.00	H		8.8072	0.0018	0.019	88		8.78	8.84		C	20280−4237	I 2	1							
100938	9.685	0.023	9.274	0.023		0.402	0.027	T	0.47	0.03	L		9.3507	0.0019	0.017	103		9.32	9.38		C			1							
100939	9.956	0.020	8.817	0.012	A	0.700	0.495	G	0.92	0.03	L *		8.7236	0.0017	0.017	171	*	8.70	8.76		D	20280−3115	I 1	2 C A	AB	327	1.970	0.007	1.92	0.02	
100940											T		10.9902	0.2007			B				D	20280−0009	I 2	1 C L C							
100941	8.764	0.015	8.189	0.013		0.510	0.000	G	0.58	0.00	H		8.2916	0.0020	0.014	89		8.27	8.32		C	20280−4237	I 2	1							S
100942	9.795	0.028	9.063	0.024		0.637	0.015	G	0.70	0.01	H		9.1185	0.0029	0.022	58		9.09	9.15		C			1							
100943	10.891	0.061	9.084	0.022	A	1.611	0.218	G	1.62	0.24	R		9.0949	0.0386	0.028	83	A	9.05	9.14		D	20280−0009	I 2	1 C P C							
100944	7.949	0.007	7.977	0.009		−0.021	0.010	T	0.00	0.01	L		7.9808	0.0013	0.010	107		7.97	8.00					1							S
100945	10.307	0.035	9.035	0.020		1.083	0.032	T	1.05	0.03	L		9.0809	0.0024	0.020	79		9.05	9.11					1							
100946	10.561	0.042	9.368	0.025		1.000	0.020	G	0.98	0.02	I		9.4024	0.0035	0.023	71		9.36	9.44		C			1							
100947	7.240	0.006	6.809	0.007		0.383	0.007	G	0.45	0.02	A		6.8657	0.0007	0.007	85		6.86	6.88		C			1							S
100948	7.647	0.009	7.458	0.010		0.181	0.013	T	0.20	0.01	L		7.5047	0.0017	0.010	73		7.48	7.52					1							S
100949	6.960	0.004	6.993	0.005	*	−0.026	0.005	T	0.00	0.01	L *		7.0020	0.0009	0.009	162	*	6.98	7.02		D	20281+3353	M 1	2 C A	AB	236	0.348	0.004	1.32	0.03	S
100950	9.427	0.027	9.060	0.028		0.358	0.034	T	0.42	0.04	L		9.1016	0.0018	0.016	64		9.07	9.13		C			1							
100951	8.418	0.014	8.199	0.016		0.209	0.020	T	0.23	0.02	L		8.2286	0.0019	0.009	69		8.21	8.24					1							S
100952	8.796	0.014	7.461	0.009		1.132	0.013	T	1.10	0.01	L		7.5044	0.0011	0.007	80		7.49	7.52		C			1							S
100953	7.593	0.006	6.346	0.005		1.074	0.005	G	1.04	0.00	H		6.3979	0.0008	0.007	82		6.38	6.41		C			1							S
100954	8.192	0.009	7.943	0.012		0.260	0.004	G	0.29	0.01	H		7.9646	0.0016	0.011	100		7.94	8.00		C			1							S
100955	10.490	0.029	9.316	0.017		1.007	0.026	T	0.98	0.02	L		9.3498	0.0018	0.022	171		9.31	9.39					1							
100956	9.642	0.025	8.721	0.019		0.801	0.024	T	0.83	0.02	L		8.7883	0.0021	0.018	71		8.77	8.81					1							
100957	12.431	0.234	10.157	0.044		1.920	0.196	T	1.97	0.17	K		9.9239	0.0032	0.021	78		9.88	9.96		C			1							G
100958	10.153	0.036	8.131	0.013		1.712	0.032	T	2.08	0.08	O		8.0068	0.0020	0.014	79		7.98	8.03					1							
100959	9.703	0.028	8.533	0.018		1.004	0.026	T	0.98	0.02	L		8.6036	0.0017	0.012	63		8.57	8.62		C			1							
100960	11.064	0.057	10.509	0.057		0.520	0.072	T	0.59	0.08	L		10.6348	0.0033	0.035	137		10.58	10.70		C			1							G
100961	9.058	0.009	8.924	0.011		0.129	0.013	T	0.14	0.01	L		8.9770	0.0017	0.019	194		8.95	9.01		C			1							
100962	8.910	0.015	8.900	0.019		0.014	0.022	T	0.03	0.02	L		8.9278	0.0021	0.014	79		8.91	8.95		C			1							
100963	7.863	0.009	7.167	0.006		0.642	0.009	T	0.71	0.01	L		7.2208	0.0011	0.010	122		7.20	7.24		C			1							S
100964	10.505	0.036	9.035	0.018		1.238	0.032	T	1.20	0.03	L		9.0730	0.0028	0.020	99		9.04	9.10					1							
100965	6.660	0.004	5.482	0.003		1.010	0.004	T	0.99	0.00	L		5.5456	0.0006	0.005	109		5.54	5.55			20282+8126	I 2	1							S
100966	9.559	0.021	9.053	0.020		0.476	0.026	T	0.55	0.03	L		9.1012	0.0018	0.018	96		9.07	9.14		C			1							
100967	10.510	0.047	9.727	0.039		0.730	0.020	G	0.78	0.02	H		9.7840	0.0010	0.014	57		9.76	9.83		D			1							
100968	8.932	0.011	8.176	0.009		0.689	0.015	G	0.75	0.01	H		8.2391	0.0014	0.016	147		8.21	8.27		C			1							S
100969	7.334	0.005	6.303	0.004		0.899	0.000	G	0.90	0.00	H		6.3547	0.0007	0.007	83		6.34	6.37		C			1							S
100970	7.696	0.007	6.975	0.006		0.662	0.007	T	0.72	0.01	L		7.0103	0.0013	0.008	84		7.00	7.02		C	20284+1846	I 1	1 S							S
100971	6.920	0.004	6.892	0.007		0.031	0.007	T	0.05	0.01	L		6.8987	0.0011	0.008	103		6.89	6.91		C			1							S
100972	8.567	0.009	8.638	0.013		−0.060	0.014	T	−0.04	0.01	L		8.6445	0.0016	0.016	123		8.61	8.67		C			1							
100973	9.266	0.015	9.118	0.019		0.142	0.023	T	0.16	0.02	L		9.1757	0.0023	0.016	102		9.15	9.21		C			1							
100974	9.891	0.021	8.930	0.015		0.832	0.020	T	0.85	0.01	L		9.0279	0.0025	0.020	124		8.99	9.06					1							
100975	9.852	0.030	8.441	0.017		1.192	0.027	T	1.15	0.02	L		8.4680	0.0019	0.012	74		8.44	8.50		C			1							
100976	8.458	0.013	7.978	0.012		0.461	0.015	G	0.53	0.02	H		8.0326	0.0022	0.020	94		8.01	8.06					1							S
100977	6.065	0.003	6.116	0.004		−0.049	0.003	G	−0.03	0.00	H		6.1140	0.0005	0.004	97		6.11	6.12			20284−0321	I 1	1							S
100978	8.971	0.011	8.850	0.013		0.117	0.016	T	0.13	0.02	L		8.8836	0.0012	0.018	177		8.85	8.92					1							
100979	8.191	0.010	7.083	0.005		0.955	0.009	T	0.94	0.01	L		7.1459	0.0009	0.010	152		7.13	7.17		D			1							S
100980	9.300	0.015	7.991	0.009		1.112	0.014	T	1.07	0.01	L		8.0459	0.0019	0.015	122		8.02	8.08					1							S
100981	7.930	0.009	7.599	0.011		0.314	0.013	T	0.36	0.02	L		7.6416	0.0017	0.018	89		7.62	7.89		U 2 C			1							S P
100982	8.347	0.012	6.964	0.006		1.170	0.011	T	1.13	0.01	L		6.9893	0.0012	0.009	81		6.98	7.00					1							S
100983	10.228	0.016	8.879	0.009		1.143	0.014	T	1.11	0.01	L		8.8970	0.0015	0.021	289		8.86	8.93					1							
100984						0.775	0.020	G	0.82	0.02	H		11.6531	0.0058	0.043	86		11.58	11.75					1							G
100985	8.180	0.008	7.180	0.008		0.874	0.008	T	0.88	0.01	L		7.2380	0.0013	0.008	81		7.22	7.25		C			1							S
100986	10.201	0.023	8.929	0.013		1.083	0.021	T	1.05	0.02	L		8.9806	0.0019	0.021	188		8.94	9.01					1							
100987	7.821	0.007	7.693	0.008		0.124	0.010	T	0.14	0.01	L		7.7184	0.0010	0.011	140		7.70	7.74					1							S
100988	8.865	0.014	6.870	0.006		1.653	0.012	T	1.68	0.01	L		6.7599	0.0015	0.016	122		6.74	6.78		U			1							S
100989	7.677	0.006	7.686	0.009		−0.004	0.010	T	0.02	0.01	L		7.6988	0.0013	0.012	118		7.67	7.72					1							S
100990	9.154	0.014	7.939	0.009		1.039	0.013	T	1.01	0.01	L		7.9981	0.0015	0.013	115		7.98	8.02		C			1							
100991	8.396	0.010	6.886	0.005		1.270	0.009	T	1.23	0.01	L		6.8950	0.0007	0.009	122		6.88	6.91					1							S
100992	9.250	0.018	7.343	0.008		1.583	0.016	T	1.60	0.02	L		7.2655	0.0016	0.011	77		7.24	7.28					1							S
100993	8.035	0.009	7.965	0.010		0.077	0.006	G	0.09	0.01	H		7.9712	0.0014	0.014	132		7.95	7.99					1							
100994	9.957	0.026	9.465	0.026		0.480	0.005	G	0.55	0.01	H		9.5744	0.0024	0.020	86		9.53	9.63			20286−4655	I 1	1							
100995	9.009	0.014	7.536	0.008		1.241	0.013	T	1.20	0.01	L		7.5643	0.0011	0.010	74		7.55	7.58		C			1							S
100996	7.296	0.005	7.420	0.007		−0.094	0.002	G	−0.08	0.00	H		7.4030	0.0007	0.007	81		7.39	7.41					1							S
100997	8.787	0.014	8.572	0.016		0.205	0.020	T	0.23	0.02	L		8.6070	0.0021	0.014	66		8.58	8.63		C			1							S
100998	8.446	0.013	7.814	0.010		0.587	0.014	T	0.66	0.01	L		7.8764	0.0019	0.012	74		7.86	7.89					1 S							S
100999	8.000	0.008	7.928	0.010		0.071	0.012	T	0.08	0.01	L		7.9359	0.0017	0.013	101		7.91	7.96					1							S
101000	9.055	0.015	9.132	0.021		−0.066	0.023	T	−0.04	0.02	L		9.1419	0.0014	0.014	115		9.11	9.17		C			1							

$20^h\ 28^m\ 38^s$ - $20^h\ 29^m\ 37^s$ 2030

101001 - 101100

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
101001	20 28 38.41	−52 24 03.8	8.91	H	307.160 029 37	−52.401 046 96	3.19	−0.76	3.58	1.08	0.84	1.24	1.45	1.31	+ 5 −30 − 1 +27 + 3 − 5 − 4 +16 +22 − 2	0	−1.28
101002	20 28 38.55	+28 46 33.5	7.92	H	307.160 625 36	+28.775 983 77	3.61	20.45	−4.63	0.42	0.53	0.83	0.44	0.55	−34 + 9 −12 −13 + 2 −20 + 1 −26 +20 −43	0	−0.57
101003	20 28 38.75	−26 15 50.3	9.71	G	307.161 442 67	−26.263 961 53	8.42	3.58	−66.65	1.35	0.85	1.50	1.71	1.36	+15 − 9 − 5 + 3 − 9 +20 −12 +19 + 4 +17	0	0.68
101004	20 28 38.88	−19 41 25.2	9.21	H	307.162 000 61	−19.690 339 89	4.21	5.14	2.49	1.35	0.85	1.65	1.54	1.20	+42 −38 −36 −14 − 3 +32 + 9 +27 −13 +43	0	−1.21
101005	20 28 41.32	−38 30 08.7	8.35	H	307.172 166 16	−38.502 409 22	2.42	−6.49	−9.18	1.01	0.60	1.18	1.25	0.97	+16 −29 − 7 − 3 − 3 +11 − 1 +11 − 7 +15	2	0.71
101006	20 28 41.34	−67 45 29.6	7.23	G	307.172 255 13	−67.758 215 62	10.92	61.25	−5.48	0.35	0.52	0.80	0.39	0.65	−48 −13 +11 − 5 + 6 − 8 + 7 +19 + 9 −49	0	0.84
101007	20 28 41.81	+39 11 17.4	8.70	H	307.174 192 97	+39.188 171 33	10.68	28.43	49.84	0.66	0.75	0.92	0.72	0.78	− 6 − 2 +10 + 3 + 2 − 4 + 2 −22 + 1 − 5	0	0.18
101008	20 28 42.57	+39 28 25.2	8.70	H	307.177 394 10	+39.473 680 20	7.83	−13.66	−25.36	0.62	0.72	0.89	0.68	0.76	−10 − 9 +10 + 1 + 5 −18 + 5 −25 + 7 −15	0	−0.69
101009	20 28 43.54	−36 21 43.2	9.25	H	307.181 402 60	−36.361 994 19	2.35	3.20	−4.12	1.12	0.78	1.32	1.28	0.99	+18 − 8 −33 −15 +26 − 1 +22 +10 + 5 +47	2	2.20
101010	20 28 43.54	−00 06 46.5	8.75	1 H	307.181 411 30	−00.112 918 65	1.92	6.91	−3.14	1.15	0.90	1.36	1.59	1.19	+18 −15 −19 +31 − 8 +22 − 3 +57 − 7 +13	0	0.06
101011	20 28 43.58	−15 44 29.4	6.41	H	307.181 603 34	−15.741 496 51	5.28	8.09	−1.15	0.86	0.51	0.92	1.00	0.61	+ 9 −25 −27 −26 + 4 +25 +10 + 0 − 4 +16	2	1.06
101012 H	20 28 43.68	+34 23 17.1	8.82	G	307.182 015 06	+34.388 091 04 A	1.76	6.14	−2.91	1.50	1.58	1.88	1.43	1.43	− 7 + 7 + 2 −10 + 4 + 1 + 1 −18 +11 −11	2	1.31
101013	20 28 44.20	−23 59 01.3	6.84	H	307.184 176 77	−23.983 690 29	5.87	−0.81	−59.45	0.85	0.54	0.99	1.07	0.80	+15 − 5 −22 +10 −16 +28 −13 +26 −21 +12	5	0.26
101014	20 28 44.63	−11 13 23.3	8.34	H	307.185 959 73	−11.223 152 23	4.83	−2.72	−24.10	1.19	0.75	1.32	1.74	1.19	+12 −19 −21 +22 − 2 − 4 + 5 +53 −22 − 3	0	0.30
101015	20 28 45.27	+06 23 37.6	8.61	H	307.188 617 97	+06.393 790 42	3.12	11.61	6.03	0.93	0.96	1.22	1.12	1.21	+37 + 9 −11 +21 +36 +37 +42 +67 + 2 +40	0	0.87
101016	20 28 46.70	+22 06 54.5	8.75	H	307.194 595 88	+22.115 134 03	0.35	1.68	−5.30	0.83	0.78	1.12	0.89	0.84	+39 − 5 + 9 +43 +20 +11 +20 +30 +24 +51	0	0.91
101017	20 28 46.74	−35 35 44.9	6.09	H	307.194 734 36	−35.595 812 90	5.20	1.69	−20.76	0.65	0.41	0.74	0.93	0.55	+15 − 7 − 1 − 2 +29 +28 +24 +16 +14 +44	2	0.96
101018	20 28 46.87	+31 11 18.6	9.00	H	307.195 300 76	+31.188 498 46	−0.48	3.85	1.34	0.59	0.69	1.03	0.70	0.74	−12 + 1 + 1 +18 − 5 −15 − 2 − 7 + 1 − 4	0	1.18
101019	20 28 48.06	−11 43 35.4	7.33	H	307.200 250 90	−11.726 511 60	10.62	−21.83	−43.68	0.92	0.64	1.04	1.17	1.00	+21 − 7 −17 − 1 +18 +19 +21 +54 −18 +23	0	−1.52
101020	20 28 48.71	+45 43 07.8	7.40	H	307.202 946 86	+45.718 836 59	3.30	6.78	−5.16	0.51	0.49	0.61	0.58	0.53	− 4 + 3 +12 +13 +12 − 2 +13 + 7 + 6 +11	0	2.08
101021	20 28 49.78	−35 21 47.4	8.91	H	307.207 403 90	−35.363 180 20	3.88	17.59	−3.91	1.03	0.61	1.26	1.72	0.88	+24 − 7 + 9 − 4 +30 +30 +21 +21 + 6 +46	0	0.34
101022	20 28 49.94	−01 44 04.1	6.82	H	307.208 072 66	−01.734 459 70	31.30	52.44	−42.87	1.02	0.67	1.08	1.44	0.90	−23 − 6 −30 +61 −43 +24 −36 +67 −23 −36	0	−0.70
101023	20 28 50.59	+39 58 54.5	8.22	3 H	307.210 804 22	+39.981 797 21	1.28	−3.72	−6.44	0.61	0.75	0.87	0.82	1.15	−22 −15 +19 −12 +16 −10 +14 −51 −14 −34	1	3.68
101024	20 28 50.97	−08 36 35.9	9.15	H	307.212 394 32	−08.609 960 17	0.94	−3.17	1.87	1.20	0.82	1.61	1.56	1.28	+18 + 0 −37 −10 −14 +43 − 1 +32 −27 +12	0	−0.18
101025	20 28 51.25	−59 50 50.6	10.12	H	307.213 529 73	−59.847 393 08	8.19	108.91	−61.51	1.15	1.19	1.76	1.80	1.58	+10 − 1 −19 −31 +17 + 7 +16 −31 +20 −11	0	0.30
101026 H	20 28 51.35	−54 40 40.1	9.15	H	307.213 966 25	−54.677 816 42 A	5.61	14.64	−1.10	1.64	1.58	2.22	1.64	1.44	+22 −10 −45 −39 +20 −33 +10 −43 +37 −17	0	0.38
101027 H	20 28 51.62	−17 48 49.2	4.77	G	307.215 098 57	−17.813 668 28 A	33.04	−15.79	−7.66	0.93	0.59	0.86	0.88	0.57	+42 −28 −26 −16 −18 +25 −11 − 8 − 8 +26	5	1.05
101028	20 28 52.40	−32 05 47.7	9.43	H	307.218 343 35	−32.096 581 09	1.65	−6.94	−7.49	1.10	0.69	1.42	1.25	0.92	+54 −42 −17 + 5 +17 + 2 +18 + 5 + 1 +81	0	−1.23
101029	20 28 53.36	−68 39 00.7	8.92	H	307.222 336 63	−68.650 193 81	4.11	14.34	1.03	0.62	0.79	1.28	0.70	1.03	−32 − 7 − 4 −15 +18 −14 +21 +11 + 3 −34	1	1.16
101030	20 28 53.59	+25 56 26.7	9.61	H	307.223 303 16	+25.940 758 88	9.07	36.93	−0.97	0.97	0.99	1.41	1.07	1.14	−10 +19 −11 +28 + 0 + 6 +12 −14 +10 +18	0	−1.58
101031	20 28 54.23	−62 27 32.5	8.39	G	307.225 975 20	−62.459 026 06	15.56	220.33	−194.70	0.74	0.62	1.04	0.75	0.70	+ 5 − 3 −19 +36 + 3 + 8 + 1 − 4 −14 − 7	0	−0.47
101032	20 28 55.02	+29 57 45.6	8.27	H	307.227 266 46	+29.962 656 46	3.49	2.02	−3.12	0.44	0.57	0.87	0.48	0.57	−31 + 8 −11 +16 −12 − 8 −12 −12 − 1 −33	0	−0.95
101033	20 28 55.41	−00 50 00.8	8.05	H	307.230 894 21	−00.833 565 08	4.58	−18.07	−40.57	1.06	0.87	1.28	1.48	1.22	+26 − 6 −15 +36 + 7 +28 + 9 +65 + 3 +27	4	0.40
101034	20 28 57.80	+10 19 52.6	7.57	H	307.240 843 12	+10.331 271 42	4.58	5.91	−20.23	0.84	0.81	1.13	0.99	1.03	+40 − 8 − 2 +10 +42 +30 +40 +60 + 4 +51	0	0.39
101035	20 28 58.16	+34 08 06.4	10.92	2 H	307.242 324 25	+34.135 110 40	4.56	−1.83	−2.93	1.21	1.26	1.77	1.37	1.33	− 9 + 4 − 1 −18 + 3 − 7 + 3 −13 +12 − 2	0	−1.92
101036	20 28 58.98	−17 26 04.9	6.71	H	307.245 731 29	−17.434 690 80	6.77	12.42	−25.35	0.83	0.51	0.91	0.92	0.61	+12 −33 −22 −15 − 3 +32 + 3 − 2 + 4 +22	2	1.59
101037	20 28 59.42	−80 43 02.3	8.97	H	307.247 594 99	−80.717 298 16	6.98	29.47	−23.00	0.73	0.64	0.95	0.83	0.82	− 2 −31 + 6 − 5 + 6 + 0 +11 −21 −24 −16	0	0.99
101038	20 28 59.53	+48 13 31.9	8.55	H	307.248 054 38	+48.225 541 64	3.69	5.79	0.08	0.71	0.62	0.80	0.87	0.68	− 6 − 5 + 6 + 2 + 5 −10 + 4 −14 +12 − 9	1	1.11
101039	20 29 00.34	−20 54 05.4	7.08	H	307.251 409 85	−20.901 503 76	6.57	10.96	−0.17	0.90	0.54	1.00	1.24	0.77	+21 − 4 −12 −10 + 2 +20 + 3 +22 − 4 +24	0	1.17
101040	20 29 00.67	−17 52 30.4	6.55	H	307.252 791 80	−17.875 117 99	6.36	37.65	−118.27	0.80	0.49	0.90	0.89	0.56	+22 −28 −25 −19 − 5 +33 + 3 − 1 + 1 +25	0	3.44
101041	20 29 01.52	+28 27 43.8	7.97	H	307.256 312 63	+28.462 155 84	6.96	38.64	5.46	0.45	0.56	0.87	0.48	0.59	−35 + 4 −15 −13 + 7 −11 + 5 −24 +20 −47	1	0.51
101042	20 29 01.79	−26 50 17.3	9.85	H	307.257 462 20	−26.838 138 91	2.83	51.93	29.91	1.42	0.95	1.63	1.75	1.51	+25 − 3 −15 −10 −12 +25 −15 +10 −13 +34	0	0.34
*101043	20 29 12.86	+02 48 08.7	11.45	H	307.303 581 91	+02.802 410 16	4.26	−0.46	−26.31	5.72	5.51	4.63	8.17	8.95	+15 −30 −32 −79 −28 +46 −14 −77 +18 +41	0	0.02
*101044	20 29 02.82	+83 37 31.7	6.19	H	307.261 740 83	+83.625 462 96	11.77	23.43	−19.05	0.46	0.45	0.51	0.55	0.54	− 4 + 0 − 4 +11 + 7 −23 + 5 −11 + 1 − 7	0	1.33
*101045	20 29 02.63	−15 03 37.3	9.21	H	307.260 953 72	−15.060 357 64	1.27	8.48	−7.96	1.44	0.87	1.81	1.56	1.02	+16 −17 −44 −29 − 5 +25 + 8 +16 −30 +17	0	−1.62
*101046 H	20 29 02.58	+07 09 29.3	8.81	H	307.260 743 12	+07.158 144 56 A	13.35	−58.45	−14.39	2.73	2.53	1.64	1.98	2.00	+33 + 7 +17 +35 +35 +26 +31 +49 +34 +60	2	−0.60
*101047	20 29 03.23	+16 15 15.4	7.39	H	307.263 474 74	+16.254 270 78	2.99	3.68	−0.15	0.66	0.56	0.83	0.85	0.63	+16 −10 −25 +24 +28 + 2 +26 +12 +14 +20	0	−0.31
*101048 H	20 29 03.73	−51 05 05.6	7.68	H	307.265 541 88	−51.084 896 05 A	9.32	−16.23	13.99	1.76	1.33	1.49	2.03	1.32	+19 − 4 −13 +20 +37 −10 +34 +16 − 1 +26	1	−0.42
*101049	20 29 04.38	−65 34 11.3	9.29	H	307.268 267 80	−65.569 802 91	5.48	3.93	−12.78	1.05	1.03	1.47	1.18	1.33	−10 −12 +18 +33 − 5 −13 + 0 − 4 −17 − 3	0	−0.05
*101050 H	20 29 04.78	+29 56 23.6	9.05	H	307.269 908 84	+29.939 883 15 A	1.94	2.03	−4.34	1.25	1.62	2.32	1.24	1.45	−28 − 2 + 6 +16 −11 −15 −10 − 6 +11 −35	4	2.49
*101051	20 29 05.20	−07 01 02.8	8.61	H	307.271 673 72	−07.017 452 42	6.13	−5.41	−11.82	1.21	0.86	1.33	1.64	1.29	+24 −19 −18 − 2 +23 −13 +27 +46 − 8 +15	0	0.39
*101052	20 29 05.88	+35 49 52.5	7.31	H	307.274 512 41	+35.831 249 36	3.59	−2.40	−17.57	0.48	0.52	0.71	0.52	0.55	−14 +12 − 7 + 4 + 4 −18 + 4 −12 +18 −20	0	1.22
*101053 H	20 29 05.97	−48 26 12.5	8.98	H	307.274 886 68	−48.436 816 10 A	8.81	55.30	−50.33	3.17	2.82	3.06	4.12	3.17	−11 −20 + 4 − 3 +10 − 6 +11 + 3 + 6 + 8	1	0.26
*101054	20 29 06.86	+28 21 39.0	7.39	G	307.278 602 88	+28.360 842 84	12.77	73.49	59.25	0.42	0.52	0.79	0.45	0.56	−28 − 1 −10 −15 + 5 −13 + 3 −21 +17 −36	0	−1.55
*101055	20 29 08.76	+12 40 51.7	6.94	1 H	307.286 490 40	+12.681 040 33	3.72	5.84	4.31	0.74	0.55	0.84	0.88	0.70	+20 −19 −12 +12 +21 +12 +19 +38 + 4 +31	0	1.93
*101056	20 29 09.66	+16 16 25.1	8.36	2 H	307.290 264 69	+16.273 642 21	3.57	49.02	−1.20	0.76	0.67	0.97	0.99	0.76	+20 −15 −27 +21 +30 − 3 +26 +14 +10 +18	0	0.91
*101057	20 29 10.70	−57 10 39.4	8.23	H	307.294 596 30	−57.177 622 03	1.71	−4.73	−0.13	0.73	0.67	1.03	0.91	0.73	+ 7 −17 −25 + 0 −15 + 0 −25 −27 +26 −40	0	0.05
*101058	20 29 11.06	+47 06 17.5	8.73	G	307.296 092 30	+47.104 853 81	4.91	18.46	9.14	0.74	0.70	0.87	0.87	0.85	−12 − 6 +14 + 8 − 8 − 4 − 8 + 8 +14 + 4	0	1.27
*101059	20 29 11.69	+04 27 23.5	7.08	H	307.298 692 05	+04.456 535 29	27.14	30.43	28.29	0.79	0.61	0.97	0.98	0.81	+14 −10 −12 + 5 − 1 +20 + 1 +39 −16 +12	0	0.01
*101060	20 29 11.86	−29 23 34.2	9.69	H	307.299 426 96	−29.392 819 83	9.02	42.34	−77.82	1.35	0.85	1.50	1.71	1.31	+11 − 6 + 6 −15 +15 +34 +12 +33 +10 +22	0	1.04
101061	20 29 12.88	+33 30 31.5	8.82	H	307.303 655 00	+33.508 749 85	2.01	3.23	−4.41	0.61	0.63	0.97	0.72	0.66	+ 1 − 2 − 2 + 1 − 6 −20 − 6 −11 +22 + 0	0	1.11
101062 H	20 29 13.54	+37 30 45.8	7.74	G	307.306 413 88	+37.512 722 43 A	5.06	−1.71	6.15	1.13	1.21	1.39	1.19	1.36	− 1 − 8 + 8 + 6 − 6 −24 − 5 +11 − 7 + 4	5	1.10
101063	20 29 15.78	−40 25 01.1	10.34	3 H	307.315 769 76	−40.416 970 04	1.89	−7.12	−22.34	2.15	1.15	2.45	3.07	1.93	− 2 +23 + 7 − 6 +28 +42 +28 +38 +31 +26	0	1.87
101064	20 29 17.96	−64 23 39.2	8.94	2 H	307.324 812 78	−64.394 230 70	0.57	1.53	0.97	0.94	0.89	1.42	1.15	1.12	−15 − 3 − 3 +10 + 3 −18 − 2 − 6 +12 −45	0	1.13
101065	20 29 18.89	+60 25 18.1	7.69	H	307.328 693 29	+60.421 682 11	4.45	6.31	−21.45	0.53	0.52	0.56	0.59	0.55	− 9 + 5 − 1 +15 +17 −16 +19 −25 +12 − 6	0	0.60
101066	20 29 20.18	+46 39 59.1	10.12	H	307.334 096 81	+46.666 408 13	2.19	−0.15	−4.43	1.09	0.96	1.22	1.41	1.19	−10 − 1 +10 −22 − 6 − 3 − 9 + 7 +18 + 1	4	1.72
101067	20 29 20.39	+36 27 17.0	5.90	1 H	307.334 952 38	+36.454 732 84	1.93	2.58	−1.58	0.37	0.40	0.52	0.40	0.40	−11 + 5 + 5 + 9 + 2 − 8 + 4 −16 +11 − 8	0	0.00
101068	20 29 20.81	+50 27 37.2	7.60	1 H	307.336 727 60	+50.460 331 00	2.14	9.00	5.73	0.56	0.47	0.58	0.63	0.50	−10 + 0 + 4 −10 + 6 − 2 + 6 − 7 + 3 − 5	0	0.60
101069	20 29 20.92	+04 35 18.3	9.03	H	307.337 181 96	+04.588 407 96	4.18	−0.92	−5.58	1.10	0.93	1.33	1.42	1.25	+30 −13 −13 + 1 +13 +13 +14 +52 −11 +31	0	−1.85
101070	20 29 21.15	+20 05 15.8	6.58	H	307.338 144 42	+20.087 714 49	13.36	−17.88	−5.96	0.62	0.51	0.80	0.73	0.56	+ 8 −24 −18 +19 +16 + 5 +15 +23 + 0 + 2	0	0.72
101071	20 29 21.30	+29 47 54.0	9.76	H	307.338 741 17	+29.798 340 77	2.98	7.84	−0.21	0.63	0.88	1.33	0.73	0.87	−28 + 6 −13 +17 − 7 + 3 − 7 −20 + 8 −34	1	1.56
101072	20 29 21.62	−34 06 40.7	8.53	H	307.340 102 50	−34.111 296 88	3.80	19.62	−6.07	0.93	0.57	1.12	1.11	0.74	+29 − 6 + 7 −15 +14 +12 +10 + 0 − 4 +59	0	0.12
101073	20 29 21.83	+35 01 39.1	9.60	H	307.340 944 77	+35.027 536 18	2.69	2.23	7.77	0.80	0.88	1.21	0.81	0.91	− 9 −12 + 5 +25 + 1 −18 + 1 − 3 + 8 − 8	0	2.51
101074	20 29 22.02	+25 04 27.2	7.75	H	307.341 750 74	+25.074 230 30	2.25	−2.69	−1.97	0.61	0.60	0.89	0.67	0.68	+ 6 + 8 −15 +23 −12 − 9 − 7 −10 + 0 +29	0	−0.84
101075	20 29 23.52	+60 58 03.8	9.46	H	307.348 010 09	+60.967 731 87	2.30	1.41	4.81	0.84	0.78	0.88	0.94	0.96	+ 0 −13 − 3 +23 +17 −21 +20 −15 +10 + 7	0	−1.03
101076	20 29 23.73	+30 22 06.8	4.01	G	307.348 879 00	+30.368 556 61	4.30	6.87	−0.64	0.29	0.36	0.52	0.31	0.34	−28 + 1 + 0 +10 − 9 − 8 − 9 −17 + 9 −33	0	0.06
101077	20 29 25.60	+01 32 31.2	10.24	H	307.356 659 70	+01.542 000 07	3.71	1.11	−0.30	1.50	1.27	1.89	2.08	1.70	+21 − 2 −23 +40 − 3 +14 + 2 +58 −23 +14	0	2.01
*101078	20 29 26.40	−61 28 35.4	8.94	H	307.359 998 58	−61.476 498 21	7.42	−30.34	−4.02	0.71	0.81	1.12	0.80	1.34	+20 −24 + 6 +34 −20 + 5 + 2 −39 + 7 +42	0	2.44
*101079	20 29 26.36	+09 53 52.3	7.21	2 H	307.359 845 38	+09.897 863 54	1.34	−13.43	−12.31	0.77	0.68	0.98	0.89	0.87	+37 −22 −22 − 2 +44 + 0 +38 −55 − 9 +52	0	0.11
101080	20 29 26.67	−49 46 58.5	8.44	H	307.361 136 14	−49.782 911 44	4.97	15.20	−16.84	1.01	0.76	1.17	1.58	0.86	+ 8 + 0 −28 +18 +25 −19 +18 + 6 +14 +16	0	0.30
101081	20 29 26.83	+44 31 46.6	9.59	H	307.361 773 59	+44.529 612 77	1.32	−2.40	−6.40	0.83	0.78	1.01	0.94	0.91	+ 3 −15 − 1 − 8 − 7 +14 − 8 − 5 + 7 +19	0	−1.02
*101082	20 29 27.31	+81 05 26.7	5.96	H	307.363 807 25	+81.090 738 43	15.88	67.05	221.67	0.50	0.45	0.52	0.62	0.55	+13 −24 −15 −11 − 5 +12 − 4 −20 + 7 +20	0	−2.00
*101083	20 29 27.05	−42 56 23.1	9.10	H	307.362 719 37	−42.939 750 22	0.31	12.52	−3.75	1.11	0.80	1.39	1.27	1.04	+21 −31 −26 + 7 + 9 − 3 +10 +11 − 5 +27	0	−0.08
*101084 H	20 29 27.11	+56 04 05.4	5.89	H	307.362 941 72	+56.068 178 98 A	3.64	4.57	4.63	0.54	0.53	0.54	0.56	0.52	−20 −13 + 7 − 6 +16 − 7 +13 −14 +16 −13	3	0.52
101085	20 29 27.41	+53 22 00.5	8.55	H	307.364 220 63	+53.366 796 54	2.37	0.46	−6.47	0.62	0.56	0.66	0.79	0.58	+ 0 −11 + 8 +15 + 0 + 0 − 1 +20 +13 + 0	0	−1.13
101086	20 29 28.25	+38 57 05.5	8.45	G	307.367 718 86	+38.951 533 72	2.61	8.86	6.73	0.58	0.66	0.81	0.59	0.67	+ 0 − 1 +10 + 4 + 1 −10 + 2 −17 + 2 + 1	0	−1.37
101087	20 29 28.39	+42 19 00.6	8.01	H	307.368 271 29	+42.316 827 89	8.84	−6.60	−63.18	0.55	0.52	0.69	0.57	0.54	−11 −11 + 5 +16 + 7 −11 + 6 −15 +22 −10	0	0.36
101088	20 29 30.02	−12 35 28.9	7.39	H	307.375 073 84	−12.591 369 05	4.65	−3.21	−6.05	0.90	0.64	1.11	1.13	0.94	+28 − 4 −24 − 2 +12 +35 +22 +53 −16 +25	0	0.04
101089	20 29 30.94	−66 57 44.8	8.52	H	307.378 905 26	−66.962 441 19	6.13	53.79	2.47	0.58	0.72	1.13	0.71	0.91	−49 + 8 − 8 +19 − 7 + 0 − 6 +14 +10 −52	0	0.39
101090	20 29 31.34	−22 23 29.4	6.13	H	307.380 565 19	−22.391 491 66	6.14	8.23	−30.91	1.01	0.50	0.94	1.17	0.65	+ 6 − 7 −15 −45 + 7 + 9 + 7 +14 −10 +10	0	0.34
101091	20 29 32.25	−57 57 27.2	9.39	G	307.384 358 15	−57.957 546 48	12.06	286.90	−91.12	0.97	0.87	1.55	1.42	1.12	+25 −25 −21 −39 + 0 − 7 − 1 −32 +27 −33	0	0.94
101092	20 29 33.89	+38 56 29.8	8.55	G	307.391 194 92	+38.941 615 70 A	1.17	−0.97	−2.63	0.92	1.26	1.27	0.97	1.07	− 3 − 3 +13 +20 + 4 − 4 + 7 −30 + 6 + 1	6	0.80
101093	20 29 34.83	+62 59 38.9	4.21	H	307.395 113 83	+62.994 137 22 +	24.04	45.00	−13.31	0.50	0.46	0.53	0.47	0.40	−11 − 8 −13 −28 + 1 +12 + 0 −37 +20 +14	2	0.87
101094	20 29 35.01	−41 23 59.1	7.53	H	307.395 885 62	−41.399 745 92	6.41	−22.64	3.04	0.77	0.51	0.88	0.95	0.65	+ 9 −21 −11 − 6 +13 +12 +14 + 2 − 3 +25	0	0.46
101095	20 29 35.54	−10 00 07.4	8.52	H	307.398 090 65	−10.002 049 83	3.25	−5.70	−9.83	1.08	0.73	1.31	1.31	1.14	+30 −24 −19 −17 + 7 +24 +13 +35 −30 +19	0	−0.49
101096	20 29 35.75	+60 59 32.7	7.84	H	307.398 975 42	+60.992 405 02	12.74	−32.12	32.22	0.61	0.56	0.62	0.68	0.66	− 6 + 1 − 5 +24 +13 −13 +17 −11 +11 + 3	0	−2.08
101097	20 29 36.28	−53 55 14.8	9.23	H	307.401 155 70	−53.920 775 28	1.17	37.42	−44.96	1.21	0.99	1.39	1.74	1.37	+17 −27 − 5 +36 + 5 −17 + 1 +15 + 4 + 2	0	0.61
101098	20 29 36.85	−21 07 34.6	9.01	1 G	307.403 559 29	−21.126 288 85	0.09	1.88	−9.68	1.26	0.79	1.57	1.65	1.14	+29 − 2 −21 −20 −10 +31 − 5 +12 −26 +24	0	1.46
101099	20 29 37.04	−76 43 21.3	9.06	H	307.404 328 43	−76.722 577 28	5.65	1.49	14.49	0.66	0.70	0.96	0.79	0.73	−16 + 5 − 3 +27 − 3 −10 − 4 + 5 −12 −14	0	1.56
101100	20 29 37.75	−22 50 42.4	7.59	H	307.407 308 17	−22.845 104 21	2.23	−9.15	11.05	0.92	0.58	1.04	1.11	0.79	+28 −19 −15 −21 − 3 +18 + 1 +12 −19 +27	0	−0.62

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
101001	9.347	0.018	8.950	0.018		0.380	0.002	G	0.44	0.00	H	9.0022	0.0026	0.016	68		8.97	9.03		C			1								
101002	8.155	0.006	7.944	0.006		0.202	0.008	T	0.22	0.01	L	7.9882	0.0011	0.014	256		7.97	8.01					1								S
101003	10.564	0.060	9.798	0.046		0.697	0.002	G	0.75	0.00	H	9.8409	0.0028	0.018	79		9.81	9.88		C			1								
101004	10.182	0.035	9.294	0.026		0.776	0.034	T	0.81	0.02	L	9.3559	0.0022	0.015	65		9.32	9.38		C			1								
101005	10.057	0.026	8.509	0.014		1.300	0.023	T	1.26	0.02	L	8.5060	0.0014	0.013	83		8.47	8.53					1								
101006	7.673	0.003	7.276	0.003		0.403	0.003	G	0.47	0.00	H	7.3190	0.0008	0.012	360		7.30	7.34		C			1								S
101007	9.852	0.020	8.783	0.014		0.926	0.019	T	0.92	0.01	L	8.8583	0.0018	0.021	149		8.83	8.90					1								
101008	9.120	0.012	8.722	0.012		0.377	0.016	T	0.44	0.02	L	8.7899	0.0018	0.018	148		8.76	8.82		C			1								
101009	9.957	0.026	9.349	0.024		0.565	0.026	T	0.64	0.02	L	9.3736	0.0025	0.020	106		9.34	9.41		C			1								
101010	9.660	0.021	8.841	0.017		0.739	0.021	T	0.79	0.01	L	8.8959	0.0044	0.023	80		8.86	8.93		U			1								
101011	7.664	0.008	6.512	0.007		0.999	0.002	G	0.98	0.00	H	6.5707	0.0013	0.008	62		6.56	6.58					1								S
101012	10.291	0.025	9.009	0.014	A	1.101	0.243	G	1.00	0.04	L *	9.0252	0.0019	0.021	143	*	8.98	9.06		D	20287+3423	M 1	2 C	A	AB	87	1.193	0.035	2.85	0.14	
101013	8.450	0.014	6.983	0.007		1.236	0.012	T	1.19	0.01	L	7.0031	0.0008	0.006	86		6.99	7.02					1								S
101014	9.921	0.028	8.467	0.015		1.226	0.025	T	1.18	0.03	L	8.5060	0.0020	0.015	72		8.48	8.53		C			1								
101015	9.787	0.022	8.718	0.015		0.926	0.020	T	0.92	0.01	L	8.7764	0.0018	0.017	89		8.75	8.80		C			1								
101016	8.566	0.011	8.709	0.016		−0.125	0.017	T	−0.11	0.02	L	8.7125	0.0026	0.023	109		8.68	8.76					1								
101017	5.965	0.003	6.074	0.004		−0.094	0.004	T	−0.08	0.01	L	6.0662	0.0006	0.006	112		6.06	6.07		C			1								S
101018	9.041	0.011	8.975	0.014		0.066	0.017	T	0.08	0.02	L	9.0247	0.0018	0.021	180		8.99	9.06					1								
101019	7.838	0.008	7.376	0.008		0.445	0.015	G	0.51	0.02	H	7.4282	0.0011	0.009	77		7.42	7.45					1								S
101020	7.371	0.007	7.394	0.007		−0.016	0.009	T	0.01	0.01	L	7.4078	0.0011	0.010	133		7.39	7.43		C			1								S
101021	9.108	0.016	8.912	0.018		0.180	0.023	T	0.20	0.03	L	8.9685	0.0018	0.012	96		8.95	9.00		C			1								
101022	7.467	0.006	6.881	0.006		0.547	0.007	T	0.62	0.01	L	6.9346	0.0010	0.008	96		6.92	6.95		C			1								S
101023	12.521	0.212	9.115	0.017		2.853	0.175	T	2.15	0.60	K	8.2883	0.0398	0.328	126		7.55	8.69		U 2 C			1 G								P
101024	11.064	0.071	9.326	0.028		1.450	0.060	T	1.45	0.10	L	9.2928	0.0019	0.015	63		9.27	9.32		C			1								
101025	10.868	0.038	10.205	0.035		0.655	0.002	G	0.72	0.00	H	10.2604	0.0031	0.038	147		10.18	10.32			20289−5951	I 1	1								
101026	10.130	0.024	9.274	0.019	A	0.800	0.495	G	0.82	0.04	L *	9.2979	0.0015	0.017	114	*	9.27	9.33		D	20289−5441	I 1	2 C	B	AB	106	1.608	0.043	3.47	0.24	
101027	5.232	0.004	4.838	0.004	*	0.386	0.014	G	0.44	0.02	A *	4.8543	0.0005	0.005	71	*	4.85	4.88		D	20289−1750	I 2	2 C	A	AB	199	1.013	0.005	2.05	0.02	S
101028	11.394	0.055	9.563	0.018		1.523	0.046	T	1.56	0.07	L	9.5494	0.0013	0.023	196		9.51	9.58					1								
101029	9.188	0.010	8.930	0.011		0.242	0.015	T	0.27	0.02	L	8.9864	0.0017	0.020	205		8.95	9.03					1								
101030	10.118	0.027	9.654	0.028		0.470	0.015	G	0.54	0.02	H	9.7138	0.0026	0.025	129		9.67	9.76					1								G
101031	9.301	0.015	8.469	0.012		0.725	0.002	G	0.78	0.00	H	8.5348	0.0019	0.019	138		8.50	8.57			20289−6228	I 1	1								
101032	8.229	0.007	8.260	0.009		−0.024	0.010	T	0.00	0.01	L	8.2729	0.0012	0.016	240		8.25	8.30		C			1								
101033	9.630	0.019	8.154	0.010		1.243	0.017	T	1.20	0.02	L	8.2142	0.0015	0.014	96		8.19	8.25		C			1								S
101034	9.775	0.021	7.797	0.009		1.640	0.018	T	1.66	0.02	L	7.6833	0.0023	0.016	93		7.66	7.71					1	S							
101035						1.710	0.510	G	1.69	0.52	J	11.0245	0.0355	0.244	139		10.71	11.28	4.61	P 1 A			1								G
101036	7.555	0.009	6.801	0.008		0.689	0.009	T	0.75	0.01	L	6.8546	0.0011	0.007	68		6.84	6.87		C			1								S
101037	9.506	0.015	9.011	0.015		0.477	0.016	T	0.55	0.02	L	9.0771	0.0019	0.019	129		9.04	9.11		C			1								
101038	8.741	0.010	8.564	0.012		0.170	0.015	T	0.19	0.01	L	8.6042	0.0017	0.016	129		8.57	8.63					1								
101039	7.257	0.007	7.104	0.006		0.139	0.009	T	0.15	0.01	L	7.1280	0.0013	0.009	70		7.11	7.14		C			1								S
101040	7.941	0.009	6.673	0.006		1.080	0.008	T	1.04	0.01	L	6.7133	0.0011	0.007	76		6.70	6.73		C	20289−1750	I 2	1								S
101041	8.198	0.007	7.986	0.008		0.202	0.010	T	0.22	0.01	L	8.0295	0.0012	0.015	236		8.00	8.06					1								S
101042	10.617	0.060	9.853	0.048		0.681	0.058	T	0.74	0.05	L	9.9881	0.0029	0.022	74		9.95	10.02		C			1								
101043						1.700	0.143	G	1.68	0.15	J	11.5579	0.0104	0.057	27		11.31	11.66					1	S							G
101044	6.391	0.003	6.213	0.003		0.163	0.000	G	0.18	0.00	H	6.2465	0.0007	0.006	119		6.23	6.26		C			1								S
101045	10.960	0.074	9.346	0.032		1.352	0.064	T	1.32	0.07	L	9.3598	0.0025	0.015	50		9.34	9.39		C			1								
101046	9.636	0.023	8.919	0.020	*	0.659	0.024	T	0.72	0.02	L *	8.9446	0.0018	0.013	79	*	8.93	8.98		D	20290+0709	I 1	2 C	A	AB	22	0.345	0.004	0.40	0.04	
101047	7.607	0.008	7.401	0.008		0.197	0.011	T	0.22	0.01	L	7.4491	0.0013	0.012	103		7.43	7.47		C			1								S
101048	8.249	0.018	7.810	0.015	A	0.500	0.495	G	0.46	0.03	L *	7.7671	0.0024	0.016	59	*	7.75	7.80		D	20291−5105	I 1	2 C	A	AB	282	1.332	0.013	1.71	0.04	S
101049	9.884	0.021	9.378	0.020		0.486	0.022	T	0.56	0.02	L	9.3982	0.0027	0.029	121		9.36	9.47		C			1								
101050	9.075	0.015	9.043	0.021	*	0.034	0.024	T	0.05	0.02	L *	9.0679	0.0017	0.022	244	*	9.03	9.12		D	20291+2956	I 1	2 C	A	AB	333	8.291	0.005	0.82	0.02	
101051	10.051	0.034	8.759	0.020		1.099	0.031	T	1.06	0.03	L	8.7789	0.0016	0.012	56		8.76	8.80		C			1								
101052	9.186	0.012	7.465	0.006		1.446	0.005	G	1.44	0.01	H	7.4456	0.0009	0.012	152		7.43	7.47			20291+3550	I 1	1								S
101053	9.602	0.023	9.127	0.023	*	0.569	0.008	G	0.64	0.01	R *	9.1057	0.0023	0.017	72	*	9.08	9.13		D	20291−4826	I 1	2 C	A	AB	346	0.415	0.004	0.43	0.04	
101054	7.810	0.006	7.423	0.007		0.366	0.009	T	0.43	0.01	L	7.4752	0.0010	0.011	218		7.46	7.49		C			1								S
101055	6.965	0.006	6.942	0.007		0.014	0.002	G	0.03	0.00	H	6.9567	0.0020	0.017	72		6.94	6.99		U 2			1								S
101056	9.907	0.026	8.500	0.014		1.205	0.024	T	4.16	0.05	O	7.7338	0.0177	0.172	102		7.57	8.07		U 2			1	S							
101057	8.342	0.009	8.248	0.010		0.092	0.013	T	0.10	0.01	L	8.2700	0.0014	0.016	119		8.24	8.30		C			1								S
101058	9.018	0.012	8.734	0.013		0.234	0.003	G	0.26	0.00	H	8.7955	0.0017	0.016	110		8.77	8.83		C			1								
101059	7.681	0.008	7.135	0.008		0.512	0.010	T	0.58	0.01	L	7.1912	0.0008	0.008	73		7.18	7.21					1								S
101060	10.525	0.048	9.771	0.038		0.673	0.046	T	0.73	0.04	L	9.8247	0.0024	0.023	82		9.79	9.87		C			1								
101061	8.819	0.011	8.833	0.014		−0.008	0.016	T	0.01	0.01	L	8.8283	0.0026	0.024	164		8.79	8.87					1								
101062	8.482	0.020	7.717	0.015	*	0.674	0.020	G	0.73	0.02	H *	7.8802	0.0014	0.013	143	*	7.86	7.91		D	20293+3731	I 1	2 C	A	AB	214	4.043	0.003	0.41	0.01	S
101063						1.500	0.510	G	3.92	0.96	K	9.8498	0.2904	1.216	57		8.97	11.66	333.00	P 1 B			1	S							D P
101064	11.184	0.056	9.194	0.017		1.686	0.048	T	2.64	0.05	O	8.9413	0.0065	0.065	119		8.86	9.06		U 2			1								
101065	7.724	0.007	7.686	0.009		0.040	0.011	T	0.06	0.01	L	7.7114	0.0010	0.011	118		7.69	7.73					1								S
101066	10.401	0.035	10.196	0.045		0.280	0.015	G	0.32	0.02	H	10.1892	0.0025	0.025	108		10.14	10.24					1	S							G
101067	6.382	0.003	5.951	0.003		0.407	0.004	T	0.47	0.00	L	5.9906	0.0008	0.010	162		5.98	6.01		M			1								S
101068	7.608	0.006	7.592	0.008		0.019	0.009	T	0.04	0.01	L	7.6133	0.0023	0.018	119		7.58	7.63	5.40	P 1 A			1								S
101069	9.075	0.016	9.027	0.021		0.049	0.024	T	0.06	0.02	L	9.0554	0.0026	0.017	70		9.03	9.09		C			1								
101070	6.860	0.006	6.591	0.005		0.233	0.005	G	0.21	0.03	C	6.6384	0.0008	0.010	97		6.62	6.66					1								S
101071	9.941	0.018	9.763	0.023		0.171	0.027	T	0.19	0.03	L	9.8139	0.0023	0.031	263		9.76	9.87					1								G
101072	9.751	0.019	8.628	0.013		0.967	0.018	T	0.95	0.01	L	8.6991	0.0013	0.014	128		8.67	8.72		D			1								
101073	10.969	0.040	9.722	0.023		1.064	0.036	T	1.03	0.03	L	9.7703	0.0023	0.024	162		9.73	9.80		C			1								G
101074	9.731	0.020	7.929	0.009		1.500	0.017	T	1.53	0.03	L	7.8743	0.0016	0.013	118		7.85	7.90					1								
101075	9.634	0.020	9.478	0.025		0.150	0.030	T	0.17	0.03	L	9.5076	0.0021	0.020	99		9.48	9.54					1								
101076	4.505	0.002	4.056	0.001		0.404	0.001	G	0.46	0.03	C	4.1032	0.0004	0.004	237		4.10	4.11					1								S
101077	12.664	0.262	10.420	0.055		0.569	0.020	G	0.64	0.02	H	10.3641	0.0039	0.029	72		10.31	10.41		C			1	S							G
101078	9.440	0.014	8.962	0.014		0.463	0.015	T	0.53	0.02	L	9.0477	0.0020	0.019	142		9.01	9.09		C			1 G								
101079	9.277	0.015	7.499	0.007		1.511	0.014	T	3.06	0.03	O	7.0973	0.0105	0.203	107		6.88	7.47		U 2			1	S							
101080	8.580	0.013	8.469	0.016		0.100	0.019	T	0.11	0.02	L	8.4830	0.0027	0.019	69		8.46	8.52					1								S
101081	9.565	0.019	9.552	0.025		0.017	0.029	T	0.04	0.03	L	9.5975	0.0028	0.022	108		9.56	9.64					1								G
101082	7.154	0.005	6.071	0.004		0.942	0.002	G	0.93	0.00	H	6.1246	0.0006	0.006	116		6.11	6.14		C	20297+8106	I 2	1								S
101083	10.242	0.029	9.204	0.020		0.903	0.026	T	0.90	0.02	L	9.2569	0.0018	0.016	81		9.23	9.29		C			1								
101084	5.823	0.004	5.884	0.003	*	−0.052	0.004	T	−0.03	0.00	L *	5.8806	0.0008	0.006	99	*	5.87	5.89		D	20295+5604	I 1	2 C	A	AB	132	0.779	0.008	2.88	0.03	S
101085	8.657	0.010	8.556	0.012		0.098	0.015	T	0.11	0.02	L	8.5904	0.0012	0.012	121		8.57	8.61		C			1								S
101086	8.493	0.008	8.440	0.010		0.044	0.009	G	0.06	0.01	H	8.4828	0.0013	0.017	145		8.45	8.51					1								
101087	8.819	0.011	8.084	0.009		0.673	0.011	T	0.73	0.01	L	8.1444	0.0015	0.013	132		8.13	8.16		C			1								
101088	8.796	0.014	7.505	0.009		1.098	0.013	T	1.06	0.01	L	7.5536	0.0010	0.007	82		7.54	7.57		C			1								S
101089	9.094	0.009	8.566	0.008		0.504	0.009	T	0.58	0.01	L	8.6312	0.0015	0.020	255		8.60	8.67		C			1								S
101090	8.178	0.009	6.318	0.006		1.543	0.014	G	1.55	0.09	H	6.2527	0.0015	0.008	68		6.24	6.27					1								S
101091	10.189	0.023	9.417	0.019		0.656	0.002	G	0.72	0.00	H	9.5271	0.0025	0.025	143		9.49	9.57		C			1								
101092	8.571	0.010	8.561	0.013	A	0.010	0.015	G	0.03	0.01	H	8.6077	0.0073	0.019	145	A	8.58	8.64		C	20296+3856	I 1	2 C	D	AB	167	10.868	0.059	3.75	0.23	D
101093	4.471	0.003	4.235	0.002		0.199	0.003	G	0.20	0.03	C	4.2716	0.0005	0.005	93		4.26	4.29					1 O								S
101094	7.936	0.007	7.559	0.009		0.357	0.011	T	0.42	0.01	L	7.6186	0.0021	0.016	91		7.59	7.64					1								S
101095	9.704	0.023	8.631	0.016		0.929	0.021	T	0.92	0.01	L	8.6813	0.0020	0.014	74		8.65	8.71		C			1								
101096	8.413	0.009	7.898	0.010		0.513	0.015	G	0.59	0.02	H	7.9535	0.0011	0.010	106		7.94	7.97		C			1								S
101097	11.070	0.079	9.399	0.031		1.397	0.067	T	1.37	0.08	L	9.3758	0.0029	0.022	62		9.34	9.42		C			1								
101098	10.477	0.046	9.173	0.025		1.165	0.000	G	1.13	0.00	H	9.1836	0.0036	0.025	64		9.14	9.21		U			1								
101099	9.530	0.014	9.111	0.014		0.409	0.016	T	0.48	0.02	L	9.1547	0.0015	0.020	147		9.12	9.19					1								
101100	9.271	0.021	7.731	0.011		1.293	0.019	T	1.25	0.02	L	7.7495	0.0011	0.010	75		7.73	7.77		C			1								S

17690 | 15893

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
101101	20 29 38.96	−02 53 07.7	4.91	H	307.412 327 75	−02.885 476 30	17.08	71.88	−22.39	0.73	0.61	0.94	0.95	0.76	+31	−22	−30	+44	+ 0	+26	+13	+73	−15	+15	0	−0.51
101102	20 29 39.17	−67 39 47.9	9.65	G	307.413 216 98	−67.663 306 31	13.97	180.23	−134.86	0.62	0.99	1.50	0.65	1.24	−42	− 1	− 7	−13	+ 0	− 6	+ 4	+31	+ 9	−47	0	2.24
101103	20 29 39.95	−55 07 06.0	9.46	G	307.416 450 82	−55.118 327 51	9.72	−25.87	74.91	1.12	0.84	1.45	1.24	0.83	+10	−13	−24	−68	+ 6	− 7	+16	−49	+25	−38	0	−0.34
101104	20 29 40.76	−04 10 57.3	7.84	H	307.419 812 80	−04.182 580 75	2.20	−8.62	−11.37	0.95	0.67	1.11	1.47	0.90	− 3	− 1	−24	+41	−30	+35	−20	+58	−13	−16	0	−0.38
101105	20 29 40.90	+05 39 40.6	8.66	H	307.420 422 27	+05.661 267 37	4.55	12.53	−9.90	0.98	0.89	1.18	1.21	1.14	+36	−14	−18	+22	+32	+13	+36	+65	− 3	+33	0	1.04
*101106	20 29 41.72	−33 01 35.4	8.59	H	307.423 850 39	−33.026 497 73	−0.14	7.53	−13.60	0.90	0.62	1.17	1.08	0.77	+43	−13	+ 0	−19	−10	− 5	− 5	−27	− 8	+72	0	0.54
*101107	20 29 41.63	−31 14 40.7	9.87	H	307.423 452 36	−31.244 637 92	3.66	−9.73	5.74	1.35	0.85	1.62	1.74	1.23	+46	− 3	− 2	− 6	+18	+ 1	+13	+11	+10	+72	0	−0.30
101108	20 29 42.66	+50 19 07.1	9.06	H	307.427 740 85	+50.318 638 07	1.28	−2.32	−4.81	0.74	0.60	0.76	0.84	0.64	− 3	+ 5	+ 0	−11	+ 4	+ 1	+ 4	−13	+14	− 1	0	0.38
101109	20 29 43.18	+38 07 31.5	8.19	G	307.429 909 32	+38.125 414 96 A	6.97	0.23	0.62	3.20	3.55	3.44	3.24	3.44	− 6	+ 0	+16	−16	+ 2	−11	+ 5	−16	− 2	+ 7	2	0.03
*101110	20 29 43.94	+38 07 46.2	8.46	G	307.433 068 37	+38.129 486 57 B	9.52	−0.03	−1.50	9.32	10.58	6.71	6.36	6.68	+ 2	+ 2	+18	−17	+ 1	−14	+ 3	−11	− 5	+12	2	0.03
*101111	20 29 43.89	−19 05 26.8	8.56	H	307.432 857 08	−19.090 775 32	10.02	18.13	1.00	1.11	0.69	1.32	1.35	0.84	+35	−14	−22	−16	+ 1	+29	+ 7	+ 7	− 6	+41	0	0.59
101112	20 29 44.41	+45 29 40.4	8.90	G	307.435 057 23	+45.494 566 59	1.25	−2.74	−1.87	0.62	0.67	0.79	0.77	0.77	− 5	+ 4	+11	− 1	+ 3	− 7	+ 3	+15	− 1	+ 3	1	2.37
101113	20 29 44.76	−42 31 11.2	10.51	H	307.436 504 51	−42.519 767 05	3.17	3.79	3.50	1.89	1.13	2.26	2.25	1.45	+16	−41	−25	+ 1	+17	+ 7	+22	+15	−13	+19	0	1.03
101114	20 29 44.85	+02 59 46.5	7.09	G	307.436 888 46	+02.996 237 56	3.98	7.82	−3.63	0.76	0.63	1.04	1.02	0.85	+19	−14	−16	+28	− 8	+20	− 2	+46	−23	+15	0	−0.66
101115	20 29 46.13	−58 46 19.3	7.86	H	307.442 189 97	−58.772 021 14	4.53	4.11	3.77	0.60	0.57	0.93	0.89	0.69	+32	−25	−14	−25	+ 7	+ 0	+ 5	−22	+ 7	−18	0	−0.12
101116	20 29 46.14	+39 39 01.6	8.86	H	307.442 251 51	+39.650 431 50	7.93	−18.38	−52.63	0.70	0.75	0.97	0.69	0.77	−21	− 5	+16	− 7	+ 5	−10	+ 9	−27	+ 3	−11	0	1.18
101117 H	20 29 47.26	+64 00 02.0	9.87	H	307.446 902 40	+64.000 551 34 *	2.84	1.15	4.14	1.83	1.83	1.09	0.98	1.09	+ 8	+ 5	+13	−40	+ 4	− 1	+ 1	−22	− 1	+42	2	−0.68
101118	20 29 47.77	+36 58 49.5	7.77	H	307.449 028 27	+36.980 404 43	1.10	−4.54	−10.00	0.45	0.51	0.66	0.50	0.57	− 5	+ 6	+15	+ 6	+ 2	−25	+ 5	+ 4	+ 0	+ 8	0	0.40
101119	20 29 49.44	+20 36 18.5	8.56	H	307.455 987 60	+20.605 128 29	0.56	9.68	−4.56	0.92	0.75	1.10	1.13	0.87	+15	−11	−13	+25	+27	−11	+23	+35	+ 5	+21	5	0.56
*101120	20 29 52.58	−18 35 10.2	6.74	G	307.469 074 40	−18.586 163 40 B	23.89	14.11	−88.21	24.81	15.91	7.82	15.41	10.29	+29	−15	−19	−14	+ 6	+24	+ 7	+ 6	+ 3	+40	18	0.95
*101121	20 29 52.46	+44 29 14.2	8.27	H	307.468 567 56	+44.487 273 71	1.20	2.40	0.83	0.62	0.55	0.73	0.73	0.67	+ 7	−14	+ 7	− 8	− 2	+16	− 5	− 2	+11	+26	0	−0.51
101122	20 29 53.49	−25 47 05.6	9.53	H	307.472 884 88	−25.784 902 67 A	5.39	32.32	−84.12	2.29	1.54	2.34	3.10	2.11	+28	− 7	−13	+21	− 9	+27	− 6	+32	− 5	+ 8	0	−0.43
101123	20 29 53.89	−18 34 58.7	5.94	H	307.474 549 31	−18.582 984 74 A	13.65	25.56	−79.45	2.69	1.64	2.42	2.49	1.82	+29	− 8	−20	−22	− 2	+20	+ 0	− 7	− 2	+41	18	0.95
101124	20 29 55.14	+53 42 16.2	7.91	G	307.479 739 20	+53.704 486 57	2.81	46.86	−18.93	0.55	0.50	0.60	0.73	0.53	− 4	−14	+11	+ 9	+ 7	+ 7	+ 3	+12	+11	− 3	0	−1.90
101125	20 29 55.28	+10 18 07.6	6.76	H	307.480 330 90	+10.302 117 97	5.70	22.70	−16.38	0.66	0.60	0.87	0.78	0.80	+31	−19	−22	+ 2	+29	+ 9	+28	+53	−19	+41	0	−0.63
101126	20 29 55.42	+25 14 55.7	9.11	H	307.480 925 02	+25.248 795 67	5.09	−7.56	−4.97	0.79	0.79	1.13	0.89	0.96	+10	+19	− 2	+21	− 1	+ 5	−18	−14	−20	+27	0	0.09
101127	20 29 55.79	+48 06 53.7	9.12	H	307.482 467 65	+48.114 918 89	2.55	−3.76	−4.46	0.76	0.66	0.84	1.02	0.78	+ 6	−20	− 3	−11	− 4	+ 0	− 6	−24	+15	+ 7	1	−1.20
101128	20 29 57.34	−70 51 16.3	9.35	H	307.488 902 67	−70.854 540 65	5.58	7.04	18.29	0.81	0.90	1.23	0.87	1.23	−26	+10	−30	−35	+32	−19	+36	−26	+17	−40	0	−0.35
101129 H	20 29 58.35	−77 39 25.6	9.04	G	307.493 116 18	−77.657 115 10 *	4.08	−44.33	38.58	2.19	2.44	1.27	1.14	1.04	−17	−24	− 2	+13	+16	−13	+19	−15	− 3	+ 6	1	0.90
101130	20 29 58.75	+14 43 10.9	9.70	H	307.494 804 36	+14.719 700 34	0.84	−10.77	−7.26	1.06	0.95	1.44	1.25	1.12	+25	−19	+ 0	+ 5	+20	+15	+19	+18	− 2	+39	0	−0.03
101131	20 29 58.81	+30 33 23.9	7.75	H	307.495 022 01	+30.556 644 18	6.68	−3.20	−25.47	0.40	0.50	0.75	0.46	0.50	−21	− 2	+ 4	+12	− 2	+ 0	− 1	−13	− 1	−16	0	−0.02
101132	20 29 59.69	−56 05 06.0	10.10	H	307.498 714 89	−56.085 010 65	4.90	−1.87	−25.29	1.38	0.95	1.61	1.46	1.01	+20	−42	−15	−50	−13	+25	−11	−41	+11	−27	3	1.27
101133	20 29 59.87	+45 55 41.5	6.43	H	307.499 478 43	+45.928 194 32	7.86	80.51	148.93	0.54	0.48	0.63	0.62	0.52	−16	−13	+16	+ 8	+ 5	−15	+ 6	+ 6	+ 8	− 2	2	3.13
101134	20 30 00.72	+72 31 54.3	6.23	H	307.502 995 82	+72.531 762 45	4.78	−0.29	−24.44	0.51	0.43	0.51	0.60	0.44	−10	−18	+22	−11	+11	+ 8	+ 4	+ 2	+14	+ 6	0	0.54
101135	20 30 01.15	+48 46 45.3	8.69	H	307.504 806 41	+48.779 256 69	3.28	5.69	15.85	0.69	0.60	0.75	0.76	0.63	− 7	+ 7	+ 1	+ 0	+ 9	− 9	+10	−14	+ 5	− 2	0	1.05
101136	20 30 01.61	−04 26 14.7	7.63	H	307.506 702 01	−04.437 426 31	18.43	23.48	−91.27	0.87	0.61	1.03	1.28	0.80	+ 0	+ 0	−26	+31	−21	+34	−12	+54	−15	−12	0	−0.77
101137	20 30 01.98	−78 54 23.0	8.24	H	307.508 267 79	−78.906 375 16	11.18	−0.36	3.33	0.57	0.57	0.78	0.68	0.60	+ 1	−13	− 9	+ 6	− 1	+ 3	− 1	−14	−10	−10	0	1.09
101138	20 30 03.53	+48 57 05.6	4.94	1 H	307.514 715 67	+48.951 550 39	3.75	10.01	7.64	0.45	0.40	0.50	0.49	0.41	− 7	+ 0	+11	−14	+ 6	−11	+ 7	− 6	− 5	+ 0	1	0.44
101139	20 30 04.77	+19 40 03.4	6.88	H	307.519 861 32	+19.667 603 19	1.53	4.54	−4.67	0.64	0.54	0.86	0.75	0.57	+12	−20	−25	+19	+20	− 1	+19	+27	− 3	+ 5	2	1.78
101140	20 30 05.00	+48 38 29.0	7.64	H	307.520 817 73	+48.641 390 93	7.03	10.63	8.21	0.54	0.48	0.60	0.61	0.53	− 3	+ 1	+ 7	− 7	+ 4	−10	+ 4	− 8	+ 4	− 1	0	0.38
101141	20 30 05.57	+22 58 52.5	9.49	H	307.523 188 79	+22.981 251 01	−0.94	−0.47	−1.88	0.89	0.82	1.20	1.00	0.85	+29	− 9	+ 8	+28	+18	+ 3	+17	+23	+10	+45	0	1.26
101142	20 30 06.93	+45 26 55.7	7.77	H	307.528 891 23	+45.448 801 46	15.61	74.09	57.56	0.52	0.53	0.65	0.64	0.63	− 8	− 3	+13	+ 1	+ 1	− 6	+ 1	+ 7	+ 2	+ 2	1	1.85
101143	20 30 07.29	+19 25 48.6	7.31	H	307.530 379 14	+19.430 155 70	2.72	−0.34	−6.29	0.81	0.61	1.07	2.18	1.03	−12	−40	−21	−14	+18	+10	+33	− 9	−23	+34	5	1.23
101144	20 30 08.42	−67 01 02.5	9.05	H	307.535 065 65	−67.017 353 11	5.95	5.90	−25.04	0.65	0.87	1.29	0.78	1.04	−52	− 4	− 1	+20	−12	+ 1	−11	+29	+ 4	−54	0	−0.59
101145	20 30 08.49	−39 28 01.1	8.86	G	307.535 386 64	−39.466 976 28	20.06	67.52	−280.83	1.16	0.71	1.37	1.38	1.09	+18	−45	−20	+ 8	− 8	+ 5	− 1	+11	−14	+ 1	0	−1.01
101146	20 30 08.61	+04 34 21.3	11.47	G	307.535 869 48	+04.572 590 92	10.71	−205.70	−425.25	2.85	2.30	3.22	3.89	3.43	+23	+20	− 5	−10	+13	+13	+ 5	+47	− 3	+37	0	−0.11
101147	20 30 08.95	+37 10 01.2	8.00	H	307.537 285 28	+37.167 009 95	3.84	0.72	−6.18	0.50	0.56	0.73	0.56	0.62	− 3	+ 0	+ 7	+ 1	− 2	−17	− 1	+ 4	+ 7	+ 6	0	−0.92
101148	20 30 09.39	+30 55 31.2	8.45	H	307.539 109 22	+30.925 324 91	4.09	−3.18	−4.52	0.51	0.65	0.97	0.61	0.69	−20	− 9	+ 8	+11	− 2	−10	+ 0	− 8	+ 5	−11	1	0.64
101149	20 30 09.79	+10 02 03.5	8.14	H	307.540 771 84	+10.034 296 24	3.50	−4.61	−3.95	0.81	0.71	1.07	0.90	0.88	+26	−12	−29	− 6	+35	+ 8	+34	+52	−11	+38	0	−1.49
101150 H	20 30 10.77	+26 50 35.2	9.69	G	307.544 867 71	+26.843 106 41 A	43.24	−163.45	−130.30	3.38	3.36	4.37	3.89	3.96	−14	−14	+ 0	−13	+ 3	+ 6	+ 1	−20	− 4	− 3	1	2.88
101151	20 30 11.20	−46 54 38.4	10.25	H	307.546 685 02	−46.910 671 22	4.88	0.51	−7.65	1.74	1.25	2.12	2.90	1.80	+23	−24	−29	+31	+ 2	−16	+ 0	+ 8	−15	+11	4	0.05
101152	20 30 13.67	+27 51 58.0	7.82	H	307.556 956 73	+27.866 102 38	1.55	8.75	4.04	0.44	0.57	0.84	0.51	0.64	− 5	− 3	− 5	− 1	+15	− 5	+14	+ 1	+10	− 1	0	−1.31
101153	20 30 14.29	−51 45 06.8	9.65	H	307.559 539 24	−51.751 901 54	14.56	−29.45	−138.80	1.35	0.90	1.38	1.70	1.14	+ 1	−32	− 7	+18	− 3	+14	− 3	+ 4	+ 1	− 1	0	0.63
101154	20 30 14.44	+19 25 15.8	6.85	H	307.560 154 91	+19.421 049 58	3.71	4.02	−4.25	0.67	0.51	0.84	0.80	0.56	+ 9	−18	− 8	+23	+20	+13	+18	+19	+ 6	+12	4	1.37
101155	20 30 14.88	−01 10 22.2	8.56	H	307.562 014 93	−01.172 823 14	1.78	8.13	−3.39	1.06	0.94	1.29	1.59	1.34	+24	+ 3	+ 2	+42	+16	+26	+14	+72	+ 4	+28	0	−0.21
*101156	20 30 15.21	+01 52 36.6	8.98	2 H	307.563 368 41	+01.876 834 61	2.55	11.26	11.40	1.06	1.00	1.60	1.33	1.31	+31	+ 4	−32	+19	+ 3	+28	+ 9	+54	−32	+24	0	0.57
*101157	20 30 15.20	−13 01 42.5	8.01	H	307.563 346 34	−13.028 461 26	3.36	−14.31	−32.39	1.04	0.67	1.26	1.26	0.99	+20	− 7	−27	− 9	+ 5	+28	+18	+49	−26	+ 8	0	−0.76
101158	20 30 17.33	−35 21 18.2	9.36	H	307.572 206 73	−35.355 045 50	−0.15	0.99	1.77	1.31	0.74	1.50	1.65	1.03	+39	−39	−18	+15	+39	− 2	+38	+33	−13	+58	0	−0.90
101159 H	20 30 17.42	−69 04 08.8	7.09	H	307.572 566 98	−69.069 123 02 A	8.53	10.14	−44.67	0.96	1.17	1.57	1.05	1.36	−16	−23	− 8	+20	+ 9	− 9	+ 6	+ 2	+ 1	−35	1	0.04
101160 H	20 30 17.95	+10 53 45.3	6.03	H	307.574 796 31	+10.895 915 74 A	5.76	19.25	3.52	0.81	0.76	0.98	0.86	0.85	+59	−18	−18	+31	+48	+ 7	+51	+66	− 8	+57	1	0.59
101161	20 30 18.25	+77 44 07.4	8.73	H	307.576 027 60	+77.735 402 19	2.71	17.50	24.79	0.66	0.67	0.73	0.70	0.72	− 1	−25	+ 4	+18	+ 9	− 9	+10	+ 0	+ 7	+12	0	0.43
101162	20 30 18.47	−04 45 16.5	8.61	3 H	307.576 970 42	−04.754 589 98	0.68	−9.59	−18.22	1.14	0.90	1.22	1.56	1.24	+36	−24	−16	+ 9	+23	+14	+32	+62	− 7	+22	0	1.95
101163	20 30 18.68	+54 40 50.6	7.45	G	307.577 814 98	+54.680 732 89	18.88	97.46	103.25	0.51	0.51	0.59	0.61	0.54	− 9	− 1	+13	+16	+ 7	− 7	+ 7	− 3	+23	− 6	3	−1.33
101164	20 30 19.97	+49 46 49.2	6.57	H	307.583 188 16	+49.780 340 66	9.54	30.49	−70.04	0.50	0.42	0.53	0.57	0.45	− 1	+ 6	+16	−13	+ 1	− 4	+ 2	−12	+ 3	+ 1	0	1.40
101165	20 30 21.14	+70 36 41.5	8.14	H	307.588 065 13	+70.611 526 44	3.98	19.63	−0.69	0.63	0.65	0.69	0.77	0.67	− 3	− 8	+23	−13	+14	− 6	+ 9	+19	+ 0	+14	4	0.94
101166	20 30 21.65	+81 08 20.2	8.68	G	307.590 199 35	+81.138 947 46	14.79	67.54	221.35	0.69	0.63	0.73	0.87	0.81	+ 8	−21	−11	−13	− 7	+11	− 8	−15	+13	+13	0	0.46
101167	20 30 22.14	−11 47 57.0	7.97	H	307.592 265 80	−11.799 168 69	5.20	0.44	−11.72	1.07	0.71	1.16	1.56	1.10	+19	−11	−10	+ 7	+10	+ 8	+17	+50	− 4	+ 7	0	−1.36
101168	20 30 22.40	−46 27 19.5	9.17	H	307.593 353 11	−46.455 418 22	5.83	−8.43	10.44	1.06	0.73	1.27	1.55	0.95	+ 7	−13	−19	+13	− 2	− 9	− 3	− 2	+ 5	+10	0	0.69
101169	20 30 23.02	−50 52 07.6	10.12	H	307.595 936 74	−50.868 790 69	5.73	16.72	−29.46	4.44	3.38	4.90	6.15	4.06	+15	−18	−12	+26	+ 0	− 3	+ 3	− 7	− 8	+17	0	
101170	20 30 23.26	+40 39 53.0	8.03	H	307.596 907 61	+40.664 734 69	3.90	4.31	3.83	0.51	0.56	0.68	0.53	0.53	− 6	−12	+ 8	− 4	+ 4	− 3	+ 1	−37	+15	−10	0	0.88
101171	20 30 23.53	+54 59 10.0	8.81	H	307.598 026 61	+54.986 105 17	3.10	7.66	−0.98	0.65	0.69	0.79	0.80	0.79	−13	+14	− 7	−13	+ 8	−32	+ 8	− 3	+24	−16	0	1.19
101172	20 30 25.25	+27 49 58.0	7.05	H	307.605 202 96	+27.832 775 81	2.46	11.13	1.98	0.41	0.52	0.80	0.49	0.59	− 4	− 7	− 9	−13	+13	− 8	+11	− 6	+ 9	− 1	0	−0.23
101173	20 30 25.75	−44 27 23.7	8.97	H	307.607 307 87	−44.456 595 99	12.31	51.39	−94.58	1.09	0.77	1.37	1.66	1.13	+13	−18	−24	+ 3	+ 5	−24	− 4	+ 1	+16	+ 1	0	−0.82
101174	20 30 26.80	+52 17 37.9	7.46	H	307.611 676 41	+52.293 870 22	3.28	3.88	−3.27	0.52	0.47	0.56	0.60	0.49	+ 0	−17	+18	+24	+ 5	−10	+ 5	+23	+ 7	+ 0	0	0.58
101175	20 30 27.65	+66 03 24.4	7.78	H	307.615 211 70	+66.056 785 17	2.89	4.42	14.25	0.54	0.54	0.60	0.57	0.50	+ 0	+ 5	+24	+ 2	+10	+13	+ 7	− 7	+ 5	+ 8	1	0.51
101176	20 30 28.52	−45 31 16.1	10.10	H	307.618 837 06	−45.521 130 34	3.43	−28.36	−48.57	1.51	1.02	1.70	2.12	1.39	+15	−20	−20	+28	+ 8	+ 7	+10	+16	+ 5	+22	2	−1.28
101177	20 30 28.89	−33 09 19.8	9.03	H	307.620 369 85	−33.155 498 81	−0.23	−13.25	−10.80	1.06	0.70	1.37	1.35	0.94	+45	−15	− 4	−12	+ 2	− 4	+ 3	−12	− 3	+74	0	0.00
101178	20 30 29.73	−37 02 06.4	8.88	H	307.623 872 71	−37.035 119 70	3.13	2.37	−14.08	1.17	0.66	1.24	1.27	0.87	+15	− 6	−22	−31	+21	+ 0	+12	+ 9	+ 6	+47	0	1.98
101179	20 30 31.35	+43 27 48.9	7.60	H	307.630 636 12	+43.463 592 08	2.36	3.04	−14.95	0.55	0.51	0.69	0.65	0.53	− 5	+ 0	+12	+ 6	− 8	−21	− 5	+ 6	+20	− 5	0	−1.24
101180	20 30 31.42	+65 26 55.9	10.54	G	307.630 928 80	+65.448 869 52	125.62	443.25	284.06	0.97	1.01	1.11	0.95	1.08	+ 5	− 7	+24	−17	+ 3	+ 1	+ 5	−18	− 7	+24	1	0.28
101181 H	20 30 33.47	+13 49 02.4	8.02	G	307.639 468 52	+13.817 328 52 *	10.16	11.00	−14.11	0.78	0.65	0.98	1.06	0.79	+39	−12	+ 3	+ 2	+ 5	+ 4	+ 4	+ 3	+ 4	+58	0	1.50
101182	20 30 33.73	−64 11 24.7	7.12	H	307.640 528 05	−64.190 194 60	6.91	34.92	−11.38	0.59	0.56	0.85	0.64	0.63	+ 4	−12	−14	+34	+14	− 8	+10	+ 3	− 2	−10	0	0.09
101183	20 30 34.25	−05 23 22.4	7.73	2 H	307.642 718 93	−05.389 560 45	2.82	−4.82	−11.01	1.03	0.69	1.09	1.59	1.00	− 2	− 4	+ 2	+22	−12	+ 3	− 8	+43	+ 1	−21	0	−0.40
*101184	20 30 34.58	+58 17 15.0	7.63	H	307.644 083 62	+58.287 511 18	8.35	−26.96	−109.74	0.50	0.57	0.59	0.56	0.73	+ 1	+ 5	+11	− 2	+12	+ 2	+13	−27	− 5	− 1	3	1.47
*101185	20 30 34.56	−49 51 18.6	10.28	2 H	307.644 011 45	−49.855 170 57	3.16	7.38	−10.63	1.53	1.17	1.96	2.51	1.46	− 6	+ 6	−16	+ 9	− 1	−23	− 6	− 2	−10	−13	5	−0.96
101186	20 30 34.97	+44 18 54.9	7.10	2 G	307.645 712 34	+44.315 236 46	0.92	−2.46	1.62	0.54	0.46	0.62	0.67	0.51	+ 0	−20	+ 9	−19	−11	+ 6	−14	− 5	+18	+ 8	0	−0.79
101187	20 30 35.78	+08 40 11.3	8.49	H	307.649 101 23	+08.669 800 81	4.41	−8.03	−7.02	0.91	0.79	1.18	1.07	1.01	+36	−22	+ 5	+19	+43	+16	+37	+59	+12	+46	0	0.11
101188	20 30 35.97	+18 32 59.2	8.73	H	307.649 878 77	+18.549 769 08	3.86	15.13	6.98	0.86	0.69	1.08	1.17	0.72	+ 5	+15	−27	+ 9	+27	+ 2	+25	+11	+13	+14	0	1.00
101189	20 30 39.39	−05 49 33.3	8.08	H	307.664 144 72	−05.825 927 77	9.26	19.88	−8.22	1.20	0.77	1.12	1.66	1.13	− 9	−20	+ 8	+50	−12	+ 7	−14	+61	+ 6	−10	0	−1.69
101190	20 30 39.66	−16 33 02.6	7.75	H	307.665 233 16	−16.550 732 34	11.22	50.73	−49.79	0.90	0.55	0.95	1.07	0.67	+ 5	−18	−19	−18	+ 5	+26	+ 9	+ 3	+ 2	+12	0	−0.43
101191	20 30 40.95	−31 17 16.3	8.77	H	307.670 635 03	−31.287 853 91	3.71	−6.03	−10.02	1.09	0.68	1.28	1.54	1.05	+25	−16	−19	− 4	− 1	+ 6	+ 4	+20	−15	+16	0	−0.13
101192	20 30 41.04	−20 42 34.8	7.05	H	307.670 995 08	−20.709 660 87	6.23	1.47	−17.98	0.98	0.61	1.05	1.25	0.78	+30	−26	−15	−28	− 2	+23	+ 1	+ 6	+ 4	+14	0	−0.44
101193	20 30 41.42	−39 16 32.7	8.89	1 H	307.672 583 79	−39.275 758 63	−1.55	−15.99	−7.89	1.30	0.74	1.48	1.30	1.23	+25	−54	−17	+ 8	+ 1	+ 3	+ 5	+20	−11	+24	2	−0.88
101194	20 30 43.60	−45 35 13.0	8.89	H	307.681 647 26	−45.586 955 64	4.14	11.71	−1.63	1.11	0.74	1.21	1.63	1.01	+13	−16	−13	+35	+10	+ 6	+10	+18	+ 8	+17	2	0.03
101195	20 30 44.45	+12 05 27.4	8.54	2 H	307.685 216 12	+12.090 956 73	2.49	−2.01	−12.04	1.02	0.72	1.31	1.12	0.90	+15	−35	− 5	+24	+28	+ 2	+22	+38	+ 9	+29	0	0.45
101196	20 30 44.70	−29 41 26.9	8.19	H	307.686 252 83	−29.690 799 61	7.54	10.77	−6.67	0.97	0.65	1.13	1.20	0.97	+23	−21	− 7	− 9	+19	+40	+19	+44	+ 5	+34	0	−0.83
101197	20 30 44.93	+36 23 38.2	7.81	H	307.687 208 32	+36.393 939 94	6.89	4.12	−19.78	0.50	0.55	0.72	0.54	0.53	−16	− 3	+12	+13	− 2	− 5	− 1	− 8	+ 4	−13	0	−0.07
101198	20 30 45.60	+27 57 30.9	8.09	H	307.689 988 65	+27.958 578 99	4.18	49.21	49.34	0.56	0.71	1.08	0.67	0.83	− 6	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
101101	6.411	0.003	5.036	0.002		1.160	0.000	G	1.12	0.00	H	5.0735	0.0005	0.004	115		5.07	5.08		C			1							S
101102	10.671	0.018	9.736	0.013		0.780	0.004	G	0.82	0.00	H	9.7976	0.0020	0.034	349		9.74	9.86					1							
101103	9.920	0.023	9.468	0.024		0.378	0.003	G	0.44	0.00	H	9.5631	0.0020	0.020	135		9.53	9.60		C			1							
101104	9.736	0.023	8.000	0.011		1.448	0.020	T	1.45	0.03	L	7.9761	0.0013	0.011	90		7.96	8.00		C			1							
101105	8.996	0.016	8.700	0.017		0.281	0.022	T	0.32	0.03	L	8.7303	0.0015	0.014	70		8.70	8.76					1							
101106	8.626	0.009	8.575	0.011		0.046	0.013	T	0.06	0.01	L	8.6151	0.0013	0.016	142		8.59	8.65		C			1							S
101107	10.420	0.030	9.988	0.034		0.422	0.037	T	0.49	0.04	L	9.9635	0.0029	0.027	140		9.93	10.01		C			1							
101108	9.018	0.013	9.042	0.018		−0.017	0.020	T	0.01	0.02	L	9.0666	0.0019	0.017	111		9.04	9.10		C			1							
101109	8.078	0.007	8.145	0.010	A	−0.070	0.015	G	−0.05	0.01	H	8.1707	0.0328	0.160	126	A	7.98	8.42		D	20297+3808	I 2	1 C P B							
101110	8.397	0.009	8.446	0.011	B	−0.050	0.015	G	−0.03	0.01	H	8.5754	0.0403			B				D	20297+3808	I 2	1 C I B							
101111	9.039	0.017	8.602	0.017		0.426	0.019	T	0.49	0.02	L	8.6513	0.0014	0.014	68		8.63	8.68		C			1							
101112	8.809	0.010	8.873	0.014		−0.050	0.015	G	−0.03	0.01	H	8.8899	0.0019	0.015	128		8.86	8.92		C			1							
101113	10.870	0.054	10.627	0.069		0.227	0.088	T	0.25	0.10	L	10.5712	0.0053	0.034	75		10.52	10.63					1							G
101114	7.072	0.007	7.081	0.008		−0.005	0.002	G	0.02	0.00	H	7.0990	0.0012	0.008	85		7.08	7.11		C			1							S
101115	7.976	0.006	7.876	0.007		0.097	0.009	T	0.11	0.01	L	7.8992	0.0013	0.015	185		7.87	7.92					1							S
101116	9.483	0.016	8.923	0.015		0.524	0.020	T	0.60	0.02	L	8.9768	0.0016	0.018	141		8.95	9.02		C			1 S							
101117	10.259	0.030	9.897	0.032	*	0.343	0.041	T	0.40	0.06	L *	9.9508	0.0022	0.019	113	*	9.91	9.99		D	20298+6400	I 1	2 C A	AB	38	0.218	0.008	0.62	0.23	G
101118	7.979	0.006	7.796	0.008		0.175	0.009	T	0.19	0.01	L	7.8284	0.0012	0.013	161		7.81	7.85					1							S
101119	8.514	0.013	8.539	0.017		−0.018	0.020	T	0.00	0.02	L	8.5604	0.0017	0.015	83		8.51	8.59					1							
101120	6.925	0.011	6.695	0.013	B	0.220	0.015	G	0.24	0.02	H	6.8018	0.1014			B				D	20299−1835	I 2	1 C I A							S
101121	8.193	0.008	8.247	0.010		−0.040	0.015	G	−0.02	0.01	H	8.2602	0.0012	0.010	113		8.24	8.28					1							
101122	10.262	0.041	9.607	0.038	A	0.599	0.042	T	0.67	0.04	L	9.6586	0.0094	0.019	83	A	9.62	9.70		C	20299−2547	M 1	2 C A	AB	1	10.466	0.029	2.79	0.13	
101123	6.006	0.005	5.914	0.006	A	0.062	0.006	G	0.07	0.00	L	5.9659	0.0580	0.108	72	A	5.74	6.03		D	20299−1835	I 2	1 C P A							S
101124	9.145	0.013	8.044	0.009		0.960	0.015	G	0.95	0.01	H	8.0825	0.0011	0.011	126		8.07	8.10		C			1							
101125	8.125	0.010	6.883	0.006		1.060	0.009	T	1.03	0.01	L	6.9332	0.0009	0.007	94		6.92	6.95		C			1							S
101126	9.355	0.018	9.125	0.020		0.219	0.025	T	0.24	0.03	L	9.1777	0.0018	0.021	109		9.12	9.21					1 G							
101127	9.297	0.015	9.114	0.018		0.175	0.022	T	0.19	0.03	L	9.1801	0.0015	0.015	114		9.15	9.21		C			1							
101128	10.008	0.019	9.409	0.018		0.558	0.019	T	0.63	0.02	L	9.4742	0.0018	0.026	170		9.42	9.53					1 S							
101129	9.549	0.015	9.069	0.014	*	0.485	0.015	G	0.56	0.02	H *	9.1329	0.0020	0.021	143	*	9.09	9.17		D	20300−7739	H 1	2 C A	AB	236	0.206	0.012	0.76	0.37	
101130	11.388	0.089	9.786	0.033		1.342	0.075	T	1.31	0.09	L	9.8573	0.0026	0.023	93		9.81	9.89		C			1 S							G
101131	7.975	0.006	7.774	0.007		0.192	0.009	T	0.21	0.01	L	7.8095	0.0011	0.015	226		7.79	7.83					1							S
101132	10.657	0.038	10.137	0.039		0.498	0.041	T	0.57	0.04	L	10.2079	0.0026	0.024	109		10.15	10.24					1							
101133	7.905	0.008	6.560	0.005		1.137	0.000	G	1.10	0.00	H	6.5977	0.0008	0.007	118		6.59	6.61		C			1 S							S
101134	7.985	0.008	6.378	0.004		1.353	0.005	G	1.32	0.01	H	6.3814	0.0008	0.007	121		6.37	6.40					1							S
101135	8.848	0.016	8.712	0.019		0.131	0.023	T	0.15	0.02	L	8.7345	0.0023	0.016	123		8.71	8.76					1							
101136	8.249	0.011	7.687	0.011		0.551	0.015	G	0.62	0.01	H	7.7458	0.0016	0.011	89		7.73	7.76					1							S
101137	8.711	0.009	8.280	0.009		0.422	0.001	G	0.49	0.00	H	8.3374	0.0013	0.016	161		8.31	8.37					1							S
101138	4.824	0.002	4.929	0.002		−0.087	0.004	G	−0.06	0.03	C	4.9191	0.0013	0.011	116		4.90	4.94		U 2	20301+4857	I 1	1							S P
101139	6.680	0.004	6.847	0.007		−0.146	0.007	T	−0.14	0.01	L	6.8321	0.0010	0.009	90		6.82	6.85		C			1							S
101140	7.691	0.006	7.638	0.008		0.054	0.009	T	0.07	0.01	L	7.6625	0.0010	0.011	125		7.65	7.68		C			1							S
101141	9.461	0.020	9.499	0.028		0.000	0.015	G	0.02	0.01	H	9.4970	0.0018	0.023	95		9.45	9.54		C			1							G
101142	8.368	0.009	7.821	0.008		0.512	0.011	T	0.58	0.01	L	7.8795	0.0011	0.012	136		7.86	7.90		C			1							S
101143	7.173	0.007	7.311	0.010		−0.120	0.011	T	−0.11	0.01	L	7.2758	0.0012	0.009	86		7.26	7.29		D	20302+1925	I 2	1 G							S
101144	9.372	0.010	9.068	0.010		0.290	0.015	T	0.33	0.02	L	9.1190	0.0019	0.025	270		9.08	9.17					1 G							
101145	9.794	0.021	8.910	0.017		0.779	0.002	G	0.82	0.00	H	9.0063	0.0022	0.019	88		8.97	9.03		C			1							
101146						0.874	0.004	G	0.92	0.00	H	11.6585	0.0103	0.058	61		11.53	11.75					1							G
101147	9.727	0.016	8.139	0.008		1.331	0.014	T	1.29	0.02	L	8.1505	0.0014	0.014	157		8.13	8.17		C			1							
101148	9.546	0.014	8.553	0.010		0.869	0.013	T	0.88	0.01	L	8.6085	0.0014	0.017	200		8.58	8.64		C			1							
101149	8.366	0.010	8.147	0.012		0.209	0.015	T	0.23	0.02	L	8.2043	0.0009	0.008	91		8.19	8.22					1							S
101150	11.576	0.097	10.101	0.042	*	1.340	0.015	G	1.55	0.02	I *	9.7821	0.0026	0.033	149	*	9.73	9.84		D	20303+2650	I 1	2 C A	AB	306	0.837	0.005	0.28	0.03	G
101151	10.781	0.049	10.212	0.046		0.536	0.050	T	0.61	0.05	L	10.3663	0.0044	0.028	81		10.32	10.42		C			1							G
101152	7.710	0.005	7.783	0.008		−0.062	0.009	T	−0.04	0.01	L	7.8006	0.0009	0.011	184		7.78	7.83					1							S
101153	10.572	0.049	9.681	0.035		0.778	0.046	T	0.81	0.03	L	9.7908	0.0029	0.018	64		9.76	9.82		C			1							
101154	6.719	0.006	6.820	0.006		0.500	0.495	G	−0.09	0.01	L	6.8186	0.0020	0.013	91		6.80	6.84		D	20302+1925	I 2	1							S
101155	10.291	0.037	8.674	0.017		1.354	0.032	T	1.32	0.04	L	8.7042	0.0015	0.015	82		8.68	8.73					1							
101156	10.941	0.054	9.263	0.022		1.429	0.048	T	3.29	0.07	O	8.7884	0.0120	0.187	77		8.52	9.00		U 2			1 S							
101157	9.391	0.020	8.119	0.012		1.083	0.018	T	1.05	0.01	L	8.1789	0.0013	0.012	74		8.16	8.21		C			1							
101158	10.931	0.054	9.516	0.025		1.195	0.047	T	1.15	0.04	L	9.5257	0.0017	0.019	99		9.50	9.56					1							
101159	7.281	0.004	7.115	0.004	A	0.100	0.495	G	0.13	0.01	L *	7.1304	0.0011	0.013	199	*	7.11	7.15			20303−6904	I 1	2 C C	AB	258	4.101	0.036	4.06	0.48	S
101160	6.026	0.005	6.052	0.006	*	−0.019	0.007	T	0.00	0.01	L *	6.0303	0.0009	0.006	90	*	6.02	6.04		D	20303+1054	I 1	2 C A	AB	349	0.929	0.003	1.86	0.02	S
101161	10.174	0.028	8.859	0.016		1.117	0.025	T	1.08	0.03	L	8.8948	0.0017	0.015	113		8.87	8.92		C			1							
101162	10.446	0.045	8.848	0.021		1.363	0.041	T	3.81	0.11	O	8.1779	0.0422	0.223	74		7.84	8.48		U 2 C			1 S							
101163	8.052	0.010	7.510	0.010		0.534	0.015	G	0.61	0.02	H	7.5641	0.0011	0.012	110		7.55	7.59					1							S
101164	7.893	0.008	6.691	0.004		1.029	0.007	T	1.00	0.01	L	6.7419	0.0007	0.007	126		6.73	6.75					1							S
101165	9.289	0.016	8.241	0.012		0.910	0.015	T	0.91	0.01	L	8.3034	0.0015	0.013	107		8.28	8.33		C			1							S
101166	9.414	0.017	8.726	0.015		0.635	0.019	T	0.70	0.02	L	8.8224	0.0016	0.013	106		8.79	8.84		C	20297+8106	I 2	1							
101167	9.373	0.018	8.090	0.011		1.092	0.016	T	1.05	0.02	L	8.1403	0.0016	0.015	80		8.12	8.17					1							
101168	9.657	0.022	9.219	0.023		0.427	0.026	T	0.49	0.03	L	9.2691	0.0018	0.015	82		9.24	9.30		C			1							
101169	10.572	0.051	10.153	0.055		0.409	0.061	T	0.48	0.07	L	10.2141	0.0037	0.033	66		10.13	10.28					1 X							
101170	7.917	0.007	7.981	0.008		−0.125	0.005	G	−0.11	0.01	H	7.9870	0.0013	0.016	137		7.95	8.01					1							
101171	9.945	0.022	8.904	0.015		0.905	0.020	T	0.91	0.01	L	8.9730	0.0017	0.015	106		8.95	9.00					1							
101172	7.810	0.007	7.117	0.005		0.640	0.004	G	0.70	0.00	H	7.1827	0.0009	0.010	182		7.17	7.20		C			1							S
101173	9.639	0.021	9.029	0.020		0.566	0.021	T	0.64	0.02	L	9.0907	0.0022	0.018	82		9.07	9.13		C			1							
101174	7.584	0.006	7.475	0.007		0.106	0.009	T	0.12	0.01	L	7.5000	0.0009	0.009	121		7.49	7.52		C			1							S
101175	9.676	0.020	7.935	0.010		1.452	0.018	T	1.45	0.03	L	7.9167	0.0015	0.012	111		7.90	7.93		C			1							
101176	10.913	0.057	10.097	0.043		0.737	0.055	T	0.78	0.04	L	10.2503	0.0038	0.024	84		10.21	10.29					1							
101177	10.596	0.032	9.153	0.016		1.217	0.028	T	1.18	0.03	L	9.1987	0.0014	0.018	150		9.17	9.24		C			1							
101178	10.218	0.029	8.990	0.017		1.049	0.026	T	1.02	0.02	L	9.0428	0.0016	0.019	98		9.01	9.08					1							
101179	7.832	0.007	7.633	0.007		0.190	0.009	T	0.21	0.01	L	7.6651	0.0014	0.015	119		7.64	7.69					1							S
101180	12.559	0.182	10.783	0.077		1.542	0.012	G	2.38	0.09	I	10.5684	0.0026	0.027	110		10.53	10.63					1							G
101181	8.580	0.011	8.078	0.011	*	0.501	0.015	G	0.57	0.02	H *	8.1229	0.0016	0.016	91	*	8.09	8.15			20306+1349	H 1	2 C S A	AB	325	0.144	0.006	0.62	0.36	S
101182	7.671	0.007	7.170	0.006		0.471	0.008	T	0.54	0.01	L	7.2243	0.0011	0.011	131		7.21	7.25		C			1							S
101183	9.889	0.027	7.914	0.011		1.612	0.020	G	1.59	0.02	J	7.8481	0.0021	0.021	70		7.80	7.87		U 2 C			1							S
101184	8.822	0.011	7.730	0.007		0.944	0.010	T	0.93	0.01	L	7.7905	0.0010	0.009	117		7.77	7.81		C	20305+5817	I 1	1 G							
101185	10.753	0.055	10.414	0.065		0.328	0.094	T	0.38	0.13	L	10.3621	0.0043	0.076	65		10.31	10.71	1.11	P 1 A			1							G P
101186	8.062	0.008	7.224	0.006		0.847	0.067	G	1.15	0.03	C	7.2137	0.0022	0.020	108		7.18	7.25		U 2			1							S
101187	8.841	0.013	8.517	0.013		0.325	0.015	G	0.38	0.02	H	8.5676	0.0026	0.020	93		8.54	8.62					1							
101188	8.851	0.014	8.754	0.017		0.095	0.021	T	0.11	0.02	L	8.7681	0.0021	0.016	96		8.74	8.81					1							
101189	8.378	0.012	8.101	0.013		0.264	0.017	T	0.30	0.02	L	8.1484	0.0014	0.013	59		8.13	8.18					1							
101190	8.318	0.011	7.816	0.013		0.510	0.015	G	0.58	0.02	H	7.8628	0.0009	0.009	69		7.84	7.88					1							S
101191	10.841	0.060	8.958	0.021		1.564	0.050	T	1.58	0.05	L	8.8937	0.0017	0.017	102		8.86	8.92		C			1							
101192	8.674	0.015	7.175	0.009		1.261	0.014	T	1.22	0.01	L	7.2076	0.0012	0.008	73		7.19	7.22		C			1 G							S
101193	10.853	0.045	9.064	0.017		1.520	0.040	T	1.76	0.12	O	8.9890	0.0031	0.023	91		8.96	9.04		U			1							
101194	10.867	0.050	9.006	0.018		1.566	0.045	T	1.58	0.05	L	9.0033	0.0020	0.018	85		8.97	9.03		C			1							
101195	10.618	0.048	8.744	0.018		1.500	0.040	G	1.50	0.10	R	8.6716	0.0081	0.049	76		8.62	8.76	112.00	P 1 A			1							P
101196	8.520	0.012	8.221	0.013		0.284	0.017	T	0.32	0.02	L	8.2639	0.0011	0.011	80		8.25	8.29		C			1							S
101197	8.264	0.008	7.845	0.007		0.396	0.010	T	0.46	0.01	L	7.9014	0.0013	0.014	158		7.87	7.93					1							S
101198	9.555	0.016	8.219	0.009		1.133	0.014	T	1.10	0.01	L	8.2614	0.0017	0.018	175		8.22	8.29					1							
101199	7.279	0.008	7.181	0.008		0.096	0.011	T	0.11	0.01	L	7.2053	0.0011	0.006	65		7.19	7.22		C			1							S
101200	8.853	0.013	8.527	0.014		0.341	0.015	G	0.40	0.02	H	8.5837	0.0027	0.020	94		8.55	8.62					1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s	±° ′ ″	mag	6 7	deg	deg	10	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	29	30
101201	20 30 48.59	−52 48 28.8	7.84	H	307.702 475 28	−52.808 006 59		1.24	18.62	−20.61	0.94	0.75	1.03	1.33	1.10	+ 6	−13	− 3	+34	+ 3	+ 1	+ 2	+19	+15	+12	0	−0.41
101202	20 30 48.63	−39 24 43.6	9.55	H	307.702 616 19	−39.412 115 93		7.36	−30.74	−19.75	1.43	0.88	1.69	1.52	1.50	+19	−48	− 5	+ 8	+ 7	+ 6	+ 1	+24	+ 7	+30	2	−0.50
101203	20 30 50.05	+50 50 20.5	8.86	H	307.708 548 57	+50.839 017 07		1.00	−2.52	−7.03	0.67	0.58	0.71	0.75	0.62	−19	−17	+12	− 6	+ 6	+ 6	+ 4	− 5	+ 2	−11	0	0.44
101204	20 30 51.34	−00 27 29.7	9.13	H	307.713 932 73	−00.458 263 20		0.53	14.57	−11.73	1.14	0.95	1.32	1.61	1.32	+23	−12	− 3	+43	+ 6	+19	+ 6	+59	+ 0	+26	4	0.96
101205	20 30 51.87	−70 00 54.3	9.35	H	307.716 114 02	−70.015 077 92		8.58	14.38	−15.15	0.80	0.93	1.35	0.94	1.23	−28	− 2	+ 2	− 6	+ 6	− 8	+ 4	−16	+ 2	−46	3	2.19
101206	20 30 52.72	+49 12 47.6	6.65	H	307.719 672 05	+49.213 228 98		7.05	0.38	−11.53	0.45	0.42	0.51	0.51	0.44	− 5	+ 4	+11	− 5	+ 2	−11	+ 2	+ 1	+ 0	+ 0	1	1.40
101207	20 30 53.82	+30 17 26.4	8.35	H	307.724 229 24	+30.290 660 08		11.20	50.12	40.17	0.46	0.60	0.91	0.50	0.59	−30	+ 2	+ 5	+ 4	− 2	+ 2	− 2	−13	+ 2	−34	0	−0.43
101208	20 30 54.19	+35 38 37.4	8.79	H	307.725 809 87	+35.643 724 03		3.91	10.82	0.48	0.65	0.70	0.97	0.70	0.67	−21	− 2	+10	+17	− 2	− 9	− 2	− 5	+13	−25	0	−0.80
101209	20 30 55.76	−10 02 07.0	7.33	H	307.732 343 16	−10.035 285 15		4.53	23.84	−47.46	0.90	0.59	1.04	1.04	0.87	+20	−29	−19	−12	+ 9	+18	+17	+39	−28	+19	0	−0.86
101210	20 30 56.64	+26 41 08.1	7.37	H	307.736 010 11	+26.685 587 60		3.92	−2.95	−22.84	0.56	0.52	0.82	0.72	0.60	−14	−11	− 1	+19	− 6	+ 4	− 1	− 2	− 6	+ 7	0	−0.23
101211 H	20 30 56.79	−29 06 45.5	6.35	H	307.736 630 00	−29.112 650 34	*	5.49	18.53	−6.31	1.53	0.94	0.96	1.12	0.78	−21	− 6	+ 3	+ 7	− 1	+12	− 6	+31	− 6	− 2	1	0.14
101212	20 30 56.95	−01 28 44.5	8.74	H	307.737 311 75	−01.479 037 15		8.45	25.84	−20.47	1.03	0.91	1.33	1.41	1.19	+29	−13	−17	+44	+ 3	+15	+11	+66	−20	+20	0	0.83
101213	20 30 58.10	+20 36 21.6	6.21	H	307.742 063 75	+20.606 005 52		9.43	96.14	58.50	0.61	0.50	0.81	0.68	0.51	+10	−28	−27	+ 5	+26	−14	+17	+ 3	+11	+ 5	0	−1.10
101214 H	20 30 59.23	+36 56 09.1	6.21	G	307.746 789 64	+36.935 849 39	A	2.06	−0.20	−4.18	0.44	0.50	0.58	0.45	0.47	− 6	+ 0	− 5	+13	− 2	− 3	+ 0	− 3	+21	− 4	3	−0.37
101215	20 31 00.06	+26 29 13.0	9.64	H	307.750 238 72	+26.486 947 82	C	11.93	13.22	4.62	10.69	11.76	13.89	11.76	12.18	− 5	− 5	+ 5	+ 7	+ 1	+ 4	+ 1	+ 0	+ 4	+15	18	2.99
101216	20 31 01.71	+26 28 59.8	8.74	H	307.757 120 01	+26.483 275 04	A	0.53	2.09	−2.94	1.44	1.32	1.59	1.75	1.32	− 5	− 5	+ 6	+ 7	+ 4	+ 3	+ 4	− 2	+ 3	+14	18	2.99
101217	20 31 01.75	−26 05 11.8	9.53	H	307.757 296 60	−26.086 619 01		9.96	30.18	−59.26	1.86	1.23	1.62	1.97	1.67	+44	−25	−12	− 6	−38	+15	−38	−53	−16	+33	0	0.81
101218 H	20 31 01.96	+59 52 33.4	8.59	G	307.758 163 78	+59.875 950 55	A	7.40	24.78	8.21	0.99	1.40	0.92	0.90	0.90	− 3	+ 8	+ 6	+14	+ 8	− 3	+15	−14	+ 3	+ 2	2	−1.02
101219	20 31 02.28	+17 04 34.1	7.50	H	307.759 506 52	+17.076 133 55		1.28	5.28	2.74	0.67	0.54	0.81	0.72	0.59	+ 5	− 3	−21	− 7	+33	+ 8	+33	+15	+ 9	+22	0	−0.03
101220	20 31 02.76	+40 25 35.6	7.64	1 H	307.761 511 99	+40.426 556 63		2.75	6.60	3.69	0.47	0.53	0.64	0.49	0.53	−11	− 1	+ 0	+ 4	+ 7	− 1	+ 8	−32	+ 8	− 6	0	−0.01
101221	20 31 04.33	−15 03 21.8	6.10	H	307.768 046 10	−15.056 051 56		10.25	−39.47	−47.97	0.84	0.58	1.07	1.04	0.73	+17	−25	−43	−27	−17	+47	+ 8	+22	−22	+ 2	0	−1.42
101222	20 31 04.36	+54 35 25.4	7.83	G	307.768 151 94	+54.590 395 50		9.19	37.48	−7.79	0.53	0.51	0.60	0.61	0.58	− 8	+18	+ 0	+19	+ 6	− 1	+ 9	− 1	+24	− 9	0	−1.62
101223 H	20 31 06.12	+15 48 27.5	6.85	H	307.775 491 85	+15.807 644 72	*	6.18	−6.79	−5.52	0.61	0.54	0.81	0.71	0.58	+21	−32	−26	+20	+29	+ 0	+27	+13	− 2	+13	0	0.74
101224	20 31 06.39	−02 35 34.9	8.67	H	307.776 621 80	−02.593 031 19		10.27	−106.77	−49.11	1.45	1.09	1.65	1.45	1.22	+18	−38	− 9	+45	+12	+16	+12	+74	− 5	+25	4	−0.05
101225	20 31 06.63	−30 42 31.7	9.00	H	307.777 630 40	−30.708 803 18		7.65	0.20	−57.16	1.32	0.78	1.37	1.78	1.14	−10	− 7	−21	+29	−25	+23	−22	+39	−14	−16	0	3.39
101226	20 31 06.89	+40 51 28.5	7.44	H	307.778 722 73	+40.857 922 29		4.39	7.39	39.91	0.49	0.53	0.66	0.51	0.55	− 5	+ 6	− 6	+ 4	+ 5	− 7	+ 7	−32	+21	− 4	0	−1.31
101227 H	20 31 07.72	+33 32 33.6	8.34	H	307.782 173 33	+33.542 672 96	*	22.38	67.43	94.60	1.25	1.70	1.16	1.26	1.44	+ 1	+ 3	− 6	+ 1	+ 1	− 8	− 6	+ 2	+12	+15	2	0.54
101228	20 31 09.17	+18 40 16.8	9.96	H	307.788 216 41	+18.671 321 96		4.56	4.95	0.63	1.38	1.06	1.69	1.82	1.19	+ 3	+14	− 7	+12	+18	+ 4	+16	+27	+ 9	+12	2	−1.08
101229	20 31 09.38	+45 36 15.7	8.77	H	307.789 102 12	+45.604 359 32		1.70	−7.20	−4.78	0.67	0.68	0.83	0.87	0.85	−16	− 1	− 2	− 8	− 2	−11	− 3	+ 0	+ 7	− 8	3	1.47
101230	20 31 10.59	+57 23 15.8	8.42	H	307.794 109 74	+57.387 732 67		12.02	31.20	9.78	0.61	0.63	0.68	0.63	0.65	+ 4	+ 6	+ 3	+ 6	+ 2	− 1	+ 7	−31	+17	+12	3	1.98
101231 H	20 31 11.01	+55 19 15.1	9.14	H	307.795 891 46	+55.320 868 44	A	2.58	−8.05	−22.97	1.11	1.16	1.17	1.15	1.11	−10	+ 0	+16	− 1	+ 8	−13	+13	+ 0	+21	+ 0	1	−0.85
101232	20 31 11.29	+21 14 38.7	9.82	G	307.797 031 54	+21.244 074 98		3.83	−3.67	−0.09	1.10	0.97	1.41	1.14	1.07	+27	−21	− 3	+48	+ 6	+ 3	+ 8	+28	+ 8	+43	0	1.65
101233	20 31 11.94	+11 15 33.7	7.28	H	307.799 749 33	+11.259 365 69	B	−3.06	−10.41	−23.69	14.04	14.08	9.53	10.16	10.17	+41	−13	−22	+ 0	+24	+ 1	+24	+38	−10	+45	0	−0.31
101234	20 31 12.53	+56 53 25.5	7.95	H	307.802 211 81	+56.890 403 76		14.18	−155.90	−142.11	0.58	0.69	0.63	0.61	0.96	− 2	−14	− 6	+ 5	−10	− 8	−11	−52	+20	+12	0	0.68
101235	20 31 13.07	+11 15 38.3	7.08	H	307.804 450 03	+11.260 627 72	A	−6.04	6.66	−11.53	4.30	4.31	4.53	4.96	5.00	+40	− 9	−13	+ 8	+30	− 2	+ 28	+49	−11	+47	0	−0.31
101236 H	20 31 13.29	+05 13 06.1	8.77	2 H	307.805 356 23	+05.218 348 06	A	22.53	307.95	280.06	4.54	3.36	5.13	5.13	4.30	+ 4	−22	+11	+ 6	+ 5	+19	− 3	+45	+20	+16	11	1.99
101237	20 31 13.37	−62 14 56.4	8.21	H	307.805 689 41	−62.248 989 51		3.06	19.06	−46.35	0.68	0.61	1.00	0.70	0.68	+17	− 8	+ 4	+30	+16	+ 8	+10	−17	−13	− 1	0	−0.36
101238	20 31 15.23	+06 21 20.5	8.24	2 H	307.813 439 88	+06.355 704 24		1.32	17.96	6.34	0.89	0.88	1.18	1.07	1.14	+33	+ 6	− 9	+10	+31	+28	+32	+59	− 1	+40	0	0.15
*101239 H	20 31 15.49	+59 44 41.6	8.66	H	307.814 550 12	+59.744 877 12	A	2.46	0.19	−0.43	1.20	1.24	1.15	1.20	1.14	+11	+ 0	− 8	+19	+15	− 3	+14	−24	+ 7	+17	1	0.96
*101240	20 31 15.46	+32 31 44.0	8.35	H	307.814 410 79	+32.528 875 90		1.28	−2.99	−7.08	0.54	0.63	0.92	0.67	0.68	−18	−10	+ 5	+20	− 3	−14	− 1	−16	+ 9	−13	0	−0.07
101241	20 31 17.05	−80 32 38.4	7.56	1 G	307.821 041 41	−80.544 009 47		7.06	21.66	−41.98	0.52	0.48	0.69	0.58	0.55	+ 4	−33	+ 2	− 2	+10	− 6	+15	−20	−23	− 5	0	−0.31
101242	20 31 17.09	−28 25 36.7	9.33	H	307.821 225 07	−28.426 871 58		9.07	11.29	−51.33	1.14	0.78	1.35	1.49	1.15	+15	−15	−12	+ 8	+ 7	+41	+13	+40	− 7	+16	2	−0.09
101243	20 31 18.81	+49 13 13.3	5.44	1 H	307.828 368 58	+49.220 373 30		8.07	8.79	−31.28	0.43	0.41	0.49	0.48	0.43	− 5	+ 4	+ 4	− 5	+ 3	−13	+ 3	− 8	+ 3	− 1	1	1.86
101244	20 31 20.29	−17 08 19.1	7.71	1 H	307.834 534 82	−17.138 637 32		2.57	−4.34	0.63	0.91	0.58	1.02	1.28	0.74	+ 7	−22	−28	−13	−11	+36	+ 2	+ 8	−12	− 8	0	1.67
101245	20 31 21.11	+52 18 33.7	6.20	H	307.837 967 67	+52.309 372 18		9.37	40.61	63.27	0.46	0.41	0.49	0.56	0.47	− 4	−14	+11	+18	+ 3	− 6	+ 3	+21	+ 4	− 2	0	0.74
101246	20 31 21.57	−44 22 41.3	7.94	H	307.839 856 67	−44.378 147 76		5.06	43.93	−19.06	0.93	0.62	1.11	1.39	0.92	+11	−19	−15	− 2	+ 6	−23	+ 3	+ 8	+ 4	+ 3	0	−0.51
101247	20 31 21.87	+05 58 47.8	9.18	H	307.841 138 87	+05.979 944 53		6.20	16.06	25.03	1.00	0.95	1.41	1.27	1.29	+32	+ 7	−13	+15	+21	+35	+22	+54	− 8	+38	0	−0.87
101248	20 31 23.98	+28 36 25.1	8.43	H	307.849 926 43	+28.606 964 56		1.13	0.05	−1.52	0.54	0.61	0.93	0.59	0.67	+ 0	− 1	− 6	+25	+14	−13	+15	− 1	+28	+ 9	0	−1.56
101249	20 31 24.49	−18 04 54.6	8.23	H	307.852 051 43	−18.081 840 93		16.85	−14.15	78.65	1.07	0.70	1.27	1.28	0.93	+37	−28	− 5	− 5	+18	+39	+16	+33	+ 3	+49	0	1.34
101250	20 31 24.65	−27 44 54.5	8.36	H	307.852 700 20	−27.748 467 23		0.28	6.20	−12.25	0.85	0.61	0.97	1.05	0.90	+18	−17	− 4	+ 3	+17	+37	+15	+44	+ 8	+33	0	−0.37
101251	20 31 25.41	+22 03 21.3	8.56	H	307.855 856 86	+22.055 921 81		7.38	−12.62	39.23	0.85	0.68	1.09	0.92	0.75	+21	− 6	− 1	+15	+ 4	+ 3	+ 4	+14	+ 6	+41	0	1.61
101252	20 31 26.34	+39 56 19.6	7.59	H	307.859 752 92	+39.938 775 00		5.36	17.38	21.86	0.48	0.53	0.65	0.47	0.54	−11	+ 0	+ 2	− 5	+10	−12	+12	−29	+11	− 4	0	−0.32
101253	20 31 26.84	−32 36 36.4	9.28	H	307.861 830 18	−32.610 123 17		4.01	14.53	−65.00	1.04	0.66	1.44	1.29	0.96	+37	−25	+18	− 8	+ 9	− 8	+13	− 4	−12	+81	0	0.00
101254	20 31 27.33	+17 36 09.6	9.06	H	307.863 878 11	+17.602 679 63		2.20	15.63	−0.39	0.93	0.76	1.11	1.11	0.85	+12	− 5	−10	− 1	+36	+ 5	+31	+19	+12	+23	0	0.64
101255	20 31 28.72	+08 55 15.7	7.83	H	307.869 651 24	+08.921 040 04		9.24	48.37	16.63	0.77	0.68	1.00	0.89	0.84	+35	−25	−11	+ 5	+39	+12	+34	+56	+ 6	+46	0	−0.31
*101256	20 31 29.57	+56 10 48.0	8.50	H	307.873 210 58	+56.179 992 95		1.55	−2.40	−7.10	0.67	0.65	0.73	0.76	0.67	−16	−12	+15	− 5	+20	− 7	+20	−21	+11	− 6	0	1.51
*101257	20 31 29.45	+28 50 31.4	10.34	H	307.872 687 71	+28.842 061 94		1.77	4.62	−13.47	1.59	1.86	2.82	1.64	1.93	−26	+ 0	−10	−16	− 5	− 6	− 6	−17	+12	−39	0	
101258	20 31 29.92	+33 05 54.1	7.17	H	307.874 685 17	+33.098 348 66		3.11	−19.24	−27.99	0.46	0.47	0.71	0.56	0.52	− 9	−12	+ 8	+12	−10	−11	− 8	− 9	+ 8	+ 1	0	0.10
101259	20 31 30.06	−63 19 51.5	9.37	1 H	307.875 252 83	−63.330 977 62		3.60	−1.46	−12.61	0.97	0.74	1.20	0.97	0.88	+12	−11	− 4	+40	+27	− 5	+30	+10	−11	+ 4	2	−0.32
101260	20 31 30.40	+74 57 16.8	5.18	1 H	307.876 661 97	+74.954 659 42		7.82	6.36	−16.47	0.49	0.47	0.54	0.52	0.51	− 5	−24	+23	+16	− 4	−16	+ 2	−15	− 7	+ 4	1	0.14
*101261	20 31 31.99	−33 45 59.8	9.75	H	307.883 301 79	−33.766 622 12		6.52	26.86	−65.23	1.29	0.89	1.62	1.87	1.29	+48	− 1	+ 1	+12	+24	+23	+24	+12	+19	+78	1	−1.28
*101262	20 31 31.97	+33 46 33.0	9.22	1 G	307.883 217 81	+33.775 830 31		38.18	142.12	16.63	0.78	0.85	1.17	0.92	0.98	− 4	+ 2	−13	− 9	− 4	− 9	− 5	− 8	− 8	+15	0	−0.08
101263	20 31 32.03	+21 53 42.3	6.86	1 H	307.883 437 63	+21.895 087 07		4.24	14.78	−4.85	0.61	0.49	0.76	0.71	0.56	+21	− 4	+ 2	+33	+ 7	+12	+11	+15	+ 6	+43	2	0.76
101264	20 31 32.85	−48 00 30.2	8.89	H	307.886 876 33	−48.008 382 43		1.83	0.39	−11.31	1.10	0.75	1.18	1.66	1.21	+ 9	−21	− 4	+10	+ 6	+ 3	+ 3	+13	+10	+11	0	0.85
101265	20 31 33.56	+42 12 14.1	8.56	G	307.889 833 57	+42.203 905 81		2.66	5.87	2.28	0.58	0.61	0.78	0.62	0.61	−16	−15	+18	+19	− 1	−16	+ 0	+ 2	+18	−12	1	−1.28
101266	20 31 34.92	+56 21 21.2	7.68	H	307.895 512 14	+56.355 900 38		3.41	4.44	2.93	0.53	0.50	0.56	0.55	0.52	−15	−12	+10	+18	+12	−15	+14	−14	+ 9	− 9	0	1.11
101267	20 31 35.78	−44 44 47.3	8.10	H	307.899 080 30	−44.746 468 51		4.28	12.00	−20.17	0.92	0.61	1.06	1.36	0.85	− 1	−11	− 9	+12	− 1	− 8	− 2	+10	+ 4	− 6	0	0.15
101268	20 31 36.27	+34 19 49.8	6.47	H	307.901 120 40	+34.330 501 16		22.18	−6.61	−52.64	0.43	0.45	0.61	0.51	0.47	− 7	+ 4	+ 1	−10	+ 0	− 2	+ 2	−22	+15	+ 1	0	−0.15
101269	20 31 36.41	−42 00 54.9	8.65	H	307.901 697 05	−42.015 252 31		4.18	−13.31	−35.06	1.05	0.75	1.30	1.23	0.88	+30	−34	−37	− 1	+19	+ 9	+26	+15	−11	+33	0	−0.46
101270	20 31 36.52	+32 33 52.4	8.61	2 H	307.902 152 77	+32.564 560 64		−0.96	−3.79	−7.31	0.69	0.82	1.15	0.81	0.81	−18	−13	+22	+27	− 8	−15	− 3	−19	+ 3	−13	1	0.20
101271	20 31 39.38	+45 10 16.6	7.95	H	307.914 096 00	+45.171 290 62		3.40	6.40	0.94	0.55	0.56	0.68	0.67	0.68	− 4	+ 2	+ 6	+ 1	+ 4	+13	+ 3	+ 2	+ 4	+12	0	1.72
101272	20 31 40.08	+10 31 54.6	8.99	G	307.917 013 22	+10.531 841 92		1.83	−20.13	3.84	1.05	0.97	1.29	1.23	1.29	+41	−16	−12	+14	+38	+ 8	+34	+58	− 3	+54	0	−0.37
101273 H	20 31 40.57	+62 27 44.2	7.71	H	307.919 043 66	+62.462 291 64	A	3.54	−5.81	−11.89	1.10	1.00	0.87	0.91	0.86	−22	− 4	− 3	−28	+20	+ 9	+14	− 9	+11	+37	2	0.63
101274	20 31 41.01	−35 31 26.0	9.25	H	307.920 856 59	−35.523 893 55		24.49	−20.81	−110.25	1.23	0.74	1.56	1.69	1.04	+33	−34	−20	+ 1	+26	+17	+22	+16	+ 9	+60	2	−0.30
101275	20 31 42.23	−37 55 28.8	8.70	H	307.925 947 20	−37.924 655 82		6.51	5.21	−32.70	1.10	0.70	1.39	1.45	0.89	+31	−22	−14	−13	+ 4	−19	+ 2	− 4	−11	+37	4	1.18
101276	20 31 42.53	−31 22 29.9	10.38	H	307.927 226 47	−31.374 958 63		1.41	−2.68	−14.19	1.72	1.03	1.79	2.20	1.58	+ 3	−15	− 9	−16	+ 4	+ 0	+ 4	+21	−11	+10	0	0.22
101277	20 31 42.95	−11 53 03.6	9.58	2 H	307.928 969 76	−11.884 333 98		1.15	9.16	4.61	1.72	1.08	1.92	2.46	1.69	+19	−35	− 6	+19	− 2	− 9	+ 2	+47	− 2	+ 7	0	0.35
101278	20 31 43.63	+30 15 39.0	7.16	H	307.931 775 28	+30.260 843 82		1.85	4.67	12.11	0.36	0.46	0.70	0.40	0.45	−31	− 1	− 3	− 2	− 4	+ 4	− 3	−15	+ 3	−36	0	−0.93
101279	20 31 43.65	+04 24 56.6	7.22	1 H	307.931 858 22	+04.415 717 81		7.15	36.92	11.65	0.81	0.63	0.95	1.11	0.89	+15	− 1	− 7	− 9	+13	+24	+ 6	+52	− 3	+29	0	−0.85
101280	20 31 44.35	+24 06 09.4	8.92	H	307.934 793 50	+24.102 607 72		0.75	1.07	−7.31	0.69	0.69	1.09	0.88	0.78	+11	−15	− 3	+22	− 1	+ 7	+ 0	+ 7	+ 9	+24	0	1.31
101281	20 31 45.21	−35 58 10.4	9.77	H	307.938 390 47	−35.969 553 93		7.38	16.16	7.40	1.31	0.83	1.48	1.90	1.14	+15	− 7	− 9	− 8	+30	+11	+23	+17	+ 2	+44	0	−1.22
101282	20 31 45.22	+32 31 21.2	8.65	3 H	307.938 425 68	+32.522 549 62		0.78	14.54	4.49	0.61	0.78	1.11	0.69	0.75	−21	−10	+31	+18	−10	−24	− 1	−12	− 1	−14	0	−0.37
101283	20 31 46.05	−28 04 24.2	7.74	H	307.941 889 87	−28.073 382 95		3.91	15.26	−16.80	0.83	0.60	1.03	1.12	0.90	+18	−17	+ 4	+ 2	+21	+51	+16	+46	+15	+35	0	−0.16
101284 H	20 31 46.51	+49 32 32.5	7.50	H	307.943 783 53	+49.542 347 28	A	5.53	8.74	7.45	0.85	0.82	0.80	0.82	0.74	+ 9	− 3	+11	−10	+ 1	−18	+ 1	+ 1	+ 7	0	0.11
101285	20 31 46.52	+56 46 47.5	6.14	H	307.943 831 04	+56.779 874 34		3.97	−14.82	−6.50	0.46	0.45	0.50	0.46	0.56	−20	− 8	+ 9	+17	+ 9	−15	+11	−17	+ 7	−15	0	1.19
101286	20 31 47.42	−73 04 18.0	8.95	2 H	307.947 599 00	−73.071 659 67		4.38	5.88	−12.11	0.69	0.89	1.17	0.81	1.19	− 9	− 9	−27	+ 8	+ 1	−13	− 6	− 8	+13	−24	0	0.18
101287	20 31 48.05	+55 33 51.9	9.64	H	307.950 189 00	+55.564 413 88		2.62	5.18	4.59	0.79	0.84	0.90	0.91	0.84	−11	+ 9	+11	+14	+10	− 8	+11	−12	+ 8	−11	0	−0.01
101288 H	20 31 51.14	−26 54 37.5	9.77	H	307.963 094 82	−26.910 415 32	*	4.70	−5.93	1.42	3.10	2.04	2.05	2.45	1.75	+12	− 3	−10	+14	− 3	+19	− 4	+21	−26	+11	1	−0.41
101289	20 31 52.13	+44 06 43.1	8.56	H	307.967 190 59	+44.111 980 42		0.97	8.92	2.52	0.67	0.61	0.80	0.90	0.69	+ 5	−14	+17	−26	−21	− 5	−20	− 9	+13	+13	0	−1.12
101290	20 31 52.24	+16 59 30.3	7.24	H	307.967 674 50	+16.991 758 21		4.53	16.20	−12.03	0.58	0.48	0.73	0.65	0.50	+ 7	−13	−12	− 3	+32	+ 6	+28	+ 9	+ 8	+23	0	0.38
101291 H	20 31 52.26	−77 11 59.8	8.70	H	307.967 749 05	−77.199 948 30	A	0.83	23.70	−23.75	1.87	1.81	2.19	1.74	1.62	−12	−19	−15	+ 7	+ 7	− 6	+10	+ 4	−15	−15	4	0.63
101292 H	20 31 52.67	−40 54 05.0	7.60	G	307.969 457 60	−40.901 389 48	B	20.99	88.35	−120.05	2.57	1.64	2.06	2.35	1.78	+21	−12	−14	−13	− 2	− 1	− 1	+ 0	+ 2	+37	6	0.59
101293	20 31 52.72	−13 46 41.2	8.77	H	307.969 685 57	−13.778 104 05		10.26	24.34	−76.20	1.37	0.94	2.01	1.57	1.31	+40	−37	−57	−29	−19	+40	+22	+56	−51	+ 1	0	1.76
101294	20 31 52.99	+60 03 47.7	7.77	H	307.970 805 94	+60.063 245 86		7.37	31.86	30.62	0.57	0.56	0.61	0.61	0.55	− 5	+11	+ 9	+12	+17	− 9	+18	−14	+14	− 5	0	−0.49
101295	20 31 53.79	+48 20 15.2	8.79	H	307.974 131 11	+48.337 552 22		1.35	−2.09	−4.31	0.71	0.63	0.79	0.87	0.71	+ 6	−12	+ 7	+ 1	− 5	− 1	− 6	− 5	+16	+13	0	0.42
101296	20 31 54.29	−34 29 42.8	8.01	H	307.976 187 99	−34.495 234 04		3.04	−3.77	7.37	0.77	0.52	0.97	0.96	0.69	+36	−17	− 9	+ 9	+32	+32	+31	+23	+19	+68	3	0.01
101297	20 31 54.49	−00 09 16.0	7.48	H	307.977 059 69	−00.154 431 20		6.49	−27.60	20.05	0.89	0.77	1.09	1.34	1.02	+15	− 4	−20	+49	− 5	+34

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
101201	9.737	0.026	8.020	0.012		1.433	0.023	T	1.42	0.04	L	7.9744	0.0016	0.012	62		7.95	8.00		C			1							S
101202	10.260	0.030	9.602	0.026		0.601	0.030	T	0.67	0.03	L	9.6727	0.0033	0.025	92		9.62	9.71					1							
101203	8.838	0.011	8.841	0.014		0.002	0.016	T	0.02	0.01	L	8.8674	0.0014	0.012	121		8.84	8.90		C			1							
101204	11.362	0.078	9.354	0.022		1.664	0.065	T	1.69	0.07	L	9.2341	0.0033	0.022	87		9.19	9.27					1							
101205	9.870	0.017	9.394	0.017		0.461	0.019	T	0.53	0.02	L	9.4488	0.0026	0.031	171		9.39	9.51					1							
101206	6.695	0.004	6.645	0.006		0.051	0.007	T	0.06	0.01	L	6.6696	0.0008	0.007	119		6.66	6.68			20309+4913	I 1	1							S
101207	8.947	0.010	8.434	0.010		0.492	0.011	T	0.56	0.01	L	8.4612	0.0013	0.017	245		8.43	8.49		C			1							
101208	10.084	0.022	8.921	0.014		0.998	0.020	T	0.98	0.02	L	8.9524	0.0021	0.022	150		8.92	8.99					1							
101209	8.434	0.015	7.439	0.010		0.870	0.013	T	0.88	0.01	L	7.4843	0.0013	0.008	70		7.48	7.50		C			1							S
101210	8.580	0.009	7.463	0.007		0.962	0.009	T	0.95	0.01	L	7.5378	0.0013	0.012	134		7.52	7.56					1							S
101211	6.618	0.006	6.375	0.005	*	0.227	0.008	T	0.25	0.01	L	* 6.4162	0.0007	0.007	80	*	6.40	6.43		D	20309−2907	M 1	2 C A	BA	117	0.279	0.022	2.70	0.15	S
101212	9.302	0.018	8.778	0.017		0.492	0.022	T	0.56	0.02	L	8.8479	0.0017	0.014	72		8.82	8.87		C			1							
101213	6.388	0.004	6.231	0.004		0.138	0.012	G	0.12	0.03	C	6.2524	0.0008	0.006	82		6.24	6.26		C	20310+2036	I 1	1							S
101214	7.347	0.007	6.315	0.005	*	0.969	0.006	G	1.20	0.03	C *	6.3529	0.0009	0.009	164	*	6.34	6.37		D	20310+3656	I 1	2 C A	AB	158	2.172	0.013	3.63	0.07	S
101215	9.506	0.022	9.520	0.030	C	−0.008	0.034	T	0.01	0.03	L	9.5616	0.0093			C				D	20310+2629	I 2	1 C I B							
101216	8.719	0.012	8.704	0.016	A	0.019	0.018	T	0.04	0.02	L	8.7551	0.0060	0.031	128	A	8.66	8.80		D	20310+2629	I 2	1 C P B							
101217	10.282	0.042	9.657	0.037		0.577	0.041	T	0.65	0.04	L	9.6506	0.0027	0.020	71		9.62	9.69		C			1 G							
101218	9.185	0.015	8.626	0.014	*	0.506	0.023	G	0.58	0.02	H *	8.6984	0.0016	0.013	113	*	8.67	8.72		D	20310+5953	H 1	2 C A	AB	355	0.479	0.026	3.34	0.12	
101219	9.680	0.024	7.697	0.010		1.644	0.021	T	1.67	0.02	L	7.6070	0.0021	0.016	114		7.57	7.63					1							
101220	7.538	0.007	7.618	0.007		−0.080	0.015	G	−0.06	0.02	H	7.6197	0.0017	0.017	138		7.59	7.64		U			1							S
101221	7.098	0.007	6.202	0.005		0.797	0.006	T	0.83	0.00	L	6.2544	0.0010	0.006	63		6.25	6.27		C	20311−1503	I 1	1 S							S
101222	8.207	0.010	7.844	0.010		0.333	0.022	G	0.39	0.03	H	7.9059	0.0015	0.011	110		7.89	7.93		C			1							S
101223	7.007	0.006	6.864	0.006	*	0.138	0.008	T	0.15	0.01	L *	6.8992	0.0010	0.009	99	*	6.88	6.92			20311+1548	I 1	2 C S C	AB	190	0.096	0.008	1.51	0.69	S
101224	9.281	0.017	8.731	0.016		0.515	0.021	T	0.59	0.02	L	8.7802	0.0010	0.011	94		8.76	8.80					1 G							
101225	10.294	0.034	9.153	0.021		0.981	0.031	T	0.96	0.03	L	9.1638	0.0020	0.016	80		9.14	9.20		C			1							
101226	8.737	0.009	7.552	0.006		1.015	0.008	T	0.99	0.01	L	7.6036	0.0011	0.011	133		7.59	7.62		C			1							
101227	9.452	0.015	8.439	0.011	*	0.884	0.014	T	0.89	0.01	L *	8.4946	0.0017	0.017	169	*	8.47	8.52		D	20311+3333	M 1	2 C A	AP	284	0.233	0.005	0.48	0.12	
101228	11.354	0.085	10.104	0.047		1.066	0.076	T	1.03	0.06	L	10.1283	0.0039	0.027	89		10.04	10.18					1							G
101229	10.166	0.024	8.879	0.014		1.095	0.022	T	1.06	0.02	L	8.9334	0.0018	0.014	126		8.91	8.96					1							
101230	8.927	0.012	8.451	0.012		0.448	0.015	T	0.52	0.02	L	8.5182	0.0011	0.012	109		8.49	8.54					1							
101231	9.395	0.015	9.245	0.019	A	0.100	0.495	G	0.09	0.05	L *	9.1770	0.0018	0.018	113	*	9.14	9.21		D	20312+5519	I 1	2 C A	AB	350	2.407	0.010	1.90	0.04	
101232	10.342	0.035	9.910	0.038		0.441	0.015	G	0.51	0.02	H	9.9042	0.0022	0.019	114		9.86	9.95		C			1							G
101233	7.686	0.009	7.384	0.010	B	0.287	0.012	T	0.33	0.01	L	7.4385	0.0483			B				D	20312+1116	I 2	1 C I B							S D
101234	8.683	0.011	8.018	0.009		0.616	0.012	T	0.68	0.01	L	8.0776	0.0013	0.008	104		8.06	8.09					1 G							S
101235	7.089	0.007	7.103	0.008	A	−0.011	0.010	T	0.01	0.01	L	7.0893	0.0406	0.150	75	A	6.93	7.34		D	20312+1116	I 2	1 C P B							S D
101236	9.271	0.042	8.507	0.028	*	0.696	0.039	T	0.75	0.03	L *	8.9066	0.0062	0.100	67	*	8.87	9.13	0.52	R 1 A	20312+0513	I 1	2 C B	AB	69	1.802	0.012	0.28	0.03	
101237	9.854	0.021	8.357	0.011		1.260	0.019	T	1.22	0.02	L	8.3737	0.0013	0.015	138		8.35	8.40		D			1							
101238	10.542	0.039	8.568	0.014		1.637	0.033	T	1.66	0.03	L	8.3537	0.0090	0.057	91		8.28	8.44		U 2			1 S							
101239	8.896	0.012	8.745	0.014	A	0.900	0.495	G	0.10	0.04	L *	8.6962	0.0015	0.014	111	*	8.67	8.72		D	20313+5945	I 1	2 C A	AB	65	1.498	0.012	2.08	0.06	S
101240	8.371	0.008	8.335	0.010		0.038	0.012	T	0.05	0.01	L	8.3677	0.0015	0.020	188		8.34	8.41					1							
101241	7.974	0.007	7.590	0.006		0.371	0.015	G	0.43	0.02	H	7.6429	0.0020	0.020	139		7.62	7.68		U 2			1							S
101242	9.999	0.032	9.416	0.030		0.546	0.032	T	0.62	0.03	L	9.4440	0.0020	0.017	85		9.41	9.48		C			1							
101243	7.479	0.008	5.634	0.004		1.566	0.007	T	1.93	0.03	O	5.5292	0.0013	0.011	120		5.51	5.55		U 2	20313+4914	I 1	1							S
101244	9.872	0.026	7.909	0.011		1.664	0.023	T	2.00	0.07	O	7.7942	0.0022	0.020	70		7.76	7.82		U			1							S
101245	7.512	0.006	6.324	0.003		1.018	0.005	T	0.99	0.00	L	6.3702	0.0006	0.007	124		6.36	6.38		C			1							S
101246	9.315	0.016	8.058	0.010		1.071	0.015	T	1.04	0.01	L	8.1068	0.0020	0.013	82		8.08	8.13					1							S
101247	9.919	0.026	9.241	0.022		0.601	0.022	G	0.67	0.02	H	9.3103	0.0020	0.017	81		9.28	9.34		C			1							
101248	8.485	0.008	8.440	0.010		0.046	0.012	T	0.06	0.01	L	8.4474	0.0017	0.019	178		8.42	8.48					1							
101249	8.875	0.015	8.296	0.013		0.553	0.015	G	0.63	0.01	H	8.3531	0.0012	0.012	71		8.33	8.39		C			1							S
101250	8.486	0.010	8.378	0.012		0.105	0.015	T	0.12	0.02	L	8.4041	0.0015	0.014	90		8.38	8.43		C			1							S
101251	8.904	0.012	8.585	0.013		0.318	0.003	G	0.37	0.00	H	8.6405	0.0016	0.017	111		8.61	8.67					1							
101252	7.645	0.006	7.587	0.007		0.058	0.009	T	0.07	0.01	L	7.6142	0.0012	0.013	137		7.59	7.64					1							S
101253	10.463	0.026	9.360	0.016		0.951	0.024	T	0.94	0.02	L	9.4393	0.0016	0.019	179		9.41	9.47		C			1							
101254	10.385	0.037	9.166	0.023		1.042	0.034	T	1.01	0.03	L	9.2312	0.0021	0.022	104		9.17	9.27					1							
101255	8.164	0.008	7.847	0.008		0.282	0.008	G	0.32	0.01	H	7.9002	0.0012	0.011	109		7.88	7.92		C			1							S
101256	8.769	0.017	8.533	0.019		0.225	0.024	T	0.25	0.03	L	8.5701	0.0018	0.017	108		8.55	8.60			20315+5611	I 1	1							
101257	10.746	0.038	10.346	0.041		0.378	0.052	T	0.44	0.06	L	10.4294	0.0028	0.037	217		10.35	10.51					1 X							G
101258	8.320	0.008	7.270	0.005		0.912	0.007	T	0.91	0.01	L	7.3277	0.0010	0.012	175		7.31	7.35					1							S
101259	9.816	0.018	9.370	0.018		0.421	0.023	T	0.49	0.02	L	9.4701	0.0022	0.025	152		9.42	9.52		U			1							
101260	5.312	0.003	5.201	0.003		0.100	0.004	T	0.11	0.00	L	5.2254	0.0010	0.007	120		5.21	5.24		M			1 G							S
101261	10.322	0.031	9.807	0.031		0.493	0.033	T	0.57	0.04	L	9.8616	0.0022	0.028	129		9.79	9.90					1 S							
101262	10.621	0.034	9.319	0.019		1.141	0.003	G	1.23	0.00	I	9.3539	0.0025	0.029	154		9.30	9.40		U			1							
101263	7.163	0.005	6.895	0.005		0.255	0.007	T	0.29	0.01	L	6.9316	0.0008	0.008	124		6.92	6.95		U 2			1							S
101264	10.019	0.027	8.985	0.019		0.900	0.025	T	0.90	0.02	L	9.0446	0.0024	0.015	75		9.01	9.07		C			1							
101265	8.516	0.009	8.560	0.012		−0.040	0.011	G	−0.02	0.01	H	8.5790	0.0017	0.015	129		8.55	8.60					1							
101266	7.503	0.007	7.657	0.009		−0.134	0.010	T	−0.13	0.01	L	7.6386	0.0014	0.011	108		7.63	7.66		C			1							S
101267	9.265	0.017	8.181	0.012		0.937	0.016	T	0.93	0.01	L	8.2665	0.0015	0.014	87		8.24	8.28					1							
101268	6.972	0.004	6.525	0.005		0.422	0.006	T	0.49	0.01	L	6.5703	0.0006	0.008	150		6.56	6.58		C			1							S
101269	10.504	0.037	8.814	0.016		1.412	0.032	T	1.39	0.04	L	8.7951	0.0019	0.014	86		8.77	8.82		C			1							
101270	12.095	0.125	9.169	0.015		2.457	0.104	T	2.63	0.56	K	8.6077	0.0116	0.128	182		8.46	8.86		U 2			1 S							
101271	7.858	0.007	7.912	0.009		−0.070	0.015	G	−0.05	0.01	H	7.9305	0.0013	0.015	126		7.91	7.95					1							S
101272	9.588	0.021	9.058	0.020		0.543	0.015	G	0.62	0.01	H	9.0866	0.0021	0.015	80		9.05	9.11		C			1							
101273	7.961	0.008	7.744	0.009	*	0.207	0.011	T	0.23	0.01	L *	7.7756	0.0012	0.011	103	*	7.75	7.80		D	20317+6228	I 1	2 C A	AB	319	0.461	0.005	1.70	0.02	S
101274	10.352	0.033	9.392	0.023		0.831	0.031	T	0.87	0.03	L	9.3960	0.0023	0.019	102		9.36	9.42			20317−3531	I 1	1							
101275	9.082	0.015	8.733	0.016		0.339	0.020	T	0.40	0.03	L	8.7836	0.0019	0.015	95		8.76	8.81		C			1							
101276	11.072	0.067	10.503	0.063		0.532	0.082	T	0.60	0.09	L	10.4938	0.0031	0.031	80		10.45	10.55		C			1							G
101277	11.680	0.120	9.830	0.040		1.460	0.015	G	1.43	0.01	J	9.7179	0.0081	0.051	63		9.64	9.79		U 2			1							
101278	9.055	0.010	7.313	0.005		1.453	0.009	T	1.46	0.01	L	7.2999	0.0008	0.011	254		7.28	7.32					1							S
101279	7.647	0.009	7.251	0.009		0.367	0.015	G	0.43	0.02	H	7.3082	0.0020	0.016	73		7.28	7.33		U			1							S
101280	10.296	0.029	9.038	0.017		1.072	0.026	T	1.04	0.02	L	9.0891	0.0022	0.020	129		9.06	9.13					1							
101281	10.466	0.036	9.840	0.033		0.578	0.036	T	0.65	0.03	L	9.8951	0.0031	0.029	104		9.84	9.94			20318−3558	I 1	1							
101282	10.678	0.033	8.930	0.013		1.486	0.029	T	3.56	0.10	O	8.3373	0.0363	0.289	180		7.83	8.70		U 2 C			1 S							G
101283	8.923	0.014	7.843	0.010		0.934	0.013	T	0.93	0.01	L	7.9002	0.0016	0.012	83		7.88	7.93		C			1							S
101284	7.541	0.006	7.530	0.007	*	0.015	0.008	T	0.03	0.01	L *	7.5119	0.0010	0.008	127	*	7.50	7.53		D	20318+4933	I 1	2 C A	AB	216	0.545	0.002	1.17	0.01	
101285	8.033	0.009	6.319	0.004		1.431	0.008	T	1.42	0.01	L	6.2797	0.0008	0.008	108		6.27	6.30					1 G							S
101286	9.329	0.013	8.945	0.013		0.364	0.017	T	0.43	0.02	L	9.0336	0.0107	0.084	150		8.90	9.13	0.14	P 1 A			1							P
101287	9.848	0.021	9.647	0.025		0.192	0.031	T	0.21	0.04	L	9.7004	0.0027	0.024	113		9.65	9.75					1							G
101288	10.703	0.062	9.826	0.043	*	0.767	0.058	T	0.81	0.04	L *	9.9149	0.0031	0.020	80	*	9.88	9.95		C	20319−2655	I 1	2 C D	AS	259	0.258	0.020	0.58	0.31	D
101289	9.843	0.022	8.653	0.014		1.019	0.020	T	0.99	0.02	L	8.7258	0.0013	0.014	111		8.70	8.74		C			1							
101290	7.191	0.007	7.230	0.007		−0.031	0.009	T	−0.01	0.01	L	7.2403	0.0009	0.009	111		7.22	7.26					1							S
101291	9.270	0.017	8.685	0.016	*	0.548	0.017	T	0.62	0.02	L *	8.8222	0.0023	0.026	157	*	8.79	8.88		D	20319−7712	I 1	2 C A	AB	94	7.838	0.005	0.58	0.02	S
101292						0.709	0.015	G	0.76	0.01	H *	7.7161	0.0027	0.013	84	*	7.70	7.75		D	20319−4054	I 1	2 C A	BA	337	4.046	0.004	0.02	0.01	S
101293	9.309	0.021	8.813	0.020		0.478	0.022	T	0.55	0.02	L	8.8749	0.0020	0.010	61		8.85	8.90					1							
101294	7.917	0.008	7.780	0.010		0.132	0.012	T	0.15	0.01	L	7.8168	0.0013	0.012	119		7.80	7.84		C			1							S
101295	8.858	0.013	8.819	0.016		0.080	0.015	G	0.09	0.02	H	8.8228	0.0024	0.020	109		8.79	8.86					1							
101296	9.338	0.014	8.109	0.009		1.050	0.013	T	1.02	0.01	L	8.1738	0.0010	0.011	133		8.16	8.20					1							S
101297	8.920	0.013	7.610	0.008		1.113	0.012	T	1.08	0.01	L	7.6518	0.0012	0.009	84		7.63	7.67		C			1							S
101298	9.631	0.025	7.922	0.012		1.427	0.022	T	1.41	0.04	L	7.9228	0.0011	0.010	97		7.91	7.94					1							S
101299	8.865	0.012	8.455	0.012	A	0.393	0.015	G	0.46	0.02	H *	8.4666	0.0011	0.012	112	*	8.45	8.49		D	20319−0327	I 1	2 C A	AB	293	2.003	0.018	3.21	0.07	S
101300	6.691	0.004	6.395	0.004	*	0.281	0.006	T	0.32	0.01	L *	6.4402	0.0008	0.007	129	*	6.43	6.45		C	20320+2548	I 1	2 C S B	AS	255	0.161	0.056	2.17	0.65	S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
101301	20 31 58.98	−50 11 05.6	7.94	H	307.995 758 04	−50.184 879 85	2.99	23.10	−39.80	1.07	0.68	1.08	1.66	0.84	+ 5	−11	−11	+21	+22	+ 0	+18	+11	+ 4	+ 9	0	−0.56
101302	20 32 00.18	+33 00 19.5	10.07	H	308.000 755 49	+33.005 407 15	21.64	300.87	286.29	1.09	1.09	1.68	1.24	1.12	− 7	−11	+21	+18	− 6	− 6	− 6	− 8	+11	− 4	0	1.50
101303	20 32 00.47	−60 02 37.5	8.76	2 H	308.001 947 31	−60.043 750 82	1.31	3.56	−0.34	0.89	0.86	1.28	1.32	1.08	+11	−18	− 9	−38	+12	+ 8	+12	−37	−15	−17	2	−0.82
101304	20 32 00.95	−65 48 54.4	7.47	H	308.003 962 09	−65.815 120 95	12.26	−69.08	−47.66	0.63	0.62	0.91	0.73	0.76	+ 0	−19	− 9	+31	+ 4	−16	− 2	− 8	− 1	−13	0	1.46
101305	20 32 01.83	+14 16 27.9	8.42	H	308.007 616 72	+14.274 417 24	8.14	−15.79	−89.64	0.84	0.71	1.09	1.08	1.02	+31	−17	−13	−11	+14	+ 8	+ 8	+15	+ 2	+57	0	0.27
101306	20 32 03.19	−23 32 52.0	10.38	G	308.013 299 40	−23.547 790 87	−0.10	18.08	−18.44	1.55	1.00	1.86	2.13	1.33	+17	− 3	−23	−11	−17	+36	− 9	+ 3	−19	+ 9	0	−0.25
101307	20 32 04.45	+60 25 21.2	7.17	H	308.018 530 14	+60.422 553 56	13.48	5.37	−77.17	0.53	0.53	0.58	0.57	0.51	− 9	+ 7	+ 4	+14	+14	−21	+17	−22	+14	− 7	0	0.84
101308 H	20 32 05.12	−05 14 32.7	6.62	H	308.021 329 88	−05.242 423 12 A	7.01	−2.74	19.61	1.05	0.83	1.09	1.41	1.21	+41	− 3	−24	+11	+20	−10	+15	+49	−24	+54	2	−0.73
101309	20 32 05.25	−08 26 18.0	8.01	H	308.021 874 03	−08.438 322 31	6.48	32.61	1.40	0.99	0.66	1.10	1.33	0.91	+11	−13	−27	− 8	− 1	+19	+12	+37	−12	− 9	0	1.23
101310	20 32 05.63	+25 21 07.4	7.91	H	308.023 463 45	+25.352 051 54	2.04	6.06	2.15	0.61	0.59	0.91	0.71	0.70	−11	+ 9	−12	− 5	−15	−13	−15	−11	− 5	+27	0	−0.52
101311	20 32 05.90	+62 29 26.3	8.02	1 H	308.024 590 25	+62.490 639 03	1.76	−7.22	−7.69	0.64	0.60	0.70	0.69	0.72	+ 5	−10	− 9	−20	+19	+ 7	+13	+ 0	+ 9	+45	0	1.30
101312	20 32 06.37	+22 00 50.9	7.72	H	308.026 524 32	+22.014 139 31	0.95	−1.28	−5.51	0.70	0.53	0.86	0.78	0.58	+12	− 6	− 7	+34	+ 9	+ 6	+12	+21	+ 4	+32	0	1.09
101313 H	20 32 06.46	+35 58 08.3	9.27	2 H	308.026 924 74	+35.968 958 72 A	1.47	0.03	−1.78	1.53	1.76	2.07	1.41	1.47	−25	−15	+24	− 8	+ 9	−11	+ 8	−11	+ 9	−23	2	0.18
101314	20 32 07.07	+70 28 20.7	8.34	H	308.029 465 06	+70.472 428 52	5.87	6.57	0.45	0.65	0.64	0.68	0.84	0.70	+ 6	− 5	+19	+ 2	+16	+ 1	+11	+31	− 3	+18	1	2.19
101315 H	20 32 07.61	+15 11 11.2	8.01	H	308.031 693 20	+15.186 443 46 A	10.21	101.25	111.80	1.27	1.14	1.48	1.42	1.14	+35	− 1	−18	−15	− 2	−17	+ 0	−13	+ 6	+37	1	−0.23
101316	20 32 07.98	+18 37 39.5	7.12	2 H	308.033 246 36	+18.627 633 01	4.15	11.92	−5.45	0.74	0.56	0.90	1.01	0.64	− 1	+15	−21	+16	+18	+ 3	+17	+18	+ 8	+10	0	0.75
101317 H	20 32 08.77	−47 42 05.3	9.96	H	308.036 545 30	−47.701 483 88 B	30.40	85.82	−132.91	4.50	3.10	3.98	6.63	3.45	+24	−13	−32	+19	+25	−16	+15	+10	−10	+38	3	0.95
101318	20 32 09.05	+22 49 27.7	6.51	H	308.037 706 01	+22.824 348 11	0.42	3.62	−5.73	0.60	0.45	0.74	0.66	0.49	+10	−19	− 1	+22	+ 1	+ 5	+ 1	+16	+ 6	+29	0	1.41
101319 H	20 32 09.36	−45 21 19.5	7.99	H	308.039 005 28	−45.355 423 27 *	7.18	4.79	−7.32	4.95	4.01	4.97	6.51	3.73	−66	−12	−12	+14	− 5	−12	+ 0	+ 2	− 4	+11	1	0.34
101320	20 32 10.23	+15 52 57.6	7.68	H	308.042 638 62	+15.882 665 24	0.97	−5.12	−14.21	0.76	0.60	0.95	1.03	0.67	+17	−10	−18	+11	+29	−12	+24	+14	− 2	+24	0	−1.57
101321	20 32 10.52	+08 50 52.0	9.38	H	308.043 825 65	+08.847 791 01	1.82	5.72	2.39	1.18	1.17	1.55	1.37	1.39	+48	−14	+16	+19	+57	+26	+47	+69	+22	+62	0	0.89
101322	20 32 10.88	−72 58 18.1	8.47	H	308.045 324 08	−72.971 703 55	5.55	17.67	−12.21	0.62	0.80	1.00	0.75	1.12	−10	− 6	−10	+ 6	− 2	− 4	− 8	−15	+ 2	−30	0	0.47
101323	20 32 12.87	+43 03 57.5	9.13	1 H	308.053 616 40	+43.065 983 97	1.95	4.28	−0.98	0.64	0.63	0.81	0.69	0.62	−10	+ 4	+21	+27	− 6	−11	− 3	+ 7	+12	−13	0	−1.22
101324	20 32 13.27	−22 09 17.5	7.74	H	308.055 305 00	−22.154 857 07	7.91	2.25	4.64	0.99	0.62	1.12	1.29	0.86	+26	− 6	−13	−14	+ 1	+11	+ 4	+24	−22	+23	0	−1.75
101325	20 32 13.52	+65 23 57.0	6.57	H	308.056 327 94	+65.399 171 25	7.55	9.75	18.34	0.45	0.45	0.50	0.44	0.46	− 5	− 1	+17	+ 0	+ 6	+ 2	+ 6	+ 1	− 3	+12	1	−0.70
101326	20 32 14.68	+20 51 34.5	7.43	H	308.061 156 01	+20.859 581 21	−0.07	−0.49	−9.05	0.69	0.53	0.92	0.67	0.57	+26	−40	−22	+40	+10	− 9	+10	+27	− 3	+34	0	0.60
*101327	20 32 14.73	−71 51 51.0	7.38	H	308.061 369 81	−71.864 155 93	6.26	0.80	−35.05	0.45	0.54	0.74	0.52	0.69	−16	−11	−10	+16	− 5	+ 1	− 6	+ 9	+ 0	−31	0	−0.75
*101328	20 32 14.69	−24 04 03.6	9.21	G	308.061 226 96	−24.067 662 34	1.57	1.85	−9.14	1.00	0.70	1.21	1.36	0.91	+19	+ 1	−24	+14	− 9	+41	+ 1	+14	− 6	+19	0	−0.60
101329	20 32 15.47	−22 09 42.3	8.08	G	308.064 475 40	−22.161 761 20	5.66	2.50	5.07	1.06	0.67	1.20	1.40	0.94	+28	− 4	−12	−11	+ 1	+ 9	+ 3	+24	−22	+25	0	−1.99
101330 H	20 32 15.77	−14 27 29.9	9.76	H	308.065 714 22	−14.458 314 79 A	4.24	15.91	−13.39	5.54	3.48	5.26	6.55	4.70	+32	−18	−35	+ 5	−15	+31	+ 7	+45	−23	+ 8	12	1.67
101331	20 32 16.10	−17 00 31.8	8.55	G	308.067 064 58	−17.008 839 93	12.02	117.17	−153.32	1.14	0.75	1.17	1.39	1.10	+ 8	− 3	−12	−27	+18	+23	+17	+31	− 2	+21	0	1.92
101332	20 32 17.05	+54 09 22.7	7.44	H	308.071 036 09	+54.156 300 44	3.72	5.44	3.97	0.49	0.50	0.57	0.62	0.54	−13	−12	+ 3	+ 9	+13	− 7	+ 8	+ 2	+19	−15	0	−0.70
101333	20 32 17.47	−83 25 51.0	9.16	H	308.072 791 52	−83.430 829 22	2.92	22.23	21.51	0.79	0.74	0.95	0.91	0.78	− 8	−12	− 9	+10	+ 0	−11	− 1	− 2	− 8	−17	0	0.51
*101334	20 32 17.75	−43 06 46.0	10.34	H	308.073 944 18	−43.112 773 69	13.82	119.10	−48.29	1.62	1.14	1.93	2.00	1.49	+33	−29	−19	+ 7	+ 9	+ 1	+10	+ 7	− 4	+42	2	0.12
*101335	20 32 17.73	+02 13 12.2	7.39	H	308.073 881 29	+02.220 066 86	3.02	3.97	2.41	0.81	0.71	1.10	1.08	0.93	+25	+ 3	− 6	+22	+18	+38	+19	+62	− 8	+25	0	−0.67
101336	20 32 18.93	−24 52 13.6	7.33	H	308.078 882 69	−24.870 454 56	3.00	9.07	−2.65	0.78	0.51	0.88	0.98	0.68	+22	−16	−16	+ 0	− 9	+27	− 6	+11	− 4	+21	0	0.89
*101337	20 32 19.68	+71 33 39.1	8.82	H	308.081 985 55	+71.560 850 28	9.72	81.90	90.60	0.74	0.66	0.76	0.92	0.66	+ 9	− 1	+26	− 7	+ 6	−16	+ 7	+11	− 5	+25	0	0.31
*101338	20 32 19.58	−49 06 57.0	8.83	H	308.081 566 45	−49.115 821 30	6.21	−13.83	−11.87	0.99	0.77	1.33	1.87	1.22	− 3	−13	−18	+26	+ 4	−46	−10	+ 8	+22	−37	0	2.42
101339	20 32 20.40	+02 07 58.1	6.47	H	308.084 982 17	+02.132 804 61	2.88	29.89	1.24	0.71	0.62	0.95	0.90	0.79	+25	− 3	− 5	+19	+19	+37	+20	+63	− 9	+24	0	0.70
101340	20 32 21.79	−28 36 06.4	8.55	H	308.090 783 47	−28.601 773 24	4.88	2.16	6.82	1.04	0.65	1.18	1.56	1.02	− 5	+ 5	+ 4	+22	−10	+41	−14	+31	− 1	− 4	0	−0.95
101341 H	20 32 22.43	+41 18 19.0	8.99	2 H	308.093 437 97	+41.305 272 89 A	−0.66	−0.68	−2.67	2.51	2.49	2.87	2.75	2.41	− 3	− 2	+ 0	− 1	− 6	− 8	− 6	−24	+15	− 7	0	−0.27
101342	20 32 22.59	−38 25 20.7	9.21	1 H	308.094 136 73	−38.422 424 03	−0.42	4.88	−5.96	1.20	0.76	1.46	1.67	1.05	+27	−29	−25	− 4	+10	+ 4	+11	+ 3	− 5	+38	2	1.04
101343	20 32 22.69	−07 27 10.9	9.54	H	308.094 536 44	−07.453 018 91	6.84	21.59	−5.49	1.45	0.95	1.60	2.16	1.53	+14	+ 7	−14	+ 8	+ 6	+23	+12	+43	− 1	+ 8	0	0.51
101344	20 32 23.31	−38 17 04.2	9.34	H	308.097 126 86	−38.284 501 65	1.19	18.54	−63.23	2.18	1.41	1.80	2.65	1.67	−10	−23	−44	−50	−10	+20	− 2	−51	+ 8	+25	2	0.88
101345	20 32 23.51	−09 51 13.1	5.66	H	308.097 973 00	−09.853 641 43	41.26	307.59	106.07	0.75	0.47	0.87	0.88	0.66	+12	−29	−26	−21	+ 2	+31	+14	+31	−21	+ 7	0	0.48
101346	20 32 23.95	+06 31 03.1	8.54	G	308.099 783 64	+06.517 517 03	8.63	74.25	23.67	0.95	0.81	1.16	1.21	1.07	+24	− 7	−20	− 4	+20	+16	+24	+54	−12	+25	0	−1.41
101347	20 32 24.06	+05 16 28.1	8.00	1 G	308.100 244 49	+05.274 473 59	6.11	7.57	−3.77	0.96	0.80	1.14	1.28	1.14	+25	−10	− 3	+ 7	+19	+16	+15	+46	+13	+35	0	0.58
101348	20 32 24.79	+58 48 47.8	9.05	H	308.103 273 17	+58.813 282 90	4.62	−15.51	−19.19	0.68	0.70	0.75	0.78	0.70	−11	− 7	− 2	+ 9	+11	−12	+10	−22	+14	− 8	1	0.97
101349	20 32 25.18	+70 31 55.7	6.76	H	308.104 914 56	+70.532 136 90	4.25	−7.26	−17.58	0.50	0.46	0.52	0.63	0.46	+ 0	− 7	+22	− 4	+10	− 4	+ 7	+10	+ 7	+12	3	0.34
101350	20 32 25.60	+48 12 59.3	6.98	H	308.106 656 63	+48.216 463 93	1.91	−8.80	5.76	0.52	0.46	0.58	0.63	0.50	− 7	−10	+ 0	+ 0	− 4	+ 0	− 4	−17	+19	+ 4	0	1.34
101351	20 32 25.93	−08 11 46.3	8.69	H	308.108 022 15	−08.196 206 04	2.55	−22.32	−9.71	1.16	0.84	1.31	1.73	1.31	+26	−11	− 4	+ 9	+13	+ 5	+20	+51	+18	+ 8	0	−0.33
101352	20 32 26.24	−10 00 30.1	10.15	H	308.109 326 74	−10.008 357 60	10.08	135.58	−80.02	1.67	1.24	2.00	2.07	1.86	+35	−26	−24	+ 5	+16	+19	+23	+55	−21	+32	2	1.97
101353 H	20 32 26.92	+27 30 51.3	8.11	1 G	308.112 161 13	+27.514 254 21 A	3.47	−5.25	0.27	0.85	1.13	1.38	0.91	1.10	+28	+ 7	− 5	−29	+ 5	−20	+ 5	− 1	+ 4	+20	2	0.62
101354	20 32 28.22	−68 35 54.7	8.75	H	308.117 591 42	−68.598 524 10	3.02	13.47	−14.28	0.62	0.82	1.30	0.70	0.98	−33	+ 4	−23	−15	+18	−21	+16	+ 5	+ 5	−35	0	0.06
101355	20 32 31.23	+03 39 56.2	8.07	H	308.130 115 96	+03.665 619 70	3.73	−12.03	−16.94	0.85	0.77	1.17	1.06	1.01	+25	+ 7	− 3	+16	+17	+30	+13	+61	− 2	+33	0	−1.97
101356	20 32 31.54	+00 35 07.3	10.99	3 H	308.131 423 51	+00.585 357 36	7.73	34.86	−25.02	4.49	3.84	5.82	7.36	5.42	+10	+11	−20	+35	−15	+34	− 7	+53	−16	+ 0	2	
101357 H	20 32 31.57	−16 36 34.4	7.16	G	308.131 556 60	−16.609 563 80 *	9.33	55.06	−14.05	0.93	0.60	0.98	1.04	0.79	+13	−28	−23	−25	+ 6	+25	+12	+27	− 2	+12	0	0.00
101358	20 32 31.67	−77 17 40.4	8.14	H	308.131 973 92	−77.294 566 48	3.14	−7.94	−15.29	0.59	0.62	0.80	0.69	0.62	− 2	− 8	−25	+28	+ 2	+ 0	+ 0	+ 8	− 1	−14	0	0.22
101359	20 32 32.04	+34 55 13.7	8.12	H	308.133 513 34	+34.920 459 42	9.36	48.70	43.71	0.51	0.56	0.78	0.55	0.59	− 8	+ 0	+ 2	+23	− 5	−20	− 4	+ 0	+ 6	− 8	0	−0.06
101360	20 32 33.65	−25 50 40.7	9.31	H	308.140 219 65	−25.844 650 36	3.88	9.20	−10.96	1.31	0.74	1.38	1.71	0.99	+10	−22	−12	+12	+ 3	+15	+ 6	+27	− 9	+14	0	−0.02
101361	20 32 36.57	−47 14 34.1	8.54	H	308.152 363 04	−47.242 819 21	2.24	11.36	−19.44	1.18	0.77	1.27	2.03	1.06	+ 2	− 7	−11	+29	− 4	+ 9	+ 0	− 2	+ 2	+ 8	0	1.29
101362	20 32 37.41	−56 36 33.7	9.62	H	308.155 881 51	−56.609 371 91	6.88	18.71	−35.64	1.10	0.77	1.38	1.18	0.88	+ 6	−38	−10	−47	− 2	+20	+ 3	−27	+ 7	−28	0	0.37
101363	20 32 38.27	−56 59 13.9	9.65	H	308.159 454 58	−56.987 187 93	5.23	−35.90	−16.41	1.11	0.94	1.49	1.28	1.12	+20	−28	−21	− 7	−10	+ 6	−21	−27	+24	−23	0	0.66
101364	20 32 40.96	+41 14 29.3	11.40	2 G	308.170 656 06	+41.241 474 29	−0.60	1.91	−2.47	1.61	1.61	2.07	1.91	1.80	+ 5	− 5	+ 2	− 8	− 6	−11	− 6	−14	+13	− 2	0	2.19
101365 H	20 32 41.42	+06 55 40.8	10.05	G	308.172 597 21	+06.928 011 63 A	2.32	2.16	−1.51	2.49	1.93	2.72	3.04	2.42	+32	−23	−17	+24	+ 9	− 5	+10	+52	−13	+20	1	−0.96
101366	20 32 41.97	−57 29 06.7	8.89	2 H	308.174 882 53	−57.485 194 41	2.59	0.50	−11.41	0.96	0.89	1.37	1.27	1.15	+17	−20	−18	− 3	− 7	−13	−19	−26	+27	−23	0	−0.13
101367	20 32 42.39	−28 35 43.5	7.32	H	308.176 607 04	−28.595 419 66	5.26	34.16	−9.23	0.75	0.52	0.90	0.97	0.77	+20	−11	− 1	+ 5	+ 8	+39	+ 6	+37	+11	+27	0	−0.80
101368	20 32 42.94	−31 22 56.5	7.78	H	308.178 928 36	−31.382 357 16 A	6.74	0.06	−8.89	1.29	0.75	1.20	1.56	1.08	− 8	−23	−10	+36	−32	+ 1	−29	+22	−26	−22	2	−0.23
101369	20 32 43.07	+19 31 38.6	11.63	2 G	308.179 455 09	+19.527 402 33	10.11	−77.15	−365.71	2.31	1.83	2.85	2.95	2.14	+11	−13	− 1	+23	+21	+ 8	+18	+25	+13	+21	0	−2.05
101370	20 32 43.51	+39 16 15.8	8.22	H	308.181 288 98	+39.271 049 68 A	3.23	2.50	0.36	0.73	0.90	0.99	0.73	0.97	− 3	−10	− 7	+ 0	+ 8	−27	+ 5	−10	+19	− 3	2	1.09
101371	20 32 43.74	+16 46 02.0	6.96	H	308.182 264 90	+16.767 234 76	1.27	3.44	−3.73	0.59	0.46	0.74	0.63	0.48	+ 3	−19	−17	− 8	+31	+ 1	+28	+ 9	+ 1	+14	0	−0.64
101372	20 32 43.92	+53 01 30.4	7.76	H	308.183 014 22	+53.025 104 60	4.59	7.93	4.33	0.52	0.45	0.55	0.67	0.52	+ 2	−14	+ 5	+11	+ 9	− 2	+ 6	+17	+12	+ 4	0	1.24
101373	20 32 46.05	−36 13 43.6	8.07	G	308.191 859 39	−36.228 783 40	1.48	5.04	−10.21	0.89	0.59	1.03	1.26	0.77	+23	+ 9	−14	−16	+19	+ 8	+13	+ 3	+17	+50	2	0.31
*101374	20 32 47.02	−20 04 10.4	9.20	H	308.195 903 97	−20.069 560 04	1.31	7.27	−9.23	1.22	0.75	1.44	1.47	0.94	+25	− 8	−10	−12	+ 0	+27	+ 2	+13	−17	+25	0	−1.14
*101375	20 32 46.97	+44 58 44.2	7.68	H	308.195 706 71	+44.978 954 62	2.52	2.58	0.63	0.53	0.54	0.67	0.64	0.59	− 3	−10	− 5	−11	− 2	+13	− 3	−13	+21	+ 9	3	0.44
101376	20 32 48.24	−64 02 28.9	8.29	H	308.201 012 73	−64.041 372 16	4.04	8.20	−43.74	0.74	0.72	1.04	0.81	0.77	+ 5	−10	−18	+30	+21	− 4	+17	− 1	− 1	−10	0	−0.05
101377	20 32 48.36	−51 56 50.6	9.62	H	308.201 509 79	−51.947 377 20	3.98	18.85	−36.67	1.33	0.97	1.43	1.81	1.34	+ 6	−22	− 8	+21	− 8	+ 7	− 3	− 1	+17	+ 6	0	0.22
101378 H	20 32 48.81	−13 32 52.8	8.39	H	308.203 386 45	−13.548 001 55 A	7.24	−43.87	−83.98	3.88	3.06	4.99	4.11	3.16	+47	+ 2	−27	+ 4	−12	+26	−11	+27	−59	−20	5	−0.97
101379	20 32 48.98	−09 21 50.9	9.54	G	308.204 098 24	−09.364 144 57	0.74	−65.72	−91.69	1.40	0.88	1.77	1.80	1.30	+ 7	− 2	−37	−28	− 1	+34	+10	+38	−29	+ 5	0	−0.05
101380	20 32 50.31	−48 46 14.2	8.14	H	308.209 637 96	−48.770 611 89	1.68	18.30	−11.41	0.97	0.66	1.06	1.30	0.97	+ 4	−31	− 5	+13	− 2	−15	− 1	+20	+ 2	−16	0	0.63
101381	20 32 51.17	+27 12 43.8	6.89	H	308.213 202 11	+27.212 163 72	2.40	4.41	0.50	0.40	0.48	0.76	0.50	0.54	− 6	+ 0	− 9	−27	+13	−13	+ 9	−17	+15	+ 6	0	−0.93
101382	20 32 51.76	+41 53 50.6	7.08	G	308.215 687 24	+41.897 377 76 +	44.99	−156.89	452.80	0.56	0.61	0.64	0.53	0.47	− 5	+12	+15	+18	− 6	−11	− 6	+ 4	+24	−10	0	−0.81
101383	20 32 52.33	+43 11 29.7	6.61	1 H	308.218 023 64	+43.191 575 25	1.83	3.58	−1.67	0.42	0.41	0.53	0.48	0.41	−12	+ 2	+15	+19	− 7	− 7	− 5	− 2	+16	−13	0	−2.46
101384	20 32 52.35	−24 56 37.4	6.35	H	308.218 137 16	−24.943 725 28	9.31	5.27	−42.89	0.68	0.43	0.76	0.85	0.59	+16	−22	−15	+ 8	− 6	+ 8	−26	− 3	+21	− 4	+16	0	1.08
*101385	20 32 52.46	−66 01 21.9	9.35	H	308.218 573 39	−66.022 762 78	0.76	3.95	−14.75	1.06	0.96	1.47	1.15	1.22	− 3	−19	+ 1	+18	+11	−16	+10	+ 7	+10	−13	0	−0.71
*101386	20 32 52.46	+08 16 08.8	8.93	1 H	308.218 564 36	+08.269 111 29	0.93	4.27	−7.49	1.17	1.13	1.39	1.42	1.40	+56	−15	− 3	+33	+58	+ 9	+53	+73	+ 6	+64	0	−0.34
101387	20 32 52.50	−05 10 16.2	8.26	H	308.218 731 99	−05.171 171 08	6.93	−5.06	19.62	0.99	0.82	1.21	1.45	1.24	+45	−10	−21	+19	+ 2	+10	+ 2	+47	−21	+47	0	−0.24
101388	20 32 52.66	−07 55 49.3	8.15	H	308.219 430 46	−07.930 355 61	7.10	67.24	−45.46	1.02	0.62	1.09	1.46	0.88	+ 0	−10	−27	− 9	− 3	+10	+ 6	+26	− 5	−20	0	0.15
101389	20 32 52.88	+12 03 26.3	8.67	H	308.220 350 02	+12.057 294 70	2.81	4.32	−16.95	1.12	0.71	1.33	1.25	0.81	+28	−36	− 4	+31	+30	− 4	+30	+24	− 3	+48	0	0.31
101390 H	20 32 53.06	+13 58 09.1	9.82	G	308.221 075 43	+13.969 206 59 C	14.23	−84.67	151.39	4.55	4.16	3.43	4.04	3.08	+49	+ 1	+ 0	+ 7	+18	− 2	+26	+19	+ 4	+43	0	−0.97
101391	20 32 53.94	+20 17 17.0	8.06	H	308.224 748 05	+20.288 044 43	2.72	16.70	7.32	0.77	0.57	0.90	0.94	0.63	+13	−14	−12	+18	+20	+ 4	+18	+15	+11	+19	0	0.24
101392	20 32 54.05	+09 48 15.2	8.59	H	308.225 220 38	+09.804 234 72	2.64	−1.97	−5.93	0.89	0.78	1.16	1.04	0.99	+31	− 3	+ 3	+ 2	+36	+32	+32	+57	+13	+44	0	0.08
101393	20 32 54.30	+46 36 04.6	9.59	3 H	308.226 232 20	+46.601 286 64	0.86	−2.34	−5.90	0.91	0.85	1.09	1.11	0.90	− 3	+11	+23	+ 6	+15	−16	+19	− 9	+15	− 5	0	1.77
101394	20 32 55.80	−60 34 44.2	9.42	H	308.232 483 52	−60.578 931 31	7.40	17.12	3.68	0.76	1.12	1.52	0.76	1.16	+39	+ 8	+23	+22	−14	− 1	−22	−48	−32	+28	0	1.66
101395	20 32 56.09	−37 27 02.4	9.12	H	308.233 696 46	−37.450 652 99	11.09	60.58	−35.45	1.22	0.73	1.36	1.28	0.89	+20	−13	−24	−40	+ 6	− 9	+ 0	−14	−11	+49	0	0.96
101396	20 32 56.88	+02 25 38.9	7.74	H	308.237 019 52	+02.427 472 91	6.42	17.37	0.46	0.80	0.78	1.07	1.04	1.00	+41	− 8	− 4	+29	+28	+27	+29	+69	− 1	+40	0	0.58
101397	20 32 57.30	−68 22 19.0	7.53	H	308.238 756 36	−68.371 957 33 A	8.64	18.60	−35.25	0.70	0.88	1.23	0.75	1.03	−31	−12	− 5	+ 4	+14	−17	+11	+ 9	+17	−32	1	0.78
101398	20 32 59.05	+49 50 28.4	6.63	H	308.246 024 70	+49.841 227 53	2.20	2.59	−2.26	0.50	0.45	0.55	0.58	0.47	− 4	+ 9	+ 1	− 5	+ 1	− 8	+ 1	− 4	− 2	+ 2	2	−1.00
101399	20 33 00.35	−62 29 45.1	8.66	G	308.251 458 92	−62.495 871 06	18.48	−2.91	−201.95	1.12	1.02	1.71

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
101301	9.121	0.017	8.029	0.012		0.944	0.016	T	0.93	0.01	L	8.1018	0.0021	0.014	69		8.08	8.13		C			1							S
101302	11.265	0.051	10.211	0.033		0.915	0.046	T	0.91	0.03	L	10.2261	0.0053	0.046	165		10.17	10.31		R			1							G
101303	10.869	0.040	8.986	0.014		1.598	0.035	T	2.38	0.07	O	8.7975	0.0048	0.048	131		8.72	8.89		U 2			1							
101304	8.028	0.009	7.524	0.007		0.518	0.001	G	0.59	0.00	H	7.5803	0.0012	0.011	120		7.56	7.61		C			1							S
101305	9.131	0.018	8.480	0.016		0.616	0.015	G	0.68	0.01	H	8.5487	0.0015	0.013	77		8.52	8.57		C			1							
101306	11.403	0.101	10.456	0.073		0.841	0.007	G	0.86	0.01	H	10.5326	0.0026	0.023	68		10.48	10.57		C			1							G
101307	7.547	0.006	7.206	0.006		0.323	0.008	T	0.37	0.01	L	7.2444	0.0010	0.011	119		7.23	7.26					1							S
101308	7.833	0.009	6.742	0.007	A	1.200	0.495	G	0.92	0.01	L *	6.7808	0.0009	0.007	66	*	6.77	6.80		D	20321−0515	I 1	2 C B	AB	218	1.732	0.035	3.61	0.11	S
101309	8.311	0.010	8.040	0.011		0.258	0.014	T	0.29	0.02	L	8.0834	0.0015	0.011	78		8.06	8.10		C			1							S
101310	8.018	0.008	7.919	0.009		0.097	0.011	T	0.11	0.01	L	7.9508	0.0016	0.014	129		7.93	7.99					1							S
101311	10.361	0.036	8.267	0.013		1.732	0.031	T	1.76	0.03	L	8.1221	0.0020	0.018	96		8.10	8.16		U 2			1 S							
101312	7.660	0.007	7.719	0.009		−0.049	0.010	T	−0.03	0.01	L	7.7154	0.0013	0.013	119		7.70	7.74		C			1							S
101313	9.483	0.016	9.363	0.020	A	0.665	0.400	G	0.22	0.06	L *	9.3349	0.0029	0.035	148	*	9.27	9.39		U 2	20321+3558	M 1	2 C B	AB	30	2.357	0.053	3.26	0.21	G
101314	8.545	0.012	8.356	0.013		0.181	0.017	T	0.20	0.02	L	8.3963	0.0014	0.016	106		8.37	8.41		C			1							S
101315	8.709	0.013	8.123	0.012	A	0.600	0.495	G	0.59	0.02	L *	8.1271	0.0014	0.015	100	*	8.11	8.15		D	20321+1511	I 1	2 C A	AB	181	1.293	0.024	2.69	0.07	S
101316	9.231	0.018	7.330	0.008		1.620	0.015	G	2.61	0.03	C	7.1233	0.0115	0.100	86		7.05	7.30		U 2			1 S							S
101317	12.755	0.330	10.648	0.074	A						T *	10.1015	0.0038	0.027	78	*	10.05	10.14		D	20322−4742	I 1	2 C D	BA	89	3.483	0.006	0.04	0.02	D
101318	7.592	0.007	6.606	0.005		0.864	0.006	T	0.88	0.00	L	6.6671	0.0007	0.007	97		6.66	6.68		C			1							S
101319	9.861	0.050	9.512	0.055	C						T *	8.0899	0.0024	0.016	77	–	8.07	8.12		D	20322−4521	I 1	3 C A							S G
101320	9.038	0.017	7.795	0.011		1.061	0.016	T	1.03	0.01	L	7.8453	0.0016	0.013	100		7.82	7.87		C			1							S
101321	10.675	0.035	9.485	0.021		1.019	0.032	T	0.99	0.03	L	9.5418	0.0024	0.021	101		9.49	9.57					1							
101322	9.632	0.015	8.561	0.011		0.927	0.014	T	0.92	0.01	L	8.6333	0.0021	0.019	157		8.60	8.66					1							
101323	9.102	0.013	9.177	0.017		−0.027	0.002	G	−0.01	0.00	H	9.1322	0.0030	0.024	144		9.10	9.17		U			1							
101324	8.157	0.012	7.764	0.013		0.384	0.015	T	0.45	0.02	L	7.8276	0.0021	0.013	78		7.81	7.85			20322−2209	I 2	1							S
101325	7.996	0.007	6.706	0.004		1.097	0.006	T	1.06	0.01	L	6.7397	0.0007	0.008	107		6.73	6.75					1							S
101326	7.290	0.006	7.425	0.007		−0.117	0.008	T	−0.10	0.01	L	7.3942	0.0011	0.010	103		7.37	7.41		C			1							S
101327	7.422	0.005	7.378	0.006		0.045	0.007	T	0.06	0.01	L	7.3986	0.0011	0.013	179		7.38	7.43					1							S
101328	8.960	0.018	9.178	0.026		−0.170	0.004	G	−0.18	0.01	H	9.1579	0.0024	0.017	78		9.13	9.19		C			1							
101329	8.545	0.016	8.112	0.016		0.413	0.020	G	0.48	0.02	H	8.1877	0.0012	0.010	80		8.17	8.22			20322−2209	I 2	1							S
101330	11.340	0.096	10.164	0.054	A	0.000	0.495	G	0.88	0.07	B *	9.9189	0.0037	0.035	65	*	9.87	9.98		R	20323−1427	I 1	2 C A	AB	27	2.260	0.024	1.07	0.07	
101331	9.369	0.022	8.613	0.018		0.646	0.003	G	0.71	0.00	H	8.6912	0.0019	0.012	63		8.67	8.71		C			1							
101332	7.319	0.006	7.427	0.007		−0.093	0.008	T	−0.07	0.01	L	7.4142	0.0008	0.010	122		7.39	7.44					1							S
101333	10.865	0.040	9.323	0.018		1.295	0.035	T	1.25	0.04	L	9.3181	0.0019	0.023	143		9.27	9.36					1							
101334	11.457	0.085	10.496	0.058		0.860	0.020	G	0.90	0.02	H	10.4836	0.0026	0.031	83		10.43	10.54					1							G
101335	9.279	0.018	7.531	0.009		1.457	0.016	T	1.46	0.03	L	7.5211	0.0013	0.009	81		7.50	7.53		C			1							S
101336	9.302	0.024	7.491	0.011		1.507	0.021	T	1.54	0.03	L	7.4523	0.0014	0.010	79		7.43	7.47					1							S
101337	9.426	0.016	8.858	0.015		0.531	0.020	T	0.60	0.02	L	8.9353	0.0015	0.016	108		8.90	8.96		C			1							
101338	9.331	0.019	8.875	0.019		0.443	0.021	T	0.51	0.02	L	8.9293	0.0019	0.017	70		8.89	8.95		C			1							
101339	8.471	0.013	6.652	0.007		1.514	0.012	T	1.55	0.02	L	6.5942	0.0014	0.009	84		6.58	6.61					1							S
101340	9.927	0.029	8.702	0.017		1.047	0.026	T	1.02	0.02	L	8.7165	0.0014	0.014	84		8.69	8.74		C			1							
101341	11.046	0.049	9.361	0.019	*	1.408	0.042	T	1.39	0.05	L *	9.1325	0.0117	0.096	113	*	9.02	9.29	6.60	P 1 A	20324+4118	I 1	2 C D	AB	54	0.948	0.043	2.72	0.26	D
101342	11.218	0.067	9.426	0.023		1.523	0.058	T	2.24	0.12	O	9.2704	0.0034	0.030	88		9.22	9.31		U			1							
101343	10.281	0.035	9.586	0.030		0.641	0.038	T	0.71	0.03	L	9.6766	0.0037	0.024	66		9.62	9.72		C			1							
101344	10.510	0.037	9.408	0.024		0.942	0.035	T	0.93	0.03	L	9.4879	0.0015	0.016	90		9.46	9.51					1 G							
101345	6.527	0.005	5.740	0.003		0.689	0.003	G	0.74	0.02	A	5.8003	0.0008	0.005	76		5.79	5.81		C	20324−0952	I 1	1							S
101346	9.167	0.015	8.588	0.014		0.544	0.027	G	0.62	0.03	H	8.6584	0.0021	0.013	85		8.63	8.68					1							
101347	8.447	0.011	8.025	0.011		0.394	0.015	G	0.46	0.02	H	8.0966	0.0040	0.025	75		8.06	8.14		U			1							S
101348	9.348	0.014	9.073	0.016		0.262	0.020	T	0.29	0.03	L	9.1235	0.0023	0.018	114		9.09	9.15					1 S							
101349	6.726	0.004	6.750	0.006		−0.017	0.007	T	0.01	0.01	L	6.7655	0.0007	0.007	111		6.75	6.78					1							S
101350	6.884	0.005	6.972	0.006		−0.075	0.007	T	−0.05	0.01	L	6.9621	0.0010	0.008	112		6.95	6.98					1							S
101351	10.155	0.031	8.855	0.018		1.105	0.028	T	1.07	0.03	L	8.8617	0.0027	0.015	69		8.84	8.89		C			1							
101352	11.213	0.080	10.246	0.051		0.767	0.006	G	0.81	0.01	H	10.2956	0.0032	0.023	70		10.26	10.33					1 S							G
101353	9.255	0.011	8.222	0.008	A	0.847	0.015	G	0.86	0.01	H *	8.2644	0.0017	0.020	216	*	8.23	8.30		U	20324+2731	I 1	2 C D	AB	184	1.400	0.042	3.42	0.15	D
101354	9.965	0.017	8.858	0.011		0.955	0.016	T	0.94	0.01	L	8.9120	0.0012	0.021	201		8.88	8.96					1							
101355	10.020	0.029	8.241	0.012		1.482	0.025	T	1.50	0.04	L	8.1941	0.0021	0.013	72		8.17	8.23		C			1							
101356	11.150	0.072	10.873	0.083		0.264	0.103	T	0.30	0.13	L	11.0574	0.0696	0.424	83		10.23	11.46	0.58	P 1 A			1 X							D
101357	7.542	0.009	7.191	0.008	*	0.323	0.005	G	0.37	0.01	H *	7.2389	0.0011	0.008	64	*	7.23	7.25		D	20325−1637	I 1	2 C S A	AB	119	0.197	0.005	0.10	0.12	S
101358	9.609	0.014	8.280	0.009		1.128	0.013	T	1.09	0.01	L	8.3052	0.0016	0.019	160		8.27	8.33					1							
101359	8.854	0.012	8.174	0.011		0.629	0.014	T	0.70	0.01	L	8.2509	0.0015	0.013	153		8.23	8.27		C			1							
101360	11.219	0.078	9.427	0.027		1.492	0.065	T	1.52	0.10	L	9.4400	0.0030	0.023	83		9.40	9.50					1							
101361	10.159	0.031	8.680	0.016		1.245	0.027	T	1.20	0.03	L	8.7032	0.0025	0.019	80		8.68	8.74					1							
101362	10.160	0.025	9.662	0.024		0.480	0.026	T	0.55	0.03	L	9.7271	0.0028	0.023	110		9.69	9.76					1							
101363	10.522	0.033	9.739	0.026		0.711	0.033	T	0.77	0.03	L	9.7981	0.0023	0.024	107		9.74	9.84					1							
101364						3.010	0.020	G	3.02	0.02	J	10.8148	0.0059	0.052	110		10.73	10.92		U			1							G
101365	11.235	0.076	10.120	0.044	A	1.100	0.020	G	1.06	0.02	J *	10.2005	0.0032	0.027	78	*	10.14	10.24		D	20327+0656	H 1	2 C A	AB	75	1.206	0.037	2.51	0.11	G
101366	10.828	0.047	9.104	0.019		1.467	0.042	T	2.45	0.12	O	8.9124	0.0193	0.103	101		8.76	9.02		U 2			1 S							
101367	7.388	0.009	7.322	0.008		0.060	0.011	T	0.07	0.01	L	7.3408	0.0009	0.009	89		7.32	7.36		C			1							S
101368	8.024	0.011	7.800	0.011	A	0.214	0.015	T	0.24	0.02	L	7.8462	0.0080	0.015	88	A	7.83	7.87			20327−3123	I 1	2 C A	AB	193	16.364	0.026	3.27	0.16	S
101369						0.880	0.015	G	0.92	0.01	H	11.8126	0.0094	0.077	87		11.56	11.89		U 2			1							G
101370	8.093	0.007	8.187	0.009	A	−0.081	0.010	T	−0.06	0.01	L	8.1943	0.0062	0.028	140	A	8.16	8.25		D	20327+3916	I 1	2 C A	AB	50	14.251	0.011	2.43	0.05	
101371	6.877	0.005	6.958	0.006		−0.058	0.002	G	−0.04	0.00	H	6.9458	0.0017	0.012	107		6.93	6.97					1							S
101372	7.737	0.007	7.755	0.008		−0.012	0.010	T	0.01	0.01	L	7.7642	0.0011	0.011	122		7.75	7.78		C			1							S
101373	7.946	0.007	8.040	0.009		−0.094	0.002	G	−0.08	0.00	H	8.0537	0.0013	0.012	114		8.03	8.07		C			1							S
101374	10.495	0.044	9.341	0.028		0.991	0.041	T	0.97	0.03	L	9.3648	0.0023	0.017	70		9.34	9.39					1							
101375	7.571	0.007	7.661	0.009		−0.077	0.010	T	−0.06	0.01	L	7.6573	0.0009	0.007	112		7.64	7.67		C			1							S
101376	8.556	0.009	8.327	0.010		0.213	0.013	T	0.24	0.01	L	8.3587	0.0020	0.021	141		8.32	8.39					1							S
101377	10.640	0.048	9.689	0.035		0.838	0.044	T	0.86	0.03	L	9.7802	0.0021	0.020	61		9.75	9.82		D			1							
101378	9.390	0.025	8.772	0.022	A	0.600	0.495	G	0.57	0.09	L *	8.4977	0.0019	0.013	65	*	8.47	8.52		D	20328−1333	I 1	2 C A	AB	173	1.241	0.010	0.13	0.03	S
101379	10.283	0.037	9.633	0.033		0.641	0.059	G	0.71	0.05	H	9.6673	0.0030	0.019	65		9.64	9.69		C			1							
101380	9.727	0.026	8.268	0.014		1.230	0.023	T	1.19	0.02	L	8.3005	0.0025	0.015	70		8.27	8.33					1							
101381	8.265	0.007	6.993	0.004		1.083	0.006	T	1.05	0.01	L	7.0533	0.0007	0.010	207		7.04	7.07					1							S
101382	8.069	0.008	7.172	0.006		0.796	0.007	G	0.84	0.01	H	7.2057	0.0008	0.009	140		7.18	7.22		D			1 O							S
101383	6.453	0.003	6.582	0.004		−0.112	0.004	T	−0.10	0.01	L	6.5736	0.0009	0.012	139		6.55	6.59		M			1							S
101384	6.351	0.005	6.351	0.004		0.001	0.006	T	0.02	0.01	L	6.3608	0.0006	0.006	83		6.35	6.37		C			1							S
101385	11.335	0.062	9.532	0.022		1.501	0.052	T	1.53	0.08	L	9.4801	0.0032	0.028	125		9.43	9.54					1 S							
101386	11.281	0.062	9.199	0.018		1.500	0.040	G	1.50	0.10	R	9.0563	0.0035	0.030	90		9.02	9.11		U			1							
101387	8.675	0.013	8.304	0.013		0.351	0.017	T	0.41	0.02	L	8.3460	0.0018	0.013	92		8.33	8.37		C			1							S
101388	8.710	0.013	8.212	0.012		0.493	0.015	G	0.57	0.02	H	8.2559	0.0012	0.010	74		8.24	8.27		C			1							S
101389	10.460	0.042	8.779	0.018		1.404	0.036	T	1.38	0.04	L	8.8111	0.0016	0.012	81		8.79	8.84		D			1							
101390	11.077	0.068	10.086	0.046	*	0.920	0.020	G	0.96	0.02	I *	9.9965	0.0035	0.019	73	*	9.95	10.03		D	20329+1357	I 1	2 C A	CD	216	0.408	0.009	0.32	0.05	G
101391	8.193	0.010	8.073	0.012		0.116	0.015	T	0.13	0.01	L	8.1004	0.0016	0.013	88		8.08	8.13		C			1							S
101392	9.937	0.023	8.730	0.014		1.032	0.021	T	1.00	0.02	L	8.7566	0.0026	0.016	89		8.73	8.78					1							
101393	11.209	0.073	9.520	0.026		1.420	0.065	T	1.40	0.10	L	9.6883	0.0501	0.377	103		9.08	9.97	15.11	P 1 A			1 S							G
101394	9.854	0.025	9.449	0.026		0.396	0.030	T	0.46	0.03	L	9.5139	0.0021	0.022	134		9.47	9.56					1 S							
101395	9.797	0.023	9.190	0.021		0.564	0.023	T	0.64	0.02	L	9.2433	0.0020	0.018	92		9.21	9.27		C			1							
101396	7.953	0.010	7.748	0.011		0.196	0.014	T	0.21	0.02	L	7.8004	0.0009	0.010	82		7.79	7.82					1							S
101397	7.583	0.005	7.508	0.006	A	0.068	0.007	T	0.08	0.01	L	7.5531	0.0046	0.021	214	A	7.53	7.60		D	20330−6822	I 1	2 C A	AB	135	12.148	0.017	2.71	0.05	S
101398	7.315	0.006	6.723	0.005		0.552	0.007	T	0.62	0.01	L	6.7471	0.0010	0.008	127		6.73	6.76		C			1 S							S
101399	9.621	0.018	8.750	0.014		0.738	0.002	G	0.78	0.00	H	8.8020	0.0014	0.018	140		8.77	8.83		C			1 X S							
101400	12.940	0.357	10.823	0.094		1.790	0.304	T	1.89	0.15	K	10.8063	0.0038	0.032	78		10.75	10.87		C			1							G

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5 6	7		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
101401	20 33 01.51	+67 18 34.2	8.34	H		308.256 286 71	+67.309 509 23		8.71	14.69	−14.26	0.70	0.57	0.71	0.80	0.61	− 1	−29	+ 9	+ 2	+ 6	+17	+ 0	+ 1	+17	+13	0	0.25
101402	20 33 01.86	+28 51 21.4	10.29	2 H		308.257 763 87	+28.855 944 69		0.23	−4.17	−17.72	1.38	1.63	2.37	1.57	1.84	− 5	− 2	+ 5	+15	+ 1	−10	+ 2	+16	+ 5	+ 9	0	3.46
101403	20 33 01.91	−71 19 13.8	8.02	H		308.257 950 37	−71.320 501 65		3.14	−15.25	17.44	0.61	0.72	1.00	0.66	0.88	−28	− 5	−20	−14	+ 9	− 3	+11	+ 1	− 1	−36	0	0.50
101404	20 33 02.60	+31 44 08.3	8.33	H		308.260 825 07	+31.735 628 04		2.08	5.52	−2.87	0.55	0.61	0.93	0.73	0.66	−12	− 3	− 3	+12	+ 4	− 5	+ 3	−13	+ 6	−12	0	−0.81
101405	20 33 03.02	−19 18 18.8	8.78	2 H		308.262 573 55	−19.305 235 98		1.29	3.17	−5.79	1.26	0.83	1.47	1.64	1.09	+38	+ 0	− 5	+ 5	+12	+16	+11	+19	−16	+42	0	1.44
101406	20 33 03.40	−02 07 57.8	8.86	H		308.264 169 32	−02.132 735 41		2.42	10.34	−2.53	1.06	0.78	1.28	1.60	1.03	− 5	− 6	−30	+45	−24	+36	−11	+63	−27	−20	0	1.88
101407	20 33 03.81	+28 51 48.0	8.68	H		308.265 890 88	+28.863 341 32		4.84	−5.66	−16.71	0.75	0.82	1.27	0.88	0.84	−11	− 9	+17	+ 0	+13	+10	+ 9	+ 4	+ 7	+ 7	2	3.51
101408	20 33 04.33	+30 56 13.9	9.20	H		308.268 050 82	+30.937 208 29		0.90	−1.02	−3.82	0.60	0.78	1.12	0.68	0.78	−28	− 1	− 2	+21	− 8	− 6	− 8	−12	+ 8	−29	0	−1.66
101409	20 33 04.79	−16 01 33.6	8.49	H		308.269 950 77	−16.025 999 84		3.93	3.51	−2.84	1.05	0.66	1.18	1.34	0.92	+ 5	−20	−13	−13	− 1	+43	+ 4	+29	− 1	+ 5	2	0.65
101410	20 33 05.02	+12 44 54.1	9.18	H		308.270 921 86	+12.748 366 57		2.61	6.44	3.35	0.99	0.89	1.24	1.27	0.99	+40	+ 0	+17	+25	+49	+30	+41	+46	+19	+56	0	0.47
101411	20 33 05.12	+31 39 25.4	7.79	2 H		308.271 319 31	+31.657 064 00		1.19	−3.91	−13.18	0.43	0.50	0.73	0.57	0.55	−19	− 1	− 1	+ 6	+ 1	− 8	+ 2	−15	+ 6	−14	0	0.77
101412	20 33 06.57	+54 27 25.0	6.82	2 H		308.277 376 58	+54.456 956 17		1.45	15.01	3.22	0.48	0.46	0.54	0.56	0.51	− 7	− 2	+ 0	+20	+ 9	−13	+ 8	− 2	+24	−10	1	0.83
101413	20 33 07.29	+39 52 00.8	8.12	H		308.280 364 32	+39.866 896 50		2.30	0.64	−0.70	0.52	0.57	0.73	0.50	0.62	− 9	−14	− 1	+ 2	+12	−12	+15	−17	+ 2	+ 2	0	−1.20
101414	20 33 07.33	+06 49 48.9	7.96	H		308.280 555 71	+06.830 241 49		10.03	70.35	22.20	0.95	0.79	1.12	1.18	1.06	+27	+ 1	−11	+14	+25	+ 3	+23	+55	− 3	+33	0	−1.24
101415	20 33 08.14	−43 19 31.2	8.14	H		308.283 916 80	−43.325 326 49		3.08	3.06	8.26	0.94	0.67	1.07	1.13	0.81	+21	−16	−16	+ 6	− 1	+ 8	+ 2	− 7	+ 0	+32	0	−0.07
101416	20 33 08.22	−58 38 29.6	8.13	H		308.284 236 31	−58.641 546 69		9.48	18.23	6.88	0.66	0.64	1.05	1.01	0.84	+26	−28	−14	−25	+ 7	+ 8	+ 2	−25	+15	−18	2	1.24
101417	20 33 08.23	−44 33 55.5	8.33	H		308.284 283 74	−44.565 418 26		3.61	2.98	−19.16	0.98	0.65	1.19	1.44	0.89	+ 5	−13	− 8	+ 2	+ 7	−17	+ 5	+ 6	+ 2	+ 3	0	0.49
101418	20 33 09.21	+22 08 57.7	8.00	H		308.288 359 95	+22.149 350 24		5.07	−0.03	−23.89	0.83	0.61	1.01	0.91	0.67	+13	−33	− 3	+36	+11	−13	+10	+27	+ 5	+30	2	−0.47
101419	20 33 10.74	+41 15 08.3	10.78	G		308.294 742 84	+41.252 294 42		2.48	−3.62	−4.49	1.43	1.28	1.75	1.67	1.46	− 4	− 7	+10	−18	− 8	− 9	− 8	−14	+11	+ 2	0	1.60
101420 H	20 33 10.97	+64 41 30.1	8.58	H		308.295 718 70	+64.691 706 48	A	3.56	6.57	−1.84	1.04	1.04	1.07	0.94	1.07	+ 7	+ 2	+17	−13	+ 7	− 5	+ 6	− 3	−10	+34	1	0.41
101421	20 33 12.76	+11 18 12.0	4.03	G		308.303 186 57	+11.303 332 17		9.09	10.75	−28.54	0.69	0.48	0.81	0.84	0.56	+16	−29	−11	+31	+26	+ 4	+25	+40	− 4	+30	4	2.90
101422	20 33 13.24	−58 06 44.2	7.86	G		308.305 182 25	−58.112 278 60		10.20	27.12	−27.86	0.68	0.63	1.06	1.05	0.82	+10	−19	−29	−34	+20	−17	+15	−29	+16	−26	0	0.60
101423	20 33 14.37	+47 09 57.3	7.79	G		308.309 866 60	+47.165 915 99		2.53	−17.18	−23.41	0.62	0.63	0.75	0.80	0.70	− 4	+ 0	+10	+19	+ 1	+ 3	+ 2	−14	+11	− 2	0	−0.19
101424	20 33 14.77	+34 01 15.7	8.33	H		308.311 532 57	+34.021 018 61		8.54	16.66	−55.91	0.55	0.64	0.85	0.65	0.67	−11	+ 6	+ 5	− 6	− 4	− 7	− 2	−21	+ 1	+ 0	0	−0.21
101425 H	20 33 15.08	+41 18 50.5	8.69	H		308.312 832 72	+41.314 035 97	A	−0.94	−1.16	−4.05	1.69	1.59	1.91	1.76	1.63	− 5	− 7	+ 8	− 4	− 8	−13	− 8	−15	+10	− 1	3	0.97
101426	20 33 15.10	+35 59 21.7	8.86	H		308.312 897 53	+35.989 362 02		3.32	17.79	13.93	0.66	0.70	0.98	0.66	0.68	−16	−10	+16	− 8	+ 7	− 1	+ 7	− 9	+ 7	− 8	0	−0.81
101427	20 33 17.61	−80 57 53.4	5.76	H		308.323 386 60	−80.964 826 33		6.19	8.35	−14.88	0.46	0.42	0.61	0.55	0.56	− 6	−34	+ 6	−18	+14	+18	+13	−30	− 3	+ 8	1	0.95
101428 H	20 33 18.23	+27 27 26.5	8.98	G		308.325 976 51	+27.457 367 73	A	2.40	8.17	5.30	1.33	1.37	1.67	1.13	1.28	− 4	− 1	−11	−30	+16	−24	+ 9	+ 8	+ 6	+ 6	0	−0.41
101429 H	20 33 19.73	−53 52 10.5	9.57	H		308.332 189 68	−53.869 577 34	A	3.44	7.52	5.58	2.40	1.71	2.51	2.90	1.85	+ 1	−33	− 7	+ 4	−16	− 1	−25	−13	+ 8	−53	0	−0.19
101430	20 33 19.89	+33 23 22.4	8.22	H		308.332 854 53	+33.389 550 55		17.71	154.45	140.28	1.08	1.20	1.65	1.21	1.24	− 7	+ 1	− 6	−19	− 5	− 7	− 4	−31	+11	− 2	0	
101431	20 33 22.63	+29 31 26.4	7.46	H		308.344 306 06	+29.524 001 66		2.10	−17.67	−26.65	0.36	0.46	0.72	0.37	0.45	−36	+ 4	− 4	+ 6	− 9	− 2	− 9	−14	+ 9	−41	1	1.91
101432	20 33 22.95	−41 31 27.6	6.80	1 G		308.345 624 82	−41.524 334 33		25.48	−75.31	−181.07	0.77	0.57	0.89	0.94	0.74	+38	−36	−31	+10	+18	+ 5	+24	+29	−11	+26	0	0.68
101433	20 33 23.41	+54 48 07.2	7.01	G		308.347 525 06	+54.802 003 33		9.45	33.67	12.64	0.45	0.48	0.54	0.51	0.52	−12	+ 9	+ 6	+ 6	+ 7	−16	+10	+ 2	+20	−14	2	0.92
101434	20 33 24.95	+69 40 17.6	7.65	H		308.353 955 45	+69.671 550 35		4.94	−8.27	−10.34	0.57	0.52	0.59	0.66	0.51	+ 2	− 1	+20	+ 6	+12	−16	+13	+ 8	+ 5	+18	0	−0.37
101435 H	20 33 25.30	−03 21 24.0	8.25	H		308.355 398 59	−03.356 654 36	*	3.66	−1.81	2.72	2.39	1.53	1.49	1.77	1.20	−13	− 1	−14	+34	−31	+19	−31	+33	−13	+ 3	1	−0.11
101436	20 33 25.54	−06 13 09.9	6.96	1 H		308.356 413 71	−06.219 405 34		1.98	5.24	5.40	0.98	0.64	1.03	1.61	0.94	− 7	−11	−32	+34	−21	+12	−13	+50	−18	−33	0	−0.75
101437 H	20 33 26.03	−20 53 48.9	9.06	H		308.358 478 53	−20.896 926 32	*	4.79	−4.13	4.05	1.24	0.73	1.35	1.46	0.89	+28	− 6	+ 2	−18	+ 7	+16	+ 3	+ 7	− 3	+42	0	−0.36
101438	20 33 26.50	+52 48 14.6	7.64	H		308.360 413 78	+52.804 053 62		3.81	−0.63	3.31	0.54	0.52	0.61	0.72	0.60	− 1	− 8	+ 9	+20	+ 7	+ 5	+ 4	+10	+ 9	− 5	0	0.80
101439	20 33 27.72	+50 41 00.1	9.01	2 H		308.365 502 53	+50.683 358 65		0.59	0.55	−0.72	0.71	0.57	0.73	0.81	0.61	− 6	− 1	+10	− 1	+ 2	+12	+ 1	+ 8	+12	− 5	0	−2.48
*101440	20 33 28.06	+59 29 21.7	8.70	H		308.366 902 96	+59.489 368 89		3.70	0.38	1.81	0.70	0.71	0.78	0.78	0.72	+ 0	+ 2	+ 5	+ 7	+ 7	− 8	+ 9	−14	+16	+ 9	1	1.25
*101441 H	20 33 27.94	+22 50 11.0	8.64	1 H		308.366 435 69	+22.836 402 60	A	1.99	−10.11	−7.46	1.50	1.20	1.69	1.46	1.20	+23	−26	−10	− 1	−14	− 5	− 9	−15	+ 1	+39	0	1.05
101442	20 33 30.39	+32 54 27.8	7.34	H		308.376 614 20	+32.907 736 07		2.60	1.21	−7.84	0.42	0.47	0.68	0.50	0.49	−12	− 5	+ 9	+17	− 5	−18	− 2	−20	+ 7	− 8	0	−1.58
101443 H	20 33 31.00	−22 13 54.2	7.47	G		308.379 156 41	−22.231 722 05	A	20.72	−85.04	−62.95	1.31	0.75	1.29	1.67	0.87	+41	+13	− 1	+ 7	− 1	−14	− 7	− 2	−30	+47	2	0.82
101444	20 33 32.46	+88 04 01.9	9.24	H		308.385 238 34	+88.067 182 50		3.04	5.11	22.86	0.76	0.73	0.87	1.02	1.01	+ 5	−18	+ 1	+ 4	+ 1	−14	+ 1	−13	+14	+22	3	−2.20
101445	20 33 34.73	−21 15 18.9	9.85	H		308.394 727 34	−21.255 237 24		6.27	−11.83	4.31	1.61	0.92	1.83	2.25	1.24	+30	−15	− 6	− 7	+ 8	+14	+ 9	+24	−13	+32	0	−1.12
101446	20 33 37.12	+01 16 09.3	8.06	H		308.404 687 41	+01.269 247 52		7.69	33.44	1.91	0.91	0.78	1.13	1.20	1.09	+28	+ 2	+ 0	+30	+26	+35	+23	+64	+ 5	+38	0	−0.92
101447	20 33 37.66	+25 52 38.5	7.84	H		308.406 915 93	+25.877 367 89		3.78	8.37	13.56	0.61	0.57	0.95	0.70	0.66	−10	+ 5	+ 6	+12	− 8	− 4	− 4	+ 1	− 7	+25	0	0.22
101448	20 33 37.73	−18 23 45.9	9.67	H		308.407 209 14	−18.396 080 58		1.04	6.59	3.84	1.44	1.04	1.66	1.77	1.68	+29	−30	−10	+ 0	+ 0	+20	+ 8	+20	+47	−26	+41	0	0.85
101449	20 33 38.43	+53 28 05.2	8.27	1 H		308.410 128 54	+53.468 114 86		8.50	25.22	19.48	0.64	0.57	0.68	0.87	0.68	−13	−18	+ 8	+16	+18	− 8	+13	− 8	+17	− 8	0	1.30
101450	20 33 38.90	−40 43 33.7	8.83	H		308.412 064 63	−40.726 015 21		1.36	12.43	−6.51	1.13	0.72	1.35	1.66	1.18	+18	−25	−18	+ 8	+ 0	−22	− 2	+19	+ 6	−12	2	0.67
101451	20 33 39.33	−53 29 51.8	8.23	H		308.413 879 88	−53.497 731 10		4.47	66.41	−58.65	0.98	0.69	1.20	1.29	0.77	− 6	− 9	−11	−13	+ 2	−14	− 8	−36	+17	−55	0	−0.99
101452	20 33 39.62	+45 10 32.0	6.71	G		308.415 087 49	+45.175 551 96		5.45	26.02	5.54	0.77	0.71	0.92	0.91	0.80	− 2	−17	+ 5	−22	+ 0	+14	− 5	− 9	+22	+11	0	
101453	20 33 42.18	−05 38 49.2	13.22	3 H		308.425 735 01	−05.647 013 79		12.96	19.07	2.26	7.59	5.61	9.36	12.10	9.03	+25	−28	− 8	+22	−15	−30	− 6	+29	−35	+39	5	1.24
101454 H	20 33 42.32	−41 03 39.2	9.97	H		308.426 339 42	−41.060 900 83	A	1.73	15.57	−15.62	3.53	2.21	3.50	5.05	3.47	+32	−18	−16	+ 9	+12	− 3	+20	+26	− 3	+16	1	0.45
101455	20 33 42.78	−32 03 05.5	10.23	H		308.428 236 55	−32.051 539 89		−1.42	−5.97	1.68	1.49	1.02	1.74	1.93	1.62	+22	− 8	− 1	+ 0	− 4	+14	− 5	+16	−16	+24	0	−1.14
101456 H	20 33 42.81	+38 34 59.3	8.04	H		308.428 382 26	+38.583 129 80	A	4.32	7.83	0.99	0.89	1.06	1.11	0.95	1.15	+ 0	+12	− 1	+17	+ 9	− 7	+11	−10	+ 2	+ 8	1	−0.13
101457	20 33 42.87	+38 50 04.8	8.75	H		308.428 630 32	+38.834 672 57		3.70	12.06	−4.18	0.59	0.72	0.83	0.62	0.82	− 7	+ 5	+ 9	+11	+11	− 3	+19	−15	+ 2	+15	2	−1.01
101458	20 33 44.80	+57 47 51.4	8.79	H		308.436 679 72	+57.797 610 43		3.51	−6.90	4.87	0.71	0.71	0.78	0.74	0.73	+ 3	− 2	+11	− 3	+ 3	+ 4	+ 5	−26	+14	+13	5	0.20
*101459	20 33 45.30	−33 13 25.2	9.94	H		308.438 740 96	−33.223 661 90		11.64	75.90	−30.64	1.37	0.87	1.81	1.78	1.33	+44	−26	+ 5	+12	+37	+ 8	+31	+27	+ 7	+83	0	2.09
*101460	20 33 45.29	+27 52 20.7	7.71	H		308.438 725 13	+27.872 429 67		8.18	31.38	15.52	0.50	0.57	0.93	0.59	0.59	− 4	−12	+22	− 7	+ 8	− 5	+ 7	+ 4	+ 2	+10	0	0.65
101461	20 33 45.61	−46 12 19.4	11.88	G		308.440 045 11	−46.205 384 24		22.27	−13.21	43.24	2.66	1.93	3.23	3.35	2.86	+18	−27	−11	+ 0	− 6	−17	− 7	+ 0	− 7	+22	0	−0.17
101462	20 33 46.16	+52 49 35.6	7.37	H		308.442 317 50	+52.826 544 21		3.54	9.44	0.41	0.48	0.47	0.54	0.63	0.51	− 1	− 7	+12	+26	+10	− 1	+ 7	+ 8	+12	− 4	0	0.24
101463	20 33 46.43	−38 31 23.9	9.43	H		308.443 477 52	−38.523 293 86		14.45	65.11	11.05	1.23	0.82	1.52	1.72	1.11	+22	−16	−10	+ 2	+13	+ 7	+11	+11	+ 3	+41	0	−0.12
101464 H	20 33 46.63	−36 43 06.7	9.37	H		308.444 300 91	−36.718 526 73	A	9.99	32.29	−51.37	3.23	2.57	2.83	3.21	2.42	+10	+32	+ 9	−15	+19	−12	+22	+26	+16	+50	1	−0.57
101465 H	20 33 46.84	−40 33 25.9	7.40	H		308.445 161 98	−40.557 188 04	A	5.39	23.21	−8.68	1.84	1.16	1.96	3.05	1.67	+11	−28	−14	+15	− 4	−11	− 8	+20	+ 5	+ 3	4	1.15
101466	20 33 46.98	−39 36 23.0	9.22	H		308.445 739 45	−39.606 376 76		9.42	−26.14	−52.57	1.20	0.73	1.43	1.33	1.00	+15	−44	− 3	+ 5	+ 6	+12	+ 8	+ 7	− 2	+35	2	−0.02
101467	20 33 48.56	+41 46 22.2	6.50	H		308.452 313 32	+41.772 821 22		10.28	−1.36	−67.14	0.44	0.44	0.57	0.50	0.45	− 5	+ 0	+14	+ 0	−10	−16	− 7	−11	+14	− 1	0	0.61
101468	20 33 48.84	−12 43 05.5	9.70	H		308.453 484 82	−12.718 206 49		3.09	−4.12	−4.08	1.49	1.10	1.78	2.00	1.68	+37	− 9	−28	−12	+ 1	+ 4	+ 5	+34	−25	+33	0	0.27
101469	20 33 49.35	−29 17 33.4	7.00	H		308.455 630 57	−29.292 613 22		13.11	37.87	0.18	0.74	0.52	0.84	0.94	0.73	+21	−31	−19	+13	− 5	+26	+ 2	+34	− 9	+ 9	0	1.05
101470	20 33 51.84	+44 49 42.4	9.07	H		308.466 008 21	+44.828 449 32		0.68	−1.87	−0.51	0.72	0.77	0.92	0.82	0.80	+ 4	− 4	+ 7	−13	− 1	+13	− 2	−24	+21	+12	0	3.16
*101471	20 33 53.22	+38 41 20.6	8.52	H		308.471 752 53	+38.689 064 39		1.80	0.92	0.50	0.55	0.62	0.77	0.62	0.71	− 5	+ 3	− 1	+13	+ 4	−13	+ 8	−18	+12	+ 4	0	0.59
*101472	20 33 53.21	−27 10 16.6	9.34	G		308.471 700 54	−27.171 290 88		15.18	71.63	−82.65	1.19	0.74	1.35	1.51	1.05	+19	−16	− 5	+ 7	+16	+34	+14	+33	+13	+35	0	−0.02
101473	20 33 53.70	+10 03 35.0	6.54	1 H		308.473 763 24	+10.059 718 02		8.13	−2.33	6.74	0.67	0.61	0.85	0.80	0.73	+22	− 9	− 6	+ 8	+32	+24	+32	+56	+ 9	+27	0	−0.15
101474 H	20 33 54.19	+35 15 03.1	4.61	2 G		308.475 784 31	+35.250 864 82	*	3.51	−2.26	−5.35	0.57	0.93	0.65	0.53	0.50	−12	− 9	+ 8	− 4	− 5	− 9	− 5	−11	+ 5	− 8	2	1.84
101475 H	20 33 54.84	+46 41 37.9	5.78	H		308.478 481 89	+46.693 861 59	A	6.78	9.66	1.82	1.56	1.64	0.68	0.82	0.86	+27	+ 9	+11	− 5	+14	− 9	+ 5	−13	+14	−12	1	0.24
101476	20 33 54.89	−10 07 22.3	8.40	H		308.478 688 50	−10.122 868 16		−0.06	4.08	−14.84	1.05	0.78	1.25	1.30	1.25	+30	−21	−13	− 4	+24	+28	+21	+55	−12	+44	0	0.75
101477	20 33 55.06	−44 30 57.5	5.12	G		308.479 429 59	−44.515 961 41		15.10	11.17	−35.67	0.69	0.45	0.80	0.98	0.55	+ 0	−12	−24	+ 1	+22	−12	+15	+ 5	+10	+11	0	0.07
101478	20 33 55.90	−35 33 53.4	10.74	H		308.482 918 85	−35.564 826 76		5.72	−18.22	−25.28	1.65	0.99	2.07	1.97	1.38	+33	−28	− 8	− 9	+13	+17	+13	+ 3	+ 3	+61	0	−0.39
101479	20 33 56.02	−52 50 20.8	8.24	G		308.483 429 73	−52.839 118 19		11.24	22.49	−31.16	0.96	0.79	1.14	1.18	0.77	+24	−20	−12	+20	− 7	+ 9	− 7	−23	− 6	+12	0	−0.62
101480	20 33 56.14	−74 32 40.1	10.07	G		308.483 901 13	−74.544 466 50		2.97	6.72	−7.85	1.12	1.11	1.59	1.31	1.45	− 3	−27	− 1	− 3	+13	−19	+19	−14	−16	+14	0	0.34
101481	20 33 56.19	+61 44 36.2	7.04	H		308.484 130 67	+61.743 390 71		3.61	10.43	5.10	0.50	0.45	0.53	0.51	0.45	− 2	+ 3	+ 6	+13	+ 5	− 9	+ 9	−12	+ 9	+12	0	0.48
*101482	20 33 57.09	+12 06 05.9	7.96	H		308.487 866 81	+12.101 651 32		1.71	11.98	8.32	0.89	0.63	1.11	0.99	0.70	+30	−30	− 6	+10	+23	+ 8	+18	+27	+ 5	+46	0	2.57
*101483	20 33 57.00	+13 01 37.9	5.39	G		308.487 486 93	+13.027 201 46		18.85	76.49	21.89	0.74	0.59	0.82	1.52	0.75	− 0	−35	+ 1	−46	+31	+37	+20	− 4	− 2	+15	0	1.39
101484	20 33 57.75	+29 41 11.6	8.48	H		308.490 631 49	+29.686 554 94		2.46	3.94	−1.62	0.41	0.52	0.85	0.44	0.52	−36	− 1	+ 1	+ 6	− 8	+ 2	− 8	−11	+ 4	−41	1	−1.15
101485	20 33 58.03	+25 36 59.8	7.90	G		308.491 804 05	+25.616 621 91		1.26	14.11	−8.15	0.63	0.61	1.00	0.75	0.79	− 6	+ 8	+ 5	− 8	−17	− 4	−18	− 9	−22	+27	1	−0.98
101486	20 33 58.25	+46 24 58.7	7.67	H		308.492 705 78	+46.416 297 35		2.46	4.59	−7.16	0.60	0.56	0.72	0.77	0.61	−14	− 4	+17	+ 7	+11	−17	+16	−15	+ 2	+ 1	1	1.22
101487	20 33 58.26	+14 42 46.0	7.75	H		308.492 754 01	+14.712 787 32		1.92	−9.26	−23.47	0.72	0.63	0.89	0.91	0.74	+20	+ 2	− 3	− 6	+31	+10	+26	+17	+16	+38	0	−0.97
101488	20 33 59.50	+52 35 52.3	7.41	H		308.497 930 47	+52.597 865 91		3.77	−17.48	−32.59	0.55	0.48	0.59	0.69	0.53	− 8	+ 8	+ 8	+10	− 1	+ 6	− 3	− 6	+13	−10	0	0.86
101489	20 33 59.92	+04 53 55.3	6.42	H		308.499 673 49	+04.898 685 47		5.24	4.79	−8.79	0.77	0.58	0.90	1.05	0.82	+16	− 9	+ 1	+21	+ 7	+ 2	+ 5	+53	+ 3	+20	0	0.89
101490	20 34 01.29	+18 11 07.8	7.03	H		308.505 362 94	+18.185 501 31		2.58	−9.83	−5.85	0.72	0.52	0.83	0.96	0.55	− 5	+17	−21	+12	+37	+ 1	+34	+ 5	+24	+ 8	0	−0.89
101491	20 34 01.64	+36 29 22.0	10.51	H		308.506 825 95	+36.489 438 69		4.34	2.35	−0.69	0.90	0.96	1.34	0.96	0.97	− 8	−10	+ 8	− 7	+ 2	− 1	+ 0	−13	+14	−13	0	−0.68
101492	20 34 01.81	−12 20 37.1	6.97	H		308.507 551 11	−12.343 641 29		7.67	7.94	−11.03	1.01	0.63	1.14	1.52	0.92	+17	−11	−24	+ 0	−27	− 2	−22	+18	−21	− 8	0	0.83
101493 H	20 34 01.96	+34 40 44.5	6.67	G		308.508 165 98	+34.679 018 46	A	3.83	9.44	0.40	0.64	0.69	0.83	0.71	0.72	− 5	+ 3	+ 5	+20	− 8	+12	− 3	− 3	− 9	+15	3	2.76
101494	20 34 03.30	+04 29 22.8	8.27	H		308.513 730 09	+04.489 661 28		12.51	−79.19	−80.60	1.09	0.98	1.31	1.66	1.32	+39	− 4	− 7	+ 7	+34	−16	+34	+70	+ 6	+36	0	−0.60
101495	20 34 04.61	+05 08 29.8	10.71	H		308.519 208 92	+05.141 624 27		1.60	−0.68	−8.53	1.64	1.38	2.22	2.08	1.92	+27	+ 9	− 7	+ 1	+13	+28	+ 8	+46	+ 0	+39	0	0.13
101496	20 34 05.04	+48 04 08.8	9.24	H		308.521 010 66	+48.069 112 08		5.93	−8.31	−25.58	0.82	0.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
101401	9.056	0.013	8.410	0.012		0.600	0.015	T	0.67	0.01	L	8.4692	0.0015	0.012	106		8.44	8.50		C			1								
101402						0.402	0.072	G	0.47	0.08	R	10.3830	0.0063	0.065	167		10.25	10.47		U	20331+2852	I 2	1 S								S G
101403	9.961	0.017	8.204	0.008		1.465	0.015	T	1.47	0.02	L	8.1575	0.0014	0.021	186		8.12	8.20		D	20332−7119	I 1	1 S								
101404	10.027	0.020	8.473	0.010		1.304	0.018	T	1.26	0.02	L	8.4885	0.0015	0.017	168		8.46	8.51		C	20330+3144	I 1	1								
101405	10.869	0.067	8.979	0.022		1.603	0.058	T	2.00	0.14	O	8.8616	0.0047	0.029	61		8.78	8.90		U 2			1								
101406	8.969	0.014	8.870	0.017		0.097	0.021	T	0.11	0.02	L	8.8961	0.0019	0.013	84		8.87	8.92		C			1								
101407	9.084	0.012	8.730	0.012		0.476	0.400	G	0.42	0.06	L	8.7672	0.0027	0.028	181		8.73	8.81		D	20331+2852	I 2	1 S								
101408	11.055	0.038	9.366	0.015		1.411	0.032	T	1.39	0.04	L	9.3416	0.0014	0.021	211		9.30	9.38					1								
101409	9.053	0.015	8.521	0.015		0.499	0.019	T	0.57	0.02	L	8.5998	0.0025	0.016	64		8.57	8.63					1								
101410	9.214	0.017	9.193	0.023		0.050	0.015	G	0.06	0.01	H	9.2038	0.0018	0.020	94		9.17	9.24					1								
101411	7.814	0.006	7.784	0.008		0.033	0.005	G	0.05	0.00	H	7.8063	0.0028	0.038	188		7.71	7.85		U 2 C			1								S
101412	9.116	0.015	7.042	0.006		1.755	0.013	T	2.47	0.03	O	6.8453	0.0031	0.030	104		6.80	6.90		U 2			1 S								S
101413	8.099	0.007	8.099	0.009		0.005	0.010	T	0.03	0.01	L	8.1259	0.0016	0.013	136		8.10	8.15					1								
101414	8.420	0.012	8.012	0.012		0.398	0.015	G	0.46	0.02	H	8.0519	0.0018	0.014	80		8.03	8.07		C			1								S
101415	9.868	0.024	8.285	0.012		1.327	0.021	T	1.29	0.02	L	8.2910	0.0017	0.016	86		8.26	8.32		C			1								
101416	9.411	0.012	8.243	0.008		1.002	0.011	T	0.98	0.01	L	8.2922	0.0012	0.017	173		8.26	8.32		C			1								
101417	10.271	0.034	8.485	0.014		1.488	0.029	T	1.51	0.04	L	8.4543	0.0024	0.019	90		8.43	8.49					1								
101418	8.222	0.010	8.024	0.011		0.189	0.014	T	0.21	0.02	L	8.0626	0.0012	0.011	99		8.04	8.09		C			1								S
101419						1.825	0.038	G	1.81	0.04	J	10.7767	0.0045	0.037	122		10.71	10.82					1								G
101420	9.062	0.018	8.609	0.020	*	0.501	0.015	G	0.57	0.02	H	* 8.6868	0.0013	0.012	107	*	8.67	8.71		D	20332+6442	I 1	2 C A	AB	86	7.243	0.016		2.76	0.07	
101421	3.889	0.002	4.020	0.002		−0.123	0.004	G	−0.10	0.03	C	3.9978	0.0009	0.005	76		3.99	4.01					1								S
101422	8.543	0.010	7.940	0.009		0.612	0.006	G	0.68	0.01	H	7.9805	0.0018	0.017	138		7.96	8.01					1								S
101423	9.574	0.017	7.944	0.009		1.412	0.008	G	1.39	0.01	H	7.9299	0.0015	0.013	115		7.90	7.95		C			1								
101424	8.837	0.010	8.384	0.010		0.427	0.013	T	0.49	0.01	L	8.4278	0.0016	0.016	161		8.41	8.46					1								
101425	10.136	0.045	8.880	0.025	*	1.071	0.040	T	1.04	0.03	L	* 8.8533	0.0025	0.027	121	*	8.81	8.89		D	20332+4119	I 1	2 C A	AB	203	9.454	0.008		1.30	0.04	
101426	9.222	0.014	8.895	0.015		0.325	0.007	G	0.38	0.01	H	8.9371	0.0020	0.020	151		8.90	8.98					1								
101427	7.217	0.005	5.896	0.002		1.122	0.004	T	1.08	0.00	L	5.9294	0.0008	0.007	140		5.92	5.94		C	20333−8058	I 1	1 G								S
101428	9.052	0.010	8.990	0.012	*	0.047	0.002	G	0.06	0.00	H	* 8.9978	0.0019	0.024	208	*	8.96	9.05		D	20333+2727	H 1	2 C A	AB	105	0.458	0.009		2.25	0.04	
101429	10.143	0.031	9.730	0.032	*	0.404	0.037	T	0.47	0.04	L	* 9.6601	0.0020	0.019	88	*	9.64	9.69		D	20333−5352	I 1	2 C A	AB	273	0.957	0.008		1.19	0.03	
101430	8.862	0.011	8.274	0.010		0.549	0.013	T	0.62	0.01	L	8.3351	0.0019	0.018	165		8.31	8.37			20333+3323	I 1	1 X								
101431	9.325	0.009	7.612	0.004		1.430	0.008	T	1.42	0.01	L	7.6005	0.0008	0.013	281		7.58	7.62					1								S
101432	7.602	0.007	6.880	0.006		0.666	0.004	G	0.73	0.00	H	6.9333	0.0017	0.013	94		6.91	6.95		U 2			1								S
101433	7.437	0.006	7.058	0.006		0.365	0.009	G	0.43	0.01	H	7.0966	0.0011	0.010	107		7.08	7.12					1								S
101434	9.500	0.018	7.814	0.009		1.408	0.016	T	1.39	0.02	L	7.7890	0.0010	0.010	110		7.77	7.80		C			1								
101435	9.511	0.020	8.367	0.013	*	0.983	0.019	T	0.96	0.01	L	* 8.4143	0.0015	0.012	93	*	8.39	8.44		D	20334−0321	H 1	2 C A	AB	139	0.250	0.009		1.48	0.10	S
101436	9.083	0.019	7.162	0.008		1.629	0.017	T	2.09	0.05	O	7.0307	0.0022	0.015	61		7.01	7.07		U	20334−0613	I 1	1								S
101437	9.418	0.020	9.117	0.022	*	0.287	0.032	T	0.33	0.04	L	* 9.1334	0.0024	0.017	62	*	9.11	9.17		C	20334−2054	H 1	2 C S B	AB	291	0.187	0.053		2.05	0.78	
101438	9.103	0.015	7.756	0.009		1.160	0.015	G	1.12	0.01	H	7.8079	0.0014	0.011	117		7.79	7.83		C			1								
101439	9.022	0.015	9.020	0.019		0.007	0.022	T	0.03	0.02	L	9.0162	0.0064	0.045	113		8.98	9.11	5.89	P 1 A			1								
101440	8.850	0.012	8.720	0.014		0.126	0.017	T	0.14	0.02	L	8.7506	0.0024	0.016	108		8.73	8.79			20335+5929	I 1	1								S
101441	10.866	0.055	8.855	0.018	A	1.667	0.143	G	1.80	0.21	K	* 8.7344	0.0031	0.024	103	*	8.69	8.77		U	20335+2250	H 1	2 C D	AB	301	1.514	0.061		3.81	0.40	D
101442	7.134	0.004	7.295	0.005		−0.150	0.002	G	−0.15	0.00	H	7.2853	0.0007	0.010	183		7.26	7.30					1								S
101443	8.120	0.012	7.524	0.009	A	0.548	0.015	G	0.62	0.01	H	* 7.5561	0.0014	0.008	68	*	7.54	7.58		D	20335−2214	I 1	2 C C	AB	21	9.820	0.048		3.97	0.24	S
101444	10.814	0.043	9.329	0.020		1.250	0.037	T	1.21	0.04	L	9.4001	0.0019	0.018	114		9.37	9.44		C			1								
101445	10.456	0.054	9.866	0.050		0.552	0.054	T	0.62	0.05	L	9.9732	0.0024	0.024	66		9.93	10.01		C			1								
101446	9.206	0.015	8.140	0.011		0.924	0.014	T	0.92	0.01	L	8.2168	0.0016	0.015	90		8.19	8.24		C			1								
101447	8.009	0.008	7.858	0.008		0.145	0.011	T	0.16	0.01	L	7.8938	0.0013	0.017	136		7.87	7.92					1 S								S
101448	11.280	0.086	9.832	0.038		1.221	0.074	T	1.18	0.07	L	9.8396	0.0030	0.017	63		9.82	9.86		C			1								
101449	8.650	0.011	8.305	0.011		0.327	0.015	T	0.38	0.02	L	8.3515	0.0019	0.022	115		8.31	8.38		U			1								
101450	11.132	0.064	9.025	0.019		1.782	0.055	T	2.14	0.12	O	8.9018	0.0022	0.017	77		8.87	8.93		C			1								
101451	9.751	0.026	8.375	0.015		1.165	0.024	T	1.13	0.02	L	8.3943	0.0016	0.013	81		8.36	8.43		C			1								
101452	6.757	0.005	6.704	0.006		0.034	0.009	G	0.05	0.01	H	6.7281	0.0008	0.007	117		6.72	6.74		C			1 X								S
101453											T	13.2993	0.2563	0.668	30		12.69	14.52		P 1 A			1								D P
101454	10.592	0.041	10.181	0.043	A						T	* 10.0484	0.0030	0.021	81	*	10.01	10.08		D	20337−4104	I 1	2 C A	AB	64	1.237	0.008		0.58	0.03	
101455	11.343	0.090	10.421	0.065		0.816	0.082	T	0.84	0.06	L	10.3788	0.0047	0.030	84		10.33	10.44		C			1								G
101456	8.115	0.007	8.119	0.009	*	0.026	0.005	G	0.04	0.00	H	* 8.0600	0.0013	0.013	143	*	8.04	8.08		D	20337+3835	I 1	2 C A	AB	30	0.885	0.003		1.09	0.01	
101457	8.792	0.010	8.740	0.012		0.053	0.014	T	0.07	0.01	L	8.7737	0.0016	0.018	146		8.74	8.80		C			1								
101458	10.105	0.023	8.902	0.014		1.029	0.021	T	1.00	0.02	L	8.9607	0.0013	0.015	119		8.93	8.98					1								
101459	10.702	0.032	9.989	0.027		0.656	0.034	T	0.72	0.03	L	10.0774	0.0025	0.028	174		10.03	10.12			20338−3313	I 1	1 S								
101460	8.049	0.007	7.742	0.007		0.283	0.006	G	0.32	0.01	H	7.7812	0.0011	0.015	178		7.76	7.81					1								S
101461						1.400	0.015	G	1.70	0.02	A	12.0144	0.0083	0.069	83		11.86	12.12					1								D
101462	7.308	0.005	7.363	0.007		−0.046	0.008	T	−0.02	0.01	L	7.3634	0.0012	0.010	120		7.35	7.38					1								S
101463	10.389	0.032	9.537	0.025		0.748	0.031	T	0.79	0.02	L	9.5689	0.0028	0.022	92		9.54	9.61		C			1								
101464	10.229	0.027	9.461	0.023	*	0.684	0.027	T	0.74	0.02	L	* 9.5035	0.0023	0.021	100	*	9.46	9.56		D	20338−3643	H 1	2 C A	AB	168	0.373	0.004		0.64	0.04	
101465	7.409	0.011	7.349	0.014	*	0.054	0.016	T	0.07	0.01	L	* 7.4193	0.0013	0.010	79	*	7.40	7.44		D	20338−4034	I 1	2 C A	AB	224	4.416	0.004		0.89	0.01	S
101466	9.953	0.023	9.300	0.021		0.597	0.023	T	0.67	0.02	L	9.3476	0.0023	0.018	96		9.31	9.38					1								
101467	7.775	0.007	6.617	0.005		0.994	0.007	T	0.97	0.01	L	6.6623	0.0007	0.007	134		6.65	6.67		C			1								S
101468	10.209	0.037	9.690	0.037		0.497	0.039	T	0.57	0.04	L	9.8046	0.0030	0.017	67		9.78	9.86					1								
101469	7.315	0.007	7.037	0.007		0.262	0.010	T	0.29	0.01	L	7.0718	0.0013	0.009	83		7.06	7.09		C			1								S
101470	9.332	0.017	9.091	0.019		0.230	0.024	T	0.26	0.03	L	9.1345	0.0018	0.019	112		9.11	9.19					1								
101471	8.467	0.008	8.506	0.010		−0.015	0.005	G	0.01	0.01	H	8.5196	0.0016	0.016	147		8.49	8.54					1								
101472	10.294	0.040	9.507	0.033		0.730	0.020	G	0.78	0.02	H	9.5062	0.0020	0.016	85		9.48	9.53		C			1								
101473	6.666	0.004	6.552	0.004		0.103	0.005	T	0.12	0.01	L	6.5778	0.0015	0.013	100		6.56	6.60		U 2			1								S
101474	6.610	0.005	4.824	0.004	*	1.593	0.023	G	1.78	0.03	C	* 4.7334	0.0025	0.029	147	*	4.67	4.78		U 2 C	20339+3514	I 1	2 C B	AB	277	0.229	0.012		2.46	0.12	S
101475	5.593	0.002	5.753	0.003	*	−0.140	0.004	T	−0.13	0.01	L	* 5.7282	0.0008	0.006	108	*	5.72	5.74			20339+4642	I 1	2 C C	AC	56	0.311	0.032		3.72	0.25	S P
101476	10.016	0.028	8.554	0.015		1.232	0.025	T	1.19	0.03	L	8.5650	0.0022	0.018	78		8.55	8.62					1								
101477	6.398	0.004	5.232	0.003		0.999	0.002	G	0.98	0.00	H	5.2841	0.0005	0.006	90		5.28	5.30					1								S
101478	11.243	0.058	10.781	0.062		0.435	0.078	T	0.50	0.08	L	10.8408	0.0032	0.032	115		10.78	10.89					1								G
101479	8.899	0.016	8.317	0.015		0.594	0.015	G	0.66	0.01	H	8.3630	0.0022	0.016	70		8.33	8.40		C			1								S
101480	10.191	0.022	10.116	0.031		0.090	0.015	G	0.10	0.02	H	10.1193	0.0029	0.036	136		10.07	10.18					1								
101481	7.117	0.007	7.055	0.006		0.062	0.009	T	0.07	0.01	L	7.0677	0.0009	0.008	97		7.05	7.08		C			1								S
101482	9.636	0.021	8.114	0.011		1.279	0.019	T	1.24	0.02	L	8.1143	0.0022	0.019	87		8.09	8.15			20339+1206	I 1	1								
101483	5.489	0.003	5.394	0.003		0.093	0.004	T	0.08	0.03	C	5.4185	0.0006	0.006	101		5.41	5.43		C			1 G								S
101484	8.391	0.005	8.458	0.007		−0.056	0.008	T	−0.03	0.01	L	8.4733	0.0011	0.019	294		8.44	8.50					1								
101485	9.653	0.016	8.047	0.008		1.360	0.015	G	1.33	0.02	H	8.0635	0.0012	0.015	140		8.04	8.09					1								
101486	7.637	0.007	7.645	0.009		−0.033	0.005	G	−0.01	0.01	H	7.6697	0.0017	0.012	98		7.65	7.69					1								S
101487	9.022	0.016	7.851	0.011		1.004	0.015	T	0.98	0.01	L	7.9147	0.0013	0.013	101		7.90	7.94		C			1								
101488	8.817	0.012	7.537	0.007		1.089	0.011	T	1.05	0.01	L	7.5795	0.0007	0.010	121		7.57	7.60		D			1								S
101489	7.713	0.009	6.527	0.005		1.016	0.008	T	0.99	0.01	L	6.5885	0.0009	0.007	75		6.58	6.60		C			1								S
101490	9.183	0.016	7.217	0.007		1.620	0.020	G	1.63	0.09	H	7.1455	0.0013	0.013	95		7.12	7.17					1								S
101491	11.055	0.048	10.488	0.045		0.530	0.059	T	0.60	0.06	L	10.6296	0.0033	0.033	161		10.57	10.67		C			1								G G
101492	7.159	0.006	6.988	0.007		0.164	0.009	T	0.18	0.01	L	7.0275	0.0013	0.007	62		7.01	7.05		C			1								S
101493	6.599	0.004	6.715	0.005	A	−0.120	0.015	G	−0.11	0.02	H	* 6.6645	0.0007	0.008	152	*	6.65	6.68		D	20340+3441	I 1	2 C A	AB	192	1.606	0.007		2.49	0.04	S
101494	8.921	0.015	8.324	0.014		0.557	0.018	T	0.63	0.02	L	8.3965	0.0020	0.015	74		8.37	8.42		C			1								S
101495	12.624	0.338	11.062	0.142		1.333	0.302	T	2.56	0.15	K	10.7171	0.0038	0.029	66		10.67	10.76		C			1								G
101496	9.717	0.022	9.288	0.023		0.405	0.029	T	0.47	0.03	L	9.3360	0.0020	0.018	96		9.30	9.36		C			1 S								
101497	10.408	0.031	9.883	0.031		0.460	0.015	G	0.53	0.02	H	9.9627	0.0025	0.033	167		9.91	10.02					1 X								G
101498	10.080	0.019	9.355	0.016		0.630	0.015	G	0.70	0.01	H	9.4708	0.0027	0.026	140		9.42	9.52					1								
101499	9.531	0.019	7.888	0.009		1.375	0.017	T	1.35	0.02	L	7.9081	0.0015	0.014	104		7.88	7.93		C			1								
101500	10.320	0.047	8.456	0.019		1.582	0.042	T	3.20	0.15	O	7.9963	0.0564	0.303	64		7.83	8.58		U 2			1 S								S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr											%	
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
101501	20 34 08.37	+22 53 46.7	9.07	H	308.534 861 82	+22.896 305 57	2.40	1.85	−2.76	0.78	0.75	1.21	0.89	0.85	+22	−28	−18	+10	+ 1	− 9	+ 4	+ 8	−15	+38	0	2.48
101502	20 34 08.55	+15 49 34.5	7.60	H	308.535 630 98	+15.826 239 72	4.00	29.35	56.26	0.72	0.56	0.91	0.94	0.62	+23	−12	+ 4	+23	+19	− 1	+20	+ 7	− 2	+41	0	0.95
101503	20 34 09.23	−29 40 18.6	10.00	H	308.538 453 85	−29.671 826 66	12.13	79.68	−115.43	1.49	0.89	1.62	2.04	1.41	− 2	+ 4	− 5	+ 5	+ 0	+32	− 4	+37	− 8	+ 9	0	−1.53
101504	20 34 09.52	−47 34 58.8	10.07	H	308.539 654 54	−47.583 000 55	10.45	16.57	−51.58	1.51	1.07	1.60	2.30	1.38	− 3	− 9	−21	+40	−18	+17	−14	+ 4	+ 3	− 5	0	0.44
101505	20 34 09.98	+20 59 06.7	6.49	H	308.541 578 87	+20.985 196 65	2.21	6.76	−4.72	0.54	0.43	0.73	0.53	0.45	+15	−24	−11	+40	+11	+ 5	+11	+26	+ 9	+29	1	−0.93
101506	20 34 10.24	−19 17 16.5	8.41	H	308.542 655 10	−19.287 922 92	3.85	−0.91	−9.73	1.04	0.64	1.18	1.34	0.91	+19	+ 4	+ 0	−16	+ 5	+25	+ 0	+20	−15	+27	0	0.09
101507	20 34 11.66	−13 43 16.5	6.11	H	308.548 566 18	−13.721 262 02	30.45	69.24	70.39	0.86	0.53	0.96	1.05	0.73	+ 7	−18	−30	−26	− 3	+31	+11	+25	−19	− 3	0	0.65
101508	20 34 12.16	+21 54 33.6	9.40	H	308.550 661 06	+21.909 331 16	9.05	−125.79	−114.14	1.13	0.94	1.45	1.24	0.97	+22	−21	−22	+37	+ 6	− 6	+ 6	+27	+ 2	+26	0	0.12
101509 H	20 34 12.58	+24 49 22.0	8.62	H	308.552 419 83	+24.822 787 91 A	1.69	10.31	−7.22	1.15	1.08	1.52	1.15	1.18	+ 3	+ 5	+ 8	+28	− 4	−11	+ 3	+ 8	+ 5	+31	1	0.39
101510	20 34 15.17	−30 35 35.8	9.65	H	308.563 205 11	−30.593 291 59	16.53	0.44	−96.74	1.32	0.85	1.49	1.60	1.28	+12	−19	−17	−16	− 6	+21	− 2	+15	−21	+14	0	−0.47
101511	20 34 16.10	+43 21 40.4	7.28	H	308.567 086 44	+43.361 210 38	13.14	16.30	−77.50	0.49	0.45	0.61	0.57	0.45	− 8	+13	+12	+ 7	− 6	−21	− 1	− 6	+17	−14	1	−2.26
101512	20 34 16.34	+19 31 50.0	7.29	2 H	308.568 101 19	+19.530 568 54	1.26	11.59	8.34	0.67	0.54	0.86	0.81	0.59	+ 6	−27	− 4	+19	+16	+ 1	+12	+21	+ 7	+12	0	0.47
101513	20 34 16.35	−14 36 40.4	9.57	G	308.568 128 79	−14.611 222 36	12.81	−161.21	−41.70	1.37	0.85	1.63	2.23	1.24	+ 7	−20	−24	− 6	−17	+47	+ 2	+36	−14	−21	0	−0.37
*101514	20 34 16.51	+49 46 23.3	7.21	H	308.568 801 20	+49.773 146 97	3.25	16.70	4.31	0.56	0.48	0.59	0.65	0.54	− 2	+ 2	+ 7	+ 5	+ 3	−12	+ 3	+10	− 3	+ 5	0	0.69
*101515	20 34 16.49	−43 26 51.5	6.73	H	308.568 728 02	−43.447 650 89	4.66	46.36	−85.73	0.75	0.50	0.83	0.87	0.58	+10	−22	−20	− 1	+ 8	+10	+ 8	+ 4	+ 6	+23	0	0.66
101516	20 34 22.14	+25 03 54.7	11.53	G	308.592 267 95	+25.065 189 62	67.65	−404.42	−564.16	1.56	1.48	2.32	1.76	1.89	− 3	− 4	+ 4	+22	− 4	+ 5	− 1	+10	+ 5	+26	0	1.10
101517	20 34 22.64	−66 43 51.0	7.41	H	308.594 320 76	−66.730 821 34	5.47	22.47	−13.67	0.47	0.55	0.90	0.65	0.78	−43	+ 8	−15	−12	+10	−10	+ 9	− 3	+11	−48	0	−1.48
101518	20 34 22.76	+37 51 01.8	7.52	H	308.594 821 80	+37.850 510 46	4.40	24.77	−24.94	0.49	0.54	0.67	0.53	0.56	−14	+ 9	− 1	− 8	+10	− 2	+12	−23	+14	− 8	1	0.84
101519	20 34 22.92	+28 21 41.4	10.44	G	308.595 511 85	+28.361 513 74	−1.68	−2.59	−9.22	1.14	1.16	1.72	1.40	1.28	+ 8	− 2	+ 0	− 7	+ 6	+ 5	+ 5	− 7	− 4	+13	0	1.93
*101520	20 34 23.11	−00 28 43.5	7.77	G	308.596 311 78	−00.478 758 72	3.89	14.21	−3.37	1.10	0.93	1.34	1.63	1.21	+24	− 8	−36	+58	− 5	+27	+11	+74	−32	+ 5	0	0.64
*101521	20 34 23.05	−00 28 13.6	10.78	H	308.596 052 10	−00.470 452 71	4.25	−4.69	−20.78	7.32	6.20	9.99	11.18	8.56	+18	− 2	−40	+33	−17	+32	− 1	+60	−38	− 1	0	
101522	20 34 26.31	+11 18 39.6	7.89	H	308.609 620 73	+11.311 006 09	6.18	4.58	3.75	0.86	0.70	1.07	1.15	0.80	+39	−19	+ 5	+37	+42	+14	+35	+41	+17	+57	0	0.93
101523	20 34 26.44	−14 52 45.5	8.29	H	308.610 180 10	−14.879 298 55	1.93	4.91	−5.44	1.07	0.73	1.27	1.27	0.93	+11	− 4	−23	−19	+ 8	+46	+21	+40	− 8	+12	0	1.24
101524	20 34 26.56	−63 39 42.7	8.81	H	308.610 668 32	−63.661 870 00	5.08	−5.61	−9.67	0.87	0.74	1.14	0.88	0.90	+20	−16	− 7	+28	+27	+ 2	+30	+ 1	− 8	+14	1	0.92
101525	20 34 27.58	−19 23 52.6	7.81	H	308.614 912 90	−19.397 953 58	4.38	5.97	−29.47	0.95	0.66	1.08	1.19	1.02	+27	+10	+ 9	−12	+17	+27	+ 7	+40	− 5	+39	0	−0.31
101526	20 34 31.81	+06 52 41.1	6.97	G	308.632 536 90	+06.878 091 64	2.82	1.01	0.49	0.85	0.73	0.91	1.20	0.85	+33	− 5	−13	−13	+19	+ 8	+22	+42	− 3	+21	2	1.45
101527	20 34 33.04	+28 16 51.4	9.13	2 H	308.637 657 68	+28.280 955 72	0.32	−1.98	−9.76	0.76	0.83	1.23	0.88	0.91	+ 1	− 4	+11	− 5	+ 1	−12	+ 3	− 9	+ 0	+14	0	0.97
101528	20 34 33.08	+41 59 47.9	7.97	H	308.637 829 73	+41.996 642 63	1.46	−6.29	−5.74	0.55	0.53	0.70	0.61	0.55	− 9	−23	+10	+13	− 4	− 9	− 2	− 2	+ 3	+ 2	1	−1.97
101529	20 34 33.11	−05 50 36.9	8.52	H	308.637 972 50	−05.843 587 52	3.30	−0.42	−14.27	1.05	0.83	1.24	1.51	1.17	+26	−20	−27	+27	+ 2	+13	+ 7	+53	−16	+25	0	0.59
101530	20 34 33.38	+57 55 40.5	8.08	H	308.639 074 27	+57.927 914 62	0.89	−4.55	−3.54	0.54	0.54	0.60	0.58	0.55	− 1	+ 2	+ 1	− 7	+ 5	− 2	+ 6	−23	+15	+ 6	4	−0.94
101531	20 34 33.80	−55 32 39.6	8.61	H	308.640 835 83	−55.544 331 10	9.26	69.34	−94.30	0.94	0.78	1.28	1.15	0.81	+12	−24	−27	−40	+ 0	− 3	− 5	−47	+29	−44	2	1.98
101532	20 34 33.99	−00 40 29.3	7.61	H	308.641 633 19	−00.674 795 49	4.88	5.25	1.69	0.99	0.81	1.23	1.44	1.05	+14	− 5	−36	+54	−13	+32	+ 2	+72	−34	− 3	0	−1.50
101533	20 34 36.00	+41 05 54.1	6.67	H	308.650 015 44	+41.098 358 31	3.73	−0.49	18.20	0.45	0.48	0.61	0.53	0.52	− 3	+ 7	+ 9	+16	− 2	−15	− 1	+ 2	+ 8	+ 0	0	0.35
101534	20 34 39.03	+29 29 39.1	9.28	H	308.662 641 16	+29.494 200 73	0.39	2.04	−11.56	0.54	0.69	1.12	0.57	0.67	−30	+ 0	+ 4	+17	−10	+ 3	−10	− 2	− 2	−34	1	1.04
101535	20 34 40.74	−43 37 04.5	10.24	H	308.669 744 47	−43.617 904 81	8.10	−22.36	−39.44	1.43	0.93	1.65	1.75	1.23	+ 7	−28	− 6	+ 5	+ 6	+ 2	+ 8	+ 5	− 7	+25	0	1.45
*101536	20 34 40.83	+26 29 07.7	9.10	H	308.670 133 65	+26.485 483 76	0.05	−3.84	−11.10	0.81	0.78	1.25	1.07	0.94	−13	−10	− 1	+18	− 3	+10	+ 0	+ 6	− 9	+ 1	0	0.12
*101537	20 34 40.79	+49 10 38.7	7.25	H	308.669 975 61	+49.177 421 89	6.71	−6.23	−10.92	0.50	0.47	0.57	0.55	0.52	+ 1	+ 1	+ 6	− 3	+ 6	+ 0	+ 6	+ 4	+ 2	+ 8	0	0.16
101538	20 34 41.96	−55 29 47.0	8.68	2 H	308.674 827 99	−55.496 376 75	2.99	13.56	−11.72	0.97	0.76	1.19	1.11	0.76	+ 9	− 4	−10	−68	+ 4	− 4	+13	−49	+13	−29	0	0.76
101539	20 34 42.76	+32 30 27.1	9.42	H	308.678 167 65	+32.507 541 13 B	−6.77	−10.03	−14.25	17.57	20.62	15.42	13.17	12.73	− 9	−14	+18	+ 3	− 2	−20	+ 2	−22	+ 0	− 5	2	0.40
101540	20 34 42.86	+03 20 55.5	11.96	G	308.678 589 75	+03.348 748 45	32.22	313.28	−431.42	17.50	14.39	21.50	23.16	20.50	+18	− 9	−16	− 3	+16	+25	+14	+48	− 7	+32	0	
101541	20 34 43.59	−02 41 43.8	10.02	H	308.681 637 00	−02.695 511 85	1.58	0.37	−3.21	1.85	1.25	1.90	2.96	1.80	−11	− 8	−29	+52	−35	+19	−28	+57	−15	−11	2	1.28
101542	20 34 43.88	+02 30 24.5	9.21	H	308.682 812 52	+02.506 804 14	3.36	12.99	−13.44	1.11	0.93	1.29	1.60	1.32	+31	−13	− 2	+26	+21	+25	+20	+62	+ 8	+35	0	0.20
101543 H	20 34 44.16	−63 18 42.0	7.34	H	308.683 985 04	−63.311 661 21 *	6.15	21.59	−8.77	0.61	0.55	0.83	0.61	0.60	+ 8	+ 0	− 8	+26	+19	+ 5	+17	− 2	−13	− 2	0	0.06
101544	20 34 44.60	+32 30 21.0	6.89	G	308.685 817 47	+32.505 843 40 A	3.04	4.63	5.32	1.02	1.16	1.25	1.09	1.07	− 8	−16	+19	+ 7	+ 0	−18	+ 5	−22	− 6	+ 1	2	0.40
101545	20 34 44.90	−72 36 55.2	10.77	2 H	308.687 066 42	−72.615 339 37	2.54	−8.00	9.14	1.24	1.47	1.95	1.41	1.90	−17	−17	+10	+29	−16	− 7	−21	− 5	+ 8	−27	0	0.03
*101546	20 34 45.10	−27 13 53.2	7.81	H	308.687 899 75	−27.231 445 75	3.60	1.67	−30.30	0.88	0.52	0.98	1.12	0.73	+ 8	− 7	− 1	+ 8	+ 7	+36	+ 5	+27	+ 6	+20	0	−0.03
*101547	20 34 45.07	−45 05 18.4	9.03	H	308.687 782 41	−45.088 449 23	6.10	−42.76	−23.63	1.14	0.77	1.37	1.71	1.06	+12	− 2	− 3	+10	+ 9	− 5	+ 9	+ 8	+ 0	+23	0	1.43
101548	20 34 45.82	−76 56 09.2	9.09	H	308.690 935 54	−76.935 902 17	4.20	19.18	−76.04	0.74	0.74	0.97	0.86	0.77	−23	−10	−11	+22	+ 1	− 1	+ 1	+11	− 5	−16	0	−0.98
*101549	20 34 46.16	−33 55 21.6	10.14	H	308.692 342 13	−33.922 657 38 B	27.60	4.59	8.87	22.61	15.87	9.40	10.24	7.68	+72	−41	−29	+33	+46	− 1	+43	+40	+ 0	+85	1	1.12
*101550	20 34 46.00	+82 00 40.3	7.01	H	308.691 651 80	+82.011 198 74	4.90	28.68	43.86	0.57	0.53	0.60	0.66	0.60	+13	−23	−14	−18	− 6	+ 1	− 9	−22	+16	+24	0	−1.26
101551	20 34 46.98	−33 55 19.2	7.86	G	308.695 746 72	−33.921 991 69 A	15.86	1.77	9.36	2.25	1.53	2.25	2.46	1.82	+68	−33	−27	+30	+44	− 2	+41	+35	+ 4	+84	1	1.12
101552	20 34 47.38	−30 28 24.3	6.42	H	308.697 425 31	−30.473 418 57	5.50	12.67	−21.90	0.76	0.46	0.84	0.95	0.67	+10	−20	−19	−20	− 4	+26	− 2	+21	− 4	+15	0	−2.28
101553	20 34 47.43	−07 13 56.7	9.53	H	308.697 622 43	−07.232 412 59	−2.23	−1.25	−1.75	4.77	3.11	5.65	8.48	4.95	+ 2	+ 0	−27	+ 5	−15	+38	− 2	+38	−19	−15	0	
101554	20 34 49.15	+13 27 52.8	7.50	G	308.704 772 12	+13.464 677 48	2.62	−6.85	−11.07	0.71	0.61	0.96	0.91	0.70	+28	−11	− 5	+18	+41	+ 2	+35	+35	+18	+32	0	0.61
101555	20 34 49.99	−15 47 50.5	8.12	H	308.708 300 28	−15.797 372 33	6.66	14.13	−9.59	0.96	0.69	1.13	1.21	0.96	+25	− 1	+ 2	−10	+27	+50	+26	+56	+11	+35	2	1.46
101556	20 34 50.41	+51 51 15.2	6.19	H	308.710 025 22	+51.854 234 47	0.45	−3.14	−5.37	0.43	0.38	0.47	0.50	0.41	−11	−21	+12	+ 9	+ 0	− 5	− 2	+ 2	+ 8	−13	0	0.90
101557	20 34 54.58	−41 59 12.8	7.28	H	308.727 401 34	−41.986 896 17	2.97	17.83	−25.99	0.73	0.56	0.84	0.95	0.86	+28	−12	− 9	+ 4	+15	+13	+14	+30	+14	+34	0	0.05
101558	20 34 55.46	−38 05 23.5	6.45	H	308.731 092 05	−38.089 861 96	14.94	18.62	−11.54	0.77	0.49	0.88	0.86	0.59	+22	−16	−28	−30	+15	−10	+ 8	− 1	− 6	+46	0	−0.34
101559	20 34 57.61	−67 14 54.2	9.45	1 H	308.740 036 59	−67.248 377 44	6.09	−0.07	26.07	0.64	0.81	1.32	0.71	1.08	−37	− 4	− 7	−29	+18	−13	+22	− 6	+ 8	−49	0	1.14
101560	20 35 00.34	+07 36 30.1	8.76	H	308.751 420 16	+07.608 348 56	5.28	17.81	−0.05	1.18	0.91	1.41	1.58	1.30	+22	− 7	−10	− 5	+17	− 7	+ 7	+39	−14	+43	4	1.64
101561	20 35 01.08	+32 02 04.5	7.48	H	308.754 508 86	+32.034 596 62	3.25	9.67	−2.32	0.46	0.53	0.77	0.59	0.58	−17	+ 1	− 1	+20	+ 4	− 8	+ 5	−19	+ 6	−13	0	−0.51
101562	20 35 01.75	−86 09 49.0	9.23	H	308.757 287 71	−86.163 611 21	6.91	−30.74	60.06	0.80	0.71	0.91	0.97	0.70	−12	− 3	−26	− 3	+ 3	− 1	+ 3	+ 3	−12	−23	0	2.05
101563	20 35 01.89	−36 26 03.7	9.30	H	308.757 872 20	−36.434 350 04	1.29	4.80	−11.68	1.20	0.78	1.44	1.68	0.96	+32	− 1	−11	−26	+ 0	+ 7	− 4	−13	− 7	+48	0	0.62
101564	20 35 02.78	+23 42 37.7	7.77	H	308.761 591 93	+23.710 463 65	10.81	46.76	−1.85	0.57	0.55	0.87	0.72	0.60	+14	−19	+ 3	+13	+15	− 2	+14	+10	− 3	+25	2	0.60
101565	20 35 02.93	+47 19 15.2	9.91	H	308.762 187 93	+47.320 875 46	2.56	−0.51	−2.06	0.89	0.85	1.04	1.18	0.99	− 2	− 4	+ 3	+22	− 1	− 4	− 1	+ 2	+10	+ 2	0	2.78
101566	20 35 03.48	+28 24 55.3	9.98	G	308.764 509 42	+28.415 368 31	−0.87	1.96	−14.31	0.90	1.16	1.56	1.05	1.23	+ 9	+ 7	− 3	+ 7	+10	− 5	+10	− 4	+ 3	+18	1	2.90
101567	20 35 03.58	−09 34 49.9	7.38	H	308.764 929 75	−09.580 521 05	2.38	10.47	−14.64	1.02	0.60	1.19	1.38	0.91	+ 0	+14	−23	−16	+ 7	+34	+14	+47	−10	+ 3	0	0.81
101568	20 35 04.37	+72 11 46.1	9.44	H	308.768 209 25	+72.196 140 84	4.35	−5.25	−1.06	0.75	0.74	0.81	1.00	0.88	− 2	−10	+13	−15	+10	+ 6	+ 5	+10	+14	+ 9	0	1.51
101569	20 35 06.20	+33 33 08.5	8.21	1 H	308.775 824 04	+33.552 364 17	3.93	8.96	3.66	0.50	0.54	0.79	0.61	0.56	− 7	+ 3	+ 4	−12	− 9	− 7	− 8	− 7	+ 5	+ 2	0	−0.47
101570	20 35 06.34	−71 11 19.7	6.41	H	308.776 419 61	−71.188 808 57	4.05	−38.53	12.30	0.46	0.51	0.69	0.51	0.67	−29	+ 0	−11	−23	+18	− 5	+22	− 3	+ 3	−40	0	−0.52
101571	20 35 06.47	+07 15 47.4	8.45	H	308.776 964 48	+07.263 163 46	2.46	9.17	−15.68	1.37	0.88	1.43	1.72	1.23	+10	+ 6	+ 1	− 8	+11	+12	+ 1	+43	− 7	+26	7	−0.73
101572	20 35 06.56	−75 09 59.5	8.88	2 H	308.777 339 59	−75.166 524 68	1.29	11.95	−16.56	0.76	0.76	1.03	0.82	0.98	− 8	−23	+ 6	−19	+ 3	+ 8	+ 4	+ 0	+ 8	−27	0	1.09
101573	20 35 07.18	+07 43 07.1	10.56	H	308.779 904 18	+07.718 628 89	5.33	−0.23	0.44	1.81	1.52	2.29	2.40	2.15	+41	−12	− 5	+ 1	+27	− 7	+18	+41	− 7	+60	0	2.43
*101574 H	20 35 07.50	−51 08 52.0	12.14	G	308.781 252 64	−51.147 787 30 A	43.51	98.02	−27.34	28.31	18.37	8.83	13.06	10.65	− 2	− 3	− 2	+ 4	+ 3	−17	− 1	+ 2	+32	+10	1	1.17
*101575	20 35 07.44	+30 15 10.3	7.60	H	308.781 011 99	+30.252 866 08	1.96	0.90	−3.60	0.34	0.45	0.69	0.38	0.47	−42	+ 1	− 3	+ 5	− 7	+ 1	− 7	−12	+ 4	−48	1	0.73
101576	20 35 07.74	−29 59 53.6	8.76	H	308.782 253 62	−29.998 229 19	3.45	9.37	13.78	1.17	0.73	1.37	1.38	0.96	+14	−15	−34	−17	− 9	+18	+ 0	+23	−28	+ 5	2	−0.39
101577	20 35 10.56	−25 28 51.2	8.92	H	308.793 979 52	−25.480 898 62	2.89	−8.15	18.36	1.07	0.70	1.18	1.37	1.02	+16	−16	−13	+ 8	+15	+26	+15	+37	+ 1	+32	0	0.76
101578	20 35 10.66	+62 28 06.6	7.78	H	308.794 423 09	+62.468 510 71	12.00	141.02	138.45	0.60	0.52	0.64	0.60	0.52	+ 1	−17	+ 9	−27	+15	+24	+ 8	− 9	+12	+34	0	−2.02
101579	20 35 12.48	+06 07 39.2	8.91	G	308.801 985 56	+06.127 563 65	32.73	390.82	−226.00	0.95	0.94	1.27	1.31	1.32	+41	+ 7	+11	+17	+34	+33	+28	+62	+14	+50	0	−0.48
101580	20 35 13.49	−09 00 13.3	7.94	H	308.806 227 41	−09.003 696 60	6.96	−23.53	−10.01	0.98	0.70	1.10	1.31	1.05	+23	− 4	−18	−11	+21	+ 9	+22	+53	− 9	+26	0	0.12
101581	20 35 14.48	+44 24 33.0	7.31	G	308.810 317 30	+44.409 176 85	9.94	−4.78	−46.06	0.54	0.48	0.64	0.63	0.48	−10	− 9	+11	−23	− 1	+10	− 3	−17	+18	− 1	0	−0.24
101582	20 35 14.70	−18 16 07.3	9.65	H	308.811 269 55	−18.268 693 52	2.62	5.04	6.28	1.43	1.08	1.90	1.67	1.65	+34	+ 1	−15	+ 3	+20	+27	+16	+51	−34	+36	3	1.46
101583	20 35 14.84	+06 16 46.4	7.53	H	308.811 832 82	+06.279 557 46	5.09	37.65	−4.41	0.79	0.71	0.96	1.05	0.94	+34	+ 5	+ 0	+ 6	+26	+24	+24	+58	+ 8	+39	2	−0.60
101584	20 35 14.98	−33 14 05.7	9.84	H	308.812 422 56	−33.234 904 58	4.15	−38.24	−15.82	1.30	0.82	1.59	1.50	1.16	+46	−41	−11	+11	+38	+15	+30	+29	+12	+78	0	−1.23
101585	20 35 16.87	+20 40 36.8	8.91	H	308.820 273 85	+20.676 896 58	3.61	35.15	−14.56	0.82	0.70	1.13	0.82	0.75	+25	−30	− 9	+27	+ 2	− 3	+ 2	+14	+ 6	+38	1	−1.36
101586	20 35 17.33	−30 27 16.3	9.14	H	308.822 198 86	−30.454 533 15	1.70	−6.90	−11.73	1.21	0.76	1.35	1.49	1.15	+22	−18	−19	−29	− 3	+22	+ 1	+18	−14	+23	0	−0.18
101587	20 35 17.91	−49 45 12.7	9.21	G	308.824 623 56	−49.753 528 72	14.73	110.69	−128.02	1.64	1.02	1.74	2.64	1.37	−16	+25	−45	+57	−12	+10	−14	+13	+12	−26	6	3.24
101588	20 35 18.02	+41 53 24.5	6.63	H	308.825 086 57	+41.890 131 79	5.53	4.29	17.51	0.46	0.46	0.60	0.55	0.48	− 7	− 1	+19	+ 2	−12	−15	− 7	−10	+ 6	+ 2	0	0.66
101589	20 35 18.51	+14 40 27.1	4.64	H	308.827 117 38	+14.674 184 82	14.36	45.08	11.71	0.58	0.51	0.75	0.76	0.57	+27	+ 0	+12	+11	+38	+25	+30	+26	+26	+47	0	0.12
101590	20 35 19.27	−11 20 40.7	8.42	H	308.830 296 84	−11.344 646 71	0.60	−14.18	−25.58	1.14	0.79	1.50	1.34	1.20	+41	−27	−32	−18	− 9	+22	+ 5	+34	−38	+26	0	0.06
101591	20 35 20.21	−40 17 04.8	8.68	H	308.834 189 71	−40.284 677 01	12.52	−2.47	−59.93	1.08	0.71	1.30	1.28	0.89	+23	−40	−22	+ 5	+11	+ 0	+13	+ 4	− 8	+20	0	1.28
101592	20 35 20.55	+10 45 30.4	8.06	H	308.835 640 59	+10.758 437 12	3.03	−4.75	−0.04	0.84	0.63	1.04	1.07	0.72	+30	−11	+ 1	+23	+43	+21	+34	+46	+19	+51	2	1.47
101593	20 35 21.78	+64 58 19.3	10.08	H	308.840 757 19	+64.972 035 52	30.53	286.59	40.88	0.86	0.89	1.00	0.93	1.18	+14	− 3	+ 7	+ 0	+11	− 1	+11	+ 9	−20	+43	3	1.26
101594	20 35 22.55	−05 31 41.8	7.92	H	308.843 966 59	−05.528 282 87	10.27	11.07	−107.54	0.90	0.69	1.21	1.20	0.89	+27	−23	−42	+30	−16	+18	− 3	+57	−29	+17	0	−0.79
101595 H	20 35 23.41	−65 18 59.0	9.44	H	308.847 524 69	−65.316 398 31 A	4.38	128.23	−44.69	2.45	1.86	2.67	2.39	1.92	− 2	−13	−21	+37	− 2	−16	− 7	+ 7	−10	−23	1	0.81
101596	20 35 24.34	−17 47 17.3	8.38	H	308.851 413 36	−17.788 130 64	7.55	−1.85	−46.68	1.10	0.69	1.25	1.38	1.04	+14	+16	− 4	−12	+16	+29	+ 8	+47	−14	+24	0	0.62
101597	20 35 26.18	+11 21 22.4	8.50	H	308.859 081 33	+11.356 223 37	26.08	82.73	372.38	0.91	0.64	1.17	1.15	0.73	+19	−15	−15	+ 0	+24	+ 0	+15	+25	+10	+40	2	1.21
101598	20 35 26.93	−02 03 05.6	7.70	H	308.862 196 88	−02.051 557 52	5.25	16.30	13.01	0.94	0.67	1.11

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
101501	9.382	0.018	9.091	0.020		0.277	0.025	T	0.31	0.03	L	9.1474	0.0020	0.019	123		9.12	9.18					1							
101502	8.893	0.017	7.719	0.011		1.007	0.016	T	0.98	0.01	L	7.7630	0.0014	0.011	91		7.75	7.79		C			1							S
101503	10.991	0.066	10.059	0.045		0.810	0.062	T	0.84	0.04	L	10.1431	0.0023	0.023	81		10.10	10.17		C			1							
101504	10.938	0.056	10.100	0.042		0.760	0.020	G	0.80	0.02	H	10.2081	0.0039	0.033	87		10.15	10.28					1							
101505	6.289	0.003	6.458	0.004		−0.138	0.003	G	−0.13	0.00	H	6.4387	0.0006	0.007	128		6.43	6.45		C			1							S
101506	8.836	0.016	8.446	0.017		0.381	0.020	T	0.45	0.02	L	8.5010	0.0021	0.012	75		8.48	8.52		C			1 S							S
101507	6.769	0.004	6.182	0.005		0.543	0.013	G	0.66	0.07	F	6.2373	0.0007	0.006	67		6.23	6.26		C			1							S
101508	10.128	0.029	9.480	0.027		0.694	0.015	G	0.75	0.01	H	9.5435	0.0023	0.023	98		9.50	9.57		C			1							
101509	8.852	0.011	8.673	0.013	*	0.171	0.016	T	0.19	0.02	L	*	8.6837	0.0018	0.018	124	*	8.65	8.72		D	20342+2449	I 1	2 C A	AB	91	0.881	0.017	2.72	0.06	
101510	10.590	0.052	9.709	0.038		0.770	0.050	T	0.81	0.04	L	9.7891	0.0044	0.024	78		9.76	9.83					1							
101511	7.738	0.006	7.323	0.006		0.392	0.008	T	0.46	0.01	L	7.3704	0.0009	0.010	139		7.36	7.39					1							S
101512	9.375	0.020	7.522	0.009		1.573	0.018	T	2.53	0.04	O	7.2976	0.0044	0.044	101		7.22	7.35	25.10	P 1 A			1 S							P
101513	10.343	0.042	9.622	0.035		0.637	0.003	G	0.70	0.00	H	9.7094	0.0021	0.018	62		9.68	9.75		C			1							
101514	9.188	0.013	7.366	0.006		1.516	0.011	T	1.55	0.02	L	7.3308	0.0010	0.009	121		7.31	7.35		C			1							S
101515	8.389	0.011	6.877	0.005		1.271	0.010	T	1.23	0.01	L	6.8855	0.0010	0.009	91		6.87	6.90		C			1							S
101516	11.526	0.104	11.423	0.157		−0.097	0.052	G	−0.08	0.06	H	11.5507	0.0065	0.065	131		11.39	11.65					1							G
101517	7.441	0.004	7.407	0.005		0.031	0.006	T	0.05	0.01	L	7.4275	0.0009	0.013	263		7.41	7.45					1 G							S
101518	8.837	0.009	7.630	0.006		1.032	0.008	T	1.00	0.01	L	7.6912	0.0012	0.011	143		7.67	7.71					1							
101519	11.118	0.058	10.310	0.044		0.750	0.009	G	0.79	0.01	H	10.5764	0.0039	0.041	161		10.51	10.65					1 S							D
101520	9.689	0.022	7.818	0.010		1.245	0.197	G	1.49	0.04	M	7.7693	0.0016	0.012	82		7.75	7.79		D	20344−0029	I 2	1							
101521											T	10.9189	0.0129	0.073	81		10.76	11.04		D	20344−0029	I 2	1 X S							G G
101522	9.672	0.030	8.046	0.015		1.361	0.026	T	1.33	0.03	L	8.0439	0.0011	0.011	99		8.02	8.06		C			1							
101523	10.422	0.039	8.469	0.014		1.620	0.033	T	1.64	0.03	L	8.4033	0.0022	0.015	78		8.37	8.43					1							
101524	10.069	0.021	8.920	0.014		0.987	0.020	T	0.97	0.02	L	8.9738	0.0020	0.023	137		8.94	9.03					1							
101525	7.813	0.009	7.813	0.011		0.005	0.013	T	0.03	0.01	L	7.8210	0.0012	0.010	71		7.81	7.84		C			1							S
101526	6.803	0.006	6.955	0.007		−0.122	0.001	G	−0.11	0.00	H	6.9313	0.0007	0.007	69		6.92	6.94		D	20345+0653	I 1	1 G							S
101527	11.252	0.065	9.432	0.020		1.546	0.056	T	3.22	0.06	O	8.9652	0.0106	0.109	165		8.75	9.07		U 2			1 S							D P
101528	8.201	0.009	7.991	0.009		0.185	0.000	G	0.20	0.00	H	8.0269	0.0013	0.013	133		8.00	8.05					1							
101529	9.819	0.024	8.621	0.016		1.025	0.022	T	1.00	0.02	L	8.6835	0.0020	0.018	87		8.65	8.70					1							
101530	8.168	0.008	8.086	0.009		0.109	0.010	G	0.12	0.01	H	8.1220	0.0013	0.012	128		8.10	8.14					1							S
101531	9.123	0.013	8.651	0.013		0.457	0.014	T	0.53	0.01	L	8.7082	0.0016	0.019	120		8.67	8.75					1							
101532	8.933	0.014	7.721	0.009		1.036	0.013	T	1.01	0.01	L	7.7769	0.0014	0.009	82		7.76	7.79		C			1							S
101533	8.620	0.009	6.829	0.005		1.491	0.008	T	1.51	0.01	L	6.8018	0.0012	0.009	129		6.78	6.82					1							S
101534	9.301	0.011	9.291	0.014		0.014	0.016	T	0.03	0.01	L	9.2966	0.0018	0.026	256		9.25	9.34					1							
101535	10.884	0.051	10.181	0.040		0.635	0.049	T	0.70	0.04	L	10.3699	0.0035	0.031	96		10.31	10.42					1							G
101536	9.314	0.019	9.139	0.023		0.168	0.028	T	0.18	0.03	L	9.1558	0.0030	0.025	116		9.12	9.20					1							
101537	7.280	0.005	7.255	0.007		0.028	0.008	T	0.04	0.01	L	7.2682	0.0009	0.008	116		7.25	7.29		C			1							S
101538	10.848	0.042	8.884	0.015		1.664	0.037	T	1.99	0.09	O	8.7699	0.0031	0.025	127		8.74	8.82		U 2			1							
101539	9.529	0.020	9.140	0.022	B	0.368	0.028	T	0.43	0.03	L	9.1674	0.0777			B				D	20347+3230	I 2	1 C I D							D
101540						1.450	0.015	G	1.81	0.07	I	11.7037	0.0086	0.054	72		11.59	11.78		D			1 X S							D G
101541	10.152	0.031	10.010	0.039		0.137	0.047	T	0.15	0.05	L	10.0721	0.0035	0.019	72		10.04	10.12					1							G
101542	9.528	0.019	9.247	0.021		0.267	0.027	T	0.30	0.03	L	9.2826	0.0018	0.022	90		9.25	9.33		C			1							
101543	7.474	0.005	7.360	0.007	*	0.103	0.008	T	0.12	0.01	L	*	7.3855	0.0012	0.013	130	*	7.36	7.40		D	20347−6319	I 1	2 C S A	AB	66	0.139	0.006	0.13	0.39	S
101544	8.327	0.008	6.989	0.004	A	1.137	0.005	G	1.10	0.06	F	7.0459	0.0146	0.012	186	A	7.01	7.06		D	20347+3230	I 2	1 C P D							S D
101545	11.111	0.054	10.676	0.056		0.411	0.072	T	0.48	0.08	L	10.8638	0.0274	0.190	154		10.67	11.12	0.41	P 1 A			1 S							G
101546	9.534	0.022	7.992	0.012		1.295	0.020	T	1.25	0.02	L	7.9709	0.0014	0.008	84		7.95	7.99		C			1							
101547	9.602	0.022	9.079	0.021		0.500	0.023	T	0.57	0.02	L	9.1405	0.0028	0.019	90		9.11	9.18		C			1							
101548	9.800	0.016	9.167	0.014		0.583	0.016	T	0.65	0.01	L	9.2136	0.0019	0.019	151		9.18	9.25		C			1							
101549	11.083	0.073	9.983	0.045	B	0.950	0.066	T	0.94	0.05	L	10.2166	0.0354			B				D	20348−3355	I 2	1 C I A							
101550	8.708	0.012	7.164	0.006		1.297	0.011	T	1.26	0.01	L	7.1695	0.0011	0.010	107		7.15	7.19		C			1							S
101551	8.388	0.008	7.884	0.008	A	0.483	0.015	G	0.55	0.02	H	7.9711	0.0050	0.019	181	A	7.95	8.02		D	20348−3355	I 2	1 C P A							S
101552	6.316	0.005	6.393	0.005		−0.075	0.003	G	−0.05	0.00	H	6.3984	0.0007	0.006	87		6.39	6.41		C			1							S
101553	10.996	0.065	9.708	0.037		1.096	0.058	T	1.06	0.06	L	9.6984	0.0051	0.037	63		9.65	9.77					1 X S							
101554	7.403	0.007	7.479	0.008		−0.069	0.015	G	−0.05	0.01	H	7.4812	0.0012	0.011	91		7.46	7.50		C			1							S
101555	8.753	0.013	8.178	0.012		0.528	0.015	G	0.60	0.02	H	8.2334	0.0014	0.011	73		8.22	8.25		C			1							S
101556	6.562	0.005	6.227	0.004		0.318	0.006	T	0.37	0.01	L	6.2661	0.0006	0.006	133		6.25	6.28		C			1							S
101557	7.460	0.006	7.284	0.008		0.161	0.010	T	0.18	0.01	L	7.3343	0.0012	0.009	90		7.32	7.35					1							S
101558	6.764	0.005	6.478	0.005		0.264	0.005	G	0.30	0.01	H	6.5164	0.0009	0.009	105		6.51	6.53					1							S
101559	10.612	0.018	9.541	0.012		0.918	0.017	T	0.92	0.01	L	9.5988	0.0020	0.032	345		9.55	9.66		U			1 S							
101560	10.461	0.047	8.870	0.021		1.334	0.041	T	1.30	0.05	L	8.9098	0.0020	0.016	68		8.88	8.93		C			1							
101561	9.358	0.013	7.629	0.006		1.442	0.011	T	1.44	0.02	L	7.6147	0.0008	0.012	186		7.59	7.64					1							
101562	9.716	0.019	9.281	0.020		0.424	0.022	T	0.49	0.02	L	9.3204	0.0022	0.018	112		9.29	9.36		C			1							
101563	11.010	0.052	9.464	0.022		1.298	0.044	T	1.26	0.05	L	9.4602	0.0020	0.023	103		9.42	9.49					1							
101564	8.319	0.009	7.812	0.008		0.476	0.011	T	0.55	0.01	L	7.8729	0.0010	0.010	128		7.85	7.89		C			1							S
101565	10.001	0.024	9.909	0.034		0.090	0.039	T	0.10	0.04	L	9.9463	0.0028	0.023	122		9.89	10.00					1							G
101566	11.296	0.063	10.023	0.032		1.194	0.005	G	1.15	0.01	I	10.1292	0.0035	0.036	159		10.07	10.19					1							D
101567	7.438	0.008	7.384	0.010		0.055	0.012	T	0.07	0.01	L	7.4028	0.0013	0.008	67		7.39	7.42		C			1							S
101568	10.094	0.025	9.526	0.023		0.531	0.030	T	0.60	0.03	L	9.5529	0.0022	0.019	105		9.52	9.60		C			1							
101569	8.140	0.008	8.187	0.010		−0.038	0.012	T	−0.02	0.01	L	8.2021	0.0021	0.024	159		8.16	8.23	1.30	P 1 A			1							
101570	8.103	0.007	6.548	0.003		1.305	0.006	T	1.26	0.02	A	6.5697	0.0009	0.009	180		6.55	6.58					1							S
101571	10.352	0.037	8.584	0.016		1.473	0.032	T	1.49	0.05	L	8.5768	0.0017	0.014	61		8.55	8.60		C			1							
101572	11.059	0.040	9.098	0.014		1.662	0.035	T	2.35	0.07	O	8.9174	0.0033	0.037	163		8.85	8.99		U 2			1							
101573	12.783	0.381	10.917	0.108		1.584	0.326	T	1.73	0.15	K	10.6659	0.0047	0.037	73		10.62	10.73		C			1							G
101574						1.440	0.042	G	1.95	0.02	A	*	12.2689	0.0108	0.093	74	*	12.10	12.41			20351−5109	I 1	2 C D	AB	268	4.948	0.032	0.07	0.14	D D
101575	7.454	0.003	7.578	0.005		−0.108	0.005	T	−0.09	0.01	L	7.5687	0.0008	0.010	302		7.55	7.59		C			1 S							S
101576	10.714	0.057	8.928	0.023		1.488	0.049	T	1.51	0.07	L	8.8930	0.0032	0.018	79		8.85	8.92					1							
101577	10.299	0.040	9.037	0.022		1.075	0.036	T	1.04	0.03	L	9.0838	0.0017	0.014	74		9.06	9.11		C			1							
101578	8.859	0.013	7.889	0.010		0.852	0.012	T	0.87	0.01	L	7.9397	0.0014	0.012	101		7.92	7.96					1							
101579	10.174	0.031	9.023	0.020		0.960	0.015	G	1.01	0.01	I	9.0527	0.0016	0.014	76		9.02	9.08		C	20352+0608	I 1	1							
101580	8.259	0.014	7.959	0.011		0.285	0.017	T	0.32	0.02	L	8.0138	0.0013	0.009	72		7.99	8.03		C			1							S
101581	7.648	0.007	7.352	0.006		0.281	0.009	T	0.32	0.01	L	7.3840	0.0011	0.011	113		7.37	7.41					1							S
101582	10.223	0.034	9.676	0.033		0.519	0.035	T	0.59	0.04	L	9.7573	0.0029	0.021	66		9.73	9.79		C			1							
101583	7.741	0.007	7.563	0.009		0.171	0.011	T	0.19	0.01	L	7.5935	0.0014	0.009	72		7.57	7.61		C			1							S
101584	10.495	0.030	9.907	0.028		0.550	0.030	T	0.62	0.03	L	9.9544	0.0023	0.022	154		9.92	10.00		C			1							
101585	9.360	0.017	8.970	0.018		0.369	0.023	T	0.43	0.03	L	8.9952	0.0022	0.020	114		8.97	9.03					1							
101586	11.020	0.070	9.322	0.026		1.000	0.040	G	0.98	0.03	R	9.3093	0.0023	0.019	87		9.27	9.34		C			1							
101587	10.055	0.032	9.305	0.027		0.690	0.015	G	0.75	0.01	H	9.3499	0.0023	0.025	67		9.31	9.39					1 S							
101588	7.845	0.007	6.735	0.004		0.930	0.015	G	0.96	0.03	C	6.7946	0.0008	0.009	131		6.78	6.81					1							S
101589	4.797	0.002	4.675	0.002		0.120	0.009	G	0.14	0.03	C	4.6914	0.0004	0.004	104		4.69	4.70					1							S
101590	10.253	0.035	8.573	0.016		1.404	0.030	T	1.38	0.04	L	8.5665	0.0018	0.012	64		8.55	8.60		C			1							
101591	9.510	0.020	8.760	0.017		0.670	0.020	T	0.73	0.02	L	8.8173	0.0024	0.015	89		8.80	8.85		C	20353−4017	I 1	1							
101592	8.559	0.011	8.122	0.011		0.413	0.014	T	0.48	0.01	L	8.1498	0.0017	0.012	100		8.13	8.17					1							S
101593	11.729	0.098	10.184	0.038		1.180	0.015	G	1.30	0.03	I	10.2058	0.0027	0.024	100		10.16	10.24		C			1							G
101594	8.513	0.008	7.963	0.008		0.515	0.010	T	0.59	0.01	L	8.0336	0.0008	0.010	110		8.02	8.05					1							S
101595	10.143	0.024	9.555	0.023	*	0.550	0.024	T	0.62	0.02	L	*	9.5650	0.0031	0.027	117	*	9.50	9.62		D	20354−6519	H 1	2 C A	AB	79	0.579	0.008	1.34	0.04	
101596	8.792	0.015	8.395	0.015		0.388	0.018	T	0.45	0.02	L	8.4655	0.0016	0.012	69		8.45	8.49		C			1							
101597	9.448	0.019	8.575	0.014		0.759	0.015	G	0.80	0.01	H	8.6367	0.0016	0.014	95		8.61	8.66		C			1 S							
101598	8.061	0.008	7.729	0.008		0.315	0.011	T	0.36	0.01	L	7.7823	0.0012	0.010	93		7.76	7.81		C			1							S
101599	10.558	0.031	9.253	0.017		1.109	0.028	T	1.07	0.03	L	9.2876	0.0024	0.022	142		9.25	9.33					1							
101600	10.600	0.057	9.399	0.031		1.021	0.052	T	0.99	0.04	L	9.4330	0.0022	0.017	80		9.41	9.45		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π δ	π $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	29	30
	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18												
101601	20 35 28.53	−23 32 09.4	8.43	H	308.868 880 89	−23.535 934 80	2.74	3.18	3.58	1.16	0.59	1.10	1.33	0.73	+ 8	− 9	− 9	−45	+12	+22	+ 8	+ 7	+ 1	+24	0	0.60
101602	20 35 28.89	+69 40 48.1	6.71	H	308.870 369 83	+69.680 020 37	6.35	46.90	−76.86	0.49	0.43	0.50	0.54	0.42	− 8	−11	+11	+ 4	+ 8	− 7	+ 7	+ 1	+14	+ 3	0	2.57
101603	20 35 29.04	−59 04 31.5	8.83	H	308.871 009 52	−59.075 408 94	7.72	2.10	−0.68	0.72	0.77	1.24	1.03	0.98	+32	−25	− 6	−41	+ 4	+ 2	+ 4	−34	+14	−22	0	−1.53
101604 H	20 35 29.13	+27 38 56.0	8.07	H	308.871 379 76	+27.648 886 76 A	0.75	0.80	−3.01	0.99	0.91	1.19	0.92	0.88	+ 4	−13	− 8	−22	+11	− 5	+ 6	+21	+ 2	+14	1	−0.50
101605	20 35 29.31	+01 50 20.0	8.01	H	308.872 119 86	+01.838 892 90	1.25	9.26	−7.12	0.77	0.65	1.06	0.99	0.83	+22	−13	−32	+ 3	+ 4	+34	+17	+52	−18	+16	0	0.83
101606	20 35 29.57	−12 57 39.8	8.45	H	308.873 216 01	−12.961 061 53	5.61	−25.95	−27.71	1.14	0.83	1.35	1.54	1.22	+28	− 9	−25	+ 2	+ 6	+11	+16	+49	−25	+14	0	0.49
101607	20 35 29.64	+06 56 49.5	6.53	H	308.873 492 75	+06.947 070 61	3.84	8.74	2.63	0.86	0.59	0.95	1.13	0.75	+ 4	−10	−10	+ 1	− 4	+ 8	− 3	+39	− 5	+ 2	8	0.27
101608	20 35 32.21	−16 31 32.9	6.19	H	308.884 192 28	−16.525 811 87	13.90	84.05	−27.61	0.84	0.54	0.93	0.96	0.72	+19	−23	−22	−26	+ 3	+33	+12	+37	−11	+16	0	0.86
101610	20 35 33.20	−27 58 55.2	9.23	H	308.888 317 47	−27.982 013 68	2.74	12.34	1.64	1.05	0.68	1.24	1.38	0.99	+21	−11	+ 6	+ 4	+11	+34	+ 6	+31	+ 6	+32	0	0.41
101611	20 35 33.61	+50 25 29.4	7.51	G	308.890 042 73	+50.424 830 11	14.22	49.14	27.61	0.58	0.50	0.61	0.67	0.56	−10	+ 1	+ 1	−17	+ 2	−10	+ 1	+ 7	− 7	− 5	2	−0.14
101612	20 35 34.77	−60 34 52.7	4.75	G	308.894 867 44	−60.581 298 19	36.27	70.15	−185.58	0.44	0.46	0.67	0.47	0.54	+28	−20	− 7	+15	− 5	+ 4	−14	−25	− 4	+ 4	0	−1.76
101613	20 35 37.93	+65 41 47.0	10.06	H	308.908 030 59	+65.696 391 01	16.19	−12.24	176.93	0.97	0.97	1.05	1.01	1.16	+15	+ 8	+ 3	−10	+ 8	− 1	+ 5	+19	−13	+23	1	−0.68
101614	20 35 38.66	+36 28 31.6	8.24	H	308.911 080 21	+36.475 452 38	15.24	−100.72	−221.79	0.56	0.62	0.83	0.59	0.69	−11	+ 2	+ 3	+ 3	+ 9	− 3	+10	− 7	+14	− 6	0	−0.55
101615	20 35 38.67	+03 59 51.5	8.63	2 H	308.911 144 53	+03.997 643 01	1.57	1.45	−21.86	1.15	0.88	1.31	1.54	1.19	+28	− 1	−18	−17	+14	+ 7	+18	+52	+ 1	+25	0	0.50
101616	20 35 39.86	−04 43 16.2	7.88	H	308.916 068 95	−04.721 155 15	4.72	9.14	−76.26	1.46	0.79	1.32	1.97	1.09	−27	−34	−19	+70	−48	− 4	−41	+64	−11	−31	0	−2.05
101617	20 35 40.09	−68 39 24.9	9.51	H	308.917 043 98	−68.656 917 41	4.08	1.84	−19.89	0.71	0.84	1.27	0.77	1.21	−16	−19	− 2	−14	+11	−14	+15	+10	+12	−28	0	−0.51
101618	20 35 41.41	+25 22 40.9	9.90	G	308.922 556 79	+25.378 027 30	9.58	−249.65	−176.22	1.01	0.89	1.46	1.24	1.14	− 4	− 2	− 1	+ 0	+ 1	+18	− 4	+15	−10	+24	0	0.82
101619	20 35 42.71	−03 19 12.4	9.11	H	308.927 962 63	−03.320 100 27	9.67	37.05	−9.77	1.13	0.99	1.51	1.70	1.32	+48	−15	−35	+ 3	−14	+34	+ 0	+37	− 9	+39	0	−0.53
101620	20 35 42.93	+03 18 10.8	7.42	H	308.928 894 49	+03.302 988 45	19.80	−124.65	−56.46	0.81	0.69	1.01	1.01	0.92	+23	+ 4	−17	+ 3	+22	+24	+23	+60	− 1	+31	0	−0.66
101621	20 35 43.02	−19 05 08.9	8.33	H	308.929 266 07	−19.085 806 53	2.84	13.89	−8.44	1.13	0.71	1.21	1.33	1.06	+ 3	−22	+20	−27	+12	+19	− 2	+26	− 3	+30	0	−0.15
101622	20 35 47.09	−00 00 04.1	7.09	H	308.946 223 42	−00.001 136 10	9.84	38.80	−27.01	0.83	0.69	1.01	1.13	0.92	+25	−20	−24	+46	+ 5	+13	+13	+66	−23	+17	0	−0.46
101623	20 35 47.82	−44 20 15.5	6.36	H	308.949 230 64	−44.337 643 33	7.94	−9.85	15.37	0.74	0.47	0.82	1.01	0.64	+12	−21	− 1	+ 6	+23	− 1	+21	+15	− 1	+31	2	0.94
101624	20 35 49.00	−24 22 24.4	7.65	H	308.954 157 44	−24.373 435 34	4.71	16.27	5.61	0.85	0.54	1.03	1.12	0.68	+16	− 8	−23	− 3	− 8	+37	+ 0	+ 8	−13	+21	0	−1.04
101625	20 35 49.20	−39 41 03.9	8.09	H	308.955 001 36	−39.684 424 77	4.00	3.31	−9.32	0.93	0.60	1.10	1.04	0.84	+28	−43	− 8	+14	+14	+ 3	+21	+12	−14	+46	2	−2.22
101626	20 35 51.67	−69 36 37.7	6.09	G	308.965 286 96	−69.610 477 63	3.93	30.71	−44.55	0.39	0.45	0.65	0.45	0.59	−26	−11	− 7	+ 7	+ 5	−12	+ 2	− 5	+ 8	−42	0	−1.28
101627	20 35 53.92	+25 28 43.4	7.65	H	308.974 678 15	+25.478 718 34	2.82	7.67	0.78	0.55	0.50	0.81	0.62	0.59	− 7	+ 1	+12	+12	− 1	+ 3	− 1	+12	+ 7	+24	1	0.21
101628	20 35 54.31	−82 17 26.1	9.16	H	308.976 270 85	−82.290 590 70	14.14	−123.80	−108.57	0.72	0.64	0.89	0.92	0.81	+ 4	−12	− 3	−20	+ 7	− 7	+ 7	−15	+ 3	+ 0	0	−1.97
101629	20 35 54.41	−26 46 24.5	7.20	G	308.976 728 86	−26.773 468 12	16.92	94.33	20.69	0.79	0.50	0.85	1.13	0.71	+ 7	−10	− 2	+21	+ 2	+30	+ 2	+37	+ 9	+ 6	0	2.20
101630	20 35 54.61	+26 44 58.9	9.50	H	308.977 548 14	+26.749 688 78	1.45	0.41	−1.68	0.66	0.77	1.18	0.84	0.91	+ 7	− 9	+ 1	−14	+ 7	+ 0	+ 6	− 2	− 9	+21	0	−1.32
101631	20 35 55.47	−78 28 10.7	9.10	H	308.981 108 47	−78.469 645 97	19.84	2.11	88.89	0.79	0.75	1.01	0.97	0.80	−10	−14	−20	+17	−13	+ 5	−10	− 5	− 6	−14	1	−0.63
101632	20 35 55.61	+37 37 26.6	8.71	2 H	308.981 697 87	+37.624 064 88	0.14	6.79	10.85	0.66	0.70	0.93	0.72	0.73	−13	+ 0	+ 6	− 6	+ 2	− 8	+ 3	− 3	+16	−19	1	2.51
101633	20 35 58.51	+50 43 13.9	8.34	H	308.993 790 40	+50.720 532 19	4.06	−9.72	0.83	0.66	0.61	0.73	0.75	0.64	− 9	+ 0	+17	− 3	+ 8	+ 4	+ 7	− 2	+ 4	− 1	0	−0.94
101634	20 36 00.69	+79 25 49.3	6.95	H	309.002 884 10	+79.430 373 28	1.33	−3.01	4.76	0.46	0.45	0.49	0.53	0.53	+ 4	− 8	−10	+25	+18	−15	+19	+ 5	− 3	+14	0	−0.63
101635	20 36 01.00	−45 16 22.4	9.57	G	309.004 159 23	−45.272 893 68	4.40	16.98	−31.89	1.20	0.93	1.56	1.83	1.17	+24	−19	−25	+16	+10	−20	+ 6	+ 3	− 6	+25	0	−0.06
101636	20 36 02.30	−54 56 28.4	8.59	H	309.009 596 75	−54.941 209 08	15.16	53.63	−80.75	0.89	0.86	1.20	1.05	0.77	+23	−14	−15	−19	−17	− 1	−28	−52	+15	−27	0	2.34
101637	20 36 03.71	−62 36 14.6	8.48	H	309.015 469 42	−62.604 059 22	7.16	38.33	−37.41	0.69	0.61	1.02	0.76	0.73	+ 4	−18	− 5	+23	+22	− 4	+19	+ 0	−10	−22	0	1.87
101638	20 36 04.75	−59 40 43.2	7.57	H	309.019 798 52	−59.678 669 45	4.25	−9.15	−41.14	0.61	0.67	0.97	0.90	0.81	+29	−18	−19	−23	+ 1	− 7	− 7	−34	+19	−25	0	−0.05
101639	20 36 05.67	+01 01 46.1	10.16	2 H	309.023 625 79	+01.029 485 64	−1.94	0.70	−0.34	1.31	1.25	1.92	1.65	1.55	+43	− 8	−40	+25	+ 7	+29	+22	+63	−29	+30	0	0.70
101640	20 36 07.33	−57 47 09.7	8.65	H	309.030 525 08	−57.786 025 55	3.94	20.99	−25.44	0.91	0.88	1.32	1.25	1.17	+ 8	−18	−25	− 2	+ 3	−17	−10	−28	+22	−25	0	−0.67
101641	20 36 08.32	+25 52 57.4	6.40	H	309.034 676 15	+25.882 618 61	4.65	23.61	11.96	0.48	0.42	0.71	0.60	0.52	− 7	+ 8	+ 7	+ 3	−11	− 4	−10	+ 1	− 2	+23	0	0.98
101642	20 36 11.62	+34 13 28.2	9.02	H	309.048 414 50	+34.224 503 53	5.15	6.07	2.23	0.59	0.69	0.92	0.66	0.67	− 8	− 2	+22	+10	−12	−10	− 7	−12	−13	+ 0	0	0.10
101643	20 36 12.41	−71 15 39.9	7.64	H	309.051 722 32	−71.261 072 61	4.50	15.62	−6.50	0.52	0.62	0.82	0.60	0.80	−30	− 5	−14	− 5	+ 6	− 1	+ 9	+ 5	+ 0	−45	0	0.66
101644	20 36 14.39	+08 14 35.7	10.12	H	309.059 959 46	+08.243 252 07	0.27	−8.34	−9.39	1.52	1.31	2.03	1.88	1.75	+44	−26	−10	+ 3	+27	− 6	+22	+34	− 9	+61	0	1.49
101645	20 36 15.89	+16 48 52.9	6.59	H	309.066 187 95	+16.814 692 49	3.65	12.71	15.22	0.59	0.49	0.75	0.68	0.52	+20	− 7	+ 3	− 7	+17	+ 4	+13	+ 5	+ 4	+35	2	0.02
101646	20 36 16.21	+59 12 47.2	7.59	H	309.067 543 70	+59.213 101 19	7.46	22.62	16.41	0.53	0.52	0.57	0.60	0.59	− 9	− 1	+ 2	+14	+11	−13	+14	−15	+ 9	+ 0	0	−1.20
101647	20 36 16.42	−12 22 52.6	6.81	H	309.068 434 68	−12.381 268 33	6.88	22.30	12.92	1.02	0.58	1.07	1.44	0.80	+ 2	−25	−29	− 1	−15	+12	− 3	+36	−10	−26	0	−1.23
101648	20 36 18.21	+37 25 02.9	8.94	H	309.075 868 02	+37.417 466 91	0.69	−3.40	−7.80	0.64	0.72	0.96	0.66	0.76	−17	+11	+ 3	+ 4	+ 3	−15	+ 6	− 3	+19	−20	0	0.36
101649 H	20 36 18.39	−15 18 40.6	8.38	H	309.076 637 31	−15.311 278 65 A	8.32	7.62	−45.58	2.97	1.79	2.71	4.19	2.28	− 3	− 3	−29	+39	−34	+18	−27	+48	−32	−43	2	0.74
101650	20 36 20.04	−39 14 06.1	9.33	H	309.083 505 35	−39.235 030 70	9.02	26.01	−24.71	1.09	0.71	1.32	1.31	0.88	+27	−35	−16	+ 5	+ 7	+15	+13	+ 3	− 7	+37	0	1.04
101651	20 36 20.37	−18 56 27.3	9.87	G	309.084 874 35	−18.940 929 57	17.80	−143.26	8.83	1.56	1.09	1.76	1.90	1.71	+26	−22	− 2	−19	+ 4	+20	+ 0	+26	−13	+40	0	−0.11
101652	20 36 21.10	+56 05 18.1	9.76	H	309.087 918 51	+56.088 353 20	2.19	4.24	−0.06	1.02	0.90	1.06	1.05	0.95	− 6	−27	+ 6	− 2	+25	− 8	+24	−11	+ 1	+ 0	1	2.47
*101653	20 36 22.48	−37 06 26.6	8.96	H	309.093 667 29	−37.107 381 00	2.34	32.62	−7.57	1.10	0.78	1.25	1.60	1.04	+27	− 3	−14	−17	+24	− 4	+15	+13	− 6	+51	4	4.39
*101654	20 36 22.31	+51 08 52.1	8.38	H	309.092 942 52	+51.147 800 51	1.82	1.70	−10.03	0.61	0.56	0.68	0.72	0.59	+ 2	−19	+11	− 2	− 3	− 3	− 3	+ 0	+ 3	− 3	0	0.49
*101655	20 36 22.41	−52 19 11.9	10.11	H	309.093 376 82	−52.319 964 87	7.64	−76.41	8.31	1.52	1.11	1.71	1.85	1.17	+13	−19	+ 1	+12	−20	+11	−26	−25	−10	−19	0	−0.95
101656	20 36 22.85	−32 36 40.1	10.41	H	309.095 206 08	−32.611 132 47	−0.32	7.92	1.31	1.48	1.07	1.72	2.12	1.63	+17	− 9	−21	+15	+ 1	+27	+ 6	+26	− 4	+22	0	−0.14
101657	20 36 23.09	+20 35 57.8	9.00	2 H	309.096 219 40	+20.599 381 94	0.62	1.78	−6.77	0.80	0.62	1.04	0.82	0.70	+ 6	−20	−16	+38	−11	+ 7	− 5	+14	− 4	+24	0	−0.69
101658	20 36 23.65	−22 42 40.7	9.00	H	309.098 538 30	−22.711 299 78	1.14	−8.39	−12.41	1.13	0.67	1.27	1.51	0.85	+15	− 4	−12	−10	− 3	+33	+ 3	+21	− 2	+ 9	0	−0.08
101659	20 36 24.08	+62 00 52.0	7.86	H	309.100 351 85	+62.014 438 26	3.06	4.34	5.60	0.58	0.48	0.58	0.55	0.48	− 1	− 5	+ 5	−21	+15	+ 7	+13	− 5	− 1	+17	0	0.13
101660	20 36 24.26	+39 11 40.7	8.48	G	309.101 080 01	+39.194 648 22	0.85	−0.35	−3.36	0.60	0.60	0.80	0.62	0.68	− 9	−10	+ 4	+ 7	+ 5	−15	+ 7	− 5	+ 7	+ 0	0	0.00
101661	20 36 24.38	−35 45 20.4	9.25	H	309.101 596 83	−35.755 670 84	9.07	87.51	−124.28	1.20	0.75	1.53	1.30	0.93	+41	−35	−14	−25	− 4	+17	− 3	−14	+ 4	+58	0	−0.10
101662	20 36 25.23	−76 14 18.2	10.10	H	309.105 119 72	−76.238 392 52	1.49	−0.73	2.52	0.98	0.91	1.22	1.09	1.00	−26	−10	− 9	+32	−19	− 5	−20	+21	− 6	−38	0	3.23
101663	20 36 25.41	+34 08 28.3	9.01	H	309.105 892 87	+34.141 189 63	1.58	−0.87	3.45	0.59	0.70	0.94	0.68	0.65	− 8	− 7	+23	+ 1	− 9	− 3	− 6	−12	+ 8	+ 1	2	0.30
101664	20 36 25.87	−09 51 14.7	8.81	H	309.107 773 94	−09.854 080 85	−2.72	−10.40	3.28	1.33	0.76	1.50	1.81	1.10	+ 7	+ 7	−28	−34	−14	+25	− 7	+20	−24	− 3	0	−2.03
101665	20 36 26.32	+47 18 26.7	8.11	H	309.109 683 57	+47.307 425 84	2.32	−1.50	9.51	0.60	0.60	0.71	0.83	0.77	− 3	+ 1	− 6	+15	+ 6	− 3	+ 6	+12	+ 1	+ 7	0	1.72
101666	20 36 26.47	−20 35 07.6	7.19	H	309.110 281 01	−20.585 444 81	3.79	15.24	−13.86	0.95	0.63	1.13	1.15	0.93	+30	−15	−26	−17	+ 8	+29	+13	+48	−22	+31	0	−0.96
101667	20 36 27.25	−66 50 22.3	8.76	H	309.113 557 82	−66.839 535 25	2.76	−18.28	−30.47	0.65	0.79	1.34	0.76	0.93	−50	+12	−13	+ 2	+ 9	−11	+10	+ 6	+11	−48	0	−0.77
101668	20 36 27.88	+41 02 39.6	7.90	H	309.116 146 21	+41.044 333 77	7.29	−8.22	−26.25	0.52	0.58	0.71	0.59	0.64	+ 4	− 5	+16	+21	+ 5	−14	+ 8	+10	+ 2	+12	1	0.69
101669	20 36 28.17	−61 24 40.1	7.96	H	309.117 391 24	−61.411 135 85	2.95	9.05	0.75	0.54	0.61	0.96	0.53	0.68	+10	−13	+ 4	+49	− 5	+ 3	−14	+ 1	− 3	− 8	0	1.55
101670	20 36 28.84	+63 24 19.5	10.18	H	309.120 151 76	+63.405 404 66	6.74	58.44	92.18	0.91	0.89	1.00	0.94	1.11	+ 6	−12	+ 7	−33	+24	+11	+ 8	+13	+ 0	+49	1	−0.99
101671 H	20 36 30.50	−45 33 28.5	7.28	G	309.127 078 91	−45.557 916 69 A	8.71	25.72	17.97	1.64	1.18	1.55	2.14	1.15	+25	−15	−27	−12	+ 0	−12	− 1	− 8	+ 6	+13	6	0.01
101672	20 36 31.06	+29 12 30.9	8.84	H	309.129 435 33	+29.208 573 29	14.38	0.81	31.15	0.60	0.66	0.99	0.67	0.70	− 8	+ 4	+ 0	+16	+ 6	+ 0	+ 8	+ 1	+ 2	+ 7	0	1.06
101673	20 36 32.98	−51 25 20.4	9.77	H	309.137 425 13	−51.422 341 75	11.81	−9.28	−49.56	1.47	1.09	1.70	2.33	1.71	+ 5	−18	− 6	+14	+ 0	−20	+ 1	+10	−13	+ 1	0	1.59
101674	20 36 33.80	+00 17 22.9	8.68	H	309.140 843 93	+00.289 703 50	4.13	25.26	−4.76	1.01	0.91	1.37	1.40	1.15	+33	−21	−38	+37	− 2	+12	+12	+63	−28	+16	0	0.66
101675	20 36 35.21	+17 08 52.7	8.82	1 H	309.146 703 37	+17.147 973 41	8.18	1.34	24.24	0.93	0.71	1.20	1.20	0.95	+22	−16	−14	−21	+14	+10	+26	+23	−15	+ 2	0	0.17
*101676	20 36 35.95	−71 04 17.0	6.84	H	309.149 811 18	−71.071 381 40	5.62	3.31	−26.64	0.49	0.56	0.75	0.57	0.73	−36	+17	−20	−30	+24	−22	+28	− 7	+19	−46	0	−0.27
*101677	20 36 35.66	+40 28 45.1	8.09	H	309.148 591 85	+40.479 196 15	3.12	3.57	−1.69	0.49	0.55	0.68	0.52	0.65	+ 1	−13	+15	+20	+ 8	−18	+12	+17	− 3	+19	0	−2.39
*101678	20 36 35.77	−38 01 31.8	8.95	2 H	309.149 061 71	−38.025 492 88	0.64	3.07	−1.47	1.23	0.77	1.45	1.44	1.07	+26	− 8	− 4	−19	+23	−16	+16	+12	−15	+60	0	−0.14
101679	20 36 36.27	+08 21 03.7	8.69	H	309.151 106 10	+08.351 016 91	9.44	−6.80	36.52	1.03	0.84	1.39	1.24	1.15	+37	−25	− 7	− 6	+31	+ 1	+22	+40	− 6	+59	0	−1.16
101680	20 36 36.61	−14 06 26.5	9.24	H	309.152 543 63	−14.107 372 76	0.41	−16.84	−9.14	1.34	1.01	1.52	1.58	1.36	+35	−13	− 7	−11	+26	+39	+35	+62	− 5	+29	0	1.08
101681	20 36 36.96	+62 25 55.0	7.86	H	309.154 012 45	+62.431 947 99	5.59	8.36	10.94	0.60	0.49	0.62	0.58	0.51	+ 4	−21	+ 4	−29	+ 9	+14	+ 3	− 3	+ 0	+29	0	−1.82
101682	20 36 37.16	+30 47 23.6	9.25	H	309.154 818 83	+30.789 895 07	4.22	−3.58	−5.66	0.59	0.77	1.14	0.66	0.81	−35	+12	−14	+22	−12	− 3	−13	− 8	+ 6	−39	2	1.06
101683	20 36 37.77	−46 00 42.7	9.73	H	309.157 371 42	−46.011 866 67	2.09	−6.20	−27.49	1.26	0.94	1.40	1.88	1.32	+20	−16	+ 4	+19	+10	+ 4	+10	+17	+ 3	+33	0	1.36
101684	20 36 38.33	−63 07 14.8	6.34	H	309.159 692 19	−63.120 764 34	17.05	10.18	−81.64	0.62	0.52	0.78	0.62	0.59	+22	− 6	− 9	+14	+28	+ 4	+21	−11	− 5	−17	7	−0.04
101685	20 36 39.06	−30 48 45.6	9.79	H	309.162 748 12	−30.812 658 33	0.50	−10.09	−18.63	1.47	0.92	1.66	1.82	1.45	+28	− 6	− 8	−36	−13	+15	−15	− 4	−20	+33	2	−0.14
101686	20 36 40.51	+04 04 11.0	10.33	H	309.168 793 58	+04.069 724 45	1.88	−1.28	0.71	1.64	1.33	1.96	2.63	1.82	+25	− 2	−24	− 1	+ 9	+ 3	+16	+53	− 8	+11	2	−0.07
101687	20 36 40.75	+16 42 48.8	8.34	H	309.169 794 39	+16.713 564 26	5.00	−9.56	8.68	0.74	0.61	0.96	0.88	0.65	+25	− 5	+ 1	− 2	+20	+ 1	+15	+ 5	+12	+38	2	1.00
101688	20 36 41.93	+08 35 41.1	8.29	H	309.174 694 53	+08.594 757 32	3.55	−11.19	−10.14	0.88	0.74	1.18	1.13	1.02	+26	−17	− 1	− 2	+32	− 8	+23	+42	−10	+51	0	2.37
101689	20 36 41.93	+18 16 34.0	8.62	H	309.174 722 57	+18.276 121 90	3.98	−18.27	−13.01	0.97	0.74	1.18	1.37	0.80	+10	+ 7	−21	+11	+37	− 1	+30	+26	+10	+20	4	−0.38
101690	20 36 42.73	+02 29 45.0	7.44	H	309.178 037 95	+02.495 836 64	1.61	25.07	0.31	0.76	0.62	1.01	0.94	0.77	+14	−11	−34	+11	+ 1	+27	+11	+56	−14	+11	0	0.20
101691 H	20 36 42.99	+50 53 23.4	7.94	G	309.179 137 56	+50.889 822 30 *	5.62	−0.77	−7.10	1.36	0.98	0.85	0.87	0.81	+ 3	+ 0	+11	+ 5	− 2	+11	− 1	+ 0	− 9	−13	7	2.90
101692	20 36 43.63	−02 32 59.7	4.91	G	309.181 779 37	−02.549 918 14	1.48	9.09	−16.05	0.76	0.54	0.91	1.10	0.75	+ 7	−10	−25	+28	−17	+31	−11	+48	− 7	+10	0	0.71
101693	20 36 45.02	−32 12 26.1	8.97	G	309.187 578 23	−32.207 241 08	11.96	−26.62	39.67	1.10	0.86	1.28	1.46	1.36	+33	−15	− 5	+15	+16	+17	+11	+42	+24	+39	0	−1.97
101694	20 36 45.15	+14 42 57.9	8.66	H	309.188 128 00	+14.716 070 55	7.02	−20.72	−48.33	0.93	0.89	1.16	1.16	0.99	+42	−11	+ 5	+23	+50	+16	+44	+46	+11	+52	0	−0.11
101695	20 36 45.48	−56 44 45.9	8.96	H	309.189 503 96	−56.746 084 34	4.16	20.14	13.80	0.88	0.77	1.25	0.99	0.89	+ 4	−35	− 8	−43	− 2	+16	+ 0	−35	+ 1	−14	0	−0.50
101696	20 36 46.55	−01 29 04.1	8.92	H	309.193 973 51	−01.484 474 37	0.76	9.86	−6.29	1.07	0.78	1.25	1.58	1.14	+20	− 4	−26	+14	−15	+24	−14	+37	− 7	+29	2	0.46
101697	20 36 47.37	−81 31 48.5	8.60	H	309.197 386 65	−81.530 136 29	6.20	−25.19	−2.57	0.64	0.59	0.82	0.76	0.70	+ 5	−32	+ 0	−15	+ 1	+ 3	+ 3	−21	− 9	− 2	1	1.12
101698	20 36 47.77	+14 43 51.0	8.34	H	309.199 043 35	+14.730 841 33 B	2.95	16.72	16.34	2.79	2.57	2.60	3.30	2.75	+38	−13	− 5	+14	+44	− 3	+35	+42	+10	+49	3	0.64
101699	20 36 49.07	−69 27 02.3	7.00	H	309.204 451 87	−69.450 629 39	6.88	−5.81	−18.10	0.44	0.53	0.76

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
101601	9.712	0.029	8.516	0.018		1.024	0.027	T	1.00	0.02	L	8.5966	0.0019	0.014	73		8.58	8.62		C			1							
101602	7.863	0.008	6.819	0.005		0.907	0.007	T	0.91	0.01	L	6.8718	0.0006	0.006	111		6.86	6.89					1							S
101603	9.415	0.011	8.891	0.011		0.501	0.012	T	0.57	0.01	L	8.9369	0.0019	0.020	185		8.91	8.98					1							
101604	8.055	0.007	8.065	0.008	*	−0.004	0.010	T	0.02	0.01	L *	8.0760	0.0011	0.016	191	*	8.05	8.10		D	20355+2739	I 1	2 C A	AB	103	0.517	0.007	2.37	0.04	S
101605	9.648	0.020	8.165	0.011		1.249	0.018	T	1.21	0.02	L	8.1652	0.0019	0.014	104		8.14	8.19					1							
101606	9.966	0.030	8.579	0.017		1.173	0.027	T	1.13	0.02	L	8.6153	0.0021	0.015	73		8.60	8.65		C			1							
101607	6.458	0.004	6.523	0.005		−0.055	0.006	T	−0.03	0.01	L	6.5151	0.0011	0.008	62		6.50	6.53		C			1							S
101608	6.437	0.004	6.208	0.006		0.218	0.007	T	0.24	0.01	L	6.2547	0.0012	0.007	71		6.24	6.26					1							S
101610	9.907	0.024	9.321	0.022		0.549	0.024	T	0.62	0.02	L	9.3440	0.0016	0.016	85		9.31	9.37		C			1							
101611	8.055	0.009	7.573	0.010		0.454	0.012	T	0.52	0.01	L	7.6232	0.0009	0.010	96		7.61	7.64		C			1							S
101612	5.108	0.003	4.788	0.002		0.291	0.012	G	0.34	0.02	A	4.8282	0.0005	0.005	135		4.82	4.84		C			1							S
101613	11.058	0.053	10.208	0.041		0.747	0.051	T	0.79	0.04	L	10.2008	0.0027	0.025	106		10.16	10.25					1							G
101614	9.028	0.011	8.315	0.009		0.656	0.012	T	0.72	0.01	L	8.3811	0.0014	0.017	156		8.35	8.41		C			1							
101615	10.601	0.043	8.856	0.018		1.484	0.038	T	2.64	0.07	O	8.6093	0.0152	0.097	71		8.50	8.77	53.87	P 1 A			1 S							
101616	8.966	0.014	7.965	0.010		0.875	0.013	T	0.88	0.01	L	8.0328	0.0013	0.011	103		8.02	8.06		C			1							S
101617	9.981	0.018	9.541	0.019		0.429	0.021	T	0.50	0.02	L	9.6065	0.0016	0.024	198		9.56	9.65		D			1							
101618	10.719	0.044	10.045	0.039		0.620	0.015	G	0.69	0.01	H	10.0284	0.0032	0.029	125		9.97	10.07			20356+2523	I 1	1							G
101619	9.531	0.019	9.168	0.020		0.344	0.026	T	0.40	0.04	L	9.1922	0.0012	0.013	78		9.16	9.21		D			1							
101620	8.007	0.010	7.488	0.008		0.487	0.012	T	0.56	0.01	L	7.5263	0.0012	0.011	83		7.51	7.54		C			1							S
101621	9.705	0.028	8.459	0.018		1.063	0.026	T	1.03	0.02	L	8.4972	0.0018	0.012	67		8.48	8.53		C			1							
101622	7.701	0.008	7.155	0.007		0.512	0.010	T	0.58	0.01	L	7.2039	0.0011	0.008	89		7.19	7.22		C			1							S
101623	7.581	0.008	6.470	0.006		0.958	0.008	T	0.95	0.01	L	6.5271	0.0010	0.008	82		6.52	6.54		C			1							S
101624	8.965	0.015	7.774	0.010		1.020	0.014	T	0.99	0.01	L	7.8211	0.0016	0.011	78		7.81	7.84		C			1							S
101625	9.660	0.019	8.208	0.011		1.224	0.017	T	1.18	0.02	L	8.2575	0.0010	0.011	101		8.24	8.28		D			1							
101626	7.761	0.005	6.233	0.003		1.293	0.005	G	1.25	0.01	H	6.2480	0.0008	0.009	190		6.23	6.26					1							S
101627	7.601	0.006	7.642	0.007		−0.033	0.008	T	−0.01	0.01	L	7.6515	0.0011	0.011	133		7.63	7.67		C			1							S
101628	9.886	0.020	9.205	0.018		0.618	0.020	T	0.69	0.02	L	9.2900	0.0018	0.018	129		9.26	9.32		C			1							
101629	7.690	0.009	7.242	0.008		0.424	0.008	G	0.49	0.01	H	7.3021	0.0011	0.009	84		7.28	7.32		C			1							S
101630	9.670	0.020	9.536	0.025		0.129	0.030	T	0.14	0.03	L	9.5520	0.0018	0.022	168		9.51	9.60					1							G
101631	10.057	0.021	9.177	0.016		0.770	0.020	T	0.81	0.01	L	9.2396	0.0016	0.022	140		9.20	9.28		D			1							
101632	10.993	0.045	8.952	0.014		1.728	0.039	T	2.59	0.05	O	8.7177	0.0042	0.038	135		8.65	8.77		U 2			1							
101633	9.693	0.021	8.451	0.013		1.060	0.019	T	1.03	0.02	L	8.5107	0.0022	0.016	105		8.49	8.54					1							
101634	6.758	0.004	6.915	0.005		−0.137	0.006	T	−0.13	0.01	L	6.8998	0.0006	0.006	124		6.89	6.91					1							S
101635	10.136	0.029	9.612	0.028		0.477	0.008	G	0.55	0.01	H	9.6853	0.0024	0.020	82		9.66	9.73					1							
101636	9.287	0.014	8.660	0.012		0.579	0.014	T	0.65	0.01	L	8.7156	0.0018	0.019	110		8.69	8.75		C			1							
101637	8.825	0.011	8.486	0.011		0.322	0.015	T	0.37	0.02	L	8.5541	0.0012	0.018	146		8.52	8.59					1							S
101638	9.091	0.012	7.696	0.007		1.173	0.020	G	1.10	0.02	A	7.7353	0.0011	0.013	148		7.70	7.76					1							S
101639	12.415	0.242	10.352	0.056		1.746	0.205	T	2.11	0.26	K	10.2354	0.0091	0.065	83		10.10	10.31		U 2			1							G
101640	10.102	0.026	8.763	0.015		1.136	0.023	T	1.10	0.02	L	8.8211	0.0020	0.019	104		8.78	8.88		C			1							
101641	6.590	0.004	6.425	0.004		0.158	0.005	T	0.17	0.01	L	6.4563	0.0007	0.008	145		6.45	6.47					1							S
101642	9.136	0.011	9.034	0.014		0.099	0.017	T	0.11	0.02	L	9.0647	0.0018	0.019	171		9.03	9.10					1							
101643	7.628	0.005	7.638	0.007		−0.008	0.008	T	0.01	0.01	L	7.6482	0.0016	0.014	165		7.62	7.67					1							S
101644	12.037	0.124	10.202	0.035		1.461	0.003	G	1.53	0.14	K	10.2414	0.0030	0.030	96		10.19	10.29					1							G
101645	8.416	0.012	6.741	0.006		1.400	0.011	T	1.38	0.01	L	6.7302	0.0008	0.008	97		6.72	6.74		C			1							S
101646	7.746	0.007	7.593	0.008		0.147	0.010	T	0.16	0.01	L	7.6420	0.0011	0.010	123		7.63	7.66		C			1							S
101647	8.445	0.011	6.938	0.008		1.267	0.011	T	1.23	0.01	L	6.9730	0.0012	0.008	67		6.96	6.99		C			1							S
101648	9.610	0.015	9.011	0.014		0.558	0.015	T	0.63	0.01	L	9.0603	0.0019	0.018	141		9.03	9.10		C			1							
101649	8.960	0.023	8.323	0.021	*	0.586	0.023	T	0.66	0.02	L *	8.5070	0.0035	0.017	71	*	8.48	8.60		D	20363−1519	I 1	2 C A	AB	23	3.442	0.005	0.44	0.03	S
101650	9.807	0.023	9.360	0.023		0.435	0.026	T	0.50	0.03	L	9.4302	0.0018	0.015	86		9.39	9.46					1							
101651	11.366	0.121	10.022	0.055		1.010	0.015	G	1.05	0.02	I	9.9866	0.0029	0.024	63		9.94	10.02		D			1 S							
101652	11.191	0.058	9.855	0.029		1.133	0.051	T	1.10	0.05	L	9.9297	0.0032	0.026	119		9.89	9.99					1							G
101653	10.413	0.031	9.133	0.018		1.089	0.028	T	1.05	0.03	L	9.1249	0.0025	0.021	105		9.09	9.15			20364−3706	I 1	1							
101654	9.626	0.019	8.498	0.013		0.971	0.018	T	0.96	0.01	L	8.5401	0.0018	0.018	118		8.52	8.58		R			1							
101655	10.979	0.072	10.157	0.055		0.725	0.069	T	0.78	0.05	L	10.2444	0.0033	0.029	71		10.20	10.31		C			1							
101656	11.076	0.065	10.479	0.063		0.557	0.080	T	0.63	0.07	L	10.5283	0.0029	0.031	79		10.46	10.58		C			1							G
101657	9.027	0.014	9.028	0.018		0.004	0.021	T	0.02	0.02	L	9.0097	0.0033	0.042	119		8.97	9.15	0.86	P 1 A			1							
101658	10.304	0.038	9.100	0.022		1.030	0.034	T	1.00	0.03	L	9.1672	0.0015	0.013	78		9.14	9.20					1							
101659	7.763	0.008	7.849	0.011		−0.080	0.015	G	−0.06	0.02	H	7.8395	0.0009	0.011	102		7.82	7.86		C			1							S
101660	8.646	0.010	8.491	0.011		0.140	0.015	G	0.15	0.01	H	8.5365	0.0016	0.016	145		8.51	8.57					1							
101661	10.351	0.032	9.352	0.021		0.862	0.030	T	0.87	0.02	L	9.3943	0.0024	0.020	104		9.37	9.43					1							
101662	10.447	0.027	10.153	0.032		0.280	0.039	T	0.32	0.05	L	10.1705	0.0026	0.030	155		10.11	10.22					1							G
101663	9.107	0.011	9.022	0.014		0.083	0.017	T	0.10	0.02	L	9.0425	0.0018	0.019	173		9.01	9.07		C			1							
101664	9.877	0.028	8.903	0.020		0.855	0.026	T	0.87	0.02	L	8.9659	0.0032	0.017	57		8.94	8.99					1							
101665	9.852	0.019	8.264	0.010		1.331	0.017	T	1.29	0.02	L	8.2624	0.0015	0.014	119		8.24	8.29		C			1							
101666	8.902	0.016	7.318	0.009		1.328	0.014	T	1.29	0.02	L	7.3436	0.0014	0.008	74		7.32	7.36		C			1							S
101667	10.608	0.022	8.928	0.010		1.404	0.019	T	1.38	0.02	L	8.8997	0.0015	0.024	284		8.86	8.94					1							
101668	8.073	0.008	7.918	0.009		0.149	0.011	T	0.16	0.01	L	7.9493	0.0010	0.014	137		7.92	7.97					1							
101669	9.559	0.027	8.112	0.015		1.220	0.024	T	1.18	0.02	L	8.1240	0.0015	0.015	175		8.10	8.15					1							
101670	11.008	0.054	10.305	0.044		0.648	0.057	T	0.71	0.05	L	10.3165	0.0028	0.022	100		10.28	10.36		C			1							G
101671	7.853	0.031	7.554	0.036	A	0.297	0.002	G	0.34	0.00	H *	7.3647	0.0014	0.009	79	*	7.35	7.38		D	20365−4533	I 1	2 C A	AB	356	2.278	0.003	0.85	0.02	S
101672	9.531	0.016	8.897	0.014		0.590	0.015	G	0.66	0.01	H	8.9645	0.0018	0.023	172		8.93	9.00					1							
101673	10.655	0.047	9.821	0.035		0.436	0.005	G	0.50	0.01	H	9.8723	0.0036	0.023	71		9.81	9.93		C			1							
101674	10.205	0.031	8.811	0.017		1.150	0.010	G	1.11	0.01	H	8.8443	0.0016	0.013	83		8.83	8.87		C			1							
101675	9.465	0.020	8.900	0.019		0.529	0.025	T	0.60	0.03	L	8.9359	0.0018	0.021	98		8.89	8.97		U			1 G							
101676	6.813	0.003	6.827	0.004		−0.008	0.005	T	0.01	0.01	L	6.8482	0.0009	0.010	168		6.83	6.86			20365−7104	I 1	1							S
101677	8.029	0.007	8.073	0.009		−0.036	0.010	T	−0.01	0.01	L	8.0908	0.0015	0.013	145		8.07	8.11		C			1							
101678	10.891	0.046	9.218	0.019		1.425	0.041	T	3.04	0.06	O	8.8376	0.0099	0.116	101		8.64	9.02		U 2			1 S							
101679	9.277	0.015	8.757	0.015		0.541	0.015	G	0.61	0.02	H	8.8083	0.0021	0.016	101		8.78	8.84					1							
101680	11.420	0.100	9.452	0.028		1.632	0.083	T	1.65	0.09	L	9.3494	0.0026	0.022	71		9.31	9.40		C			1							
101681	8.336	0.010	7.912	0.008		0.412	0.015	G	0.48	0.02	H	7.9554	0.0014	0.012	107		7.94	7.97			20366+6226	I 1	1							S
101682	9.446	0.010	9.272	0.012		0.167	0.015	T	0.18	0.01	L	9.3109	0.0019	0.026	245		9.27	9.35					1							
101683	10.217	0.030	9.754	0.031		0.450	0.034	T	0.52	0.04	L	9.8287	0.0027	0.023	86		9.78	9.88					1							
101684	6.801	0.004	6.389	0.004		0.413	0.004	G	0.48	0.00	H	6.4320	0.0008	0.007	127		6.42	6.44		C			1 G							S
101685	10.786	0.059	9.833	0.043		0.826	0.057	T	0.85	0.04	L	9.9304	0.0042	0.025	72		9.89	9.97					1							
101686	12.203	0.223	10.515	0.080		1.437	0.195	T	1.91	0.17	K	10.4206	0.0045	0.031	64		10.38	10.49		C			1							G
101687	8.425	0.011	8.340	0.014		0.083	0.017	T	0.10	0.02	L	8.3748	0.0015	0.016	95		8.34	8.40					1							
101688	8.406	0.010	8.290	0.012		0.104	0.005	G	0.12	0.01	H	8.3301	0.0012	0.012	87		8.30	8.35		C			1							
101689	10.045	0.029	8.741	0.017		1.100	0.015	G	1.06	0.02	H	8.7842	0.0018	0.019	89		8.75	8.82					1							
101690	9.048	0.014	7.567	0.008		1.247	0.013	T	1.21	0.01	L	7.5986	0.0014	0.011	89		7.58	7.62		C			1							S
101691	8.133	0.010	7.995	0.013	*	0.120	0.015	G	0.13	0.01	H *	7.9768	0.0014	0.012	105	*	7.96	8.00		D	20367+5053	I 1	2 C A	AC	150	0.218	0.006	0.80	0.13	S
101692	6.995	0.007	5.076	0.003		1.606	0.041	G	1.66	0.00	G	5.0188	0.0015	0.008	82		5.00	5.03					1							S
101693	9.497	0.020	8.999	0.019		0.498	0.015	G	0.57	0.02	H	9.0751	0.0021	0.016	76		9.05	9.11					1							
101694	9.515	0.027	8.789	0.023		0.666	0.028	T	0.73	0.02	L	8.7970	0.0016	0.015	99		8.78	8.82		C	20368+1444	I 3	1							
101695	9.553	0.020	9.001	0.019		0.523	0.021	T	0.60	0.02	L	9.0731	0.0016	0.013	89		9.04	9.10					1							
101696	10.996	0.058	9.101	0.020		1.574	0.049	T	1.59	0.05	L	9.0338	0.0022	0.016	82		9.01	9.06		C			1							
101697	10.020	0.022	8.752	0.013		1.080	0.020	T	1.04	0.02	L	8.7731	0.0019	0.016	137		8.75	8.80					1							
101698	9.505	0.029	8.397	0.020	B	0.955	0.027	T	0.94	0.02	L	8.5090	0.0071			B				D	20368+1444	I 3	1 C I B							
101699	8.372	0.008	7.121	0.005		1.067	0.007	T	1.03	0.01	L	7.1709	0.0009	0.014	183		7.15	7.19					1							S
101700	8.711	0.018	8.366	0.019	A	0.327	0.024	T	0.38	0.03	L	8.4356	0.0069	0.036	100	A	8.21	8.48		D	20368+1444	I 3	1 C P B							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas			mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
101701	20 36 49.67	+68 33 29.1	8.46	H	309.206 946 36	+68.558 074 40		2.49	−8.32	−22.64	0.67	0.57	0.68	0.79	0.58	− 4	−17	− 1	− 8	+ 7	+16	+ 4	−11	+16	+ 8	0	0.40
101702	20 36 50.50	+49 54 34.6	7.09	H	309.210 423 29	+49.909 604 75		5.76	0.65	4.36	0.54	0.48	0.59	0.61	0.52	− 5	+ 3	+11	− 1	+ 0	−12	+ 1	+11	+ 5	+ 1	2	−0.87
101703	20 36 50.86	+44 54 40.2	8.13	G	309.211 909 11	+44.911 166 14		7.08	18.81	24.16	0.61	0.58	0.76	0.67	0.57	− 9	−14	+11	−13	− 1	+13	− 4	−20	+25	− 1	1	4.32
101704	20 36 53.32	−16 45 53.4	10.30	H	309.222 147 73	−16.764 822 70		14.23	13.94	−185.35	1.86	1.28	2.41	2.22	2.10	+37	−25	−30	−14	+ 8	+24	+17	+51	−38	+31	0	0.22
101705	20 36 54.44	−67 25 09.8	8.03	2 H	309.226 836 37	−67.419 382 84		0.77	27.74	4.39	0.46	0.66	1.05	0.55	0.89	−48	− 3	− 3	− 9	+ 3	− 4	+ 7	+20	+ 2	−55	0	0.25
101706 H	20 36 55.06	−12 44 13.4	7.65	H	309.229 407 95	−12.737 058 55	A	11.40	14.83	−32.36	1.70	1.11	1.70	2.25	1.37	+11	−13	−10	+16	−12	+17	− 1	+53	− 1	−13	0	0.18
101707	20 36 55.08	−37 23 12.8	7.44	H	309.229 517 41	−37.386 875 96		4.71	−24.63	−4.61	0.85	0.55	1.00	1.00	0.67	+25	− 8	−29	−26	+16	− 7	+ 8	+ 1	− 8	+54	0	−0.57
101708	20 36 57.68	+10 28 42.2	8.20	H	309.240 344 12	+10.478 384 30		5.57	−0.54	−18.56	0.89	0.72	1.14	1.16	0.80	+35	− 7	+18	+29	+50	+23	+39	+50	+22	+56	2	0.53
101709	20 36 58.72	+32 21 04.5	7.15	H	309.244 663 35	+32.351 243 72		3.94	25.65	15.44	0.38	0.46	0.66	0.44	0.46	−20	− 9	+ 2	+10	+ 1	−11	− 2	−24	+ 7	−29	0	1.12
101710 H	20 36 58.88	+12 02 56.6	7.62	H	309.245 335 49	+12.049 043 51	A	10.79	42.78	−27.85	1.82	1.31	2.00	2.05	1.22	+34	−12	− 2	+15	+33	+ 8	+26	+27	+13	+45	1	0.36
101711	20 36 59.58	+21 34 08.9	8.34	H	309.248 253 76	+21.569 137 44		2.65	−2.27	−22.24	0.73	0.65	0.97	0.81	0.70	+18	−19	− 4	+25	+ 6	+ 7	+ 5	+14	+12	+30	0	0.24
101712	20 37 01.46	−50 19 07.5	10.31	G	309.256 066 53	−50.318 736 64		5.99	41.55	−40.05	1.69	1.13	1.88	2.75	1.70	+13	−25	−23	+16	+ 5	−16	− 4	+ 6	+15	−24	0	0.58
101713	20 37 02.78	+79 31 46.3	9.76	H	309.261 591 09	+79.529 516 71		3.91	12.16	15.24	0.79	0.76	0.85	0.92	0.91	+10	−12	− 9	+23	+19	−22	+21	+ 4	− 2	+25	3	−0.24
101714	20 37 03.89	+08 58 40.0	7.48	G	309.266 197 55	+08.977 784 75		5.47	30.25	6.41	0.73	0.57	0.96	0.87	0.69	+26	− 5	− 5	− 5	+26	+13	+20	+27	+ 1	+47	3	1.58
101715	20 37 04.06	+67 30 15.3	7.70	H	309.266 920 49	+67.504 247 87		4.03	12.29	18.06	0.60	0.48	0.59	0.68	0.49	− 9	−27	+ 7	+15	+ 1	+ 9	− 2	−13	+19	+ 4	0	1.64
101716	20 37 04.66	+26 27 43.1	5.59	H	309.269 427 55	+26.461 974 99		10.68	16.27	−11.39	0.40	0.39	0.67	0.56	0.47	− 3	+ 2	+10	−12	−11	− 5	−12	− 1	− 1	+23	0	2.02
101717	20 37 05.96	−57 11 58.7	9.58	H	309.274 836 42	−57.199 645 19		6.10	17.78	−45.66	1.02	0.96	1.43	1.33	1.26	+ 7	−24	−12	+17	− 6	− 1	−11	−22	+ 9	− 4	0	−1.21
101718	20 37 07.63	−00 31 02.6	8.71	H	309.281 773 41	−00.517 395 62		0.20	7.23	7.94	1.22	0.93	1.54	2.00	1.34	+ 2	− 6	−40	+38	−27	+33	−13	+60	−28	− 9	0	−0.53
101719	20 37 07.90	+61 21 52.9	7.03	H	309.282 935 49	+61.364 691 63		17.24	23.98	−43.77	0.54	0.45	0.53	0.53	0.44	− 5	+ 2	+ 6	+26	+ 6	− 6	+11	− 3	+ 3	+ 9	0	0.59
101720	20 37 07.96	+36 35 02.5	7.50	H	309.283 172 96	+36.584 030 50		5.89	−8.24	−23.14	0.44	0.47	0.65	0.47	0.53	−11	− 1	+ 3	+ 2	− 1	−18	+ 0	− 7	+ 7	− 7	0	−0.71
101721	20 37 08.42	+64 21 37.8	7.67	H	309.285 085 89	+64.360 512 99		2.99	12.68	6.23	0.55	0.61	0.63	0.58	0.75	+14	− 6	+12	− 7	+29	+ 2	+14	+36	+ 6	+51	0	−0.66
101722 H	20 37 09.07	−31 14 03.9	9.22	G	309.287 797 95	−31.234 412 15	A	2.29	2.05	1.14	2.04	1.40	2.04	2.27	1.76	+36	−14	−15	+ 5	− 8	+ 6	− 6	+12	−14	+40	5	0.22
101723	20 37 10.47	+38 57 17.9	8.99	G	309.293 614 10	+38.954 964 08		2.65	5.75	9.35	0.64	0.68	0.89	0.67	0.74	− 9	− 2	+ 9	+ 0	+ 1	− 9	+ 1	+ 6	+ 7	− 1	0	−0.40
101724	20 37 10.83	−01 18 39.9	7.09	H	309.295 110 86	−01.311 080 77		5.09	−6.20	27.32	0.93	0.60	1.02	1.34	0.87	−12	− 1	−28	+48	−38	+33	−33	+47	−22	+12	2	−0.31
101725	20 37 11.02	−65 01 59.7	6.69	G	309.295 916 03	−65.033 250 86		5.45	19.98	−11.72	0.53	0.50	0.77	0.63	0.55	+ 1	−12	−18	+26	+15	−17	+ 9	− 3	− 7	−12	0	−0.48
101726	20 37 11.53	−44 44 40.6	8.10	H	309.298 043 16	−44.744 604 88		27.18	132.39	−75.12	0.99	0.62	1.16	1.35	0.78	+ 9	−18	−15	−17	+11	−19	+ 8	− 3	−10	+17	0	0.14
101727	20 37 12.39	+48 46 05.4	8.27	H	309.301 630 66	+48.768 169 28		3.78	5.24	1.71	0.60	0.53	0.66	0.73	0.66	+13	+ 3	+ 4	−17	− 8	+ 0	−10	+ 0	+ 9	+25	0	−0.58
101728	20 37 12.68	+52 58 23.2	6.64	H	309.302 841 14	+52.973 116 63		3.67	−11.71	−18.91	0.47	0.47	0.53	0.61	0.51	−17	− 9	+ 3	+ 9	+11	− 5	+ 6	−22	+18	−24	0	−0.58
101729	20 37 13.23	+46 08 19.8	9.39	H	309.305 123 83	+46.138 834 53		−0.71	0.29	3.78	0.94	0.70	1.00	1.06	0.76	− 9	− 3	+ 8	+ 3	− 2	− 4	− 2	+ 4	−12	−15	0	0.38
*101730	20 37 13.90	+16 33 06.6	8.75	H	309.307 900 70	+16.551 837 56		2.44	3.73	−3.72	0.91	0.74	1.11	1.05	0.83	+21	+ 1	+ 3	−19	+26	+ 2	+19	+21	+19	+35	0	0.20
*101731	20 37 13.89	−62 33 43.0	10.09	H	309.307 859 77	−62.561 948 49		7.34	45.04	−26.57	1.18	1.07	1.78	1.35	1.33	+10	− 9	− 1	+31	+27	− 9	+25	+15	+ 2	−12	3	1.92
*101732	20 37 14.21	+79 17 18.3	8.78	H	309.309 199 70	+79.288 413 36		3.09	12.85	3.97	0.67	0.62	0.70	0.77	0.68	+ 6	−16	− 8	+28	+20	−23	+20	− 8	+ 6	+10	0	−0.24
*101733	20 37 14.17	+13 17 11.2	8.92	H	309.309 053 71	+13.286 446 82		8.50	−26.19	−21.44	0.93	0.77	1.29	1.20	0.80	+34	−17	−13	+14	+27	+ 2	+22	+16	+ 5	+42	0	1.60
101734	20 37 14.58	−13 11 03.2	7.84	G	309.310 733 42	−13.184 229 26		7.83	64.44	−5.74	1.01	0.77	1.13	1.29	1.02	+35	−10	−15	+ 6	+18	+31	+32	+66	− 3	+19	0	0.48
101735	20 37 14.83	−07 53 48.9	9.44	H	309.311 780 22	−07.896 927 08		8.73	159.13	−2.94	1.39	1.15	2.34	2.35	1.74	+16	− 9	−60	+ 8	−26	+45	+ 6	+59	−56	−16	6	−0.13
101736	20 37 15.18	+50 04 52.0	9.85	H	309.313 230 46	+50.081 111 59		1.70	5.59	1.07	0.88	0.82	0.98	1.01	0.85	−11	− 3	+20	− 7	+ 8	− 3	+ 8	+ 1	+ 3	− 3	0	−0.39
101737	20 37 15.32	−40 36 59.5	10.38	H	309.313 843 69	−40.616 521 21		1.50	2.79	−15.66	1.57	1.04	1.88	1.99	1.32	+30	−34	−22	+ 8	+12	− 8	+14	+ 7	−12	+34	4	0.37
101738	20 37 15.51	−28 42 47.3	7.95	H	309.314 615 18	−28.713 131 20		3.17	1.89	−26.34	0.87	0.54	1.00	1.04	0.79	+17	−27	−14	− 3	− 2	+14	+ 1	+15	−12	+28	0	−1.10
101739	20 37 15.92	−34 09 29.3	8.04	H	309.316 331 12	−34.158 149 52		20.67	−110.58	−12.63	0.87	0.56	1.13	1.00	0.75	+48	−32	−17	+11	+36	+15	+30	+24	+16	+78	0	−0.13
101740	20 37 15.95	−16 33 57.7	10.52	G	309.316 461 16	−16.566 030 03		1.65	−28.90	−40.87	2.12	1.40	2.68	2.51	2.43	+26	− 3	−28	−21	+16	+10	+12	+50	−44	+33	0	0.27
101741	20 37 16.24	+21 48 13.9	8.43	H	309.317 663 66	+21.803 856 93		4.73	−6.92	−13.57	0.82	0.66	1.09	0.93	0.67	+18	− 3	+ 6	+39	+18	+ 6	+18	+24	+13	+28	0	−0.20
*101742	20 37 17.01	−59 50 22.0	8.15	H	309.320 883 14	−59.839 439 57		2.67	18.53	−8.83	0.74	0.75	1.07	0.98	0.90	+38	− 8	−13	−41	−10	−11	−11	−40	+15	−10	0	1.86
*101743	20 37 16.98	+23 53 43.2	11.79	H	309.320 747 97	+23.895 329 50		1.04	−3.26	−12.72	2.98	2.44	3.93	3.62	2.62	+19	−18	− 9	+ 6	+11	−22	+ 6	+11	+ 4	+33	6	−1.31
*101744	20 37 16.97	+08 56 29.0	9.47	G	309.320 703 54	+08.941 388 65		7.06	10.89	−17.58	1.16	0.91	1.56	1.40	1.11	+25	+ 1	+11	− 2	+29	+15	+20	+30	− 4	+47	3	0.69
101745	20 37 17.85	−34 30 37.7	8.78	H	309.324 382 81	−34.510 466 32		2.12	−2.44	23.46	1.00	0.71	1.32	1.20	0.92	+58	−25	−20	+13	+30	+15	+27	+19	+19	+81	0	−1.32
101746	20 37 18.38	+00 05 49.2	6.21	H	309.326 577 23	+00.097 002 61		5.07	5.25	−10.11	0.70	0.51	0.86	0.96	0.66	+ 5	−12	−31	+36	−19	+25	− 9	+52	−22	− 7	0	1.54
101747	20 37 18.63	−62 10 04.3	7.85	G	309.327 625 20	−62.167 849 25		5.50	7.61	−53.18	0.60	0.56	0.91	0.62	0.67	+ 5	−21	− 4	+42	+10	−11	+ 6	+20	+ 3	−16	1	−0.73
101748	20 37 20.13	+35 26 10.4	8.66	2 T	309.333 879 71	+35.436 234 81		4.03	−2.27	−16.75	0.58	0.66	0.91	0.71	0.75	−13	+ 7	+ 7	+12	+ 1	−19	+ 4	−11	+10	−11	0	0.25
101749	20 37 20.56	−53 03 45.9	9.18	H	309.335 649 51	−53.062 755 53		2.60	−7.70	−2.72	1.20	0.93	1.41	1.32	0.85	+15	−30	−18	− 4	−18	+11	−31	−45	+10	−36	0	0.63
101750 H	20 37 20.82	+75 35 56.7	7.46	2 H	309.336 748 46	+75.599 093 15	A	36.16	309.20	539.49	1.35	1.20	0.97	1.12	0.97	+ 0	−17	+ 6	− 1	− 2	+ 3	− 5	−11	+18	+ 1	0	1.23
101751	20 37 21.16	−15 08 50.0	6.76	H	309.338 168 76	−15.147 224 43		3.69	61.24	−46.06	0.91	0.57	1.04	1.14	0.78	+10	− 4	−21	−20	+ 0	+39	+10	+40	−14	+ 4	2	0.03
101752	20 37 21.58	−34 44 08.2	8.78	H	309.339 906 89	−34.735 602 03		14.53	12.06	−19.84	0.91	0.64	1.20	1.15	0.87	+41	+ 1	− 6	− 6	+17	+26	+15	+ 4	+32	+75	1	−0.32
101753	20 37 22.34	+39 29 38.9	8.89	H	309.343 077 04	+39.494 147 33		3.45	−2.89	−7.80	0.66	0.67	0.91	0.65	0.70	− 5	−14	+20	− 7	+ 9	+ 3	+ 8	− 8	+ 8	+ 8	0	−1.00
101754	20 37 22.67	+38 05 54.4	7.09	G	309.344 456 20	+38.098 434 26		2.58	−1.80	9.13	0.46	0.48	0.64	0.52	0.50	−10	+10	+ 6	+ 4	+ 3	+ 3	+ 4	−10	+ 9	−11	1	−1.36
101755	20 37 22.99	+42 59 28.2	7.28	H	309.345 806 35	+42.991 178 13		2.46	5.99	1.76	0.47	0.50	0.61	0.54	0.52	−13	+ 2	+14	+26	− 2	−17	+ 2	−18	+11	−12	0	−0.97
101756	20 37 23.57	+38 19 43.6	6.21	H	309.348 225 12	+38.328 772 08		9.93	13.77	−43.95	0.42	0.44	0.57	0.51	0.48	−12	+ 6	− 1	+ 3	− 1	− 1	+ 0	−15	+12	−15	0	−1.24
101757	20 37 25.29	+41 23 35.0	7.79	G	309.355 389 36	+41.393 045 57		13.07	17.34	26.56	0.57	0.58	0.76	0.68	0.64	+ 2	+ 5	+20	+ 5	− 5	−19	− 1	+ 4	− 4	+17	0	−0.09
101758	20 37 25.43	−43 02 35.3	7.88	H	309.355 977 07	−43.043 148 86		7.05	31.20	−33.38	0.79	0.61	0.98	1.09	0.91	+13	− 7	−26	+10	+ 0	+14	+ 4	+18	− 9	+14	0	−0.05
101759	20 37 25.59	+39 48 22.0	8.31	H	309.356 626 95	+39.806 119 79		2.48	−2.70	−12.52	0.59	0.64	0.83	0.61	0.67	− 6	− 4	+25	− 7	+ 7	+ 4	+ 6	− 4	+ 2	+ 8	2	−0.07
101760	20 37 25.60	−11 52 13.9	8.95	G	309.356 681 78	−11.870 524 27		19.01	−79.29	−217.25	1.16	0.83	1.65	1.55	1.14	+30	−17	−39	−12	−16	+45	+10	+49	−37	+ 1	0	1.04
101761	20 37 26.83	+29 57 34.8	8.93	1 H	309.361 789 91	+29.959 673 92		2.84	2.43	−6.86	0.53	0.73	1.13	0.60	0.75	−44	− 3	+ 7	+11	− 6	+12	− 6	− 6	−10	−43	1	1.84
101762	20 37 28.33	+32 03 18.2	7.89	H	309.368 059 13	+32.055 051 51		1.88	9.71	7.75	0.44	0.50	0.75	0.56	0.52	−19	− 6	+ 0	+16	+ 0	− 5	− 4	−18	+14	−30	0	−1.27
101763 H	20 37 29.76	+42 33 15.6	9.11	H	309.374 011 86	+42.554 328 07	A	10.98	−108.03	−154.59	1.47	1.57	1.69	1.40	1.39	− 7	− 8	+14	+13	+ 0	−17	+ 2	−17	+10	+ 7	0	1.54
101764	20 37 31.15	+31 00 09.3	7.89	2 H	309.379 783 00	+31.002 576 19		2.87	2.40	−16.27	0.45	0.56	0.84	0.50	0.56	−32	+ 2	− 2	+ 9	− 3	−11	− 4	−21	+12	−37	2	0.48
101765	20 37 31.77	+31 34 21.1	6.32	G	309.382 383 46	+31.572 541 34		4.16	8.98	−0.63	0.34	0.39	0.58	0.39	0.40	−35	− 5	+ 0	+ 7	− 4	− 5	− 6	−17	+14	−46	0	−0.31
101766	20 37 31.89	+20 20 15.7	9.22	H	309.382 873 19	+20.337 703 13		3.49	−1.10	−8.28	0.95	0.70	1.21	0.95	0.75	+12	−23	+ 5	+50	+ 8	+ 4	+10	+29	+10	+35	0	0.31
101767	20 37 31.91	+20 14 50.5	9.24	H	309.382 970 46	+20.247 348 67		1.75	−1.41	−17.05	1.01	0.80	1.37	1.03	0.86	+14	−11	+ 0	+35	+10	+ 5	+11	+25	+ 2	+32	4	1.09
101768	20 37 32.73	+31 31 19.2	6.51	H	309.386 388 77	+31.521 987 19		20.30	−34.30	−31.67	0.36	0.41	0.62	0.42	0.42	−33	− 1	− 3	+ 3	− 3	− 7	− 5	−20	+15	−46	0	−0.48
101769 H	20 37 32.87	+14 35 42.7	3.64	G	309.386 957 34	+14.595 202 89	*	33.49	118.28	−47.65	2.16	1.38	0.88	1.33	1.09	+18	−13	−12	− 1	+21	+ 5	− 2	−20	+12	+47	14	0.86
101770	20 37 32.91	+59 00 10.4	7.95	H	309.387 119 66	+59.002 889 79		2.08	4.11	14.86	0.59	0.54	0.63	0.66	0.62	− 4	− 8	+ 3	+13	+ 4	−14	+ 4	− 4	+13	− 4	0	0.03
101771	20 37 33.79	+06 30 03.4	7.14	H	309.390 803 30	+06.500 949 61		8.02	4.31	−6.76	0.78	0.62	1.00	1.00	0.87	+16	− 4	−11	+ 6	+12	+14	+ 8	+53	−16	+25	2	0.49
101772	20 37 33.99	−47 17 30.0	3.11	1 G	309.391 623 65	−47.291 662 39		32.21	49.20	66.07	0.65	0.49	0.75	0.90	0.56	+ 2	−19	−20	+ 5	− 9	− 4	− 8	−12	− 8	−12	2	−0.68
101773	20 37 35.24	−61 31 47.1	4.86	1 H	309.396 832 25	−61.529 744 15		16.73	59.15	−71.70	0.38	0.42	0.64	0.37	0.47	+ 9	−10	− 6	+47	− 5	+ 3	−15	+ 0	+ 1	−10	0	0.52
101774	20 37 35.87	−21 20 07.2	8.27	H	309.399 454 83	−21.335 338 93		13.45	−19.84	−9.60	1.04	0.65	1.17	1.19	0.88	+24	−20	−22	−24	− 2	+31	+ 6	+36	−12	+19	0	−0.57
101776	20 37 37.53	+09 17 52.5	8.09	H	309.406 395 57	+09.297 909 75		3.44	8.00	−3.15	0.82	0.61	1.02	0.99	0.70	+25	−15	+ 7	+ 6	+26	+11	+20	+25	+ 1	+52	4	−0.45
101777	20 37 37.63	+35 58 31.1	10.62	H	309.406 790 67	+35.975 312 00		4.37	−4.77	−10.44	1.02	1.19	1.58	1.18	1.49	− 7	− 2	+ 2	+ 1	+10	−12	+11	− 4	− 6	− 1	0	0.90
101778	20 37 38.40	−36 32 20.4	9.66	H	309.409 980 67	−36.538 989 99		13.29	146.51	15.32	5.62	3.60	6.44	6.58	4.46	+28	−29	−18	−33	− 5	+ 6	− 5	−23	− 1	+44	0	
101779 H	20 37 39.96	+53 50 37.1	8.71	G	309.416 490 60	+53.843 639 52	A	14.56	10.73	−217.26	1.05	1.00	1.05	1.20	0.98	−10	−28	+ 6	+33	− 2	− 2	− 5	+ 4	+ 7	− 8	1	0.23
101780	20 37 40.09	+18 17 03.8	9.76	3 H	309.417 032 82	+18.284 375 39		0.43	−3.46	3.29	1.22	0.88	1.51	1.61	0.89	− 6	− 9	+10	− 2	+25	− 1	+18	+ 7	+ 8	+10	0	1.97
101781	20 37 40.45	−24 22 22.1	8.33	H	309.418 543 36	−24.372 798 55		2.08	−0.63	−6.99	0.87	0.53	1.02	1.11	0.68	+19	− 9	−10	− 5	+ 9	+38	+12	+12	+ 1	+37	2	−0.31
101782	20 37 41.56	+19 04 13.1	7.80	H	309.423 173 76	+19.070 293 95		1.30	11.82	1.13	0.72	0.58	0.92	0.92	0.58	+11	−21	− 3	+22	+27	− 2	+20	+19	+ 6	+13	0	−0.22
101783	20 37 42.51	+12 26 19.3	9.45	H	309.427 140 67	+12.438 704 75		3.64	3.91	0.29	1.16	1.00	1.51	1.52	1.08	+30	−16	−13	+17	+45	+ 6	+36	+30	+16	+44	0	0.51
101784	20 37 42.83	+35 11 59.3	7.85	H	309.428 470 20	+35.199 807 90		9.52	−1.52	17.91	0.53	0.60	0.82	0.59	0.67	−21	− 8	+ 7	+16	−12	−25	− 8	−12	+12	− 9	2	−0.90
101785	20 37 43.45	−22 26 34.4	7.42	H	309.431 053 35	−22.442 888 03		19.82	−14.79	10.82	0.86	0.54	0.97	1.09	0.75	+19	−12	−16	−19	− 2	+33	+ 5	+33	− 5	+13	2	1.43
101786	20 37 43.55	+53 43 23.9	8.60	H	309.431 438 53	+53.723 315 73		1.87	−3.09	−19.86	0.69	0.64	0.78	0.88	0.68	−12	−26	+ 8	+22	+ 9	−10	+ 0	− 8	+20	−19	0	−1.66
101787	20 37 43.87	−41 13 39.0	6.62	H	309.432 771 49	−41.227 509 52		11.18	38.41	−51.07	0.77	0.48	0.82	1.12	0.65	+ 7	− 9	− 9	−15	+20	−17	+15	+10	− 1	+19	4	−1.63
101788 H	20 37 44.32	+33 21 59.4	6.97	G	309.434 674 76	+33.366 505 01	A	2.76	3.51	−5.34	0.69	0.77	0.95	0.77	0.72	− 4	+11	+ 5	− 6	+ 0	−19	+ 4	−22	+15	+10	1	−0.02
101789	20 37 44.46	−65 57 20.2	9.73	H	309.435 254 28	−65.955 600 62		6.77	−6.14	−38.44	1.00	0.88	1.40	1.16	1.03	−18	−14	− 1	+10	+ 0	+10	+ 0	+ 4	+ 2	−20	0	0.62
101790	20 37 45.12	+46 39 53.9	9.65	H	309.437 997 84	+46.664 959 04		0.52	−3.13	−7.12	0.82	0.73	0.94	1.00	0.82	− 7	+15	+ 9	+11	+ 6	− 3	+ 7	− 3	+ 7	−11	0	−1.20
101791	20 37 45.95	−37 36 18.2	9.78	H	309.441 476 66	−37.605 058 81		9.17	88.03	−86.01	1.43	0.86	1.54	1.65	1.17	+17	+12	− 6	−30	+22	− 8	+ 9	+ 8	− 2	+59	2	2.30
101792	20 37 46.50	+51 27 55.7	8.43	H	309.443 740 03	+51.465 465 07		0.76	−3.63	−5.63	0.63	0.59	0.73	0.75	0.65	+ 5	−30	+ 2	+18	+ 4	−19	+ 1	− 7	+10	+ 1	0	−0.05
101793	20 37 47.34	−28 49 32.6	9.34	H	309.447 229 58	−28.825 715 59		3.71	15.86	9.85	1.23	0.87	1.47	1.47	1.13	+31	−17	−23	−14	−10	+27	− 4	+ 6	−12	+33	0	−0.87
101794 H	20 37 48.12	+60 45 21.5	7.08	G	309.450 496 80	+60.755 963 93	A	3.55	16.87	11.66	0.79	0.68	0.72	0.82	0.64	+ 4	+30	+14	+17	+ 6	− 5	+ 6	+ 3	− 3	+ 3	1	−0.35
101795	20 37 48.19	+19 06 44.6	8.57	H	309.450 784 31	+19.112 391 76		−0.01	−7.78	−5.13	0.88	0.65	1.06	1.06	0.68	+13	−28	− 1	+16	+25	+ 8	+24	+19	− 9	+20	0	−0.09
101796	20 37 48.45	+05 18 03.4	8.54	H	309.451 863 39	+05.300 951 33		4.83	22.54	6.39	0.84	0.84	1.15	1.07	1.13	+35	+ 3	−16	+20	+28	+27	+28	+69	−12	+40	0	−2.15
101797	20 37 48.56	−18 46 33.8	9.28	H	309.452 320 22	−18.776 064 13		5.34	9.27	6.61	1.29	0.85	1.50	1.55	1.23	+14	+ 7	−17	−10	+ 8	+30	+ 4	+45	−19	+24	0	2.77
101798 H	20 37 48.90	+29 44 12.8	9.94	H	309.453 731 03	+29.736 902 12	B	7.04	5.90	−19.45	1.68	2.30	3.02	1.78	2.04	−14	− 3	+ 4	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
101701	11.040	0.050	8.672	0.013		1.997	0.043	T	3.02	0.06	O	8.3672	0.0024	0.022	128		8.32	8.39				1							
101702	8.421	0.010	7.220	0.006		1.028	0.009	T	1.00	0.01	L	7.2591	0.0009	0.008	106		7.25	7.27		C		1							S
101703	8.565	0.010	8.158	0.010		0.375	0.015	G	0.44	0.02	H	8.2252	0.0013	0.012	119		8.20	8.25				1							
101704	11.772	0.152	10.369	0.066		1.186	0.130	T	1.15	0.12	L	10.4698	0.0025	0.022	60		10.42	10.51		D		1							G
101705	10.139	0.013	8.256	0.006		1.598	0.012	T	2.46	0.03	O	8.0483	0.0025	0.040	350		7.99	8.12		U 2		1	S						
101706	8.070	0.012	7.641	0.011	*	0.405	0.015	T	0.47	0.02	L *	7.7393	0.0016	0.013	74	*	7.72	7.83		D	20369−1245	I 1	2 C	A	AB	196	9.279	0.004	1.15	0.02	S
101707	9.028	0.012	7.561	0.007		1.236	0.011	T	1.19	0.01	L	7.6029	0.0013	0.010	121		7.59	7.62		C		1							S
101708	9.438	0.018	8.298	0.012		0.980	0.017	T	0.96	0.01	L	8.3687	0.0012	0.010	92		8.35	8.39		D		1							
101709	7.352	0.004	7.169	0.004		0.175	0.005	T	0.19	0.01	L	7.2089	0.0006	0.009	193		7.19	7.23				1							S
101710	8.399	0.016	7.663	0.015	*	0.674	0.018	T	0.73	0.01	L *	7.7572	0.0014	0.013	89	*	7.74	7.78		D	20370+1203	I 1	2 C	A	AB	221	2.088	0.003	0.30	0.01	S
101711	9.797	0.023	8.472	0.014		1.125	0.021	T	1.09	0.02	L	8.5094	0.0020	0.015	104		8.49	8.54				1							
101712	11.043	0.071	10.390	0.058		0.520	0.020	G	0.59	0.02	H	10.4223	0.0044	0.031	70		10.35	10.47				1							G
101713	9.977	0.024	9.801	0.030		0.169	0.036	T	0.18	0.04	L	9.8134	0.0023	0.021	119		9.78	9.85		C		1							
101714	7.760	0.009	7.490	0.008		0.257	0.011	T	0.29	0.01	L	7.5452	0.0010	0.009	92		7.53	7.57				1							S
101715	7.640	0.008	7.693	0.010		−0.044	0.012	T	−0.02	0.01	L	7.6944	0.0018	0.014	107		7.67	7.72				1							S
101716	5.525	0.003	5.584	0.003		−0.050	0.004	T	−0.03	0.00	L	5.5851	0.0005	0.006	157		5.58	5.59		C		1							S
101717	10.074	0.027	9.569	0.027		0.485	0.029	T	0.56	0.03	L	9.6884	0.0028	0.024	93		9.64	9.74		C		1							
101718	10.981	0.056	8.910	0.018		1.660	0.001	G	1.86	0.02	A	8.8005	0.0025	0.020	86		8.77	8.84		C		1							
101719	7.490	0.005	7.066	0.006		0.401	0.007	T	0.47	0.01	L	7.1168	0.0010	0.008	98		7.10	7.13		C		1							S
101720	7.581	0.006	7.511	0.008		0.069	0.009	T	0.08	0.01	L	7.5314	0.0012	0.013	156		7.51	7.55				1							S
101721	9.772	0.021	7.855	0.009		1.640	0.015	G	1.65	0.09	H	7.7852	0.0018	0.013	104		7.76	7.80				1							
101722	11.069	0.074	9.245	0.026	A	1.077	0.218	G	1.04	0.18	R *	9.2311	0.0029	0.018	65	*	9.19	9.27		C	20372−3114	H 1	2 C	D	AB	76	2.151	0.164	4.15	0.62	D
101723	8.915	0.011	8.950	0.014		−0.040	0.015	G	−0.02	0.01	H	8.9829	0.0022	0.022	140		8.95	9.02				1							
101724	8.316	0.012	7.195	0.006		0.965	0.010	T	0.95	0.01	L	7.2550	0.0008	0.012	87		7.24	7.28		D		1							S
101725	6.601	0.004	6.687	0.004		−0.068	0.002	G	−0.05	0.00	H	6.6773	0.0007	0.008	124		6.66	6.69				1							S
101726	8.883	0.014	8.163	0.012		0.648	0.014	T	0.71	0.01	L	8.2374	0.0018	0.017	85		8.21	8.26				1							S
101727	8.309	0.008	8.244	0.010		0.065	0.012	T	0.07	0.01	L	8.2986	0.0011	0.011	112		8.28	8.32				1							
101728	8.050	0.009	6.759	0.005		1.098	0.008	T	1.06	0.01	L	6.8126	0.0010	0.008	120		6.80	6.83				1							S
101729	10.246	0.030	9.468	0.025		0.750	0.015	G	0.79	0.01	H	9.5359	0.0024	0.024	118		9.50	9.59		C		1							G
101730	8.972	0.016	8.772	0.019		0.191	0.023	T	0.21	0.03	L	8.8151	0.0017	0.017	90		8.78	8.85		C		1							
101731	10.954	0.047	10.158	0.037		0.705	0.046	T	0.76	0.04	L	10.2301	0.0032	0.033	141		10.17	10.28				1	S						
101732	8.858	0.011	8.777	0.013		0.080	0.016	T	0.09	0.02	L	8.8125	0.0017	0.016	113		8.78	8.84		C		1							
101733	9.627	0.024	8.978	0.021		0.549	0.015	G	0.62	0.01	H	9.0381	0.0020	0.019	91		9.00	9.07				1							
101734	8.405	0.012	7.870	0.011		0.509	0.012	T	0.58	0.01	L	7.9352	0.0009	0.007	81		7.92	7.95				1							S
101735	10.159	0.035	9.475	0.031		0.632	0.039	T	0.70	0.04	L	9.5704	0.0029	0.015	56		9.54	9.60		C		1							
101736	9.873	0.025	9.858	0.036		0.019	0.040	T	0.04	0.04	L	9.8672	0.0028	0.023	99		9.83	9.91		C		1							G
101737	10.674	0.044	10.412	0.056		0.309	0.020	G	0.35	0.03	H	10.4609	0.0040	0.029	86		10.41	10.50		C		1							G
101738	9.849	0.025	8.124	0.012		1.439	0.022	T	1.43	0.04	L	8.0896	0.0017	0.011	85		8.07	8.11				1							S
101739	8.719	0.008	8.111	0.007		0.565	0.008	T	0.64	0.01	L	8.1595	0.0014	0.015	179		8.14	8.19				1							S
101740	11.328	0.104	10.674	0.101		0.840	0.073	G	0.86	0.05	H	10.6558	0.0048	0.028	60		10.60	10.71		C		1							G
101741	8.534	0.010	8.408	0.012		0.122	0.015	T	0.14	0.01	L	8.4774	0.0014	0.015	100		8.44	8.51				1							
101742	9.605	0.017	8.282	0.010		1.123	0.015	T	1.09	0.02	L	8.3178	0.0012	0.013	141		8.29	8.35				1							
101743						0.187	0.140	G	0.21	0.16	R	11.8469	0.0084	0.078	103		11.69	11.98				1	S						D
101744	9.957	0.026	9.437	0.026		0.463	0.015	G	0.53	0.02	H	9.5568	0.0028	0.020	82		9.52	9.59		C		1							
101745	9.944	0.017	8.857	0.011		0.940	0.015	T	0.93	0.01	L	8.9462	0.0017	0.020	180		8.92	8.98				1							
101746	6.095	0.003	6.197	0.004		−0.076	0.005	G	−0.06	0.01	H	6.1904	0.0012	0.008	91		6.18	6.20				1							S
101747	8.428	0.008	7.894	0.008		0.513	0.015	G	0.59	0.02	H	7.9561	0.0013	0.013	162		7.93	7.98				1							S
101748	8.677	0.011	8.663	0.014		0.013	0.016	T	0.03	0.01	L	8.5873	0.0159	0.157	145		8.47	8.99	0.72	P 1 A		1							
101749	10.448	0.039	9.282	0.023		1.000	0.035	T	0.98	0.03	L	9.3504	0.0020	0.017	85		9.33	9.39		C		1							
101750	8.563	0.009	7.568	0.007	*	0.859	0.009	T	0.87	0.01	L *	7.5982	0.0185	0.129	108	*	7.46	7.80	0.28	P 1 A	20374+7536	I 1	2 C	C	AB	291	0.501	0.011	2.80	0.05	S P
101751	8.410	0.010	6.900	0.007		1.260	0.007	G	1.28	0.06	F	6.9163	0.0011	0.008	70		6.91	6.93		C		1							S
101752	9.566	0.014	8.857	0.012		0.639	0.014	T	0.70	0.01	L	8.9147	0.0013	0.016	160		8.89	8.95		C		1	S						
101753	8.962	0.010	8.901	0.013		0.061	0.015	T	0.07	0.01	L	8.9157	0.0022	0.019	149		8.88	8.95				1							
101754	9.208	0.012	7.270	0.005		1.590	0.015	G	1.60	0.09	H	7.2179	0.0011	0.012	141		7.20	7.24				1							S
101755	7.151	0.004	7.267	0.006		−0.101	0.006	T	−0.08	0.01	L	7.2508	0.0007	0.009	139		7.23	7.27		C		1							S
101756	7.497	0.005	6.317	0.004		1.011	0.005	T	0.99	0.00	L	6.3789	0.0006	0.007	144		6.37	6.39		C		1							S
101757	8.310	0.010	7.843	0.009		0.440	0.012	T	0.51	0.01	L	7.9005	0.0013	0.013	120		7.88	7.92				1							S
101758	7.971	0.009	7.896	0.009		0.068	0.011	T	0.08	0.01	L	7.9125	0.0014	0.013	96		7.89	7.94				1							S
101759	10.099	0.020	8.446	0.010		1.382	0.018	T	1.35	0.02	L	8.4522	0.0014	0.014	147		8.42	8.48				1							
101760	10.028	0.034	9.048	0.024		0.832	0.003	G	0.87	0.00	H	9.1087	0.0014	0.014	68		9.08	9.13				1							
101761	8.959	0.008	8.939	0.010		0.023	0.012	T	0.04	0.01	L	8.9409	0.0017	0.022	257		8.91	8.98		U	20374+2958	I 1	1	S						
101762	7.833	0.006	7.864	0.008		−0.039	0.002	G	−0.02	0.00	H	7.8836	0.0010	0.011	194		7.86	7.90		C			1							S
101763	9.534	0.038	8.730	0.023	*	0.727	0.034	T	0.78	0.02	L *	9.2557	0.0026	0.026	132	*	9.22	9.29		R	20375+4233	I 1	2 C	A	AB	19	1.615	0.006	0.93	0.03	
101764	9.927	0.014	8.110	0.006		1.543	0.013	T	2.37	0.03	O	7.9261	0.0020	0.029	241		7.88	7.97		U 2			1							
101765	6.199	0.003	6.299	0.003		−0.089	0.003	G	−0.07	0.00	H	6.3002	0.0006	0.008	220		6.29	6.31		C	20375+3133	I 2	1							S
101766	9.393	0.018	9.243	0.022		0.144	0.027	T	0.16	0.03	L	9.2726	0.0019	0.019	115		9.25	9.31		C			1							
101767	10.534	0.039	9.388	0.025		0.985	0.036	T	0.97	0.03	L	9.4022	0.0023	0.024	111		9.37	9.44		C			1							
101768	6.923	0.003	6.543	0.004		0.371	0.004	T	0.43	0.00	L	6.5964	0.0005	0.008	224		6.58	6.61		C	20375+3133	I 2	1							S
101769	4.160	0.002	3.676	0.002	*	0.425	0.015	G	0.50	0.03	C *	3.7230	0.0006	0.004	100	*	3.72	3.73		D	20375+1436	I 1	2 C	A	AB	205	0.240	0.006	0.91	0.05	S
101770	9.904	0.022	8.143	0.010		1.468	0.019	T	1.48	0.03	L	8.0867	0.0018	0.015	125		8.07	8.11					1							S
101771	7.301	0.006	7.169	0.008		0.127	0.009	T	0.14	0.01	L	7.1881	0.0014	0.009	78		7.17	7.21		C			1							S
101772	4.390	0.002	3.221	0.002		0.998	0.004	G	0.98	0.02	A	3.2707	0.0006	0.005	74		3.26	3.29		M	20376−4717	I 1	1							S
101773	5.381	0.002	4.906	0.002		0.447	0.003	T	0.52	0.00	L	4.9562	0.0011	0.011	167		4.94	4.97		U 2			1							S P
101774	8.799	0.014	8.330	0.013		0.470	0.015	G	0.54	0.02	H	8.3752	0.0022	0.013	71		8.35	8.39					1							S
101776	9.391	0.016	8.184	0.011		1.032	0.015	T	1.00	0.01	L	8.2536	0.0010	0.012	99		8.23	8.27		D			1							
101777	11.209	0.057	10.733	0.062		0.448	0.077	T	0.52	0.08	L	10.7230	0.0028	0.037	155		10.66	10.81					1	S						G
101778	10.464	0.036	9.748	0.031		0.645	0.036	T	0.71	0.03	L	9.7915	0.0022	0.021	112		9.75	9.82		C			1	X	S					G
101779	9.518	0.018	8.867	0.016	A	0.610	0.015	G	0.68	0.01	H *	8.8193	0.0023	0.019	113	*	8.78	8.86		D	20377+5351	I 1	2 C	A	AB	210	4.225	0.011	2.70	0.07	
101780	9.877	0.027	9.840	0.039		0.039	0.044	T	0.05	0.03	L	9.7585	0.0079	0.045	75		9.67	10.79		P 1 A			1							G
101781	8.328	0.013	8.299	0.017		0.027	0.019	T	0.04	0.01	L	8.3457	0.0018	0.012	79		8.33	8.36		C			1							S
101782	7.847	0.009	7.809	0.012		0.040	0.014	T	0.06	0.01	L	7.8223	0.0016	0.011	91		7.81	7.84		C			1							S
101783	9.685	0.021	9.521	0.026		0.157	0.031	T	0.17	0.03	L	9.5019	0.0028	0.026	96		9.45	9.54		C			1							
101784	9.215	0.014	7.976	0.009		1.057	0.013	T	1.02	0.01	L	8.0190	0.0011	0.014	142		7.99	8.04		C			1							
101785	7.942	0.008	7.469	0.008		0.465	0.015	G	0.54	0.02	H	7.5267	0.0009	0.007	85		7.51	7.55					1							S
101786	10.022	0.025	8.711	0.015		1.114	0.023	T	1.08	0.02	L	8.7627	0.0018	0.014	112		8.73	8.79					1							
101787	7.130	0.007	6.664	0.005		0.434	0.008	G	0.50	0.01	H	6.7175	0.0008	0.007	91		6.71	6.74		C			1							S
101788	8.761	0.017	7.408	0.010	A	1.112	0.010	G	1.07	0.01	H *	7.1193	0.0012	0.011	162	*	7.10	7.14		D	20377+3322	I 1	2 C	A	AB	262	3.127	0.002	1.06	0.01	S
101789	10.404	0.026	9.764	0.023		0.588	0.026	T	0.66	0.02	L	9.8540	0.0028	0.034	150		9.79	9.93					1							
101790	9.805	0.022	9.667	0.027		0.133	0.033	T	0.15	0.03	L	9.6967	0.0021	0.021	116		9.67	9.73		C			1							G
101791	10.604	0.039	9.858	0.032		0.667	0.038	T	0.73	0.03	L	9.9103	0.0024	0.030	109		9.87	9.96					1							
101792	8.437	0.009	8.425	0.011		0.016	0.013	T	0.04	0.01	L	8.4481	0.0016	0.017	127		8.43	8.48		C			1							
101793	10.718	0.051	9.449	0.029		1.081	0.046	T	1.04	0.04	L	9.5105	0.0022	0.016	76		9.48	9.54		C			1							
101794	8.062	0.017	7.136	0.011	*	0.838	0.017	G	0.86	0.01	H *	7.2599	0.0012	0.010	103	*	7.24	7.28		D	20378+6045	I 1	2 C	A	AB	259	2.032	0.006	2.13	0.02	S
101795	8.628	0.013	8.559	0.016		0.069	0.019	T	0.08	0.02	L	8.6019	0.0024	0.012	86		8.58	8.62		C			1							
101796	8.509	0.012	8.538	0.015		−0.022	0.018	T	0.00	0.02	L	8.5437	0.0016	0.014	93		8.52	8.57		C			1							
101797	9.723	0.029	9.342	0.030		0.361	0.039	T	0.42	0.04	L	9.3607	0.0028	0.017	66		9.32	9.40					1							
101798	10.662	0.034	10.096	0.033	B						T *	10.0729	0.0032	0.036	205	*	10.01	10.15		D	20378+2944	I 2	2 C	A	BC	130	1.190	0.010	0.97	0.03	G
101799	7.036	0.007	7.082	0.007		−0.041	0.003	G	−0.02	0.00	H	7.0847	0.0010	0.008	66		7.07	7.11					1							S
101800	5.494	0.003	5.433	0.003		0.050	0.005	G	0.09	0.03	C	5.4521	0.0006	0.006	92		5.44	5.46		C			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)											Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5 6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
101801 H	20 37 49.73	+47 55 48.4	8.67	H	309.457 211 19	+47.930 098 06	C	2.41	3.27	0.77	1.62	2.38	1.34	1.49	1.32	+13	−30	+	2	−	3	+	0	+	9	−	4	−	3	+	6	+17	0	0.06
101802	20 37 49.96	+02 01 03.2	10.44	2 H	309.458 150 04	+02.017 551 93		−1.49	1.57	−4.16	4.48	3.47	5.51	5.67	4.58	+39	−39	−31	+	8	+	9	−	4	+13	+39	−14	+32	0					
101803	20 37 50.18	+29 43 18.0	8.25	H	309.459 090 00	+29.721 654 34		4.01	3.49	−8.69	0.47	0.62	0.93	0.53	0.66	−27	+	3	−	2	+21	+	0	+	1	+	1	−	3	−	6	−20	0	−1.56
101804	20 37 51.14	+47 56 41.9	7.93	G	309.463 065 69	+47.944 963 38	A	5.09	4.49	0.89	1.52	1.42	1.38	1.82	1.53	−	8	−24	+	4	+	5	−	1	+14	−	5	+	7	+19	+13	3	1.33
101805	20 37 51.59	+31 37 13.2	9.70	H	309.464 973 06	+31.620 339 07		3.88	−20.40	−29.64	0.77	0.89	1.39	0.98	0.90	−24	−	9	+11	+12	+	3	+	0	+	0	−17	+12	−31			2	2.06
101806	20 37 51.94	−60 38 03.6	7.50	H	309.466 405 63	−60.634 325 69		21.31	−190.97	−64.27	0.53	0.63	0.91	0.57	0.71	+31	−13	−12	+12	−	3	+	8	−16	−32	+	6	+	1			0	−0.05
*101807	20 37 52.22	+47 57 01.0	9.64	H	309.467 576 11	+47.950 268 79	B	1.83	4.18	−9.32	18.20	15.70	6.94	8.69	7.48	−	7	−21	+	8	+	1	+	2	+12	−	2	+	1	+20	+18	3	1.33
*101808	20 37 52.18	−25 06 33.1	6.38	H	309.467 420 44	−25.109 183 09		19.86	72.85	−15.41	0.75	0.43	0.85	1.11	0.55	+	8	+	7	−	4	+25	+11	+48	+15	+25	+17	+28			0	0.95
101809	20 37 52.24	−12 00 58.6	8.01	H	309.467 673 71	−12.016 280 75		1.88	−21.59	−10.16	1.03	0.70	1.36	1.38	0.95	+26	−31	−40	−	9	−15	+42	+15	+56	−33	−	6					0	1.20
101810	20 37 54.71	+18 16 06.4	6.22	2 H	309.477 943 30	+18.268 431 17		9.16	36.23	61.18	0.81	0.52	0.99	1.00	0.52	−	9	−	9	−	2	+	6	+16	+	6	+10	+	6			0	1.54
101811	20 37 55.86	−11 01 58.9	7.19	H	309.482 736 98	−11.033 037 09		3.01	2.78	−30.05	0.95	0.62	1.13	1.09	0.87	+27	−32	−18	−10	+	7	+22	+12	+49	−19	+25					0	1.25
101812	20 37 56.00	−57 52 26.7	7.82	G	309.483 335 17	−57.874 071 74		13.22	80.80	28.03	0.68	0.69	1.00	0.88	0.81	−	7	−	9	−29	−	2	+	0	−	2	−	6	−28	+28	−32	0	0.17
101813	20 37 57.09	−08 32 00.8	8.44	H	309.487 863 89	−08.533 563 12		3.88	4.26	−29.24	1.10	0.75	1.22	1.55	1.15	+14	−13	−16	+18	+11	+	9	+12	+54	−14	+18					0	−1.72
*101814	20 37 58.56	+77 14 03.9	10.25	2 H	309.493 992 48	+77.234 417 99		16.22	−28.85	−178.05	0.88	0.97	1.00	0.96	1.02	−12	−18	+13	+	3	+12	−	5	+13	−	3	+	2	+	5		4	−0.14
*101815	20 37 58.43	−48 32 44.4	8.19	H	309.493 457 58	−48.545 678 38		4.86	6.54	−23.42	1.09	0.78	1.09	1.31	0.95	+37	−35	−14	+33	+22	+	1	+24	+26	−	6	+37					0	0.45
101816	20 37 58.63	+13 05 32.7	7.75	H	309.494 272 82	+13.092 419 87		4.87	20.39	5.21	0.75	0.60	1.01	0.94	0.65	+19	−17	+	3	+16	+35	+10	+28	+23	+12	+34					0	1.73
101817	20 37 58.68	+41 09 19.9	8.99	H	309.494 514 68	+41.155 530 49		2.67	−3.70	−19.84	0.75	0.81	1.05	0.84	0.94	−10	−14	+28	+21	−	6	−25	+	4	+	8	−13	+15			0	−0.17
101818	20 37 58.83	+42 50 42.8	7.03	H	309.495 133 77	+42.845 220 12		15.76	90.50	171.88	0.46	0.49	0.59	0.53	0.52	−15	−	1	+	7	+27	+	0	−15	+	2	−14	+11	−13			1	0.11
101819	20 37 59.01	−52 48 21.1	8.66	H	309.495 880 39	−52.805 855 28		4.37	31.80	−36.81	1.12	0.83	1.25	1.28	0.87	+15	−34	−20	+19	−26	+11	−51	−35	+15	−50						0	−0.59
101820 H	20 38 01.40	+10 11 20.3	8.22	G	309.505 838 10	+10.188 976 84	A	3.10	3.62	−3.55	5.92	1.51	1.33	1.25	0.86	+50	−12	−	4	−	2	+20	+	0	+	9	+15	−	2	+35		0	−0.15
101821	20 38 04.05	+27 04 43.8	7.80	H	309.516 895 82	+27.078 837 44		4.46	37.44	16.33	0.47	0.55	0.90	0.60	0.65	+	3	−	5	−	1	−35	+13	−	7	+	7	+	2	+	5	+17	0	1.08
101822	20 38 04.56	+24 37 37.4	8.39	G	309.518 999 03	+24.627 058 43		8.55	−45.86	−91.43	0.68	0.66	0.94	0.69	0.67	+24	−	4	+15	+33	+11	−13	+14	+28	+	0	+37					1	1.92
101823	20 38 04.86	−24 13 43.8	6.89	H	309.520 247 00	−24.228 838 96		7.62	50.14	−22.33	0.73	0.44	0.82	0.95	0.61	+13	−18	−11	−	8	+	6	+33	+	9	+18	−	2	+22			0	0.85
101824	20 38 05.02	+76 49 58.8	7.07	H	309.520 927 94	+76.833 010 20		7.63	23.86	63.34	0.52	0.48	0.52	0.58	0.50	−18	−16	+18	−11	+27	+10	+23	−13	+	5	−	4					1	−0.34
101825	20 38 05.93	+46 53 08.9	7.97	H	309.524 711 61	+46.885 808 82		2.90	5.83	3.60	0.60	0.53	0.68	0.75	0.58	−	6	+17	+	3	+19	+	1	−	1	+	0	−	1	+10	−20	0	2.11
101826	20 38 08.29	+30 34 39.0	7.51	H	309.534 534 02	+30.577 492 14		3.52	3.46	2.79	0.35	0.46	0.67	0.38	0.47	−39	+	3	−	8	+	8	−	4	−	8	−	5	−19	+13	−44	1	−0.07
101827	20 38 08.64	−04 22 54.5	6.93	H	309.536 003 20	−04.381 809 65		4.02	10.75	−12.28	0.79	0.59	1.04	1.12	0.75	+18	−18	−37	+12	−17	+28	−	1	+49	−21	+	0					0	0.79
101828	20 38 08.77	−76 53 33.6	7.71	H	309.536 540 91	−76.892 654 74		2.90	−2.53	−20.10	0.57	0.54	0.71	0.67	0.62	−13	−	7	−19	+32	−	2	−	3	+	3	+23	−	1	−22		0	−0.11
101829	20 38 09.16	−30 33 31.0	8.19	G	309.538 187 00	−30.558 605 36		4.03	27.67	−12.30	1.00	0.60	1.11	1.32	0.95	+10	−	2	+10	−22	−	6	+11	−10	−	6	−22	+26			0	−0.42
101830	20 38 09.32	−30 58 40.7	7.28	H	309.538 813 62	−30.977 982 55		1.99	−7.06	1.51	0.85	0.52	0.97	1.14	0.85	+16	−	6	+	1	−22	+	0	+18	−	5	+	6	−14	+34		0	−1.99
101831	20 38 10.13	−58 19 58.0	9.47	H	309.542 217 77	−58.332 767 48		2.39	9.77	8.19	1.10	1.01	1.51	1.61	1.25	−10	−	7	−32	−22	+12	−10	+	5	−37	+27	−53			0	−1.08
101832	20 38 10.92	+42 10 26.0	8.33	H	309.545 512 70	+42.173 875 75		1.26	6.89	0.52	0.56	0.64	0.79	0.63	0.68	−	5	−	8	+15	+	8	−	4	−14	−	1	−14	+16	+	2	0	−0.70
101833	20 38 11.93	−50 37 21.6	7.74	H	309.549 726 36	−50.622 673 68		2.26	12.66	−42.67	0.98	0.66	1.12	1.59	0.90	+	5	−22	−17	+14	−	1	−32	−	9	−	5	+	5	−18		5	1.58
101834	20 38 12.79	+33 21 01.8	7.54	H	309.553 302 62	+33.350 493 55		4.97	−19.76	−17.96	0.46	0.50	0.71	0.55	0.52	−	8	+	5	−	2	−	2	−	1	−	8	+	0	−	6	+	2	+	3	0	0.12
101835	20 38 13.00	−55 07 57.1	9.13	H	309.554 150 40	−55.132 539 61		1.60	8.43	−5.51	1.07	1.01	1.50	1.29	1.02	+20	−23	−33	−16	−	4	−	5	−20	−49	+26	−31					0	1.55
101836	20 38 13.12	+39 32 49.2	8.04	H	309.554 667 18	+39.547 004 61		7.53	3.20	27.25	0.53	0.58	0.74	0.53	0.57	−	8	−	5	+21	−	8	+	2	+	0	+	2	−	9	+	1	+	3	0	−1.68
101837	20 38 15.51	+27 39 19.5	9.83	H	309.564 617 52	+27.655 430 42		2.37	12.40	24.21	0.87	0.94	1.46	1.00	1.11	+	5	−	4	−	2	−	1	+	3	−	5	+	2	+17	−16	+12	0	−0.10
101838	20 38 15.74	+44 19 57.7	6.68	H	309.565 589 58	+44.332 699 26		3.03	6.18	3.62	0.46	0.42	0.54	0.52	0.41	−15	+	2	+	2	−	9	+	2	−	2	+	2	−22	+17	−20	0	2.10
101839	20 38 16.91	+48 04 12.2	6.61	H	309.570 456 77	+48.070 055 82		8.84	48.72	23.80	0.52	0.47	0.59	0.61	0.55	+	6	−19	+	4	−12	−	2	+	8	−	6	+	2	+	9	+27	0	2.37
101840	20 38 16.93	−19 33 38.7	9.39	H	309.570 549 94	−19.560 737 38		3.93	−3.63	−12.29	1.43	0.97	1.56	1.62	1.44	+35	−40	−18	−21	+20	+23	+21	+52	−16	+41						0	0.24
101841	20 38 17.17	+42 04 25.3	7.52	H	309.571 542 97	+42.073 683 46		1.30	2.44	−0.58	0.54	0.57	0.72	0.61	0.60	+	1	−	4	+11	+11	−	3	−17	+	0	−11	+12	+	8	1	−1.33
101842	20 38 17.33	+03 21 23.4	8.82	H	309.572 198 08	+03.356 492 36		3.17	2.13	1.13	1.02	0.80	1.22	1.31	1.01	+	9	−	5	−34	−19	+17	+22	+24	+55	−14	+11			0	−0.76
101843	20 38 18.60	−81 17 20.3	5.89	1 H	309.577 520 70	−81.288 970 11		5.13	0.60	−38.24	0.44	0.42	0.56	0.49	0.47	+	6	−31	−	2	−12	+	4	+	6	+	6	−26	−10	−	4	1	1.08
101844	20 38 19.42	−55 36 19.0	11.36	G	309.580 913 91	−55.605 291 17		31.24	14.43	−78.78	2.04	2.03	2.81	2.33	1.98	+	5	−	6	−26	−65	+15	−11	+13	−60	+23	−23			3	0.94
101845	20 38 19.66	−51 50 41.0	9.18	H	309.581 911 36	−51.844 720 97		−0.82	−18.47	−0.53	1.42	1.12	1.61	1.88	1.19	+35	−	9	+	9	−	6	−26	−20	−40	−39	+	8	−36		0	1.50
101846	20 38 19.90	−52 21 38.3	10.05	H	309.582 899 12	−52.360 629 91		26.85	−196.32	−34.16	1.72	1.29	1.92	2.29	1.42	+14	−17	−10	+20	−25	+21	−49	−31	−	6	−56					0	1.39
101847	20 38 20.27	−01 06 18.3	4.31	1 H	309.584 472 94	−01.105 079 51		8.50	15.66	−17.01	0.80	0.57	1.00	1.27	0.80	−	6	+	2	−39	+44	−35	+39	−23	+54	−28	−15			4	2.67
101848	20 38 20.85	+13 19 52.3	7.80	H	309.586 877 79	+13.331 188 58		10.54	117.03	91.61	0.72	0.60	0.98	0.90	0.66	+21	−15	−	5	+13	+32	+15	+28	+28	+	8	+32			0	−0.56
101849	20 38 20.92	−21 25 27.0	8.48	H	309.587 176 80	−21.424 171 27		3.52	1.80	−10.36	1.04	0.65	1.09	1.17	0.89	+17	−17	−	2	−24	+12	+24	+11	+42	−	3	+21			0	−1.26
*101850	20 38 21.04	+25 35 26.6	8.49	H	309.587 664 68	+25.590 712 84		2.81	−3.84	−2.28	0.79	0.66	1.03	0.87	0.72	+12	+10	+	5	+20	+19	+10	+18	+24	+	5	+23			0	−1.90
*101851	20 38 20.98	+52 22 42.6	7.90	H	309.587 413 76	+52.378 490 76		6.60	24.35	23.11	0.52	0.54	0.62	0.65	0.58	−	8	−17	−	7	+11	+13	−	9	+	3	−22	+19	−25			1	0.49
101852	20 38 21.11	−04 30 42.7	7.78	H	309.587 968 57	−04.511 861 04		23.89	−8.69	−3.52	0.87	0.66	1.15	1.22	0.84	+18	−21	−36	+19	−16	+28	−	1	+52	−19	+	2					5	−1.44
101853	20 38 21.30	−03 11 15.5	8.19	H	309.588 767 43	−03.187 643 91		2.56	5.85	−0.31	1.48	0.84	1.41	1.99	1.12	−31	−21	−31	+64	−50	+18	−40	+71	−23	−42			0	−0.41
101854	20 38 22.68	−72 25 30.6	8.91	H	309.594 494 63	−72.425 163 55		13.27	21.53	−106.64	0.75	0.86	1.13	0.85	1.12	−19	−17	−	3	+13	−14	−	5	−19	−	4	+	1	−37			0	0.63
101855	20 38 23.63	−44 31 29.0	7.30	H	309.598 439 21	−44.524 709 58		12.35	98.99	−22.15	0.83	0.56	1.00	1.07	0.73	+17	−34	−16	+	3	+	6	−14	+	7	+	2	−10	+22		0	−1.33
101856	20 38 24.43	+06 43 32.3	11.70	G	309.601 772 20	+06.725 626 94		29.12	−131.49	−51.67	2.94	2.35	3.59	4.11	3.52	+23	+	4	−16	+13	+22	+	4	+14	+56	−16	+40			3	1.26
101857	20 38 25.37	−66 32 16.2	8.32	G	309.605 724 80	−66.537 840 50		15.98	116.36	−381.90	0.59	0.65	1.08	0.69	0.72	−51	+	2	−	6	+11	+	5	−	5	+	4	+	8	+	3	−46	2	0.61
101858	20 38 25.43	−20 59 38.3	7.25	H	309.605 942 50	−20.993 981 31		8.88	49.05	−45.02	0.87	0.53	0.94	1.15	0.72	+	3	−	8	−13	−16	−	4	+36	+	2	+26	−	6	−	1	0	−0.28
101859	20 38 25.50	−60 36 36.8	8.31	H	309.606 264 38	−60.610 219 42		2.56	0.83	−10.06	0.65	0.79	1.20	0.73	0.92	+32	−	9	−25	+13	+	0	+	1	−20	−36	+20	−12		0	−1.18
101860	20 38 26.17	−35 18 02.3	9.31	H	309.609 023 92	−35.300 635 01		0.45	14.23	3.91	1.06	0.73	1.31	1.36	1.01	+38	−	7	−	5	−17	+	3	+10	+	1	−	8	+	4	+69		0	0.02
101861	20 38 27.09	+23 04 07.0	8.98	H	309.612 895 09	+23.068 617 31		2.63	−5.15	−8.51	0.81	0.76	1.22	0.96	0.80	+16	−28	−15	+	6	+12	−	7	+11	+18	−	6	+14			0	1.43
101862	20 38 28.60	+60 55 06.5	8.32	2 H	309.619 178 20	+60.918 475 58		2.55	3.87	13.06	0.69	0.61	0.69	0.72	0.63	+	3	+	9	+16	+35	+	7	−	5	+	9	+14	−	4	+	5	0	0.12
101863	20 38 29.19	+75 15 44.8	8.70	H	309.621 611 14	+75.262 452 72		3.14	6.30	7.40	0.66	0.58	0.68	0.75	0.70	+	3	−22	+	2	+	8	−	9	−	3	−14	−19	+19	+	1	0	−0.17
101864	20 38 29.97	+18 52 10.9	9.28	H	309.624 872 12	+18.869 683 16		7.32	32.09	44.14	1.11	0.82	1.36	1.39	0.83	+18	−13	+	1	+27	+35	+14	+30	+19	+	5	+24			0	1.09
101865	20 38 30.14	−70 04 22.0	7.78	H	309.625 587 17	−70.072 773 65		3.56	4.03	−26.46	0.54	0.63	0.88	0.63	0.79	−35	−	1	−13	+	5	−	5	−15	−	5	+14	+11	−51		2	0.80
101866	20 38 30.89	+63 01 32.8	9.10	H	309.628 714 73	+63.025 766 84		4.66	15.36	2.74	0.72	0.65	0.80	0.73	0.72	+	1	−23	+15	−36	+12	+21	+	2	−	4	−	3	+36			0	1.28
101867	20 38 31.29	+21 12 04.2	4.81	H	309.630 384 81	+21.201 179 64		15.27	74.38	−2.48	0.50	0.41	0.67	0.52	0.43	−	3	−16	−24	+21	−	3	+	7	−	4	+27	−	9	+10		0	−1.14
101868	20 38 31.91	+24 06 57.5	5.06	H	309.632 951 07	+24.115 977 42		6.61	9.99	−7.80	0.48	0.45	0.66	0.50	0.48	+18	−	7	−	8	+41	+11	−19	+12	+26	−	7	+31			1	0.07
101869	20 38 34.19	+61 00 21.4	9.51	H	309.642 448 09	+61.005 933 36		1.86	6.40	2.49	0.89	0.78	0.89	0.93	0.86	−	4	+	2	−	1	+34	−	6	−13	−	6	+	7	−	4	−	2	0	1.11
101870	20 38 34.99	+23 40 49.8	5.91	1 G	309.645 785 12	+23.680 507 31		1.65	4.09	−5.32	0.52	0.49	0.74	0.60	0.51	+15	−20	−	5	+39	+11	−19	+10	+21	+	6	+24			0	0.65
101871	20 38 36.71	−00 04 52.6	9.17	H	309.652 965 51	−00.081 275 53		6.40	−0.33	3.49	1.04	0.83	1.27	1.65	1.29	+22	−13	−31	+22	−	7	+21	−	2	+35	−	4	+27			0	−0.79
101873 H	20 38 38.10	−25 39 56.7	9.26	H	309.658 733 65	−25.665 760 18	A	6.76	46.11	−69.39	3.00	2.16	2.60	2.93	2.30	+18	−16	−10	+	7	+	6	+24	+	8	+18	−	6	+38		3	−0.10
101874	20 38 39.03	+57 24 50.6	8.83	G	309.662 612 92	+57.414 068 87		4.45	−3.91	−17.11	0.64	0.67	0.74	0.62	0.68	−	1	−	2	+	9	+	0	+10	+	3	+10	−	9	+19	+10	1	0.99
101875	20 38 40.04	+38 38 08.0	6.76	G	309.666 833 30	+38.635 562 58		37.12	200.85	−193.24	0.43	0.47	0.62	0.44	0.44	−12	−	4	+16	+	0	−	2	−	9	−	1	−17	+11	−11		0	−0.59
101876	20 38 40.94	−41 45 48.9	8.90	H	309.670 566 89	−41.763 589 57		2.17	14.97	−21.31	1.09	0.72	1.19	1.47	0.96	+16	−16	−	9	+	7	+	6	+	3	+	8	+	3	−	8	+35	0	−0.45
101877	20 38 40.96	+43 25 36.6	8.94	H	309.670 681 34	+43.426 834 35		2.24	20.98	16.07	0.77	0.75	0.96	0.92	0.78	−22	−	7	+18	+13	+	0	−16	+	4	−19	+	6	−16			0	0.06
101878	20 38 41.78	+12 34 17.9	9.63	G	309.674 073 80	+12.571 638 55		3.58	16.92	1.82	1.07	0.92	1.45	1.47	0.98	+34	−	9	+	1	+29	+40	+19	+32	+31	+23	+45			0	1.85
101879	20 38 42.48	−17 03 54.9	7.88	H	309.677 015 82	−17.065 245 73		2.79	−10.25	−34.07	1.04	0.60	1.14	1.33	0.95	+16	−13	−	7	−27	−	2	+24	−	3	+29	−18	+19			0	−0.62
101880	20 38 42.58	−43 43 49.6	10.21	H	309.677 411 18	−43.730 442 49		16.73	236.02	−371.67	1.53	1.18	1.81	1.86	1.86	+27	−24	−	5	+	7	+19	+13	+18	+39	+	1	+33			0	1.71
101881	20 38 43.59	+24 46 40.8	7.42	H	309.681 612 17	+24.778 011 23		1.04	4.74	−3.51	0.58	0.50	0.73	0.59	0.53	+19	−	2	+	1	+36	+15	−	7	+16	+27	+	4	+32			0	1.38
101882	20 38 43.98	+13 18 54.5	5.69	1 G	309.683 269 68	+13.315 125 67		2.50	2.66	−0.39	0.57	0.46	0.75	0.73	0.51	+14	−11	+	0	+16	+32	+19	+27	+27	+12	+29					0	1.49
101883	20 38 44.31	+25 33 02.4	7.71	G	309.684 635 64	+25.550 679 39		4.00	−12.17	−12.35	0.66	0.59	0.87	0.74	0.64	+11	+	5	+	6	+26	+19	−	2	+19	+23	+11	+19			0	0.00
101884	20 38 47.56	+89 24 23.5	8.93	H	309.698 156 11	+89.406 534 68		4.13	−2.27	−11.63	0.71	0.60	0.74	0.91	0.75	+	7	−14	+17	−25	−	4	−	1	−	5	−	9	+	4	+14		0	−0.44
101885	20 38 48.19	−38 26 37.7	10.32	H	309.700 781 81	−38.443 818 97		1.61	−9.85	0.37	1.51	1.04	1.83	1.57	1.16	+29	−17	−36	−29	+17	−13	+	8	−	1	−	6	+52			0	0.76
101886 H	20 38 50.11	+15 00 26.3	8.12	G	309.708 770 97	+15.007 306 70	A	2.47	−10.89	−2.43	1.39	1.07	1.55	1.67	1.03	+39	−	7	−25	+30	+49	−13	+39	+35	+14	+46			0	0.22
101887	20 38 51.95	−40 22 07.8	9.12	H	309.716 456 33	−40.368 845 37		1.49	3.26	2.91	1.37	0.83	1.54	1.36	1.04	+36	−54	−24	+10	+22	+	5	+27	+21	−13	+43			0	0.50
*101888	20 38 52.69	+23 15 31.1	9.20	3 H	309.719 532 97	+23.258 647 24	*	0.90	2.08	6.44	0.93	0.88	1.30	1.09	0.88	+18	−36	−25	+	2	+	1	−	1	+14	+17	−	7	+12		0	−1.58
*101889	20 38 52.68	−36 27 00.4	8.99	G	309.719 497 38	−36.450 106 55		9.52	−17.66	21.51	1.13	0.66	1.31	1.30	0.92	+26	−25	−13	−17	+24	+	2	+18	+19	−	9	+54			0	1.67
101890	20 38 53.96	+71 10 08.3	7.93	H	309.724 839 19	+71.168 963 45		1.56	25.86	18.29	0.61	0.58	0.65	0.74	0.53	−	5	−	7	+25	−13	+12	−	7	+11	−14	+10	+	0			0	1.30
101891	20 38 54.20	+07 10 42.3	8.05	H	309.725 814 51	+07.178 424 96		2.22	2.90	−1.08	0.81	0.60	1.10	0.98	0.84	+22	−25	−	8	−10	+20	−	3	+10	+30	−	5	+48			2	1.17
101892	20 38 54.36	−57 50 46.7	9.43	H	309.726 480 62	−57.846 312 07		9.30	18.67	−31.79	0.97	0.94	1.34	1.36	1.38	+	3	−13	+	0	−	8	+13	+	4	+10	−16	+19	−	7		2	0.37
101893	20 38 55.37	+26 42 01.2	8.85	H	309.730 723 71	+26.700 332 16		19.06	−2.37	9.37	0.67	0.74	1.21	0.88	0.90	+	1	−17	+27	−37	+	0	−	3	−	6	−	6	−	7	+29	0	0.30
101894	20 38 56.24	−71 05 40.0	7.08	2 H	309.734 351 10	−71.094 437 52		2.16	−5.88	−2.55	0.51	0.54	0.77	0.56	0.69	−25	−	1	−	8	−29	+20	−12	+23	−11	+	6	−39			0	−1.62
101895	20 38 56.45	+08 31 21.9	7.53	H	309.735 222 98	+08.522 748 49		13.40	26.01	12.16	0.81	0.56	0.99	1.00	0.66	+27	−

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
101801	8.727	0.012	8.643	0.015	*	0.083	0.018	T	0.10	0.02	L *		8.7071	0.0015	0.015	108	*	8.68	8.74		C	20378+4756	I 3	2 C C	CD	9	0.412	0.048	3.56	0.27	
101802	12.555	0.270	10.717	0.087		1.561	0.234	T	1.96	0.17	K		10.5246	0.0053	0.045	80		10.45	10.58		U			1 X							G
101803	8.347	0.007	8.235	0.008		0.139	0.140	G	0.09	0.02	L		8.2782	0.0014	0.017	203		8.25	8.31		D	20378+2944	I 2	1							S
101804	7.912	0.009	7.917	0.012	A	−0.020	0.020	G	0.00	0.02	H		7.9819	0.0236	0.043	109	A	7.89	8.02		D	20378+4756	I 3	1 C P A							S
101805	11.048	0.046	9.808	0.024		1.058	0.041	T	1.02	0.03	L		9.8660	0.0032	0.031	200		9.82	9.91					1							G
101806	8.310	0.009	7.576	0.008		0.667	0.010	G	0.73	0.01	H		7.6330	0.0011	0.011	144		7.62	7.66		C			1							S
101807	10.394	0.049	9.551	0.036	B	0.757	0.046	T	0.80	0.03	L		9.4821	0.0751			B				D	20378+4756	I 3	1 C I A							
101808	6.752	0.005	6.413	0.004		0.328	0.007	T	0.38	0.01	L		6.4624	0.0008	0.005	84		6.45	6.47		C			1							S
101809	9.754	0.027	8.154	0.014		1.341	0.024	T	1.31	0.03	L		8.1594	0.0018	0.009	73		8.14	8.17		C			1							
101810	7.705	0.016	6.351	0.017		1.162	0.019	T	3.85	0.07	O		5.7461	0.0227	0.109	71		5.40	5.85	62.27	P 1 B			1 S							S P
101811	7.138	0.006	7.177	0.008		−0.041	0.002	G	−0.02	0.00	H		7.1860	0.0015	0.009	67		7.17	7.20		C			1							S
101812	8.282	0.008	7.845	0.007		0.448	0.001	G	0.52	0.00	H		7.9065	0.0016	0.016	112		7.88	7.94		C			1							S
101813	8.630	0.013	8.412	0.014		0.208	0.018	T	0.23	0.02	L		8.5021	0.0023	0.013	68		8.49	8.53					1							
101814	11.181	0.060	10.336	0.046		0.743	0.058	T	0.78	0.05	L		10.3870	0.0045	0.036	100		10.29	10.43		U			1							G
101815	8.223	0.010	8.187	0.013		0.033	0.015	T	0.05	0.01	L		8.2072	0.0019	0.014	68		8.19	8.25		C			1							S
101816	7.893	0.012	7.769	0.010		0.120	0.015	T	0.13	0.01	L		7.7974	0.0012	0.013	96		7.77	7.82		C			1							S
101817	10.062	0.023	9.052	0.016		0.882	0.021	T	0.89	0.01	L		9.1437	0.0017	0.021	125		9.10	9.18					1							
101818	7.607	0.005	7.080	0.005		0.495	0.006	T	0.57	0.01	L		7.1356	0.0009	0.009	129		7.12	7.15		C			1							S
101819	10.095	0.031	8.772	0.018		1.123	0.028	T	1.09	0.03	L		8.8299	0.0021	0.016	99		8.81	8.86		C			1							
101820	10.169	0.037	8.374	0.016	*	1.593	0.218	G	1.60	0.24	R *		8.2279	0.0018	0.020	96	*	8.20	8.26		D	20380+1011	H 1	2 C A	AB	81	0.308	0.024	2.35	0.36	
101821	8.479	0.007	7.857	0.006		0.579	0.008	T	0.65	0.01	L		7.9254	0.0011	0.014	206		7.90	7.95		C			1							S
101822	8.956	0.015	8.437	0.014		0.460	0.015	G	0.53	0.02	H		8.5097	0.0015	0.015	113		8.48	8.54		C			1							
101823	7.131	0.007	6.917	0.008		0.198	0.010	T	0.22	0.01	L		6.9526	0.0010	0.007	72		6.94	6.97		C			1							S
101824	7.533	0.006	7.106	0.007		0.403	0.009	T	0.47	0.01	L		7.1656	0.0007	0.007	92		7.15	7.18					1							S
101825	7.899	0.007	7.957	0.011		−0.048	0.012	T	−0.03	0.01	L		7.9630	0.0012	0.013	117		7.95	7.99		C			1							
101826	7.522	0.004	7.510	0.005		0.016	0.006	T	0.04	0.01	L		7.5271	0.0009	0.012	299		7.51	7.55					1							S
101827	8.450	0.011	7.055	0.006		1.179	0.010	T	1.14	0.01	L		7.0966	0.0008	0.008	97		7.08	7.11		C			1							S
101828	8.945	0.010	7.823	0.007		0.960	0.015	G	0.97	0.02	A		7.8716	0.0011	0.016	167		7.84	7.90			20381−7654	I 1	1							S
101829	8.643	0.013	8.238	0.013		0.393	0.015	G	0.46	0.02	H		8.2738	0.0021	0.013	71		8.25	8.29		C			1							S
101830	9.380	0.019	7.447	0.008		1.604	0.016	T	1.62	0.02	L		7.3959	0.0016	0.010	78		7.37	7.42					1							S
101831	9.880	0.021	9.519	0.022		0.351	0.027	T	0.41	0.03	L		9.5521	0.0037	0.026	104		9.51	9.60					1							
101832	8.848	0.011	8.362	0.010		0.457	0.014	T	0.53	0.01	L		8.4298	0.0013	0.013	121		8.41	8.46		C			1							
101833	9.691	0.024	7.912	0.011		1.482	0.021	T	1.50	0.03	L		7.8713	0.0017	0.013	70		7.86	7.90		C			1							S
101834	8.910	0.010	7.659	0.006		1.067	0.009	T	1.03	0.01	L		7.7088	0.0010	0.012	162		7.69	7.73		C			1							
101835	10.815	0.043	9.254	0.019		1.310	0.037	T	1.27	0.04	L		9.2839	0.0023	0.029	100		9.23	9.35					1							
101836	8.774	0.009	8.121	0.008		0.606	0.010	T	0.68	0.01	L		8.1718	0.0013	0.015	159		8.15	8.20					1							
101837	10.611	0.035	9.909	0.030		0.647	0.038	T	0.71	0.03	L		9.9620	0.0025	0.034	147		9.89	10.01		C			1							G
101838	6.518	0.004	6.665	0.005		−0.133	0.005	G	−0.12	0.01	H		6.6413	0.0008	0.010	129		6.63	6.66					1							S
101839	7.794	0.009	6.714	0.005		0.934	0.008	T	0.93	0.01	L		6.7703	0.0006	0.008	114		6.75	6.78		C	20383+4804	I 1	1							S
101840	10.897	0.076	9.467	0.038		1.207	0.067	T	1.17	0.07	L		9.5548	0.0023	0.016	65		9.54	9.60		C			1							
101841	9.819	0.018	7.739	0.007		1.721	0.015	T	1.75	0.01	L		7.6239	0.0012	0.011	122		7.60	7.65					1							
101842	8.723	0.012	8.808	0.017		−0.051	0.015	G	−0.03	0.01	H		8.8067	0.0018	0.014	82		8.79	8.83		C			1							
101843	8.161	0.008	6.117	0.004		1.692	0.007	T	1.72	0.01	L		5.9984	0.0014	0.011	142		5.98	6.01		U 2			1							S
101844						1.420	0.020	G	1.72	0.05	I		11.4894	0.0042	0.049	115		11.39	11.58					1							G
101845	11.027	0.065	9.374	0.026		1.382	0.055	T	1.35	0.07	L		9.3339	0.0034	0.027	78		9.27	9.37					1							
101846	11.345	0.089	10.157	0.050		1.143	0.004	G	1.24	0.01	I		10.1791	0.0034	0.027	82		10.14	10.22		C			1							
101847	5.501	0.003	4.412	0.003		0.949	0.010	G	0.91	0.02	A		4.4737	0.0009	0.006	79		4.47	4.49		M	20383−0106	I 1	1							S
101848	8.952	0.016	7.909	0.011		0.906	0.015	T	0.91	0.01	L		7.9563	0.0013	0.011	94		7.94	7.97					1							
101849	8.412	0.012	8.460	0.015		−0.041	0.017	T	−0.02	0.02	L		8.4774	0.0017	0.013	78		8.46	8.50		C			1							S
101850	9.510	0.018	8.602	0.013		0.806	0.017	T	0.83	0.01	L		8.6436	0.0015	0.015	118		8.62	8.67		C			1							
101851	7.975	0.008	7.910	0.008		0.065	0.011	T	0.07	0.01	L		7.9294	0.0013	0.011	126		7.90	7.95		C			1							S
101852	8.486	0.011	7.843	0.009		0.597	0.012	T	0.67	0.01	L		7.9047	0.0017	0.017	99		7.88	7.93					1							S
101853	9.838	0.024	8.333	0.013		1.266	0.021	T	1.22	0.02	L		8.3502	0.0018	0.016	80		8.33	8.38		C			1							
101854	9.642	0.015	8.987	0.013		0.599	0.015	T	0.67	0.01	L		9.0365	0.0020	0.023	162		9.01	9.08		C			1							
101855	8.510	0.011	7.411	0.008		0.949	0.010	T	0.94	0.01	L		7.4667	0.0012	0.010	89		7.45	7.48		C			1							S
101856						1.457	0.020	G	1.84	0.09	I		11.8536	0.0066	0.057	61		11.79	11.95					1							D
101857	9.122	0.012	8.411	0.010		0.653	0.002	G	0.72	0.00	H		8.4578	0.0013	0.018	252		8.43	8.49					1							S
101858	8.446	0.012	7.358	0.010		0.940	0.012	T	0.93	0.01	L		7.4137	0.0010	0.007	75		7.40	7.43		C	20384−2100	I 1	1							S
101859	9.785	0.036	8.479	0.022		1.110	0.033	T	1.07	0.03	L		8.4767	0.0016	0.016	137		8.45	8.50		C			1							
101860	11.226	0.058	9.423	0.020		1.501	0.049	T	1.53	0.07	L		9.4342	0.0024	0.021	133		9.40	9.47		C			1							
101861	10.274	0.028	9.087	0.017		1.017	0.026	T	0.99	0.02	L		9.1468	0.0022	0.020	122		9.11	9.18					1							
101862	8.771	0.012	8.367	0.012		0.382	0.016	T	0.45	0.02	L		8.4131	0.0058	0.042	105		8.35	8.46	0.15	P 1 A			1							
101863	8.873	0.011	8.711	0.013		0.156	0.016	T	0.17	0.02	L		8.7556	0.0015	0.012	111		8.74	8.78		C			1							P
101864	9.939	0.028	9.348	0.025		0.552	0.033	T	0.62	0.03	L		9.3986	0.0023	0.020	91		9.37	9.43		C			1							
101865	9.008	0.010	7.871	0.007		0.970	0.010	T	0.95	0.01	L		7.9286	0.0013	0.015	182		7.90	7.96					1							S
101866	9.424	0.018	9.099	0.019		0.309	0.024	T	0.35	0.03	L		9.1754	0.0015	0.017	105		9.15	9.21					1							
101867	4.771	0.002	4.803	0.002		−0.030	0.009	G	−0.01	0.03	C		4.8068	0.0004	0.005	122		4.80	4.81					1 G							S
101868	4.880	0.003	5.033	0.003		−0.133	0.004	T	−0.12	0.01	L		5.0151	0.0005	0.004	113		5.01	5.02		C			1							S
101869	9.576	0.019	9.535	0.024		0.043	0.028	T	0.06	0.02	L		9.5330	0.0027	0.020	96		9.50	9.57		C			1							
101870	7.147	0.004	6.042	0.004		0.953	0.004	T	0.94	0.00	L		6.0744	0.0010	0.010	115		6.06	6.09		M			1							S
101871	9.775	0.022	9.222	0.021		0.495	0.015	G	0.57	0.02	H		9.2775	0.0021	0.016	90		9.24	9.31		C			1							
101873	9.985	0.029	9.337	0.026	*	0.594	0.029	T	0.66	0.03	L *		9.3834	0.0016	0.014	75	*	9.36	9.41		D	20386−2540	I 1	2 C A	AB	11	0.431	0.003	0.21	0.02	
101874	8.990	0.013	8.792	0.015		0.121	0.015	G	0.14	0.01	H		8.8695	0.0016	0.016	112		8.83	8.89					1							
101875	7.528	0.006	6.835	0.005		0.610	0.000	G	0.68	0.00	H		6.8935	0.0007	0.007	154		6.88	6.91			20386+3838	I 1	1							S
101876	10.290	0.029	8.986	0.017		1.108	0.026	T	1.07	0.03	L		9.0732	0.0022	0.018	93		9.04	9.11					1							
101877	10.238	0.023	9.019	0.014		1.042	0.021	T	1.01	0.02	L		9.1061	0.0021	0.018	128		9.08	9.16		C			1							
101878	10.025	0.027	9.625	0.030		0.370	0.015	G	0.43	0.02	H		9.7228	0.0022	0.022	106		9.68	9.76		C			1							
101879	9.869	0.028	8.037	0.012		1.505	0.020	G	1.53	0.03	H		8.0002	0.0016	0.015	70		7.98	8.02					1							S
101880	11.316	0.067	10.314	0.043		0.936	0.013	G	0.98	0.01	I		10.3593	0.0035	0.030	90		10.30	10.40					1							G
101881	7.318	0.005	7.409	0.007		−0.078	0.008	T	−0.06	0.01	L		7.3985	0.0012	0.011	117		7.38	7.42		C			1							S
101882	7.680	0.008	5.868	0.004		1.509	0.047	G	1.42	0.03	C		5.8469	0.0013	0.011	96		5.83	5.86		M			1							S
101883	7.908	0.007	7.733	0.009		0.170	0.015	G	0.19	0.01	H		7.7642	0.0013	0.013	106		7.75	7.79					1							S
101884	9.193	0.014	8.956	0.016		0.236	0.015	G	0.26	0.02	H		9.0005	0.0011	0.013	107		8.97	9.02		C			1							
101885	10.882	0.048	10.334	0.049		0.513	0.061	T	0.59	0.06	L		10.4367	0.0040	0.032	106		10.38	10.50					1							G
101886	9.405	0.020	8.311	0.013	A	0.380	0.351	G	0.94	0.02	L *		8.2647	0.0011	0.013	102	*	8.24	8.29		D	20388+1500	I 1	2 C A	AB	117	3.039	0.012	2.40	0.04	S
101887	10.923	0.051	9.274	0.022		1.420	0.015	G	1.40	0.02	I		9.2651	0.0023	0.019	90		9.22	9.31		C			1							
101888	11.463	0.073	9.411	0.020		1.737	0.062	T	2.35	0.25	O		9.2383	0.0487	0.277	132		8.84	9.53	123.60	P 1 B			1 V							G P
101889	9.568	0.018	9.066	0.017		0.505	0.015	G	0.58	0.02	H		9.1046	0.0021	0.018	116		9.07	9.13		C			1							
101890	10.108	0.025	8.111	0.009		1.655	0.021	T	1.68	0.02	L		8.0445	0.0015	0.014	124		8.02	8.07		C			1							
101891	8.426	0.009	8.083	0.010		0.347	0.015	G	0.41	0.02	H		8.1322	0.0011	0.010	89		8.11	8.15		C			1							S
101892	9.939	0.021	9.457	0.022		0.466	0.023	T	0.54	0.02	L		9.5317	0.0025	0.026	109		9.49	9.57		C			1							
101893	9.712	0.015	8.930	0.013		0.680	0.015	G	0.74	0.01	H		8.9855	0.0018	0.023	183		8.95	9.02					1							
101894	9.231	0.012	7.288	0.005		1.647	0.011	T	2.17	0.03	O		7.1429	0.0026	0.021	172		7.11	7.17		U 2			1							S
101895	8.046	0.009	7.576	0.008		0.443	0.011	T	0.51	0.01	L		7.6270	0.0011	0.011	99		7.61	7.64					1							S
101896	8.119	0.008	7.834	0.010	A	0.500	0.495	G	0.29	0.03	L *		7.8578	0.0019	0.015	119	*	7.83	7.88			20389+4741	I 1	2 C C	AB	150	2.056	0.063	3.76	0.15	S
101897	8.176	0.010	7.786	0.012		0.369	0.014	T	0.43	0.01	L		7.8311	0.0010	0.008	66		7.82	7.85					1							S
101898	9.138	0.015	8.592	0.014		0.518	0.015	T	0.59	0.02	L		8.6457	0.0016	0.014	92		8.62	8.68					1							
101899	7.079	0.003	5.801	0.002		1.088	0.003	T	1.05	0.00	L		5.8478	0.0004	0.007	286		5.84	5.86		C			1							S
101900	6.896	0.006	6.484	0.005		0.403	0.006	T	0.47	0.01	L		6.5402	0.0006	0.007	109		6.53	6.56					1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr																			%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28										29	30
101901	20 39 01.22	−60 49 35.3	8.95	H	309.755 096 47	−60.826 474 12		3.36	7.98	−7.22	0.77	0.79	1.23	0.85	1.21	+29	−15	−13	+37	+ 6	+ 0	+ 3	− 3	+ 2	+23										0	−0.87
101902	20 39 01.41	−53 51 18.2	8.25	H	309.755 879 73	−53.855 053 45		5.14	27.93	−52.95	1.00	0.81	1.23	1.20	0.73	+ 9	+22	− 2	−22	−14	−13	−20	−55	+ 1	−31										4	1.58
101903	20 39 01.90	+56 11 19.6	8.53	H	309.757 897 32	+56.188 770 19		2.08	0.62	−3.30	0.67	0.61	0.71	0.72	0.70	− 6	− 6	− 1	+23	+19	−13	+22	− 2	+16	+ 4										0	0.01
101904	20 39 02.59	−28 25 31.6	7.95	G	309.760 771 83	−28.425 444 71		16.06	77.49	8.65	0.86	0.57	1.00	0.99	0.79	+26	−29	− 9	−13	− 1	+25	+ 4	+ 9	−14	+34										0	−0.56
101905	20 39 02.65	−49 19 53.3	7.33	G	309.761 046 26	−49.331 458 90		29.73	−145.33	13.90	0.82	0.58	0.90	1.13	0.72	+17	−22	−27	+12	+15	− 2	+11	+ 1	+ 7	+ 6										0	−2.68
101906	20 39 04.23	−16 33 34.1	7.18	G	309.767 607 49	−16.559 473 78		17.96	109.26	−28.21	0.89	0.56	1.04	1.19	0.86	+21	− 2	−12	−16	+ 5	+28	+ 5	+43	−16	+22										0	−0.93
101907	20 39 04.36	+05 43 27.6	8.62	H	309.768 170 28	+05.724 335 57		1.68	2.84	−8.10	1.06	1.07	1.26	1.47	1.57	+47	+ 4	− 3	+35	+44	+23	+39	+73	− 7	+56										0	0.17
101908	20 39 04.42	−36 21 21.4	8.13	H	309.768 407 70	−36.355 946 91		1.89	6.93	−15.31	0.86	0.59	1.01	0.98	0.77	+39	−25	−18	− 8	+ 8	+21	+ 2	+19	+16	− 6	+61										0	0.63
101909	20 39 04.97	+15 50 17.6	5.99	H	309.770 702 50	+15.838 235 58		2.51	−2.33	−15.14	0.63	0.53	0.81	0.76	0.61	+25	− 3	+ 8	+14	+39	+26	+33	+37	+21	+41										2	0.25
101910	20 39 05.37	+14 47 55.1	10.52	H	309.772 372 72	+14.798 635 32		15.09	94.93	−148.56	1.49	1.28	1.92	2.03	1.40	+40	− 9	+ 0	+ 3	+25	− 5	+18	+23	+ 8	+51										4	−1.20
101911	20 39 05.86	−04 55 46.2	6.46	H	309.774 430 55	−04.929 504 91		13.93	−1.68	4.50	0.76	0.56	0.97	1.08	0.74	+17	−18	−27	+25	−10	+21	+ 1	+59	−16	+ 4										0	0.38
101912	20 39 06.12	+24 25 00.0	8.23	H	309.775 501 47	+24.416 673 30		8.91	39.93	8.55	0.61	0.63	0.89	0.61	0.64	+23	− 5	− 2	+26	+12	−11	+13	+24	− 9	+35										1	1.72
101913	20 39 06.64	−49 04 33.4	9.05	G	309.777 678 02	−49.075 932 74		6.94	28.48	−60.58	1.13	0.77	1.13	1.51	1.04	+14	−22	−12	+ 8	+17	+ 2	+16	+ 8	+ 5	+19										0	−0.83
101914	20 39 07.13	−35 25 06.4	8.74	H	309.779 703 58	−35.418 440 93		5.24	13.52	8.62	0.89	0.60	1.10	1.02	0.76	+44	−20	− 8	− 8	+13	+ 6	+13	+ 3	− 8	+68										0	−1.03
101915	20 39 07.31	+19 33 36.3	7.63	H	309.780 442 33	+19.560 081 63		2.67	19.93	5.27	0.68	0.55	0.92	0.73	0.56	+22	−22	−13	+37	+20	+ 3	+20	+31	+ 3	+34										0	0.54
101916	20 39 07.59	+10 05 10.1	5.07	G	309.781 635 40	+10.086 151 96		33.27	323.58	21.07	0.67	0.48	0.82	0.82	0.55	+17	−15	− 2	+12	+24	+16	+21	+24	+ 3	+36										0	0.24
101917	20 39 08.85	+07 48 30.8	8.37	H	309.786 873 57	+07.808 557 78		0.59	1.81	−13.29	0.97	0.73	1.31	1.13	0.91	+45	−35	− 7	+13	+39	+ 0	+29	+44	+ 2	+64										0	0.60
101918	20 39 09.51	−33 10 38.2	7.55	H	309.789 625 18	−33.177 277 46		0.92	22.45	−29.32	0.86	0.62	0.92	1.01	0.91	+27	−35	−18	+17	+18	+19	+45	+ 0	+29										2	0.42
101919	20 39 10.63	+21 49 02.7	6.08	H	309.794 289 67	+21.817 405 83		3.52	30.19	15.86	0.56	0.41	0.70	0.61	0.41	− 4	−14	− 8	+17	+ 7	− 1	+ 6	+ 9	+ 5	+ 8										0	−0.38
101920 H	20 39 13.04	+10 58 42.0	8.35	H	309.804 344 91	+10.978 338 52	A	7.18	23.86	−23.55	1.59	1.12	1.73	1.72	1.14	+34	−20	− 7	+12	+24	− 4	+14	+19	+ 0	+36										2	−0.26
101921	20 39 13.25	−02 24 46.7	6.23	H	309.805 192 24	−02.412 983 35		2.65	8.02	3.31	0.72	0.56	0.92	1.02	0.72	+16	−16	−33	+37	−12	+33	+ 2	+62	−15	+ 2										0	0.42
101922	20 39 15.65	−19 16 42.5	7.88	H	309.815 199 18	−19.278 464 98		3.25	14.61	−4.32	1.03	0.67	1.16	1.32	1.01	+19	−19	+ 9	−20	+10	+32	− 3	+42	+14	+36										0	−0.60
101923 H	20 39 16.32	−14 57 17.0	5.24	G	309.817 984 49	−14.954 712 33	A	1.86	2.58	−19.66	1.65	1.31	1.08	1.27	0.76	+23	− 6	− 8	− 6	− 5	+ 9	+ 4	+28	−39	− 6										0	0.66
101924	20 39 17.41	−44 07 46.4	9.60	H	309.822 558 51	−44.129 551 24		7.45	19.05	11.02	1.30	0.91	1.53	1.48	1.30	+18	−29	−11	− 3	− 3	− 2	+15	− 8	+15	0										0	1.34
101925	20 39 17.79	−06 11 27.5	7.47	1 H	309.824 126 34	−06.190 959 47		1.33	−13.87	34.28	0.80	0.65	1.06	1.10	0.90	+37	−11	−18	+31	+ 4	+ 6	+ 6	+59	−23	+39										2	−0.97
101926	20 39 18.00	+02 08 36.7	7.81	2 H	309.824 981 13	+02.143 539 04		1.39	3.17	−0.15	0.86	0.71	1.25	1.03	0.95	+17	−11	−41	+ 8	− 2	+15	+ 5	+51	−33	+15										0	−0.34
101927	20 39 18.05	−36 45 38.0	8.51	H	309.825 215 31	−36.760 559 43		1.53	−0.22	5.19	0.96	0.68	1.21	1.29	0.94	+36	− 5	−11	− 7	+15	− 6	+10	+ 4	+ 5	+63										0	−0.74
101928 H	20 39 19.13	+29 05 55.7	8.03	G	309.829 688 99	+29.098 805 41	A	6.99	−14.90	−5.48	0.98	1.03	1.27	0.86	0.87	− 9	−11	+ 5	+ 0	+ 4	− 2	+ 4	+ 4	+ 1	+11										1	0.89
101929	20 39 19.37	−50 39 06.7	8.52	H	309.830 715 55	−50.651 853 42		2.32	−1.97	−16.94	1.11	0.81	1.39	1.89	1.07	+17	−11	− 8	+21	+ 3	−35	+ 0	− 5	− 9	+12										5	0.34
101930	20 39 20.35	+26 04 04.4	6.98	H	309.834 779 05	+26.067 877 04		4.48	−36.18	−109.66	0.58	0.48	0.80	0.75	0.51	− 5	+ 5	+13	+22	+ 5	+ 7	+ 8	+ 2	+14	+18										0	0.26
101931	20 39 21.60	−61 32 08.2	7.17	H	309.840 013 66	−61.535 616 04		2.70	9.98	−6.22	0.44	0.49	0.77	0.44	0.55	+12	−11	+ 1	+55	+ 3	+ 1	− 4	+10	− 5	− 3										0	0.09
101932	20 39 21.86	+10 04 32.5	8.52	H	309.841 092 82	+10.075 684 10		35.22	317.09	20.21	0.95	0.71	1.14	1.27	0.84	+31	−12	+ 2	+18	+24	+ 6	+21	+18	+ 6	+56										2	1.28
101933	20 39 22.90	+11 42 45.0	11.78	H	309.845 430 81	+11.712 491 41		28.56	−246.22	4.01	2.80	2.03	3.50	3.33	2.20	+23	+ 5	−13	− 9	+30	+ 6	+25	+17	+23	+38										2	0.02
101934	20 39 23.13	+45 40 00.9	6.61	H	309.846 356 80	+45.666 912 80		1.67	3.37	−0.56	0.51	0.42	0.58	0.63	0.45	−13	−18	− 1	−20	− 4	+12	− 7	−16	+26	−13										1	2.06
101935	20 39 23.33	−11 45 51.1	7.81	H	309.847 207 41	−11.764 188 95		5.74	37.59	−4.58	1.01	0.75	1.26	1.22	1.00	+31	−29	−17	− 6	+14	+42	+25	+57	−18	+23										2	1.29
101936	20 39 24.83	+00 29 11.4	5.15	H	309.853 464 40	+00.486 491 90		13.33	103.00	−19.44	0.66	0.50	0.88	0.85	0.65	+ 7	− 6	−42	+ 6	−29	+40	−18	+26	−22	+ 5										0	1.67
101937	20 39 26.17	+05 14 38.5	10.79	H	309.859 046 91	+05.244 017 34		−0.58	−4.09	−4.38	1.56	1.44	1.99	2.05	1.89	+35	− 5	−21	− 7	+22	+29	+27	+52	+ 2	+40										0	−0.18
101938	20 39 26.62	+65 08 44.1	8.58	G	309.860 927 06	+65.145 581 60		5.74	19.22	36.82	0.63	0.64	0.70	0.66	0.83	+14	+ 6	− 2	+ 2	+20	− 5	+15	+25	− 7	+43										4	−1.01
101939	20 39 27.13	−07 43 57.0	8.23	H	309.863 023 20	−07.732 503 60		4.74	0.54	−11.95	1.21	0.77	1.34	1.86	1.17	− 9	−18	−10	+27	−18	+28	−14	+53	−15	− 7										0	−0.08
101940	20 39 27.31	+73 48 33.2	10.08	H	309.863 775 87	+73.809 224 59		7.71	−2.93	26.64	0.80	0.91	1.04	0.72	1.01	− 5	− 9	+23	−27	− 2	+ 1	− 5	+ 1	+22	− 1										3	0.03
101941	20 39 29.76	+28 05 18.8	7.78	H	309.874 020 54	+28.088 567 92		1.26	−14.54	−23.31	0.47	0.56	0.82	0.60	0.67	+ 5	+ 1	+ 0	+15	+16	−24	+ 2	+ 7	− 7	+22										0	1.77
101942	20 39 29.93	−22 29 45.2	11.69	H	309.874 695 84	−22.495 900 79		15.89	291.26	−167.60	3.16	1.80	3.40	4.98	3.02	+11	− 2	− 7	−14	−13	+ 4	−10	+29	−18	+ 3										0	1.24
101943	20 39 30.08	+13 20 27.4	7.51	H	309.875 326 35	+13.340 931 85		6.12	20.02	−16.45	0.81	0.55	0.97	0.93	0.59	+11	− 4	− 6	− 9	+30	+ 6	+24	+19	+15	+28										0	0.12
101944	20 39 31.28	+26 41 51.4	7.14	H	309.880 339 77	+26.697 612 20		6.88	9.79	8.56	0.43	0.46	0.78	0.58	0.55	+ 3	+ 0	+ 9	−37	− 1	− 6	− 6	−10	+ 2	+22										0	−1.04
101945	20 39 32.19	+21 12 16.5	9.21	G	309.884 136 05	+21.204 577 09		3.34	−24.29	−43.87	0.88	0.74	1.18	0.95	0.79	+ 7	−20	−11	+22	− 1	+ 4	− 1	+26	+ 2	+16										0	0.42
101946	20 39 32.70	+38 22 32.1	7.90	H	309.886 232 43	+38.375 582 68		2.43	−3.38	−8.04	0.51	0.57	0.73	0.58	0.56	− 6	+ 4	+13	− 1	− 1	+ 0	+ 0	− 7	+ 8	− 6										0	−1.26
101947	20 39 32.82	−14 58 29.1	8.11	H	309.886 732 67	−14.974 759 78		3.53	5.79	5.96	1.26	0.70	1.42	1.42	1.01	+18	−33	−31	−42	+ 3	+39	+19	+47	−31	+ 9										2	0.33
101948	20 39 33.01	+42 14 56.7	6.81	H	309.887 539 03	+42.249 088 36		30.46	−62.56	−221.47	0.44	0.48	0.60	0.50	0.55	+ 1	+ 0	+ 8	+ 8	+ 1	−16	+ 4	− 5	+14	+11										0	−1.47
101949 H	20 39 33.31	+40 34 46.8	6.07	1 H	309.888 797 36	+40.579 656 47	B	3.63	6.67	0.84	1.11	1.21	1.09	0.84	0.93	−19	−10	+ 8	+17	+ 1	−12	+ 4	+ 3	+ 3	+ 4										1	0.93
101950 H	20 39 34.27	+21 43 16.7	8.46	H	309.892 785 53	+21.721 315 15	A	2.56	15.90	12.17	1.51	1.20	1.70	1.57	1.18	+12	− 4	−14	+28	+ 5	+ 3	+ 7	+18	+ 1	+23										4	0.64
101951 H	20 39 35.15	+30 30 15.1	7.82	H	309.896 438 09	+30.504 183 77	A	3.01	−5.30	−17.04	0.72	0.94	1.20	0.71	0.85	−27	+ 4	+ 1	+11	− 7	− 2	−10	− 4	+ 5	−38										1	0.28
101952	20 39 36.21	−20 05 22.7	9.65	H	309.900 879 00	−20.089 634 47		5.94	−3.36	8.79	1.34	0.80	1.43	1.87	1.16	+ 5	−19	−12	− 7	−14	+22	− 9	+31	−13	− 2										0	0.92
101953	20 39 36.33	+30 48 50.8	7.36	H	309.901 394 71	+30.814 116 11		4.20	−22.78	−23.13	0.36	0.48	0.70	0.40	0.50	−38	+ 2	− 4	+ 1	− 1	−13	− 2	−21	+13	−45										0	−1.08
101954	20 39 36.95	−42 49 24.1	8.67	G	309.903 978 76	−42.823 361 53		8.76	1.65	0.32	0.99	0.68	1.13	1.25	1.05	+18	−18	− 5	− 8	+ 9	+ 9	+11	+18	− 6	+19										0	−0.71
101955 H	20 39 37.20	+04 58 18.7	7.88	G	309.905 017 73	+04.971 853 86	A	53.82	862.35	67.57	1.89	1.56	2.21	2.15	1.78	+ 9	+17	− 8	+ 3	+ 1	+40	+ 2	+34	+ 0	+15										19	3.35
101956	20 39 37.41	−10 34 16.2	10.71	G	309.905 875 72	−10.571 157 57		2.01	−51.67	−208.31	2.20	1.28	2.62	2.79	2.01	− 5	+14	−30	−15	− 1	+24	− 3	+42	−38	− 1										0	−1.24
101957	20 39 38.06	−30 55 24.8	8.57	G	309.908 563 91	−30.923 565 54		5.56	−1.47	9.20	0.99	0.64	1.21	1.31	0.95	+22	−17	−15	−13	+ 1	+40	+ 5	+15	− 6	+32										0	−0.24
101958 H	20 39 38.25	+15 54 43.4	3.77	G	309.909 393 95	+15.912 052 70	*	13.55	54.14	7.91	1.41	0.87	0.71	0.75	0.68	+68	+ 4	+ 5	−14	+10	+11	+24	+30	+18	+47										2	0.01
101959	20 39 39.76	+26 18 30.4	8.32	H	309.915 647 77	+26.308 435 98		3.93	9.02	0.95	0.72	0.60	1.07	1.00	0.67	− 5	−10	+ 5	−11	+ 8	+19	+ 3	− 1	+ 4	+22										0	−0.61
*101960 H	20 39 43.28	+80 29 59.9	8.73	2 H	309.930 341 36	+80.499 977 55	*	1.56	−5.23	−2.99	0.72	0.62	0.73	0.85	0.72	+ 1	−16	− 8	+14	+17	− 4	+16	− 1	+ 8	+ 5										0	−0.52
*101961	20 39 43.14	−42 50 24.9	10.30	H	309.929 752 33	−42.840 255 56		6.40	−22.22	−111.55	1.47	1.08	1.76	2.00	1.88	+21	−11	+ 5	+ 0	+23	+18	+20	+34	+ 9	+38										0	0.00
101962	20 39 43.40	−64 36 25.8	8.51	2 H	309.930 823 20	−64.607 164 31		7.51	0.37	−22.95	1.98	1.86	2.87	2.43	2.12	+ 9	−16	−24	+ 8	+15	−16	+12	− 5	−10	+ 0										1	
101963 H	20 39 44.96	+47 20 43.0	7.93	G	309.937 331 46	+47.345 264 31	A	3.19	6.10	4.11	0.92	0.94	1.01	1.03	0.92	+ 2	−10	+ 1	+13	+ 6	− 2	+ 3	+ 0	+22	−10										0	−0.25
101964	20 39 47.75	−32 07 42.4	9.39	H	309.948 947 84	−32.128 441 26		3.41	−8.11	−8.67	1.54	0.82	1.54	1.99	1.12	+12	−23	−22	+39	+ 7	+ 2	+11	+26	−10	+17										0	1.20
101965	20 39 51.72	−62 54 27.4	6.22	G	309.965 493 09	−62.907 598 08		7.66	32.33	−83.92	0.51	0.49	0.74	0.51	0.58	+13	−12	−12	+18	+10	+ 3	+15	− 2	− 3	− 4										0	1.19
101966	20 39 51.85	+11 14 58.0	6.39	H	309.966 030 77	+11.249 447 43		30.31	47.44	83.05	0.66	0.46	0.81	0.80	0.52	+12	−18	−12	+17	+31	+ 7	+28	+19	+ 6	+28										0	−0.66
101967	20 39 52.25	+13 25 10.9	7.13	H	309.967 699 15	+13.419 695 05		2.62	4.25	−12.91	0.73	0.51	0.88	0.84	0.55	+ 7	−10	−10	−15	+31	+ 1	+22	+16	+13	+24										0	0.25
101968	20 39 52.43	−36 02 00.3	7.22	1 H	309.968 455 65	−36.033 429 90		6.12	33.56	−50.95	0.74	0.52	0.94	0.84	0.67	+43	−30	−19	− 5	+14	+12	+16	+ 4	+ 2	+71										0	0.49
101969	20 39 53.82	−07 34 23.0	8.21	H	309.974 240 13	−07.573 060 24		3.62	12.19	−4.60	1.16	0.78	1.35	1.64	1.06	+ 8	− 5	−29	+33	−20	+30	−12	+52	−20	+ 3										0	−0.70
101970	20 39 54.25	+38 45 30.6	8.12	H	309.976 053 46	+38.758 505 95		2.61	4.43	−1.98	0.56	0.57	0.78	0.56	0.57	− 7	− 7	+10	− 2	− 5	− 4	− 5	+ 1	+10	− 4										0	−2.18
101971	20 39 54.46	+67 47 33.1	8.98	H	309.976 924 92	+67.792 540 95		11.42	81.14	−77.90	0.79	0.68	0.81	1.05	0.71	+ 8	− 7	+ 9	+ 6	+11	+20	+ 7	+ 4	+20	+25										0	0.33
101972	20 39 54.66	−40 58 19.6	8.85	H	309.977 769 02	−40.972 120 38		4.77	8.15	−39.18	1.10	0.66	1.27	1.62	0.90	+22	−21	−21	− 8	+ 8	− 2	+ 5	+ 6	− 2	+32										0	−0.05
101973	20 39 54.82	+59 42 10.8	8.26	H	309.978 434 28	+59.702 986 71		5.09	−2.45	−23.78	0.63	0.57	0.65	0.66	0.63	− 2	− 6	+ 9	+16	+ 5	− 6	+ 8	− 1	+ 1	+11										1	0.09
101974	20 39 55.40	+35 23 26.3	6.89	H	309.980 847 63	+35.390 637 08		8.19	31.58	36.52	0.45	0.46	0.66	0.52	0.53	−15	+10	− 4	− 8	+ 1	−13	+ 0	−12	+ 4	−21										0	−0.13
101975	20 39 55.78	−53 23 33.9	8.32	H	309.982 412 74	−53.392 757 37		7.50	−7.50	18.17	0.91	0.79	1.10	1.08	0.71	+ 1	+ 4	+ 9	+16	−22	+13	−35	−44	−10	−35										0	0.30
101976	20 39 55.90	−27 43 02.1	7.57	H	309.982 929 86	−27.717 248 81		4.19	27.04	−24.14	0.94	0.50	1.00	1.36	0.67	+12	−10	−13	+33	− 8	+18	+ 0	+ 5	−11	+23										0	0.85
101977	20 39 57.31	−43 36 22.9	10.07	2 H	309.988 793 78	−43.606 348 01		3.17	8.54	−14.99	1.52	1.04	1.82	2.03	1.66	+25	−16	−11	− 7	+ 2	+13	+ 5	+23	−12	+22										4	0.79
101978	20 39 59.16	+58 53 39.1	8.45	H	309.996 483 83	+58.894 207 80		0.98	6.78	−3.39	0.60	0.57	0.65	0.71	0.62	− 2	+ 5	+10	+ 7	+ 4	− 6	+ 4	− 2	+ 3	+ 1										1	−1.03
101979	20 39 59.83	+08 26 49.4	6.85	H	309.999 307 61	+08.447 065 55		3.90	15.10	−21.02	0.70	0.51	0.92	0.89	0.62	+29	−19	− 1	+ 2	+23	+19	+16	+24	+ 8	+54										0	1.02
101980	20 39 59.89	+48 48 28.9	8.98	2 H	309.999 542 79	+48.808 018 32		2.00	−1.34	−12.45	0.69	0.64	0.77	0.79	0.75	+14	−12	+ 2	−17	− 5	+ 4	− 9	− 6	+ 9	+35										0	−1.08
101981	20 40 01.15	+08 44 58.1	8.65	H	310.004 796 64	+08.749 482 71		2.02	27.79	6.21	0.95	0.70	1.25	1.16	0.84	+29	+ 8	+11	− 5	+25	+31	+16	+27	+21	+56										0	1.90
101982	20 40 01.68	+27 16 45.4	8.92	H	310.006 990 63	+27.279 283 92		13.19	−52.48	11.94	0.59	0.73	1.25	0.76	0.91	− 3	− 6	+14	−19	+ 4	−11	+ 2	+ 1	−13	+16										0	−0.59
101983	20 40 02.27	−60 32 51.0	5.11	H	310.009 443 47	−60.547 509 37		41.33	312.88	−568.99	0.46	0.49	0.73	0.58	0.63	+21	−15	−13	− 7	− 1	+ 0	− 6	−22	+ 8	−12										0	−1.44
101984	20 40 02.96	−18 08 19.0	5.15	1 H	310.012 327 08	−18.138 606 30		4.32	−22.73	−21.63	0.84	0.51	0.91	1.02	0.74	+20	− 4	−17	−27	− 1	+13	+ 0	+33	−18	+21										0	0.20
101985	20 40 02.99	−28 47 31.2	10.22	3 H	310.012 473 33	−28.791 997 94		−1.45	−11.11	0.86	2.41	1.40	2.38	2.86	1.76	− 2	+12	−23	−63	+ 9	−45	− 9	−30	−35	+26										0	0.44
101986	20 40 03.22	+43 27 32.5	5.97	H	310.013 398 93	+43.459 016 30		6.93	−69.45	−56.74	0.43	0.42	0.54	0.49	0.45	−14	+13	+ 1	+13	− 2	− 6	+ 1	−10	+11	−10										0	1.15
101987	20 40 06.22	−34 12 14.2	9.16	H	310.025 908 38	−34.203 937 20		9.93	10.33	−2.36	1.09	0.72	1.37	1.35	1.04	+46	−13	+ 8	− 6	+11	− 2	+ 9	+ 6	− 1	+73										3	−1.42
101988	20 40 06.27	−14 00 47.0	8.07	2 H	310.026 135 59	−14.013 065 42		2.38	−16.46	−14.57	1.05	0.63	1.23	1.34	0.91	+14	− 2	−27	−13	− 6	+11	+ 1	+42	−34	+ 1										0	3.04
101989	20 40 07.79	+41 15 10.0	10.60	H	310.032 439 23	+41.252 771 39		13.41	170.48	109.14	1.17	1.28	1.69	1.38	1.53	− 6	−10	+13	+11	+ 3	−26	+10	− 6	− 5	+12										0	−0.17
101990	20 40 08.46	−39 19 51.2	8.89	H	310.035 244 60	−39.330 889 93		1.88	30.45	−51.15	1.11	0.73	1.36	1.26	0.88	+32	−37	−26	+14	+13	+ 0	+21	+12	−21	+40										0	−0.64
101991	20 40 09.12	−00 52 15.2	11.42	3 H	310.037 995 76	−00.870 881 09		9.80	75.17	11.48	2.16	1.79	2.84	3.18	2.42	+35	−18	−33	+24	− 6	+25	+ 5	+52	−12	+28										0	0.88
101992	20 40 09.94

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
101901	10.320	0.034	9.090	0.020		1.050	0.031	T	1.02	0.03	L	9.1162	0.0024	0.020	146		9.08	9.15		C		1							
101902	8.708	0.013	8.294	0.013		0.420	0.015	G	0.49	0.02	H	8.3448	0.0019	0.014	81		8.33	8.38				1							S
101903	8.818	0.013	8.545	0.014		0.260	0.018	T	0.29	0.02	L	8.6045	0.0020	0.014	104		8.58	8.63				1							
101904	8.618	0.012	8.019	0.011		0.541	0.011	G	0.61	0.01	H	8.0737	0.0016	0.011	81		8.06	8.09		C		1							S
101905	8.107	0.010	7.411	0.008		0.626	0.002	G	0.69	0.00	H	7.4701	0.0011	0.008	71		7.46	7.48		C		1							S
101906	7.723	0.010	7.208	0.009		0.483	0.015	G	0.55	0.02	H	7.2784	0.0010	0.008	70		7.27	7.30				1							S
101907	10.291	0.032	8.785	0.017		1.267	0.028	T	1.23	0.03	L	8.7853	0.0018	0.016	85		8.76	8.82		C		1							
101908	8.163	0.008	8.122	0.009		0.037	0.011	T	0.05	0.01	L	8.1483	0.0012	0.013	123		8.13	8.18		C		1							S
101909	5.784	0.003	5.955	0.004		−0.145	0.002	G	−0.14	0.00	H	5.9349	0.0009	0.006	100		5.92	5.94		C	20391+1550	I 1	1						S
101910	11.654	0.120	10.658	0.086		0.871	0.110	T	0.88	0.08	L	10.6842	0.0047	0.033	93		10.62	10.73					1						G
101911	7.758	0.007	6.572	0.005		1.016	0.007	T	0.99	0.01	L	6.6225	0.0005	0.006	92		6.61	6.64		D			1						S
101912	8.884	0.017	8.295	0.016		0.550	0.021	T	0.62	0.02	L	8.3444	0.0016	0.014	119		8.32	8.37		C			1						
101913	9.516	0.023	9.122	0.023		0.453	0.007	G	0.52	0.01	H	9.1496	0.0021	0.012	67		9.13	9.18					1						
101914	9.003	0.011	8.758	0.013		0.229	0.017	T	0.25	0.02	L	8.8095	0.0015	0.014	142		8.79	8.84		C			1						
101915	7.811	0.008	7.645	0.008		0.159	0.011	T	0.18	0.01	L	7.6891	0.0011	0.010	110		7.67	7.71					1						S
101916	6.132	0.016	5.367	0.011		0.702	0.013	G	0.75	0.07	F	5.2133	0.0005	0.005	102		5.21	5.22		C	20392+1005	I 2	1						S
101917	9.758	0.018	8.500	0.011		1.072	0.016	T	1.04	0.01	L	8.5399	0.0012	0.012	109		8.51	8.56					1						
101918	9.377	0.018	7.700	0.009		1.401	0.016	T	1.38	0.02	L	7.6997	0.0018	0.012	83		7.67	7.73					1						S
101919	6.020	0.004	6.072	0.004		−0.043	0.005	T	−0.02	0.01	L	6.0708	0.0007	0.008	102		6.06	6.09					1						S
101920	8.855	0.020	8.350	0.021	*	0.475	0.026	T	0.55	0.03	L	* 8.4549	0.0021	0.015	79	*	8.43	8.49		D	20392+1059	I 1	2 C	A	AB	263	6.161	0.007	1.42	0.03	
101921	6.108	0.004	6.212	0.004		−0.090	0.005	T	−0.07	0.01	L	6.2024	0.0006	0.005	91		6.19	6.21		C			1						S
101922	9.766	0.025	8.027	0.012		1.450	0.022	T	1.45	0.04	L	8.0095	0.0017	0.010	69		7.99	8.03		C			1						
101923	5.082	0.003	5.231	0.003	*	−0.129	0.004	G	−0.12	0.01	H	* 5.2029	0.0007	0.005	74	*	5.18	5.22		D	20392−1457	I 1	2 C	A	AB	114	0.345	0.003	0.42	0.02	S
101924	10.112	0.025	9.665	0.026		0.435	0.029	T	0.50	0.03	L	9.7009	0.0027	0.022	91		9.67	9.74		C			1						
101925	9.514	0.015	7.674	0.007		1.530	0.013	T	1.57	0.03	L	7.5902	0.0018	0.015	130		7.57	7.61		U 2			1						
101926	10.026	0.027	8.028	0.011		1.692	0.024	T	2.31	0.06	O	7.8590	0.0061	0.038	69		7.81	7.97		U 2 C			1						
101927	9.767	0.019	8.619	0.012		0.986	0.018	T	0.97	0.01	L	8.6754	0.0016	0.018	126		8.65	8.71					1						
101928	8.612	0.009	8.112	0.009	A	0.505	0.015	G	0.58	0.02	H	* 8.1257	0.0012	0.017	162	*	8.10	8.15		D	20393+2906	I 1	2 C	B	AB	359	2.693	0.028	3.27	0.13	S
101929	10.146	0.034	8.657	0.018		1.253	0.030	T	1.21	0.03	L	8.6781	0.0027	0.016	70		8.66	8.72		C			1						
101930	8.659	0.010	7.129	0.006		1.287	0.011	G	1.30	0.06	F	7.1356	0.0013	0.011	136		7.12	7.16					1						S
101931	7.128	0.004	7.172	0.005		−0.037	0.006	T	−0.01	0.01	L	7.1663	0.0008	0.010	183		7.15	7.18		C			1						S
101932	9.711	0.026	8.640	0.018		0.910	0.015	G	0.95	0.02	I	8.6670	0.0015	0.015	99		8.64	8.69			20392+1005	I 2	1						
101933											T	11.9188	0.0112	0.080	87		11.75	12.05					1						G
101934	6.521	0.004	6.606	0.004		−0.073	0.005	T	−0.05	0.01	L	6.5949	0.0009	0.007	117		6.58	6.61		C			1						S
101935	9.101	0.015	7.918	0.010		1.014	0.014	T	0.99	0.01	L	7.9752	0.0016	0.011	80		7.95	8.01		C			1						S
101936	6.510	0.004	5.266	0.003		1.060	0.015	G	1.02	0.02	A	5.3213	0.0004	0.004	96		5.31	5.33			20394+0029	I 1	1						S
101937	12.468	0.252	11.124	0.122		1.153	0.231	T	1.77	0.15	K	10.8909	0.0033	0.033	81		10.83	10.94					1						G
101938	8.795	0.012	8.604	0.014		0.180	0.015	G	0.20	0.02	H	8.6411	0.0015	0.017	102		8.61	8.68					1						
101939	9.389	0.020	8.335	0.014		0.915	0.018	T	0.91	0.01	L	8.3854	0.0015	0.011	60		8.36	8.41		C			1						S
101940	10.841	0.049	10.075	0.039		0.698	0.049	T	0.75	0.04	L	10.2181	0.0028	0.021	93		10.16	10.25					1						G
101941	9.599	0.015	7.929	0.008		1.396	0.013	T	1.37	0.02	L	7.9293	0.0010	0.013	171		7.91	7.95					1	G					
101942											T	11.8330	0.0103	0.064	69		11.72	11.93					1						G
101943	8.957	0.014	7.635	0.009		1.122	0.013	T	1.08	0.01	L	7.6732	0.0009	0.009	98		7.66	7.69		D			1						S
101944	7.541	0.004	7.175	0.005		0.347	0.006	T	0.41	0.01	L	7.2243	0.0009	0.011	199		7.21	7.24					1						S
101945	9.742	0.031	9.311	0.032		0.523	0.015	G	0.60	0.02	H	9.2734	0.0021	0.019	123		9.24	9.31		C			1	S					
101946	8.196	0.007	7.933	0.009		0.250	0.011	T	0.28	0.01	L	7.9737	0.0016	0.015	135		7.95	7.99		C	20395+3823	I 1	1						S
101947	9.732	0.040	8.264	0.021		1.237	0.035	T	1.20	0.03	L	8.2740	0.0014	0.012	80		8.26	8.29					1						
101948	7.412	0.006	6.871	0.005		0.507	0.007	T	0.58	0.01	L	6.9226	0.0009	0.008	125		6.91	6.94					1						S
101949	5.927	0.005	6.081	0.006	*	−0.134	0.007	T	−0.13	0.01	L	* 6.0306	0.0014	0.009	143	*	6.02	6.04	5.96	P 1 A	20396+4035	I 1	2 C	A	BA	186	0.849	0.002	0.01	0.01	S
101950	9.641	0.029	8.634	0.021	*	1.320	0.015	G	1.28	0.02	K	* 8.6184	0.0031	0.030	101	*	8.59	8.69		D	20396+2143	I 1	2 C	A	AB	298	9.944	0.009	1.60	0.04	
101951	7.929	0.005	7.776	0.006	*	0.147	0.008	T	0.16	0.01	L	* 7.8739	0.0009	0.014	274	*	7.85	7.90		D	20396+3030	I 1	2 C	A	AB	223	2.384	0.003	1.15	0.02	S
101952	10.028	0.036	9.646	0.040		0.373	0.046	T	0.44	0.05	L	9.7329	0.0035	0.021	76		9.70	9.78		C			1						
101953	8.927	0.007	7.483	0.004		1.218	0.006	T	1.18	0.01	L	7.5234	0.0009	0.012	301		7.50	7.55					1						S
101954	9.094	0.015	8.703	0.015		0.415	0.007	G	0.48	0.01	H	8.7650	0.0020	0.016	98		8.73	8.78		C			1						
101955	9.539	0.021	8.086	0.012	*	1.241	0.032	G	1.44	0.02	A	* 7.9818	0.0013	0.014	89	*	7.96	8.01		D	20396+0458	I 1	2 C	A	AB	127	0.919	0.008	1.44	0.06	
101956	11.418	0.102	10.879	0.097		0.610	0.003	G	0.68	0.00	H	10.8476	0.0050	0.034	60		10.81	10.90		C			1						G
101957	9.060	0.015	8.616	0.015		0.440	0.015	G	0.51	0.02	H	8.6572	0.0016	0.015	76		8.63	8.68					1						
101958	3.714	0.002	3.766	0.002	*	−0.057	0.005	G	−0.01	0.05	F	* 3.7650	0.0005	0.005	99	*	3.76	3.77		D	20396+1555	I 1	2 C	A	AG	221	0.218	0.020	2.57	0.13	S
101959	9.563	0.019	8.432	0.012		0.973	0.017	T	0.96	0.01	L	8.4891	0.0017	0.018	140		8.46	8.52					1						
101960	10.998	0.050	9.032	0.016	*	1.666	0.043	T	3.02	0.06	O	* 8.6415	0.0144	0.106	110	*	8.47	8.95		U 2	20397+8030	H 1	2 C	S B	AB	143	0.171	0.019	0.39	0.58	P
101961	10.962	0.053	10.306	0.047		0.609	0.060	T	0.68	0.05	L	10.4331	0.0032	0.030	89		10.39	10.47		C			1						G
101962	9.251	0.017	8.638	0.015		0.579	0.015	G	0.65	0.01	H	8.6339	0.0069	0.072	120		8.48	8.71		U 2			1	X	S				
101963	7.906	0.008	7.940	0.011	A	−0.060	0.015	G	−0.04	0.01	H	* 7.9392	0.0010	0.011	123	*	7.92	7.96		D	20398+4721	I 1	2 C	B	AB	27	1.367	0.040	3.55	0.16	S
101964	11.301	0.089	9.538	0.031		1.469	0.075	T	1.48	0.11	L	9.5189	0.0022	0.016	76		9.48	9.55		D			1						
101965	7.632	0.006	6.342	0.004		1.099	0.001	G	1.06	0.00	H	6.3788	0.0007	0.007	123		6.37	6.39					1	G					S
101966	7.051	0.005	6.452	0.004		0.559	0.006	T	0.63	0.01	L	6.5103	0.0007	0.006	92		6.50	6.53		C	20399+1116	I 1	1						S
101967	9.062	0.015	7.288	0.007		1.478	0.013	T	1.49	0.02	L	7.2597	0.0015	0.010	101		7.24	7.28		C			1						S
101968	7.647	0.007	7.255	0.006		0.366	0.015	G	0.43	0.02	H	7.3059	0.0027	0.023	133		7.27	7.34	0.14	P 1 A			1						S
101969	9.575	0.020	8.339	0.013		1.055	0.019	T	1.02	0.02	L	8.3780	0.0019	0.015	89		8.35	8.41					1						
101970	9.447	0.015	8.229	0.009		1.041	0.014	T	1.01	0.01	L	8.2882	0.0014	0.014	147		8.27	8.32		C			1						
101971	9.594	0.020	9.044	0.019		0.515	0.025	T	0.59	0.03	L	9.0939	0.0020	0.018	107		9.06	9.12		C			1						
101972	9.198	0.016	8.898	0.017		0.290	0.015	G	0.33	0.02	H	8.9283	0.0019	0.012	90		8.90	8.95		C			1						
101973	8.419	0.009	8.267	0.010		0.146	0.013	T	0.16	0.01	L	8.3122	0.0015	0.015	119		8.29	8.34					1						S
101974	8.097	0.008	7.006	0.005		0.943	0.007	T	0.93	0.01	L	7.0554	0.0009	0.010	163		7.04	7.08		C			1						S
101975	8.673	0.012	8.355	0.013		0.302	0.017	T	0.35	0.02	L	8.3987	0.0018	0.020	92		8.36	8.43					1						S
101976	8.717	0.015	7.663	0.011		0.915	0.014	T	0.91	0.01	L	7.7252	0.0014	0.010	76		7.71	7.74		C			1						S
101977	10.613	0.037	10.143	0.039		0.456	0.042	T	0.53	0.04	L	10.1757	0.0080	0.082	84		10.12	10.41	1.51	P 1 A			1						
101978	10.867	0.042	8.679	0.013		1.807	0.035	T	1.84	0.04	L	8.5392	0.0020	0.017	128		8.51	8.56		R			1						
101979	8.209	0.010	6.972	0.006		1.056	0.009	T	1.02	0.01	L	7.0160	0.0008	0.007	96		7.00	7.03					1						S
101980	9.172	0.014	8.986	0.017		0.178	0.021	T	0.20	0.02	L	9.0377	0.0018	0.024	122		8.99	9.08		U			1						
101981	10.015	0.025	8.801	0.015		1.038	0.023	T	1.01	0.02	L	8.8199	0.0014	0.013	100		8.80	8.84		C			1						
101982	9.851	0.017	8.986	0.014		0.730	0.015	G	0.78	0.01	H	9.0568	0.0017	0.024	206		9.02	9.10					1						
101983	5.758	0.003	5.179	0.002		0.544	0.022	G	0.64	0.02	A	5.2317	0.0006	0.005	140		5.22	5.24		C			1						S
101984	7.283	0.010	5.344	0.005		1.647	0.012	G	2.02	0.05	F	5.2281	0.0012	0.012	69		5.19	5.24		U 2			1	S					S
101985						1.500	0.510	G	2.50	0.72	K	10.2366	0.1303	1.081	48		8.87	11.99	138.30	P 1 A			1						G
101986	7.510	0.006	6.107	0.004		1.186	0.006	T	1.15	0.01	L	6.1370	0.0008	0.007	132		6.12	6.15					1						S
101987	9.657	0.019	9.217	0.020		0.429	0.022	T	0.50	0.02	L	9.2543	0.0023	0.019	121		9.22	9.29					1						
101988	10.121	0.030	8.304	0.013		1.543	0.027	T	2.49	0.05	O	8.0927	0.0042	0.045	79		8.01	8.14		U 2 C			1	S					
101989	11.489	0.071	10.664	0.057		0.743	0.069	T	0.79	0.05	L	10.7483	0.0040	0.044	124		10.66	10.83		C			1						G
101990	10.651	0.039	9.044	0.018		1.346	0.034	T	1.31	0.04	L	9.0403	0.0022	0.016	87		9.01	9.07		C	20401−3920	I 1	1						
101991											T	11.5786	0.0205	0.166	77		10.87	11.86		U 2 C			1						G
101992	10.129	0.031	8.304	0.013		1.550	0.028	T	1.79	0.09	O	8.2216	0.0020	0.021	107		8.18	8.25		U			1						
101993	8.218	0.012	7.961	0.011		0.245	0.015	T	0.27	0.02	L	8.0084	0.0023	0.016	87		7.98	8.04		U			1						S
101994	10.938	0.070	9.101	0.025		1.528	0.059	T	1.57	0.13	L	9.0406	0.0027	0.020	77		9.01	9.08		C			1						
101995	9.704	0.026	8.072	0.013		1.366	0.023	T	1.33	0.03	L	8.0581	0.0012	0.014	124		8.04	8.08		C	20402+2356	I 1	1						
101996	10.209	0.022	9.477	0.019		0.657	0.022	T	0.72	0.02	L	9.5444	0.0024	0.023	158		9.50	9.58					1						
101997	7.265	0.007	6.437	0.006		0.719	0.005	G	0.78	0.02	A	6.5029	0.0006	0.005	84		6.49	6.51					1						S
101998	7.966	0.009	6.739	0.006		1.048	0.008	T	1.02	0.01	L	6.7810	0.0006	0.006	97		6.77	6.79					1						S
101999	12.012	0.245	10.631	0.111		1.004	0.007	G	1.05	0.01	I	10.7170	0.0045	0.026	71		10.67	10.76		C			1						G
102000	9.209	0.018	9.177	0.023		0.034	0.027	T	0.05	0.02	L	9.1577	0.0026	0.023	66		9.11	9.19					1						

$20^h\ 40^m\ 13^s$ - $20^h\ 41^m\ 27^s$ 2050

102001 - 102100

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π δ	π $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr											%	
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
102001	20 40 13.20	+54 16 03.6	9.32	H	310.054 989 64	+54.267 663 85	2.56	−3.74	−6.41	0.74	0.79	0.86	0.94	0.83	−15	− 7	+ 5	+20	+ 6	−16	+ 4	−13	+15	−19	1	0.17
102002 H	20 40 13.40	+54 27 09.6	9.36	H	310.055 832 28	+54.452 664 78 A	2.39	−3.64	−3.89	1.48	1.49	1.44	1.59	1.50	+ 7	+ 3	+10	− 1	+ 9	+12	+ 8	− 7	+ 9	−19	1	−1.09
102003	20 40 13.49	−37 34 55.8	8.08	H	310.056 223 23	−37.582 176 43	0.35	−5.48	−9.48	0.92	0.63	1.09	1.24	0.83	+37	+10	−10	−21	+13	−11	+ 4	+ 4	−10	+62	0	1.92
102004	20 40 13.72	+29 20 22.1	9.17	H	310.057 179 04	+29.339 480 93	3.31	−5.21	−26.91	0.72	0.90	1.38	0.80	0.92	− 3	+ 6	+15	− 1	+14	+ 9	+10	+ 1	− 8	+13	2	−0.70
102005	20 40 13.95	+75 00 29.3	8.88	H	310.058 119 33	+75.008 127 47	3.45	9.63	13.26	0.72	0.66	0.77	0.80	0.79	+ 6	−22	+ 2	+12	− 7	−12	−12	− 2	+25	+ 4	1	0.04
102006	20 40 15.16	−51 13 45.7	8.19	H	310.063 146 27	−51.229 367 84	5.42	29.32	−31.79	1.12	0.90	1.27	1.33	0.78	+41	+14	+19	−30	−25	−24	−34	−58	−13	− 9	0	2.86
102007	20 40 16.47	−65 04 20.8	8.51	H	310.068 634 99	−65.072 440 80	2.39	4.74	−14.47	0.95	0.84	1.35	1.19	0.89	+ 0	−11	−35	+42	+23	−27	+19	+14	+ 1	− 2	0	0.33
102009	20 40 17.55	+00 40 47.0	8.47	H	310.073 105 45	+00.679 733 50	1.81	10.17	−4.82	0.86	0.71	1.15	1.18	1.02	+25	− 4	−24	+ 8	+ 0	+37	+ 3	+40	− 2	+36	0	1.36
102010	20 40 17.64	+03 26 28.5	6.94	H	310.073 496 94	+03.441 257 39 A	5.58	41.35	8.74	1.16	0.94	1.22	1.53	1.08	+37	+11	− 3	+ 7	+36	+ 2	+32	+69	+ 2	+46	1	0.91
102011	20 40 17.88	+60 30 17.3	6.02	H	310.074 489 78	+60.504 813 11	30.12	13.73	185.72	0.49	0.43	0.48	0.56	0.49	−11	+ 1	+ 8	+41	− 1	− 3	+ 1	+20	− 6	− 4	0	0.88
102012	20 40 18.46	+25 47 20.9	8.18	H	310.076 935 53	+25.789 143 47	2.08	4.76	−3.71	0.78	0.64	0.99	0.93	0.63	+18	− 6	+17	+38	+22	+ 4	+21	+23	+ 7	+27	0	0.54
102013	20 40 19.04	−35 47 56.0	7.47	G	310.079 345 35	−35.798 878 91	9.82	45.15	−23.86	0.77	0.51	0.93	0.87	0.67	+37	−24	−11	− 9	+20	+14	+18	+10	+ 1	+69	1	1.88
102014	20 40 19.81	−33 25 54.9	5.47	G	310.082 552 26	−33.431 930 38	13.64	22.87	35.93	0.72	0.49	0.79	0.91	0.71	+13	−25	− 6	+20	+ 5	+28	+ 2	+38	+11	+20	2	1.43
102015	20 40 20.59	−43 03 50.8	8.02	G	310.085 787 42	−43.064 102 58	3.45	21.67	3.53	0.93	0.71	1.09	1.27	1.12	+37	−11	−16	+ 7	+13	+11	+17	+29	+ 3	+34	0	1.04
102016	20 40 20.79	+38 46 48.8	8.02	H	310.086 637 06	+38.780 217 30	18.60	154.45	37.64	0.50	0.54	0.73	0.55	0.53	−10	−14	+12	+ 6	− 3	− 9	− 3	− 5	+12	− 7	0	−1.66
102017	20 40 20.91	+15 42 38.3	8.54	H	310.087 141 44	+15.710 632 97	3.12	−5.87	−8.39	0.92	0.74	1.15	1.04	0.76	+30	+12	+10	+ 4	+38	+23	+33	+37	+27	+44	0	1.32
102018	20 40 22.22	−24 07 02.3	7.21	G	310.092 574 62	−24.117 317 94	23.42	181.90	−293.22	0.89	0.52	0.89	1.13	0.78	+ 5	− 5	− 8	−30	+19	+31	+20	+37	+12	+16	0	−0.09
102019	20 40 22.63	−46 49 35.5	7.47	H	310.094 310 12	−46.826 540 74	3.29	21.77	−4.47	0.82	0.62	0.91	1.08	0.70	+12	−18	−20	+11	+ 2	+ 2	+ 3	− 8	− 2	+15	0	−0.05
102020	20 40 25.44	−29 11 55.9	7.75	H	310.105 992 81	−29.198 856 11	2.99	7.09	0.64	0.85	0.56	1.02	1.07	0.90	+19	− 6	+ 2	−12	−11	+20	−14	− 3	−21	+34	0	−0.26
102021	20 40 25.77	−32 51 06.4	8.48	H	310.107 361 36	−32.851 774 71	10.01	−25.30	35.50	1.17	0.76	1.25	1.49	0.95	+30	−25	−22	+11	+10	+28	+13	+22	+11	+ 9	0	−1.03
102022	20 40 27.80	+01 35 18.6	10.21	H	310.115 843 04	+01.588 496 14	13.14	0.03	−35.24	1.50	1.28	1.85	2.21	1.95	+35	−24	−14	+26	+23	+11	+24	+63	− 1	+35	0	−0.79
102023	20 40 28.01	−54 01 10.5	8.85	H	310.116 689 15	−54.019 573 71	15.09	74.17	−214.72	1.11	0.89	1.30	1.63	1.11	− 4	− 3	−10	− 8	− 2	−19	−17	−40	+19	−59	0	1.45
102024	20 40 30.34	−10 11 43.7	9.02	H	310.126 420 33	−10.195 479 33	0.42	−13.60	−10.86	1.31	0.90	1.75	1.64	1.29	+17	−14	−45	−18	− 4	+33	+16	+57	−44	+ 1	0	−0.73
102025	20 40 30.49	−30 03 07.0	10.06	H	310.127 047 65	−30.051 945 22	22.36	100.12	−26.79	1.67	0.97	1.78	2.51	1.54	− 4	+ 9	−15	+24	−28	+20	−26	+ 7	−26	+ 1	0	0.47
102026	20 40 32.56	−16 07 27.7	5.79	G	310.135 664 67	−16.124 359 41	9.90	−68.21	73.94	0.91	0.52	1.05	1.15	0.80	+ 8	+ 0	−27	−31	− 1	+33	+ 0	+41	−29	+13	0	0.15
102027	20 40 32.89	+55 06 25.2	7.34	H	310.137 035 05	+55.107 002 74	2.56	−4.84	−4.99	0.47	0.51	0.56	0.52	0.56	− 9	+12	+ 5	+ 2	+11	−12	+13	− 3	+12	− 5	0	2.28
102028	20 40 34.68	+03 04 26.8	8.86	H	310.144 501 38	+03.074 117 25	0.25	2.98	−10.05	1.15	0.91	1.34	1.54	1.25	+20	− 2	−35	−18	+30	− 1	+29	+54	−20	+25	0	0.78
102029 H	20 40 35.25	+15 38 35.3	6.76	H	310.146 890 03	+15.643 136 57 *	14.36	93.84	44.75	0.95	1.26	0.88	1.07	0.86	− 7	−17	+ 5	− 4	+20	+16	+20	+17	− 3	+23	2	−0.08
102030	20 40 35.36	−27 35 11.8	7.73	H	310.147 318 53	−27.586 607 54	7.85	−17.99	2.24	0.94	0.53	1.01	1.33	0.67	+15	−12	−16	+28	−10	+19	− 2	+ 0	−10	+22	0	−1.12
102031 H	20 40 35.78	+21 55 37.4	7.36	H	310.149 067 70	+21.927 046 69 *	3.48	11.19	−5.02	1.13	0.75	0.95	0.91	0.61	+ 6	−26	− 8	+12	+ 4	−10	+ 1	+ 3	+ 9	+27	1	0.61
102032	20 40 35.89	−26 38 42.3	6.51	H	310.149 530 66	−26.645 086 58	8.64	11.66	−24.10	0.71	0.44	0.79	0.96	0.60	+14	−20	+ 3	+17	+12	+32	+10	+20	+11	+32	0	0.37
102033 H	20 40 36.26	+29 48 19.6	6.02	H	310.151 101 22	+29.805 447 50 A	12.20	20.61	43.05	0.47	0.54	0.65	0.45	0.48	−11	+ 0	+ 6	+35	+ 5	− 8	+ 9	+ 4	− 1	+ 4	1	0.44
102034	20 40 36.42	+31 21 28.8	7.92	H	310.151 743 22	+31.357 997 08	3.40	11.49	−16.05	0.43	0.54	0.83	0.50	0.57	−33	− 2	+ 5	− 5	− 5	−10	− 4	−15	+ 7	−40	1	−0.49
102035	20 40 36.86	+37 23 50.8	8.01	H	310.153 576 19	+37.397 457 82	6.59	85.60	−2.89	0.50	0.52	0.70	0.55	0.57	−17	+ 1	+ 3	− 2	+ 4	− 5	+ 5	− 7	+ 6	− 9	2	1.23
102036	20 40 39.27	−45 40 04.1	8.67	H	310.163 630 51	−45.667 814 66	3.24	−1.23	−6.35	1.05	0.82	1.31	1.59	1.09	+29	−23	−21	+17	+13	−16	+ 9	+10	+ 2	+24	0	−0.13
102037	20 40 42.26	+26 04 45.2	6.74	2 H	310.176 087 27	+26.079 215 36	5.82	20.91	−18.72	0.59	0.47	0.73	0.74	0.52	+ 9	+ 0	+ 2	+36	+13	+ 7	+13	+30	+ 3	+19	0	2.10
102038	20 40 42.46	+14 31 36.8	7.85	H	310.176 935 44	+14.526 885 15	5.69	23.27	8.45	0.72	0.61	0.94	0.83	0.64	+25	−22	+ 4	+ 6	+35	+10	+28	+36	+ 9	+34	0	0.97
102039 H	20 40 44.27	−64 11 04.3	7.78	H	310.184 476 35	−64.184 534 40 A	9.16	24.46	−65.14	1.20	1.18	1.59	1.27	1.35	+20	− 9	− 5	+32	+25	+ 4	+27	+ 7	−12	+24	4	−0.34
102040	20 40 45.07	+19 56 05.2	6.43	H	310.187 779 67	+19.934 777 41	47.65	119.13	312.24	0.56	0.42	0.76	0.57	0.43	+20	−24	− 2	+39	+13	− 2	+13	+28	+10	+39	0	−1.49
102041	20 40 45.47	+00 56 21.2	8.82	2 H	310.189 472 28	+00.939 226 67	5.42	−2.63	−21.89	0.96	0.76	1.26	1.30	1.09	+23	−13	−29	− 7	+ 2	+33	+ 7	+39	− 6	+31	0	−0.24
102042	20 40 46.06	−06 47 50.4	8.38	H	310.191 921 38	−06.797 336 54	2.06	42.16	−25.77	0.96	0.82	1.17	1.32	1.11	+42	−17	−13	+29	+15	+12	+16	+65	− 8	+43	5	0.15
102043	20 40 48.08	−69 45 45.7	9.20	H	310.200 325 92	−69.762 695 18	5.80	−17.45	−26.26	0.76	0.92	1.30	0.84	1.13	−38	− 3	− 5	+ 8	−17	−15	+15	+23	+22	−56	2	−2.60
102044 H	20 40 49.01	−55 58 57.3	8.91	H	310.204 195 61	−55.982 582 93 A	6.23	−36.49	−4.26	1.68	1.72	2.19	1.87	1.58	+35	−21	−19	−33	− 1	−18	−14	−44	+26	− 2	2	0.88
102045	20 40 49.10	−60 26 29.0	9.19	G	310.204 567 70	−60.441 396 85	1.87	31.19	−18.25	0.87	0.92	1.37	1.29	1.19	+24	−16	−20	−29	− 2	− 1	+ 0	−20	+26	−28	0	0.20
102046	20 40 49.35	−18 47 29.5	8.24	H	310.205 635 94	−18.791 533 31	15.78	44.38	−428.55	1.08	0.71	1.22	1.29	1.02	+29	+ 3	−23	−26	+ 6	+17	+10	+47	−22	+26	0	−1.56
*102047	20 40 49.64	−25 02 58.6	7.60	2 H	310.206 817 20	−25.049 622 08	1.00	−5.41	−9.71	0.88	0.56	1.02	1.31	0.81	− 1	+ 5	−27	+24	−21	+45	−12	+36	−11	− 9	5	−2.11
*102048	20 40 49.64	+55 24 53.8	9.30	H	310.206 814 61	+55.414 946 58	0.51	−11.02	−10.47	0.78	0.74	0.85	0.87	0.82	− 2	+ 4	+ 0	− 1	+14	− 4	+14	− 6	+ 7	+ 7	0	1.98
102049	20 40 50.04	+35 02 24.5	7.23	H	310.208 482 41	+35.040 141 19	8.02	−14.95	−45.44	0.47	0.51	0.72	0.53	0.56	− 7	+ 8	− 1	− 6	− 9	−28	− 9	−17	+ 6	− 8	0	1.74
102050	20 40 52.38	−28 32 57.3	6.69	H	310.218 240 65	−28.549 257 32	1.46	15.51	−7.07	0.70	0.47	0.83	0.87	0.66	+25	−12	+ 1	− 8	−13	+26	−13	−11	−13	+37	0	0.66
102051	20 40 53.27	+41 12 09.0	7.01	H	310.221 968 87	+41.202 498 82	4.57	7.72	−1.23	0.43	0.50	0.62	0.47	0.52	−12	+ 0	+17	+ 9	− 5	−19	− 1	− 4	+13	−12	0	−0.44
102052	20 40 54.02	+17 34 15.6	6.81	H	310.225 092 39	+17.571 002 11	4.04	16.06	14.07	0.75	0.51	0.91	1.09	0.56	+ 9	+11	+11	+ 6	+29	+14	+21	+23	+20	+26	0	0.35
102053	20 40 54.30	−50 07 12.6	9.29	H	310.226 270 15	−50.120 179 59	1.31	1.48	12.05	1.22	1.08	1.65	2.03	1.34	+16	−13	−25	+16	+11	−28	+ 2	−13	+ 1	+ 6	0	−0.57
102054	20 40 54.58	+62 48 31.7	8.13	H	310.227 399 75	+62.808 797 25	2.03	9.05	13.61	0.65	0.59	0.73	0.64	0.64	+ 6	−17	+11	−30	+17	+25	+ 7	+ 2	+ 5	+39	0	−0.09
102055	20 40 54.70	−08 38 16.5	8.33	H	310.227 932 05	−08.637 924 67	4.48	1.23	−1.28	1.12	0.63	1.31	1.51	0.95	+ 3	− 5	−13	− 3	−14	+25	−13	+37	−27	+ 1	2	−1.24
102056	20 40 55.43	+32 48 34.3	9.39	H	310.230 952 57	+32.809 516 36	2.48	11.26	−10.70	0.75	0.83	1.20	0.84	0.84	−20	+ 3	+ 2	+21	− 2	− 7	+ 0	− 2	+ 7	−13	0	1.12
102057	20 40 55.61	−42 23 48.2	6.25	H	310.231 721 20	−42.396 716 43	6.98	15.08	11.05	0.69	0.46	0.80	0.97	0.63	+16	−24	−10	+ 9	+10	− 2	+ 8	+ 7	+ 2	+24	4	1.72
102058	20 40 57.62	−59 11 26.1	9.30	H	310.240 072 89	−59.190 595 64	4.52	27.38	−27.20	0.84	0.92	1.38	1.29	1.23	+38	−25	− 7	−32	+ 1	−11	+ 3	−26	− 1	− 8	0	−1.06
102059	20 40 58.12	−08 02 36.1	8.07	H	310.242 185 16	−08.043 360 55	4.35	−0.33	−20.52	1.27	0.78	1.38	1.84	1.09	−15	−12	− 1	+51	−32	+11	−31	+67	− 5	−13	0	0.09
102060	20 40 58.35	−17 47 44.5	8.48	H	310.243 143 13	−17.795 691 64	2.46	0.90	0.08	1.12	0.74	1.26	1.31	1.11	+30	−12	−15	−23	+16	+28	+14	+56	−12	+37	0	−0.26
102061 H	20 41 00.19	−14 30 41.1	7.79	G	310.250 792 56	−14.511 416 09 A	3.22	0.65	6.96	1.99	1.45	2.22	2.12	1.77	+37	−24	−14	+ 4	+26	+ 8	+27	+66	−29	+40	5	1.30
102062	20 41 00.36	+39 04 56.4	6.51	H	310.251 499 14	+39.082 322 75	3.21	5.45	−0.22	0.40	0.42	0.56	0.40	0.40	−13	− 5	+20	− 6	− 4	− 1	− 4	− 2	+ 5	− 7	0	0.12
102063	20 41 01.18	−40 34 29.7	9.78	H	310.254 896 46	−40.574 923 19	10.54	26.60	38.62	1.35	0.86	1.59	1.61	1.22	+29	−38	−15	− 5	+ 2	+ 4	+ 6	− 1	− 8	+45	0	−1.02
102064	20 41 01.37	−51 52 50.8	8.87	2 H	310.255 691 34	−51.880 780 60	0.34	10.86	−17.21	1.20	0.93	1.42	1.50	0.92	+16	−14	−14	−21	− 2	− 4	−20	−55	+15	−49	0	0.24
102065	20 41 01.79	+34 17 37.8	8.35	H	310.257 442 60	+34.293 833 74	0.72	8.73	6.57	0.51	0.58	0.80	0.61	0.68	− 7	− 2	+ 2	+18	− 3	−18	− 2	+ 8	+ 6	− 4	0	1.94
102066 H	20 41 02.54	+32 18 26.3	5.53	H	310.260 583 73	+32.307 315 86 A	4.05	2.86	−11.79	0.41	0.44	0.57	0.43	0.42	−18	− 6	− 6	+12	− 4	−14	− 6	− 7	+ 6	−22	1	0.03
102067	20 41 03.04	+71 51 14.2	8.60	H	310.262 681 30	+71.853 948 63	1.32	9.71	−0.63	0.64	0.58	0.66	0.83	0.66	− 2	− 3	+17	−15	+ 8	− 7	+ 7	− 2	+15	+ 6	0	−0.29
102068	20 41 04.96	−64 02 08.0	9.01	H	310.270 651 87	−64.035 550 48	2.87	3.15	−24.47	0.90	0.93	1.32	0.97	1.13	+28	− 5	− 8	+43	+27	+ 4	+32	+14	+ 2	+38	0	−1.80
102069	20 41 06.00	−55 36 19.1	7.50	H	310.274 984 43	−55.605 297 10	5.69	91.87	−35.69	0.79	0.67	1.01	0.92	0.65	+ 5	−19	−25	−53	+11	+ 3	+ 9	−47	+11	−12	2	1.23
102070	20 41 06.76	−61 35 32.3	8.46	H	310.278 155 32	−61.592 292 06	7.52	29.72	−18.28	0.54	0.65	1.05	0.53	0.67	+10	−15	− 7	+54	+ 3	− 1	− 2	+24	− 8	− 9	0	−0.39
102071	20 41 06.97	−69 31 16.4	8.38	H	310.279 040 43	−69.521 219 68	2.70	11.37	−13.96	0.57	0.64	0.97	0.63	0.81	−32	−13	+ 9	+ 6	− 7	−19	− 5	+17	+16	−43	1	−1.69
102072	20 41 07.35	−09 38 39.9	8.10	H	310.280 623 02	−09.644 402 99	5.43	80.15	−40.94	1.15	0.76	1.30	1.99	1.18	+ 3	− 1	−31	+31	−15	+14	− 7	+60	−33	−13	5	−1.79
102073	20 41 07.75	−45 48 44.3	9.24	H	310.282 288 98	−45.812 296 81	6.91	−82.42	−127.01	0.98	0.78	1.23	1.53	1.03	+ 9	− 4	−19	+20	− 5	− 9	− 8	− 2	+ 6	− 1	0	0.08
102074	20 41 08.47	+44 21 27.8	8.36	H	310.285 281 88	+44.357 729 86	0.36	−11.04	−12.72	0.65	0.57	0.77	0.72	0.60	−11	+ 0	+ 7	− 5	+ 4	+ 6	+ 4	− 6	+ 5	− 9	0	1.60
102075	20 41 11.98	+06 10 21.0	9.01	H	310.299 933 57	+06.172 489 17	6.72	9.44	−39.61	1.29	0.89	1.55	1.51	1.16	+12	−35	−15	+ 9	+12	+12	+13	+53	− 8	+15	0	−0.03
102076	20 41 12.08	+18 12 13.8	8.69	H	310.300 337 00	+18.203 826 61	8.22	51.71	−10.86	1.24	0.83	1.30	2.88	1.14	+10	−19	− 4	−48	+12	+21	− 3	−20	− 5	+28	0	1.44
102077	20 41 12.20	+12 39 07.5	8.65	H	310.300 841 87	+12.652 075 79	10.02	−10.03	−40.18	0.92	0.68	1.15	1.21	0.72	+20	− 1	− 3	+10	+34	+ 4	+27	+24	+16	+33	4	−0.45
102078	20 41 12.91	−13 30 01.0	7.30	H	310.303 809 78	−13.500 289 59	4.76	14.23	−14.95	1.04	0.58	1.13	1.55	0.84	+ 3	−15	−13	+ 0	− 9	−11	+ 2	+48	−16	−16	0	1.25
102080	20 41 16.21	+14 34 58.4	6.01	H	310.317 556 70	+14.582 878 86	6.68	−8.52	0.39	0.58	0.46	0.75	0.74	0.48	+ 7	−17	+ 3	+ 6	+28	+12	+21	+11	+15	+22	0	−1.44
102081	20 41 18.10	+30 11 28.9	8.18	H	310.325 429 09	+30.191 366 04	16.70	231.11	−37.37	0.45	0.60	0.85	0.54	0.65	−18	+ 0	− 2	+28	+ 4	− 9	+ 5	− 6	+ 4	−13	0	−1.58
102082	20 41 18.28	+48 08 28.9	9.11	3 H	310.326 149 33	+48.141 373 78 *	3.69	−6.43	−12.62	1.31	1.28	1.77	1.53	0.99	+20	+23	+55	−46	−23	−31	− 4	−25	+ 5	+ 1	0	0.61
102083	20 41 18.28	+31 15 00.9	7.38	H	310.326 178 45	+31.250 262 19	1.36	2.78	−17.20	0.38	0.49	0.75	0.43	0.52	−41	− 3	+ 4	− 5	− 3	−10	− 3	−14	+10	−48	0	0.52
102084	20 41 18.52	+29 21 34.4	8.05	G	310.327 146 79	+29.359 545 72	4.59	13.79	−15.38	0.53	0.60	0.94	0.58	0.66	−12	− 7	+ 7	+13	+13	+ 0	+16	− 2	− 7	+ 9	0	0.40
102085	20 41 19.15	−17 22 42.4	6.95	H	310.329 777 07	−17.378 432 86	2.89	−1.06	−7.70	0.97	0.58	1.07	1.15	0.85	+24	−18	−15	−29	+ 2	+27	+ 3	+40	−11	+25	0	0.42
102086	20 41 20.41	+27 39 21.7	8.22	H	310.335 049 28	+27.656 015 13	4.02	0.25	−16.06	0.49	0.57	0.91	0.59	0.65	−10	− 3	+20	− 9	− 3	−13	+ 1	−15	+ 1	+14	0	−0.62
*102087	20 41 21.68	−80 52 59.0	9.15	H	310.340 341 02	−80.883 048 64	9.73	67.67	−153.29	0.71	0.69	0.91	0.84	0.80	+ 9	−20	− 2	−23	+ 6	+ 1	+ 5	−42	−15	−11	1	−2.15
*102088	20 41 21.55	+52 35 15.2	10.31	1 G	310.339 808 18	+52.587 547 76	−0.34	−7.61	−2.36	1.11	1.00	1.20	1.41	1.15	−12	−12	+ 4	+16	+ 9	− 5	+ 7	−10	+ 4	−15	1	−0.02
*102089	20 41 21.63	+31 52 11.9	9.51	H	310.340 128 30	+31.869 985 61	1.83	5.74	6.96	0.70	0.77	1.18	0.84	0.80	−31	− 4	+ 2	+21	−19	+ 3	−18	+ 7	− 1	−38	0	0.10
102090	20 41 21.87	+72 58 27.9	7.27	H	310.341 114 84	+72.974 409 79	6.72	−13.49	−8.29	0.53	0.51	0.57	0.63	0.58	− 9	− 5	+19	+17	+ 5	+ 1	+ 4	+10	+19	−11	0	0.89
102091	20 41 23.01	+21 38 54.7	8.67	H	310.345 877 00	+21.648 522 09	0.53	3.93	−8.13	0.90	0.68	1.14	1.00	0.67	− 3	−10	−13	+ 9	+15	− 4	+13	+ 6	+ 3	+ 7	0	0.00
102092	20 41 23.58	−31 35 53.3	5.75	1 H	310.348 260 07	−31.598 142 37	7.78	110.84	−60.44	0.73	0.46	0.78	0.91	0.65	+17	−19	−17	− 2	+13	+28	+19	+35	− 8	+21	0	0.63
102093	20 41 24.05	+29 19 58.8	8.37	H	310.350 215 00	+29.333 011 94	1.50	3.50	5.04	0.64	0.68	1.08	0.73	0.79	− 4	− 3	− 8	+ 1	+20	−10	+11	− 1	−23	+14	0	−1.44
102094	20 41 24.26	−25 59 59.5	6.29	H	310.351 066 63	−25.999 850 39	5.06	9.39	−25.13	0.73	0.44	0.80	0.94	0.63	+11	−13	− 6	+ 6	+ 1	+24	+ 1	+19	− 2	+23	0	−0.15
102095	20 41 24.54	−05 59 52.6	7.35	H	310.352 253 58	−05.997 955 31	3.44	5.61	−2.64	1.16	0.71	1.32	1.69	0.99	−14	+ 1	−42	+52	−37	+32	−28	+69	−26	−21	0	0.66
102096	20 41 24.63	−42 08 01.3	6.28	2 H	310.352 613 83	−42.133 699 67	3.49	48.91	−33.19	0.71	0.48	0.80	0.97	0.65	+17	−25	−11	− 1	+11	+ 4	+11	+ 3	− 1	+24	2	0.80
102097	20 41 25.20	+54 12 34.0	7.99	H	310.355 015 83	+54.209 449 73	1.12	−2.37	−10.77	0.57	0.54	0.62	0.72	0.60	−10	− 4	− 1	+28	+ 4	−11	+ 1	− 5	+10	−16	0	0.85
102098	20 41 25.91	+45 16 49.2	1.25	2 G	310.357 972 70	+45.280 334 23	1.01	1.56	1.55	0.52	0.42	0.57	0.62	0.41	−10	−15	+ 2	−21	− 6	+ 9	− 7	−24	+23	−16	4	0.46
102099	20 41 26.94	−07 11 45.6	8.26	H	310.362 244 66	−07.196 008 68	4.28	6.16	−18.33	0.91	0.68	1.13	1.25	0.92	+27	−12	−12	+28	−13	+ 5	−11	+50	−15	+28	0	−1.62
102100	20 41 27.35	+33 42 33.8	7.71	H	310.363 945 56	+33.709 402 73	2.18	−8.88	8.08	0.48	0.52	0.74	0.58	0.61	−19	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
102001	9.459	0.017	9.340	0.021		0.115	0.025	T	0.13	0.03	L	9.3606	0.0022	0.022	123		9.33	9.40					1							
102002	9.611	0.016	9.540	0.022	A	0.000	0.495	G	0.09	0.06	L *	9.3970	0.0025	0.023	137	*	9.36	9.43		D	20402+5427	I 1	2 C	A	AB	49	1.368	0.008	1.07	0.03	
102003	9.254	0.014	8.174	0.010		0.934	0.013	T	0.93	0.01	L	8.2421	0.0013	0.013	113		8.22	8.26		C			1							
102004	10.575	0.035	9.292	0.019		1.092	0.031	T	1.05	0.03	L	9.3384	0.0024	0.023	152		9.29	9.38		C			1							
102005	9.268	0.017	8.893	0.017		0.355	0.022	T	0.42	0.02	L	8.9608	0.0016	0.013	106		8.94	8.98		C			1							
102006	8.849	0.016	8.260	0.014		0.551	0.016	T	0.62	0.01	L	8.3143	0.0026	0.017	82		8.27	8.35		C	20403−5114	I 1	1							S
102007	9.970	0.021	8.648	0.012		1.122	0.019	T	1.08	0.02	L	8.6817	0.0024	0.024	124		8.65	8.73					1 G							
102009	9.538	0.021	8.578	0.015		0.844	0.019	T	0.86	0.01	L	8.6216	0.0014	0.012	90		8.60	8.64		C	20403+0041	I 1	1							
102010	8.398	0.012	7.057	0.007	A	1.137	0.011	T	1.10	0.01	L	7.1056	0.0080	0.014	81	A	7.09	7.13			20403+0327	I 1	2 C	B	AB	84	16.740	0.055	3.35	0.16	S
102011	6.537	0.004	6.067	0.004		0.443	0.005	T	0.51	0.01	L	6.1182	0.0009	0.007	108		6.11	6.13					1							S
102012	8.171	0.009	8.181	0.011		−0.004	0.013	T	0.02	0.01	L	8.1860	0.0012	0.013	107		8.16	8.21					1							
102013	7.878	0.006	7.519	0.007		0.340	0.009	T	0.40	0.01	L	7.5620	0.0011	0.012	139		7.55	7.59					1							S
102014	6.917	0.005	5.594	0.004		1.118	0.000	G	1.08	0.00	H	5.6410	0.0008	0.005	81		5.63	5.65		C			1							S
102015	9.496	0.018	8.152	0.011		1.134	0.020	G	1.11	0.02	A	8.1835	0.0015	0.012	85		8.16	8.21		C			1							
102016	8.792	0.010	8.102	0.009		0.637	0.011	T	0.70	0.01	L	8.1582	0.0011	0.012	150		8.14	8.18		C			1							
102017	10.398	0.053	8.751	0.023		1.378	0.046	T	1.35	0.06	L	8.6931	0.0024	0.016	95		8.66	8.73					1							
102018	7.938	0.008	7.261	0.009		0.607	0.008	G	0.68	0.01	H	7.3392	0.0010	0.007	76		7.33	7.35		C			1							S
102019	9.142	0.016	7.607	0.009		1.289	0.014	T	1.25	0.01	L	7.6333	0.0016	0.011	82		7.61	7.66					1							S
102020	9.116	0.016	7.866	0.010		1.066	0.015	T	1.03	0.01	L	7.9204	0.0013	0.009	76		7.90	7.94		C			1							S
102021	9.237	0.017	8.546	0.015		0.626	0.017	T	0.69	0.01	L	8.6069	0.0022	0.014	80		8.59	8.64		C			1 G							S
102022	11.022	0.062	10.279	0.051		0.665	0.061	T	0.73	0.05	L	10.3490	0.0035	0.026	78		10.29	10.38		C			1							G
102023	9.712	0.023	8.922	0.019		0.679	0.003	G	0.74	0.00	H	8.9833	0.0022	0.016	73		8.95	9.01		C			1							
102024	10.383	0.040	9.142	0.022		1.059	0.036	T	1.03	0.03	L	9.1872	0.0016	0.014	72		9.15	9.21		C			1							
102025	11.806	0.149	10.192	0.054		1.095	0.015	G	1.17	0.02	I	10.1885	0.0031	0.029	67		10.15	10.24					1							
102026	7.064	0.006	5.904	0.004		0.997	0.002	G	0.98	0.00	H	5.9557	0.0006	0.005	71		5.95	5.96		C			1							S
102027	7.320	0.006	7.334	0.006		−0.008	0.008	T	0.01	0.01	L	7.3475	0.0013	0.012	120		7.32	7.37					1							S
102028	10.377	0.043	8.962	0.022		1.195	0.038	T	1.15	0.03	L	9.0262	0.0017	0.013	78		8.99	9.06		C			1							
102029	7.299	0.008	6.812	0.007	*	0.458	0.010	T	0.53	0.01	L *	6.8665	0.0008	0.006	95	*	6.86	6.88		D	20406+1539	H 1	2 C	A	AB	101	0.220	0.004	0.87	0.07	S
102030	8.018	0.006	7.756	0.010		0.208	0.002	G	0.23	0.00	H	7.7953	0.0017	0.010	71		7.78	7.82		C			1							S
102031	7.302	0.006	7.358	0.007	*	−0.046	0.008	T	−0.02	0.01	L *	7.3522	0.0012	0.009	99	*	7.34	7.37		D	20406+2156	I 1	2 C	A	AB	250	0.240	0.004	0.55	0.10	S
102032	7.226	0.007	6.578	0.006		0.594	0.007	T	0.66	0.01	L	6.6346	0.0010	0.007	70		6.62	6.65		C			1							S
102033	6.223	0.002	6.045	0.002	*	0.163	0.003	T	0.18	0.00	L *	6.0748	0.0006	0.006	186	*	6.06	6.08		D	20406+2948	I 1	2 C	A	AB	337	0.756	0.009	3.12	0.04	S
102034	8.027	0.005	7.928	0.007		0.097	0.008	T	0.11	0.01	L	7.9563	0.0011	0.015	254		7.93	7.98					1							S
102035	9.218	0.012	8.131	0.008		0.940	0.011	T	0.93	0.01	L	8.1743	0.0012	0.013	161		8.15	8.20		C			1							
102036	9.925	0.024	8.763	0.016		0.997	0.022	T	0.98	0.02	L	8.8344	0.0019	0.018	82		8.80	8.86					1							
102037	6.817	0.005	6.758	0.006		0.059	0.007	T	0.07	0.01	L	6.7707	0.0013	0.011	109		6.76	6.82		U 2 C			1							S P
102038	7.945	0.008	7.853	0.010		0.090	0.012	T	0.10	0.01	L	7.8884	0.0019	0.014	107		7.87	7.91					1							S
102039	8.937	0.011	7.943	0.008	*	0.870	0.010	T	0.88	0.01	L *	7.9395	0.0018	0.014	125	*	7.92	7.98		D	20407−6411	I 1	2 C	A	AB	67	0.704	0.004	1.24	0.02	S
102040	7.195	0.005	6.498	0.005		0.611	0.009	G	0.71	0.03	G	6.5617	0.0008	0.007	122		6.55	6.58			20408+1956	I 1	1							S
102041	9.468	0.020	8.921	0.019		0.512	0.025	T	0.58	0.03	L	8.9380	0.0035	0.107	89		8.90	9.29	2.37	P 1 A			1							
102042	9.189	0.012	8.471	0.011		0.660	0.013	T	0.72	0.01	L	8.5193	0.0012	0.013	137		8.49	8.54		C			1							S
102043	10.015	0.018	9.300	0.015		0.657	0.019	T	0.72	0.02	L	9.3405	0.0022	0.025	189		9.29	9.39					1							
102044	9.410	0.015	8.972	0.015	*	0.427	0.017	T	0.49	0.02	L *	9.0078	0.0020	0.018	110	*	8.98	9.04			20408−5559	H 1	2 C	B	AB	218	0.814	0.050	3.47	0.24	
102045	10.410	0.038	9.260	0.024		0.944	0.003	G	0.93	0.00	I	9.3718	0.0017	0.021	133		9.34	9.42					1							
102046	8.819	0.016	8.298	0.015		0.489	0.020	T	0.56	0.02	L	8.3456	0.0016	0.012	73		8.32	8.37		C			1							S
102047	9.752	0.027	7.806	0.011		1.650	0.024	T	2.11	0.06	O	7.6712	0.0021	0.015	77		7.65	7.71		U 2			1							S
102048	11.637	0.100	9.486	0.025		1.778	0.082	T	1.81	0.08	L	9.3982	0.0030	0.025	107		9.36	9.44					1							
102049	7.768	0.006	7.282	0.006		0.457	0.008	T	0.53	0.01	L	7.3295	0.0012	0.011	152		7.31	7.35		C			1							S
102050	8.336	0.013	6.822	0.007		1.273	0.012	T	1.23	0.01	L	6.8457	0.0007	0.008	84		6.83	6.86		D			1							S
102051	6.936	0.004	6.994	0.006		−0.067	0.009	G	−0.04	0.01	H	6.9987	0.0007	0.008	128		6.98	7.01		C			1							S
102052	6.727	0.006	6.796	0.006		−0.058	0.008	T	−0.04	0.01	L	6.8000	0.0010	0.008	71		6.78	6.81					1							S
102053	10.748	0.050	9.379	0.027		1.159	0.045	T	1.12	0.04	L	9.4537	0.0021	0.016	65		9.43	9.49					1							
102054	9.434	0.016	8.236	0.010		1.025	0.015	T	1.00	0.01	L	8.2981	0.0017	0.013	101		8.27	8.32		C			1							S
102055	9.645	0.022	8.447	0.014		1.025	0.020	T	1.00	0.02	L	8.4934	0.0014	0.010	74		8.48	8.52		C			1							
102056	11.176	0.044	9.534	0.017		1.374	0.037	T	1.34	0.04	L	9.5411	0.0021	0.027	192		9.48	9.59					1							G
102057	7.439	0.007	6.359	0.004		0.934	0.006	T	0.93	0.00	L	6.4146	0.0014	0.011	95		6.40	6.43			20409−4224	I 1	1							S
102058	9.830	0.018	9.339	0.018		0.474	0.020	T	0.55	0.02	L	9.3998	0.0020	0.020	149		9.37	9.43					1							
102059	9.340	0.018	8.180	0.012		0.996	0.017	T	0.97	0.01	L	8.2348	0.0015	0.014	90		8.22	8.27		C			1							S
102060	8.639	0.014	8.461	0.016		0.163	0.020	T	0.18	0.02	L	8.5327	0.0009	0.011	66		8.51	8.55					1							
102061	8.134	0.010	7.841	0.012	A	0.288	0.015	G	0.33	0.02	H *	7.8467	0.0011	0.010	78	*	7.83	7.87		D	20410−1431	I 1	2 C	D	AB	226	2.828	0.033	3.10	0.13	S D
102062	6.361	0.003	6.482	0.004		−0.105	0.004	T	−0.09	0.01	L	6.4802	0.0011	0.009	147		6.47	6.50			20410+3905	I 1	1							S
102063	10.725	0.039	9.863	0.029		0.770	0.020	G	0.81	0.02	H	9.9249	0.0035	0.027	90		9.88	9.98					1							
102064	11.040	0.071	9.083	0.023		1.659	0.061	T	2.28	0.12	O	8.9165	0.0071	0.064	96		8.86	9.05		U 2			1							
102065	8.533	0.009	8.361	0.011		0.168	0.015	G	0.18	0.01	H	8.4040	0.0013	0.015	157		8.38	8.43		C			1							
102066	6.620	0.004	5.624	0.003	*	0.871	0.004	T	0.88	0.00	L *	5.6858	0.0005	0.006	213	*	5.68	5.70		D	20411+3218	I 1	2 C	A	AB	46	2.758	0.003	2.23	0.02	S
102067	8.905	0.012	8.638	0.013		0.254	0.017	T	0.29	0.02	L	8.6749	0.0013	0.010	103		8.65	8.70					1							
102068	10.313	0.026	9.123	0.016		1.019	0.024	T	0.99	0.02	L	9.1739	0.0022	0.023	131		9.13	9.21					1							
102069	8.796	0.011	7.610	0.007		1.016	0.010	T	0.99	0.01	L	7.6693	0.0013	0.013	115		7.65	7.69					1							S
102070	8.744	0.010	8.488	0.011		0.240	0.015	T	0.27	0.02	L	8.5312	0.0014	0.018	189		8.50	8.56					1							S P
102071	8.411	0.007	8.373	0.008		0.035	0.009	T	0.05	0.01	L	8.3960	0.0015	0.017	194		8.37	8.43					1							S
102072	9.468	0.020	8.220	0.013		1.064	0.019	T	1.03	0.02	L	8.2735	0.0010	0.010	80		8.26	8.29		D			1							
102073	10.038	0.027	9.334	0.024		0.636	0.027	T	0.70	0.02	L	9.3734	0.0025	0.021	81		9.34	9.41		C			1							
102074	8.496	0.008	8.375	0.010		0.109	0.012	T	0.12	0.01	L	8.4049	0.0012	0.013	130		8.38	8.43					1							
102075	9.900	0.029	9.115	0.023		0.713	0.029	T	0.77	0.02	L	9.1536	0.0018	0.018	79		9.13	9.18		C			1							
102076	9.310	0.018	8.769	0.017		0.507	0.022	T	0.58	0.02	L	8.8041	0.0021	0.017	80		8.78	8.84					1 G							
102077	9.366	0.016	8.699	0.014		0.618	0.018	T	0.69	0.02	L	8.7782	0.0016	0.015	105		8.76	8.81		C			1							S
102078	8.792	0.013	7.429	0.008		1.154	0.012	T	1.12	0.01	L	7.4703	0.0009	0.009	81		7.45	7.49					1							S
102080	7.623	0.007	6.147	0.005		1.235	0.006	G	1.19	0.01	H	6.1719	0.0008	0.006	103		6.16	6.18		C			1							S
102081	9.005	0.009	8.239	0.008		0.670	0.015	G	0.73	0.01	H	8.3157	0.0011	0.014	217		8.29	8.34		C			1							
102082						2.450	0.510	G	2.45	0.52	J	9.1363	0.0787	0.715	80		8.31	10.53	417.00	P 1 A			1 V							G
102083	8.908	0.007	7.508	0.004		1.183	0.006	T	1.14	0.01	L	7.5483	0.0009	0.013	284		7.53	7.57					1							S
102084	8.665	0.009	8.103	0.008		0.526	0.011	T	0.60	0.01	L	8.1659	0.0013	0.015	145		8.14	8.19		C			1							
102085	8.581	0.013	7.101	0.007		1.246	0.012	T	1.20	0.01	L	7.1093	0.0012	0.008	70		7.10	7.12		C			1							S
102086	8.389	0.007	8.238	0.008		0.145	0.010	T	0.16	0.01	L	8.2711	0.0012	0.016	186		8.25	8.29		C			1							
102087	9.959	0.019	9.184	0.015		0.689	0.018	T	0.75	0.01	L	9.2929	0.0019	0.022	141		9.25	9.32					1							
102088	10.954	0.047	10.355	0.043		0.554	0.008	G	0.63	0.01	H	10.4384	0.0045	0.036	116		10.38	10.51	4.32	P 1 A			1							G
102089	9.729	0.015	9.527	0.018		0.193	0.022	T	0.21	0.03	L	9.5736	0.0020	0.026	220		9.52	9.62					1							G
102090	8.719	0.013	7.383	0.008		1.133	0.012	T	1.10	0.01	L	7.4415	0.0008	0.007	96		7.43	7.46					1							S
102091	10.772	0.053	8.847	0.017		1.632	0.046	T	1.77	0.12	O	8.7668	0.0017	0.015	100		8.75	8.79		C			1							
102092	7.767	0.007	5.940	0.005		1.551	0.007	T	1.91	0.04	O	5.8406	0.0021	0.011	81		5.82	5.86		U 2			1							S
102093	9.552	0.015	8.456	0.010		0.947	0.014	T	0.94	0.01	L	8.5320	0.0014	0.014	144		8.50	8.56		C			1 G							
102094	7.893	0.008	6.430	0.004		1.224	0.004	G	1.18	0.00	K	6.4537	0.0011	0.008	78		6.44	6.47					1							S
102095	8.627	0.012	7.447	0.008		1.011	0.011	T	0.99	0.01	L	7.5159	0.0011	0.011	95		7.50	7.54		C			1							S
102096	8.315	0.012	6.511	0.007		1.584	0.019	G	2.50	0.05	F	6.2990	0.0039	0.032	91		6.21	6.34		U 2			1	S						S
102097	8.108	0.009	7.988	0.011		0.116	0.013	T	0.13	0.01	L	8.0300	0.0016	0.013	131		8.01	8.05		C			1							S
102098	1.471	0.007	1.343	0.007		0.092	0.007	G	0.16	0.03	C	1.2966	0.0021	0.016	110		1.27	1.34		U 2	20415+4517	I 1	1							S P
102099	9.602	0.016	8.380	0.010		1.044	0.015	T	1.01	0.01	L	8.4255	0.0012	0.011	139		8.41	8.45		C			1							
102100	8.920	0.011	7.821	0.007		0.949	0.010	T	0.94	0.01	L	7.8763	0.0010	0.013	176		7.85	7.90					1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s	±° ′ ″	mag	6 7	deg	deg	10	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	% 29	30
	3	4	5		8	9		11	12	13	14	15	16	17	18											
102101	20 41 28.06	+57 25 45.5	10.27	G	310.366 897 50	+57.429 297 57		41.74	97.19	207.01	1.03	1.03	1.15	1.10	1.19	− 2	− 6	+ 6	+ 8	+14	− 7	+17	− 7	+ 3	+ 8	0	−0.64
*102102	20 41 28.88	−48 12 38.8	10.20	2 G	310.370 344 61	−48.210 778 30		3.74	34.43	19.82	1.73	1.27	1.78	2.62	2.03	+17	−19	−16	+55	− 5	+ 7	−13	+29	+13	− 6	5	0.13
*102103	20 41 28.84	−73 37 35.3	9.42	H	310.370 166 75	−73.626 475 43		2.49	33.84	−30.69	0.84	0.96	1.32	1.10	1.10	− 8	−16	−18	+18	+15	−24	+10	+11	− 4	−12	1	1.94
102104	20 41 30.01	+84 36 50.0	8.49	H	310.375 021 55	+84.613 893 37		5.31	−8.93	−12.76	0.66	0.64	0.71	0.74	0.83	+ 0	−13	− 9	+ 3	+12	+ 1	+13	+ 0	+ 4	+ 9	0	2.13
102105	20 41 32.12	+35 54 40.2	7.47	H	310.383 840 31	+35.911 168 47		4.57	−27.77	−63.68	0.48	0.55	0.73	0.53	0.58	− 9	− 5	− 1	+ 3	+ 2	−14	+ 2	−24	+ 8	− 7	0	1.19
102106	20 41 32.80	+15 23 09.1	7.86	H	310.386 676 83	+15.385 869 67		6.09	14.32	3.30	0.73	0.59	0.94	0.89	0.62	+25	−13	+ 8	+15	+31	+23	+26	+26	+ 9	+37	0	−1.88
102107	20 41 32.90	−31 38 35.1	8.92	H	310.387 092 20	−31.643 069 87		1.98	15.96	−19.72	1.13	0.85	1.25	1.40	1.04	+37	−33	−32	−12	+ 7	+29	+20	+18	−15	+15	0	0.33
102108	20 41 33.34	−27 59 41.5	7.63	H	310.388 903 97	−27.994 865 18		4.43	21.95	−11.89	0.91	0.51	0.96	1.24	0.71	+ 7	−15	− 2	+20	−16	+14	−13	+ 6	−12	+10	0	−0.19
102109	20 41 33.44	+33 01 40.4	8.60	H	310.389 349 77	+33.027 875 04		1.98	2.71	−4.27	0.53	0.57	0.83	0.59	0.62	−19	− 3	− 3	+14	− 6	−13	− 7	+ 0	+ 6	−23	0	0.82
102110	20 41 33.84	+35 43 51.5	8.05	2 H	310.390 991 00	+35.730 975 00		3.02	−3.19	−14.09	0.53	0.59	0.80	0.56	0.60	−14	− 2	+ 1	− 8	+ 8	− 5	+ 8	−23	+ 2	−13	0	0.69
102111	20 41 34.67	+59 59 11.9	10.48	H	310.394 450 62	+59.986 640 47		2.79	−4.70	−1.72	1.08	1.01	1.16	1.21	1.11	− 1	− 8	+18	+10	+ 5	+ 1	+ 5	+ 4	− 4	+ 9	3	1.13
102112	20 41 36.23	−42 15 56.9	9.67	H	310.400 971 87	−42.265 807 62		1.28	−3.51	−8.67	1.29	0.90	1.46	1.80	1.21	+24	−17	− 8	+17	+17	+ 7	+18	+12	+ 0	+40	0	−1.03
102113 H	20 41 37.06	+43 50 12.3	8.36	2 G	310.404 435 96	+43.836 758 51	A	2.38	3.46	−2.17	1.03	1.00	1.14	1.10	1.02	−10	− 6	+ 1	+ 0	+ 6	− 5	+10	−14	+ 2	+ 0	1	0.44
102114	20 41 37.64	+13 48 31.7	6.81	H	310.406 848 83	+13.808 804 73		6.32	20.82	−0.15	0.61	0.48	0.77	0.71	0.51	+14	−22	− 5	− 3	+36	+ 8	+25	+27	+16	+28	2	0.26
102115	20 41 40.65	−05 29 34.8	10.53	G	310.419 381 39	−05.493 006 24		35.83	82.40	64.28	1.94	1.47	2.50	3.00	2.07	+18	−13	−35	+40	−15	+27	− 2	+68	−25	+ 9	0	−0.14
102116	20 41 40.89	−01 47 27.3	8.13	H	310.420 379 16	−01.790 922 79		5.78	11.72	10.36	1.12	0.79	1.37	1.72	1.00	−17	+ 0	−53	+59	−50	+41	−33	+65	−42	−39	0	1.76
102117	20 41 41.49	+11 33 58.4	7.49	H	310.422 891 80	+11.566 208 79		3.23	15.14	−15.54	0.71	0.53	0.89	0.95	0.59	+28	−14	− 7	+18	+23	+15	+21	+12	+ 9	+44	0	2.70
102118	20 41 41.58	+38 14 21.9	7.98	H	310.423 243 31	+38.239 414 37		4.38	6.79	10.50	0.52	0.51	0.70	0.57	0.55	− 9	− 3	+14	− 2	− 5	− 8	− 4	+ 0	+ 2	+ 3	0	0.97
*102119	20 41 41.83	−22 19 15.8	9.83	2 H	310.424 301 15	−22.321 056 28		43.42	659.18	−535.63	1.48	0.89	1.48	1.85	1.50	+ 4	−21	+ 0	−30	+15	+15	+ 5	+23	− 7	+31	2	0.29
*102120	20 41 41.80	+24 10 57.0	6.92	H	310.424 183 47	+24.182 494 88		2.07	6.11	−4.40	0.50	0.47	0.71	0.50	0.50	+ 7	+ 7	− 1	+39	+12	− 9	+17	+14	+17	+21	0	3.91
102121	20 41 41.87	+36 45 48.9	8.26	H	310.424 451 74	+36.763 588 24		2.07	−0.37	0.31	0.58	0.56	0.80	0.62	0.64	−10	+ 0	− 4	+ 7	− 1	− 8	+ 0	− 2	− 2	+ 5	2	1.66
102122	20 41 42.38	+43 26 35.7	7.86	G	310.426 580 79	+43.443 249 29		4.07	8.70	12.22	0.56	0.55	0.71	0.62	0.60	− 6	+10	+ 3	+15	+ 8	−11	+11	− 3	+ 4	+ 1	1	0.86
102123	20 41 43.20	−40 25 23.4	8.72	H	310.430 002 27	−40.423 175 83		2.31	5.34	−13.43	1.03	0.69	1.22	1.31	1.01	+29	−34	− 6	− 2	+ 5	+13	+ 4	+ 1	+ 5	+49	0	1.20
102124	20 41 43.28	−12 20 19.0	8.88	G	310.430 328 96	−12.338 599 05		7.08	−35.94	−19.67	1.05	0.72	1.26	1.32	1.02	+17	−21	− 6	+ 1	+12	+38	+14	+56	−14	+17	0	−1.15
102125	20 41 43.74	−75 21 01.5	6.51	G	310.432 259 74	−75.350 410 89	A	22.95	151.42	−161.48	1.91	2.08	2.10	2.00	2.13	−19	− 6	− 6	−12	+ 5	− 4	+ 4	− 7	− 2	−35	0	−1.36
102126	20 41 43.79	+32 46 26.5	9.46	H	310.432 467 40	+32.774 030 55		1.85	−0.40	−1.55	0.70	0.78	1.13	0.81	0.82	−24	− 8	+ 1	+23	−13	−14	−14	+ 5	+13	−29	0	0.76
102127	20 41 44.40	+28 16 11.0	8.16	H	310.435 003 91	+28.269 727 67		5.26	−1.52	−13.50	0.48	0.55	0.83	0.55	0.65	+ 1	+ 6	+ 6	− 5	− 4	−15	− 4	+ 0	− 3	+21	0	0.13
102128	20 41 45.14	−75 20 45.5	7.18	G	310.438 080 85	−75.345 985 34	B	25.35	153.68	−170.29	10.42	11.55	7.15	6.66	7.31	−16	−11	− 6	− 6	+ 4	− 5	+ 2	− 6	+ 0	−33	0	−1.36
102129	20 41 45.22	−67 02 57.3	8.44	H	310.438 408 82	−67.049 248 36		3.54	−4.75	−8.42	0.51	0.65	1.08	0.54	0.76	−48	−11	+ 2	−13	+15	− 6	+16	+11	− 6	−44	0	−0.78
102130	20 41 45.64	−10 56 43.7	8.02	H	310.440 186 09	−10.945 479 66		18.55	21.88	−6.14	1.08	0.68	1.18	1.36	0.98	+12	−10	− 7	−16	+18	+34	+22	+53	− 2	+14	0	−0.09
102131	20 41 45.98	+12 31 07.4	7.76	G	310.441 573 09	+12.518 708 37	A	12.29	50.24	−32.09	1.53	1.14	1.42	1.73	1.11	+34	+ 5	− 6	+ 3	+27	+ 4	+21	+25	+16	+49	3	1.11
102132	20 41 46.01	+12 31 19.7	10.70	H	310.441 717 07	+12.522 140 79	B	−3.12	46.27	−27.13	30.98	23.41	14.51	18.13	10.49	+31	+ 2	− 4	+ 3	+30	+ 3	+23	+16	+18	+47	3	1.11
102133	20 41 46.40	−68 08 06.4	8.37	H	310.443 318 47	−68.135 099 17		6.43	14.58	17.60	0.50	0.63	0.94	0.58	0.78	−22	−15	− 3	− 4	+ 8	+ 0	+10	+ 8	−11	−24	1	1.34
102134	20 41 46.68	−28 45 42.8	7.59	G	310.444 514 32	−28.761 901 83		7.82	34.85	29.23	0.75	0.48	0.90	0.95	0.70	+20	− 9	+11	− 6	− 5	+23	− 6	− 9	−17	+41	0	−0.75
102135	20 41 48.39	−03 24 06.8	8.45	H	310.451 645 40	−03.401 882 48		5.43	−28.60	−50.30	1.06	0.74	1.17	1.44	1.04	+ 3	−24	− 5	+48	− 7	+18	− 8	+67	+ 3	+ 7	2	−1.91
102136	20 41 48.47	−47 54 45.7	8.49	H	310.451 938 31	−47.912 684 82		2.20	−4.87	3.67	1.11	0.79	1.18	1.58	1.04	+28	−26	−16	+37	+10	+ 3	+11	+ 8	− 6	+24	0	2.21
102137	20 41 49.50	+22 34 21.2	8.47	H	310.456 248 66	+22.572 556 79		2.64	2.97	−7.83	0.62	0.58	0.94	0.76	0.58	+14	−20	+ 9	+26	+18	+ 6	+12	+24	+15	+22	0	0.42
102138	20 41 49.68	+22 59 00.2	8.05	H	310.457 010 39	+22.983 385 96		2.61	3.99	−6.17	0.61	0.60	1.01	0.76	0.59	+ 9	−26	+19	+17	+14	+ 7	+ 7	+23	+15	+20	0	0.52
102139	20 41 50.35	−02 01 18.7	8.34	H	310.459 776 33	−02.021 852 61		9.96	−27.21	−40.92	1.01	0.81	1.37	1.60	1.01	+ 3	− 1	−52	+44	−31	+39	− 9	+70	−39	−20	2	−0.24
102140	20 41 50.81	+54 01 52.5	9.58	H	310.461 702 52	+54.031 262 03		0.11	−1.69	−7.87	0.79	0.75	0.89	0.95	0.87	− 5	−13	+ 0	+16	+ 1	−14	− 1	− 1	+ 6	− 9	0	−0.67
102141 H	20 41 50.97	−32 26 03.6	10.27	G	310.462 385 29	−32.434 341 65	B	97.80	269.32	−365.69	11.33	6.23	4.65	6.55	4.65	− 7	− 7	− 8	+21	− 9	+14	− 6	+26	+ 5	+ 6	7	1.06
102142	20 41 51.40	−34 17 53.0	8.53	H	310.464 147 73	−34.298 053 40		5.46	45.69	−19.83	1.06	0.68	1.30	1.36	0.90	+42	−34	−26	+14	− 4	+ 1	+ 1	+ 7	−13	+33	0	−1.60
102143	20 41 51.44	−54 33 30.5	8.61	H	310.464 327 65	−54.558 460 06		0.75	5.57	−20.95	1.09	0.83	1.32	1.58	1.05	− 3	−23	−23	+22	−18	+11	−36	−17	+11	−59	2	−0.08
102144	20 41 51.69	+20 42 51.0	7.40	G	310.465 364 57	+20.714 172 30		9.51	−1.50	−56.04	0.91	0.76	1.23	0.99	0.82	+14	−12	−13	+26	+ 5	+ 8	+ 7	+22	+ 0	+32	0	
102145	20 41 51.97	−59 26 42.6	7.97	1 H	310.466 536 36	−59.445 154 27		4.24	0.72	−7.72	0.91	0.87	1.11	1.09	1.18	− 6	−12	−22	−37	+ 4	− 0	− 3	−18	+ 4	+23	0	0.37
102146	20 41 52.55	−23 08 11.5	8.07	H	310.468 962 67	−23.136 516 06		11.86	38.96	17.05	0.91	0.59	1.04	1.22	0.93	+14	− 5	− 7	− 8	+12	+41	+12	+40	+ 3	+25	0	0.89
102147	20 41 53.37	+12 58 50.2	8.27	H	310.472 354 63	+12.980 621 43		17.91	−95.54	−72.87	1.63	1.27	2.01	1.97	1.46	+21	−13	− 8	− 8	+22	+12	+19	+13	+ 4	+37	3	
102148	20 41 53.53	−07 37 12.6	8.34	H	310.473 021 64	−07.620 177 83		4.23	−0.78	−6.43	0.93	0.67	1.08	1.28	0.95	+22	−20	+ 2	+27	− 3	+ 0	− 6	+52	+ 1	+30	0	0.00
102149	20 41 53.82	+20 41 12.4	7.95	H	310.474 257 55	+20.686 773 41		2.21	23.44	−19.46	0.67	0.55	0.95	0.69	0.55	+15	−18	− 4	+25	+11	+ 8	+10	+26	+ 4	+27	0	−1.30
102150 H	20 41 53.91	+14 18 38.7	8.12	H	310.474 630 68	+14.310 740 88	A	4.77	−11.92	−8.96	1.19	0.95	1.39	1.52	0.95	+29	+ 4	− 4	+14	+39	− 3	+27	+30	+23	+40	0	0.03
102151	20 41 54.27	+39 31 04.9	8.21	H	310.476 114 82	+39.518 020 79		7.43	11.41	−0.35	0.52	0.56	0.75	0.55	0.55	− 5	−10	+12	+ 1	+ 1	− 5	+ 0	− 2	+14	− 6	0	−0.60
102152	20 41 54.52	−27 12 57.3	9.18	H	310.477 159 48	−27.215 910 92		12.36	173.74	−16.66	1.12	0.63	1.22	1.51	0.98	+ 3	−25	− 5	− 1	− 8	+12	− 3	+11	−24	+ 8	0	0.58
102153	20 41 55.21	+13 47 26.1	8.50	H	310.480 060 51	+13.790 595 23		9.06	32.42	3.46	0.83	0.56	1.01	1.02	0.61	− 3	−18	− 8	− 9	+18	+12	+13	+13	+ 8	+ 7	0	−0.15
102154	20 41 56.29	+42 31 28.9	7.52	H	310.484 535 88	+42.524 689 24		14.88	64.47	45.70	0.51	0.53	0.67	0.60	0.64	+ 0	− 1	+13	+31	+ 4	− 9	+ 9	+ 6	+19	+15	0	−0.71
102155	20 41 56.50	+41 43 00.7	5.68	H	310.485 407 48	+41.716 871 97		3.13	4.07	1.12	0.40	0.41	0.54	0.48	0.45	− 5	+ 6	+ 4	+ 0	− 3	−22	+ 0	−18	+21	− 6	0	−0.88
102156	20 41 57.00	+46 23 12.0	8.86	H	310.487 501 84	+46.386 677 20		8.08	17.06	14.72	0.75	0.67	0.87	0.86	0.69	− 9	−10	− 2	+14	− 1	− 4	− 5	−18	+24	−14	0	2.33
102157	20 41 57.06	−66 45 38.3	5.14	H	310.487 762 81	−66.760 625 42		3.88	8.89	−23.23	0.35	0.40	0.66	0.44	0.48	−42	+ 0	− 9	+ 2	+18	− 5	+17	+ 5	− 1	−39	0	−1.17
102158	20 41 58.16	+17 31 17.0	6.24	H	310.492 313 74	+17.521 384 20		7.54	16.52	43.10	0.72	0.49	0.86	1.03	0.50	+17	+11	+ 8	+ 9	+32	+13	+24	+19	+23	+30	0	1.25
102159	20 41 59.53	−54 00 22.6	11.71	H	310.498 050 76	−54.006 276 71		14.47	62.91	−250.62	2.82	2.08	3.29	3.78	2.58	+10	−28	−16	+ 5	− 6	−14	−25	−31	+23	−43	6	−0.13
102160	20 42 01.50	−50 15 45.3	7.52	2 H	310.506 244 48	−50.262 589 04		4.10	26.12	−35.94	0.93	0.76	1.14	1.31	0.78	+22	+ 8	+ 0	−14	−13	−20	−25	−50	− 1	−24	0	2.38
102161	20 42 02.33	+31 18 42.6	7.01	H	310.509 697 82	+31.311 846 71		4.88	20.56	17.30	0.33	0.41	0.64	0.37	0.44	−37	− 2	+ 0	+ 0	− 5	− 8	− 6	−12	+ 7	−46	1	1.96
102162	20 42 02.52	−76 10 50.0	5.99	H	310.510 504 72	−76.180 568 92		9.68	190.83	−9.43	0.42	0.41	0.54	0.47	0.46	−21	+ 0	−12	+23	− 7	− 1	− 9	+11	+ 3	−35	0	1.06
102163	20 42 02.96	−48 47 00.1	8.19	1 H	310.512 340 32	−48.783 373 23		2.28	18.97	−3.07	1.01	0.73	1.10	1.27	0.94	+22	−33	−24	+19	− 7	+13	− 6	− 4	+ 3	+ 9	0	−1.02
102164	20 42 04.06	−46 24 00.6	7.44	2 H	310.516 918 23	−46.400 158 14		0.44	8.07	−2.93	0.81	0.59	0.91	1.18	0.78	+20	−18	−15	+23	+ 8	− 1	+10	+ 5	− 6	+22	0	1.84
102165	20 42 05.16	−70 55 51.0	7.80	H	310.521 519 09	−70.930 844 86		8.17	17.42	−42.48	0.54	0.64	0.88	0.60	0.75	−24	+ 6	−12	−25	+17	−19	+17	−10	+ 6	−32	0	0.06
102166	20 42 05.88	+06 30 27.4	7.08	H	310.524 479 23	+06.507 614 91		3.59	8.74	−5.24	0.85	0.51	1.00	0.94	0.56	+ 4	−15	−17	−16	+48	− 5	+32	+31	+11	+35	0	1.33
102167	20 42 06.86	+43 11 03.8	9.20	G	310.528 601 04	+43.184 379 99		0.65	−1.66	−5.64	0.78	0.77	0.98	0.94	0.97	+ 3	− 2	− 2	+20	+ 9	−12	+10	+ 6	+ 4	+12	0	−1.48
102168	20 42 07.40	−38 40 35.6	9.15	H	310.530 829 23	−38.676 561 98		14.09	−16.50	−97.86	1.18	0.78	1.34	1.22	0.91	+22	−15	−32	−22	+29	−11	+22	+17	−13	+49	0	−1.07
102169	20 42 08.25	−26 28 49.7	9.36	H	310.534 379 21	−26.480 465 19		3.01	−9.50	−23.61	1.17	0.74	1.30	1.47	1.17	+21	−13	− 9	−10	+ 3	+19	− 1	+29	− 8	+33	0	1.00
102170	20 42 09.57	+19 51 52.6	7.51	H	310.539 881 15	+19.864 621 14		6.29	9.19	−6.74	0.69	0.56	1.07	0.69	0.57	+16	−24	+16	+34	+ 8	− 7	+ 8	+30	+ 8	+41	4	−1.78
102171	20 42 10.05	+49 44 05.1	8.56	G	310.541 882 71	+49.734 750 76		1.71	−2.43	−4.99	0.69	0.59	0.75	0.90	0.73	−11	+ 2	+ 2	−11	− 1	−18	+ 1	−17	+ 8	+ 4	0	−0.66
102172	20 42 10.12	+08 37 13.7	11.06	G	310.542 179 57	+08.620 469 56		−3.56	0.49	2.72	1.80	1.33	2.42	2.28	1.57	+24	− 2	− 3	− 6	+22	+20	+15	+20	+ 7	+51	0	−0.55
102173	20 42 10.33	+47 10 45.7	8.48	H	310.543 052 68	+47.179 362 52		10.25	−86.63	−118.57	0.62	0.55	0.72	0.71	0.56	−12	− 3	+12	+16	− 1	− 3	− 2	− 7	+19	−13	0	2.24
102174	20 42 11.52	+34 33 59.5	8.10	H	310.547 998 22	+34.566 539 63		3.58	14.15	4.72	0.51	0.54	0.77	0.59	0.63	−13	+ 1	−13	+18	− 1	−18	− 2	− 1	+10	− 6	1	−0.32
102175	20 42 11.55	−23 00 04.5	8.60	H	310.548 120 83	−23.001 260 76		4.47	4.03	1.45	1.10	0.74	1.22	1.58	1.15	+10	− 8	− 6	+ 6	+ 7	+35	+ 8	+42	+ 1	+14	0	1.11
102176	20 42 11.68	−75 03 21.2	8.04	H	310.548 665 59	−75.055 881 14		3.94	39.88	−2.24	0.67	0.61	0.87	0.79	0.77	−28	−17	− 4	−17	−10	+ 8	− 2	+21	− 4	−49	1	2.90
102177	20 42 12.63	+50 20 24.1	5.41	H	310.552 611 49	+50.340 020 67		3.53	1.14	3.71	0.51	0.49	0.56	0.66	0.68	−11	+ 4	+11	−22	+20	− 5	+24	−28	+ 2	−25	0	−1.47
102178	20 42 13.02	−17 04 43.3	8.85	H	310.554 234 57	−17.078 682 12		1.26	−16.04	−1.16	1.26	0.86	1.44	1.51	1.29	+37	− 2	−11	−23	+19	+34	+21	+59	−10	+38	0	2.28
102179	20 42 13.45	−56 48 11.8	9.18	H	310.556 051 49	−56.803 270 09		9.04	51.66	−58.43	0.85	0.83	1.30	1.07	0.86	+ 0	−27	−19	−21	+12	− 3	+ 9	−26	+ 1	−10	0	0.11
102180	20 42 15.12	+07 10 53.2	8.33	H	310.562 992 12	+07.181 445 18		2.78	−15.86	−9.80	0.93	0.68	1.21	1.10	0.76	+32	−30	+ 3	+13	+50	+ 7	+35	+46	+ 7	+60	0	1.13
102181	20 42 15.71	−44 53 06.7	6.99	H	310.565 474 49	−44.885 207 96		5.07	3.89	1.51	0.73	0.56	0.87	0.97	0.86	+17	−24	− 6	+12	+ 5	− 9	+ 1	+21	+14	+ 9	0	−0.84
102182	20 42 16.63	−30 33 36.3	8.60	G	310.569 279 96	−30.560 077 02		6.91	9.01	−41.32	1.09	0.63	1.19	1.32	0.85	+13	−23	−24	+ 0	+ 5	+23	+13	+25	−15	+16	0	−0.91
102183 H	20 42 16.80	+57 23 07.3	6.99	H	310.570 005 23	+57.385 359 50	A	6.84	−4.97	6.39	0.73	0.79	0.68	0.59	0.73	− 2	−15	+15	+16	+16	− 4	+18	+18	− 5	+13	1	−0.86
102184	20 42 16.84	−38 35 01.5	8.85	H	310.570 186 51	−38.583 743 45		−0.17	9.37	−4.89	1.14	0.85	1.28	1.26	0.98	+46	−31	−34	− 5	+33	−10	+26	+26	− 8	+59	0	−0.57
102185	20 42 17.65	+25 17 55.1	9.20	H	310.573 537 76	+25.298 643 50		1.05	4.14	−3.85	0.91	0.78	1.14	1.07	0.81	+18	+ 8	−10	+ 3	+10	− 2	+ 8	+24	+ 1	+27	0	1.37
102186	20 42 18.70	−52 41 48.0	8.83	G	310.577 930 29	−52.696 672 07		82.57	81.54	−1065.84	1.08	0.87	1.25	1.41	0.89	+12	− 7	− 2	+18	−21	+21	−40	−37	−11	−42	0	−1.17
102187	20 42 18.91	+57 45 28.3	8.12	H	310.578 777 83	+57.757 865 37		3.02	−2.69	−7.97	0.60	0.60	0.67	0.66	0.67	− 1	− 9	+21	+ 9	+ 2	− 6	+ 2	+19	+ 4	+10	0	0.17
102188	20 42 20.07	+12 37 58.1	7.73	H	310.583 630 96	+12.632 797 17		5.03	26.07	−8.16	0.74	0.54	0.93	0.94	0.59	+16	−13	−14	+ 6	+24	− 5	+19	+17	+ 2	+25	2	−0.22
*102189	20 42 20.35	+45 49 26.1	7.59	H	310.584 803 86	+45.823 916 11		17.96	−56.03	−188.36	0.63	0.50	0.67	0.78	0.53	−11	−21	− 6	−25	− 5	+13	− 6	−21	+20	− 9	3	0.55
*102190	20 42 20.35	+19 09 39.4	12.31	2 H	310.584 783 41	+19.160 939 80		−8.00	−2.39	−7.87	2.53	2.04	3.57	2.96	2.28	+22	− 3	+15	+31	+ 4	+11	+ 6	+19	+ 2	+46	0	1.05
102191	20 42 20.42	−47 41 29.7	10.20	H	310.585 092 03	−47.691 584 20		4.47	2.01	9.92	3.16	2.62	3.74	4.86	3.10	+29	−19	−26	+20	+ 3	−16	− 1	−17	− 7	+23	0	
102192	20 42 20.57	−65 25 46.7	9.82	H	310.585 694 86	−65.429 649 81		2.45	21.31	1.43	1.00	0.93	1.40	1.14	1.15	−11	−13	−11	+15	+ 7	− 3	+ 6	+14	+10	−24	3	2.09
102193	20 42 21.24	+63 21 03.7	7.66	H	310.588 483 20	+63.351 026 04		1.98	0.89	0.47	0.53	0.48	0.57	0.53	0.51	− 5	−15	+ 5	−34	+14	+16	+ 4	− 6	+12	+27	0	1.00
102194	20 42 21.91	+10 28 23.6	8.21	H	310.591 273 61	+10.473 233 61		2.02	−7.11	−2.52	0.84	0.60	1.07	1.18	0.69	+25	− 1	+ 6	+24	+33	+16	+29	+20	+20	+50	0	0.24
102195	20 42 22.32	+35 27 22.4	6.70	2 H	310.593 018 18	+35.456 213 50		2.78	−1.48	−7.61	0.42	0.45	0.62	0.50	0.51	−13	+ 6	− 3	− 7	+ 2	−11	+ 1	−19	+ 5	−16	1	0.69
102196	20 42 26.03	+30 16 01.2	8.15	H	310.608 448 33	+30.267 005 80		2.81	−1.84	−20.47	0.45	0.59	0.84	0.57	0.66	−12	− 3	− 4	+30	+ 2	− 8	+ 5	+ 3	−11	+ 1	0	−1.52
*102197	20 42 27.46	−52 29 06.4	9.21	H	310.614 427 04	−52.485 119 57		3.29	11.76	−22.94	1.17	0.85	1.30	1.54	0.93	+ 7	−17	− 3	+ 2	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
102101	11.751	0.132	10.322	0.055		1.360	0.015	G	1.59	0.03	I	10.3689	0.0037	0.032	107		10.32	10.42				1							G
102102	10.665	0.048	10.175	0.050		0.490	0.020	G	0.56	0.02	H	10.3144	0.0034	0.026	65		10.25	10.35		U		1							
102103	10.881	0.035	9.527	0.019		1.147	0.031	T	1.11	0.03	L	9.5833	0.0031	0.035	158		9.53	9.64				1							
102104	8.681	0.012	8.511	0.014		0.163	0.017	T	0.18	0.02	L	8.5506	0.0014	0.016	105		8.52	8.58				1							
102105	9.179	0.011	7.615	0.006		1.320	0.015	G	1.28	0.02	H	7.6198	0.0011	0.013	177		7.60	7.64				1							
102106	9.128	0.018	7.985	0.012		0.983	0.017	T	0.96	0.01	L	8.0259	0.0017	0.013	91		8.01	8.05		C		1							S
102107	10.509	0.038	9.041	0.019		1.237	0.033	T	1.20	0.03	L	9.0846	0.0019	0.013	85		9.06	9.11		C		1 G							
102108	7.574	0.008	7.614	0.009		−0.062	0.002	G	−0.04	0.00	H	7.6200	0.0011	0.009	77		7.61	7.63		C		1							S
102109	8.581	0.008	8.575	0.010		0.010	0.012	T	0.03	0.01	L	8.6102	0.0012	0.016	197		8.59	8.64				1							
102110	7.963	0.006	8.026	0.008		−0.053	0.009	T	−0.03	0.01	L	8.0404	0.0023	0.022	180		8.01	8.08		U 2		1							
102111	11.032	0.050	10.511	0.049		0.489	0.063	T	0.56	0.07	L	10.5873	0.0032	0.028	109		10.55	10.63		C		1							G
102112	10.872	0.049	9.621	0.028		1.067	0.044	T	1.03	0.04	L	9.8163	0.0029	0.024	95		9.78	9.85		C		1							
102113	8.263	0.007	8.340	0.010	A	−0.088	0.030	G	−0.06	0.02	L *	8.3013	0.0023	0.022	126	*	8.26	8.34		U 2	20416+4350	I 1	2 C B	AB	180	6.218	0.039	3.56	0.19	
102114	7.013	0.005	6.833	0.005		0.172	0.007	T	0.19	0.01	L	6.8685	0.0008	0.007	117		6.86	6.88				1							S
102115	12.168	0.175	10.914	0.098		1.318	0.003	G	1.52	0.01	I	10.6453	0.0020	0.020	86		10.60	10.68				1							G
102116	8.331	0.010	8.164	0.012		0.160	0.015	T	0.18	0.01	L	8.1858	0.0010	0.007	80		8.16	8.21				1							S
102117	9.423	0.022	7.639	0.010		1.486	0.019	T	1.51	0.03	L	7.6178	0.0012	0.012	96		7.60	7.64				1							S
102118	9.625	0.015	8.107	0.008		1.276	0.013	T	1.24	0.01	L	8.1406	0.0010	0.012	146		8.11	8.16		C		1							
102119	11.448	0.128	10.034	0.058		1.121	0.009	G	1.48	0.02	A	9.9393	0.0049	0.034	72		9.87	9.99		U		1							
102120	6.847	0.005	6.911	0.006		−0.054	0.007	T	−0.03	0.01	L	6.9105	0.0009	0.009	124		6.90	6.92		C		1							S
102121	10.335	0.030	8.433	0.012		1.579	0.026	T	1.60	0.03	L	8.3757	0.0010	0.014	148		8.35	8.40				1							
102122	7.890	0.007	7.857	0.008		0.025	0.005	G	0.04	0.00	H	7.8883	0.0012	0.012	120		7.87	7.91		C		1							S
102123	10.401	0.032	8.870	0.015		1.286	0.028	T	1.25	0.03	L	8.8795	0.0022	0.016	93		8.86	8.91				1							
102124	9.554	0.020	8.892	0.017		0.579	0.015	G	0.65	0.01	H	8.9788	0.0014	0.014	77		8.96	9.01		C		1							
102125	7.213	0.005	6.513	0.005	A	0.620	0.015	G	0.62	0.07	F	6.5957	0.0238	0.124	172	A	6.45	6.81		D	20417−7521	I 2	1 C P B						S
102126	9.476	0.013	9.455	0.017		0.024	0.020	T	0.04	0.02	L	9.4791	0.0019	0.026	201		9.43	9.53				1							G
102127	8.865	0.010	8.217	0.009		0.594	0.010	T	0.66	0.01	L	8.2830	0.0011	0.014	163		8.26	8.31		C		1							
102128	7.881	0.007	7.173	0.006	B	0.640	0.015	G	0.70	0.01	H	7.3001	0.0388			B				D	20417−7521	I 2	1 C I B						S
102129	8.756	0.009	8.474	0.010		0.267	0.014	T	0.30	0.02	L	8.5094	0.0011	0.019	326		8.47	8.55				1 S							S
102130	8.729	0.013	8.092	0.012		0.592	0.015	T	0.66	0.01	L	8.1453	0.0013	0.009	77		8.13	8.16				1							S
102131	8.254	0.011	7.791	0.008	A	0.453	0.015	G	0.52	0.02	H	7.8481	0.0053	0.018	110	A	7.82	7.88		D	20418+1231	I 2	1 C P A						S
102132	11.289	0.091	10.224	0.051	B	0.923	0.079	T	0.92	0.06	L	10.9828	0.0817			B				D	20418+1231	I 2	1 C I A						
102133	9.010	0.009	8.431	0.009		0.543	0.009	T	0.62	0.01	L	8.4890	0.0014	0.018	221		8.46	8.52				1							S
102134	8.032	0.010	7.605	0.010		0.408	0.015	G	0.47	0.02	H	7.6724	0.0008	0.009	87		7.66	7.69				1							S
102135	9.103	0.014	8.531	0.013		0.573	0.015	G	0.65	0.01	H	8.5752	0.0012	0.013	97		8.55	8.60		C		1							
102136	10.329	0.039	8.613	0.017		1.432	0.034	T	1.42	0.05	L	8.6301	0.0022	0.014	69		8.60	8.66		C		1							
102137	8.477	0.010	8.464	0.013		0.017	0.015	T	0.04	0.01	L	8.4863	0.0014	0.015	133		8.46	8.51		C		1							
102138	9.267	0.013	8.163	0.009		0.952	0.012	T	0.94	0.01	L	8.2145	0.0012	0.013	142		8.20	8.24			20418+2259	I 1	1						
102139	8.932	0.014	8.390	0.013		0.508	0.017	T	0.58	0.02	L	8.4499	0.0019	0.014	93		8.43	8.47		C		1							S
102140	10.004	0.026	9.598	0.027		0.384	0.035	T	0.45	0.04	L	9.6744	0.0021	0.020	120		9.64	9.71		C		1							G
102141						1.550	0.020	G	2.90	0.02	A *	10.1659	0.0041	0.031	69	*	10.13	10.21		D	20451−3122	I 2	2 C D	BC	187	3.349	0.007	0.09	0.06	G D
102142	9.052	0.018	8.605	0.018		0.435	0.020	T	0.50	0.02	L	8.6266	0.0015	0.017	90		8.60	8.65		C		1							S
102143	10.395	0.035	8.758	0.017		1.370	0.031	T	1.34	0.04	L	8.7641	0.0024	0.019	74		8.74	8.80		C		1							
102144	7.745	0.005	7.466	0.007		0.329	0.015	G	0.38	0.02	H	7.4797	0.0011	0.010	125		7.47	7.50		D	20419+2042	I 2	1 X S						S
102145	10.132	0.020	8.161	0.008		1.670	0.018	T	1.94	0.05	O	8.0561	0.0021	0.018	165		8.02	8.09		U		1 G							S
102146	8.579	0.013	8.108	0.012		0.446	0.015	G	0.52	0.02	H	8.1658	0.0017	0.012	76		8.15	8.19				1							S
102147	8.966	0.013	8.313	0.012		0.606	0.015	T	0.68	0.01	L	8.3960	0.0017	0.013	100		8.37	8.42				1 X							
102148	8.439	0.009	8.351	0.011		0.086	0.013	T	0.10	0.01	L	8.3774	0.0014	0.015	122		8.36	8.40		C		1							S
102149	9.363	0.015	8.082	0.009		1.090	0.014	T	1.05	0.01	L	8.1189	0.0010	0.012	120		8.10	8.14		C	20419+2042	I 2	1						S
102150	8.272	0.009	8.169	0.010	*	0.100	0.012	T	0.11	0.01	L *	8.1645	0.0016	0.014	108	*	8.14	8.19		D	20419+1419	I 1	2 C A	AB	249	0.689	0.013	2.53	0.06	S
102151	8.492	0.009	8.228	0.009		0.251	0.012	T	0.28	0.01	L	8.2851	0.0018	0.017	147		8.25	8.31				1							S
102152	9.971	0.030	9.247	0.026		0.651	0.030	T	0.71	0.03	L	9.3152	0.0017	0.013	70		9.29	9.33		C		1							
102153	9.009	0.012	8.539	0.012		0.443	0.016	T	0.51	0.02	L	8.6000	0.0022	0.018	121		8.57	8.63				1							
102154	8.065	0.007	7.572	0.008		0.464	0.010	T	0.53	0.01	L	7.6241	0.0010	0.012	124		7.61	7.64				1							S
102155	5.532	0.003	5.655	0.003		−0.107	0.004	T	−0.09	0.01	L	5.6443	0.0006	0.005	128		5.64	5.65		C		1							S
102156	9.291	0.013	8.911	0.014		0.360	0.018	T	0.42	0.02	L	8.9431	0.0015	0.020	128		8.91	8.98				1							
102157	5.059	0.001	5.131	0.001		−0.061	0.001	T	−0.04	0.00	L	5.1266	0.0005	0.006	290		5.12	5.14				1							S
102158	7.442	0.008	6.346	0.006		0.942	0.002	G	0.93	0.00	H	6.3991	0.0011	0.006	75		6.39	6.41		C		1							S
102159						1.800	0.495	G	3.14	1.65	I	11.5731	0.0087	0.063	73		11.45	11.68				1							G
102160	9.474	0.024	7.731	0.011		1.482	0.022	T	2.33	0.06	O	7.5624	0.0073	0.045	76		7.51	7.64		U 2		1							S P
102161	7.033	0.003	7.018	0.004		0.019	0.005	T	0.04	0.01	L	7.0287	0.0006	0.009	286		7.01	7.04		C		1							S
102162	6.521	0.003	6.035	0.003		0.450	0.005	G	0.52	0.02	A	6.0870	0.0006	0.007	164		6.07	6.10				1							S
102163	10.274	0.035	8.385	0.015		1.569	0.030	T	1.59	0.03	L	8.3116	0.0039	0.021	62		8.28	8.34		U		1							S
102164	9.578	0.019	7.651	0.008		1.634	0.017	T	2.19	0.05	O	7.5015	0.0053	0.031	71		7.46	7.54		U 2		1							S
102165	7.966	0.007	7.819	0.008		0.134	0.010	T	0.15	0.01	L	7.8471	0.0015	0.018	166		7.82	7.87				1							S
102166	6.955	0.005	7.069	0.005		−0.099	0.006	T	−0.08	0.01	L	7.0544	0.0011	0.009	107		7.04	7.08				1							S
102167	10.245	0.031	9.336	0.023		0.890	0.028	G	0.90	0.02	H	9.3548	0.0020	0.019	114		9.32	9.39		C		1							
102168	9.987	0.022	9.220	0.018		0.683	0.022	T	0.74	0.02	L	9.2809	0.0029	0.021	102		9.25	9.35		C		1							
102169	11.297	0.091	9.567	0.031		1.443	0.076	T	1.44	0.12	L	9.5005	0.0017	0.018	84		9.47	9.53		C		1							
102170	8.791	0.012	7.606	0.008		1.015	0.011	T	0.99	0.01	L	7.6746	0.0013	0.013	123		7.65	7.70		C		1							S
102171	8.613	0.011	8.556	0.014		0.063	0.005	G	0.07	0.01	H	8.5881	0.0012	0.012	99		8.56	8.62		D		1							
102172						1.485	0.008	G	1.55	0.14	K	11.2213	0.0036	0.042	90		11.15	11.30		C		1							G
102173	9.075	0.012	8.545	0.012		0.520	0.015	G	0.59	0.02	H	8.5992	0.0016	0.015	135		8.58	8.63		C		1							
102174	8.207	0.008	8.098	0.009		0.106	0.011	T	0.12	0.01	L	8.1381	0.0015	0.015	157		8.11	8.17		C		1							
102175	10.397	0.038	8.732	0.018		1.392	0.033	T	1.37	0.04	L	8.7463	0.0021	0.013	62		8.73	8.79				1							
102176	9.474	0.013	8.161	0.008		1.115	0.012	T	1.08	0.01	L	8.2056	0.0012	0.017	166		8.18	8.24				1							
102177	5.268	0.003	5.393	0.003		−0.107	0.004	T	−0.09	0.01	L	5.3772	0.0010	0.007	111		5.37	5.39			20422+5020	I 1	1 G						S
102178	10.742	0.057	8.985	0.022		1.465	0.048	T	1.47	0.07	L	8.9868	0.0014	0.014	70		8.96	9.01		C		1							
102179	9.824	0.020	9.201	0.018		0.576	0.020	T	0.65	0.02	L	9.3025	0.0018	0.019	102		9.27	9.35		C		1							
102180	10.092	0.023	8.482	0.011		1.348	0.020	T	1.31	0.02	L	8.4784	0.0014	0.014	121		8.45	8.50		C		1							
102181	7.097	0.005	7.001	0.006		0.087	0.007	T	0.10	0.01	L	7.0292	0.0010	0.009	78		7.02	7.05		C		1							S
102182	9.037	0.016	8.640	0.016		0.387	0.015	G	0.45	0.02	H	8.6704	0.0018	0.016	76		8.64	8.71				1							
102183	7.235	0.008	7.072	0.010	A	0.300	0.495	G	0.14	0.02	L *	7.0325	0.0011	0.009	107	*	7.02	7.05		D	20423+5723	I 1	2 C A	AB	86	1.118	0.005	1.71	0.02	S
102184	10.421	0.031	8.979	0.016		1.216	0.027	T	1.18	0.03	L	9.0100	0.0020	0.021	103		8.97	9.04				1							
102185	9.175	0.015	9.198	0.021		−0.016	0.024	T	0.01	0.02	L	9.2054	0.0020	0.015	91		9.17	9.24				1							
102186	10.559	0.035	9.006	0.017		1.324	0.012	G	1.59	0.00	A	8.9254	0.0018	0.016	92		8.89	8.96				1							
102187	9.354	0.018	8.226	0.012		0.971	0.017	T	0.96	0.01	L	8.2834	0.0014	0.015	107		8.26	8.30				1							
102188	9.373	0.017	7.837	0.009		1.290	0.015	T	1.25	0.02	L	7.8861	0.0014	0.014	103		7.86	7.91				1							
102189	8.322	0.009	7.648	0.009		0.613	0.010	T	0.68	0.01	L	7.7248	0.0014	0.012	124		7.70	7.74			20423+4549	I 1	1						S
102190											T	12.3279	0.0163	0.119	96		12.02	12.53		U 2			1						D
102191	10.808	0.062	10.330	0.062		0.463	0.068	T	0.53	0.07	L	10.3027	0.0034	0.028	68		10.24	10.34		C			1 X						
102192	10.393	0.027	9.870	0.026		0.456	0.015	G	0.53	0.02	H	9.9224	0.0029	0.029	140		9.87	9.97					1						
102193	7.726	0.008	7.676	0.010		0.070	0.015	G	0.08	0.02	H	7.6939	0.0011	0.009	110		7.68	7.71		C			1						S
102194	10.036	0.024	8.375	0.012		1.389	0.021	T	1.36	0.03	L	8.3586	0.0012	0.012	89		8.33	8.38					1						
102195	6.473	0.003	6.655	0.004		−0.159	0.004	T	−0.16	0.01	L	6.6393	0.0013	0.013	161		6.60	6.66		U 2 C			1						S P
102196	9.501	0.012	8.261	0.008		1.058	0.011	T	1.02	0.01	L	8.3163	0.0013	0.015	213		8.29	8.34		C			1						
102197	10.644	0.041	9.340	0.023		1.108	0.037	T	1.07	0.04	L	9.3803	0.0023	0.019	96		9.34	9.41		C			1						
102198	7.449	0.007	7.315	0.008		0.129	0.010	T	0.14	0.01	L	7.3561	0.0010	0.011	106		7.34	7.37					1						S
102199	8.830	0.010	8.841	0.013		−0.005	0.015	T	0.02	0.01	L	8.8601	0.0015	0.020	186		8.83	8.89					1						
102200	9.984	0.028	9.261	0.023		0.650	0.027	T	0.71	0.02	L	9.3181	0.0023	0.019	78		9.29	9.36		C			1						

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
102201	20 42 28.85	+05 48 41.0	8.71	H	310.620 224 95	+05.811 386 67	2.91	−0.93	−21.53	1.16	0.78	1.41	1.42	1.02	+ 8	−29	− 8	− 6	+16	+33	+15	+42	− 2	+19	0	0.26
102202	20 42 29.44	+58 42 09.7	8.63	H	310.622 664 71	+58.702 701 30	2.15	8.37	2.04	0.64	0.62	0.70	0.72	0.70	+ 8	+ 9	+ 8	− 7	+ 2	− 4	+ 1	+ 4	− 1	+19	3	1.12
102203	20 42 29.44	−05 18 03.0	7.61	H	310.622 683 93	−05.300 821 37	33.15	−61.44	−173.43	0.89	0.70	1.20	1.25	0.98	+34	−18	−28	+26	+10	+20	+17	+69	−21	+30	0	−0.61
102204	20 42 30.05	−41 13 34.6	10.18	G	310.625 215 22	−41.226 269 99	9.35	17.71	32.02	1.49	0.92	1.72	1.95	1.22	+12	−19	−10	−14	+ 9	− 2	+ 7	+ 4	− 2	+23	0	−0.23
*102205	20 42 33.55	−84 24 25.4	6.94	H	310.639 786 36	−84.407 049 99	11.89	60.30	−25.44	0.49	0.44	0.56	0.55	0.44	− 6	−14	−15	+16	− 5	− 4	− 5	+ 7	− 5	−14	0	−1.20
*102206 H	20 42 33.47	+12 43 41.9	7.57	H	310.639 477 72	+12.728 301 62 A	7.70	−6.10	−25.75	2.13	1.64	2.62	2.40	1.53	+22	−17	−21	−12	+11	− 6	+ 9	+ 3	− 8	+17	13	2.56
102207	20 42 34.53	−20 04 35.1	12.38	2 G	310.643 873 51	−20.076 414 21	47.39	354.56	−97.85	3.59	2.24	4.04	4.22	3.49	+19	−24	+ 4	−12	+14	+28	+ 7	+45	− 2	+31	0	0.07
102208	20 42 35.10	+82 31 52.0	5.75	H	310.646 249 21	+82.531 105 84	9.11	30.77	21.68	0.47	0.46	0.51	0.59	0.55	+ 8	−16	−13	−13	− 4	− 2	− 5	−27	+11	+13	0	−0.50
102209	20 42 35.11	+13 35 10.2	8.99	G	310.646 284 48	+13.586 154 12	9.56	21.41	29.53	0.90	0.75	1.15	1.13	0.76	+16	− 6	− 5	− 3	+43	+11	+31	+22	+23	+33	0	−0.16
102210	20 42 36.60	−48 24 54.4	8.61	H	310.652 506 49	−48.415 114 28	9.41	−62.91	4.01	1.07	0.86	1.21	1.49	1.07	+19	−23	−21	+29	−16	+18	−11	−20	+ 5	+18	0	0.41
102211	20 42 37.27	−13 05 40.0	8.08	G	310.655 292 73	−13.094 431 55	13.89	−155.28	−156.51	1.15	0.65	1.37	1.39	0.98	+ 6	−26	−23	− 5	− 6	+28	+ 4	+49	−34	+ 0	3	1.88
102212	20 42 37.83	+16 07 42.3	9.04	H	310.657 621 54	+16.128 408 83	2.33	−0.69	−8.15	1.00	0.84	1.28	1.26	0.92	+16	− 9	+12	− 3	+35	− 1	+26	+29	+ 7	+35	0	0.09
102213	20 42 38.88	−15 40 15.7	8.21	H	310.661 995 76	−15.671 030 16	6.44	14.02	−2.63	1.26	0.71	1.46	1.55	1.02	+18	−17	− 5	−30	− 1	+38	+ 1	+44	−13	+13	2	1.12
102214	20 42 38.99	+47 24 32.6	8.35	G	310.662 443 84	+47.409 045 72	3.79	20.24	49.79	0.60	0.61	0.75	0.71	0.59	− 7	+ 4	+18	+16	− 3	− 6	− 3	−12	+14	−14	0	−0.39
102215	20 42 39.67	+63 12 47.3	7.44	H	310.665 291 27	+63.213 142 61	7.08	15.60	−16.50	0.53	0.47	0.59	0.52	0.48	− 1	−24	+ 0	−34	+14	+26	+ 4	− 9	+19	+30	0	−0.44
102216	20 42 39.69	+60 36 04.9	6.17	H	310.665 382 79	+60.601 361 96	4.50	−3.84	−18.90	0.46	0.42	0.48	0.50	0.44	−11	+ 0	+ 3	+27	− 1	− 7	+ 1	+ 6	+ 4	+ 0	0	0.17
102217	20 42 39.77	−18 06 34.9	7.33	2 H	310.665 718 31	−18.109 684 24	3.06	1.15	3.64	0.89	0.56	0.96	1.10	0.83	+23	− 5	− 3	−26	+13	+24	+ 8	+49	− 2	+31	2	−0.57
102218	20 42 40.60	−10 58 11.0	7.74	G	310.669 150 64	−10.969 711 13	13.85	36.69	−7.78	1.02	0.58	1.19	1.33	0.82	− 3	− 3	−27	−15	− 5	+47	+10	+49	−25	−13	0	−2.89
102219	20 42 41.09	+36 22 51.2	8.15	H	310.671 215 25	+36.380 882 58	1.04	−3.57	−5.82	0.55	0.53	0.77	0.55	0.55	−11	− 8	+ 3	+ 9	− 4	−19	− 2	− 9	+ 0	− 4	1	1.10
102220	20 42 42.26	+52 37 50.0	8.45	H	310.676 068 92	+52.630 568 64	1.57	−2.33	−6.00	0.63	0.69	0.75	0.78	0.78	−17	− 3	+ 9	+ 6	+ 2	− 9	+ 3	+ 0	+ 1	−22	0	1.55
102221	20 42 45.10	+02 59 43.2	8.17	H	310.687 902 04	+02.995 323 19	12.07	−9.26	−5.63	0.92	0.67	1.03	1.25	0.96	+15	+10	−10	−18	+21	+ 3	+18	+44	+ 0	+23	0	0.06
102222	20 42 45.70	−15 54 31.6	8.47	H	310.690 422 81	−15.908 771 98	4.90	2.67	−2.15	1.14	0.74	1.42	1.51	1.10	+21	− 1	−23	−12	− 2	+36	+ 4	+51	−24	+15	3	2.95
102223	20 42 47.10	+51 01 31.1	8.04	H	310.696 231 84	+51.025 318 07	2.60	15.22	12.89	0.61	0.62	0.73	0.73	0.70	+ 4	+ 1	+11	+ 6	+ 7	−11	+ 7	−10	+23	− 5	0	−2.32
102224	20 42 48.44	+66 19 36.2	7.01	H	310.701 828 36	+66.326 711 72	3.81	11.78	3.11	0.51	0.45	0.51	0.64	0.53	+ 8	− 9	+ 3	+12	+13	− 7	+13	+15	− 9	+24	0	2.22
102225	20 42 48.78	−20 00 39.3	9.84	G	310.703 244 03	−20.010 922 19	−1.67	−17.98	−6.36	1.44	0.93	1.62	1.81	1.48	+20	− 3	+11	−15	+ 9	+29	− 1	+33	+ 1	+33	2	1.01
102226	20 42 49.41	+20 50 43.7	8.26	H	310.705 878 71	+20.845 470 31	39.38	−81.38	−352.20	0.75	0.64	1.03	0.85	0.64	+17	− 8	+14	+36	+20	+ 9	+17	+38	+ 8	+30	2	−0.10
102227	20 42 50.33	−40 51 38.0	8.65	H	310.709 694 70	−40.860 551 37	8.40	−19.59	−50.68	0.96	0.65	1.19	1.13	0.89	+18	−31	−10	− 5	− 2	+12	+ 3	− 7	+ 8	+35	0	1.39
102228	20 42 50.92	+53 09 59.9	9.94	H	310.712 179 62	+53.166 635 36	2.35	0.79	−5.22	0.87	0.83	0.96	1.08	0.91	−21	−16	+10	+22	− 3	− 8	− 2	+ 3	− 3	−20	0	0.22
102229	20 42 51.78	−58 38 12.1	9.82	H	310.715 764 03	−58.636 693 56	4.18	−12.75	11.91	1.35	1.21	1.72	1.78	1.35	+13	− 4	−25	−40	+ 6	−12	+ 8	−26	+18	−23	0	−1.27
102230	20 42 52.95	−39 33 31.7	6.30	H	310.720 613 20	−39.558 809 98	2.48	17.76	−8.11	0.65	0.43	0.80	0.80	0.54	+25	−30	− 9	+ 4	+ 9	+12	+14	− 1	− 7	+47	0	−1.10
102231	20 42 54.15	−71 55 38.7	7.61	H	310.725 618 36	−71.927 423 47	10.76	−43.28	20.00	0.52	0.62	0.83	0.59	0.75	−18	− 8	−14	+ 7	− 2	+ 2	− 4	− 8	− 9	−34	0	0.02
102232	20 42 54.24	+43 10 38.7	8.46	H	310.726 016 03	+43.177 412 97	2.65	0.68	2.59	0.59	0.62	0.79	0.71	0.77	+ 0	+14	+ 1	+18	+ 6	− 4	+10	+ 7	+19	+ 8	1	1.28
102233	20 42 55.42	+49 03 10.0	7.31	H	310.730 898 29	+49.052 777 40	14.63	52.56	0.03	0.52	0.53	0.63	0.58	0.58	− 2	− 6	− 1	−14	− 2	+ 7	− 1	−28	+22	+14	2	0.18
102234	20 42 56.38	+39 01 25.6	8.78	H	310.734 896 01	+39.023 778 14	13.16	92.27	96.28	0.64	0.65	0.86	0.64	0.73	−14	+ 4	− 4	+ 2	+ 3	− 2	+ 2	+15	+ 0	− 1	0	−0.80
102235	20 42 56.78	−18 54 58.6	10.80	G	310.736 583 94	−18.916 268 52	50.17	605.85	−858.80	12.25	7.62	13.14	14.82	10.50	+13	−13	−30	−32	− 1	+21	+ 5	+23	−16	+13	0	
102236	20 42 59.17	−50 28 43.8	7.92	H	310.746 535 49	−50.478 846 34	6.71	32.68	1.18	1.01	0.80	1.25	1.55	0.85	+19	+18	−10	+12	−18	− 6	−42	−43	− 1	−46	4	1.95
102237	20 43 00.11	+35 29 53.3	11.41	G	310.750 454 30	+35.498 129 37	21.86	−205.32	−569.56	1.49	1.62	2.18	1.97	1.94	− 8	+ 7	+ 1	− 9	− 1	−12	− 1	−10	+ 0	− 6	0	1.27
102238	20 43 00.26	+26 48 35.9	10.79	2 G	310.751 083 86	+26.809 983 77	16.81	−128.98	−251.46	1.02	1.23	2.01	1.21	1.33	+ 4	−21	+ 8	−24	+23	+ 0	+19	+ 8	− 5	+14	2	0.88
102239	20 43 00.44	+19 19 17.1	8.91	H	310.751 840 15	+19.321 421 25	4.31	−12.14	−10.06	0.93	0.76	1.40	1.01	0.81	+15	−11	+22	+26	− 8	+ 0	− 5	+13	+ 5	+42	0	−0.67
102240	20 43 02.03	+52 17 42.3	7.75	H	310.758 450 73	+52.295 096 67	12.71	−23.93	163.65	0.54	0.55	0.64	0.66	0.65	− 6	−19	− 1	+ 6	+ 8	−13	+ 6	− 9	+ 5	−16	0	0.25
102241 H	20 43 02.43	−28 46 12.3	8.13	H	310.760 137 13	−28.770 081 72 A	7.63	5.34	−13.28	1.51	0.88	1.44	1.73	1.20	+11	+ 6	+ 5	− 7	− 8	+15	−14	+ 0	−18	+43	2	0.15
*102242	20 43 03.51	+17 06 10.0	8.54	1 H	310.764 635 91	+17.102 785 84	0.78	−4.61	3.79	1.01	0.82	1.32	1.25	0.79	+19	+ 4	+15	+ 2	+40	+ 6	+31	+27	+17	+32	0	0.86
*102243	20 43 03.32	+86 53 22.2	9.04	H	310.763 835 57	+86.889 499 74	3.79	18.14	20.80	0.73	0.73	0.82	0.84	0.89	+11	+ 5	+ 0	+ 2	−10	− 2	− 7	−18	+ 6	+26	0	0.76
102244	20 43 03.89	−32 22 20.9	9.25	H	310.766 206 97	−32.372 471 03	3.67	0.50	−16.90	1.45	0.92	1.60	2.14	1.35	+29	−19	− 3	+13	+11	− 8	+ 8	+32	+12	+29	2	1.03
102245	20 43 04.73	−42 05 21.1	8.48	H	310.769 714 46	−42.089 190 48	2.77	15.37	20.37	1.02	0.70	1.18	1.39	0.95	+28	−24	−14	+17	+19	+ 6	+20	+15	− 1	+39	0	0.35
102246	20 43 04.88	+17 05 17.3	9.18	3 H	310.770 328 39	+17.088 141 30 *	−0.50	5.91	3.18	1.47	1.41	1.74	1.81	1.30	+38	+ 5	+ 4	+24	+47	+ 9	+40	+58	+ 5	+43	0	1.62
102247	20 43 05.30	−46 46 25.7	10.18	H	310.772 081 27	−46.773 803 30	4.88	−4.03	5.91	1.49	1.22	1.75	1.92	1.67	+35	−19	−13	+10	− 7	− 9	− 7	−10	−19	+26	0	−0.06
102248	20 43 05.75	+52 21 38.8	10.12	G	310.773 964 64	+52.360 791 21	1.79	−5.67	−3.64	1.04	0.92	1.13	1.31	1.08	−11	−22	+ 1	+12	+ 8	+ 0	+ 5	−12	+ 0	−21	0	−1.36
102249	20 43 06.00	+03 36 16.1	8.90	G	310.774 999 78	+03.604 472 73	3.26	−9.14	−24.77	1.16	0.83	1.44	1.61	1.17	+21	−33	−11	+23	+ 8	−21	+ 7	+48	−12	+27	0	0.22
102250	20 43 06.42	−62 58 30.7	8.15	H	310.776 748 72	−62.975 189 68	2.97	6.99	−13.45	0.73	0.61	1.01	0.83	0.88	+ 9	−17	− 7	+ 8	+11	−10	+11	+ 6	+ 8	−18	0	−0.52
102251	20 43 07.71	−21 57 45.4	9.11	H	310.782 116 13	−21.962 605 67	3.76	−5.16	3.37	1.26	0.73	1.38	1.72	1.23	+ 9	−19	− 8	− 3	+ 4	+27	+ 4	+42	−16	+14	0	0.37
102252	20 43 08.72	+44 04 12.2	9.03	H	310.786 346 79	+44.070 063 83	2.21	2.66	0.38	0.78	0.75	0.99	0.83	0.76	− 1	+ 8	+21	− 2	+ 7	− 5	+ 9	−11	+ 6	− 3	0	0.90
102253	20 43 10.98	+66 39 26.5	5.59	H	310.795 764 97	+66.657 362 93	23.49	25.11	34.71	0.48	0.43	0.49	0.57	0.47	− 4	−17	+16	+19	+ 9	− 6	+10	+16	− 3	+13	5	2.26
102254	20 43 11.29	+40 37 44.1	8.57	H	310.797 023 85	+40.628 920 36	2.47	4.95	1.04	0.54	0.57	0.74	0.61	0.60	−19	− 6	+ 7	+20	− 7	−23	− 6	− 4	+21	−23	0	−0.53
102255	20 43 11.31	+51 08 39.3	7.86	H	310.797 140 70	+51.144 250 71	2.96	−0.09	3.47	0.57	0.57	0.67	0.71	0.66	+ 5	+ 0	+10	+ 2	+ 8	−10	+ 6	−15	+22	− 8	0	−0.70
102256	20 43 12.49	−32 17 35.4	9.86	2 H	310.802 021 39	−32.293 168 70	−0.09	−2.29	−4.12	1.53	0.92	1.68	2.21	1.36	+16	+ 5	+ 0	+ 8	+ 5	+22	+ 4	+21	+ 1	+26	0	1.59
102257	20 43 13.25	−13 52 34.7	9.45	H	310.805 226 28	−13.876 302 76	2.14	−1.50	5.85	1.64	1.04	1.84	2.33	1.58	+30	−35	−17	+11	+17	−12	+25	+68	−20	+22	0	1.57
102258	20 43 13.69	+57 06 50.4	6.34	H	310.807 023 39	+57.114 004 68	0.52	−2.34	−3.38	0.44	0.46	0.50	0.43	0.50	− 7	− 2	+16	+16	+10	−14	+15	+18	− 2	+ 0	0	0.56
102259	20 43 13.74	−76 32 49.4	7.68	H	310.807 249 10	−76.547 063 36	15.22	58.46	−148.33	0.58	0.55	0.71	0.69	0.60	−25	+ 1	−26	+41	−11	+ 1	−15	+17	− 7	−38	0	0.17
102260	20 43 14.02	−43 18 36.5	10.19	H	310.808 426 90	−43.310 151 15	2.70	3.59	−7.95	1.40	1.09	1.68	1.85	1.55	+38	−20	−12	− 5	+ 6	+ 6	+ 8	+ 1	−10	+53	0	0.31
102261 H	20 43 14.49	+33 49 53.6	7.51	1 H	310.810 366 25	+33.831 548 27 A	2.24	14.70	5.35	0.63	0.69	0.85	0.64	0.67	−17	− 2	−14	− 7	+ 0	− 2	+ 0	−16	+13	−11	2	−0.59
102262	20 43 14.77	+00 45 42.9	10.20	H	310.811 537 63	+00.761 903 90	3.93	−3.98	−5.74	1.39	1.08	1.76	1.86	1.55	+25	−16	−25	−16	+ 3	+17	+ 6	+29	− 7	+28	0	0.64
102263	20 43 14.95	−44 04 52.2	10.32	H	310.812 281 62	−44.081 178 41	10.65	−28.16	−6.03	1.44	1.06	1.73	1.72	1.63	+20	−18	−12	−15	− 4	+13	− 1	− 2	−16	+30	0	−0.30
102264	20 43 16.03	−29 25 24.3	6.95	H	310.816 781 13	−29.423 404 16	44.57	−43.54	−207.55	0.74	0.49	0.87	0.90	0.64	+26	−21	−18	− 5	+ 4	+31	+ 9	+12	− 3	+37	0	1.61
102265	20 43 16.19	−62 32 15.1	8.13	G	310.817 454 71	−62.537 522 43	7.73	21.27	−21.62	0.64	0.59	0.92	0.69	0.77	+ 9	− 8	− 1	+42	+ 7	+ 2	+ 3	+13	+ 2	− 8	1	−1.09
102266	20 43 16.27	−10 44 31.8	8.15	H	310.817 772 37	−10.742 157 57	0.83	27.28	13.18	1.09	0.64	1.27	1.45	0.94	+ 6	+ 3	−15	− 8	+ 4	+44	+14	+57	−14	− 1	0	0.92
102267	20 43 16.63	+36 30 07.5	9.72	H	310.819 298 92	+36.502 074 59	7.72	147.44	−38.79	0.85	0.88	1.23	0.92	0.99	−10	−11	− 3	+15	− 5	−16	− 6	− 1	+ 5	− 9	2	−1.72
102268	20 43 19.51	−46 21 20.0	9.10	H	310.831 283 77	−46.355 557 44	5.02	19.89	−12.88	1.06	0.92	1.32	1.60	1.33	+27	− 9	− 7	+21	+ 1	−13	− 2	− 4	−10	+15	0	−0.74
102269	20 43 19.54	−57 42 58.8	9.49	H	310.831 402 12	−57.716 339 52	3.44	14.77	−35.94	0.91	0.90	1.28	1.14	1.09	− 2	−29	− 7	−23	+ 5	+11	+ 3	−22	+ 6	+ 0	2	1.36
102270	20 43 19.99	+78 48 55.8	8.21	H	310.833 273 83	+78.815 510 77	2.32	−5.72	−8.73	0.61	0.64	0.68	0.65	0.64	+ 1	− 8	−13	+ 4	+11	− 2	+ 9	−26	+20	+ 5	1	0.36
102271	20 43 19.99	+25 49 29.2	7.03	H	310.833 306 54	+25.824 774 10	0.97	1.53	−6.09	0.59	0.50	0.80	0.70	0.51	+ 9	−12	− 5	+23	+15	− 8	+13	+16	+ 1	+13	0	2.14
102272	20 43 20.39	−02 29 56.4	9.23	G	310.834 951 41	−02.498 990 01	14.07	−145.03	−196.65	1.34	0.99	1.63	2.11	1.48	+26	+31	+11	+50	+20	+50	+18	+69	+20	+36	0	0.06
102273	20 43 21.28	+15 11 45.1	8.68	H	310.838 669 17	+15.195 849 18	11.92	50.87	−11.48	0.79	0.66	1.06	1.02	0.71	+13	+ 1	+ 0	+ 7	+28	+25	+23	+23	+ 9	+27	0	0.84
102274	20 43 21.62	+63 12 32.9	7.66	H	310.840 096 14	+63.209 130 51	1.42	−13.72	−3.66	0.56	0.49	0.62	0.53	0.53	+ 1	−23	− 1	−34	+16	+24	+ 6	− 5	+22	+34	0	0.39
102275	20 43 23.64	+33 52 07.3	7.27	H	310.848 482 27	+33.868 689 21	2.88	13.57	7.39	0.42	0.44	0.62	0.46	0.47	−19	+ 0	−13	−12	− 2	− 1	− 2	−18	+17	−24	0	0.37
102276	20 43 24.20	+35 35 16.1	6.48	3 T	310.850 820 82	+35.587 809 30 *	1.47	−6.01	−3.28	0.47	0.56	0.72	0.52	0.60	−14	− 2	+ 8	−14	+ 9	− 8	+ 9	−13	− 1	− 1	2	0.88
102277	20 43 25.10	+23 38 41.1	7.99	H	310.854 588 30	+23.644 740 06	0.62	4.34	−5.28	0.58	0.57	0.89	0.64	0.58	+10	− 6	− 8	+28	+15	− 6	+13	+23	+ 2	+10	3	−0.33
102278	20 43 25.39	+25 36 08.3	7.14	H	310.855 786 67	+25.602 301 06	2.68	19.64	5.79	0.67	0.54	0.84	0.84	0.58	+ 9	− 6	+ 7	+21	+ 7	− 7	+ 8	+13	+ 6	+22	0	1.94
102279	20 43 25.91	+22 04 51.6	9.90	H	310.857 965 08	+22.081 003 02	2.41	−2.60	−4.39	1.28	0.87	1.55	1.38	0.90	− 5	−32	− 7	+25	+ 0	− 6	− 2	+ 2	+24	+ 6	+ 4	0	−0.78
102280	20 43 26.45	−22 27 14.0	7.20	H	310.860 188 26	−22.453 880 84	6.05	−9.66	−16.23	0.91	0.51	0.97	1.15	0.79	+ 7	−23	−11	−18	+ 8	+38	+ 9	+40	− 2	+14	0	−0.54
102281	20 43 27.55	+15 04 28.9	4.43	1 H	310.864 773 81	+15.074 682 24	16.03	−19.61	−41.74	0.54	0.45	0.68	0.71	0.51	+10	− 7	+ 0	+15	+28	+18	+24	+31	+ 7	+19	2	−1.00
102282	20 43 27.55	−37 44 40.7	9.18	H	310.864 783 81	−37.744 639 74	1.69	21.89	−9.94	1.18	0.75	1.26	1.47	0.93	+19	−16	−12	−21	+30	+ 1	+23	+22	− 8	+36	0	0.57
102283 H	20 43 27.91	+16 56 41.9	8.53	H	310.866 276 38	+16.944 971 62 A	12.69	−17.13	24.95	2.58	1.82	2.65	2.67	1.72	+19	+ 0	− 8	− 1	+28	− 8	+15	+33	+ 0	+43	3	0.75
102284	20 43 29.38	+55 17 30.6	6.96	H	310.872 417 35	+55.291 821 50	3.17	6.01	−8.38	0.46	0.46	0.52	0.50	0.51	−15	+ 3	− 1	+ 5	+14	−15	+16	−10	+14	− 6	0	2.12
102285	20 43 32.63	+00 28 09.8	8.79	G	310.885 975 67	+00.469 398 29	1.17	14.07	4.03	0.94	0.78	1.35	1.20	1.10	+30	− 1	−28	+ 1	+ 5	+29	+ 7	+48	−21	+34	0	0.54
102286	20 43 32.99	−70 19 29.6	8.54	H	310.887 450 87	−70.324 876 74	6.64	1.08	2.82	0.67	0.76	1.11	0.78	0.90	−32	+ 0	−18	+13	− 5	−17	− 8	+14	+10	−50	0	−0.45
102287	20 43 33.34	+23 31 41.6	8.20	H	310.888 931 05	+23.528 233 83	0.95	3.51	−3.34	0.64	0.54	0.91	0.69	0.57	− 9	− 6	−12	+18	+ 8	−12	+ 5	+19	+10	− 6	0	0.54
102288	20 43 33.87	−13 08 30.8	9.44	H	310.891 110 98	−13.141 895 44	1.69	13.75	4.36	1.30	0.84	1.59	1.83	1.37	+18	−19	−20	+ 4	+ 9	+23	+11	+64	−29	+18	0	0.13
102289	20 43 34.06	−15 11 14.3	8.30	H	310.891 897 00	−15.187 303 86	10.08	20.29	−7.75	1.07	0.69	1.28	1.39	1.03	+27	−13	− 5	−22	+14	+40	+12	+56	− 5	+30	2	1.28
102290	20 43 34.10	−24 41 30.1	8.66	H	310.892 084 93	−24.691 703 84	17.60	46.59	−9.42	1.21	0.59	1.13	1.49	0.93	+ 5	− 2	−14	−40	+ 0	+ 5	− 3	+10	−11	+ 6	0	−2.70
102291	20 43 34.77	−11 38 29.2	6.81	H	310.894 865 89	−11.641 452 53	3.12	8.75	−12.80	0.91	0.52	0.98	1.08	0.76	+11	−23	− 2	−25	+14	+32	+13	+50	− 5	+16	0	1.14
102292	20 43 34.98	+35 04 22.7	9.39	H	310.895 755 39	+35.072 967 17	1.82	1.32	−0.41	0.83	0.86	1.31	0.90	0.96	− 9	+16	−10	− 3	+ 3	−21	+ 2	− 5	+ 6	−11	0	0.50
102293 H	20 43 36.11	−51 48 03.8	7.93	G	310.900 458 53	−51.801 043 93 A	9.65	22.56	−42.69	1.07	0.88	1.21	1.35	0.76	+17	− 8	+12	−19	−15	+ 0	−23	−45	+ 4	−40	1	0.16
102294	20 43 37.15	−30 13 44.5	8.01	H	310.904 784 98	−30.229 022 41	4.36	−15.15	−16.30	1.06	0.62	1.21	1.39	0.79	+26	−19	−24	+26	+ 5	+31	+17	+15	− 1	+36	0	−0.43
102295 H	20 43 38.80	+19 43 40.8	7.85	H	310.911 680 45	+19.728 005 98 A	5.17	28.76	−12.11	1.43	1.21	1.73	1.40	1.22	+26	+ 4	+ 5	+23	+ 2	+11	+ 5	+12	− 2	+57	1	1.90
102296	20 43 38.90	+09 06 52.2	7.92	H	310.912 062 65	+09.114 494 63	6.03	−8.54	−37.55	0.79	0.56	1.02	0.98	0.63	+20	− 6	+ 6	+ 2	+26	+16	+19	+21	+17	+44	0	0.20
102297	20 43 38.99	+06 34 41.6	7.21	H	310.912 456 52	+06.578 213 76	1.46	−2.38	−3.01	0.79	0.50	1.02	0.87	0.56	+23	−37	− 3	− 6	+39	+15	+22	+28	+16	+52	0	0.43
102298	20 43 39.37	−23 28 12.6	7.99	G	310.914 027 88	−23.470 167 48	7.13	10.43	−3.75	0.91	0.56	1.01	1.22	0.85	+ 8	−13	−13	− 9	+ 1	+35	+ 7	+35	−13	+ 5	0	1.78
102299	20 43 40.11	+05 23 24.8	6.69	H	310.917 109 21	+05.390 212 25	9.81	20.95	−3.49	0.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
102201	10.849	0.052	8.874	0.018		1.638	0.044	T	1.66	0.04	L	8.8194	0.0022	0.019	79		8.79	8.85				1								
102202	11.535	0.078	8.924	0.015		2.147	0.064	T	2.19	0.07	L	8.6891	0.0026	0.021	110		8.65	8.72		R		1 S								
102203	8.494	0.011	7.691	0.008		0.711	0.010	T	0.77	0.01	L	7.7470	0.0010	0.009	97		7.73	7.77		C		1							S	
102204	10.920	0.051	10.304	0.048		0.570	0.008	G	0.64	0.01	H	10.3145	0.0033	0.030	87		10.26	10.36		C		1								
102205	7.194	0.004	6.957	0.005		0.221	0.006	T	0.19	0.02	A	6.9980	0.0007	0.011	155		6.98	7.02				1							S	
102206	8.008	0.012	7.557	0.012	*	0.425	0.016	T	0.49	0.02	L *	7.6624	0.0017	0.013	95	*	7.64	7.69		D	20425+1245	I 1	2 C A	AB	87	8.483	0.005	0.10	0.01	S
102207						−0.199	0.015	G	−0.22	0.02	A	12.4258	0.0123	0.106	77		12.27	12.62		U			1							G
102208	5.747	0.003	5.748	0.003		0.000	0.004	T	0.02	0.00	L	5.7587	0.0008	0.006	120		5.75	5.77					1							S
102209	9.611	0.019	9.063	0.018		0.558	0.015	G	0.63	0.01	H	9.0938	0.0023	0.019	113		9.05	9.12					1 S							
102210	9.308	0.019	8.676	0.017		0.569	0.003	G	0.64	0.00	H	8.7384	0.0017	0.014	66		8.71	8.76		C			1							
102211	8.823	0.013	8.126	0.011		0.598	0.011	G	0.67	0.01	H	8.2077	0.0012	0.012	66		8.19	8.23		C			1						S	
102212	11.126	0.073	9.167	0.023		1.625	0.061	T	1.65	0.06	L	9.1478	0.0025	0.022	85		9.11	9.18					1							
102213	9.574	0.022	8.336	0.014		1.057	0.020	T	1.02	0.02	L	8.3738	0.0017	0.012	71		8.34	8.40		C			1							
102214	9.687	0.017	8.443	0.011		1.066	0.015	G	1.03	0.01	H	8.5208	0.0018	0.015	136		8.49	8.55		C			1							
102215	7.616	0.007	7.455	0.009		0.155	0.011	T	0.17	0.01	L	7.4956	0.0011	0.009	111		7.48	7.52					1						S	
102216	6.201	0.003	6.169	0.004		0.034	0.005	T	0.05	0.00	L	6.1867	0.0005	0.006	110		6.18	6.20					1						S	
102217	7.726	0.009	7.381	0.009		0.347	0.015	G	0.41	0.02	H	7.4142	0.0053	0.029	74		7.38	7.45	0.83	P 1 A			1						S	
102218	8.272	0.012	7.803	0.012		0.476	0.015	G	0.55	0.02	H	7.8415	0.0011	0.010	80		7.82	7.86		C			1						S	
102219	8.498	0.009	8.182	0.010		0.343	0.009	G	0.40	0.01	H	8.2267	0.0016	0.016	155		8.20	8.26					1							
102220	8.565	0.010	8.465	0.012		0.097	0.015	T	0.11	0.02	L	8.4843	0.0018	0.015	114		8.45	8.51			20427+5238	I 1	1 S						S	
102221	8.693	0.014	8.224	0.014		0.455	0.015	T	0.52	0.02	L	8.2729	0.0014	0.011	76		8.25	8.30		C			1						S	
102222	8.772	0.014	8.495	0.016		0.264	0.020	T	0.30	0.03	L	8.5434	0.0016	0.011	73		8.52	8.56		C			1							
102223	9.851	0.019	8.198	0.009		1.382	0.017	T	1.35	0.02	L	8.1908	0.0015	0.014	120		8.17	8.22		C			1							
102224	7.035	0.005	7.013	0.005		0.025	0.007	T	0.04	0.01	L	7.0222	0.0011	0.010	118		7.01	7.04		C			1						S	
102225	10.805	0.050	9.967	0.038		0.855	0.017	G	0.87	0.01	H	9.9921	0.0032	0.024	86		9.96	10.03		C			1							
102226	9.404	0.015	8.370	0.011		0.889	0.015	T	0.89	0.01	L	8.4066	0.0015	0.014	118		8.38	8.44		C			1							
102227	9.199	0.015	8.687	0.015		0.491	0.016	T	0.56	0.02	L	8.7615	0.0021	0.018	93		8.73	8.80					1						S	
102228	10.263	0.032	9.941	0.035		0.306	0.044	T	0.35	0.06	L	10.0214	0.0016	0.020	115		9.97	10.06					1						G	
102229	10.392	0.036	9.841	0.032		0.522	0.036	T	0.59	0.04	L	9.9312	0.0035	0.030	78		9.88	9.99		C			1							
102230	7.661	0.006	6.410	0.004		1.073	0.004	G	1.04	0.00	H	6.4646	0.0009	0.008	101		6.45	6.48		C			1						S	
102231	8.009	0.006	7.650	0.006		0.340	0.008	T	0.40	0.01	L	7.6915	0.0012	0.014	169		7.67	7.72					1						S	
102232	8.403	0.010	8.449	0.013		−0.048	0.004	G	−0.03	0.00	H	8.4488	0.0013	0.014	116		8.42	8.48			20429+4311	I 1	1 S							
102233	7.710	0.006	7.346	0.007		0.345	0.009	T	0.40	0.01	L	7.3938	0.0011	0.011	110		7.38	7.42		C			1						S	
102234	9.470	0.016	8.855	0.014		0.573	0.019	T	0.65	0.02	L	8.9025	0.0021	0.019	153		8.87	8.94					1							
102235						1.450	0.020	G	2.04	0.02	A	10.7872	0.0051	0.035	68		10.72	10.84		C	20429−1855	I 1	1 X						G G	
102236	8.334	0.015	7.963	0.011		0.387	0.015	G	0.45	0.02	H	8.0058	0.0020	0.014	81		7.97	8.03		C			1						S	
102237						1.381	0.015	G	1.63	0.03	I	11.5221	0.0051	0.053	150		11.42	11.60					1						G	
102238						1.083	0.020	G	1.15	0.03	I	10.9489	0.0043	0.052	190		10.85	11.03		U 2			1 S						G	
102239	9.162	0.014	8.885	0.016		0.264	0.020	T	0.30	0.03	L	8.9846	0.0021	0.019	115		8.95	9.01		C			1							
102240	8.403	0.011	7.812	0.010		0.552	0.013	T	0.62	0.01	L	7.8690	0.0012	0.010	110		7.85	7.89		C			1						S	
102241	8.835	0.016	8.225	0.014	A	0.700	0.495	G	0.57	0.03	L *	8.2412	0.0015	0.015	80	*	8.22	8.27			20430−2846	I 1	2 C A	AB	226	7.918	0.039	3.33	0.12	S
102242	10.765	0.056	8.738	0.018		1.611	0.218	G	1.62	0.24	R	8.6533	0.0021	0.021	82		8.62	8.69		U	20431+1706	I 2	1							
102243	10.481	0.033	9.152	0.018		1.128	0.029	T	1.09	0.03	L	9.2085	0.0021	0.020	115		9.16	9.24					1							
102244	10.042	0.032	9.285	0.026		0.676	0.031	T	0.74	0.03	L	9.3831	0.0025	0.022	68		9.35	9.42		C			1							
102245	10.030	0.026	8.639	0.015		1.176	0.024	T	1.14	0.02	L	8.6436	0.0013	0.012	92		8.62	8.67		C			1							
102246	10.690	0.060	9.124	0.028		1.500	0.510	G	4.27	0.98	Q	8.4959	0.1114	0.890	75		8.20	10.33	277.40	P 1 B	20431+1706	I 2	1 V						G P	
102247	10.850	0.048	10.155	0.041		0.629	0.048	T	0.70	0.04	L	10.3181	0.0041	0.027	78		10.27	10.38					1							
102248	10.628	0.044	10.154	0.045		0.450	0.015	G	0.52	0.02	H	10.2236	0.0031	0.024	98		10.17	10.27		C			1						G	
102249	10.071	0.039	9.015	0.027		0.908	0.007	G	0.91	0.01	H	9.0495	0.0025	0.018	61		9.03	9.10		C			1							
102250	9.646	0.020	8.265	0.012		1.169	0.018	T	1.13	0.02	L	8.3147	0.0017	0.013	110		8.30	8.34					1							
102251	10.530	0.040	9.208	0.022		1.122	0.036	T	1.08	0.04	L	9.2809	0.0029	0.017	72		9.25	9.33		C			1							
102252	10.332	0.025	9.176	0.016		0.993	0.023	T	0.97	0.02	L	9.1973	0.0020	0.019	123		9.17	9.24		C			1							
102253	5.859	0.003	5.617	0.003		0.218	0.004	G	0.24	0.01	H	5.6598	0.0006	0.006	109		5.65	5.67		C			1						S	
102254	8.490	0.008	8.567	0.011		−0.066	0.012	T	−0.04	0.01	L	8.5544	0.0014	0.014	138		8.53	8.58		C			1							
102255	9.035	0.011	7.960	0.008		0.931	0.010	T	0.93	0.01	L	8.0263	0.0011	0.009	117		8.01	8.04		C			1						S	
102256	10.474	0.044	9.944	0.043		0.506	0.046	T	0.58	0.05	L	9.9719	0.0044	0.052	64		9.93	10.12	3.02	P 1 A			1							P
102257	10.596	0.048	9.530	0.031		0.924	0.043	T	0.92	0.03	L	9.6154	0.0026	0.018	74		9.58	9.64		C			1							
102258	6.665	0.004	6.368	0.004		0.282	0.005	T	0.32	0.01	L	6.4138	0.0007	0.008	114		6.40	6.43					1						S	P
102259	8.401	0.008	7.734	0.007		0.599	0.022	G	0.64	0.02	A	7.8007	0.0013	0.013	158		7.78	7.83					1						S	
102260	10.525	0.042	10.217	0.050		0.294	0.070	T	0.34	0.09	L	10.2681	0.0039	0.026	87		10.21	10.31					1							
102261	7.464	0.005	7.505	0.006	*	−0.033	0.007	T	−0.01	0.01	L *	7.5038	0.0017	0.018	179	*	7.48	7.53		U 2	20432+3350	H 1	2 C C	AB	163	0.979	0.032	3.89	0.13	S
102262	10.709	0.048	10.245	0.050		0.437	0.063	T	0.51	0.07	L	10.2984	0.0037	0.028	80		10.21	10.35					1						G	
102263	11.104	0.059	10.408	0.052		0.630	0.059	T	0.70	0.05	L	10.4570	0.0037	0.031	81		10.41	10.51		C			1						G	
102264	7.777	0.008	7.029	0.007		0.671	0.004	G	0.75	0.07	F	7.0897	0.0009	0.008	89		7.08	7.11		C			1						S	
102265	8.612	0.009	8.170	0.009		0.433	0.001	G	0.50	0.00	H	8.2261	0.0016	0.012	143		8.21	8.25					1						S	
102266	9.410	0.020	8.252	0.013		0.994	0.019	T	0.97	0.01	L	8.3149	0.0018	0.012	88		8.30	8.34		C			1						S	
102267	10.351	0.027	9.806	0.027		0.511	0.034	T	0.58	0.04	L	9.8275	0.0028	0.027	142		9.79	9.88					1						G	
102268	9.645	0.022	9.128	0.021		0.495	0.023	T	0.57	0.02	L	9.2062	0.0022	0.019	73		9.17	9.24		C			1							
102269	10.734	0.042	9.587	0.025		0.986	0.038	T	0.97	0.03	L	9.6510	0.0025	0.021	99		9.62	9.69		C			1							
102270	10.411	0.031	8.401	0.011		1.665	0.026	T	1.69	0.03	L	8.3170	0.0017	0.019	123		8.29	8.35					1							
102271	7.418	0.006	7.055	0.007		0.344	0.009	T	0.40	0.01	L	7.1079	0.0013	0.010	102		7.09	7.12			20433+2549	I 1	1						S	
102272	10.037	0.026	9.331	0.023		0.641	0.003	G	0.71	0.00	H	9.3611	0.0023	0.019	94		9.33	9.41		C			1							
102273	9.213	0.021	8.732	0.020		0.453	0.026	T	0.52	0.03	L	8.7766	0.0012	0.016	101		8.75	8.80		C			1							
102274	7.657	0.008	7.665	0.009		0.054	0.005	G	0.07	0.00	H	7.6795	0.0010	0.009	107		7.66	7.70					1						S	
102275	7.131	0.004	7.254	0.006		−0.107	0.006	T	−0.09	0.01	L	7.2424	0.0011	0.014	185		7.22	7.26					1						S	
102276	8.104	0.074	6.618	0.044		1.251	0.068	T	1.21	0.07	L	6.5371	0.0585	0.429	159		6.01	7.06	16.39	P 1 A			1 V						S	P
102277	7.911	0.009	7.986	0.012		−0.064	0.014	T	−0.04	0.01	L	7.9810	0.0015	0.013	118		7.96	8.01		C			1						S	
102278	9.272	0.015	7.334	0.007		1.608	0.013	T	1.63	0.01	L	7.2531	0.0015	0.012	99		7.24	7.28			20434+2537	I 1	1						S	
102279	10.205	0.029	9.970	0.037		0.224	0.044	T	0.25	0.05	L	9.9684	0.0030	0.025	101		9.92	10.01					1						G	
102280	8.434	0.011	7.313	0.008		0.965	0.011	T	0.95	0.01	L	7.3651	0.0009	0.008	80		7.35	7.38					1						S	
102281	4.784	0.005	4.463	0.003		0.302	0.013	G	0.34	0.03	C	4.5040	0.0030	0.025	96		4.46	4.53	0.16	P 1 A			1						S	P
102282	10.881	0.045	9.337	0.020		1.297	0.039	T	1.26	0.04	L	9.3403	0.0020	0.023	117		9.29	9.39					1							
102283	9.086	0.023	8.623	0.024	*	0.436	0.030	T	0.50	0.03	L *	8.6250	0.0027	0.022	80	*	8.59	8.66		R	20435+1657	I 1	2 C A	AB	179	3.927	0.005	0.36	0.02	
102284	6.880	0.004	6.956	0.006		−0.065	0.007	T	−0.04	0.01	L	6.9477	0.0009	0.009	119		6.94	6.97		C			1						S	
102285	8.948	0.016	8.816	0.019		0.136	0.012	G	0.15	0.01	H	8.8315	0.0016	0.014	82		8.81	8.86		C			1							
102286	9.183	0.011	8.591	0.010		0.553	0.011	T	0.63	0.01	L	8.6628	0.0019	0.023	166		8.63	8.70					1						S	
102287	8.116	0.008	8.186	0.011		−0.059	0.012	T	−0.04	0.01	L	8.1850	0.0014	0.012	114		8.17	8.21		C			1							
102288	9.676	0.024	9.447	0.029		0.213	0.037	T	0.24	0.04	L	9.5114	0.0023	0.020	82		9.47	9.55					1							
102289	8.806	0.014	8.344	0.014		0.465	0.015	G	0.54	0.02	H	8.3992	0.0015	0.012	79		8.38	8.42		C			1						S	
102290	9.389	0.019	8.735	0.017		0.598	0.019	T	0.67	0.02	L	8.7865	0.0017	0.014	76		8.76	8.81		C			1						S	
102291	8.094	0.008	6.937	0.006		0.993	0.008	T	0.97	0.01	L	6.9754	0.0010	0.008	87		6.97	6.99		C			1						S	
102292	11.104	0.051	9.432	0.020		1.397	0.043	T	1.37	0.05	L	9.5380	0.0028	0.028	155		9.49	9.58		C			1							
102293	8.372	0.011	8.000	0.013	A	0.401	0.015	G	0.47	0.02	H *	8.0044	0.0011	0.013	107	*	7.98	8.03		D	20436−5148	I 1	2 C A	AB	327	3.553	0.012	3.02	0.07	S
102294	9.426	0.021	8.123	0.013		1.107	0.019	T	1.07	0.02	L	8.1767	0.0014	0.014	80		8.15	8.20					1							
102295	8.619	0.014	7.904	0.012	*	0.657	0.015	T	0.72	0.01	L *	7.9860	0.0018	0.017	120	*	7.96	8.02		D	20436+1944	I 1	2 C A	AB	306	7.434	0.005	0.94	0.02	S
102296	8.268	0.010	7.954	0.010		0.298	0.013	T	0.34	0.02	L	7.9961	0.0013	0.011	98		7.97	8.02		C			1						S	
102297	8.568	0.009	7.325	0.006		1.061	0.008	T	1.03	0.01	L	7.3785	0.0012	0.010	121		7.36	7.39		C			1						S	
102298	8.626	0.013	8.046	0.012		0.543	0.015	G	0.62	0.01	H	8.0971	0.0014	0.010	77		8.08	8.12		C			1						S	
102299	6.818	0.005	6.706	0.006		0.109	0.007	T	0.12	0.01	L	6.7349	0.0009	0.010	94		6.72	6.75					1						S	
102300						1.997	0.400	G	3.75	1.18	I	11.4678	0.0055	0.049	107		11.39	11.56					1						G	

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
102301	20 43 41.12	−00 10 43.8	11.46	G	310.921 331 41	−00.178 827 55		38.38	362.58	254.00	2.37	1.98	3.24	3.09	2.72	+30	− 5	−35	+28	+10	+24	+16	+64	−24	+30	0	−2.20
102302	20 43 41.93	+04 04 42.1	7.67	H	310.924 698 07	+04.078 373 31		0.09	−5.68	−12.78	0.73	0.65	1.06	0.91	0.83	+22	−11	−46	−	4	−	3	+27	+10	+49	−34	+18	0	1.57
102303	20 43 41.96	−40 03 37.1	8.00	H	310.924 828 84	−40.060 306 80		3.51	23.15	−12.17	0.86	0.58	1.07	1.07	0.76	+25	−27	−	6	+	2	−	6	+10	+	3	−15	−	7	+50	4	−1.93
102304	20 43 43.02	−02 26 59.9	7.77	H	310.929 244 53	−02.449 962 96		4.14	44.98	−9.91	0.93	0.68	1.18	1.43	0.94	−	1	+	1	−36	+47	−26	+37	−13	+65	−33	−17	0	−0.69
102305	20 43 43.43	−35 38 24.8	8.97	H	310.930 965 41	−35.640 209 41		−0.54	8.43	4.42	1.01	0.71	1.28	1.15	0.91	+55	−25	−13	−	4	+18	+	3	+17	+	9	−	1	+79	0	−1.16
102306	20 43 44.15	+46 19 05.4	7.05	H	310.933 967 93	+46.318 170 69		5.70	−2.17	−16.43	0.54	0.47	0.62	0.67	0.49	−11	−14	+	4	−	2	−11	+	5	−12	−12	+25	−12	3	0.51
102307	20 43 44.50	−42 02 54.1	10.27	H	310.935 397 48	−42.048 359 81		9.16	19.54	−45.20	1.85	1.34	2.18	2.43	1.89	+43	−34	−19	+22	+19	−	9	+23	+15	−13	+53	4	−0.03
102308	20 43 45.37	−36 34 36.6	10.20	H	310.939 033 77	−36.576 827 65		8.52	45.29	44.93	1.37	0.87	1.66	1.41	1.11	+40	−27	−	9	−16	+15	+	9	+15	+	9	−	7	+65	0	−0.34
102309	20 43 47.66	+23 47 28.0	6.93	H	310.948 602 98	+23.791 117 84		2.84	11.72	−2.44	0.51	0.45	0.70	0.52	0.46	+	7	−13	−	7	+36	+12	−14	+11	+30	+	6	+15	0	0.31
102310	20 43 47.72	−21 14 00.4	8.50	H	310.948 845 50	−21.233 438 84		7.57	4.68	0.42	1.11	0.69	1.26	1.45	1.01	+18	−	8	−24	−11	+	3	+31	+11	+46	−18	+14	0	−1.14
102311	20 43 47.98	+35 24 35.8	8.09	H	310.949 935 65	+35.409 957 63		2.62	−1.96	−8.91	0.63	0.64	0.88	0.78	0.77	−	8	−	2	−11	−14	+	7	−	9	+	6	−	9	+	7	+	1	1	−1.26
102312	20 43 48.46	+66 34 52.3	9.20	H	310.951 932 09	+66.581 184 84		4.76	6.36	14.34	0.78	0.75	0.83	0.93	0.82	+	4	−19	+20	+18	+	9	−	6	+13	+	6	−	5	+29	0	1.21
102313	20 43 49.28	+41 50 32.3	8.50	G	310.955 337 52	+41.842 301 38		1.43	4.43	−1.77	0.56	0.58	0.77	0.62	0.64	+	1	+	1	+12	−	1	−	4	−28	+	0	−	3	+14	+	5	0	−0.37
102314	20 43 50.13	+39 27 34.8	7.73	H	310.958 892 19	+39.459 664 58		2.63	−11.88	−17.83	0.50	0.55	0.72	0.52	0.56	−14	−	9	+14	−11	+	8	−	3	+	7	−10	+16	−	4	0	−0.52
102315	20 43 51.49	+33 06 07.4	8.25	H	310.964 553 87	+33.102 064 93		2.28	−1.66	3.77	0.50	0.57	0.81	0.57	0.61	−22	+	3	−	5	−	1	+	0	−10	−	2	−21	+	7	−32	1	−0.35
102316	20 43 51.50	−25 49 30.7	7.90	H	310.964 597 56	−25.825 185 37		1.62	30.02	15.85	0.87	0.53	1.02	1.22	0.85	+	5	+	7	−20	+17	−20	+39	−19	+29	−26	+	1	0	−1.40
102317	20 43 51.75	−61 59 56.9	9.06	H	310.965 632 65	−61.999 132 34		2.12	−12.42	2.22	0.76	0.85	1.21	0.83	1.03	+	9	−12	−	8	+43	+	1	+	5	+	0	+37	−	3	−15	2	1.54
102318	20 43 51.94	+01 41 24.2	9.65	G	310.966 424 76	+01.690 046 72		3.08	−8.48	−15.57	1.15	0.92	1.48	1.53	1.26	+23	−11	−25	+	9	+	7	+29	+	8	+49	−	1	+33	0	0.03
102319	20 43 52.33	+34 04 14.5	7.65	H	310.968 054 61	+34.070 701 85		3.24	−11.04	−29.85	0.44	0.46	0.65	0.52	0.49	−20	−	5	−	5	+	0	−	4	−	1	−	4	−	6	+16	−21	0	−0.08
102320 H	20 43 53.35	+31 19 10.4	9.95	2 G	310.972 308 63	+31.319 565 00	A	18.49	11.65	−4.89	1.28	1.58	2.34	1.25	1.47	−33	−	8	+	6	−	5	−	9	−	5	−	7	+	4	+	3	−36	0	1.13
102321	20 43 53.57	+42 13 12.8	7.01	H	310.973 219 11	+42.220 231 28		4.89	11.99	−12.98	0.47	0.47	0.61	0.57	0.52	−	1	−	1	+	7	+11	−	7	−20	−	4	−	8	+20	+	0	0	−1.56
102322 H	20 43 53.80	−05 57 14.7	7.85	H	310.974 169 83	−05.954 074 24	A	5.93	6.58	−12.71	2.08	2.04	1.58	2.28	1.28	−	1	−	6	−	4	+49	−	9	+14	−13	+49	−10	+	4	1	0.30
102323	20 43 54.38	−68 34 07.5	9.12	H	310.976 584 89	−68.568 763 83		4.51	−22.53	−14.63	0.65	0.82	1.20	0.69	0.93	−25	−14	−	9	−	3	+	4	−	4	+	5	+	6	−	1	−31	0	−1.58
102324	20 43 54.90	−27 54 51.4	8.04	H	310.978 734 47	−27.914 286 55		6.96	9.90	8.98	0.99	0.59	1.06	1.36	0.83	+10	−	4	−	9	+22	−29	+	9	−26	−	3	−27	+	8	0	0.13
102325	20 43 55.04	−19 20 38.9	7.44	H	310.979 336 53	−19.344 143 76		4.55	−35.91	−55.48	0.92	0.53	1.01	1.14	0.79	+14	−	3	−	7	−23	+	4	+36	+	7	+39	−13	+10	0	0.61
*102326	20 43 55.60	−68 54 52.2	8.08	H	310.981 658 62	−68.914 494 77		3.10	19.02	−20.38	0.51	0.61	0.89	0.60	0.73	−30	−	5	−	5	+	3	+	4	−11	+	3	+	3	+	7	−39	0	−0.11
*102327	20 43 55.57	+27 27 16.3	8.49	G	310.981 557 09	+27.454 520 00		3.15	−3.95	−7.17	0.52	0.61	0.99	0.63	0.71	−	5	+	3	+	5	−	4	+	0	−18	+	0	+	2	−	2	+12	0	−0.44
102328	20 43 56.34	+09 49 18.7	8.88	H	310.984 733 99	+09.821 862 23		2.87	−15.67	−3.78	1.01	0.68	1.30	1.46	0.75	+24	−11	+	6	+22	+33	+14	+25	+24	+19	+44	0	0.28
102329	20 43 56.96	−05 35 24.8	7.19	1 H	310.987 328 50	−05.590 216 32		5.96	7.75	−7.18	0.83	0.59	1.08	1.17	0.82	+23	−15	−26	+16	−	2	+24	+	7	+61	−18	+14	0	1.01
102330	20 43 59.33	+17 34 17.6	8.01	2 H	310.997 226 76	+17.571 544 72		2.51	−9.19	−8.99	0.97	0.69	1.11	1.44	0.73	+14	+10	−10	+	7	+47	+	7	+37	+27	+16	+29	0	−0.90
102331	20 44 00.03	+21 24 02.3	7.18	H	311.000 142 25	+21.400 639 67		9.07	6.97	7.50	0.66	0.46	0.80	0.76	0.46	+	4	−	2	+	3	+31	+20	+15	+18	+32	+17	+20	0	0.63
102332	20 44 00.62	−21 21 18.4	9.84	H	311.002 582 97	−21.355 119 49		38.26	31.42	−265.31	3.11	1.94	2.00	5.71	5.25	−	5	−	6	−13	−44	+36	+38	+21	+29	+19	+56	2	−0.38
102333	20 44 02.19	−51 55 15.0	4.51	H	311.009 111 22	−51.920 840 51		41.38	155.49	−53.64	0.73	0.52	0.82	0.92	0.51	+	7	−	4	−19	−19	−	7	−	4	−14	−43	+12	−37	0	−1.69
102334	20 44 02.45	+55 49 45.5	8.52	G	311.010 199 32	+55.829 310 65		3.60	16.27	−41.78	0.74	0.66	0.79	0.81	0.78	−	8	−15	+	1	−	7	+16	+	8	+14	+	8	+	6	−	1	1	−0.40
102335	20 44 03.49	+29 08 46.2	7.61	H	311.014 549 02	+29.146 155 86		1.34	8.99	15.49	0.46	0.51	0.81	0.51	0.58	+	0	+15	+	9	−	4	+	7	−	8	+	8	−	3	+	0	+17	0	2.91
102336	20 44 04.10	−31 55 42.3	7.39	G	311.017 066 33	−31.928 405 92		1.92	6.04	−2.83	0.85	0.55	1.00	1.11	0.81	+22	−11	−	2	−	5	+	8	+37	+	6	+21	+	5	+38	0	−0.63
102337	20 44 06.33	−30 00 04.8	9.94	G	311.026 365 33	−30.001 333 59		7.32	−60.65	−318.98	1.38	0.86	1.56	1.79	1.20	+24	−20	−11	+	1	+15	+24	+17	+22	−	9	+36	0	−0.08
102338	20 44 07.51	−44 46 19.1	8.20	H	311.031 307 88	−44.771 973 92		17.31	16.95	−62.47	0.84	0.73	1.02	1.09	1.18	+28	−14	−	7	+10	+10	−	2	+	8	+18	+12	+30	0	0.17
102339	20 44 07.62	−29 49 01.8	9.72	H	311.031 767 21	−29.817 163 39		1.48	9.29	−3.90	1.27	0.83	1.48	1.61	1.19	+29	−24	−	7	−	6	+	9	+32	+11	+15	−	3	+43	2	1.10
102340	20 44 07.88	−04 06 34.6	8.87	H	311.032 822 31	−04.109 619 31		0.04	6.38	−4.30	1.30	0.89	1.53	1.71	1.23	+26	−30	−17	+37	+	9	+11	+11	+71	−15	+11	+25	0	−0.27
102341	20 44 08.42	+14 48 01.5	8.77	H	311.035 077 08	+14.800 409 71		2.72	−5.17	−34.63	1.03	0.68	1.19	1.38	0.77	+	7	−15	−12	+25	+25	+	7	+21	+25	+	9	+21	0	−0.04
102342	20 44 09.13	−11 36 13.1	8.49	H	311.038 031 33	−11.603 639 06		1.76	0.15	−24.65	1.11	0.62	1.35	1.32	0.90	+16	−17	−34	−30	−	6	+33	+13	+51	−39	−	3	0	−0.01
102343	20 44 11.78	−12 17 49.0	9.51	H	311.049 099 50	−12.296 930 74		2.22	−15.37	12.87	1.34	0.99	1.63	1.69	1.49	+38	−21	−	8	+	0	+29	+31	+30	+73	−15	+38	0	−0.68
102344	20 44 12.61	−03 54 55.4	7.04	H	311.052 555 76	−03.915 387 41		4.83	6.03	−6.19	0.99	0.64	1.18	1.29	0.87	+	5	−29	−	9	+38	−10	+18	−	7	+66	−	6	+	4	0	−1.60
102345	20 44 12.69	−69 51 20.0	8.38	H	311.052 864 15	−69.855 552 22		2.85	15.95	−18.01	0.60	0.69	1.01	0.67	0.82	−29	−	4	−	9	+10	−	5	−22	−	7	+11	+17	−44	1	0.26
102346	20 44 12.91	+21 54 25.6	10.09	G	311.053 790 96	+21.907 122 63		12.14	178.94	123.86	1.35	0.99	1.86	1.34	1.00	−	6	−43	+21	+20	+	8	−15	+	7	+20	+	4	+16	2	2.77
102347	20 44 13.01	+35 32 12.5	9.02	H	311.054 208 74	+35.536 802 33		2.38	−9.47	−13.38	0.72	0.81	1.15	0.83	0.94	−	4	+	5	+	5	−13	+	0	−	8	−	1	+	9	−19	−	1	1	3.39
102348 H	20 44 13.92	−77 59 16.4	10.03	H	311.058 016 52	−77.987 884 44	*	6.24	−0.77	−1.42	1.01	0.91	1.26	1.18	1.09	+	2	−12	−	3	+11	+	3	−10	+	3	+13	−	5	+10	0	0.88
102349	20 44 14.50	−49 05 10.4	10.03	H	311.060 419 30	−49.086 209 48		3.87	27.14	−12.38	1.52	1.14	1.67	1.86	1.35	+16	−33	−	5	+	2	−12	−	6	−	8	−29	−12	+15	0	−1.04
102350	20 44 16.07	+01 49 07.7	8.87	G	311.066 972 92	+01.818 798 29		4.56	17.26	−18.22	0.99	0.76	1.27	1.31	1.04	+14	−	5	−27	+	2	+	5	+30	+	9	+50	−11	+22	0	−0.36
102351	20 44 16.34	−09 02 58.6	7.66	H	311.068 096 11	−09.049 623 75		5.43	23.58	−14.42	0.92	0.59	1.12	1.18	0.82	+11	−23	−28	+36	−11	+19	−	3	+68	−27	+	5	4	0.64
102352	20 44 16.49	+05 58 58.8	12.39	G	311.068 695 42	+05.983 010 18		−0.81	−5.25	−7.90	1.88	1.21	2.45	2.15	1.41	+20	−16	−19	−	9	+40	+	2	+26	+32	+10	+50	0	−0.05
102353	20 44 16.53	−53 50 39.8	8.36	2 T	311.068 862 10	−53.844 392 11		8.42	−35.71	−58.24	0.91	0.77	1.15	1.17	0.80	+14	−15	−29	+10	−15	+12	−29	−34	+14	−35	0	1.14
102354 H	20 44 21.08	−64 11 21.5	9.83	H	311.087 837 43	−64.189 301 59	A	5.01	−13.56	−10.15	2.62	3.70	4.19	2.68	3.72	+17	−	2	−	9	+41	+14	+	1	+15	+23	−	6	+17	2	0.64
102355	20 44 21.13	−34 31 08.1	9.13	2 H	311.088 062 06	−34.518 911 64		1.86	−5.45	−6.35	1.32	0.81	1.40	1.52	1.16	+13	−42	−	5	+26	+	7	+	3	+	6	+37	−	2	+23	0	−0.89
102356	20 44 21.40	+36 42 49.2	7.73	1 H	311.089 167 88	+36.713 670 55		1.48	−6.30	−13.63	0.51	0.54	0.74	0.55	0.62	−15	+	1	+	2	+15	−	4	−	6	−	3	+	5	−12	−	7	2	1.59
102357	20 44 21.95	+19 45 04.1	10.29	G	311.091 473 56	+19.751 144 35		50.18	−15.95	−600.01	1.51	1.16	1.99	1.57	1.33	+12	−	9	+12	+20	+10	−	2	−	6	+27	−	5	+51	0	1.21
102358	20 44 22.04	+56 29 18.3	5.91	2 H	311.091 836 99	+56.488 408 56		3.38	9.84	−1.60	0.43	0.43	0.47	0.43	0.46	−	9	+	0	+	9	+22	+11	−	6	+13	+12	+	0	−	2	0	0.93
102359	20 44 22.46	+43 57 33.7	9.01	H	311.093 585 25	+43.959 362 81		2.99	5.03	1.84	0.73	0.71	0.89	0.89	0.83	−10	−	2	+15	+	1	+	7	−11	+10	−15	−	3	+	5	0	0.74
102360	20 44 23.97	+39 44 56.5	8.06	H	311.099 887 28	+39.749 036 47		3.11	31.46	16.54	0.54	0.60	0.77	0.57	0.65	−	7	−	4	+	8	−	6	+	2	−14	+	3	−13	+12	−	1	0	0.28
102361	20 44 25.35	+17 41 50.3	10.36	G	311.105 626 77	+17.697 304 85		2.70	−6.68	−7.78	1.50	1.12	1.78	2.26	1.21	+24	+	4	−	3	+16	+43	+	4	+34	+40	+12	+32	0	−0.35
102362	20 44 25.49	−08 25 39.7	8.29	H	311.106 214 17	−08.427 692 97		3.62	3.30	1.19	1.00	0.64	1.25	1.20	0.90	+21	−37	−17	+40	−	1	−	3	+	0	+64	−19	+25	0	1.72
102363	20 44 26.60	+31 41 44.8	7.92	H	311.110 814 01	+31.695 771 63		−0.68	−0.34	−3.52	0.42	0.52	0.80	0.48	0.55	−37	+	0	+	1	+	0	−12	−	6	−11	−	5	+	9	−43	0	−0.25
102364 H	20 44 26.83	+21 19 01.7	8.20	H	311.111 791 85	+21.317 145 30	A	2.00	−0.07	−8.41	1.14	0.91	1.38	1.18	0.85	−	1	+	3	−	3	+	7	−	8	−	6	−10	+28	+	1	+	9	2	0.79
*102365	20 44 27.10	−33 29 15.0	9.37	H	311.112 910 79	−33.487 486 28		6.17	2.58	2.43	1.16	0.79	1.30	1.43	1.15	+19	−29	−	5	+	8	−	1	+11	−	1	+18	−	4	+28	0	0.54
*102366	20 44 27.15	+83 44 06.1	8.26	H	311.113 143 39	+83.735 016 65		2.10	6.13	6.05	0.60	0.64	0.69	0.71	0.81	+	9	−12	−18	+	4	+	1	−12	−	2	−23	+	3	+	7	0	−0.01
*102367 H	20 44 27.09	+61 36 04.3	9.15	H	311.112 891 16	+61.601 189 97	*	1.15	4.86	−6.79	0.75	0.69	0.81	0.69	0.75	−10	+	5	+	6	−	8	+18	−15	+24	−12	−	3	+27	0	1.10
102368	20 44 30.17	+19 30 51.8	8.06	H	311.125 690 16	+19.514 393 89		2.59	−8.85	−21.08	0.80	0.65	1.10	0.89	0.69	+25	−11	+14	+26	−	3	+	2	+	0	+14	+	8	+44	0	0.72
102369	20 44 31.29	+51 01 52.3	8.95	1 H	311.130 354 65	+51.031 194 23		1.55	3.61	−1.28	0.69	0.70	0.82	0.84	0.85	+	2	+	2	+12	+	7	+	8	−14	+10	+	0	−	1	−	2	2	0.33
102370	20 44 33.08	+69 45 06.8	6.50	H	311.137 835 16	+69.751 900 57		7.56	−28.44	−36.10	0.49	0.44	0.52	0.54	0.46	−	7	−13	−	1	−10	+	6	−	2	+	2	−26	+33	+	3	0	−0.79
102371	20 44 33.26	−14 11 08.7	6.87	2 H	311.138 591 27	−14.185 762 59		2.18	20.09	−18.65	1.16	0.69	1.31	1.56	0.99	+26	−29	−17	+	5	+	7	−12	+19	+69	−19	+11	5	−0.23
102372	20 44 34.75	−66 29 53.2	9.31	H	311.144 786 48	−66.498 097 71		4.95	34.43	−14.29	0.75	0.83	1.38	0.87	0.93	−43	+	2	−	5	+17	+	9	+	3	+	8	+22	−	1	−34	2	2.08
102373	20 44 35.33	−28 12 16.4	7.24	G	311.147 192 13	−28.204 569 44		11.38	48.38	−22.08	1.13	0.59	1.06	1.61	1.12	−13	+22	+	4	+47	−38	+26	−50	+17	−36	−17	0	−0.22
102374	20 44 35.36	+23 37 29.9	8.14	H	311.147 328 86	+23.624 976 59		0.22	4.44	−4.86	0.60	0.56	0.84	0.60	0.56	+16	−	1	−	7	+35	+17	−	5	+16	+33	+	7	+21	0	−0.83
102375	20 44 35.80	−63 08 08.8	8.91	H	311.149 184 17	−63.135 786 45		12.84	61.06	−147.58	0.92	0.76	1.24	1.11	1.15	+11	−	4	−	3	+12	+	9	−14	+10	+16	+24	−	4	0	−0.58
102376	20 44 36.33	−71 14 01.9	8.32	H	311.151 390 86	−71.233 861 36		4.52	18.17	2.69	0.62	0.71	0.99	0.70	0.88	−21	−14	+	7	−13	+	8	+	3	+	7	−18	+	0	−38	0	−2.11
102377	20 44 36.45	+47 17 49.0	6.57	H	311.151 873 47	+47.296 936 51		1.37	4.12	−10.19	0.45	0.45	0.54	0.53	0.45	−11	+	4	+12	+	9	+	3	−	4	+	4	−15	+12	−12	1	−0.09
102378	20 44 36.58	−00 06 04.7	8.70	H	311.152 432 24	−00.101 306 64		3.08	30.41	−7.62	0.97	0.81	1.36	1.24	1.15	+31	−	8	−30	+12	+17	+24	+22	+62	−20	+35	0	0.19
102379	20 44 37.00	−10 29 40.1	8.21	H	311.154 150 94	−10.494 471 37		11.91	109.05	−123.69	1.06	0.56	1.19	1.32	0.83	+	3	−21	−24	−	7	−11	+27	+	2	+51	−29	−12	0	0.20
102380	20 44 38.81	+13 33 19.3	7.57	H	311.161 704 39	+13.555 354 30		6.14	30.44	−7.75	0.63	0.55	0.86	0.79	0.56	+12	−23	−	3	+	5	+28	+	5	+23	+17	−	4	+24	5	1.05
102381	20 44 40.93	−35 49 39.2	6.95	H	311.170 531 92	−35.827 558 91		4.85	11.53	0.10	0.67	0.51	0.86	0.80	0.67	+50	−16	−	6	−	3	+15	+	6	+15	+	3	+	1	+78	0	−0.33
102382	20 44 43.09	+29 43 20.3	10.48	H	311.179 550 15	+29.722 303 84		−0.33	7.34	2.65	0.98	1.13	1.73	1.27	1.26	+	0	+	2	+	5	+37	+10	−	1	+12	+16	+	5	+15	0	0.69
102383	20 44 44.90	+04 53 35.4	8.71	H	311.187 101 11	+04.893 172 46		9.95	25.86	4.27	0.87	0.62	1.18	1.10	0.75	+32	−29	−12	+	1	+11	+15	+13	+19	−13	+48	0	0.27
102384	20 44 46.80	+20 29 23.3	6.97	H	311.195 000 49	+20.489 810 12		7.58	−9.75	−43.55	0.60	0.48	0.83	0.67	0.49	+10	−12	+18	+29	+10	+	4	+	9	+18	+	8	+28	0	1.04
102385	20 44 47.67	+11 58 16.4	8.73	H	311.198 644 57	+11.971 213 92		3.43	−36.21	−27.76	0.92	0.68	1.20	1.36	0.76	+28	−10	+	5	+27	+31	+20	+27	+23	+13	+49	0	−0.23
102386 H	20 44 49.23	−20 53 34.2	7.64	H	311.205 116 05	−20.892 833 17	A	3.44	−20.53	−28.59	1.51	0.90	1.50	1.79	1.35	+	8	−	8	−	6	+	7	+	7	+20	−	2	+51	−29	+22	0	0.22
102387	20 44 51.63	−39 33 38.8	8.18	H	311.215 106 46	−39.560 777 82		1.76	14.56	7.83	0.90	0.64	1.11	1.08	0.86	+33	−17	−	7	−24	−10	+	7	−	7	−21	−11	+56	0	−1.74
102388	20 44 52.52	+25 16 15.8	4.92	G	311.218 846 79	+25.271 048 23		8.94	−27.74	−177.60	0.57	0.44	0.77	0.68	0.49	+	8	−	9	−	7	+11	+11	−17	+	1	+25	−13	+24	0	−0.25
102389	20 44 53.92	−08 00 22.7	8.06	H	311.224 649 88	−08.006 296 66		5.65	4.74	−2.21	0.92	0.59	1.11	1.23	0.83	+13	−23	−15	+43	−	9	+	1	−	6	+65	−18	+13	3	0.83
102390 H	20 44 54.58	+12 18 45.6	6.71	H	311.227 400 26	+12.312 656 00	A	4.81	20.42	4.04	1.02	0.76	1.11	1.24	0.78	+25	+	1	+	4	+14	+34	+	7	+22	+25	+10	+47	4	0.52
102391	20 44 56.94	−11 01 50.7	8.56	H	311.237 259 45	−11.030 747 97		2.51	−16.57	−12.75	1.24	0.62	1.40	1.67	0.97	−	1	−	7	−10	−19	+	0	+46	+	2	+57	−16	−	3	0	−0.13
102392	20 44 57.01	−47 26 57.7	9.84	H	311.237 543 55	−47.449 348 07		7.90	41.24	−20.60	1.28	1.00	1.43	1.76	1.39	+34	−27	−18	+13	+10	−	3	+	9	+	3	+	1	+24	0	−0.73
102393	20 44 57.03	+00 17 31.7	7.55	G	311.237 641 49	+00.292 135 44		16.84	133.97	−78.24	0.84	0.65	1.11	1.05	0.90	+21	−16	−25	−	3	+17	+26	+23	+60	−15	+22	0	−1.18
102394	20 44 57.17	−03 33 29.3	10.43	G	311.238 216 28	−03.558 139 88		20.89	−144.84	−207.78	1.64	1.24	2.07	2.36	1.80	+25	−17	−25	+37	+	3	+17	+	8	+65	−21	+24	0	−2.06
102395	20 44 57.56	−66 12 11.7	3.42	G	311.239 815 30	−66.203 238 26		23.71	−42.40	10.57	0.37	0.37	0.63	0.46	0.46	−44	−	1	−	9	+28	−	5	−	6	−	5	+18	+	0	−45	1	−0.02
102396 H	20 44 57.56	−50 29 16.5	7.27	H	311.239 841 88	−50.487 909 22	A	1.88	8.59	−6.69

No.	Tycho Magnitudes					Colour Indices					Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
102301						1.449	0.007	G	1.80	0.03	I	11.5577	0.0051	0.041	79		11.49	11.62					1							G
102302	9.800	0.025	7.876	0.010		1.597	0.021	T	1.62	0.02	L	7.7817	0.0016	0.012	80		7.76	7.80					1							
102303	9.318	0.017	8.115	0.011		1.029	0.016	T	1.00	0.01	L	8.1680	0.0016	0.015	95		8.15	8.19					1							
102304	9.323	0.016	7.888	0.009		1.211	0.014	T	1.17	0.01	L	7.9348	0.0013	0.011	98		7.92	7.96					1							
102305	10.341	0.021	9.064	0.012		1.087	0.019	T	1.05	0.02	L	9.1382	0.0017	0.017	166		9.11	9.17					1							
102306	8.387	0.009	7.169	0.005		1.041	0.008	T	1.01	0.01	L	7.2195	0.0010	0.009	132		7.21	7.23		C	20437+4619	I 1	1							S
102307	10.940	0.055	10.342	0.053		0.558	0.056	T	0.63	0.05	L	10.3849	0.0030	0.034	90		10.33	10.46		C			1							G
102308	11.035	0.049	10.313	0.042		0.649	0.049	T	0.71	0.04	L	10.3385	0.0035	0.028	134		10.29	10.40					1							
102309	6.857	0.004	6.912	0.006		−0.046	0.007	T	−0.02	0.01	L	6.9187	0.0010	0.009	130		6.91	6.93					1							S
102310	8.860	0.014	8.547	0.015		0.297	0.019	T	0.34	0.03	L	8.5763	0.0017	0.014	78		8.56	8.60		C			1							S
102311	9.840	0.020	8.236	0.010		1.344	0.018	T	1.31	0.02	L	8.2457	0.0016	0.016	156		8.22	8.28		C			1							
102312	9.912	0.023	9.257	0.020		0.608	0.026	T	0.68	0.02	L	9.3285	0.0021	0.019	104		9.30	9.37		C			1							
102313	8.426	0.009	8.490	0.011		−0.050	0.015	G	−0.03	0.01	H	8.4831	0.0018	0.015	131		8.46	8.51		C			1							
102314	8.963	0.011	7.822	0.007		0.981	0.010	T	0.96	0.01	L	7.8927	0.0012	0.013	149		7.87	7.92		C	20438+3928	I 1	1							
102315	9.831	0.016	8.410	0.009		1.200	0.014	T	1.16	0.01	L	8.4170	0.0012	0.016	200		8.39	8.45		C			1							
102316	9.363	0.020	8.033	0.012		1.129	0.018	T	1.09	0.02	L	8.0691	0.0010	0.008	87		8.05	8.08					1							S
102317	10.487	0.028	9.169	0.015		1.119	0.025	T	1.08	0.03	L	9.2259	0.0023	0.021	151		9.19	9.27		C			1							
102318	10.221	0.034	9.666	0.032		0.498	0.008	G	0.57	0.01	H	9.7508	0.0025	0.018	83		9.72	9.78		C			1							
102319	7.650	0.004	7.657	0.006		−0.002	0.007	T	0.02	0.01	L	7.6606	0.0011	0.013	190		7.64	7.68					1							
102320	11.631	0.056	10.101	0.023	A	1.210	0.015	G	1.17	0.01	I	*	10.0253	0.0027	0.037	277	*	9.96	10.09		U	20439+3119	H 1	2 C D	AB	127	4.444	0.055	3.19	0.20	G D
102321	7.353	0.006	7.034	0.005		0.302	0.005	G	0.35	0.01	H	7.0845	0.0010	0.008	123		7.07	7.10					1							S
102322	9.200	0.014	7.970	0.009	*	1.050	0.013	T	1.02	0.01	L	*	8.0152	0.0012	0.009	96	*	8.00	8.04		D	20439−0557	I 1	2 C A	AB	358	0.324	0.003	0.82	0.03	S
102323	9.732	0.014	9.139	0.013		0.554	0.014	T	0.63	0.01	L	9.2381	0.0019	0.024	210		9.20	9.29					1							
102324	8.265	0.012	8.054	0.013		0.202	0.017	T	0.22	0.02	L	8.1036	0.0012	0.011	73		8.09	8.12		C			1							S
102325	8.891	0.013	7.560	0.008		1.129	0.012	T	1.09	0.01	L	7.6101	0.0008	0.010	91		7.60	7.63		C			1							S
102326	8.711	0.008	8.145	0.007		0.529	0.009	T	0.60	0.01	L	8.1985	0.0013	0.018	215		8.17	8.23		C			1							S
102327	9.182	0.011	8.531	0.010		0.574	0.002	G	0.65	0.00	H	8.6080	0.0013	0.015	175		8.58	8.63		C			1							
102328	10.674	0.043	9.050	0.019		1.360	0.037	T	1.33	0.04	L	9.0296	0.0023	0.020	99		8.99	9.06					1							
102329	7.601	0.006	7.228	0.006		0.353	0.008	T	0.41	0.01	L	7.2755	0.0014	0.013	107		7.25	7.31		U 2			1							S
102330	10.171	0.027	8.239	0.011		1.638	0.024	T	2.37	0.07	O		8.0528	0.0104	0.066	82		7.98	8.16	4.07	P 1 A			1 S							
102331	7.333	0.006	7.198	0.008		0.130	0.009	T	0.14	0.01	L	7.2245	0.0009	0.008	98		7.21	7.24		C			1							S
102332	11.376	0.102	9.909	0.043		1.191	0.001	G	1.41	0.02	A	9.9588	0.0039	0.025	76		9.92	10.01		C			1 G							
102333	4.848	0.003	4.546	0.003		0.278	0.004	G	0.30	0.02	A	4.5841	0.0007	0.005	97		4.58	4.60					1							S
102334	10.042	0.032	8.683	0.018		1.150	0.015	G	1.11	0.01	H	8.7035	0.0023	0.017	99		8.67	8.74					1							
102335	7.769	0.007	7.616	0.008		0.147	0.010	T	0.16	0.01	L	7.6603	0.0011	0.010	142		7.64	7.68		C			1							S
102336	9.061	0.014	7.536	0.008		1.291	0.020	G	1.24	0.02	A	7.5591	0.0011	0.009	80		7.54	7.57		C			1							S
102337	10.419	0.040	10.026	0.044		0.428	0.032	G	0.50	0.03	H	10.0341	0.0032	0.025	79		10.00	10.07		C			1							
102338	8.993	0.015	8.277	0.013		0.645	0.015	T	0.71	0.01	L	8.3307	0.0014	0.016	82		8.30	8.36					1							S
102339	12.083	0.168	9.895	0.035		1.600	0.015	G	1.57	0.01	J	9.8384	0.0023	0.022	85		9.79	9.89		C			1							
102340	10.768	0.045	9.026	0.018		1.453	0.038	T	1.46	0.06	L	9.0039	0.0014	0.014	95		8.98	9.03		C			1							
102341	10.855	0.076	8.952	0.026		1.580	0.064	T	1.60	0.07	L	8.8882	0.0023	0.020	97		8.85	8.92					1							
102342	10.488	0.038	8.646	0.014		1.532	0.032	T	1.58	0.07	L	8.6081	0.0013	0.011	96		8.59	8.62		C			1							
102343	9.736	0.022	9.566	0.029		0.155	0.035	T	0.17	0.04	L	9.5682	0.0024	0.020	97		9.53	9.60		C			1							
102344	8.542	0.010	7.176	0.006		1.157	0.009	T	1.12	0.01	L	7.2102	0.0012	0.008	97		7.20	7.24		C			1							S
102345	8.560	0.008	8.410	0.009		0.136	0.011	T	0.15	0.01	L	8.4304	0.0018	0.021	181		8.40	8.46					1							S
102346	11.147	0.063	10.210	0.045		0.760	0.020	G	0.80	0.02	H	10.2413	0.0036	0.032	94		10.17	10.29					1							G
102347	9.145	0.013	9.054	0.016		0.060	0.000	G	0.07	0.00	H	9.0498	0.0021	0.020	138		9.02	9.09		C			1							
102348	10.829	0.036	10.065	0.030	*	0.681	0.036	T	0.74	0.03	L	*	10.1675	0.0033	0.030	136	*	10.12	10.23			20442−7759	H 1	2 C S C	AB	66	0.160	0.038	1.04	0.77	
102349	10.664	0.044	10.059	0.040		0.563	0.044	T	0.64	0.04	L	10.1576	0.0037	0.019	61		10.13	10.20		C			1							
102350	9.416	0.018	8.906	0.017		0.476	0.015	G	0.55	0.02	H	8.9838	0.0019	0.012	77		8.96	9.00		C			1							
102351	8.044	0.007	7.694	0.010		0.332	0.011	T	0.39	0.01	L	7.7383	0.0010	0.009	125		7.72	7.76		C			1							S
102352						1.335	0.020	G	1.40	0.14	K	11.0969	0.0052	0.037	99		11.03	11.16					1							G
102353	8.840	0.013	8.407	0.013		0.423	0.015	T	0.49	0.02	L	8.4837	0.0130	0.075	81		8.39	8.59	0.41	P 1 A			1							S P
102354	10.804	0.041	10.089	0.034	*	0.657	0.043	T	0.72	0.04	L	*	9.9671	0.0027	0.031	144	*	9.90	10.02		D	20444−6411	I 1	2 C A	AB	191	0.829	0.006	0.51	0.02	
102355	11.337	0.084	9.333	0.024		1.661	0.070	T	1.68	0.07	L	9.2433	0.0055	0.040	84		9.18	9.30		U 2			1 S							P
102356	9.904	0.021	7.939	0.009		1.630	0.018	T	1.65	0.02	L	7.8379	0.0014	0.018	154		7.81	7.87		U			1							
102357	12.147	0.163	10.587	0.064		1.457	0.023	G	1.84	0.10	I	10.3846	0.0040	0.036	126		10.31	10.44					1 G							G
102358	8.066	0.011	6.128	0.010		1.643	0.012	T	2.33	0.07	O	5.9499	0.0100	0.069	109		5.84	6.07	32.90	P 1 A			1 S							S
102359	9.008	0.011	9.003	0.015		0.010	0.015	G	0.03	0.01	H	9.0223	0.0015	0.014	123		8.99	9.05					1							
102360	9.400	0.013	8.180	0.009		1.043	0.012	T	1.01	0.01	L	8.2324	0.0011	0.016	147		8.21	8.26					1							
102361	10.820	0.049	10.390	0.050		0.443	0.015	G	0.51	0.02	H	10.4491	0.0042	0.034	86		10.38	10.49					1							G
102362	8.759	0.009	8.337	0.009		0.399	0.012	T	0.46	0.01	L	8.3818	0.0011	0.011	138		8.36	8.40		C			1							S
102363	8.089	0.005	7.953	0.007		0.183	0.005	G	0.20	0.01	H	7.9838	0.0013	0.018	256		7.96	8.01					1							S
102364	9.283	0.024	8.271	0.017	*	0.883	0.022	T	0.89	0.02	L	*	8.3554	0.0014	0.014	93	*	8.33	8.38		D	20444+2119	I 1	2 C A	AB	325	5.385	0.014	2.85	0.07	
102365	9.927	0.026	9.393	0.025		0.509	0.027	T	0.58	0.03	L	9.4829	0.0020	0.020	80		9.42	9.53		D			1							
102366	9.724	0.022	8.400	0.013		1.124	0.020	T	1.09	0.02	L	8.4315	0.0015	0.016	111		8.41	8.46					1							
102367	10.750	0.050	9.356	0.027	*	0.680	0.040	G	0.74	0.03	R	*	9.2924	0.0024	0.021	97	*	9.26	9.33			20445+6136	H 1	2 C S C	AB	345	0.152	0.059	1.84	0.92	
102368	9.336	0.015	8.169	0.010		1.001	0.014	T	0.98	0.01	L	8.2219	0.0017	0.014	129		8.20	8.25		C			1							
102369	9.053	0.014	8.958	0.018		0.093	0.021	T	0.11	0.02	L	8.9907	0.0031	0.025	115		8.94	9.03		U			1							
102370	7.736	0.007	6.605	0.005		0.973	0.007	T	0.96	0.01	L	6.6639	0.0008	0.007	112		6.65	6.68		C			1							S
102371	8.912	0.014	7.064	0.007		1.569	0.013	T	2.03	0.05	O	6.9436	0.0049	0.026	78		6.92	7.00		U 2			1							S
102372	9.771	0.032	9.305	0.032		0.452	0.035	T	0.52	0.04	L	9.4170	0.0021	0.027	265		9.37	9.46					1 S							
102373	7.587	0.007	7.270	0.009		0.279	0.002	G	0.32	0.00	H	7.3203	0.0010	0.008	70		7.31	7.33					1							S
102374	8.014	0.008	8.097	0.011		−0.071	0.012	T	−0.05	0.01	L	8.1183	0.0016	0.015	131		8.10	8.15					1							S
102375	9.577	0.020	8.950	0.019		0.579	0.020	T	0.65	0.02	L	9.0313	0.0024	0.020	104		8.99	9.06					1							
102376	8.273	0.008	8.317	0.010		−0.036	0.012	T	−0.01	0.01	L	8.3192	0.0015	0.018	159		8.29	8.36					1							S
102377	8.342	0.010	6.724	0.004		1.355	0.008	T	1.32	0.01	L	6.7182	0.0009	0.008	131		6.71	6.74		C			1							S
102378	9.041	0.015	8.742	0.017		0.268	0.002	G	0.30	0.00	H	8.7726	0.0018	0.016	87		8.75	8.80		C			1							
102379	8.856	0.012	8.272	0.011		0.545	0.014	T	0.62	0.01	L	8.3272	0.0015	0.013	98		8.30	8.35		C			1							S
102380	7.621	0.006	7.584	0.007		0.039	0.009	T	0.05	0.01	L	7.5927	0.0011	0.010	102		7.58	7.61		C			1 S							S
102381	8.122	0.006	7.048	0.004		0.930	0.005	T	0.92	0.00	L	7.1138	0.0009	0.010	168		7.10	7.13					1							S
102382	11.941	0.112	10.619	0.052		1.122	0.097	T	1.08	0.10	L	10.6424	0.0031	0.033	161		10.58	10.70		C			1							G
102383	9.212	0.017	8.755	0.017		0.431	0.022	T	0.50	0.02	L	8.8093	0.0016	0.013	98		8.78	8.83					1							
102384	7.290	0.005	7.009	0.006		0.267	0.007	T	0.30	0.01	L	7.0434	0.0008	0.008	124		7.03	7.06		C			1							S
102385	10.168	0.027	8.851	0.016		1.118	0.025	T	1.08	0.03	L	8.8992	0.0022	0.016	112		8.86	8.92					1							
102386	9.090	0.019	7.833	0.012	A	1.100	0.495	G	1.05	0.05	L	*	7.8080	0.0014	0.010	85	*	7.80	7.83		D	20448−2054	I 1	2 C A	AB	100	1.729	0.009	1.75	0.03	S
102387	9.571	0.020	8.311	0.013		1.074	0.019	T	1.04	0.02	L	8.3466	0.0016	0.018	106		8.31	8.37					1							
102388	6.444	0.004	5.054	0.003		1.183	0.005	G	1.11	0.03	C	5.0868	0.0006	0.005	102		5.08	5.10		C			1 G							S
102389	9.082	0.012	8.159	0.009		0.817	0.011	T	0.84	0.01	L	8.2122	0.0011	0.011	156		8.19	8.23		C			1							S
102390	6.989	0.009	6.812	0.009	*	0.170	0.012	T	0.19	0.01	L	*	6.7675	0.0014	0.009	104	*	6.75	6.78		D	20449+1219	I 1	2 C A	AB	128	1.088	0.005	1.34	0.02	S
102391	9.818	0.021	8.642	0.014		1.008	0.020	T	0.98	0.02	L	8.7240	0.0012	0.013	97		8.70	8.75		D			1							
102392	10.342	0.031	9.865	0.032		0.462	0.035	T	0.53	0.04	L	9.9368	0.0033	0.020	71		9.91	9.97		C			1							
102393	8.360	0.011	7.638	0.008		0.656	0.007	G	0.72	0.01	H	7.6885	0.0009	0.009	89		7.67	7.71		D			1							S
102394	11.821	0.113	10.609	0.059		1.101	0.005	G	1.18	0.01	I	10.5575	0.0033	0.027	103		10.51	10.60		C			1							G
102395	3.636	0.001	3.443	0.001		0.163	0.005	G	0.20	0.02	A	3.4733	0.0003	0.003	254		3.47	3.48		C			1							S
102396	7.313	0.011	7.332	0.013	*	−0.013	0.016	T	0.01	0.01	L	*	7.2756	0.0014	0.010	90	*	7.26	7.29		D	20451−5030	I 2	2 C A	AB	35	0.975	0.003	0.01	0.01	S
102397	10.316	0.026	8.659	0.012		1.411	0.024	T	2.87	0.04	O		8.3457	0.0057	0.078	132		8.21	8.46		U 2			1 S							
102398	8.698	0.012	8.173	0.011	*	0.454	0.009	G	0.52	0.01	R	*	8.1631	0.0016	0.011	103	*	8.14	8.18		D	20450+1243	I 2	2 C A	BA	346	0.659	0.002	0.03	0.01	S
102399	11.876	0.155	10.511	0.067		0.999	0.005	G	1.04	0.01	I		10.5779	0.0033	0.030	104		10.52	10.62		C			1							G
102400	8.585	0.012	8.181	0.012		0.360	0.042	G	0.45	0.04	L		8.2207	0.0014	0.011	106		8.20	8.24		D	20450+1243	I 2	1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
102401	20 45 03.74	+44 29 54.3	10.79		G	311.265 601 37	+44.498 409 83		80.01	433.52	272.98	1.25	1.22	1.57	1.44	1.28	– 1	– 1	+15	+12	+10	– 9	+12	–12	– 8	+ 7	6	0.20
102402	20 45 03.83	−72 26 18.9	9.23	2	H	311.265 977 52	−72.438 577 58		1.57	−5.07	4.63	0.90	1.00	1.34	1.00	1.13	– 7	–21	– 9	+ 1	+ 2	–14	– 1	–19	+ 6	–13	4	0.43
102403	20 45 05.99	−43 28 32.6	9.50		H	311.274 940 87	−43.475 713 17		5.99	18.01	−7.96	1.14	0.90	1.36	1.63	1.36	+38	–15	– 7	–13	–12	+ 1	– 6	–25	–13	+58	0	−0.81
102404	20 45 06.77	+29 02 08.4	9.56		H	311.278 199 91	+29.035 667 00		1.66	−1.72	−6.27	0.75	0.78	1.25	0.85	0.88	+ 2	+ 7	+ 7	+ 1	+ 9	+ 0	+ 6	+ 9	–11	+19	0	−1.13
*102405	20 45 08.65	−50 30 23.2	7.42		H	311.286 061 34	−50.506 432 44		3.63	28.06	−7.60	0.83	0.66	1.09	1.23	0.69	+19	–11	–18	– 3	– 8	–23	–28	–46	+28	–52	0	1.03
*102406	20 45 08.63	−68 41 05.9	9.31		H	311.285 970 48	−68.684 971 73		13.56	31.99	−15.47	0.71	0.90	1.30	0.76	1.03	–31	–11	–17	– 2	+ 0	+ 2	+ 2	+10	– 3	–40	0	0.70
102407	20 45 08.74	+06 01 27.9	7.86		H	311.286 403 00	+06.024 426 87		3.31	10.75	8.33	0.86	0.55	1.05	1.04	0.61	+15	–26	–12	–22	+29	– 8	+13	+ 7	+ 1	+49	0	−0.12
102408	20 45 08.92	−47 16 59.4	8.56		H	311.287 167 44	−47.283 173 03		1.63	−12.66	−25.06	1.14	0.82	1.28	1.48	1.16	+23	–28	–23	+23	– 3	+14	– 3	+ 9	+ 2	+ 3	0	−1.95
102409	20 45 09.34	−31 20 24.1	8.81	2	G	311.288 917 88	−31.340 024 11		100.59	280.37	−360.09	1.20	0.75	1.35	1.58	0.98	+34	–13	+ 8	– 5	+28	+35	+21	+32	+13	+51	0	0.19
102410	20 45 10.60	+51 12 38.0	9.27		G	311.294 171 05	+51.210 569 20		1.03	0.68	−7.25	0.79	0.75	0.90	0.99	0.94	– 4	+ 9	+10	+11	+ 5	– 8	+ 6	– 8	+ 6	– 8	0	0.27
102411	20 45 10.66	+29 54 41.6	8.53		H	311.294 432 52	+29.911 557 88		2.81	0.28	−25.56	0.52	0.60	0.88	0.66	0.68	– 6	– 1	+ 1	+44	+ 5	– 3	+ 8	+19	+11	+ 8	0	−1.44
102412 T	20 45 11.73	−35 09 58.9	6.80	1	H	311.298 889 47	−35.166 351 95		7.81	−15.34	−29.75	0.76	0.50	0.95	1.07	0.70	+27	– 3	– 2	+12	+ 5	+ 6	+ 6	+ 5	+ 3	+43	4	0.72
102413 H	20 45 12.26	−01 02 34.5	7.86		H	311.301 097 71	−01.042 926 24	A	3.43	−17.44	−18.40	1.27	1.03	1.31	1.66	1.27	+34	– 3	+ 7	+41	+31	+26	+27	+72	+14	+44	0	−0.46
102414	20 45 13.12	−27 14 50.3	6.50		G	311.304 672 48	−27.247 298 15		6.93	−0.60	7.43	0.74	0.48	0.90	0.96	0.89	+19	– 7	+ 7	+ 1	–18	+ 1	–20	+ 1	–39	+29	0	0.37
102415	20 45 13.25	+31 46 26.7	7.71		H	311.305 203 28	+31.774 070 50		3.52	1.17	−15.33	0.41	0.54	0.83	0.49	0.60	–37	– 2	+ 0	+ 7	–13	–13	–13	– 5	+19	–46	0	−0.28
102416	20 45 13.45	+60 19 35.8	10.52		H	311.306 035 03	+60.326 608 00		6.52	77.50	75.97	1.06	0.95	1.10	1.24	0.99	–11	+10	+ 8	+13	– 7	–10	– 3	– 8	+ 7	– 5	3	−1.05
102417	20 45 13.71	−41 17 46.5	8.16		H	311.307 120 96	−41.296 246 30		5.97	10.33	−47.33	0.96	0.62	1.18	1.20	0.78	+21	–21	–22	– 2	+16	+17	+20	+ 4	+ 1	+45	0	0.96
102418	20 45 13.96	−30 57 19.8	8.62	2	H	311.308 177 30	−30.955 488 49		14.95	83.72	−64.47	1.34	0.71	1.44	2.13	0.97	+29	+11	– 1	+26	– 1	+15	+ 3	+ 9	+ 1	+ 2	8	2.09
102419	20 45 14.93	−15 47 53.8	6.98		H	311.312 221 73	−15.798 270 56		17.28	74.66	6.31	0.96	0.61	1.14	1.25	1.01	+21	–10	+ 4	–13	+29	+40	+12	+70	– 4	+40	0	0.98
102420	20 45 15.40	+25 10 31.0	8.14		H	311.314 157 07	+25.175 283 87		9.09	4.32	−55.57	0.77	0.60	0.95	1.02	0.66	+10	– 3	+10	+ 3	+11	+ 2	+ 5	+35	– 1	+28	0	0.27
102421	20 45 15.79	−06 09 28.2	8.20		H	311.315 809 49	−06.157 821 39		8.13	−26.87	−30.41	1.40	0.69	1.30	1.97	1.01	–42	–12	+ 0	+63	–53	+ 4	–51	+67	–15	–40	0	−0.83
102422	20 45 17.27	+61 50 12.5	3.41		H	311.321 952 63	+61.836 794 04		69.73	86.08	817.89	0.47	0.41	0.49	0.44	0.39	–10	+ 0	+17	–11	+15	+ 5	+13	– 3	+ 8	+15	0	0.71
102423	20 45 17.60	−34 58 08.4	9.91		H	311.323 317 87	−34.969 012 84		5.09	6.64	−21.60	1.45	0.95	1.55	2.31	1.38	+14	–13	–12	+18	– 7	+ 2	– 6	+17	+ 4	+ 9	0	−0.65
102424	20 45 18.54	−59 35 51.1	8.49		H	311.327 252 47	−59.597 519 76		4.04	46.28	−15.98	0.67	0.70	1.14	1.08	0.92	+22	–13	– 8	–40	+ 5	– 3	+13	–19	+23	–36	0	−1.36
102425	20 45 18.98	−70 42 53.2	8.11		H	311.329 074 47	−70.714 764 61		5.13	24.22	−29.88	0.58	0.69	0.98	0.66	0.80	–19	+ 7	–17	– 6	+ 4	–19	+ 1	–12	+12	–30	0	−1.63
102426	20 45 19.85	−56 05 51.5	9.56		H	311.332 720 91	−56.097 639 12		3.35	54.23	−27.71	0.93	1.04	1.51	1.23	1.06	+ 8	–12	–42	–40	+27	–21	+15	–24	+23	– 5	0	−0.06
102427	20 45 19.99	+07 02 20.0	8.33	2	T	311.333 300 61	+07.038 893 26		2.79	−9.77	1.81	0.98	0.57	1.27	1.00	0.62	+16	–50	– 8	– 3	+31	+ 6	+17	+22	+ 7	+39	0	−0.54
102428	20 45 20.71	−79 05 24.3	8.90	2	H	311.336 273 84	−79.090 081 80		0.95	8.57	−23.40	0.68	0.75	0.91	0.79	0.82	– 8	–12	–13	+13	–11	+ 7	–10	– 7	– 1	–15	0	0.86
102429	20 45 20.84	+68 52 20.7	9.06		H	311.336 832 02	+68.872 422 52		2.67	−7.54	−6.42	0.70	0.64	0.73	0.86	0.70	– 5	–11	+10	– 7	+ 4	+ 8	+ 2	– 6	+13	+14	3	1.96
102430	20 45 20.99	+46 21 17.4	6.71		H	311.337 437 85	+46.354 847 00		5.36	1.76	−21.30	0.49	0.45	0.57	0.67	0.47	–15	– 9	+ 5	– 1	–13	+13	–11	– 5	+11	–14	0	0.50
102431	20 45 21.20	+57 34 49.1	4.52		G	311.338 319 28	+57.580 297 99		36.87	−62.95	−235.56	0.41	0.40	0.46	0.41	0.45	– 7	+10	+ 3	+20	+ 7	–16	+ 6	+20	–13	+ 4	3	2.29
102432	20 45 21.57	−54 46 29.2	8.64		H	311.339 890 37	−54.774 766 70		5.88	13.63	−14.58	1.01	0.84	1.34	1.49	1.00	– 2	–20	–30	+33	–24	+10	–37	–11	+17	–48	4	0.95
102433	20 45 23.02	−15 02 05.1	7.38		H	311.345 920 25	−15.034 740 68		5.23	35.88	17.98	0.99	0.63	1.17	1.24	1.00	+29	+ 2	– 9	–19	+20	+33	+15	+68	–13	+34	0	1.09
102434	20 45 23.60	−41 34 13.2	8.94		H	311.348 339 99	−41.570 329 64		8.57	−1.45	−59.65	1.21	0.81	1.46	1.66	1.15	+28	–32	–20	+15	+18	+ 3	+21	+12	– 6	+39	0	−0.28
102435 T	20 45 23.86	−30 28 41.3	6.78	1	H	311.349 406 26	−30.478 150 34		16.40	−12.11	−24.75	0.82	0.51	0.98	1.09	0.69	+27	–20	–10	+13	+ 9	+42	+13	+25	+ 7	+37	0	0.63
102436	20 45 24.13	−07 44 04.4	8.81		H	311.350 558 21	−07.734 542 76		6.48	11.02	0.30	0.97	0.66	1.18	1.38	0.95	+14	–14	–16	+42	– 6	+ 1	– 4	+68	–21	+14	0	−1.12
102437	20 45 26.61	−46 11 26.9	8.25		H	311.360 866 98	−46.190 812 95		3.19	−0.43	−43.31	0.93	0.75	1.22	1.41	1.13	+23	–16	– 8	+ 7	–15	–26	–19	– 8	– 8	– 1	0	0.48
102438	20 45 27.95	+03 10 07.4	8.35		H	311.366 468 42	+03.168 729 22		9.34	35.27	−115.69	0.98	0.69	1.12	1.42	0.93	+ 7	–11	–15	+17	+ 2	+16	+ 0	+61	+ 0	+15	0	0.98
102439 H	20 45 28.01	+05 52 53.2	7.43		H	311.366 707 59	+05.881 454 73	A	7.14	90.98	−96.70	1.71	1.11	1.91	1.80	1.13	+29	– 3	–18	– 8	+20	– 6	+12	+ 5	+ 1	+60	8	1.58
102440	20 45 28.23	+18 05 24.2	6.74	3	H	311.367 620 34	+18.090 057 93		2.63	10.61	−9.91	0.79	0.53	0.96	0.92	0.55	+33	–13	– 6	+44	+33	+11	+32	+26	+18	+46	0	0.13
102441	20 45 28.52	−38 03 55.6	9.29		H	311.368 830 67	−38.065 446 26		2.07	−5.96	−12.37	1.07	0.79	1.30	1.48	0.99	+41	–29	–33	–21	+ 9	– 4	+ 3	– 1	+ 3	+45	2	−1.08
102442	20 45 29.21	+26 06 21.1	8.15		H	311.371 704 06	+26.105 862 27		1.41	5.31	−4.79	0.57	0.61	0.91	0.75	0.68	+17	+ 0	+ 4	–22	+17	+ 2	+12	+22	+ 9	+24	0	1.76
102443	20 45 30.35	−64 25 38.8	7.61		H	311.376 462 59	−64.427 438 10		4.43	−1.17	−20.81	0.63	0.62	0.84	0.74	0.76	+15	– 3	–16	+28	+29	–10	+27	+31	+ 2	+11	0	−0.34
102444 H	20 45 31.33	−51 05 22.4	8.98		H	311.380 529 91	−51.089 550 51	A	6.60	52.20	−66.83	2.30	1.70	2.45	2.79	1.51	+25	– 9	– 8	–21	–13	–12	–21	–42	+16	–43	1	0.97
102445	20 45 31.79	+62 23 45.2	7.93	2	H	311.382 438 28	+62.395 895 04		3.03	8.16	6.87	0.58	0.56	0.65	0.55	0.58	+ 5	– 5	+17	–10	+32	+16	+27	+10	+15	+35	1	−0.59
102446	20 45 32.50	−42 56 58.7	8.88		G	311.385 423 69	−42.949 652 55		15.33	−60.86	−202.44	1.09	0.88	1.28	1.55	1.26	+34	–18	+ 0	+ 4	–15	–12	– 5	–27	–22	+52	0	2.26
102447	20 45 34.54	−14 31 15.0	10.72		G	311.393 929 39	−14.520 825 23		−0.92	5.54	−21.41	2.06	1.38	2.33	2.78	2.25	+28	–16	– 8	+ 1	+12	+ 8	+10	+65	–12	+31	0	0.93
102448	20 45 34.96	+65 36 14.5	9.41		H	311.395 655 39	+65.604 017 68		0.49	−0.89	−4.71	0.77	0.79	0.85	0.85	0.80	+12	+ 7	+ 7	– 6	+ 4	– 6	+ 6	–17	+15	+23	1	0.79
102449 H	20 45 35.28	+46 21 02.1	9.07		G	311.397 009 03	+46.350 587 33	A	0.92	−2.42	−4.76	5.71	4.40	1.73	2.11	1.42	–31	– 6	+ 9	+ 7	–13	+ 2	–10	+ 0	+ 8	–16	2	−1.57
102450	20 45 35.38	+11 38 28.5	7.89		H	311.397 412 11	+11.641 243 23		2.73	14.49	−43.84	0.88	0.63	1.07	1.21	0.69	+23	+ 2	+15	+11	+43	+25	+32	+32	+27	+46	0	0.32
102451	20 45 35.61	−01 25 46.8	8.65		H	311.398 359 04	−01.429 675 85		8.00	−28.09	13.55	1.00	0.84	1.23	1.55	1.18	+25	– 3	+ 0	+43	+16	+36	+17	+74	+ 5	+28	0	0.56
102452	20 45 38.53	−62 40 23.2	8.09		H	311.410 545 37	−62.673 106 37		3.44	32.00	−39.88	0.62	0.63	0.95	0.69	0.82	+14	–18	–13	+22	+ 5	– 4	+ 1	+ 3	+ 7	– 3	0	−1.55
102453 T	20 45 39.76	+30 43 10.8	4.22		G	311.415 663 02	+30.719 656 80		15.84	−8.01	24.04	0.33	0.41	0.62	0.39	0.46	–25	+ 0	+ 7	+17	– 1	–12	+ 0	+10	+14	–20	2	1.29
102454	20 45 40.34	+23 01 03.0	7.76		H	311.418 103 47	+23.017 500 26		3.94	17.15	2.11	0.56	0.57	0.94	0.73	0.58	+15	–16	– 7	+23	+19	– 8	+14	+25	+ 6	+ 9	0	−0.41
102455	20 45 40.93	−10 07 19.5	8.57		H	311.420 559 20	−10.122 071 85		6.99	−17.10	−27.30	1.10	0.68	1.15	1.41	1.01	+17	–28	+ 1	+13	+12	+ 7	+14	+69	+ 2	+12	0	−2.06
102456	20 45 41.28	+18 34 35.6	8.54		H	311.422 010 40	+18.576 558 18		3.22	7.98	0.12	0.83	0.57	1.10	0.90	0.59	+26	–14	– 7	+45	+12	+ 5	+16	+26	+ 7	+42	0	0.43
102457	20 45 42.02	+46 11 49.0	8.64	2	H	311.425 096 51	+46.196 949 60		3.71	−4.49	−9.50	0.73	0.69	0.84	0.99	0.77	–12	–17	+ 1	–12	– 9	+ 3	– 8	–28	+12	–14	3	0.79
102458	20 45 42.35	+19 07 32.9	9.82		H	311.426 437 97	+19.125 794 45		15.61	−53.81	−142.09	1.13	0.93	1.55	1.22	1.00	+33	–10	+ 3	+40	+14	+11	+13	+38	+10	+51	0	1.31
102459	20 45 43.08	+50 40 25.9	7.19		G	311.429 499 17	+50.673 853 88		2.52	6.03	8.44	0.52	0.51	0.61	0.63	0.62	+ 5	+10	+18	–11	+ 2	–15	+ 5	–13	– 5	+ 5	0	−1.26
102460	20 45 44.49	+43 26 42.5	8.68		H	311.435 364 81	+43.445 145 59		3.32	1.63	1.03	0.66	0.71	0.84	0.71	0.84	– 4	+ 8	+ 6	+17	+13	+ 3	+19	–16	+ 5	+10	3	0.41
102461	20 45 45.17	+22 55 15.5	7.70		H	311.438 199 22	+22.920 960 96		4.00	12.09	−9.07	0.55	0.53	0.87	0.67	0.55	+11	–26	–12	+11	+19	– 2	+15	+32	+ 2	+ 7	0	−1.87
102462	20 45 46.06	−03 22 25.6	9.12		H	311.441 911 81	−03.373 775 10		3.83	2.37	−0.11	1.13	0.89	1.52	1.63	1.28	+20	– 8	–34	+29	+ 0	+23	+ 9	+66	–34	+15	0	−0.21
102463	20 45 48.39	−56 57 12.5	8.41		G	311.451 620 58	−56.953 461 58		7.68	24.82	−39.60	0.70	0.69	1.07	0.81	0.65	– 3	–20	–21	–28	+ 5	+19	+ 6	–29	+12	–18	0	−1.35
102464	20 45 48.57	+71 46 23.3	8.86		H	311.452 375 61	+71.773 142 55		8.02	32.98	50.14	0.68	0.70	0.75	0.84	0.70	–13	–18	+29	–11	+ 6	– 2	+ 6	–15	+ 2	– 6	0	1.06
102465	20 45 48.73	−49 20 05.0	13.51		H	311.453 043 93	−49.334 713 73	B	−2.20	131.60	−71.02	94.54	59.22	39.06	57.13	28.94	+22	–13	– 3	+ 4	–21	– 6	–28	–42	+ 1	– 3	16	1.20
102466	20 45 49.46	+68 33 06.8	8.60		H	311.456 083 46	+68.551 902 14		15.09	110.53	137.43	0.70	0.63	0.73	0.89	0.81	– 2	–18	+ 4	– 8	+20	+16	+11	+12	+21	+31	0	0.99
102467	20 45 49.88	−49 20 08.5	10.83		G	311.457 827 29	−49.335 696 34	A	2.13	53.88	−82.73	8.20	6.96	8.04	8.65	4.87	+21	– 7	+ 3	–12	–18	– 4	–24	–49	– 1	–12	16	1.20
102468	20 45 49.89	+30 39 30.6	8.54		H	311.457 874 89	+30.658 500 45		1.38	9.66	4.33	0.56	0.65	0.98	0.69	0.69	– 3	– 1	+10	+41	+ 7	–14	+10	+23	+11	+ 7	0	1.47
102469	20 45 49.91	+50 45 43.4	8.44		H	311.457 954 17	+50.762 055 76		2.46	−12.66	−25.89	0.68	0.66	0.81	0.87	0.81	+ 3	+ 7	+19	+ 1	+ 4	–16	+ 6	–10	– 9	+ 2	0	−0.88
*102470	20 45 51.25	+20 47 26.2	8.33		H	311.463 531 63	+20.790 610 16		1.76	4.80	−4.38	0.79	0.55	0.99	0.96	0.61	+13	+11	+ 8	+35	+15	+19	+15	+32	+16	+29	0	−1.35
*102471	20 45 51.17	−27 36 20.3	9.54		H	311.463 224 99	−27.605 635 83		13.59	21.35	−17.97	1.43	0.81	1.57	2.02	1.54	+10	+ 8	+ 0	+ 3	–31	+ 9	–38	+ 4	–38	+ 6	0	−0.31
102472	20 45 55.92	+08 14 58.6	12.11		G	311.483 002 25	+08.249 604 49		2.04	7.25	−1.48	5.51	4.08	7.02	6.67	4.54	+14	– 7	– 9	–16	+21	+17	+13	+ 5	+23	+41	0		
102473	20 45 56.65	+60 36 07.7	9.63		H	311.486 027 96	+60.602 135 55		2.29	1.50	−10.65	0.76	0.74	0.84	0.78	0.74	– 7	+ 7	+ 5	+10	+ 4	–14	+10	–11	+14	+ 7	1	−0.03
102474	20 45 56.99	+07 22 44.7	6.98		H	311.487 465 41	+07.379 096 24		6.00	19.29	9.58	0.70	0.46	0.89	0.89	0.50	+15	–19	– 4	+ 4	+29	+ 9	+19	+17	+19	+40	0	−0.61
102475	20 45 57.25	−08 27 23.2	8.32		H	311.488 542 65	−08.456 436 33		7.90	−22.78	−22.78	1.00	0.64	1.14	1.31	0.97	+10	–29	+ 2	+50	+ 6	+ 2	– 3	+76	+ 1	+25	1	0.88
102476	20 45 59.04	−00 49 28.9	8.16		H	311.495 999 37	−00.824 696 91		2.37	−2.02	−14.43	0.89	0.64	1.11	1.24	0.89	+10	– 4	–29	+28	– 2	+29	+ 6	+63	–25	+ 5	0	0.13
102477	20 46 00.16	−25 06 14.9	8.05		H	311.500 676 79	−25.104 150 22		1.97	8.03	10.45	1.15	0.54	1.05	1.50	0.96	+ 4	+ 0	–11	–51	+ 1	+ 3	– 7	+14	–31	+18	0	−0.75
102478	20 46 00.49	−06 17 35.9	8.65		H	311.502 050 44	−06.293 301 73		2.34	8.14	−19.53	1.27	0.68	1.37	1.87	1.04	–22	– 5	– 3	+52	–31	+12	–32	+67	–21	–18	0	0.05
102479	20 46 00.58	+02 44 25.3	8.76		H	311.502 425 97	+02.740 371 66		2.21	14.40	7.19	1.05	0.82	1.21	1.66	1.11	+21	–20	–18	– 4	+21	+ 1	+17	+57	+ 2	+21	0	0.31
102480	20 46 01.21	−00 20 25.4	6.76		H	311.505 025 62	−00.340 396 70		5.00	3.27	−6.23	0.69	0.48	0.86	0.84	0.65	+11	– 7	–25	+ 7	+ 3	+23	+ 6	+52	–16	+17	0	0.48
102481	20 46 02.06	+38 49 22.1	8.31		H	311.508 580 10	+38.822 811 15		9.60	3.33	−29.65	0.53	0.53	0.71	0.60	0.63	–18	+ 5	+ 4	– 1	+ 2	–18	+ 4	– 1	+ 8	+ 2	1	0.54
102482	20 46 03.91	−36 35 37.8	9.73		H	311.516 292 38	−36.593 836 32		9.48	106.89	−46.93	1.14	0.85	1.50	1.24	1.03	+47	–27	–19	–11	+11	+10	+12	– 3	+ 4	+73	0	−1.05
102483	20 46 04.72	+54 23 25.8	8.26		H	311.519 664 12	+54.390 497 79		3.57	6.08	5.67	0.57	0.61	0.68	0.64	0.73	– 7	– 1	– 3	+ 7	+ 7	– 7	–20	+ 8	+ 8	–12	+ 1	1	1.22
102484	20 46 05.56	−83 41 15.3	8.66		H	311.523 146 36	−83.687 596 40		4.89	9.46	−17.32	0.66	0.60	0.81	0.85	0.68	– 1	–15	–19	+14	+ 9	–18	+ 3	+ 4	+ 7	–10	0	0.37
102485	20 46 05.77	−25 16 13.9	4.13		G	311.524 025 47	−25.270 516 82		68.16	−51.38	−156.66	0.72	0.43	0.91	0.92	0.78	+12	– 1	–13	–11	–15	+33	–17	+14	–42	+10	0	−0.16
102486 H	20 46 09.63	−21 44 42.4	7.82		G	311.540 108 57	−21.745 113 45	A	30.10	106.15	−269.94	1.26	0.77	1.34	1.57	1.07	+19	– 4	–18	– 7	– 4	+34	+ 2	+46	–28	+ 7	0	−0.38
102487	20 46 09.97	−21 30 50.4	5.91		H	311.541 557 12	−21.513 991 11		12.09	23.45	−17.01	0.71	0.45	0.81	0.94	0.71	+17	–17	– 3	– 4	+ 9	+41	+ 6	+47	+ 6	+25	0	0.05
102488	20 46 12.43	+33 58 10.0	2.48	1	H	311.551 800 91	+33.969 453 34		45.26	356.16	330.28	0.37	0.37	0.53	0.40	0.38	–21	+ 3	– 9	–13	–16	– 5	–14	–13	+14	–40	0	−1.55
102489 H	20 46 12.66	+35 32 25.6	9.38	1	G	311.552 739 74	+35.540 442 22	A	2.47	−1.77	−3.24	1.21	1.48	1.65	1.24	1.51	– 6	+ 1	+16	+ 5	– 4	– 8	– 4	+ 2	– 5	+ 4	1	−0.16
102490 H	20 46 13.25	+15 54 25.8	7.09		H	311.555 218 76	+15.907 156 29	A	26.15	87.38	65.31	1.52	1.06	1.46	1.46	0.84	– 1	– 9	–30	– 9	+39	–22	+28	+ 7	+ 7	+12	2	1.58
102491	20 46 14.88	−28 26 34.4	9.01		H	311.561 979 54	−28.442 892 54		11.14	−87.51	−67.68	1.49	0.83	1.41	2.22	1.41	– 8	+ 5	–30	+59	–31	+28	–30	+43	–34	–18	0	0.02
102492	20 46 15.19	−51 15 56.9	9.47		H	311.563 275 90	−51.265 809 66		−0.62	19.72	−21.49	1.39	1.01	1.66	2.26	1.27	+ 6	–21	–18	+11	–18	–21	–35	–22	+34	–66	0	−1.74
102493	20 46 15.86	−12 48 35.3	8.84		H	311.566 084 13	−12.809 795 68		−0.91	1.61	−28.46	1.36	1.01	1.70	1.66	1.66	+45	–38	–29	– 1	+33	+22	+35	+80	–32	+45	0	−1.16
102494	20 46 16.69	−23 43 26.3	7.52		H	311.569 537 06	−23.723 985 80		2.44	−8.66	−8.40	0.86	0.49	0.94	1.11	0.77	+ 8	– 9	–11	–19	+ 0	+28	+ 0	+30	–23	+10	0	0.54
102495	20 46 18.25	−23 04 47.0	10.73		G	311.576 025 66	−23.079 720 86		32.48	210.52	−331.33	1.96	1.03	1.98	2.47	1.71	+12	–23	– 3	–33	+ 2	+24	+ 1	+37	–10	+16	2	−0.59
102496	20 46 18.58	−36 07 12.1	6.49		H	311.577 408 46	−36.120 025 28		14.42	40.22	−52.07	0.65	0.48	0.84	0.74	0.63	+46	–26	– 8	– 5	+18	+13	+17	+ 9	+ 3	+74	3	−1.64
102497

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
102401	12.860	0.310	10.915	0.087		1.491	0.005	G	2.01	0.03	I	10.8490	0.0042	0.042	118		10.78	10.90					1							G
102402	10.592	0.031	9.367	0.018		1.047	0.028	T	1.02	0.02	L	9.4039	0.0033	0.036	155		9.35	9.46		U	20451−7226	I 1	1 S							
102403	10.117	0.028	9.577	0.028		0.513	0.030	T	0.59	0.03	L	9.6156	0.0019	0.017	86		9.59	9.65		C			1							
102404	9.572	0.017	9.552	0.023		0.023	0.026	T	0.04	0.02	L	9.5749	0.0022	0.022	146		9.54	9.62		C			1							G
102405	8.785	0.013	7.524	0.008		1.075	0.012	T	1.04	0.01	L	7.5889	0.0018	0.015	94		7.57	7.61			20451−5030	I 2	1							S
102406	10.182	0.019	9.368	0.015		0.719	0.018	T	0.77	0.01	L	9.4533	0.0022	0.029	223		9.41	9.50					1							
102407	7.925	0.008	7.873	0.010		0.053	0.012	T	0.07	0.01	L	7.8800	0.0016	0.013	112		7.85	7.90					1							S
102408	10.448	0.034	8.720	0.015		1.442	0.029	T	1.44	0.05	L	8.6962	0.0022	0.016	73		8.66	8.72		C			1							
102409	10.701	0.057	8.935	0.022		1.470	0.290	G	2.10	0.00	A	8.7620	0.0052	0.036	70		8.71	8.82	4.89	P 1 A	20451−3122	I 2	1							
102410	9.534	0.019	9.325	0.022		0.290	0.015	G	0.33	0.02	H	9.3422	0.0024	0.023	104		9.31	9.38		C			1							
102411	8.658	0.008	8.552	0.009		0.103	0.011	T	0.12	0.01	L	8.5754	0.0013	0.018	191		8.55	8.60		C			1							
102412	7.587	0.009	6.890	0.007		0.630	0.009	T	0.70	0.01	L	6.9378	0.0027	0.020	95		6.91	6.97	2.94	P 1 A	20452−3510	I 1	1							S P
102413	9.061	0.013	7.984	0.009	*	0.932	0.012	T	0.93	0.01	L *	8.0200	0.0011	0.011	110	*	7.99	8.04		D	20452−0103	I 1	2 C A	AB	278	0.848	0.012	2.58	0.04	S
102414	7.685	0.010	6.602	0.005		0.946	0.006	G	0.94	0.00	H	6.6565	0.0008	0.006	85		6.65	6.67					1							S
102415	9.084	0.009	7.825	0.005		1.073	0.008	T	1.04	0.01	L	7.8795	0.0010	0.014	252		7.86	7.90		C			1							
102416	11.288	0.065	10.576	0.055		0.642	0.064	T	0.71	0.06	L	10.6557	0.0031	0.033	121		10.60	10.70					1							G
102417	9.885	0.024	8.319	0.013		1.314	0.021	T	1.28	0.02	L	8.3171	0.0017	0.016	86		8.30	8.34		C			1							
102418	9.432	0.034	8.680	0.028		0.576	0.015	G	0.65	0.01	H	8.7421	0.0052	0.054	70		8.64	8.80		U 2			1 S							P
102419	7.375	0.006	6.996	0.006		0.359	0.008	T	0.42	0.01	L	7.0609	0.0008	0.006	92		7.05	7.07					1							S
102420	8.609	0.011	8.180	0.011		0.405	0.014	T	0.47	0.01	L	8.2369	0.0018	0.014	101		8.22	8.27		C			1							
102421	8.940	0.012	8.282	0.011		0.610	0.014	T	0.68	0.01	L	8.3327	0.0011	0.012	111		8.32	8.36		C			1							S
102422	4.590	0.003	3.525	0.002		0.912	0.002	G	0.94	0.04	G	3.5692	0.0006	0.004	96		3.56	3.58			20453+6150	I 1	1							S
102423	10.427	0.053	9.923	0.047		0.474	0.064	T	0.55	0.07	L	10.0185	0.0025	0.024	66		9.98	10.06		C			1							
102424	9.720	0.015	8.601	0.010		0.964	0.014	T	0.95	0.01	L	8.6563	0.0018	0.018	165		8.62	8.68		C			1							
102425	8.599	0.009	8.145	0.009		0.428	0.012	T	0.50	0.01	L	8.2041	0.0013	0.019	160		8.17	8.24					1							S
102426	10.112	0.022	9.595	0.022		0.495	0.023	T	0.57	0.02	L	9.6704	0.0029	0.028	126		9.62	9.72					1							
102427	8.483	0.010	8.346	0.011		0.132	0.014	T	0.15	0.01	L	8.3834	0.0104	0.061	101		8.31	8.52	0.73	P 1 A			1							
102428	11.240	0.050	9.145	0.015		1.772	0.043	T	2.70	0.05	O	8.8824	0.0047	0.055	155		8.80	8.97		U 2			1							
102429	9.348	0.017	9.090	0.019		0.246	0.024	T	0.28	0.03	L	9.1365	0.0018	0.018	98		9.11	9.17		C			1							
102430	6.722	0.004	6.696	0.005		−0.027	0.005	G	0.02	0.00	L	6.7177	0.0009	0.008	133		6.70	6.73					1							S
102431	5.184	0.002	4.579	0.002		0.535	0.005	G	0.58	0.03	C	4.6297	0.0006	0.004	113		4.62	4.64		C	20454+5735	I 1	1 G							S
102432	9.055	0.016	8.714	0.017		0.330	0.026	T	0.38	0.04	L	8.7153	0.0020	0.015	81		8.68	8.75		C			1							
102433	8.666	0.012	7.475	0.008		1.020	0.011	T	0.99	0.01	L	7.5462	0.0008	0.010	112		7.53	7.56					1							S
102434	10.305	0.031	9.050	0.018		1.070	0.028	T	1.03	0.02	L	9.1025	0.0019	0.016	77		9.07	9.13		C			1							
102435	7.176	0.006	6.825	0.006		0.333	0.008	T	0.39	0.01	L	6.8631	0.0018	0.015	79		6.83	6.88		U 2	20454−3029	I 1	1							S
102436	8.914	0.011	8.832	0.013		0.081	0.016	T	0.09	0.02	L	8.8430	0.0012	0.013	151		8.82	8.87		C			1							
102437	9.546	0.024	8.370	0.015		1.008	0.022	T	0.98	0.02	L	8.4196	0.0019	0.015	64		8.40	8.45		D			1							
102438	9.074	0.016	8.420	0.014		0.607	0.018	T	0.68	0.02	L	8.4844	0.0014	0.011	79		8.47	8.52					1							
102439	8.731	0.011	7.563	0.007	*	1.002	0.010	T	0.98	0.01	L *	7.5952	0.0011	0.011	103	*	7.57	7.62		C	20455+0553	H 1	2 C C	AB	297	0.840	0.057	3.78	0.22	S
102440	8.661	0.011	6.995	0.006		1.419	0.010	T	3.28	0.12	O	6.5239	0.0474	0.269	85		6.00	6.83		U 2 B			1 S							S P
102441	10.767	0.039	9.423	0.021		1.140	0.035	T	1.10	0.04	L	9.4560	0.0017	0.015	107		9.42	9.49		C			1 S							
102442	8.109	0.007	8.154	0.009		−0.036	0.010	T	−0.01	0.01	L	8.1424	0.0013	0.014	143		8.12	8.17					1							
102443	7.730	0.005	7.616	0.007		0.103	0.008	T	0.12	0.01	L	7.6519	0.0015	0.014	132		7.63	7.69					1 G							S
102444	9.788	0.023	9.163	0.021	*	0.639	0.008	G	0.70	0.01	R *	9.1103	0.0032	0.021	92	*	9.07	9.15		D	20455−5105	I 1	2 C A	AB	236	1.048	0.007	1.27	0.03	
102445	8.042	0.010	7.947	0.009		0.093	0.013	T	0.11	0.01	L	7.9636	0.0017	0.025	102		7.93	8.17	10.60	P 1 A			1							S P
102446	9.613	0.023	8.987	0.021		0.636	0.009	G	0.70	0.01	H	9.0151	0.0024	0.017	80		8.99	9.05		C			1							
102447	11.699	0.114	10.905	0.089		0.993	0.015	G	0.97	0.01	I	10.8804	0.0042	0.034	103		10.81	10.94					1							G
102448	11.365	0.067	9.591	0.024		1.478	0.056	T	1.49	0.08	L	9.5469	0.0032	0.029	105		9.50	9.59					1							
102449	9.655	0.017	9.181	0.017	*	0.500	0.014	G	0.57	0.01	H *	9.1891	0.0015	0.017	131	*	9.16	9.22		C	20456+4621	H 1	2 C C	AB	290	0.352	0.069	3.18	0.47	
102450	9.297	0.017	8.011	0.010		1.094	0.015	T	1.06	0.02	L	8.0580	0.0015	0.015	111		8.04	8.09					1							S
102451	9.331	0.014	8.694	0.012		0.592	0.016	T	0.66	0.01	L	8.7777	0.0015	0.015	108		8.75	8.80		C			1							
102452	8.519	0.009	8.137	0.010		0.362	0.012	T	0.42	0.01	L	8.1776	0.0010	0.012	122		8.16	8.20		D			1							S
102453	5.574	0.002	4.344	0.001		1.051	0.006	G	1.01	0.03	C	4.3754	0.0005	0.005	179		4.37	4.39			20457+3043	I 1	1							S
102454	9.017	0.012	7.867	0.008		0.988	0.011	T	0.97	0.01	L	7.9209	0.0011	0.011	130		7.90	7.94		C			1							S
102455	9.086	0.014	8.599	0.013		0.458	0.017	T	0.53	0.02	L	8.6728	0.0013	0.013	122		8.65	8.70		C			1							S
102456	8.474	0.010	8.528	0.013		−0.047	0.015	G	−0.03	0.01	H	8.5301	0.0017	0.014	111		8.51	8.55		C			1							
102457	10.738	0.042	8.919	0.016		1.545	0.037	T	2.79	0.05	O	8.6143	0.0057	0.067	129		8.51	8.74		U 2			1 S							
102458	10.846	0.048	9.937	0.033		0.792	0.045	T	0.82	0.03	L	9.9694	0.0031	0.029	132		9.91	10.01		R			1							G
102459	7.851	0.007	7.273	0.006		0.540	0.008	T	0.61	0.01	L	7.3085	0.0010	0.010	113		7.29	7.33			20457+5040	I 1	1							S
102460	8.617	0.010	8.665	0.013		−0.035	0.005	G	−0.01	0.01	H	8.6731	0.0023	0.019	111		8.64	8.70		C			1							
102461	7.730	0.006	7.707	0.009		0.026	0.010	T	0.04	0.01	L	7.7183	0.0010	0.011	135		7.70	7.74		C			1							S
102462	10.268	0.027	9.232	0.018		0.901	0.024	T	0.90	0.02	L	9.2759	0.0016	0.019	111		9.24	9.31					1							
102463	8.881	0.011	8.429	0.011		0.455	0.015	G	0.52	0.02	H	8.4979	0.0014	0.014	111		8.47	8.53		C			1							S
102464	9.452	0.017	8.914	0.016		0.504	0.021	T	0.58	0.02	L	8.9733	0.0016	0.017	96		8.95	9.01					1							
102465											T	13.6650	0.2045			B				D	20458−4920	I 2	1 C I B							
102466	9.446	0.016	8.695	0.014		0.686	0.017	T	0.74	0.01	L	8.7462	0.0020	0.016	104		8.71	8.77		C			1							
102467	11.388	0.089	10.739	0.084	A	0.610	0.020	G	0.68	0.02	H	10.9885	0.0186	0.050	85	A	10.87	11.05		D	20458−4920	I 2	1 C P B							G
102468	10.173	0.031	8.702	0.016		1.239	0.027	T	1.20	0.03	L	8.7051	0.0010	0.015	184		8.68	8.74					1							
102469	10.646	0.044	8.622	0.014		1.677	0.037	T	1.70	0.04	L	8.5423	0.0017	0.014	108		8.52	8.57		C			1							
102470	8.255	0.008	8.313	0.011		−0.048	0.012	T	−0.03	0.01	L	8.3222	0.0014	0.015	120		8.30	8.35		C			1							
102471	10.430	0.043	9.619	0.034		0.717	0.042	T	0.77	0.03	L	9.6823	0.0028	0.020	79		9.64	9.72					1							
102472						1.571	0.012	G	1.85	0.17	K	12.2915	0.0064	0.072	79		12.15	12.44					1 X							G
102473	9.855	0.022	9.628	0.025		0.217	0.031	T	0.24	0.04	L	9.6949	0.0017	0.018	116		9.66	9.73		C			1							G
102474	7.058	0.005	6.993	0.007		0.065	0.008	T	0.07	0.01	L	7.0036	0.0009	0.008	106		6.99	7.02					1							S
102475	8.730	0.009	8.344	0.009		0.365	0.012	T	0.43	0.01	L	8.4026	0.0010	0.010	173		8.38	8.42		C			1							S
102476	9.499	0.018	8.282	0.011		1.040	0.016	T	1.01	0.01	L	8.3314	0.0012	0.013	108		8.31	8.35		C			1							S
102477	9.367	0.027	8.168	0.017		1.026	0.025	T	1.00	0.02	L	8.2183	0.0013	0.011	69		8.20	8.23		C			1							
102478	8.831	0.011	8.679	0.013		0.146	0.016	T	0.16	0.02	L	8.6991	0.0016	0.013	114		8.67	8.73		C			1							
102479	9.114	0.016	8.812	0.018		0.351	0.015	G	0.41	0.02	H	8.8471	0.0024	0.014	73		8.83	8.87					1							
102480	7.977	0.009	6.869	0.006		0.955	0.008	T	0.94	0.01	L	6.9231	0.0008	0.006	103		6.91	6.94					1							S
102481	8.740	0.010	8.351	0.010		0.368	0.013	T	0.43	0.01	L	8.3975	0.0011	0.013	151		8.38	8.43		C			1							
102482	10.522	0.027	9.774	0.023		0.669	0.027	T	0.73	0.02	L	9.8641	0.0020	0.023	176		9.82	9.91					1							
102483	8.289	0.008	8.244	0.010		0.046	0.012	T	0.06	0.01	L	8.2794	0.0016	0.015	125		8.26	8.31		C			1							S
102484	9.054	0.013	8.692	0.013		0.352	0.016	T	0.41	0.02	L	8.7422	0.0014	0.014	125		8.71	8.77					1							
102485	4.656	0.003	4.194	0.002		0.426	0.005	G	0.49	0.02	A	4.2320	0.0005	0.004	67		4.22	4.24					1							S
102486	9.016	0.015	7.935	0.011	A	0.914	0.003	G	0.96	0.00	I *	7.9613	0.0010	0.009	92	*	7.94	7.98		D	20462−2145	H 1	2 C A	AB	91	1.105	0.033	3.12	0.07	S
102487	5.993	0.004	5.920	0.003		0.066	0.004	T	0.08	0.00	L	5.9412	0.0007	0.005	92		5.93	5.95					1							S
102488	3.815	0.002	2.600	0.002		1.021	0.015	G	1.00	0.02	G	2.6430	0.0003	0.005	151		2.64	2.65		M	20462+3358	I 1	1							S
102489	9.409	0.015	9.460	0.022	A	0.027	0.015	G	0.04	0.01	H *	9.4051	0.0028	0.027	144	*	9.36	9.46		U	20462+3532	I 1	2 C C	AB	294	4.242	0.041	3.47	0.27	G
102490	8.035	0.014	7.143	0.011	*	0.794	0.013	T	0.83	0.01	L *	7.2426	0.0017	0.013	95	*	7.22	7.28		D	20462+1554	I 1	2 C A	AB	10	5.975	0.003	0.81	0.01	S
102491	9.817	0.026	9.051	0.022		0.682	0.026	T	0.74	0.02	L	9.1485	0.0026	0.014	72		9.12	9.18		C			1							
102492	10.764	0.049	9.580	0.028		1.015	0.044	T	0.99	0.04	L	9.6312	0.0029	0.020	88		9.59	9.67		C			1							
102493	10.520	0.036	8.969	0.017		1.302	0.031	T	1.26	0.03	L	8.9954	0.0017	0.014	94		8.97	9.02					1							
102494	7.666	0.009	7.552	0.011		0.103	0.013	T	0.12	0.01	L	7.5655	0.0010	0.008	79		7.55	7.59					1							S
102495						1.299	0.001	G	1.49	0.00	I	10.8065	0.0039	0.030	80		10.75	10.85		C			1							G
102496	6.981	0.003	6.537	0.003		0.433	0.003	T	0.50	0.00	L	6.5843	0.0007	0.007	162		6.57	6.60					1							S
102497	5.375	0.002	5.466	0.003		−0.078	0.003	T	−0.06	0.00	L	5.4638	0.0007	0.007	109		5.45	5.48					1 G							S
102498	10.063	0.031	8.962	0.020		0.950	0.029	T	0.94	0.02	L	9.0181	0.0023	0.015	78		9.00	9.04					1							
102499	7.808	0.006	6.475	0.004		1.131	0.006	T	1.09	0.01	L	6.5056	0.0008	0.007	112		6.49	6.52					1							S
102500	11.792	0.109	10.630	0.061		0.990	0.099	T	1.03	0.09	L	10.5839	0.0028	0.029	98		10.53	10.63		C			1							G

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA		Dec	V		α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	F1	F2
	h m s		±° ′ ″	mag		deg		deg	mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3		4	5	6 7	8		9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
102501	20 46 24.32		−38 30 40.4	9.62	H	311.601 319 55		−38.511 228 30	4.02	9.09	8.27	1.25	0.82	1.31	1.45	1.11	+23	− 6	−11	−38	+ 8	− 4	− 1	− 6	− 3	+56	0	0.81
102502	20 46 24.51		+56 50 05.9	7.57	H	311.602 115 79		+56.834 978 52	8.07	59.69	48.19	0.54	0.55	0.60	0.52	0.56	+ 1	− 1	+17	+15	+ 6	− 7	+ 7	+ 9	−10	+ 4	0	0.52
102503	20 46 25.31		−39 36 58.2	8.95	H	311.605 457 25		−39.616 174 05	4.37	−7.95	−30.92	1.08	0.71	1.31	1.34	0.95	+27	− 6	−11	−28	+ 1	− 5	− 1	−14	−13	+54	2	−1.06
102504	20 46 26.03		+16 54 12.9	7.12	H	311.608 474 30		+16.903 577 67	2.33	−1.03	−13.87	0.74	0.52	0.92	0.96	0.51	+ 9	−10	+ 2	− 7	+29	+10	+17	+11	+22	+25	0	−0.78
*102505	20 46 27.56		−26 51 54.0	10.19	H	311.614 826 32		−26.865 004 10	B 16.64	33.45	−7.55	45.71	31.41	21.59	27.80	28.99	+45	+ 0	+12	−21	+15	+21	− 5	+30	−19	+60	3	1.61
*102506	20 46 27.06		−50 48 19.8	6.54	H	311.612 750 90		−50.805 491 16	4.28	26.57	−17.40	0.74	0.54	0.86	0.97	0.52	+ 6	− 3	−12	−12	−12	− 2	−18	−42	+11	−40	0	1.71
*102507	20 46 27.39		−26 52 07.1	7.01	H	311.614 141 37		−26.868 636 42	A 19.59	2.55	−22.22	2.09	1.41	1.78	2.28	2.19	+49	+ 9	+ 6	−28	+ 7	+ 6	−10	+28	−24	+62	3	1.61
102508	20 46 27.69		−71 56 58.3	8.80	2 T	311.615 386 00		−71.949 536 11	4.80	30.71	−17.27	0.64	0.88	1.08	0.71	0.98	−20	− 9	−21	− 8	+10	− 6	+ 7	−17	+15	−38	0	−2.52
102509	20 46 27.95		−18 48 31.5	8.67	H	311.616 447 67		−18.808 743 51	3.09	3.89	−1.41	1.11	0.62	1.19	1.39	1.01	+ 9	− 5	− 4	−18	− 4	+25	−10	+35	−18	+15	0	0.29
102510	20 46 28.80		+11 12 25.6	8.84	H	311.620 011 98		+11.207 122 55	0.86	1.92	−7.67	1.00	0.76	1.28	1.36	0.85	+35	−10	+ 9	+20	+35	+20	+28	+32	+14	+51	0	−1.28
102511	20 46 30.00		+10 18 06.4	11.09	H	311.625 017 28		+10.301 781 28	11.06	178.51	−52.56	1.97	1.26	2.50	2.61	1.39	+19	− 7	− 5	+ 6	+25	− 3	+19	+13	+10	+39	2	−0.40
102512	20 46 30.13		−22 09 50.0	7.35	H	311.625 532 90		−22.163 884 15	7.31	10.31	−44.84	0.85	0.52	0.93	1.04	0.78	+15	−18	−15	−17	+ 7	+35	+14	+44	−13	+13	0	−1.03
102513	20 46 30.66		+48 16 12.3	8.23	H	311.627 770 33		+48.270 072 35	7.19	42.71	4.57	0.57	0.59	0.71	0.63	0.59	−12	+10	+ 9	− 2	+11	+ 2	+12	−19	+19	−10	0	−1.09
102514	20 46 30.78		+12 37 19.6	7.98	H	311.628 235 70		+12.622 113 77	5.23	12.96	1.42	0.81	0.53	0.96	1.03	0.59	+15	−14	+12	+ 2	+26	+10	+17	+15	+14	+44	0	0.40
102515 H	20 46 31.16		−16 41 52.5	8.28	H	311.629 823 80		−16.697 920 12	A 11.82	−47.83	27.85	3.08	1.98	3.40	3.98	2.91	+37	− 4	− 7	+14	+24	+40	+26	+68	−24	+31	3	1.55
102516	20 46 31.72		−24 54 51.6	7.85	G	311.632 176 34		−24.914 337 04	7.35	4.59	−18.09	1.10	0.52	1.01	1.44	0.90	+13	−11	− 5	−50	− 5	+ 7	− 6	+17	−27	+18	0	0.52
102517 H	20 46 32.04		+50 05 12.7	9.05	H	311.633 515 80		+50.086 848 39	* 1.57	−3.88	−10.97	0.88	0.83	0.99	1.10	0.92	− 3	− 9	+23	−28	+ 6	+ 8	+ 4	−26	− 1	− 3	2	2.49
102518 H	20 46 32.34		+67 16 32.6	8.14	H	311.634 749 19		+67.275 714 93	A 2.90	−10.64	−13.67	0.96	0.86	0.81	0.92	0.75	+ 7	−11	− 9	+20	+ 9	− 8	+ 5	+10	+ 5	+ 0	1	−0.05
102519	20 46 33.48		+39 55 48.3	9.51	H	311.639 501 03		+39.930 072 18	−0.53	1.23	−3.00	0.78	0.79	1.06	0.81	0.85	−22	+ 4	+ 3	+ 1	+ 1	−11	+ 5	−12	+12	− 7	0	0.73
102520 H	20 46 33.74		+50 04 29.8	10.78	H	311.640 576 91		+50.074 943 00	A 1.17	1.84	−4.70	2.53	2.99	2.39	2.59	2.43	+18	−23	+16	−25	+ 1	+24	− 3	−17	+ 0	+14	0	−0.61
102521	20 46 34.31		−17 09 45.9	7.66	H	311.642 953 07		−17.162 753 61	28.47	−66.53	−60.43	0.93	0.54	1.06	1.13	0.89	+19	− 3	−14	−19	+10	+31	+10	+57	−24	+19	0	2.46
102522	20 46 35.40		−28 49 04.7	9.56	H	311.647 514 07		−28.817 970 05	2.34	2.13	5.22	1.27	0.86	1.42	1.64	1.41	+24	−17	−16	+ 6	+ 3	+16	+ 3	+32	−10	+30	0	−0.88
102523 H	20 46 35.63		+59 51 12.0	8.54	G	311.648 468 16		+59.853 338 96	A 17.52	−132.08	−289.23	1.37	1.13	1.21	1.48	1.11	+11	−20	+ 1	+16	− 2	− 8	− 4	+ 3	+ 8	+ 3	0	0.75
102524	20 46 35.97		+54 52 35.4	8.40	2 H	311.649 857 77		+54.876 506 30	0.42	−3.68	−8.07	0.64	0.63	0.73	0.67	0.76	− 7	+ 3	− 6	+ 4	+12	−15	+13	+ 5	−13	+ 8	3	0.72
102525	20 46 36.70		−60 16 53.5	8.18	H	311.652 907 84		−60.281 520 76	12.90	105.37	−70.21	0.58	0.61	1.01	0.99	0.78	+15	− 8	− 4	−20	+28	−20	+33	+ 5	+14	−42	0	1.41
102526	20 46 37.35		+69 56 08.6	7.93	H	311.655 627 66		+69.935 725 76	4.04	−2.83	−8.91	0.61	0.52	0.63	0.77	0.61	− 5	−11	− 2	+10	+ 0	+ 6	− 3	− 5	+26	− 4	0	−1.02
102527	20 46 37.50		−10 42 48.6	8.42	H	311.656 256 93		−10.713 498 01	10.42	12.34	−6.32	1.08	0.70	1.22	1.32	1.02	+26	−14	− 7	− 9	+19	+21	+21	+68	−12	+25	0	0.51
*102528	20 46 38.39		−19 26 17.2	7.63	G	311.659 972 98		−19.438 115 68	5.42	38.55	−5.28	0.97	0.49	1.11	1.18	0.94	+ 9	+24	−10	−12	+ 5	+20	−19	+50	−33	+26	0	−1.82
*102529 H	20 46 38.39		+62 37 33.9	9.16	G	311.659 946 88		+62.626 089 02	A 2.48	1.39	6.04	1.03	0.98	1.06	0.98	1.01	+ 0	−11	+17	−12	+32	+33	+22	+18	+ 8	+41	2	0.72
102530 H	20 46 38.61		+46 31 54.2	6.30	H	311.660 855 51		+46.531 727 72	A 7.89	−16.16	−14.75	1.68	1.14	0.68	0.73	0.54	−37	− 6	− 1	− 6	− 2	+ 1	− 4	−12	+16	−13	3	0.22
102531 H	20 46 38.87		+16 07 28.6	5.15	G	311.661 948 85		+16.124 623 94	B 31.69	−6.10	−201.74	4.45	3.55	2.37	2.86	1.84	+ 3	−13	−25	− 8	+31	−20	+18	+11	+ 3	+15	18	2.01
102532 H	20 46 39.52		+16 07 29.2	4.27	G	311.664 658 33		+16.124 773 26	A 32.14	−25.88	−196.27	1.20	0.87	1.19	1.32	0.80	+ 1	−18	−13	− 1	+32	−10	+17	+13	+10	+15	18	2.01
102533 H	20 46 39.79		−33 36 14.7	9.01	H	311.665 772 43		−33.604 081 10	* 12.05	39.00	−23.48	2.07	1.29	1.58	1.69	1.20	+20	− 6	−24	+ 7	−10	+10	− 1	+ 3	− 7	+17	0	0.11
102534	20 46 41.72		+26 21 43.3	9.44	H	311.673 824 30		+26.362 038 35	−0.11	1.41	−1.70	0.94	0.92	1.36	1.24	1.04	+ 7	−20	+ 9	−51	+24	+ 1	+10	+35	+ 1	+25	0	−0.35
102535	20 46 44.14		+20 07 23.1	8.61	H	311.683 914 37		+20.123 087 17	5.82	−6.54	−31.66	0.84	0.69	1.07	0.98	0.75	+26	− 1	+ 4	+19	+ 7	+ 5	+ 7	+19	+11	+39	0	−0.78
102536	20 46 44.42		+37 28 10.3	8.98	H	311.685 091 83		+37.469 540 77	2.57	−1.12	−1.86	0.59	0.70	0.89	0.67	0.74	−14	+ 0	+16	− 2	+ 7	− 3	+ 7	−10	− 4	−11	0	1.60
102537	20 46 44.54		+24 27 45.0	7.38	H	311.685 570 11		+24.462 500 04	5.08	36.30	13.43	0.52	0.45	0.70	0.52	0.46	+11	−13	−10	+24	+16	− 5	+14	+32	+ 3	+17	0	0.98
102538	20 46 45.06		−27 10 59.2	7.88	G	311.687 737 29		−27.183 101 71	10.30	3.10	18.86	0.91	0.60	1.01	1.16	1.08	+27	− 1	+14	−15	−18	+ 2	−28	+ 1	−19	+42	0	0.68
102539	20 46 46.08		+18 59 04.3	9.80	H	311.691 997 29		+18.984 538 66	2.21	−10.56	−3.16	1.03	0.87	1.44	1.15	0.94	+33	−18	−10	+36	+14	+ 7	+16	+37	− 2	+50	0	2.09
102540	20 46 46.25		−64 54 33.3	6.70	H	311.692 700 26		−64.909 255 95	7.33	86.40	−70.44	0.51	0.48	0.72	0.64	0.57	− 7	− 6	−17	− 8	+18	−11	+19	+11	+ 7	−26	0	−0.10
102541	20 46 47.40		−29 21 14.1	8.73	H	311.697 520 74		−29.353 927 63	7.85	3.63	−92.14	1.00	0.72	1.11	1.20	1.20	+30	−32	−22	+ 2	+25	+19	+31	+49	−21	+37	0	0.95
102542	20 46 47.47		+32 25 11.8	7.03	H	311.697 794 79		+32.419 953 42	3.42	13.93	−13.30	0.37	0.43	0.65	0.41	0.46	−27	+ 0	− 3	+ 0	−11	− 6	−11	− 2	+13	−33	0	0.95
102543	20 46 47.85		+10 00 24.0	9.53	H	311.699 360 70		+10.006 655 42	5.00	−4.09	2.19	1.20	0.80	1.59	1.55	0.85	+27	−14	− 8	+16	+35	+ 4	+28	+28	+ 9	+44	0	0.75
*102544	20 46 49.23		+63 59 08.5	7.66	H	311.705 122 58		+63.985 701 65	7.68	38.93	53.66	0.53	0.49	0.58	0.53	0.53	+ 2	−13	− 7	−20	+14	+ 8	+10	− 6	+16	+25	1	0.60
*102545	20 46 49.22		+07 33 10.7	8.39	2 H	311.705 078 53		+07.552 965 72	5.71	11.14	−26.52	0.92	0.58	1.14	1.13	0.63	+ 0	−13	−17	− 7	+21	+ 3	+14	+ 4	+17	+22	0	−0.30
102546	20 46 49.37		+02 26 15.2	8.37	3 H	311.705 693 88		+02.437 556 30	0.90	−6.77	4.97	1.02	0.83	1.19	1.44	1.18	+20	+ 8	−13	− 9	+31	+ 4	+24	+63	− 8	+32	0	−0.47
102547	20 46 50.23		−02 42 53.3	8.24	H	311.709 279 43		−02.714 810 21	4.66	5.34	0.54	1.15	0.74	1.36	1.72	1.08	− 9	+ 6	−34	+52	−23	+34	−16	+74	−35	−15	0	−0.70
102548	20 46 51.03		−58 07 37.2	9.52	H	311.712 621 01		−58.126 993 49	14.82	−93.71	3.97	1.07	1.14	1.56	1.24	1.22	+23	−36	−20	−25	− 4	− 2	− 7	−36	+ 6	+ 4	0	−0.90
102549	20 46 52.00		+34 30 28.0	8.17	H	311.716 668 89		+34.507 770 73	1.85	−12.30	−10.25	0.57	0.57	0.84	0.65	0.61	−20	− 5	− 7	+ 3	− 4	+ 2	− 5	− 1	+12	−25	0	−0.25
102550	20 46 52.89		−52 24 04.8	9.85	H	311.720 358 81		−52.401 323 95	4.59	14.78	−24.73	1.43	1.07	1.53	1.72	1.06	+17	−10	− 9	−24	−15	+ 1	−19	−45	+ 6	−22	2	0.03
102551	20 46 53.04		+47 06 41.3	7.83	H	311.721 015 46		+47.111 481 47	5.42	19.54	19.33	0.53	0.52	0.65	0.62	0.57	−10	+ 3	− 4	+11	+ 6	− 4	+ 4	−19	+19	−16	1	−1.86
102552	20 46 55.28		+37 55 14.4	9.13	H	311.730 322 89		+37.920 674 44	2.91	0.55	−5.36	0.65	0.71	0.89	0.74	0.78	−14	− 3	+13	+32	+ 0	−10	+ 1	−12	+ 3	−15	0	−1.64
102553	20 46 55.48		+32 51 50.3	8.29	H	311.731 157 28		+32.863 975 92	A 4.97	7.14	−3.91	1.20	1.55	1.66	1.25	1.46	−25	+ 4	− 1	+ 0	− 4	− 2	− 5	−17	− 2	−34	5	1.70
102554	20 46 56.34		+32 51 50.7	9.60	H	311.734 764 10		+32.864 091 50	B 4.07	6.95	−7.08	5.99	7.00	3.71	2.96	3.51	−23	+ 3	− 4	+ 4	− 8	+ 2	− 9	−12	− 2	−33	5	1.70
102555 H	20 46 58.91		−58 17 51.0	9.52	H	311.745 471 63		−58.297 504 15	A 5.81	16.86	−16.03	2.11	2.12	2.60	2.38	2.07	+15	− 7	−23	−32	+19	−23	+14	−25	+13	−17	1	−0.28
102556	20 47 00.83		+30 55 18.4	9.16	H	311.753 441 66		+30.921 771 72	10.06	−24.60	58.41	0.70	0.87	1.42	0.87	1.05	−25	−11	+18	+16	− 3	−17	− 0	+ 8	+ 6	−18	0	0.89
102557 H	20 47 00.94		+49 01 20.1	9.36	H	311.753 930 92		+49.022 260 88	* 1.10	11.87	−1.07	1.88	2.09	1.24	1.28	1.05	−26	−14	+12	−12	+ 0	+10	− 8	−16	+22	− 4	1	0.01
102558 H	20 47 01.06		+58 25 00.4	6.68	2 H	311.754 424 69		+58.416 777 52	* 2.10	−2.06	−3.63	0.48	0.43	0.50	0.54	0.49	+ 3	+ 0	+ 4	+11	+10	− 6	+10	+15	+ 3	+12	0	1.76
102559	20 47 01.09		+27 18 57.1	9.90	H	311.754 537 96		+27.315 860 50	1.77	−1.70	−14.78	0.85	1.06	1.57	0.97	1.11	+16	− 4	+ 3	+17	+25	−16	+24	+42	+ 4	+17	0	0.48
102560	20 47 01.68		+34 35 40.5	9.98	G	311.756 979 89		+34.594 591 70	−1.37	−3.14	−4.61	0.91	0.94	1.37	1.03	1.00	−26	−16	+ 6	− 3	− 8	− 3	−10	+17	+13	−27	0	0.23
102561	20 47 03.57		−02 29 12.7	6.28	1 H	311.764 889 06		−02.486 859 51	4.14	−19.81	−21.53	0.85	0.56	1.07	1.28	0.78	− 5	− 4	−39	+39	−29	+36	−13	+68	−40	−22	0	−0.31
102562	20 47 03.70		+46 11 15.0	8.70	H	311.765 412 28		+46.187 493 50	3.08	−11.71	−16.60	0.71	0.68	0.85	0.98	0.74	− 9	− 9	+ 3	− 6	−13	+ 3	−11	−17	+ 9	−12	3	0.55
102563	20 47 04.09		+34 01 42.7	7.78	H	311.767 024 06		+34.028 526 08	6.97	−17.12	−9.23	0.45	0.49	0.71	0.51	0.51	−15	+ 6	− 6	− 4	− 8	− 7	− 7	−15	+20	−26	0	0.76
102564	20 47 04.54		−01 41 37.3	7.63	H	311.768 918 45		−01.693 695 73	1.02	36.39	−0.90	0.82	0.61	1.02	1.21	0.88	+16	− 4	−17	+36	+ 3	+27	+ 7	+67	−18	+12	0	−1.10
102565	20 47 05.10		+14 43 46.6	8.04	H	311.771 238 98		+14.729 620 08	7.35	22.51	−16.89	0.70	0.52	0.89	0.86	0.55	+11	− 3	−13	+ 7	+21	+13	+20	+13	+ 7	+24	2	1.79
102566	20 47 07.15		+60 06 02.6	7.94	H	311.779 783 79		+60.100 711 85	0.98	6.63	12.09	0.64	0.58	0.67	0.73	0.63	− 2	+ 3	− 3	+29	+ 4	−14	+ 7	+ 1	+14	+ 7	0	−0.90
102567	20 47 07.95		−44 01 27.4	9.79	H	311.783 125 23		−44.024 266 79	4.78	7.40	14.49	1.37	0.99	1.64	1.78	1.32	+30	−18	− 6	− 5	+14	+14	+15	+10	− 6	+38	0	−0.19
102568	20 47 08.47		+32 10 19.9	7.42	H	311.785 277 42		+32.172 206 78	4.69	21.77	19.84	0.40	0.49	0.74	0.47	0.51	−30	− 2	+12	+ 1	−11	−10	− 9	− 7	+ 7	−31	0	0.73
102569	20 47 09.28		−12 23 26.2	9.88	G	311.788 673 67		−12.390 611 54	14.60	3.42	−142.62	1.80	1.28	2.09	2.31	2.04	+44	−26	−28	−13	+25	+ 3	+30	+72	−31	+41	0	2.24
102570 H	20 47 09.92		+42 24 35.4	7.22	H	311.791 315 51		+42.409 842 07	A 1.44	5.42	−0.51	0.81	0.85	0.97	0.86	0.83	− 5	− 4	− 3	+10	− 7	−24	− 6	−26	+15	+ 3	3	1.69
102571	20 47 10.72		+34 22 26.8	4.93	H	311.794 685 03		+34.374 103 29	8.18	39.26	8.24	0.37	0.39	0.55	0.41	0.39	−22	− 1	− 4	− 3	−10	− 5	− 9	−19	+23	−31	0	0.24
102572	20 47 10.92		+52 36 33.1	7.70	H	311.795 483 44		+52.609 189 91	4.29	22.64	10.06	0.55	0.56	0.64	0.67	0.72	−15	−13	+ 0	+ 0	− 3	− 1	− 2	+ 9	+ 4	−24	0	1.65
102573	20 47 12.51		−57 54 02.5	7.92	H	311.802 115 77		−57.900 693 02	0.85	−3.10	−0.69	0.75	0.79	1.08	0.91	0.73	+16	−12	−21	+ 8	− 8	+12	−10	−25	+ 3	− 5	0	−0.07
102574	20 47 12.67		+13 43 00.8	9.13	H	311.802 809 39		+13.716 880 73	1.61	16.61	−19.99	0.96	0.74	1.22	1.19	0.79	+18	−13	+ 3	− 4	+20	− 4	+15	+10	+ 2	+34	0	−1.11
102575	20 47 13.78		−85 04 56.3	8.92	H	311.807 407 48		−85.082 305 04	2.98	28.08	−19.40	0.71	0.68	0.87	0.79	0.68	−16	−22	−16	+15	−15	+10	−10	+11	−17	−36	0	0.61
102576	20 47 13.88		+51 47 41.4	7.99	H	311.807 824 94		+51.794 828 30	6.31	36.04	−2.20	0.58	0.58	0.68	0.71	0.81	−10	−14	+ 2	+ 2	− 1	−10	+ 0	+15	− 3	−13	2	1.26
102577	20 47 14.32		−05 04 59.3	8.07	H	311.809 648 21		−05.083 151 42	5.48	−0.37	−11.66	0.98	0.56	1.22	1.38	0.83	− 8	+ 2	−13	+25	−15	+37	−15	+62	−22	− 8	3	1.16
102578	20 47 14.61		−31 27 21.0	8.79	G	311.810 876 17		−31.455 847 09	11.49	77.14	−54.98	1.10	0.66	1.29	1.66	1.04	+27	− 4	− 4	− 2	−11	+29	−11	+ 4	− 9	+34	4	0.44
102579	20 47 15.88		−47 10 22.1	7.36	H	311.816 183 47		−47.172 807 05	11.12	30.87	3.10	0.77	0.54	0.83	1.11	0.82	+15	−25	−18	+25	− 7	+ 4	− 9	+18	+ 6	−16	0	−0.15
102580	20 47 16.51		−35 09 14.0	8.26	H	311.818 793 71		−35.153 890 62	25.32	151.97	−79.32	1.02	0.63	1.12	1.45	0.90	+17	+ 0	− 4	+ 6	−16	+ 8	−15	+ 5	−22	+ 9	2	0.06
102581	20 47 16.66		−27 41 54.3	7.89	G	311.819 410 39		−27.698 412 65	14.21	−28.83	−11.35	0.98	0.63	1.13	1.31	1.11	+31	−30	− 6	+ 6	+ 4	+ 4	+ 8	+37	−21	+30	0	1.25
102582	20 47 16.79		+10 51 41.6	9.72	H	311.819 945 77		+10.861 569 11	31.68	91.47	−592.07	1.29	0.89	1.62	1.73	0.97	+19	− 6	− 1	+10	+26	+12	+22	+19	+ 1	+34	0	0.45
102583	20 47 18.42		+16 30 18.8	8.56	H	311.826 761 58		+16.505 209 22	1.09	−6.09	−9.32	0.92	0.58	1.07	1.13	0.58	−14	+ 7	−21	−26	+28	−14	+20	+ 0	+18	− 1	0	−0.11
102584 H	20 47 20.09		−26 24 54.7	7.13	H	311.833 707 31		−26.415 186 64	A 8.45	6.52	−1.76	1.60	0.90	1.64	1.98	1.58	+16	+15	+ 7	+ 9	− 3	+34	−26	+27	−32	+22	0	0.82
102585	20 47 20.77		+45 34 48.0	6.41	H	311.836 522 47		+45.579 988 71	2.49	4.22	−22.39	0.54	0.47	0.64	0.68	0.48	− 7	−16	+14	−13	− 7	+ 6	− 7	−10	+ 2	+ 0	0	1.50
102586	20 47 22.31		−50 32 45.7	7.59	H	311.842 973 58		−50.546 034 22	7.93	10.99	−64.19	0.86	0.66	1.05	1.10	0.60	+ 3	+ 7	−23	−10	−11	− 1	−16	−45	+18	−35	0	0.93
102587	20 47 22.92		−18 37 16.1	8.14	G	311.845 491 61		−18.621 134 92	13.96	−6.68	−36.13	1.02	0.61	1.12	1.26	1.05	+20	−13	+ 4	−19	+22	+26	+12	+55	−12	+34	0	1.23
102588	20 47 23.65		−45 51 16.2	6.83	H	311.848 543 46		−45.854 508 13	5.12	9.48	−5.17	0.82	0.57	1.04	1.25	0.84	+ 8	−16	− 9	− 4	− 7	−35	− 7	+ 2	−12	− 9	0	−1.12
102589 H	20 47 24.53		+36 29 26.7	4.53	2 G	311.852 195 64		+36.490 736 58	A 3.71	14.93	−8.20	0.51	0.57	0.61	0.48	0.55	−11	− 4	+ 5	+13	+ 2	−12	+ 4	− 3	+ 3	− 3	2	2.78
102590	20 47 25.93		+49 23 18.0	8.15	H	311.858 046 30		+49.388 332 08	7.91	16.33	−22.54	0.68	0.56	0.73	0.87	0.63	− 7	− 2	+11	−16	− 4	+ 4	− 4	−17	+13	−19	3	2.30
102591	20 47 27.13		−15 36 54.8	8.16	H	311.863 050 26		−15.615 222 11	3.81	−8.19	−12.81	1.06	0.58	1.18	1.37	0.99	+18	+ 2	− 1	−25	+ 8	+18	− 2	+50	−20	+27	0	−0.35
102592	20 47 28.25		+06 48 53.7	7.95	G	311.867 687 79		+06.814 930 50	12.81	66.32	34.30	0.98	0.58	1.24	1.15	0.64	+33	−43	−16	+19	+29	+ 1	+21	+20	+ 8	+52	0	−0.60
102593	20 47 28.35		+12 27 50.6	10.07	3 H	311.868 115 71		+12.464 061 64	1.55	14.75	8.69	1.21	0.87	1.54	1.56	0.97	+23	+ 1	+15	+ 3	+33	+18	+23	+31	+17	+46	0	0.91
102594 H	20 47 29.23		−80 19 27.3	8.47	G	311.871 793 19		−80.324 261 12	A 3.94	30.76	4.99	2.75	2.75	1.13	0.91	0.99	+ 6	− 8	− 4	− 5	+ 3	−17	+ 3	− 4	− 9	+ 4	1	−0.54
102595	20 47 29.94		+09 51 51.4	7.72	H	311.874 762 81		+09.864 287 15	8.62	25.22	30.08	0.80	0.52	1.06	1.03	0.57	+ 8	−17	+ 1	+ 8	+23	+21	+18	+18	+ 8	+32	2	3.06
102596	20 47 30.06		−00 25 42.9	9.09	G	311.875 255 13		−00.428 582 31	1.08	−0.82	−7.86	1.09	0.78	1.38	1.40	1.14	+14	+13	−11	+ 8	+20	+35	+19	+62	+ 1	+28	0	−0.07

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
102501	10.136	0.027	9.652	0.026		0.468	0.029	T	0.54	0.03	L	9.7266	0.0026	0.023	110		9.68	9.77					1							
102502	8.018	0.007	7.615	0.008		0.409	0.015	G	0.48	0.02	H	7.6599	0.0010	0.010	115		7.64	7.68		C			1 G							S
102503	9.561	0.018	9.011	0.018		0.521	0.019	T	0.59	0.02	L	9.0593	0.0020	0.016	108		9.03	9.09		C			1							
102504	9.087	0.014	7.270	0.007		1.512	0.012	T	1.54	0.02	L	7.2401	0.0013	0.013	90		7.22	7.26					1							S
102505											T	10.5215	0.1458			B				D	20465−2652	I 2	1 C I A							
102506	8.080	0.008	6.689	0.006		1.162	0.005	G	1.12	0.01	H	6.7061	0.0009	0.010	95		6.69	6.72					1							S
102507	7.473	0.007	7.049	0.009	A	0.414	0.009	T	0.48	0.01	L	7.0996	0.0071	0.026	91	A	7.05	7.14		D	20465−2652	I 2	1 C P A							S
102508	9.218	0.012	8.839	0.013		0.359	0.016	T	0.42	0.02	L	8.8397	0.0162	0.166	163		8.71	9.13	0.79	P 1 A			1							
102509	10.414	0.032	8.817	0.015		1.338	0.028	T	1.30	0.03	L	8.8280	0.0020	0.016	108		8.80	8.86					1							
102510	10.709	0.050	9.028	0.021		1.404	0.043	T	1.38	0.05	L	8.9824	0.0024	0.019	100		8.95	9.02					1							
102511	11.724	0.133	11.036	0.116		0.635	0.145	T	0.70	0.13	L	11.2234	0.0056	0.044	97		11.17	11.32		C			1							G
102512	9.038	0.015	7.476	0.008		1.311	0.013	T	1.27	0.01	L	7.5023	0.0012	0.009	93		7.48	7.52		C			1							S
102513	8.807	0.011	8.277	0.010		0.497	0.013	T	0.57	0.01	L	8.3387	0.0013	0.014	117		8.32	8.37		C			1							
102514	8.228	0.009	7.985	0.011		0.232	0.013	T	0.26	0.02	L	8.0532	0.0014	0.012	110		8.04	8.08					1							S
102515	9.881	0.035	9.017	0.027	A	1.000	0.495	G	0.80	0.07	B *	8.4260	0.0014	0.015	103	*	8.40	8.46		R	20465−1642	I 1	2 C A	AB	292	3.856	0.006	0.07	0.01	
102516	8.346	0.013	7.890	0.012		0.461	0.015	G	0.53	0.02	H	7.9478	0.0009	0.007	72		7.94	7.96					1							S
102517	11.606	0.098	9.373	0.023	*						T *	9.2044	0.0028	0.022	103	*	9.17	9.24			20465+5005	H 1	2 C S B	AB	334	0.147	0.044	1.60	0.91	
102518	8.455	0.010	8.190	0.011	A	1.000	0.495	G	0.19	0.07	L *	8.2023	0.0015	0.016	108	*	8.17	8.23		D	20465+6717	I 1	2 C B	AB	36	6.412	0.033	3.46	0.18	S
102519	10.944	0.052	9.644	0.026		1.155	0.009	G	1.12	0.01	I	9.6799	0.0023	0.023	138		9.64	9.72		C			1							G
102520	11.489	0.090	10.771	0.088	*	0.660	0.102	T	0.72	0.08	L *	10.9268	0.0048	0.037	99	*	10.87	10.98		D	20466+5004	H 1	2 C B	AB	21	0.479	0.019	1.88	0.11	G
102521	8.407	0.009	7.724	0.008		0.620	0.009	T	0.69	0.01	L	7.7862	0.0011	0.010	124		7.77	7.81		C			1							S
102522	9.823	0.029	9.577	0.035		0.234	0.043	T	0.26	0.05	L	9.6304	0.0022	0.016	64		9.60	9.66		C			1							
102523	9.239	0.014	8.616	0.013	A	0.653	0.155	G	0.65	0.02	L *	8.6292	0.0013	0.015	116	*	8.60	8.66		D	20466+5951	I 1	2 C B	AB	29	1.334	0.028	2.93	0.11	
102524	9.016	0.012	8.492	0.012		0.492	0.015	T	0.56	0.02	L	8.5037	0.0025	0.035	126		8.46	8.65	10.75	P 1 A			1							
102525	8.756	0.009	8.239	0.008		0.486	0.005	G	0.56	0.01	H	8.2913	0.0011	0.014	165		8.26	8.32					1							S
102526	7.936	0.006	7.929	0.010		0.011	0.011	T	0.03	0.01	L	7.9419	0.0020	0.012	106		7.92	7.97					1							S
102527	8.980	0.012	8.456	0.012		0.492	0.015	T	0.56	0.02	L	8.5298	0.0014	0.013	103		8.50	8.56		C			1							S
102528	8.051	0.009	7.656	0.008		0.382	0.015	G	0.45	0.02	H	7.7104	0.0013	0.010	115		7.69	7.73					1							S
102529	9.136	0.017	8.981	0.020	A	0.322	0.155	G	0.11	0.05	L *	8.9160	0.0016	0.014	99	*	8.89	8.95		D	20466+6238	I 1	2 C A	AB	69	9.599	0.013	2.61	0.08	
102530	6.383	0.003	6.312	0.004	*	0.064	0.004	T	0.07	0.00	L *	6.3273	0.0006	0.006	130	*	6.32	6.34		D	20466+4632	I 1	2 C A	AB	109	0.330	0.009	2.47	0.08	S
102531	5.719	0.005	5.151	0.005	B	0.495	0.009	G	0.59	0.01	L *	5.2448	0.0107			B				D	20467+1607	I 2	1 C I A							S
102532	5.594	0.005	4.378	0.003	A	1.042	0.004	G	1.03	0.09	G *	4.4364	0.0060	0.036	107	A	4.42	4.59		D	20467+1607	I 2	1 C P A							S
102533	9.876	0.027	9.102	0.022	*	0.704	0.027	T	0.76	0.02	L *	9.1470	0.0029	0.024	84	*	9.11	9.18		C	20467−3336	H 1	2 C A	AB	163	0.208	0.006	0.45	0.14	
102534	9.706	0.016	9.460	0.020		0.234	0.024	T	0.26	0.03	L	9.5080	0.0017	0.024	155		9.47	9.55					1							
102535	9.202	0.014	8.661	0.014		0.486	0.006	G	0.56	0.01	H	8.7195	0.0019	0.016	107		8.70	8.75		C			1							
102536	8.969	0.011	8.948	0.014		0.024	0.016	T	0.04	0.01	L	8.9924	0.0016	0.016	158		8.96	9.03		C			1							
102537	7.632	0.006	7.414	0.006		0.208	0.008	T	0.23	0.01	L	7.4493	0.0010	0.009	122		7.43	7.47		C			1							S
102538	8.264	0.011	7.904	0.012		0.341	0.015	T	0.40	0.02	L	7.9694	0.0015	0.011	89		7.95	7.99		C			1							S
102539	9.920	0.021	9.777	0.028		0.138	0.033	T	0.15	0.03	L	9.8496	0.0022	0.022	118		9.80	9.89		C			1							G
102540	8.084	0.007	6.822	0.005		1.075	0.007	T	1.04	0.01	L	6.8726	0.0010	0.011	144		6.85	6.89					1							S
102541	9.986	0.034	8.853	0.022		0.975	0.032	T	0.96	0.03	L	8.8998	0.0017	0.012	68		8.88	8.92		C			1							
102542	6.979	0.004	7.025	0.004		−0.037	0.005	T	−0.01	0.01	L	7.0306	0.0008	0.010	216		7.01	7.05		C			1							S
102543	10.022	0.027	9.578	0.029		0.445	0.008	G	0.51	0.01	H	9.6284	0.0027	0.022	95		9.59	9.67		C			1							
102544	7.931	0.010	7.685	0.010		0.254	0.003	G	0.29	0.00	H	7.7317	0.0011	0.011	116		7.71	7.75		C			1							S
102545	9.074	0.014	8.483	0.013		0.552	0.017	T	0.62	0.02	L	8.5116	0.0017	0.016	93		8.49	8.92		U 2 C			1							S P
102546	10.103	0.032	8.582	0.016		1.299	0.029	T	3.91	0.09	O	7.8886	0.0337	0.238	78		7.34	8.47	235.00	P 1 A			1 S							
102547	8.372	0.010	8.260	0.012		0.109	0.015	T	0.12	0.02	L	8.2840	0.0019	0.011	104		8.27	8.32					1							S
102548	10.372	0.037	9.601	0.030		0.686	0.036	T	0.74	0.03	L	9.6560	0.0032	0.021	80		9.63	9.69		C			1							
102549	9.723	0.019	8.308	0.011		1.195	0.017	T	1.15	0.01	L	8.3389	0.0018	0.017	165		8.31	8.37		C			1							
102550	10.759	0.052	9.976	0.041		0.695	0.050	T	0.75	0.04	L	9.9891	0.0031	0.022	80		9.95	10.03		C			1							
102551	7.870	0.008	7.830	0.011		0.036	0.012	T	0.05	0.01	L	7.8491	0.0013	0.012	126		7.83	7.87					1							S
102552	9.345	0.015	9.170	0.018		0.168	0.022	T	0.18	0.02	L	9.1866	0.0015	0.019	147		9.16	9.23		C			1							
102553	8.492	0.008	8.303	0.010	A	0.181	0.012	T	0.20	0.01	L	8.3551	0.0053	0.021	196	A	8.33	8.42		D	20469+3252	I 2	1 C P A							
102554	9.836	0.020	9.526	0.023	B	0.294	0.028	T	0.34	0.04	L	9.7216	0.0177			B				D	20469+3252	I 2	1 C I A							
102555	10.111	0.028	9.655	0.028	A	0.500	0.495	G	0.45	0.07	L *	9.6120	0.0034	0.025	77	*	9.58	9.66		D	20470−5818	I 1	2 C A	AB	33	1.171	0.021	1.84	0.06	
102556	10.063	0.031	9.263	0.024		0.724	0.030	T	0.78	0.02	L	9.3048	0.0023	0.023	183		9.25	9.35					1 G							
102557	10.786	0.053	9.547	0.028	*	1.057	0.047	T	1.02	0.04	L *	9.5276	0.0027	0.019	100	*	9.50	9.56		C	20470+4901	H 1	2 C A	AB	244	0.203	0.031	1.71	0.49	G
102558	8.600	0.010	7.103	0.005	*	1.260	0.009	T	1.22	0.01	L *	6.8344	0.0049	0.049	138	*	6.75	6.90		U 2 C	20470+5825	H 1	2 C S B	AB	39	0.148	0.008	0.54	0.37	S P
102559	10.508	0.036	9.983	0.035		0.493	0.045	T	0.57	0.05	L	10.0108	0.0022	0.027	140		9.96	10.06					1							G
102560	10.253	0.027	10.072	0.036		0.271	0.014	G	0.31	0.02	H	10.0536	0.0028	0.029	161		10.00	10.10		C			1 S							G
102561	8.336	0.011	6.461	0.004		1.558	0.009	T	1.58	0.01	L	6.3944	0.0020	0.014	107		6.38	6.42		U 2			1							S
102562	8.814	0.013	8.719	0.016		0.120	0.015	G	0.13	0.01	H	8.7496	0.0017	0.016	116		8.72	8.77		C			1							
102563	8.164	0.006	7.819	0.007		0.320	0.015	G	0.37	0.02	H	7.8625	0.0012	0.014	189		7.84	7.89					1							S
102564	9.211	0.013	7.770	0.008		1.216	0.012	T	1.18	0.01	L	7.7932	0.0010	0.009	117		7.77	7.81		C			1							S
102565	8.295	0.010	8.081	0.011		0.204	0.014	T	0.22	0.02	L	8.1025	0.0012	0.014	100		8.08	8.13					1							S
102566	10.111	0.022	8.126	0.009		1.645	0.019	T	1.67	0.02	L	8.0534	0.0015	0.013	124		8.04	8.08					1							
102567	10.687	0.058	9.874	0.048		0.734	0.058	T	0.78	0.04	L	9.9370	0.0030	0.025	80		9.90	9.98					1							
102568	7.476	0.005	7.420	0.005		0.056	0.007	T	0.07	0.01	L	7.4423	0.0011	0.011	217		7.42	7.46					1							S
102569	11.096	0.060	10.058	0.040		0.955	0.015	G	1.00	0.01	I	10.0135	0.0030	0.025	80		9.98	10.05		C			1							
102570	7.115	0.006	7.174	0.007	*	−0.049	0.008	T	−0.03	0.01	L *	7.2089	0.0018	0.021	121	*	7.19	7.27		D	20472+4225	I 1	2 C A	AB	94	9.942	0.006	1.62	0.02	S
102571	6.623	0.003	5.082	0.002		1.294	0.003	T	1.25	0.00	L	5.0907	0.0005	0.005	178		5.08	5.10			20472+3422	I 1	1							S
102572	9.067	0.012	7.814	0.008		1.068	0.011	T	1.03	0.01	L	7.8680	0.0014	0.011	105		7.85	7.89					1							
102573	9.414	0.019	8.049	0.011		1.156	0.017	T	1.12	0.01	L	8.0869	0.0013	0.014	96		8.07	8.12		C			1							S
102574	10.309	0.034	9.245	0.022		0.922	0.031	T	0.92	0.02	L	9.2933	0.0027	0.024	104		9.25	9.33		C			1							
102575	10.334	0.026	9.065	0.015		1.081	0.023	T	1.04	0.02	L	9.0852	0.0018	0.017	133		9.06	9.11					1							
102576	8.374	0.010	8.027	0.011		0.342	0.003	G	0.40	0.00	H	8.0731	0.0009	0.011	96		8.06	8.09		C	20472+5148	I 1	1							S
102577	8.691	0.018	8.135	0.017		0.536	0.015	G	0.58	0.01	L	8.1814	0.0009	0.012	140		8.16	8.21					1							S
102578	9.451	0.024	8.812	0.021		0.574	0.015	G	0.65	0.01	H	8.9077	0.0017	0.014	69		8.88	8.94		C			1							
102579	7.712	0.007	7.387	0.008		0.300	0.016	G	0.34	0.02	H	7.4303	0.0014	0.010	81		7.42	7.45					1							S
102580	9.244	0.022	8.378	0.017		0.759	0.021	T	0.80	0.01	L	8.3974	0.0017	0.014	67		8.37	8.42		C			1							
102581	8.463	0.013	7.952	0.014		0.505	0.015	G	0.58	0.02	H	8.0044	0.0010	0.009	82		7.99	8.02		C			1							S
102582	11.223	0.078	9.867	0.039		1.032	0.001	G	1.08	0.00	I	9.8585	0.0031	0.024	87		9.81	9.90		C			1							
102583	10.838	0.060	8.752	0.018		1.765	0.052	T	2.09	0.12	O	8.6341	0.0020	0.018	108		8.60	8.66					1							
102584	7.524	0.011	7.291	0.013	A						T *	7.2405	0.0014	0.009	83	*	7.23	7.26		D	20473−2625	I 1	2 C A	AB	254	1.746	0.012	1.61	0.02	S
102585	8.532	0.011	6.606	0.005		1.606	0.005	G	1.58	0.01	J	6.5246	0.0011	0.012	106		6.50	6.54			20473+4535	I 1	1							S
102586	8.765	0.013	7.692	0.009		0.929	0.012	T	0.92	0.01	L	7.7489	0.0014	0.013	97		7.72	7.77					1							S
102587	8.807	0.025	8.220	0.023		0.568	0.015	G	0.64	0.01	H	8.2630	0.0011	0.012	109		8.24	8.28		C	20474−1837	I 1	1							S
102588	8.493	0.013	6.967	0.007		1.282	0.012	T	1.24	0.01	L	6.9852	0.0015	0.009	71		6.97	7.00		C			1							S
102589	4.422	0.003	4.551	0.003	*	−0.083	0.015	G	−0.12	0.03	C *	4.5206	0.0022	0.021	154	*	4.47	4.54		U 2 C	20475+3629	I 1	2 C A	AB	12	0.867	0.002	1.48	0.01	S
102590	8.699	0.011	8.194	0.011		0.460	0.015	G	0.53	0.02	H	8.2491	0.0013	0.013	102		8.23	8.27		C			1							
102591	9.511	0.018	8.263	0.011		1.064	0.016	T	1.03	0.01	L	8.3247	0.0010	0.011	103		8.31	8.35		C			1							
102592	8.422	0.010	7.993	0.010		0.405	0.013	T	0.47	0.01	L	8.0472	0.0011	0.011	100		8.02	8.07		C			1							S
102593	10.340	0.036	9.955	0.041		0.364	0.051	T	0.43	0.06	L	10.1588	0.0293	0.248	104		9.65	10.37	0.47	P 1 A			1 S							G
102594	8.877	0.010	8.520	0.011	*	0.344	0.015	G	0.40	0.02	H *	8.5548	0.0017	0.017	140	*	8.53	8.58		D	20475−8019	H 1	2 C A	AB	1	0.338	0.003	0.05	0.04	S
102595	8.589	0.013	7.808	0.011		0.710	0.013	T	0.76	0.01	L	7.8650	0.0011	0.008	105		7.85	7.88					1							S
102596	9.392	0.017	9.126	0.019		0.240	0.015	G	0.27	0.02	H	9.1611	0.0021	0.018	107		9.13	9.19		C			1							
102597	9.716	0.020	9.408	0.022	A	0.293	0.028	T	0.33	0.04	L	9.4947	0.0096	0.016	104	A	9.44	9.52		C	20475+5553	I 1	2 C B	AB	244	10.950	0.043	3.15	0.18	G
102598	8.145	0.008	8.132	0.009		0.017	0.011	T	0.04	0.01	L	8.1670	0.0017	0.016	113		8.14	8.19					1							
102599	6.839	0.005	5.489	0.003		1.144	0.005	T	1.11	0.01	L	5.5306	0.0006	0.005	112		5.52	5.55		C			1							S
102600	11.142	0.065	10.390	0.055		0.617	0.005	G	0.69	0.00	H	10.4342	0.0032	0.029	98		10.39	10.49					1							G

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
*102601	20 47 34.59	+01 49 54.8	7.22	H	311.894 145 78	+01.831 900 78	3.30	−23.44	−12.17	0.79	0.53	0.95	0.98	0.71	+13 −17 −31 −10 + 7 +19 +15 +57 −26 + 8	0	1.23
*102602	20 47 34.58	−14 25 31.2	11.01	G	311.894 079 08	−14.425 338 83	9.31	−300.11	−277.12	2.41	1.43	2.57	3.71	2.50	+ 5 −20 + 7 + 7 + 4 + 5 − 4 +63 − 3 +18	0	1.66
102603	20 47 34.63	−26 31 32.7	9.90	H	311.894 305 22	−26.525 753 28	9.01	−22.58	8.19	1.63	0.89	1.82	2.31	1.74	+ 2 +13 − 8 +23 −34 +14 −40 +11 −49 − 4	3	−2.26
102604 H	20 47 35.71	−45 33 40.3	8.97	H	311.898 786 31	−45.561 191 21 A	8.17	26.47	22.28	3.81	3.83	4.00	5.52	5.13	+29 −14 −16 + 1 +17 −51 + 7 +17 −20 +64	0	0.62
102605	20 47 35.85	+13 05 33.7	9.16	H	311.899 376 14	+13.092 686 33	1.93	−3.64	0.37	0.98	0.79	1.27	1.32	0.90	+19 −11 + 9 − 1 +21 +11 +13 +17 +13 +39	0	−1.01
102606	20 47 35.96	+08 20 09.1	12.25	H	311.899 850 23	+08.335 868 52	2.90	−8.95	−5.90	2.65	2.11	3.47	3.56	2.49	+26 − 3 − 3 + 0 +24 +32 +20 +18 +20 +47	0	0.44
102607	20 47 36.13	−10 03 04.0	8.48	H	311.900 528 53	−10.051 122 91	5.19	−8.02	42.04	1.02	0.65	1.23	1.29	0.86	+13 −26 − 8 +34 −11 +17 −11 +63 − 2 +13	0	0.74
102608	20 47 36.40	−79 51 13.1	7.60	G	311.901 657 16	−79.853 642 31	5.64	−13.42	6.33	0.53	0.54	0.69	0.59	0.57	+ 9 −19 − 9 +17 + 0 −11 + 0 − 8 − 8 + 4	0	−2.86
102609	20 47 36.85	+45 40 29.3	9.53	G	311.903 559 59	+45.674 801 71	1.48	−1.77	1.27	0.98	0.95	1.24	1.25	1.03	− 4 − 8 +26 −15 − 7 − 7 − 4 −18 − 9 + 4	0	0.09
102610	20 47 37.86	+12 59 10.2	7.43	H	311.907 735 84	+12.986 154 78	25.60	24.14	38.26	0.70	0.51	0.92	0.84	0.56	+ 6 −16 +14 − 7 +28 +11 +16 +28 +13 +32	0	0.43
102611	20 47 38.33	+16 14 18.7	7.60	H	311.909 688 83	+16.238 518 22	18.63	129.66	−31.79	0.76	0.46	0.87	0.88	0.47	−15 −13 −18 −21 +27 −14 +18 + 4 +12 − 7	0	0.35
102612	20 47 38.70	+06 58 33.8	7.28	H	311.911 251 45	+06.976 057 59	12.54	−13.66	−16.05	0.87	0.50	1.13	0.96	0.53	+18 −49 −19 + 9 +21 − 8 +11 + 8 + 7 +33	0	1.75
102613	20 47 39.38	−44 05 47.1	10.25	H	311.914 082 65	−44.096 423 38	4.53	−38.87	−20.70	1.33	0.99	1.60	1.56	1.23	+26 −24 −12 −12 + 7 + 8 +11 − 2 −12 +34	2	0.05
102614	20 47 39.59	−07 06 40.0	8.58	H	311.914 942 33	−07.111 119 36	4.12	−6.31	−2.01	1.25	0.75	1.38	1.68	1.08	+ 5 −31 − 8 +40 − 4 + 1 − 3 +72 − 7 + 5	0	1.12
102615	20 47 39.80	+50 46 02.8	8.10	H	311.915 821 59	+50.767 449 21	5.08	13.73	36.27	0.57	0.60	0.70	0.70	0.71	+ 2 +15 +13 − 1 − 3 − 4 − 4 −11 − 5 −10	0	0.61
*102616	20 47 40.31	+70 55 57.6	10.76	G	311.917 959 62	+70.932 660 65	37.39	335.80	536.41	1.32	1.26	1.41	1.69	1.40	−12 − 1 − 2 −24 +13 −14 +11 −28 +27 − 9	0	0.56
*102617	20 47 40.28	+13 36 45.0	8.66	H	311.917 814 46	+13.612 508 17	8.98	−34.96	−156.06	0.90	0.67	1.13	1.30	0.71	+26 − 9 +16 +27 +27 +16 +21 +30 +16 +41	0	−0.29
102618	20 47 40.53	−09 29 44.5	3.78	H	311.918 885 74	−09.495 689 88	14.21	31.89	−35.32	0.81	0.45	0.90	0.95	0.60	− 1 −43 − 4 +33 −20 +10 −21 +60 + 5 + 0	3	2.04
102619 H	20 47 40.78	+42 04 06.8	7.53	H	311.919 924 10	+42.068 562 45 A	1.48	5.96	1.63	1.09	1.16	0.99	0.84	0.85	+13 − 3 + 8 + 8 − 6 −32 + 2 −14 +11 +14	1	0.13
102620	20 47 40.84	+22 41 44.9	7.62	H	311.920 156 53	+22.695 808 56	12.75	123.82	−8.79	0.54	0.55	0.88	0.69	0.58	+19 −20 + 0 +16 +21 + 4 +18 +42 + 1 +19	0	−1.12
102621	20 47 41.50	+09 25 18.5	9.08	H	311.922 929 74	+09.421 815 32	4.92	0.21	−14.38	1.01	0.70	1.29	1.46	0.76	+23 −14 −12 +10 +20 +19 +16 + 9 +15 +41	2	0.14
102622	20 47 43.33	+43 16 12.3	8.31	2 H	311.930 523 13	+43.270 088 28	0.77	6.12	7.96	0.59	0.64	0.80	0.63	0.63	− 8 − 7 +20 + 4 + 7 +11 + 6 − 9 + 4 + 2	0	0.77
102623	20 47 43.74	+31 54 46.2	8.14	1 H	311.932 260 45	+31.912 823 00	1.52	−5.27	−5.21	0.45	0.59	0.92	0.50	0.63	−35 + 4 + 1 + 2 − 8 −12 − 7 − 2 +17 −36	0	0.26
102624	20 47 44.24	−05 01 39.4	4.43	2 H	311.934 324 62	−05.027 603 03	7.33	−3.30	−40.24	0.74	0.45	0.99	1.09	0.69	+ 2 + 3 −20 +17 −16 +29 −15 +55 −30 + 0	0	1.95
102625	20 47 44.95	+29 40 52.5	10.59	H	311.937 311 90	+29.681 241 17	2.27	4.12	4.60	0.98	1.13	1.64	1.24	1.24	+ 2 + 6 +15 +36 + 6 − 6 + 8 +14 − 1 +10	0	−0.03
102626	20 47 45.00	−36 35 40.1	9.44	2 H	311.937 493 23	−36.594 479 93	22.52	25.46	−80.66	1.26	0.89	1.64	1.78	1.42	+54 −49 −23 −31 + 6 +26 +17 −19 −16 + 9	1	0.93
102627	20 47 45.24	+10 27 55.2	7.43	H	311.938 480 64	+10.465 342 55	8.85	−4.87	−32.89	0.85	0.52	1.07	1.07	0.52	+12 −16 − 8 − 1 +32 +11 +23 +16 +10 +31	4	−0.44
102628	20 47 47.09	−51 17 46.8	10.43	H	311.946 220 44	−51.296 326 58	3.25	14.56	7.41	1.77	1.27	2.04	2.52	1.38	+ 8 − 2 −17 − 9 −12 − 2 −18 −31 +12 −44	0	−0.25
102629	20 47 47.52	+29 38 16.7	8.10	H	311.947 992 48	+29.637 961 29	2.51	−6.05	−13.02	0.54	0.60	0.91	0.68	0.69	− 3 − 1 + 6 +22 + 4 − 8 + 5 + 8 + 4 + 9	0	−0.52
102630	20 47 47.75	+26 10 40.8	7.07	H	311.948 940 82	+26.177 989 61	1.12	4.23	−4.18	0.48	0.50	0.79	0.60	0.54	+ 9 −13 + 4 −26 +24 + 7 +20 +20 + 0 +12	1	−0.55
102631	20 47 47.86	+03 18 23.2	6.38	H	311.949 398 60	+03.306 443 16	6.98	37.66	9.71	0.62	0.41	0.74	0.80	0.51	+20 −13 − 6 + 1 +25 +17 +18 +33 + 7 +42	0	1.45
102632	20 47 48.03	+31 40 18.5	7.85	H	311.950 133 83	+31.671 818 32	2.93	4.14	−2.40	0.44	0.61	0.94	0.52	0.67	−40 + 2 + 5 + 6 − 8 −17 − 6 + 0 +18 −41	0	2.07
102633 H	20 47 48.33	+06 00 29.7	5.57	G	311.951 367 11	+06.008 241 04 A	6.35	8.81	−13.01	0.94	0.56	1.08	0.91	0.55	+38 − 4 −18 − 6 +19 −21 +13 +12 − 1 +54	1	−0.18
102634	20 47 48.57	−32 54 45.9	10.57	G	311.952 360 15	−32.912 742 85	11.64	−132.71	−268.88	1.90	1.05	2.07	2.42	1.34	+11 −20 −13 + 6 − 7 + 7 − 1 − 2 −17 +18	0	−0.38
102635	20 47 49.29	+47 49 54.9	5.60	1 H	311.955 392 18	+47.831 912 24	6.06	−8.68	−17.58	0.42	0.40	0.48	0.48	0.41	−21 + 3 + 6 + 6 + 8 + 0 + 7 −22 +11 −24	0	−0.18
102636	20 47 49.37	−23 28 30.7	7.85	H	311.955 707 83	−23.475 182 59	2.87	−0.23	−33.27	0.99	0.54	1.11	1.32	0.94	+12 −20 −21 − 8 − 7 +25 + 0 +36 −29 + 7	0	−0.20
102637	20 47 49.98	+44 46 00.9	8.56	H	311.958 258 71	+44.766 905 92	5.06	31.22	12.93	0.72	0.68	0.90	0.88	0.75	− 6 +13 +32 +16 + 8 −12 +11 +10 −10 +10	0	1.51
102638	20 47 50.40	+56 01 33.5	9.44	H	311.960 013 20	+56.025 978 42	7.95	−2.77	19.56	0.79	0.72	0.86	0.97	0.87	− 7 −16 + 9 +12 + 4 −11 + 6 + 2 − 5 − 5	0	2.35
102639	20 47 52.42	+20 24 11.6	9.86	H	311.968 419 17	+20.403 223 61	1.36	4.27	−25.49	1.19	1.07	1.61	1.35	1.09	+28 −10 +15 +22 +13 − 3 +13 +24 + 3 +40	2	1.43
102640	20 47 52.47	+27 35 43.7	7.03	H	311.968 633 88	+27.595 479 58	10.27	23.60	−13.74	0.45	0.53	0.71	0.48	0.55	+29 + 7 + 7 +23 +27 − 8 +26 +36 − 2 +34	0	0.05
102641	20 47 52.81	−27 45 01.1	7.57	H	311.970 032 97	−27.750 304 92 A	5.40	20.44	28.71	1.29	0.82	1.25	1.81	1.35	+32 −18 −10 −11 + 8 + 6 + 3 +42 −12 +41	2	0.34
102642	20 47 52.89	+52 24 27.3	6.29	H	311.970 388 10	+52.407 579 41	23.88	71.97	−169.67	0.50	0.52	0.56	0.58	0.65	−22 −12 +12 +11 +12 − 3 +18 − 8 −11 −22	0	0.08
102643	20 47 55.65	−30 14 29.0	9.90	G	311.981 895 83	−30.241 376 16	11.03	−140.06	−135.75	1.26	0.95	1.53	1.66	1.52	+29 −15 + 0 − 6 +16 +37 +11 +35 − 3 +43	3	1.14
102644	20 47 56.94	−45 13 02.6	8.66	H	311.987 230 39	−45.217 385 14	6.03	21.85	−35.96	0.96	0.79	1.15	1.18	0.98	+25 −13 −15 + 1 + 7 − 2 + 7 − 3 + 1 +29	0	−0.41
102645	20 47 58.68	−60 51 06.8	9.02	H	311.994 498 56	−60.851 875 65	1.80	16.16	−12.21	0.72	0.86	1.35	0.91	0.96	+19 − 7 − 5 +30 +20 −19 +18 +36 +21 −21	0	3.03
102646	20 47 59.34	+87 32 14.6	8.52	H	311.997 264 13	+87.537 397 06	6.79	35.26	23.30	0.67	0.64	0.72	0.81	0.80	+25 − 3 − 6 +15 +10 − 4 +11 + 6 + 9 +41	0	0.51
102647	20 47 59.48	−32 17 34.5	9.96	H	311.997 835 56	−32.292 918 03	3.49	−15.47	−26.60	1.35	0.84	1.63	1.64	1.24	+30 −27 −11 − 9 + 1 +27 + 7 +13 −18 +38	0	−0.53
102648	20 47 59.59	+39 17 15.8	7.00	3 H	311.998 281 47	+39.287 710 90	0.88	−3.25	−4.02	0.46	0.51	0.63	0.50	0.59	−18 + 2 + 8 − 7 +13 − 5 +17 −16 + 2 + 8	0	−0.53
102649	20 48 05.34	−34 44 58.5	9.01	H	312.022 237 47	−34.749 578 97	3.20	2.59	−30.92	1.09	0.76	1.31	1.44	1.07	+27 −18 +14 +16 + 9 +25 + 9 + 8 − 8 +44	0	−1.39
102650 H	20 48 06.25	+27 27 25.7	8.23	2 H	312.026 054 90	+27.457 134 51 A	2.85	5.89	−11.56	1.61	1.67	2.23	1.57	1.40	+24 + 2 + 9 +10 +15 −22 +17 +24 − 7 +35	1	0.67
102651	20 48 08.03	−52 33 39.5	9.02	H	312.033 443 55	−52.560 976 88	5.00	12.52	−35.71	1.14	0.82	1.22	1.42	0.86	+19 −21 −16 −13 −14 + 9 −19 −37 + 2 −22	0	2.18
102652	20 48 08.23	−09 44 55.8	7.25	H	312.034 276 95	−09.748 821 40	4.65	4.65	5.04	0.88	0.53	1.09	1.16	0.70	+ 5 −20 −24 +30 −31 +27 −24 +56 −14 − 3	4	1.00
102653	20 48 09.72	+02 42 55.9	6.94	H	312.040 510 39	+02.715 525 71	4.69	37.99	−23.94	0.83	0.49	0.91	1.16	0.67	+10 −13 −14 + 1 +21 − 4 +12 +50 −16 +29	0	1.46
102654	20 48 10.28	+24 38 23.5	8.77	H	312.042 833 84	+24.639 874 29	1.82	4.92	9.55	0.78	0.73	1.08	0.81	0.72	+10 +10 −22 +38 +16 + 5 +17 +40 − 2 +13	0	0.18
102655	20 48 10.75	−06 01 21.9	8.44	H	312.044 772 98	−06.022 758 70	18.43	40.26	−14.15	0.96	0.65	1.40	1.35	1.00	+17 − 3 −19 +22 − 2 +21 − 2 +62 −35 +17	0	1.56
102656	20 48 10.84	+28 31 45.9	8.08	H	312.045 179 92	+28.529 425 23	2.21	5.90	1.00	0.53	0.56	0.93	0.62	0.63	+ 1 + 5 + 5 −10 + 5 −16 + 3 + 1 − 4 +21	0	−0.25
102657	20 48 12.12	+49 59 44.1	7.92	H	312.050 492 59	+49.995 576 56	5.72	−3.14	−16.13	0.64	0.59	0.73	0.80	0.65	+ 0 −11 + 8 −25 − 4 +13 − 4 −16 + 1 − 5	0	1.38
102658	20 48 12.95	−16 31 16.3	6.99	H	312.053 939 62	−16.521 188 14	5.67	−40.82	−56.28	0.94	0.48	0.98	1.25	0.76	+ 5 −13 −11 −23 −10 +32 − 5 +39 −18 − 4	0	1.34
102659	20 48 13.17	−16 44 19.5	7.84	H	312.054 889 94	−16.738 751 61	15.67	−10.71	−59.90	1.06	0.60	1.18	1.33	0.93	+12 − 9 −10 −13 − 5 +35 − 3 +45 −15 + 6	0	1.22
102660	20 48 13.66	−19 15 36.9	6.81	H	312.056 915 66	−19.260 236 43	11.64	36.30	−24.34	0.85	0.52	0.96	1.00	0.82	+24 −17 −18 −25 +14 +37 +17 +52 −17 +29	0	−0.95
102661	20 48 13.77	−78 57 03.6	7.98	G	312.057 365 80	−78.951 001 08	7.47	55.43	−38.06	0.57	0.60	0.71	0.65	0.74	−18 −20 + 4 +23 −19 − 2 −21 +18 + 7 −29	0	0.09
102662	20 48 14.30	−00 17 57.7	8.65	H	312.059 588 04	−00.299 361 99	3.80	−0.49	13.92	0.98	0.68	1.21	1.25	1.00	+10 − 4 − 2 + 1 +24 +36 +15 +64 + 2 +29	0	1.32
102663	20 48 15.19	+15 28 10.6	7.77	H	312.063 302 11	+15.469 600 11	2.32	1.82	−12.21	0.75	0.55	0.93	0.90	0.55	+11 −11 − 4 + 2 +24 +17 +19 +13 +10 +27	0	−0.01
102664	20 48 15.20	−12 27 15.8	8.02	H	312.063 324 09	−12.454 387 28	26.41	−13.08	34.28	1.10	0.66	1.27	1.50	1.05	+21 −17 −13 −21 + 3 +26 + 3 +54 −15 +23	0	−0.22
102665	20 48 15.30	+14 44 28.9	9.50	G	312.063 765 16	+14.741 350 65	5.81	23.27	38.03	0.93	0.73	1.17	1.18	0.75	+16 − 2 + 4 +13 +17 +17 +15 + 9 + 9 +30	0	0.89
102666	20 48 15.56	−04 38 24.6	6.96	H	312.064 822 68	−04.640 166 27	6.07	−21.41	−47.66	0.99	0.53	1.05	1.27	0.76	−21 −25 + 8 +45 −23 +12 −28 +64 + 0 − 8	0	2.00
102667	20 48 16.31	+44 04 35.8	8.84	H	312.067 969 71	+44.076 613 01	3.38	−11.43	6.10	0.79	0.74	0.97	0.96	0.83	+ 0 + 3 +18 +12 + 6 −11 +10 − 2 −10 +19	0	1.57
102668	20 48 16.90	−22 50 44.0	7.97	H	312.070 411 12	−22.845 551 31	5.23	14.18	4.80	1.00	0.48	1.02	1.25	0.87	+10 −25 + 0 −26 − 3 +18 −10 +34 −18 +22	0	−0.82
102669	20 48 17.00	−71 20 56.4	9.76	H	312.070 825 90	−71.348 998 19	0.64	10.65	−5.22	0.87	1.03	1.39	0.89	1.29	−26 − 4 + 9 −26 +13 −13 +16 − 9 +16 −37	0	0.15
102670	20 48 18.36	−44 11 48.1	6.47	H	312.076 489 48	−44.196 702 20	5.58	94.90	−53.31	0.70	0.51	0.82	0.80	0.64	+26 −18 −14 − 6 + 1 + 8 + 4 − 3 −11 +30	2	1.16
102671	20 48 18.46	−13 29 19.2	9.70	H	312.076 897 09	−13.488 666 32	3.65	6.47	1.05	1.30	0.88	1.67	1.74	1.45	+26 −17 −17 − 7 +15 +35 +10 +62 −21 +34	2	−0.18
102672	20 48 19.18	−40 00 03.8	7.52	H	312.079 930 36	−40.001 064 79	3.64	41.79	−52.80	0.78	0.54	0.98	0.96	0.71	+31 −21 − 6 + 8 +19 +17 +23 + 8 − 6 +57	0	−0.53
102673 H	20 48 20.84	+58 15 24.9	8.40	H	312.086 823 99	+58.256 920 16 *	4.57	14.82	5.70	0.71	0.60	0.71	0.79	0.60	− 1 + 9 +18 +34 +10 + 0 +13 + 6 + 9 + 7	0	−1.16
102674	20 48 21.45	+07 35 39.3	7.11	H	312.089 378 74	+07.594 257 29	4.78	39.46	−13.48	0.80	0.47	0.94	0.94	0.50	− 2 − 6 −18 −13 +13 +14 + 9 + 2 +16 +24	0	−1.95
102675	20 48 21.76	−22 44 25.0	7.31	1 H	312.090 674 69	−22.740 277 90	20.09	45.80	−177.23	0.86	0.45	0.94	1.08	0.80	+16 − 9 −11 −22 − 4 +28 − 8 +35 −24 +20	0	−1.01
102676	20 48 22.88	−49 57 04.0	8.73	H	312.095 318 93	−49.951 104 18	0.76	−3.06	8.34	0.97	0.81	1.17	1.08	0.70	+20 −27 −10 − 2 −16 + 4 −26 −47 + 8 −14	0	2.71
102677	20 48 23.29	−37 21 47.5	8.57	G	312.097 048 17	−37.363 184 93	6.89	6.90	−30.18	0.84	0.58	1.09	0.92	0.73	+37 −28 −15 −20 +11 +10 +10 − 3 − 2 +67	1	2.44
102678	20 48 23.48	+21 13 59.8	7.14	H	312.097 827 71	+21.233 288 90	2.72	11.75	6.65	0.69	0.51	0.90	0.82	0.52	− 4 − 8 + 8 +15 + 6 − 1 + 2 +25 +12 +16	0	−1.24
102679	20 48 24.00	−03 39 46.6	11.76	G	312.100 019 78	−03.662 950 36	11.88	158.55	−152.67	2.49	1.72	3.25	3.71	2.66	+10 + 5 −13 +31 + 0 +24 − 2 +64 −22 +14	0	0.77
102680	20 48 24.56	+03 38 56.5	6.78	H	312.102 333 22	+03.649 033 77	0.95	3.68	1.54	0.65	0.43	0.79	0.83	0.50	+17 − 7 − 1 − 3 +34 +30 +24 +29 +19 +47	0	0.50
102681 T	20 48 24.96	−18 11 59.8	8.05	H	312.104 019 66	−18.199 941 19 B	6.04	16.82	−7.32	21.69	10.57	11.60	14.94	11.79	+17 + 8 −11 −37 + 5 +18 − 5 +34 −36 +27	1	0.76
102682 H	20 48 25.05	−54 30 40.0	11.90	G	312.104 361 87	−54.511 111 08 A	12.81	67.54	−183.18	6.48	4.55	6.59	8.23	4.34	+12 −12 −31 −13 − 1 − 8 − 9 −33 + 9 −10	0	1.18
102683	20 48 25.17	+26 49 13.2	9.11	H	312.104 884 13	+26.820 327 77	3.30	5.52	−4.03	0.70	0.78	1.26	0.83	0.80	+ 4 −13 +13 −12 +19 −15 +19 +14 − 6 +11	0	−0.23
102684	20 48 25.53	+68 01 57.5	6.98	H	312.106 369 75	+68.032 629 79	12.60	40.07	108.97	0.54	0.51	0.57	0.60	0.57	− 2 − 8 +10 − 6 +15 + 3 +13 − 2 +13 +18	0	0.23
*102685	20 48 25.96	−18 12 06.1	7.14	H	312.108 181 52	−18.201 690 70 A	2.58	19.87	−11.13	7.14	4.04	6.51	8.33	6.66	+21 +12 −14 −18 +10 +25 − 1 +54 −36 +27	1	0.76
*102686	20 48 25.89	+36 49 07.9	8.94	H	312.107 873 23	+36.818 873 83	1.12	−1.33	−3.22	0.58	0.73	0.93	0.64	0.87	− 4 + 5 −10 + 6 +15 −22 +16 − 1 +15 + 6	2	1.92
102687	20 48 26.33	+45 27 07.6	7.66	H	312.109 720 47	+45.452 098 03	4.15	6.34	2.02	0.57	0.55	0.72	0.74	0.64	− 7 + 2 +23 − 2 + 2 − 8 + 3 − 2 −11 + 1	0	0.18
102688	20 48 27.28	+00 11 46.5	7.89	H	312.113 663 57	+00.196 240 83	4.70	−68.79	−83.01	0.91	0.74	1.10	1.21	0.83	+22 −22 −35 − 3 − 7 +32 +12 +54 −23 + 1	0	2.19
*102689 H	20 48 27.82	+01 43 22.1	7.25	H	312.115 902 85	+01.722 798 89 A	3.03	−20.60	−34.34	1.18	0.87	1.26	1.31	1.01	+23 −23 − 2 − 5 +32 + 9 +24 +59 −10 +39	0	0.38
*102690 H	20 48 27.80	−31 26 12.9	8.84	H	312.115 852 51	−31.436 907 12 A	−2.20	11.40	0.04	2.13	1.20	2.06	2.84	1.77	+12 − 6 − 4 +19 + 8 − 3 +13 + 23 −31 +15	3	−0.20
102691	20 48 27.92	−14 54 22.3	8.85	H	312.116 323 05	−14.906 207 15	1.67	−9.50	−5.56	1.32	0.78	1.48	1.73	1.31	+14 + 8 + 1 − 8 + 6 + 2 − 6 +46 −21 +27	0	−0.43
102692	20 48 28.56	−74 18 29.2	8.93	H	312.118 996 76	−74.308 107 41	1.17	9.09	−3.59	0.78	0.75	1.10	0.90	0.85	− 6 −23 −24 − 3 +12 − 5 +12 +16 + 6 −24	0	−0.02
102693	20 48 29.00	−43 59 17.8	5.11	H	312.120 831 53	−43.988 271 27	24.35	175.78	−112.17	0.74	0.53	0.90	0.92	0.78	+37 −50 −40 −21 − 6 +12 + 4 −24 −14 + 2	6	1.52
102694	20 48 29.60	+69 39 28.3	7.43	H	312.123 333 30	+69.657 866 30	7.60	19.55	14.33	0.55	0.50	0.58	0.66	0.55	− 4 −14 + 3 + 1 + 3 + 6 + 0 − 9 +20 + 5	0	0.17
102695	20 48 30.01	−82 16 07.2	8.99	H	312.125 029 65	−82.268 664 98	2.74	13.06	−3.18	0.70	0.65	0.84	0.87	0.73	+ 0 −12 − 4 +19 + 8 − 1 + 7 −27 + 3 − 6	0	0.48
102696	20 48 30.82	−57 42 21.1	7.76	H	312.128 398 10	−57.705 853 37	3.36	35.29	12.18	0.63	0.66	0.98	0.74	0.62	+16 −20 −32 −24 − 4 + 4 − 2 −17 + 1 + 0	0	−0.60
102697	20 48 31.20	−48 40 11.2	7.79	H	312.130 004 93	−48.669 783 55	7.06	−11.83	3.48	0.86	0.63	0.97	1.06	0.59	+18 −10 + 4 + 6 −25 +10 −39 −41 − 8 −34	0	0.35
102698	20 48 32.04	+23 00 42.3	7.47	H	312.133 520 13	+23.011 751 31	3.09	4.71	1.20	0.55	0.53	0.79	0.63	0.57	+10 −15 −11 +20 +20 − 3 +17 +41 + 1 +14	0	−0.25
102699	20 48 32.51	+74 29 23.0	8.45	H	312.135 445 46	+74.489 730 66	4.37	34.91	58.22	0.62	0.67	0.74	0.62	0.75	+ 2 −11 +23 − 9 + 4 − 3 + 4 − 2 +10 + 5	1	0.21
102700	20 48 32.78	+53 54 22.0	8.13	2 H	312.136 567 20	+53.906 112 70	0.80	−2.65	−4.63	0.60	0.56	0.66	0.73	0.68	− 8 − 2 − 5 +11 + 4 − 1 + 3 + 1 + 4 −14	0	0.92

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
102601	9.149	0.018	7.384	0.009		1.471	0.016	T	1.48	0.02	L	7.3536	0.0011	0.008	97		7.34	7.37		C			1							S
102602	11.432	0.088	10.900	0.092		0.589	0.015	G	0.66	0.01	H	11.1248	0.0060	0.039	85		11.04	11.19					1							G
102603	10.976	0.060	10.062	0.043		0.796	0.057	T	0.83	0.04	L	10.0439	0.0029	0.022	74		10.01	10.09		C			1							
102604	9.522	0.021	9.097	0.021	*	0.531	0.008	G	0.60	0.01	R	*	9.0835	0.0021	0.018	80	*	9.05	9.11		D	20476−4534	I 1	2 C	A	AB	213	0.578	0.003	0.22	0.02	
102605	10.503	0.037	9.295	0.021		1.033	0.033	T	1.01	0.03	L		9.3251	0.0019	0.020	109		9.28	9.35		C			1							
102606						1.640	0.218	G	1.71	0.26	K		12.3591	0.0136	0.083	100		12.23	12.53					1							D
102607	9.054	0.013	8.545	0.013		0.506	0.015	G	0.58	0.02	H		8.5863	0.0011	0.010	131		8.57	8.60		C			1							
102608	8.953	0.012	7.726	0.007		1.071	0.002	G	1.04	0.00	H		7.7591	0.0010	0.012	142		7.74	7.78		C			1							S
102609	9.656	0.026	9.539	0.034		0.160	0.015	G	0.18	0.01	H		9.6137	0.0026	0.024	101		9.58	9.65					1							G
102610	8.151	0.009	7.520	0.008		0.587	0.010	T	0.66	0.01	L		7.5606	0.0009	0.009	116		7.54	7.57					1							S
102611	8.174	0.011	7.650	0.010		0.501	0.011	T	0.57	0.01	L		7.7105	0.0009	0.009	109		7.69	7.72					1							S
102612	7.833	0.008	7.343	0.006		0.461	0.009	T	0.53	0.01	L		7.3836	0.0009	0.009	97		7.37	7.40		C			1							S
102613	11.105	0.103	10.327	0.085		0.493	0.100	G	0.57	0.10	R		10.3573	0.0024	0.022	85		10.32	10.39					1							G
102614	9.893	0.019	8.684	0.012		1.034	0.018	T	1.01	0.01	L		8.7501	0.0015	0.017	106		8.72	8.79		C			1							
102615	8.290	0.009	8.115	0.011		0.154	0.015	G	0.17	0.01	H		8.1531	0.0016	0.011	108		8.14	8.18		C			1							
102616						1.365	0.020	G	1.60	0.04	I		10.8648	0.0045	0.034	100		10.79	10.94					1							G
102617	9.303	0.016	8.725	0.015		0.559	0.015	G	0.63	0.01	H		8.7857	0.0018	0.017	106		8.76	8.81					1							
102618	3.787	0.002	3.771	0.002		0.000	0.012	G	−0.01	0.02	A		3.7818	0.0004	0.004	130		3.78	3.79					1							S
102619	7.590	0.006	7.531	0.009	*	0.055	0.005	G	0.07	0.00	H	*	7.5571	0.0012	0.011	122	*	7.54	7.58		D	20477+4204	I 1	2 C	A	AB	201	0.417	0.003	1.21	0.02	S
102620	8.115	0.008	7.671	0.008		0.419	0.010	T	0.49	0.01	L		7.7201	0.0013	0.012	145		7.70	7.74					1							S
102621	10.318	0.036	9.119	0.021		1.026	0.033	T	1.00	0.03	L		9.2504	0.0021	0.018	95		9.22	9.28		C			1							
102622	8.506	0.008	8.339	0.010		0.160	0.012	T	0.18	0.01	L		8.3707	0.0054	0.061	125		8.31	8.49	1.43	P 1 A			1							
102623	8.264	0.006	8.145	0.007		0.115	0.009	T	0.13	0.01	L		8.1822	0.0015	0.018	252		8.15	8.21		M			1							S
102624	6.563	0.004	4.650	0.003		1.639	0.029	G	2.21	0.02	A		4.4921	0.0025	0.025	116		4.44	4.52		U 2			1	S						S
102625	10.591	0.036	10.510	0.052		0.080	0.059	T	0.09	0.06	L		10.6168	0.0034	0.036	161		10.55	10.67					1							G
102626	10.640	0.030	9.543	0.020		0.939	0.028	T	0.93	0.02	L		9.5896	0.0089	0.079	161		9.48	9.72	0.38	P 1 A			1 G							
102627	7.759	0.009	7.472	0.008		0.264	0.015	G	0.30	0.02	H		7.5072	0.0010	0.009	99		7.49	7.53		C			1							S
102628	11.056	0.060	10.494	0.057		0.530	0.061	T	0.60	0.06	L		10.5479	0.0041	0.033	90		10.49	10.60		C			1							G
102629	9.219	0.012	8.190	0.009		0.896	0.011	T	0.90	0.01	L		8.2570	0.0016	0.019	174		8.23	8.29					1							
102630	6.978	0.003	7.057	0.005		−0.067	0.005	T	−0.04	0.01	L		7.0554	0.0009	0.011	177		7.04	7.07					1							S
102631	6.364	0.003	6.380	0.004		−0.013	0.004	T	0.01	0.00	L		6.3857	0.0007	0.006	107		6.38	6.40					1							S
102632	8.116	0.006	7.875	0.006		0.230	0.008	T	0.26	0.01	L		7.9172	0.0012	0.015	246		7.89	7.95					1							S
102633	5.596	0.003	5.611	0.004	A	−0.010	0.013	G	0.01	0.00	L	*	5.5845	0.0006	0.005	108	*	5.58	5.60		D	20478+0600	I 1	2 C	A	AB	197	1.500	0.010	2.85	0.04	S
102634	11.702	0.122	10.749	0.080		0.800	0.005	G	0.84	0.01	H		10.7123	0.0025	0.029	77		10.67	10.76		C			1							G
102635	7.523	0.006	5.768	0.004		1.466	0.005	G	1.44	0.01	L		5.7362	0.0008	0.008	126		5.72	5.75		M	20478+4750	I 1	1							S
102636	9.937	0.027	8.058	0.012		1.594	0.024	T	2.19	0.07	O		7.9074	0.0019	0.014	93		7.88	7.93					1							S
102637	8.980	0.012	8.595	0.012		0.360	0.015	G	0.42	0.02	H		8.6459	0.0023	0.020	115		8.61	8.68					1							
102638	10.333	0.028	9.535	0.022		0.723	0.027	T	0.77	0.02	L		9.5820	0.0018	0.016	109		9.55	9.61					1							G
102639	11.427	0.073	10.073	0.037		1.147	0.064	T	1.11	0.06	L		10.0349	0.0033	0.027	103		9.98	10.08					1	S						G
102640	7.336	0.005	7.066	0.005		0.257	0.007	T	0.29	0.01	L		7.0986	0.0010	0.010	149		7.08	7.12					1							S
102641	8.903	0.016	7.698	0.011	A	1.031	0.015	T	1.00	0.01	L		7.7359	0.0084	0.016	81	A	7.72	7.76			20479−2745	I 1	2 C	A	AB	177	17.676	0.025	2.96	0.12	S
102642	7.409	0.006	6.384	0.004		0.883	0.008	G	0.89	0.01	H		6.4334	0.0007	0.005	105		6.43	6.45		C	20479+5224	I 1	1 G							S
102643	10.853	0.056	9.929	0.039		0.700	0.001	G	0.75	0.00	H		10.0414	0.0035	0.029	79		10.00	10.09					1							
102644	9.275	0.017	8.714	0.016		0.530	0.017	T	0.60	0.02	L		8.7790	0.0027	0.018	84		8.76	8.82					1							S
102645	10.678	0.032	9.136	0.016		1.295	0.028	T	1.25	0.03	L		9.1763	0.0023	0.027	158		9.13	9.23					1							
102646	9.000	0.013	8.571	0.013		0.405	0.017	T	0.47	0.02	L		8.6175	0.0012	0.017	125		8.59	8.65		C			1							S
102647	10.633	0.045	9.919	0.040		0.657	0.049	T	0.72	0.04	L		10.1061	0.0029	0.022	77		10.05	10.15		C			1							
102648	7.835	0.017	7.104	0.018		0.670	0.020	T	0.73	0.02	L		7.1357	0.0105	0.175	141		7.00	7.65	18.60	P 1 A	20480+3917	I 1	1	S						S
102649	10.119	0.032	9.130	0.022		0.854	0.030	T	0.87	0.02	L		9.1526	0.0025	0.017	77		9.12	9.19		C			1							
102650	8.873	0.012	8.433	0.012	*	0.415	0.016	T	0.48	0.02	L	*	8.3255	0.0021	0.024	150	*	8.29	8.41	1.50	P 1 A	20481+2727	I 1	2 C	A	AB	167	1.122	0.005	0.53	0.02	S
102651	10.116	0.032	9.108	0.022		0.880	0.029	T	0.89	0.02	L		9.1748	0.0040	0.023	79		9.14	9.22					1							
102652	9.030	0.020	7.389	0.011		1.373	0.018	T	1.34	0.02	L		7.3985	0.0008	0.008	126		7.39	7.41		C			1							S
102653	8.290	0.011	7.059	0.006		1.051	0.010	T	1.02	0.01	L		7.1036	0.0015	0.009	87		7.09	7.12					1							S
102654	10.669	0.040	8.910	0.016		1.466	0.034	T	1.48	0.05	L		8.9049	0.0013	0.015	112		8.87	8.94					1							
102655	9.180	0.013	8.523	0.012		0.610	0.015	T	0.68	0.01	L		8.5748	0.0018	0.017	121		8.55	8.60					1							S
102656	9.563	0.016	8.219	0.009		1.140	0.014	T	1.10	0.01	L		8.2475	0.0013	0.018	177		8.22	8.28		C			1							
102657	8.080	0.009	7.930	0.011		0.144	0.013	T	0.16	0.01	L		7.9741	0.0016	0.016	111		7.95	8.00					1							S
102658	7.533	0.007	7.049	0.006		0.456	0.008	T	0.53	0.01	L		7.0966	0.0005	0.005	91		7.09	7.11		D			1							S
102659	8.367	0.012	7.900	0.010		0.461	0.015	G	0.53	0.02	H		7.9455	0.0012	0.013	93		7.92	7.97		C			1							S
102660	7.299	0.006	6.852	0.005		0.422	0.007	T	0.49	0.01	L		6.9070	0.0011	0.009	106		6.89	6.92		C			1							S
102661	8.465	0.008	8.027	0.008		0.441	0.015	G	0.51	0.02	H		8.0814	0.0013	0.013	153		8.05	8.11					1							S
102662	8.945	0.012	8.664	0.014		0.267	0.017	T	0.30	0.02	L		8.7262	0.0019	0.015	118		8.70	8.75		C			1							
102663	9.752	0.022	7.928	0.010		1.518	0.019	T	1.55	0.03	L		7.8879	0.0019	0.015	107		7.86	7.91					1							
102664	8.749	0.015	8.074	0.013		0.619	0.015	G	0.69	0.01	H		8.1493	0.0012	0.008	70		8.13	8.17					1							S
102665	10.186	0.036	9.558	0.032		0.523	0.015	G	0.60	0.02	H		9.5730	0.0025	0.020	96		9.54	9.61		C			1	S						
102666	8.462	0.010	7.081	0.005		1.169	0.009	T	1.13	0.01	L		7.1221	0.0010	0.011	135		7.10	7.14					1							S
102667	10.604	0.047	8.949	0.020		1.392	0.043	T	1.37	0.05	L		8.9597	0.0018	0.017	115		8.93	8.99		D			1							
102668	8.256	0.010	7.993	0.012		0.247	0.016	T	0.28	0.02	L		8.0427	0.0011	0.011	113		8.03	8.07		C			1							S
102669	9.769	0.017	9.755	0.023		0.018	0.026	T	0.04	0.02	L		9.7785	0.0024	0.033	168		9.71	9.85					1							
102670	7.987	0.009	6.615	0.005		1.161	0.008	T	1.12	0.01	L		6.6406	0.0011	0.011	87		6.62	6.66		C			1							S
102671	9.990	0.032	9.727	0.037		0.247	0.050	T	0.28	0.06	L		9.7771	0.0023	0.022	79		9.73	9.81		C			1							
102672	8.909	0.012	7.633	0.007		1.086	0.011	T	1.05	0.01	L		7.6927	0.0013	0.013	117		7.67	7.72		C			1							S
102673	8.965	0.011	8.469	0.011	*	0.466	0.015	T	0.54	0.02	L	*	8.5026	0.0016	0.018	127	*	8.48	8.53		D	20483+5815	I 1	2 C	S A	AB	288	0.188	0.005	0.58	0.17	
102674	8.386	0.009	7.214	0.006		1.005	0.008	T	0.98	0.01	L		7.2735	0.0008	0.008	101		7.26	7.29		C			1							S
102675	7.929	0.007	7.372	0.008		0.527	0.008	T	0.60	0.01	L		7.4223	0.0015	0.011	114		7.40	7.46		U 2			1							S
102676	10.274	0.034	8.851	0.018		1.201	0.030	T	1.16	0.03	L		8.8991	0.0022	0.019	92		8.86	8.95		C			1							
102677	9.129	0.011	8.632	0.010		0.490	0.015	G	0.56	0.02	H		8.6825	0.0011	0.017	152		8.66	8.71					1							S
102678	8.348	0.011	7.243	0.007		0.953	0.010	T	0.94	0.01	L		7.3046	0.0011	0.008	95		7.29	7.32		C			1							S
102679						1.364	0.031	G	1.60	0.06	I		11.8582	0.0051	0.060	125		11.75	11.96					1							D
102680	6.657	0.004	6.757	0.004		−0.086	0.005	T	−0.07	0.01	L		6.7516	0.0009	0.008	125		6.74	6.77					1							S
102681						0.734	0.126	G	0.89	0.03	L		7.6171	0.0418			B				D	20484−1812	I 2	1 C	I B						
102682						1.360	0.015	G	1.73	0.02	A	*	12.0382	0.0083	0.066	81	*	11.93	12.16		D	20484−5431	H 1	2 C	C	AB	89	0.813	0.037	0.99	0.14	D
102683	9.308	0.013	9.126	0.016		0.174	0.019	T	0.19	0.02	L		9.1698	0.0015	0.021	154		9.13	9.21					1							
102684	7.417	0.005	7.015	0.006		0.380	0.007	T	0.44	0.01	L		7.0717	0.0009	0.008	111		7.05	7.09		C			1							S
102685	8.322	0.011	7.230	0.009	A	0.944	0.011	T	0.93	0.01	L		7.2990	0.0319	0.078	93	A	7.26	7.54		D	20484−1812	I 2	1 C	P B						S
102686	9.143	0.016	8.998	0.020		0.140	0.024	T	0.15	0.03	L		8.9902	0.0019	0.019	158		8.95	9.02		C			1							
102687	7.541	0.007	7.647	0.007		−0.097	0.017	G	−0.08	0.02	H		7.6347	0.0013	0.012	106		7.62	7.66					1							S
102688	8.204	0.009	7.910	0.009		0.280	0.012	T	0.32	0.01	L		7.9678	0.0014	0.011	123		7.95	7.98		C			1 G							S
102689	8.573	0.011	7.379	0.007	*	1.022	0.010	T	1.00	0.01	L	*	7.4162	0.0009	0.010	104	*	7.40	7.43		D	20485+0143	I 1	2 C	A	AB	19	0.703	0.009	2.63	0.04	S
102690	10.367	0.044	8.997	0.023	A	1.000	0.495	G	1.00	0.03	L	*	9.0048	0.0022	0.014	66	*	8.97	9.03		D	20485−3126	I 1	2 C	A	AB	321	1.559	0.012	2.13	0.06	
102691	10.279	0.037	9.000	0.021		1.089	0.033	T	1.05	0.03	L		9.0225	0.0023	0.016	82		8.99	9.05		C			1							
102692	10.651	0.034	9.055	0.015		1.337	0.029	T	1.30	0.03	L		9.0853	0.0016	0.022	148		9.05	9.13					1							
102693	5.526	0.003	5.148	0.003		0.361	0.014	G	0.42	0.02	A		5.1917	0.0007	0.007	81		5.18	5.20			20485−4359	I 1	1 G							S
102694	7.595	0.006	7.451	0.009		0.139	0.010	T	0.15	0.01	L		7.4853	0.0008	0.010	110		7.47	7.50					1							S
102695	10.353	0.027	9.115	0.016		1.057	0.025	T	1.02	0.02	L		9.1631	0.0012	0.017	146		9.13	9.19					1							
102696	8.938	0.016	7.867	0.011		0.927	0.015	T	0.92	0.01	L		7.9193	0.0016	0.013	90		7.89	7.94		C			1							S
102697	8.024	0.010	7.826	0.010		0.189	0.013	T	0.21	0.01	L		7.8518	0.0014	0.011	105		7.83	7.87		C			1							S
102698	7.434	0.005	7.472	0.008		−0.030	0.009	T	−0.01	0.01	L		7.4713	0.0010	0.011	124		7.46	7.49					1							S
102699	10.356	0.035	8.600	0.014		1.464	0.030	T	1.47	0.04	L		8.5798	0.0014	0.012	90		8.56	8.60			20485+7429	I 1	1							
102700	8.579	0.010	8.174	0.010		0.393	0.020	G	0.46	0.02	H		8.2207	0.0042	0.037	121		8.17	8.29		U 2			1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)													Soln	
HIP	RA		Dec	V		α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	F1	F2
	h m s		±° ′ ″	mag		deg		deg	mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$				%	
1 2	3		4	5	6 7	8		9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28				29	30
102701	20 48 33.30	+21 37 36.0	7.86	H		312.138 751 91	+21.626 671 75		5.07	−1.56	−0.46	0.77	0.55	0.94	0.90	0.59	+ 0	−16	+ 7	+30	+10	− 1	+ 8	+38	+ 3	+11				0	−1.53
102702	20 48 34.54	−20 47 02.3	9.09	H		312.143 919 46	−20.783 958 98		0.57	−8.52	−11.98	1.09	0.67	1.24	1.36	1.12	+15	−24	+ 4	− 8	+13	+40	+ 4	+49	+ 4	+28				2	0.95
102703	20 48 35.78	+09 27 58.7	7.62	H		312.149 093 76	+09.466 312 69		14.75	22.89	−22.61	1.08	0.60	1.18	1.26	0.77	+33	−32	− 4	− 0	+25	+32	+36	+39	− 7	+20				0	3.19
102704	20 48 35.84	+35 54 38.7	9.03	1 H		312.149 340 27	+35.910 740 06		0.54	−6.31	−11.25	0.60	0.74	0.95	0.68	0.78	−13	+ 1	+12	+20	− 6	−21	− 1	+ 1	+ 9	− 7				0	1.05
102705	20 48 36.17	−43 00 27.0	7.09	H		312.150 695 74	−43.007 486 74		3.19	2.94	−24.67	0.81	0.57	0.88	1.04	0.74	+28	−21	− 7	+ 2	+15	− 1	+16	+11	−14	+39				0	1.77
102706	20 48 36.72	+17 50 24.1	8.17	H		312.152 985 32	+17.840 025 68		3.16	39.87	−42.27	0.96	0.62	1.11	1.18	0.66	+35	+ 9	+ 8	+56	+27	+21	+32	+35	+19	+52				0	1.31
102707	20 48 37.59	+30 47 34.6	7.26	H		312.156 638 63	+30.792 944 97		2.29	−43.92	−57.81	0.46	0.55	0.84	0.57	0.62	−12	− 9	+13	+32	+ 7	−16	+ 9	+ 4	+ 2	− 9				2	0.88
102708	20 48 38.05	−58 58 09.6	9.69	H		312.158 528 30	−58.969 323 15		1.27	16.59	−13.00	1.15	1.11	1.55	1.63	1.38	− 8	+11	−25	−22	+21	−13	+19	−17	+32	−11				0	−0.26
*102709	20 48 41.46	+54 05 32.2	9.46	H		312.172 750 78	+54.092 290 80		14.11	149.47	216.06	0.83	0.88	0.97	0.98	1.01	− 8	−12	+14	− 1	+ 7	+ 0	+ 7	− 4	− 4	−10				1	1.70
*102710	20 48 41.46	−51 15 53.3	9.91	H		312.172 748 79	−51.264 795 92		11.10	57.75	−12.57	1.56	1.16	1.89	2.33	1.26	+ 7	+14	−20	+ 8	−16	− 1	−27	−31	+ 7	−43				0	0.97
102711	20 48 41.66	+01 31 39.3	8.05	H		312.173 572 47	+01.527 583 56		1.97	13.04	4.47	0.87	0.59	1.04	1.01	0.82	+ 7	− 9	−18	− 7	+16	+24	+13	+56	−23	+18				0	0.05
102712 H	20 48 42.74	+51 54 37.2	6.26	G		312.178 071 22	+51.910 325 19	A	4.12	6.42	2.39	0.56	0.57	0.60	0.64	0.75	+ 3	−23	+ 6	− 5	− 4	+ 4	− 6	+ 4	+ 3	+ 2				1	−1.10
102713	20 48 42.81	+19 51 34.6	8.65	H		312.178 355 28	+19.859 600 23		7.71	9.97	−19.10	0.87	0.75	1.15	1.04	0.80	+28	−17	− 9	+37	+22	− 6	+21	+47	− 8	+37				2	0.43
102714	20 48 42.90	+41 45 46.3	7.42	H		312.178 743 88	+41.762 858 90		3.39	0.38	−3.72	0.50	0.50	0.64	0.53	0.50	− 6	+ 4	+ 4	+14	− 2	−11	− 2	− 6	+12	−11				2	−1.41
102715	20 48 47.73	+70 43 22.3	8.38	H		312.198 871 83	+70.722 849 10		3.38	7.85	−20.86	0.69	0.71	0.77	0.86	0.79	− 2	− 6	+ 3	−17	+ 8	− 3	+ 5	−19	+24	+ 3				0	−0.53
102716	20 48 47.84	+48 13 59.8	7.85	H		312.199 348 20	+48.233 266 32		4.99	−0.47	−15.07	0.51	0.51	0.60	0.56	0.56	−19	+ 5	− 3	− 7	+10	− 2	+10	−13	− 1	−15				0	1.19
102717	20 48 48.17	−72 12 43.4	8.00	H		312.200 712 86	−72.212 061 77		3.28	10.80	−7.81	0.55	0.61	0.84	0.62	0.75	−18	−15	−16	+ 9	− 1	− 7	− 2	+ 7	+ 3	−36				0	−0.78
*102718	20 48 50.73	+05 11 58.1	9.59	H		312.211 359 14	+05.199 478 18		1.64	−5.98	76.28	3.59	2.31	4.29	3.94	2.39	+10	−16	−12	−35	+21	+ 2	+10	−11	+ 9	+35				3		
*102719	20 48 50.63	−59 14 03.7	7.53	H		312.210 976 84	−59.234 358 39		2.64	36.03	−31.45	0.60	0.59	0.87	0.81	0.65	+12	−15	−16	−25	+ 3	+ 7	+ 4	−14	+18	−16				0	−0.06
102720	20 48 51.18	+22 59 39.0	7.65	2 H		312.213 233 73	+22.994 168 49		5.39	19.73	−5.91	0.61	0.58	0.87	0.71	0.61	+13	− 4	+ 8	+27	+16	+ 4	+15	+32	+ 0	+21				0	0.41
102721	20 48 52.89	+11 51 53.6	7.75	H		312.220 382 70	+11.864 898 63		1.72	−2.89	−19.99	0.79	0.56	1.04	1.01	0.60	+24	−14	+ 3	+ 7	+25	+ 4	+19	+21	+ 8	+37				0	1.54
102722 H	20 48 54.99	+45 37 27.2	8.58	G		312.229 129 03	+45.624 234 69	*	0.09	−2.23	−1.62	0.79	0.69	0.94	1.07	0.88	− 7	−13	+11	− 9	− 5	− 5	− 4	− 1	− 8	+ 7				1	0.06
102723 H	20 48 55.66	−20 37 08.1	9.06	2 H		312.231 907 10	−20.618 920 56	A	10.66	69.64	−22.17	3.62	1.95	3.23	4.03	2.58	+15	−17	− 7	−17	− 7	+30	− 1	+37	−15	− 8				9	0.86
102724	20 48 56.29	+46 06 50.9	4.81	1 H		312.234 555 83	+46.114 140 81		1.45	−2.92	−2.62	0.46	0.43	0.55	0.62	0.47	−14	− 6	+ 4	−12	− 3	− 7	− 2	−18	+12	−16				2	0.81
102725	20 48 56.45	−68 47 28.0	7.00	H		312.235 222 08	−68.791 104 68		12.94	42.15	−61.28	0.40	0.47	0.69	0.45	0.52	−28	− 5	−15	+ 8	+ 1	+ 2	+ 0	+ 1	− 2	−37				0	−0.37
102726	20 48 56.84	−19 01 09.0	10.64	2 H		312.236 825 95	−19.019 165 25		−0.91	−15.41	−12.68	2.29	2.36	2.06	2.80	2.13	+51	−15	− 6	− 9	+ 8	+35	+ 6	+30	−14	+17				2	1.64
102727	20 48 57.29	+61 07 07.9	7.92	H		312.238 727 79	+61.118 857 14		14.13	19.77	−40.66	0.56	0.51	0.62	0.52	0.52	− 7	+23	− 6	+ 4	+10	− 6	+18	−16	+17	+20				1	−0.03
102728 H	20 48 59.70	+25 40 20.7	7.94	G		312.248 762 93	+25.672 406 43	A	3.19	17.19	8.23	1.19	1.08	1.30	1.05	0.86	+24	−14	− 4	− 5	+19	− 6	+17	+21	−10	+11				1	−0.55
102729	20 49 00.52	+38 51 54.4	7.52	H		312.252 148 48	+38.865 121 07		2.05	3.48	−2.80	0.46	0.49	0.64	0.48	0.53	−17	+ 0	+ 4	−13	+ 7	− 7	+ 9	−20	+11	− 2				0	0.81
*102730	20 49 00.83	−72 31 57.7	7.22	H		312.253 443 56	−72.532 684 12		3.38	10.72	−19.39	0.47	0.48	0.67	0.56	0.59	−18	−11	− 9	+19	− 3	− 3	− 3	+14	− 3	−29				0	−0.75
*102731 H	20 49 00.64	+39 47 29.9	7.52	H		312.252 660 26	+39.791 646 82	A	2.26	5.00	−2.74	0.74	0.77	0.90	0.69	0.80	−12	+ 0	− 1	− 5	+10	−15	+ 8	+ 0	+ 0	+15				1	0.20
102732	20 49 00.84	+31 50 55.8	12.94	3 H		312.253 515 60	+31.848 837 66		−2.73	−2.46	−6.40	2.21	3.00	3.79	2.90	4.38	−14	+22	+ 1	−24	− 9	−13	−11	−53	+11	−19				2	2.09
102733	20 49 01.52	−29 01 58.3	8.46	H		312.256 319 81	−29.032 866 58		2.60	20.49	−8.71	1.35	0.83	1.36	1.81	1.42	+19	−33	+ 0	+43	+ 5	+11	+ 1	+61	+ 3	+15				0	−0.14
102734	20 49 01.83	−36 46 50.6	8.15	G		312.257 622 27	−36.780 711 05		6.03	33.95	−62.02	0.78	0.59	1.06	0.89	0.75	+57	−38	−28	−15	− 1	+14	+ 1	−10	+ 8	+74				1	1.61
102735	20 49 02.89	+19 48 54.8	9.30	H		312.262 062 02	+19.815 223 57		2.59	−0.60	−2.90	0.97	0.89	1.35	1.12	0.92	+30	−19	− 9	+29	+22	− 7	+22	+43	−12	+39				0	−0.99
102736	20 49 03.35	+22 23 28.3	7.86	H		312.263 940 23	+22.391 199 39		9.84	23.52	32.25	0.58	0.61	0.95	0.75	0.68	+14	−13	+ 9	+16	+19	− 1	+18	+44	− 4	+18				0	−0.47
102737	20 49 03.93	−33 00 54.2	8.27	H		312.266 363 37	−33.015 048 67		2.15	17.96	−9.29	1.00	0.69	1.15	1.24	0.90	+34	−18	−11	+ 5	+ 3	+20	+ 6	+15	− 4	+37				0	0.47
102738	20 49 04.12	−12 36 38.1	7.72	G		312.267 166 00	−12.610 586 16		6.20	13.53	−8.54	1.22	1.01	1.18	1.57	1.17	+40	−14	−13	−31	+ 2	+25	+10	+40	− 6	+30				0	1.35
102739	20 49 04.54	+06 05 02.2	7.75	H		312.268 925 32	+06.083 936 03		5.27	−5.49	−10.91	0.85	0.48	1.08	0.96	0.51	+14	−34	+ 1	+ 3	+27	+ 4	+18	+15	+ 7	+39				0	0.94
102740	20 49 05.04	+25 40 13.0	7.67	H		312.270 984 94	+25.670 267 72		3.96	17.21	8.61	0.55	0.51	0.85	0.64	0.53	+ 2	−15	− 7	+ 1	+18	− 1	+17	+21	− 6	− 2				1	0.50
102741	20 49 06.45	+58 44 48.9	7.80	G		312.276 862 24	+58.746 913 69		12.41	135.49	100.50	0.58	0.55	0.63	0.63	0.56	+ 6	+11	+14	− 2	+15	− 5	+13	+13	+ 4	+18				0	1.63
*102742	20 49 06.81	−81 10 12.5	9.60	H		312.278 375 80	−81.170 146 11		6.27	72.75	16.51	0.81	0.79	1.07	1.03	0.96	+ 2	−21	− 3	−19	+ 4	+ 6	+ 7	−30	−18	− 9				0	−0.30
*102743	20 49 06.66	−21 37 59.5	9.40	H		312.277 742 66	−21.633 189 49		−2.23	3.74	−24.70	4.26	2.43	4.52	4.96	3.98	+20	− 8	+14	−36	− 3	+14	− 5	+20	−29	+26				0		
102744	20 49 07.14	−45 42 11.9	9.20	2 H		312.279 736 02	−45.703 314 84		3.87	−2.28	−25.00	1.15	0.80	1.28	1.60	1.12	+26	−21	−16	−11	+12	−13	+10	+ 6	+ 2	+24				0	−0.29
102745	20 49 07.35	+24 56 56.0	8.99	G		312.280 636 26	+24.948 886 42		3.71	−177.72	−213.11	0.88	0.66	1.09	1.03	0.69	+ 5	−17	−12	+ 1	+19	+ 5	+18	+31	− 4	+ 5				0	−1.09
102746	20 49 07.41	+42 57 17.7	7.33	H		312.280 877 75	+42.954 927 36		1.37	2.62	0.19	0.47	0.49	0.64	0.53	0.48	− 2	+ 1	+22	+11	+ 0	+ 9	− 1	− 4	+11	+ 2				0	0.18
102747	20 49 08.26	+54 14 00.8	7.16	H		312.284 415 91	+54.233 563 93		7.49	−3.67	89.40	0.47	0.50	0.55	0.54	0.56	− 9	− 3	+ 2	+ 0	+ 2	− 5	+ 2	− 5	+ 4	− 2				2	0.54
102748	20 49 08.42	+37 31 24.5	8.62	H		312.285 072 95	+37.523 459 12		3.40	−3.21	1.70	0.58	0.73	0.90	0.67	0.78	−11	+ 2	+ 2	+ 9	+ 4	−11	+ 6	−18	+13	− 8				1	1.56
102749	20 49 08.81	+40 54 55.9	7.73	H		312.286 716 19	+40.915 539 88		5.93	28.16	−7.33	0.46	0.49	0.64	0.59	0.67	−15	+ 1	− 4	− 5	+ 4	− 8	+ 3	−22	+ 3	−16				0	−0.72
*102750	20 49 09.57	+39 17 24.2	7.92	H		312.289 869 07	+39.290 054 83		3.43	25.03	33.94	0.58	0.63	0.80	0.63	0.69	−21	−12	+15	− 3	+ 4	−11	+11	−23	−13	+ 0				1	−0.06
*102751	20 49 09.54	−48 46 08.5	7.99	G		312.289 751 29	−48.769 037 45		10.09	88.65	−129.01	0.94	0.71	1.08	1.16	0.65	+24	− 8	+ 2	+ 5	−24	+11	−41	−47	− 5	−30				2	1.20
102752	20 49 09.91	+54 21 56.6	9.20	H		312.291 312 48	+54.365 710 93		1.08	−1.04	−6.23	0.66	0.70	0.78	0.74	0.79	−11	− 5	+ 3	− 5	+ 5	−12	+ 5	+ 0	− 1	− 2				1	0.25
102753	20 49 10.01	−54 46 37.4	9.25	G		312.291 704 53	−54.777 059 18		24.45	184.57	−279.58	1.12	1.02	1.58	1.71	1.17	+ 5	−10	−34	+11	+ 6	−12	− 4	−27	+23	−12				0	−1.17
102754 H	20 49 11.60	+45 24 39.8	9.76	G		312.298 339 83	+45.411 065 12	A	3.13	−11.47	−6.12	4.41	3.00	2.84	3.95	2.46	+ 8	− 2	+13	+ 1	+ 8	−11	+ 6	+ 4	−10	+23				1	0.00
102755	20 49 12.05	+35 33 49.1	6.60	1 H		312.300 224 78	+35.563 637 26		5.33	12.06	−30.24	0.38	0.43	0.59	0.42	0.45	−20	− 4	+ 1	+ 0	− 2	−10	− 2	− 5	+ 8	−14				0	0.44
102756 H	20 49 12.85	+05 01 30.9	8.20	H		312.303 533 10	+05.025 243 29	A	1.33	8.80	−7.95	1.74	1.28	1.44	1.40	0.79	+22	−30	− 2	− 8	+14	+ 2	+14	+ 8	+ 4	+43				1	0.40
102757	20 49 14.11	−52 42 25.5	8.21	G		312.308 809 98	−52.707 087 51		8.16	36.22	−55.94	0.93	0.67	1.07	1.08	0.67	+ 9	−24	−12	+ 7	−16	+20	−23	−24	+ 2	−28				0	1.65
102758	20 49 14.66	+14 36 20.8	7.11	H		312.311 066 69	+14.605 790 05		5.01	3.67	−5.05	0.67	0.48	0.88	1.01	0.62	+16	− 3	−10	−10	+ 6	+29	+14	+29	−14	+ 4				2	0.67
102759	20 49 14.75	−48 13 28.3	6.96	H		312.311 472 13	−48.224 531 27		5.65	−13.56	19.39	0.85	0.60	0.96	1.45	0.70	+ 8	−11	−10	+28	−24	−13	−46	−24	+16	−62				0	0.52
102760	20 49 14.88	+38 00 22.9	8.60	H		312.312 019 12	+38.006 372 23		3.54	−1.35	−1.82	0.59	0.76	0.93	0.61	0.73	−13	+10	+19	+10	+ 1	−14	+ 7	−22	+16	−11				0	0.34
102761	20 49 15.01	+62 31 47.1	7.98	H		312.312 552 26	+62.529 736 25		2.32	3.32	−12.25	0.55	0.55	0.63	0.51	0.59	− 6	− 1	− 1	−18	+24	+17	+27	−14	+15	+25				0	1.00
102762	20 49 15.06	−20 37 49.2	8.13	G		312.312 744 36	−20.630 326 78		16.41	213.13	−190.64	0.95	0.58	1.04	1.16	0.97	+20	−17	+ 2	−21	+15	+38	+ 8	+45	+ 2	+33				0	1.18
102763	20 49 15.83	−46 38 55.5	7.82	H		312.315 956 42	−46.648 742 02		4.19	24.71	−35.27	0.84	0.62	0.99	1.44	0.94	+20	−27	−28	+25	−13	− 2	−20	+ 9	+ 6	−31				0	−0.37
102764	20 49 16.21	+33 13 47.2	8.98	2 H		312.317 533 30	+33.229 777 39	A	3.13	1.00	−6.57	2.01	2.50	3.05	1.94	2.36	−28	− 4	+ 6	+ 3	− 2	−12	− 3	− 1	+15	−38				4	2.83
102765	20 49 16.32	+54 31 38.1	8.84	H		312.317 993 10	+54.527 261 15		0.91	13.52	6.45	0.70	0.72	0.81	0.77	0.78	− 5	− 4	+ 6	− 6	+ 3	− 8	+ 4	− 9	− 4	+ 8				4	0.98
102766	20 49 16.34	+32 17 07.6	8.25	H		312.318 095 62	+32.285 437 92		42.23	−161.09	−267.82	0.48	0.59	0.98	0.57	0.66	−30	+ 5	− 3	+ 4	− 6	− 7	− 4	− 6	+20	−30				0	0.02
102767	20 49 16.44	+47 03 05.0	9.52	2 H		312.318 513 36	+47.051 390 14		0.43	−2.16	−1.71	0.71	0.73	0.89	0.88	0.88	−13	− 7	+ 8	+ 1	+ 5	+ 8	+ 4	−18	+ 7	−13				0	0.24
102768	20 49 16.46	+41 08 33.3	8.42	H		312.318 563 22	+41.142 592 24		8.09	46.78	37.80	0.54	0.60	0.76	0.59	0.65	−17	+ 1	+ 0	+ 8	+ 4	−13	+ 4	−15	+18	−16				0	0.00
102769	20 49 16.94	−30 11 31.5	7.26	H		312.320 578 91	−30.192 074 57		2.97	−6.00	−31.83	0.80	0.60	1.00	1.06	0.96	+36	− 4	+ 2	+ 0	+ 6	+39	− 1	+26	− 3	+43				0	0.94
102770	20 49 17.25	−00 33 47.8	6.24	2 H		312.321 889 30	−00.563 275 06		3.46	−26.76	−25.36	0.74	0.48	0.91	0.88	0.67	+ 7	− 5	−17	− 7	+13	+24	+11	+58	−16	+17				0	0.11
102771	20 49 17.39	+64 02 32.2	6.45	1 H		312.322 479 07	+64.042 268 79		1.27	−3.97	−4.81	0.45	0.44	0.50	0.46	0.47	+ 3	−11	− 4	− 6	+10	+ 4	+ 9	−10	+13	+27				1	1.48
102772	20 49 17.61	−25 46 52.3	5.86	H		312.323 356 08	−25.781 194 69		3.58	12.83	−18.62	0.78	0.46	0.90	0.97	0.83	+24	+ 2	+ 8	−31	−12	+18	−25	+ 2	−33	+34				0	−0.18
102773	20 49 18.28	−68 46 35.0	5.41	G		312.326 146 27	−68.776 400 32		10.70	−64.57	−49.78	0.34	0.39	0.57	0.38	0.43	−27	− 8	− 8	+ 3	+ 2	+ 1	+ 2	− 4	− 5	−37				0	−0.15
102774	20 49 18.52	+04 01 54.0	7.66	1 H		312.327 172 56	+04.031 663 36		0.30	11.17	3.88	0.78	0.45	0.90	1.02	0.52	+18	− 9	+ 2	+ 0	+27	+22	+17	+18	+21	+52				2	−0.02
*102775	20 49 19.01	+58 44 55.5	6.88	H		312.329 208 46	+58.748 744 88		5.02	−4.01	−2.39	0.47	0.42	0.49	0.51	0.44	− 2	+10	+12	+ 7	+11	− 4	+12	+11	+ 4	+10				1	1.11
*102776	20 49 18.72	−69 28 17.7	10.19	G		312.327 981 21	−69.471 595 06		12.95	−196.73	15.50	1.00	1.11	1.62	1.08	1.33	−27	− 6	+ 2	+ 7	− 6	−12	− 7	+ 6	+16	−46				0	0.84
102777	20 49 19.41	−08 47 38.4	7.80	2 H		312.330 894 47	−08.794 008 77		2.24	12.17	−18.23	0.88	0.61	1.06	1.15	0.71	+29	−34	−30	+ 8	−24	+18	−12	+35	− 5	+11				0	0.16
102778	20 49 19.83	+18 29 15.0	8.73	H		312.332 623 12	+18.487 504 90		2.48	14.43	−6.09	0.86	0.65	1.16	0.97	0.69	+17	−16	− 1	+48	+ 8	+12	+12	+40	− 4	+37				3	1.90
102779	20 49 20.18	+17 55 49.9	9.25	H		312.334 072 74	+17.930 535 61		10.29	126.94	38.37	1.13	0.67	1.37	1.24	0.70	+ 7	− 7	− 2	+52	− 4	+ 9	+ 5	+25	+ 3	+33				0	−0.07
102780	20 49 20.54	−18 02 08.8	6.20	H		312.335 591 92	−18.035 773 44		2.90	0.20	−33.47	0.84	0.48	0.93	1.11	0.87	+16	− 9	−13	−36	+ 2	+30	− 2	+24	−20	+28				0	0.16
102781	20 49 22.14	+83 56 29.4	7.18	G		312.342 268 17	+83.941 505 92		13.05	20.69	106.83	0.53	0.51	0.59	0.62	0.64	+ 2	−19	−14	+16	− 2	−15	− 3	−14	+ 2	+ 6				0	2.20
102782 H	20 49 23.53	+11 24 09.6	9.30	G		312.348 039 92	+11.402 656 88	B	29.16	219.90	−125.38	5.82	3.37	3.28	4.10	2.30	+22	+ 1	− 7	−13	+17	+17	+ 2	+ 6	+12	+40				1	3.16
102783	20 49 23.90	−42 11 20.3	9.31	G		312.349 593 77	−42.188 974 06		5.94	4.95	−29.18	1.18	0.84	1.44	1.54	1.07	+30	−23	−20	− 4	− 3	−14	+ 0	− 7	−23	+36				2	1.30
102784	20 49 24.52	+11 24 14.2	9.31	G		312.352 176 49	+11.403 935 43	C	29.16	116.23	−104.49	281.16	187.31	3.28	199.55	98.13	+12	−20	− 3	−15	+19	+32	+12	− 3	+ 7	+35				1	3.16
102785	20 49 25.07	−11 27 17.8	7.74	H		312.354 473 47	−11.454 940 06		3.98	12.54	1.86	0.93	0.72	1.08	1.17	0.97	+49	−32	−37	−32	−21	+27	−16	+ 8	− 5	+52				0	0.68
102786	20 49 26.74	+28 39 54.7	10.60	H		312.361 405 33	+28.665 193 45		12.90	23.76	60.90	1.12	1.29	2.01	1.25	1.41	+ 4	+ 2	+ 9	− 6	+12	+ 0	+ 8	+25	−15	+17				2	0.70
102787	20 49 28.47	+75 45 21.7	8.35	H		312.368 626 48	+75.756 038 75		3.33	9.45	3.06	0.65	0.62	0.71	0.72	0.69	+ 8	−18	−16	− 8	+ 7	+ 8	+ 4	−19	+26	+21				0	0.97
102788	20 49 28.80	+42 38 20.9	8.50	2 H		312.369 983 18	+42.639 129 58		1.52	4.88	21.33	0.68	0.66	0.87	0.78	0.68	− 8	+ 4	+19	− 1	− 3	− 3	− 2	− 1	+ 6	− 1				0	−1.09
102789	20 49 28.83	−51 53 26.1	8.29	G		312.370 115 97	−51.890 572 25		6.87	58.57	19.37	1.06	0.76	1.15	1.47	0.83	+11	− 5	−15	−12	−16	− 8	−20	−29	+11	−34				0	−0.63
102790	20 49 28.93	−46 13 36.8	4.90	H		312.370 538 40	−46.226 892 49		8.06	37.85	27.28	0.70	0.52	0.83	0.94	0.62	+20	−16	−29	+ 3	+13	−13	+ 8	− 1	+ 4	+15				0	0.87
102791	20 49 29.08	+71 46 28.4	8.23	H		312.371 175 75	+71.774 543 65		28.61	138.83	100.66	0.71	0.66	0.74	0.84	0.63	−10	−20	+18	+ 7	+11	− 3	+ 6	−23	+11	−10				0	0.21
102792	20 49 29.09	−41 42 41.6	8.24	H		312.371 211 61	−41.711 560 78		9.61	0.84	25.16	0.94	0.63	1.10	1.14	0.79	+20	−21	− 1	−12	+10	+14	+ 7	+ 0	+ 2	+48				2	−0.30
102793	20 49 29.63	−08 39 07.7	8.43	H		312.373 454 87	−08.652 135 89		15.98	−344.39	−151.98	0.94	0.73	1.13	1.29	0.78	+31	−21	−35	+ 6	−29	+24	−14	+28	− 4	+11				0	0.13
102794	20 49 31.79	+43 46 21.7	8.87	H		312.382 445 05	+43.772 692 46		4.11	5.69	−7.17	0.71	0.67	0.87	0.78

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
102701	9.155	0.015	7.979	0.010		1.008	0.014	T	0.98	0.01	L	8.0290	0.0012	0.012	99		8.01	8.05		C			1							
102702	9.169	0.013	9.110	0.017		0.059	0.020	T	0.07	0.02	L	9.1154	0.0015	0.014	104		9.08	9.14		C			1							
102703	8.307	0.012	7.683	0.010		0.581	0.014	T	0.65	0.01	L	7.7490	0.0011	0.009	98		7.74	7.77		C			1 G							S
102704	8.925	0.011	9.036	0.016		−0.080	0.015	G	0.00	0.02	L	9.0364	0.0024	0.024	163		8.99	9.08		U			1							
102705	8.776	0.013	7.249	0.007		1.283	0.012	T	1.24	0.01	L	7.2455	0.0022	0.016	81		7.22	7.27					1							S
102706	9.774	0.019	8.258	0.011		1.274	0.017	T	1.23	0.02	L	8.3239	0.0014	0.014	121		8.30	8.35		C			1							
102707	9.153	0.013	7.418	0.006		1.447	0.011	T	1.45	0.02	L	7.4005	0.0012	0.013	157		7.38	7.43					1							S
102708	11.130	0.064	9.750	0.031		1.168	0.056	T	1.13	0.05	L	9.8608	0.0027	0.028	80		9.81	9.90		C			1							
102709	10.328	0.033	9.540	0.026		0.715	0.032	T	0.77	0.03	L	9.6057	0.0023	0.021	116		9.57	9.64		C			1							G
102710	10.760	0.048	9.922	0.036		0.737	0.046	T	0.78	0.03	L	10.0542	0.0049	0.033	84		10.00	10.10					1							
102711	9.882	0.022	8.185	0.010		1.417	0.019	T	1.40	0.03	L	8.1945	0.0014	0.012	111		8.16	8.21					1							
102712	6.144	0.004	6.236	0.006	*	−0.071	0.001	G	−0.05	0.00	H	*	6.2678	0.0005	0.005	99	*	6.26	6.28		D	20487+5155	I 1	2 C A	AB	73	4.210	0.005	2.49	0.02	S
102713	8.965	0.012	8.663	0.014		0.284	0.015	G	0.32	0.02	H		8.7234	0.0015	0.014	98		8.70	8.75		C			1							
102714	8.563	0.009	7.501	0.007		0.921	0.009	T	0.92	0.01	L		7.5796	0.0010	0.010	133		7.56	7.60					1							S
102715	10.198	0.029	8.532	0.013		1.393	0.025	T	1.37	0.03	L		8.5225	0.0021	0.017	102		8.49	8.55					1							
102716	7.985	0.008	7.872	0.010		0.110	0.012	T	0.12	0.01	L		7.8920	0.0010	0.012	130		7.87	7.91		C			1							
102717	8.131	0.007	8.017	0.008		0.105	0.005	G	0.12	0.01	H		8.0457	0.0016	0.017	155		8.01	8.08					1							S
102718	10.321	0.027	9.745	0.025		0.541	0.027	T	0.61	0.03	L		9.7074	0.0033	0.028	108		9.66	9.76			20488+0512	I 1	1 X S							
102719	7.590	0.007	7.549	0.009		0.043	0.011	T	0.06	0.01	L		7.5538	0.0011	0.012	109		7.54	7.58					1							S
102720	9.314	0.015	7.822	0.009		1.275	0.014	T	3.95	0.06	O		7.1201	0.0251	0.167	117		6.92	7.47		U 2 C			1 S							
102721	9.554	0.019	7.900	0.010		1.383	0.017	T	1.36	0.02	L		7.8968	0.0012	0.011	100		7.88	7.91		C			1							S
102722	8.977	0.013	8.651	0.014	*	0.407	0.019	G	0.47	0.02	H	*	8.6735	0.0027	0.021	106	*	8.64	8.70			20489+4537	H 1	2 C S A	AB	307	0.165	0.018	1.06	0.46	
102723	9.834	0.031	9.007	0.024	*	0.745	0.030	T	0.79	0.02	L	*	9.2052	0.0062	0.056	99	*	9.16	9.42		U 2 C	20490−2038	I 1	2 C A	AB	140	5.945	0.006	0.34	0.03	
102724	5.254	0.003	4.891	0.003		0.571	0.015	G	0.59	0.03	C		4.9240	0.0021	0.017	108		4.90	4.95		U 2	20489+4607	I 1	1 S							S P
102725	7.334	0.004	7.028	0.004		0.283	0.004	G	0.32	0.01	H		7.0752	0.0009	0.011	217		7.06	7.09					1							S
102726	12.087	0.178	10.331	0.053		3.300	0.500	G	3.32	0.51	J		10.4339	0.0028	0.033	84		10.38	10.52		U			1 G							G
102727	8.471	0.013	7.947	0.011		0.492	0.015	T	0.56	0.02	L		8.0264	0.0014	0.012	101		8.01	8.05					1							S
102728	7.963	0.009	7.925	0.009	*	0.040	0.015	G	0.06	0.01	H	*	7.9594	0.0016	0.013	136	*	7.93	7.98		C	20490+2540	H 1	2 C B	AB	226	0.539	0.038	3.56	0.13	S
102729	7.378	0.006	7.501	0.007		−0.107	0.008	T	−0.09	0.01	L		7.4839	0.0008	0.009	153		7.47	7.50					1							S
102730	7.207	0.004	7.216	0.006		−0.004	0.007	T	0.02	0.01	L		7.2330	0.0012	0.012	163		7.21	7.26					1							S
102731	7.451	0.009	7.459	0.012	*	−0.003	0.014	T	0.02	0.01	L	*	7.5303	0.0014	0.013	143	*	7.51	7.58		D	20490+3948	I 1	2 C A	AB	86	4.127	0.006	2.31	0.04	S
102732						1.500	0.510	G	3.92	0.96	K		12.4512	0.0803	0.859	199		9.53	13.06	365.00	P 1 B			1 G							D P
102733	10.131	0.034	8.622	0.017		1.269	0.030	T	1.23	0.03	L		8.6225	0.0017	0.014	76		8.60	8.64					1							
102734	8.575	0.007	8.163	0.007		0.394	0.015	G	0.46	0.02	H		8.2321	0.0012	0.011	164		8.21	8.25		C			1							S
102735	9.591	0.018	9.313	0.021		0.264	0.026	T	0.30	0.03	L		9.3692	0.0025	0.022	93		9.33	9.40		C			1							
102736	8.275	0.008	7.905	0.008		0.389	0.003	G	0.45	0.00	H		7.9446	0.0014	0.012	140		7.93	7.97					1							S
102737	9.906	0.027	8.394	0.014		1.271	0.024	T	1.23	0.03	L		8.4266	0.0019	0.012	79		8.41	8.45		C			1							
102738	8.745	0.018	7.803	0.013		0.837	0.015	G	0.86	0.01	H		7.8584	0.0017	0.009	51		7.84	7.87		C			1 G							S
102739	8.054	0.008	7.768	0.010		0.272	0.012	T	0.31	0.01	L		7.8275	0.0014	0.012	109		7.81	7.85		C			1							S
102740	7.614	0.007	7.655	0.008		−0.020	0.015	G	0.00	0.01	H		7.6718	0.0009	0.010	135		7.66	7.69		C			1							S
102741	8.937	0.013	7.892	0.009		0.910	0.015	G	0.95	0.02	I		7.9437	0.0009	0.011	129		7.93	7.96			20493+5845	I 2	1							
102742	10.500	0.029	9.633	0.022		0.760	0.028	T	0.80	0.02	L		9.7350	0.0018	0.025	141		9.69	9.78					1							
102743	10.974	0.052	9.490	0.024		1.249	0.045	T	1.21	0.04	L		9.5639	0.0022	0.016	108		9.53	9.59		C			1 X							
102744	10.324	0.033	9.307	0.023		0.887	0.030	T	0.89	0.02	L		9.3621	0.0044	0.031	86		9.30	9.43		U 2			1							
102745	10.055	0.025	9.036	0.018		0.918	0.015	G	0.96	0.02	I		9.1131	0.0020	0.016	109		9.08	9.15					1							
102746	7.314	0.006	7.334	0.007		−0.014	0.008	T	0.01	0.01	L		7.3365	0.0011	0.010	125		7.32	7.36					1							S
102747	8.555	0.010	7.284	0.007		1.082	0.010	T	1.04	0.01	L		7.3289	0.0009	0.009	124		7.31	7.35					1							S
102748	10.351	0.028	8.758	0.013		1.335	0.024	T	1.30	0.03	L		8.7709	0.0016	0.018	146		8.74	8.80		C			1							
102749	8.415	0.010	7.789	0.008		0.582	0.011	T	0.65	0.01	L		7.8521	0.0011	0.011	154		7.83	7.87		C			1 G							S
102750	9.334	0.016	8.041	0.010		1.100	0.015	T	1.06	0.02	L		8.0877	0.0015	0.016	141		8.07	8.12		C	20492+3917	I 1	1 S							
102751	8.603	0.012	8.076	0.011		0.500	0.011	G	0.57	0.01	H		8.1055	0.0019	0.015	110		8.08	8.14					1							S
102752	9.267	0.016	9.161	0.019		0.103	0.023	T	0.12	0.03	L		9.2410	0.0018	0.018	123		9.21	9.27		C			1							
102753	10.497	0.041	9.327	0.025		0.979	0.013	G	1.02	0.01	I		9.3938	0.0034	0.025	85		9.36	9.44		C			1							
102754	10.520	0.037	9.905	0.035	*	0.708	0.014	G	0.76	0.01	H	*	9.8866	0.0034	0.028	102	*	9.85	9.93		D	20492+4525	I 1	2 C A	AP	266	0.378	0.006	0.38	0.06	G
102755	8.746	0.009	6.798	0.004		1.622	0.010	G	1.63	0.09	H		6.7140	0.0012	0.013	171		6.69	6.73		M			1							S
102756	9.556	0.015	8.330	0.010	*	1.047	0.014	T	1.02	0.01	L	*	8.3653	0.0017	0.013	124	*	8.34	8.39			20492+0502	H 1	2 C A	AB	178	0.349	0.027	3.45	0.17	
102757	8.681	0.012	8.253	0.012		0.418	0.001	G	0.48	0.00	H		8.3100	0.0017	0.014	78		8.29	8.33		C			1							S
102758	7.067	0.004	7.083	0.007		−0.048	0.001	G	−0.03	0.00	H		7.0964	0.0011	0.010	106		7.08	7.12					1 G							S
102759	8.284	0.010	7.071	0.006		1.037	0.009	T	1.01	0.01	L		7.1294	0.0013	0.010	100		7.11	7.15					1							S
102760	9.832	0.019	8.726	0.013		0.954	0.018	T	0.94	0.01	L		8.7687	0.0015	0.017	137		8.73	8.79					1							
102761	7.991	0.009	7.981	0.012		0.034	0.005	G	0.05	0.00	H		8.0000	0.0009	0.009	112		7.98	8.03					1							S
102762	8.862	0.012	8.206	0.011		0.594	0.007	G	0.66	0.01	H		8.2542	0.0011	0.011	98		8.23	8.27					1							S
102763	9.397	0.019	7.954	0.011		1.210	0.015	G	1.17	0.01	H		7.9862	0.0016	0.009	75		7.97	8.00		C			1							S
102764	12.748	0.229	9.556	0.018	A	1.745	0.400	G	1.72	0.41	J		9.0829	0.0240	0.130	197	A	8.89	9.28		U 2 C	20493+3314	I 1	2 C B	AB	239	13.142	0.016	1.65	0.12	
102765	10.284	0.028	8.956	0.016		1.127	0.025	T	1.09	0.03	L		9.0064	0.0017	0.018	122		8.98	9.05		C			1							
102766	9.469	0.012	8.372	0.008		0.939	0.011	T	0.99	0.01	L		8.3976	0.0014	0.016	233		8.37	8.43			20493+3217	I 1	1							
102767	9.687	0.020	9.538	0.027		0.100	0.015	G	0.11	0.02	H		9.5615	0.0039	0.034	115		9.49	9.61		U 2			1 S							G
102768	8.960	0.011	8.470	0.010		0.465	0.015	G	0.54	0.02	H		8.5249	0.0012	0.014	154		8.50	8.55		C			1							
102769	9.267	0.019	7.450	0.009		1.500	0.015	G	1.58	0.07	L		7.3766	0.0013	0.010	84		7.36	7.39					1							S
102770	8.155	0.020	6.510	0.022		1.401	0.024	T	3.12	0.06	O		6.1066	0.0077	0.183	127		6.02	6.58		U 2			1 S							S P
102771	6.484	0.004	6.457	0.005		0.025	0.006	T	0.04	0.01	L		6.4654	0.0012	0.010	115		6.45	6.49		U 2			1							S
102772	5.766	0.003	5.847	0.003		−0.069	0.004	T	−0.05	0.00	L		5.8384	0.0005	0.004	83		5.83	5.85					1							S
102773	6.876	0.003	5.536	0.002		1.122	0.004	G	1.09	0.06	F		5.5814	0.0005	0.007	223		5.57	5.59					1							S
102774	9.787	0.018	7.843	0.008		1.613	0.016	T	1.63	0.02	L		7.7747	0.0018	0.016	130		7.75	7.80		U			1							S
102775	6.812	0.004	6.867	0.006		−0.046	0.007	T	−0.02	0.01	L		6.8705	0.0010	0.008	133		6.85	6.89			20493+5845	I 2	1							S
102776	11.106	0.043	10.251	0.031		0.747	0.005	G	0.79	0.01	H		10.3331	0.0032	0.043	185		10.25	10.42					1 S							G
102777	9.893	0.025	8.062	0.011		1.555	0.023	T	2.74	0.03	O		7.7710	0.0044	0.047	98		7.70	7.86		U 2			1 S							S
102778	10.393	0.029	8.864	0.014		1.285	0.025	T	1.24	0.03	L		8.8930	0.0017	0.015	121		8.87	8.92		C			1							
102779	9.855	0.021	9.317	0.020		0.549	0.015	G	0.62	0.01	H		9.3715	0.0022	0.019	115		9.34	9.40		C			1							
102780	8.048	0.009	6.370	0.006		1.402	0.009	T	1.38	0.01	L		6.3405	0.0007	0.006	78		6.33	6.35			20493−1802	I 1	1							S
102781	7.677	0.007	7.239	0.007		0.413	0.009	T	0.48	0.01	L		7.2797	0.0010	0.010	114		7.26	7.30		C			1							S
102782	10.752	0.052	9.506	0.028	*	1.074	0.002	G	1.14	0.00	I	*	9.3993	0.0037	0.026	102	–	9.36	9.44		D	20494+1124	I 2	2 C P C	BA	5	0.736	0.004	0.21	0.02	G
102783	9.757	0.021	9.319	0.022		0.405	0.007	G	0.47	0.01	H		9.4126	0.0020	0.019	86		9.38	9.44		C			1							
102784						1.073	0.024	G	1.14	0.04	I		9.6670	0.0531	0.411	99	–	9.41	10.86		D	20494+1124	I 2	1 C L C							G
102785	8.084	0.015	7.772	0.015		0.320	0.015	G	0.37	0.02	H		7.8236	0.0030	0.017	49		7.80	7.85					1							S
102786	11.286	0.065	10.728	0.067		0.527	0.069	T	0.60	0.07	L		10.7170	0.0039	0.038	153		10.60	10.80					1 S							G
102787	9.608	0.021	8.459	0.014		0.987	0.020	T	0.97	0.02	L		8.5205	0.0021	0.015	107		8.50	8.54					1							
102788	10.836	0.042	8.704	0.013		1.803	0.036	T	2.27	0.08	O		8.5601	0.0033	0.027	113		8.51	8.61		U 2			1							
102789	8.980	0.014	8.387	0.013		0.575	0.019	G	0.65	0.02	H		8.4226	0.0019	0.018	87		8.39	8.45		C			1							S
102790	6.888	0.007	5.066	0.003		1.494	0.059	G	1.57	0.02	A		5.0181	0.0010	0.008	78		5.01	5.04					1							S
102791	9.161	0.015	8.284	0.011		0.767	0.014	T	0.81	0.01	L		8.3651	0.0014	0.019	99		8.33	8.41					1							S
102792	8.765	0.012	8.298	0.012		0.442	0.011	G	0.51	0.01	H		8.3388	0.0022	0.016	83		8.31	8.36		C			1							S
102793	9.179	0.016	8.508	0.014		0.611	0.016	T	0.68	0.01	L		8.5619	0.0016	0.014	86		8.54	8.59		C			1							S
102794	8.909	0.013	8.879	0.016		0.040	0.015	G	0.06	0.01	H		8.8883	0.0014	0.015	112		8.86	8.91		C			1							
102795	8.261	0.009	7.973	0.012		0.274	0.014	T	0.31	0.02	L		8.0314	0.0011	0.012	106		8.01	8.05					1							S
102796	9.576	0.020	7.436	0.008	*	1.622	0.218	G	1.96	0.10	N	*	7.2637	0.0024	0.016	105	*	7.24	7.29		U 2	20496+5047	H 1	2 C D	AB	106	0.326	0.040	3.35	0.30	S D
102797	8.775	0.010	8.848	0.014		−0.062	0.016	T	−0.04	0.02	L		8.8552	0.0023	0.021	139		8.82	8.89		U			1							
102798	10.564	0.033	9.237	0.018		1.126	0.029	T	1.09	0.03	L		9.3381	0.0030	0.027	128		9.29	9.38					1							
102799	9.428	0.014	8.074	0.008		1.147	0.013	T	1.11	0.01	L		8.1190	0.0013	0.016	159		8.09	8.15					1							
102800	9.464	0.020	8.064	0.011		1.183	0.018	T	1.14	0.02	L		8.1143	0.0012	0.013	108		8.09	8.14		C			1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ μ_δ	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
102801	20 49 36.71	+51 18 51.9	6.65	H	312.402 960 50	+51.314 414 26		15.70	8.25	−45.30	0.48	0.49	0.58	0.60	0.58	− 3	+ 8	+18	+ 0	− 3	−11	− 3	−16	+ 0	−22	0	−0.50
102802	20 49 37.14	−03 53 19.6	8.92	H	312.404 757 06	−03.888 773 43		−0.17	4.33	9.43	1.07	0.81	1.38	1.62	1.16	+21	+13	− 8	+31	+ 1	+28	− 1	+58	−14	+24	2	2.23
102803	20 49 37.26	−80 08 01.1	7.91	2 T	312.405 238 93	−80.133 648 71		5.15	1.67	14.56	0.57	0.54	0.72	0.62	0.57	+17	−20	−17	+11	+ 9	−12	+ 3	−19	+ 0	+ 1	0	0.14
102804	20 49 37.69	+50 07 37.5	6.50	2 G	312.407 047 30	+50.127 070 30		2.73	−12.85	4.95	0.52	0.48	0.59	0.68	0.56	+ 1	− 1	+ 6	−19	− 6	+ 5	− 5	−14	+ 9	−11	0	0.11
102805	20 49 37.74	+12 32 41.6	6.01	G	312.407 232 73	+12.544 891 31		33.81	54.06	97.46	0.62	0.43	0.83	0.74	0.45	+ 9	−20	+14	− 9	+22	+ 9	+11	+18	+14	+31	0	−0.74
102806	20 49 38.57	+26 54 14.7	8.85	H	312.410 716 31	+26.904 096 65		1.55	4.62	−5.43	0.72	0.74	1.20	0.86	0.82	+19	− 3	− 2	− 9	+16	−26	+13	+28	− 4	+24	0	−0.93
102807	20 49 39.00	+13 57 45.9	7.12	H	312.412 486 71	+13.962 760 45		19.64	89.75	74.05	0.68	0.45	0.84	0.91	0.49	+ 9	+ 8	− 5	− 2	+28	− 7	+21	+24	+20	+24	0	0.75
102808	20 49 39.55	−75 50 00.1	7.90	H	312.414 808 14	−75.833 365 11		3.87	32.37	−51.26	0.61	0.58	0.77	0.73	0.73	−25	− 4	− 3	+11	− 4	+ 5	− 2	+17	− 5	−41	0	1.70
102809	20 49 40.87	+26 56 20.8	10.53	G	312.420 273 32	+26.939 108 43		20.91	23.14	213.12	1.14	1.21	2.04	1.51	1.31	+20	− 9	− 8	− 4	+20	−32	+12	+23	−24	+31	0	−0.35
102810	20 49 41.12	−02 41 42.8	9.51	H	312.421 333 52	−02.695 210 64		2.77	−6.96	−8.23	1.16	0.81	1.48	1.69	1.19	+16	−21	−20	+22	− 6	+14	+ 0	+54	−23	+17	0	0.37
102811	20 49 41.18	+24 51 58.0	8.35	H	312.421 582 78	+24.866 103 11		1.98	−8.45	−7.64	0.71	0.58	0.98	0.79	0.61	− 1	−18	−21	+17	+12	+ 1	+13	+34	− 9	− 3	0	−1.46
102812	20 49 42.34	−25 48 20.1	9.19	H	312.426 417 89	−25.805 580 51		10.38	61.43	23.11	1.32	0.67	1.40	1.61	1.20	+26	+14	− 1	−44	−23	+18	−33	− 6	−44	+25	3	−0.13
102813	20 49 43.33	+00 19 32.0	9.10	H	312.430 556 69	+00.325 543 24		3.16	2.77	4.28	1.06	0.70	1.27	1.55	1.03	+ 6	−17	− 9	+14	+ 6	+27	+ 8	+57	− 5	+ 8	0	−0.02
102814	20 49 46.15	+11 29 41.7	7.41	H	312.442 309 03	+11.494 924 17		4.22	10.74	−7.57	0.73	0.51	0.96	0.93	0.53	+27	−15	+ 2	+11	+28	+12	+21	+26	+ 8	+40	0	−0.33
102815	20 49 46.40	+25 46 15.3	7.67	H	312.443 350 42	+25.770 903 71		19.42	85.54	4.35	0.55	0.55	0.88	0.67	0.58	+11	−16	− 9	−10	+29	− 3	+25	+20	+ 9	+ 3	0	−1.07
102816	20 49 47.13	−53 37 32.1	9.86	H	312.446 394 70	−53.625 570 24		3.48	5.50	8.61	1.19	0.94	1.52	1.47	0.91	+ 9	−20	−20	+13	−22	+37	−22	−24	− 5	−19	0	−0.68
102817	20 49 47.91	−28 28 07.8	10.86	2 G	312.449 645 47	−28.468 837 80		22.62	86.52	−153.74	2.15	1.52	2.39	3.22	2.47	+15	− 4	−19	+37	− 7	+35	− 3	+39	− 4	+11	15	1.64
102818	20 49 47.98	−36 51 18.1	7.96	H	312.449 934 30	−36.855 036 98		5.25	20.59	−6.65	0.74	0.55	0.97	0.85	0.71	+43	−24	−11	−16	+ 4	+18	+ 6	− 9	+ 8	+72	1	0.73
102819	20 49 48.24	+07 51 51.0	6.32	H	312.451 019 00	+07.864 154 80		6.30	26.21	12.43	0.68	0.44	0.84	0.84	0.47	+ 8	−12	−12	− 8	+23	+18	+18	+14	+ 7	+29	0	0.24
102820	20 49 48.78	−06 41 49.1	7.91	H	312.453 232 15	−06.696 967 37		11.87	22.68	16.84	0.93	0.67	1.16	1.24	0.83	+25	−35	−23	+19	− 7	+31	+ 2	+58	− 1	+18	0	2.22
102821	20 49 48.80	−33 55 26.0	8.83	H	312.453 329 92	−33.923 881 35		1.88	12.66	4.91	1.09	0.73	1.24	1.52	1.01	+23	− 4	+18	+22	+ 6	+ 8	+ 7	+ 9	− 5	+39	0	−0.74
102822	20 49 49.03	−24 49 17.8	9.24	H	312.454 309 55	−24.821 609 00		1.27	−6.94	−5.77	1.29	0.65	1.46	1.46	1.27	+28	+17	− 3	−39	−10	+ 7	−29	+18	−45	+38	0	0.55
102823	20 49 50.01	−00 19 27.4	7.18	G	312.458 366 25	−00.324 290 37		3.78	6.66	5.08	0.77	0.53	1.00	1.00	0.75	+ 9	− 8	−19	− 1	+ 9	+33	+ 9	+64	−19	+14	2	1.29
102824	20 49 51.69	+64 35 34.9	8.55	H	312.465 356 57	+64.593 032 76		3.32	−0.43	−14.07	0.64	0.60	0.70	0.70	0.72	+ 3	+ 9	− 8	+16	+ 5	+15	+ 7	+ 8	+ 5	+22	1	1.23
102825	20 49 52.36	−65 33 31.6	9.25	H	312.468 182 74	−65.558 766 27		6.12	−10.86	12.83	0.74	0.75	1.31	0.87	0.92	−42	+ 8	−13	+24	+ 2	− 9	+ 3	+24	+11	−42	0	0.25
102826	20 49 52.82	−69 41 21.7	9.90	H	312.470 103 81	−69.689 354 91		1.73	−0.54	−0.88	0.90	1.08	1.62	0.93	1.14	−17	+ 0	−29	− 5	+ 6	−25	− 1	− 8	+13	−32	0	1.15
102827	20 49 54.64	+46 39 40.8	6.33	2 G	312.477 673 95	+46.661 327 83		3.55	4.53	3.85	0.46	0.47	0.59	0.58	0.65	− 8	−13	− 7	− 8	− 2	+ 9	− 2	−19	+ 3	− 8	3	0.56
102828	20 49 55.87	−67 41 50.9	8.97	H	312.482 800 02	−67.697 469 18		3.13	56.76	−46.85	0.59	0.78	1.19	0.67	0.89	−26	− 1	−23	− 5	+ 3	−16	+ 0	+15	+18	−32	2	1.02
102829	20 49 56.41	−05 08 47.9	9.01	3 H	312.485 041 00	−05.146 641 25	*	−1.02	−6.16	−9.56	1.59	1.08	1.76	2.27	1.50	+ 2	− 8	− 7	+42	− 3	+21	− 5	+70	−18	+10	0	1.14
102830	20 49 57.21	+40 02 34.3	8.27	H	312.488 370 10	+40.042 849 18		3.72	−2.90	−12.59	0.56	0.59	0.78	0.64	0.67	−11	+ 4	+ 7	+17	− 2	−12	+ 1	−11	+ 6	− 4	1	−0.56
102831	20 49 58.08	−33 46 46.8	4.89	H	312.491 997 93	−33.779 673 20		8.57	3.71	−20.19	0.74	0.49	0.80	0.94	0.69	+18	−27	− 3	+20	− 7	+ 4	− 4	+ 7	− 6	+29	0	0.12
102832	20 49 58.73	+02 26 01.8	7.03	H	312.494 707 23	+02.433 824 09		3.60	3.80	−6.37	0.80	0.42	0.85	1.07	0.49	+11	−14	−10	− 1	+35	− 8	+21	+32	− 2	+42	0	1.13
102833	20 49 59.07	+05 32 40.4	6.20	H	312.496 132 07	+05.544 557 18		6.58	43.16	1.02	0.76	0.40	0.86	0.89	0.44	− 1	−15	− 4	−27	+40	+ 2	+20	+20	+18	+33	0	0.74
102834	20 50 00.24	+10 26 28.8	10.17	H	312.501 019 61	+10.441 346 43		8.67	117.61	144.09	1.40	0.99	1.62	1.95	1.16	+38	−15	− 5	+16	+33	+16	+26	+37	+11	+55	0	1.74
102835	20 50 00.65	+45 20 46.3	8.77	H	312.502 726 11	+45.346 195 50		2.44	−6.56	−9.70	0.83	0.79	1.02	1.09	1.09	−11	+ 6	+15	−10	+13	− 1	+13	+ 1	− 4	− 1	0	1.17
102836	20 50 01.08	+20 52 48.3	7.96	H	312.504 498 34	+20.880 079 04		3.63	14.15	4.24	0.84	0.56	0.97	0.99	0.62	− 9	− 4	− 6	+ 1	+ 5	+ 6	+ 0	+35	+ 7	+ 6	0	−2.12
102837	20 50 01.68	−23 34 22.5	9.93	H	312.507 006 17	−23.572 909 08		0.79	−9.15	−21.56	1.67	0.90	1.76	2.25	1.71	+24	−24	− 4	−26	+ 5	+ 8	+ 0	+46	−19	+34	0	1.59
102838	20 50 02.98	+07 51 00.0	8.54	H	312.512 430 12	+07.849 986 51		16.74	212.40	105.65	0.92	0.60	1.18	1.09	0.63	+ 6	−13	− 2	− 9	+23	+23	+17	+ 7	+ 8	+35	4	−0.05
102839	20 50 03.17	−39 42 30.6	8.32	H	312.513 212 29	−39.708 488 42		2.90	−3.07	0.37	0.92	0.65	1.11	1.12	0.86	+32	−19	−20	−20	+15	+ 8	+11	+ 4	+ 9	+52	0	−1.19
102840	20 50 03.70	+26 04 15.0	7.94	H	312.515 421 28	+26.070 838 48		3.56	−0.05	−16.85	0.57	0.58	0.93	0.70	0.61	+ 7	−21	− 6	−18	+27	+ 1	+25	+23	−11	+ 6	1	1.01
102841	20 50 04.00	+00 21 33.4	8.34	H	312.516 675 91	+00.359 272 18		3.29	5.91	5.00	0.91	0.58	1.14	1.41	0.83	− 5	− 7	−21	+23	−12	+36	− 2	+62	−19	−16	0	−0.99
102842	20 50 04.33	−75 54 36.5	9.22	2 H	312.518 025 14	−75.910 134 04		7.74	−65.56	−6.63	0.81	0.80	1.06	0.95	0.95	−18	− 2	− 8	+14	+ 6	+ 4	+ 6	+11	+ 7	−28	0	0.00
*102843	20 50 04.83	+44 03 32.3	5.06	G	312.520 131 54	+44.058 982 20		23.67	122.68	132.30	0.44	0.43	0.56	0.52	0.42	− 8	+ 5	+30	+ 5	+ 1	− 1	+ 1	− 9	− 1	−12	1	−0.15
*102844	20 50 04.78	+16 59 04.8	9.41	2 H	312.519 901 14	+16.984 653 94		4.17	−8.81	−7.64	1.17	0.76	1.37	1.64	0.79	+ 2	+ 6	−23	+ 4	+27	− 4	+20	+19	+ 3	+13	0	1.17
102845	20 50 05.07	−27 22 03.5	7.16	H	312.521 136 10	−27.367 631 56	A	6.16	4.07	−30.18	2.23	1.52	1.89	2.55	2.27	+34	−26	− 8	− 4	+15	+16	+ 6	+48	−18	+48	14	2.01
102846 H	20 50 05.17	−35 33 32.4	8.93	H	312.521 550 85	−35.558 987 62	*	1.64	38.50	−13.89	1.16	0.72	1.32	1.56	0.83	+25	−22	−27	+19	+ 7	+ 4	+11	+ 8	−10	+23	0	0.25
102847	20 50 05.47	+27 22 39.7	7.18	H	312.522 808 61	+27.377 683 11		3.98	14.46	7.45	0.43	0.47	0.68	0.46	0.48	+16	+ 3	+ 6	+11	+17	−12	+17	+20	+ 1	+21	1	−1.79
102848	20 50 06.37	−27 21 56.4	9.30	H	312.526 534 81	−27.365 660 95	B	12.22	−12.59	−33.33	37.54	23.03	14.90	21.20	19.76	+33	−20	− 5	−20	+10	+ 8	− 2	+39	−19	+50	14	2.01
102849	20 50 08.93	−33 34 37.9	10.20	H	312.537 227 41	−33.577 194 10		4.73	−18.81	1.23	1.75	1.07	1.79	2.90	1.59	+28	+ 2	+ 3	+32	+ 4	+10	+ 5	+22	+ 6	+30	0	−0.59
102850	20 50 09.49	+13 17 54.3	7.22	H	312.539 536 05	+13.298 422 60		4.40	−6.16	−29.78	0.67	0.47	0.86	0.85	0.49	+12	+ 0	+ 2	−11	+33	+ 7	+22	+27	+18	+29	0	0.52
102851	20 50 10.54	+29 23 03.3	8.32	H	312.543 918 42	+29.384 258 38		48.38	23.11	−59.15	1.04	1.11	1.77	1.34	1.27	−12	+ 2	+ 8	−15	− 3	−21	− 1	−12	+ 9	+ 5	0	
102852	20 50 11.90	+12 05 01.2	8.47	G	312.549 595 21	+12.083 674 34		1.85	3.20	2.61	0.82	0.55	1.07	1.06	0.58	+17	−13	+ 2	+11	+18	+ 2	+13	+23	+11	+29	0	−0.83
102853	20 50 12.70	+03 39 08.4	9.21	3 T	312.552 903 50	+03.652 339 33		−0.33	−3.69	−7.68	0.98	0.61	1.25	1.26	0.65	+25	− 9	+ 9	+ 6	+29	+32	+21	+14	+18	+54	0	0.39
102854	20 50 13.05	−38 14 27.7	8.85	H	312.554 394 18	−38.241 022 49		2.17	3.67	−22.77	0.97	0.70	1.25	1.26	0.91	+36	−10	− 9	−22	+ 9	− 9	+ 2	− 8	− 5	+67	2	0.04
102855	20 50 15.95	−75 02 15.7	8.40	H	312.566 461 40	−75.037 689 80		7.36	21.62	−64.75	0.64	0.67	0.91	0.74	0.79	−14	−16	−17	− 7	− 6	+ 4	− 2	+18	+10	−33	2	1.44
102856	20 50 17.15	−30 25 24.1	8.97	G	312.571 470 99	−30.423 374 81		8.40	6.01	−3.59	1.04	0.70	1.17	1.26	1.13	+33	−19	− 9	−28	− 7	+24	− 8	+14	−16	+39	0	2.59
102857	20 50 17.57	+17 12 44.1	8.67	H	312.573 216 69	+17.212 240 12		1.22	−5.46	−4.54	0.82	0.55	1.08	0.97	0.56	+ 2	− 5	− 7	+31	− 3	+12	− 1	+29	+ 0	+18	0	−1.53
102858	20 50 18.25	+56 47 54.4	7.12	H	312.576 024 67	+56.798 433 79		3.06	4.15	3.53	0.46	0.42	0.49	0.47	0.43	− 6	− 8	+ 4	+14	+10	− 5	+11	+ 7	− 2	+ 6	0	0.01
102859	20 50 18.34	−48 34 21.8	7.76	2 H	312.576 414 59	−48.572 735 91		2.51	−9.17	3.89	0.93	0.73	1.04	1.23	0.68	+28	+ 0	+ 3	+23	−27	+10	−55	−44	− 3	−43	2	3.79
102860	20 50 18.85	−67 11 03.6	7.85	2 H	312.578 521 53	−67.184 339 95		3.18	2.98	0.65	0.44	0.58	0.92	0.48	0.69	−31	− 7	−12	−19	+ 4	− 6	+ 4	+ 9	+ 9	−38	0	1.16
102861	20 50 19.25	−30 06 10.3	9.76	H	312.580 220 71	−30.102 870 44		3.13	−22.00	21.94	1.30	0.87	1.42	1.59	1.46	+29	−11	− 4	−29	+ 1	+17	− 7	+19	−11	+46	2	0.38
102862	20 50 22.62	−40 36 26.6	8.94	G	312.594 229 93	−40.607 379 44		16.78	−75.09	−448.95	1.02	0.77	1.30	1.41	0.99	+36	−12	+ 6	+23	+16	+29	+19	+ 6	+11	+58	0	−0.46
102863	20 50 23.60	+31 21 11.3	7.94	H	312.598 316 76	+31.353 135 96		3.02	8.43	−8.00	0.47	0.63	0.89	0.56	0.73	−33	− 1	− 2	+28	− 2	−14	+ 0	− 3	+12	−26	0	1.69
102864	20 50 24.52	+14 03 47.2	9.33	G	312.602 179 84	+14.063 111 54		7.16	−53.94	−59.38	0.98	0.72	1.26	1.32	0.79	+14	−16	+12	+16	+30	+14	+23	+25	+ 9	+33	0	−0.78
102865	20 50 25.37	−51 58 32.9	11.55	G	312.605 708 37	−51.975 814 94		12.39	−112.36	−172.86	2.62	1.99	3.08	3.61	2.14	+19	− 9	− 8	+ 0	−13	− 8	−22	−27	+14	−27	0	1.05
*102866	20 50 26.89	−72 58 52.2	9.04	2 H	312.612 034 65	−72.981 158 73		2.03	−2.14	0.66	0.82	0.87	1.19	1.06	0.90	− 3	+ 4	−29	+39	+ 4	+ 1	+ 0	+13	−11	−14	2	−0.22
*102867	20 50 26.82	+05 03 40.8	9.02	H	312.611 753 14	+05.061 342 50		−0.14	−23.22	−51.53	1.07	0.59	1.27	1.25	0.67	+11	− 7	− 3	−29	+26	+ 3	+10	+10	+17	+45	0	1.02
102868	20 50 27.40	−82 15 47.1	9.30	H	312.614 178 53	−82.263 078 51		13.94	24.55	−77.22	0.73	0.66	0.87	0.88	0.72	− 5	− 7	− 1	−25	+ 7	−10	+ 7	−21	− 6	− 4	0	0.87
102869	20 50 30.19	−24 58 57.2	6.84	H	312.625 778 27	−24.982 551 13		18.63	−78.48	−110.31	0.92	0.45	0.97	1.14	0.84	+27	+12	+ 7	−37	−18	+ 5	−30	+12	−37	+30	0	−1.19
102870	20 50 32.80	+52 53 54.7	9.69	H	312.636 659 25	+52.898 529 26		44.57	288.09	441.01	0.86	0.90	1.01	1.12	1.22	+ 0	− 5	+ 0	+ 0	+ 6	− 2	+ 6	−12	+ 1	− 3	0	0.49
102871	20 50 32.84	+29 58 39.3	8.65	H	312.636 828 73	+29.977 571 06		3.25	1.84	−8.51	0.56	0.67	1.05	0.72	0.77	−13	+ 0	+ 4	+31	+ 6	−15	+ 9	+ 5	+ 8	− 5	1	0.38
102872	20 50 32.89	−42 29 18.8	8.39	H	312.637 055 98	−42.488 564 84		11.51	−70.62	−5.68	0.97	0.68	1.11	1.37	0.87	+23	− 5	+ 1	− 6	+ 5	+ 8	+ 4	− 4	+ 1	+38	0	0.66
102873	20 50 33.56	−58 55 25.0	8.31	H	312.639 831 36	−58.923 614 06		2.98	−24.22	−5.64	0.83	0.79	1.13	1.01	0.83	+ 7	− 2	−26	−27	+10	− 8	+ 7	−31	+24	−13	0	0.47
102874	20 50 35.12	+23 44 43.9	7.77	H	312.646 349 99	+23.745 515 07		4.10	−2.83	−4.17	0.57	0.53	0.80	0.60	0.58	+15	− 5	−10	+41	+19	−14	+17	+38	+ 8	+21	0	−1.75
102875	20 50 35.85	−15 30 39.2	8.02	H	312.649 377 78	−15.510 896 87		4.18	50.33	−13.76	0.97	0.72	1.08	1.21	1.15	+15	− 5	−14	−12	+ 4	+25	+ 6	+10	− 8	+33	0	0.33
102876 H	20 50 36.01	+30 54 45.3	6.80	G	312.650 038 36	+30.912 594 38	A	7.03	58.21	36.27	0.58	0.69	0.91	0.68	0.74	− 9	+ 7	−14	+21	+23	−12	+21	−13	− 1	− 4	1	0.44
102877 H	20 50 36.39	+30 24 47.1	8.02	G	312.651 620 23	+30.413 087 48	A	8.53	−41.73	−10.13	0.96	1.20	1.47	0.96	1.07	−12	− 5	+ 5	+34	+ 9	−20	+11	+ 3	− 1	− 8	1	−0.63
102878	20 50 37.01	+18 03 04.5	6.63	H	312.654 227 64	+18.051 256 22		10.09	72.92	12.47	0.71	0.51	0.92	1.51	0.60	+11	−19	−27	+36	+ 0	−21	+ 2	+15	−17	+67	1	−0.31
102879	20 50 37.14	+61 36 34.2	10.52	H	312.654 734 29	+61.609 499 18		1.55	2.40	−0.23	1.17	1.11	1.29	1.04	1.20	−16	+19	− 1	−22	+22	+ 2	+33	−32	+31	+18	2	−0.02
102880	20 50 38.55	+22 43 49.4	7.61	H	312.660 643 78	+22.730 391 96		8.67	19.28	0.76	0.58	0.51	0.85	0.70	0.54	+ 5	−13	+ 8	+21	+11	− 3	+ 9	+37	+ 1	+18	0	0.47
102881	20 50 39.25	+26 20 47.5	9.60	H	312.663 525 85	+26.346 528 74		20.09	117.20	−109.01	0.91	0.91	1.43	1.19	0.92	+14	−13	− 1	−38	+19	− 1	+13	+10	+ 2	+16	0	−2.13
102882	20 50 39.42	−55 22 15.7	9.89	H	312.664 270 80	−55.371 020 31		0.98	18.77	−13.52	1.32	1.08	1.55	1.85	1.23	−18	− 6	−24	+28	−16	+ 7	−15	− 7	+ 4	−25	2	1.27
102883	20 50 39.56	+36 32 41.2	8.85	H	312.664 823 15	+36.544 779 72		1.40	−0.46	−2.61	0.55	0.67	0.84	0.59	0.74	−10	+ 7	− 5	+ 6	+ 8	−14	+12	−18	+13	− 1	0	−1.78
102884 H	20 50 39.60	−27 58 35.8	8.98	H	312.664 982 33	−27.976 599 66	*	5.69	58.92	−35.35	4.09	1.78	1.66	1.82	1.69	−24	−23	−15	− 3	+14	+ 9	+18	+35	−24	+46	1	0.64
102885	20 50 39.64	+42 22 55.2	7.32	H	312.665 179 80	+42.382 009 06		3.31	7.74	−7.47	0.49	0.47	0.62	0.53	0.46	− 8	+ 0	+ 9	+ 6	− 6	−14	− 5	− 5	+ 4	− 8	0	0.39
102886	20 50 39.77	+19 22 00.6	9.19	H	312.665 689 05	+19.366 845 93		1.71	5.19	−5.08	1.00	0.86	1.28	1.15	0.94	+30	− 7	− 6	+34	+22	− 1	+21	+52	−11	+41	1	1.01
102887	20 50 40.34	−44 53 19.0	8.94	H	312.668 078 02	−44.888 620 75		3.16	22.17	−10.02	1.12	0.79	1.35	1.31	1.04	+31	−17	−13	− 9	− 1	+ 9	+ 4	− 5	−20	+42	0	−0.92
102888	20 50 41.28	+53 18 18.1	8.87	H	312.672 009 98	+53.305 016 67		2.23	−9.12	−18.74	0.76	0.71	0.83	0.98	0.86	− 2	− 6	+ 3	+15	+12	− 5	+10	− 1	+ 6	− 9	1	1.57
102889	20 50 41.48	+20 28 32.1	7.91	H	312.672 834 53	+20.475 575 02		2.26	2.85	−9.54	0.79	0.65	1.09	0.89	0.68	+ 8	−13	+ 4	+15	+19	+ 3	+13	+48	+ 3	+22	0	−0.24
102890	20 50 41.56	−09 28 47.5	8.88	2 H	312.673 180 33	−09.479 871 72	A	7.93	2.81	5.44	2.90	2.55	3.45	3.67	2.51	+40	−17	−46	+22	−26	+43	+ 4	+54	−17	+25	14	1.50
102891	20 50 41.70	−12 32 41.0	5.87	G	312.673 756 81	−12.544 729 77		13.06	127.05	−72.39	0.93	0.60	1.00	1.09	0.78	+18	−16	−20	−42	− 3	+28	− 3	+15	−13	+28	0	0.53
102892 H	20 50 41.84	−31 15 45.4	8.30	G	312.674 339 39	−31.262 618 46	*	9.83	−31.77	8.81	1.02	0.69	1.15	1.33	1.10	+15	−17	−17	+14	−13	+16	−10	+29	−24	+10	2	2.36
*102893	20 50 42.58	+85 52 04.5	8.52	G	312.677 431 77	+85.867 915 53	A	5.62	12.18	15.61	1.53	1.42	1.26	1.75	1.58	+ 4	−15	−11	+14	− 8	+13	− 4	+ 5	− 7	+ 4	12	2.37
*102894	20 50 42.19	−04 47 27.2	8.04	G	312.675 781 78	−04.790 885 79		7.59	25.94	−4.49	1.01	0.76	1.27	1.36	0.88	+24	−15	−19	+27	−20	+23	− 9	+46	−13	+14	0	−1.29
102895	20 50 42.80	−56 14 28.4	8.97	2 H	312.678 316 38	−56.241 229 93		24.41	104.41	−187.88	0.96	0.84	1.28	1.15	0.98	+11	− 6	−16	−49	+ 1	− 3	+ 6	−23	+20	−13	0	−1.15
102896	20 50 43.67	+29 48 12.1	9.24	H	312.681 941 32	+29.803 353 46		1.42	0.68	−3.06	0.68	0.81	1.24	0.86	0.93	−13	+ 0	+ 8	+26	+ 4	− 8	+ 6	+ 6	+ 8	− 4	0	0.17
102897	20 50 44.18	+55 01 25.4	7.65	H	312.684 076 85	+55.023 733 99		8.51	47.91	11.95	0.51	0.50	0.57	0.59	0.54	− 9	− 7	− 2	+ 2	+ 6	−10	+ 6	+ 3	− 5

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
102801	7.087	0.005	6.694	0.006		0.372	0.007	T	0.43	0.01	L	6.7413	0.0007	0.007	105		6.73	6.75		C			1								S
102802	10.653	0.040	9.060	0.018		1.335	0.035	T	1.30	0.04	L	9.0730	0.0022	0.021	117		9.03	9.11					1 S								
102803	9.288	0.014	8.024	0.009		1.077	0.013	T	1.04	0.01	L	8.0761	0.0091	0.054	130		7.93	8.15		U 2			1								
102804	8.574	0.010	6.784	0.005		1.624	0.005	G	2.78	0.03	C	6.5425	0.0057	0.063	114		6.40	6.61		U 2	20496+5008	I 1	1 S								S
102805	6.519	0.004	6.054	0.004		0.420	0.000	G	0.49	0.00	H	6.0999	0.0008	0.006	95		6.09	6.11		C	20496+1233	I 1	1								S
102806	8.828	0.010	8.840	0.013		−0.006	0.015	T	0.01	0.01	L	8.8527	0.0020	0.022	161		8.82	8.89		C			1								S
102807	7.640	0.008	7.157	0.006		0.455	0.009	T	0.52	0.01	L	7.2184	0.0007	0.009	110		7.20	7.23		C			1								S
102808	9.226	0.012	8.028	0.008		1.025	0.011	T	1.00	0.01	L	8.0676	0.0015	0.015	170		8.04	8.10					1								
102809	12.060	0.146	10.555	0.060		1.027	0.020	G	1.07	0.02	I	10.6606	0.0030	0.034	157		10.60	10.71		C			1 G								G
102810	11.554	0.083	9.652	0.024		1.613	0.071	T	1.94	0.22	K	9.5932	0.0024	0.021	115		9.56	9.63					1								
102811	8.740	0.012	8.375	0.012		0.346	0.016	T	0.41	0.02	L	8.4376	0.0013	0.013	107		8.41	8.46		C			1								
102812	9.849	0.030	9.202	0.027		0.593	0.030	T	0.66	0.03	L	9.3122	0.0027	0.019	84		9.28	9.35		C			1								
102813	10.483	0.031	9.220	0.018		1.076	0.028	T	1.04	0.02	L	9.2689	0.0019	0.017	133		9.24	9.30		C			1								
102814	8.637	0.012	7.522	0.008		0.961	0.011	T	0.95	0.01	L	7.5726	0.0010	0.012	109		7.55	7.59					1								S
102815	8.392	0.009	7.733	0.008		0.602	0.009	T	0.67	0.01	L	7.7956	0.0008	0.012	151		7.77	7.81					1								S
102816	10.470	0.040	9.946	0.038		0.501	0.042	T	0.57	0.04	L	9.9669	0.0027	0.026	94		9.91	10.00		C			1								
102817	13.355	0.585	10.831	0.097		1.356	0.016	G	1.58	0.03	I	10.9239	0.0068	0.057	83		10.83	11.01		U	20498−2828	I 1	1 S								G
102818	9.292	0.011	8.079	0.007		1.037	0.010	T	1.01	0.01	L	8.1297	0.0011	0.013	156		8.11	8.16		C			1								
102819	6.343	0.003	6.323	0.004		0.019	0.004	T	0.04	0.00	L	6.3371	0.0007	0.007	114		6.33	6.35		C			1								S
102820	8.532	0.012	7.971	0.011		0.531	0.015	G	0.60	0.02	H	8.0243	0.0014	0.011	81		8.01	8.04		C			1								S
102821	10.733	0.082	8.975	0.030		1.465	0.069	T	1.47	0.10	L	8.9677	0.0020	0.016	71		8.94	9.00		C			1								
102822	9.707	0.019	9.310	0.020		0.388	0.023	T	0.45	0.03	L	9.3348	0.0018	0.017	116		9.31	9.37		C			1								
102823	8.735	0.010	7.313	0.006		1.203	0.015	G	1.16	0.01	H	7.3463	0.0009	0.009	135		7.33	7.36		C			1								S
102824	9.863	0.020	8.672	0.013		1.020	0.019	T	0.99	0.01	L	8.7210	0.0016	0.015	116		8.70	8.75		C			1 G								
102825	9.619	0.011	9.284	0.012		0.323	0.018	T	0.37	0.02	L	9.3339	0.0018	0.024	242		9.28	9.38					1								
102826	10.054	0.019	9.955	0.026		0.089	0.029	T	0.10	0.03	L	9.9392	0.0037	0.036	165		9.87	10.01					1								
102827	6.253	0.004	6.324	0.004		−0.066	0.005	G	−0.04	0.01	H	6.3154	0.0013	0.012	119		6.30	6.38		U 2 C	20499+4640	I 1	1 G								S P
102828	10.225	0.018	9.102	0.012		0.967	0.017	T	0.95	0.01	L	9.1377	0.0018	0.026	231		9.10	9.19					1								
102829	10.656	0.082	9.200	0.036		1.246	0.074	T	4.04	0.19	O	8.4699	0.0709	0.997	85		7.89	10.23	204.00	P 1 B			1 V								G P
102830	10.225	0.025	8.431	0.010		1.494	0.021	T	1.52	0.03	L	8.3995	0.0016	0.017	143		8.37	8.43					1								
102831	6.157	0.005	5.004	0.004		1.004	0.003	G	0.97	0.02	A	5.0571	0.0007	0.005	73		5.05	5.07		C	20500−3347	I 1	1								S
102832	9.012	0.012	7.194	0.006		1.513	0.011	T	1.55	0.02	L	7.1554	0.0009	0.008	123		7.14	7.17					1								S
102833	7.451	0.006	6.304	0.004		0.986	0.006	T	0.97	0.01	L	6.3630	0.0007	0.006	125		6.35	6.38		C	20500+0532	I 1	1								S
102834	11.220	0.074	10.307	0.049		0.795	0.069	T	0.83	0.05	L	10.3127	0.0029	0.022	100		10.27	10.35		C			1								G
102835	9.944	0.025	8.879	0.016		0.923	0.022	T	0.92	0.02	L	8.9327	0.0026	0.020	119		8.90	8.97			20500+4521	I 1	1								
102836	8.181	0.010	7.983	0.011		0.189	0.014	T	0.21	0.02	L	8.0189	0.0014	0.014	89		7.99	8.04		C			1								S
102837	11.482	0.086	10.103	0.041		1.167	0.075	T	1.13	0.07	L	10.0978	0.0024	0.025	106		10.05	10.15					1								
102838	9.338	0.016	8.598	0.013		0.679	0.015	G	0.74	0.01	H	8.6807	0.0013	0.014	112		8.66	8.70		C			1								
102839	8.522	0.009	8.342	0.011		0.172	0.013	T	0.19	0.01	L	8.3838	0.0016	0.015	107		8.36	8.41		C			1								S
102840	8.137	0.006	7.968	0.009		0.162	0.010	T	0.18	0.01	L	7.9940	0.0014	0.019	180		7.97	8.02					1								S
102841	8.757	0.009	8.364	0.009		0.372	0.012	T	0.43	0.01	L	8.4272	0.0010	0.013	137		8.41	8.45		C			1								S
102842	10.041	0.020	9.282	0.016		0.677	0.019	T	0.74	0.02	L	9.3592	0.0030	0.032	156		9.31	9.43		U 2			1								
102843	5.312	0.002	5.087	0.002		0.198	0.002	G	0.20	0.03	C	5.1189	0.0006	0.006	116		5.11	5.13		C	20501+4404	I 1	1								S
102844	11.273	0.068	9.680	0.027		1.359	0.060	T	3.42	0.10	O	9.1696	0.0196	0.122	104		9.04	9.40		U 2 C			1 S								
102845	8.461	0.017	7.236	0.010	A	1.047	0.016	T	1.02	0.01	L	7.3307	0.0122	0.049	86	A	7.23	7.38		D	20501−2722	I 2	1 C P A								S
102846	9.400	0.019	8.990	0.020	*	0.401	0.023	T	0.47	0.03	L *	9.0167	0.0024	0.013	74	*	8.99	9.04		C	20501−3534	H 1	2 C S B	AB	214	0.142	0.015		0.51	0.58	
102847	7.109	0.005	7.167	0.006		−0.048	0.007	T	−0.03	0.01	L	7.1704	0.0010	0.010	160		7.15	7.19					1								S
102848	9.773	0.027	9.166	0.026	B	0.566	0.032	T	0.64	0.03	L	9.6606	0.0811			B				D	20501−2722	I 2	1 C I A								
102849	10.571	0.078	10.437	0.115		0.405	0.107	G	0.47	0.12	R	10.2902	0.0031	0.030	72		10.24	10.34		C			1								
102850	8.574	0.010	7.346	0.007		1.049	0.010	T	1.02	0.01	L	7.3872	0.0011	0.009	112		7.37	7.40		C			1								S
102851	9.727	0.018	8.447	0.011		1.068	0.003	G	1.03	0.00	H	8.4662	0.0015	0.018	168		8.44	8.50					1 X S								
102852	8.427	0.011	8.481	0.014		−0.034	0.003	G	−0.01	0.00	H	8.4748	0.0014	0.012	101		8.45	8.50		C			1								
102853	10.160	0.025	9.291	0.019		0.580	0.020	G	0.61	0.02	A	9.2903	0.0456	0.284	136		9.01	9.66	6.17	P 1 A			1 S								
102854	10.541	0.029	9.011	0.014		1.285	0.025	T	1.24	0.03	L	9.0063	0.0019	0.019	142		8.98	9.04		C			1								
102855	8.972	0.010	8.460	0.010		0.508	0.015	G	0.58	0.02	H	8.5156	0.0017	0.022	169		8.48	8.55					1								S
102856	9.475	0.020	8.975	0.020		0.453	0.015	G	0.52	0.02	H	9.0662	0.0016	0.013	82		9.04	9.10		C			1								
102857	8.754	0.011	8.674	0.014		0.079	0.017	T	0.09	0.02	L	8.7057	0.0015	0.014	120		8.68	8.73		C			1								
102858	7.019	0.005	7.100	0.006		−0.069	0.007	T	−0.05	0.01	L	7.1044	0.0008	0.008	122		7.09	7.12		C			1								S
102859	9.877	0.022	7.949	0.009		1.635	0.020	T	1.90	0.06	O	7.8493	0.0035	0.025	108		7.81	7.88		U 2			1								S
102860	9.875	0.013	8.019	0.006		1.543	0.011	T	1.60	0.02	L	7.9615	0.0012	0.018	292		7.93	8.00		U			1								S
102861	10.528	0.042	9.856	0.035		0.611	0.041	T	0.68	0.04	L	9.8847	0.0035	0.023	81		9.83	9.92		C			1								
102862	9.749	0.019	9.015	0.016		0.628	0.008	G	0.70	0.01	H	9.0783	0.0023	0.018	95		9.05	9.13		C			1								
102863	8.000	0.007	7.943	0.008		0.057	0.010	T	0.07	0.01	L	7.9674	0.0013	0.014	195		7.94	7.99					1								S
102864	9.985	0.027	9.404	0.024		0.591	0.015	G	0.66	0.01	H	9.4264	0.0027	0.019	109		9.39	9.45					1								
102865						0.900	0.007	G	0.94	0.01	I	11.7271	0.0077	0.066	80		11.58	11.83					1								G
102866	11.384	0.064	9.237	0.017		1.815	0.055	T	2.31	0.12	O	9.0888	0.0129	0.118	151		8.93	9.37		U 2 C			1								P
102867	10.152	0.022	9.115	0.016		0.948	0.015	G	0.94	0.01	I	9.1632	0.0016	0.016	127		9.13	9.18					1								
102868	10.102	0.023	9.384	0.020		0.646	0.023	T	0.71	0.02	L	9.4391	0.0020	0.020	149		9.41	9.47					1								
102869	7.424	0.006	6.902	0.005		0.490	0.007	T	0.56	0.01	L	6.9507	0.0008	0.007	112		6.94	6.96		C			1								S
102870	11.206	0.060	9.836	0.028		1.160	0.052	T	1.12	0.05	L	9.8258	0.0034	0.035	116		9.77	9.88		R			1								G
102871	8.887	0.009	8.673	0.010		0.204	0.013	T	0.22	0.01	L	8.7170	0.0011	0.016	170		8.69	8.75					1								
102872	9.095	0.014	8.448	0.012		0.593	0.014	T	0.66	0.01	L	8.5194	0.0017	0.012	84		8.49	8.54					1								S
102873	10.228	0.031	8.511	0.014		1.433	0.027	T	1.42	0.04	L	8.4487	0.0022	0.015	93		8.43	8.49		C			1								
102874	8.378	0.010	7.829	0.009		0.514	0.012	T	0.59	0.01	L	7.8821	0.0013	0.013	129		7.86	7.91		C			1								S
102875	9.352	0.025	8.127	0.016		1.047	0.023	T	1.02	0.02	L	8.1832	0.0014	0.012	55		8.16	8.21		C			1								
102876	7.163	0.005	6.861	0.005	A	0.265	0.015	G	0.29	0.01	L *	6.8807	0.0008	0.008	152	*	6.87	6.89		D	20506+3055	I 1	2 C A	AB	306	1.537	0.012		2.94	0.05	S
102877	8.445	0.013	8.034	0.014	*	0.402	0.015	G	0.47	0.02	H *	8.1205	0.0019	0.019	167	*	8.09	8.15		D	20506+3025	I 1	2 C A	AB	233	3.684	0.009		2.05	0.04	S
102878	6.672	0.004	6.622	0.004		0.036	0.003	G	0.05	0.00	H	6.6450	0.0006	0.007	137		6.63	6.66		C			1 G								S
102879	10.680	0.049	10.606	0.077		0.073	0.085	T	0.08	0.09	L	10.5413	0.0043	0.032	94		10.48	10.60		C			1								G
102880	7.819	0.007	7.623	0.007		0.187	0.009	T	0.21	0.01	L	7.6700	0.0015	0.014	141		7.65	7.70					1								S
102881	10.886	0.042	9.754	0.025		0.966	0.039	T	0.95	0.03	L	9.7513	0.0027	0.027	172		9.70	9.79					1 S								G
102882	11.651	0.103	10.017	0.037		1.367	0.086	T	1.34	0.10	L	10.0401	0.0042	0.027	84		10.00	10.09		C			1								
102883	8.807	0.010	8.820	0.013		−0.007	0.015	T	0.01	0.01	L	8.8531	0.0015	0.017	169		8.82	8.89					1								
102884	10.138	0.034	9.112	0.023	*	0.883	0.032	T	0.89	0.02	L *	9.1288	0.0018	0.015	89	*	9.10	9.15		D	20507−2759	H 1	2 C A	AB	23	0.205	0.010		0.85	0.22	
102885	7.185	0.005	7.299	0.006		−0.099	0.007	T	−0.08	0.01	L	7.2942	0.0009	0.010	121		7.27	7.31		C			1								S
102886	11.386	0.077	9.379	0.023		1.700	0.066	T	1.93	0.15	O	9.2784	0.0024	0.022	107		9.24	9.32					1								
102887	10.381	0.033	9.063	0.019		1.119	0.030	T	1.08	0.03	L	9.1064	0.0014	0.018	90		9.07	9.14		C			1								
102888	10.646	0.040	9.020	0.018		1.361	0.035	T	1.33	0.04	L	9.0163	0.0021	0.018	121		8.98	9.05		C			1								
102889	9.549	0.019	8.053	0.010		1.259	0.017	T	1.22	0.02	L	8.0677	0.0017	0.013	102		8.04	8.09		C			1								
102890	9.887	0.026	8.980	0.020	A	0.805	0.025	T	0.83	0.02	L	9.0353	0.0124	0.041	80	A	8.99	9.14		U	20507−0929	H 1	2 C A	AB	114	15.084	0.009		0.83	0.03	S
102891	7.240	0.009	5.992	0.006		1.075	0.001	G	1.04	0.00	H	6.0326	0.0010	0.008	57		6.02	6.04		C			1								S
102892	8.961	0.015	8.346	0.013	*	0.556	0.015	G	0.63	0.01	H *	8.4046	0.0014	0.012	79	*	8.38	8.42		D	20507−3116	I 1	2 C S A	AB	108	0.193	0.022		1.44	0.33	S
102893	8.773	0.019	8.550	0.022	A	0.218	0.015	G	0.24	0.02	H	8.5948	0.0095	0.034	134	A	8.53	8.64		D	20508+8552	I 2	1 C P A								S
102894	8.692	0.014	8.110	0.013		0.569	0.015	G	0.64	0.01	H	8.1548	0.0013	0.010	79		8.14	8.18		C			1								S
102895	9.969	0.020	9.040	0.015		0.814	0.007	G	0.85	0.01	H	9.1123	0.0041	0.036	122		9.05	9.17		U 2			1								
102896	9.303	0.012	9.223	0.016		0.072	0.018	T	0.08	0.02	L	9.2701	0.0015	0.022	173		9.23	9.31					1								
102897	7.877	0.007	7.671	0.008		0.197	0.010	T	0.22	0.01	L	7.7123	0.0012	0.011	121		7.70	7.74		C			1								S
102898	10.090	0.025	9.532	0.023		0.527	0.025	T	0.60	0.03	L	9.6020	0.0022	0.022	120		9.56	9.64		C			1								
102899	9.713	0.017	9.111	0.015		0.561	0.020	T	0.63	0.02	L	9.1927	0.0019	0.021	156		9.16	9.23					1								
102900	9.707	0.018	8.153	0.010		1.304	0.016	T	1.26	0.02	L	8.1673	0.0016	0.013	114		8.15	8.19		C			1								

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
102901	20 50 47.15	−32 03 16.0	6.42	H	312.696 472 74	−32.054 450 23		4.69	−8.32	−63.27	0.85	0.55	0.95	1.00	0.82	+19	−22	−14	−22	− 1	+26	+ 3	+25	−20	+20	0	0.65
102902 H	20 50 48.34	+22 32 17.9	10.09	H	312.701 437 04	+22.538 301 86	*	1.67	−13.39	−20.11	0.92	0.91	1.52	1.32	0.97	+19	− 1	+ 1	+12	+16	+ 9	+13	+32	− 4	+26	0	0.17
102903	20 50 48.81	−14 12 01.4	7.93	H	312.703 390 78	−14.200 377 96		4.48	23.95	−2.26	1.16	0.90	1.40	1.56	1.60	+37	+ 3	+14	−22	−33	+15	−37	−33	−35	+46	0	0.06
102904	20 50 49.38	−03 21 19.9	8.69	H	312.705 743 40	−03.355 528 45		0.65	−6.79	−4.39	1.36	0.82	1.38	2.06	1.10	−18	+ 5	− 6	+46	−33	+23	−31	+58	− 9	−19	2	−1.31
102905 H	20 50 50.52	−70 59 02.7	8.19	H	312.710 510 65	−70.984 094 03	A	5.39	18.79	−15.84	0.98	0.99	1.29	0.95	1.09	−16	+ 2	− 3	− 1	+ 0	− 4	+ 0	− 6	− 1	−30	1	−0.63
102906	20 50 51.87	−61 25 17.7	9.09	H	312.716 123 41	−61.421 574 03		7.97	108.56	2.39	0.64	0.81	1.26	0.67	0.92	+14	− 3	+ 6	+55	+ 4	+ 0	− 4	+21	+17	− 3	1	1.46
102907	20 50 52.76	+35 55 19.5	7.96	H	312.719 823 74	+35.922 088 30		4.34	−3.75	−11.64	0.46	0.52	0.71	0.50	0.56	−16	+ 0	− 4	+ 3	+ 2	−22	+ 2	−16	+24	−16	0	−1.41
102908	20 50 54.14	−21 18 43.8	7.14	H	312.725 591 33	−21.312 161 81		14.06	8.66	−76.94	0.81	0.48	0.86	0.95	0.79	+15	−25	− 8	−23	− 3	+24	− 6	+16	− 7	+27	2	4.10
102909	20 50 55.23	+33 45 34.3	8.91	H	312.730 119 75	+33.759 532 53		2.38	4.35	−2.52	0.53	0.63	0.91	0.57	0.65	−18	+ 0	− 2	+11	−11	−19	−12	− 1	+21	−29	0	−2.39
102910	20 50 55.98	+34 45 14.4	6.64	H	312.733 249 94	+34.754 000 92		5.59	28.34	8.04	0.45	0.46	0.65	0.51	0.47	−31	− 2	−11	−18	− 7	+11	− 4	−10	+14	−39	0	−1.76
*102911	20 50 57.02	−42 17 40.0	10.03	G	312.737 598 44	−42.294 445 39		3.32	62.20	−52.98	1.43	1.03	1.68	1.92	1.33	+30	−12	− 4	− 9	+ 5	− 6	+ 4	− 3	− 4	+43	0	−0.48
*102912	20 50 56.99	+48 01 49.5	6.98	H	312.737 467 43	+48.030 409 43		4.81	22.72	33.94	0.46	0.45	0.55	0.52	0.51	−15	+ 5	+ 5	+ 5	+ 4	− 8	+ 5	−16	+ 8	−15	0	0.36
102913	20 50 57.16	−17 17 28.2	8.52	H	312.738 150 04	−17.291 180 47		0.22	−16.44	2.69	1.23	0.82	1.37	1.85	1.46	+ 9	− 3	− 5	−13	−25	+40	−26	−26	−13	+21	0	1.38
102914	20 50 57.56	−01 50 09.0	9.79	G	312.739 851 02	−01.835 845 25		25.07	−147.21	−446.20	2.08	1.46	1.87	2.00	1.62	+31	−39	−12	+22	+20	+15	+24	+66	−14	+30	4	0.58
102915	20 50 59.12	+85 52 04.7	11.30	H	312.746 337 07	+85.867 962 93	B	−5.39	10.65	16.84	26.29	25.33	17.27	23.75	21.25	+ 6	−10	− 7	+ 5	− 9	+ 8	− 5	− 6	− 5	+ 3	12	2.37
102916	20 51 00.76	−37 54 47.8	5.52	1 G	312.753 179 95	−37.913 289 91		5.20	−6.71	−17.22	0.58	0.42	0.74	0.67	0.54	+39	−24	−14	−16	+14	+16	+11	+ 3	+ 8	+66	2	1.37
102917	20 51 00.96	+18 03 58.1	8.62	H	312.753 990 55	+18.066 145 35		2.36	15.59	7.00	0.93	0.59	1.10	0.98	0.62	+ 7	−13	− 3	+55	+ 3	+10	+ 6	+46	+ 6	+28	1	−0.82
102918	20 51 01.68	+46 02 24.5	9.22	G	312.757 014 79	+46.040 126 11		1.63	7.88	3.60	0.84	0.78	1.03	1.18	1.13	− 6	+ 9	− 1	−13	− 1	−16	− 5	− 2	−10	+16	0	−1.50
102919	20 51 03.86	+50 56 58.4	9.32	G	312.766 073 68	+50.949 557 81		5.09	−4.05	−33.65	0.84	0.80	0.97	1.14	0.87	− 5	+ 6	+17	+21	−11	+ 5	−15	−13	+ 5	−24	3	1.61
102920	20 51 04.12	+52 23 44.6	7.08	H	312.767 172 20	+52.395 713 79		8.66	−42.18	6.29	0.50	0.49	0.59	0.60	0.58	− 9	− 7	+ 4	+ 1	+ 2	− 3	+ 0	− 8	+14	−19	0	1.44
102921 H	20 51 05.41	+51 25 01.7	6.91	G	312.772 546 24	+51.417 143 83	A	8.27	39.50	42.54	0.82	0.86	0.90	0.94	0.87	+ 1	− 9	+10	+14	+ 8	−15	+ 6	−17	−10	− 9	1	−0.29
102922	20 51 05.77	−16 24 52.6	8.05	H	312.774 028 13	−16.414 602 99		1.74	−14.07	−4.28	1.20	1.18	1.17	1.56	1.30	+43	−25	−23	−36	−18	+26	−11	−22	− 3	+21	0	−0.81
102923	20 51 06.54	+07 01 40.4	9.82	G	312.777 244 22	+07.027 883 42		20.71	238.64	−361.67	1.23	0.85	1.63	1.61	0.88	+21	− 4	+17	+10	+28	+16	+20	+25	+15	+38	0	1.04
102924	20 51 09.59	−78 07 55.0	8.21	G	312.789 945 29	−78.131 944 76		13.46	−45.30	36.58	0.60	0.63	0.80	0.69	0.71	− 8	−16	− 5	+ 4	−14	− 5	−13	+ 1	− 1	−12	0	0.49
102925	20 51 09.78	−44 51 07.9	9.77	H	312.790 745 79	−44.852 191 75		3.34	7.50	−10.63	1.21	0.87	1.45	1.39	1.15	+33	−29	−21	− 7	+ 2	+20	+ 9	+ 6	− 8	+35	0	0.11
102926	20 51 09.99	+55 29 19.5	8.31	2 H	312.791 620 43	+55.488 756 93		2.64	−1.99	−4.77	0.67	0.55	0.67	0.80	0.57	− 5	−13	− 1	+ 2	+11	− 4	+11	+14	− 6	− 5	0	−1.54
102927	20 51 11.13	−01 06 09.7	9.46	H	312.796 357 35	−01.102 697 08		−0.19	−17.43	1.07	1.19	0.89	1.55	1.49	1.29	+25	− 2	−15	+10	+31	+18	+24	+71	−17	+38	0	1.82
102928	20 51 11.37	−25 34 57.2	7.59	H	312.797 393 19	−25.582 550 32		2.98	1.84	6.07	1.25	0.57	1.12	1.73	1.20	+23	+ 7	+17	−58	+ 5	+ 3	−27	+38	−15	+55	0	0.96
102929	20 51 12.46	+03 29 25.6	7.66	H	312.801 899 47	+03.490 432 97		9.39	−8.53	63.13	0.74	0.44	0.90	0.92	0.50	+18	− 9	+ 7	+ 1	+34	+31	+24	+33	+12	+44	0	−0.66
102930	20 51 12.61	−21 59 31.4	9.98	H	312.802 523 49	−21.992 065 98		4.45	6.09	−6.43	1.76	0.98	2.01	2.09	1.83	+22	−12	−33	−41	−11	+15	−14	+19	−39	+35	0	−1.54
102931	20 51 13.65	+46 39 05.7	9.94	G	312.806 860 39	+46.651 580 85		2.05	−5.29	−5.42	0.92	0.92	1.14	1.15	1.18	− 2	− 1	+ 1	−11	− 3	− 8	− 6	+ 6	+ 5	+11	0	0.52
102932	20 51 14.19	−38 16 04.1	8.04	G	312.809 143 66	−38.267 800 83		6.52	16.29	−24.46	0.79	0.59	1.04	0.93	0.71	+37	− 6	−20	−26	+ 8	−14	+ 1	−10	− 3	+65	0	−0.48
102933	20 51 15.71	+72 56 52.8	8.32	G	312.815 476 49	+72.948 001 53		8.03	31.66	13.37	0.62	0.66	0.71	0.72	0.62	− 4	+ 4	+31	+12	+ 1	− 2	+ 0	−14	+ 6	− 6	4	2.54
102934	20 51 18.68	−42 04 13.6	9.86	G	312.827 843 80	−42.070 432 28		3.42	11.16	9.16	1.28	0.92	1.59	1.72	1.18	+32	−26	−14	− 4	+ 1	− 1	+ 1	− 5	− 1	+37	0	1.86
102935	20 51 19.03	−13 55 27.4	7.60	2 G	312.829 309 79	−13.924 278 47		5.50	19.69	−58.72	1.02	0.75	1.13	1.33	1.22	+36	−10	+ 0	−30	−23	+ 8	−25	−17	−20	+48	0	1.30
102936	20 51 19.67	−04 17 11.5	8.39	H	312.831 939 71	−04.286 540 54		4.62	7.27	−13.68	0.98	0.82	1.33	1.56	0.93	+21	+ 1	−36	+19	−36	+40	−17	+37	−21	+10	0	0.31
102937	20 51 20.22	−57 27 44.9	9.07	H	312.834 270 28	−57.462 466 51		4.37	15.42	−10.86	0.88	0.87	1.27	1.14	1.03	+20	− 3	−22	−12	− 2	+ 0	− 2	−13	+11	− 6	2	0.05
102938	20 51 20.73	+16 54 44.9	9.12	H	312.836 365 54	+16.912 458 84		3.33	−7.56	−13.67	0.96	0.66	1.30	1.26	0.69	+15	+ 4	− 1	+26	+ 9	+14	+ 9	+26	− 6	+33	0	1.66
102939	20 51 21.20	−07 56 42.5	8.89	H	312.838 319 01	−07.945 128 69		1.04	−5.21	−0.80	1.19	0.87	1.39	1.78	0.97	+11	−25	−41	+23	−36	+25	−22	+34	− 3	−12	0	0.11
102940	20 51 22.64	−26 46 47.3	9.18	H	312.844 335 36	−26.779 795 96		2.96	20.81	2.93	1.16	0.78	1.38	1.76	1.42	+12	+ 3	− 3	+16	+ 4	+41	− 4	+46	−11	+24	2	1.37
102941	20 51 23.64	−50 38 58.1	8.35	G	312.848 509 74	−50.649 473 96		7.94	−10.71	27.66	0.96	0.73	1.14	1.21	0.73	+13	+ 0	−20	−17	−10	−13	−14	−39	+22	−12	0	1.83
102942	20 51 24.06	+39 39 10.5	8.25	H	312.850 243 70	+39.652 906 66		2.69	−15.88	−7.87	0.60	0.67	0.94	0.63	0.74	−10	−17	+25	+ 3	+ 1	−22	+ 8	− 4	− 3	+ 7	0	−1.22
102943	20 51 24.12	+57 03 43.2	9.32	2 H	312.850 503 46	+57.062 004 54		1.57	−5.36	−5.73	0.76	0.71	0.82	0.83	0.74	− 4	−14	+ 7	+13	+ 7	− 7	+ 7	− 9	+ 9	+ 3	0	−2.26
102944	20 51 24.49	+01 19 53.8	8.97	H	312.852 030 65	+01.331 612 46		2.78	9.84	−0.49	1.03	0.61	1.21	1.48	0.75	+16	−18	+13	− 3	+41	+26	+19	+41	+18	+55	0	−0.33
102945 H	20 51 25.69	−05 37 35.9	5.99	G	312.857 050 76	−05.626 635 80	A	16.97	95.77	1.25	1.17	0.88	1.26	1.31	0.72	+38	−29	−50	+15	−26	+25	−11	+32	−17	+ 7	3	0.46
102946	20 51 25.77	+27 25 43.5	7.98	H	312.857 391 28	+27.428 760 78		6.55	4.85	−10.04	0.51	0.55	0.82	0.56	0.58	+14	+ 5	+ 6	+ 8	+16	−15	+16	+18	+ 2	+23	0	−1.25
102947	20 51 27.75	+39 23 32.5	8.03	G	312.865 627 92	+39.392 370 69		4.95	1.04	−17.37	0.54	0.62	0.80	0.57	0.68	−15	−11	+21	− 2	+ 3	−16	+ 9	−17	−11	+ 0	0	−0.22
102948	20 51 27.86	−21 55 17.1	9.47	H	312.866 082 56	−21.921 402 78		0.58	−7.01	−4.02	1.41	0.91	1.56	1.88	1.59	+20	− 2	− 1	−16	−11	−17	−14	+ 0	−27	+33	0	−0.24
102949	20 51 28.24	+28 15 01.9	5.66	3 H	312.867 647 39	+28.250 518 68		1.95	3.92	−5.48	0.41	0.42	0.60	0.43	0.45	+ 9	+ 9	− 2	+25	+21	−14	+23	+16	+ 3	+19	0	−0.24
102950	20 51 30.05	−51 36 29.4	5.06	H	312.875 208 05	−51.608 166 92		5.75	−0.24	−4.95	0.74	0.45	0.79	1.00	0.46	+ 8	− 1	−27	−12	−12	+13	− 9	−21	+ 4	−23	0	−0.91
102951	20 51 30.70	+47 42 27.4	7.36	H	312.877 917 35	+47.707 618 37		6.98	0.60	23.75	0.51	0.50	0.60	0.56	0.58	−12	+ 7	+ 1	+ 0	+ 9	+ 3	+10	−11	+ 8	−12	0	0.03
102952	20 51 30.82	+56 21 56.8	8.09	H	312.878 419 23	+56.365 787 76		6.64	50.30	−17.30	0.58	0.55	0.63	0.58	0.58	− 4	−12	+ 1	+16	+11	−14	+15	+ 3	− 4	+15	1	−0.95
102953	20 51 30.94	+37 59 22.2	7.29	2 H	312.878 920 81	+37.989 501 85		2.01	−3.86	−3.02	0.44	0.52	0.66	0.46	0.54	−16	− 6	+11	+ 5	+ 5	−12	+ 8	−10	+13	− 3	1	0.71
102954	20 51 33.61	−27 14 40.9	6.74	H	312.890 048 76	−27.244 706 19		8.12	−1.61	−23.56	0.85	0.61	0.98	1.05	0.97	+40	−31	−27	+14	+14	+28	+24	+64	−20	+32	0	0.84
*102955	20 51 34.11	−13 45 00.0	8.38	H	312.892 119 48	−13.749 991 19		0.93	19.71	−4.21	1.21	0.94	1.43	1.58	1.33	+38	−16	−32	−39	−30	+30	−21	−10	−22	+33	0	−0.31
*102956	20 51 34.15	+49 39 16.0	6.99	H	312.892 275 79	+49.654 437 42		3.53	−18.05	−49.65	0.55	0.49	0.60	0.69	0.55	− 3	−10	+ 2	−25	− 2	+16	− 2	−26	+ 6	−11	0	0.49
*102957 H	20 51 33.88	−56 23 17.2	8.62	H	312.891 171 12	−56.388 105 98	B	1.27	35.01	−23.81	3.71	3.25	3.08	2.87	1.95	+25	− 8	−19	−43	− 9	+ 2	− 2	−28	+12	−10	7	2.40
102958	20 51 35.96	+32 33 43.5	8.91	H	312.899 815 64	+32.562 077 83		4.35	12.94	8.72	0.51	0.64	1.02	0.60	0.68	−27	− 6	+14	+ 4	− 6	+ 5	− 6	+ 3	+ 5	−25	1	0.55
102959	20 51 36.22	−27 59 42.9	6.84	H	312.900 929 47	−27.995 262 94		10.22	41.48	2.33	0.78	0.56	0.91	0.99	0.88	+29	−29	− 8	+ 9	+13	+35	+12	+50	+ 1	+35	0	0.71
102960	20 51 36.84	−34 51 39.8	9.24	H	312.903 508 32	−34.861 048 26		1.17	13.57	−17.53	1.14	0.75	1.31	1.41	1.04	+28	−34	−22	+15	+ 4	+10	+12	+22	−19	+25	0	0.81
102961	20 51 37.47	−73 41 30.9	8.05	H	312.906 135 87	−73.691 905 32		14.28	−46.52	−59.30	0.59	0.63	0.86	0.78	0.68	− 8	−14	−22	+20	+11	− 9	+ 6	+22	+ 1	−13	0	0.09
102962 H	20 51 38.40	−62 25 45.2	5.67	G	312.910 013 11	−62.429 215 13	A	13.67	83.04	−49.38	0.92	0.96	1.16	0.86	0.92	+ 6	−18	− 5	+29	+ 8	+ 0	+ 4	+19	− 6	−21	3	2.36
102963	20 51 38.88	−29 26 30.2	7.12	H	312.912 013 31	−29.441 727 73		16.21	−109.19	−104.21	1.04	0.60	1.02	1.42	0.98	+ 7	−21	− 7	+40	−21	+13	−25	+45	+ 0	− 5	0	0.79
102964	20 51 39.30	−45 27 21.9	9.73	G	312.913 765 38	−45.456 083 60		26.17	−166.48	40.75	1.28	0.93	1.46	1.58	1.16	+27	−20	−14	− 4	+10	+17	+11	+ 0	+ 5	+33	0	0.20
102965 H	20 51 40.72	−61 24 55.6	8.03	H	312.919 668 23	−61.415 442 89	A	5.93	−43.92	21.16	1.10	1.25	1.68	1.02	1.41	+24	−19	− 4	+35	+14	−17	+ 9	+27	+14	+ 7	1	0.17
102966	20 51 42.02	+01 08 48.6	9.11	H	312.925 067 78	+01.146 832 33		3.02	3.16	2.33	1.04	0.58	1.23	1.24	0.71	+17	+ 0	+ 8	− 2	+35	+36	+24	+34	+18	+53	0	−1.97
102967	20 51 43.14	−66 59 51.0	9.09	H	312.929 748 65	−66.997 495 63		2.55	6.45	−21.35	0.65	0.89	1.38	0.66	1.07	−42	−10	− 2	−15	−11	− 2	−10	+32	+16	−47	2	0.11
102968	20 51 43.15	+12 02 08.2	8.06	H	312.929 790 63	+12.035 618 41		12.11	16.77	−27.50	0.74	0.54	0.98	0.90	0.61	+12	−24	+ 2	+ 8	+15	+16	+10	+27	+ 8	+27	0	−0.12
102969	20 51 43.44	+73 04 49.1	8.31	H	312.930 994 04	+73.080 294 07		6.29	16.01	15.15	0.58	0.61	0.68	0.63	0.60	− 5	− 3	+28	+12	+ 0	− 2	+ 0	− 7	+16	− 5	0	1.60
102970	20 51 44.05	+74 46 44.1	7.81	H	312.933 541 82	+74.778 928 56		33.80	402.83	575.67	0.62	0.61	0.68	0.68	0.61	+11	− 6	+15	+23	+ 0	−10	− 1	−15	+20	+ 7	1	0.09
102971	20 51 44.55	+49 41 50.0	8.05	H	312.935 640 09	+49.697 208 94		2.08	−10.66	−25.75	0.68	0.60	0.75	0.85	0.67	− 3	− 9	+ 3	−21	− 1	+17	− 2	−23	+ 8	− 3	1	0.98
102972	20 51 44.59	+13 33 40.7	8.84	H	312.935 779 38	+13.561 305 06		9.41	18.51	42.56	0.84	0.64	1.13	1.08	0.69	+27	−18	+ 3	+10	+26	+11	+20	+37	+ 5	+37	0	−1.54
102973	20 51 45.96	+20 12 00.9	8.43	H	312.941 496 40	+20.200 257 95		2.38	11.12	5.78	0.86	0.65	1.13	0.96	0.67	+16	−18	+ 2	+25	+24	+ 2	+20	+44	+ 1	+28	0	−0.85
102974	20 51 46.84	+09 39 57.4	10.15	H	312.945 166 41	+09.665 953 91		5.00	4.57	16.90	1.40	0.86	1.73	1.86	0.93	+16	−11	+ 7	+ 1	+30	+23	+19	+25	+20	+38	0	1.70
102975	20 51 47.29	−10 19 02.1	7.49	H	312.947 061 34	−10.317 256 40		3.64	0.25	−1.67	0.98	0.70	1.16	1.33	0.92	+20	−24	−14	+16	−24	+25	−23	+44	+ 2	+29	2	2.43
102976	20 51 47.53	+69 05 50.3	13.21	3 H	312.948 030 74	+69.097 319 17		−0.12	−2.42	14.27	4.43	4.66	5.22	6.14	6.36	+ 4	−15	−23	+ 7	+ 5	−19	− 1	−11	+21	+15	8	2.89
102977	20 51 48.32	+13 55 07.9	7.58	H	312.951 328 95	+13.918 868 73		0.72	−1.72	−2.70	0.72	0.52	0.91	0.88	0.56	+15	− 6	+ 0	− 6	+28	+12	+20	+37	+ 3	+31	0	−0.92
102978	20 51 49.30	−26 55 08.9	4.12	1 H	312.955 400 84	−26.919 126 42		5.19	−7.97	−2.54	0.74	0.50	0.95	1.05	0.83	+19	− 3	+ 1	+10	+14	+54	+ 6	+52	+ 0	+31	0	2.65
102979 H	20 51 49.68	−34 33 39.8	9.65	H	312.956 984 64	−34.561 068 03	A	3.68	0.46	−4.57	3.46	2.39	3.28	3.86	2.56	+30	−25	−25	− 7	+ 0	− 7	+ 1	+ 1	− 7	+13	1	0.04
102980	20 51 49.83	+23 19 53.2	7.15	2 H	312.957 626 87	+23.331 439 71		1.93	16.58	2.12	0.59	0.52	0.88	0.62	0.55	+11	+ 2	+ 1	+28	+16	− 9	+16	+33	− 6	+23	0	0.34
102981	20 51 49.85	+21 52 07.3	8.21	G	312.957 719 86	+21.868 700 61		10.29	20.32	−13.59	0.65	0.56	0.97	0.85	0.60	+13	−17	+ 3	+16	+12	+ 8	+ 9	+39	− 1	+23	0	−1.58
102982	20 51 50.20	+74 38 20.9	7.26	H	312.959 184 82	+74.639 125 56		8.57	4.63	−17.64	0.53	0.51	0.60	0.55	0.52	+ 3	− 7	+13	+ 5	+ 3	− 4	+ 1	− 9	+26	− 2	1	0.32
102983	20 51 50.98	+56 50 04.7	8.63	H	312.962 430 11	+56.834 638 11		1.13	−1.81	−4.89	0.64	0.59	0.69	0.69	0.65	− 7	−16	− 1	+20	+ 7	−20	+ 9	+ 1	+ 1	+ 5	0	−1.89
102984	20 51 54.58	−78 52 23.7	9.10	2 H	312.977 403 78	−78.873 260 09		0.96	−1.01	2.20	0.75	0.80	0.98	0.86	0.91	− 1	−12	− 9	+16	− 9	+ 5	−12	− 4	+10	−17	0	0.35
102985	20 51 55.83	+33 16 41.6	9.00	H	312.982 617 28	+33.278 230 96		9.84	15.81	12.06	0.60	0.70	1.09	0.64	0.73	−22	+ 9	+ 8	+ 7	−12	−14	−10	+ 8	+16	−30	1	1.87
102986	20 51 55.96	+08 46 21.9	6.83	H	312.983 147 14	+08.772 737 12		4.02	12.85	−10.82	0.77	0.42	0.92	1.04	0.45	+11	−28	+ 0	+20	+21	+13	+16	+22	+ 6	+31	3	1.30
102987	20 51 57.35	+46 44 05.2	7.53	H	312.988 946 48	+46.734 778 37		3.47	4.07	1.81	0.51	0.55	0.65	0.65	0.78	+ 1	− 7	+ 1	− 3	− 9	+ 0	−10	− 6	− 2	+14	0	−1.22
102988	20 51 58.54	+62 11 16.2	10.23	H	312.993 931 09	+62.187 839 91		14.67	71.76	115.13	1.02	1.00	1.14	0.96	1.05	−10	− 8	+10	−25	+18	+14	+21	−29	+ 0	+19	0	0.12
*102989	20 51 58.76	−33 10 40.7	6.06	H	312.994 818 27	−33.177 960 29		4.93	7.09	−5.62	0.72	0.50	0.83	0.87	0.76	+25	−11	− 9	−15	−11	+18	−11	+10	−24	+26	0	1.86
*102990 H	20 51 58.63	+43 45 28.7	7.91	H	312.994 309 43	+43.757 981 34	A	0.33	5.46	1.17	1.99	2.11	2.16	1.83	1.74	+ 5	− 2	+20	− 3	+ 4	− 4	+ 2	− 7	+14	+ 0	6	1.25
102991	20 51 59.86	−09 23 59.6	8.94	H	312.999 405 86	−09.399 881 38		2.80	6.63	−10.05	1.23	0.95	1.52	1.62	1.18	+54	−46	−47	+ 9	− 2	+ 0	+ 9	+46	−25	+47	0	2.31
102992	20 52 00.07	+78 12 21.7	8.13	H	313.000 298 92	+78.206 023 29		4.18	−1.04	−14.44	0.55	0.54	0.59	0.62	0.57	− 7	− 5	+ 1	+ 4	+14	+ 0	+13	−22	+13	− 4	0	−0.15
102993	20 52 00.39	+32 50 56.1	6.42	H	313.001 623 15	+32.848 915 54		1.67	0.24	−8.66	0.34	0.40	0.60	0.38	0.44	−27	+ 8	+ 3	− 4	− 7	− 7	− 5	− 7	+17	−29	0	1.39
102994	20 52 00.71	−11 26 22.2	7.09	H	313.002 973 62	−11.439 490 13		5.05	68.02	−18.65	0.89	0.64	1.01	1.16	0.91	+46	−15	−10	−21	−30	+15	−34	+11	−11	+54	0	1.03
102995	20 52 01.47	−05 55 58.9	8.29	H	313.006 113 75	−05.933 016 40		3.94	4.82	−7.05	0.95	0.78	1.33	1.46	0.80	+28	−27	−52	+ 2	−39	+48	− 8	+42	−13	+ 2	0	2.65
102996	20 52 01.83	−02 15 40.7	9.01	H	313.007 622 06	−02.261 319 43		4.31	8.33	−16.09	1.16	1.03	1.41	1.64	1.25	+45	−19	−12	+18	+ 9	+11	+16	+53	− 1	+37	0	1.08
102997	20 52 03.14	+07 34 56.9	8.03	H	313.013 074 61	+07.582 475 11		8.89	34.79	−13.39	0.83	0.50	1.03	1.04	0.54	+12	− 4	+ 6	−10	+27	+28	+17	+30	+11	+34	0	0.27
102998	20 52 03.46	−22 55 41.0	9.77	H	313.014 424 71	−22.928

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55 56-7	58-61	62	63	64	65	66	67	68-70
102901	8.394	0.013	6.592	0.006		1.513	0.003	G	1.57	0.03	L	6.5428	0.0010	0.009	86		6.53	6.56		C		1							S
102902	12.112	0.126	10.264	0.039	*	0.747	0.126	G	0.79	0.09	R *	10.2395	0.0031	0.031	145	*	10.18	10.27			20508+2232 H 1	2 C S C	AB	309	0.174	0.091	1.82	1.62	G
102903	9.165	0.021	8.052	0.014		0.959	0.020	T	0.95	0.01	L	8.0913	0.0021	0.012	47		8.07	8.11		C		1							
102904	10.341	0.039	8.848	0.020		1.256	0.034	T	1.21	0.04	L	8.8502	0.0023	0.018	92		8.82	8.89				1							
102905	8.472	0.008	8.244	0.009	*	0.212	0.012	T	0.23	0.01	L *	8.2604	0.0015	0.017	162	*	8.22	8.29		D	20508−7059 H 1	2 C A	AB	71	0.637	0.009	2.50	0.05	S
102906	9.652	0.015	9.130	0.014		0.499	0.015	T	0.57	0.02	L	9.1961	0.0016	0.021	168		9.16	9.23				1							
102907	8.021	0.006	7.964	0.008		0.057	0.009	T	0.07	0.01	L	7.9820	0.0013	0.015	174		7.96	8.01				1							
102908	7.662	0.008	7.198	0.007		0.450	0.008	T	0.52	0.01	L	7.2351	0.0014	0.010	82		7.22	7.26				1							S
102909	8.893	0.009	8.906	0.012		−0.007	0.014	T	0.01	0.01	L	8.9129	0.0018	0.019	190		8.88	8.94				1							
102910	7.949	0.006	6.753	0.004		1.024	0.006	T	1.00	0.01	L	6.8031	0.0009	0.009	162		6.79	6.82				1							S
102911	10.766	0.045	10.202	0.043		0.660	0.020	G	0.72	0.02	H	10.1892	0.0030	0.022	81		10.13	10.23				1							
102912	8.902	0.011	7.136	0.005		1.473	0.005	G	1.52	0.03	C	7.1064	0.0008	0.008	133		7.09	7.12		C		1							S
102913	10.123	0.044	8.632	0.022		1.255	0.039	T	1.21	0.04	L	8.6791	0.0015	0.011	44		8.66	8.70				1 S							
102914	11.087	0.053	9.932	0.031		1.035	0.029	G	1.08	0.04	I	9.9286	0.0028	0.023	105		9.89	9.97		C		1 G							
102915	11.323	0.074	10.879	0.089	B	0.419	0.107	T	0.49	0.11	L	11.1518	0.0800			B				D	20508+8552 I 2	1 C I A							
102916	7.332	0.005	5.669	0.003		1.380	0.006	G	1.36	0.03	C	5.6668	0.0009	0.008	162		5.66	5.68		M		1							S
102917	9.099	0.013	8.653	0.013		0.421	0.017	T	0.49	0.02	L	8.7196	0.0016	0.016	132		8.69	8.74		C		1							S
102918	9.356	0.024	9.237	0.029		0.091	0.028	G	0.10	0.03	H	9.2507	0.0020	0.019	97		9.22	9.28		C		1							
102919	10.176	0.033	9.425	0.027		0.650	0.015	G	0.71	0.01	H	9.4518	0.0025	0.020	100		9.42	9.48		C		1 S							
102920	8.151	0.010	7.181	0.008		0.852	0.010	T	0.87	0.01	L	7.2403	0.0009	0.008	110		7.22	7.25		C		1							S
102921	7.283	0.008	6.973	0.009	*	0.303	0.015	G	0.35	0.02	H *	6.9766	0.0009	0.008	99	*	6.96	6.99		D	20512+5126 I 1	2 C A	AB	38	0.810	0.002	0.75	0.01	S
102922	9.965	0.032	8.182	0.014		1.485	0.028	T	1.50	0.04	L	8.1748	0.0021	0.012	51		8.15	8.20		C		1 G							
102923	11.090	0.068	10.014	0.043		0.900	0.020	G	0.94	0.02	I	9.9772	0.0032	0.022	96		9.94	10.01		C		1							
102924	8.784	0.010	8.247	0.009		0.498	0.015	G	0.57	0.02	H	8.3138	0.0014	0.017	147		8.29	8.35		C		1							S
102925	10.280	0.032	9.757	0.031		0.500	0.034	T	0.57	0.04	L	9.8856	0.0017	0.015	86		9.85	9.92				1							
102926	8.913	0.012	8.374	0.011		0.554	0.005	G	0.63	0.01	H	8.4323	0.0032	0.034	116		8.28	8.48		U 2 C		1							P
102927	11.468	0.084	9.639	0.028		1.522	0.070	T	1.56	0.10	L	9.5826	0.0021	0.018	104		9.56	9.63		C		1							
102928	9.206	0.013	7.721	0.007		1.250	0.012	T	1.21	0.01	L	7.7485	0.0010	0.010	103		7.73	7.77		C		1							S
102929	8.325	0.007	7.726	0.007		0.559	0.009	T	0.63	0.01	L	7.7852	0.0007	0.010	153		7.77	7.81				1							S
102930	11.290	0.098	10.036	0.052		1.069	0.087	T	1.03	0.07	L	10.1485	0.0034	0.027	74		10.11	10.20		C		1							
102931	10.151	0.029	10.043	0.041		0.240	0.015	G	0.27	0.02	H	10.0136	0.0020	0.020	116		9.97	10.06				1							G
102932	8.401	0.008	8.047	0.008		0.336	0.011	T	0.39	0.01	L	8.1154	0.0012	0.013	151		8.09	8.14		C		1							S
102933	8.885	0.014	8.356	0.013		0.510	0.015	G	0.58	0.02	H	8.4271	0.0011	0.011	102		8.41	8.45		C		1							
102934	10.271	0.031	9.838	0.033		0.383	0.005	G	0.45	0.01	H	9.9415	0.0039	0.030	75		9.90	9.99				1							
102935	7.985	0.013	7.644	0.011		0.348	0.015	G	0.41	0.02	H	7.6753	0.0042	0.029	49		7.64	7.74		U 2		1							S
102936	8.402	0.011	8.385	0.013		0.020	0.016	T	0.04	0.01	L	8.3999	0.0016	0.013	77		8.38	8.43				1							S
102937	9.369	0.018	9.074	0.019		0.280	0.028	T	0.32	0.04	L	9.1377	0.0025	0.023	89		9.10	9.18				1							
102938	9.542	0.019	9.150	0.020		0.371	0.026	T	0.43	0.03	L	9.2019	0.0019	0.019	109		9.16	9.23				1							
102939	10.721	0.056	9.039	0.023		1.405	0.048	T	1.38	0.06	L	9.0333	0.0023	0.016	67		9.00	9.06		C		1							
102940	11.143	0.097	9.388	0.034		1.463	0.081	T	1.47	0.13	L	9.3161	0.0023	0.021	96		9.29	9.35		C		1							
102941	8.868	0.013	8.389	0.012		0.460	0.015	G	0.53	0.02	H	8.4499	0.0015	0.017	90		8.42	8.49		D		1							S
102942	9.453	0.015	8.363	0.011		0.942	0.014	T	0.93	0.01	L	8.4085	0.0018	0.015	135		8.39	8.44		C		1							
102943	9.715	0.020	9.377	0.021		0.321	0.027	T	0.37	0.04	L	9.3988	0.0035	0.042	124		9.34	9.48		U 2		1							
102944	10.782	0.042	9.114	0.017		1.394	0.036	T	1.37	0.04	L	9.1153	0.0016	0.020	139		9.08	9.15		C		1							
102945	6.601	0.012	6.114	0.010	*	0.464	0.003	G	0.53	0.00	H *	6.1007	0.0005	0.005	73	*	6.09	6.11		D	20514−0537 I 1	2 C A	AB	16	0.993	0.003	0.99	0.01	S
102946	8.264	0.011	8.004	0.012		0.248	0.015	T	0.28	0.02	L	8.0508	0.0018	0.015	150		8.03	8.08				1							S
102947	8.584	0.009	8.078	0.009		0.480	0.014	G	0.55	0.01	H	8.1403	0.0013	0.012	145		8.12	8.16				1							
102948	11.085	0.079	9.606	0.035		1.245	0.068	T	1.20	0.07	L	9.6301	0.0032	0.018	64		9.60	9.67		C		1							
102949	6.337	0.049	5.672	0.032		0.616	0.049	T	0.68	0.04	L	5.7914	0.0523	0.326	134		5.51	6.20	4.44	P 1 A		1							S
102950	6.501	0.005	5.180	0.003		1.125	0.001	G	1.09	0.00	H	5.2257	0.0007	0.006	85		5.22	5.24		C		1							S
102951	8.788	0.010	7.483	0.006		1.109	0.009	T	1.07	0.01	L	7.5285	0.0009	0.010	130		7.51	7.55		C		1							
102952	8.909	0.010	8.178	0.009		0.689	0.015	G	0.75	0.01	H	8.2331	0.0016	0.017	121		8.21	8.27				1							
102953	7.332	0.006	7.294	0.008		0.035	0.009	T	0.05	0.01	L	7.3075	0.0033	0.035	139		7.27	7.37	3.30	P 1 A		1							S
102954	7.332	0.006	6.797	0.006		0.509	0.006	T	0.58	0.01	L	6.8533	0.0009	0.008	104		6.84	6.87		C		1							S
102955	10.396	0.050	8.554	0.020		1.500	0.040	G	1.53	0.06	R	8.5031	0.0024	0.013	50		8.48	8.53		C		1							
102956	8.521	0.011	7.094	0.006		1.205	0.010	T	1.16	0.01	L	7.1574	0.0013	0.008	111		7.15	7.18				1							S
102957	9.110	0.014	8.667	0.014	*	0.418	0.018	T	0.48	0.02	L *	8.7136	0.0023	0.021	123	*	8.69	8.78		D	20516−5623 I 1	2 C A	BA	110	8.987	0.005	0.04	0.02	S
102958	9.127	0.010	8.930	0.012		0.188	0.015	T	0.21	0.02	L	8.9777	0.0016	0.022	224		8.94	9.02				1							
102959	7.158	0.006	6.865	0.006		0.260	0.000	G	0.29	0.00	H	6.9082	0.0008	0.007	94		6.89	6.93		C		1							S
102960	11.238	0.062	9.390	0.022		1.500	0.040	G	1.50	0.10	R	9.3656	0.0018	0.016	90		9.34	9.39				1							
102961	8.861	0.009	8.129	0.008		0.671	0.010	T	0.73	0.01	L	8.1830	0.0013	0.015	161		8.16	8.21		C		1							S
102962	5.815	0.006	5.628	0.006	*	0.203	0.015	G	0.22	0.02	H *	5.7148	0.0008	0.008	142	*	5.70	5.73		D	20516−6226 I 1	2 C A	AB	83	2.447	0.002	0.30	0.01	S
102963	7.701	0.009	7.191	0.008		0.489	0.009	T	0.56	0.01	L	7.2269	0.0011	0.010	91		7.20	7.25				1 S							S
102964	11.000	0.054	9.839	0.033		1.010	0.010	G	1.05	0.01	H	9.8565	0.0029	0.021	83		9.81	9.89				1 S							
102965	8.655	0.008	8.192	0.008	A	0.400	0.495	G	0.51	0.02	L *	8.1300	0.0008	0.015	173	*	8.10	8.15		D	20517−6125 I 1	2 C A	AB	309	1.451	0.008	1.82	0.05	S
102966	9.072	0.012	9.101	0.017		−0.022	0.019	T	0.00	0.02	L	9.1083	0.0017	0.019	135		9.08	9.14		C		1							
102967	10.567	0.021	9.185	0.011		1.169	0.019	T	1.13	0.02	L	9.2584	0.0015	0.027	278		9.21	9.31				1							
102968	8.734	0.013	8.121	0.012		0.571	0.015	T	0.64	0.01	L	8.1783	0.0014	0.011	100		8.16	8.20				1							S
102969	8.482	0.011	8.328	0.013		0.148	0.016	T	0.16	0.02	L	8.3596	0.0012	0.011	105		8.34	8.38		C		1							S
102970	8.683	0.011	7.890	0.009		0.685	0.011	G	0.74	0.01	H	7.9490	0.0012	0.012	107		7.93	7.97				1							
102971	9.982	0.024	8.222	0.011		1.467	0.021	T	1.48	0.03	L	8.1862	0.0017	0.015	114		8.16	8.21				1							
102972	9.346	0.016	8.881	0.016		0.465	0.015	G	0.54	0.02	H	8.9427	0.0018	0.018	109		8.91	8.97		C		1							
102973	8.505	0.010	8.428	0.013		0.076	0.015	T	0.09	0.02	L	8.4623	0.0014	0.013	105		8.43	8.48		C		1							S
102974	11.150	0.055	10.290	0.043		0.770	0.052	T	0.81	0.04	L	10.2970	0.0037	0.027	104		10.24	10.35		C		1							G
102975	8.349	0.010	7.571	0.008		0.707	0.010	T	0.76	0.01	L	7.6286	0.0008	0.007	82		7.62	7.64		C		1							S
102976						1.606	0.082	G	2.62	0.20	I	13.2115	0.0251	0.189	58		12.61	13.60		U		1							G
102977	9.606	0.022	7.754	0.010		1.540	0.019	T	1.59	0.04	L	7.6970	0.0012	0.011	110		7.68	7.72		C		1							S
102978	6.253	0.005	4.300	0.003		1.633	0.047	G	1.76	0.02	A	4.2197	0.0011	0.008	99		4.20	4.23		M		1							S
102979	9.414	0.028	8.961	0.027	*	0.427	0.036	T	0.49	0.04	L *	9.7531	0.0026	0.020	84	*	9.72	9.79		D	20518−3434 I 1	2 C A	AB	38	2.277	0.008	0.20	0.02	
102980	9.293	0.014	7.351	0.006		1.611	0.012	T	1.63	0.01	L	7.2602	0.0020	0.021	130		7.23	7.29		U 2		1							S
102981	8.788	0.010	8.276	0.009		0.501	0.015	G	0.57	0.02	H	8.3167	0.0011	0.015	142		8.30	8.34		C		1							
102982	7.447	0.006	7.275	0.006		0.165	0.008	T	0.18	0.01	L	7.3212	0.0010	0.009	105		7.30	7.34				1							S
102983	8.949	0.012	8.659	0.013		0.276	0.017	T	0.31	0.02	L	8.7014	0.0021	0.016	122		8.68	8.73				1							
102984	11.454	0.061	9.294	0.016		1.826	0.052	T	2.30	0.10	O	9.1502	0.0031	0.037	154		9.10	9.21		U 2		1							
102985	9.602	0.012	9.064	0.012		0.504	0.015	T	0.58	0.02	L	9.1108	0.0020	0.022	207		9.07	9.15				1							
102986	8.817	0.012	6.992	0.006		1.518	0.011	T	1.55	0.02	L	6.9565	0.0011	0.009	114		6.94	6.97		C		1							S
102987	7.430	0.005	7.505	0.008		−0.070	0.014	G	−0.05	0.01	H	7.5102	0.0011	0.010	119		7.49	7.53		C		1							S
102988	11.398	0.072	10.335	0.045		0.912	0.067	T	0.91	0.05	L	10.3717	0.0025	0.028	105		10.33	10.42				1							G
102989	6.103	0.004	6.065	0.005		0.029	0.006	G	0.05	0.01	H	6.0786	0.0008	0.006	76		6.07	6.09		C		1							S
102990	8.545	0.014	7.909	0.012	*	0.615	0.012	G	0.68	0.01	H *	8.0423	0.0011	0.016	110	*	8.01	8.08		D	20520+4345 I 1	2 C A	AB	121	9.084	0.004	0.13	0.02	
102991	10.235	0.034	9.059	0.022		1.008	0.032	T	0.98	0.03	L	9.1078	0.0014	0.011	81		9.08	9.13		C		1							
102992	8.419	0.009	8.157	0.010		0.249	0.013	T	0.28	0.02	L	8.2017	0.0011	0.012	128		8.18	8.23				1							S
102993	6.234	0.002	6.392	0.003		−0.138	0.003	T	−0.13	0.00	L	6.3777	0.0004	0.007	223		6.37	6.39				1							S
102994	8.447	0.010	7.204	0.006		1.061	0.009	T	1.03	0.01	L	7.2563	0.0006	0.005	102		7.25	7.27				1							S
102995	9.601	0.027	8.430	0.018		1.004	0.025	T	0.98	0.02	L	8.4573	0.0013	0.010	76		8.43	8.48				1							S
102996	9.363	0.017	9.038	0.018		0.309	0.023	T	0.35	0.03	L	9.0836	0.0022	0.018	84		9.06	9.11		C		1							
102997	8.452	0.009	8.064	0.010		0.392	0.004	G	0.46	0.00	H	8.1197	0.0012	0.013	127		8.10	8.15		C		1							S
102998	11.189	0.088	9.906	0.045		1.092	0.077	T	1.05	0.08	L	9.9421	0.0028	0.022	64		9.89	9.97				1							
102999	7.202	0.008	7.306	0.008		−0.090	0.010	T	−0.07	0.01	L	7.2878	0.0017	0.099	157		7.26	7.84	3.00	P 1 A		1 V							S
103000	8.834	0.010	8.346	0.009		0.463	0.005	G	0.53	0.01	H	8.3748	0.0017	0.015	167		8.35	8.41			20521−3810 I 1	1 X S							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ α*	μ_δ δ	μ_δ π	μ_δ α*	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
103001	20 52 04.36	+63 38 44.4	10.13	H	313.018 173 14	+63.645 669 96	3.44	17.87	7.57	0.80	0.78	0.90	0.86	0.94	+ 5	−16	+ 1	−25	+11	+20	+ 8	−10	+11	+35	0	−0.34
103002	20 52 05.13	−33 52 54.6	7.85	H	313.021 394 17	−33.881 821 52	1.95	7.13	−14.67	1.05	0.63	1.05	1.46	0.93	− 2	−23	−11	+27	−25	− 2	−25	+29	− 3	−19	0	1.11
103003	20 52 06.58	+38 35 14.8	9.23	H	313.027 395 91	+38.587 454 14	0.83	1.07	−2.27	0.69	0.75	1.02	0.66	0.75	−14	+ 9	+12	−17	+ 8	− 9	+ 7	−10	−12	− 2	0	2.22
103004	20 52 07.73	+27 05 49.7	4.56	H	313.032 189 80	+27.097 127 71	15.06	−72.33	−60.95	0.42	0.45	0.60	0.56	0.54	+16	− 3	− 8	+15	+ 2	−11	+ 7	− 5	− 3	+34	0	0.45
103005	20 52 08.69	−05 30 25.4	5.55	H	313.036 221 44	−05.507 044 21	4.33	1.26	−6.20	0.81	0.60	1.08	1.17	0.63	+15	−29	−45	+12	−40	+50	−16	+40	− 8	− 3	0	1.30
103006	20 52 08.90	−44 07 02.9	8.62	H	313.037 085 34	−44.117 467 93	8.23	18.14	−3.32	0.93	0.74	1.16	1.10	0.90	+26	−24	−16	− 8	− 8	−10	− 3	−15	−24	+32	0	−0.02
103007	20 52 09.72	+44 26 04.6	8.72	H	313.040 495 11	+44.434 622 49	1.33	−0.45	−4.06	0.80	0.72	0.97	1.05	0.89	−11	+ 4	+19	− 9	+10	− 3	+11	−14	− 2	−10	0	−1.61
103008	20 52 13.05	−65 08 41.4	8.66	H	313.054 386 43	−65.144 840 48	13.89	19.59	−29.85	0.67	0.65	1.16	0.81	0.80	−38	+ 7	−10	+ 4	+21	− 8	+21	+ 8	+ 3	−37	0	−0.22
103009	20 52 13.48	+33 48 11.6	8.13	H	313.056 162 60	+33.803 208 67	1.91	5.60	1.94	0.46	0.58	0.82	0.52	0.61	−21	+ 3	+ 9	+12	−15	−18	−13	+ 5	+23	−28	0	−3.06
103010	20 52 13.55	−66 31 50.7	8.70	H	313.056 454 43	−66.530 761 67	5.06	8.11	−16.75	0.63	0.73	1.20	0.73	0.81	−29	− 9	− 9	+20	+ 0	− 5	− 2	+16	+ 4	−32	0	−1.04
103011	20 52 14.10	−30 41 49.4	7.51	H	313.058 754 64	−30.697 048 78	4.33	18.55	−20.42	0.82	0.57	0.99	0.93	0.89	+34	−25	−19	−17	− 3	+26	+ 1	+31	−25	+34	2	0.97
103012	20 52 14.22	+39 30 04.6	7.39	H	313.059 229 49	+39.501 283 40	3.48	11.22	10.34	0.48	0.55	0.71	0.49	0.57	−15	− 6	+21	− 7	+ 1	−13	+ 6	−18	− 8	+ 0	0	1.12
103013	20 52 14.68	+35 44 04.6	7.77	2 H	313.061 147 00	+35.734 611 17	3.04	4.58	0.33	0.45	0.54	0.74	0.48	0.55	−19	− 5	+ 5	− 1	− 5	−17	− 5	− 9	+19	−24	0	1.68
103014	20 52 14.95	+66 17 02.6	10.52	H	313.062 292 52	+66.284 066 96	23.29	267.87	291.61	1.06	1.04	1.17	1.47	1.27	+ 2	− 6	− 3	+ 0	− 6	+20	− 4	−12	+13	+14	6	1.60
103015	20 52 15.05	+30 37 34.4	9.57	H	313.062 725 60	+30.626 220 12	10.37	−35.51	−159.62	0.87	1.05	1.78	1.20	1.15	−15	−16	+21	+39	+ 9	−24	+11	+ 2	+28	− 5	1	−0.11
103016	20 52 15.13	−43 53 01.1	8.72	G	313.063 052 95	−43.883 625 84	5.26	4.94	−10.30	0.95	0.71	1.12	1.20	0.90	+34	−22	−16	− 3	+ 7	−13	+ 9	− 2	−16	+40	0	−0.10
103017	20 52 15.72	−00 07 08.4	8.47	G	313.065 513 16	−00.119 012 16	8.99	24.85	−4.00	0.98	0.71	1.25	1.34	0.98	+22	−29	−25	+27	+ 7	+20	+16	+67	−25	+17	0	0.03
103018	20 52 16.09	−19 38 36.8	7.29	H	313.067 049 85	−19.643 568 88	5.60	11.58	−12.03	0.82	0.58	0.89	1.10	0.86	+ 6	−11	−17	− 4	− 3	+21	+ 1	+ 2	+ 4	+ 6	0	−0.06
103019	20 52 16.30	−39 59 49.1	10.35	G	313.067 935 31	−39.996 978 91	28.49	107.80	−158.45	1.96	1.13	1.97	3.31	1.79	+33	− 7	−12	−63	+ 0	+ 7	+16	−18	+14	− 4	3	1.33
103020	20 52 18.77	−04 42 09.3	8.11	G	313.078 195 69	−04.702 592 17	2.83	23.07	5.98	0.98	0.83	1.35	1.46	0.86	+28	−27	−53	+12	−30	+36	− 2	+47	−21	− 2	0	−1.16
103021	20 52 19.13	+05 56 56.6	8.80	H	313.079 688 05	+05.949 064 14	3.70	12.05	3.87	1.15	0.55	1.32	1.32	0.58	− 8	−40	+16	+ 6	+23	+ 0	+10	+16	+16	+26	0	0.12
103022	20 52 20.17	+10 43 56.3	8.46	H	313.084 024 95	+10.732 313 40	−0.11	−1.30	1.04	0.94	0.57	1.14	1.28	0.63	+22	−20	+ 7	+20	+28	+23	+19	+25	+20	+42	0	−0.36
103023	20 52 20.74	+50 37 59.1	8.74	H	313.086 426 72	+50.633 074 33	2.88	−18.42	−25.32	0.71	0.69	0.84	0.89	0.73	− 9	− 9	+18	−12	− 6	− 4	− 5	−13	+15	−10	0	−0.92
103024	20 52 20.96	+55 03 04.4	6.77	H	313.087 347 27	+55.051 213 06	6.23	28.72	12.26	0.44	0.42	0.48	0.49	0.45	−11	+ 0	+ 0	− 3	+ 9	− 8	+ 7	+10	+ 0	− 2	1	−0.35
103025	20 52 21.07	+15 06 22.6	8.72	H	313.087 794 56	+15.106 277 16	15.73	−32.16	17.95	0.89	0.63	1.11	1.09	0.67	+ 9	+ 2	− 3	−11	+36	+ 2	+25	+44	+11	+26	0	0.68
103026	20 52 21.56	−03 13 13.7	7.84	2 H	313.089 841 32	−03.220 477 60	2.65	−1.16	−39.97	1.06	0.79	1.30	1.53	0.91	+15	− 4	−33	+27	−37	+24	−23	+32	−29	+ 0	0	−0.41
103027	20 52 21.59	−21 13 51.3	7.36	H	313.089 961 99	−21.230 920 14	3.01	−9.92	10.54	0.86	0.64	0.94	1.04	1.00	+14	−17	−14	−23	−12	+26	− 9	−20	− 2	+36	0	1.19
103028 H	20 52 21.84	+20 07 41.6	7.54	H	313.091 011 08	+20.128 210 85 A	3.40	−3.29	−0.58	1.79	1.74	1.74	1.51	1.20	− 6	−13	+ 2	+17	+ 5	−10	+ 5	+22	+ 3	+27	1	−0.08
103029	20 52 22.55	−64 46 03.5	8.17	H	313.093 953 27	−64.767 637 80	6.94	33.95	21.38	0.66	0.59	0.99	0.78	0.67	−24	− 2	− 9	− 8	+ 9	+ 1	+ 9	+11	+ 4	−26	1	−1.40
103030	20 52 24.20	+52 39 34.0	9.67	H	313.100 832 93	+52.659 444 63	2.47	15.10	8.43	0.80	0.76	0.91	0.99	0.88	+ 5	− 9	− 3	− 2	+ 1	+ 0	− 2	−18	+15	− 1	0	−0.97
103031	20 52 26.58	−67 35 57.3	8.50	H	313.110 746 20	−67.599 248 05	14.86	11.03	2.04	0.52	0.64	1.00	0.58	0.75	−32	+ 5	−20	−12	+ 7	−16	+ 6	+11	+10	−35	1	0.67
103032	20 52 27.49	−19 31 47.5	8.42	H	313.114 548 23	−19.529 868 58	4.44	−0.73	−10.30	1.03	0.76	1.15	1.26	1.07	+10	−18	−16	−17	+ 0	+32	+ 5	− 1	+ 0	+20	0	0.62
103033	20 52 28.07	+56 49 52.6	8.69	H	313.116 974 01	+56.831 269 70	2.00	−0.54	−2.41	0.72	0.68	0.79	0.80	0.75	+ 2	−12	− 1	+13	+ 4	−17	+ 6	− 5	+ 3	+12	0	0.92
103034	20 52 29.17	−08 03 46.9	8.73	H	313.121 528 12	−08.063 021 97	1.67	3.41	−1.83	1.16	0.85	1.38	1.71	0.98	+19	−26	−29	+23	−35	+22	−22	+40	+ 3	+10	2	0.41
103035	20 52 29.24	+58 39 18.4	7.39	H	313.121 836 38	+58.655 099 11	4.62	−11.18	−12.27	0.54	0.50	0.58	0.59	0.54	−13	+16	− 2	− 4	+15	−10	+17	− 3	+17	− 3	3	−0.10
103036	20 52 29.91	+18 01 38.5	6.55	H	313.124 631 08	+18.027 367 70	6.88	0.73	−15.26	0.65	0.43	0.79	0.72	0.44	−10	−12	−18	+47	−15	+ 8	−10	+38	− 7	+ 6	3	−0.37
103037	20 52 31.04	−13 12 10.6	6.85	H	313.129 316 82	−13.202 952 30	5.16	36.00	1.04	0.94	0.65	0.99	1.25	0.95	+23	− 7	− 3	−37	−15	+18	−18	−11	−11	+34	0	0.89
103038	20 52 32.44	−48 15 18.6	8.01	H	313.135 155 27	−48.255 164 45	4.28	0.35	2.07	0.92	0.75	1.16	1.40	0.72	+24	− 8	− 7	− 1	−22	−14	−34	−40	+20	−43	2	−0.62
103039	20 52 33.20	−16 58 29.3	11.41	G	313.138 352 15	−16.974 812 80	182.15	−306.70	30.78	2.82	2.26	3.68	3.77	4.05	+35	−11	+ 5	−30	−14	+34	−16	−20	−22	+52	7	0.94
103040	20 52 33.36	+44 11 42.2	9.68	H	313.139 002 00	+44.195 052 45	2.25	−0.93	−4.98	1.04	0.98	1.28	1.24	1.12	+ 4	+11	+20	− 3	+ 8	− 6	+ 8	+18	+ 1	− 4	0	0.07
103041	20 52 34.22	+41 58 46.6	7.87	H	313.142 574 16	+41.979 609 39	5.68	5.47	0.16	0.51	0.50	0.67	0.55	0.54	−11	+10	+12	+13	− 6	−15	− 4	+ 1	− 5	− 6	0	0.72
103042	20 52 34.39	−31 41 36.2	8.59	H	313.143 309 56	−31.693 376 17	3.07	11.36	−15.27	1.14	0.68	1.27	1.43	1.04	+ 6	−18	−22	+24	−25	+34	−20	+35	−23	− 6	0	0.17
103043	20 52 37.55	−38 54 23.4	7.88	H	313.156 450 65	−38.906 493 26	7.00	24.77	13.47	0.85	0.59	1.03	1.03	0.76	+35	−21	−18	−11	+33	− 8	+21	+20	− 5	+69	0	2.03
103044	20 52 37.94	+37 55 41.3	9.42	H	313.158 102 45	+37.928 135 49	0.89	2.44	0.39	0.72	0.81	1.06	0.78	0.93	− 9	−13	+ 6	+19	− 1	−23	+ 2	+ 8	− 4	+ 2	1	0.55
103045	20 52 39.21	−08 58 59.7	4.73	G	313.163 357 49	−08.983 237 82	21.01	47.06	−32.91	0.83	0.61	1.04	1.14	0.75	+41	−29	−38	+ 0	−14	− 2	− 5	+30	−25	+34	2	−0.64
103046 H	20 52 39.71	−64 32 05.0	7.95	G	313.165 472 34	−64.534 725 83 A	10.33	−57.58	14.31	1.38	1.35	1.89	1.47	1.36	− 5	− 4	−14	+10	− 5	+ 5	−13	+ 3	+ 1	−19	2	−0.55
103047	20 52 40.68	+84 39 31.9	10.98	H	313.169 495 20	+84.658 871 61	−0.33	0.17	−0.42	1.21	1.11	1.28	1.44	1.30	+ 5	−13	− 5	−12	+ 6	− 1	+ 7	−19	− 2	+13	1	0.84
103048	20 52 41.59	−53 16 23.8	7.68	H	313.173 290 87	−53.273 275 65	15.52	38.30	−54.27	0.87	0.67	0.99	1.16	0.79	+ 6	−23	−17	+25	−28	+14	−38	− 9	+12	−35	0	0.06
103049	20 52 43.13	−39 06 31.0	6.89	H	313.179 724 49	−39.108 618 92	2.45	−9.13	−4.25	0.73	0.53	0.85	0.97	0.66	+32	− 3	− 4	−19	+21	+ 9	+10	+ 4	+ 9	+64	0	2.10
103050	20 52 43.24	+56 35 05.8	7.50	H	313.180 184 03	+56.584 951 87	2.35	4.62	3.64	0.48	0.46	0.53	0.50	0.50	− 1	− 9	− 6	+15	+10	−16	+13	− 2	− 1	+15	0	0.16
103051	20 52 43.28	+38 48 20.7	7.96	H	313.180 314 29	+38.805 754 07	1.85	19.54	0.82	0.56	0.65	0.85	0.61	0.67	− 7	+ 5	+21	−14	+ 5	−12	+ 7	− 9	+ 0	− 1	1	−0.19
*103052	20 52 43.86	−56 43 10.6	8.12	H	313.182 764 87	−56.719 602 40	3.07	−17.26	−1.75	0.91	0.74	1.12	1.05	0.77	+19	−12	−28	−52	+ 0	− 4	+ 7	−14	+ 4	− 7	0	−0.35
*103053	20 52 43.84	+44 42 53.5	8.96	H	313.182 656 11	+44.714 848 86	2.80	−14.00	−16.52	0.89	0.78	1.05	1.17	1.00	−14	+ 0	+21	−10	+16	− 3	+16	−11	− 8	−14	0	0.76
103054	20 52 44.77	−10 03 54.3	9.28	H	313.186 558 41	−10.065 076 01	7.90	23.84	4.14	1.43	1.12	1.84	1.95	1.47	+39	−22	−34	+19	−12	+14	− 1	+53	−31	+34	0	1.77
103055 H	20 52 44.94	+46 06 47.7	8.65	H	313.187 235 59	+46.113 251 21 A	18.68	−24.60	−13.01	6.03	3.72	1.30	1.81	3.69	+ 3	+ 2	+ 4	− 7	−12	−19	− 1	−36	− 4	+11	1	0.29
103056	20 52 45.47	−47 55 06.2	10.21	H	313.189 475 22	−47.918 402 53	4.73	39.44	−91.26	1.47	1.17	1.68	1.73	1.04	+37	+ 0	+ 4	+ 9	−28	− 3	−52	−51	+ 3	−31	0	1.16
103057	20 52 47.89	+31 43 36.0	8.03	H	313.199 544 29	+31.726 676 44	3.87	4.13	7.24	0.43	0.61	0.84	0.50	0.67	−28	+ 0	− 1	+12	+ 3	+ 0	+ 3	+ 0	+ 6	−18	0	−1.10
103058	20 52 48.33	+60 58 51.3	9.45	H	313.201 389 49	+60.980 911 66	−0.23	−0.21	−5.64	0.78	0.82	0.89	0.75	1.07	− 7	+14	−11	+19	+24	− 2	+45	−11	+24	+42	1	1.39
103059 H	20 52 49.63	−16 09 54.6	8.51	H	313.206 793 28	−16.165 169 60 A	4.33	27.51	−17.10	2.00	1.56	1.97	2.30	2.12	+22	+ 8	+ 0	− 6	−28	+18	−24	−14	−23	+42	0	−0.22
103060	20 52 51.48	−29 36 33.4	10.16	H	313.214 506 44	−29.609 288 76	2.57	33.41	−37.39	1.95	1.02	2.00	2.64	1.71	+ 9	−35	+ 1	+13	−23	− 3	−21	+39	− 6	+ 3	0	−1.00
103061	20 52 53.21	+42 36 27.9	8.43	G	313.221 695 10	+42.607 751 73	1.92	−0.10	−3.66	0.64	0.68	0.86	0.75	0.76	− 4	+ 5	+ 5	+ 3	− 3	−11	− 2	+ 3	+ 2	− 4	0	0.16
103062	20 52 53.58	+24 54 52.6	6.63	H	313.223 268 74	+24.914 601 99	4.09	−7.75	−7.87	0.57	0.45	0.76	0.67	0.46	+ 0	−13	−10	+11	+18	− 5	+15	+26	+ 5	+ 0	0	−1.85
103063	20 52 53.79	−50 31 19.7	8.53	H	313.224 131 35	−50.522 135 89	1.92	21.17	−10.01	1.03	0.74	1.16	1.34	0.80	+23	−13	− 2	−16	−12	− 4	−15	−30	+ 5	− 8	5	1.92
103064	20 52 53.95	−54 33 49.2	8.59	H	313.224 789 91	−54.563 677 19	2.91	7.39	−2.99	0.95	0.78	1.13	1.33	0.89	+10	−17	−19	+25	+ 1	+ 1	+ 0	− 7	+12	+ 8	0	0.24
103065	20 52 53.99	−24 12 52.6	8.30	H	313.224 944 61	−24.214 622 10	1.90	−30.40	−17.70	1.05	0.66	1.11	1.41	1.19	+22	+ 1	+ 3	−24	−23	+ 2	−28	−15	−28	+34	0	−0.82
103066	20 52 56.20	+29 19 55.0	7.68	H	313.234 182 98	+29.331 934 18	1.26	6.27	−5.46	0.50	0.52	0.82	0.60	0.57	−13	+ 4	+ 8	+ 6	+ 3	−15	+ 6	− 4	+ 9	− 1	1	1.73
103067 H	20 52 57.26	+42 58 25.7	10.09	H	313.238 591 91	+42.973 793 89 A	9.47	104.43	144.93	3.51	2.57	2.31	1.91	2.05	+ 5	−15	+ 7	−10	+10	+ 3	+ 8	−13	+ 7	+ 7	0	−0.35
103068	20 52 57.71	+10 59 46.2	8.26	H	313.240 439 99	+10.996 178 31	6.48	15.93	−51.65	0.81	0.58	1.09	1.15	0.68	+19	− 7	+ 0	+19	+21	+31	+18	+33	+15	+35	2	−0.79
103069	20 52 59.81	+23 22 16.2	12.40	3 H	313.249 189 21	+23.371 154 03	1.28	−6.66	−13.34	1.20	1.18	1.85	1.41	1.42	+13	− 1	− 6	+13	+15	−23	+12	+29	−13	+30	0	−0.87
103070	20 53 00.95	+20 46 17.9	8.83	H	313.253 954 67	+20.771 627 03	2.87	5.40	−4.28	0.99	0.73	1.38	1.18	0.75	+ 5	+ 0	−17	+20	+23	+ 6	+18	+51	−15	+15	0	−0.90
103071 H	20 53 01.10	−23 46 59.0	6.32	G	313.254 591 12	−23.783 050 45 A	13.33	84.08	−62.70	1.35	1.13	1.17	1.55	1.66	+38	+17	+15	− 8	+ 7	− 2	− 9	+ 8	−32	+64	7	1.32
103072	20 53 01.17	−02 14 40.7	8.27	H	313.254 869 91	−02.244 650 48	7.31	3.73	−67.57	1.09	0.76	1.27	1.66	0.93	+12	+14	−20	+ 3	−15	+21	− 6	+36	− 6	+ 4	0	−0.68
103073	20 53 03.49	+34 45 07.6	7.95	H	313.264 529 26	+34.752 109 31	1.89	4.30	−2.79	0.56	0.55	0.87	0.61	0.57	−29	−16	+ 3	−23	− 3	+14	− 2	+ 1	+13	−36	0	−1.04
103074 H	20 53 04.23	+29 08 43.7	7.58	H	313.267 612 24	+29.145 469 90 A	4.47	13.14	−1.92	1.27	1.41	1.79	1.48	1.56	+ 6	+13	+ 1	+ 0	+ 6	−24	+ 5	− 9	+ 6	+11	0	−0.41
103075	20 53 04.81	−56 13 12.4	7.67	H	313.270 043 98	−56.220 110 43	3.68	3.11	−7.16	0.70	0.60	0.96	0.79	0.63	+15	−25	−25	−58	− 1	+18	+ 8	−23	+ 7	− 9	0	0.11
103076	20 53 05.08	−42 35 09.2	8.58	H	313.271 182 64	−42.585 883 61	4.43	14.52	−4.97	0.94	0.67	1.11	1.27	0.82	+31	−21	−14	− 4	+10	− 7	+ 8	+ 3	− 7	+37	0	0.34
103077	20 53 05.57	−11 34 25.5	6.38	H	313.273 219 11	−11.573 761 68	22.17	40.45	42.26	0.83	0.60	0.99	1.11	0.90	+45	−10	−13	−20	−22	+16	−28	+16	−17	+55	0	−1.20
103078	20 53 07.02	−35 52 07.7	9.11	H	313.279 240 80	−35.868 802 56	3.43	0.07	−17.50	1.16	0.73	1.26	1.73	1.02	+17	−20	−25	+ 0	−19	+13	−14	+ 1	− 9	+ 8	0	0.63
103079	20 53 07.37	+29 38 57.3	6.36	H	313.280 713 16	+29.649 253 74	7.64	−4.78	−64.56	0.39	0.45	0.70	0.50	0.51	−15	+ 3	+ 3	+ 0	+ 0	−17	+ 3	−15	+10	+ 0	0	−0.64
103080	20 53 07.90	+06 16 05.3	9.08	H	313.282 900 78	+06.268 141 98	−0.01	6.55	−5.98	1.16	0.62	1.31	1.52	0.69	+ 9	−25	+12	+28	+27	− 2	+19	+32	+15	+34	0	2.28
103081	20 53 08.93	−46 37 04.6	7.59	1 G	313.287 196 35	−46.617 958 25	5.65	52.01	5.46	0.90	0.59	0.99	1.65	0.92	+10	− 1	−21	−48	+ 7	−16	+ 4	−34	+21	−15	0	1.49
103082	20 53 11.00	−31 30 53.7	7.32	H	313.295 840 64	−31.514 922 87	3.65	65.30	−65.81	0.85	0.59	1.03	1.09	0.88	+26	−17	−18	− 3	−11	+39	− 7	+27	−14	+21	0	−0.09
103083	20 53 11.27	+15 25 54.8	8.86	2 H	313.296 967 30	+15.431 877 29	2.04	13.09	5.39	0.93	0.60	1.14	1.21	0.63	+ 7	−11	−12	− 6	+41	−17	+28	+40	− 2	+24	0	−0.73
103084	20 53 13.36	+40 19 42.3	8.69	H	313.305 671 74	+40.328 412 15	3.22	−13.27	−21.95	0.61	0.69	0.92	0.69	0.79	− 3	+ 8	+ 7	+ 6	− 3	−18	− 4	+ 8	−24	+ 8	0	−1.26
103085	20 53 13.60	+16 20 29.9	7.56	H	313.306 662 65	+16.341 635 12	8.67	47.08	4.91	0.69	0.45	0.88	0.86	0.50	+ 3	− 6	+ 4	+ 8	+18	− 4	+10	+42	+ 5	+23	2	2.18
103086	20 53 13.87	+42 21 47.0	8.93	H	313.307 796 24	+42.363 063 90	3.78	23.03	6.01	0.73	0.72	0.96	0.85	0.80	−22	+ 7	+12	+10	− 9	−14	− 7	− 3	− 9	−19	0	1.92
103087	20 53 14.25	+02 27 00.0	8.63	H	313.309 380 98	+02.450 000 43	9.78	6.71	−10.48	0.87	0.47	1.02	1.12	0.53	+19	−11	+ 9	+14	+32	+21	+23	+23	+22	+50	0	−0.53
103088	20 53 14.32	−36 30 49.6	7.31	H	313.309 671 28	−36.513 767 03	6.69	47.98	−67.27	0.89	0.57	1.00	1.43	0.76	+17	+ 8	− 8	+23	−16	+21	− 7	−16	− 4	+33	0	0.19
103089	20 53 14.75	+44 23 14.2	4.80	1 H	313.311 438 66	+44.387 266 52	6.51	11.27	−2.44	0.44	0.43	0.57	0.52	0.48	−18	+16	+14	− 9	+12	− 5	+14	−25	+19	−27	1	0.71
103090	20 53 16.24	−65 23 48.5	8.40	H	313.317 645 90	−65.396 812 31	4.66	−38.69	8.46	0.59	0.59	1.04	0.75	0.75	−45	− 6	+ 2	+ 6	+ 9	− 7	+ 9	+ 9	− 5	−46	0	−1.16
103091	20 53 17.54	−34 39 43.8	9.06	H	313.323 097 58	−34.662 175 05	16.24	69.26	−96.80	1.13	0.83	1.31	1.34	1.11	+30	−35	−33	+ 6	−10	+22	+ 1	+31	−11	+12	0	0.04
103092	20 53 18.29	+54 31 03.6	7.15	G	313.326 222 20	+54.517 666 29	6.90	21.31	179.34	0.44	0.46	0.52	0.51	0.53	− 7	− 3	+ 4	− 2	+ 4	−16	+ 4	− 1	+ 7	+ 3	1	0.83
103093	20 53 18.45	+57 33 11.9	9.68	H	313.326 857 48	+57.553 298 50	13.66	−155.80	−123.15	0.83	0.74	0.89	0.93	0.84	− 1	−14	− 8	+15	+10	−15	+ 9	−10	+14	+ 3	1	0.02
103094	20 53 18.56	+45 10 54.1	5.48	H	313.327 327 75	+45.181 683 41	4.38	8.60	−4.43	0.49	0.49	0.62	0.62	0.55	−16	+12	+14	− 3	+ 8	− 8	+ 8	−22	+ 9	−29	0	−1.63
103095	20 53 19.69	−45 19 05.1	8.69	H	313.332 033 51	−45.318 082 85	6.08	−25.60	7.92	1.00	0.76	1.28	1.03	0.64	+29	−32	−34	−26	−20	+29	−21	−46	+24	+ 4	0	1.14
103096	20 53 19.79	+62 09 22.6	8.55	G	313.332 452 63	+62.156 272 28	141.95	1.08	−774.24	0.70	0.67	0.77	0.67	0.76	−10	− 3	+10	−18	+23	+ 8	+27	−19	− 2	+21	0	−0.84
103097	20 53 20.16	−28 01 27.2	8.35	H	313.333 997 34	−28.024 218 29	7.99	68.86	−14.56	1.02	0.69	1.18	1.34	1.12	+32	−10	− 1	+ 8	+ 8	+29	+ 2	+48	− 5	+34	0	0.42
103098	20 53 21.22	+39 20 26.6	8.23	H	313.338 402 83	+39.340 719 85	3.39	3.18	−3.35	0.58	0.64	0.87	0.61	0.73	−11	− 2	+10	+ 0	+ 4	−10	+ 5	+ 1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
103001	10.535	0.039	10.137	0.042		0.377	0.053	T	0.44	0.06	L	10.2177	0.0023	0.020	112		10.18	10.27		C			1								G
103002	9.942	0.031	8.043	0.013		1.611	0.028	T	1.99	0.08	O	7.9284	0.0017	0.017	79		7.91	7.96			20521−3353	I 1	1								S
103003	9.459	0.016	9.267	0.019		0.184	0.023	T	0.20	0.03	L	9.2949	0.0020	0.021	126		9.26	9.34					1								
103004	5.619	0.003	4.662	0.002		0.835	0.002	G	0.87	0.03	C	4.7191	0.0005	0.006	150		4.71	4.73					1 G								S
103005	5.442	0.003	5.537	0.003		−0.076	0.010	G	−0.06	0.02	A	5.5292	0.0006	0.005	73		5.52	5.54		C			1								S
103006	9.124	0.015	8.680	0.015		0.433	0.017	T	0.50	0.02	L	8.7205	0.0024	0.015	83		8.69	8.75					1								S
103007	9.398	0.021	8.860	0.019		0.512	0.021	T	0.58	0.02	L	8.8365	0.0023	0.017	104		8.80	8.86		C			1								
103008	9.417	0.010	8.749	0.009		0.608	0.010	T	0.68	0.01	L	8.7945	0.0017	0.021	234		8.76	8.83					1								
103009	8.182	0.006	8.136	0.007		0.047	0.009	T	0.06	0.01	L	8.1505	0.0010	0.014	185		8.13	8.17		C			1								
103010	10.194	0.018	8.811	0.010		1.170	0.016	T	1.13	0.01	L	8.8699	0.0022	0.023	224		8.84	8.91					1								
103011	9.429	0.018	7.668	0.008		1.468	0.016	T	1.48	0.02	L	7.6373	0.0013	0.011	103		7.62	7.65					1								S
103012	7.493	0.005	7.397	0.007		0.094	0.008	T	0.11	0.01	L	7.4269	0.0008	0.009	139		7.41	7.45		D			1								S
103013	10.021	0.021	8.021	0.008		1.657	0.018	T	1.68	0.02	L	7.8786	0.0034	0.036	184		7.81	7.94		U 2	20522+3544	I 1	1	S							
103014	12.044	0.144	10.751	0.077		1.095	0.131	T	1.06	0.14	L	10.6671	0.0034	0.029	98		10.60	10.71					1								G
103015	10.364	0.027	9.654	0.024		0.653	0.029	T	0.72	0.03	L	9.7048	0.0026	0.029	156		9.64	9.75		R			1								G
103016	8.741	0.012	8.740	0.016		0.020	0.015	G	0.04	0.01	H	8.7276	0.0019	0.017	87		8.71	8.76		C			1								
103017	9.008	0.014	8.529	0.014		0.500	0.015	G	0.57	0.02	H	8.5634	0.0013	0.015	101		8.54	8.59		C			1								
103018	7.230	0.006	7.265	0.008		−0.056	0.002	G	−0.03	0.00	H	7.2773	0.0014	0.009	54		7.26	7.29					1								S
103019	12.070	0.159	10.421	0.055		1.332	0.008	G	1.54	0.01	I	10.4523	0.0037	0.027	98		10.40	10.49		C			1 G								G
103020	9.590	0.020	8.224	0.012		1.149	0.020	G	1.11	0.02	H	8.2955	0.0017	0.010	73		8.28	8.31		C			1								
103021	9.001	0.013	8.801	0.015		0.123	0.015	G	0.14	0.01	H	8.8434	0.0016	0.017	132		8.82	8.88					1								
103022	10.541	0.039	8.633	0.015		1.584	0.033	T	1.60	0.03	L	8.5781	0.0023	0.019	115		8.55	8.61					1								
103023	8.917	0.012	8.762	0.014		0.149	0.017	T	0.16	0.02	L	8.7968	0.0025	0.021	105		8.76	8.83					1								
103024	6.859	0.004	6.779	0.006		0.079	0.007	T	0.09	0.01	L	6.8054	0.0007	0.008	121		6.79	6.82		C			1								S
103025	9.493	0.016	8.785	0.014		0.652	0.017	T	0.72	0.01	L	8.8504	0.0017	0.015	116		8.82	8.87		C			1								S
103026	9.925	0.031	8.104	0.013		1.547	0.028	T	2.74	0.04	O	7.8146	0.0070	0.063	66		7.73	7.92		U 2			1	S							
103027	8.686	0.014	7.462	0.009		1.046	0.013	T	1.02	0.01	L	7.5234	0.0016	0.009	56		7.51	7.54		C			1								S
103028	8.323	0.010	7.627	0.009	*	0.642	0.011	T	0.71	0.01	L *	7.6768	0.0016	0.012	108	*	7.66	7.70		D	20524+2008	I 1	2 C	A	AB	348	0.356	0.002	0.27	0.02	S
103029	9.017	0.012	8.244	0.010		0.703	0.012	T	0.76	0.01	L	8.3135	0.0017	0.020	162		8.28	8.35					1								S
103030	10.028	0.028	9.694	0.031		0.317	0.039	T	0.37	0.05	L	9.7507	0.0020	0.018	109		9.72	9.80					1								G
103031	9.139	0.009	8.549	0.008		0.552	0.009	T	0.62	0.01	L	8.6233	0.0016	0.021	243		8.59	8.66					1								
103032	10.445	0.048	8.568	0.019		1.560	0.041	T	1.58	0.04	L	8.5407	0.0023	0.015	53		8.51	8.57		C			1	S							
103033	10.571	0.033	8.853	0.014		1.434	0.028	T	1.43	0.04	L	8.8221	0.0015	0.017	125		8.80	8.85		C			1								
103034	9.001	0.017	8.769	0.019		0.221	0.024	T	0.24	0.03	L	8.7933	0.0025	0.014	67		8.77	8.82		C			1								S
103035	8.537	0.008	7.477	0.006		0.919	0.008	T	0.92	0.01	L	7.5462	0.0013	0.011	134		7.53	7.57					1								S
103036	7.803	0.006	6.661	0.004		0.982	0.006	T	0.96	0.01	L	6.7186	0.0008	0.008	126		6.71	6.73		C			1								S
103037	8.715	0.016	7.003	0.008		1.429	0.014	T	1.42	0.02	L	6.9852	0.0012	0.008	53		6.97	7.00		C			1	S							S
103038	9.638	0.022	8.151	0.012		1.252	0.020	T	1.21	0.02	L	8.1719	0.0016	0.015	101		8.15	8.19					1								
103039						1.653	0.022	G	2.73	0.07	I	11.3693	0.0054	0.040	47		11.30	11.43		C			1	S							G
103040	10.122	0.062	9.771	0.071		0.530	0.015	G	0.60	0.02	H	9.7989	0.0024	0.020	96		9.76	9.84		C			1								G
103041	7.920	0.006	7.870	0.009		0.051	0.010	T	0.06	0.01	L	7.8941	0.0013	0.013	134		7.88	7.92					1								S
103042	10.103	0.033	8.697	0.017		1.188	0.029	T	1.15	0.03	L	8.7519	0.0012	0.013	80		8.73	8.78		C			1								
103043	8.168	0.008	7.905	0.009		0.247	0.012	T	0.28	0.01	L	7.9528	0.0014	0.014	129		7.93	7.97		C			1								S
103044	9.664	0.018	9.432	0.021		0.221	0.026	T	0.24	0.03	L	9.4913	0.0023	0.026	133		9.45	9.53			20526+3756	I 1	1	S							G
103045	5.115	0.003	4.755	0.003		0.325	0.003	G	0.36	0.02	A	4.8052	0.0008	0.006	74		4.80	4.82		C			1								S
103046	8.453	0.009	8.026	0.009	*	0.440	0.015	G	0.51	0.02	H *	8.0557	0.0019	0.019	138	*	8.03	8.08			20527−6432	H 1	2 C	C	AB	37	0.994	0.042	3.56	0.28	S
103047						1.600	0.490	G	2.60	1.22	I	10.9828	0.0042	0.034	97		10.92	11.03		C			1								G
103048	8.216	0.009	7.732	0.009		0.481	0.003	G	0.55	0.00	H	7.7809	0.0016	0.016	85		7.76	7.80					1								S
103049	8.112	0.010	6.980	0.004		0.974	0.008	T	0.96	0.01	L	7.0563	0.0010	0.008	113		7.04	7.08		C			1								S
103050	7.334	0.005	7.470	0.006		−0.118	0.007	T	−0.10	0.01	L	7.4603	0.0009	0.010	123		7.44	7.48					1								S
103051	9.809	0.017	8.112	0.008		1.417	0.015	T	1.40	0.02	L	8.1038	0.0014	0.017	144		8.07	8.13					1								
103052	9.541	0.016	8.251	0.010		1.097	0.015	T	1.06	0.02	L	8.2875	0.0017	0.018	112		8.26	8.33		C			1								
103053	10.278	0.035	9.135	0.023		0.983	0.033	T	0.96	0.03	L	9.1284	0.0020	0.018	108		9.10	9.16		C			1								
103054	9.935	0.026	9.387	0.024		0.513	0.032	T	0.59	0.03	L	9.3902	0.0021	0.017	77		9.36	9.42		C			1								
103055	9.699	0.020	8.775	0.015	*	0.804	0.019	T	0.83	0.01	L *	8.7863	0.0019	0.016	111	*	8.76	8.82		D	20527+4607	I 1	2 C	A	AB	266	0.304	0.009	1.14	0.13	
103056	10.871	0.053	10.233	0.048		0.587	0.053	T	0.66	0.05	L	10.3391	0.0023	0.023	103		10.29	10.39		C			1								
103057	9.289	0.011	8.140	0.007		0.987	0.010	T	0.97	0.01	L	8.1967	0.0012	0.016	224		8.17	8.23					1								
103058	9.919	0.027	9.476	0.027		0.418	0.035	T	0.48	0.04	L	9.5466	0.0016	0.019	104		9.51	9.58					1								G
103059	8.983	0.023	8.363	0.021	*	0.574	0.023	T	0.65	0.02	L *	8.6367	0.0027	0.016	52	*	8.60	8.67		D	20528−1610	I 1	2 C	A	AB	60	2.981	0.007	0.90	0.05	S
103060	11.417	0.084	10.191	0.046		1.041	0.077	T	1.01	0.06	L	10.3041	0.0042	0.028	82		10.26	10.34					1								
103061	9.063	0.014	8.535	0.013		0.504	0.014	T	0.58	0.01	L	8.5533	0.0017	0.016	124		8.53	8.58					1								
103062	8.827	0.013	6.827	0.006		1.657	0.011	T	1.68	0.01	L	6.7360	0.0012	0.010	105		6.72	6.75					1								S
103063	9.874	0.023	8.651	0.014		1.045	0.021	T	1.02	0.02	L	8.6941	0.0023	0.021	87		8.67	8.73		C			1								
103064	10.197	0.027	8.748	0.015		1.222	0.024	T	1.18	0.02	L	8.7512	0.0017	0.017	96		8.72	8.78		C			1								
103065	9.958	0.044	8.424	0.022		1.289	0.039	T	1.25	0.04	L	8.4597	0.0019	0.011	63		8.44	8.48		C			1								
103066	7.633	0.006	7.684	0.008		−0.042	0.009	T	−0.02	0.01	L	7.6738	0.0017	0.016	149		7.65	7.70					1								S
103067	11.403	0.071	10.243	0.040	*	0.988	0.064	T	1.03	0.06	L *	10.2316	0.0037	0.036	117	*	10.18	10.29		D	20530+4258	M 1	2 C	A	AB	87	0.371	0.013	1.57	0.11	G
103068	8.906	0.012	8.332	0.012		0.574	0.015	G	0.65	0.01	H	8.3867	0.0016	0.013	112		8.36	8.42		C			1								S
103069						1.500	0.510	G	6.12	0.96	Q	10.6712	0.0961	0.549	137		9.81	11.39	466.00	P 1 A			1	S							G
103070	8.799	0.012	8.839	0.016		−0.032	0.018	T	−0.01	0.02	L	8.8303	0.0014	0.016	99		8.80	8.86		C			1								
103071	7.563	0.018	6.522	0.013	A	0.876	0.002	G	0.89	0.00	H *	6.4720	0.0013	0.007	51	*	6.46	6.49		D	20530−2347	I 1	2 C	A	AB	200	1.690	0.006	2.09	0.02	S
103072	8.909	0.013	8.339	0.012		0.533	0.016	T	0.61	0.02	L	8.3864	0.0017	0.014	79		8.36	8.42		C			1								S
103073	7.875	0.007	7.930	0.009		−0.065	0.015	G	−0.04	0.01	H	7.9363	0.0013	0.015	150		7.91	7.97					1								S
103074	7.734	0.010	7.665	0.012	*	0.069	0.015	T	0.08	0.02	L *	7.6111	0.0014	0.014	139	*	7.59	7.64		D	20531+2909	I 1	2 C	A	AB	28	0.882	0.002	0.22	0.01	S
103075	9.391	0.015	7.815	0.008		1.322	0.013	T	1.28	0.01	L	7.8243	0.0013	0.011	117		7.80	7.85					1								S
103076	9.843	0.023	8.699	0.015		0.983	0.021	T	0.96	0.02	L	8.7462	0.0022	0.018	81		8.72	8.77		C			1								
103077	7.192	0.004	6.457	0.004		0.661	0.007	G	0.71	0.02	A	6.5159	0.0009	0.008	115		6.50	6.53		C			1								S
103078	9.895	0.026	9.175	0.021		0.648	0.025	T	0.71	0.02	L	9.2419	0.0026	0.015	71		9.21	9.26		C			1								
103079	7.751	0.005	6.477	0.003		1.085	0.005	T	1.05	0.00	L	6.5266	0.0008	0.008	177		6.52	6.54		C			1								S
103080	10.733	0.038	9.223	0.017		1.270	0.033	T	1.23	0.03	L	9.2423	0.0018	0.017	132		9.21	9.27		C			1								
103081	7.826	0.009	7.600	0.008		0.184	0.002	G	0.20	0.00	H	7.6483	0.0018	0.015	109		7.62	7.67		U			1 G								S
103082	8.447	0.014	7.427	0.009		0.919	0.000	G	0.92	0.00	H	7.4775	0.0011	0.008	87		7.47	7.49		C			1								S
103083	9.050	0.013	8.853	0.015		0.188	0.019	T	0.21	0.02	L	8.9233	0.0032	0.030	105		8.87	8.97	0.78	P 1 A			1								
103084	8.838	0.012	8.696	0.014		0.137	0.017	T	0.15	0.02	L	8.7387	0.0018	0.017	119		8.71	8.77		C			1	S							
103085	7.815	0.008	7.589	0.007		0.216	0.010	T	0.24	0.01	L	7.6247	0.0007	0.007	115		7.61	7.64					1								S
103086	9.257	0.014	8.957	0.015		0.312	0.004	G	0.36	0.01	H	9.0033	0.0020	0.017	127		8.97	9.03		C			1								
103087	9.140	0.012	8.667	0.012		0.460	0.015	G	0.53	0.02	H	8.7295	0.0013	0.012	140		8.70	8.76					1								
103088	8.641	0.012	7.418	0.008		1.045	0.011	T	1.02	0.01	L	7.4773	0.0013	0.010	78		7.46	7.49		C			1								S
103089	4.613	0.003	4.764	0.002		−0.134	0.006	G	−0.16	0.03	C	4.7404	0.0011	0.008	94		4.73	4.75		M			1								S
103090	9.702	0.011	8.510	0.007		1.021	0.010	T	0.99	0.01	L	8.5670	0.0014	0.022	278		8.53	8.60					1								
103091	9.864	0.026	9.135	0.022		0.654	0.026	T	0.72	0.02	L	9.1929	0.0027	0.020	91		9.17	9.23					1								
103092	8.354	0.010	7.265	0.006		0.960	0.009	G	0.95	0.01	H	7.3163	0.0008	0.009	126		7.30	7.33		C			1								S
103093	10.553	0.037	9.758	0.028		0.705	0.035	T	0.76	0.03	L	9.8162	0.0024	0.021	117		9.77	9.86		C			1								G
103094	6.863	0.005	5.585	0.003		1.088	0.005	T	1.05	0.01	L	5.6436	0.0005	0.005	115		5.64	5.65		C			1								S
103095	9.215	0.015	8.713	0.015		0.439	0.002	G	0.51	0.00	H	8.7858	0.0017	0.017	109		8.76	8.82					1								
103096	10.459	0.035	8.762	0.015		1.483	0.012	G	1.97	0.07	I	8.6286	0.0019	0.016	116		8.60	8.65		C	20532+6210	I 1	1								
103097	9.058	0.013	8.410	0.011		0.594	0.013	T	0.66	0.01	L	8.4772	0.0018	0.015	110		8.45	8.50					1								S
103098	9.736	0.017	8.354	0.010		1.169	0.015	T	1.13	0.01	L	8.3990	0.0012	0.014	146		8.37	8.42		C			1								
103099	11.170	0.057	9.956	0.032		1.038	0.051	T	1.01	0.04	L	10.0798	0.0020	0.021	126		10.04	10.11		C			1								G
103100	10.745	0.036	9.457	0.020		1.096	0.032	T	1.06	0.03	L	9.5254	0.0028	0.032	127		9.49	9.60					1								

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
103101	20 53 22.77	+19 06 56.1	9.87	H	313.344 867 38	+19.115 577 79	1.87	4.79	−5.64	1.19	0.84	1.50	1.41	0.87	+ 8	− 9	+ 2	+28	+16	− 2	+12	+43	+ 6	+23	0	0.53
103102	20 53 24.62	−46 41 37.2	9.26	G	313.352 565 05	−46.693 664 43	9.66	−23.36	−197.62	1.15	0.88	1.43	1.92	1.41	+26	−14	−12	−26	− 5	+ 0	−11	−29	+10	+ 9	0	0.35
103103	20 53 24.94	−30 43 08.1	6.35	H	313.353 905 69	−30.718 909 20	6.14	34.13	−18.37	0.69	0.49	0.82	0.80	0.74	+35	−26	−15	− 7	− 6	+26	− 3	+26	−18	+31	0	−1.38
103104	20 53 25.51	+48 16 02.9	7.38	H	313.356 280 92	+48.267 472 74	10.65	19.39	7.84	0.49	0.47	0.57	0.55	0.51	−17	+10	+ 2	+ 1	+ 6	− 4	+ 6	−18	+ 7	−16	0	1.09
103105	20 53 25.61	−64 11 50.4	7.26	H	313.356 697 75	−64.197 320 97	8.48	−11.90	12.58	0.58	0.55	0.82	0.64	0.60	+ 9	−14	−19	+24	+12	− 6	+10	+14	− 1	− 2	0	0.26
103106	20 53 25.63	+08 09 52.1	12.25	2 G	313.356 793 19	+08.164 483 99	14.29	−43.43	−4.93	3.40	2.06	4.11	4.49	2.25	+15	−12	+12	+ 2	+23	+ 7	+15	+22	+ 6	+37	0	1.92
103107	20 53 25.89	−49 22 58.2	8.76	H	313.357 881 65	−49.382 824 01	13.74	43.91	−31.23	1.06	0.79	1.22	1.42	0.85	+15	−14	−18	+23	−31	+27	−47	−22	+ 0	−44	0	1.64
103108	20 53 26.38	+42 24 36.8	6.67	H	313.359 932 93	+42.410 212 01	7.23	8.13	−4.71	0.46	0.43	0.59	0.51	0.49	−17	+11	+11	+ 1	− 3	−20	− 1	+ 2	− 1	−11	0	−0.11
103109	20 53 26.94	+10 14 04.2	9.06	H	313.362 245 54	+10.234 513 50	3.60	12.37	−6.65	1.12	0.66	1.34	1.43	0.69	+15	−18	+ 4	+ 4	+31	+13	+20	+28	+14	+32	0	−0.24
103110	20 53 27.09	+00 19 31.8	8.41	H	313.362 888 89	+00.325 513 76	5.40	2.75	−27.32	0.95	0.59	1.10	1.08	0.59	+40	−30	−19	− 5	+10	+23	+ 7	− 5	+18	+59	0	1.25
103111 H	20 53 29.92	+03 00 07.3	7.53	H	313.374 652 85	+03.002 022 60 *	2.46	−8.96	1.00	1.42	0.85	1.02	1.11	0.58	+30	− 6	+ 2	+16	+17	+16	+14	+16	+18	+33	1	−0.53
103112	20 53 31.89	+34 44 46.1	8.29	H	313.382 855 17	+34.746 128 27	3.36	5.51	1.97	0.69	0.68	1.05	0.78	0.73	−24	−11	− 2	−30	+ 0	+12	+ 2	− 3	+12	−30	0	−1.11
103113 H	20 53 32.15	+45 23 02.3	8.33	H	313.383 937 71	+45.383 968 55 *	3.94	10.79	−3.26	0.75	0.73	0.94	0.95	0.84	−13	+ 8	+17	+ 4	+ 7	− 8	+10	−17	+ 5	−10	0	0.28
103114	20 53 32.17	−19 06 49.4	6.82	H	313.384 055 03	−19.113 731 88	4.63	5.77	0.08	0.91	0.61	0.99	1.07	0.87	− 3	− 9	−25	−31	+ 2	+42	+12	− 7	+ 3	+16	0	0.03
103115	20 53 32.71	+30 57 04.9	7.93	H	313.386 271 59	+30.951 347 46	−0.18	4.21	−3.48	0.56	0.57	0.93	0.66	0.68	− 3	−10	+ 2	+38	+10	−16	+12	+ 6	+ 5	− 3	0	1.19
103116 H	20 53 33.32	+31 37 34.1	6.85	H	313.388 833 65	+31.626 142 91 *	7.95	38.17	21.92	0.81	1.02	0.75	0.52	0.59	−43	− 5	+ 2	+13	− 3	+ 0	− 4	+14	− 1	−12	1	0.64
103117	20 53 34.07	−14 25 13.5	7.99	H	313.391 961 67	−14.420 424 40	2.85	−13.27	−3.71	0.96	0.74	1.19	1.24	1.11	+28	−15	−20	− 8	− 6	+39	+ 0	+13	− 7	+34	0	2.33
103118 H	20 53 34.76	−77 50 18.6	9.36	H	313.394 853 29	−77.838 495 64 *	10.67	49.79	−56.97	1.78	2.04	1.50	1.51	1.19	− 2	− 7	− 5	− 6	− 2	−11	− 2	−10	− 3	− 7	0	−0.81
103119	20 53 34.84	−41 04 29.9	8.02	H	313.395 157 37	−41.074 979 88	5.22	15.46	−29.90	0.84	0.62	1.01	0.90	0.77	+41	−37	−17	−10	−14	+14	− 8	−18	− 6	+45	0	1.65
103120 H	20 53 35.40	+35 13 40.6	8.12	H	313.397 496 06	+35.227 933 87 A	1.59	−0.46	−1.88	1.39	1.72	1.41	0.94	1.20	+25	− 5	+ 3	− 5	− 4	−10	− 5	−13	+21	−10	1	0.48
103121	20 53 38.45	+19 35 30.1	8.15	H	313.410 189 89	+19.591 697 62	5.09	10.30	−22.66	0.79	0.57	1.01	0.89	0.59	+ 7	−24	−11	+31	+10	−13	+ 8	+46	− 7	+14	0	0.22
103122	20 53 38.84	+22 43 33.0	9.72	H	313.411 847 90	+22.725 841 69	8.90	−25.62	−64.38	1.03	0.95	1.52	1.27	1.01	+18	−19	+16	+ 8	+21	+ 3	+15	+45	− 2	+34	0	1.40
103123	20 53 39.64	+21 15 43.5	8.26	H	313.415 146 81	+21.262 094 87	3.90	−9.23	−38.19	0.93	0.60	1.14	1.01	0.62	+15	−32	+ 8	+30	+19	−10	+19	+44	− 9	+31	0	0.25
103124	20 53 39.86	−36 11 45.0	7.13	1 G	313.416 089 57	−36.195 844 67	3.08	18.40	−56.91	0.81	0.54	0.92	1.17	0.72	+12	− 7	−19	+24	−24	+27	−18	− 3	−16	+ 7	0	1.01
103125	20 53 39.86	−11 39 16.9	9.00	H	313.416 096 74	−11.654 690 10	5.62	12.48	6.95	1.20	1.08	1.42	1.77	1.69	+52	−19	+ 2	+ 1	+21	+19	+ 0	+57	+ 5	+73	0	0.46
103126	20 53 39.88	+41 02 58.4	7.60	1 H	313.416 158 53	+41.049 569 00	2.75	5.40	−1.14	0.45	0.54	0.66	0.53	0.64	− 7	− 6	+14	+11	+ 1	−12	+ 2	+20	−13	+12	1	−1.40
103127	20 53 40.15	−39 48 34.7	5.34	1 G	313.417 300 78	−39.809 628 25	7.92	44.22	−97.24	0.73	0.51	0.84	0.78	0.55	+32	−18	−28	−29	+14	− 2	+ 5	− 3	+ 5	+53	0	−1.01
103128	20 53 41.17	+61 46 32.3	7.31	H	313.421 536 88	+61.775 641 37	6.61	71.47	140.89	0.57	0.52	0.63	0.53	0.53	− 5	− 6	+17	−15	+25	+11	+25	− 9	+ 5	+24	1	0.85
103129	20 53 41.21	−71 31 04.4	9.00	H	313.421 689 10	−71.517 883 25	1.16	27.17	−18.09	0.78	0.85	1.19	0.76	0.91	−21	−21	−17	−28	+16	− 1	+19	−12	−11	−33	1	0.10
103130 H	20 53 41.31	+59 18 27.7	6.96	G	313.422 104 39	+59.307 696 40 *	7.72	40.17	−28.28	0.54	0.51	0.62	0.60	0.60	−14	+ 5	− 8	+17	− 4	− 4	+ 1	− 7	+36	− 1	3	1.64
103131	20 53 41.78	+36 07 48.9	7.78	H	313.424 076 71	+36.130 249 65	17.19	−62.30	−95.21	0.46	0.55	0.73	0.49	0.59	−16	+ 0	+ 3	− 7	− 4	−23	− 4	−10	+ 6	−13	0	2.67
103132	20 53 42.74	+54 50 33.0	9.25	H	313.428 103 30	+54.842 494 44	2.14	−10.75	−12.23	0.65	0.69	0.77	0.73	0.77	− 6	+ 9	+ 2	− 7	+ 5	−15	+ 6	+ 2	+ 8	+ 2	1	1.04
103133	20 53 44.32	−44 20 26.7	7.52	H	313.434 660 64	−44.340 743 73	2.09	2.51	−1.85	0.80	0.61	0.94	0.99	0.78	+32	−17	−12	− 3	+11	+18	+10	+11	+12	+43	0	−0.40
103134	20 53 44.38	+27 43 34.3	8.91	H	313.434 931 87	+27.726 181 89	0.25	6.09	−2.21	0.62	0.69	0.96	0.69	0.75	+10	+11	− 3	+ 6	+18	− 6	+19	− 2	+ 9	+19	0	−0.87
103135	20 53 44.63	−59 42 30.2	7.54	H	313.435 952 91	−59.708 378 58	3.24	10.35	−13.53	0.54	0.53	0.88	0.75	0.55	+ 5	−14	− 7	−18	+30	− 3	+32	+ 8	− 1	−34	0	0.03
103136	20 53 45.69	−36 42 45.8	8.94	H	313.440 369 37	−36.712 714 90	9.25	45.54	−136.28	1.16	0.75	1.28	1.71	0.97	+14	+ 2	−12	+31	−19	+23	−12	− 8	−10	+20	0	0.44
103137 H	20 53 47.35	+37 23 08.3	8.82	G	313.447 287 89	+37.385 635 48 A	2.09	−5.29	−6.96	1.23	1.43	1.67	1.20	1.48	−13	−14	+ 1	+13	+ 4	− 6	+ 3	+13	− 1	− 4	1	−0.17
103138	20 53 49.43	−18 47 20.8	9.76	G	313.455 954 76	−18.789 097 74	26.08	98.44	−91.88	1.42	1.20	1.75	1.79	1.56	+28	−17	−40	−28	−12	+36	+ 5	− 5	− 6	+24	0	1.06
103139	20 53 51.71	−49 26 58.3	9.55	H	313.465 476 06	−49.449 528 80	15.66	46.76	−28.28	1.33	0.96	1.52	1.71	1.05	+26	−32	−20	+19	−25	+17	−44	−23	+13	−39	0	1.20
103140	20 53 51.81	−55 35 14.5	8.23	1 H	313.465 884 77	−55.587 359 34	5.32	16.57	−2.07	0.86	0.69	1.10	1.04	0.73	+ 0	−22	−13	+ 8	− 8	+17	−12	− 8	+19	−19	2	0.87
103141	20 53 52.19	+56 21 46.9	7.52	H	313.467 444 75	+56.363 026 16	1.46	−5.28	−3.97	0.49	0.49	0.55	0.51	0.50	+ 0	−14	− 3	+18	+11	−17	+13	+ 2	− 5	+15	0	0.50
103142	20 53 52.28	−40 47 01.5	9.36	H	313.467 816 58	−40.783 737 53	11.88	−22.45	−130.16	1.16	0.85	1.39	1.36	1.02	+34	− 9	− 9	−21	− 8	+ 5	− 7	−19	− 6	+52	0	−1.14
103143	20 53 52.41	+49 32 00.4	7.03	G	313.468 360 02	+49.533 435 19	0.32	−3.10	−4.72	0.53	0.49	0.60	0.66	0.52	− 7	− 4	− 4	−11	+ 2	+20	+ 1	−27	+10	−12	0	0.97
103144	20 53 53.63	+44 23 11.1	7.23	2 H	313.473 460 43	+44.386 413 49	10.68	26.77	−1.15	0.60	0.54	0.73	0.77	0.61	−16	+ 3	+16	−20	+12	+10	+10	−22	+15	−23	3	−0.37
103145	20 53 53.91	+33 26 16.1	5.47	1 H	313.474 610 43	+33.437 808 55	5.35	−20.60	34.02	0.33	0.41	0.58	0.37	0.44	−30	+ 7	+ 6	+ 3	−17	−12	−15	+ 8	+17	−38	1	−0.08
103146	20 53 54.48	+58 53 43.5	10.15	H	313.476 999 75	+58.895 409 53	4.56	3.13	2.38	0.95	1.00	1.14	1.09	1.15	−13	+15	− 6	+ 1	+ 7	− 2	+14	−22	+35	− 1	0	0.11
103147	20 53 55.68	+24 27 07.2	8.98	H	313.481 995 34	+24.452 003 39	9.45	45.22	19.52	0.84	0.67	1.19	0.93	0.72	+13	+ 5	− 9	+34	+25	+ 2	+24	+36	−11	+17	0	−0.06
103148	20 53 55.77	−26 19 10.4	7.74	H	313.482 375 13	−26.319 553 95	7.97	17.65	−102.23	1.19	0.65	1.18	1.34	1.05	+33	−43	−31	−39	+10	+37	+33	+55	−25	+15	0	0.43
103149	20 53 56.72	+29 29 58.8	8.02	H	313.486 322 36	+29.499 677 83	0.69	8.03	−4.37	0.54	0.58	0.88	0.64	0.66	−14	+ 7	− 4	+ 0	+ 6	−16	+ 9	−15	+15	− 1	0	0.72
103150	20 53 57.34	−02 45 54.1	11.10	G	313.488 897 85	−02.765 024 68	29.58	−615.19	−371.55	1.93	1.66	2.36	2.86	2.08	+41	−13	−21	+ 8	− 2	+14	+ 6	+39	− 5	+36	0	−1.09
103151	20 53 57.47	−12 17 30.2	8.29	H	313.489 463 96	−12.291 716 08	3.72	0.49	−5.96	1.00	0.74	1.34	1.34	1.19	+45	−13	−34	−22	−13	+18	−22	+34	−30	+56	0	0.70
103152	20 53 57.70	+24 06 00.7	8.79	H	313.490 423 85	+24.100 197 58	5.26	2.67	−11.73	0.79	0.71	1.15	0.87	0.76	+16	− 9	+ 6	+35	+23	−13	+23	+41	+ 6	+20	0	−0.66
103153	20 53 57.97	+45 39 22.9	10.00	H	313.491 542 70	+45.656 350 24	14.13	113.52	166.69	1.06	1.04	1.29	1.45	1.31	−17	+13	+ 5	+ 4	+ 6	− 2	+ 5	−24	+ 3	−21	0	−0.59
103154	20 53 58.37	−06 53 21.9	6.44	H	313.493 216 99	−06.889 407 14	14.18	26.15	−22.32	0.81	0.59	1.05	1.18	0.65	+30	−35	−48	−15	−38	+48	−17	+17	+ 3	+15	0	3.02
103155	20 53 58.96	+01 25 28.1	8.28	H	313.495 654 55	+01.424 460 35	2.57	20.16	0.19	1.02	0.57	1.11	1.33	0.54	+18	− 7	−11	−22	+30	+16	+11	+ 0	+29	+51	0	0.52
103156 H	20 53 59.15	−61 57 55.4	9.24	H	313.496 476 18	−61.965 381 49 A	0.75	7.69	−25.09	1.24	1.40	1.72	1.25	1.37	+ 8	−27	+12	+34	+13	− 9	+14	+10	+ 1	− 4	1	0.03
103157	20 53 59.33	−35 01 24.9	8.70	H	313.497 228 73	−35.023 582 74	4.46	5.32	−32.38	0.98	0.64	1.09	1.18	1.00	+14	−35	−17	+11	−13	+19	− 8	+27	−12	+10	0	0.69
103158	20 54 01.08	−24 16 49.8	7.28	H	313.504 520 69	−24.280 498 63	3.60	25.78	−30.37	0.97	0.71	1.01	1.50	1.50	+29	+ 8	+ 4	−34	−22	+ 7	−25	−28	− 5	+51	0	0.95
103159	20 54 01.43	+48 26 15.1	7.70	H	313.505 945 85	+48.437 524 90	3.53	9.08	3.96	0.50	0.49	0.58	0.61	0.56	−19	+ 2	+ 4	+ 6	+ 5	+ 2	+ 3	−17	+ 2	−28	0	1.27
103160	20 54 02.23	+07 05 34.6	11.36	G	313.509 292 09	+07.092 936 88	0.57	0.11	−8.70	1.98	1.18	2.39	2.54	1.34	+14	+ 8	+ 7	− 8	+33	+23	+21	+33	+14	+40	0	0.58
103161	20 54 02.88	−48 12 51.8	10.69	G	313.512 002 93	−48.214 382 48	6.40	47.76	−153.76	1.84	1.28	2.12	2.51	1.39	+17	−11	− 6	+ 5	−23	− 7	−32	−23	+10	−38	0	2.69
103162	20 54 03.12	−10 55 27.3	7.04	H	313.512 990 95	−10.924 240 24	2.28	−33.38	−12.83	0.94	0.64	1.07	1.33	0.94	+28	−14	− 3	+ 1	−27	+15	−31	+21	− 4	+44	2	−0.01
103163	20 54 04.45	+40 54 04.7	8.41	1 H	313.518 553 17	+40.901 293 68	6.67	−10.17	−24.27	0.56	0.64	0.84	0.64	0.76	− 6	− 6	+14	+14	− 2	−22	+ 2	+16	−25	+15	1	−0.15
103164	20 54 04.81	−04 32 31.9	6.78	1 H	313.520 039 90	−04.542 194 79	9.92	54.63	7.35	0.79	0.66	1.10	1.26	0.67	+11	−13	−53	+22	−44	+53	−16	+41	−17	− 7	5	−1.05
103165	20 54 05.30	+09 22 33.6	11.27	G	313.522 086 72	+09.376 003 24	2.01	−3.66	−6.44	2.02	1.30	2.54	2.75	1.44	+18	− 9	− 5	+ 7	+20	− 4	+15	+25	− 8	+33	0	−0.89
103166	20 54 05.73	−18 59 48.3	7.46	H	313.523 872 67	−18.996 751 94	14.97	−9.05	−36.12	0.90	0.61	0.98	1.13	0.86	− 6	− 9	−28	−29	+ 0	+41	+13	−10	+ 1	+ 7	0	0.48
103167	20 54 05.94	+45 06 36.5	7.36	H	313.524 736 19	+45.110 147 99	1.98	−0.47	0.71	0.54	0.54	0.69	0.67	0.60	−16	+ 8	+20	+ 2	+ 8	− 6	+ 9	−19	+ 9	−25	0	−0.01
103168	20 54 06.58	−27 55 30.7	6.41	1 H	313.527 402 09	−27.925 197 65	3.41	−11.68	−17.16	0.76	0.54	0.91	0.99	0.86	+24	−16	+ 7	+15	+13	+38	+ 3	+48	+ 6	+35	2	1.68
103169	20 54 06.75	+18 01 41.2	8.14	H	313.528 119 04	+18.028 122 11	4.89	−1.56	−3.12	0.76	0.56	1.00	0.88	0.60	+ 8	−20	− 8	+35	+ 4	+ 2	+ 4	+44	− 3	+22	1	−0.58
103170	20 54 07.32	+78 15 02.7	8.28	H	313.530 517 56	+78.250 740 54	4.68	12.27	21.35	0.60	0.61	0.65	0.67	0.66	− 8	− 5	+ 8	+ 6	+14	+ 3	+14	−14	+13	+ 1	0	1.33
103171	20 54 07.51	+03 57 16.4	7.79	H	313.531 272 74	+03.954 559 71	3.11	0.11	−15.46	0.87	0.45	1.01	0.97	0.46	− 9	−27	+20	−38	+41	+28	+19	+20	+10	+29	0	−1.05
103172	20 54 10.51	+19 45 14.7	7.22	H	313.543 779 95	+19.754 087 32	4.09	36.31	10.29	0.70	0.45	0.85	0.79	0.47	− 4	−20	− 7	+22	+ 3	− 6	+ 1	+36	− 4	+ 4	0	0.88
103173	20 54 11.81	−32 51 03.2	9.18	H	313.549 192 82	−32.850 883 10	2.86	14.27	−1.11	1.08	0.71	1.25	1.30	1.09	+21	−27	−16	−25	+ 0	+31	+ 7	+29	−21	+20	0	1.07
103174	20 54 13.89	−51 37 15.7	9.64	H	313.557 861 38	−51.621 034 68	2.15	−4.27	−31.37	1.18	0.94	1.53	1.72	0.95	+ 3	+ 0	−38	+ 6	−16	+ 5	−18	−23	+21	−30	0	0.41
103175	20 54 15.16	+24 47 32.3	9.34	G	313.563 147 52	+24.792 305 42	5.69	2.50	0.36	1.04	0.80	1.45	1.22	0.85	+ 3	−16	+ 9	+18	+17	+ 4	+16	+41	−13	+ 8	0	0.34
103176	20 54 16.02	−37 55 37.3	10.44	H	313.566 757 16	−37.927 037 55	4.79	17.26	−29.88	1.35	0.94	1.74	1.46	1.22	+42	−26	−12	−22	+ 9	+11	+ 7	+ 0	+ 2	+70	0	1.70
103177	20 54 16.96	−46 42 41.2	9.37	H	313.570 646 76	−46.711 442 74	3.13	0.02	−1.75	1.22	0.95	1.61	1.44	0.76	+29	− 1	+ 4	−29	−22	−12	−27	−55	+ 5	−15	0	0.58
103178	20 54 17.51	−35 48 25.6	10.48	H	313.572 955 15	−35.807 105 62	−2.74	16.37	−1.38	1.76	1.09	1.91	2.60	1.58	+16	−13	−11	+16	−10	+11	− 8	+15	− 3	+15	0	1.77
103179	20 54 18.04	−43 04 55.5	9.77	H	313.575 161 25	−43.082 071 91	13.82	13.19	−14.17	1.16	0.93	1.47	1.44	1.06	+37	−18	−20	+ 5	− 1	−10	+ 2	−12	−19	+44	0	−0.61
103180	20 54 18.26	−53 30 08.7	12.07	2 G																						
103181	20 54 18.34	+28 58 53.2	7.89	H	313.576 427 10	+28.981 444 89	2.70	1.54	−2.48	0.61	0.58	0.89	0.69	0.63	+ 4	+ 8	−10	+27	+20	−19	+19	+ 2	+18	+ 0	0	0.03
103182	20 54 18.53	−26 37 33.6	10.03	H	313.577 192 72	−26.625 991 24	9.01	13.07	18.47	1.60	1.08	2.12	2.20	1.82	+32	−12	−19	−10	+10	+53	+19	+51	−13	+31	0	1.29
103183	20 54 19.63	−52 01 22.8	8.72	H	313.581 785 14	−52.022 999 29	1.26	−1.46	2.20	0.98	0.84	1.26	1.30	0.80	+12	−10	−40	− 3	− 4	+ 2	− 8	−28	+19	−12	0	0.00
103184	20 54 20.06	−62 50 07.8	7.24	H	313.583 577 77	−62.835 496 99	4.31	12.32	−7.37	0.59	0.52	0.84	0.63	0.57	+13	−24	− 9	+41	+15	− 9	+13	+23	− 6	+ 3	0	−2.43
103185	20 54 20.26	+08 11 08.3	11.87	2 G	313.584 401 20	+08.185 642 01	2.51	−8.59	−8.11	3.02	1.83	3.70	4.21	2.06	+21	+ 6	+14	− 3	+29	+13	+18	+26	+16	+42	4	1.45
103186	20 54 21.03	+11 04 31.9	8.28	H	313.587 639 66	+11.075 519 96	2.06	−12.66	−14.02	0.88	0.56	1.07	1.12	0.62	+13	−21	+ 5	+12	+23	+14	+15	+39	+ 9	+31	0	1.32
103187	20 54 21.67	−08 30 41.2	8.45	H	313.590 289 96	−08.511 434 35	3.46	17.83	11.41	1.25	0.91	1.51	1.87	1.11	+15	−21	−45	+30	−37	+ 7	−22	+40	−34	+ 8	0	0.02
103188	20 54 21.83	+53 46 00.8	7.90	H	313.590 961 45	+53.766 888 35	2.66	−2.98	−5.99	0.55	0.56	0.63	0.60	0.65	− 2	+ 1	− 7	+11	+15	−11	+17	+ 2	+ 7	+11	0	−0.55
103189	20 54 22.25	+40 42 10.6	6.69	H	313.592 700 54	+40.702 956 51	4.82	6.80	1.17	0.42	0.48	0.62	0.48	0.57	−10	+ 0	+14	+ 4	− 6	− 8	− 6	+12	−16	+ 0	0	0.61
*103190	20 54 22.42	+69 56 51.0	7.86	H	313.593 436 32	+69.947 493 86	3.81	−2.25	11.36	0.60	0.60	0.66	0.75	0.71	−14	−19	− 5	− 6	+18	+ 6	+14	+18	−16	+11	0	0.73
*103191	20 54 22.39	+28 31 19.2	6.55	2 T	313.593 309 36	+28.522 010 21	1.84	−0.01	−5.80	0.44	0.46	0.68	0.48	0.48	− 6	+ 8	−24	+16	+24	−21	+22	+ 4	+20	− 4	0	−1.06
103192	20 54 23.94	−25 34 35.0	7.69	H	313.599 744 70	−25.576 386 29	3.55	13.77	−60.20	0.94	0.73	1.10	1.18	1.08	+11	−19	−31	−21	+ 3	+41	+18	+ 3	+ 5	+30	0	−1.07
103193	20 54 24.07	−29 40 54.4	10.59	G	313.600 281 79	−29.681 781 19	9.41	184.88	−66.53	2.12	1.32	2.21	2.83	2.20	+13	−24	−12	+28	−21	+ 3	−21	+49	−17	+ 4	2	0.53
103194	20 54 24.22	−53 35 22.2	8.04	H	313.600 914 45	−53.589 500 42	2.70	2.05	−7.56	1.00	0.77	1.16	1.33	0.83	+15	−21	−23	+24	−17	+15	−19	−19	+ 3	− 7	0	0.71
103195	20 54 25.74	+12 04 27.5	7.84	H	313.607 252 41	+12.074 319 35	3.16	26.78	7.07	0.82	0.50	0.96	1.00	0.55	+ 9	−16	+ 2	−12	+27	+ 5	+14	+37	+11	+29	0	1.15
103196	20 54 26.01	+48 55 47.3	7.95	H	313.608 384 86	+48.929 807 15	5.48	12.25	2.27	0.55	0.50	0.60	0.70	0.59	−23	− 8	+ 6	− 8	+15	+10	+13	−26	+ 6	−28	0	−0.04
103197	20 54 28.13	+21 42 11.1	8.91	H	313.617 188 03	+21.703 083 59	6.37	−6.82	−19.24	0.75	0.72	1.26	0.96	0.75	+12	−19	+ 4	+10	+20	+ 0	+18	+48	− 9	+15	0	−0.70
103198	20 54 31.29	+25 38 47.1	8.72	H	313.630 382 90	+25.646 406 75	2.16	19.01	−5.09	0.69	0.68	1.18	0.86	0.67	+11	−23	+13	−12	+35	+16	+26	+24	− 1	+18	0	0.43
103199	20 54 33.35	+30 45 50.2	9.68	H	313.638 948 06	+30.763 932 07	16.33	151.37	57.17	0.77	0.98	1.48	1.01	1.10	− 9	−21	+10	+37	+ 2	−24	+ 2	+23	+12	− 2	2	0.44
103200	20 54 33.64	+28 03 27.5	5.03	G	313.640 155 02	+28.057 631 54	4.41	0.12	−4.17	0.42

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
103101	12.069	0.131	9.997	0.031		1.715	0.107	T	1.74	0.11	L	9.9704	0.0022	0.029	128		9.91	10.02				1							G
103102	9.957	0.025	9.296	0.022		0.571	0.002	G	0.64	0.00	H	9.3876	0.0022	0.019	111		9.36	9.42				1 G							
103103	7.767	0.007	6.474	0.005		1.100	0.007	T	1.06	0.01	L	6.5143	0.0009	0.008	112		6.50	6.52				1							S
103104	7.655	0.007	7.403	0.008		0.240	0.010	T	0.27	0.01	L	7.4514	0.0009	0.010	125		7.44	7.47				1							S
103105	7.535	0.005	7.297	0.006		0.222	0.008	T	0.24	0.01	L	7.3322	0.0012	0.011	122		7.31	7.36				1							S
103106						1.400	0.007	G	1.46	0.14	K	12.4389	0.0100	0.087	111		12.32	12.60		U		1							D
103107	9.345	0.016	8.819	0.015		0.502	0.016	T	0.57	0.02	L	8.8717	0.0016	0.014	92		8.85	8.90		D		1							S
103108	6.645	0.004	6.666	0.005		−0.017	0.006	T	0.01	0.01	L	6.6772	0.0008	0.008	135		6.66	6.69		C		1							S
103109	10.836	0.055	9.216	0.022		1.356	0.047	T	1.32	0.06	L	9.2107	0.0022	0.017	105		9.16	9.25				1							
103110	9.803	0.023	8.537	0.014		1.079	0.021	T	1.04	0.02	L	8.5754	0.0016	0.011	95		8.56	8.59				1							
103111	8.271	0.007	7.606	0.006	*	0.616	0.008	T	0.68	0.01	L *	7.6625	0.0011	0.011	149	*	7.64	7.68		D	20535+0300	M 1	2 C A	AB	123	0.222	0.004	0.01	0.07	S
103112	10.511	0.031	8.512	0.011		1.657	0.026	T	1.68	0.03	L	8.3996	0.0017	0.018	148		8.37	8.43				1								
103113	9.549	0.017	8.432	0.012	*	0.962	0.016	T	0.95	0.01	L *	8.4935	0.0016	0.014	119	*	8.46	8.52		C	20535+4523	H 1	2 C S A	AB	229	0.124	0.012	0.71	0.63	
103114	8.137	0.011	6.939	0.007		1.025	0.010	T	1.00	0.01	L	6.9833	0.0013	0.010	54		6.97	7.00		C		1							S
103115	7.823	0.006	7.900	0.008		−0.066	0.009	T	−0.04	0.01	L	7.9166	0.0011	0.013	163		7.89	7.94		C	20536+3057	I 1	1 G						S
103116	7.212	0.004	6.887	0.004	*	0.309	0.006	T	0.35	0.01	L *	6.9292	0.0008	0.010	203	*	6.91	6.94		D	20536+3138	H 1	2 C A	AB	132	0.253	0.018	2.62	0.17	S
103117	9.129	0.020	8.069	0.014		0.919	0.018	T	0.92	0.01	L	8.1541	0.0010	0.010	47		8.14	8.18		C		1								
103118	10.262	0.024	9.425	0.019	*	0.737	0.024	T	0.78	0.02	L *	9.4964	0.0021	0.022	132	*	9.46	9.53		D	20536−7750	H 1	2 C A	AB	266	0.272	0.005	0.11	0.08	
103119	9.210	0.014	8.120	0.010		0.942	0.013	T	0.93	0.01	L	8.1814	0.0016	0.012	93		8.16	8.21				1							S
103120	8.192	0.008	8.139	0.009	*	0.054	0.011	T	0.07	0.01	L *	8.1493	0.0013	0.015	177	*	8.12	8.17		D	20536+3514	I 1	2 C A	AB	49	0.358	0.004	0.94	0.03	S
103121	8.429	0.009	8.174	0.010		0.243	0.013	T	0.27	0.02	L	8.2178	0.0013	0.014	120		8.19	8.24			20536+1935	I 1	1							S
103122	10.267	0.028	9.781	0.029		0.457	0.037	T	0.53	0.04	L	9.8204	0.0028	0.025	135		9.78	9.86		C			1							G
103123	8.755	0.011	8.298	0.011		0.431	0.014	T	0.50	0.01	L	8.3545	0.0016	0.015	113		8.32	8.38			20537+2116	I 1	1							S
103124	9.040	0.017	7.298	0.009		1.440	0.015	G	1.45	0.06	F	7.2628	0.0030	0.017	83		7.25	7.31		U 2			1							S
103125	9.596	0.017	9.090	0.016		0.486	0.018	T	0.56	0.02	L	9.1085	0.0014	0.012	109		9.09	9.13		C			1							
103126	7.462	0.006	7.571	0.007		−0.094	0.008	T	−0.08	0.01	L	7.5741	0.0036	0.030	138		7.54	7.61	1.21	P 1 A			1							S
103127	7.064	0.006	5.490	0.003		1.318	0.002	G	1.22	0.06	F	5.5067	0.0007	0.008	115		5.49	5.52		M			1							S
103128	7.619	0.006	7.336	0.007		0.269	0.009	T	0.30	0.01	L	7.3839	0.0011	0.010	107		7.37	7.40					1							S
103129	10.241	0.021	9.114	0.013		0.970	0.019	T	0.95	0.01	L	9.1610	0.0025	0.027	179		9.12	9.21					1							
103130	7.368	0.006	6.995	0.006	*	0.395	0.005	G	0.46	0.01	H *	7.0456	0.0009	0.008	98	*	7.03	7.06		D	20537+5918	I 1	2 C S A	AB	124	0.156	0.005	0.29	0.27	S
103131	8.713	0.010	7.863	0.008		0.747	0.010	G	0.79	0.01	H	7.9280	0.0010	0.013	173		7.91	7.96		C			1							S
103132	9.500	0.015	9.242	0.017		0.246	0.021	T	0.28	0.03	L	9.3169	0.0015	0.017	131		9.28	9.34					1							
103133	9.619	0.021	7.711	0.009		1.584	0.018	T	1.60	0.02	L	7.6398	0.0016	0.012	91		7.62	7.66					1							S
103134	8.857	0.011	8.900	0.015		−0.035	0.017	T	−0.01	0.02	L	8.9119	0.0022	0.020	137		8.88	8.95					1							
103135	7.535	0.006	7.536	0.007		0.004	0.008	T	0.02	0.01	L	7.5542	0.0009	0.012	163		7.53	7.58					1							S
103136	10.032	0.030	9.031	0.021		0.863	0.029	T	0.88	0.02	L	9.0866	0.0022	0.016	79		9.06	9.11		C			1							
103137	10.224	0.022	9.021	0.013	A	1.000	0.042	G	0.98	0.03	R *	9.0081	0.0019	0.021	142	*	8.98	9.05		D	20538+3723	I 1	2 C A	AB	356	9.036	0.023	2.62	0.08	
103138	11.257	0.110	9.806	0.049		1.085	0.015	G	1.15	0.02	I	9.8663	0.0032	0.017	52		9.84	9.89		C			1							
103139	10.353	0.031	9.523	0.024		0.731	0.030	T	0.78	0.02	L	9.6944	0.0030	0.026	92		9.66	9.74					1							
103140	8.638	0.011	8.259	0.011		0.359	0.014	T	0.42	0.01	L	8.3098	0.0034	0.027	87		8.27	8.35		U	20539−5535	I 1	1							S
103141	7.647	0.007	7.534	0.007		0.110	0.009	T	0.12	0.01	L	7.5666	0.0011	0.009	116		7.55	7.58					1							S
103142	10.351	0.031	9.423	0.022		0.807	0.029	T	0.83	0.02	L	9.5043	0.0022	0.027	103		9.46	9.56		C			1 S							
103143	7.534	0.006	7.094	0.007		0.415	0.008	T	0.48	0.01	L	7.1326	0.0010	0.010	112		7.11	7.15					1							S
103144	8.196	0.013	7.315	0.010		0.785	0.015	G	0.82	0.01	H	7.3672	0.0042	0.034	91		7.30	7.41		U 2			1							S
103145	7.477	0.005	5.648	0.003		1.522	0.005	T	1.56	0.01	L	5.5960	0.0008	0.010	212		5.58	5.61		U 2	20540+3327	I 1	1							S
103146	10.426	0.030	10.098	0.035		0.311	0.043	T	0.36	0.06	L	10.2265	0.0030	0.028	113		10.15	10.29		C			1							G
103147	9.561	0.020	9.036	0.019		0.515	0.015	G	0.59	0.02	H	9.0975	0.0020	0.017	117		9.07	9.13		C			1							
103148	8.403	0.011	7.795	0.009		0.543	0.015	G	0.62	0.01	H	7.8572	0.0009	0.009	89		7.84	7.88		C			1							S
103149	7.989	0.006	8.021	0.008		−0.025	0.009	T	0.00	0.01	L	8.0185	0.0015	0.016	156		8.00	8.04		C			1							S
103150						1.275	0.037	G	1.45	0.06	I	11.1737	0.0027	0.024	68		11.13	11.21					1							G
103151	8.947	0.012	8.348	0.011		0.559	0.014	T	0.63	0.01	L	8.4116	0.0013	0.011	95		8.39	8.43		C			1							S
103152	10.286	0.028	8.896	0.015		1.176	0.025	T	1.14	0.02	L	8.9543	0.0017	0.017	123		8.92	8.99					1							
103153	11.087	0.059	10.025	0.038		0.911	0.055	T	0.91	0.04	L	10.1424	0.0038	0.032	105		10.08	10.19					1							G
103154	6.858	0.005	6.477	0.006		0.361	0.007	T	0.42	0.01	L	6.5253	0.0007	0.005	73		6.52	6.53		C			1							S
103155	10.242	0.030	8.428	0.012		1.510	0.026	T	1.54	0.04	L	8.4085	0.0015	0.010	109		8.39	8.43		C			1							
103156	10.443	0.025	9.333	0.016	*	0.957	0.023	T	0.94	0.02	L *	9.4085	0.0023	0.024	163	*	9.36	9.44			20540−6158	H 1	2 C A	AB	353	0.586	0.018	2.81	0.09	
103157	8.770	0.012	8.699	0.015		0.064	0.017	T	0.07	0.02	L	8.7302	0.0014	0.014	92		8.71	8.76		C			1							
103158	8.499	0.016	7.400	0.011		0.949	0.015	T	0.94	0.01	L	7.4457	0.0009	0.008	46		7.43	7.46					1							S
103159	7.645	0.007	7.686	0.008		−0.035	0.009	T	−0.01	0.01	L	7.6956	0.0014	0.010	127		7.68	7.71		C			1							S
103160						2.790	0.020	G	3.10	0.17	K	11.4058	0.0046	0.045	145		11.31	11.48		C			1							G
103161	11.283	0.078	10.747	0.083		0.503	0.019	G	0.58	0.02	H	10.8206	0.0048	0.041	84		10.76	10.88		C			1							G
103162	8.938	0.013	7.186	0.007		1.461	0.012	T	1.47	0.02	L	7.1689	0.0013	0.009	88		7.16	7.19		C			1							S
103163	8.612	0.010	8.423	0.012		0.181	0.015	T	0.20	0.02	L	8.4715	0.0019	0.017	133		8.44	8.51		M			1							
103164	7.096	0.005	6.818	0.006		0.264	0.007	T	0.30	0.01	L	6.8533	0.0015	0.010	77		6.84	6.88		M			1							S
103165						1.510	0.020	G	1.64	0.15	K	11.4366	0.0048	0.042	112		11.38	11.51		C			1							G
103166	8.131	0.011	7.516	0.011		0.570	0.011	T	0.64	0.01	L	7.5802	0.0009	0.006	50		7.57	7.59		D			1							S
103167	7.315	0.006	7.345	0.009		−0.033	0.008	G	−0.01	0.01	H	7.3539	0.0012	0.010	114		7.34	7.37		C	20541+4507	I 1	1							S
103168	8.524	0.012	6.597	0.006		1.634	0.011	T	1.86	0.04	O	6.5023	0.0022	0.015	94		6.49	6.53	7.32	P 1 A			1							S
103169	9.312	0.016	8.225	0.011		0.940	0.015	T	0.93	0.01	L	8.3002	0.0013	0.015	124		8.27	8.33					1							S
103170	9.629	0.017	8.393	0.011		1.055	0.016	T	1.02	0.01	L	8.4434	0.0013	0.013	120		8.42	8.47		C			1							
103171	9.727	0.018	7.957	0.009		1.475	0.016	T	1.49	0.02	L	7.9240	0.0015	0.014	157		7.90	7.95			20541+0357	I 1	1							
103172	8.429	0.011	7.315	0.008		0.960	0.011	T	0.95	0.01	L	7.3822	0.0009	0.009	122		7.36	7.40		C			1							S
103173	10.591	0.052	9.287	0.028		1.108	0.046	T	1.07	0.05	L	9.3477	0.0019	0.015	87		9.32	9.37		C			1							
103174	10.611	0.043	9.733	0.033		0.768	0.042	T	0.81	0.03	L	9.7784	0.0032	0.021	78		9.75	9.82		C			1							
103175	10.023	0.028	9.380	0.024		0.576	0.015	G	0.65	0.01	H	9.4798	0.0021	0.025	106		9.44	9.52					1							
103176	11.120	0.044	10.466	0.040		0.607	0.050	T	0.68	0.04	L	10.5668	0.0029	0.033	159		10.51	10.63					1							G P
103177	10.688	0.039	9.484	0.023		1.030	0.035	T	1.00	0.03	L	9.5359	0.0019	0.021	109		9.50	9.57		C			1							
103178	11.011	0.062	10.498	0.064		0.482	0.081	T	0.55	0.09	L	10.5816	0.0039	0.035	83		10.52	10.65		C			1							G
103179	10.655	0.038	9.813	0.030		0.740	0.037	T	0.79	0.03	L	9.9047	0.0031	0.021	86		9.87	9.94		C			1							
103180						1.490	0.015	G	2.08	0.02	A	12.5675	0.0126	0.108	72		12.26	12.69		U			S							D G
103181	8.272	0.009	7.921	0.011		0.376	0.001	G	0.44	0.00	H	7.9743	0.0014	0.013	124		7.95	8.00					1							S
103182	10.867	0.064	10.150	0.053		0.645	0.063	T	0.71	0.06	L	10.1598	0.0027	0.026	83		10.12	10.21		C	20543−2638	I 1	1 S							
103183	10.250	0.033	8.857	0.018		1.178	0.029	T	1.14	0.03	L	8.8910	0.0025	0.017	89		8.86	8.91					1							
103184	8.706	0.009	7.368	0.006		1.135	0.008	T	1.10	0.01	L	7.4057	0.0012	0.011	143		7.39	7.43					1							S
103185						1.650	0.015	G	2.30	0.30	K	11.9543	0.0135	0.119	115		11.76	12.16		U 2			1							D
103186	9.582	0.018	8.379	0.012		1.029	0.017	T	1.00	0.01	L	8.4426	0.0013	0.014	116		8.42	8.47		C			1							
103187	8.910	0.016	8.491	0.016		0.396	0.021	T	0.46	0.02	L	8.5412	0.0016	0.009	65		8.53	8.55		C			1							
103188	10.183	0.024	8.121	0.009		1.799	0.008	G	1.81	0.09	H	7.9975	0.0015	0.014	121		7.97	8.02		C			1							
103189	6.592	0.004	6.687	0.004		−0.081	0.005	T	−0.06	0.01	L	6.6641	0.0007	0.008	133		6.65	6.68			20544+4042	I 1	1 S							S
103190	9.100	0.015	7.968	0.010		0.974	0.014	T	0.96	0.01	L	8.0253	0.0017	0.012	105		8.00	8.05			20544+6957	I 1	1							
103191	6.357	0.009	6.526	0.009		−0.147	0.011	T	−0.14	0.01	L	6.5202	0.0091	0.085	131		6.41	6.63	0.20	P 1 A			1							S
103192	9.177	0.019	7.822	0.011		1.148	0.017	T	1.11	0.01	L	7.8576	0.0011	0.008	50		7.84	7.88					1							S
103193	11.329	0.088	10.715	0.077		0.603	0.002	G	0.67	0.00	H	10.7392	0.0043	0.037	95		10.68	10.80					1							G
103194	9.899	0.025	8.212	0.012		1.409	0.022	T	1.39	0.03	L	8.1858	0.0019	0.019	84		8.16	8.22					1							S
103195	9.155	0.014	7.969	0.009		1.016	0.013	T	0.99	0.01	L	8.0011	0.0006	0.011	122		7.98	8.02		D			1							
103196	8.253	0.008	7.975	0.008		0.253	0.004	G	0.28	0.01	H	8.0229	0.0009	0.010	120		8.00	8.04		C			1							
103197	9.125	0.013	8.922	0.015		0.194	0.019	T	0.21	0.02	L	8.9746	0.0015	0.015	128		8.95	9.01		C			1							S
103198	10.106	0.019	8.852	0.011		1.069	0.017	T	1.03	0.01	L	8.8795	0.0018	0.017	180		8.85	8.92					1							
103199	10.792	0.038	9.821	0.025		0.840	0.035	T	0.86	0.03	L	9.8226	0.0032	0.029	171		9.78	9.87					1							G
103200	6.961	0.004	5.175	0.002		1.481	0.002	G	1.50	0.00	H	5.1534	0.0007	0.006	140		5.14	5.16					1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	π	$\mu_{\alpha*}$	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28												29	30
103201	20 54 34.12	−52 31 25.3	8.44		G	313.642 153 52	−52.523 690 06		4.24	−0.01	−21.18	1.02	0.70	1.11	1.18	0.66	+ 0	− 5	−24	−19	− 6	+ 7	− 5	−27	+15	−12												0	−0.32
103202	20 54 34.34	+23 12 23.6	9.51		H	313.643 083 91	+23.206 543 92		5.08	−18.05	−14.06	0.84	0.84	1.29	0.89	0.89	+14	+ 2	− 9	+13	+13	−12	+10	+26	−14	+28												0	1.53
103203	20 54 34.65	+11 26 32.5	7.86		H	313.644 372 44	+11.442 350 43		2.51	7.61	14.05	0.79	0.51	0.94	0.96	0.57	+15	−18	+ 4	− 2	+30	+13	+19	+44	+ 7	+35												0	1.73
103204	20 54 34.93	+51 30 22.5	9.56		H	313.645 525 60	+51.506 245 46		18.77	291.85	−40.67	0.89	0.87	1.03	1.16	0.97	− 1	+ 7	+18	+15	+ 0	− 6	− 5	−26	+13	−19												0	0.02
*103205	20 54 35.17	−36 53 40.0	8.86		H	313.646 544 82	−36.894 451 06		4.44	33.41	−35.92	1.20	0.70	1.30	1.73	0.90	+ 6	+ 0	− 8	+30	−17	+24	−13	+10	− 4	+ 9												0	0.46
*103206	20 54 35.10	−50 43 38.3	6.23		H	313.646 239 25	−50.727 302 30		2.10	10.75	−15.93	0.71	0.47	0.78	0.94	0.50	+ 9	− 8	−16	−16	− 6	−10	− 8	−23	+17	−27												0	1.58
103207	20 54 35.92	−27 55 49.9	7.69		H	313.649 673 94	−27.930 515 15		1.15	11.77	5.57	0.90	0.65	1.05	1.16	1.05	+31	−19	+ 1	+ 9	+13	+34	+ 5	+50	+ 4	+40												0	1.03
103208	20 54 36.37	−49 38 00.5	9.84		H	313.651 534 87	−49.633 466 54		14.99	91.00	12.44	1.39	1.00	1.47	1.71	1.09	+15	−19	− 6	+22	−26	+14	−39	−22	− 2	−30												4	1.45
*103209	20 54 36.63	+05 00 58.8	9.21		H	313.652 610 72	+05.016 331 21		2.37	15.98	−15.25	1.30	0.64	1.56	1.53	0.70	+ 0	− 4	− 1	−26	+35	−15	+19	+24	+14	+29												0	−0.02
*103210	20 54 36.60	+47 44 23.0	8.67		H	313.652 492 32	+47.739 726 48		2.50	5.96	2.01	0.68	0.66	0.80	0.78	0.72	−10	− 2	− 8	− 5	+11	+ 0	+11	−15	+16	+ 1												5	1.20
103211	20 54 37.90	+26 28 29.7	9.73		H	313.657 922 10	+26.474 929 43		−2.83	1.54	−4.21	0.77	0.82	1.24	0.97	0.87	+27	−14	−16	− 6	+34	−20	+28	+39	+ 2	+26												0	−0.24
*103212	20 54 43.46	+21 02 27.6	10.64		H	313.681 101 67	+21.041 013 45		13.13	−112.49	−142.22	4.14	2.98	5.02	4.95	3.12	+ 5	−11	−19	+ 5	+15	− 6	+11	+14	+ 3	+10												3	
*103213	20 54 39.92	+46 13 52.3	6.67		H	313.666 328 96	+46.231 191 28		8.36	13.81	1.71	0.47	0.48	0.59	0.60	0.60	− 9	− 3	+11	−15	− 4	− 5	− 2	−20	+ 9	+12												0	0.49
*103214	20 54 40.36	+29 49 23.8	10.28	2	H	313.668 163 61	+29.823 280 12		1.11	0.04	−3.13	0.87	0.98	1.55	1.12	1.13	−17	+ 3	− 7	+18	− 3	−13	− 3	+13	+10	− 3												0	2.62
*103215	20 54 41.20	−45 43 50.5	9.49	2	H	313.671 648 74	−45.730 687 37		2.79	−24.52	−7.89	1.28	0.86	1.44	1.34	0.71	+24	−17	−13	−34	−22	+18	−24	−52	+10	− 9												2	−0.09
*103216	H 20 54 41.99	+37 04 25.4	7.15		G	313.674 956 17	+37.073 717 25	A	5.77	9.62	−3.74	0.57	0.66	0.77	0.55	0.66	−15	− 9	+ 5	− 8	+ 7	− 3	+ 4	+ 4	+ 1	− 8												0	0.37
*103217	20 54 43.00	+03 36 28.6	7.55		H	313.679 161 40	+03.607 947 42		2.67	−5.43	−11.61	0.81	0.44	0.93	0.95	0.48	+ 1	−26	+10	−30	+34	+29	+14	+19	+18	+36												0	0.83
103218	20 54 43.62	−20 56 57.3	8.01		H	313.681 733 32	−20.949 259 63		4.99	10.90	−20.76	1.03	0.74	1.09	1.23	1.19	+ 8	+12	−22	−38	−10	+ 9	−12	−24	+18	+34												0	0.71
103219	20 54 44.28	+75 55 31.7	5.99		H	313.684 481 28	+75.925 467 06		7.51	30.92	42.29	0.51	0.44	0.52	0.54	0.46	+ 4	−24	− 3	−14	+ 5	+16	+ 1	−25	+22	+19												1	1.62
103220	20 54 44.60	−34 52 48.1	8.67		H	313.685 850 56	−34.880 030 04		3.29	8.87	0.85	0.99	0.69	1.14	1.34	1.04	+10	−16	−25	+11	−17	+25	−12	+25	−11	+ 8												0	−1.17
103221	20 54 45.17	−29 24 30.3	8.64		H	313.688 189 81	−29.408 409 83		0.72	32.92	16.71	1.19	0.71	1.33	1.79	1.18	+ 0	+ 9	−29	+31	−36	+32	−32	+37	−44	−20												0	0.54
103222	H 20 54 45.29	+45 08 10.6	7.66		H	313.688 719 87	+45.136 276 26	A	2.70	6.32	0.46	1.01	1.09	1.18	1.17	1.10	−19	+19	+17	+13	+ 2	− 2	+ 7	− 8	+ 7	−26												1	0.80
103223	20 54 46.32	−08 52 59.7	7.02		H	313.693 001 46	−08.883 239 70		6.19	20.34	−32.80	0.89	0.64	1.01	1.33	0.86	+26	−11	−12	+ 4	−27	− 1	−23	+21	−10	+30												0	−1.32
103224	20 54 46.90	−18 47 34.2	6.66		H	313.695 404 69	−18.792 829 12		11.17	76.84	15.73	0.81	0.59	0.92	1.03	0.80	+ 0	− 7	−34	−30	− 6	+39	+ 8	−14	+ 5	+13												0	0.47
103225	20 54 46.96	−00 22 46.9	9.54		H	313.695 679 40	−00.379 681 65		3.36	15.71	6.20	1.39	0.83	1.59	1.79	0.84	+47	−24	− 7	+16	+16	+15	+15	+ 5	+12	+65												2	1.61
103226	20 54 47.85	−17 55 22.3	5.78		G	313.699 384 83	−17.922 852 85		8.25	−58.88	−17.03	0.85	0.60	0.96	1.11	0.77	−12	−10	−37	−26	− 5	+48	+15	−12	+ 1	− 2												0	2.57
103227	20 54 48.58	−58 27 14.7	3.67		H	313.702 415 09	−58.454 094 70		5.41	21.06	−24.75	0.57	0.44	0.73	0.66	0.51	− 5	−24	− 5	−23	+10	+ 5	+19	+ 7	+ 0	−37												0	0.65
103228	20 54 48.61	−73 04 04.9	8.44		H	313.702 532 99	−73.068 036 51		3.37	6.65	−54.63	0.68	0.70	0.95	0.90	0.86	−11	−10	−10	+30	+ 4	− 8	+ 3	+30	−11	−19												1	−0.53
103229	20 54 48.76	−60 12 36.1	8.04		H	313.703 186 31	−60.210 014 41		4.99	−19.87	−12.30	0.58	0.63	1.01	0.90	0.63	+16	−16	− 9	−17	+28	+ 6	+25	+ 2	+ 1	−18												1	0.19
103230	H 20 54 49.14	−46 36 01.1	7.41		H	313.704 741 55	−46.600 308 20	A	13.49	86.04	−135.06	1.44	1.10	1.63	1.62	0.85	+43	− 6	− 4	−24	−25	−20	−33	−56	+ 3	− 3												2	−0.07
103231	20 54 49.74	−64 11 59.7	8.44	1	H	313.707 261 09	−64.199 909 16		5.51	−5.88	−19.21	0.76	0.77	1.13	0.82	0.77	+ 1	− 5	−27	+17	+ 8	− 1	+ 7	+19	+ 8	− 5												0	0.36
103232	H 20 54 49.83	+32 42 22.7	7.46		G	313.707 626 72	+32.706 301 94	A	17.37	69.46	51.79	1.00	1.31	1.60	1.16	1.46	−26	+ 9	−13	+17	−16	+ 6	−20	+12	− 5	−29												2	0.53
*103233	20 54 50.59	+34 21 22.4	8.50		H	313.710 792 20	+34.356 232 99		4.51	2.17	−2.24	0.61	0.70	1.07	0.67	0.81	−36	− 6	+ 8	− 9	+ 0	− 8	− 1	+ 1	+26	−40												1	−2.23
*103234	20 54 50.53	−54 26 32.7	9.40		H	313.710 529 05	−54.442 427 61		11.94	−88.79	47.18	1.17	0.93	1.36	1.80	1.26	− 7	−19	−25	+39	−22	+ 1	−28	+13	+ 8	−37												0	−1.24
103235	20 54 51.51	−83 51 14.5	10.05		H	313.714 611 95	−83.854 028 30		4.22	6.58	−4.71	0.90	0.80	1.10	1.10	0.84	− 2	−17	−19	+ 7	+ 3	− 8	+ 2	− 5	−10	−10												0	0.18
103236	20 54 53.39	+17 41 31.0	8.74		H	313.722 460 49	+17.691 939 15		9.01	29.66	−67.46	0.88	0.59	1.17	1.05	0.63	+ 5	− 8	+ 0	+37	− 4	+10	+ 0	+31	− 9	+26												0	0.29
103237	20 54 54.15	−01 22 32.6	7.75		H	313.725 611 19	−01.375 729 10		15.17	15.17	−13.30	0.96	0.60	1.20	1.19	0.68	+35	+ 7	+ 2	− 7	+ 3	+37	+ 0	+ 7	+24	+57												0	0.07
103238	20 54 55.51	−00 42 10.8	8.24		G	313.731 271 20	−00.703 005 08		7.41	16.00	−18.85	0.92	0.57	1.09	1.18	0.58	+36	−21	−11	−20	− 4	+30	− 6	−15	+15	+59												0	1.24
103239	20 54 55.76	+36 47 03.4	9.29		H	313.732 353 97	+36.784 268 58		10.97	187.40	14.39	0.76	0.87	1.19	0.85	1.01	−18	−10	+ 9	− 8	+ 7	+ 0	+ 8	+ 8	− 8	−12												0	0.54
103240	20 54 56.04	−15 16 59.1	7.87		H	313.733 480 15	−15.283 086 97		8.20	−15.67	−16.45	1.04	0.81	1.13	1.65	1.50	+24	− 9	− 4	− 4	−31	+25	−30	−21	+ 3	+47												0	−0.63
103241	20 54 57.53	+47 32 01.7	10.85	2	H	313.739 723 38	+47.533 810 70		1.51	−1.04	−2.28	1.41	1.52	1.73	1.61	1.92	− 6	+ 0	− 6	− 1	+ 7	− 1	+13	−23	+ 2	+16												0	1.59
103242	20 54 57.73	+33 45 50.5	6.93	2	H	313.740 548 19	+33.764 023 94		1.33	−3.96	−7.67	0.37	0.49	0.68	0.42	0.57	−28	+ 3	+ 1	+ 8	−12	−17	−12	+ 1	+16	−38												0	−2.44
103243	20 54 59.58	+81 48 17.3	8.25		G	313.748 270 76	+81.804 794 80		3.21	10.65	8.64	0.62	0.59	0.67	0.73	0.73	+ 3	−20	−16	−18	+ 1	+ 3	− 2	−20	+16	+13												0	−2.58
103244	20 55 01.31	−42 51 53.6	8.93		H	313.755 451 85	−42.864 876 89		5.60	38.87	−47.92	1.12	0.80	1.41	1.40	0.89	+32	−18	−30	− 4	+ 3	−12	+ 3	−12	−13	+46												0	−0.60
103245	20 55 01.81	+53 44 00.6	9.13		H	313.757 533 78	+53.733 494 72		−0.72	−0.87	−6.67	0.64	0.61	0.71	0.73	0.68	−12	+ 8	+ 9	+19	+ 4	− 1	+ 6	+ 1	+11	− 3												0	1.12
103246	20 55 02.18	+17 15 34.5	7.85		H	313.759 077 88	+17.259 586 47		4.14	−0.47	−11.03	0.82	0.49	1.00	0.96	0.52	+10	+13	+ 2	+56	+ 6	+18	+10	+47	− 1	+32												1	0.27
*103247	H 20 55 02.33	+28 05 26.4	7.80		H	313.759 714 75	+28.090 675 92	A	14.65	113.04	−80.62	1.40	1.40	1.47	1.00	1.04	−10	+ 3	− 8	− 5	+23	− 9	+22	+10	+ 0	+ 9												1	0.10
*103248	20 55 02.30	−41 24 39.4	9.57		G	313.759 570 66	−41.410 948 91		−0.07	6.47	4.11	1.17	0.85	1.41	1.54	1.06	+41	−33	−14	+16	+ 2	+12	+ 7	− 7	+ 0	+49												6	2.49
103249	20 55 03.13	+19 15 32.6	9.12		H	313.763 047 24	+19.259 064 38		2.05	6.19	−2.76	0.90	0.63	1.19	1.03	0.65	− 2	−15	− 7	+24	+ 3	−12	+ 0	+44	− 6	+ 8												1	1.67
103250	20 55 03.37	−07 10 41.6	7.81		H	313.764 052 87	−07.178 232 64		18.74	−12.33	−183.73	0.95	0.70	1.21	1.37	0.80	+35	−32	−39	−15	−32	+37	−13	+18	− 9	+21												0	2.67
103251	20 55 03.79	+66 55 39.8	9.10		H	313.765 799 61	+66.927 722 62		1.75	1.16	−13.24	0.76	0.75	0.84	0.95	0.81	+ 1	− 5	+ 2	+11	+ 9	− 5	+ 7	−18	+22	− 1												0	−1.00
103252	20 55 03.82	+25 53 04.8	8.48		H	313.765 928 93	+25.884 679 19		1.99	3.55	−1.56	0.59	0.62	0.98	0.73	0.64	+15	−11	− 4	−21	+37	+ 3	+32	+37	+ 4	+16												0	−0.11
103253	20 55 04.31	−22 51 08.5	9.01		H	313.767 958 59	−22.852 357 40		2.94	10.35	−32.23	1.25	1.08	1.42	1.61	1.85	+35	+12	+ 6	−26	−31	− 6	−33	−38	−37	+47												0	−0.30
103254	20 55 05.22	−45 23 04.1	8.31		H	313.771 748 83	−45.384 461 25		2.99	7.42	−0.48	0.94	0.66	1.17	0.94	0.52	+26	−32	−37	−31	−26	+33	−27	−53	+26	− 3												0	1.59
103255	20 55 05.45	+39 12 58.9	8.03		H	313.772 711 50	+39.216 365 03		1.39	−0.44	−5.87	0.58	0.67	0.88	0.60	0.70	−12	−13	+19	− 3	− 5	−17	+ 0	− 3	−10	− 3												1	−0.36
103256	20 55 06.53	+13 10 33.1	8.82		G	313.777 214 00	+13.175 847 52		44.04	549.90	372.13	0.85	0.69	1.19	1.12	0.74	+23	−16	+10	+ 4	+23	+16	+16	+35	− 1	+36												0	1.37
103257	20 55 06.75	−41 40 19.5	9.68		H	313.778 124 34	−41.672 086 09		2.72	−4.39	−14.71	1.32	1.01	1.72	1.61	1.19	+38	−27	−11	+ 9	+ 1	+ 6	+ 3	− 8	− 2	+42												0	0.74
103258	20 55 07.27	+51 30 04.1	9.49		H	313.780 283 50	+51.501 130 57		1.36	5.31	−1.91	0.77	0.81	0.92	0.98	0.90	− 3	+10	+13	+ 0	+ 2	− 5	+ 1	−26	+14	−18												0	−1.06
103259	20 55 08.00	−28 29 31.5	8.89		H	313.783 320 98	−28.492 086 45		9.99	−37.84	−50.44	1.02	0.67	1.15	1.31	1.10	+30	−27	− 7	−11	− 6	+25	−10	+30	− 6	+36												0	1.93
103260	20 55 08.17	−52 07 10.5	7.02		H	313.784 023 50	−52.119 584 00		21.64	108.20	−113.32	0.82	0.56	0.94	1.49	0.81	− 7	+ 9	−33	−36	+ 5	+ 1	+ 9	−22	+24	−22												2	2.97
103261	20 55 08.26	−01 22 23.1	6.55	1	G	313.784 429 52	−01.373 090 42		12.59	13.47	25.12	0.79	0.48	0.97	1.01	0.52	+32	− 9	− 7	−14	+ 0	+38	− 3	− 4	+26	+57												0	−0.47
103262	20 55 08.43	+01 48 47.6	6.70		H	313.785 130 91	+01.813 216 91		7.82	33.08	−2.34	0.80	0.44	0.85	1.13	0.43	+26	−20	−11	− 8	+19	+ 2	+ 6	+ 6	+18	+43												0	−1.75
103263	20 55 09.14	+46 21 00.9	7.00		H	313.788 074 02	+46.350 262 39		6.33	−16.85	−43.88	0.49	0.51	0.63	0.64	0.64	− 6	+ 4	+13	−15	− 6	− 9	− 3	−17	+17	+13												0	−0.97
103264	H 20 55 13.68	−30 08 24.9	8.24		G	313.806 995 06	−30.140 243 78	*	5.76	9.23	−31.87	0.91	0.60	1.05	1.17	0.95	+22	−13	−12	+ 8	− 9	+29	− 9	+43	−16	+16												0	−1.40
103265	20 55 13.78	−46 13 56.3	9.31		G	313.807 410 11	−46.232 299 71		4.22	26.08	5.68	1.25	0.87	1.43	1.45	0.74	+32	−15	−13	−34	−22	− 3	−27	−52	+20	−20												2	−0.89
103266	20 55 15.31	−01 58 23.0	9.15		H	313.813 772 35	−01.973 065 98		8.75	25.66	25.69	1.10	0.88	1.37	1.45	1.03	+37	−13	−28	− 4	−19	+15	−12	+18	− 6	+31												0	0.08
103267	20 55 15.52	−40 34 13.8	8.89		H	313.814 656 50	−40.570 511 73		3.82	49.43	−24.66	1.08	0.73	1.22	1.09	0.86	+25	−14	− 4	−39	+ 0	− 4	+ 0	−20	−19	+49												0	−0.52
103268	20 55 16.66	+43 47 26.3	7.73		G	313.819 396 87	+43.790 634 74		14.10	−0.84	−64.33	0.55	0.60	0.76	0.65	0.62	− 6	− 2	+ 9	+ 2	+12	+13	+ 8	−23	+14	−11												0	−0.19
103269	20 55 16.71	+42 18 04.1	10.28		G	313.819 631 44	+42.301 136 33		14.24	56.66	−389.54	1.06	1.11	1.46	1.30	1.34	−15	+19	− 2	− 1	+13	−19	+18	−24	+24	−13												0	1.19
103270	20 55 17.39	+12 50 00.1	9.27		H	313.822 442 89	+12.833 374 33		2.81	−0.14	3.15	0.86	0.73	1.17	1.12	0.78	+27	−15	+ 4	+ 5	+23	+ 5	+18	+36	+ 2	+36												0	−0.02
103271	20 55 17.59	+09 43 15.8	7.45		H	313.823 281 63	+09.721 059 20		16.72	39.72	42.18	0.84	0.45	0.94	1.11	0.49	+ 8	−16	+ 3	+ 8	+28	+ 5	+19	+38	+ 4	+27												0	1.11
*103272	H 20 55 17.96	+42 30 48.6	7.03		H	313.824 819 94	+42.513 486 46	A	2.61	5.50	−3.30	0.62	0.63	0.74	0.66	0.63	−14	+16	+ 2	+ 0	+ 4	− 8	+ 8	+ 0	+16	−11												2	0.10
*103273	20 55 17.95	+47 29 05.4	8.86		H	313.824 779 09	+47.484 821 93		2.75	4.94	7.43	0.75	0.82	0.93	0.91	1.03	− 6	+ 2	− 1	− 5	+ 6	+ 8	+14	−32	+15	+24												3	−0.39
103274	20 55 18.68	−22 07 25.0	8.32		H	313.827 831 94	−22.123 621 12		2.62	−2.94	−22.09	1.07	0.84	1.16	1.29	1.36	+24	−12	+ 4	−23	−30	+ 8	−27	−39	−21	+43												0	0.10
103275	20 55 22.26	+29 45 43.3	8.69		H	313.842 736 60	+29.762 027 59		0.91	0.64	0.45	0.62	0.67	1.08	0.80	0.73	−14	− 9	+ 9	+29	− 8	−25	− 5	+20	+10	− 1												3	−0.40
103276	20 55 22.56	+62 25 15.8	7.86		H	313.844 019 97	+62.421 043 29		3.51	30.28	51.64	0.58	0.54	0.63	0.55	0.59	− 4	+ 0	+ 6	−11	+22	+10	+26	−14	+ 9	+26												0	0.47
103277	20 55 23.11	+40 18 00.1	7.14	2	H	313.846 290 18	+40.300 031 37		1.55	2.44	−1.88	0.45	0.51	0.67	0.49	0.53	− 7	− 1	+20	− 1	− 9	−13	− 6	− 3	−12	+ 2												0	1.29
103278	20 55 23.79	+32 41 20.8	7.05		H	313.849 134 90	+32.689 118 17		5.63	−17.75	5.80	0.39	0.50	0.76	0.56	0.61	−32	+ 3	− 8	−16	− 8	+ 6	−11	+ 2	− 4	−15												2	0.26
103279	20 55 23.85	−57 52 03.6	8.35		H	313.849 380 04	−57.867 667 16		3.56	18.89	−24.19	0.74	0.76	1.08	0.91	0.87	+ 8	− 3	−13	−12	− 7	+ 6	− 4	− 5	+25	−15												0	−0.57
103280	20 55 24.44	−11 18 51.6	8.22		H	313.851 830 83	−11.314 340 36		3.20	0.55	23.69	1.22	0.76	1.38	1.63	1.14	+30	−22	−19	− 3	−38	+ 3	−35	+11	−22	+41												2	0.94
103281	20 55 26.29	+25 13 50.2	8.29		H	313.859 546 61	+25.230 618 82		4.00	−14.71	−49.99	0.62	0.55	0.95	0.75	0.59	+ 5	−12	+ 1	− 8	+27	− 2	+24	+30	+ 3	+ 5												0	−0.26
103282	20 55 26.50	+43 22 02.2	6.73	1	H	313.860 403 81	+43.367 269 47		5.03	−14.85	−18.25	0.48	0.51	0.65	0.55	0.54	−16	+ 3	+ 4	+ 0	+ 7	+14	+ 7	−26	+ 9	−13												0	−0.25
103283	20 55 29.05	−14 36 56.1	8.77		H	313.871 048 26	−14.615 593 99		2.60	1.13	−3.98	1.17	0.87	1.39	1.51	1.49	+22	− 9	−12	−20	−12	+28	−12	− 5	−17	+42												0	2.01
103284	20 55 29.20	+65 41 14.3	7.41		H	313.871 680 16	+65.687 301 68		3.54	−4.24	−7.84	0.52	0.52	0.57	0.62	0.65	+ 1	−11	− 7	+21	+ 6	+ 4	+11	+ 3	+12	+20												1	1.07
103285	20 55 30.10	−03 48 44.3	8.30	2	H	313.875 423 96	−03.812 298 01		0.78	11.67	−4.91	1.09	0.82	1.33	1.57	0.89	+18	−29	−49	+27	−37	+32	−18	+29	− 8	+ 1												0	1.20
103286	20 55 30.21	−40 13 07.1	8.78		H	313.875 889 09	−40.218 651 86		2.77	24.51	−18.05	1.10	0.70	1.16	1.16	0.84	+26	− 4	−11	−43	+ 2	− 3	− 6	−13	− 3	+55												0	−0.20
103287	20 55 31.91	+14 08 34.0	9.07		H	313.882 954 27	+14.142 771 31		26.83	39.05	−148.35	2.03	1.79	2.77	2.59	2.12	+21	+ 4	− 3	− 8	+31	+15	+22	+52	+ 9	+33												4	
103288	20 55 33.12	+20 24 04.0	7.27		H	313.888 011 64	+20.401 107 75		2.35	3.00	7.66	0.72	0.46	0.87	0.81	0.46	− 3	−17	− 6	+ 0	+16	+ 3	+10	+38	− 4	+10												0	0.16
103289	20 55 33.39	+26 47 08.3	9.23		H	313.889 124 32	+26.785 636 91		5.29	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
103201	8.894	0.014	8.473	0.014		0.405	0.015	G	0.47	0.02	H	8.5322	0.0019	0.016	89		8.51	8.56		C			1							S
103202	10.119	0.026	9.547	0.024		0.535	0.031	T	0.61	0.03	L	9.6274	0.0025	0.024	138		9.57	9.67					1							
103203	9.440	0.017	7.989	0.009		1.223	0.015	T	1.18	0.01	L	8.0191	0.0013	0.013	121		8.00	8.05					1							S
103204	10.539	0.041	9.619	0.030		0.800	0.039	T	0.83	0.03	L	9.7066	0.0026	0.024	102		9.66	9.75					1							G
103205	9.470	0.022	8.955	0.021		0.493	0.023	T	0.57	0.02	L	8.9724	0.0019	0.014	78		8.94	8.99		C			1							
103206	6.093	0.004	6.206	0.004		−0.098	0.005	T	−0.08	0.01	L	6.2019	0.0009	0.006	80		6.19	6.21		C			1							S
103207	9.537	0.018	7.832	0.009		1.423	0.016	T	1.41	0.03	L	7.8255	0.0011	0.010	96		7.81	7.84					1							S
103208	10.714	0.042	9.887	0.032		0.729	0.040	T	0.78	0.03	L	9.9811	0.0032	0.020	88		9.93	10.02		C			1							
103209	10.626	0.037	9.352	0.020		1.085	0.033	T	1.05	0.03	L	9.3820	0.0014	0.017	131		9.35	9.41					1							
103210	8.667	0.011	8.650	0.014		−0.031	0.007	G	−0.01	0.01	H	8.6660	0.0022	0.014	113		8.64	8.70					1							
103211	9.753	0.018	9.730	0.025		0.026	0.028	T	0.04	0.02	L	9.7457	0.0018	0.024	151		9.69	9.79		C			1							G
103212	11.818	0.122	10.695	0.073		0.967	0.111	T	0.95	0.09	L	10.8081	0.0034	0.030	109		10.75	10.86		C			1 X							G
103213	6.770	0.004	6.673	0.004		0.067	0.004	G	0.08	0.03	C	6.7004	0.0009	0.008	116		6.69	6.71					1 S							S
103214	10.242	0.023	10.289	0.038		−0.038	0.040	T	−0.02	0.04	L	10.2707	0.0030	0.033	174		10.20	10.34		U			1							G
103215	10.137	0.026	9.622	0.026		0.493	0.028	T	0.57	0.03	L	9.6015	0.0063	0.142	108		9.56	10.07	0.99	P 1 A			1							
103216	7.178	0.006	7.206	0.007	A	0.020	0.015	G	0.00	0.01	L *	7.1564	0.0010	0.010	145	*	7.14	7.18		D	20547+3704	I 1	2 C A	AB	26	1.708	0.007	2.70	0.03	S
103217	9.673	0.017	7.741	0.007		1.603	0.015	T	1.62	0.01	L	7.6664	0.0012	0.012	131		7.65	7.69					1							S
103218	8.265	0.014	8.034	0.016		0.215	0.021	T	0.24	0.02	L	8.0709	0.0017	0.014	48		8.05	8.09					1							S
103219	7.196	0.006	6.101	0.005		0.946	0.006	T	0.94	0.00	L	6.1530	0.0006	0.006	113		6.14	6.17		C			1							S
103220	10.768	0.045	8.810	0.017		1.624	0.038	T	1.65	0.04	L	8.7830	0.0023	0.020	86		8.75	8.81		C			1							
103221	9.968	0.023	8.759	0.014		1.034	0.021	T	1.01	0.02	L	8.8071	0.0019	0.017	107		8.79	8.84					1							
103222	7.531	0.009	7.600	0.011	*	−0.070	0.015	G	−0.05	0.01	H *	7.6423	0.0015	0.011	106	*	7.62	7.66		D	20548+4508	H 1	2 C A	AB	333	2.606	0.010	1.92	0.04	S
103223	8.425	0.011	7.150	0.006		1.086	0.010	T	1.05	0.01	L	7.1880	0.0013	0.009	74		7.17	7.20					1							S
103224	7.001	0.007	6.690	0.007		0.297	0.011	T	0.34	0.01	L	6.7341	0.0015	0.012	54		6.72	6.75					1							S
103225	11.348	0.069	9.686	0.026		1.389	0.058	T	1.36	0.07	L	9.6847	0.0031	0.025	106		9.64	9.74					1							
103226	7.214	0.008	5.902	0.005		1.122	0.000	G	1.08	0.00	H	5.9352	0.0012	0.006	52		5.93	5.95					1							S
103227	5.274	0.003	3.791	0.002		1.250	0.015	G	1.11	0.02	A	3.8340	0.0007	0.005	104		3.83	3.84			20548−5827	I 1	1							S
103228	9.858	0.018	8.570	0.011		1.096	0.016	T	1.06	0.02	L	8.6112	0.0017	0.019	157		8.58	8.65					1							
103229	9.436	0.013	8.168	0.008		1.080	0.012	T	1.04	0.01	L	8.2057	0.0012	0.015	197		8.18	8.23		C			1							
103230	8.093	0.009	7.532	0.009	*	0.524	0.002	G	0.60	0.00	H *	7.5253	0.0011	0.011	115	*	7.51	7.54		D	20548−4636	I 1	2 C A	AB	143	0.774	0.002	0.99	0.01	S
103231	9.658	0.019	8.528	0.012		0.972	0.017	T	0.96	0.01	L	8.6021	0.0019	0.024	125		8.56	8.65		U			1							
103232	8.237	0.011	7.608	0.011	*	0.594	0.015	G	0.66	0.01	H *	7.5716	0.0010	0.013	224	*	7.55	7.59		D	20548+3242	I 1	2 C A	AB	285	1.073	0.002	0.05	0.01	S
103233	8.429	0.007	8.485	0.010		−0.046	0.011	T	−0.02	0.01	L	8.4932	0.0016	0.017	161		8.47	8.52		C			1							S
103234	10.072	0.026	9.452	0.024		0.574	0.026	T	0.65	0.02	L	9.5259	0.0030	0.026	88		9.48	9.56		C			1							
103235	10.540	0.036	10.056	0.036		0.468	0.039	T	0.54	0.04	L	10.1519	0.0021	0.024	130		10.11	10.20		C			1							G
103236	9.454	0.019	8.830	0.017		0.622	0.015	G	0.69	0.01	H	8.8716	0.0020	0.017	116		8.85	8.90		C			1							
103237	8.326	0.012	7.809	0.010		0.480	0.015	G	0.55	0.02	H	7.8602	0.0012	0.009	86		7.84	7.88		C			1							S
103238	8.817	0.011	8.304	0.011		0.496	0.015	G	0.57	0.02	H	8.3493	0.0014	0.011	107		8.33	8.37		C			1							S
103239	9.909	0.019	9.343	0.018		0.529	0.023	T	0.60	0.02	L	9.4032	0.0026	0.025	152		9.35	9.45					1							
103240	8.200	0.012	7.903	0.015		0.309	0.015	G	0.35	0.02	H	7.9470	0.0015	0.012	51		7.92	7.97		C			1							S
103241	12.080	0.229	10.992	0.147		0.940	0.208	T	0.93	0.15	L	11.0196	0.0337	0.249	109		10.65	11.30	4.05	P 1 A			1 S							G
103242	9.215	0.011	7.149	0.004		1.748	0.010	T	2.48	0.02	O	6.9481	0.0031	0.042	190		6.88	7.01		U 2			1 S							S
103243	8.718	0.012	8.292	0.012		0.400	0.015	G	0.47	0.02	H	8.3460	0.0013	0.012	117		8.32	8.37		C			1							S
103244	9.603	0.019	8.982	0.017		0.574	0.019	T	0.65	0.02	L	9.0565	0.0027	0.021	79		9.02	9.09					1							S
103245	9.555	0.017	9.164	0.018		0.370	0.023	T	0.43	0.03	L	9.2164	0.0016	0.016	127		9.19	9.24		C			1							
103246	7.915	0.007	7.853	0.010		0.056	0.011	T	0.07	0.01	L	7.8710	0.0012	0.015	124		7.85	7.89					1							S
103247	8.637	0.009	7.882	0.008	*	0.674	0.009	T	0.73	0.01	L *	7.9391	0.0015	0.015	137	*	7.92	7.97		D	20550+2806	I 1	2 C A	AB	125	0.482	0.003	0.63	0.01	S
103248	9.357	0.015	9.503	0.023		−0.150	0.015	G	−0.15	0.02	H	9.5199	0.0023	0.022	97		9.48	9.55		C			1							
103249	9.210	0.014	9.116	0.018		0.092	0.021	T	0.10	0.02	L	9.1531	0.0020	0.017	112		9.12	9.18		C			1							
103250	8.536	0.012	7.871	0.010		0.616	0.013	T	0.68	0.01	L	7.9450	0.0014	0.010	73		7.93	7.96		C			1							S
103251	10.928	0.053	9.244	0.020		1.407	0.045	T	1.39	0.05	L	9.2477	0.0029	0.024	109		9.21	9.29		R			1							
103252	8.793	0.008	8.509	0.009		0.280	0.015	G	0.32	0.02	H	8.5557	0.0015	0.018	197		8.53	8.59					1							
103253	10.475	0.055	9.192	0.032		1.000	0.040	G	0.98	0.03	R	9.1725	0.0019	0.016	44		9.15	9.21		D			1							
103254	9.400	0.016	8.410	0.012		0.867	0.015	T	0.88	0.01	L	8.4671	0.0013	0.016	113		8.44	8.49					1							
103255	9.866	0.019	8.159	0.009		1.425	0.017	T	1.41	0.03	L	8.1734	0.0014	0.013	143		8.14	8.20		C			1							
103256	10.160	0.030	8.951	0.018		1.054	0.005	G	1.11	0.01	I	8.9400	0.0016	0.017	99		8.91	8.96					1							
103257	11.192	0.055	9.802	0.027		1.176	0.048	T	1.14	0.04	L	9.8454	0.0032	0.030	99		9.80	9.89		C			1							
103258	9.945	0.027	9.522	0.027		0.400	0.035	T	0.47	0.04	L	9.5819	0.0026	0.018	101		9.55	9.61		C			1							G
103259	9.612	0.021	8.957	0.019		0.599	0.021	T	0.67	0.02	L	9.0197	0.0018	0.013	94		9.00	9.05					1							
103260	7.767	0.007	7.113	0.006		0.607	0.008	T	0.68	0.01	L	7.1512	0.0013	0.008	95		7.13	7.17			20551−5207	I 1	1 G							S
103261	6.879	0.005	6.565	0.006		0.286	0.010	G	0.33	0.02	A	6.6210	0.0015	0.014	93		6.60	6.64	0.10	P 1 A			1							S
103262	7.149	0.007	6.750	0.005		0.377	0.008	T	0.44	0.01	L	6.7920	0.0007	0.008	89		6.78	6.81		C			1							S
103263	8.274	0.009	7.104	0.006		1.002	0.014	G	0.98	0.01	H	7.1649	0.0009	0.009	116		7.15	7.18		C			1							S
103264	9.031	0.014	8.304	0.012	*	0.702	0.015	G	0.76	0.01	H *	8.3711	0.0019	0.015	117	*	8.35	8.40			20552−3008	H 1	2 C S B	AB	22	0.113	0.022	1.35	0.86	S
103265	9.918	0.022	9.353	0.021		0.541	0.005	G	0.61	0.01	H	9.4284	0.0024	0.023	118		9.40	9.47					1							
103266	10.136	0.040	9.256	0.030		0.785	0.037	T	0.82	0.03	L	9.2989	0.0023	0.014	64		9.28	9.33		C			1							
103267	9.969	0.022	8.967	0.016		0.876	0.020	T	0.89	0.01	L	9.0439	0.0025	0.018	94		9.02	9.07		C			1							S
103268	8.272	0.009	7.789	0.010		0.490	0.015	G	0.56	0.02	H	7.8336	0.0014	0.012	112		7.82	7.85		C			1							S
103269	10.989	0.047	10.368	0.044		0.590	0.020	G	0.66	0.02	H	10.4113	0.0035	0.036	131		10.34	10.47					1							G
103270	9.564	0.017	9.303	0.019		0.249	0.024	T	0.28	0.03	L	9.3354	0.0020	0.021	115		9.31	9.37					1							
103271	7.971	0.008	7.508	0.007		0.436	0.010	T	0.50	0.01	L	7.5513	0.0013	0.011	130		7.53	7.57		C			1							S
103272	6.898	0.005	6.981	0.006	*	−0.071	0.007	T	−0.05	0.01	L *	7.0155	0.0010	0.009	147	*	7.00	7.03		D	20553+4231	I 1	2 C A	AB	77	2.766	0.006	2.46	0.03	S
103273	8.933	0.013	8.867	0.016		0.100	0.015	G	0.11	0.02	H	8.8961	0.0025	0.017	102		8.87	8.93					1							
103274	9.888	0.031	8.437	0.017		1.223	0.028	T	1.18	0.03	L	8.4875	0.0016	0.014	55		8.46	8.51					1							
103275	8.632	0.008	8.678	0.011		−0.037	0.012	T	−0.01	0.01	L	8.6865	0.0014	0.023	168		8.65	8.72					1							
103276	9.082	0.012	7.974	0.008		0.955	0.011	T	0.94	0.01	L	8.0279	0.0012	0.012	132		8.01	8.05		C			1							
103277	7.334	0.006	7.172	0.006		0.161	0.010	G	0.18	0.01	H	7.1942	0.0033	0.041	137		7.12	7.28		U 2 C			1 S							S P
103278	8.704	0.007	7.191	0.004		1.272	0.006	T	1.23	0.01	L	7.2105	0.0008	0.010	233		7.19	7.23		C			1 G							S
103279	9.582	0.019	8.464	0.013		0.963	0.018	T	0.95	0.01	L	8.5181	0.0022	0.017	107		8.48	8.56					1							
103280	9.470	0.018	8.332	0.012		0.979	0.017	T	0.96	0.01	L	8.3833	0.0016	0.012	78		8.36	8.40		C			1							
103281	8.703	0.011	8.318	0.011		0.388	0.015	G	0.45	0.02	H	8.3811	0.0011	0.016	156		8.35	8.41					1							
103282	8.605	0.010	6.868	0.005		1.449	0.009	T	1.45	0.01	L	6.8639	0.0007	0.010	129		6.85	6.88		M			1							S
103283	9.137	0.019	8.824	0.021		0.299	0.030	T	0.34	0.04	L	8.8457	0.0024	0.011	48		8.83	8.86		C			1							
103284	7.335	0.006	7.391	0.007		−0.070	0.015	G	−0.05	0.01	H	7.3967	0.0009	0.009	105		7.38	7.41		C			1							S
103285	10.556	0.051	8.600	0.019		1.622	0.043	T	1.64	0.04	L	8.4161	0.0031	0.030	66		8.37	8.46		U 2			1							
103286	9.934	0.021	8.888	0.015		0.909	0.019	T	0.91	0.01	L	8.9393	0.0017	0.021	108		8.91	8.98		C			1							
103287	10.040	0.024	9.209	0.020		0.748	0.024	T	0.79	0.02	L	9.2174	0.0026	0.027	105		9.18	9.26		R			1 X							
103288	8.991	0.012	7.409	0.007		1.326	0.011	T	1.29	0.01	L	7.4270	0.0012	0.010	127		7.41	7.45					1							S
103289	9.699	0.017	9.258	0.018		0.427	0.015	G	0.49	0.02	H	9.3310	0.0023	0.024	149		9.29	9.38					1							
103290	10.188	0.024	9.860	0.027		0.316	0.039	T	0.36	0.05	L	9.9442	0.0154	0.118	114		9.72	10.10	0.08	P 1 A			1							
103291	10.381	0.028	9.865	0.028		0.494	0.030	T	0.57	0.03	L	9.8886	0.0040	0.030	97		9.83	9.96					1							
103292	10.148	0.027	7.899	0.009		1.856	0.023	T	1.89	0.02	L	7.6996	0.0027	0.021	92		7.67	7.74		U 2			1							
103293	10.625	0.028	8.649	0.010		1.638	0.024	T	1.66	0.03	L	8.5859	0.0022	0.026	199		8.54	8.63		U 2			1							
103294	6.634	0.004	5.318	0.002		1.119	0.000	G	1.08	0.00	H	5.3553	0.0007	0.007	96		5.34	5.37					1							S
103295	8.066	0.007	7.934	0.010		0.140	0.015	G	0.15	0.01	H	7.9682	0.0014	0.014	145		7.95	7.99		C			1							S
103296	9.263	0.016	9.057	0.018		0.197	0.023	T	0.22	0.03	L	9.1267	0.0019	0.019	114		9.09	9.16					1							
103297	9.267	0.016	7.953	0.010		1.116	0.015	T	1.08	0.02	L	8.0089	0.0014	0.012	109		7.99	8.03					1							S
103298	5.699	0.003	5.555	0.003		0.131	0.004	T	0.15	0.00	L	5.5874	0.0006	0.006	124		5.58	5.60			20556+1234	I 1	1							S
103299	8.943	0.011	8.527	0.011		0.393	0.005	G	0.46	0.01	H	8.5861	0.0014	0.016	135		8.56	8.61		C			1							
103300	8.815	0.011	8.414	0.011		0.411	0.015	G	0.48	0.02	H	8.4567	0.0012	0.013	95		8.44	8.48		C			1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
103301 H	20 55 40.64	+04 31 57.7	6.04	G	313.919 343 51	+04.532 695 68	A	9.02	60.96	11.26	1.21	0.63	1.19	1.29	0.63	+18	− 7	− 3	−11	+29	+ 6	+15	+32	+ 5	+44	1	0.86
103302 H	20 55 40.79	−66 08 59.7	7.62	H	313.919 955 21	−66.149 924 78	*	11.75	−1.52	−4.73	0.52	0.53	0.87	0.68	0.69	−19	− 8	−13	+31	+ 7	−11	+ 5	+25	+ 2	−27	0	0.60
103303	20 55 41.65	+35 40 13.8	10.82	H	313.923 562 14	+35.670 487 49	A	4.93	6.32	9.22	2.22	2.75	3.33	2.13	2.81	−12	−11	+ 4	− 7	− 5	−12	− 1	+ 2	+ 6	−21	0	0.45
103304	20 55 42.25	+53 48 21.4	8.14	G	313.926 058 53	+53.805 936 45		2.00	0.17	−23.98	0.56	0.58	0.65	0.58	0.64	− 7	− 5	+ 7	+ 8	+ 8	− 2	+ 9	+ 3	+ 5	+ 3	1	−1.07
103305	20 55 42.44	+34 01 35.2	7.83	H	313.926 827 85	+34.026 447 56		0.81	0.02	−0.72	0.47	0.61	0.87	0.50	0.69	−32	+ 7	+ 5	+ 2	− 7	−16	− 7	− 9	+14	−42	0	0.33
103306	20 55 43.33	+32 10 09.8	8.00	H	313.930 543 75	+32.169 400 43		2.93	9.96	−20.06	0.42	0.57	0.87	0.50	0.66	−31	+ 5	− 8	+ 1	+ 0	+ 1	− 1	+13	+ 4	−25	1	0.15
103307	20 55 45.38	+64 30 58.7	8.49	H	313.939 081 23	+64.516 304 51		2.82	−7.48	−10.21	0.59	0.60	0.68	0.65	0.68	+ 9	− 5	− 4	+14	+ 8	+11	+10	− 4	+27	+29	1	1.61
103308	20 55 45.82	−44 34 32.7	7.29	1 H	313.940 909 80	−44.575 753 35		2.64	6.81	−5.20	0.73	0.55	0.90	0.78	0.46	+33	−27	−30	−25	−21	+26	−24	−50	+21	+ 7	0	−0.46
103309	20 55 47.09	+07 39 59.1	7.37	H	313.946 195 23	+07.666 403 88		8.46	−55.99	−62.82	0.74	0.42	0.87	0.96	0.49	+ 4	−16	+13	− 4	+29	+26	+14	+42	+10	+31	0	−0.25
103310	20 55 47.56	−50 49 17.4	9.28	H	313.948 177 09	−50.821 510 18		2.70	13.14	−2.87	1.18	0.85	1.55	1.83	1.08	+16	−16	−18	+ 6	− 3	−29	−13	− 5	+16	−42	0	−1.02
103311	20 55 47.64	−17 06 50.5	7.27	2 G	313.948 491 97	−17.114 026 14		20.96	59.21	−61.55	0.86	0.64	1.00	1.11	0.87	+ 8	−15	−28	−22	− 7	+42	+ 5	− 4	+ 0	+14	0	0.03
103312	20 55 49.81	+47 25 03.6	5.68	2 G	313.957 524 83	+47.417 665 42		0.35	−2.82	−3.74	0.47	0.48	0.58	0.58	0.61	−13	− 1	−11	−10	+ 6	+13	+10	−26	+27	+16	2	−0.35
103313	20 55 50.21	+03 23 34.0	8.51	H	313.959 220 52	+03.392 781 58		3.04	1.06	4.82	0.90	0.60	1.15	1.12	0.58	+27	−23	− 7	−20	+21	+29	+ 5	+ 5	+33	+47	0	2.58
103314	20 55 53.19	+28 42 02.9	7.70	G	313.971 606 60	+28.700 806 52		4.48	4.10	8.84	0.59	0.53	0.82	0.68	0.58	+ 4	− 1	− 5	+25	+21	−13	+20	+17	+11	+ 2	0	0.48
103315	20 55 54.43	−31 30 20.4	7.95	H	313.976 800 01	−31.505 658 10		5.56	34.98	−6.22	0.84	0.63	1.05	1.09	0.98	+39	−17	− 2	− 4	+13	+39	+ 8	+48	− 4	+43	0	0.67
103316	20 55 55.28	+10 52 35.7	8.49	H	313.980 352 05	+10.876 578 96		7.49	−47.25	−12.78	0.87	0.55	1.09	1.08	0.60	+15	−23	− 3	+ 5	+22	+ 4	+16	+37	− 5	+30	0	−1.42
103317	20 55 55.47	+58 04 12.0	8.51	H	313.981 105 78	+58.070 004 84		3.76	−17.99	−36.02	0.66	0.71	0.76	0.70	0.85	− 2	+ 1	− 5	+16	+21	−15	+26	+ 2	+11	+16	2	1.40
103318 H	20 55 55.95	+59 05 35.9	8.86	H	313.983 126 09	+59.093 311 50	A	2.64	5.35	6.15	1.36	1.60	1.50	1.34	1.94	−11	− 1	− 5	− 3	+ 2	−11	+ 5	− 2	+23	+ 5	3	−0.82
103319	20 55 56.75	+63 05 08.6	9.63	H	313.986 460 62	+63.085 723 25		2.69	−5.27	−4.16	0.78	0.72	0.84	0.77	0.82	− 2	+ 0	+ 9	−18	+20	+11	+21	−10	+ 7	+18	0	−0.21
103320	20 55 57.96	−65 25 58.6	8.35	2 H	313.991 492 08	−65.432 934 27		7.14	−40.10	10.45	0.57	0.57	1.01	0.71	0.75	−30	− 8	+ 7	+13	+19	− 4	+20	+17	+ 0	−30	0	−1.75
103321	20 55 58.28	−33 59 38.5	8.76	H	313.992 851 27	−33.994 024 54		2.05	13.02	−0.46	1.17	0.76	1.29	1.41	1.04	+21	−31	−28	+11	−18	+19	− 8	+33	−18	− 1	0	0.15
103322	20 55 59.00	+44 22 26.1	6.83	H	313.995 849 01	+44.373 922 95		5.61	4.03	4.26	0.56	0.56	0.69	0.73	0.61	−25	+ 8	+15	− 5	+20	− 5	+18	−32	+13	−34	0	−1.28
103323	20 55 59.13	+17 52 00.5	8.60	H	313.996 378 75	+17.866 812 12		5.48	−12.81	55.84	0.88	0.60	1.11	1.04	0.63	+ 3	+ 6	+ 6	+37	+ 8	+ 5	+ 5	+51	− 3	+21	0	3.81
103324	20 55 59.28	−59 56 41.6	11.47	2 G	313.997 011 01	−59.944 885 26		35.56	512.30	−314.04	1.59	1.70	2.72	2.51	1.80	+ 9	−20	− 6	−24	+37	+ 0	+37	+ 2	− 9	−32	1	−3.18
103325	20 55 59.56	+21 24 23.6	8.80	H	313.998 176 55	+21.406 548 28		1.92	−6.10	−22.91	0.79	0.65	1.10	1.01	0.67	+16	−19	− 6	+18	+23	− 5	+18	+38	+ 0	+18	0	−0.59
103326	20 55 59.77	−15 18 13.9	8.75	H	313.999 039 75	−15.303 860 82		0.00	0.29	0.47	1.23	0.94	1.48	1.86	1.67	+25	−18	−14	− 7	−35	+17	−22	−26	−30	+40	7	1.09
103327	20 56 01.88	+06 19 57.3	8.24	H	314.007 831 80	+06.332 583 06		10.71	27.59	−44.26	0.86	0.47	1.01	1.13	0.53	+ 5	− 5	− 4	+ 7	+15	+17	+10	+37	− 6	+22	0	2.85
103328	20 56 02.01	+15 23 31.0	8.20	H	314.008 394 98	+15.391 947 13		2.81	4.98	−4.50	0.80	0.55	1.09	1.01	0.57	+12	− 2	+ 9	−13	+20	−12	+14	+35	+10	+23	0	0.02
103329	20 56 02.12	+31 58 27.6	10.26	H	314.008 818 67	+31.974 324 15		2.21	−5.14	−5.59	2.14	2.79	3.90	2.32	3.12	−22	+ 4	−11	−12	+ 0	− 5	− 1	− 9	+ 2	−21	2	
103330	20 56 02.18	+27 34 31.9	6.66	H	314.009 072 54	+27.575 515 82		5.54	10.21	7.61	0.43	0.48	0.69	0.45	0.51	+ 8	+14	−19	+18	+28	−16	+28	+23	+14	+15	0	−1.08
103331	20 56 03.16	+38 50 56.4	11.60	G	314.013 165 04	+38.848 991 68		16.77	305.38	−5.21	2.86	3.33	4.22	3.12	3.64	−16	− 3	+13	−16	+11	− 2	+12	−17	− 9	− 3	1	
103332	20 56 05.07	−19 01 58.8	8.75	H	314.021 117 15	−19.033 003 15		0.84	0.04	8.78	1.18	0.94	1.26	1.69	1.54	+31	− 5	−21	−36	−32	+23	−28	−40	− 5	+40	0	0.10
103333	20 56 05.40	+09 15 37.7	6.74	H	314.022 492 44	+09.260 483 71		3.22	−15.95	−44.61	0.71	0.38	0.84	0.93	0.42	− 1	−14	+12	+ 3	+26	+24	+15	+32	+ 9	+24	0	0.12
103334	20 56 07.06	−07 42 58.6	8.24	H	314.029 407 21	−07.716 275 44		3.14	4.33	−3.68	1.13	0.80	1.44	1.50	1.04	+35	−30	−32	+13	−20	+14	− 5	+37	−30	+29	0	0.80
103335	20 56 08.51	+21 26 25.4	7.85	H	314.035 472 44	+21.440 378 57		6.78	10.60	11.52	0.61	0.53	0.90	0.82	0.53	+20	−20	− 8	+ 7	+25	+ 2	+21	+33	− 5	+20	0	−0.81
103336	20 56 09.06	+28 34 31.0	8.60	H	314.037 746 11	+28.575 291 58		2.11	15.13	−0.10	0.70	0.67	1.05	0.85	0.74	+ 3	+ 4	−20	+11	+23	−26	+19	+20	+11	+ 0	0	−0.56
103337	20 56 09.15	−13 31 16.9	10.21	G	314.038 113 17	−13.521 372 44		1.48	−16.96	−83.97	1.54	1.08	1.86	2.05	1.67	+44	+ 0	−15	−15	−23	+23	−31	+16	−17	+52	0	0.55
103338	20 56 09.35	−17 14 35.3	7.53	H	314.038 947 06	−17.243 143 28		3.40	−5.35	2.78	0.91	0.65	1.06	1.17	0.91	+ 3	−10	−32	−15	− 6	+40	+ 7	+ 1	+ 2	+13	0	−0.39
103339	20 56 09.65	−57 34 11.5	7.67	H	314.040 205 00	−57.569 870 51		3.65	−6.42	8.47	0.65	0.63	0.93	0.79	0.65	+ 8	− 3	−15	−20	+ 2	+ 6	+ 4	−12	+20	− 8	0	−0.16
103340	20 56 10.88	−55 13 20.8	7.34	H	314.045 334 47	−55.222 442 71		6.55	40.62	−48.32	0.72	0.62	0.99	0.99	0.66	− 9	+ 1	−35	+ 0	+ 3	− 3	+ 0	−20	+28	−34	2	−1.31
103341	20 56 11.59	+43 25 27.5	6.87	H	314.048 279 82	+43.424 305 16		4.98	10.03	2.48	0.47	0.51	0.64	0.54	0.53	−13	− 9	+13	+ 4	+ 9	+10	+ 5	−25	+15	−13	0	0.15
103342	20 56 11.98	+75 43 11.0	6.76	H	314.049 906 41	+75.719 721 26		5.83	83.63	45.48	0.53	0.49	0.56	0.60	0.51	+10	−14	+ 0	− 8	+ 0	+20	− 1	−26	+21	+25	0	0.51
103343	20 56 12.78	+51 04 30.0	6.61	H	314.053 266 99	+51.075 012 90		3.40	6.12	3.69	0.48	0.46	0.55	0.60	0.48	− 8	− 2	+14	+ 3	−11	−14	−10	−15	+15	−22	0	2.32
103344	20 56 13.02	−29 04 15.0	8.71	H	314.054 245 84	−29.070 841 45		3.08	21.85	−46.43	1.05	0.68	1.15	1.34	1.02	+22	−33	−11	− 2	− 6	+16	− 4	+42	− 9	+19	0	−1.15
103345	20 56 13.54	+22 35 05.2	8.06	H	314.056 413 46	+22.584 764 22		8.14	15.09	−5.81	0.68	0.60	1.04	0.78	0.61	+11	− 9	+ 2	+11	+25	− 7	+22	+32	− 5	+18	0	2.79
103346	20 56 17.01	+56 53 15.0	6.23	G	314.070 854 81	+56.887 506 78		4.10	4.68	4.94	0.42	0.46	0.49	0.45	0.50	− 2	−14	−11	+22	+12	−18	+13	− 3	+ 0	+ 6	1	1.63
103347	20 56 18.24	−03 33 42.2	6.57	G	314.076 006 85	−03.561 710 67		4.50	23.16	7.12	0.79	0.60	1.01	1.14	0.65	+22	−32	−50	+ 7	−32	+34	−14	+24	− 1	− 1	0	−0.77
103348	20 56 18.82	+42 46 07.6	6.68	H	314.078 402 63	+42.768 764 06		12.85	−35.90	−18.05	0.48	0.49	0.62	0.52	0.52	−17	+10	+ 4	+ 0	+ 8	−10	+11	−28	+13	−15	1	0.88
103349	20 56 18.91	−12 10 07.6	11.76	G	314.078 795 36	−12.168 786 85		20.89	106.65	−465.37	2.90	2.15	3.22	4.18	3.49	+47	−17	− 9	−23	−19	+18	−30	+17	− 3	+64	0	0.01
103350 H	20 56 20.07	−32 16 12.0	10.01	H	314.083 622 89	−32.270 012 36	B	0.02	28.60	20.26	9.97	7.21	8.91	11.86	9.22	+20	−12	−26	+18	−15	+14	− 7	+43	−13	+10	1	1.50
103351	20 56 20.42	−04 54 43.1	9.10	H	314.085 096 68	−04.911 975 59		−0.86	5.73	−0.11	1.25	1.10	1.76	2.09	1.13	+11	− 5	−53	+17	−39	+53	−10	+37	−13	− 7	0	−0.94
103352	20 56 20.63	+37 28 06.6	8.83	H	314.085 947 26	+37.468 507 63		3.54	5.57	−11.85	0.62	0.73	0.90	0.70	0.74	−12	− 3	− 1	+19	+ 0	− 2	+ 0	+ 3	− 4	−10	0	−0.71
103353	20 56 23.30	+27 30 14.3	8.11	H	314.097 086 37	+27.503 958 43		2.84	20.92	−11.19	0.57	0.64	0.91	0.59	0.69	+14	+11	−18	+21	+31	−17	+30	+32	+ 9	+20	0	−0.42
103354	20 56 23.77	+36 22 38.6	7.82	H	314.099 045 33	+36.377 399 62		5.49	0.34	−16.47	0.46	0.54	0.73	0.48	0.54	−25	+ 0	+11	−19	+ 0	−13	+ 2	−13	+10	−27	0	0.97
103355 H	20 56 24.09	+43 07 46.5	8.43	G	314.100 369 11	+43.129 589 15	*	1.79	−0.54	−4.38	1.23	1.42	1.16	0.96	1.06	−18	−13	+ 7	+ 3	+ 7	+10	+ 5	−30	+24	−11	0	−0.19
103356	20 56 24.45	+43 54 02.5	7.04	H	314.101 886 47	+43.900 706 00		4.77	−3.14	−24.11	0.55	0.58	0.73	0.64	0.61	−14	− 7	+ 2	+ 8	+10	− 3	+ 2	−41	+26	−25	0	−1.72
103357	20 56 24.92	+65 49 39.4	7.57	H	314.103 827 29	+65.827 611 81		2.16	−2.61	−8.38	0.60	0.57	0.66	0.77	0.71	+ 0	−28	+ 3	+21	+ 7	+14	+ 9	− 3	+15	+29	0	0.55
103358	20 56 25.24	+14 48 58.5	7.28	H	314.105 174 93	+14.816 263 85		1.62	4.16	1.58	0.77	0.48	0.95	1.08	0.50	+21	− 2	+ 7	+20	+25	+ 1	+20	+37	+ 3	+30	0	0.84
103359	20 56 25.44	+50 43 43.1	5.83	H	314.105 999 85	+50.728 649 66		18.75	40.36	−21.22	0.48	0.44	0.53	0.60	0.46	− 6	−13	+ 5	−10	−14	− 2	−14	−19	+20	−15	2	−0.13
103360	20 56 25.89	+49 11 45.0	5.92	H	314.107 865 28	+49.195 830 69		2.56	11.34	6.78	0.46	0.45	0.52	0.55	0.50	−23	− 2	− 9	−10	+15	+ 3	+13	−30	+12	−28	0	−1.22
103361 H	20 56 26.63	−59 16 25.0	7.96	G	314.110 948 68	−59.273 617 05	A	18.97	−3.52	−28.10	1.45	1.17	1.71	1.54	1.07	−15	+14	−27	−16	+34	−16	+29	+ 1	+ 4	−39	1	0.86
103362	20 56 28.02	−20 35 02.5	9.86	H	314.116 769 31	−20.584 020 35		4.30	7.13	6.29	1.50	1.27	1.77	1.99	2.05	+28	−10	−29	−10	− 7	+ 5	− 5	− 1	−19	+45	0	0.14
103363	20 56 28.26	−37 20 12.0	8.40	H	314.117 751 25	−37.336 676 46		9.40	46.65	−74.70	1.01	0.65	1.16	1.47	0.87	+23	−10	−21	+26	− 7	+40	+ 1	+29	− 4	+15	0	−1.87
103364	20 56 28.31	+30 25 40.4	11.24	3 H	314.117 943 75	+30.427 891 34		0.42	−3.73	−11.33	1.02	1.27	2.06	1.43	1.56	−23	−11	−13	+26	− 7	−14	− 9	+23	+ 2	−12	0	0.01
103365	20 56 28.81	+09 00 23.4	8.63	H	314.120 033 59	+09.006 488 67		6.47	5.20	−20.73	0.97	0.55	1.15	1.34	0.60	+13	+ 4	+12	+ 4	+36	+14	+24	+43	+13	+33	1	1.29
103366	20 56 30.82	+14 40 59.9	7.15	1 H	314.128 401 41	+14.683 306 80		2.41	−0.13	−10.39	0.71	0.48	0.92	0.93	0.50	+19	− 6	+ 5	+ 1	+21	− 9	+16	+37	+ 2	+27	0	2.22
103367	20 56 31.54	+05 24 16.3	9.93	H	314.131 434 42	+05.404 540 79		2.19	−27.89	−8.85	1.52	0.80	1.88	1.81	0.88	+17	−37	+ 9	+ 6	+24	+ 2	+10	+39	+15	+39	0	1.13
103368	20 56 33.01	−53 25 25.6	9.95	G	314.137 545 59	−53.423 772 07		19.88	280.83	−50.17	1.44	1.10	1.68	2.00	1.32	+12	−32	−29	− 1	+ 1	− 3	+ 1	−12	+ 1	+13	0	0.39
103369	20 56 33.99	−32 02 12.2	9.68	H	314.141 616 68	−32.036 724 52		3.28	71.27	−13.20	1.31	0.84	1.54	1.75	1.30	+17	− 9	−22	+ 7	−18	+26	−12	+40	−26	+ 5	0	1.23
103370	20 56 34.07	−01 03 48.5	7.99	H	314.141 946 73	−01.063 465 11		5.16	−5.88	0.20	0.91	0.61	1.03	1.16	0.58	+48	−24	−16	−28	−25	+21	−24	−45	+18	+66	4	0.30
103371	20 56 34.78	+44 55 29.0	5.96	H	314.144 908 63	+44.924 727 29		0.83	−0.24	−2.22	0.47	0.49	0.61	0.61	0.55	−25	+18	+ 3	− 4	+14	− 4	+14	−32	+24	−36	0	−1.15
103372	20 56 36.02	−80 22 12.0	9.70	H	314.150 085 27	−80.369 988 95		6.56	91.18	−184.94	0.81	0.82	1.08	0.89	0.92	+10	−31	−24	− 3	− 3	− 5	− 7	−20	+ 1	−18	1	0.37
103373 H	20 56 36.88	+47 11 45.1	8.85	G	314.153 674 87	+47.195 852 91	*	3.53	3.76	0.24	0.74	0.87	0.91	0.96	1.07	+ 5	− 4	− 7	−25	−13	+11	− 7	−49	+19	+30	0	1.52
103374	20 56 37.66	−71 31 53.1	9.92	H	314.156 921 01	−71.531 410 28		7.61	13.54	3.10	0.89	1.10	1.46	0.93	1.14	−26	− 4	−29	−27	+14	− 7	+14	−12	− 9	−38	0	−0.38
103375 H	20 56 37.70	+52 49 36.1	9.46	H	314.157 069 92	+52.826 692 27	A	8.76	108.09	89.66	1.46	1.36	1.40	1.68	1.37	+ 6	−12	+10	− 2	−12	+ 4	−10	− 8	+13	+10	1	−0.14
103376	20 56 38.98	+34 59 02.6	10.77	G	314.162 433 72	+34.984 059 65		20.30	444.80	92.12	1.84	2.21	3.09	2.05	2.70	−18	− 3	+ 4	−21	+ 4	− 3	+ 4	−10	+12	−15	0	
103377	20 56 39.01	−06 57 24.7	8.11	G	314.162 548 62	−06.956 854 40		7.69	21.71	−61.02	1.11	0.90	1.41	1.68	1.32	+34	−10	−26	+25	+ 0	+24	+ 3	+54	−22	+44	0	0.99
103378	20 56 39.20	+19 00 23.9	10.02	H	314.163 332 18	+19.006 643 61		2.21	−5.58	5.56	1.14	0.80	1.56	1.25	0.84	+ 5	−24	− 3	+13	+ 2	−22	+ 1	+35	−12	+20	0	1.02
103379	20 56 39.98	−09 39 16.0	10.26	H	314.166 594 82	−09.654 451 71		5.16	−68.43	−353.72	1.80	1.51	2.08	2.81	2.30	+46	−14	−16	+15	+14	−18	+ 8	+52	−24	+60	5	0.20
103380	20 56 40.80	+56 55 36.0	7.96	G	314.170 004 41	+56.926 673 68		2.25	−4.28	−3.94	0.56	0.66	0.70	0.61	0.73	+ 1	−22	−18	+19	+11	−18	+ 6	− 2	+ 9	− 2	0	0.83
103381 H	20 56 43.73	+12 59 33.8	7.98	G	314.182 191 56	+12.992 721 46	A	3.22	22.64	−8.57	1.39	0.81	1.49	1.58	0.76	− 5	− 6	+21	−10	+28	+ 2	+18	+44	+16	+24	2	0.71
103382	20 56 43.82	+31 35 27.8	8.88	H	314.182 585 13	+31.591 069 40		−1.76	−3.92	−6.79	0.57	0.71	1.03	0.70	0.87	− 4	+ 1	− 3	+29	+13	− 7	+15	+14	− 7	+ 7	0	0.59
103383	20 56 44.22	+10 09 03.1	8.97	H	314.184 258 11	+10.150 854 68		4.83	17.20	−2.87	1.09	0.64	1.31	1.64	0.75	+16	−23	+ 6	+40	+26	+ 9	+23	+53	− 7	+31	0	−0.91
103384	20 56 44.65	−03 40 28.3	7.24	H	314.186 053 34	−03.674 532 90		2.60	9.09	−11.74	0.88	0.68	1.15	1.22	0.73	+27	−39	−51	+ 8	−31	+34	−11	+21	− 5	− 1	0	−0.84
103385 H	20 56 44.90	+62 36 53.8	9.79	H	314.187 075 77	+62.614 942 11	A	1.63	−0.90	−2.78	2.15	1.75	1.35	1.27	1.33	+29	+ 5	+ 6	−15	+18	+16	+15	− 7	+14	+35	0	−0.20
103386	20 56 45.81	−15 51 04.6	8.23	H	314.190 865 81	−15.851 291 30		5.90	6.95	0.37	1.00	0.75	1.21	1.23	1.08	+25	−26	−35	−15	−11	+32	− 2	+ 9	−10	+38	0	−1.94
103387	20 56 46.18	+35 46 28.4	8.96	H	314.192 403 97	+35.774 544 49		3.84	8.42	10.53	0.60	0.75	1.01	0.63	0.81	−23	+ 2	+11	+ 4	− 4	−18	− 2	+ 4	+15	−25	0	−0.12
103388	20 56 46.62	−10 26 44.9	11.38	2 G	314.194 247 22	−10.445 807 03		67.71	−24.44	−1109.77	9.19	6.67	10.55	14.41	9.62	+29	+ 5	−16	−10	−25	− 8	−25	+10	−24	+34	0	
103389	20 56 47.27	−26 17 46.4	5.70	H	314.196 959 20	−26.296 219 51		47.61	95.07	−65.06	0.84	0.61	0.95	1.06	0.83	+18	− 7	−19	−22	+13	+39	+21	+24	+22	+28	0	−0.16
103390 H	20 56 47.37	−44 51 48.9	11.42	H	314.197 386 42	−44.863 588 69	A	17.00	17.79	35.88	5.42	4.14	5.64	4.52	2.87	+52	−38	−28	−31	−26	+16	−35	+52	−23	+30	4	2	0.71
103391	20 56 47.45	+01 42 56.4	6.89	H	314.197 718 53	+01.715 676 16		11.24	−2.49	−203.31	0.86	0.49	0.94	1.22	0.45	+28	−14	−13	−12	+ 6	−10	− 3	−15	+15	+38	0	−0.01
103392	20 56 47.85	+42 53 42.4	7.21	G	314.199 361 42	+42.895 117 22		11.64	218.84	225.06	0.51	0.57	0.68	0.58	0.62	−19	+ 2	− 3	− 6	+10	+ 5	+10	−36	+17	−18	2	−0.67
103393	20 56 48.07	−04 50 47.2	11.87	G	314.200 294 76	−04.846 439 51		56.56	786.98	−219.52	2.89	2.53	4.03	5.03	2.84	+15	+ 6	−44	+28	−38	+55	−14	+35	− 6	+ 9	0	0.90
103394 H	20 56 50.64	+61 33 38.8	8.10	H	314.210 983 21	+61.560 771 80	A	9.39	22.32	14.71	1.01	0.93	1.00	0.92	0.95	+ 8	+ 0	+12	−11	+24	+ 6	+25	− 7	+ 4	+38	2	0.47
103395 H	20 56 50.97	−48 40 17.2	7.95	H	314.212 378 53	−48.671 441 39	A	4.15	−12.03	5.44	1.11	0.87	1.24	1.44	0.80	+ 0	+34	+ 1	+23	−28	+ 4	−24	−19	+ 7	−37	1	−0.55
103396	20 56 51.75	+05 45 35.5	9.78	G	314.215 639 73	+05.759 849 05		3.46	7.18	−17.04	1.39	0.78	1.82	1.74	0.83	+21	−32	+12	+24	+23	+ 9	+17	+34	+ 8	+38	4	1.86
103397	20 56 52.21	−33 59 54.8	7.36	H	314.217 551 03	−33.998 563 91		9.89	−22.87	17.31	0.87	0.54	0.96	1.06	0.80	+ 9	−19	−22	− 3	−12	+24	− 8	+40	−15	+ 5	0	0.86
103398	20 56 52.73	−22 00 20.7	7.47	H	314.219 729 08	−22.005 739 60		2.13	10.13	−2.54	0.90	0.67	0.98	1.09	1.00

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
103301	7.520	0.035	6.364	0.019	A	0.824	0.006	G	0.87	0.02	A *	6.1886	0.0007	0.008	130	*	6.17	6.20		D	20557+0432	I 1	2 C A	AB	282	2.047	0.002	1.09	0.01	S
103302	8.378	0.007	7.697	0.006	*	0.618	0.007	T	0.69	0.01	L *	7.7537	0.0010	0.012	212	*	7.73	7.78			20557−6609	H 1	2 C S A	AB	31	0.121	0.009	0.84	0.39	S
103303	11.369	0.065	10.793	0.064	A	0.538	0.081	T	0.61	0.09	L	10.9414	0.0172	0.057	172	A	10.86	11.05			20557+3540	I 1	2 C A	AB	24	12.257	0.028	1.79	0.10	G
103304	9.351	0.015	8.249	0.010		0.980	0.015	G	0.96	0.01	H	8.3031	0.0013	0.015	124		8.27	8.33		C			1							
103305	9.206	0.010	7.936	0.006		1.082	0.009	T	1.04	0.01	L	7.9957	0.0014	0.015	175		7.97	8.02					1							
103306	8.153	0.006	8.005	0.006		0.142	0.008	T	0.16	0.01	L	8.0550	0.0013	0.014	222		8.03	8.08		C			1							S
103307	8.524	0.009	8.486	0.011		0.040	0.013	T	0.06	0.01	L	8.5090	0.0018	0.014	110		8.49	8.54		C			1							
103308	9.445	0.018	7.492	0.007		1.620	0.015	G	2.08	0.02	A	7.3667	0.0014	0.016	122		7.33	7.39		U			1							S
103309	8.486	0.009	7.461	0.006		0.893	0.008	T	0.90	0.01	L	7.5280	0.0010	0.014	175		7.51	7.55		C			1							S
103310	10.657	0.043	9.366	0.025		1.098	0.039	T	1.06	0.04	L	9.4489	0.0025	0.019	79		9.42	9.48		C			1							
103311	7.950	0.011	7.392	0.010		0.544	0.015	G	0.62	0.01	H	7.4176	0.0058	0.034	54		7.36	7.46		U 2			1							S P
103312	6.198	0.004	5.766	0.005		0.408	0.006	T	0.67	0.03	C	5.8010	0.0025	0.020	107		5.75	5.84		U 2			1							S
103313	8.868	0.012	8.536	0.012		0.327	0.015	G	0.38	0.02	H	8.5924	0.0017	0.015	110		8.57	8.63					1							
103314	8.219	0.008	7.765	0.009		0.428	0.011	T	0.50	0.01	L	7.8055	0.0011	0.013	134		7.79	7.83					1							S
103315	8.006	0.010	7.941	0.013		0.059	0.015	T	0.07	0.01	L	7.9714	0.0009	0.010	106		7.95	8.00					1							S
103316	9.122	0.012	8.539	0.011		0.545	0.014	T	0.62	0.01	L	8.6124	0.0016	0.017	125		8.58	8.64		C			1							S
103317	9.967	0.021	8.626	0.012		1.137	0.019	T	1.10	0.02	L	8.6743	0.0019	0.016	111		8.63	8.71					1							
103318	9.186	0.015	9.029	0.018	*	0.151	0.022	T	0.17	0.02	L *	8.9175	0.0020	0.017	101	*	8.89	8.95		D	20559+5906	I 1	2 C A	AB	6	0.920	0.004	0.80	0.02	
103319	9.888	0.023	9.643	0.027		0.233	0.033	T	0.26	0.04	L	9.6972	0.0022	0.020	112		9.66	9.72		C			1							G
103320	8.704	0.007	8.381	0.007		0.310	0.011	T	0.36	0.01	L	8.4242	0.0052	0.049	260		8.36	8.49	0.55	P 1 A			1							S
103321	10.023	0.031	8.883	0.020		0.980	0.029	T	0.96	0.02	L	8.9227	0.0025	0.017	83		8.89	8.95					1							
103322	6.773	0.005	6.825	0.005		−0.047	0.010	G	−0.03	0.01	H	6.8210	0.0008	0.008	98		6.81	6.83					1							S
103323	9.194	0.014	8.676	0.014		0.519	0.015	G	0.59	0.02	H	8.7178	0.0020	0.018	118		8.69	8.76					1 S							
103324						1.460	0.021	G	1.85	0.09	I	11.5524	0.0045	0.051	146		11.45	11.63		U			1							G
103325	9.173	0.013	8.831	0.014		0.313	0.003	G	0.36	0.00	H	8.8802	0.0010	0.012	126		8.86	8.91					1							
103326	10.776	0.066	8.893	0.024		1.500	0.040	G	1.53	0.06	R	8.8784	0.0027	0.018	47		8.85	8.90		C			1 S							
103327	8.711	0.009	8.282	0.009		0.405	0.012	T	0.47	0.01	L	8.3284	0.0015	0.015	152		8.30	8.36					1							S
103328	8.142	0.009	8.189	0.012		−0.038	0.014	T	−0.02	0.01	L	8.1975	0.0015	0.013	92		8.18	8.23		C			1							S
103329	12.286	0.154	10.535	0.046		1.489	0.132	T	1.83	0.21	K	10.3569	0.0033	0.038	204		10.28	10.41					1 X S							G
103330	8.095	0.007	6.786	0.005		1.112	0.007	T	1.07	0.01	L	6.8260	0.0010	0.010	148		6.81	6.85			20560+2735	I 1	1							S
103331						1.274	0.020	G	1.45	0.03	I	11.7840	0.0047	0.054	130		11.69	11.87					1 X							G
103332	10.741	0.065	8.958	0.023		1.000	0.040	G	0.98	0.03	R	8.9151	0.0038	0.016	52		8.87	8.94					1 S							
103333	8.766	0.010	6.905	0.005		1.547	0.009	T	1.61	0.02	L	6.8518	0.0010	0.010	149		6.84	6.87					1							S
103334	9.429	0.020	8.366	0.014		0.921	0.018	T	0.92	0.01	L	8.4056	0.0018	0.013	70		8.38	8.42		C			1							
103335	8.241	0.010	7.878	0.010		0.310	0.000	G	0.36	0.00	H	7.9275	0.0008	0.010	132		7.91	7.95		D			1							S
103336	8.657	0.011	8.589	0.013		0.068	0.016	T	0.08	0.02	L	8.6248	0.0016	0.018	127		8.59	8.66		D			1							
103337	11.305	0.064	10.391	0.047		0.893	0.015	G	0.90	0.01	H	10.3543	0.0026	0.019	89		10.32	10.38		C			1							G
103338	8.946	0.020	7.647	0.012		1.104	0.018	T	1.07	0.02	L	7.6990	0.0017	0.010	56		7.68	7.72		C			1							S
103339	8.918	0.012	7.779	0.008		0.979	0.011	T	0.96	0.01	L	7.8328	0.0012	0.014	105		7.81	7.86		C			1							S
103340	8.790	0.014	7.447	0.008		1.139	0.013	T	1.10	0.01	L	7.5029	0.0014	0.011	82		7.48	7.52		C			1							S
103341	6.731	0.004	6.855	0.005		−0.108	0.006	T	−0.09	0.01	L	6.8396	0.0010	0.008	126		6.83	6.85					1							S
103342	8.205	0.010	6.893	0.005		1.114	0.009	T	1.08	0.01	L	6.9329	0.0008	0.007	99		6.92	6.94		C			1							S
103343	6.464	0.004	6.589	0.004		−0.097	0.002	G	−0.08	0.00	H	6.5792	0.0010	0.009	121		6.57	6.60					1							S
103344	10.214	0.030	8.848	0.017		1.157	0.027	T	1.12	0.02	L	8.8759	0.0014	0.012	100		8.85	8.90		C			1							
103345	8.296	0.009	8.076	0.010		0.210	0.013	T	0.23	0.01	L	8.1233	0.0012	0.013	127		8.10	8.14					1							S
103346	6.006	0.003	6.192	0.004		−0.172	0.004	G	−0.18	0.01	H	6.1720	0.0007	0.007	113		6.16	6.18					1							S P
103347	6.467	0.005	6.554	0.006		−0.078	0.006	G	−0.08	0.02	A	6.5538	0.0006	0.004	69		6.55	6.56					1							S
103348	8.122	0.007	6.807	0.005		1.117	0.007	T	1.08	0.01	L	6.8440	0.0008	0.008	137		6.83	6.86					1							S
103349						1.347	0.009	G	1.57	0.01	I	11.8944	0.0064	0.043	83		11.81	11.97					1							G
103350	10.657	0.045	10.192	0.046	*	0.438	0.059	T	0.51	0.06	L *	10.1165	0.0027	0.029	98	*	10.06	10.18		D	20563−3216	I 1	2 C A	BA	169	0.740	0.006	0.06	0.02	
103351	11.219	0.069	9.249	0.022		1.634	0.058	T	1.66	0.06	L	9.2134	0.0040	0.021	71		9.18	9.24					1							
103352	9.300	0.012	8.859	0.012		0.408	0.015	G	0.47	0.02	H	8.9198	0.0016	0.020	148		8.89	8.96		C			1							
103353	9.456	0.015	8.226	0.010		1.050	0.014	T	1.02	0.01	L	8.2750	0.0013	0.013	153		8.25	8.30		C			1							
103354	7.817	0.007	7.822	0.007		0.000	0.009	T	0.02	0.01	L	7.8327	0.0011	0.010	169		7.81	7.86					1							S
103355	9.660	0.017	8.608	0.012	*	1.050	0.015	G	1.02	0.01	H *	8.5835	0.0024	0.022	133	*	8.55	8.64		D	20564+4308	M 1	2 C A	AB	155	0.300	0.005	0.90	0.07	
103356	8.537	0.010	7.163	0.006		1.163	0.009	T	1.12	0.01	L	7.2094	0.0011	0.011	113		7.20	7.23					1							S
103357	9.487	0.017	7.738	0.008		1.458	0.015	T	1.46	0.02	L	7.7046	0.0013	0.011	112		7.68	7.72		C			1							S
103358	8.478	0.010	7.416	0.009		0.921	0.010	T	0.92	0.01	L	7.4449	0.0013	0.010	105		7.43	7.46		C			1							S
103359	6.228	0.004	5.873	0.004		0.337	0.005	T	0.39	0.01	L	5.9125	0.0006	0.006	116		5.90	5.92		C	20564+5044	I 1	1							S
103360	7.267	0.005	6.033	0.003		1.054	0.005	T	1.02	0.00	L	6.0870	0.0007	0.006	117		6.08	6.10		C			1							S
103361	8.599	0.019	7.914	0.013	*	0.646	0.015	G	0.71	0.01	H *	8.0842	0.0018	0.015	112	*	8.06	8.11		D	20564−5916	I 1	2 C A	AB	341	2.437	0.010	1.86	0.05	S
103362	10.471	0.054	9.920	0.051		0.516	0.066	T	0.59	0.07	L	9.9746	0.0030	0.021	48		9.93	10.01		D			1							
103363	8.938	0.014	8.441	0.014		0.479	0.015	T	0.55	0.02	L	8.5027	0.0017	0.012	74		8.48	8.52		C			1							S
103364	11.455	0.068	11.095	0.083		0.341	0.100	T	0.40	0.14	L	11.3195	0.0329	0.313	179		10.69	11.60	0.56	P 1 A			1							D
103365	9.285	0.013	8.685	0.012		0.560	0.016	T	0.63	0.01	L	8.7548	0.0016	0.014	142		8.73	8.78		C			1							
103366	9.253	0.015	7.361	0.007		1.572	0.013	T	1.59	0.01	L	7.2634	0.0012	0.011	114		7.24	7.28		M			1							S
103367	10.425	0.037	9.971	0.037		0.458	0.015	G	0.53	0.02	H	10.0343	0.0025	0.025	119		9.99	10.09					1							G
103368	11.108	0.073	10.150	0.050		0.939	0.006	G	0.99	0.01	I	10.1047	0.0028	0.024	83		10.06	10.15		C			1							
103369	10.144	0.030	9.731	0.032		0.404	0.036	T	0.47	0.04	L	9.7706	0.0022	0.023	100		9.74	9.81		C			1							
103370	9.267	0.014	8.100	0.009		1.001	0.013	T	0.98	0.01	L	8.1575	0.0011	0.009	108		8.14	8.18		C			1							S
103371	5.985	0.003	5.968	0.004		0.020	0.005	T	0.04	0.01	L	5.9742	0.0005	0.005	93		5.96	5.98					1							S
103372	10.316	0.024	9.602	0.020		0.000	0.020	G	0.02	0.02	H	9.7095	0.0023	0.026	137		9.66	9.75					1 S							
103373	8.999	0.013	8.904	0.016	*	0.100	0.015	G	0.11	0.02	H *	8.9187	0.0016	0.017	108	*	8.89	8.95			20566+4712	H 1	2 C S C	AB	161	0.136	0.014	0.73	1.04	
103374	10.441	0.026	9.977	0.026		0.450	0.029	T	0.52	0.03	L	10.0200	0.0032	0.036	171		9.96	10.08					1							
103375	10.261	0.034	9.655	0.030	A						T *	9.6069	0.0017	0.017	110	*	9.57	9.63		D	20566+5250	I 1	2 C A	AB	331	1.304	0.014	1.94	0.05	G
103376	12.209	0.150	10.759	0.065		1.140	0.020	G	1.23	0.03	I	10.9576	0.0039	0.046	156		10.88	11.01					1 X S							G
103377	8.523	0.013	8.174	0.013		0.379	0.015	G	0.44	0.02	H	8.1952	0.0017	0.011	72		8.17	8.21		C			1							S
103378	10.750	0.055	10.081	0.044		0.620	0.059	T	0.69	0.05	L	10.1461	0.0022	0.025	112		10.10	10.21		C			1							G
103379	11.017	0.074	10.316	0.058		0.525	0.012	G	0.60	0.01	H	10.3724	0.0036	0.026	69		10.34	10.45		C			1							G
103380	8.455	0.010	8.005	0.010		0.424	0.013	T	0.49	0.01	L	8.0698	0.0013	0.014	111		8.05	8.09		C	20567+5656	I 1	1 S							S
103381	8.344	0.012	7.967	0.012	*	0.362	0.015	G	0.42	0.02	H *	8.0651	0.0013	0.014	133	*	8.04	8.09		D	20567+1300	I 1	2 C A	AB	219	5.112	0.004	1.13	0.01	S
103382	8.886	0.009	8.880	0.012		0.010	0.014	T	0.03	0.01	L	8.8876	0.0015	0.019	168		8.86	8.92					1							
103383	10.368	0.029	9.057	0.016		1.114	0.026	T	1.08	0.03	L	9.1367	0.0021	0.021	131		9.10	9.17					1							
103384	8.608	0.014	7.351	0.009		1.071	0.013	T	1.04	0.01	L	7.4077	0.0013	0.009	70		7.39	7.42		C			1							S
103385	9.981	0.022	9.825	0.029	*	0.150	0.034	T	0.17	0.04	L *	9.8407	0.0020	0.019	122	*	9.79	9.87		D	20567+6237	H 1	2 C A	AB	248	0.385	0.022	2.40	0.13	G
103386	8.463	0.015	8.257	0.017		0.190	0.022	T	0.21	0.03	L	8.2942	0.0024	0.010	51		8.27	8.32		C			1							S
103387	9.124	0.011	8.968	0.013		0.150	0.016	T	0.17	0.02	L	9.0092	0.0019	0.022	178		8.96	9.04		C			1							
103388						1.563	0.020	G	2.37	0.01	A	11.4955	0.0068	0.058	70		11.36	11.61		U			1 X							G G
103389	6.298	0.006	5.757	0.004		0.507	0.011	G	0.57	0.02	A	5.8109	0.0012	0.007	48		5.80	5.83					1							S
103390						1.594	0.082	G	1.73	0.17	K *	11.5218	0.0075	0.057	117	*	11.45	11.65		D	20568−4452	H 1	2 C D	AB	231	0.685	0.067	2.00	0.19	G D
103391	8.165	0.010	6.998	0.006		0.997	0.003	G	0.98	0.00	H	7.0519	0.0012	0.009	84		7.03	7.07					1							S
103392	8.412	0.010	7.303	0.006		0.960	0.000	G	1.01	0.00	I	7.3635	0.0009	0.010	142		7.35	7.38			20568+4254	I 1	1							S
103393						1.490	0.020	G	2.68	0.02	A	11.9066	0.0103	0.061	70		11.82	12.03					1							D
103394	8.503	0.020	8.076	0.020	*	0.403	0.026	T	0.47	0.03	L *	8.1928	0.0011	0.012	102	*	8.17	8.22		D	20568+6134	I 1	2 C A	AB	330	4.138	0.008	2.05	0.03	S
103395	8.182	0.017	7.874	0.018	*	0.293	0.023	T	0.33	0.03	L *	8.0307	0.0014	0.015	102	*	8.00	8.06		D	20568−4840	I 1	2 C A	AB	85	3.705	0.013	2.83	0.06	S
103396	10.477	0.038	9.826	0.033		0.617	0.015	G	0.69	0.01	H	9.8864	0.0019	0.019	113		9.85	9.92		C			1							
103397	7.926	0.011	7.409	0.009		0.490	0.015	G	0.56	0.02	H	7.4647	0.0011	0.010	90		7.45	7.48		C			1							S
103398	9.244	0.022	7.637	0.011		1.346	0.019	T	1.31	0.02	L	7.6234	0.0020	0.011	53		7.61	7.66		C			1							S
103399	9.015	0.015	7.794	0.010		1.043	0.014	T	1.01	0.01	L	7.8668	0.0016	0.013	91		7.85	7.89		C			1 G							S
103400	9.204	0.016	8.846	0.017		0.339	0.022	T	0.40	0.03	L	8.9049	0.0014	0.016	100		8.88	8.93					1							
																												44696	13639	

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)													Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$			F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr														%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			29	30
103401	20 56 54.03	−09 41 51.1	5.49	1 H	314.225 124 43	−09.697 516 69		5.42	−3.51	−11.53	0.87	0.61	0.99	1.38	0.91	+35	− 9	−16	−15	− 6	− 9	−14	+31	−10	+49			0	0.90
103402 H	20 56 55.86	+10 58 34.3	9.07	H	314.232 732 66	+10.976 182 65	A	0.67	1.59	2.39	1.75	1.10	1.84	2.02	1.05	+20	−15	+10	+25	+20	− 5	+19	+46	− 6	+35			2	−0.26
103403	20 56 56.97	+47 34 44.1	7.68	H	314.237 363 11	+47.578 910 02		7.05	9.02	3.09	0.58	0.61	0.73	0.73	0.78	− 5	+14	−16	−10	− 4	+14	+ 6	−32	+25	+24			0	0.55
103404	20 56 57.19	+41 38 50.1	9.82	H	314.238 294 60	+41.647 247 90		7.26	128.66	118.26	1.00	1.09	1.41	1.12	1.43	−11	+ 2	+ 2	+23	+ 9	−24	+23	−29	+10	+ 9			0	0.82
103405	20 57 01.38	+17 05 50.9	7.15	H	314.255 764 33	+17.097 464 89		7.69	−9.04	2.54	0.77	0.45	0.93	0.97	0.48	+ 8	+10	+ 9	+52	+ 6	+26	+ 9	+45	+ 6	+29			0	2.93
103406	20 57 02.27	−06 28 14.2	8.72	H	314.259 437 78	−06.470 609 50		3.82	−8.56	0.61	1.13	0.88	1.51	1.85	1.11	+22	−18	−41	+16	−35	+46	−17	+28	− 4	+22			0	2.61
103407	20 57 02.44	−34 06 14.8	9.58	1 H	314.260 165 49	−34.104 120 39		2.50	−5.85	−10.54	1.28	0.86	1.39	1.61	1.28	+22	−27	−21	− 3	−13	+13	−11	+23	− 3	+16			0	2.15
103408	20 57 02.64	−50 31 07.2	9.48	H	314.260 992 21	−50.518 665 36		8.79	5.02	−29.69	1.19	0.86	1.32	1.77	1.14	+23	−28	−18	+18	− 9	− 5	−12	+ 4	+ 0	−14			0	−0.88
103409	20 57 02.68	+46 32 44.7	8.73	G	314.261 174 64	+46.545 756 79		2.61	−4.55	−2.96	0.68	0.76	0.87	0.88	0.92	+ 7	− 2	+ 7	− 8	− 8	− 5	− 4	−32	+12	+21			0	−0.87
103410	20 57 04.77	+37 45 06.7	8.70	H	314.269 865 54	+37.751 855 91		1.86	−2.12	0.13	0.57	0.66	0.84	0.61	0.74	−13	− 3	− 8	+ 8	+ 3	− 9	+ 3	+ 8	− 2	+ 0			0	−1.14
103411	20 57 06.28	−30 10 42.6	9.71	H	314.276 181 76	−30.178 486 56		2.66	43.68	11.28	1.66	0.92	1.60	2.25	1.40	− 2	−32	+ 3	+30	−25	+ 0	−26	+50	+ 7	−10			0	−0.36
103412	20 57 09.74	−67 41 56.1	7.71	H	314.290 597 79	−67.698 924 77		4.63	−16.11	26.34	0.47	0.53	0.80	0.56	0.68	−31	− 6	−10	− 2	+ 0	−10	− 1	+ 2	+ 1	−40			0	0.86
103413 H	20 57 10.41	+41 10 01.9	3.94	G	314.293 381 84	+41.167 193 84	*	9.17	8.51	−23.97	0.64	0.80	0.51	0.41	0.47	+31	− 2	+ 5	−11	+ 5	−25	− 1	−30	+22	− 1			1	−1.37
*103414	20 57 10.57	+00 27 50.2	6.06	H	314.294 043 17	+00.463 932 42		10.24	11.81	−62.98	0.80	0.48	0.85	0.98	0.46	+32	−19	−12	−34	−15	+28	−19	−31	+24	+50			0	0.98
*103415	20 57 10.56	−36 33 57.5	9.22	G	314.293 992 61	−36.565 982 83		4.31	12.51	−34.49	1.32	0.90	1.48	2.10	1.34	+ 6	+ 1	−16	+30	−22	+38	−17	+38	−10	− 9			0	−0.35
103416	20 57 10.85	−37 57 47.4	9.14	H	314.295 189 31	−37.963 177 20		1.72	12.33	−17.84	1.09	0.80	1.41	1.19	0.99	+50	−29	−18	− 4	+15	+22	+15	+13	+ 9	+67			0	1.39
103417	20 57 11.23	+16 15 05.1	7.47	2 H	314.296 804 79	+16.251 406 85		2.38	1.50	−0.41	0.75	0.54	1.07	0.88	0.58	+21	+14	+20	+33	+14	+11	+ 8	+53	+ 5	+42			0	0.59
103418	20 57 11.71	+02 28 03.0	8.56	H	314.298 787 31	+02.467 498 18		4.04	10.36	1.50	0.92	0.62	1.18	1.12	0.59	+35	− 9	+ 1	−13	+ 4	+44	− 1	− 2	+24	+47			0	−2.30
103419	20 57 12.83	+05 04 49.4	8.37	3 H	314.303 466 57	+05.080 394 86		2.52	14.31	−2.42	1.17	0.57	1.34	1.31	0.59	+17	−46	+ 5	− 9	+12	+10	− 6	+20	+26	+38			0	2.26
103420	20 57 12.84	+69 03 27.6	6.82	H	314.303 506 35	+69.057 653 20		6.91	−78.22	−34.93	0.55	0.53	0.60	0.63	0.55	− 7	−21	+ 0	+10	+ 4	− 3	− 1	−21	+24	− 2			0	−0.65
103421	20 57 13.04	+58 49 00.2	7.94	H	314.304 319 00	+58.816 735 07		4.23	5.89	3.15	0.58	0.60	0.65	0.66	0.74	−20	+17	− 7	+14	+12	− 5	+15	− 9	+18	−22			0	0.94
103422	20 57 13.09	+35 18 42.1	6.62	H	314.304 552 14	+35.311 706 81		4.37	4.19	8.33	0.39	0.49	0.69	0.40	0.52	−21	+ 6	+ 6	−12	− 3	−13	− 2	−19	+22	−33			0	1.90
103423	20 57 13.78	+22 52 44.0	8.19	H	314.307 417 70	+22.878 882 52		1.77	−8.72	−31.64	0.67	0.64	1.02	0.74	0.66	+15	− 5	− 9	+ 9	+21	−11	+18	+38	− 9	+21			0	0.30
103424	20 57 14.66	−59 23 57.5	8.29	H	314.311 075 86	−59.399 317 59		5.93	18.46	−18.73	0.86	0.68	1.13	1.09	0.76	−20	+26	−14	−19	+27	−20	+30	− 3	+25	−46			0	1.40
*103425	20 57 14.94	+02 19 57.8	8.25	H	314.312 266 29	+02.332 732 52		3.17	−11.02	−23.94	0.86	0.60	1.04	1.05	0.55	+30	−22	−25	−10	− 8	+24	− 6	−16	+15	+34			0	−0.09
*103426	20 57 14.67	−86 46 50.9	7.61	H	314.311 133 57	−86.780 798 01		3.82	14.95	−15.03	0.60	0.50	0.63	0.68	0.53	−14	−10	+ 0	− 5	+ 6	+ 1	+ 6	+ 4	+ 4	−18			0	−0.20
103427	20 57 16.01	−66 31 42.8	9.94	H	314.316 703 29	−66.528 562 31		2.35	29.63	−5.31	0.75	0.83	1.34	0.81	1.12	−18	−14	+ 1	− 6	− 8	− 2	− 3	+24	+ 1	−35			1	1.86
103428 H	20 57 16.58	+48 17 44.8	8.26	H	314.319 082 09	+48.295 772 14	*	1.52	2.62	0.36	2.79	1.85	1.06	1.12	1.20	−14	− 1	−12	+10	+ 4	− 8	+ 1	−14	− 1	− 5			1	−0.10
103429	20 57 17.17	−23 50 45.2	7.64	H	314.321 533 04	−23.845 897 73		8.05	−2.53	−15.89	0.84	0.66	1.03	1.10	0.89	+15	− 5	−30	−12	− 1	+44	+ 9	+16	+15	+36			0	−0.09
103430	20 57 18.50	−58 10 02.1	10.04	G	314.327 084 20	−58.167 236 82		16.10	33.10	27.75	1.10	0.96	1.58	1.36	1.10	+ 0	−19	−15	− 6	+ 8	+ 8	+10	+ 4	+ 5	−38			2	1.25
103431	20 57 18.88	+05 48 52.4	9.34	2 H	314.328 675 73	+05.814 550 32		4.54	15.50	−0.77	1.32	0.75	1.54	1.77	0.81	+24	−20	+ 3	+20	+18	+16	+14	+35	+ 7	+38			0	−0.23
103432	20 57 19.55	+25 45 17.9	10.07	H	314.331 469 15	+25.754 974 76		1.69	6.46	4.51	0.79	0.86	1.40	1.00	1.00	+18	− 3	−12	−25	+35	− 7	+34	+34	+ 9	+14			0	−1.34
103433	20 57 20.83	+40 10 39.0	10.01	3 H	314.336 797 38	+40.177 511 62		0.88	−1.77	−1.95	0.89	1.14	1.43	0.99	1.23	+ 4	− 9	+13	+ 1	− 1	−14	− 1	−16	+11	− 2			2	0.40
103434	20 57 21.33	−27 27 04.0	9.89	H	314.338 856 04	−27.451 113 00		3.97	−1.11	−15.16	1.38	1.17	1.80	1.96	1.59	+25	− 1	−33	− 8	−21	+48	− 9	+ 3	+ 1	+31			0	1.49
*103435	20 57 22.17	+87 01 57.5	7.42	H	314.342 394 47	+87.032 625 39		6.65	14.93	17.71	0.50	0.52	0.59	0.61	0.64	+13	+ 9	+15	+12	− 4	−12	− 2	+ 0	−13	+29			0	−0.72
*103436	20 57 22.13	−17 50 37.5	9.55	H	314.342 228 21	−17.843 756 08		1.09	−7.07	1.17	1.33	0.86	1.44	1.98	1.27	+ 1	−10	−12	−13	−16	+38	−12	− 8	− 8	+ 3			0	−0.10
103437	20 57 22.27	−64 56 17.0	7.70	G	314.342 807 63	−64.938 052 85		10.22	−5.84	−28.72	0.51	0.51	0.90	0.64	0.62	−48	+ 1	+ 1	+10	+ 6	+ 1	+ 5	+17	− 3	−47			1	0.63
103438 H	20 57 22.41	−59 04 33.0	7.95	H	314.343 365 16	−59.075 825 10	A	19.63	23.12	−58.51	1.74	1.46	1.87	1.56	1.18	− 2	− 8	− 3	−17	+17	−14	+26	+12	+13	−49			8	1.72
103439 H	20 57 22.44	+62 50 56.0	7.89	H	314.343 515 07	+62.848 881 30	*	2.62	7.87	1.16	0.55	0.51	0.58	0.54	0.57	− 9	− 1	+ 7	−18	+22	+10	+22	−11	+ 8	+21			2	2.03
103440	20 57 23.25	−41 04 55.0	8.31	H	314.346 887 96	−41.081 956 71		7.47	9.80	−22.87	0.85	0.62	1.05	0.95	0.72	+31	−17	−10	−10	+ 9	+16	+10	+ 4	− 2	+45			0	0.74
103441	20 57 24.87	+22 21 47.7	11.98	G	314.353 626 22	+22.363 243 73		73.24	773.07	−211.88	2.06	1.88	3.24	2.64	1.96	+14	−18	− 4	+ 0	+23	+ 3	+20	+30	−12	+18			1	1.20
103442	20 57 25.01	+41 41 22.4	7.34	H	314.354 214 45	+41.689 557 62		4.33	0.88	5.66	0.49	0.58	0.71	0.58	0.71	−15	− 9	+11	+24	+ 5	−29	+17	−30	+ 6	+ 0			0	−0.57
103443	20 57 27.36	−36 32 52.7	9.74	H	314.364 017 92	−36.547 982 23		2.47	26.74	−41.04	1.52	1.11	1.74	2.51	1.56	+16	+ 1	−26	+24	−21	+30	−10	+37	−14	− 9			0	0.51
103444	20 57 27.40	+18 17 48.5	8.79	H	314.364 184 46	+18.296 797 79		1.42	2.70	1.09	0.85	0.62	1.14	1.02	0.64	+15	+ 0	+13	+32	+23	+ 9	+17	+54	− 2	+29			0	−0.47
103445	20 57 28.57	−35 31 47.8	10.34	H	314.369 037 05	−35.529 934 07		1.88	33.15	−4.17	1.46	1.06	1.67	1.84	1.50	+20	−19	− 9	− 1	−13	+18	−14	+17	− 2	+19			0	0.64
103446	20 57 28.96	+00 36 06.7	9.14	H	314.370 666 33	+00.601 860 05		5.58	31.04	6.66	1.47	0.83	1.48	1.91	0.80	+37	−17	−10	−41	−22	+20	−25	−31	+18	+53			0	2.09
103447	20 57 29.19	−03 14 11.9	7.84	2 H	314.371 627 06	−03.236 640 32		2.30	−10.87	−9.83	0.89	0.61	1.08	1.18	0.59	+38	−36	−37	− 1	− 8	+24	− 6	−25	+26	+47			0	0.33
103448	20 57 29.52	+59 46 47.6	9.33	H	314.372 990 43	+59.779 875 73		2.97	−7.06	−15.19	0.76	0.73	0.90	0.75	0.81	− 9	+ 6	−15	+ 4	+ 3	− 8	+10	−24	+39	+12			0	0.33
103449	20 57 30.12	+29 49 30.9	8.72	H	314.375 520 34	+29.825 260 29		0.55	0.44	2.17	0.67	0.80	1.12	0.82	0.92	− 6	+ 4	+ 9	+29	+ 1	−14	+ 3	+24	+ 4	− 1			0	1.19
103450	20 57 30.73	+00 35 35.9	9.96	H	314.378 051 14	+00.593 312 23		0.89	7.81	1.96	2.13	1.17	2.15	2.74	1.13	+36	−18	−11	−40	−20	+18	−24	−29	+18	+52			2	0.38
103451	20 57 31.55	−48 37 12.9	8.77	H	314.381 472 39	−48.620 252 34		2.31	−0.23	−18.06	1.07	0.78	1.25	1.36	0.74	+12	−13	−18	−12	−18	+ 5	−19	−30	+15	−23			0	−0.03
103452	20 57 35.58	+39 39 45.7	7.48	1 H	314.398 236 81	+39.662 692 49		3.55	8.41	−0.47	0.48	0.53	0.69	0.54	0.57	−20	−10	+ 9	+14	− 8	−15	− 6	−14	+13	−13			0	−1.29
103453	20 57 37.03	+33 18 04.2	8.31	H	314.404 305 64	+33.301 166 99		6.40	12.91	−2.73	0.43	0.59	0.83	0.50	0.73	−31	+ 7	−10	+ 5	− 7	−23	− 8	+ 1	+22	−40			0	1.02
*103454 H	20 57 39.71	+61 21 36.7	7.69	H	314.415 471 31	+61.360 189 72	A	13.57	58.77	12.52	1.21	1.10	1.16	1.11	1.13	+10	− 1	+ 4	+ 3	+25	+ 2	+31	− 8	− 1	+37			3	1.11
*103455	20 57 39.50	+26 24 17.4	6.93	H	314.414 581 50	+26.404 846 20		30.11	273.13	95.85	0.53	0.50	0.84	0.65	0.57	− 4	+ 4	−19	−24	+34	−22	+30	+17	+16	− 6			0	1.37
103456	20 57 39.88	−24 29 21.0	8.23	H	314.416 186 46	−24.489 167 92		9.50	18.03	−14.53	1.04	0.82	1.20	1.18	1.06	+33	−33	−38	− 9	+16	+29	+28	+44	− 6	+33			0	−0.48
103457	20 57 40.16	−07 42 48.5	7.52	H	314.417 341 00	−07.713 474 80		1.68	6.27	2.95	0.96	0.66	1.13	1.37	0.87	+26	− 8	−13	+ 0	−20	+22	−18	+31	−13	+33			0	0.63
*103458	20 57 40.49	−44 07 37.2	6.52	G	314.418 700 03	−44.127 000 27		46.26	−515.51	−975.63	0.70	0.46	0.81	0.72	0.38	+20	−28	−23	−26	−13	+21	−15	−45	+19	+ 0			0	0.88
*103459	20 57 40.46	−27 44 40.4	8.85	H	314.418 589 07	−27.744 545 74		6.22	11.21	9.69	1.09	0.98	1.45	1.45	1.19	+17	+ 6	−39	+ 6	−23	+42	−11	+17	−19	+17			0	1.65
103460	20 57 40.61	−16 01 53.6	5.89	H	314.419 223 41	−16.031 543 55		17.58	51.27	1.73	0.75	0.52	0.85	0.93	0.67	+10	−19	−31	−13	−12	+36	− 5	+10	+ 4	+19			0	−1.62
103461 H	20 57 40.68	+58 49 19.4	7.90	H	314.419 504 80	+58.822 052 53	A	2.18	5.26	3.44	1.16	1.32	1.16	1.09	1.31	+ 1	+ 8	− 6	+ 9	+ 5	+ 2	+ 8	+ 1	+14	+19			0	0.60
103462	20 57 42.07	−24 53 09.4	8.67	H	314.425 309 72	−24.885 945 74		2.37	−0.59	−5.99	1.08	0.80	1.21	1.52	1.07	+14	−15	−30	−19	+10	+31	+20	+23	+ 8	+13			0	−0.04
103463	20 57 42.71	−35 44 47.5	11.03	H	314.427 942 95	−35.746 536 98		6.07	−22.99	−11.91	2.11	1.48	2.40	2.59	2.12	+24	−22	−11	− 6	−12	+16	−10	+27	− 8	+19			0	0.81
103464	20 57 42.84	−30 49 25.3	9.68	H	314.428 496 05	−30.823 687 51		7.50	11.57	−42.63	1.23	0.88	1.42	1.50	1.32	+34	−22	− 2	−14	+ 5	+30	− 1	+37	+ 1	+42			4	−0.57
103465	20 57 43.12	−32 47 59.4	10.07	H	314.429 671 08	−32.799 827 48		5.58	14.27	−16.67	1.74	1.25	1.97	2.10	1.36	+31	−44	−51	−24	−19	+29	+ 5	+30	−15	− 1			2	1.47
103466 H	20 57 45.76	−44 01 40.3	9.00	H	314.440 649 22	−44.027 874 81	A	8.16	63.03	−1.83	2.55	1.80	2.68	2.73	1.42	+45	−37	−34	−19	−21	+ 9	−32	−48	+25	+13			2	1.19
103467	20 57 46.49	−26 14 22.5	8.64	H	314.443 691 63	−26.239 579 94		0.31	−20.48	−22.83	1.18	0.97	1.36	1.41	1.20	+32	−11	−21	−18	+10	+39	+16	+27	+11	+41			0	1.85
*103468	20 57 46.66	−68 25 28.9	7.02	H	314.444 429 82	−68.424 687 21		9.35	53.29	−21.80	0.39	0.46	0.65	0.44	0.55	−26	− 6	− 9	+ 4	− 3	− 2	− 5	− 2	+ 2	−41			0	−0.02
*103469	20 57 46.58	−21 33 23.7	8.71	H	314.444 077 32	−21.556 576 28		7.92	17.17	−51.29	1.18	0.82	1.23	1.42	1.15	+21	+ 2	−17	−35	− 8	+15	−12	+ 3	− 6	+38			0	0.12
103470 H	20 57 47.00	−72 17 17.7	9.27	H	314.445 849 80	−72.288 237 73	A	12.52	19.19	16.12	1.47	1.49	1.93	1.53	1.53	−11	−25	− 1	− 3	+23	− 9	+22	+15	− 6	−15			0	0.87
103471	20 57 48.58	+55 29 15.4	7.26	1 G	314.452 423 31	+55.487 618 43		6.25	26.28	20.06	0.49	0.48	0.53	0.53	0.57	−23	+ 8	−10	−20	+19	− 7	+17	− 7	− 1	− 6			0	0.69
103472	20 57 48.87	+04 11 43.8	6.84	H	314.453 614 09	+04.195 487 50		2.42	3.67	−0.16	1.55	0.95	1.78	1.77	0.98	+24	−23	− 8	−27	+ 5	+ 9	− 4	+ 3	+17	+38			0		
103473	20 57 49.21	−67 16 44.4	9.74	H	314.455 032 10	−67.278 989 53		6.99	25.65	−13.78	0.73	0.93	1.47	0.75	1.04	−32	−12	− 7	−22	− 3	+ 4	− 1	+ 9	− 3	−37			1	0.69
103474	20 57 49.96	+67 45 48.6	7.73	H	314.458 175 69	+67.763 492 83		2.87	−3.26	−2.98	0.62	0.62	0.67	0.68	0.61	− 2	−18	+12	− 6	+ 8	− 2	+ 7	−23	+14	+14			1	−0.76
103475 H	20 57 51.45	−37 43 11.0	9.02	2 H	314.464 366 64	−37.719 709 05	A	4.30	19.47	−2.85	3.07	2.23	3.23	3.74	2.48	+18	+ 8	−11	+25	− 2	+45	+ 6	+41	+16	+24			3	1.15
103476	20 57 53.19	+44 47 17.4	7.36	2 H	314.471 611 04	+44.788 169 80		2.16	−11.68	−8.62	0.63	0.65	0.82	0.81	0.72	−19	+10	+ 0	−16	+19	− 3	+18	−38	+27	−30			0	0.67
103477	20 57 53.69	+08 23 40.0	9.06	H	314.473 699 10	+08.394 445 85		2.39	19.00	3.93	1.03	0.58	1.24	1.53	0.67	+10	+ 4	+ 3	+19	+22	+29	+15	+44	− 2	+25			0	−0.03
103478	20 57 53.88	−46 28 49.8	9.64	H	314.474 484 81	−46.480 495 50		6.65	13.75	−19.96	1.37	1.13	1.69	1.50	0.95	+37	+ 5	−14	−36	−17	−13	−22	−50	+12	+ 5			0	0.64
103479	20 57 54.44	−36 27 11.2	9.85	G	314.476 814 35	−36.453 118 10		4.50	35.33	4.41	1.73	1.13	1.78	2.77	1.63	+ 8	−10	−18	+25	−22	+13	−16	+37	− 8	−17			0	−0.56
103480	20 57 55.23	−20 04 28.1	8.73	G	314.480 121 65	−20.074 477 71		13.57	−117.07	−123.32	1.12	0.82	1.32	1.33	1.19	+18	−11	−21	−25	+ 1	+33	+ 2	+15	−14	+36			0	−0.76
103481	20 57 56.64	−33 38 56.2	9.02	H	314.486 019 63	−33.648 940 01		10.35	56.67	−79.21	1.08	0.70	1.21	1.30	0.98	+29	−31	−29	−22	−10	+28	+ 1	+33	−11	+18			0	−0.28
103482	20 57 57.48	+24 15 08.8	7.70	H	314.489 508 56	+24.252 440 04		3.42	8.37	−12.86	0.66	0.52	0.88	0.74	0.56	+ 6	+ 1	− 9	+31	+19	− 8	+17	+41	+ 2	+14			3	0.79
103483	20 57 59.69	+08 03 44.5	6.95	H	314.498 712 28	+08.062 352 57		4.19	37.43	−1.83	0.79	0.40	0.89	1.09	0.47	− 4	−21	+ 3	+13	+10	+10	+ 4	+45	− 1	+14			0	1.21
103484	20 58 00.07	−38 41 18.5	9.66	H	314.500 288 21	−38.688 480 35		11.30	21.45	−22.75	1.13	0.81	1.45	1.23	0.99	+55	−19	−14	−36	− 8	− 1	−11	−11	− 3	+69			0	−0.16
103485	20 58 00.41	+56 07 10.2	7.95	H	314.501 690 88	+56.119 500 24		10.60	−1.81	−6.51	0.50	0.59	0.61	0.53	0.67	−10	− 9	−12	+13	+12	−15	+14	−10	+ 4	+ 3			0	−1.68
103486	20 58 01.29	−55 57 01.7	8.44	H	314.505 376 94	−55.950 464 27		5.73	3.77	−16.01	1.00	0.77	1.17	1.23	0.83	+15	−20	−17	−18	−16	+11	−15	−21	+ 4	−10			0	−0.30
103487	20 58 01.93	−11 57 17.6	7.41	H	314.508 062 31	−11.954 894 73		4.42	−13.14	−12.71	0.95	0.64	1.06	1.32	0.82	+16	−20	−15	+21	−22	+27	−18	+39	+ 4	+18			0	−0.12
103488	20 58 02.26	+29 23 40.4	8.05	G	314.509 435 37	+29.394 546 89		8.22	39.00	−0.52	0.64	0.62	0.92	0.69	0.69	+ 3	− 8	+ 4	+35	+15	−16	+17	+32	+ 3	+ 7			0	−0.34
103489	20 58 02.54	+12 32 29.1	8.91	H	314.510 565 16	+12.541 410 76		7.17	−14.80	−6.63	0.87	0.55	1.05	1.15	0.58	+10	− 7	+ 9	− 3	+31	+ 3	+19	+52	+ 6	+26			0	0.73
103490	20 58 03.00	+06 53 48.9	7.74	H	314.512 508 48	+06.896 907 81		3.19	−14.32	−10.51	0.79	0.47	0.94	0.99	0.50	+17	−20	− 7	− 9	+15	+22	+11	+36	+ 1	+27			0	2.12
103491	20 58 04.32	−15 09 42.5	8.56	H	314.517 993 73	−15.161 816 42		12.35	79.27	−15.24	1.09	0.75	1.35	1.52	0.99	+12	− 5	−29	− 3	−10	+42	+ 0	+23	− 9	+16			0	1.58
103492	20 58 04.79	+50 52 18.8	8.84	G	314.519 969 34	+50.871 885 00		4.47	26.99	5.27	0.80	0.67	0.82	1.07	0.75	− 5	− 9	− 7	+ 7	−18	+ 2	−18	−16	+15	−14			0	−0.32
103493	20 58 05.08	+29 16 37.5	8.12	H	314.521 161 96	+29.277 093 66		1.54	28.97	16.61	0.67	0.66	0.95	0.74	0.73	+ 7	− 8	+ 3	+35	+17	−17	+17	+34	+ 7	+ 9			0	−0.11
103494	20 58 05.45	−22 57 21.3	9.49	H	314.522 707 96	−22.955 930 01		1.00	4.71	−0.63	1.23	0.94	1.41	1.75	1.43	+13	− 1	−18	+ 8	− 3	+26	− 1	+19	+ 0	+31			0	−0.35
103495	20 58 05.62	−06 10 30.2	8.97	H	314.523 400 93	−06.175 055 99		5.11	−29.76	−16.11	1.48	0.89	1.79	1.72	1.11	+24	−49	−28	+24	−30	+ 9	−12	+26	−20	+25			0	0.40
103496	20 58 06.57	+17 05 00.7	7.61	H	314.527 360 76	+17.083 533 09		3.15	−10.78	−33.52	0.84	0.50	1.02	1.03	0.53	+ 7	+ 8	+13	+48	+11	+15	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
103401	7.427	0.007	5.658	0.004		1.474	0.006	T	1.49	0.01	L	5.6158	0.0014	0.009	72		5.60	5.63		M	20570−0941	I 1	1 S							S
103402	9.065	0.012	9.106	0.017	*	−0.033	0.019	T	−0.01	0.02	L *	9.0708	0.0017	0.018	141	*	9.04	9.10		D	20569+1059	H 1	2 C A	AB	293	0.633	0.017	2.55	0.07	
103403	7.708	0.009	7.674	0.010		0.031	0.012	T	0.05	0.01	L	7.6952	0.0017	0.014	107		7.67	7.71					1							S
103404	10.572	0.038	9.891	0.034		0.630	0.042	T	0.70	0.04	L	9.9575	0.0034	0.032	130		9.91	10.01					1							G
103405	7.337	0.005	7.163	0.006		0.167	0.007	T	0.18	0.01	L	7.2104	0.0010	0.008	122		7.19	7.22					1							S
103406	8.893	0.015	8.746	0.018		0.141	0.022	T	0.16	0.02	L	8.7693	0.0016	0.012	68		8.75	8.79		C			1							
103407	10.354	0.040	9.654	0.035		0.645	0.043	T	0.71	0.04	L	9.7180	0.0021	0.022	84		9.66	9.75		U	20570−3406	I 1	1							
103408	10.159	0.030	9.555	0.028		0.562	0.030	T	0.64	0.03	L	9.6071	0.0025	0.021	81		9.57	9.64		C			1							
103409	9.212	0.014	8.773	0.014		0.480	0.015	G	0.55	0.02	H	8.8305	0.0020	0.021	115		8.80	8.86					1							
103410	8.846	0.009	8.718	0.011		0.124	0.013	T	0.14	0.01	L	8.7448	0.0014	0.020	159		8.71	8.77		C			1							
103411	10.820	0.050	9.768	0.034		0.903	0.047	T	0.90	0.03	L	9.8580	0.0029	0.022	91		9.81	9.90					1							
103412	9.011	0.009	7.823	0.006		1.018	0.008	T	0.99	0.01	L	7.8730	0.0011	0.015	229		7.85	7.90					1							S
103413	3.959	0.002	3.941	0.002	*	0.027	0.010	G	0.01	0.05	D *	3.9504	0.0006	0.004	122	*	3.94	3.96		D	20572+4110	H 1	2 C A	AB	219	0.244	0.010	2.33	0.07	S
103414	7.639	0.009	6.195	0.004		1.217	0.002	G	1.18	0.00	H	6.2260	0.0007	0.007	88		6.22	6.24		C	20572+0028	I 1	1							S
103415	10.688	0.046	9.271	0.023		1.100	0.015	G	1.06	0.02	H	9.3729	0.0023	0.019	82		9.35	9.40		C			1							
103416	10.482	0.031	9.255	0.018		1.048	0.028	T	1.02	0.02	L	9.3109	0.0025	0.018	118		9.28	9.34		C			1							
103417	9.408	0.015	7.746	0.007		1.415	0.014	T	3.30	0.05	O	7.2688	0.0167	0.113	136		7.18	7.48		U 2 C			1 S							S
103418	9.007	0.014	8.596	0.014		0.397	0.015	G	0.46	0.02	H	8.6554	0.0019	0.013	85		8.63	8.68		C			1							
103419	8.457	0.011	8.373	0.013		0.076	0.015	T	0.09	0.02	L	8.4021	0.0031	0.028	99		8.37	8.50	3.44	P 1 A			1							S
103420	8.460	0.009	6.965	0.005		1.258	0.008	T	1.22	0.01	L	6.9842	0.0008	0.009	108		6.97	7.01		C			1							S
103421	7.920	0.009	7.928	0.011		−0.003	0.013	T	0.02	0.01	L	7.9468	0.0014	0.013	115		7.93	7.98					1 S							S
103422	8.548	0.008	6.771	0.004		1.480	0.007	T	1.50	0.01	L	6.7477	0.0009	0.011	178		6.73	6.76					1							S
103423	9.793	0.019	8.319	0.011		1.241	0.017	T	1.20	0.02	L	8.3558	0.0012	0.015	125		8.33	8.38		C			1							
103424	8.629	0.010	8.289	0.011		0.323	0.014	T	0.37	0.02	L	8.3695	0.0021	0.017	117		8.34	8.40		C			1							S
103425	9.611	0.020	8.364	0.013		1.064	0.019	T	1.03	0.02	L	8.4197	0.0014	0.011	88		8.40	8.44		C			1							
103426	7.697	0.006	7.621	0.007		0.068	0.008	T	0.08	0.01	L	7.6418	0.0014	0.012	134		7.63	7.67		C			1							S
103427	10.427	0.021	9.945	0.021		0.454	0.027	T	0.52	0.03	L	10.0461	0.0021	0.033	236		9.98	10.10					1							
103428	8.530	0.010	8.325	0.011	*	0.286	0.009	G	0.33	0.01	H *	8.3353	0.0013	0.013	114	*	8.32	8.36		D	20573+4818	H 1	2 C A	AB	358	0.259	0.019	2.23	0.25	
103429	8.204	0.013	7.684	0.011		0.500	0.015	G	0.57	0.02	H	7.7482	0.0020	0.011	57		7.73	7.77					1							S
103430	11.225	0.073	10.151	0.045		0.940	0.015	G	0.98	0.01	I	10.1567	0.0033	0.029	111		10.10	10.20					1							
103431	9.661	0.023	9.363	0.025		0.283	0.032	T	0.32	0.04	L	9.4128	0.0136	0.089	102		9.31	9.53	0.88	P 1 A			1							
103432	10.239	0.025	10.097	0.034		0.137	0.040	T	0.15	0.04	L	10.1229	0.0025	0.025	189		10.08	10.16		C			1							G
103433	12.053	0.136	10.239	0.042		1.830	0.510	G	1.81	0.52	J	10.1027	0.0478	0.313	132		9.74	10.55	20.14	P 1 A			1							G
103434	10.472	0.050	9.913	0.047		0.528	0.051	T	0.60	0.05	L	10.0104	0.0028	0.016	49		9.98	10.06					1							
103435	7.553	0.007	7.434	0.007		0.100	0.015	G	0.11	0.02	H	7.4606	0.0009	0.011	123		7.44	7.49					1							S
103436	11.065	0.079	9.592	0.037		1.241	0.069	T	1.20	0.07	L	9.7091	0.0028	0.016	50		9.69	9.74		C			1							
103437	8.819	0.007	7.804	0.005		0.885	0.006	G	0.89	0.00	H	7.8596	0.0010	0.013	252		7.83	7.88					1							S
103438	8.685	0.019	7.951	0.017	*	0.658	0.019	T	0.72	0.02	L *	8.0883	0.0015	0.014	110	*	8.06	8.11		D	20574−5905	I 1	2 C A	AB	260	4.473	0.005	0.62	0.02	S
103439	8.099	0.008	7.902	0.009	*	0.188	0.011	T	0.21	0.01	L *	7.9490	0.0010	0.010	130	*	7.93	7.97		D	20574+6251	H 1	2 C S A	AB	301	0.140	0.018	1.56	0.49	S
103440	8.841	0.012	8.362	0.012		0.446	0.002	G	0.52	0.00	H	8.4102	0.0018	0.016	102		8.39	8.44					1							S
103441						1.533	0.020	G	2.32	0.14	I	12.0923	0.0062	0.061	113		11.96	12.18					1							D
103442	7.506	0.005	7.366	0.006		0.135	0.007	T	0.15	0.01	L	7.3951	0.0012	0.009	125		7.38	7.41		C			1							S
103443	11.034	0.061	9.847	0.035		0.990	0.021	G	0.97	0.02	H	9.9082	0.0039	0.027	80		9.86	9.96		C			1							
103444	8.750	0.011	8.777	0.014		−0.020	0.016	T	0.00	0.01	L	8.7947	0.0016	0.015	128		8.77	8.82					1							
103445	11.211	0.081	10.429	0.063		0.710	0.080	T	0.76	0.07	L	10.4837	0.0036	0.031	85		10.44	10.53					1							G
103446	9.579	0.020	9.159	0.020		0.397	0.026	T	0.46	0.03	L	9.2293	0.0024	0.017	92		9.20	9.26			20575+0036	I 2	1							
103447	9.887	0.025	8.087	0.011		1.529	0.023	T	2.67	0.04	O	7.8262	0.0052	0.044	98		7.77	7.89		U 2			1 S							
103448	9.625	0.022	9.377	0.025		0.236	0.031	T	0.26	0.04	L	9.3950	0.0024	0.020	96		9.36	9.44		C			1							
103449	10.489	0.034	8.848	0.015		1.373	0.029	T	1.34	0.04	L	8.8671	0.0021	0.021	142		8.83	8.92					1							
103450	11.900	0.167	10.216	0.050		1.407	0.138	T	1.39	0.17	L	10.1102	0.0048	0.037	91		10.05	10.16			20575+0036	I 2	1 S							G
103451	10.014	0.026	8.864	0.017		0.988	0.024	T	0.97	0.02	L	8.9320	0.0020	0.024	92		8.89	8.98					1							
103452	7.348	0.005	7.453	0.007		−0.091	0.008	T	−0.07	0.01	L	7.4538	0.0014	0.016	141		7.43	7.48		M			1							S
103453	8.656	0.007	8.344	0.008		0.296	0.010	T	0.34	0.01	L	8.3888	0.0010	0.013	210		8.36	8.42					1							
103454	8.753	0.024	8.072	0.021	A	0.900	0.495	G	0.75	0.07	B *	7.8258	0.0023	0.017	99	*	7.80	7.87		R	20577+6122	I 1	2 C A	AB	100	3.368	0.004	1.26	0.02	S
103455	7.636	0.006	7.002	0.004		0.584	0.005	T	0.66	0.01	L	7.0599	0.0010	0.010	150		7.04	7.08					1							S
103456	8.815	0.015	8.303	0.015		0.501	0.015	G	0.57	0.02	H	8.3456	0.0012	0.012	58		8.32	8.37					1							S
103457	7.513	0.007	7.514	0.009		−0.009	0.002	G	0.01	0.00	H	7.5284	0.0008	0.008	67		7.51	7.54		C			1							S
103458	7.222	0.005	6.584	0.004		0.587	0.012	G	0.68	0.02	A	6.6408	0.0006	0.007	130		6.63	6.65		C			1							S
103459	9.074	0.018	8.858	0.021		0.200	0.027	T	0.22	0.03	L	8.9147	0.0023	0.014	58		8.89	8.95					1							S
103460	6.098	0.004	5.897	0.004		0.180	0.007	G	0.14	0.03	C	5.9378	0.0009	0.006	58		5.93	5.95		C			1							S
103461	8.065	0.011	7.940	0.013	*	0.121	0.016	T	0.14	0.02	L *	7.9463	0.0015	0.013	111	*	7.92	7.96		D	20577+5849	I 1	2 C A	AB	212	0.556	0.003	0.78	0.01	S
103462	10.480	0.054	8.808	0.023		1.397	0.046	T	1.37	0.06	L	8.8108	0.0020	0.013	50		8.79	8.83		C			1							
103463	11.860	0.149	11.014	0.125		0.574	0.107	G	0.65	0.10	R	11.1555	0.0053	0.042	76		11.08	11.24		C			1							G
103464	10.589	0.042	9.780	0.033		0.715	0.041	T	0.77	0.03	L	9.8192	0.0022	0.019	103		9.77	9.85		C			1							
103465	10.843	0.054	10.201	0.050		0.596	0.064	T	0.67	0.06	L	10.1948	0.0024	0.025	104		10.16	10.25		C	20577−3248	I 1	1 G							
103466	9.605	0.017	9.154	0.018	A	1.100	0.495	G	0.65	0.04	L *	9.1297	0.0019	0.020	126	*	9.10	9.16		D	20578−4402	I 1	2 C B	AB	253	1.997	0.067	3.24	0.22	S
103467	10.127	0.041	8.771	0.022		1.149	0.036	T	1.11	0.03	L	8.8016	0.0028	0.013	45		8.79	8.83					1							
103468	7.227	0.004	7.045	0.005		0.167	0.006	T	0.18	0.01	L	7.0766	0.0007	0.011	200		7.06	7.09					1							S
103469	9.206	0.021	8.734	0.021		0.457	0.023	T	0.53	0.02	L	8.8157	0.0025	0.016	49		8.79	8.84		C			1							S
103470	10.201	0.022	9.439	0.018	A	0.500	0.495	G	0.69	0.04	L *	9.4015	0.0029	0.028	158	*	9.35	9.45		D	20578−7217	I 1	2 C A	AB	27	3.313	0.013	2.13	0.06	
103471	7.688	0.008	7.292	0.007		0.340	0.005	G	0.40	0.01	H	7.3509	0.0020	0.019	103		7.33	7.38	0.08	P 1 A			1							S
103472	8.645	0.011	6.981	0.006		1.391	0.010	T	1.36	0.01	L	6.9893	0.0007	0.008	109		6.98	7.00					1 X							S
103473	10.149	0.016	9.766	0.017		0.374	0.020	T	0.44	0.02	L	9.8247	0.0019	0.026	255		9.76	9.87					1							
103474	9.452	0.018	7.870	0.009		1.326	0.016	T	1.29	0.02	L	7.8844	0.0010	0.012	105		7.87	7.91		C			1							
103475	9.167	0.023	8.944	0.027	*	0.213	0.033	T	0.24	0.04	L *	9.0860	0.0052	0.036	76	*	9.04	9.15		U 2	20579−3743	I 1	2 C A	AB	308	5.903	0.006	0.32	0.03	S
103476	9.601	0.023	7.652	0.009		1.652	0.020	T	3.05	0.05	O	7.2485	0.0168	0.095	94		7.11	7.38		U 2			1 S							
103477	9.582	0.016	9.107	0.016		0.447	0.021	T	0.52	0.02	L	9.1589	0.0016	0.018	150		9.13	9.19		C			1							
103478	10.281	0.029	9.726	0.029		0.525	0.030	T	0.60	0.03	L	9.7581	0.0029	0.024	97		9.69	9.80		C			1							
103479	10.404	0.037	9.873	0.036		0.454	0.002	G	0.52	0.00	H	9.9743	0.0030	0.021	71		9.94	10.01		C			1							
103480	9.560	0.027	8.816	0.022		0.645	0.002	G	0.71	0.00	H	8.8615	0.0025	0.014	53		8.84	8.89		C			1							
103481	9.725	0.025	9.064	0.022		0.603	0.025	T	0.67	0.02	L	9.1454	0.0014	0.017	98		9.12	9.17		C			1							
103482	7.725	0.008	7.701	0.010		0.027	0.012	T	0.04	0.01	L	7.7149	0.0013	0.012	111		7.69	7.74					1							S
103483	8.162	0.007	7.054	0.004		0.955	0.006	T	0.94	0.00	L	7.1153	0.0010	0.009	154		7.10	7.13					1							S
103484	10.509	0.025	9.690	0.020		0.723	0.024	T	0.77	0.02	L	9.7971	0.0021	0.022	164		9.76	9.83					1							
103485	8.446	0.008	7.998	0.009		0.446	0.015	G	0.52	0.02	H	8.0508	0.0012	0.010	118		8.03	8.07		C			1							S
103486	9.685	0.022	8.549	0.014		0.977	0.020	T	0.96	0.02	L	8.6070	0.0020	0.014	81		8.58	8.63					1							
103487	8.695	0.013	7.528	0.009		1.001	0.012	T	0.98	0.01	L	7.5801	0.0011	0.010	83		7.56	7.60		C			1							S
103488	8.550	0.009	8.081	0.009		0.442	0.012	T	0.51	0.01	L	8.1446	0.0010	0.012	123		8.12	8.16					1							S
103489	9.313	0.014	8.952	0.014		0.342	0.018	T	0.40	0.02	L	8.9892	0.0014	0.017	162		8.96	9.02		C			1							
103490	9.807	0.020	7.905	0.009		1.579	0.017	T	1.60	0.02	L	7.8527	0.0014	0.016	146		7.83	7.88					1							S
103491	9.356	0.023	8.666	0.020		0.625	0.023	T	0.69	0.02	L	8.6910	0.0029	0.012	49		8.67	8.71		C			1 S							
103492	9.554	0.017	8.921	0.015		0.600	0.015	G	0.67	0.01	H	8.9603	0.0020	0.019	118		8.93	8.99		C			1							
103493	9.434	0.016	8.255	0.010		1.011	0.015	T	0.99	0.01	L	8.2868	0.0015	0.015	128		8.26	8.31		C	20581+2917	I 1	1							
103494	10.813	0.067	9.593	0.036		1.043	0.059	T	1.01	0.05	L	9.6551	0.0028	0.016	62		9.62	9.69		C			1							
103495	9.521	0.022	9.047	0.022		0.446	0.028	T	0.52	0.03	L	9.0687	0.0014	0.011	68		9.04	9.09					1							
103496	9.251	0.017	7.753	0.009		1.260	0.015	T	1.22	0.02	L	7.7653	0.0012	0.011	129		7.74	7.78		C			1							S
103497	10.709	0.040	9.553	0.025		0.993	0.037	T	0.97	0.03	L	9.6488	0.0029	0.025	106		9.61	9.69		C			1							
103498	8.910	0.012	8.341	0.011		0.536	0.012	T	0.61	0.01	L	8.3984	0.0018	0.015	110		8.38	8.43		C			1							S
103499	9.478	0.012	9.035	0.013		0.432	0.014	T	0.50	0.01	L	9.1096	0.0017	0.022	183		9.07	9.15					1							
103500	10.215	0.020	9.012	0.013		1.029	0.019	T	1.00	0.02	L	9.0863	0.0013	0.018	177		9.06	9.12					1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
103501	20 58 10.05	−44 54 56.6	9.50		G	314.541 864 86	−44.915 710 18		5.34	5.89	−13.40	1.11	0.81	1.39	1.14	0.65	+32	−26	−20	−32	−20	+22	−23	−51	+14	+ 4	0	0.80
103502	H 20 58 11.29	+40 11 27.2	10.75		H	314.547 025 82	+40.190 899 87	A	25.55	234.65	201.09	5.00	7.26	2.42	1.95	2.44	−51	+ 3	+ 1	+ 2	+ 3	−15	+ 2	−22	+20	−29	1	−0.90
103503	20 58 11.65	−69 08 46.1	6.85		H	314.548 560 36	−69.146 151 31		6.03	16.85	−28.90	0.40	0.46	0.65	0.47	0.56	−23	− 3	+ 1	+12	− 7	− 7	− 8	+ 3	+ 1	−36	0	−0.24
103504	20 58 13.34	−39 03 16.7	9.69		H	314.555 583 73	−39.054 634 25		4.48	3.46	−12.25	1.16	0.86	1.38	1.30	1.01	+47	− 1	−14	−42	− 8	−14	−16	−21	− 4	+71	0	0.73
103505	H 20 58 13.45	+35 10 29.8	9.99	2	H	314.556 035 10	+35.174 943 61	A	9.25	5.73	−15.85	3.30	4.33	4.95	3.16	4.20	−28	+ 1	− 8	− 8	+ 2	−23	− 2	−23	+31	−22	7	2.68
103506	20 58 13.55	+48 45 38.7	8.32		H	314.556 479 06	+48.760 754 93		3.04	5.49	2.83	0.61	0.63	0.73	0.74	0.85	− 3	− 6	− 7	+10	+12	−10	+13	+ 8	− 5	− 7	0	0.31
103507	20 58 13.83	−21 20 07.1	9.18		H	314.557 645 81	−21.335 312 32		8.53	2.22	−25.04	1.29	0.93	1.51	1.52	1.33	+14	+18	−27	−22	− 9	+19	−16	+ 9	−18	+39	0	1.14
∗103508	20 58 15.36	+82 59 13.9	8.15		H	314.564 016 66	+82.987 198 68		6.41	17.67	−2.87	0.60	0.58	0.66	0.72	0.71	+ 6	−18	− 2	+13	− 3	−10	− 3	− 6	+ 7	+13	0	0.68
∗103509	20 58 15.30	+47 37 03.6	7.50		G	314.563 769 47	+47.617 672 17		2.84	2.13	3.89	0.55	0.59	0.69	0.70	0.81	− 5	+14	−14	− 7	− 7	+11	+ 2	−32	+20	+23	0	0.90
103510	20 58 15.53	+30 23 45.2	6.54		H	314.564 716 67	+30.395 883 41		6.11	60.30	22.57	0.37	0.47	0.74	0.51	0.60	−22	− 8	− 1	+28	− 5	−12	− 3	+ 4	− 2	+16	0	−0.37
103511	20 58 16.35	+22 19 33.3	5.30		H	314.568 136 67	+22.325 917 54		8.21	−2.60	−4.08	0.50	0.42	0.69	0.52	0.42	+10	−24	−15	+15	+20	− 6	+18	+43	−10	+14	1	0.93
103512	20 58 17.42	+08 30 55.2	8.20		H	314.572 589 62	+08.515 338 93		8.94	−4.84	4.38	0.88	0.45	0.97	1.21	0.51	+ 1	+ 1	+ 3	− 2	+20	+15	+ 8	+43	+ 5	+24	0	0.11
103513	20 58 17.60	+26 54 12.8	8.74		H	314.573 352 71	+26.903 549 62		0.39	−0.78	−6.19	0.68	0.79	1.13	0.71	0.93	+15	+14	−11	+25	+28	−11	+30	+33	+ 8	+20	0	−0.64
103514	20 58 18.11	−55 56 05.2	9.51		H	314.575 452 60	−55.934 768 97		5.83	26.39	−35.87	1.18	0.98	1.50	1.50	1.02	+22	−20	−31	−11	−12	+ 9	−12	−19	+10	−12	0	−0.23
103515	20 58 18.46	+24 13 18.7	9.27		H	314.576 917 99	+24.221 847 51		0.98	−2.58	0.95	0.80	0.68	1.24	0.94	0.75	+ 6	−15	−15	+17	+20	−13	+19	+32	−12	+ 8	0	1.35
103516	20 58 18.70	+23 02 46.9	6.57		H	314.577 912 21	+23.046 351 80		5.73	20.17	−2.80	0.53	0.47	0.76	0.57	0.48	+18	+ 0	−13	+39	+25	−18	+22	+45	− 9	+25	0	−0.85
103517	H 20 58 18.81	−43 45 06.6	9.17		H	314.578 372 75	−43.751 827 39	A	10.47	−7.90	15.60	2.80	1.63	2.69	2.96	1.32	+20	− 5	−16	+ 1	−21	+13	−13	−30	+15	+ 0	1	0.58
103518	20 58 19.38	−76 01 08.6	8.08		H	314.580 754 21	−76.019 061 11		2.03	13.05	−12.13	0.62	0.63	0.82	0.70	0.74	−16	−15	− 4	+14	+ 5	+ 3	+ 4	+ 5	+ 3	−25	0	1.80
103519	20 58 19.38	+44 28 17.5	5.55		G	314.580 756 81	+44.471 541 14	+	12.32	101.62	69.74	0.60	0.53	0.63	0.62	0.51	− 2	− 5	−11	+11	+18	− 7	+ 8	−28	+19	−38	0	−0.28
103520	20 58 20.36	−80 37 11.8	8.35		H	314.584 829 46	−80.619 947 69		6.87	−16.55	22.79	0.62	0.58	0.78	0.74	0.68	+ 1	−15	− 8	− 5	+ 1	− 2	+ 1	− 8	− 7	−14	1	−1.10
103521	20 58 21.34	−17 01 01.7	8.40		H	314.588 915 36	−17.017 146 89		3.53	12.79	−21.71	1.10	0.78	1.26	1.31	0.89	+ 3	−12	−43	−15	− 8	+32	+ 5	+12	− 6	+ 5	0	−0.90
103522	20 58 22.88	−40 59 35.9	7.70		H	314.595 339 08	−40.993 315 77		7.87	7.01	−47.91	1.68	1.28	1.98	1.59	1.34	+40	−25	−26	−37	− 7	+ 2	− 6	−24	− 3	+54	0	
103523	20 58 24.95	+46 36 14.3	7.45		H	314.603 978 97	+46.603 974 44		10.78	40.68	49.95	0.54	0.62	0.72	0.65	0.71	+ 4	+ 2	− 5	−19	−10	+ 4	− 7	−36	+29	+12	0	−0.37
103524	H 20 58 25.01	+26 18 30.5	9.30		H	314.604 206 61	+26.308 468 12	∗	−1.87	−12.57	−5.64	0.84	0.87	1.37	1.12	1.00	+12	− 2	−16	−14	+37	−22	+34	+28	+12	+ 4	0	0.97
103525	20 58 25.52	+45 08 59.1	9.22		H	314.606 323 18	+45.149 757 32		0.45	−2.23	−5.18	0.87	0.87	1.10	1.13	1.02	−12	+20	− 3	+13	+18	− 2	+12	−37	+25	−30	0	−0.38
103526	20 58 25.62	+39 28 40.2	7.74		G	314.606 758 91	+39.477 845 64		6.16	6.73	13.90	0.50	0.58	0.75	0.58	0.66	−14	−18	− 6	+17	− 2	−22	− 5	−13	+22	−12	1	0.29
103527	20 58 25.96	+10 50 21.7	5.51		H	314.608 179 04	+10.839 369 50		13.68	−47.95	−34.35	0.59	0.33	0.70	0.73	0.36	+ 5	−25	+ 3	− 2	+20	+ 5	+12	+42	− 3	+21	0	−0.89
103528	20 58 27.26	+41 21 27.8	7.11		H	314.613 592 13	+41.357 731 29		4.93	5.24	5.07	0.49	0.73	0.69	0.57	1.12	− 3	−10	− 3	− 0	− 4	−20	−10	−65	+21	− 6	0	0.55
103529	20 58 28.16	+23 14 51.0	8.07	1	H	314.617 316 42	+23.247 494 25		9.72	29.72	5.61	0.62	0.60	0.95	0.66	0.63	+13	− 4	−29	+37	+22	−25	+16	+52	−22	+22	0	−0.42
103530	H 20 58 30.03	+50 27 42.4	5.59		H	314.625 106 62	+50.461 783 08	A	2.58	9.80	3.44	0.65	0.59	0.65	0.78	0.58	− 5	−21	+12	− 4	−10	−17	−11	−19	+20	−16	2	−0.02
103531	20 58 30.71	+14 51 09.9	9.10		H	314.627 960 11	+14.852 757 46		5.66	50.08	59.27	1.17	0.64	1.36	1.51	0.66	+ 2	+ 0	+ 7	−26	+24	−26	+14	+56	+ 3	+17	0	−1.11
103532	20 58 30.94	+41 56 23.7	6.17	1	G	314.628 934 63	+41.939 924 17		7.01	11.60	0.22	0.41	0.47	0.58	0.47	0.57	−14	+ 6	+ 4	+11	+ 5	−26	+13	−23	+10	− 1	0	−1.00
103533	20 58 31.23	+16 26 08.1	8.61		H	314.630 131 08	+16.435 583 56	B	−3.21	−4.29	−12.23	10.48	7.14	7.00	6.30	4.05	+21	+ 1	+29	+13	+14	+ 4	+ 5	+44	+ 7	+43	17	2.15
103534	20 58 31.30	+08 48 01.9	8.26		H	314.630 431 70	+08.800 518 51		3.85	−10.21	−13.61	0.82	0.47	0.96	1.09	0.53	+ 6	−15	+14	+ 4	+22	+21	+10	+44	+11	+28	0	−0.86
103535	20 58 31.40	+40 41 55.6	7.98		H	314.630 853 83	+40.698 779 25		11.09	26.82	−4.30	0.56	0.70	0.86	0.64	0.79	−15	+10	+ 2	− 6	+ 9	−13	+14	−35	+27	−11	0	0.44
103536	20 58 32.00	−54 21 55.4	8.89		H	314.633 347 04	−54.365 395 58		1.56	13.19	−15.41	0.93	0.80	1.20	1.29	0.83	+ 4	−23	−19	+32	−15	+10	−11	−15	− 3	− 4	0	0.78
103537	20 58 32.23	+16 26 12.2	7.53		H	314.634 302 50	+16.436 712 37	A	1.64	−6.19	−12.67	2.49	1.85	2.85	2.52	1.71	+22	+ 8	+24	+26	+19	+ 9	+10	+55	+ 3	+42	17	2.15
103538	20 58 32.86	−55 47 52.1	9.61		H	314.636 896 61	−55.797 797 53		6.36	17.17	−3.64	1.30	1.08	1.58	1.65	1.17	+20	−17	−11	−11	−11	+ 0	−16	−28	+14	− 9	0	−0.86
103539	20 58 36.18	+58 58 33.9	10.10		H	314.650 749 83	+58.976 084 24		2.26	−4.47	−3.72	0.91	0.92	1.01	1.04	1.07	−11	+ 5	− 5	+10	+ 7	− 6	+ 9	+ 0	+10	− 1	0	0.49
103540	20 58 39.13	+38 08 59.3	8.28		H	314.663 054 93	+38.149 817 06		4.79	25.83	2.80	0.55	0.61	0.78	0.56	0.66	−19	− 2	− 5	+ 4	+10	− 4	+12	− 9	+ 9	− 7	0	0.96
103541	H 20 58 40.10	−62 33 52.4	8.16		G	314.667 088 35	−62.564 542 00	A	4.84	0.83	13.02	1.43	1.56	1.56	1.23	1.14	−26	−23	− 3	+27	+10	−12	+10	+ 9	−19	−12	3	0.23
103542	H 20 58 40.11	−70 25 19.9	7.19	3	H	314.667 119 19	−70.422 192 86	A	10.12	2.47	10.67	3.63	3.95	5.66	3.95	3.91	−22	− 4	+ 9	− 3	+ 0	−16	+ 3	+ 2	−13	−31	25	9.56
103543	20 58 41.40	+72 19 47.7	8.31		H	314.672 483 55	+72.329 920 00		5.33	30.41	35.85	0.68	0.61	0.69	0.90	0.65	−11	− 8	+13	− 2	+13	− 1	+10	−14	+ 5	−16	0	−1.30
103544	20 58 41.72	+34 16 28.3	11.21		H	314.673 853 52	+34.274 530 88		42.80	292.04	−144.25	1.32	1.74	2.23	1.54	2.00	−37	+ 3	− 7	−21	+19	− 3	+18	−40	+ 9	−43	2	0.55
103545	20 58 41.87	−14 28 59.1	5.95	2	T	314.674 470 74	−14.483 080 81		11.83	−54.64	−19.31	0.70	0.45	0.83	0.99	0.63	+19	−14	−16	− 6	−17	+41	−20	+29	+10	+32	0	0.26
∗103546	20 58 43.50	+44 24 52.7	7.44		G	314.681 236 29	+44.414 627 86		3.16	−2.89	−20.06	0.63	0.58	0.75	0.82	0.67	−26	− 1	+ 5	−15	+16	+ 3	+14	−33	+18	−26	0	−0.96
∗103547	20 58 43.45	−28 14 35.5	9.75		H	314.681 039 60	−28.243 184 56		4.14	95.87	−53.64	1.34	1.13	1.65	1.52	1.31	+23	−22	−43	+ 5	−15	+25	− 2	+23	−21	+18	0	0.85
103548	20 58 43.69	+31 38 51.0	7.18		H	314.682 026 00	+31.647 488 04		4.45	21.06	9.72	0.40	0.48	0.69	0.48	0.57	−19	+10	− 4	+17	+ 6	− 8	+11	−14	+ 7	− 3	1	0.09
103549	20 58 44.08	+60 29 56.5	9.48		H	314.683 657 81	+60.499 024 73		2.15	−3.84	−1.40	0.70	0.71	0.83	0.72	0.76	− 2	+12	− 4	− 2	+ 6	+ 7	+13	−20	+24	+29	0	1.00
103550	20 58 45.14	−03 50 29.4	6.95		H	314.688 073 53	−03.841 492 63		8.27	−15.89	14.01	0.78	0.49	0.94	1.04	0.48	+33	−32	−22	+ 6	− 7	+27	− 4	−25	+25	+49	0	−0.26
103551	20 58 46.40	+16 25 23.2	8.11		H	314.693 347 84	+16.423 112 54		8.15	−6.26	−33.91	0.85	0.52	1.16	1.04	0.56	+16	+ 8	+11	+40	+15	+ 9	+11	+52	− 8	+36	0	−1.41
103552	20 58 47.20	+07 04 35.5	9.58		H	314.696 676 39	+07.076 531 71		0.70	15.82	−4.87	1.11	0.75	1.36	1.33	0.75	+31	− 7	+ 7	−12	+24	+35	+16	+42	+11	+42	0	1.18
103553	20 58 47.49	−61 48 41.0	8.93	2	H	314.697 875 09	−61.811 375 00		2.14	16.34	−19.28	0.78	0.84	1.37	0.79	0.82	+16	−18	−13	+64	+12	−12	+ 8	+12	+ 4	+12	0	0.97
103554	20 58 49.54	−03 19 05.0	7.58		H	314.706 422 52	−03.318 055 41		5.40	2.72	−33.11	0.82	0.50	0.96	1.08	0.46	+30	−27	−28	− 8	− 1	+19	− 5	−35	+32	+50	0	−0.57
103555	20 58 50.33	+80 09 25.5	8.68		H	314.709 720 41	+80.157 070 38		2.38	17.07	11.04	0.64	0.65	0.69	0.81	0.75	− 1	− 5	− 1	+14	+18	+10	+15	−14	+ 7	− 5	0	1.22
103556	20 58 52.58	+17 52 01.8	7.96		H	314.719 101 12	+17.867 177 21		5.21	4.74	−0.85	0.74	0.55	1.00	0.88	0.55	+11	+ 0	+21	+30	+21	+11	+14	+57	+ 8	+27	0	0.55
∗103557	20 58 54.64	+46 15 09.4	7.05		H	314.727 684 12	+46.252 612 41		7.73	12.29	−36.08	0.49	0.55	0.66	0.58	0.60	−12	+13	− 2	− 4	+ 4	−14	+ 7	−34	+23	−14	0	−1.08
∗103558	20 58 54.64	+20 03 04.7	9.46		H	314.727 672 61	+20.051 298 28		0.97	2.05	−6.26	0.96	0.72	1.32	1.19	0.73	+ 0	−11	− 1	+15	+12	− 8	+ 9	+39	−13	+11	0	1.17
103559	20 58 55.63	+44 03 37.5	6.65		H	314.731 774 60	+44.060 410 57		4.56	19.24	16.02	0.58	0.52	0.69	0.71	0.58	−26	+ 9	+ 0	− 9	+14	− 4	+14	−31	+25	−30	0	0.40
103560	20 58 55.66	+28 27 58.0	9.89		H	314.731 907 28	+28.466 100 52		3.94	−5.31	−14.95	1.04	1.12	1.60	1.26	1.32	+18	− 9	+ 8	+32	+27	−30	+25	+47	+ 3	+18	3	−0.16
103561	20 58 57.97	−00 25 23.4	9.10		H	314.741 555 33	−00.423 167 11		6.93	23.71	−6.53	1.15	0.70	1.25	1.34	0.63	+40	−21	−12	−26	−26	+19	−25	−40	+17	+51	0	0.16
103562	20 58 58.56	+47 38 57.7	8.37		H	314.744 020 46	+47.649 371 13		1.90	1.18	−26.63	0.78	0.83	1.01	1.01	1.09	− 9	+21	−32	+ 0	−11	+12	+ 1	−30	+20	+22	0	−1.66
103563	20 58 58.92	−31 38 37.5	8.55		G	314.745 504 54	−31.643 746 28		4.98	39.93	16.58	0.94	0.70	1.16	1.19	1.05	+34	−26	−13	− 8	+10	+44	+ 9	+52	+ 1	+40	0	0.33
103564	20 59 00.13	+05 15 54.8	10.79		G	314.750 527 37	+05.265 214 20		−3.74	5.90	−0.96	2.04	1.17	2.35	2.58	1.20	+26	−30	+ 2	+ 8	+11	+ 9	+ 4	+25	+14	+40	4	1.28
103565	20 59 00.95	+32 14 16.3	8.27		G	314.753 946 58	+32.237 868 57		8.98	−8.44	−37.93	0.50	0.70	1.07	0.63	0.80	−35	+16	−15	+12	+ 4	− 6	+ 8	−10	+26	−26	3	0.36
103566	20 59 02.37	−18 54 57.7	8.23		H	314.759 878 66	−18.916 021 62		5.05	−73.12	−95.42	1.07	0.79	1.28	1.60	1.05	+13	− 8	−37	−14	−14	+32	− 4	+16	−14	+15	3	1.73
103567	20 59 03.53	−34 42 35.5	10.35		H	314.764 713 11	−34.709 867 08		12.76	−80.83	−38.06	1.84	1.19	1.95	2.35	1.72	+12	−31	+ 8	+20	−23	− 2	−24	+38	+ 6	+ 1	2	1.16
103568	20 59 03.54	+22 21 01.5	6.78	1	H	314.764 762 49	+22.350 418 43		3.75	−0.66	13.36	0.56	0.48	0.75	0.63	0.49	+21	−12	−19	+30	+27	−16	+24	+47	− 7	+24	1	0.63
103569	H 20 59 04.54	+04 17 37.8	5.30		G	314.768 928 95	+04.293 846 72	A	16.59	−113.43	−150.28	4.23	2.06	3.40	4.32	2.03	+29	−17	+ 4	−15	− 5	+ 9	−14	+13	+ 1	+46	4	5.04
103570	20 59 04.99	+34 29 18.6	8.29		H	314.770 808 67	+34.488 503 34		11.96	−20.34	59.25	0.60	0.73	1.06	0.68	0.79	−30	− 4	+ 5	−14	+ 7	+ 8	+ 6	−26	+ 7	−32	1	−0.27
∗103571	20 59 05.18	+04 17 41.9	5.24		H	314.771 570 32	+04.294 975 61	C	16.59	−113.43	−150.28	12.62	7.01	3.40	4.32	2.03	+34	+ 3	+ 6	− 1	− 6	+ 9	− 5	− 6	+ 1	+46	4	5.04
∗103572	20 59 05.17	−25 22 48.9	8.56		G	314.771 545 97	−25.380 261 68		14.72	163.09	−236.18	1.13	0.83	1.29	1.65	1.09	+21	−16	−16	+ 8	+ 3	+26	+ 7	+33	+18	+12	3	0.86
103573	20 59 05.34	+09 59 12.2	8.18		H	314.772 242 88	+09.986 729 06		13.80	76.75	−7.52	0.86	0.48	1.02	1.25	0.51	+ 8	−11	+23	+29	+22	+19	+12	+53	+13	+26	0	−1.06
103574	H 20 59 05.38	−13 12 56.6	8.57		G	314.772 406 93	−13.215 715 75	∗	2.68	20.99	−0.36	2.06	1.25	1.53	1.61	1.23	+10	− 4	−19	− 7	− 1	+39	− 4	+33	− 8	+58	2	−1.18
∗103575	20 59 06.64	−06 54 24.0	8.02		H	314.777 687 15	−06.906 664 61		6.80	13.36	−12.69	1.05	0.73	1.29	1.56	0.96	+14	+ 1	−20	+20	−27	+32	−21	+36	−16	+19	0	0.53
∗103576	20 59 06.64	−16 05 34.7	11.31		G	314.777 664 99	−16.092 968 66		29.12	−123.81	−242.71	2.52	1.92	2.89	3.53	2.37	+26	−24	−28	+ 9	−11	+21	− 3	+27	+ 0	+12	0	−1.48
103577	20 59 08.36	+03 33 15.8	12.03		G	314.784 844 48	+03.554 384 16		31.40	328.97	−723.55	3.00	1.86	3.68	3.38	1.79	+40	−22	− 3	−28	+ 2	+24	− 5	+ 7	+14	+50	0	−0.64
103578	20 59 08.47	−48 06 01.6	9.37		H	314.785 271 22	−48.100 440 26		15.32	102.29	−159.62	1.15	0.84	1.37	1.34	0.81	+17	−15	−16	− 5	−17	+ 9	−19	−26	+10	−10	6	1.73
103579	20 59 11.79	+44 47 25.6	7.13		H	314.799 131 66	+44.790 440 95		5.21	54.70	21.92	0.56	0.56	0.71	0.73	0.65	−21	+12	− 5	−14	+19	− 4	+16	−39	+29	−37	0	−1.51
103580	20 59 14.07	+37 55 48.4	8.00		G	314.808 618 49	+37.930 101 05		2.63	0.45	−16.49	0.50	0.62	0.78	0.51	0.66	−20	− 1	− 7	− 1	+ 9	− 3	+ 9	−12	+11	−14	0	0.22
103581	20 59 14.45	−10 42 49.3	8.51		H	314.810 228 18	−10.713 684 50		30.07	35.96	−21.36	1.08	0.76	1.27	1.60	1.05	+30	− 2	−17	+ 3	−16	+16	−15	+32	−12	+38	0	1.36
103582	20 59 15.50	−38 19 56.8	9.49		H	314.814 569 71	−38.332 446 24		1.08	14.53	−14.67	1.23	0.84	1.51	1.33	1.09	+47	−30	−18	−33	−15	+16	−12	−11	− 6	+55	0	1.24
103583	20 59 16.37	−47 58 59.4	10.59		H	314.818 211 69	−47.983 165 34		22.60	119.85	40.98	1.73	1.33	2.10	1.97	1.23	+19	−16	−17	− 6	−17	+ 9	−19	−31	+ 7	− 7	0	0.83
103584	H 20 59 16.45	+15 34 21.8	8.05		H	314.818 542 76	+15.572 708 52	A	2.90	9.31	−5.89	1.39	0.97	1.58	1.29	0.83	+ 3	− 6	+12	+46	+ 2	+ 0	+ 0	+60	− 9	+22	2	−1.23
103585	20 59 16.51	−31 34 37.3	9.53		H	314.818 781 60	−31.577 021 29		13.61	64.55	−30.09	1.28	0.90	1.54	1.36	1.17	+45	−44	−39	−26	−12	+35	+13	+40	−27	+20	6	−1.35
103586	H 20 59 17.19	+08 38 15.7	8.86	1	G	314.821 620 86	+08.637 696 40	∗	−0.05	3.03	−9.26	0.91	0.46	1.06	1.23	0.50	+ 4	−21	+17	+ 1	+17	+11	+ 6	+42	+ 5	+26	0	2.13
103587	20 59 17.80	−78 10 50.4	9.02		H	314.824 176 72	−78.180 674 02		10.11	29.35	−48.17	0.72	0.72	0.91	0.78	0.87	−10	−20	+ 8	+ 9	−12	+ 1	−15	+ 6	+ 6	−10	0	0.46
∗103588	20 59 18.91	−42 53 11.5	9.84		H	314.828 799 00	−42.886 531 90		3.19	40.77	−12.92	1.31	0.86	1.57	1.56	0.75	+24	−13	− 8	−20	−22	+ 3	−26	−47	+14	− 8	2	−0.58
∗103589	20 59 18.80	−14 08 06.1	8.80		H	314.828 324 66	−14.135 032 52		3.85	−15.71	−8.52	1.03	0.68	1.24	1.44	1.01	+23	−18	− 7	+ 0	−14	+35	−26	+40	+11	+44	2	0.75
103590	20 59 19.70	+21 00 29.1	8.56		G	314.832 065 33	+21.008 086 28		3.65	14.54	−2.34	0.84	0.62	1.07	1.09	0.64	+ 9	−16	− 7	+18	+23	− 7	+18	+51	+ 0	+11	0	0.27
103591	20 59 21.22	−08 52 42.3	8.86		H	314.838 433 35	−08.878 424 22		4.63	−27.62	−25.85	1.50	1.01	1.59	2.36	1.30	−14	+15	−34	+53	−42	+41	−31	+54	−27	− 5	0	−0.24
103592	20 59 21.97	+70 57 55.9	8.13		H	314.841 538 76	+70.965 535 56		4.49	−13.80	−16.75	0.68	0.60	0.71	0.85	0.67	−20	−30	+18	− 3	+10	+11	+ 5	− 8	+12	+ 3	0	−0.48
103593	20 59 22.42	+35 28 28.6	8.92		H	314.843 435 47	+35.474 621 48		2.83	−2.33	−6.92	0.55	0.71	0.93	0.57	0.78	−21	+ 3	+ 0	+ 0	+ 0	−15	+ 1	− 7	+21	+16	2	1.08
103594	H 20 59 23.14	+36 25 43.8	8.00		H	314.846 424 41	+36.428 832 25	A	1.77	11.57	3.59	1.14	1.48	1.16	0.74	0.93	+ 8	− 4	+ 5	−14	− 1	− 8	+ 1	−23	+11	− 9	1	−0.28
103595	20 59 24.27	−20 26 39.7	8.18		G	314.851 131 82	−20.444 365 74		12.87	16.74	−18.00	1.05	0.75	1.14	1.27	1.09	+21	− 1	+13	−32	+ 3	+29	−12	+11	+10	+47	0	−0.63
103596	20 59 24.61	+42 19 28.0	6.47		H	314.852 526 26	+42.324 450 32		4.25	16.68	6.45	0.44	0.48	0.62	0.51	0.61	−10	+22	− 1	− 1	+ 6	−25	+12	−23	+ 6	+ 4	0	−0.36
103597	H 20 59 25.26	−30 30

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
103501	9.755	0.022	9.533	0.026		0.207	0.004	G	0.23	0.01	H	9.5672	0.0018	0.022	128		9.53	9.61					1							
103502											T *	10.8710	0.0033	0.035	133	*	10.79	10.93		D			2 C B	AB	149	0.334	0.023	1.30	0.27	G
103503	6.770	0.003	6.829	0.004		−0.062	0.002	G	−0.04	0.00	H	6.8367	0.0009	0.010	165		6.82	6.86					1							S
103504	10.189	0.020	9.673	0.020		0.485	0.026	T	0.56	0.03	L	9.7960	0.0027	0.029	177		9.75	9.85					1							
103505	11.189	0.049	10.170	0.032	A						T *	10.1468	0.0053	0.107	165	*	10.05	10.61	0.63	P 1 A	20582+3510	M 1	2 C A	AB	309	1.212	0.038	1.67	0.14	G
103506	8.433	0.010	8.337	0.012		0.107	0.009	G	0.12	0.01	H	8.3601	0.0014	0.016	111		8.33	8.39					1							
103507	9.758	0.030	9.278	0.031		0.464	0.033	T	0.53	0.04	L	9.2816	0.0022	0.018	49		9.24	9.31		C			1							S
103508	8.360	0.010	8.175	0.011		0.177	0.014	T	0.19	0.02	L	8.2107	0.0014	0.015	120		8.18	8.24		C			1							S
103509	7.374	0.006	7.486	0.009		−0.102	0.008	G	−0.09	0.01	H	7.4800	0.0011	0.009	100		7.46	7.49		C			1							S
103510	7.858	0.006	6.652	0.003		1.032	0.005	T	1.00	0.00	L	6.7087	0.0007	0.009	198		6.69	6.72					1							S
103511	7.153	0.005	5.453	0.003		1.419	0.005	T	1.40	0.01	L	5.4389	0.0006	0.006	138		5.43	5.45		C			1							S
103512	8.642	0.008	8.248	0.009		0.373	0.011	T	0.44	0.01	L	8.2906	0.0011	0.013	158		8.27	8.32		C			1							S
103513	10.556	0.033	8.897	0.014		1.387	0.028	T	1.36	0.03	L	8.8872	0.0019	0.020	145		8.85	8.91					1 S							
103514	9.932	0.025	9.504	0.026		0.418	0.029	T	0.48	0.03	L	9.6012	0.0019	0.022	80		9.56	9.64		C			1							
103515	9.313	0.019	9.248	0.024		0.065	0.028	T	0.07	0.03	L	9.2990	0.0024	0.016	105		9.27	9.33					1							
103516	7.677	0.005	6.669	0.004		0.880	0.005	T	0.89	0.00	L	6.7261	0.0007	0.009	136		6.71	6.74					1							S
103517	9.398	0.042	8.821	0.028	*	0.542	0.037	T	0.62	0.04	L *	9.2853	0.0023	0.023	120	*	9.24	9.32		D	20583−4345	I 1	2 C A	AB	135	1.652	0.005	0.69	0.02	
103518	10.080	0.023	8.235	0.010		1.534	0.020	T	1.58	0.04	L	8.1981	0.0015	0.017	141		8.17	8.22					1							
103519	6.800	0.004	5.664	0.003		0.973	0.004	G	0.96	0.00	H	5.7165	0.0007	0.005	109		5.71	5.73					1 O							S
103520	9.562	0.015	8.464	0.011		0.948	0.014	T	0.94	0.01	L	8.5168	0.0014	0.015	145		8.49	8.55		C			1							
103521	9.626	0.026	8.510	0.018		0.962	0.025	T	0.95	0.02	L	8.5686	0.0011	0.012	61		8.55	8.60		D			1							
103522	8.109	0.007	7.740	0.009		0.350	0.011	T	0.41	0.01	L	7.7804	0.0013	0.013	107		7.76	7.81					1 X							S
103523	8.001	0.008	7.509	0.006		0.474	0.008	T	0.55	0.01	L	7.5565	0.0012	0.010	119		7.54	7.57		C			1							S
103524	11.362	0.070	9.471	0.021	*	0.743	0.126	G	1.56	0.08	S *	9.4223	0.0026	0.027	140	*	9.37	9.46		R	20584+2619	H 1	2 C S A	AB	347	0.189	0.009	0.76	0.56	
103525	9.529	0.022	9.260	0.026		0.310	0.015	G	0.36	0.02	H	9.3001	0.0023	0.019	94		9.25	9.33		C			1							G
103526	8.061	0.007	7.781	0.007		0.266	0.009	T	0.30	0.01	L	7.8184	0.0014	0.015	151		7.80	7.84					1							S
103527	6.699	0.004	5.619	0.003		0.934	0.004	T	0.93	0.00	L	5.6682	0.0006	0.007	175		5.66	5.68			20585+1049	I 1	1							S
103528	9.116	0.014	7.294	0.007		1.516	0.012	T	1.55	0.02	L	7.2334	0.0015	0.012	128		7.21	7.25			20585+4122	I 1	1 G							S
103529	8.469	0.009	8.110	0.009		0.340	0.012	T	0.40	0.02	L	8.1549	0.0022	0.020	131		8.12	8.18		U			1							S
103530	5.345	0.008	5.472	0.006	*	−0.144	0.016	G	−0.14	0.02	H *	5.5460	0.0006	0.006	121	*	5.54	5.56		D	20585+5028	I 1	2 C A	AB	26	1.947	0.002	0.92	0.01	S
103531	9.716	0.020	9.201	0.020		0.586	0.015	G	0.66	0.01	H	9.2218	0.0016	0.016	123		9.19	9.25		C			1							
103532	6.061	0.003	6.151	0.004		−0.079	0.002	G	−0.06	0.00	H	6.1484	0.0010	0.011	125		6.13	6.16		M			1							S
103533	8.634	0.013	8.654	0.017	B	−0.014	0.019	T	0.01	0.02	L	8.7244	0.0299			B				D	20586+1626	I 3	1 C I A							
103534	8.693	0.008	8.296	0.009		0.376	0.011	T	0.44	0.01	L	8.3453	0.0014	0.015	173		8.32	8.37		C			1							S
103535	8.415	0.009	8.026	0.009		0.391	0.015	G	0.46	0.02	H	8.0744	0.0019	0.017	129		8.04	8.10					1							
103536	10.731	0.053	9.033	0.022		1.418	0.045	T	1.40	0.07	L	9.0357	0.0027	0.017	84		9.01	9.07		C			1							
103537	7.426	0.007	7.516	0.008	A	−0.077	0.010	T	−0.06	0.01	L	7.5065	0.0137	0.079	128	A	7.46	7.69		D	20586+1626	I 3	1 C P A							S
103538	10.230	0.030	9.645	0.028		0.548	0.030	T	0.62	0.03	L	9.7308	0.0035	0.022	79		9.70	9.77		C			1							
103539	10.580	0.043	10.117	0.042		0.436	0.055	T	0.50	0.06	L	10.2070	0.0028	0.024	110		10.17	10.24		C			1							G
103540	9.527	0.014	8.384	0.009		0.983	0.013	T	0.96	0.01	L	8.4426	0.0015	0.015	145		8.42	8.47		C			1							
103541	8.510	0.008	8.216	0.009	*	0.323	0.004	G	0.37	0.01	H *	8.2230	0.0016	0.015	143	*	8.20	8.26		D	20587−6234	I 1	2 C A	AB	141	0.386	0.004	1.05	0.03	S
103542	7.729	0.014	7.262	0.016	*	0.450	0.510	G	0.49	0.04	L *	7.2874	0.0086	0.117	169	−	7.24	7.91	0.95	P 1 A	20587−7025	I 1	3 C B							S G
103543	8.586	0.011	8.333	0.012		0.244	0.015	G	0.27	0.02	H	8.3745	0.0015	0.014	105		8.35	8.40		C			1							
103544	12.549	0.219	11.117	0.098		1.741	0.200	G	2.98	0.54	I	11.1207	0.0048	0.041	155		11.05	11.19		C			1							G
103545	6.242	0.007	5.982	0.005		0.244	0.009	T	0.27	0.01	L	6.0158	0.0063	0.060	101		5.99	6.19	1.58	P 1 A			1							S
103546	9.112	0.016	7.576	0.009		1.238	0.008	G	1.20	0.01	H	7.6214	0.0012	0.010	106		7.61	7.64					1							S
103547	10.580	0.054	9.877	0.048		0.635	0.054	T	0.70	0.05	L	9.8851	0.0028	0.018	60		9.85	9.94					1							
103548	7.116	0.004	7.169	0.005		−0.044	0.006	T	−0.02	0.01	L	7.1745	0.0008	0.010	171		7.16	7.19		C			1							S
103549	9.939	0.022	9.479	0.022		0.434	0.028	T	0.50	0.03	L	9.5748	0.0024	0.017	116		9.54	9.60					1							G
103550	7.163	0.005	6.965	0.006		0.189	0.007	T	0.21	0.01	L	7.0121	0.0010	0.008	100		7.00	7.02		C			1							S
103551	8.566	0.010	8.149	0.010		0.394	0.013	T	0.46	0.01	L	8.2023	0.0013	0.012	132		8.18	8.22		C	20586+1626	I 3	1							S
103552	9.889	0.025	9.639	0.030		0.238	0.037	T	0.27	0.05	L	9.6438	0.0022	0.024	110		9.60	9.69		C			1							
103553	10.704	0.029	9.163	0.014		1.316	0.027	T	3.44	0.05	O	8.6589	0.0086	0.086	178		8.57	8.87		U 2			1 S							
103554	8.015	0.008	7.618	0.008		0.376	0.015	G	0.44	0.02	H	7.6713	0.0010	0.009	121		7.66	7.69		C			1							S
103555	10.462	0.033	8.820	0.015		1.374	0.029	T	1.34	0.04	L	8.8260	0.0018	0.015	111		8.80	8.85		C			1							
103556	8.264	0.009	7.985	0.010		0.265	0.013	T	0.30	0.02	L	8.0288	0.0013	0.012	133		8.00	8.05					1							S
103557	7.274	0.005	7.065	0.007		0.193	0.008	T	0.21	0.01	L	7.1087	0.0014	0.013	118		7.09	7.13					1							S
103558	9.681	0.021	9.464	0.025		0.207	0.031	T	0.23	0.04	L	9.5243	0.0023	0.021	115		9.48	9.56		C			1							
103559	8.014	0.008	6.755	0.005		1.073	0.007	T	1.04	0.01	L	6.8142	0.0010	0.010	118		6.80	6.83					1							S
103560	12.046	0.137	10.173	0.040		1.589	0.118	T	1.82	0.21	K	9.9883	0.0035	0.029	115		9.94	10.04					1							G
103561	9.467	0.023	9.135	0.025		0.315	0.032	T	0.36	0.04	L	9.1761	0.0025	0.014	76		9.16	9.20		C			1							
103562	10.315	0.039	8.556	0.017		1.380	0.015	G	1.35	0.02	H	8.5188	0.0022	0.016	95		8.50	8.55					1							
103563	9.025	0.014	8.607	0.015		0.427	0.015	G	0.49	0.02	H	8.6458	0.0017	0.015	119		8.62	8.67		C			1 S							S
103564						1.551	0.003	G	1.62	0.14	K	10.9272	0.0045	0.036	97		10.87	10.98		C			1							G
103565	8.784	0.009	8.333	0.009		0.425	0.012	T	0.49	0.01	L	8.3743	0.0013	0.015	197		8.35	8.40		C			1							
103566	9.464	0.027	8.358	0.018		0.954	0.025	T	0.94	0.02	L	8.3968	0.0027	0.017	56		8.36	8.41		C			1							
103567	10.944	0.055	10.463	0.063		0.453	0.076	T	0.52	0.08	L	10.4503	0.0030	0.025	83		10.40	10.51		C			1							G
103568	8.990	0.012	6.986	0.005		1.661	0.010	T	1.68	0.01	L	6.8914	0.0014	0.016	142		6.86	6.92		U 2			1							S
103569	5.960	0.013	5.452	0.014	*	0.464	0.027	G	0.55	0.01	L *	5.3140	0.0014	0.016	101	−	5.30	5.37		D	20591+0418	I 2	2 C P A	AB	286	0.935	0.007	0.35	0.05	S G
103570	8.981	0.010	8.358	0.009		0.580	0.012	T	0.65	0.01	L	8.4168	0.0018	0.019	162		8.38	8.45					1							
103571	7.784	0.014	7.275	0.012	C	0.457	0.029	G	0.53	0.03	H	5.3441	0.0094	0.094	102	−	5.30	6.05		D	20591+0418	I 2	1 C F A							S G
103572	9.275	0.025	8.667	0.022		0.568	0.017	G	0.64	0.02	H	8.6794	0.0020	0.010	45		8.65	8.70		C			1							S
103573	8.715	0.008	8.225	0.008		0.461	0.010	T	0.53	0.01	L	8.2811	0.0013	0.014	184		8.25	8.31					1							S
103574	8.972	0.014	8.588	0.014	*	0.370	0.015	G	0.43	0.02	H *	8.6430	0.0015	0.012	92	*	8.62	8.66		D	20591−1313	I 1	2 C A	AB	62	0.243	0.008	0.03	0.18	
103575	8.254	0.012	8.053	0.014		0.192	0.017	T	0.21	0.02	L	8.0835	0.0015	0.011	70		8.06	8.10		C			1							S
103576						1.380	0.010	G	1.63	0.02	I	11.4109	0.0045	0.040	52		11.35	11.46		C			1							G
103577						1.400	0.014	G	1.67	0.04	I	12.1046	0.0080	0.071	94		11.94	12.22					1							G
103578	10.272	0.029	9.499	0.024		0.688	0.029	T	0.75	0.02	L	9.5027	0.0045	0.039	109		9.46	9.56		R	20591−4806	I 1	1							
103579	8.179	0.010	7.244	0.007		0.830	0.015	G	0.85	0.01	H	7.2834	0.0010	0.009	102		7.26	7.30		C			1							S
103580	10.165	0.022	8.209	0.009		1.622	0.019	T	1.64	0.02	L	8.0937	0.0017	0.017	160		8.06	8.12					1							
103581	9.753	0.027	8.635	0.018		0.955	0.026	T	1.00	0.02	L	8.6535	0.0017	0.016	80		8.63	8.68		C			1							
103582	10.145	0.029	9.593	0.027		0.523	0.029	T	0.60	0.03	L	9.6045	0.0024	0.023	115		9.56	9.65			20593−3820	I 1	1 S							
103583	12.310	0.178	10.707	0.074		1.348	0.160	T	1.57	0.30	L	10.6934	0.0059	0.049	105		10.62	10.77		R			1							G
103584	8.360	0.008	8.090	0.008	*	0.257	0.010	T	0.29	0.01	L *	8.1178	0.0014	0.012	172	*	8.10	8.14		D	20593+1534	I 1	2 C A	AB	308	0.520	0.002	0.88	0.01	S
103585	10.400	0.038	9.666	0.032		0.658	0.038	T	0.72	0.03	L	9.6653	0.0024	0.021	100		9.63	9.70		C			1							
103586	10.339	0.026	8.453	0.011	*	0.575	0.015	G	1.97	0.08	S *	8.3703	0.0028	0.038	157	*	8.29	8.41		R 2	20593+0838	H 1	2 C S A	AB	167	0.123	0.005	0.75	0.36	
103587	9.742	0.016	9.093	0.015		0.595	0.016	T	0.67	0.01	L	9.1485	0.0017	0.019	139		9.11	9.18		C			1							
103588	10.407	0.031	9.810	0.028		0.557	0.031	T	0.63	0.03	L	9.9723	0.0020	0.027	119		9.93	10.02					1							
103589	10.227	0.026	8.954	0.015		1.084	0.023	T	1.05	0.02	L	8.9693	0.0012	0.011	111		8.95	8.99					1							
103590	9.290	0.015	8.626	0.013		0.677	0.015	G	0.74	0.01	H	8.6950	0.0011	0.017	125		8.67	8.73					1							
103591	9.959	0.031	8.943	0.022		0.886	0.028	T	0.89	0.02	L	9.0176	0.0017	0.017	65		9.00	9.06		C			1							
103592	8.326	0.011	8.150	0.012		0.169	0.015	T	0.18	0.01	L	8.1845	0.0017	0.014	113		8.16	8.21		C			1							S
103593	8.870	0.009	8.902	0.012		−0.025	0.014	T	0.00	0.01	L	8.9181	0.0019	0.023	178		8.89	8.96					1							
103594	8.111	0.007	8.016	0.009	*	0.093	0.010	T	0.11	0.01	L *	8.0370	0.0010	0.013	158	*	8.02	8.06		D	20594+3626	I 1	2 C A	AB	194	0.385	0.006	1.70	0.04	
103595	8.882	0.017	8.246	0.015		0.593	0.015	G	0.66	0.01	H	8.2973	0.0020	0.013	53		8.28	8.32		C			1							S
103596	6.370	0.003	6.460	0.004		−0.077	0.004	T	−0.06	0.01	L	6.4510	0.0007	0.007	130		6.44	6.46		C			1							S
103597	8.520	0.013	7.451	0.010	*	0.926	0.012	T	0.92	0.01	L *	7.5219	0.0018	0.010	74	*	7.51	7.54		C	20594−3031	H 1	2 C S B	AB	313	0.111	0.031	1.79	1.33	S
103598	7.386	0.007	5.697	0.003		1.411	0.006	T	1.39	0.01	L	5.6853	0.0008	0.009	99		5.67	5.70					1							S
103599	8.469	0.014	8.248	0.015		0.211	0.019	T	0.23	0.02	L	8.2970	0.0018	0.013	73		8.28	8.33		C			1							S
103600	10.155	0.030	8.791	0.017		1.155	0.027	T	1.12	0.02	L	8.8162	0.0019	0.017	88		8.79	8.85					1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	$\mu_{\alpha*}$	μ_δ	π	$\mu_{\alpha*}$	μ_δ	π	$\mu_{\alpha*}$	μ_δ	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
103601	20 59 27.67	−16 52 46.5	7.98		H	314.865 292 03	−16.879 583 61		10.84	59.16	−7.01	0.96	0.72	1.07	1.16	0.91	+17	−17	−24	−13	+ 3	+23	+ 4	+27	+ 2	+28	0	−1.26
103602	20 59 27.89	+79 18 10.2	8.31		H	314.866 210 36	+79.302 824 94		11.87	34.20	−6.97	0.55	0.55	0.60	0.62	0.57	−	1	−12	+ 3	+25	+ 2	−	8	−	1	−22	+21	− 3	0	0.32
*103603	20 59 28.24	+40 57 36.9	7.00		H	314.867 673 56	+40.960 239 53		5.11	28.95	−1.27	0.46	0.59	0.69	0.51	0.66	−13	+ 3	+ 8	+ 5	−	1	−13	+	1	−32	+14	−12	0	−1.78
*103604 H	20 59 28.23	+50 12 41.6	8.60		H	314.867 641 28	+50.211 553 28	A	4.76	9.46	−9.85	1.82	1.67	1.76	2.04	1.93	−12	−24	−	8	−	2	−	6	+	9	−	6	−	4	+13	−34	1	1.09
103605	20 59 29.08	−33 36 58.5	7.35		G	314.871 150 97	−33.616 242 30		15.44	98.05	−145.41	0.84	0.51	0.95	0.98	0.70	+30	−32	−29	−26	−21	+34	−10	+22	−13	+16	0	−1.89
103606	20 59 29.12	+55 56 24.4	6.66		H	314.871 319 54	+55.940 098 36		3.65	−9.28	−12.93	0.44	0.47	0.50	0.46	0.53	−12	−	1	−	8	+13	+10	−	9	+14	−10	+	5	+	5	0	0.61
103607	20 59 29.62	−58 51 31.7	7.90		H	314.873 399 98	−58.858 811 86		3.15	−18.38	3.57	0.76	0.68	1.07	0.90	0.68	−	3	−	5	−18	−	4	+20	−	7	+19	+	4	−	3	−35	0	1.53
*103608	20 59 31.13	+32 11 47.3	9.38		H	314.879 695 35	+32.196 467 53		−0.31	−0.21	−3.40	0.63	0.83	1.28	0.79	0.99	−33	+	4	−20	+	8	+10	−10	+	9	−	8	+22	−30	1	−1.00
*103609	20 59 31.10	−27 01 25.7	8.22		G	314.879 578 45	−27.023 808 66		13.78	−80.39	−218.66	2.20	1.09	1.43	3.35	1.19	−	1	+24	−45	−78	+25	−36	+22	+28	−	5	−	3	0	1.25
103610	20 59 31.51	−01 28 04.5	8.40		H	314.881 296 03	−01.467 904 93		2.49	−8.57	−33.60	0.97	0.56	1.11	1.20	0.52	+39	−35	−26	−32	−17	+38	−20	−36	+33	+57	0	−0.19
103611	20 59 32.67	+01 03 55.5	8.61		H	314.886 121 93	+01.065 405 90		20.98	224.99	105.24	1.17	0.67	1.15	1.84	0.66	+39	−	2	−11	−46	−25	−	3	−27	−29	+13	+47	0	1.21
103612	20 59 33.11	+43 03 51.5	8.06		H	314.887 959 21	+43.064 302 56		0.82	2.59	−1.09	0.56	0.62	0.75	0.64	0.72	−15	+	5	−	3	+	8	+	6	−	5	+	8	−26	+12	−13	0	−1.45
103613	20 59 33.47	−31 17 12.9	9.45		H	314.889 470 96	−31.286 903 75		10.19	6.85	−120.80	1.30	0.85	1.49	1.42	1.20	+32	−40	−28	−22	−	5	+27	+	7	+39	−22	+22	0	−1.04
103614	20 59 34.76	+61 16 54.6	9.49		H	314.894 846 05	+61.281 840 23		8.01	5.24	−9.55	0.86	0.81	0.96	0.86	0.87	+	2	+	1	+	8	−	4	+17	+11	+23	−19	+11	+30	0	1.31
103615	20 59 34.90	+24 18 10.6	10.30		H	314.895 435 11	+24.302 955 64		4.22	60.16	−3.71	1.24	1.14	1.88	1.53	1.37	+11	−20	−28	+	4	+33	−22	+32	+39	−18	+	6	4	0.17
103616	20 59 36.13	−19 02 06.8	6.26	1	H	314.900 552 33	−19.035 232 89		7.58	8.84	−20.76	0.90	0.61	1.03	1.17	0.81	+	8	+	0	−32	−33	−	6	+35	−	2	+11	−12	+22	0	−0.84
103617	20 59 37.79	+31 16 15.9	8.91		H	314.907 459 29	+31.271 072 68		1.00	5.77	−0.91	0.57	0.79	1.09	0.71	0.98	−28	+	8	−15	+19	+	2	−	8	+11	−33	+18	−12	0	1.33
103618	20 59 38.60	−17 27 59.8	9.26		H	314.910 821 35	−17.466 599 33		4.08	15.00	3.64	1.36	1.00	1.56	1.66	1.44	+28	−	4	−24	−30	−	1	+21	−	6	+18	−13	+46	0	0.97
103619 H	20 59 39.72	+74 17 10.7	8.03		H	314.915 518 50	+74.286 308 43	A	3.93	16.38	35.03	0.84	0.81	0.88	0.78	0.73	+	8	−10	+	9	−14	−	2	+14	−	6	−	6	+34	+	9	2	−0.10
103620 H	20 59 40.24	−52 10 28.7	8.33		G	314.917 658 41	−52.174 636 37	*	23.42	149.68	−164.99	1.06	0.87	1.40	1.70	0.89	+	6	−	5	−37	+17	−27	−	1	−32	−23	+25	−36	0	−1.63
103621	20 59 41.00	−62 52 38.3	6.88		H	314.920 834 62	−62.877 306 77		4.87	25.00	1.09	0.52	0.51	0.78	0.57	0.52	+12	−17	−17	+29	+15	+	0	+13	+	4	−19	−	2	0	−0.97
103622	20 59 41.75	−74 26 36.3	8.61		H	314.923 977 62	−74.443 404 42		1.22	8.89	−1.47	0.70	0.68	0.95	0.75	0.77	−19	−11	−11	−17	−	6	−	1	−	4	+	4	+14	−36	0	2.09
103623	20 59 42.29	+04 16 21.7	8.48		H	314.926 226 48	+04.272 704 34		2.82	−19.29	−21.52	1.21	0.60	1.32	1.40	0.61	+25	−28	−13	−30	−	7	−	7	−13	+	9	+	0	+36	0	1.34
103624	20 59 42.90	+38 49 22.5	6.76		G	314.928 765 76	+38.822 921 41		3.23	10.39	−1.52	0.41	0.47	0.59	0.43	0.52	−20	−10	−	1	+	0	+12	−	7	+14	−17	+	6	−	8	0	−1.27
103625	20 59 44.15	−43 30 26.0	8.78	2	H	314.933 962 85	−43.507 233 46		0.55	−0.71	−7.44	0.98	0.68	1.21	1.01	0.54	+30	−28	−23	−22	−22	+21	−28	−51	+25	+	3	2	0.17
103626	20 59 45.42	−20 28 19.0	9.19		G	314.939 244 09	−20.471 933 22		16.42	142.49	17.49	1.46	1.11	1.46	1.89	1.26	+36	−21	−28	−38	−28	+25	−16	−	3	−12	+24	0	0.80
103627	20 59 46.33	−04 10 46.9	11.70		G	314.943 051 80	−04.179 690 96		8.04	42.15	−204.76	2.81	1.58	3.42	4.43	1.74	+38	−15	−	7	+13	+	9	+34	+	9	−	6	+36	+66	0	2.11
103628	20 59 47.17	+77 27 21.3	7.99		H	314.946 550 81	+77.455 914 25		3.11	9.35	9.88	0.53	0.48	0.54	0.59	0.54	−	6	−14	+	5	+21	+	6	+	0	+	7	−	6	+	2	+	1	0	1.67
103629	20 59 48.04	+14 02 01.9	9.02		H	314.950 166 84	+14.033 863 40		2.44	9.08	1.76	0.95	0.60	1.13	1.27	0.63	+10	−	8	+16	+	3	+35	+31	+20	+66	+	1	+26	0	−0.17
*103630 H	20 59 48.36	+20 04 09.3	8.61		H	314.951 508 86	+20.069 238 18	A	5.60	28.22	4.25	1.74	1.36	2.05	1.88	1.30	−	1	+	6	−15	+	9	+16	+	3	+	9	+56	−16	+23	1	0.97
*103631	20 59 48.18	−37 01 54.3	9.71		H	314.950 769 98	−37.031 745 12		4.90	−5.21	−19.06	1.46	1.08	1.62	2.40	1.43	+15	+15	−28	+44	−19	+37	−	9	+41	−12	−	3	0	−2.37
103632 H	20 59 49.55	+47 31 15.4	4.74	1	H	314.956 459 46	+47.520 945 07	*	2.90	7.25	2.47	0.74	1.09	0.64	0.67	0.70	+19	+	7	−22	−10	−13	+16	−	6	−41	+	9	+24	7	0.54
103633	20 59 49.63	+55 13 04.9	6.80		H	314.956 792 67	+55.218 032 98		2.98	4.12	−0.91	0.55	0.49	0.55	0.65	0.54	−29	+	2	−	2	−41	+23	−	4	+20	−19	+14	−19	0	−2.00
103634	20 59 49.90	+55 32 14.7	9.61		H	314.957 905 98	+55.537 423 17		2.70	2.43	−1.91	0.80	0.78	0.89	0.89	0.97	−20	+	5	+	4	−12	+14	−	5	+17	−13	+16	+	7	0	−0.76
103635	20 59 50.82	+16 49 27.7	6.62		H	314.961 736 03	+16.824 364 87		20.93	52.86	−9.22	0.75	0.44	0.95	0.90	0.46	+	9	+13	+12	+49	+14	+16	+	7	+63	−11	+22	1	−0.09
103636	20 59 51.22	−58 45 27.9	11.67		G	314.963 408 74	−58.757 740 35		31.99	121.42	−348.09	1.99	1.72	2.95	2.39	1.82	−	7	−17	−10	−12	+25	+	2	+29	+	7	−15	−39	3	0.08
103637	20 59 51.30	+44 59 47.2	6.64		H	314.963 736 97	+44.996 449 11		1.39	0.98	1.15	0.52	0.51	0.64	0.71	0.62	−20	+13	−	9	+10	+15	−	2	+	6	−32	+21	−44	0	−0.83
103638	20 59 52.18	+02 51 21.6	8.75		H	314.967 403 98	+02.856 001 10		4.75	−10.84	−30.73	1.00	0.60	1.17	1.12	0.60	+40	−39	−16	−43	−	8	+33	−12	−	1	+10	+49	0	1.62
103639	20 59 54.71	+50 03 46.8	9.07		H	314.977 973 65	+50.062 998 14		4.06	23.38	18.23	0.78	0.71	0.90	1.08	0.87	−12	−	9	−13	+	0	−	5	+	6	−	5	−	3	+19	−21	0	−1.56
103640	20 59 54.84	−13 03 05.9	6.61		H	314.978 513 97	−13.051 635 03		10.21	−28.67	1.28	0.86	0.68	0.89	1.14	0.74	+50	−16	−17	−22	−24	+34	−17	+24	+	0	+41	0	−2.18
103641 H	20 59 55.10	+40 15 29.9	6.58		G	314.979 580 38	+40.258 310 99	A	25.60	232.32	210.00	0.54	0.62	0.72	0.60	0.66	−12	+11	−18	−	3	+	8	−15	+	5	−12	+	3	−15	2	0.21
103642	20 59 56.96	+29 16 45.3	8.96		H	314.987 337 74	+29.279 242 25		3.76	−11.81	−41.96	0.78	0.89	1.14	0.91	1.02	+	5	−	5	+	2	+36	+14	−21	+15	+27	+	6	+13	0	1.28
103643 H	20 59 57.52	−53 26 29.1	8.73		H	314.989 662 40	−53.441 410 41	*	4.81	−1.83	−28.91	1.04	0.76	1.23	1.42	0.85	+11	−30	−27	+	9	−	4	+	9	+	0	−	6	−	7	+	2	0	−0.48
103644	20 59 58.28	+18 37 08.2	7.12		H	314.992 825 88	+18.618 948 52		5.34	36.34	−2.78	0.67	0.47	0.89	0.76	0.51	−	2	−	7	−	6	+	6	+18	−19	+	8	+59	−12	+17	0	2.22
103645	20 59 58.80	+32 29 44.5	6.85	2	H	314.994 986 28	+32.495 706 00		3.37	−2.07	−28.23	0.36	0.49	0.69	0.48	0.57	−34	+	2	−16	−	5	+11	+	0	+11	−16	+16	−30	2	1.49
103646	20 59 59.62	−36 07 46.2	6.10		H	314.998 410 27	−36.129 499 45		24.11	103.88	−58.20	0.74	0.50	0.83	0.88	0.69	+25	−36	−20	+11	−	8	+22	−	5	+30	+	0	+18	0	0.87
103647 H	20 59 59.92	−51 10 52.7	9.62		H	314.999 682 58	−51.181 313 18	A	2.91	91.78	−79.75	6.47	3.24	2.34	3.47	1.94	−	7	−	1	−13	+	6	−	4	−28	−	9	−	2	+33	−37	0	0.09
103648	21 00 00.30	+42 55 52.4	7.73		H	315.001 233 11	+42.931 226 08		8.50	39.40	17.12	0.55	0.62	0.75	0.64	0.74	−13	+10	+15	+	1	+15	−	6	+19	−13	+	6	+	0	0	−0.49
103649	21 00 02.33	+05 35 36.3	9.84		H	315.009 702 79	+05.593 425 38		2.43	−1.78	−15.63	1.34	0.76	1.52	1.79	0.76	+24	−15	+	4	+	3	+	1	+19	−	1	+15	+11	+35	0	−1.25
103650	21 00 03.17	+70 40 07.7	9.32		H	315.013 223 58	+70.668 791 86		38.87	151.18	−47.05	0.81	0.71	0.83	1.07	0.82	−21	−28	+14	−16	+13	+13	+	5	−	6	+10	+	5	0	1.23
103651	21 00 03.92	−29 28 37.0	9.05		H	315.016 324 97	−29.476 949 81		3.74	−7.40	−30.36	1.32	0.97	1.44	1.74	1.34	+17	−32	−	9	+22	+	1	+19	−	1	+31	+11	+22	0	−0.02
103652 H	21 00 03.95	+07 30 58.2	5.98		H	315.016 474 57	+07.516 179 86	A	13.85	48.10	6.98	1.64	0.82	1.10	1.39	0.52	+39	−24	+	4	+	6	+	9	+	6	+	9	+32	−	1	+41	1	−0.18
103653	21 00 04.54	−30 35 00.2	9.20		H	315.018 931 93	−30.583 385 31		9.81	−68.37	−46.51	1.32	0.90	1.30	1.69	1.19	−	6	−26	−19	+34	−20	+	0	−17	+24	−	6	−	7	0	−1.17
*103654	21 00 05.04	−69 34 43.5	6.86		H	315.020 988 91	−69.578 749 59		26.88	453.15	−282.58	0.44	0.46	0.69	0.49	0.56	−12	−	7	+	1	+	6	−	2	−12	−	1	+11	+	0	−26	0	−1.07
*103655 H	21 00 04.88	+40 04 15.2	10.12		G	315.020 325 65	+40.070 879 12	A	66.21	614.37	−247.16	1.92	2.17	2.54	2.07	2.45	−12	+	7	−	4	−	4	+	1	−14	+	8	−17	+22	−17	1	0.69
103656	21 00 06.38	+42 35 51.2	9.53	3	H	315.026 589 64	+42.597 564 06		0.50	0.50	−2.03	0.82	0.86	1.09	0.94	1.11	−13	+13	+	5	−12	+17	−11	+17	−	4	−	6	+	7	0	0.76
103657	21 00 06.52	−26 33 22.1	10.05		H	315.027 157 58	−26.556 152 12		0.52	5.31	−0.66	1.67	1.25	1.91	1.85	1.53	+12	+	3	−42	−34	−	9	+24	−	7	+11	−10	+33	0	0.85
103658	21 00 06.60	+48 40 46.0	7.30	1	H	315.027 495 24	+48.679 432 62		7.18	11.38	5.66	0.47	0.51	0.59	0.60	0.70	−	6	+	4	−	6	−	2	+	5	+	0	+	6	+15	−10	−	8	1	2.58
103659	21 00 08.69	−10 37 41.7	7.49		H	315.036 199 18	−10.628 252 05		12.43	−0.01	1.60	0.95	0.63	1.02	1.36	0.83	+12	−10	−11	+14	−13	+18	−13	+41	+11	+19	0	−0.73
103660	21 00 10.70	+19 57 40.8	7.28		H	315.044 576 32	+19.961 325 36		13.75	85.49	23.44	0.72	0.46	0.88	0.87	0.48	−	7	−	6	−	2	+	3	+19	−	3	+	3	+	7	2	0.73
103661	21 00 11.02	−45 37 12.8	9.85		H	315.045 917 49	−45.620 211 23		6.95	3.76	−53.76	1.25	1.06	1.70	1.31	0.95	+32	−13	−	3	−15	−15	+21	−15	−38	−	6	+22	0	−1.04
103662	21 00 12.37	−40 06 45.8	8.31		H	315.051 543 72	−40.112 717 48		2.81	27.97	1.21	0.87	0.58	1.03	0.91	0.64	+33	−	9	−15	−33	+	5	−	5	−	1	−11	−	1	+56	2	−1.53
103663	21 00 13.65	−15 06 52.0	8.95		H	315.056 878 69	−15.114 436 30		1.31	−8.99	−0.02	1.11	0.78	1.45	1.61	1.02	+20	−10	−30	+12	−27	+51	−21	+45	−	4	+23	0	0.63
103664	21 00 13.83	−69 43 39.1	9.11	1	H	315.057 629 41	−69.727 538 01		−0.07	10.12	−7.25	0.79	0.87	1.27	0.83	1.09	−22	−14	+20	−	8	−	5	−	8	−	1	+10	+	1	−33	0	0.17
103665	21 00 14.56	−13 29 54.9	8.19		H	315.060 646 08	−13.498 588 24		2.06	5.54	−11.11	1.08	0.75	1.46	1.53	1.00	+35	−25	−38	−13	−25	+46	−16	+36	−	8	+37	0	−0.97
103666	21 00 14.58	+52 40 26.7	9.30		G	315.060 735 13	+52.674 093 81		2.76	5.76	−1.80	0.75	0.71	0.86	0.91	0.90	−	1	−	6	+	7	+	4	−	3	−	6	−	2	+	6	−13	−	8	0	0.41
103667	21 00 16.17	+33 30 39.4	9.24	2	H	315.067 387 06	+33.510 943 95		1.78	−3.56	−2.57	0.60	0.92	1.24	0.69	1.06	−20	+	8	−19	−	5	+	9	−25	+	5	−22	+28	−31	0	0.52
103668	21 00 16.74	−36 18 31.2	9.62		H	315.069 749 14	−36.308 659 69		8.57	−1.57	−4.80	1.40	0.96	1.59	1.74	1.37	+25	−24	−10	+10	−	3	+23	−	1	+36	−	8	+21	0	2.22
103669	21 00 17.37	+61 29 50.5	7.68	1	H	315.072 376 42	+61.497 368 13	A	4.52	−44.30	−26.30	0.94	0.89	0.95	0.88	0.81	+	0	−	1	+31	−12	+28	+16	+28	−15	+	8	+30	1	0.51
103670	21 00 19.00	−27 20 35.9	7.93		H	315.079 162 75	−27.343 306 08		6.95	27.66	−74.75	0.96	0.72	1.05	1.31	0.97	+13	−16	−20	−20	+	2	+28	+	5	+16	+	0	+20	0	2.28
103671	21 00 20.39	−11 00 30.2	7.93		G	315.084 957 18	−11.008 393 33		5.99	20.39	6.42	1.33	0.75	1.51	1.32	0.82	+32	−52	−28	−	7	−24	+29	−18	+21	+	6	+24	2	1.68
103672	21 00 21.36	−13 20 03.1	10.30		G	315.089 020 09	−13.334 183 09		6.71	36.80	−242.37	1.72	1.23	2.21	2.34	1.77	+35	−17	−26	−11	−13	+38	−17	+36	−	7	+47	0	−1.69
103673	21 00 21.56	−51 15 56.3	5.76		H	315.089 850 65	−51.265 634 21		35.07	−88.47	132.61	0.67	0.48	0.83	1.04	0.57	+12	−15	−30	−	7	+	8	−12	−13	−19	+28	−36	0	0.69
103674	21 00 25.37	+55 46 20.0	8.26		H	315.105 705 92	+55.772 232 43		4.96	3.67	−12.45	0.60	0.58	0.68	0.70	0.72	−	3	−	8	+	1	+	0	+	6	−	4	+	4	+	5	+	9	+14	0	−0.47
*103675	21 00 27.70	+19 19 47.0	5.69	1	H	315.115 407 86	+19.329 725 83		5.47	−17.03	−59.66	0.64	0.40	0.80	0.78	0.42	−	7	+	8	−	3	+	0	+26	−	9	+14	+45	−	6	+13	3	1.00
*103676	21 00 27.67	−47 01 15.5	9.29		H	315.115 300 18	−47.020 970 58		1.97	20.09	−17.41	1.16	0.87	1.45	1.35	0.83	+23	−20	−19	−30	−	4	+	1	−	8	−34	+18	+	1	0	−0.14
103677	21 00 29.48	+01 36 36.8	8.24		H	315.122 818 88	+01.610 232 22		4.84	28.62	−4.95	0.99	0.62	1.11	1.20	0.61	+25	−	6	−16	−18	−10	+23	−	9	−12	+21	+38	0	1.01
103678	21 00 29.71	+17 21 52.8	9.78		H	315.123 774 85	+17.364 656 27		25.60	−53.63	−165.27	1.33	1.03	1.69	1.89	1.02	+20	+	5	−	6	+12	+	8	+10	+	2	+36	−12	+41	3	1.95
103679	21 00 32.42	−83 08 47.8	7.24		H	315.135 096 16	−83.146 601 37		4.10	11.96	−3.23	0.51	0.47	0.62	0.62	0.51	+	4	−20	−12	+	6	+23	−	6	+21	−	6	+	6	+	6	2	1.80
103680	21 00 32.44	−54 55 11.8	9.16		H	315.135 150 40	−54.919 950 24		3.13	7.12	−7.03	0.99	0.99	1.40	1.21	0.96	+19	−20	−27	+	8	−17	+	7	−24	−27	+29	−10	2	−0.03
103681	21 00 32.65	−05 28 38.3	6.53		H	315.136 038 67	−05.477 312 50		5.22	13.28	−17.10	1.25	0.86	1.32	3.14	1.03	+43	−38	−52	−26	−43	+38	−12	−37	+	4	+68	0	1.34
103682	21 00 33.81	−04 43 47.7	6.21		H	315.140 884 20	−04.729 924 04		37.80	47.64	−138.75	0.85	0.50	1.01	1.33	0.51	+37	−	5	−	5	+19	+	0	+26	+10	−27	+29	+68	0	0.70
103683	21 00 34.98	+29 45 36.1	8.44	1	H	315.145 750 79	+29.760 040 32		0.98	10.48	0.35	0.73	0.76	1.17	0.89	0.86	+	1	+16	−19	+21	+34	−19	+31	+	2	+25	−	9	0	−0.33
103684	21 00 35.20	−42 39 20.1	9.48	2	H	315.146 666 99	−42.655 594 53		1.45	−3.59	−18.88	1.17	0.81	1.51	1.26	0.68	+30	−22	−	9	−27	−18	+11	−25	−52	+20	+	3	0	1.58
103685	21 00 36.11	+56 18 07.9	8.99		H	315.150 475 02	+56.302 185 47		4.31	0.81	10.39	0.66	0.68	0.76	0.77	0.79	−10	−16	+	4	+22	+	2	−20	+	3	+	7	+	7	+	0	0	0.02
103686	21 00 39.44	+08 12 40.6	8.49		H	315.164 327 22	+08.211 264 22		0.09	0.87	17.66	1.10	0.60	1.17	1.48	0.60	+36	−	2	+14	+	7	+25	+20	+19	+61	+11	+45	0	−1.29
103687 H	21 00 40.38	−35 17 30.3	6.70		H	315.168 261 71	−35.291 736 35	A	16.58	66.15	−65.56	0.97	0.67	0.95	1.18	0.83	+24	−17	−27	+11	−31	+18	−25	+27	−11	−	1	0	−0.55
103688	21 00 40.70	−05 21 28.4	8.30		H	315.169 582 73	−05.357 898 27		6.01	17.92	−10.20	1.39	0.78	1.59	1.57	0.88	+51	−35	−43	+	4	−27	+29	−	4	+14	−27	+27	0	0.27
103689 H	21 00 40.75	−41 10 44.8	8.55		H	315.169 790 62	−41.179 097 99	A	7.66	39.48	−26.13	2.14	1.43	2.23	1.57	1.00	+27	−23	−18	−44	−19	+15	−23	−47	+19	+35	2	0.77
103690	21 00 43.00	+16 03 49.7	7.76		H	315.179 148 65	+16.063 795 93		4.49	−10.76	4.43	0.87	0.56	1.16	1.02	0.59	+	7	+21	−	3	+43	+17	+20	+	7	+73	−17	+21	0	−0.17
103691	21 00 43.27	+33 53 23.6	9.62		H	315.180 280 85	+33.889 899 68		14.86	−0.63	−320.94	0.75	0.92	1.42	0.81	1.04	−14	+	7	+	2	−	1	+	6	−20	+	8	+	3	+15	−19	0	0.99
103692	21 00 43.40	+17 26 52.7	8.05		H	315.180 820 67	+17.447 975 45		18.98	264.45	4.60	0.85	0.57	1.08	1.03	0.59	+19	−	7	+14	+38	+29	+	3	+23	+67	−	8	+34	0	1.29
103693	21 00 43.41	−53 44 20.5	6.26	1	H	315.180 876 64	−53.739 014 33		4.05	13.28	−22.98	0.63	0.50	0.78	0.77	0.48	+11	−27	−27	+	9	−10	+21	−	5	−21	+	2	+	0	0	−1.23
103694	21 00 44.54	+44 47 07.2	8.49		H	315.185 585 28	+44.785 327 52		6.44	13.15	18.43	0.72	0.65	0.86	1.02	0.82	−16	+	7	−	2	−14	+	9	+	5	+	9	−16	+12	−30	0	0.02
103695	21 00 44.72	+09 59 45.1

No.	Tycho Magnitudes					Colour Indices					Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
103601	8.488	0.014	8.029	0.014		0.446	0.016	T	0.52	0.02	L	8.0843	0.0021	0.014	57		8.06	8.11		C			1							
103602	8.842	0.011	8.365	0.011		0.449	0.014	T	0.52	0.01	L	8.4137	0.0012	0.012	132		8.39	8.43		C			1							S
103603	8.350	0.010	7.118	0.006		1.052	0.009	T	1.02	0.01	L	7.1651	0.0011	0.011	136		7.15	7.18					1							S
103604	8.907	0.020	8.432	0.020	*	0.447	0.026	T	0.52	0.03	L *	8.7057	0.0014	0.015	114	*	8.67	8.74		D	20595+5013	I 1	2 C A	AB	149	1.934	0.003	0.41	0.01	
103605	8.424	0.010	7.435	0.009		0.843	0.006	G	0.86	0.00	H	7.5037	0.0011	0.010	105		7.49	7.52		C			1							S
103606	8.324	0.008	6.795	0.004		1.285	0.007	T	1.24	0.01	L	6.8170	0.0009	0.008	121		6.80	6.83					1							S
103607	9.200	0.014	8.020	0.009		1.011	0.013	T	0.99	0.01	L	8.0695	0.0018	0.015	129		8.04	8.09					1							S
103608	9.307	0.013	9.355	0.018		−0.039	0.020	T	−0.02	0.02	L	9.3774	0.0022	0.021	189		9.34	9.41		C			1							
103609	9.298	0.021	8.307	0.015		0.856	0.002	G	0.87	0.00	H	8.3642	0.0016	0.014	57		8.34	8.39		D			1 G							
103610	9.810	0.022	8.511	0.013		1.104	0.020	T	1.07	0.02	L	8.5638	0.0010	0.012	107		8.55	8.59		C			1							
103611	9.449	0.023	8.689	0.018		0.673	0.007	G	0.72	0.02	A	8.7471	0.0026	0.021	78		8.71	8.78					1							
103612	8.162	0.008	8.080	0.009		0.081	0.011	T	0.09	0.01	L	8.0952	0.0012	0.012	130		8.06	8.12		C			1							
103613	10.323	0.036	9.542	0.031		0.694	0.036	T	0.75	0.03	L	9.5867	0.0020	0.019	93		9.55	9.62		C			1							
103614	10.223	0.028	9.550	0.025		0.623	0.031	T	0.69	0.03	L	9.6170	0.0020	0.019	102		9.59	9.65		C			1							
103615	10.930	0.060	10.389	0.060		0.507	0.076	T	0.58	0.08	L	10.4056	0.0028	0.024	95		10.37	10.46		C			1							G
103616	6.116	0.005	6.244	0.008		−0.110	0.008	T	−0.09	0.01	L	6.2249	0.0017	0.021	54		6.21	6.26	2.24	P 1 A			1							S P
103617	10.389	0.027	9.027	0.014		1.154	0.024	T	1.12	0.02	L	9.0762	0.0016	0.022	184		9.04	9.11		C			1							
103618	10.533	0.054	9.384	0.033		0.987	0.049	T	0.97	0.04	L	9.4219	0.0031	0.019	53		9.38	9.45		C			1							
103619	9.314	0.015	8.171	0.010	A	1.700	0.495	G	0.98	0.02	L *	8.1975	0.0013	0.013	113	*	8.18	8.22		D	20597+7417	I 1	2 C B	AB	138	4.379	0.028	3.66	0.13	
103620	9.369	0.018	8.443	0.014	*	0.829	0.002	G	0.87	0.00	H *	8.4797	0.0018	0.013	81	*	8.46	8.51		D	20597−5211	I 1	2 C S A	AB	49	0.185	0.010	0.50	0.38	
103621	8.750	0.010	7.033	0.005		1.433	0.009	T	1.42	0.01	L	7.0212	0.0010	0.012	125		7.00	7.04					1							S
103622	10.506	0.026	8.763	0.011		1.453	0.022	T	1.46	0.04	L	8.7498	0.0021	0.023	171		8.71	8.79					1							
103623	10.340	0.037	8.656	0.016		1.407	0.032	T	1.39	0.04	L	8.6228	0.0018	0.015	94		8.59	8.65					1							
103624	7.762	0.007	6.866	0.005		0.793	0.004	G	0.82	0.03	C	6.9140	0.0007	0.008	151		6.90	6.93					1							S
103625	10.873	0.045	9.032	0.017		1.563	0.040	T	2.60	0.06	O	8.7862	0.0054	0.071	122		8.72	8.90		U 2			1							
103626	10.005	0.037	9.223	0.031		0.697	0.002	G	0.75	0.00	H	9.3287	0.0032	0.017	51		9.30	9.36		C			1 G							
103627						0.987	0.007	G	1.03	0.01	I	11.8428	0.0099	0.069	99		11.76	11.99					1							G
103628	8.133	0.007	7.995	0.009		0.133	0.011	T	0.15	0.01	L	8.0358	0.0012	0.010	129		8.02	8.05					1							S
103629	10.616	0.031	9.131	0.015		1.250	0.027	T	1.21	0.03	L	9.1840	0.0015	0.016	183		9.15	9.22		C			1							
103630	8.940	0.024	8.606	0.028	*	0.317	0.035	T	0.37	0.05	L *	8.6903	0.0031	0.026	122	*	8.65	8.73		R	20598+2004	I 1	2 C A	AB	252	3.288	0.005	0.57	0.02	
103631	10.135	0.033	9.811	0.037		0.311	0.054	T	0.36	0.07	L	9.7809	0.0028	0.024	75		9.75	9.83		C			1							
103632	4.641	0.002	4.739	0.003	*	−0.084	0.004	T	−0.06	0.01	L *	4.7200	0.0016	0.013	98	*	4.70	4.74		U 2 C	20598+4731	I 1	2 C A	AE	33	0.202	0.030	2.84	0.38	S
103633	8.573	0.010	6.939	0.006		1.367	0.009	T	1.34	0.01	L	6.9491	0.0010	0.009	98		6.93	6.97					1							S
103634	10.161	0.030	9.634	0.029		0.495	0.038	T	0.57	0.04	L	9.7233	0.0019	0.017	98		9.69	9.75		C			1							G
103635	7.058	0.005	6.656	0.005		0.376	0.005	G	0.44	0.01	H	6.7111	0.0007	0.007	142		6.70	6.72		C	20599+1650	I 1	1							S
103636						1.437	0.020	G	1.77	0.05	I	11.7666	0.0053	0.058	127		11.65	11.85					1							G
103637	7.922	0.009	6.754	0.005		1.002	0.008	T	0.98	0.01	L	6.8027	0.0010	0.008	109		6.79	6.82		C			1							S
103638	9.350	0.016	8.802	0.015		0.513	0.020	T	0.59	0.02	L	8.8647	0.0014	0.012	109		8.84	8.89					1							
103639	9.498	0.017	9.088	0.017		0.388	0.022	T	0.45	0.02	L	9.1625	0.0021	0.018	112		9.13	9.20		C			1							
103640	6.819	0.006	6.634	0.005		0.177	0.007	T	0.19	0.01	L	6.6681	0.0011	0.008	87		6.65	6.68		C			1 G							S
103641	7.256	0.005	6.655	0.005	A	0.584	0.015	G	0.62	0.01	L *	6.6971	0.0008	0.008	140	*	6.68	6.71			20599+4015	I 1	2 C B	AD	215	1.949	0.027	4.07	0.10	S
103642	9.665	0.019	9.020	0.017		0.600	0.015	G	0.67	0.01	H	9.0901	0.0024	0.021	113		9.05	9.13					1							
103643	9.248	0.017	8.778	0.017	*	0.443	0.022	T	0.51	0.02	L *	8.8285	0.0023	0.018	88	*	8.79	8.86			21000−5326	H 1	2 C S A	AB	26	0.120	0.027	1.17	0.96	
103644	8.464	0.010	7.237	0.006		1.048	0.009	T	1.02	0.01	L	7.2915	0.0007	0.008	130		7.27	7.31					1							S
103645	8.995	0.009	7.063	0.004		1.638	0.008	T	2.26	0.02	O	6.8993	0.0021	0.027	217		6.85	6.94		U 2			1 S							S
103646	6.552	0.005	6.143	0.005		0.400	0.006	T	0.47	0.01	L	6.1941	0.0007	0.005	88		6.18	6.21		C			1							S
103647	10.360	0.035	9.691	0.031	*	0.609	0.035	T	0.68	0.03	L *	9.7471	0.0044	0.040	90	*	9.69	9.83		R	21000−5111	I 1	2 C A	AB	272	0.318	0.008	0.38	0.15	
103648	8.093	0.009	7.752	0.008		0.323	0.011	T	0.37	0.01	L	7.8117	0.0012	0.015	127		7.79	7.84					1							S
103649	11.900	0.131	10.046	0.039		1.255	0.002	G	1.38	0.15	K	9.9870	0.0033	0.024	108		9.94	10.04					1							G
103650	10.711	0.047	9.454	0.028		1.120	0.015	G	1.20	0.02	I	9.4447	0.0018	0.018	102		9.41	9.47					1							
103651	10.742	0.068	9.134	0.029		1.347	0.058	T	1.31	0.07	L	9.1963	0.0029	0.018	56		9.17	9.23		C			1							
103652	6.314	0.004	6.016	0.004	*	0.283	0.006	T	0.32	0.01	L *	6.0563	0.0007	0.006	103	*	6.05	6.07		D	21001+0731	I 1	2 C A	AB	34	0.355	0.008	1.90	0.03	S
103653	9.817	0.034	9.285	0.032		0.507	0.035	T	0.58	0.04	L	9.3126	0.0021	0.016	58		9.28	9.36					1							
103654	7.635	0.006	6.931	0.005		0.627	0.007	G	0.69	0.01	H	6.9973	0.0008	0.009	163		6.98	7.01					1							S
103655	12.365	0.201	10.558	0.059	*	1.520	0.020	G	2.22	0.15	I *	10.2137	0.0043	0.042	140	*	10.15	10.29		U 2	21001+4004	I 1	2 C A	AB	76	1.015	0.019	2.03	0.10	G P
103656	11.768	0.095	9.688	0.023		2.180	0.510	G	2.17	0.52	J	9.5987	0.0440	0.387	131		8.92	9.96	14.71	P 1 A			1							G
103657	11.699	0.128	10.103	0.049		1.337	0.108	T	1.30	0.13	L	10.2030	0.0033	0.022	53		10.16	10.24		D			1							
103658	7.336	0.007	7.330	0.008		0.010	0.010	T	0.03	0.01	L	7.3098	0.0014	0.016	113		7.28	7.33		U	21001+4841	I 1	1 S							S
103659	8.007	0.012	7.538	0.009		0.442	0.014	T	0.51	0.01	L	7.5856	0.0012	0.008	69		7.57	7.60		C			1							S
103660	7.772	0.008	7.325	0.007		0.422	0.010	T	0.49	0.01	L	7.3736	0.0009	0.009	124		7.36	7.39		C			1							S
103661	11.015	0.054	9.920	0.033		0.946	0.049	T	0.94	0.04	L	10.0144	0.0034	0.023	93		9.96	10.08		C			1							
103662	9.682	0.017	8.410	0.011		1.083	0.016	T	1.05	0.01	L	8.4833	0.0017	0.016	138		8.46	8.51					1							S
103663	9.423	0.016	9.010	0.017		0.390	0.022	T	0.46	0.02	L	9.0420	0.0017	0.016	101		9.02	9.06		C			1							
103664	10.831	0.036	9.260	0.016		1.318	0.031	T	1.28	0.04	L	9.2618	0.0029	0.031	172		9.21	9.32		U			1							
103665	10.132	0.029	8.350	0.013		1.484	0.025	T	1.50	0.04	L	8.3278	0.0022	0.017	86		8.30	8.35					1							
103666	9.613	0.020	9.269	0.021		0.280	0.015	G	0.32	0.02	H	9.3553	0.0018	0.018	117		9.32	9.39		C			1							
103667	11.440	0.056	9.471	0.016		1.668	0.048	T	2.34	0.08	O	9.2936	0.0026	0.036	209		9.24	9.36		U 2			1							
103668	10.493	0.047	9.711	0.037		0.695	0.046	T	0.75	0.04	L	9.7541	0.0038	0.023	81		9.72	9.79		C			1							
103669	8.996	0.013	7.800	0.008	A	1.024	0.012	T	1.00	0.01	L	7.8485	0.0065	0.021	104	A	7.82	7.88		U	21003+6130	I 1	2 C A	AB	75	14.341	0.028	2.92	0.09	S
103670	9.403	0.024	8.050	0.014		1.147	0.022	T	1.11	0.02	L	8.0944	0.0024	0.014	63		8.06	8.12		C			1							S
103671	8.326	0.013	7.963	0.014		0.385	0.015	G	0.45	0.02	H	8.0172	0.0016	0.012	77		8.00	8.04		C			1 G							S
103672	11.275	0.076	10.540	0.065		0.797	0.003	G	0.84	0.00	H	10.4478	0.0026	0.022	85		10.41	10.49					1							G
103673	6.327	0.004	5.824	0.003		0.480	0.017	G	0.59	0.07	F	5.8728	0.0007	0.006	96		5.87	5.89					1							S
103674	9.834	0.019	8.369	0.011		1.234	0.017	T	1.19	0.02	L	8.4175	0.0016	0.014	116		8.40	8.44					1							
103675	7.766	0.008	5.895	0.004		1.588	0.007	T	2.09	0.03	O	5.7633	0.0022	0.018	130		5.73	5.78		U 2	21005+1920	I 1	1 S							S
103676	10.572	0.039	9.327	0.022		1.062	0.035	T	1.03	0.03	L	9.4598	0.0025	0.020	92		9.43	9.49		C			1							
103677	8.595	0.013	8.245	0.013		0.337	0.015	G	0.39	0.02	H	8.3243	0.0018	0.011	77		8.31	8.35		C			1							S
103678	11.239	0.066	9.980	0.034		1.073	0.058	T	1.04	0.05	L	9.9365	0.0025	0.028	159		9.90	9.99		R			1 G							G
103679	9.072	0.011	7.400	0.006		1.397	0.010	T	1.37	0.01	L	7.3871	0.0013	0.012	143		7.37	7.41					1							S
103680	10.769	0.044	9.359	0.023		1.191	0.039	T	1.15	0.04	L	9.3261	0.0026	0.022	81		9.28	9.36		C			1							
103681	6.585	0.004	6.530	0.004		0.056	0.005	T	0.07	0.00	L	6.5551	0.0005	0.007	97		6.54	6.57					1 G							S
103682	6.984	0.005	6.278	0.004		0.635	0.008	G	0.66	0.02	A	6.3397	0.0006	0.007	100		6.33	6.36					1							S
103683	10.667	0.036	8.648	0.013		1.673	0.030	T	1.70	0.03	L	8.5455	0.0031	0.026	120		8.51	8.59		U			1							
103684	9.699	0.018	9.451	0.021		0.236	0.026	T	0.26	0.03	L	9.5480	0.0185	0.141	125		9.34	9.67	0.07	P 1 A			1							
103685	9.465	0.015	9.029	0.015		0.430	0.015	G	0.50	0.02	H	9.0860	0.0015	0.019	126		9.06	9.13					1							
103686	10.382	0.035	8.658	0.015		1.438	0.030	T	1.43	0.05	L	8.6271	0.0015	0.018	132		8.59	8.65					1							
103687	7.964	0.010	6.823	0.005	*	0.981	0.009	T	0.96	0.01	L *	6.8620	0.0010	0.008	94	*	6.85	6.87		D	21007−3518	I 1	2 C A	AB	95	1.018	0.029	3.61	0.09	S
103688	8.715	0.012	8.336	0.012		0.368	0.015	G	0.43	0.02	H	8.3841	0.0013	0.012	95		8.36	8.42		C			1 G							S
103689	9.177	0.012	8.704	0.012	A	0.700	0.495	G	0.55	0.05	L *	8.6535	0.0013	0.016	137	*	8.62	8.68		D	21007−4111	I 1	2 C A	AB	341	1.362	0.012	2.16	0.12	S
103690	8.911	0.010	7.865	0.007		0.909	0.009	T	0.91	0.01	L	7.9151	0.0008	0.010	165		7.90	7.94					1							
103691	10.627	0.031	9.771	0.023		0.751	0.030	T	0.79	0.02	L	9.7556	0.0024	0.030	200		9.71	9.80			21007+3354	I 1	1 S							G
103692	8.905	0.011	8.128	0.009		0.707	0.011	T	0.76	0.01	L	8.1897	0.0013	0.012	162		8.17	8.21		C			1							S
103693	8.338	0.010	6.457	0.005		1.563	0.009	T	1.58	0.01	L	6.3821	0.0017	0.013	95		6.36	6.41		M			1							S
103694	9.445	0.016	8.595	0.013		0.740	0.015	G	0.79	0.01	H	8.6350	0.0022	0.016	110		8.61	8.66		C			1							
103695	7.686	0.006	7.650	0.007		0.038	0.009	T	0.05	0.01	L	7.6778	0.0009	0.011	184		7.66	7.70		C			1							S
103696	10.257	0.026	9.701	0.025		0.526	0.027	T	0.60	0.03	L	9.7582	0.0029	0.027	120		9.72	9.80					1							
103697	10.090	0.030	8.809	0.017		1.090	0.027	T	1.05	0.03	L	8.8614	0.0030	0.019	81		8.83	8.91					1							
103698	9.900	0.020	8.682	0.012		1.041	0.018	T	1.01	0.01	L	8.6913	0.0012	0.014	179		8.67	8.72		C			1							
103699	8.988	0.018	8.180	0.014	A	0.747	0.002	G	0.79	0.00	H *	8.1656	0.0024	0.015	70	*	8.14	8.19		D	21008−0821	I 1	2 C A	AB	249	2.682	0.025	3.03	0.08	S
103700	7.142	0.009	7.269	0.010	*	−0.109	0.011	T	−0.09	0.01	L *	7.2088	0.0124	0.064	126	*	7.12	7.27		U 2 C	21008+4635	H 1	2 C A	AB	237	1.033	0.007	1.95	0.04	S P

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Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
103701	21 00 50.78	−31 13 58.5	9.04	H	315.211 599 01	−31.232 929 43	1.81	3.09	−1.94	1.20	0.90	1.41	1.23	1.10	+30	−48	−39	−10	− 7	+17	+ 9	+17	−20	+17	0	1.28
103702	21 00 51.41	+68 26 41.2	10.20	H	315.214 220 39	+68.444 785 99	10.77	72.51	30.45	0.97	0.98	1.05	1.24	1.12	− 3	+ 2	+17	−14	+ 2	− 9	+ 4	−22	+ 2	− 1	0	0.03
103703	21 00 51.78	−17 31 51.1	6.07	H	315.215 768 21	−17.530 855 32	5.98	−31.09	−17.44	0.84	0.55	0.88	1.06	0.74	− 7	+ 0	−22	−14	+ 4	+32	+ 7	+20	+ 3	+13	0	1.37
103704	21 00 52.72	+46 22 59.3	8.57	H	315.219 676 25	+46.383 127 30	2.97	−0.77	−8.30	0.67	0.70	0.89	0.80	0.85	− 5	+10	− 2	− 6	− 1	+ 1	+ 1	−14	+14	− 2	0	1.03
103705	21 00 53.14	−36 03 14.8	6.64	G	315.221 421 58	−36.054 119 55	7.95	39.40	62.56	0.78	0.56	0.87	0.95	0.75	+31	−32	−21	+13	− 6	+21	− 1	+32	− 2	+19	0	1.55
103706	21 00 53.37	+37 39 11.2	8.10	H	315.222 354 47	+37.653 098 72	3.35	18.93	2.90	0.48	0.60	0.76	0.48	0.62	−12	+ 0	− 5	− 7	+ 2	− 9	+ 2	− 4	+ 4	− 8	0	1.61
103707	21 00 53.65	+53 11 51.1	9.45	H	315.223 545 67	+53.197 523 58	2.61	−6.14	−14.88	0.84	0.65	0.82	0.93	0.76	+ 1	+ 4	+ 2	−33	+ 0	+ 4	+ 0	−14	− 1	+ 2	0	−0.95
103708	21 00 53.73	+24 51 53.4	8.46	H	315.223 859 97	+24.864 845 47	3.65	−2.47	−6.93	0.76	0.63	1.19	0.98	0.67	−10	− 1	−16	−51	+44	−18	+39	+ 4	+10	−14	0	−0.72
103709	21 00 53.78	+15 03 22.3	8.24	H	315.224 073 90	+15.056 201 00	3.76	−0.99	−4.27	0.75	0.55	1.07	0.84	0.59	+ 6	−15	+ 6	+33	+14	− 5	+ 4	+69	− 7	+32	0	−0.15
103710	21 00 53.80	−42 08 38.1	10.04	H	315.224 176 99	−42.143 918 30	17.74	−19.21	−43.65	1.54	1.10	1.94	1.59	0.91	+37	−31	− 5	−24	−26	+14	−35	−54	+13	+ 8	0	0.56
103711	21 00 54.32	−32 20 51.6	9.10	H	315.226 342 76	−32.347 679 06	3.42	6.02	−5.81	1.17	0.79	1.49	1.51	1.04	+35	−36	−41	−20	−27	+49	+ 1	+34	−22	+ 4	0	2.03
103712	21 00 54.38	−19 55 03.4	8.55	H	315.226 580 34	−19.917 623 76	3.70	9.92	−11.45	1.15	0.72	1.14	1.37	1.02	+ 8	+ 5	−13	−48	− 7	+18	−13	−14	−17	+29	0	−0.23
103713	21 00 57.21	−42 01 44.7	11.10	G	315.238 354 97	−42.029 092 36	24.07	408.65	−5.70	2.20	1.69	2.81	2.25	1.44	+44	−36	−15	−22	−25	+13	−36	−54	+18	+15	1	1.08
103714	21 00 58.50	−34 08 15.1	10.12	H	315.243 755 55	−34.137 523 31	12.81	4.16	15.96	1.50	0.93	1.76	1.89	1.44	+28	− 9	− 9	− 9	−14	+34	−17	+33	− 9	+23	0	0.05
103715	21 01 01.28	+51 21 34.4	9.13	H	315.255 353 66	+51.359 550 28	1.83	2.68	−2.95	0.79	0.70	0.88	1.01	0.77	− 5	−10	+ 8	− 9	−13	− 9	−12	− 6	+10	− 8	0	1.75
103716	21 01 02.00	−11 27 37.9	8.84	H	315.258 315 22	−11.460 529 00	1.21	9.06	7.55	1.19	0.78	1.42	1.72	1.02	+24	−12	−31	+ 1	−24	+26	−16	+28	−10	+25	0	0.03
103717	21 01 02.12	+51 23 05.9	9.85	H	315.258 820 32	+51.384 959 94	3.49	−4.41	−3.33	0.96	0.84	1.05	1.38	0.91	− 3	−10	+15	+ 8	−23	− 3	−20	− 1	+ 6	−15	0	1.26
103718	21 01 02.29	+09 09 24.5	9.92	H	315.259 550 21	+09.156 792 29	0.63	3.18	−0.66	1.41	0.75	1.54	1.82	0.76	+26	−16	+ 7	+ 1	+20	+16	+12	+56	− 1	+40	0	1.32
103719	21 01 02.96	−12 33 57.6	9.75	H	315.262 349 98	−12.566 007 88	7.41	−9.83	4.96	1.75	1.10	1.85	2.55	1.40	+ 8	+ 0	− 4	+32	−38	+13	−32	+28	−10	+16	0	0.69
103720	21 01 03.28	−29 43 42.8	7.09	H	315.263 681 55	−29.728 560 77	7.56	24.99	−38.46	0.84	0.64	0.94	1.08	0.83	+16	−31	−29	+12	− 7	+17	− 2	+21	− 2	+11	0	−0.17
103721	21 01 03.64	−65 32 02.0	9.90	H	315.265 166 01	−65.533 880 74	3.19	32.34	6.12	0.94	0.97	1.59	1.13	1.30	−20	+ 1	+ 0	+21	+19	+12	+23	+26	− 2	−13	0	1.66
103722	21 01 04.04	+01 02 05.6	7.28	H	315.266 843 89	+01.034 902 05	0.73	1.03	13.35	0.97	0.57	1.02	1.55	0.55	+34	− 7	−13	−33	−28	− 2	−24	−29	+ 9	+37	0	1.08
103723	21 01 04.19	−28 52 35.5	9.37	H	315.267 452 72	−28.876 536 31	9.78	−34.30	−43.36	1.25	1.06	1.51	1.54	1.41	+36	−29	−30	+ 0	− 6	+35	+ 0	+20	+ 8	+40	0	1.26
103724	21 01 04.86	−00 46 07.9	8.43	H	315.270 265 44	−00.768 848 66	4.11	0.93	13.33	1.10	0.64	1.24	1.27	0.61	+32	−40	−25	− 9	−17	+27	−15	−14	+22	+41	0	−0.25
103725	21 01 06.16	+34 24 59.1	8.58	H	315.275 681 33	+34.416 411 87	2.89	16.68	−14.87	0.55	0.64	0.98	0.62	0.67	−29	−11	+17	− 6	− 1	+10	− 2	+ 3	− 6	−33	1	−0.76
103726	21 01 06.46	−29 45 00.0	8.16	H	315.276 898 17	−29.750 011 31	9.33	16.64	−39.51	0.99	0.76	1.12	1.33	0.99	+ 5	− 9	−25	+13	−22	+27	−17	+14	− 8	+ 0	0	−0.97
103727	21 01 07.68	+20 36 32.1	9.23	H	315.282 006 10	+20.608 915 91	1.30	5.32	−5.94	0.96	0.66	1.29	1.21	0.69	− 6	+ 4	−11	+19	+ 9	− 1	+ 4	+51	−20	+ 0	0	−0.66
103728	21 01 08.33	−13 31 48.0	6.55	H	315.284 722 33	−13.530 004 85	6.05	−0.17	5.47	0.78	0.51	0.95	1.00	0.69	+30	−29	−16	−18	−16	+42	−21	+25	+12	+43	0	−1.52
103729	21 01 08.62	−03 26 28.6	7.90	H	315.285 916 53	−03.441 275 57	2.92	25.94	−26.63	0.87	0.55	1.04	1.23	0.52	+38	−19	−16	+ 4	+ 1	+24	− 1	−33	+36	+61	0	−0.02
103730	21 01 09.43	+11 57 12.5	7.69	H	315.289 289 77	+11.953 485 41	5.97	−20.48	−14.72	0.66	0.44	0.87	0.91	0.49	+10	−16	+ 9	+ 8	+26	+ 3	+16	+56	− 5	+27	0	1.15
103731	21 01 09.53	+52 08 13.1	7.77	H	315.289 710 25	+52.136 974 87	3.85	−29.11	−2.06	0.60	0.52	0.66	0.71	0.56	+ 2	+ 4	+15	+ 7	−10	− 1	−10	− 2	− 3	−11	0	0.27
103732 H	21 01 10.92	+46 09 20.8	5.38	1 G	315.295 510 32	+46.155 764 88 A	2.39	6.14	3.43	0.50	0.53	0.58	0.53	0.55	− 5	+ 3	− 7	+ 4	− 5	−15	− 4	−13	+19	− 5	4	−0.45
103733	21 01 12.65	−58 14 18.7	8.71	H	315.302 704 82	−58.238 539 41	3.11	16.30	−17.35	0.78	0.74	1.23	0.90	0.74	− 5	−13	+ 1	−16	+21	+ 2	+24	− 1	−12	−31	0	1.22
103734	21 01 12.87	+36 01 33.7	6.01	H	315.303 613 08	+36.026 025 14	4.96	−3.86	−6.36	0.35	0.41	0.57	0.35	0.41	−26	+ 2	+ 8	−12	− 2	− 6	− 1	−11	+ 7	−24	0	0.51
103735	21 01 13.49	−35 11 02.2	7.68	H	315.306 209 44	−35.183 954 22	22.18	−180.80	−51.23	1.07	0.62	1.11	1.43	0.85	+17	−35	−35	+38	−24	+14	−15	+41	−15	−12	0	−1.64
103736	21 01 14.31	+43 43 18.4	7.70	1 G	315.309 643 70	+43.721 782 06	3.37	6.91	2.40	0.61	0.55	0.75	0.70	0.64	−15	−23	+ 2	+ 5	− 1	+ 4	− 5	−18	+13	−17	0	−0.42
103737	21 01 15.92	−22 52 39.1	8.20	G	315.316 340 09	−22.877 514 00	9.32	40.29	−5.77	1.10	0.93	1.30	1.24	1.21	+40	−44	−40	− 6	+15	+32	+25	+45	− 6	+42	0	1.41
103738	21 01 17.46	−32 15 28.0	4.67	1 G	315.322 756 95	−32.257 766 81	14.59	−2.09	−0.19	0.70	0.47	0.79	0.77	0.62	+29	−43	−25	−26	−10	+32	+ 0	+19	− 7	+22	0	0.11
103739	21 01 18.35	+10 07 26.9	8.74	H	315.326 461 90	+10.124 143 17	3.25	7.73	1.90	0.85	0.51	1.02	1.27	0.55	+16	− 5	+ 3	+25	+20	+24	+15	+55	− 2	+27	1	−0.81
103740	21 01 20.14	−33 32 39.0	9.13	H	315.333 917 05	−33.544 157 33	2.03	−8.13	−0.99	1.28	0.76	1.44	1.66	1.20	+31	−21	− 6	−21	−19	+19	−18	+25	−14	+26	0	−0.60
103741	21 01 21.76	−47 19 38.8	9.90	G	315.340 684 28	−47.327 432 82	5.38	100.11	−132.47	1.24	0.95	1.58	1.46	0.87	+26	− 9	− 8	−21	−15	+ 4	−18	−40	+ 4	− 3	0	1.19
103742	21 01 22.17	+01 04 11.2	7.16	1 H	315.342 388 09	+01.069 780 63	2.93	7.39	−40.47	0.90	0.53	0.97	1.38	0.49	+35	− 4	− 5	−25	−27	− 3	−21	−22	+ 8	+34	0	1.98
103743	21 01 22.21	−49 21 05.0	7.70	G	315.342 527 55	−49.351 376 88	12.85	42.50	8.11	0.74	0.60	0.90	0.97	0.57	+22	−11	−27	+19	−12	+18	−11	−26	+ 8	+10	0	0.42
103744	21 01 22.42	−02 30 50.3	7.95	H	315.343 395 93	−02.513 978 84	7.24	3.40	−11.46	0.85	0.60	1.19	1.38	0.64	+29	− 9	−31	− 9	−30	+57	−10	+ 8	+ 2	+22	0	1.94
103745	21 01 23.70	−75 25 29.5	8.35	H	315.348 760 16	−75.424 865 98 A	4.35	25.99	−16.79	1.71	1.76	1.79	1.79	1.94	−17	−10	+ 5	+11	+ 6	+ 0	+ 6	+ 2	− 5	−15	3	2.76
*103746	21 01 25.01	−23 04 42.7	7.81	H	315.354 203 40	−23.078 518 13	2.20	−7.22	−10.72	0.98	0.79	1.17	1.06	0.92	+39	−40	−48	− 5	+ 6	+20	+17	+28	− 5	+30	0	0.00
*103747 T	21 01 24.93	−75 25 44.3	10.08	H	315.353 856 98	−75.428 982 94 B	6.41	21.40	−18.51	11.06	12.71	6.81	6.55	7.62	−18	− 8	+ 8	+ 7	+ 4	− 4	+ 5	+ 1	− 5	−15	3	2.76
103748	21 01 25.90	−32 53 44.2	6.86	H	315.357 900 51	−32.895 601 63	6.17	−11.53	−2.26	0.77	0.49	0.89	1.00	0.69	+20	−26	−27	+ 4	−25	+36	−16	+29	−12	+ 4	0	0.26
103749 H	21 01 26.09	+40 37 04.6	7.14	G	315.358 694 98	+40.617 947 13 A	19.29	50.75	1.19	0.83	0.90	0.84	0.69	0.78	−23	− 1	+ 1	+ 8	+ 6	− 7	+ 7	+ 7	− 4	− 6	2	−0.07
103750	21 01 26.26	−57 36 47.8	10.00	H	315.359 423 14	−57.613 266 48	1.04	16.56	12.03	1.04	1.04	1.75	1.31	0.98	−12	+14	−29	−32	+36	−31	+32	−17	+16	−39	0	−1.29
103751	21 01 26.43	−18 55 02.8	9.00	H	315.360 129 51	−18.917 457 23	2.35	8.31	−2.28	1.43	0.91	1.63	2.00	1.29	− 1	+16	−28	− 1	−12	+24	−11	+22	−29	+ 0	0	0.31
*103752	21 01 28.03	−68 12 34.6	6.36	H	315.366 794 88	−68.209 605 95	12.00	−15.51	5.30	0.36	0.43	0.62	0.41	0.50	−28	− 7	− 7	+ 8	− 5	− 5	− 7	− 1	+ 6	−43	0	−1.27
*103753	21 01 28.03	+47 12 19.9	8.98	G	315.366 787 80	+47.205 540 09	1.17	−0.28	−9.00	0.74	0.71	0.90	0.85	0.82	+ 4	+23	− 1	−19	− 7	− 2	− 8	−11	− 3	+15	0	1.38
103754	21 01 28.71	+79 17 43.8	8.65	G	315.369 644 44	+79.295 488 17	20.24	117.77	187.06	0.60	0.62	0.66	0.69	0.68	− 1	− 2	+ 5	+25	+ 2	−11	+ 3	−17	+13	− 1	0	−2.73
103755	21 01 28.86	−15 13 45.2	11.23	3 H	315.370 238 08	−15.229 209 38	−2.99	18.77	−106.21	2.04	1.42	2.46	2.58	1.87	+35	−22	−28	−14	−24	+37	−22	+33	− 3	+36	0	−0.06
103756	21 01 29.00	+10 44 09.4	9.09	H	315.370 823 46	+10.735 951 27	1.81	3.57	−6.76	1.01	0.61	1.21	1.37	0.66	+17	+ 1	+12	− 2	+31	+23	+17	+59	+ 1	+33	0	−0.24
103757	21 01 29.66	+26 43 53.6	8.69	G	315.373 581 36	+26.731 561 89	3.84	24.21	−3.45	0.61	0.63	0.99	0.65	0.65	+ 7	+ 8	− 3	+13	+25	−11	+24	+23	− 1	+14	0	0.43
103758 H	21 01 32.31	+66 42 33.6	8.24	H	315.384 613 04	+66.709 322 46 A	5.78	5.59	−19.77	1.29	1.21	1.16	1.56	1.12	− 1	+17	+ 7	+ 3	− 1	+ 1	+ 2	+ 3	− 3	+22	1	−0.13
103759 H	21 01 32.83	−27 48 12.1	7.62	G	315.386 781 03	−27.803 370 29 A	2.75	8.33	8.10	1.86	1.62	1.77	1.92	1.44	+25	+ 5	−41	−19	−24	+43	+ 5	+ 0	−14	−14	1	0.22
103760	21 01 33.13	+01 30 14.8	8.22	H	315.388 031 63	+01.504 124 38	0.25	−16.03	−15.91	0.96	0.56	1.11	1.07	0.55	+37	−23	−13	−26	−22	+22	−21	−13	+11	+44	0	1.53
103761	21 01 35.03	+25 11 09.9	9.86	H	315.395 974 66	+25.186 096 75	4.15	1.93	−6.14	0.76	0.79	1.43	0.95	0.86	+ 9	− 6	−20	−33	+41	−20	+37	+17	− 9	+ 8	1	1.02
103762	21 01 35.87	−16 26 08.3	8.20	H	315.399 439 07	−16.435 641 46	2.21	−8.08	−6.04	0.99	0.71	1.12	1.43	0.96	+23	−14	−22	+13	−24	+23	−18	+24	−11	+25	0	0.73
103763	21 01 36.91	+68 09 47.8	7.34	1 H	315.403 788 40	+68.163 271 15	2.33	6.74	−1.48	0.55	0.55	0.62	0.64	0.54	−15	−22	+37	+ 6	+ 4	− 6	+ 9	−10	− 9	+ 0	0	1.33
103764	21 01 37.69	+21 26 44.4	8.84	H	315.407 054 37	+21.445 668 95	2.52	−5.45	−13.60	0.70	0.76	1.21	0.99	0.75	+25	−11	− 1	+ 4	+32	+ 3	+31	+59	− 8	+18	0	1.04
103765	21 01 37.96	+63 41 09.0	8.15	H	315.408 180 55	+63.685 831 84	3.10	−12.17	− 5.09	0.58	0.60	0.66	0.62	0.66	− 1	−14	+ 6	+15	+18	− 4	+21	+ 6	+ 1	+25	1	0.62
103766	21 01 38.38	−00 28 38.7	10.83	G	315.409 906 79	−00.477 415 48	27.61	157.14	−136.38	2.10	1.21	2.42	2.47	1.15	+35	−25	−31	−25	−18	+37	−14	− 7	+22	+45	0	−0.84
103767 H	21 01 38.66	+47 30 06.6	7.93	H	315.411 078 65	+47.501 820 85 A	14.62	99.25	45.94	1.12	1.61	1.01	1.10	0.89	−17	+13	− 3	−19	− 3	+10	− 4	−11	+ 6	+ 9	0	1.17
103768	21 01 38.93	−32 31 27.1	9.37	G	315.412 217 31	−32.524 182 10	48.87	244.32	−120.90	1.36	0.90	1.71	1.88	1.32	+27	−10	−28	−12	−24	+43	−13	+27	−21	+12	2	0.85
103769	21 01 40.45	−04 07 53.5	7.24	2 H	315.418 560 25	−04.131 516 51	4.47	3.78	6.58	0.86	0.57	1.03	1.25	0.54	+42	−18	− 9	+ 1	− 6	+24	− 6	−40	+31	+65	0	−0.71
103770	21 01 41.66	+28 06 05.3	7.76	H	315.423 587 53	+28.101 480 31	12.01	11.89	−42.14	0.59	0.55	0.95	0.69	0.59	− 5	− 3	+ 1	+ 7	+22	−14	+19	+17	+19	−12	0	−1.03
103771	21 01 41.72	−13 30 28.9	8.97	H	315.423 824 22	−13.508 023 14	2.83	−4.15	−30.29	1.16	0.84	1.44	1.48	1.11	+27	−21	−26	− 1	− 6	+40	− 4	+44	− 5	+35	0	−1.19
103772	21 01 42.19	+62 07 18.2	9.11	H	315.425 774 88	+62.121 710 27	2.32	2.31	− 9.78	0.70	0.69	0.79	0.70	0.74	+ 8	− 7	+11	−10	+23	+15	+23	− 5	+ 1	+35	0	0.60
103773	21 01 42.78	−23 47 57.1	8.51	H	315.428 269 43	−23.799 204 74	8.26	12.08	−35.05	1.05	0.82	1.35	1.51	1.15	+11	+19	−12	+15	+ 5	+55	+16	+22	+23	+32	3	0.00
103774	21 01 42.93	−48 52 41.4	9.53	H	315.428 867 06	−48.878 163 37	2.80	12.71	−16.06	1.14	0.85	1.33	1.48	0.83	+30	− 8	− 9	+ 0	−11	+16	−13	−28	− 5	+ 9	0	−2.45
103775 H	21 01 43.49	+29 37 48.5	7.98	H	315.431 192 75	+29.630 139 79 A	2.16	0.71	− 5.05	0.94	1.02	1.36	1.03	1.04	+ 1	+24	−16	+11	+27	−17	+29	+10	+30	− 5	2	−0.52
103776	21 01 44.01	−44 31 06.5	11.02	H	315.433 367 93	−44.518 465 82	17.01	56.35	38.20	2.97	2.33	3.45	3.34	1.95	+35	− 3	+ 2	−30	−22	− 8	−26	−55	− 7	+13	4	2.53
103777	21 01 45.27	−26 52 51.4	6.04	H	315.438 623 72	−26.880 933 51	10.94	15.24	−24.68	0.91	0.64	0.96	1.03	0.81	+15	−26	−31	−30	+ 0	+23	+ 5	+13	− 6	+21	0	1.28
103778	21 01 45.69	+11 33 28.3	9.45	H	315.440 383 84	+11.557 858 19	5.56	3.24	−0.37	1.04	0.68	1.31	1.32	0.74	+15	−17	+ 8	− 7	+30	+ 3	+18	+56	− 6	+33	0	0.30
103779	21 01 47.44	+44 11 13.6	6.76	H	315.447 681 53	+44.187 117 14	13.64	22.86	−85.33	0.57	0.49	0.66	0.73	0.57	−21	+ 6	+ 2	− 6	+ 7	+ 3	+ 6	−11	+ 8	−28	0	0.89
103780	21 01 49.36	−33 59 04.7	10.31	H	315.455 659 97	−33.984 639 11	3.05	−0.46	6.36	1.60	0.95	1.82	1.89	1.40	+40	−29	−21	−29	−24	+32	−16	+18	−15	+26	0	−0.61
103781	21 01 49.72	+07 31 47.6	7.91	H	315.457 153 27	+07.529 877 35	4.60	13.67	−16.54	0.96	0.51	1.04	1.35	0.51	+23	−15	+ 2	+ 9	+ 3	+21	+ 5	+52	+ 2	+27	0	−1.32
103782 H	21 01 50.08	+39 15 38.4	7.46	G	315.458 651 68	+39.260 658 57 A	5.25	−13.41	−18.41	0.86	0.98	1.10	0.93	1.03	−12	−13	+ 0	+34	+ 0	−22	+ 1	− 5	+16	+ 3	3	−1.95
103783	21 01 50.63	−36 34 26.9	7.12	H	315.460 961 23	−36.574 135 17	2.61	9.41	− 7.02	0.83	0.63	0.96	1.07	0.89	+30	−20	−14	+12	− 6	+24	− 4	+28	+ 0	+25	0	1.28
103784	21 01 50.93	+21 06 19.3	7.64	H	315.462 192 38	+21.105 349 11	18.56	111.66	30.49	0.62	0.49	0.96	0.86	0.51	+ 1	−14	− 4	− 5	+25	+ 1	+19	+50	−10	+ 4	0	2.17
103785	21 01 52.41	−04 39 57.7	8.76	G	315.468 384 53	−04.666 030 37	10.32	53.45	−18.85	1.18	0.65	1.33	1.73	0.64	+41	−16	−11	+22	− 4	+ 1	+10	−37	+14	+70	0	0.39
103786	21 01 52.56	−74 29 32.7	10.17	H	315.468 979 95	−74.492 412 43	−0.72	7.90	−14.79	1.65	1.75	2.32	1.95	1.98	−15	− 4	−12	−12	− 1	− 4	− 1	− 9	+11	−30	2	
103787	21 01 52.97	−22 34 56.7	9.62	G	315.470 723 83	−22.582 415 58	25.84	163.33	−77.61	1.43	1.23	1.60	1.63	1.70	+38	−29	−32	−14	+16	+18	+22	+28	− 8	+45	0	−2.26
103788	21 01 54.17	+49 38 31.9	8.50	H	315.475 728 03	+49.642 183 50	3.44	37.42	27.59	0.73	0.70	0.85	0.89	0.77	+ 0	−13	+21	+19	+ 6	− 9	+ 8	+23	− 3	+ 2	0	−0.16
103789	21 01 54.76	+02 16 43.5	10.20	H	315.478 167 43	+02.278 749 84	1.63	1.96	−14.16	1.56	0.93	1.75	1.78	0.95	+48	−33	− 7	−54	−19	+38	−27	−14	+18	+59	0	−0.27
*103790	21 01 54.87	+57 45 55.0	7.19	H	315.478 631 07	+57.765 291 36	4.34	9.58	11.52	0.48	0.45	0.52	0.50	0.46	−11	− 5	− 1	+19	−16	+15	+ 6	− 1	− 1		1	0.11
*103791 H	21 01 54.85	+23 39 57.2	7.82	G	315.478 525 25	+23.665 896 51 *	1.59	2.70	−9.73	0.71	0.60	1.09	0.77	0.61	+ 0	− 7	−19	+43	+20	−30	+14	+36	+ 6	− 2	0	−0.40
103792	21 01 55.01	+57 04 18.7	6.70	H	315.479 210 55	+57.071 855 86	4.30	5.69	3.20	0.47	0.41	0.50	0.52	0.44	− 6	−26	+ 0	+29	+ 7	−27	+ 7	+10	+ 3	+ 2	1	2.60
103793	21 01 55.07	+40 18 40.0	7.88	H	315.479 454 46	+40.311 113 22	5.34	18.19	9.32	0.53	0.59	0.76	0.64	0.73	−14	− 6	− 5	+ 8	+ 7	− 0	+ 3	−10	+ 0	−17	1	1.23
103794	21 01 55.29	−42 04 46.5	7.99	1 H	315.480 380 73	−42.079 586 68	3.34	−8.67	−28.15	0.87	0.65	1.16	0.81	0.52	+37	−35	− 9	−28	−23	+23	−32	−57	+17	+20	0	1.30
103795	21 01 56.32	+27 07 47.8	9.14	H	315.484 665 59	+27.129 937 24	1.03	11.60	1.79	0.62	0.67	1.02	0.68	0.72	+ 5	+ 2	− 3	+19	+11	+17	−10	+16	− 5	+ 8	0	−1.80
103796	21 01 57.40	+47 01 09.9	7.79	H	315.489 152 32	+47.019 418 70	6.46	28.70	−1.73	0.59	0.55	0.70	0.69	0.57	− 2	+ 4	+ 3	−28	− 7	+15	− 7	−16	+ 5	+ 4	1	−0.78
103797	21 01 58.23	−60 48 26.6	8.67	H	315.492 633 32	−60.807 392 80	6.88	13.10	18.87	0.58	0.68	1.11	0.94	0.68	+15	−20	−10	−27	+22	+ 6	+24	− 1	− 4	−28	1	−0.08
103798	21 01 58.38	+13 19 28.1	7.94	H	315.493 240 26	+13.324 461 80	3.92	6.52	−4.42	0.72	0.46	0.92	0.94	0.55	+ 4	−18	− 2	+ 5	+27	+12	+20	+48	−23	+20	0	−0.11
103799	21 01

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
103701	11.365	0.091	9.266	0.027		1.736	0.076	T	1.76	0.08	L	9.1448	0.0029	0.023	64		9.11	9.19					1							
103702	11.194	0.059	10.252	0.040		0.831	0.053	T	0.85	0.04	L	10.3565	0.0029	0.023	107		10.31	10.39					1 S							G
103703	7.705	0.009	6.199	0.007		1.267	0.009	T	1.23	0.01	L	6.2250	0.0013	0.007	56		6.21	6.24		C			1 S							S
103704	8.796	0.012	8.596	0.014		0.127	0.005	G	0.14	0.01	H	8.6224	0.0014	0.017	126		8.60	8.65					1							
103705	7.992	0.009	6.744	0.005		1.057	0.002	G	1.02	0.00	H	6.8117	0.0010	0.008	88		6.79	6.82		C			1							S
103706	9.381	0.013	8.224	0.009		0.993	0.012	T	0.97	0.01	L	8.2662	0.0010	0.014	162		8.24	8.29		C			1							S
103707	9.841	0.021	9.487	0.022		0.336	0.028	T	0.39	0.04	L	9.5341	0.0015	0.015	102		9.51	9.56					1							G
103708	9.938	0.020	8.588	0.011		1.144	0.018	T	1.11	0.02	L	8.6303	0.0011	0.014	157		8.61	8.66		C			1							
103709	10.248	0.023	8.401	0.009		1.536	0.020	T	1.59	0.04	L	8.3614	0.0012	0.014	185		8.34	8.38					1							
103710	11.352	0.060	10.123	0.033		1.043	0.055	T	1.01	0.04	L	10.1885	0.0029	0.029	133		10.15	10.24		C			1							
103711	10.845	0.073	9.234	0.032		1.349	0.063	T	1.31	0.07	L	9.2468	0.0021	0.018	93		9.22	9.28		C			1							
103712	9.019	0.018	8.588	0.018		0.421	0.021	T	0.49	0.02	L	8.6501	0.0019	0.009	57		8.64	8.67					1 S							S
103713						1.217	0.009	G	1.44	0.02	A	11.2362	0.0060	0.052	123		11.14	11.32					1							G
103714	10.771	0.049	10.188	0.048		0.545	0.061	T	0.62	0.06	L	10.2423	0.0031	0.027	112		10.21	10.29		C			1							
103715	9.646	0.022	9.155	0.022		0.462	0.028	T	0.53	0.03	L	9.2332	0.0021	0.021	115		9.21	9.27					1							
103716	10.014	0.031	8.970	0.020		0.907	0.028	T	0.91	0.02	L	8.9969	0.0030	0.019	63		8.97	9.02					1							
103717	10.654	0.045	9.895	0.036		0.692	0.045	T	0.75	0.04	L	9.9935	0.0028	0.027	120		9.93	10.04					1							G
103718	11.454	0.079	9.987	0.035		1.236	0.068	T	1.19	0.07	L	10.0815	0.0022	0.023	131		10.04	10.12					1							G
103719	10.828	0.054	9.803	0.035		0.893	0.048	T	0.90	0.04	L	9.9066	0.0020	0.023	76		9.88	9.97		D			1							
103720	7.265	0.006	7.106	0.009		0.153	0.010	T	0.17	0.01	L	7.1376	0.0015	0.009	61		7.12	7.15					1							S
103721	10.325	0.021	9.921	0.023		0.395	0.026	T	0.46	0.03	L	9.9892	0.0027	0.032	188		9.93	10.05					1 S							
103722	9.285	0.026	7.398	0.011		1.568	0.022	T	1.59	0.02	L	7.3993	0.0012	0.010	69		7.38	7.42		D			1							S
103723	10.203	0.037	9.460	0.032		0.665	0.037	T	0.73	0.03	L	9.5052	0.0033	0.016	62		9.47	9.53		C			1							
103724	9.766	0.022	8.551	0.014		1.039	0.020	T	1.01	0.02	L	8.6018	0.0020	0.014	81		8.58	8.62		C			1							
103725	8.626	0.008	8.586	0.010		0.042	0.012	T	0.06	0.01	L	8.6047	0.0018	0.018	169		8.57	8.64					1							
103726	8.507	0.013	8.171	0.014		0.324	0.021	T	0.38	0.03	L	8.2441	0.0017	0.012	60		8.22	8.27		C			1							S
103727	9.427	0.017	9.259	0.020		0.150	0.020	G	0.17	0.02	H	9.2879	0.0017	0.016	126		9.27	9.32		C			1							
103728	7.615	0.008	6.645	0.007		0.852	0.008	T	0.87	0.01	L	6.7004	0.0008	0.006	87		6.69	6.71		C			1							S
103729	9.904	0.020	8.082	0.009		1.516	0.017	T	1.55	0.03	L	8.0193	0.0013	0.015	122		7.99	8.04					1							
103730	8.147	0.006	7.726	0.007		0.398	0.009	T	0.46	0.01	L	7.7793	0.0010	0.013	187		7.76	7.81		C			1							S
103731	9.177	0.013	7.888	0.008		1.096	0.012	T	1.06	0.01	L	7.9383	0.0013	0.012	127		7.92	7.96					1							
103732	5.160	0.003	5.396	0.004	A	−0.206	0.009	G	−0.24	0.01	L *	5.3464	0.0020	0.018	125	*	5.32	5.37		U 2	21012+4609	I 1	2 C B	AB	161	2.850	0.025	4.16	0.13	S P
103733	10.054	0.022	8.819	0.014		1.054	0.020	T	1.02	0.02	L	8.8814	0.0019	0.021	114		8.85	8.92					1							
103734	7.271	0.004	6.113	0.003		0.994	0.004	T	0.97	0.00	L	6.1728	0.0006	0.007	168		6.16	6.18					1							S
103735	8.456	0.010	7.772	0.009		0.620	0.010	T	0.69	0.01	L	7.8084	0.0010	0.010	104		7.79	7.83		C			1							S
103736	7.566	0.007	7.686	0.008		−0.102	0.005	G	−0.09	0.01	H	7.6706	0.0017	0.015	99		7.64	7.70		U			1							S
103737	8.669	0.014	8.235	0.014		0.415	0.015	G	0.48	0.02	H	8.2923	0.0014	0.016	58		8.27	8.32		D			1							S
103738	5.787	0.003	4.769	0.002		0.890	0.003	G	0.90	0.02	A	4.8136	0.0013	0.011	91		4.81	4.84		U 2	21013−3215	I 1	1							S
103739	8.701	0.009	8.707	0.012		−0.001	0.014	T	0.02	0.01	L	8.7450	0.0012	0.015	162		8.72	8.77		C			1							
103740	11.005	0.055	9.255	0.022		1.459	0.047	T	1.47	0.07	L	9.2640	0.0017	0.018	105		9.24	9.29		C			1							
103741	10.751	0.044	9.891	0.032		0.677	0.005	G	0.74	0.00	H	10.0475	0.0035	0.025	93		10.01	10.09		C			1							
103742	9.170	0.021	7.344	0.010		1.519	0.018	T	1.55	0.03	L	7.2852	0.0017	0.009	67		7.27	7.31		M			1							S
103743	8.278	0.012	7.737	0.011		0.510	0.015	G	0.58	0.02	H	7.8134	0.0013	0.010	85		7.80	7.83		C			1							S
103744	8.950	0.013	8.037	0.010		0.815	0.015	G	0.84	0.01	H	8.1044	0.0012	0.009	103		8.09	8.12		C			1 G							S
103745	8.630	0.009	8.340	0.010	A	0.276	0.012	T	0.31	0.01	L	8.4212	0.0123	0.065	157	A	8.35	8.52		D	21014−7526	I 2	1 C P A							S
103746	9.925	0.031	8.008	0.013		1.591	0.027	T	1.61	0.03	L	7.9193	0.0019	0.014	56		7.90	7.95					1							S
103747	10.421	0.030	9.897	0.030	B	0.492	0.038	T	0.56	0.04	L	10.1500	0.0477			B				D	21014−7526	I 2	1 C I A							
103748	7.045	0.005	6.878	0.006		0.160	0.007	T	0.18	0.01	L	6.9136	0.0007	0.006	99		6.90	6.93					1							S
103749	7.728	0.006	7.218	0.005	*	0.503	0.003	G	0.58	0.00	H *	7.2627	0.0011	0.011	131	*	7.24	7.28		D	21014+4037	H 1	2 C A	AB	309	0.510	0.020	3.37	0.09	S
103750	10.526	0.032	9.968	0.031		0.527	0.033	T	0.60	0.04	L	10.1129	0.0026	0.027	120		10.06	10.16					1							
103751	10.177	0.047	9.044	0.030		0.680	0.040	G	0.74	0.03	R	9.1411	0.0025	0.014	48		9.12	9.18		C			1							
103752	6.501	0.003	6.372	0.003		0.101	0.002	G	0.11	0.00	H	6.4042	0.0006	0.008	207		6.39	6.42					1							S
103753	9.042	0.014	9.008	0.019		0.021	0.008	G	0.04	0.01	H	8.9801	0.0018	0.018	109		8.95	9.01					1							
103754	9.512	0.017	8.722	0.014		0.717	0.017	T	0.77	0.01	L	8.7953	0.0019	0.021	126		8.76	8.83					1							
103755	11.139	0.068	11.023	0.097		0.112	0.111	T	0.13	0.11	L	11.2705	0.0699	0.541	101		10.40	11.67	0.45	P 1 A			1							G
103756	10.377	0.028	9.202	0.017		1.008	0.026	T	0.98	0.02	L	9.2512	0.0018	0.017	158		9.22	9.28		C			1							
103757	9.096	0.012	8.717	0.013		0.339	0.006	G	0.40	0.01	H	8.7816	0.0014	0.014	149		8.76	8.81					1							
103758	8.767	0.013	8.448	0.014	A	0.500	0.495	G	0.39	0.09	L *	8.3247	0.0021	0.014	110	*	8.30	8.35		D	21015+6643	I 1	2 C A	AB	160	1.347	0.007	0.96	0.02	S
103759	8.817	0.017	7.758	0.012	*	0.884	0.020	G	0.89	0.01	H *	7.8041	0.0022	0.011	60	*	7.78	7.82		D	21015−2748	H 1	2 C A	AB	113	0.483	0.017	2.60	0.06	S
103760	8.162	0.011	8.243	0.014		−0.060	0.015	G	−0.01	0.01	L	8.2205	0.0014	0.012	79		8.20	8.24					1							S
103761	9.888	0.018	9.855	0.027		0.035	0.030	T	0.05	0.02	L	9.8803	0.0021	0.020	183		9.84	9.92		C			1							G
103762	9.912	0.031	8.327	0.015		1.329	0.027	T	1.29	0.03	L	8.3576	0.0015	0.012	70		8.34	8.39		C			1							
103763	7.785	0.007	7.466	0.008		0.306	0.011	T	0.35	0.01	L	7.4118	0.0018	0.013	108		7.39	7.43		M			1 S							S
103764	10.345	0.025	8.945	0.014		1.183	0.022	T	1.14	0.02	L	9.0048	0.0011	0.015	155		8.98	9.03					1							
103765	9.721	0.020	8.296	0.011		1.203	0.018	T	1.16	0.02	L	8.3116	0.0014	0.016	114		8.28	8.34		C			1							
103766						1.407	0.005	G	1.75	0.02	A	10.9308	0.0037	0.038	75		10.86	10.98		C			1							G
103767	8.585	0.012	8.022	0.011	*	0.529	0.007	G	0.60	0.01	H *	8.0487	0.0015	0.012	106	*	8.03	8.07		C	21016+4730	H 1	2 C D	AB	171	0.550	0.028	3.74	0.24	D
103768	11.070	0.107	9.540	0.045		1.239	0.004	G	1.43	0.02	A	9.4479	0.0031	0.019	86		9.41	9.48					1							
103769	9.184	0.013	7.488	0.007		1.444	0.012	T	2.77	0.02	O	7.2025	0.0043	0.051	119		7.10	7.25		U 2			1 S							S
103770	8.309	0.008	7.811	0.009		0.493	0.015	G	0.57	0.02	H	7.8715	0.0012	0.013	138		7.86	7.90					1							S
103771	10.950	0.054	9.111	0.019		1.530	0.045	T	1.57	0.10	L	9.0972	0.0027	0.021	83		9.06	9.13					1							
103772	9.740	0.022	9.167	0.021		0.536	0.027	T	0.61	0.03	L	9.2315	0.0018	0.016	107		9.20	9.25					1							
103773	9.331	0.025	8.593	0.021		0.661	0.025	T	0.72	0.02	L	8.6422	0.0023	0.011	46		8.62	8.66		C			1							S
103774	9.944	0.026	9.557	0.028		0.378	0.033	T	0.44	0.04	L	9.6152	0.0029	0.026	80		9.58	9.66					1							
103775	7.789	0.009	7.917	0.015	*	−0.110	0.015	G	−0.09	0.02	H *	7.9429	0.0018	0.012	115	*	7.92	7.97			21017+2938	I 1	2 C C	AB	206	3.716	0.037	3.83	0.24	S
103776	12.200	0.160	11.050	0.099		0.988	0.147	T	0.97	0.12	L	11.1763	0.0070	0.059	104		11.08	11.28					1 S							G
103777	6.137	0.003	6.056	0.005		0.073	0.005	T	0.08	0.01	L	6.0721	0.0011	0.008	55		6.06	6.09					1							S
103778	9.748	0.017	9.471	0.019		0.264	0.024	T	0.30	0.03	L	9.5216	0.0020	0.024	158		9.48	9.55		C			1							
103779	7.131	0.006	6.785	0.005		0.315	0.006	G	0.30	0.03	C	6.8272	0.0010	0.009	110		6.81	6.84		C	21018+4411	I 1	1							S
103780	10.688	0.049	10.412	0.059		0.263	0.072	T	0.30	0.09	L	10.3740	0.0025	0.026	115		10.32	10.41		C			1							G
103781	7.994	0.008	7.920	0.008		0.073	0.011	T	0.08	0.01	L	7.9444	0.0012	0.012	125		7.93	7.96					1							S
103782	8.073	0.016	7.668	0.015	A	0.402	0.015	G	0.47	0.02	H *	7.5659	0.0009	0.011	155	*	7.55	7.58		D	21018+3916	I 1	2 C A	AB	317	1.188	0.004	0.79	0.01	S
103783	8.938	0.019	7.279	0.010		1.387	0.017	T	1.36	0.02	L	7.2647	0.0013	0.014	76		7.24	7.28					1							S
103784	8.493	0.008	7.714	0.007		0.708	0.008	T	0.76	0.01	L	7.7776	0.0009	0.010	161		7.76	7.80					1							S
103785	9.247	0.015	8.756	0.014		0.425	0.015	G	0.49	0.02	H	8.8414	0.0015	0.013	111		8.82	8.86					1							
103786	10.334	0.022	10.118	0.028		0.200	0.035	T	0.22	0.04	L	10.2381	0.0033	0.038	161		10.14	10.29					1 X S							G
103787	10.920	0.069	9.657	0.038		1.055	0.015	G	1.11	0.02	I	9.7214	0.0029	0.022	48		9.69	9.74		C			1							
103788	10.045	0.022	8.624	0.013		1.200	0.020	T	1.16	0.02	L	8.6684	0.0016	0.015	107		8.64	8.69		C			1							
103789	11.858	0.117	10.386	0.052		1.530	0.001	G	1.66	0.15	K	10.3080	0.0025	0.024	105		10.27	10.34					1							G
103790	7.098	0.004	7.178	0.006		−0.068	0.007	T	−0.05	0.01	L	7.1721	0.0009	0.009	115		7.16	7.19		C			1							S
103791	8.627	0.011	7.911	0.009	*	0.687	0.015	G	0.74	0.01	H *	7.9485	0.0014	0.012	136	*	7.93	7.97		D	21019+2340	I 1	2 C S A	AB	141	0.186	0.004	0.28	0.17	S
103792	6.544	0.004	6.673	0.005		−0.112	0.006	T	−0.10	0.01	L	6.6615	0.0009	0.008	115		6.65	6.68		C	21019+5704	I 1	1							S
103793	8.090	0.009	7.895	0.009		0.187	0.012	T	0.21	0.01	L	7.9393	0.0014	0.015	141		7.91	7.96		C			1 G							S
103794	10.019	0.022	8.207	0.010		1.508	0.019	T	1.54	0.03	L	8.1163	0.0023	0.020	141		8.09	8.15		U			1							S
103795	9.349	0.014	9.152	0.017		0.188	0.021	T	0.21	0.02	L	9.1997	0.0018	0.017	150		9.17	9.23		C			1							
103796	7.865	0.009	7.802	0.011		0.063	0.013	T	0.07	0.01	L	7.8206	0.0015	0.012	114		7.80	7.84					1							S
103797	9.041	0.010	8.697	0.010		0.326	0.013	T	0.38	0.02	L	8.7522	0.0014	0.017	205		8.72	8.78					1							
103798	7.942	0.008	7.935	0.008		0.011	0.010	T	0.03	0.01	L	7.9538	0.0011	0.011	159		7.93	7.97		C			1							S
103799	9.447	0.014	8.128	0.009		1.120	0.013	T	1.08	0.01	L	8.1559	0.0013	0.014	170		8.13	8.18					1							
103800						1.527	0.038	G	2.38	0.02	A	11.2600	0.0056	0.048	95		11.18	11.36					1							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$							F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	δ	π	$\mu_{\alpha*}$							%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28										29	30
103801	21 01 59.85	−11 41 46.3	7.02	H	315.499 355 43	−11.696 195 63		7.05	−19.39	−31.39	0.86	0.54	0.99	1.31	0.74	+15	− 3	−16	+ 7	−18	+30	−16	+34	− 1	+23										2	−0.16
103802	21 02 00.61	+36 58 10.5	8.28	H	315.502 554 39	+36.969 581 60		1.10	−5.72	−9.62	0.50	0.59	0.77	0.52	0.62	−16	+ 9	+ 6	−15	+ 0	− 2	+ 0	− 8	+ 2	−17										2	−0.21
103803	21 02 01.31	−71 50 00.1	8.75	2 H	315.505 451 25	−71.833 349 16		3.65	12.43	−13.94	0.68	0.77	1.09	0.77	0.83	−14	−12	−17	− 3	+20	+ 2	+21	+ 3	−15	−25										0	2.00
103804 H	21 02 02.05	+03 45 58.0	7.85	H	315.508 536 75	+03.766 102 10	A	10.26	10.02	−14.85	1.36	0.68	1.29	1.39	0.63	+38	−33	−13	−24	−11	− 1	−10	+19	+ 4	+41										2	−0.05
103805	21 02 04.90	−50 03 19.0	8.82	H	315.520 419 57	−50.055 271 29		3.47	7.90	−33.89	0.96	0.70	1.15	1.27	0.73	+17	−20	−26	+ 9	−23	+33	−27	−26	+ 3	−24										2	1.53
103806	21 02 05.49	−00 01 03.6	8.69	H	315.522 869 99	−00.017 660 34		2.19	−6.76	6.32	1.08	0.62	1.13	1.48	0.58	+32	−20	−25	−35	− 7	+ 9	−11	− 9	+14	+34										2	0.38
103807	21 02 06.47	+60 54 32.0	9.48	H	315.526 975 15	+60.908 886 78		0.91	−6.08	−5.45	0.72	0.76	0.85	0.73	0.80	+ 8	− 1	+ 5	− 6	+13	+ 0	+18	−18	+ 8	+38										5	−0.07
103808	21 02 07.73	−21 19 56.0	8.97	H	315.532 199 65	−21.332 226 18		3.83	25.43	−13.19	1.12	0.94	1.31	1.50	1.41	+30	−15	−28	− 8	+ 7	+22	+ 7	+27	+ 3	+46										0	0.93
103809	21 02 07.73	+47 58 34.3	8.72	G	315.532 204 20	+47.976 193 20		2.93	−18.61	−19.21	0.73	0.75	0.90	1.00	0.92	− 8	− 4	+ 6	− 7	−13	+13	−14	+ 7	− 7	+ 1										0	1.22
103810 H	21 02 09.00	+56 40 10.6	5.83	G	315.537 485 12	+56.669 611 37	A	4.47	9.75	1.14	0.64	0.56	0.62	0.65	0.57	+ 3	−32	+ 7	+ 7	+ 9	−16	+ 3	+22	+12	+18										1	0.42
103811	21 02 09.48	−50 35 45.0	9.79	G	315.539 517 99	−50.595 829 26		3.28	11.72	13.22	1.24	0.91	1.41	1.77	1.14	+14	−21	−14	− 1	−16	+17	−20	−19	+ 4	−27										0	−1.67
103812	21 02 12.17	+19 54 01.2	9.06	H	315.550 701 66	+19.900 346 50		17.10	3.56	223.43	1.05	0.74	1.30	1.38	0.75	+ 6	+21	+ 5	+ 4	+24	− 3	+16	+71	− 3	+ 9										1	0.25
103813 H	21 02 12.51	+07 10 47.3	6.72	H	315.552 114 21	+07.179 800 89	A	9.83	−5.55	−15.61	2.03	0.96	1.82	2.30	0.86	+26	− 9	+ 1	+ 9	− 2	+28	+ 5	+50	+ 0	+26										2	1.64
103814	21 02 12.67	−43 00 06.8	6.64	G	315.552 800 88	−43.001 877 98		12.28	67.02	−112.70	1.24	0.74	1.04	1.59	1.04	+ 4	−40	−35	−67	− 3	+35	− 5	−56	+37	+15										0	2.87
103815	21 02 14.77	+30 31 18.8	7.98	H	315.561 531 22	+30.521 887 18		4.74	16.35	15.80	0.46	0.59	0.86	0.61	0.67	+ 2	− 8	− 9	+47	+20	−17	+14	+ 4	+18	− 1										0	−0.62
103816	21 02 14.83	+23 05 21.9	9.47	H	315.561 794 57	+23.089 420 92		1.92	−9.55	−7.03	0.92	0.77	1.31	1.04	0.81	+ 4	− 9	−13	+47	+17	−27	+13	+48	+ 5	+ 6										0	0.29
103817 H	21 02 15.34	+20 37 26.2	9.91	H	315.563 919 18	+20.623 931 33	*	−1.27	7.69	−15.71	1.22	0.76	1.61	1.44	0.77	− 1	−22	+ 0	+20	+23	−14	+18	+61	−17	+12										0	−0.31
103818	21 02 17.08	+33 44 19.4	7.81	H	315.571 159 86	+33.738 725 79		13.05	42.83	72.97	0.41	0.54	0.78	0.45	0.60	−25	+ 1	+ 1	+ 2	+ 0	−11	+ 0	− 1	+ 0	−23										1	−0.87
103819	21 02 17.67	−42 59 49.7	6.90	G	315.573 631 96	−42.997 141 55		11.81	71.24	−111.25	0.78	0.51	0.98	0.78	0.43	+36	−38	−27	−34	−17	+21	−22	−48	+22	+14										2	1.71
103820	21 02 18.19	−52 17 29.7	9.36	G	315.575 787 03	−52.291 590 63		32.80	58.37	76.52	1.45	1.01	1.60	3.06	1.40	−10	−20	−23	+44	−28	−17	−39	+ 2	+13	−49										0	−1.03
103821	21 02 20.65	+28 14 41.1	8.68	H	315.586 026 64	+28.244 745 07		0.82	10.98	−4.25	0.76	0.82	1.29	0.87	0.89	− 9	+ 1	+12	+24	+ 6	−29	+ 9	+28	+21	−14										0	0.25
103822	21 02 20.96	+39 30 32.5	6.50	1 H	315.587 320 37	+39.509 032 18	A	2.31	2.01	1.09	0.53	0.58	0.70	0.56	0.65	− 9	−16	− 3	+22	+ 0	−22	− 1	+ 1	+15	− 8										2	1.86
103823	21 02 21.76	+23 19 27.4	7.42	H	315.590 686 02	+23.324 291 65		1.93	6.07	−6.74	0.58	0.50	0.83	0.63	0.53	+14	− 3	−24	+39	+25	−26	+20	+33	+ 5	+13										1	0.48
103824 H	21 02 21.96	+37 39 15.9	7.72	H	315.591 512 57	+37.654 408 38	A	22.83	−79.08	−222.19	1.35	1.77	1.75	1.32	1.71	−19	+10	−12	−10	+ 4	− 8	+ 6	−30	+19	−22										2	1.31
103825	21 02 22.07	−17 18 37.8	7.85	H	315.591 946 94	−17.310 495 64		4.71	−45.32	−7.92	0.89	0.75	1.07	1.13	1.04	+35	− 7	−20	−20	−13	+30	−11	+ 2	− 8	+46										0	1.43
103826	21 02 23.38	−27 02 40.6	9.88	H	315.597 397 34	−27.044 600 44		1.41	5.44	3.37	1.75	1.26	1.83	1.92	1.65	+14	−11	−23	−35	+ 2	+23	+ 7	+ 6	− 7	+22										0	1.40
103827	21 02 23.90	+52 34 32.9	8.66	H	315.599 601 81	+52.575 803 15		3.64	9.42	4.83	0.67	0.58	0.72	0.76	0.61	− 4	+ 3	+12	+ 9	+ 2	− 3	+ 1	−10	− 5	− 6										0	1.11
103828	21 02 24.20	+44 47 27.6	6.18	2 H	315.600 851 55	+44.790 990 18		2.64	−6.09	−4.18	0.52	0.45	0.60	0.71	0.54	−24	+12	− 5	− 3	+ 8	+ 5	+ 6	−21	+ 8	−39										0	−0.30
103829	21 02 24.33	+49 37 58.4	7.92	H	315.601 375 40	+49.632 876 73		2.71	8.74	−0.43	0.58	0.56	0.68	0.69	0.60	− 6	−12	+18	+13	+ 6	−10	+ 7	+19	− 5	+ 1										0	−0.46
103830	21 02 24.92	−42 00 31.8	10.14	H	315.603 828 88	−42.008 845 83		5.27	−6.53	16.19	1.63	1.11	2.16	1.45	0.89	+34	−37	−11	−30	−20	+30	−28	−56	+17	+20										1	1.97
103831	21 02 25.44	−40 39 28.2	9.85	H	315.606 005 38	−40.657 839 10		8.50	2.11	−14.98	1.23	0.91	1.59	1.07	0.72	+38	− 3	− 9	−52	−22	+ 4	−24	−56	+16	+34										3	−0.12
103832	21 02 25.78	−38 56 59.9	10.40	G	315.607 424 44	−38.949 959 69		25.66	−78.74	−348.65	1.64	1.18	2.10	1.57	1.05	+56	−27	−19	−52	−34	+30	−32	−45	+16	+45										5	0.40
103833	21 02 25.85	+27 48 26.4	7.33	2 H	315.607 706 37	+27.807 329 71		20.06	88.25	6.10	0.51	0.55	0.85	0.57	0.57	− 1	− 3	+ 8	+12	+19	−11	+18	+24	+ 9	− 1										0	0.04
103834	21 02 25.99	−12 26 49.2	7.13	H	315.608 273 16	−12.447 011 85		3.76	15.85	−30.39	0.94	0.61	1.03	1.31	0.81	+16	−26	−17	+13	−17	+17	−17	+36	+ 9	+23										0	−0.42
103835	21 02 26.40	+05 33 37.6	8.64	H	315.610 010 14	+05.560 438 08		3.77	−2.25	−39.35	1.01	0.55	1.17	1.34	0.56	+34	− 6	− 7	− 9	− 3	+24	− 2	+35	− 6	+39										3	1.92
103836	21 02 27.05	−38 31 50.0	5.93	H	315.612 717 90	−38.530 558 47		15.21	154.93	−169.51	0.73	0.47	0.89	0.94	0.49	+14	− 6	−17	+ 1	−24	+47	−19	−11	− 8	− 6										2	−0.16
103837	21 02 27.64	+17 57 13.3	8.23	H	315.615 179 78	+17.953 697 43		1.60	1.64	−8.54	0.87	0.69	1.11	1.03	0.75	+23	− 1	+ 2	+23	+36	− 6	+27	+72	− 9	+38										0	−0.05
103838	21 02 28.35	+44 08 49.8	9.00	H	315.618 126 77	+44.147 179 67		1.85	5.39	−1.28	0.87	0.68	0.96	1.11	0.79	−13	+ 7	− 1	− 7	+12	+ 0	+13	−15	+16	−12										0	−1.22
*103839	21 02 28.89	−53 24 23.6	12.60	H	315.620 376 23	−53.406 567 57		2.84	−140.94	−319.81	4.30	3.20	4.98	6.34	4.07	+ 5	−16	−11	−16	− 1	− 7	− 2	−18	+ 3	−22										2	3.94
*103840	21 02 28.85	−09 26 51.9	7.64	H	315.620 196 95	−09.447 751 47		2.31	21.81	−14.89	1.03	0.69	1.19	1.64	0.85	+ 1	− 2	−31	+37	−44	+41	−29	+32	−17	+ 2										0	−1.16
103841	21 02 29.01	+63 10 10.6	9.19	H	315.620 867 82	+63.169 608 79		3.27	10.47	8.88	0.71	0.70	0.80	0.74	0.80	− 7	− 5	+18	+ 1	+22	+14	+23	− 5	− 4	+18										1	−0.60
103842	21 02 30.21	−63 57 49.7	8.11	H	315.625 893 19	−63.963 796 00		2.04	52.40	−34.28	0.61	0.61	1.15	0.74	0.70	−35	− 1	+ 4	+12	+14	−11	+13	+ 8	+ 7	−32										0	−0.13
103843	21 02 31.40	+21 40 51.1	7.92	H	315.630 819 37	+21.680 863 26		6.75	53.35	1.09	0.65	0.60	1.00	0.79	0.60	+16	−17	+10	+17	+34	+ 2	+29	+61	− 6	+23										0	1.41
103844	21 02 31.41	−24 52 30.9	8.29	H	315.630 855 55	−24.875 252 79		8.91	58.45	−2.59	1.07	0.82	1.21	1.29	1.21	+24	− 8	−20	−23	− 6	+22	− 5	+ 1	− 8	+41										0	0.18
103845	21 02 32.33	+35 20 34.8	8.46	G	315.634 725 99	+35.343 009 24		4.73	−25.53	−56.18	0.50	0.61	0.84	0.50	0.65	−19	− 1	+ 3	− 6	−11	− 5	−12	+ 4	+ 5	−18										0	0.25
103846	21 02 33.20	−12 30 43.5	9.40	H	315.638 333 96	−12.512 088 72		4.59	−14.12	− 1.88	1.40	0.94	1.57	2.05	1.35	+22	−17	−18	+ 9	−18	+18	−19	+32	+ 0	+34										0	0.70
103847	21 02 34.29	−15 28 26.0	7.79	H	315.642 868 50	−15.473 878 27		5.66	−29.87	−62.69	0.92	0.58	1.09	1.30	0.74	+17	−11	−30	+ 1	−42	+45	−35	+21	− 8	+17										0	−1.52
103848 H	21 02 34.54	+30 41 08.4	8.53	H	315.643 899 45	+30.685 675 88	A	3.97	−0.48	−2.42	1.19	1.47	1.93	1.45	1.51	− 8	−18	+14	+54	+ 9	−19	+11	+14	+13	+ 3										1	0.88
103849	21 02 34.78	+26 09 26.7	7.76	H	315.644 928 38	+26.157 419 09		9.90	−4.32	6.55	0.56	0.55	0.92	0.66	0.58	+ 0	+ 1	−11	−19	+35	−23	+29	+24	+ 2	+ 6										1	1.81
103850	21 02 35.10	+48 01 50.4	6.86	H	315.646 242 53	+48.030 675 66		3.05	9.25	6.38	0.52	0.49	0.61	0.70	0.56	+ 2	+ 0	+ 8	− 3	− 9	+16	−10	+ 7	− 3	+ 8										0	1.30
103851	21 02 35.23	−09 59 44.4	6.55	2 H	315.646 791 59	−09.995 655 39		2.50	−8.67	13.95	0.78	0.52	0.85	1.13	0.64	+16	−13	−22	+ 6	−30	+19	−24	+10	+ 2	+13										0	1.23
103852 H	21 02 36.08	+21 41 28.2	8.06	G	315.650 348 02	+21.691 171 63	A	12.43	38.94	−31.87	1.30	1.18	1.57	1.14	0.84	− 2	−14	−10	+10	+17	−15	+14	+54	−20	+14										0	0.18
103853	21 02 38.03	−30 46 53.0	8.79	G	315.658 478 40	−30.781 398 42		4.51	−2.69	12.35	1.25	0.90	1.29	1.75	1.10	− 8	−12	−45	+38	−36	+30	−28	+11	−16	−27										0	0.99
103854	21 02 38.99	−61 52 49.2	8.81	H	315.662 445 51	−61.880 328 14		11.11	22.36	−93.27	0.66	0.87	1.27	0.69	0.96	+32	−26	−24	+58	+24	−20	+14	+ 7	+ 4	+16										0	−0.50
103855 H	21 02 39.36	−50 29 35.1	9.07	G	315.664 007 01	−50.493 078 12	A	22.81	236.83	−102.30	2.94	2.01	2.87	3.77	2.25	+13	−17	−13	− 2	−12	+ 8	−11	−19	− 4	− 5										0	1.83
103856	21 02 39.81	+41 17 09.2	8.59	H	315.665 857 53	+41.285 883 02		0.83	−4.77	−10.72	0.56	0.64	0.83	0.65	0.76	−12	+ 0	+ 2	+17	− 8	−18	− 8	− 2	+17	−16										2	−1.55
103857	21 02 40.23	−39 16 50.7	9.06	H	315.667 611 09	−39.280 748 02		0.50	13.00	−22.01	0.99	0.68	1.29	0.92	0.66	+33	− 6	+ 3	−46	− 7	+ 5	− 9	−28	+ 6	+41										0	−0.09
103858	21 02 40.28	+11 39 25.5	7.24	H	315.667 844 54	+11.657 090 20		4.48	15.91	0.60	0.67	0.43	0.81	0.83	0.49	+ 1	−17	+ 4	−20	+24	+ 4	+12	+42	+ 2	+19										1	0.40
103859	21 02 40.42	+45 53 03.9	7.69	G	315.668 411 11	+45.884 427 74		51.65	402.30	141.72	0.60	0.55	0.72	0.66	0.57	−13	+14	+10	+19	+ 2	− 8	+ 4	− 4	+ 5	− 9										1	2.62
103860	21 02 41.14	−34 48 44.8	9.73	G	315.671 415 47	−34.812 450 74		19.77	94.05	−196.73	1.33	0.85	1.49	1.63	1.29	+34	−21	−27	+ 2	−13	+15	− 8	+32	−21	+19										2	1.52
103861	21 02 41.24	+26 30 29.1	7.19	1 H	315.671 826 65	+26.508 086 94		4.36	−0.58	−9.31	0.51	0.52	0.81	0.53	0.54	+ 6	+ 7	− 2	+10	+27	−12	+26	+28	+ 6	+13										0	0.19
103862	21 02 41.59	−35 18 52.2	8.69	H	315.673 296 49	−35.314 495 80		1.78	8.95	−21.00	1.11	0.72	1.17	1.53	1.03	+33	−25	−18	+16	−17	+16	−12	+33	− 2	+ 9										0	−1.16
103863	21 02 42.92	+03 21 01.1	6.62	H	315.678 852 51	+03.350 296 53		6.41	42.01	−18.96	0.95	0.43	0.98	1.02	0.43	+29	−37	−10	−35	−18	+13	−23	+ 8	+10	+40										0	0.71
103864	21 02 43.97	+31 27 50.3	8.74	H	315.683 210 83	+31.463 972 22		2.80	2.52	−1.31	0.55	0.66	0.98	0.69	0.78	−23	+13	− 6	+17	− 3	−16	− 1	− 3	− 1	− 6										0	−0.87
103865	21 02 45.16	−19 14 55.5	6.96	H	315.688 173 32	−19.248 758 16		5.52	21.82	−11.83	0.97	0.73	1.18	1.38	0.98	+24	− 3	−33	−13	−31	−32	−23	− 2	−19	+23										0	−1.42
103866	21 02 45.47	−51 54 17.9	8.74	H	315.689 473 61	−51.904 974 39		2.50	12.93	−4.70	1.06	0.83	1.34	1.90	1.26	+16	−22	−16	+15	+ 0	−25	−10	− 6	+20	−12										4	−1.33
103867	21 02 46.96	−64 17 41.0	11.04	H	315.695 664 56	−64.294 709 34		24.22	157.29	−164.86	1.06	1.02	1.96	1.37	1.25	−49	+ 6	− 2	+ 3	+ 8	−15	+ 7	+ 9	+ 8	−50										0	−0.23
103868	21 02 47.18	+15 58 01.6	6.88	1 H	315.696 579 95	+15.967 122 01		1.98	−4.46	−2.92	0.72	0.43	0.87	0.93	0.47	− 8	+ 6	− 8	+23	+ 1	+16	− 4	+50	− 8	+13										0	−0.93
103869	21 02 47.47	+11 16 48.4	8.09	H	315.697 782 34	+11.280 100 58		6.62	6.17	5.77	0.87	0.50	1.03	1.08	0.55	− 7	−17	+11	−28	+19	+ 3	+ 8	+37	+ 0	+11										0	−0.94
103870	21 02 48.07	+21 48 36.0	7.53	H	315.700 302 64	+21.809 987 61		2.76	7.76	−5.81	0.57	0.47	0.86	0.74	0.49	+10	−10	−14	+ 8	+29	−11	+25	+54	−17	+12										0	1.58
103871	21 02 48.62	+45 50 56.0	6.50	G	315.702 569 02	+45.848 899 36		2.41	2.48	−3.89	0.46	0.43	0.56	0.51	0.43	−13	+14	+13	+10	− 6	− 3	− 5	− 6	+ 7	−21										0	−0.97
103872	21 02 48.81	+48 31 03.3	8.12	H	315.703 393 47	+48.517 584 15		1.98	5.57	1.08	0.57	0.58	0.71	0.71	0.64	− 7	− 4	+20	− 2	− 1	+ 1	− 1	+ 9	− 6	+ 0										0	−0.07
103873	21 02 50.06	+38 34 14.7	8.57	2 H	315.708 571 52	+38.570 745 06		1.22	−16.92	−24.45	0.59	0.73	0.98	0.65	0.82	−10	−14	+ 7	+ 5	+ 9	−12	+10	−11	+ 2	−11										0	0.58
103874	21 02 50.76	+28 19 24.2	7.85	H	315.711 507 33	+28.323 377 15		5.41	23.83	14.66	0.63	0.58	0.98	0.69	0.63	− 2	− 8	+ 4	+40	+18	−26	+16	+20	+27	− 7										0	−0.33
103875	21 02 54.12	+71 30 51.5	8.13	H	315.725 501 54	+71.514 313 16		4.08	20.30	14.16	0.70	0.62	0.72	1.00	0.80	−12	−26	+ 7	− 8	+ 3	+ 2	+ 0	− 5	+11	− 5										1	0.91
103876	21 02 55.07	+32 20 59.6	6.92	H	315.729 447 56	+32.349 891 85		1.92	2.86	−3.45	0.37	0.47	0.70	0.49	0.55	−29	+ 0	− 1	+ 5	+ 5	− 3	+ 4	+ 1	+ 6	−24										0	1.22
103877	21 02 55.90	+28 59 05.6	7.73	H	315.732 907 46	+28.984 876 64		7.30	5.96	−6.62	0.64	0.58	0.94	0.69	0.67	− 3	+10	− 3	+32	+22	−18	+25	+18	+29	− 5										1	−2.78
103878	21 02 56.00	+12 57 07.8	8.15	H	315.733 341 59	+12.952 161 09		6.64	12.59	0.18	0.72	0.51	0.96	0.88	0.63	+ 9	− 7	− 3	− 4	+25	+15	+20	+35	−12	+25										0	0.26
103879	21 02 56.04	+46 16 27.2	9.46	H	315.733 513 07	+46.274 232 73		1.09	−3.54	−5.05	0.79	0.85	1.03	0.94	0.92	− 4	+14	+ 6	+ 3	+ 2	− 2	− 2	− 3	+ 0	+ 0										0	−0.72
103880	21 02 56.49	−29 06 37.2	7.01	H	315.735 369 67	−29.110 337 71		3.75	9.64	−1.98	0.77	0.61	0.89	0.87	0.73	+17	−30	−31	+ 9	−13	+28	− 3	+10	− 4	+17										0	1.02
103881	21 02 57.35	−07 19 17.5	8.22	H	315.738 941 26	−07.321 528 36		9.88	72.11	17.31	1.07	0.58	1.23	1.50	0.57	+42	−23	− 6	+ 8	−22	+23	− 7	−44	+22	+71										0	2.06
103882	21 02 57.97	−38 37 52.3	5.32	H	315.741 561 02	−38.631 182 69		28.32	−27.86	−108.81	0.71	0.49	0.86	0.90	0.49	+15	− 7	−26	− 2	−29	+45	−21	−15	−16	−10										0	−0.48
103883	21 02 58.26	−32 35 16.8	8.29	H	315.742 729 60	−32.588 004 88		10.45	48.79	−15.94	0.97	0.76	1.24	1.29	1.13	+17	− 3	−11	− 7	−19	+39	−14	−14	−29	+14										0	−1.16
*103884	21 02 58.52	+29 58 45.8	8.51	H	315.743 829 55	+29.979 387 89		6.23	−39.29	− 3.35	0.63	0.77	1.21	0.85	0.91	+ 5	− 9	−11	+36	+29	−23	+22	+21	+17	− 5										0	0.50
*103885	21 02 58.48	−41 07 06.2	9.69	H	315.743 683 98	−41.118 376 61		1.14	−8.42	−27.82	1.32	0.93	1.56	1.17	0.77	+37	− 7	−10	−55	−22	+11	−23	−54	+11	+37										0	−0.12
*103886	21 02 58.50	−55 55 38.1	9.09	H	315.743 748 79	−55.927 240 54		9.51	39.50	−30.76	1.16	0.93	1.34	1.62	1.04	+ 6	−18	−14	+ 4	+ 4	+ 4	+ 1	− 2	−32	+ 3	−12										0	−0.22
*103887	21 02 58.51	−63 15 05.8	8.80	H	315.743 789 76	−63.251 600 36		2.52	4.31	1.34	0.84	0.86	1.24	0.90	0.89	+18	− 4	+ 0	+35	+18	+ 0	+17	+ 5	−19	+15										0	−0.79
103888	21 02 59.58	+35 02 15.1	8.19	H	315.748 241 95	+35.037 514 56		6.29	34.82	13.40	0.47	0.60	0.81	0.49	0.63	−20	− 2	+ 3	−10	−10	− 5	−11	− 4	+ 4	−19										0	0.76
103889	21 02 59.62	−00 55 29.1	6.50	G	315.748 426 58	−00.924 747 17		2.24	7.26	1.10	0.73	0.43	0.80	0.91	0.43	+18	−23	−20	−16	−13	+30	−11	−11	+19	+27										2	−0.96
103890	21 03 01.03	+15 45 37.9	7.68	H	315.754 300 18	+15.760 535 31		3.16	12.39	−4.99	0.74	0.48	0.93	0.91	0.54	− 3	− 1	− 7	+20	+10	+12	+ 0	+55	− 6	+23										1	−0.35
103891	21 03 01.78	+14 43 48.1	6.33	1 H	315.757 414 01	+14.730 014 42		5.15	25.64	4.79	0.59	0.39	0.82	0.63	0.43	− 3	−22	+ 1	+28	− 5	−11	−10	+43	− 6	+28								

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
103801	7.543	0.007	7.075	0.006		0.454	0.007	T	0.52	0.01	L	7.1171	0.0011	0.007	62		7.10	7.13		C			1							S
103802	8.307	0.008	8.269	0.010		0.040	0.012	T	0.06	0.01	L	8.2960	0.0012	0.015	167		8.27	8.32					1							S
103803	9.288	0.012	8.796	0.012		0.463	0.015	T	0.53	0.02	L	8.8543	0.0042	0.035	154		8.80	8.91	0.16	P 1 A			1 S							
103804	8.408	0.011	7.931	0.010	A	0.300	0.495	G	0.54	0.02	L *	7.9500	0.0011	0.009	100	*	7.94	7.96		D	21020+0346	I 1	2 C A	AB	202	2.304	0.022	3.43	0.09	S
103805	9.294	0.018	8.856	0.018		0.420	0.015	G	0.49	0.02	H	8.9128	0.0021	0.016	92		8.89	8.94		C			1							
103806	9.926	0.028	8.800	0.018		0.969	0.026	T	0.95	0.02	L	8.8550	0.0025	0.015	75		8.83	8.88					1							
103807	9.836	0.022	9.528	0.024		0.293	0.030	T	0.33	0.04	L	9.5581	0.0027	0.020	110		9.53	9.60		C			1							
103808	10.176	0.042	9.028	0.027		0.986	0.039	T	0.97	0.03	L	9.1308	0.0018	0.014	54		9.10	9.16		C			1							
103809	10.405	0.035	8.829	0.017		1.330	0.015	G	1.29	0.02	I	8.8369	0.0016	0.014	104		8.81	8.87		D			1							
103810	5.535	0.010	5.615	0.010	*	−0.058	0.012	G	−0.04	0.01	H *	5.8002	0.0005	0.005	125	*	5.79	5.81		D	21022+5640	I 1	2 C A	AB	354	1.631	0.002	0.63	0.01	S
103811	10.341	0.033	9.861	0.032		0.558	0.007	G	0.63	0.01	H	9.9028	0.0024	0.022	85		9.87	9.94		C			1							
103812	9.873	0.018	9.151	0.016		0.666	0.015	G	0.73	0.01	H	9.2015	0.0014	0.018	167		9.17	9.23		C			1							
103813	7.247	0.006	6.707	0.006	*	0.500	0.020	G	0.48	0.02	H *	6.8107	0.0011	0.009	130	*	6.79	6.82		R	21022+0711	I 1	2 C A	AB	215	2.854	0.003	0.21	0.01	S
103814	7.436	0.007	6.702	0.006		0.663	0.001	G	0.74	0.07	F	6.7810	0.0009	0.008	122		6.77	6.79		C	21022−4300	I 2	1 G							S
103815	8.098	0.007	7.994	0.009		0.101	0.011	T	0.11	0.01	L	8.0211	0.0012	0.014	174		8.00	8.05					1							S
103816	9.752	0.020	9.443	0.021		0.294	0.027	T	0.34	0.04	L	9.5416	0.0020	0.020	138		9.50	9.57					1							
103817	12.036	0.137	10.092	0.038	*	1.114	0.218	G	1.08	0.23	R *	10.0812	0.0022	0.027	164	*	10.04	10.12			21023+2037	H 1	2 C S C	AB	173	0.130	0.095	2.05	1.52	G
103818	8.376	0.007	7.859	0.007		0.486	0.009	T	0.56	0.01	L	7.9169	0.0009	0.012	209		7.90	7.94					1							S
103819						0.959	0.007	G	1.00	0.07	F	7.0609	0.0008	0.009	120		7.05	7.08		C	21022−4300	I 2	1							S
103820	10.757	0.051	9.464	0.027		1.046	0.006	G	1.10	0.01	I	9.4898	0.0026	0.020	78		9.45	9.53		C			1							
103821	10.644	0.036	8.818	0.014		1.519	0.031	T	1.55	0.05	L	8.8032	0.0021	0.020	118		8.77	8.83		C			1							
103822	8.389	0.009	6.622	0.004	A	1.510	0.015	G	1.46	0.03	C	6.6111	0.0087	0.017	152	A	6.58	6.63		U 2	21023+3931	I 1	2 C A	AB	299	18.826	0.021	2.69	0.10	S
103823	7.428	0.005	7.416	0.006		0.016	0.007	T	0.04	0.01	L	7.4332	0.0011	0.008	132		7.42	7.45		C			1							S
103824	8.549	0.013	7.718	0.010	*	0.748	0.012	T	0.79	0.01	L *	7.8620	0.0011	0.012	153	*	7.84	7.88		D	21024+3739	I 1	2 C A	AB	265	4.662	0.003	0.14	0.01	S
103825	8.126	0.013	7.894	0.013		0.221	0.017	T	0.24	0.02	L	7.9207	0.0021	0.012	56		7.90	7.94		C			1							S
103826	10.470	0.050	9.905	0.047		0.533	0.051	T	0.61	0.05	L	9.9927	0.0038	0.026	52		9.96	10.06		C			1							
103827	8.645	0.010	8.662	0.013		0.020	0.015	G	0.04	0.01	H	8.6764	0.0015	0.014	120		8.65	8.71					1							
103828	8.337	0.010	6.438	0.008		1.687	0.012	G	2.65	0.03	C	6.1764	0.0046	0.046	118		6.12	6.30		U 2			1 S							S P
103829	7.939	0.009	7.908	0.009		0.033	0.012	T	0.05	0.01	L	7.9355	0.0011	0.011	109		7.92	7.96		C			1							
103830	10.734	0.038	10.193	0.036		0.514	0.039	T	0.59	0.04	L	10.2504	0.0039	0.033	131		10.20	10.31					1							
103831	10.428	0.028	9.893	0.026		0.509	0.029	T	0.58	0.03	L	9.9552	0.0021	0.024	159		9.91	10.00		C			1							
103832	11.829	0.143	10.469	0.057		1.158	0.005	G	1.26	0.01	I	10.5324	0.0029	0.032	132		10.48	10.59					1							G
103833	8.085	0.009	7.423	0.007		0.614	0.010	T	0.68	0.01	L	7.4598	0.0031	0.039	134		7.42	7.57	0.70	P 1 A			1							S
103834	9.096	0.016	7.285	0.008		1.507	0.014	T	1.54	0.02	L	7.2561	0.0015	0.009	71		7.24	7.27		C			1							S
103835	10.308	0.030	8.781	0.015		1.283	0.026	T	1.24	0.03	L	8.8023	0.0015	0.014	129		8.78	8.83		C			1							
103836	7.366	0.007	6.070	0.005		1.106	0.005	G	1.07	0.01	K	6.0960	0.0008	0.006	77		6.09	6.11		C			1							S
103837	9.719	0.015	8.373	0.009		1.141	0.014	T	1.10	0.01	L	8.4023	0.0015	0.013	156		8.38	8.42					1							
103838	8.957	0.014	9.019	0.019		−0.052	0.021	T	−0.03	0.02	L	8.9937	0.0022	0.020	110		8.96	9.03					1							
103839											T	12.7367	0.0116	0.099	70		12.54	12.95					1							D
103840	9.454	0.021	7.799	0.011		1.384	0.019	T	1.36	0.02	L	7.7882	0.0009	0.007	74		7.77	7.80		C			1							S
103841	9.347	0.018	9.192	0.022		0.149	0.027	T	0.16	0.03	L	9.2411	0.0017	0.018	108		9.21	9.28					1							
103842	10.084	0.017	8.299	0.008		1.487	0.015	T	1.51	0.02	L	8.2372	0.0016	0.020	222		8.20	8.27					1 S							
103843	9.287	0.033	8.024	0.021		1.076	0.031	T	1.04	0.03	L	8.0898	0.0012	0.011	164		8.07	8.11		C	21026+2141	I 2	1							S
103844	9.346	0.019	8.387	0.014		0.844	0.018	T	0.86	0.01	L	8.4432	0.0022	0.013	53		8.42	8.47		C			1							S
103845	8.829	0.009	8.518	0.009		0.324	0.015	G	0.38	0.02	H	8.5432	0.0014	0.017	180		8.52	8.57		C			1							
103846	9.915	0.027	9.483	0.029		0.422	0.032	T	0.49	0.03	L	9.4938	0.0034	0.020	69		9.46	9.52		C			1							
103847	8.924	0.011	7.890	0.008		0.908	0.015	G	0.92	0.02	A	7.9480	0.0016	0.012	106		7.92	7.97					1							S
103848	9.228	0.013	8.597	0.012	A	0.600	0.495	G	0.66	0.02	L *	8.6596	0.0018	0.017	159	*	8.63	8.68			21026+3041	I 1	2 C C	AB	165	1.563	0.073	3.85	0.30	
103849	8.448	0.009	7.831	0.009		0.571	0.009	T	0.64	0.01	L	7.8823	0.0012	0.011	149		7.87	7.90		C			1							S
103850	9.094	0.013	7.062	0.006		1.683	0.011	T	1.71	0.01	L	6.9639	0.0013	0.011	111		6.95	6.98					1							S
103851	8.580	0.013	6.790	0.006		1.521	0.012	T	2.63	0.04	O	6.5437	0.0105	0.059	72		6.46	6.64		U 2			1 S							S
103852	8.781	0.010	8.144	0.009	*	0.593	0.007	G	0.66	0.01	H *	8.1693	0.0011	0.012	172	*	8.15	8.19		D	21026+2141	I 2	2 C A	AB	342	0.508	0.002	0.89	0.01	S
103853	9.285	0.025	8.831	0.025		0.450	0.015	G	0.52	0.02	H	8.8878	0.0023	0.015	53		8.86	8.92		C			1							
103854	9.547	0.013	8.873	0.011		0.613	0.013	T	0.68	0.01	L	8.9408	0.0016	0.018	173		8.91	8.99		C			1							
103855	10.374	0.034	9.228	0.022	A	1.027	0.004	G	1.07	0.01	I *	9.1975	0.0024	0.018	92	*	9.17	9.25		C	21027−5030	I 1	2 C D	AB	10	5.366	0.028	2.78	0.12	D
103856	8.549	0.009	8.589	0.011		−0.032	0.013	T	−0.01	0.01	L	8.5853	0.0019	0.016	145		8.56	8.61					1							
103857	10.542	0.027	9.189	0.014		1.147	0.024	T	1.11	0.02	L	9.2234	0.0023	0.022	165		9.19	9.27					1							
103858	7.442	0.006	7.257	0.007		0.177	0.009	T	0.19	0.01	L	7.2967	0.0010	0.009	139		7.28	7.31		C			1							S
103859	8.955	0.014	7.825	0.010		0.970	0.016	G	0.93	0.01	L	7.8372	0.0018	0.016	120		7.81	7.86		D	21028+4552	I 2	1 S							
103860	10.882	0.060	9.841	0.038		0.911	0.005	G	0.96	0.01	I	9.8733	0.0028	0.025	114		9.83	9.92		C			1							
103861	9.464	0.013	7.411	0.005		1.700	0.011	T	1.72	0.01	L	7.2954	0.0024	0.020	154		7.26	7.32		U 2			1							S
103862	10.182	0.029	8.828	0.016		1.147	0.026	T	1.11	0.02	L	8.8633	0.0012	0.013	106		8.84	8.89		C			1							
103863	8.003	0.009	6.739	0.005		1.077	0.008	T	1.04	0.01	L	6.7860	0.0010	0.007	106		6.77	6.80		C			1							S
103864	8.722	0.009	8.707	0.011		0.019	0.013	T	0.04	0.01	L	8.7540	0.0017	0.019	171		8.72	8.79		C			1							
103865	8.610	0.016	7.090	0.009		1.278	0.014	T	1.24	0.01	L	7.1207	0.0017	0.008	53		7.11	7.14		C			1							S
103866	10.516	0.045	8.874	0.020		1.374	0.039	T	1.34	0.05	L	8.8908	0.0020	0.017	74		8.85	8.92		C			1							
103867						1.190	0.020	G	1.32	0.04	I	11.1652	0.0025	0.033	242		11.11	11.22		C			1							G
103868	9.104	0.011	7.078	0.005		1.715	0.010	T	2.05	0.03	O	6.9599	0.0015	0.015	144		6.93	6.98		U 2			1							S
103869	8.546	0.011	8.144	0.011		0.392	0.007	G	0.46	0.01	H	8.1789	0.0010	0.012	126		8.16	8.20		C			1							S
103870	7.458	0.005	7.516	0.007		−0.048	0.008	T	−0.03	0.01	L	7.5217	0.0009	0.011	173		7.51	7.54		C			1							S
103871	6.323	0.003	6.471	0.004		−0.124	0.002	G	−0.11	0.00	R	6.4575	0.0006	0.006	125		6.45	6.47		D	21028+4552	I 2	1							S
103872	8.147	0.007	8.129	0.009		0.030	0.015	G	0.05	0.01	H	8.1388	0.0013	0.011	122		8.12	8.16		C			1							
103873	10.546	0.032	8.825	0.013		1.464	0.028	T	2.71	0.04	O	8.5567	0.0068	0.051	147		8.48	8.65		U 2			1 S							
103874	8.062	0.007	7.867	0.008		0.187	0.010	T	0.21	0.01	L	7.9101	0.0014	0.015	139		7.89	7.94					1							S
103875	9.870	0.020	8.297	0.010		1.319	0.018	T	1.28	0.02	L	8.2878	0.0016	0.014	112		8.26	8.31					1							
103876	8.737	0.009	7.050	0.004		1.409	0.008	T	1.39	0.01	L	7.0623	0.0009	0.010	200		7.05	7.08					1							S
103877	8.917	0.012	7.836	0.009		0.935	0.011	T	0.93	0.01	L	7.8893	0.0012	0.012	134		7.87	7.91		C			1							
103878	8.149	0.008	8.138	0.010		0.015	0.012	T	0.03	0.01	L	8.1660	0.0015	0.015	147		8.14	8.19					1							S
103879	9.566	0.023	9.552	0.033		0.018	0.037	T	0.04	0.03	L	9.4738	0.0027	0.026	125		9.43	9.51					1							G
103880	7.131	0.007	7.018	0.009		0.102	0.010	T	0.12	0.01	L	7.0492	0.0011	0.007	58		7.04	7.06		C			1							S
103881	8.715	0.012	8.272	0.011		0.418	0.015	T	0.48	0.02	L	8.3090	0.0011	0.010	109		8.30	8.34					1							S
103882	5.804	0.004	5.369	0.004		0.424	0.005	T	0.49	0.01	L	5.4139	0.0006	0.006	87		5.40	5.42		C			1							S
103883	8.970	0.019	8.390	0.018		0.544	0.019	T	0.62	0.02	L	8.4044	0.0017	0.017	64		8.38	8.43					1							S P
103884	9.982	0.022	8.661	0.013		1.122	0.020	T	1.08	0.02	L	8.6778	0.0017	0.016	147		8.65	8.71		C			1							
103885	10.261	0.023	9.769	0.024		0.566	0.007	G	0.64	0.01	H	9.8099	0.0020	0.024	152		9.77	9.85		C			1							
103886	9.709	0.023	9.118	0.021		0.552	0.023	T	0.62	0.02	L	9.2060	0.0026	0.018	78		9.18	9.24		C			1							
103887	10.751	0.048	8.915	0.018		1.527	0.041	T	1.57	0.09	L	8.9200	0.0031	0.025	104		8.87	8.96					1							
103888	8.734	0.008	8.230	0.008		0.484	0.006	G	0.56	0.01	H	8.2945	0.0014	0.016	173		8.27	8.33					1							
103889	6.365	0.004	6.476	0.005		−0.094	0.015	G	−0.08	0.02	A	6.4711	0.0005	0.005	84		6.46	6.48					1							S
103890	8.851	0.010	7.785	0.007		0.939	0.012	G	0.93	0.01	H	7.8424	0.0008	0.011	156		7.82	7.86		C			1							S
103891	8.513	0.009	6.530	0.004		1.680	0.008	T	2.02	0.03	O	6.4137	0.0013	0.017	155		6.39	6.44		U 2			1							S
103892	6.996	0.021	6.495	0.020	A	0.479	0.007	G	0.55	0.01	H *	6.3245	0.0008	0.006	98	*	6.32	6.33		D	21031+0132	I 1	2 C A	AB	123	1.338	0.004	0.57	0.01	S
103893	8.810	0.012	7.298	0.007		1.271	0.011	T	1.23	0.01	L	7.3246	0.0012	0.010	117		7.31	7.34					1							S
103894	7.385	0.005	6.206	0.003		1.011	0.005	T	0.99	0.00	L	6.2680	0.0007	0.007	159		6.25	6.28		C			1 S							S
103895	10.006	0.026	9.233	0.021		0.680	0.020	G	0.74	0.02	H	9.2859	0.0020	0.018	120		9.26	9.32		C			1							
103896	9.304	0.024	8.618	0.021		0.632	0.003	G	0.70	0.00	H	8.6788	0.0035	0.014	49		8.65	8.70					1							S
103897	10.993	0.049	10.207	0.039		0.637	0.015	G	0.70	0.01	H	10.3312	0.0044	0.033	121		10.28	10.40		U			1							G
103898	9.031	0.016	8.004	0.011		0.894	0.015	T	0.90	0.01	L	8.0389	0.0016	0.011	83		8.02	8.06		C	21031−5246	I 1	1							S
103899	7.802	0.008	7.378	0.008		0.401	0.010	T	0.47	0.01	L	7.4265	0.0010	0.009	81		7.41	7.44		C			1							S
103900	8.463	0.013	8.449	0.016		0.018	0.019	T	0.04	0.02	L	8.4432	0.0018	0.013	60		8.43	8.47		C			1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)											Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
103901	21 03 09.63	+25 55 11.8	8.25		H	315.790 142 69	+25.919 950 26		5.69	9.75	3.38	0.65	0.59	1.02	0.76	0.63	+10	−16	−	5	−	6	+39	−10	+36	+35	−11	+16	0	2.11
103902	H 21 03 10.17	−27 43 53.4	6.25		G	315.792 357 90	−27.731 505 78	*	2.58	35.15	−36.35	2.87	2.78	1.39	1.75	1.44	−49	−	2	−15	−28	+15	+14	+12	−35	−	4	−23	1	0.62
*103903	21 03 11.58	+36 44 38.9	8.46		H	315.798 238 84	+36.744 138 29		2.46	0.69	−2.61	0.53	0.66	0.87	0.57	0.76	−20	+	5	−	2	−12	+	6	−	7	+	5	−16	+	7	−26	0	1.24
*103904	21 03 11.41	−07 47 38.0	9.09		H	315.797 537 12	−07.793 877 19		5.93	23.67	−0.85	1.11	0.70	1.29	1.69	0.71	+45	−18	−	3	+	4	−28	+23	−11	−47	+19	+73	0	1.41
103905	21 03 12.03	+31 59 52.7	7.99		H	315.800 118 04	+31.997 969 16		2.33	−7.89	−20.34	0.51	0.57	0.91	0.66	0.66	−23	+	9	−	3	+19	−	4	−14	−	3	+	7	+	2	−12	0	−0.07
103906	21 03 12.09	−58 29 51.2	9.00		H	315.800 372 90	−58.497 545 61		6.03	−1.34	−4.66	0.83	0.82	1.28	1.03	0.83	−	3	−18	−	5	−13	+19	+12	+18	−10	−	9	−28	1	−0.52
103907	21 03 13.24	−14 49 54.9	8.56		H	315.805 166 56	−14.831 906 75		0.46	−6.95	−28.47	1.12	0.75	1.37	1.49	0.93	+26	−25	−40	−	3	−39	+41	−25	+21	−14	+17		0	−1.46
103908	21 03 13.34	+75 37 14.5	8.06	1	H	315.805 595 77	+75.620 706 02		5.61	−15.54	−27.67	0.62	0.59	0.67	0.67	0.58	−	4	−13	+25	−	7	+13	+11	+10	−17	+10	+10	0	1.59
103909	21 03 13.62	−67 23 29.7	9.35		H	315.806 759 04	−67.391 572 07		3.03	−0.26	−6.55	0.78	0.99	1.45	0.82	1.22	−35	−11	−14	−	5	−12	+	8	−11	+	5	−	5	−50	4	1.60
103910	21 03 14.33	−56 57 51.4	12.88	2	H	315.809 702 66	−56.964 290 43		70.51	−357.97	353.22	3.24	3.07	5.16	3.91	3.27	+	7	−10	+	5	−38	+15	+	2	+27	−	2	−12	−31	3	2.25
103911	21 03 14.57	−60 22 45.7	9.85		H	315.810 696 40	−60.379 351 17		5.11	14.95	−16.51	0.91	1.00	1.65	1.48	1.12	+12	−	5	−22	−26	+20	−17	+27	+	9	+17	−38	0	0.85
103912	21 03 15.02	−37 27 12.1	10.05		H	315.812 584 83	−37.453 374 70		0.96	17.71	−5.63	1.52	1.12	1.66	2.47	1.39	+29	+13	−	2	+13	−37	+18	−37	−15	−18	−	4	0	−2.56
103913	21 03 16.24	+07 04 58.3	10.27		G	315.817 675 34	+07.082 862 49		19.76	246.36	−169.41	1.60	0.92	1.76	2.57	0.97	+28	−26	−	3	+	2	+	6	+17	+	6	+45	+	5	+36	0	1.07
103914	21 03 16.43	−36 45 22.2	9.69		H	315.818 477 35	−36.756 164 91		3.48	−7.28	17.89	1.33	1.00	1.47	1.74	1.50	+39	+	3	−	2	−10	−27	+	9	−30	−	8	−19	+28	0	0.21
103915	21 03 17.48	+38 09 09.7	8.10		H	315.822 834 69	+38.152 705 94		2.04	4.56	−3.18	0.50	0.60	0.79	0.48	0.65	−25	−	5	+	2	−	5	+15	−	6	+17	−19	+16	−14	0	−0.27
103916	21 03 17.80	−25 04 27.0	7.70		H	315.824 177 36	−25.074 166 23		3.61	25.07	−2.27	0.96	0.76	1.11	1.11	1.14	+20	−10	−23	−18	−	4	+22	+	0	+	5	−17	+39	0	0.13
103917	21 03 18.07	−69 10 15.9	8.31		H	315.825 298 83	−69.171 094 13		12.67	44.80	−60.43	0.59	0.66	0.98	0.65	0.77	−21	−10	−	3	+23	−	6	−11	−	7	+10	−13	−29	0	−1.08
103918	21 03 19.60	+50 48 06.9	8.28		H	315.831 665 43	+50.801 926 07		4.54	15.92	17.42	0.69	0.58	0.77	0.85	0.63	−13	−25	+11	−10	+	2	+11	−	1	+	4	+	9	−	8	0	−0.99
103919	21 03 19.92	+27 19 53.7	7.07		H	315.832 991 83	+27.331 583 58		3.76	−12.60	−24.20	0.49	0.52	0.83	0.55	0.54	+	6	+	1	+10	+18	+20	−19	+21	+25	+15	+	3	0	−0.66
*103920	21 03 20.06	−17 28 07.3	7.44		H	315.833 566 80	−17.468 681 36		3.38	−0.82	−5.03	0.89	0.73	1.03	1.17	1.08	+33	−	8	−16	−14	−25	+27	−23	−12	−	8	+42	0	0.01
*103921	21 03 20.06	−38 04 27.6	9.70		H	315.833 565 97	−38.074 322 54		10.92	17.16	−73.80	1.55	1.00	1.68	2.18	1.00	+20	−	6	−19	+34	−36	+36	−46	−23	−13	−24		2	−0.50
103922	21 03 20.12	−19 43 23.8	8.88		H	315.833 816 72	−19.723 276 52		6.00	2.07	−2.85	1.24	1.01	1.41	1.88	1.90	+35	+	6	−12	−34	−21	+32	−24	−21	+	5	+63	3	−0.15
103923	21 03 21.83	+18 13 05.4	10.25		H	315.840 939 81	+18.218 174 01		9.20	21.45	28.96	1.29	0.84	1.76	1.59	0.89	+10	+	3	+	6	+	9	+17	−21	+12	+52	−	6	+23	5	−2.10
103924	21 03 22.92	+03 34 12.5	8.05		H	315.845 516 84	+03.570 152 05		6.84	7.67	−8.88	1.08	0.48	1.11	1.24	0.52	+37	−18	+	1	−36	−14	+	7	−22	+28	−	2	+52	3	−0.26
103925	21 03 23.80	−73 02 47.9	8.74		H	315.849 172 10	−73.046 634 63		3.90	37.18	−69.77	0.76	0.73	1.06	0.95	0.82	−13	−15	−17	+18	+13	−	5	+12	+	4	−24	−20	0	0.33
103926	21 03 23.90	−02 34 14.8	7.77		G	315.849 577 25	−02.570 780 08		12.64	−16.94	−7.47	0.85	0.53	1.01	1.13	0.54	+42	−	8	−12	−12	−24	+40	−18	−19	+22	+53		0	0.01
103927	21 03 23.97	−21 32 12.7	8.46		H	315.849 876 10	−21.536 865 18		3.71	−4.88	−13.44	1.02	0.84	1.20	1.39	1.21	+27	−16	−33	−	3	+	5	+22	+12	+20	+	3	+33	0	0.08
103928	21 03 25.53	−05 22 28.8	7.68		H	315.856 366 37	−05.374 676 76		3.26	13.84	−14.06	0.93	0.59	1.13	1.46	0.59	+43	+	5	−10	+	4	−25	+33	−	6	−53	+34	+74	0	−0.01
103929	21 03 26.03	+50 21 06.5	6.37		H	315.858 463 44	+50.351 802 52		8.40	64.48	45.82	0.49	0.44	0.55	0.64	0.47	−10	−15	+	9	−15	−	1	+	4	−	2	+	5	+	4	−	6	0	0.31
*103930	H 21 03 29.53	+29 05 33.2	6.96		G	315.873 057 29	+29.092 546 41	A	5.31	−6.00	−19.28	0.75	0.77	1.01	0.80	0.81	+17	+	5	−	4	+23	+20	−21	+19	+29	+14	+	6	2	−0.02
*103931	21 03 29.49	−01 34 46.7	6.91		H	315.872 891 75	−01.579 646 46		20.68	21.41	−9.10	0.81	0.46	0.87	1.03	0.47	+18	−31	−	2	+	3	−11	+19	−14	−	5	+26	+32	0	−0.88
*103932	21 03 29.51	−02 19 19.6	6.99		H	315.872 971 42	−02.322 124 39		5.09	−24.18	−33.13	0.83	0.46	1.01	1.11	0.49	+28	−14	−	5	−11	−	4	+52	−	7	−	2	+34	+51	2	1.06
103933	21 03 29.78	+23 59 46.6	7.16	2	H	315.874 087 28	+23.996 287 29		3.93	−2.04	−10.84	0.67	0.54	0.94	0.76	0.56	+	1	−11	−	7	+25	+21	−11	+20	+42	−	7	−	1	0	0.91
103934	21 03 31.51	−52 53 21.0	7.46	1	H	315.881 295 65	−52.889 171 88		0.75	−15.36	10.62	0.88	0.62	1.00	1.37	0.72	−	4	−20	−29	+14	−	7	−	7	−16	−17	+	5	−42	0	−0.75
103935	21 03 32.43	+17 27 44.5	9.46		H	315.885 112 74	+17.462 362 68		0.66	8.84	−2.79	0.90	0.73	1.16	1.17	0.82	+18	+	2	+	4	+29	+19	+	7	+15	+55	−	4	+29	1	−1.13
103936	21 03 35.04	−56 08 09.0	9.64		H	315.896 016 00	−56.135 824 96		7.46	44.35	−23.10	1.24	1.02	1.45	1.67	1.21	−	1	−12	−	3	+	9	+	2	+	4	−	5	−23	+11	−22	0	−0.66
103937	21 03 35.32	−41 46 03.9	10.91		H	315.897 187 00	−41.767 754 55		2.23	2.64	5.00	1.86	1.33	2.48	1.76	1.09	+33	−31	−	6	−40	−18	+33	−24	−54	+13	+21		1	2.10
103938	21 03 36.01	+81 09 39.1	6.94		H	315.900 035 43	+81.160 851 86		4.20	20.93	29.08	0.51	0.47	0.53	0.57	0.47	−	5	−13	+	6	−	3	+12	−	2	+	9	−18	+	7	−10	0	−1.45
103939	21 03 36.23	+33 43 10.5	8.17		H	315.900 946 52	+33.719 574 27		0.41	3.05	−3.95	0.44	0.56	0.82	0.50	0.64	−28	+	2	−10	+	1	−	1	−	8	−	2	+12	−	4	−27	0	1.50
103940	21 03 36.47	+67 14 37.0	9.65		H	315.901 978 33	+67.243 624 00		6.00	−14.80	−30.62	0.91	0.92	1.04	1.11	0.92	−	7	−14	+38	+	2	+	3	−	1	+	5	−10	−	7	+18	0	0.12
103941	21 03 36.53	−39 41 15.7	9.28		H	315.902 192 71	−39.687 702 98		11.10	64.99	−90.33	1.05	0.83	1.31	0.90	0.68	+55	−	8	+	0	−59	−35	+	0	−37	−59	+	8	+49	0	0.77
103942	21 03 37.05	−12 50 59.1	7.99		H	315.904 363 89	−12.849 753 01		2.99	11.46	1.72	1.05	0.72	1.10	1.42	0.91	+15	−22	−25	+31	−	9	+16	−	6	+53	+	3	+14	0	1.11
103943	21 03 38.01	+25 32 58.3	9.48		H	315.908 364 69	+25.549 523 53		22.07	139.05	165.33	0.87	0.76	1.53	1.06	0.78	+	3	−23	+	6	−	9	+25	−14	+24	+17	−	9	+	6	0	1.02
103944	21 03 38.06	+15 30 54.6	8.68		H	315.908 594 65	+15.515 174 83		2.71	−4.09	−37.12	0.89	0.61	1.19	1.08	0.75	+	1	−	7	+	7	+15	+	4	−	1	−	3	+34	+	0	+33	0	0.68
103945	21 03 38.44	+45 22 04.6	7.87		H	315.910 162 29	+45.367 945 41		3.93	9.89	−4.32	0.56	0.49	0.66	0.68	0.53	−13	+	5	+	5	+10	+	1	−	2	+	1	−	5	+10	−16	0	0.08
103946	H 21 03 38.86	+53 57 50.2	8.52		H	315.911 914 28	+53.963 954 65	*	3.87	−0.59	−14.96	1.87	1.52	0.96	0.86	0.98	+20	+	9	+	4	+	0	−	9	−13	−	8	−13	+10	+14	0	−0.51
103947	21 03 40.55	−06 14 33.0	8.99		H	315.918 949 92	−06.242 496 34		6.10	7.67	−50.56	1.29	0.74	1.51	2.01	0.74	+41	+	4	−	2	+11	−14	+25	+	2	−41	+26	+71	2	0.16
103948	21 03 42.97	+71 18 51.3	7.79		H	315.929 051 79	+71.314 262 05		4.95	15.23	4.51	0.59	0.53	0.62	0.85	0.66	−15	−23	+11	+	3	+	5	+12	+	1	+	4	+	8	−	8	0	−0.21
103949	21 03 43.50	+46 51 47.8	6.32		H	315.931 249 60	+46.863 289 98		12.40	−38.98	−57.57	0.43	0.43	0.54	0.51	0.43	−	7	+	7	+11	−	8	−	6	+	7	−	6	−	1	−	6	−	8	0	−0.34
103950	21 03 45.30	+12 01 19.8	9.31		G	315.938 743 92	+12.022 166 47		6.16	55.96	83.22	1.03	0.76	1.28	1.41	0.94	−	5	+	7	−19	−	9	+27	−	2	+24	−	4	+31	+	8	0	0.48
103951	21 03 45.93	−40 40 49.5	8.74		G	315.941 387 17	−40.680 419 67		2.31	−9.62	−4.90	1.21	0.92	1.44	1.06	0.72	+54	+	7	+21	−61	−39	−	6	−40	−64	−	9	+49	0	−1.34
103952	21 03 46.04	+42 16 40.9	9.12		H	315.941 846 47	+42.278 021 38		3.46	2.82	2.01	0.72	0.76	0.97	0.74	0.84	−	3	+23	−	3	−	2	+10	−	7	+10	−16	+	1	−	2	2	−0.38
103953	21 03 46.77	−68 04 18.5	7.64		H	315.944 865 57	−68.071 793 66		18.16	95.20	−3.24	0.48	0.58	0.85	0.54	0.66	−33	+	1	−13	+	0	+	0	−	6	−	1	−	4	+	4	−45	0	−0.36
103954	21 03 47.14	−63 28 51.3	7.67	1	G	315.946 416 42	−63.480 903 79		1.95	2.57	−2.49	0.53	0.53	0.95	0.61	0.59	−18	−	2	−	5	+19	+16	+	3	+16	+	8	−	4	−15	0	−2.54
103955	21 03 47.20	+54 20 39.8	7.74		H	315.946 672 93	+54.344 392 33		9.15	35.16	7.99	0.49	0.49	0.59	0.59	0.61	−	7	+	4	+	6	+15	+	4	−15	+	5	+	5	−	3	−	2	0	−1.65
103956	21 03 47.58	+53 17 09.0	5.93		H	315.948 270 16	+53.285 822 52		8.05	42.14	32.09	0.43	0.42	0.52	0.47	0.51	+	1	+11	+15	−	3	−	6	−10	−	6	−14	−14	+	6	0	1.35
103957	H 21 03 48.24	−24 19 20.5	7.88		G	315.950 998 06	−24.322 354 46	*	10.08	21.46	−7.85	0.94	0.75	1.12	1.18	1.06	+13	+10	−26	−	7	−21	+32	−16	−	8	−12	+27		0	−0.93
103958	21 03 48.91	−40 41 26.6	7.90		H	315.953 785 90	−40.690 723 46		3.45	−9.81	−21.19	0.91	0.75	1.14	0.80	0.57	+46	−	7	−	7	−54	−31	+	8	−35	−68	+13	+34	0	−0.10
103959	21 03 50.46	−32 30 49.0	9.05		H	315.960 230 02	−32.513 613 03		4.82	32.63	−32.20	1.20	1.21	1.45	1.36	1.76	+15	−	4	+16	−34	−17	+11	−10	−53	−40	+34		0	0.64
103960	21 03 50.60	−19 37 06.0	8.72		H	315.960 822 70	−19.618 343 96		3.60	−18.11	−5.54	1.26	0.84	1.35	1.78	1.48	+	0	+	8	+	1	−17	−	8	+24	−15	−10	−17	+33	0	−1.01
103961	21 03 51.18	+57 53 30.1	8.67		H	315.963 248 26	+57.891 693 00		2.55	4.20	3.57	0.66	0.63	0.72	0.67	0.65	−	9	−	2	−	3	+	4	+	9	−	7	+	8	+	8	+	7	+	3	0	1.10
103962	21 03 51.34	−73 45 09.2	8.98		H	315.963 900 91	−73.752 544 94		11.22	151.79	−131.99	0.74	0.74	1.03	0.91	0.87	−17	−	2	+	0	+	9	−12	+	7	−11	+17	−20	−27	1	−0.68
103963	21 03 52.14	+41 37 41.9	6.34		G	315.967 239 70	+41.628 304 31		9.87	−2.29	−53.33	0.39	0.42	0.55	0.46	0.48	−12	+10	−	4	+	0	−	3	−16	−	2	−21	+14	−14		0	0.45
103964	21 03 52.59	−09 54 12.9	8.14		H	315.969 115 06	−09.903 588 34		0.19	−14.40	−30.05	0.93	0.58	1.09	1.40	0.63	+30	−17	−17	+17	−23	+35	−	9	−19	+22	+49		0	0.41
103965	21 03 52.66	−62 10 34.7	9.22		H	315.969 405 33	−62.176 314 30		0.24	−5.38	−6.85	0.88	1.02	1.44	0.99	1.08	+23	−20	−18	+55	+22	−13	+18	+19	−10	+12		0	−1.44
103966	21 03 52.85	+55 13 49.1	7.14		H	315.970 226 22	+55.230 306 54		1.69	−2.68	−4.04	0.46	0.43	0.51	0.50	0.44	−12	+	5	+	6	−12	+14	−	3	+14	+	1	+12	−	6	0	−1.55
103967	21 03 53.08	−20 44 53.4	8.49		H	315.971 155 54	−20.748 180 07		7.42	7.07	−19.75	1.14	0.87	1.29	1.43	1.36	+17	−19	−23	−23	+16	+33	+17	+28	−	9	+41		3	−0.98
103968	21 03 53.79	+46 19 49.9	7.79	2	H	315.974 139 79	+46.330 533 77		1.61	2.07	0.81	0.55	0.52	0.67	0.62	0.53	−	7	+11	+11	+	2	−	1	−	3	−	1	+	1	−	2	−	5	0	−0.39
103969	21 03 54.53	+10 58 14.4	10.00		G	315.977 206 11	+10.970 663 96		5.82	−5.61	22.67	2.84	2.83	3.34	3.43	3.06	+20	−22	−19	−23	−	4	+17	−	3	−53	+21	+32	0		
103970	H 21 03 56.15	+18 44 06.2	7.90		H	315.983 958 36	+18.735 047 50	A	4.93	−3.36	−19.74	1.32	0.94	1.58	1.52	0.90	−	4	−23	+20	+25	+16	−15	+11	+54	−	3	+20	0	1.05
103971	21 03 56.57	+49 14 22.1	8.19		H	315.985 688 63	+49.239 469 09		2.26	0.30	1.49	0.59	0.56	0.70	0.76	0.60	−	3	−	2	+23	+	9	+	0	−	9	+	2	+14	−	5	−	4	0	−0.50
103972	21 03 58.49	−06 08 22.7	10.49		G	315.993 710 10	−06.139 628 95		20.22	−344.97	−280.81	1.80	1.19	2.18	2.84	1.13	+44	+	2	−	2	+	3	−17	+30	−	7	−48	+29	+70	2	1.74
103973	21 03 59.12	+43 35 33.2	7.81		H	315.996 325 75	+43.592 561 36		2.79	−58.95	−57.45	0.60	0.58	0.79	0.76	0.67	−11	−	4	+18	+18	+	6	−	5	+	9	−	3	+	6	+	2	1	−0.13
103974	21 03 59.68	+65 03 07.1	8.73		H	315.998 656 60	+65.051 984 73		3.45	−38.25	−26.69	0.68	0.64	0.74	0.81	0.72	−	1	−	3	+13	+	8	+10	+12	+10	−	6	+15	+16	0	−0.71
103975	21 04 00.02	−33 16 57.6	10.32		H	316.000 062 54	−33.282 668 74		7.21	19.74	−43.10	1.68	1.16	1.83	2.40	1.60	+11	−17	−22	−	8	−21	+22	−13	−	8	−23	−11	0	−0.84
103976	H 21 04 01.56	−18 06 43.5	7.47		H	316.006 479 45	−18.112 085 32	A	5.52	−7.61	−31.81	2.01	1.44	2.00	2.27	2.05	−	2	+15	−12	−17	−19	+	9	−29	−	8	−29	+34	1	1.11
103977	21 04 02.67	−46 19 57.4	10.74		G	316.011 133 38	−46.332 600 85		9.85	113.39	−77.35	1.65	1.28	2.05	1.67	1.15	+22	−19	−	7	−26	−13	+21	−13	−46	−	2	+10	0	−0.44
103978	21 04 03.02	−70 25 42.8	8.83		H	316.012 567 18	−70.428 541 90		14.00	−52.57	−33.59	0.70	0.74	1.10	0.79	0.80	−23	−	4	−17	+	4	−	3	−13	−	5	+	6	−	2	−34	0	−0.96
103979	21 04 03.55	+14 22 24.4	7.86		H	316.014 773 70	+14.373 430 58		8.87	−24.69	7.36	0.86	0.47	1.13	0.96	0.59	−11	−23	+	9	+49	−10	−19	+	4	+37	−	6	+37	0	0.46
103980	21 04 04.27	+33 14 00.1	8.13	1	H	316.017 789 96	+33.233 360 48		1.37	5.31	−8.52	0.42	0.60	0.85	0.52	0.68	−30	−	1	−	8	+	7	+	0	−	9	−	1	+	3	+	4	−23	2	0.28
103981	H 21 04 04.71	−05 49 23.0	5.53		H	316.019 635 09	−05.823 049 08	A	6.03	20.90	−7.01	1.03	0.80	1.17	1.57	0.70	+58	−	2	−13	−17	−20	+20	−26	−49	+21	+62		2	1.09
103982	21 04 04.77	−70 06 28.3	8.24		H	316.019 864 00	−70.107 850 70		5.29	12.39	−23.20	0.66	0.68	0.98	0.79	0.81	−25	−	4	−	3	−	8	+	1	−	8	+	3	+16	+	8	−37	0	−2.54
103983	21 04 05.74	+03 58 51.8	8.39		H	316.023 900 23	+03.981 057 02		15.70	−71.25	−155.22	1.27	0.54	1.29	1.51	0.56	+30	−33	+	0	−32	−11	+11	−18	+31	+	6	+46	0	0.56
103984	21 04 06.42	+63 22 46.6	7.34		G	316.026 766 51	+63.379 624 98		7.56	−5.06	−8.75	0.48	0.45	0.53	0.50	0.48	−	9	−14	+10	+	0	+12	+	0	+13	−	2	−	4	+12	1	−0.19
103985	21 04 06.84	−45 34 20.6	9.84		H	316.028 496 17	−45.572 379 37		6.82	−9.74	22.56	1.29	1.04	1.69	1.40	0.94	+42	−18	−	6	−25	−17	+22	−19	−48	−	6	+27	2	−0.42
103986	21 04 07.15	−42 58 01.9	8.94		H	316.029 811 84	−42.967 181 27		11.86	−55.33	−31.89	1.13	0.91	1.50	1.11	0.75	+41	−30	−13	−25	−20	+	7	−29	−56	+11	+15		4	0.55
103987	21 04 07.55	+02 59 43.4	7.31		H	316.031 451 39	+02.995 377 12		17.83	−272.98	−368.63	1.63	0.59	1.29	2.78	0.78	+31	−45	−10	−80	−31	+39	−42	+	5	−	2	+54	0	2.15
103988	H 21 04 08.11	−47 57 39.2	6.98		H	316.033 781 13	−47.960 882 24	A	3.26	14.44	−14.58	0.97	0.88	1.12	1.11	0.78	+40	−	9	+18	−17	−25	−16	−29	−43	−	6	+20	2	0.78
103989	21 04 08.27	+12 40 43.1	7.93		H	316.034 458 55	+12.678 649 58		4.00	−0.71	−1.69	0.81	0.61	1.01	1.00	0.78	−	1	+	6	+	1	−17	+25	+16	+23	+	0	+16	+19	0	0.42
103990	21 04 08.73	−37 31 44.4	8.63		G	316.036 387 85	−37.529 008 87		7.88	−53.33	−18.71	1.14	0.76	1.26	1.82	0.78	+23	+17	−	4	+25	−33	+31	−43	−29	−17	−24		0	0.44
103991	21 04 09.51	−35 48 06.8	9.25		H	316.039 619 68	−35.801 884 64		6.04	40.67	−82.45	1.20	0.84	1.33	1.61	1.42	+33	−14	−	5	+20	−	9	+16	−14	+30	−12	+25		0	0.72
103992	21 04 10.79	−11 21 47.7	9.98		G																								
103993	21 04 11.30	+22 31 28.3	9.16		H	316.047 102 91	+22.524 517 68		1.49	47.33	20.32	0.80	0.63	1.25	0.94	0.65	+	9	+	6	−	4	+12	+31	−20	+28	+55	−	7	+11		1	0.56
103994	21 04 11.92	−29 08 54.3	8.35		H	316.049 682 05	−29.148 410 99		12.68	1.48	−87.89	0.99	0.80	1.12	1.12	1.09	+20	−35	−29	+11	−15	+12	−	9	−	4	−	6	+22		0	0.68
103995	21 04 12.48	−55 20 03.9	8.58		H																								
103996	21 04 13.31	−55 19 58.4	8.60		H					

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
103901	8.452	0.008	8.270	0.009		0.170	0.015	G	0.19	0.01	H	8.3110	0.0013	0.015	161		8.29	8.34		C			1							
103902	7.456	0.009	6.353	0.006	*	0.945	0.001	G	0.94	0.00	H *	6.4171	0.0009	0.007	56	*	6.41	6.44		D	21032−2744	I 1	2 C A	AB	298	0.281	0.010	1.34	0.05	S
103903	8.460	0.007	8.456	0.009		0.008	0.010	T	0.03	0.01	L	8.4671	0.0018	0.016	168		8.44	8.50		C	21032+3645	I 1	1							S
103904	9.674	0.020	9.133	0.018		0.507	0.024	T	0.58	0.03	L	9.1968	0.0016	0.016	105		9.17	9.23					1							
103905	9.444	0.013	8.113	0.008		1.129	0.012	T	1.09	0.01	L	8.1588	0.0012	0.013	172		8.13	8.18					1							
103906	9.605	0.017	9.038	0.016		0.534	0.017	T	0.61	0.02	L	9.1137	0.0023	0.020	112		9.08	9.15					1							
103907	10.617	0.037	8.751	0.015		1.551	0.032	T	1.57	0.03	L	8.6773	0.0019	0.018	95		8.65	8.71					1							
103908	8.414	0.010	8.100	0.010		0.315	0.003	G	0.36	0.00	H	8.1395	0.0017	0.018	106		8.11	8.17		U			1							S
103909	9.803	0.015	9.414	0.015		0.368	0.020	T	0.43	0.02	L	9.4331	0.0029	0.035	219		9.37	9.49			21032−6724	I 1	1 S							
103910						1.653	0.082	G	2.73	0.24	I	12.8520	0.0148	0.137	123		12.53	13.07		U			1 S							G
103911	10.322	0.025	9.849	0.025		0.458	0.028	T	0.53	0.03	L	9.9493	0.0025	0.027	167		9.90	10.00					1							
103912	10.484	0.040	10.032	0.041		0.440	0.045	T	0.51	0.05	L	10.1482	0.0033	0.022	74		10.11	10.19		C			1							
103913	11.543	0.087	10.377	0.050		0.980	0.000	G	1.02	0.00	I	10.4181	0.0033	0.025	114		10.38	10.46		C			1							G
103914	10.337	0.048	9.778	0.044		0.528	0.048	T	0.60	0.05	L	9.8028	0.0024	0.021	73		9.77	9.83		C			1							
103915	7.952	0.006	8.076	0.008		−0.110	0.015	G	−0.09	0.02	H	8.0623	0.0013	0.015	151		8.04	8.09					1							
103916	7.976	0.012	7.710	0.012		0.253	0.016	T	0.28	0.02	L	7.7759	0.0020	0.012	55		7.76	7.80		C			1							S
103917	8.950	0.010	8.389	0.009		0.530	0.010	T	0.60	0.01	L	8.4305	0.0016	0.020	178		8.39	8.47					1							S
103918	8.525	0.009	8.300	0.010		0.215	0.013	T	0.24	0.01	L	8.3461	0.0014	0.015	114		8.33	8.38					1							
103919	9.423	0.014	7.292	0.005		1.802	0.012	T	2.52	0.02	O	7.0904	0.0020	0.021	132		7.06	7.13		R 2			1 S							S
103920	8.927	0.020	7.573	0.012		1.147	0.018	T	1.11	0.02	L	7.6084	0.0016	0.009	56		7.59	7.63		C			1							
103921	10.492	0.038	9.798	0.032		0.628	0.037	T	0.70	0.03	L	9.8307	0.0025	0.017	87		9.80	9.86		C			1 S							
103922	8.918	0.022	8.894	0.029		0.027	0.034	T	0.04	0.03	L	8.8954	0.0021	0.014	48		8.87	8.91		C			1							S
103923	11.017	0.045	10.341	0.039		0.625	0.050	T	0.69	0.04	L	10.3851	0.0024	0.027	152		10.33	10.43					1							G
103924	8.250	0.010	8.076	0.012		0.167	0.015	T	0.18	0.01	L	8.1076	0.0009	0.011	126		8.09	8.13		C			1							S
103925	10.128	0.021	8.852	0.013		1.086	0.019	T	1.05	0.02	L	8.9107	0.0016	0.018	153		8.86	8.95					1 S							
103926	8.222	0.011	7.782	0.011		0.398	0.015	G	0.46	0.02	H	7.8516	0.0012	0.008	88		7.83	7.86		C			1							S
103927	10.136	0.040	8.611	0.019		1.282	0.035	T	1.24	0.04	L	8.6207	0.0017	0.009	54		8.60	8.64		C			1							
103928	8.951	0.013	7.785	0.009		1.000	0.012	T	0.98	0.01	L	7.8497	0.0012	0.010	118		7.84	7.87		C			1							S
103929	7.629	0.005	6.482	0.004		0.986	0.005	T	0.97	0.00	L	6.5390	0.0010	0.008	118		6.52	6.55					1							S
103930	8.152	0.007	6.997	0.005	A	0.980	0.015	G	0.97	0.01	L *	7.0312	0.0011	0.008	126	*	7.02	7.05			21035+2905	I 1	2 C C	AB	109	4.786	0.040	4.08	0.19	S
103931	7.380	0.006	6.957	0.006		0.423	0.006	G	0.48	0.02	A	6.9983	0.0011	0.008	80		6.98	7.01		C			1							S
103932	8.217	0.012	7.094	0.007		0.967	0.011	T	0.95	0.01	L	7.1513	0.0008	0.008	86		7.14	7.16		C			1							S
103933	9.026	0.012	7.396	0.006		1.389	0.011	T	3.72	0.03	O	6.7565	0.0111	0.120	129		6.63	6.99		U 2	21035+2400	I 1	1 S							S P
103934	9.516	0.020	7.652	0.009		1.582	0.018	T	1.96	0.06	O	7.5423	0.0019	0.018	81		7.51	7.56		U			1							S
103935	9.399	0.015	9.434	0.021		−0.027	0.024	T	−0.01	0.02	L	9.4597	0.0017	0.018	135		9.43	9.49		C			1							
103936	10.244	0.034	9.667	0.031		0.542	0.034	T	0.62	0.04	L	9.7563	0.0033	0.024	78		9.71	9.79		C			1							
103937	11.320	0.063	10.903	0.074		0.408	0.080	T	0.47	0.09	L	10.9982	0.0037	0.040	128		10.92	11.07					1							G
103938	7.261	0.007	6.971	0.006		0.276	0.009	T	0.31	0.01	L	7.0172	0.0011	0.009	107		7.00	7.03					1							S
103939	8.091	0.006	8.153	0.007		−0.052	0.008	T	−0.03	0.01	L	8.1629	0.0011	0.014	208		8.14	8.19					1							
103940	10.240	0.031	9.628	0.028		0.570	0.037	T	0.64	0.03	L	9.7698	0.0025	0.024	98		9.73	9.82					1							G
103941	10.115	0.018	9.351	0.015		0.681	0.018	T	0.74	0.01	L	9.4161	0.0015	0.019	181		9.38	9.46		C			1							
103942	7.908	0.011	7.964	0.013		−0.057	0.002	G	−0.04	0.00	H	7.9729	0.0009	0.010	70		7.95	7.99					1							S
103943	10.628	0.034	9.602	0.024		0.894	0.031	T	0.90	0.02	L	9.6418	0.0027	0.028	159		9.60	9.70		R			1							
103944	10.583	0.035	8.861	0.014		1.437	0.030	T	1.43	0.05	L	8.8124	0.0015	0.019	126		8.78	8.85					1							
103945	7.769	0.008	7.869	0.008		−0.060	0.015	G	−0.04	0.01	H	7.8570	0.0012	0.012	127		7.84	7.88		C			1							S
103946	8.889	0.012	8.561	0.013	*	0.311	0.017	T	0.36	0.02	L *	8.5957	0.0016	0.018	124	*	8.57	8.63		D	21037+5358	I 1	2 C A	AC	8	0.285	0.010	1.69	0.12	
103947	9.641	0.017	9.033	0.016		0.567	0.020	T	0.64	0.02	L	9.1146	0.0021	0.021	119		9.09	9.15		C			1							
103948	7.873	0.009	7.804	0.010		0.069	0.013	T	0.08	0.01	L	7.8206	0.0011	0.010	109		7.80	7.84		C			1							S
103949	6.624	0.004	6.352	0.005		0.259	0.006	T	0.29	0.01	L	6.3875	0.0008	0.008	135		6.38	6.40		C			1 S							S
103950	9.895	0.027	9.352	0.026		0.507	0.027	G	0.58	0.03	H	9.4158	0.0022	0.021	98		9.38	9.46					1							
103951	8.728	0.009	8.704	0.011		0.010	0.015	G	0.03	0.01	H	8.7370	0.0017	0.022	166		8.71	8.78		D	21038−4041	I 2	1							
103952	9.448	0.018	9.137	0.020		0.295	0.025	T	0.34	0.03	L	9.1942	0.0020	0.019	125		9.17	9.23		C			1							
103953	8.266	0.007	7.702	0.006		0.546	0.003	G	0.62	0.00	H	7.7601	0.0011	0.014	206		7.74	7.79					1							S
103954	8.714	0.009	7.750	0.007		0.834	0.003	G	0.85	0.00	H	7.8249	0.0012	0.016	182		7.80	7.86		M			1							S
103955	8.204	0.011	7.773	0.009		0.407	0.013	T	0.47	0.01	L	7.8360	0.0014	0.011	118		7.82	7.86		C			1 G							S
103956	7.201	0.005	6.034	0.004		1.001	0.005	T	0.98	0.00	L	6.0978	0.0006	0.005	121		6.09	6.11		C			1 G							S
103957	8.407	0.016	7.878	0.015	*	0.476	0.015	G	0.55	0.02	H *	7.9536	0.0015	0.012	50	*	7.94	8.04		D	21038−2419	I 1	2 C S A	AB	132	0.137	0.055	0.71	0.62	S
103958	9.195	0.011	8.012	0.007		1.014	0.010	T	0.99	0.01	L	8.0683	0.0014	0.015	170		8.04	8.10			21038−4041	I 2	1 S							S
103959	9.707	0.031	9.179	0.030		0.504	0.032	T	0.58	0.03	L	9.1627	0.0027	0.020	51		9.13	9.20		D	21038−3231	I 1	1 S							
103960	10.024	0.059	8.813	0.037		0.680	0.040	G	0.74	0.03	R	8.8603	0.0025	0.018	52		8.82	8.88		C			1							
103961	11.341	0.062	8.948	0.014		1.972	0.051	T	2.01	0.05	L	8.7540	0.0019	0.019	122		8.71	8.79					1							
103962	9.745	0.016	9.052	0.014		0.638	0.002	G	0.70	0.00	H	9.1130	0.0018	0.022	165		9.08	9.16					1							
103963	6.798	0.003	6.373	0.004		0.390	0.006	G	0.46	0.01	H	6.4329	0.0008	0.007	135		6.42	6.44			21038+4137	I 1	1							S
103964	9.748	0.023	8.272	0.013		1.243	0.021	T	1.20	0.02	L	8.3008	0.0013	0.012	86		8.28	8.34					1							
103965	11.128	0.047	9.345	0.017		1.485	0.040	T	1.50	0.06	L	9.3435	0.0019	0.025	155		9.29	9.39		C			1							
103966	7.785	0.007	7.211	0.005		0.554	0.005	G	0.63	0.01	H	7.2647	0.0008	0.009	120		7.25	7.28		C			1							S
103967	9.004	0.019	8.527	0.019		0.462	0.021	T	0.53	0.02	L	8.5960	0.0024	0.014	51		8.57	8.62		C			1							S
103968	7.798	0.010	7.817	0.013		0.016	0.005	G	0.04	0.01	H	7.8002	0.0044	0.048	131		7.74	7.99	1.51	P 1 A			1							S
103969	10.607	0.058	10.037	0.058		0.530	0.020	G	0.60	0.02	H	10.1138	0.0029	0.025	70		10.06	10.16		C			1 X							G
103970	9.176	0.013	8.013	0.009	A	0.800	0.495	G	0.94	0.01	L *	8.0631	0.0014	0.013	138	*	8.04	8.08			21039+1844	I 1	2 C C	AB	246	5.420	0.071	4.08	0.21	
103971	8.546	0.010	8.216	0.011		0.320	0.020	G	0.37	0.03	H	8.2631	0.0011	0.013	117		8.24	8.29					1							
103972	11.553	0.093	10.530	0.061		0.959	0.019	G	1.01	0.02	I	10.6192	0.0038	0.028	117		10.57	10.66		C			1							G
103973	9.096	0.019	7.912	0.012		1.015	0.018	T	0.99	0.01	L	7.9748	0.0014	0.013	113		7.95	8.00					1							
103974	10.198	0.027	8.839	0.015		1.151	0.024	T	1.11	0.02	L	8.9033	0.0015	0.014	112		8.88	8.93		C			1							
103975	11.185	0.088	10.307	0.068		0.768	0.086	T	0.81	0.06	L	10.4597	0.0055	0.030	59		10.41	10.51		C			1							G
103976	8.069	0.021	7.588	0.019	*	0.453	0.026	T	0.52	0.03	L *	7.5716	0.0015	0.009	49	*	7.55	7.59		D	21040−1807	I 1	2 C A	AB	337	0.861	0.003	0.84	0.01	S
103977	11.651	0.106	10.974	0.095		0.770	0.020	G	0.81	0.02	H	10.9174	0.0050	0.037	100		10.87	10.97		C			1							G
103978	9.438	0.013	8.882	0.012		0.526	0.013	T	0.60	0.01	L	8.9440	0.0019	0.022	168		8.91	8.99					1							
103979	8.060	0.007	7.886	0.010		0.167	0.011	T	0.18	0.01	L	7.9181	0.0013	0.014	149		7.90	7.94					1							S
103980	10.283	0.021	8.353	0.008		1.602	0.018	T	1.62	0.02	L	8.2478	0.0014	0.021	264		8.22	8.28		U			1							
103981	6.344	0.007	5.597	0.005	*	0.683	0.007	T	0.74	0.01	L *	5.6679	0.0008	0.007	110	*	5.66	5.68		D	21041−0549	I 1	2 C A	AB	195	2.437	0.006	1.67	0.02	S
103982	9.792	0.017	8.383	0.010		1.190	0.015	T	1.15	0.01	L	8.4101	0.0015	0.018	182		8.38	8.44					1							
103983	9.221	0.015	8.488	0.013		0.650	0.015	G	0.75	0.01	L	8.5319	0.0012	0.013	121		8.51	8.56		C			1							
103984	7.790	0.009	7.373	0.007		0.389	0.015	G	0.45	0.02	H	7.4309	0.0013	0.011	116		7.41	7.45					1							S
103985	10.731	0.045	9.882	0.034		0.746	0.043	T	0.79	0.03	L	9.9749	0.0035	0.027	99		9.92	10.01					1							
103986	9.534	0.017	9.000	0.016		0.509	0.017	T	0.58	0.02	L	9.0511	0.0021	0.019	104		9.01	9.09					1							
103987	7.975	0.007	7.391	0.006		0.547	0.007	T	0.62	0.01	L	7.4303	0.0008	0.007	125		7.42	7.44					1 G							S
103988	8.467	0.027	7.071	0.011	*	1.180	0.023	T	1.14	0.02	L *	7.1483	0.0012	0.011	93	*	7.13	7.17		D	21041−4758	I 1	2 C A	AB	319	3.281	0.013	3.28	0.08	S
103989	10.131	0.026	8.179	0.011		1.619	0.022	T	1.64	0.02	L	8.0395	0.0016	0.014	118		8.02	8.06		C			1							
103990	9.316	0.016	8.709	0.014		0.588	0.015	G	0.66	0.01	H	8.7470	0.0017	0.013	91		8.72	8.77		C			1							S
103991	9.940	0.026	9.351	0.023		0.551	0.026	T	0.62	0.02	L	9.3720	0.0019	0.019	106		9.34	9.40					1							
103992											T	8.6241	0.0051	0.028	61		8.57	8.69		D			S							D G
103993	10.600	0.028	9.277	0.015		1.123	0.025	T	1.09	0.03	L	9.3237	0.0016	0.019	172		9.29	9.36		C			1							
103994	9.006	0.018	8.406	0.017		0.578	0.015	G	0.65	0.01	H	8.4711	0.0027	0.014	57		8.45	8.49		C			1							S
103995						0.645	0.126	G	0.71	0.11	R	8.7172	0.0062	0.052	84		8.67	8.97		D	21042−5520	I 2	S							S G
103996						0.886	0.150	G	0.70	0.06	L	8.7349	0.0087	0.078	84		8.68	8.93		D	21042−5520	I 2	S							S G
103997	8.595	0.015	8.233	0.015		0.352	0.019	T	0.41	0.02	L	8.3014	0.0031	0.021	47		8.23	8.33		U 2			1							
103998	8.401	0.014	6.742	0.006		1.387	0.012	T	1.36	0.01	L	6.7395	0.0011	0.008	97		6.72	6.76		C			1							S
103999	9.722	0.023	8.651	0.016	*	0.927	0.021	T	0.92	0.01	L *	8.7199	0.0019	0.017	89	*	8.69	8.75		D	21042−5423	H 1	2 C A	AB	167	0.359	0.009	1.81	0.10	
104000	10.201	0.020	8.808	0.011		1.178	0.018	T	1.14	0.02	L	8.8591	0.0019	0.024	202		8.82	8.90					1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
104001	21 04 14.82	−27 48 24.5	11.39		G	316.061 749 72	−27.806 793 80		14.40	184.67	38.60	2.61	2.04	3.26	3.78	3.14	+17	+ 1	−28	−15	−10	+42	+ 1	− 1	+ 0	+33	0	−0.99
104002	21 04 16.64	+39 58 20.1	9.40		3 H	316.069 326 33	+39.972 261 94	*	−0.02	−1.97	−2.92	0.84	1.05	1.44	1.02	1.15	−10	+ 8	+10	− 7	+19	− 4	+17	−14	+16	−12	5	1.80
104003	21 04 16.72	−45 09 05.6	10.12		1 H	316.069 661 21	−45.151 557 39		20.84	−17.51	−184.83	1.53	1.23	1.92	1.66	1.09	+37	−13	+ 5	−29	−13	+ 8	−17	−48	− 7	+23	0	2.35
104004	21 04 16.91	+09 30 57.1	9.29		H	316.070 441 25	+09.515 863 52		2.30	−9.16	−9.02	1.22	1.18	1.65	1.83	1.18	+29	− 8	−15	+14	+ 2	+43	+ 2	−36	+32	+36	0	−0.28
104005	21 04 17.75	+02 41 24.4	11.13		G	316.073 950 39	+02.690 123 57		3.84	−2.80	−3.11	2.41	1.28	2.72	2.66	1.30	+45	−13	+ 8	−45	− 9	+16	−17	+29	+ 0	+54	2	1.40
104006	21 04 17.99	+17 29 37.5	8.30		H	316.074 948 50	+17.493 743 81		4.73	7.06	−8.17	0.76	0.58	1.03	0.96	0.74	+10	−10	− 2	+22	+ 6	+ 8	+ 6	+25	− 7	+37	0	1.09
104007	21 04 18.21	+46 31 52.8	8.61		H	316.075 895 40	+46.531 340 29		2.04	−1.90	−3.24	0.63	0.65	0.81	0.74	0.67	− 9	+ 6	+13	− 8	+ 2	+ 5	+ 0	− 1	− 9	+ 0	0	1.08
104008	21 04 18.73	+37 23 35.2	8.34		H	316.078 055 91	+37.393 105 44		2.29	7.28	−5.54	0.57	0.67	0.89	0.54	0.70	−18	+17	− 5	−17	+ 4	−14	+ 5	−20	+10	−19	0	−0.63
104009	21 04 19.17	+36 08 57.4	9.05		H	316.079 881 46	+36.149 271 51		0.36	−1.07	−3.86	1.12	1.40	1.78	1.14	1.50	−22	− 5	+ 2	−28	+11	+ 5	+11	−27	+ 0	−17	0	
104010	21 04 20.04	+06 16 42.0	10.94		G	316.083 496 76	+06.278 322 79		0.70	−3.91	−7.11	1.75	1.15	2.05	2.10	1.13	+41	−15	− 8	−31	− 3	+30	− 1	+31	− 2	+39	2	−0.54
*104011	21 04 20.53	−27 31 53.4	8.27		H	316.085 549 25	−27.531 507 29		2.36	1.30	3.65	1.31	0.92	1.25	1.60	1.45	+ 9	+ 1	−16	−42	+13	+10	+11	− 1	− 1	+34	0	1.26
*104012	21 04 20.52	−42 33 04.1	9.33		H	316.085 512 49	−42.551 151 77		4.27	27.10	−33.42	1.42	1.15	1.89	1.27	0.93	+59	−52	−29	−31	−31	+27	−43	−60	+26	+29	2	0.38
104013	21 04 21.21	+46 31 05.5	9.34		G	316.088 390 76	+46.518 183 69	A	−0.26	−4.01	−5.20	1.81	1.78	2.06	1.81	1.67	− 7	+ 2	+16	−18	+ 5	+ 7	+ 2	− 6	− 7	+ 7	6	−0.07
104014	21 04 22.19	+31 40 14.3	8.43		H	316.092 473 98	+31.670 641 83		6.68	29.42	−25.71	0.55	0.67	1.04	0.69	0.78	−20	+10	−11	+24	+ 4	−23	+ 4	+ 1	+ 7	− 9	0	−2.44
104015	21 04 22.50	+23 49 18.1	10.36		3 H	316.093 760 12	+23.821 685 67		−0.03	−0.53	0.45	0.86	0.79	1.28	0.98	0.85	+20	+10	+ 4	+40	+14	− 2	+13	+25	+ 1	+19	1	1.36
104016	21 04 22.78	−43 05 08.0	7.33		H	316.094 896 85	−43.085 550 83		5.06	27.00	3.57	0.86	0.63	1.11	0.90	0.54	+37	−23	− 7	−28	−15	+ 8	−20	−49	+ 3	+21	2	−0.31
104017	21 04 23.28	−51 53 43.8	8.19		H	316.097 002 56	−51.895 491 88		6.77	2.86	−2.72	0.87	0.76	1.28	1.55	0.87	+22	−23	−28	+22	+10	−41	−13	−33	+18	−13	0	−0.52
104018	21 04 23.63	−77 32 43.1	8.28		H	316.098 443 86	−77.545 319 35		3.74	19.50	−1.21	0.64	0.66	0.84	0.76	0.74	− 5	−18	+ 6	+15	− 1	− 2	− 1	− 9	− 9	−13	0	−0.07
104019 H	21 04 24.32	−19 51 17.8	4.82		G	316.101 352 59	−19.854 931 22	A	20.64	−39.01	−24.45	3.21	3.64	1.47	2.03	1.43	+44	− 8	−27	−16	−11	+28	+ 0	+20	− 8	+41	1	1.12
104020	21 04 26.86	+65 01 14.7	8.37		H	316.111 907 64	+65.020 763 66		3.99	−12.62	−10.93	0.63	0.57	0.66	0.72	0.62	+ 1	− 8	+19	+23	+ 7	+15	+ 6	+ 8	+ 9	+19	1	0.09
104021 H	21 04 27.55	+59 04 21.0	10.02		H	316.114 802 01	+59.072 510 71	A	3.35	−3.48	−2.99	1.53	1.46	1.54	1.55	1.36	−12	+ 3	− 8	− 7	+17	−18	+13	−12	+12	+ 7	1	1.26
104022	21 04 28.43	−26 44 06.3	8.43		H	316.118 443 10	−26.735 088 56		4.00	13.80	1.24	1.03	0.93	1.29	1.41	1.37	+32	−19	−37	−17	− 7	+37	+ 6	+10	+ 0	+40	0	0.81
*104023	21 04 33.06	−36 01 42.9	12.03		2 G	316.137 759 19	−36.028 581 38		18.58	304.12	−10.30	3.31	2.30	3.75	4.28	2.70	+50	− 7	− 5	− 7	−29	+26	−26	− 3	− 1	+21	0	−1.28
*104024	21 04 31.19	−44 27 42.0	9.33		G	316.129 955 95	−44.461 673 03		12.35	60.95	−49.04	1.24	1.14	1.60	1.37	0.96	+43	+ 3	+11	−20	−23	−10	−29	−60	+15	+32	0	0.64
*104025	21 04 31.29	+08 39 01.6	9.49		H	316.130 370 64	+08.650 444 52		6.77	32.97	−16.46	1.37	1.20	1.68	1.62	1.19	+31	−29	−39	−20	− 4	+11	−12	−52	+37	+28	0	2.33
*104026	21 04 31.87	−46 15 19.5	7.06		H	316.132 809 62	−46.255 416 94		16.63	104.81	−68.63	0.78	0.64	0.98	0.79	0.55	+31	−14	− 3	−27	−18	+28	−22	−53	− 4	+14	2	1.15
*104027	21 04 32.42	−39 00 28.7	9.82		H	316.135 093 60	−39.007 971 60		15.76	−4.73	−86.18	1.44	0.96	1.79	1.67	0.81	+33	−10	− 1	−30	−26	+34	−29	−51	− 6	− 3	0	−1.62
*104028 H	21 04 32.53	+07 45 36.7	8.09		H	316.135 543 56	+07.760 206 25	A	3.97	0.89	−19.84	1.42	1.20	1.61	1.82	1.20	+11	+17	−45	−28	− 5	+ 9	+ 6	−35	+41	+27	2	0.23
*104029	21 04 32.92	+50 47 03.3	7.99		2 T	316.137 181 24	+50.784 256 51		4.28	−2.67	−5.40	0.63	0.55	0.71	0.81	0.61	− 7	−14	+12	− 5	+ 3	+ 5	+ 1	+ 3	+11	− 6	0	0.02
104030	21 04 34.24	−58 55 59.2	7.35		H	316.142 650 67	−58.933 112 50		3.80	−8.27	−26.19	0.65	0.57	0.92	0.78	0.54	− 5	−14	−12	− 2	+16	+16	+16	− 2	−16	−27	0	0.23
104031	21 04 34.64	+05 30 10.3	5.63		H	316.144 348 79	+05.502 860 35		4.74	14.15	0.49	0.75	0.41	0.82	0.91	0.40	+35	−21	−11	−28	− 9	+25	− 9	+13	+ 4	+40	3	1.21
104032 H	21 04 34.73	+52 23 59.2	7.59		G	316.144 719 92	+52.399 776 57	A	3.95	8.73	4.59	0.90	0.79	0.90	0.96	0.73	− 8	−14	+18	+ 2	+ 4	+ 8	+ 1	− 7	+12	− 2	0	0.31
104033	21 04 35.43	+50 28 13.7	8.27		H	316.147 630 88	+50.470 458 38		3.32	9.15	4.65	0.65	0.63	0.77	0.87	0.69	− 4	−20	+11	− 9	+ 3	+ 4	+ 1	+13	+ 4	− 1	1	2.02
104034	21 04 35.84	+60 15 24.0	7.29		H	316.149 350 62	+60.256 653 10		14.32	7.02	−28.40	0.49	0.45	0.55	0.50	0.49	+ 3	+ 4	− 3	+ 5	+17	+ 4	+20	− 3	+20	+32	0	1.78
104035	21 04 37.77	+12 01 29.1	7.71		H	316.157 377 41	+12.024 738 33		4.45	27.09	−10.91	0.73	0.74	0.97	0.92	0.80	+25	−21	−29	−12	− 6	+19	− 7	−34	+28	+25	0	−0.57
104036	21 04 38.07	−51 16 26.8	7.25		H	316.158 619 57	−51.274 098 25		5.66	44.45	28.28	0.79	0.66	1.01	1.15	0.71	+20	−24	−26	+15	− 7	−10	−25	−38	+19	−23	0	−0.58
104037	21 04 39.42	−64 02 51.3	7.45		H	316.164 230 00	−64.047 572 88		1.42	−1.92	−1.74	0.54	0.51	0.97	0.65	0.60	−44	− 2	+ 3	+ 9	+13	− 9	+13	+ 3	− 4	−38	0	0.29
104038 H	21 04 39.71	+58 31 14.1	8.20		H	316.165 448 46	+58.520 578 44	*	3.72	8.80	3.58	0.58	0.57	0.65	0.62	0.55	− 4	+ 7	+11	+ 9	+11	−12	+12	+ 8	+ 8	+ 2	0	0.97
104039	21 04 40.09	+30 55 04.5	8.61		H	316.167 045 00	+30.917 913 17		2.95	20.76	10.31	0.62	0.85	1.15	0.78	0.91	− 1	− 5	−16	+43	+13	− 8	+11	+20	− 6	+ 0	1	0.98
104040 H	21 04 40.77	+37 09 47.2	8.80		H	316.169 866 33	+37.163 120 87	A	2.07	14.20	3.20	2.67	2.72	3.41	2.62	2.78	−10	+ 8	+ 2	−12	− 5	−16	− 9	+ 3	+15	− 7	1	1.12
104041	21 04 41.63	+02 56 32.1	6.41		G	316.173 469 69	+02.942 260 21		8.16	12.37	5.77	0.99	0.44	1.03	1.13	0.43	+39	−23	+12	−40	−28	+ 3	−30	+10	+ 4	+51	0	−0.01
104042	21 04 42.63	+41 00 28.8	8.28		H	316.177 606 65	+41.008 010 99		1.81	0.69	−1.05	0.54	0.63	0.80	0.67	0.74	− 9	− 1	− 6	+17	+ 0	−15	+ 0	−11	+17	− 5	0	−0.65
104043	21 04 43.03	−77 01 22.3	5.13		1 T	316.179 285 92	−77.022 869 38		22.07	13.83	−369.38	0.45	0.45	0.57	0.57	0.55	− 3	−13	−10	+22	− 6	− 1	− 7	+ 2	− 1	−13	1	1.73
104044 H	21 04 43.42	+49 01 44.1	8.05		G	316.180 912 41	+49.028 905 23	*	1.03	−3.14	−6.85	0.85	1.06	0.79	0.85	0.72	+ 4	− 1	+23	−15	+ 1	− 7	+ 3	+ 1	−26	+ 8	1	0.52
104045	21 04 44.23	−04 49 42.3	8.34		H	316.184 289 11	−04.828 423 86		18.64	−140.25	−195.05	1.00	0.59	1.21	1.47	0.59	+42	− 8	+ 9	+14	−10	+29	− 4	−18	+24	+62	0	0.10
104046	21 04 44.99	−08 46 46.0	8.40		H	316.187 451 09	−08.779 445 30		1.86	2.47	−24.43	1.06	0.56	1.22	1.46	0.53	+34	−22	− 1	+ 6	+ 0	+27	− 1	−30	+30	+61	2	1.17
104047 H	21 04 45.11	+03 32 02.0	7.63		H	316.187 966 54	+03.533 894 08	A	16.05	15.46	−13.28	2.58	1.24	2.41	3.15	1.17	+42	+ 9	+ 9	−41	−16	−29	−20	+14	−17	+54	5	3.01
104048	21 04 45.32	+02 16 11.8	6.34		H	316.188 833 24	+02.269 931 81		8.41	94.64	−66.08	0.89	0.42	0.96	1.02	0.42	+45	−35	−10	−50	−25	+37	−27	+14	+ 9	+51	2	−1.09
104049	21 04 46.01	−55 20 08.9	9.64		H	316.191 709 65	−55.335 804 58		0.80	32.94	−44.15	1.31	1.05	1.53	2.06	1.14	+16	−12	−17	+ 9	+ 6	−18	− 1	−29	− 2	+ 6	4	−0.12
104050	21 04 46.99	+42 29 22.7	8.36		H	316.195 778 57	+42.489 643 17		2.18	16.53	6.75	0.60	0.65	0.80	0.68	0.69	+ 3	+15	+10	−11	+ 6	−13	+ 7	−29	+ 3	− 1	0	1.04
104051	21 04 48.85	+55 35 16.3	8.03		G	316.203 551 66	+55.587 864 19		7.53	11.76	23.35	0.53	0.52	0.60	0.55	0.53	− 2	+ 0	+ 8	+ 8	+ 7	− 8	+ 8	+ 6	+10	+ 4	0	−0.63
104052	21 04 49.42	+08 50 24.7	7.66		H	316.205 902 20	+08.840 203 02		8.98	−3.94	−32.68	1.03	0.81	1.23	1.23	0.85	+24	−37	−46	−15	+ 0	+13	− 5	−39	+29	+17	0	1.29
104053	21 04 49.96	+50 01 33.6	8.77		H	316.208 169 53	+50.026 008 98		6.31	23.07	7.42	0.78	0.67	0.86	1.04	0.75	− 5	− 2	+ 8	+ 3	+11	− 7	+10	+ 4	− 1	− 2	0	0.18
104054	21 04 51.15	+61 54 32.5	8.31		H	316.213 109 77	+61.909 025 53		2.29	3.84	1.31	0.61	0.57	0.68	0.59	0.57	− 7	− 2	+22	−11	+29	+22	+27	−12	+17	+23	0	0.17
104055	21 04 52.12	+61 11 20.4	9.77		H	316.217 178 48	+61.189 011 27		1.93	−12.55	−14.16	0.92	0.82	1.00	0.90	0.86	− 9	− 6	+19	−19	+28	+15	+26	−11	+ 7	+31	1	1.46
104056	21 04 52.20	−22 30 05.5	9.64		H	316.217 495 28	−22.501 536 41		1.58	2.95	4.92	1.43	1.19	1.73	1.72	1.61	+30	+ 9	−21	−20	− 5	+42	+ 6	+ 0	+23	+47	0	1.12
104057	21 04 52.63	+12 26 41.6	7.65		G	316.219 294 41	+12.444 879 72		10.71	−28.59	−26.65	0.79	0.59	0.94	0.93	0.68	− 4	+ 9	−25	−30	+15	+ 6	+16	−19	+25	+10	0	0.39
104058	21 04 53.32	−63 30 25.3	8.46		H	316.222 185 78	−63.507 024 86		5.59	18.59	−32.79	0.60	0.59	1.17	0.67	0.62	−29	+ 2	− 4	+22	+12	+12	+13	+ 5	−20	−20	0	−2.65
104059	21 04 53.94	−16 57 14.1	11.45		G	316.224 748 42	−16.953 917 15		52.26	−914.54	−2035.65	2.62	1.83	3.06	3.86	2.61	+34	−18	−24	+ 6	−26	+ 9	−20	+34	−24	+39	2	0.19
104060	21 04 55.86	+43 55 40.3	3.72		1 H	316.232 732 51	+43.927 851 22		2.77	8.60	0.35	0.44	0.39	0.52	0.57	0.45	−11	− 3	+ 7	+16	+ 8	+ 4	+ 8	+ 7	−10	− 1	0	−2.03
*104061	21 04 56.57	−44 45 16.0	10.12		H	316.235 714 70	−44.754 442 81		5.50	−25.37	−21.84	1.66	1.47	2.11	1.71	1.21	+50	+ 0	+ 1	−29	−28	−10	−34	−62	− 7	+37	0	1.14
*104062	21 04 56.57	+47 52 11.7	8.51		H	316.235 710 34	+47.869 906 93		4.81	4.56	5.56	0.73	0.69	0.89	0.89	0.67	+ 1	+ 0	+26	− 5	−11	+16	−13	− 3	− 3	− 4	1	0.69
104063	21 04 56.94	−27 12 02.7	9.76		H	316.237 265 11	−27.200 744 63		6.41	−96.01	−112.12	1.53	1.19	1.76	1.98	1.90	+20	− 5	−19	−18	−10	+30	− 8	− 7	+ 5	+44	0	0.15
104064	21 04 57.72	+35 25 45.9	7.35		H	316.240 515 01	+35.429 423 90		3.12	26.77	13.38	0.42	0.54	0.75	0.42	0.59	−24	+ 2	−11	−17	+ 6	− 9	+ 5	−17	+21	−18	1	−0.69
104065	21 05 00.42	−66 15 13.9	9.12		H	316.251 764 19	−66.253 868 56		13.38	−61.50	−14.92	0.68	0.90	1.41	0.76	1.11	−37	− 9	− 7	−12	+ 6	− 1	+ 6	−13	− 9	−43	1	0.83
104066 H	21 05 01.11	+12 43 23.4	9.05		H	316.254 641 41	+12.723 175 34	B	6.72	50.47	−7.15	35.16	32.71	2.25	2.45	1.88	+37	− 3	+ 0	+ 3	+ 1	+10	−12	−27	+28	+10	0	−0.14
104067	21 05 02.21	+12 43 20.6	8.66		H	316.259 190 06	+12.722 393 77	A	6.72	50.47	−7.15	2.26	1.56	2.25	2.45	1.88	− 8	+ 7	−10	−29	+22	+10	+25	− 6	+28	+10	0	−0.14
*104068	21 05 02.28	−26 09 44.8	9.58		H	316.259 520 48	−26.162 449 67		3.76	13.87	−2.57	1.45	1.10	1.70	2.23	1.63	+14	−12	−27	+ 0	−21	+31	−12	+ 7	−12	− 2	3	−0.69
*104069	21 05 02.28	+33 01 06.6	9.60		H	316.259 493 07	+33.018 494 30		0.46	−4.73	−6.93	0.62	0.88	1.23	0.73	0.93	−28	+ 5	−11	+ 4	+ 7	− 3	+ 6	+ 0	+ 1	−15	0	0.83
104070	21 05 02.93	−67 36 46.8	9.44		H	316.262 188 53	−67.612 994 75		4.76	18.62	−74.03	0.77	0.94	1.31	0.84	1.17	−42	+ 0	− 6	+14	−18	− 3	−19	+17	+ 4	−59	0	1.08
104071	21 05 04.95	−32 49 34.2	7.72		G	316.270 612 32	−32.826 153 95		18.15	−47.61	−6.45	0.85	0.75	1.12	1.10	0.91	+14	−20	−30	−12	−22	+52	− 2	−16	+14	+11	0	−0.48
104072	21 05 05.83	−56 07 15.0	8.98		H	316.274 274 09	−56.120 845 80		3.43	−5.14	−28.20	1.10	0.87	1.40	1.26	0.81	−10	− 8	+ 7	− 6	+20	+ 9	+12	−29	− 3	−32	0	0.99
104073	21 05 05.95	+18 39 21.5	7.39		H	316.274 775 39	+18.655 964 76		1.45	19.47	5.00	0.75	0.54	1.04	0.96	0.71	+ 5	−24	+ 2	+13	+10	−19	+ 8	+26	−17	+41	2	1.14
104074	21 05 06.66	+40 24 59.0	9.04		H	316.277 755 63	+40.416 379 83		6.09	2.06	−17.08	0.67	0.76	1.01	0.78	0.84	− 8	−10	−10	+13	+ 1	−12	− 3	− 8	+27	−14	4	0.40
104075 H	21 05 07.95	+07 56 44.4	7.97		H	316.283 116 71	+07.945 655 95	A	22.57	4.88	−89.05	3.42	4.75	2.95	3.18	2.47	− 7	+14	−40	−15	+ 3	+ 9	+11	−36	+46	+26	1	0.05
104076	21 05 08.53	+73 12 10.0	8.73		H	316.285 546 49	+73.202 768 14		15.04	132.85	136.20	0.61	0.64	0.71	0.67	0.75	+ 6	+ 3	+13	+ 9	+ 4	−14	+ 6	+12	−11	+17	0	−0.49
104077	21 05 08.53	−37 13 52.1	7.01		H	316.285 553 43	−37.231 151 69		8.74	64.41	−95.25	0.85	0.55	0.92	1.17	0.51	+29	−14	−15	+12	−35	+22	−42	−33	+ 4	−15	0	0.13
104078 H	21 05 09.41	+19 36 11.0	11.61		G	316.289 195 78	+19.603 045 08	A	18.60	−200.76	−567.33	6.08	6.49	4.99	5.22	3.63	−52	+15	− 2	−15	+11	−26	+ 5	+13	− 9	+19	1	0.04
104079	21 05 10.20	+05 39 35.4	10.91		G	316.292 497 59	+05.659 837 69		3.67	2.75	2.27	1.98	1.38	2.33	2.46	1.39	+39	−10	−21	−22	− 6	+17	− 4	+14	+ 5	+41	2	0.22
104080	21 05 11.13	+26 45 20.8	8.18		H	316.296 361 84	+26.755 766 39		3.11	6.28	−5.41	0.56	0.61	0.96	0.60	0.66	+ 2	+11	−22	+ 3	+33	−27	+28	+30	+ 3	+10	0	0.52
104081	21 05 11.45	−32 20 40.5	7.98		G	316.297 700 77	−32.344 582 54		5.93	2.93	13.21	0.83	0.74	0.95	0.98	1.05	+25	−25	− 6	−24	−21	+20	−13	−34	−16	+37	0	0.11
104082	21 05 11.76	+35 45 48.7	8.45		H	316.299 013 42	+35.763 526 52		0.91	−7.96	33.10	0.56	0.69	0.98	0.57	0.74	−28	+ 4	− 4	−27	+ 8	− 9	+ 8	−23	+16	−30	0	−1.36
104083	21 05 13.23	−66 57 27.7	9.22		H	316.305 113 78	−66.957 690 75		10.17	51.42	−71.26	0.62	0.80	1.21	0.65	0.99	−31	−14	+ 3	−11	− 4	− 7	− 4	− 3	− 1	−44	2	0.13
104084	21 05 14.15	+51 09 03.5	8.82		H	316.308 960 24	+51.150 972 62		8.74	58.23	28.36	0.74	0.64	0.82	1.00	0.72	+ 0	− 9	− 8	+ 7	+ 3	+ 5	+ 1	− 7	+10	− 6	0	0.32
104085	21 05 14.23	−54 43 37.0	5.17		H	316.309 305 13	−54.726 950 35		9.35	16.51	−37.55	0.56	0.50	0.69	0.69	0.52	+20	−23	+ 0	+24	−13	+16	−11	−37	−16	+11	2	0.89
104086	21 05 14.57	+23 36 01.5	7.55		H	316.310 701 28	+23.600 426 08		1.30	3.64	−4.94	0.65	0.50	0.98	0.71	0.50	− 1	−14	− 4	+34	+19	−24	+18	+57	−10	+ 3	1	0.47
104087	21 05 15.79	+15 01 49.1	9.55		H	316.315 786 57	+15.030 311 64		5.80	7.43	3.71	0.99	0.74	1.34	1.22	0.92	+17	−14	− 6	+ 6	+ 7	− 7	+ 2	+26	− 5	+43	0	−0.03
104088	21 05 17.34	+82 17 21.0	8.84		H	316.322 263 20	+82.289 159 45		6.32	11.54	27.17	0.75	0.67	0.80	0.93	0.79	+ 8	−31	− 4	−15	− 8	+16	−11	−17	+16	+11	0	0.11
104089	21 05 18.78	+33 29 41.8	8.03		H	316.328 231 54	+33.494 948 76		2.97	5.67	−4.34	0.41	0.60	0.83	0.48	0.66	−33	+ 6	−12	+10	+ 2	− 7	+ 1	− 2	+ 3	−31	0	0.79
104090 H	21 05 19.23	+00 43 37.4	7.78		G	316.330 109 08	+00.727 062 05	*	6.25	−9.71	13.07	0.82	0.40	0.88	1.00	0.41	+27	−23	− 7	−17	−15	+21	−16	+20	+11	+38	0	−1.58
104091	21 05 19.30	+09 10 10.1	8.02		H	316.330 428 54	+09.169 480 85		5.70	48.16	−5.61	0.84	0.89	1.19	1.27	0.91	+25	− 9	−46	+ 4	−13	+34	− 5	−50	+39	+30	0	1.28
104092	21 05 19.70	+07 04 14.4	8.27		G	316.332 082 34	+07.070 667 97		67.38	77.69	−563.47	1.13	1.01	1.35	1.49	0.95	+43	−40	−50	−22	−13	+11	−27	−60	+41	+27	0	−0.16
104093 H	21 05 19.86	+28 07 17.1	12.04		H	316.332 735 87	+28.121 417 36	A	−4.00	6.07	−36.41	5.90	7.23	7.70	5.21	8.15	+26	+ 7	− 8	+ 7	+18	−27	+ 7	+ 9	+29	+14	1	0.74
104094	21 05 22.57	+27 16 15.5	8.59		H	316.344 051 98	+27.270 972 36		11.79	−165.25	−150.40	0.71	0.78	1.17	0.80	0.87	+ 7	+ 3	− 3	+ 8	+29	−19	+30	+43	+ 9	+ 2	0	0.95
104095	21 05 23.22	−45 14 30.3	8.22		H	316.346 730 26	−45.241 736 72		8.74	27.50	−25.00	1.01	0.78	1.20	1.06	0.69	+33	− 9	+ 3	−33	−16	+16	−20	−55	− 2	+25	0	1.21
104096	21 05 23.27	+64 11 34.4	10.50		H	316.346 952 91	+64.192 895 30		2.74	16.54	9.34	1.33	1.25	1.36	1.32	1.40	+ 4	+ 9	+ 9	+27	− 3	+ 3	− 3	− 1	−20	+19	4	0.75
104097	21 05 23.38	+14 32 23.5	10.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
104001						1.132	0.012	G	1.22	0.02	I	11.5194	0.0070	0.045	51		11.45	11.59					1						G
104002	10.975	0.045	9.673	0.023		1.107	0.040	T	1.07	0.04	L	9.5504	0.0442	0.312	147		9.33	10.14	7.86	P 1 A			1 V						G
104003	11.401	0.081	10.115	0.040		1.089	0.073	T	1.16	0.10	L	10.2540	0.0043	0.030	101		10.21	10.33		U			1						
104004	10.682	0.057	9.357	0.030		1.125	0.050	T	1.09	0.05	L	9.4525	0.0032	0.024	56		9.40	9.49		C			1						
104005						1.570	0.015	G	2.00	0.21	K	11.2200	0.0058	0.059	124		11.12	11.29					1						G
104006	8.594	0.009	8.330	0.010		0.251	0.013	T	0.28	0.02	L	8.3700	0.0014	0.014	123		8.34	8.40		C			1						
104007	8.711	0.010	8.620	0.012		0.106	0.005	G	0.12	0.01	H	8.6482	0.0012	0.014	126		8.62	8.67		D			1 S						
104008	9.548	0.015	8.432	0.010		0.962	0.014	T	0.95	0.01	L	8.5068	0.0016	0.016	170		8.48	8.54					1						
104009	9.060	0.011	9.073	0.014		−0.007	0.016	T	0.01	0.01	L	9.0574	0.0017	0.024	174		9.02	9.11					1 X S						
104010						1.630	0.015	G	1.69	0.19	S	10.8846	0.0076	0.060	100		10.82	10.99		R			1						G
104011	9.576	0.026	8.389	0.017		1.017	0.024	T	0.99	0.02	L	8.4380	0.0023	0.015	54		8.42	8.46		C			1						
104012	10.471	0.031	9.463	0.022		0.880	0.028	T	0.89	0.02	L	9.4896	0.0020	0.024	114		9.46	9.53			21043−4233	I 1	1						
104013	9.280	0.016	9.296	0.023	A	0.070	0.015	G	0.08	0.02	H	9.3357	0.0291	0.080	132	A	9.22	9.45		D	21044+4631	H 1	2 C B	AB	93	18.252	0.018	1.23	0.10	D
104014	8.848	0.010	8.478	0.010		0.385	0.004	G	0.45	0.00	H	8.5176	0.0015	0.016	165		8.49	8.54		C			1						
104015	10.744	0.062	9.173	0.028		1.500	0.510	G	3.15	0.98	Q	10.2199	0.2367	1.549	146		8.07	11.48	136.04	P 1 B			1						G P
104016	9.107	0.013	7.481	0.007		1.361	0.012	T	1.33	0.01	L	7.4814	0.0010	0.011	107		7.46	7.50					1						S
104017	8.624	0.013	8.231	0.013		0.384	0.016	T	0.45	0.02	L	8.2744	0.0024	0.015	81		8.26	8.30					1						S
104018	9.714	0.017	8.411	0.010		1.100	0.015	G	1.06	0.02	H	8.4532	0.0017	0.022	137		8.43	8.50					1						
104019	5.064	0.004	4.873	0.003	*	0.169	0.004	G	0.18	0.02	A	* 4.9015	0.0006	0.005	47	*	4.89	4.91		D	21044−1951	I 1	2 C A	AB	281	0.339	0.028	2.37	0.06	S
104020	8.497	0.010	8.360	0.012		0.132	0.015	T	0.15	0.01	L	8.4196	0.0012	0.015	120		8.39	8.44		C			1						S
104021	10.397	0.031	10.180	0.039	A	0.388	0.400	G	0.43	0.07	B	* 10.1108	0.0022	0.021	118	*	10.08	10.15		D	21045+5904	I 1	2 C A	AB	33	9.575	0.028	2.55	0.10	G
104022	8.710	0.018	8.445	0.019		0.252	0.025	T	0.28	0.03	L	8.5006	0.0027	0.015	51		8.47	8.53		C	21045−2644	I 1	1						S
104023						1.439	0.013	G	1.43	0.02	H	12.1663	0.0088	0.072	102		11.99	12.27		U			1						D
104024	10.196	0.029	9.428	0.024		0.680	0.015	G	0.74	0.01	H	9.4756	0.0032	0.025	92		9.44	9.52					1						
104025	10.638	0.069	9.619	0.042		0.888	0.060	T	0.89	0.04	L	9.6455	0.0031	0.020	56		9.60	9.68		C			1						
104026	7.762	0.008	7.137	0.006		0.582	0.007	G	0.65	0.01	H	7.1884	0.0010	0.011	107		7.17	7.21					1						S
104027	10.788	0.045	9.890	0.034		0.783	0.043	T	0.82	0.03	L	9.9586	0.0016	0.022	112		9.92	10.00		C			1						
104028	8.628	0.013	8.194	0.013	A	0.500	0.495	G	0.51	0.04	L	* 8.1843	0.0016	0.012	70	*	8.15	8.20		D	21045+0746	I 1	2 C A	AB	242	1.150	0.010	2.01	0.03	S
104029	8.498	0.009	8.042	0.009		0.430	0.012	T	0.50	0.01	L	8.1426	0.0128	0.141	117		7.90	8.25	0.27	P 1 A			1						P
104030	7.583	0.006	7.381	0.007		0.193	0.009	T	0.21	0.01	L	7.4097	0.0013	0.011	111		7.39	7.44					1						S
104031	7.799	0.009	5.808	0.004		1.650	0.015	G	1.65	0.02	A	5.7410	0.0009	0.007	100		5.73	5.75			21045+0530	I 1	1						S
104032	7.460	0.009	7.462	0.011	*	−0.042	0.015	G	−0.02	0.01	H	* 7.5827	0.0011	0.010	131	*	7.57	7.61		D	21046+5224	I 1	2 C A	AB	265	1.881	0.004	1.57	0.02	S
104033	8.332	0.008	8.276	0.010		0.056	0.012	T	0.07	0.01	L	8.2935	0.0016	0.016	122		8.27	8.32		C	21046+5028	I 1	1 S						
104034	7.815	0.008	7.345	0.006		0.456	0.015	G	0.53	0.02	H	7.3952	0.0010	0.009	130		7.38	7.42					1						S
104035	9.003	0.016	7.824	0.010		1.011	0.015	T	0.99	0.01	L	7.8736	0.0018	0.013	77		7.85	7.89			21046+1201	I 1	1						S
104036	8.711	0.012	7.380	0.007		1.129	0.011	T	1.09	0.01	L	7.4200	0.0014	0.009	82		7.40	7.43		C			1						S
104037	9.578	0.011	7.628	0.005		1.653	0.010	T	1.71	0.04	O	7.5571	0.0011	0.016	248		7.53	7.58					1						S
104038	8.507	0.009	8.222	0.010	*	0.271	0.012	T	0.31	0.01	L	* 8.2716	0.0013	0.014	125	*	8.24	8.30		D	21047+5831	H 1	2 C S A	AB	327	0.186	0.013	1.72	0.27	
104039	9.979	0.022	8.714	0.013		1.078	0.020	T	1.04	0.02	L	8.7748	0.0014	0.015	141		8.75	8.81		C			1						
104040	9.973	0.020	8.912	0.014	A	1.079	0.197	G	0.88	0.03	L	* 8.9581	0.0022	0.025	165	*	8.92	9.01			21047+3710	H 1	2 C B	AB	283	1.359	0.088	3.16	0.22	
104041	7.769	0.006	6.536	0.004		1.051	0.002	G	1.02	0.00	H	6.5793	0.0009	0.006	121		6.57	6.59					1						S
104042	8.341	0.007	8.280	0.009		0.061	0.011	T	0.07	0.01	L	8.3069	0.0013	0.016	150		8.28	8.33		C			1						
104043	5.721	0.003	5.183	0.002		0.490	0.008	G	0.66	0.07	F	5.2252	0.0020	0.019	133		5.21	5.26	2.88	P 1 A			1						S
104044	8.181	0.009	8.050	0.010	*	0.130	0.015	G	0.14	0.01	H	* 8.0866	0.0015	0.014	120	*	8.06	8.11		D	21047+4902	I 1	2 C A	AB	85	0.235	0.003	0.48	0.07	
104045	9.134	0.015	8.406	0.013		0.639	0.004	G	0.70	0.00	H	8.4755	0.0017	0.013	99		8.44	8.50		C			1						S
104046	9.578	0.018	8.493	0.012		0.938	0.017	T	0.93	0.01	L	8.5603	0.0011	0.013	114		8.54	8.59					1						S
104047	8.639	0.013	7.999	0.011	A						T	* 7.7647	0.0008	0.009	123	*	7.75	7.78		D	21048+0332	I 1	2 C A	AB	173	3.355	0.005	1.33	0.03	S
104048	7.555	0.006	6.451	0.004		0.965	0.001	G	0.95	0.00	H	6.5078	0.0007	0.006	135		6.50	6.52					1						S
104049	10.075	0.030	9.639	0.031		0.412	0.040	T	0.48	0.04	L	9.7289	0.0043	0.028	81		9.68	9.78					1						
104050	9.884	0.020	8.507	0.011		1.165	0.018	T	1.13	0.02	L	8.5248	0.0014	0.016	129		8.50	8.56					1						
104051	8.374	0.009	8.047	0.009		0.268	0.006	G	0.30	0.01	H	8.1073	0.0013	0.012	131		8.08	8.13		C			1						
104052	8.118	0.013	7.709	0.015		0.411	0.015	G	0.48	0.02	H	7.7565	0.0020	0.014	58		7.74	7.78					1						S
104053	9.832	0.021	8.864	0.015		0.850	0.019	T	0.86	0.01	L	8.9244	0.0020	0.017	117		8.90	8.95					1						
104054	8.568	0.011	8.344	0.012		0.214	0.015	T	0.24	0.02	L	8.3800	0.0014	0.013	108		8.36	8.41					1						
104055	10.120	0.026	9.742	0.030		0.358	0.037	T	0.42	0.04	L	9.8527	0.0029	0.022	100		9.82	9.89		C			1						G
104056	11.488	0.127	9.799	0.047		1.411	0.107	T	1.39	0.13	L	9.7836	0.0034	0.014	40		9.76	9.80					1						
104057	8.068	0.009	7.663	0.012		0.396	0.015	G	0.46	0.02	H	7.7273	0.0017	0.013	95		7.71	7.75		C	21049+1227	I 1	1						S
104058	8.689	0.008	8.492	0.009		0.181	0.012	T	0.20	0.01	L	8.5227	0.0016	0.019	215		8.50	8.56					1						S
104059						1.443	0.012	G	2.03	0.02	A	11.5516	0.0056	0.043	107		11.46	11.62					1						G
104060	5.837	0.005	3.898	0.003		1.609	0.005	T	1.63	0.01	L	3.8343	0.0010	0.014	101		3.81	3.86		U 2			1						S
104061	10.787	0.043	10.170	0.039		0.571	0.043	T	0.64	0.04	L	10.2429	0.0051	0.034	97		10.19	10.29					1						
104062	8.559	0.011	8.521	0.014		0.020	0.015	G	0.04	0.01	H	8.5243	0.0021	0.016	93		8.50	8.55					1						
104063	10.521	0.054	9.798	0.045		0.650	0.053	T	0.71	0.05	L	9.8904	0.0043	0.021	49		9.84	9.92		C			1						
104064	7.641	0.006	7.374	0.007		0.254	0.009	T	0.29	0.01	L	7.4226	0.0009	0.011	156		7.40	7.44			21050+3526	I 1	1						S
104065	9.899	0.014	9.177	0.012		0.649	0.014	T	0.71	0.01	L	9.2563	0.0026	0.031	238		9.21	9.31					1						
104066	11.095	0.083	10.193	0.059	*						T	9.1786	0.0722	0.395	90	−	8.79	10.12		D	21050+1243	I 2	2 C F C	BC	108	0.470	0.055	0.48	0.37	G
104067	9.912	0.030	8.917	0.020	A	1.102	0.218	G	1.06	0.23	R	8.8260	0.0099	0.063	91	−	8.75	8.96		D	21050+1243	I 2	1 C P C						G
104068	11.650	0.171	9.803	0.049		1.500	0.040	G	1.53	0.06	R	9.7064	0.0023	0.015	46		9.68	9.73		C			1						
104069	9.724	0.013	9.615	0.018		0.106	0.021	T	0.12	0.02	L	9.6475	0.0023	0.031	257		9.60	9.70					1 S						G
104070	10.045	0.018	9.480	0.017		0.533	0.018	T	0.61	0.02	L	9.5589	0.0021	0.027	206		9.50	9.61		C			1						
104071	8.428	0.014	7.798	0.013		0.606	0.015	G	0.68	0.01	H	7.8394	0.0010	0.010	53		7.82	7.86		D			1						S
104072	10.476	0.041	9.075	0.022		1.184	0.036	T	1.14	0.03	L	9.1421	0.0031	0.020	78		9.10	9.19		C			1						
104073	7.509	0.008	7.395	0.007		0.111	0.010	T	0.12	0.01	L	7.4312	0.0013	0.012	97		7.42	7.45					1						S
104074	9.428	0.014	9.085	0.015		0.325	0.019	T	0.38	0.03	L	9.1216	0.0025	0.021	139		9.09	9.17					1						
104075	8.756	0.015	8.045	0.013	*	0.654	0.016	T	0.72	0.01	L	* 8.1066	0.0021	0.018	76	*	8.07	8.13			21051+0757	H 1	2 C B	AB	309	0.410	0.143	3.83	0.18	S
104076	9.335	0.016	8.791	0.015		0.510	0.020	T	0.58	0.02	L	8.8386	0.0016	0.012	111		8.82	8.86					1						
104077	8.448	0.011	7.149	0.008		1.104	0.011	T	1.07	0.01	L	7.1754	0.0014	0.009	102		7.16	7.19					1						S
104078						1.244	0.020	G	1.40	0.02	I	* 11.7831	0.0088	0.062	102	*	11.62	11.86			21052+1936	H 1	2 C B	AB	336	0.326	0.018	0.54	0.24	D
104079						1.460	0.020	G	1.52	0.14	K	11.0746	0.0057	0.042	82		11.02	11.15		C			1						G
104080	8.225	0.008	8.181	0.009		0.045	0.011	T	0.06	0.01	L	8.2045	0.0015	0.015	165		8.18	8.23					1						S
104081	8.268	0.012	7.992	0.016		0.216	0.003	G	0.24	0.00	H	8.0476	0.0017	0.011	58		8.03	8.07		C	21052−3221	I 1	1						S
104082	9.723	0.014	8.550	0.010		1.006	0.013	T	0.98	0.01	L	8.6197	0.0017	0.017	161		8.59	8.65					1						
104083	9.953	0.015	9.267	0.013		0.622	0.015	T	0.69	0.01	L	9.3467	0.0020	0.024	241		9.30	9.40		C			1						
104084	9.361	0.017	8.862	0.016		0.460	0.015	G	0.53	0.02	H	8.9245	0.0017	0.018	121		8.90	8.96		C			1						
104085	6.723	0.005	5.300	0.003		1.201	0.001	G	1.16	0.00	H	5.3336	0.0006	0.005	85		5.33	5.34		C			1						S
104086	9.288	0.012	7.695	0.007		1.335	0.011	T	1.30	0.01	L	7.7039	0.0010	0.011	174		7.69	7.72					1						S
104087	9.845	0.018	9.570	0.021		0.262	0.026	T	0.29	0.03	L	9.6232	0.0027	0.026	141		9.58	9.67					1						
104088	9.324	0.016	8.882	0.016		0.417	0.021	T	0.48	0.02	L	8.9324	0.0019	0.017	120		8.90	8.97		C			1						
104089	8.070	0.006	8.033	0.008		0.039	0.009	T	0.05	0.01	L	8.0477	0.0010	0.013	226		8.03	8.08		C			1						S
104090	8.170	0.010	7.780	0.011	*	0.385	0.003	G	0.45	0.00	H	* 7.8383	0.0009	0.009	118	*	7.82	7.85		D	21053+0044	H 1	2 C S B	AB	302	0.110	0.030	1.37	0.79	S
104091	8.472	0.014	8.091	0.015		0.399	0.015	G	0.46	0.02	H	8.1135	0.0023	0.016	60		8.09	8.15					1						S
104092	9.887	0.090	8.439	0.051		1.119	0.015	G	1.36	0.02	A	8.4116	0.0015	0.010	60		8.39	8.43		C	21054+0704	I 1	1						
104093											T	* 12.1779	0.0112	0.127	127	*	11.93	12.32		D	21053+2807	H 1	2 C D	AB	11	0.690	0.012	0.08	0.07	D X
104094	9.409	0.014	8.676	0.012		0.672	0.015	T	0.73	0.01	L	8.7307	0.0018	0.021	138		8.70	8.77					1						
104095	8.709	0.013	8.253	0.012		0.419	0.013	G	0.49	0.01	H	8.3137	0.0016	0.013	98		8.29	8.33					1						S
104096	11.972	0.112	10.523	0.048		1.222	0.096	T	1.18	0.09	L	10.6571	0.0040	0.040	122		10.59	10.72					1 G						G
104097						1.150	0.015	G	1.25	0.03	I	10.5626	0.0029	0.030	130		10.51	10.62		D			1 G						G
104098	9.300	0.013	8.058	0.008	*	1.060	0.012	T	1.03	0.01	L	* 8.0843	0.0014	0.016	152	*	8.06	8.11		D	21054−8124	H 1	2 C A	AB	150	0.229	0.004	0.05	0.10	
104099	10.088	0.026	8.837	0.016		1.067	0.024	T	1.03	0.02	L	8.8973	0.0022	0.018	97		8.87	8.93					1						
104100	9.858	0.019	8.657	0.012		1.028	0.018	T	1.00	0.01	L	8.7133	0.0018	0.022	170		8.68	8.75					1						

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$			F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr																				%		
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			29	30									
104101	21 05 26.79	+05 57 30.6	5.94	G	316.361 620 27	+05.958 488 57		27.06	−117.36	−119.06	1.38	0.70	1.07	2.37	0.99	+34	−43	−37	−84	−28	+45	−11	−40	− 8	+19			2	0.67									
104102	21 05 27.03	+34 48 43.6	7.96	H	316.362 639 86	+34.812 112 10		3.41	1.09	−4.55	0.45	0.59	0.79	0.47	0.66	−25	+ 8	−20	− 8	+ 5	−13	+ 4	−20	+26	−22			0	1.64									
104103	21 05 27.34	−30 18 26.6	9.19	H	316.363 917 13	−30.307 402 41		6.53	−38.55	−43.26	1.10	0.81	1.25	1.50	1.05	+13	−32	−36	+ 2	−20	+27	−11	− 9	− 7	− 8			0	1.09									
104104	21 05 28.77	+37 38 24.1	8.58	H	316.369 873 61	+37.640 014 44		2.32	19.02	7.10	0.60	0.66	0.90	0.56	0.71	−26	+ 7	−12	−17	+ 6	−12	+ 5	−20	+25	−25			0	−1.16									
104105	21 05 29.21	+78 07 34.8	5.91	G	316.371 711 22	+78.126 322 22		7.91	19.04	28.71	0.42	0.40	0.44	0.47	0.42	−10	− 3	+ 5	+10	+14	− 5	+15	−17	+11	− 6			0	−0.80									
104106	21 05 30.01	+29 05 46.3	8.00	1 H	316.375 040 41	+29.096 185 18		2.30	8.08	−8.22	0.65	0.67	1.09	0.77	0.77	− 1	+ 7	−20	+23	+31	−25	+27	+ 8	+12	− 7			0	−0.09									
104107 H	21 05 30.82	+53 40 05.5	8.23	2 H	316.378 433 92	+53.668 202 52	A	2.69	5.64	6.00	1.49	1.15	1.33	1.46	1.17	+ 3	+ 4	+ 4	+ 5	−10	−12	−10	+13	+21	− 8			3	2.51									
104108	21 05 31.57	−59 08 18.0	9.42	H	316.381 556 77	−59.138 326 67		29.76	105.83	−19.65	2.68	2.33	3.76	3.09	2.32	−15	−16	− 3	−19	+29	+ 5	+28	−13	−17	−28			0										
104109	21 05 31.61	+20 43 37.5	8.20	H	316.381 724 39	+20.727 093 54		0.54	10.36	−5.03	0.70	0.53	0.99	1.01	0.58	− 5	−13	+12	− 7	+29	− 9	+20	+41	+ 2	+ 9			1	0.64									
*104110 H	21 05 32.41	+62 09 31.9	7.81	H	316.385 044 93	+62.158 859 58	A	3.62	3.45	6.82	1.57	1.43	1.45	1.42	1.28	+ 9	+12	+ 7	− 8	+19	+23	+17	−10	− 5	+25			1	7.81									
*104111	21 05 31.99	−04 21 43.3	7.15	H	316.383 294 49	−04.362 036 87		2.20	−18.56	−15.33	0.80	0.52	0.92	1.20	0.54	+41	−12	+ 2	+ 2	−20	+13	−13	−10	+14	+51			2	1.83									
*104112	21 05 32.19	−43 31 18.7	7.20	G	316.384 105 75	−43.521 866 72		5.61	−23.66	−52.95	0.83	0.75	1.07	0.87	0.61	+54	−14	+ 0	−25	−30	+ 0	−36	−62	−10	+37			0	−0.15									
104113 H	21 05 34.47	+60 29 33.5	9.41	H	316.393 616 21	+60.492 639 15	A	2.73	5.28	5.24	3.43	2.91	1.14	1.12	1.13	−24	+ 3	+ 2	− 8	+10	+ 6	+ 4	−10	+12	+32			0	0.99									
104114	21 05 34.55	−50 08 40.9	9.27	H	316.393 947 55	−50.144 706 19		5.95	26.15	−58.93	1.08	1.08	1.33	1.63	1.86	+29	−12	−15	− 7	−24	+23	−30	−62	− 2	+15			2	−0.80									
104115	21 05 35.79	+46 57 47.8	7.57	G	316.399 133 27	+46.963 279 50		1.20	−4.19	−3.98	0.54	0.54	0.67	0.66	0.56	−11	+ 3	+12	−16	− 5	+ 5	− 5	+ 0	+ 6	− 7			0	−0.15									
104116	21 05 36.56	+29 41 39.8	9.56	H	316.402 340 00	+29.694 393 60		0.30	6.99	−5.45	0.90	0.98	1.77	1.10	1.13	−10	+12	−21	−18	+24	−35	+28	+ 7	+ 8	−23			0	0.10									
104117 H	21 05 37.17	−51 50 45.1	9.34	H	316.404 892 80	−51.845 857 34	A	10.27	14.82	27.84	3.47	3.28	4.34	5.49	4.99	+28	−28	−22	+26	+10	−49	−18	−27	+24	−18			1	0.57									
104118	21 05 37.37	+36 21 04.6	9.73	H	316.405 708 90	+36.351 266 78		0.27	−6.06	−13.15	0.88	1.18	1.53	0.89	1.17	−24	+ 1	− 1	−14	+14	−15	+14	−38	+28	−28			0	−0.37									
104119	21 05 38.08	+16 53 05.0	8.22	H	316.408 651 70	+16.884 729 97		2.44	1.17	−21.61	0.81	0.55	1.03	1.05	0.66	+ 0	−10	+ 5	+36	+ 4	+13	+ 7	+23	+10	+28			0	1.26									
104120	21 05 38.40	−36 21 15.5	8.87	H	316.409 980 27	−36.354 296 22		1.86	13.11	−2.12	1.04	0.64	1.14	1.23	0.61	+40	−22	− 6	− 3	−37	+21	−42	−35	+ 4	+ 5			0	0.64									
104121	21 05 38.52	−14 54 17.5	8.00	H	316.410 517 42	−14.904 853 73		0.67	17.29	−0.13	0.96	0.65	1.13	1.24	0.85	+28	−23	−18	− 8	−17	+33	−18	+32	+ 0	+36			0	0.56									
104122	21 05 40.27	−08 23 49.9	8.13	H	316.417 780 48	−08.397 185 62		3.13	14.20	−18.04	1.02	0.53	1.22	1.48	0.51	+37	−13	+ 0	+16	− 3	+39	+ 3	−33	+38	+67			2	−0.28									
104123	21 05 40.61	+07 52 30.9	8.74	H	316.419 217 25	+07.875 250 94		0.44	3.29	−9.91	1.06	1.06	1.40	1.34	1.08	+26	−26	−42	− 8	−12	+31	− 8	−51	+39	+33			0	0.05									
104124	21 05 40.91	+26 38 29.0	10.75	G	316.420 467 58	+26.641 401 38		22.07	−149.93	−210.64	1.16	1.15	2.03	1.38	1.25	− 5	+ 5	−11	−27	+31	−19	+26	+17	+ 1	+ 0			3	1.02									
104125	21 05 40.97	−44 56 56.5	6.94	H	316.420 727 13	−44.949 022 59		5.87	−28.17	−20.55	0.85	0.62	0.96	0.93	0.56	+35	−15	− 4	−31	−15	+ 4	−17	−50	+ 1	+32			0	−0.23									
104126	21 05 42.93	+31 33 57.0	8.99	H	316.428 863 85	+31.565 846 45		2.69	−0.51	1.27	0.64	0.74	1.18	0.81	0.85	− 7	+ 1	− 7	+34	+14	−25	+14	+ 3	+23	− 4			0	−0.08									
104127	21 05 43.99	+47 48 17.0	7.43	H	316.433 303 24	+47.804 709 34		4.75	5.34	3.94	0.55	0.52	0.68	0.73	0.52	− 3	+ 1	+18	− 4	−11	+25	−12	+ 2	+ 4	− 6			1	1.03									
104128	21 05 48.49	+15 19 38.7	6.64	H	316.452 026 12	+15.327 412 69		22.82	86.07	−80.29	0.70	0.43	0.91	0.83	0.50	−10	−16	−11	+ 9	+ 3	− 5	− 2	+28	−10	+20			0	0.71									
104129 H	21 05 48.62	−57 44 11.1	8.27	H	316.452 576 57	−57.736 413 85	*	5.89	−11.37	−0.06	1.26	1.29	1.43	1.03	0.87	+ 7	+ 9	− 1	−33	+20	−32	+30	− 4	+20	−34			3	−0.15									
104130	21 05 49.14	+30 13 02.2	8.53	2 H	316.454 767 36	+30.217 274 09		2.91	12.02	−17.98	0.69	0.82	1.18	0.91	0.90	− 5	− 1	− 8	+37	+17	+ 0	+16	+ 4	+ 8	+ 3			2	2.76									
104131	21 05 51.12	+20 02 28.6	8.27	G	316.462 989 68	+20.041 270 60		8.76	8.38	−61.75	0.98	0.62	1.15	1.39	0.77	− 7	+12	+ 0	+ 2	+20	+ 1	+16	+10	+ 6	+28			0	−0.16									
104132	21 05 51.71	−10 36 42.3	8.51	G	316.465 460 93	−10.611 744 49		7.49	35.73	−3.62	1.04	0.59	1.18	1.62	0.57	+40	− 9	− 2	+18	−15	+21	+ 0	−39	+24	+67			0	−0.67									
104133	21 05 52.08	+39 19 35.4	8.15	G	316.467 014 53	+39.326 490 85		2.61	−0.58	−0.29	0.51	0.64	0.87	0.55	0.72	− 8	− 4	+ 1	+15	+ 9	−27	+ 9	− 8	+34	−12			0	−0.31									
104134 H	21 05 55.24	+21 18 13.3	8.62	H	316.480 182 58	+21.303 682 29	A	1.86	8.05	−5.79	1.20	1.08	1.70	1.63	1.10	+19	− 2	+11	+10	+40	+12	+31	+36	−14	+21			1	0.57									
104135	21 05 55.50	+20 56 48.4	6.83	1 H	316.481 269 12	+20.946 769 53		2.57	20.83	−17.14	0.59	0.47	0.87	0.86	0.52	− 7	−12	+16	−26	+37	+ 6	+28	+32	− 2	+ 0			3	0.34									
104136	21 05 56.25	+48 02 40.1	7.58	H	316.484 378 46	+48.044 466 56		2.15	−2.52	0.70	0.59	0.57	0.73	0.73	0.53	− 4	− 7	+34	−21	− 8	+14	−10	− 2	+ 3	− 4			1	−1.09									
104137	21 05 56.31	+04 25 42.3	12.13	G	316.484 626 31	+04.428 424 41		43.63	135.46	−169.87	3.94	2.36	4.58	5.26	2.56	+39	−27	−16	−13	−12	+ 9	− 9	+14	+ 1	+45			0	−1.82									
104138	21 05 56.64	+01 51 52.2	10.40	H	316.485 987 74	+01.864 511 24		15.09	154.94	−81.23	1.61	0.85	1.81	1.83	0.90	+43	−37	−15	−47	− 7	+35	−11	−38	− 1	+49			0	0.22									
104139	21 05 56.78	−17 13 57.8	4.08	H	316.486 580 82	−17.232 710 95		20.61	79.64	−61.64	0.84	0.54	0.92	1.23	0.71	+27	−10	− 9	− 2	−37	+19	−34	+21	− 5	+34			2	1.59									
104140	21 05 56.90	+45 43 03.3	8.52	H	316.487 084 51	+45.717 592 95		4.30	10.51	4.45	0.63	0.60	0.77	0.71	0.59	−16	+ 3	+14	+17	− 5	− 5	− 3	− 7	+ 5	−12			0	−0.69									
104141	21 05 58.54	+24 29 55.3	7.61	H	316.493 896 09	+24.498 686 65		7.69	−2.92	−39.41	0.53	0.48	0.88	0.66	0.49	+ 9	−10	+ 0	−19	+42	−11	+42	+53	− 5	+ 5			1	1.41									
104142	21 05 58.69	−69 54 16.2	8.90	H	316.494 522 97	−69.904 504 79		2.56	8.43	7.13	0.72	0.82	1.17	0.81	0.98	−24	− 8	− 6	− 2	− 1	−15	+ 0	+17	+16	−36			0	0.46									
104143	21 05 59.19	+69 15 55.5	8.87	H	316.496 610 39	+69.265 412 59		1.87	11.62	9.86	0.68	0.69	0.77	0.83	0.69	+ 0	− 6	+26	+ 6	+ 6	+10	− 8	+ 9	− 6	+10	+ 3		0	−0.74									
104144	21 05 59.22	+34 04 21.0	8.96	H	316.496 737 68	+34.072 490 22		2.31	−1.40	−19.72	0.68	0.93	1.30	0.74	1.02	−37	+16	−10	− 2	+ 8	−19	+ 9	−15	+21	−43			3	−0.18									
104145	21 06 00.48	−42 28 43.1	10.78	H	316.502 018 69	−42.478 648 80		6.42	54.32	−11.62	1.87	1.29	2.40	1.61	1.11	+39	−46	−10	−32	−24	+21	−25	−47	+ 6	+24			2	1.51									
104146	21 06 00.50	+62 55 18.6	6.88	H	316.502 097 77	+62.921 834 79		3.40	10.51	−12.44	0.50	0.47	0.55	0.51	0.49	− 5	+ 1	+18	− 6	+22	+17	+20	− 2	+ 6	+11			0	1.39									
104147	21 06 00.67	+76 52 22.6	8.78	H	316.502 787 76	+76.872 946 06		3.12	−22.55	−31.62	0.76	0.69	0.79	0.89	0.79	+ 3	−15	+ 6	+16	+11	+11	+ 7	+ 9	+10	− 1			0	1.52									
104148	21 06 01.12	−30 07 29.8	5.69	H	316.504 681 34	−30.124 953 61		9.83	32.50	−68.66	0.70	0.56	0.81	0.87	0.73	+15	−23	−33	− 7	−14	+28	− 5	− 7	− 2	+ 9			0	0.71									
104149	21 06 01.33	+76 15 59.4	9.28	H	316.505 561 08	+76.266 503 43		7.91	−31.56	−23.53	0.92	0.66	0.82	1.13	0.73	+ 2	−20	+ 6	−48	+ 2	+24	− 2	−13	+14	+ 6			1	−0.15									
104150	21 06 01.95	−57 35 32.8	8.00	H	316.508 132 12	−57.592 453 47		3.56	−12.49	−4.90	0.68	0.67	1.08	0.91	0.69	− 9	+ 7	−13	−22	+29	−25	+28	− 8	+11	−42			0	−2.48									
104151	21 06 02.94	−61 33 43.7	9.84	G	316.512 253 09	−61.562 150 86		5.10	−14.97	−102.19	0.82	1.12	1.71	0.92	1.15	+32	−20	−22	+49	+24	−12	+13	− 1	− 2	+10			0	1.78									
104152	21 06 03.84	−57 08 47.1	8.15	G	316.516 020 50	−57.146 411 57		14.75	134.48	−201.07	0.68	0.67	1.08	0.81	0.64	− 5	−11	− 2	−34	+25	+ 1	+26	−17	−17	−27			0	−1.24									
104153	21 06 04.57	−52 22 44.1	8.75	G	316.519 033 55	−52.378 928 39		4.25	27.12	−23.46	1.01	0.85	1.30	1.70	0.93	+10	−16	−32	+ 6	+ 5	+ 2	− 7	−28	+ 6	−35			0	−1.27									
104154	21 06 05.31	+20 24 59.4	8.90	H	316.522 125 93	+20.416 509 27		6.28	−32.10	−40.96	0.93	0.77	1.42	1.25	1.05	− 6	−23	+11	− 1	+ 5	− 5	+ 6	+ 2	− 7	+16			0	0.07									
104155	21 06 06.19	−52 54 50.9	8.44	H	316.525 798 09	−52.914 131 06		6.04	32.65	9.02	0.98	0.75	1.22	1.70	0.95	+ 3	− 8	−12	+22	− 8	+ 3	−21	−15	+ 8	−45			0	−1.31									
104156	21 06 07.45	−38 13 23.1	9.63	H	316.531 051 29	−38.223 084 70		5.48	22.17	−75.60	1.39	0.90	1.56	2.10	0.80	+17	+ 8	−12	+35	−32	+40	−47	−38	− 9	−29			0	−1.04									
104157	21 06 08.27	−06 08 22.7	9.14	H	316.534 456 57	−06.139 633 57		7.81	−0.26	6.31	1.19	0.70	1.42	1.75	0.67	+38	− 8	−17	+ 1	−23	+27	−11	−31	+17	+55			0	0.56									
104158	21 06 08.52	+41 01 29.1	9.57	H	316.535 512 51	+41.024 763 79		11.54	−49.62	1.06	0.73	0.88	1.08	0.88	1.08	−10	+ 1	−20	+14	+ 1	−13	− 1	− 8	+14	− 9			1	0.78									
104159	21 06 11.62	+40 58 37.0	8.45	H	316.548 408 50	+40.976 949 69		1.71	−4.26	−15.23	0.65	0.68	0.92	0.73	0.78	− 9	− 3	−11	+21	+ 4	−17	+ 4	−18	+27	− 6			0	−1.77									
104160	21 06 12.43	−31 02 10.3	8.41	H	316.551 791 17	−31.036 186 43		4.46	−1.21	−24.34	1.07	0.78	1.10	1.43	1.06	+ 4	−20	−18	+30	−20	+11	−19	− 2	− 1	− 4			0	−1.82									
104161	21 06 13.53	−15 43 21.5	11.63	G	316.556 378 51	−15.722 651 28		7.80	129.42	93.56	2.64	2.03	3.21	3.35	2.80	+44	−22	−22	−16	− 9	+25	−10	+40	−16	+47			0	−1.87									
104162	21 06 15.09	+25 43 12.2	9.68	H	316.562 873 72	+25.720 051 40		0.12	22.24	12.29	1.02	0.78	1.54	1.17	0.80	−14	−11	+ 6	−33	+42	− 3	+39	+21	− 5	−11			2	3.19									
104163	21 06 17.12	−48 31 34.4	7.26	H	316.571 346 63	−48.526 211 79		13.94	2.39	−41.37	0.71	0.59	0.90	0.87	0.54	+21	−11	−11	− 3	− 8	+21	−12	−40	+ 2	+ 4			0	0.78									
104164	21 06 17.71	+07 30 25.0	7.73	G	316.573 772 53	+07.506 947 69		18.22	93.64	4.41	0.90	0.83	1.20	1.22	0.81	+34	−28	−53	− 7	−18	+24	−18	−49	+41	+30			0	0.00									
104165	21 06 18.43	−05 32 59.8	8.65	H	316.576 795 35	−05.549 948 35		1.63	5.35	−4.45	1.21	0.64	1.30	1.74	0.61	+35	− 6	+ 0	+ 4	−22	+ 9	−11	−27	+ 7	+53			0	−1.35									
104166	21 06 18.87	+28 24 47.8	9.01	H	316.578 622 10	+28.413 265 53		3.32	1.44	1.57	0.74	0.73	1.28	0.85	0.78	+ 2	+ 5	− 8	+31	+23	−35	+21	+23	+22	− 9			0	−0.40									
104167	21 06 20.60	−10 22 54.7	10.05	H	316.585 852 21	−10.381 853 84		1.19	4.72	−2.26	1.50	0.86	1.74	2.32	0.84	+48	− 9	− 5	+24	−16	+31	+ 1	−37	+30	+72			0	0.92									
104168	21 06 21.42	−37 35 15.3	7.67	1 H	316.589 263 09	−37.587 596 72		4.71	−29.91	−2.88	0.94	0.56	1.06	1.41	0.51	+18	+11	−12	+39	−34	+42	−50	−30	−11	−31			3	−0.67									
104169	21 06 22.30	−45 35 29.6	8.08	H	316.592 922 98	−45.591 550 97		4.86	−43.24	−61.13	0.88	0.69	1.08	0.93	0.59	+35	−16	− 9	−32	−17	+18	−21	−52	+10	+20			0	1.04									
104170	21 06 22.59	+45 16 13.8	8.77	H	316.594 136 67	+45.270 512 34		2.77	5.09	3.55	0.68	0.61	0.81	0.80	0.63	−19	− 6	+ 9	+ 5	+ 2	+ 3	+ 2	− 6	− 1	−10			0	−0.66									
104171	21 06 23.39	+71 25 55.5	5.88	H	316.597 469 74	+71.432 079 05		20.36	−48.18	−116.00	0.50	0.44	0.52	0.64	0.48	−20	−31	+16	−15	+ 9	+ 8	+ 1	− 7	+17	−18			0	0.91									
104172	21 06 23.45	+26 55 27.9	6.13	H	316.597 712 42	+26.924 407 89		9.37	43.50	−19.01	0.44	0.45	0.72	0.48	0.47	+ 0	+ 8	−11	+12	+27	−24	+24	+33	+ 6	+ 4			1	2.00									
104173	21 06 23.90	−34 37 43.6	6.81	H	316.599 585 40	−34.628 773 51		6.50	35.13	−7.00	0.81	0.54	0.89	0.96	0.52	+21	−22	−14	−25	−18	+36	−15	−36	+ 0	+ 7			2	0.95									
104174	21 06 24.68	−32 20 29.9	5.20	H	316.602 838 19	−32.341 638 49		9.22	−4.96	8.57	0.63	0.54	0.74	0.73	0.76	+15	−26	−10	− 9	− 3	+25	+ 4	− 6	−10	+29			0	−0.62									
104175	21 06 24.96	+21 38 06.8	9.41	2 H	316.604 020 15	+21.635 231 07		−0.37	8.04	−1.23	0.89	0.86	1.43	1.09	0.99	+ 8	+ 1	+ 5	−12	+33	− 1	+27	+51	− 7	+17			0	2.77									
104176	21 06 25.28	+59 26 21.4	7.55	H	316.605 322 64	+59.439 285 84		5.78	8.34	−20.12	0.52	0.46	0.56	0.49	0.49	− 4	+ 9	− 6	+12	+23	−12	+30	− 7	+13	+17			0	1.49									
104177	21 06 25.50	−41 23 09.4	5.55	H	316.606 239 28	−41.385 936 03		3.50	29.24	−11.98	0.73	0.55	0.92	0.66	0.46	+38	−27	−30	−47	−14	+20	−15	−43	+21	+38			2	0.45									
104178	21 06 25.65	+10 46 46.3	9.40	H	316.606 880 02	+10.779 537 57		5.85	9.32	8.00	1.21	1.09	1.69	1.44	1.08	+31	−35	−45	−16	+12	− 3	−12	−44	+49	+16			2	1.74									
104179	21 06 25.89	+13 06 52.4	8.17	H	316.607 880 29	+13.114 567 03		17.27	30.84	−127.95	0.84	0.68	1.10	1.15	0.72	+19	− 9	−23	+16	−34	+45	−20	− 1	+28	+47			0	1.21									
104180	21 06 26.99	+32 27 28.1	10.12	H	316.612 467 33	+32.457 802 58	B	5.84	8.90	−0.73	11.28	13.48	7.40	9.64	11.14	−22	− 4	+ 1	+ 0	+ 1	+ 0	+ 0	− 3	+ 6	−15			7	1.92									
104181	21 06 27.44	+15 59 29.7	8.73	1 H	316.614 329 12	+15.991 589 59		2.97	7.67	−3.69	1.03	0.62	1.28	1.35	0.69	−27	+12	−21	+18	− 2	− 6	− 2	+13	− 3	+ 4			0	3.14									
104182	21 06 27.67	+32 27 11.8	8.66	H	316.615 280 83	+32.453 289 92	A	10.32	−4.60	−39.40	1.86	2.25	2.59	2.10	2.26	−19	− 1	− 1	− 3	+ 4	− 2	+ 4	−11	+ 3	−11			7	1.92									
104183	21 06 29.45	−68 38 45.2	7.57	2 H	316.622 723 41	−68.645 900 14		2.74	−6.10	−5.77	0.51	0.58	0.87	0.59	0.65	−24	+ 0	−14	+ 5	+ 1	− 7	− 1	+ 4	−10	−31			4	0.36									
104184	21 06 29.67	+25 40 07.5	8.19	H	316.623 629 46	+25.668 760 59		0.90	23.84	9.23	0.65	0.56	1.01	0.72	0.59	+ 4	− 5	− 8	+ 2	+34	−12	+32	+43	− 8	+ 5			0	1.47									
104185	21 06 30.24	+31 11 04.8	5.77	2 T	316.626 007 09	+31.184 668 42		1.72	3.98	−4.78	0.38	0.45	0.62	0.44	0.48	− 2	+ 2	−10	+39	+20	−12	+19	+ 7	+14	+ 2			1	−0.80									
104186	21 06 30.45	−11 57 19.4	8.50	H	316.626 880 04	−11.955 385 12		1.63	8.84	−32.70	1.08	0.56	1.20	1.55	0.53	+28	− 4	−17	+ 2	− 3	+20	+ 1	−33	+34	+52			0	0.36									
104187	21 06 30.50	−54 57 23.0	7.41	H	316.627 097 06	−54.956 395 40		5.14	11.80	3.56	0.73	0.60	0.86	0.95	0.69	+16	−14	− 8	+24	−14	+22	−18	−27	−12	− 4			0	0.92									
*104188	21 06 33.44	−73 47 26.2	9.09	H	316.639 328 97	−73.790 623 32		2.90	1.79	−18.67	0.75	0.80	1.09	0.86	0.93	−10	− 7	+ 4	− 3	− 6	+ 5	− 6	− 5	−12	−16			0	−0.05									
*104189	21 06 33.41	−00 06 18.1	6.92	1 H	316.639 223 92	−00.105 021 11		4.01	9.60	2.15	0.84	0.48	0.89	1.39	0.53	+22	− 5	+ 1	+ 2	− 9	+34	− 8	+48	+18	+38			0	0.16									
104190	21 06 34.37	+38 02 22.0	7.59	H	316.643 203 77	+38.039 452 41		9.95	−1.55	−43.94	0.53	0.70	0.77	0.57	0.96	−16	+ 6	− 6	+ 6	+16	−17	+10	−55	+12	−26			0	1.02									
104191	21 06 34.58	−49 57 47.9	9.09	G	316.644

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
104101	6.591	0.006	6.019	0.004		0.538	0.004	G	0.62	0.07	F	6.0636	0.0008	0.007	69		6.05	6.08					1 G							S
104102	7.972	0.006	7.948	0.008		0.027	0.009	T	0.04	0.01	L	7.9758	0.0013	0.012	167		7.95	7.99					1							S
104103	9.768	0.028	9.234	0.027		0.509	0.029	T	0.58	0.03	L	9.3053	0.0013	0.013	56		9.28	9.33		C			1							
104104	8.739	0.009	8.607	0.011		0.127	0.013	T	0.14	0.01	L	8.6309	0.0012	0.016	161		8.61	8.66		D			1							
104105	5.821	0.003	5.907	0.004		−0.065	0.003	G	−0.04	0.00	H	5.8940	0.0006	0.006	117		5.89	5.90		C			1							S
104106	9.970	0.022	8.159	0.009		1.507	0.019	T	1.54	0.03	L	8.1286	0.0013	0.016	140		8.10	8.16		U			1							
104107	8.393	0.010	8.314	0.012	*	0.078	0.015	T	0.09	0.02	L *	8.2571	0.0025	0.020	121	*	8.21	8.28		U 2	21055+5340	I 1	2 C	A	AB	287	0.649	0.003	0.74	0.01	
104108	10.722	0.038	9.548	0.023		1.040	0.015	G	1.09	0.02	I	9.5619	0.0028	0.025	105		9.51	9.60		C			1 X							
104109	8.165	0.008	8.170	0.011		0.000	0.012	T	0.02	0.01	L	8.2045	0.0013	0.012	142		8.18	8.22		C			1							S
104110	7.876	0.012	7.773	0.014	*	0.090	0.400	G	0.03	0.03	L *	7.8249	0.0013	0.013	113	–	7.81	7.86		D	21055+6210	I 1	3 C	B						S G
104111	9.177	0.016	7.321	0.007		1.543	0.014	T	1.60	0.03	L	7.2652	0.0011	0.009	94		7.25	7.28					1							S
104112	8.378	0.009	7.316	0.007		0.940	0.015	G	0.93	0.01	H	7.3624	0.0011	0.010	98		7.35	7.38		C			1							S
104113	9.750	0.020	9.478	0.023	*	0.259	0.028	T	0.29	0.04	L *	9.4828	0.0023	0.021	119	*	9.45	9.51		D	21056+6030	I 1	2 C	A	AB	115	0.316	0.006	0.87	0.07	
104114	9.941	0.025	9.333	0.023		0.601	0.005	G	0.67	0.00	H	9.3930	0.0024	0.022	95		9.37	9.43		C			1 G							
104115	9.808	0.021	7.739	0.008		1.786	0.012	G	1.71	0.03	C	7.6631	0.0012	0.013	132		7.64	7.68					1							
104116	9.563	0.016	9.546	0.023		0.020	0.026	T	0.04	0.02	L	9.5770	0.0030	0.026	117		9.52	9.61					1 G							G
104117	10.290	0.034	9.535	0.029	*	0.674	0.034	T	0.73	0.03	L *	9.4713	0.0028	0.029	88	*	9.43	9.53		D	21056−5151	I 1	2 C	A	AB	40	0.779	0.006	0.15	0.02	
104118	11.390	0.063	9.876	0.026		1.273	0.054	T	1.23	0.06	L	9.8896	0.0034	0.033	173		9.84	9.94					1							G
104119	10.212	0.025	8.408	0.011		1.470	0.015	G	1.48	0.04	L	8.3489	0.0011	0.014	120		8.33	8.38		C			1							
104120	10.693	0.041	9.023	0.018		1.396	0.035	T	1.37	0.04	L	9.0121	0.0014	0.017	144		8.99	9.04					1							
104121	9.175	0.016	8.112	0.011		0.921	0.015	T	0.92	0.01	L	8.1644	0.0015	0.011	78		8.14	8.18		C			1							S
104122	9.363	0.015	8.236	0.010		0.970	0.014	T	0.95	0.01	L	8.2966	0.0013	0.012	133		8.28	8.32		C			1							S
104123	10.557	0.050	8.920	0.023		1.160	0.040	G	1.12	0.04	R	8.9119	0.0024	0.017	71		8.89	8.94		C			1							
104124	12.531	0.259	10.803	0.079		1.050	0.020	G	1.10	0.03	I	10.8936	0.0031	0.031	154		10.84	10.95		C			1							G
104125	8.340	0.012	7.054	0.006		1.094	0.010	T	1.06	0.01	L	7.1122	0.0011	0.009	104		7.10	7.13		C			1							S
104126	8.872	0.010	8.983	0.013		−0.096	0.015	T	−0.08	0.02	L	8.9616	0.0018	0.022	156		8.93	9.01					1							
104127	7.368	0.007	7.431	0.008		−0.050	0.015	G	−0.03	0.01	H	7.4187	0.0014	0.011	102		7.40	7.44			21057+4748	I 1	1	S						S
104128	7.201	0.005	6.695	0.004		0.476	0.006	T	0.55	0.01	L	6.7481	0.0008	0.008	133		6.73	6.76		C			1							S
104129	8.845	0.011	8.314	0.011	*	0.506	0.012	T	0.58	0.01	L *	8.3761	0.0017	0.015	115	*	8.35	8.40		D	21058−5744	I 1	2 C	A	AB	238	0.284	0.004	0.64	0.07	S
104130	10.736	0.039	8.971	0.015		1.471	0.033	T	1.48	0.05	L	8.6367	0.0208	0.214	144		8.45	8.96	191.20	P 1 A			1	S						
104131	8.770	0.012	8.285	0.012		0.460	0.015	G	0.53	0.02	H	8.3613	0.0015	0.013	83		8.34	8.39		C			1							
104132	9.086	0.012	8.565	0.011		0.500	0.015	G	0.57	0.02	H	8.6268	0.0015	0.014	124		8.60	8.65		C			1							S
104133	8.368	0.008	8.161	0.009		0.180	0.015	G	0.20	0.02	H	8.2097	0.0014	0.015	151		8.19	8.24		C			1							
104134	8.831	0.010	8.721	0.012	*	0.107	0.015	T	0.12	0.02	L *	8.6630	0.0015	0.015	159	*	8.64	8.69		D	21059+2118	I 1	2 C	A	AB	66	1.014	0.005	1.50	0.02	S
104135	6.876	0.005	6.830	0.005		0.047	0.007	T	0.06	0.01	L	6.8488	0.0023	0.021	152		6.82	6.88	1.09	P 1 A			1							S
104136	7.622	0.006	7.594	0.009		0.050	0.015	G	0.06	0.01	H	7.6035	0.0014	0.009	96		7.59	7.62		C			1							S
104137						1.548	0.020	G	2.43	0.14	I	12.2825	0.0127	0.079	77		12.16	12.40					1							D
104138	11.528	0.077	10.536	0.049		0.868	0.068	T	0.88	0.05	L	10.5551	0.0029	0.023	133		10.50	10.59		C			1	S						G
104139	4.094	0.002	4.075	0.002		−0.010	0.008	G	0.00	0.02	A	4.0838	0.0004	0.003	114		4.08	4.09		C			1							S
104140	8.529	0.009	8.508	0.012		0.010	0.015	G	0.03	0.01	H	8.5282	0.0014	0.015	126		8.50	8.55		C			1							
104141	7.978	0.006	7.651	0.006		0.338	0.001	G	0.39	0.00	H	7.6895	0.0008	0.010	218		7.67	7.71					1							S
104142	10.067	0.022	9.018	0.015		0.911	0.020	T	0.91	0.01	L	9.0647	0.0019	0.024	172		9.03	9.10					1							
104143	9.141	0.015	8.899	0.017		0.231	0.021	T	0.26	0.03	L	8.9398	0.0021	0.016	107		8.91	8.97		C			1							
104144	10.925	0.040	9.145	0.015		1.483	0.034	T	1.50	0.05	L	9.0888	0.0024	0.024	181		9.05	9.13					1	S						
104145	11.252	0.065	10.680	0.060		0.538	0.065	T	0.61	0.07	L	10.9015	0.0043	0.031	110		10.84	10.95		C			1							G
104146	8.772	0.013	7.036	0.006		1.448	0.011	T	1.45	0.02	L	7.0103	0.0011	0.009	107		6.99	7.03					1							S
104147	10.272	0.027	8.955	0.015		1.118	0.024	T	1.08	0.03	L	8.9476	0.0014	0.015	106		8.92	8.97					1	S						
104148	7.038	0.007	5.812	0.005		1.047	0.007	T	1.02	0.01	L	5.8560	0.0016	0.009	58		5.84	5.87					1							S
104149	9.822	0.022	9.311	0.022		0.480	0.028	T	0.55	0.03	L	9.3872	0.0016	0.015	95		9.36	9.41		C			1							
104150	9.465	0.016	8.123	0.009		1.138	0.014	T	1.10	0.01	L	8.1707	0.0019	0.015	122		8.15	8.20					1							S
104151	10.725	0.029	9.934	0.023		0.710	0.008	G	0.76	0.01	H	9.9894	0.0024	0.030	190		9.94	10.06					1							
104152	8.918	0.010	8.234	0.009		0.631	0.006	G	0.70	0.01	H	8.2887	0.0013	0.015	137		8.27	8.31		C			1							S
104153	9.221	0.016	8.782	0.016		0.430	0.015	G	0.50	0.02	H	8.8418	0.0022	0.017	82		8.81	8.88		C			1							
104154	9.528	0.019	8.966	0.018		0.526	0.023	T	0.60	0.02	L	9.0143	0.0025	0.019	87		8.99	9.04		C			1							S
104155	9.005	0.015	8.486	0.015		0.497	0.016	T	0.57	0.02	L	8.5453	0.0019	0.016	80		8.52	8.58		C			1							S
104156	10.298	0.026	9.700	0.024		0.558	0.026	T	0.63	0.02	L	9.7503	0.0020	0.020	118		9.72	9.79		C			1							
104157	9.843	0.024	9.244	0.021		0.559	0.028	T	0.63	0.03	L	9.2628	0.0024	0.019	104		9.23	9.29		C			1							
104158	10.462	0.029	9.617	0.022		0.743	0.028	T	0.79	0.02	L	9.7073	0.0022	0.022	144		9.66	9.76		C			1							G
104159	9.763	0.016	8.543	0.010		1.043	0.015	T	1.01	0.01	L	8.6223	0.0014	0.017	149		8.59	8.66		C			1							
104160	9.970	0.035	8.528	0.018		1.216	0.031	T	1.18	0.03	L	8.5729	0.0021	0.015	57		8.54	8.60		C			1							
104161						0.994	0.009	G	1.04	0.01	I	11.8220	0.0050	0.047	79		11.73	11.91					1							G
104162	10.349	0.025	9.759	0.025		0.551	0.031	T	0.62	0.03	L	9.7968	0.0022	0.024	171		9.74	9.85			21063+2543	I 1	1	S						G
104163	8.009	0.008	7.329	0.007		0.616	0.009	G	0.68	0.01	H	7.3917	0.0011	0.009	99		7.38	7.41		C			1							S
104164	8.269	0.014	7.743	0.016		0.495	0.015	G	0.57	0.02	H	7.8315	0.0008	0.009	58		7.81	7.85		D			1							S
104165	8.942	0.015	8.674	0.017		0.255	0.021	T	0.29	0.03	L	8.7200	0.0026	0.015	95		8.70	8.75					1							S
104166	8.940	0.011	8.959	0.015		−0.013	0.017	T	0.01	0.02	L	9.0113	0.0017	0.016	139		8.97	9.04		C			1							
104167	10.236	0.028	10.056	0.035		0.172	0.042	T	0.19	0.04	L	10.1057	0.0023	0.027	124		10.07	10.16					1							
104168	8.102	0.008	7.707	0.008		0.374	0.010	T	0.44	0.01	L	7.7576	0.0016	0.018	134		7.73	7.79		U			1							S
104169	9.258	0.017	8.175	0.012		0.937	0.016	T	0.93	0.01	L	8.2384	0.0015	0.012	113		8.21	8.26					1							
104170	8.849	0.011	8.779	0.014		0.063	0.016	T	0.07	0.02	L	8.7992	0.0017	0.015	119		8.77	8.83		C			1							D
104171	6.335	0.004	5.923	0.004		0.386	0.007	G	0.45	0.01	H	5.9715	0.0006	0.005	112		5.96	5.98					1							S
104172	7.442	0.005	6.243	0.003		1.026	0.005	T	1.00	0.00	L	6.2998	0.0008	0.007	163		6.29	6.31					1							S
104173	8.191	0.011	6.928	0.008		1.076	0.011	T	1.04	0.01	L	6.9817	0.0006	0.008	82		6.97	7.00		D			1							S
104174	6.615	0.006	5.320	0.004		1.104	0.004	G	1.07	0.00	H	5.3629	0.0008	0.005	61		5.35	5.37					1							S
104175	11.607	0.092	9.614	0.025		1.652	0.076	T	1.67	0.08	L	9.5246	0.0108	0.087	143		9.46	9.69	59.70	P 1 A			1	S						
104176	7.646	0.006	7.566	0.008		0.079	0.009	T	0.09	0.01	L	7.5777	0.0011	0.010	119		7.56	7.60		C			1							S
104177	7.291	0.005	5.679	0.003		1.350	0.005	T	1.32	0.01	L	5.6961	0.0007	0.006	145		5.69	5.71		C	21065−4123	I 2	1							S
104178	9.824	0.028	9.405	0.029		0.396	0.037	T	0.46	0.04	L	9.4922	0.0030	0.021	63		9.45	9.52					1							
104179	8.913	0.014	8.244	0.012		0.620	0.015	T	0.69	0.01	L	8.3010	0.0014	0.013	95		8.28	8.33		C			1							S
104180	10.519	0.035	10.012	0.034	B	0.476	0.044	T	0.55	0.05	L	9.9880	0.0341			B				D	21065+3227	I 2	1 C I A							
104181	10.910	0.057	8.930	0.018		1.660	0.015	G	1.67	0.09	H	8.8379	0.0021	0.024	117		8.80	8.87		U			1							
104182	9.558	0.013	8.686	0.011	A	0.779	0.013	T	0.81	0.01	L	8.8048	0.0145	0.074	193	A	8.70	8.92		D	21065+3227	I 2	1 C P A							
104183	9.732	0.014	7.772	0.006		1.661	0.013	T	2.01	0.04	O	7.6551	0.0035	0.032	191		7.61	7.71		U 2			1							S
104184	10.063	0.019	8.339	0.009		1.438	0.017	T	1.43	0.03	L	8.3194	0.0014	0.017	188		8.29	8.35					1							
104185	6.424	0.017	5.830	0.011		0.554	0.018	T	0.63	0.02	L	5.8961	0.0152	0.129	156		5.75	6.03	2.50	P 1 A			1							S
104186	9.883	0.022	8.602	0.013		1.090	0.020	T	1.05	0.02	L	8.6641	0.0015	0.014	109		8.64	8.69		C			1							
104187	7.880	0.010	7.453	0.009		0.393	0.015	G	0.46	0.02	H	7.5026	0.0017	0.013	88		7.48	7.53		C			1							S
104188	10.613	0.028	9.209	0.015		1.187	0.025	T	1.15	0.02	L	9.2554	0.0019	0.023	164		9.21	9.30					1							
104189	8.884	0.014	7.073	0.007		1.507	0.012	T	1.54	0.02	L	7.0398	0.0019	0.019	111		7.01	7.07		U 2			1							S
104190	8.190	0.007	7.650	0.007		0.506	0.009	T	0.58	0.01	L	7.7013	0.0010	0.013	173		7.68	7.72					1 G							S
104191	9.817	0.023	9.191	0.021		0.582	0.027	T	0.65	0.03	L	9.2148	0.0023	0.016	94		9.18	9.24		C			1							
104192						1.260	0.015	G	1.43	0.02	A	11.2456	0.0046	0.046	146		11.17	11.31					1							G
104193	8.713	0.011	8.265	0.011		0.423	0.014	T	0.49	0.01	L	8.3144	0.0016	0.012	110		8.30	8.34					1							
104194	6.587	0.006	4.717	0.003		1.569	0.012	G	1.54	0.03	C	4.6764	0.0009	0.009	97		4.66	4.69		U 2 C	21066+4739	I 1	1							S
104195	8.456	0.009	7.919	0.010		0.519	0.015	G	0.59	0.02	H	7.9744	0.0011	0.010	145		7.96	8.00		C	21065−4123	I 2	1							S
104196	8.836	0.011	8.837	0.015		−0.020	0.015	G	0.00	0.01	H	8.8542	0.0048	0.033	115		8.80	8.90	5.95	P 1 A			1							
104197						1.260	0.020	G	1.43	0.03	I	11.1269	0.0048	0.038	107		11.05	11.18		C			1							G
104198	9.484	0.020	8.244	0.013		1.058	0.019	T	1.02	0.02	L	8.2757	0.0014	0.013	97		8.25	8.30		C			1							
104199	9.541	0.018	8.884	0.016		0.604	0.012	G	0.67	0.01	H	8.9281	0.0019	0.014	101		8.90	8.95		C			1							
104200	10.245	0.043	9.459	0.034		0.642	0.003	G	0.71	0.00	H	9.5378	0.0034	0.020	54		9.51	9.58		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
*104201	21 06 39.71	−07 24 17.5	9.78	H	316.665 460 69	−07.404 863 55	−0.51	7.79	−9.55	1.63	0.87	1.90	2.20	0.84	+47	−29	−10	+20	−13	+21	− 6	−25	+26	+63	2	1.51
104202	21 06 39.79	+03 48 10.8	6.48	H	316.665 778 59	+03.802 996 36	14.63	94.78	50.31	0.98	0.54	1.03	1.23	0.57	+41	−15	−10	−40	−22	− 2	−24	−18	+ 0	+48	0	1.02
104203	21 06 40.73	+51 25 33.6	7.79	H	316.669 718 81	+51.426 003 52	3.60	3.79	−0.54	0.56	0.53	0.65	0.67	0.57	− 4	−20	+ 9	− 2	+ 3	+ 5	+ 0	+ 0	+ 9	− 2	1	2.65
104204	21 06 41.51	−20 10 48.8	6.54	H	316.672 954 31	−20.180 222 90	7.74	−47.31	−17.11	0.90	0.74	1.09	1.17	0.89	+24	−11	−30	−17	+12	+44	+23	+40	+ 7	+33	0	0.26
104205	21 06 43.01	+26 33 27.4	8.25	H	316.679 222 29	+26.557 609 51	3.33	− 7.49	−12.52	0.63	0.59	0.96	0.70	0.62	+ 5	+ 8	− 5	+10	+29	−13	+26	+27	+ 4	+12	0	0.80
*104206 H	21 06 43.80	−80 41 51.9	7.12	G	316.682 484 70	−80.697 751 89 A	11.79	59.44	−140.79	0.62	0.62	0.72	0.70	0.67	− 2	− 6	− 3	− 7	− 5	+11	− 2	− 7	− 3	−18	2	−0.37
*104207	21 06 43.71	+48 11 20.6	7.62	H	316.682 130 36	+48.189 062 00	6.07	7.96	4.33	0.56	0.53	0.68	0.72	0.54	+ 6	− 2	+24	−27	− 8	+16	− 9	− 6	+ 9	+ 1	0	0.44
104208	21 06 45.10	+43 46 54.6	8.40	H	316.687 925 04	+43.781 826 22	5.41	9.37	− 6.79	0.63	0.59	0.78	0.79	0.69	− 7	− 5	+ 7	+11	+12	− 3	+13	+ 1	−10	+ 5	0	1.60
104209	21 06 46.01	−01 01 30.6	8.31	H	316.691 690 13	−01.025 160 37	4.66	31.69	− 5.40	1.08	0.62	1.19	1.34	0.67	+41	− 8	− 4	−33	−13	+33	−17	+23	+ 7	+50	0	0.78
104210 H	21 06 46.78	+34 07 56.4	7.44	H	316.694 898 86	+34.132 333 22 A	6.77	3.64	−25.56	0.97	1.26	1.55	0.84	1.19	−28	+ 8	− 4	+23	− 8	− 8	−10	+10	+11	−43	16	1.98
104211	21 06 49.62	+52 00 17.1	9.02	H	316.706 757 03	+52.004 742 98	3.05	6.94	1.52	0.69	0.63	0.79	0.82	0.69	− 2	+ 0	− 8	− 5	+ 0	− 4	+ 0	− 8	+ 9	− 6	0	0.97
104212	21 06 49.94	+81 01 13.4	7.12	H	316.708 101 21	+81.020 399 07	3.35	−13.82	3.66	0.53	0.48	0.55	0.61	0.48	− 5	− 9	+ 8	+ 1	+15	− 1	+11	−21	+12	−10	0	−0.78
104213	21 06 50.32	+76 23 41.5	8.15	H	316.709 651 07	+76.394 849 55	4.67	− 9.65	− 7.75	0.66	0.57	0.70	0.79	0.56	− 7	−29	+22	−25	+12	+30	+ 3	−17	+ 6	− 3	0	2.11
104214	21 06 50.84	+38 44 29.4	5.20	3 G	316.711 812 58	+38.741 494 46	287.13	4155.10	3258.90	0.84	1.05	1.51	0.95	1.19	− 7	+ 0	+ 5	− 5	+ 2	−32	+ 5	−28	+35	−13	5	
104215	21 06 51.27	+40 19 10.7	8.24	2 H	316.713 637 33	+40.319 631 32	1.48	1.53	− 0.68	0.62	0.69	0.92	0.69	0.82	−20	−11	−13	+ 3	+ 8	−10	+ 4	−22	+34	−14	0	−1.31
104216	21 06 51.34	−23 12 56.2	7.51	H	316.713 935 14	−23.215 604 15	5.58	46.08	12.48	0.92	0.65	0.97	1.16	0.92	+14	−16	−14	−19	− 6	+14	−11	+11	+ 1	+30	0	0.80
*104217	21 06 52.19	+38 44 03.9	6.05	2 G	316.717 468 43	+38.734 413 92	285.42	4107.40	3143.72	0.41	0.50	0.72	0.43	0.59	−10	− 8	−18	− 3	+ 8	−30	− 3	−32	+48	−29	0	0.89
*104218	21 06 52.06	+63 46 42.4	8.24	H	316.716 936 79	+63.778 440 37	3.17	1.88	−12.15	0.88	0.88	1.00	0.88	0.94	− 4	− 7	+11	−12	+13	+ 6	+14	−14	− 1	+20	1	
104219	21 06 52.35	−00 57 48.1	7.27	H	316.718 105 47	−00.963 354 27	8.53	−15.92	−17.13	1.28	0.59	1.01	2.26	0.75	+49	−34	−17	−73	−39	+42	−42	−18	+ 9	+54	0	−0.69
*104220	21 06 52.49	+45 40 32.1	7.23	H	316.718 711 30	+45.675 570 86	2.80	−2.38	−11.22	0.51	0.46	0.61	0.57	0.45	−13	+10	+12	+15	− 6	− 2	− 4	− 1	+ 2	−11	1	−0.72
*104221	21 06 52.48	−24 39 07.8	8.62	H	316.718 680 30	−24.652 154 35	5.65	11.22	−24.46	1.07	0.85	1.36	1.49	1.05	+ 4	+11	−43	+ 7	−23	+43	− 9	+20	− 7	+16	0	0.00
104222	21 06 53.69	−25 33 44.8	8.16	H	316.723 692 71	−25.562 454 70	2.59	9.98	1.53	0.95	0.69	1.12	1.10	0.91	+15	− 4	−27	−14	− 5	+31	− 1	+15	−10	+29	0	0.42
104223	21 06 54.94	+59 53 23.1	7.71	H	316.728 935 91	+59.889 751 32	5.96	33.01	31.74	0.54	0.50	0.59	0.52	0.53	+ 2	+ 5	+ 9	+17	+25	− 7	+32	+ 2	+12	+25	0	0.99
104224	21 06 55.23	+04 05 12.5	8.55	H	316.730 129 03	+04.086 799 19	4.31	− 3.25	−11.43	1.50	1.44	1.70	1.88	1.45	+53	−35	−40	−33	−37	+16	−43	−71	+38	+48	0	0.67
104225	21 06 56.21	+69 40 28.0	8.19	H	316.734 193 05	+69.674 436 13	30.45	108.95	66.05	0.69	0.61	0.72	0.84	0.62	−13	−27	+22	−18	+ 7	+ 5	+ 1	−10	+14	+ 0	0	−0.38
104226	21 06 57.09	−28 26 55.6	9.38	H	316.737 885 55	−28.448 791 13	15.71	128.06	10.30	1.12	1.08	1.75	1.38	1.18	+14	− 7	−61	−15	−28	+42	− 1	+ 9	−34	+ 5	0	−0.30
104227	21 07 00.30	−35 03 25.6	9.06	H	316.751 262 33	−35.057 100 83	1.85	13.21	−16.50	1.30	0.83	1.45	1.51	0.68	+35	+ 2	+ 2	−22	−30	+32	−34	−49	+ 4	+11	0	0.41
104228	21 07 02.10	+23 34 53.3	8.15	H	316.758 759 11	+23.581 476 93	0.45	− 3.42	− 2.30	0.76	0.59	1.08	0.87	0.61	+ 4	− 2	− 6	+29	+22	− 6	+19	+54	−14	+ 5	0	1.31
104229	21 07 03.63	−23 08 56.0	7.09	H	316.765 143 72	−23.148 894 64	14.61	116.94	29.03	0.85	0.59	0.89	0.98	0.80	+14	−14	−23	−31	− 2	+21	− 6	+10	− 1	+34	0	1.13
104230	21 07 06.56	−18 42 05.5	8.26	H	316.777 346 11	−18.701 514 07	3.20	− 4.38	− 5.62	0.95	0.71	1.11	1.30	1.02	+38	−16	−16	−10	+ 2	+25	− 7	+48	− 3	+51	0	−1.79
104231	21 07 07.11	−60 57 10.4	9.04	H	316.779 605 36	−60.952 892 78	3.53	21.57	−17.84	0.74	0.87	1.36	1.35	0.96	+19	−23	− 6	−40	+23	+ 0	+21	− 3	−18	+ 0	0	0.01
104232	21 07 07.37	−07 45 09.3	8.86	H	316.780 716 28	−07.752 576 24	5.98	− 6.66	−13.82	1.18	0.66	1.40	1.61	0.61	+32	−13	+ 2	+14	−14	+32	− 6	−30	+18	+51	0	0.68
104233	21 07 07.60	+38 18 53.9	7.95	H	316.781 652 51	+38.314 959 37	2.60	− 7.08	−16.41	0.50	0.64	0.84	0.55	0.70	−18	− 8	− 6	+ 5	+11	−17	+ 5	−37	+33	−28	0	−0.13
104234	21 07 07.69	−25 00 20.7	4.49	2 G	316.782 022 66	−25.005 747 96	6.24	−27.19	−43.37	0.76	0.54	0.82	0.95	0.71	+16	−12	−24	−21	− 7	+16	− 4	+ 3	− 8	+20	0	0.68
104235	21 07 08.35	+30 35 45.5	7.55	H	316.784 785 31	+30.595 977 76	0.91	2.10	− 4.01	0.45	0.53	0.75	0.56	0.57	+ 3	+ 3	−10	+49	+20	− 5	+18	+11	+13	+ 4	2	0.37
104236	21 07 09.06	−43 57 14.9	10.05	H	316.787 751 63	−43.954 130 22	4.90	−20.28	−66.45	1.40	1.19	1.81	1.52	0.96	+48	−11	− 6	−23	−29	+ 5	−35	−58	+ 1	+25	0	−1.66
104237	21 07 09.54	+39 29 49.5	8.58	H	316.789 734 82	+39.497 084 16	4.58	3.27	− 4.65	0.66	0.74	1.05	0.71	0.87	−21	+ 7	− 7	+ 6	+ 7	−23	+11	−24	+43	−19	0	−1.34
104238	21 07 09.85	−59 02 58.8	9.20	H	316.791 048 27	−59.049 670 78	0.62	− 0.68	−17.21	1.01	0.86	1.44	1.24	0.86	− 3	−19	−23	+ 4	+15	+10	+17	+ 9	−19	−32	0	−0.32
104239 H	21 07 10.15	−13 55 22.1	7.12	1 H	316.792 295 38	−13.922 816 46 A	56.67	382.32	−46.55	1.22	0.77	1.18	1.31	0.60	+39	− 7	− 9	+11	−20	+16	− 9	−25	+20	+54	1	0.37
104240	21 07 10.71	+15 24 29.4	10.50	H																						
104241	21 07 10.93	+15 24 06.2	8.16	G	316.795 529 36	+15.401 722 27	11.25	54.24	29.15	0.90	0.61	1.21	1.06	0.72	− 7	− 5	−10	− 1	+ 6	− 7	− 3	+25	− 4	+26	2	1.77
104242	21 07 12.26	+36 57 00.6	8.19	H	316.801 081 20	+36.950 157 00 A	1.23	2.71	0.74	0.78	1.01	1.05	0.63	0.86	− 9	− 7	+ 0	+ 5	− 3	− 9	− 1	−17	+17	− 6	1	−0.17
104243	21 07 13.16	+47 44 14.9	9.01	G																						
*104244	21 07 13.84	−83 55 27.4	8.47	H	316.807 684 48	−83.924 267 36	5.24	21.74	− 0.07	0.60	0.54	0.74	0.66	0.55	+ 4	−25	− 4	+ 0	+13	− 5	+12	− 3	− 4	− 6	0	−1.53
*104245	21 07 13.36	+47 44 03.5	7.33	G	316.805 677 63	+47.734 294 07	3.03	7.98	9.71	0.58	0.55	0.72	0.74	0.55	− 5	− 2	+22	− 4	−12	+12	−13	− 7	+ 2	−11	0	−0.20
104246	21 07 14.13	−38 54 14.7	8.46	H	316.808 867 56	−38.904 088 44	11.16	−20.87	4.67	1.05	0.66	1.23	1.28	0.57	+24	− 4	−17	+ 7	−38	+44	−43	−41	− 8	−11	0	−1.04
104247	21 07 14.53	+60 32 25.0	9.03	H	316.810 524 20	+60.540 280 93	5.70	15.17	10.15	0.70	0.69	0.81	0.74	0.83	+ 3	− 2	+ 8	− 5	+17	+ 9	+20	− 5	+ 9	+41	1	1.14
104248	21 07 14.82	+19 42 35.3	9.18	H	316.811 735 29	+19.709 815 21	4.06	−30.06	− 2.99	1.23	0.85	1.66	1.76	1.04	−12	+24	− 8	−24	+26	−36	+22	−11	+ 9	+11	0	−2.10
104249	21 07 14.87	−38 02 52.0	8.48	H	316.811 974 79	−38.047 764 71	2.66	32.28	6.08	1.15	0.66	1.28	1.76	0.60	+18	+ 1	−14	+33	−39	+38	−52	−30	− 7	−31	0	−0.85
104250 H	21 07 14.93	+44 40 26.7	7.38	G	316.812 210 11	+44.674 076 50 A	3.34	5.43	1.94	0.78	0.65	0.81	0.98	0.66	− 5	+15	+ 8	+ 7	+ 4	−19	+ 6	+ 0	− 1	+ 9	1	1.32
104251	21 07 15.38	−48 58 13.0	8.35	G	316.814 092 59	−48.970 278 93	5.68	15.55	16.92	0.88	0.69	1.09	1.10	0.66	+26	−25	−20	−12	−14	+21	−17	−39	+ 8	+ 2	0	−0.26
104252	21 07 15.43	−16 25 21.2	8.35	3 H	316.814 289 21	−16.422 558 86	−0.78	2.66	−26.52	1.33	0.78	1.54	1.89	1.04	+20	+11	−17	− 3	−42	+39	−43	+16	−16	+23	0	0.34
104253	21 07 15.86	−49 09 23.5	8.51	H	316.816 079 93	−49.156 528 40	6.39	− 3.59	−46.47	0.96	0.71	1.15	1.17	0.63	+16	− 7	−15	−14	−14	+24	−13	−42	+ 1	+ 2	2	0.67
104254	21 07 16.44	+68 36 55.1	8.10	H	316.818 500 70	+68.615 300 19	7.22	−16.45	−11.08	0.59	0.61	0.69	0.70	0.65	+ 1	+ 3	+32	+ 5	+ 6	−21	+13	+11	− 1	+13	2	0.48
104255	21 07 16.88	+55 00 13.5	8.05	H	316.820 342 36	+55.003 742 52	3.44	1.64	−28.48	0.58	0.59	0.66	0.66	0.56	−18	+ 1	+15	−24	+15	−10	+13	− 7	+ 6	−10	0	1.15
104256 H	21 07 17.49	−57 01 55.4	8.82	H	316.822 871 77	−57.032 047 46 A	18.69	33.01	−115.28	1.70	2.08	2.07	1.52	1.11	−30	−14	− 9	−27	+21	+ 0	+29	− 9	−24	−33	2	−0.53
104257	21 07 17.63	+37 11 45.8	8.87	H	316.823 441 17	+37.196 052 80	2.88	15.99	5.15	0.66	0.85	1.07	0.65	0.90	−11	− 3	+ 7	−19	− 1	− 4	− 1	−29	+16	− 1	0	−0.46
104258	21 07 18.32	+49 47 25.5	7.54	H	316.826 329 41	+49.790 416 25	8.20	26.18	− 6.86	0.55	0.51	0.63	0.67	0.60	− 2	+ 1	+ 8	+17	+ 8	−17	+ 9	+12	− 4	− 8	0	−0.01
104259	21 07 19.05	+04 08 30.1	8.25	H	316.829 354 34	+04.141 688 72	8.42	4.65	−23.81	1.24	1.19	1.38	1.56	1.16	+48	−31	−32	−31	−37	+18	−39	−73	+35	+48	0	−1.25
104260	21 07 19.67	−57 46 26.0	8.89	H	316.831 944 77	−57.773 900 13	5.50	13.55	−31.02	0.75	0.76	1.23	1.01	0.79	− 7	+ 9	−10	−15	+22	−17	+22	+ 0	+13	−39	0	−2.44
104261	21 07 19.79	−20 29 59.5	8.24	H	316.832 466 18	−20.499 860 37	4.36	7.90	16.35	1.16	1.02	1.45	1.35	1.12	+41	−30	−46	−24	+ 1	+39	+20	+36	− 4	+36	0	0.58
104262	21 07 20.02	+32 30 08.1	7.96	H	316.833 409 91	+32.502 241 33	1.65	3.86	− 2.86	0.45	0.57	0.85	0.57	0.64	−30	+11	−13	+ 6	− 3	−11	− 2	+ 1	+14	−15	0	1.57
104263	21 07 20.50	+52 02 58.1	9.24	2 H	316.835 425 19	+52.049 465 98 *	6.25	19.91	39.55	1.06	0.98	1.06	1.08	0.87	−36	+23	−30	−20	+13	−21	− 1	− 5	+ 1	− 7	0	−1.30
104264	21 07 20.60	−39 15 42.2	8.94	H	316.835 832 66	−39.261 729 62	0.87	−11.60	13.50	1.21	0.86	1.32	1.40	0.70	+42	− 1	− 8	−37	−40	+33	−41	−61	−12	+10	0	0.60
104265	21 07 21.87	−00 45 54.7	6.58	G	316.841 118 47	−00.765 181 70	5.81	2.65	20.38	0.82	0.44	0.84	1.10	0.50	+33	−15	− 8	−33	−12	+28	−19	+38	+ 4	+46	0	−0.46
104266	21 07 22.71	−27 17 29.5	7.29	H	316.844 626 88	−27.291 522 69	5.69	32.37	−30.14	0.87	0.61	0.93	1.01	0.73	+ 3	−20	−39	−28	− 2	+25	+ 5	+ 6	− 3	+12	0	1.88
104267	21 07 22.79	−31 29 58.7	8.41	H	316.844 952 10	−31.499 638 41	7.91	−39.39	−42.28	1.17	0.80	1.10	1.49	0.82	− 1	−16	− 7	+47	−33	+16	−29	−30	+ 3	− 3	0	−0.29
104268	21 07 23.69	+47 16 39.1	7.27	H	316.848 724 23	+47.277 514 70	7.51	13.77	2.07	0.53	0.49	0.63	0.68	0.50	− 9	+ 4	+11	− 8	−12	+12	−10	− 1	+ 0	−13	0	0.17
104269	21 07 24.72	−59 59 30.9	6.77	H	316.852 980 28	−59.991 912 22	12.86	−49.17	−16.34	0.67	0.54	0.86	0.82	0.52	−19	+ 2	−17	−22	+33	−14	+28	−10	+ 2	−35	0	−1.36
104270	21 07 24.80	+45 43 45.4	9.76	H	316.853 350 40	+45.729 291 66	4.30	15.87	−12.12	1.11	1.05	1.36	1.34	1.13	−15	+ 9	+ 5	+21	− 7	− 2	− 5	− 2	+15	−16	1	−0.40
104271 H	21 07 24.97	−08 09 51.5	8.25	G	316.854 035 69	−08.164 296 37 A	4.24	19.20	4.36	1.35	0.85	1.51	1.90	0.79	+41	− 8	−23	+11	−21	+43	− 6	−21	+30	+58	1	−0.31
104272 H	21 07 26.28	−08 14 05.6	7.02	H	316.859 514 04	−08.234 876 28 *	7.50	−20.90	− 9.96	1.43	0.81	1.09	1.33	0.55	+38	−25	−17	− 2	−17	+34	−12	−34	+35	+60	1	−0.17
104273	21 07 26.42	+39 33 34.4	9.09	H	316.860 072 22	+39.559 547 64	4.52	5.25	14.60	0.72	0.84	1.16	0.81	0.97	−16	+ 8	−12	+10	+ 8	−22	+10	−28	+41	−18	0	−1.72
104274	21 07 27.26	+09 17 45.2	7.49	H	316.863 574 66	+09.295 890 34	3.87	12.36	− 4.70	0.79	0.77	1.06	1.17	0.76	+23	−22	−50	+ 2	−19	+29	−16	−57	+44	+21	0	0.80
104275 H	21 07 29.36	+24 28 29.5	8.92	H	316.872 331 63	+24.474 873 68 A	2.50	4.79	− 4.22	2.35	1.54	2.59	2.77	1.48	+ 3	− 7	− 4	−37	+49	−17	+48	+45	− 8	+ 2	0	2.03
104276	21 07 29.88	−19 05 17.2	6.69	H	316.874 506 41	−19.088 103 47	7.20	36.21	−61.42	0.82	0.61	1.04	1.17	0.82	+36	−17	−26	−11	− 7	+44	− 3	+43	+ 2	+41	0	0.40
104277	21 07 30.32	−29 06 05.1	9.99	H	316.876 346 58	−29.101 429 86	10.46	26.18	− 5.40	1.52	1.31	1.93	1.89	1.44	+35	−38	−59	−10	−28	+30	−10	− 1	− 9	+ 5	0	−0.43
104278	21 07 31.30	−38 41 28.9	7.49	H	316.880 437 14	−38.691 363 97	7.22	40.09	−22.40	0.88	0.55	0.98	1.17	0.49	+23	− 6	−15	+16	−37	+34	−44	−37	− 5	−18	0	−1.06
104279	21 07 32.88	−00 09 49.8	6.61	2 H	316.886 997 18	−00.163 831 62	2.65	− 4.97	− 8.58	0.84	0.44	0.89	1.20	0.48	+33	−12	+13	−21	− 3	+23	−12	+34	+21	+52	0	−0.16
104280 H	21 07 33.46	+63 04 14.5	8.26	H	316.889 403 83	+63.070 707 53 A	2.71	− 6.00	−22.72	1.25	1.28	1.34	1.16	1.16	− 1	−10	+29	− 4	+17	+18	+18	− 6	+ 1	+32	1	1.40
104281	21 07 33.61	+15 39 31.7	6.27	H	316.890 058 77	+15.658 796 87	8.83	47.42	−57.48	0.73	0.45	0.94	0.91	0.51	−23	+ 5	− 6	+29	−15	+ 2	−10	+18	−11	+ 7	0	2.29
104282	21 07 35.14	−50 47 23.3	9.00	H	316.896 406 27	−50.789 818 20	8.34	98.78	11.06	1.15	0.85	1.33	1.55	0.92	+27	−31	−22	+ 9	− 9	+11	− 1	−29	− 8	+25	0	−2.36
104283	21 07 36.29	+51 35 02.5	7.37	H	316.901 220 92	+51.584 019 72	5.01	19.86	6.93	0.52	0.50	0.62	0.61	0.57	− 7	−27	+ 8	+ 8	− 1	− 4	− 3	+10	+ 7	− 5	0	1.50
104284	21 07 36.63	+71 40 54.4	8.09	H	316.902 636 55	+71.681 771 60	7.41	28.22	16.55	0.62	0.57	0.65	0.88	0.64	−13	−19	+14	−22	+11	+16	+ 8	−12	− 4	− 7	0	−1.77
104285	21 07 36.66	−23 55 13.4	10.05	3 H	316.902 735 58	−23.920 402 62	0.32	− 4.35	− 9.50	4.75	2.65	4.27	4.87	4.43	+33	−76	−50	−78	−36	+61	+10	−43	−13	+28	0	2.23
104286	21 07 37.51	−44 17 30.3	7.68	H	316.906 309 33	−44.291 757 89	1.27	− 1.26	− 8.43	0.82	0.65	1.04	0.95	0.60	+33	− 4	+ 2	−14	−15	+10	−16	−45	− 2	+29	2	−0.59
104287 H	21 07 37.65	−51 13 29.9	8.88	H	316.906 865 46	−51.224 983 62 A	11.20	28.46	−53.14	2.25	1.87	2.52	2.85	1.80	+32	−25	−30	+11	+ 3	−22	− 3	−25	− 4	+24	0	−0.37
104288	21 07 37.89	+14 20 55.1	8.28	G	316.907 859 50	+14.348 625 18	9.00	60.72	18.39	0.82	0.65	1.03	1.03	0.74	+22	−12	− 5	+ 9	− 7	+ 5	− 7	+13	+10	+42	2	0.92
104289	21 07 39.14	−47 19 06.2	10.25	H	316.913 062 91	−47.318 397 92	14.64	−198.40	−555.42	1.39	1.20	1.84	1.61	1.10	+28	− 3	+ 3	−21	− 3	−12	− 6	−41	− 3	+28	2	−0.50
104290	21 07 40.10	+48 51 19.0	7.74	H	316.917 080 93	+48.855 277 70	4.97	− 3.70	−35.32	0.56	0.55	0.67	0.70	0.56	+ 4	+ 0	+18	−13	− 4	+ 7	− 4	− 6	+ 1	− 2	1	0.51
104291	21 07 40.84	+68 15 14.6	6.88	H	316.920 181 11	+68.254 067 58	4.03	8.11	3.71	0.48	0.45	0.51	0.57	0.48	− 7	− 8	+19	+16	+ 4	−11	+ 5	+ 4	+ 4	− 3	1	0.61
104292	21 07 41.05	−45 46 08.5	8.20	G	316.921 033 86	−45.769 038 13	14.72	−45.42	12.59	0.93	0.71	1.12	0.97	0.60	+30	−12	+ 5	−31	−11	+16	−14	−49	− 6	+24	0	−0.58
104293	21 07 42.41	−02 03 08.0	6.86	H	316.926 699 74	−02.052 220 29	12.73	86.44	9.81	0.89	0.51	0.99	1.23	0.54	+37	−26	−19	− 2	−20	+15	−11	+23	− 1	+41	0	−0.15
104294	21 07 43.72	−05 33 59.1	7.59	G	316.932 162 34	−05.566 430 33	20.09	205.37	224.03	0.92	0.55	1.02	1.34	0.57	+32	−13	+ 2	+28	−18	+18	− 6	− 1	+10	+45	0	0.47
104295	21 07 44.24	+67 18 35.8	8.88	H	316.934 331 04	+67.309 931 14	3.92	− 5.24	4.22	0.69	0.58	0.70	0.86	0.64	− 5	−14	+14	− 9	+ 0	+ 9	− 2	+ 0	+ 3	+ 4	0	1.39
104296	21 07 44.50	−45 22 46.0	6.45	H	316.935 423 77	−45.379 451 92	10.57	31.35	− 7.07	0.72	0.53	0.84	0.74	0.46	+32	−24	− 4	−33	−14	+21	−17	−51	+ 2	+23	0	1.10
104297	21 07 44.68	−17 27 20.8	6.18	G	316.936 152 61	−17.455 788 44	7.54	29.87	−46.62	0.80	0.55	0.90	1.24	0.83	+28	− 2	+ 3	+ 3	−18	+18	−27	+34	− 1	+49	0	1.25
104298	21 07 44.81	−31 03 25.3	7.24	H	316.936 726 51	−31.057 017 75	14.98	240.90	98.49	0.92	0.65	0.96	1.39	0.61	+ 3	+ 0	−29	+34	−36	+33	−27	−28	+ 4	− 3	0	−2.11
104299	21 07 45.59	−67 55 12.1	8.55	G	316.939 975 60	−67.920 039 33	37.36	211.44	−112.54	0.63	0.73	1.11	0.69	0.86	−33	− 8	+ 3	+13	−11	+ 1	−11	+15	− 4	−48	0	−0.69
104300	21 07 46.47	−08 25 49.5	8.48	H	316.943 642 16	−08.430 415 58	4.40	7.95	− 7.85	0.97	0.60	1.23	1.57	0.64	+37	−14	−12	− 7	−22	+45	−15	−30	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
104201	11.810	0.126	9.991	0.040		1.545	0.109	T	2.16	0.47	K	9.8433	0.0020	0.021	103		9.81	9.89		C			1							
104202	7.596	0.009	6.588	0.007		0.880	0.009	T	0.89	0.01	L	6.6386	0.0008	0.006	76		6.63	6.65					1							S
104203	7.824	0.008	7.792	0.009		0.034	0.011	T	0.05	0.01	L	7.8072	0.0017	0.012	112		7.78	7.83		C			1							S
104204	8.201	0.013	6.685	0.006		1.280	0.002	G	1.24	0.00	H	6.6947	0.0008	0.005	48		6.68	6.70					1							S
104205	9.897	0.020	8.388	0.010		1.320	0.015	G	1.28	0.02	H	8.4038	0.0013	0.015	164		8.38	8.43		C			1							
104206	7.462	0.006	7.110	0.006	*	0.351	0.015	G	0.41	0.02	H *	7.1960	0.0009	0.010	157	*	7.18	7.21		D	21067−8042	I 1	2 C	A	AB	245	4.781	0.007	2.62	0.03	S
104207	7.647	0.009	7.594	0.009		0.048	0.011	T	0.06	0.01	L	7.6399	0.0013	0.009	108		7.62	7.66		C			1							S
104208	8.433	0.013	8.401	0.016		0.034	0.019	T	0.05	0.01	L	8.4234	0.0015	0.014	106		8.40	8.45		C			1							
104209	9.926	0.027	8.454	0.014		1.240	0.024	T	1.20	0.02	L	8.4766	0.0014	0.013	96		8.46	8.50					1							
104210	7.711	0.007	7.414	0.007	*	0.282	0.009	T	0.32	0.01	L *	7.5113	0.0012	0.011	181	*	7.49	7.53		D	21068+3408	I 1	2 C	A	AB	28	2.786	0.004	0.81	0.01	S
104211	9.292	0.015	9.047	0.017		0.233	0.021	T	0.26	0.03	L	9.0925	0.0012	0.014	120		9.06	9.12					1							
104212	8.940	0.014	7.262	0.007		1.402	0.012	T	1.38	0.01	L	7.2653	0.0012	0.011	117		7.25	7.28		C			1							S
104213	8.528	0.010	8.197	0.011		0.340	0.006	G	0.40	0.01	H	8.2294	0.0014	0.012	103		8.21	8.25		C			1							S
104214						1.069	0.015	G	1.13	0.02	I	5.3685	0.0259	0.215	167		5.17	5.85		U 2	21069+3844	I 2	1	S						S G
104215	10.492	0.027	8.447	0.010		1.731	0.024	T	2.19	0.06	O	8.3051	0.0026	0.022	146		8.26	8.34		U 2			1							
104216	8.697	0.016	7.609	0.011		0.940	0.015	T	0.93	0.01	L	7.6694	0.0010	0.007	56		7.65	7.69		C			1							S
104217	7.764	0.012	6.208	0.009		1.309	0.012	T	1.27	0.01	L	6.1467	0.0010	0.013	154		6.11	6.17		U 2	21069+3844	I 2	1	S						S
104218	8.516	0.010	8.267	0.011		0.237	0.014	T	0.26	0.02	L	8.3128	0.0014	0.012	115		8.29	8.33					1 X							S
104219	7.717	0.007	7.308	0.008		0.387	0.010	T	0.45	0.01	L	7.3590	0.0009	0.007	104		7.35	7.37					1 G							S
104220	7.944	0.008	7.306	0.006		0.587	0.007	T	0.66	0.01	L	7.3545	0.0009	0.009	124		7.34	7.37		C			1							S
104221	9.049	0.021	8.682	0.022		0.348	0.028	T	0.41	0.04	L	8.6992	0.0023	0.013	52		8.67	8.73		C			1							S
104222	8.339	0.012	8.167	0.014		0.165	0.017	T	0.18	0.02	L	8.2140	0.0015	0.009	57		8.20	8.25					1							S
104223	7.849	0.008	7.736	0.009		0.110	0.011	T	0.12	0.01	L	7.7527	0.0012	0.010	114		7.73	7.77		C			1							S
104224	10.171	0.037	8.693	0.019		1.245	0.033	T	1.20	0.03	L	8.7131	0.0025	0.020	60		8.69	8.75		R	21069+0405	I 1	1							
104225	9.149	0.014	8.274	0.011		0.766	0.005	G	0.81	0.01	H	8.3297	0.0013	0.012	108		8.31	8.36					1							
104226	10.447	0.047	9.478	0.033		0.851	0.043	T	0.89	0.04	L	9.5257	0.0025	0.019	66		9.50	9.56		C			1							
104227	10.516	0.047	9.182	0.025		1.160	0.040	G	1.12	0.04	R	9.2260	0.0027	0.019	87		9.20	9.27					1							
104228	10.071	0.022	8.320	0.010		1.460	0.019	T	1.47	0.03	L	8.2860	0.0013	0.013	156		8.26	8.31		C			1							
104229	7.574	0.009	7.141	0.008		0.423	0.010	T	0.49	0.01	L	7.1888	0.0011	0.006	52		7.18	7.20		C			1							S
104230	9.538	0.020	8.350	0.013		1.018	0.019	T	0.99	0.01	L	8.4306	0.0012	0.010	87		8.42	8.45		C			1							
104231	10.386	0.023	9.160	0.014		1.047	0.021	T	1.02	0.02	L	9.2046	0.0020	0.022	189		9.17	9.25		C			1							
104232	10.835	0.056	9.027	0.020		1.505	0.047	T	1.53	0.07	L	8.9868	0.0019	0.017	101		8.95	9.02		C			1							
104233	7.950	0.007	7.945	0.008		0.009	0.010	T	0.03	0.01	L	7.9578	0.0016	0.015	163		7.93	7.99					1							S
104234	6.616	0.007	4.703	0.004		1.604	0.005	G	1.81	0.02	A	4.6097	0.0026	0.013	55		4.59	4.66		U 2	21071−2500	I 1	1	S						S
104235	7.405	0.004	7.530	0.006		−0.109	0.006	T	−0.09	0.01	L	7.5121	0.0009	0.010	177		7.50	7.53					1							S
104236	10.861	0.044	10.072	0.034		0.716	0.043	T	0.77	0.04	L	10.1882	0.0029	0.030	106		10.14	10.25					1							
104237	8.808	0.010	8.606	0.011		0.193	0.014	T	0.21	0.02	L	8.6416	0.0017	0.019	147		8.61	8.67					1							
104238	10.971	0.048	9.346	0.021		1.360	0.041	T	1.33	0.05	L	9.3512	0.0030	0.024	98		9.31	9.40		C			1							
104239	8.251	0.013	7.198	0.010	*	0.901	0.007	G	0.99	0.02	A *	7.2700	0.0021	0.016	103	*	7.24	7.29		U 2 C	21072−1355	I 1	2 C	A	AB	175	4.309	0.010	3.04	0.05	S
104240											T	10.6313	0.0381	0.398	106		9.19	11.02		D	21072+1524	I 2		S						G
104241	8.701	0.012	8.207	0.012		0.455	0.015	G	0.52	0.02	H	8.2811	0.0019	0.020	123		8.24	8.31		D	21072+1524	I 2	1							S
104242	8.147	0.006	8.166	0.008	A	−0.013	0.009	T	0.01	0.01	L	8.1986	0.0052	0.019	169	A	8.17	8.23			21072+3657	I 1	2 C	A	AB	276	13.107	0.019	2.98	0.08	
104243						0.160	0.040	G	0.18	0.04	R	7.4154	0.0088	0.085	94		7.35	7.75		D	21072+4744	I 2		S						G
104244	8.889	0.012	8.501	0.012		0.379	0.014	T	0.44	0.01	L	8.5620	0.0018	0.015	134		8.53	8.59					1							
104245	7.371	0.006	7.340	0.009		0.047	0.004	G	0.06	0.00	H	7.3526	0.0009	0.009	99		7.34	7.37		D	21072+4744	I 2	1	S						S
104246	9.126	0.015	8.532	0.014		0.555	0.015	T	0.63	0.01	L	8.5846	0.0013	0.011	109		8.56	8.60		C			1							S
104247	9.664	0.019	9.089	0.018		0.537	0.023	T	0.61	0.02	L	9.1434	0.0021	0.019	113		9.11	9.17		C			1							
104248	10.129	0.028	9.258	0.022		0.778	0.027	T	0.81	0.02	L	9.3333	0.0027	0.025	82		9.30	9.38		C			1							
104249	9.782	0.019	8.576	0.012		1.032	0.018	T	1.00	0.01	L	8.6479	0.0016	0.014	132		8.62	8.67					1							
104250	7.325	0.006	7.409	0.008	A	−0.050	0.015	G	−0.03	0.01	H *	7.3884	0.0009	0.009	109	*	7.37	7.41		D	21072+4440	I 1	2 C	A	AB	218	4.247	0.023	3.60	0.09	S
104251	8.829	0.012	8.395	0.012		0.435	0.015	G	0.50	0.02	H	8.4536	0.0017	0.015	103		8.43	8.48		C			1							S
104252	9.963	0.024	8.469	0.013		1.277	0.022	T	4.55	0.04	O	7.4741	0.0097	0.106	64		7.13	7.81		U 2			1	S						P
104253	8.848	0.012	8.506	0.013		0.331	0.020	T	0.39	0.03	L	8.5893	0.0019	0.015	102		8.56	8.61		C			1							S
104254	8.445	0.009	8.120	0.010		0.309	0.013	T	0.35	0.02	L	8.1754	0.0012	0.012	109		8.15	8.20		C			1							S
104255	9.191	0.013	8.148	0.009		0.906	0.012	T	0.91	0.01	L	8.2075	0.0012	0.013	126		8.18	8.22		C			1							
104256	9.876	0.018	8.931	0.013	*	0.820	0.017	T	0.84	0.01	L *	8.9631	0.0018	0.018	133	*	8.93	9.00		D	21073−5702	H 1	2 C	A	AB	340	0.431	0.013	2.11	0.08	
104257	10.277	0.025	8.991	0.014		1.094	0.022	T	1.06	0.02	L	9.0370	0.0018	0.019	151		9.00	9.07					1							
104258	7.865	0.007	7.571	0.008		0.270	0.015	G	0.30	0.02	H	7.6150	0.0011	0.011	108		7.60	7.64		C			1							S
104259	8.946	0.020	8.324	0.018		0.594	0.015	G	0.66	0.01	H	8.3770	0.0019	0.014	57		8.35	8.40					1							S
104260	9.278	0.014	8.925	0.015		0.343	0.018	T	0.40	0.02	L	8.9705	0.0019	0.019	119		8.94	9.02		C			1							
104261	9.835	0.034	8.375	0.019		1.272	0.010	G	1.23	0.01	H	8.3968	0.0018	0.010	47		8.38	8.42		C			1							
104262	7.866	0.006	7.942	0.008		−0.065	0.009	T	−0.04	0.01	L	7.9420	0.0011	0.013	189		7.91	7.97					1							S
104263	9.887	0.023	9.250	0.020		0.592	0.026	T	0.66	0.02	L	9.3656	0.0014	0.018	122		9.33	9.54	2.35	P 1 A			1 V							
104264	10.217	0.030	9.049	0.019		1.002	0.028	T	0.98	0.02	L	9.1104	0.0022	0.016	89		9.07	9.14					1							
104265	7.980	0.009	6.695	0.006		1.076	0.006	G	1.04	0.01	H	6.7514	0.0007	0.007	113		6.74	6.76		C			1							S
104266	7.512	0.008	7.303	0.010		0.200	0.012	T	0.22	0.01	L	7.3511	0.0015	0.011	65		7.33	7.37		C			1							S
104267	9.030	0.020	8.467	0.018		0.558	0.015	G	0.63	0.01	H	8.5309	0.0020	0.019	64		8.51	8.56					1							S
104268	7.241	0.006	7.258	0.007		−0.050	0.006	G	−0.03	0.01	H	7.2633	0.0011	0.009	117		7.25	7.28					1							S
104269	7.549	0.007	6.839	0.006		0.642	0.005	G	0.71	0.00	H	6.9082	0.0013	0.009	109		6.89	6.92					1							S
104270	10.148	0.027	9.856	0.031		0.580	0.020	G	0.65	0.02	H	9.8875	0.0032	0.033	124		9.83	9.94					1							S D
104271	8.414	0.011	8.277	0.013	*	0.128	0.002	G	0.14	0.00	H *	8.3047	0.0009	0.010	104	*	8.29	8.33		D	21074−0810	H 1	2 C	A	AB	29	0.760	0.023	3.09	0.08	S
104272	7.313	0.006	7.056	0.007	*	0.226	0.002	G	0.25	0.00	H *	7.0909	0.0009	0.008	104	*	7.08	7.10		D	21074−0814	I 1	2 C	A	AB	273	0.212	0.009	0.68	0.20	S
104273	9.587	0.017	9.143	0.018		0.419	0.023	T	0.49	0.02	L	9.1788	0.0022	0.022	142		9.14	9.21					1							
104274	8.737	0.013	7.589	0.009		0.986	0.012	T	0.97	0.01	L	7.6546	0.0011	0.009	72		7.64	7.67		C			1							S
104275	8.986	0.012	8.754	0.014	*	0.221	0.017	T	0.24	0.02	L *	8.9849	0.0013	0.019	215	*	8.96	9.02		D	21075+2428	I 1	2 C	A	AB	111	5.582	0.003	0.75	0.01	
104276	7.852	0.012	6.792	0.008		0.919	0.011	T	0.92	0.01	L	6.8520	0.0006	0.006	74		6.84	6.87					1							S
104277	10.958	0.072	10.085	0.053		0.764	0.069	T	0.80	0.05	L	10.1248	0.0040	0.027	60		10.07	10.19		C			1							
104278	7.955	0.008	7.523	0.007		0.408	0.010	T	0.47	0.01	L	7.5815	0.0009	0.010	117		7.56	7.60		C			1							S
104279	8.668	0.026	6.845	0.012		1.548	0.024	T	2.60	0.04	O	6.6017	0.0031	0.049	114		6.50	6.65		U 2 C	21075−0010	I 1	1	S						S
104280	9.429	0.019	8.384	0.013	A	0.800	0.495	G	0.85	0.02	L *	8.4093	0.0015	0.014	109	*	8.39	8.43		D	21076+6304	I 1	2 C	B	AB	339	1.414	0.030	3.05	0.15	
104281	7.564	0.006	6.389	0.003		1.008	0.005	T	0.98	0.00	L	6.4352	0.0009	0.007	112		6.42	6.45					1							S
104282	9.813	0.025	9.064	0.021		0.670	0.025	T	0.73	0.02	L	9.1311	0.0017	0.017	79		9.10	9.16		D			1							S
104283	7.355	0.006	7.374	0.007		−0.013	0.008	T	0.01	0.01	L	7.3754	0.0010	0.011	116		7.36	7.39					1							S
104284	8.552	0.010	8.138	0.010		0.407	0.015	G	0.47	0.02	H	8.1866	0.0014	0.011	110		8.17	8.20		C			1							S
104285						1.500	0.510	G	2.32	0.64	K	10.0991	0.3140	0.969	29		9.21	12.27	276.00	P 1 B			1							G P
104286	9.771	0.021	7.854	0.009		1.591	0.018	T	1.61	0.02	L	7.7901	0.0017	0.016	111		7.77	7.82					1							S
104287	9.454	0.019	8.910	0.017	A	0.520	0.100	G	0.56	0.06	L *	8.9882	0.0028	0.015	85	*	8.96	9.02		C	21076−5114	H 1	2 C	C	AB	341	1.082	0.070	3.52	0.34	
104288	8.653	0.014	8.295	0.014		0.353	0.013	G	0.41	0.01	H	8.3583	0.0016	0.014	90		8.34	8.39					1							S
104289	11.018	0.057	10.286	0.047		0.679	0.011	G	0.74	0.01	H	10.3872	0.0036	0.029	89		10.32	10.43		C			1							
104290	8.963	0.012	7.833	0.008		0.960	0.015	G	0.95	0.01	H	7.9060	0.0011	0.011	117		7.89	7.92		C	21077+4851	I 1	1							S P
104291	6.998	0.005	6.894	0.005		0.101	0.007	T	0.11	0.01	L	6.9229	0.0010	0.010	116		6.91	6.94		C			1							S
104292	8.786	0.012	8.281	0.011		0.473	0.003	G	0.54	0.00	H	8.3175	0.0017	0.014	106		8.29	8.34		C			1							S
104293	7.100	0.005	6.880	0.006		0.210	0.007	T	0.23	0.01	L	6.9265	0.0008	0.007	96		6.91	6.94					1							S
104294	8.255	0.012	7.656	0.009		0.546	0.005	G	0.62	0.01	H	7.7028	0.0010	0.008	91		7.68	7.72		C	21077−0534	I 1	1							S
104295	9.231	0.015	8.901	0.016		0.313	0.021	T	0.36	0.03	L	8.9554	0.0016	0.013	106		8.93	8.98					1							
104296	6.739	0.004	6.478	0.004		0.245	0.006	T	0.27	0.01	L	6.5164	0.0006	0.006	107		6.50	6.53		D			1	S						S
104297	6.138	0.003	6.172	0.003		−0.035	0.000	G	−0.01	0.00	H	6.1746	0.0005	0.004	121		6.17	6.18		C			1							S
104298	7.752	0.011	7.290	0.010		0.464	0.017	G	0.53	0.02	H	7.3450	0.0012	0.009	66		7.33	7.36		C			1							S
104299	9.628	0.014	8.637	0.010		0.840	0.003	G	0.88	0.00	H	8.6956	0.0019	0.022	188		8.66	8.74					1							
104300	9.015	0.014	8.550	0.014		0.438	0.018	T	0.51	0.02	L	8.5753	0.0016	0.011	99		8.55	8.59		C	21078−0826	I 1	1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
104301	21 07 46.84	−42 14 43.4	8.93	H	316.945 147 38	−42.245 375 45	4.09	−19.87	−3.45	1.19	1.05	1.61	0.97	0.77	+67	−57	−46	−52	−48	+42	−49	−68	+32	+51	0	1.01
104302 H	21 07 46.91	+71 22 54.5	8.43	H	316.945 445 29	+71.381 812 33	A 2.18	11.73	15.42	1.20	1.12	1.14	1.47	1.12	−	9	−21	+22	−19	+12	−	1	+	8	−	3	+10	−	2	0	1.01
104303	21 07 47.54	+44 57 51.3	7.53	H	316.948 095 26	+44.964 242 12	7.04	4.56	6.83	0.56	0.51	0.67	0.76	0.57	−	4	+	1	+	3	+	9	+	8	−	2	+	7	+	9	−	2	+10	0	0.64
104304 H	21 07 48.28	+29 45 24.4	9.60	G	316.951 178 51	+29.756 786 55	A 28.53	87.83	−247.65	1.63	1.45	2.23	1.96	1.34	−10	+	8	−	7	+25	+23	−26	+15	−	1	+26	−19	1	0.03
104305	21 07 49.21	+01 09 14.0	6.71	H	316.955 036 85	+01.153 879 65	3.88	8.23	−45.82	0.72	0.47	0.82	1.08	0.51	+35	−19	−	3	−36	−	4	+37	−	5	+41	+14	+45	0	0.92
104306	21 07 49.29	−34 11 54.6	7.96	H	316.955 359 98	−34.198 499 69	3.99	30.43	−30.04	0.94	0.75	1.02	1.23	0.65	+	5	−22	−	5	−13	−	7	+29	−10	−55	+	5	−	8	0	1.07
104307	21 07 49.64	−37 15 51.5	8.45	H	316.956 817 90	−37.264 307 82	2.13	14.16	−2.09	0.96	0.57	1.08	1.19	0.50	+33	−20	−	5	+	1	−33	+23	−40	−38	+	2	−	7	0	0.60
104308	21 07 51.19	−54 12 58.8	6.69	H	316.963 311 88	−54.216 319 65	15.05	26.56	−81.50	0.70	0.57	0.80	0.90	0.66	+18	−22	−22	+25	−21	+22	−26	−22	+	3	−	8	0	0.61
104309	21 07 51.86	+34 22 27.7	8.50	2 H	316.966 067 89	+34.374 366 88	−0.98	13.24	2.65	0.56	0.76	1.06	0.69	0.96	−31	+14	−21	−	2	+	7	−18	+	5	−21	+13	−26	0	−0.10
*104310 H	21 07 52.88	−10 12 40.7	8.48	H	316.970 344 07	−10.211 314 74	A 10.37	−111.19	−112.58	2.02	1.04	2.19	2.61	0.88	+36	−21	+14	+20	−	2	+30	+	7	−27	+29	+68	0	−0.19
*104311	21 07 52.72	−12 11 07.0	9.11	H	316.969 678 58	−12.185 273 64	7.35	34.95	−5.34	1.31	0.62	1.40	1.78	0.55	+27	−	2	−	4	+	9	−	1	+16	+	5	−35	+28	+52	0	0.58
104312	21 07 53.50	−56 38 09.4	8.48	G	316.972 899 05	−56.635 947 19	6.04	21.48	−11.29	0.77	0.66	1.13	0.87	0.62	−	9	−13	−	7	−16	+27	+	7	+27	−12	−21	−33	0	1.00
104313	21 07 53.84	−48 56 24.1	6.70	H	316.974 328 42	−48.940 014 36	8.39	23.91	−46.47	0.63	0.54	0.82	0.81	0.51	+22	−17	−24	−	4	−15	+21	−15	−42	+10	+	8	0	0.15
104314	21 07 54.33	+28 37 00.1	9.35	1 H	316.976 388 96	+28.616 702 34	0.80	−3.09	−1.53	0.80	0.75	1.28	0.91	0.77	+	4	+	4	−	2	+23	+22	−21	+21	+33	+	8	−	5	0	1.06
104315	21 07 54.46	+01 30 53.4	8.35	H	316.976 935 99	+01.514 842 14	6.23	1.27	20.07	0.95	0.58	1.05	1.14	0.63	+36	−24	−	6	−35	+	4	+37	−	5	+39	+12	+49	0	−1.46
104316	21 07 55.41	+33 23 49.3	7.78	H	316.980 891 89	+33.397 029 91	0.61	1.78	−7.69	0.36	0.54	0.77	0.46	0.63	−35	+	3	−	8	+	1	+	8	−	7	+	9	−	9	+13	−24	2	0.66
104317	21 07 55.97	−22 20 06.9	7.81	H	316.983 187 92	−22.335 251 67	9.85	11.03	−26.71	0.97	0.71	1.04	1.32	1.05	+17	+	9	−12	−23	−	5	+10	−12	+	9	−	8	+37	0	−1.05
104318	21 07 56.41	+07 25 58.7	8.01	H	316.985 037 93	+07.432 970 30	27.86	191.67	−11.24	1.00	1.00	1.34	1.27	0.92	+38	−37	−54	−	6	−12	+19	−21	−56	+44	+25	0	0.11
104319	21 07 57.20	+02 13 30.2	9.16	H	316.988 339 71	+02.225 060 03	3.51	−6.72	14.06	1.26	0.74	1.36	1.37	0.73	+22	−18	−	5	−35	−	3	+21	−	9	−13	+17	+36	4	4.08
104320	21 07 57.40	+14 40 25.3	7.03	H	316.989 163 86	+14.673 684 36	2.44	11.67	−2.87	0.66	0.48	0.85	0.79	0.56	+	9	−12	−	1	+	8	−	3	+10	−	7	+18	+14	+35	0	0.62
104321	21 07 58.28	−15 37 25.3	7.72	2 H	316.992 848 13	−15.623 705 55	1.06	27.00	−10.91	0.93	0.54	1.10	1.21	0.51	+41	−16	−	7	−14	−31	+41	−27	−37	+19	+52	0	0.12
104322	21 07 58.48	−54 44 26.1	8.99	H	316.993 668 63	−54.740 587 29	6.65	−36.68	22.41	1.02	0.90	1.18	1.54	1.19	+	9	+	1	−11	+46	−10	+19	−	9	−13	−	7	+	4	0	−1.10
104323	21 08 00.64	−62 56 46.4	7.47	H	317.002 672 09	−62.946 232 33	5.16	28.94	−31.84	0.56	0.57	0.97	0.90	0.69	−25	−	6	−	1	+16	+	4	+	9	+19	−11	−11	−	0	0	1.13
104324 H	21 08 00.68	+05 09 06.0	6.73	H	317.002 837 20	+05.151 657 27	* 4.20	−18.27	−16.50	1.63	2.59	1.31	1.42	1.10	−13	+	0	−45	−26	−23	+33	−	5	−54	+51	+29	3	0.45
104325	21 08 01.06	+09 21 45.2	7.38	H	317.004 398 72	+09.362 560 53	12.11	−7.15	−0.83	0.76	0.70	1.04	1.09	0.71	+16	−15	−55	−	7	−10	+18	−	7	−46	+40	+12	0	−0.30
104326	21 08 01.07	−46 29 34.9	7.06	H	317.004 452 38	−46.493 034 80	6.53	27.12	−7.53	0.82	0.68	1.03	0.82	0.57	+44	+	7	+	5	−29	−26	+18	−32	−61	−11	+32	0	0.60
104327	21 08 01.31	+21 45 53.1	7.73	G	317.005 451 06	+21.764 752 46	9.12	27.29	−57.45	0.64	0.55	0.98	0.77	0.67	+	3	+	6	−	8	+	0	+15	−24	+12	+	9	+	5	+23	4	0.70
104328	21 08 01.74	−37 50 12.7	9.85	H	317.007 231 23	−37.836 847 93	10.83	−55.33	−60.36	3.11	1.95	3.49	4.87	1.70	+25	+	3	−21	+16	−40	+35	−43	−33	−	2	−19	4						
104329	21 08 01.92	+25 10 35.9	9.84	H	317.007 979 17	+25.176 629 57	28.60	−21.03	−162.85	0.99	0.78	1.55	1.29	0.79	−	3	+10	+14	−24	+46	−16	+46	+37	+26	−13	1	0.93
104330	21 08 03.95	+23 22 37.9	9.53	H	317.016 446 53	+23.377 194 05	6.15	40.99	−5.41	0.82	0.75	1.29	0.96	0.88	+	2	−	9	−	5	+21	+11	−18	+11	+48	−14	+	6	0	−1.40
*104331	21 08 04.39	−09 09 57.8	9.72	G	317.018 302 96	−09.166 044 84	22.41	−145.20	−365.72	1.35	0.74	1.59	1.93	0.76	+40	−20	+	4	+13	−14	+25	−	3	−24	+19	+66	2	1.51
*104332	21 08 04.39	−46 11 09.3	9.55	H	317.018 291 59	−46.185 909 58	8.39	9.49	−36.16	1.12	0.88	1.43	1.20	0.80	+35	−	9	+	0	−25	−14	+17	−16	−45	−	7	+25	0	−1.56
104333	21 08 05.31	+17 06 26.1	9.13	G	317.022 124 50	+17.107 247 57	7.62	33.64	68.93	0.89	0.70	1.18	1.18	0.85	+	9	−	1	−	4	+24	+11	+10	+11	+28	−	7	+30	0	2.05
104334	21 08 06.40	+38 31 44.8	7.74	H	317.026 648 92	+38.529 114 59	9.58	28.09	3.75	0.50	0.59	0.84	0.51	0.69	−16	−	4	−11	+	7	+11	−19	+	8	−20	+37	−21	0	0.08
104335	21 08 07.17	−48 36 16.2	10.63	H	317.029 854 64	−48.604 508 17	1.95	9.62	−10.93	1.46	1.22	1.80	1.73	1.19	+31	−24	−24	−	7	−20	+15	−24	−41	+	9	+	6	0	1.00
104336	21 08 07.49	+31 25 17.1	9.42	H	317.031 206 17	+31.421 428 13	0.18	−2.17	−4.09	0.79	0.89	1.34	1.01	0.96	+10	+	4	−12	+52	+23	−23	+16	+19	+23	−	2	0	−0.85
104337	21 08 07.60	−37 02 42.7	8.64	G	317.031 685 33	−37.045 192 90	5.72	14.20	−17.75	0.93	0.55	1.06	1.10	0.48	+36	−28	−13	−	1	−34	+30	−41	−38	+	7	−	3	0	−0.78
104338	21 08 09.37	−00 59 22.9	6.88	H	317.039 035 65	−00.989 685 33	12.07	69.51	5.91	0.91	0.46	0.87	1.21	0.48	+48	−12	−	3	−43	−30	+18	−29	+13	+	4	+54	0	−0.12
104339	21 08 10.73	+32 07 27.3	9.15	H	317.044 719 61	+32.124 260 68	0.37	−6.92	−5.98	0.78	0.78	1.32	0.97	0.89	−	1	+	2	−	8	+42	+17	−20	+14	+	6	+12	−	1	0	0.92
104340	21 08 11.95	−14 19 19.2	8.03	H	317.049 794 62	−14.322 011 25	6.18	18.59	−9.94	0.93	0.55	1.14	1.21	0.50	+42	+	1	+	0	−	3	−19	+41	−14	−38	+24	+58	0	0.44
104341	21 08 13.33	−16 43 36.0	8.11	H	317.055 525 71	−16.726 655 41	0.58	21.85	−18.82	1.00	0.55	1.11	1.49	0.58	+41	−16	−	4	−14	−36	+23	−28	−23	+	9	+52	0	−2.01
104342	21 08 14.45	+35 19 58.5	8.64	H	317.060 188 58	+35.332 923 13	2.22	2.60	−1.14	0.52	0.66	0.91	0.51	0.70	−17	−	6	−17	−18	+11	−	8	+	9	−21	+20	−14	0	−0.24
104343	21 08 15.46	−12 52 50.6	8.01	H	317.064 419 45	−12.880 714 69	4.02	5.05	−7.40	1.08	0.54	1.27	1.57	0.51	+34	−	9	−15	−	1	−10	+36	−	5	−37	+37	+60	0	0.06
104344	21 08 17.07	+43 44 51.3	7.87	H	317.071 130 60	+43.747 587 18	15.35	115.57	49.68	0.56	0.57	0.74	0.68	0.56	−11	−	6	+15	+12	−	3	−	4	−	3	−15	+	0	−15	0	−2.03
104345	21 08 18.02	+53 13 34.1	7.48	H	317.075 082 18	+53.226 151 60	5.72	41.46	44.31	0.54	0.47	0.59	0.54	0.47	+	0	+14	+	8	−13	−	3	−10	−	2	−	3	−	5	−	2	0	2.46
104346	21 08 19.76	−76 19 02.2	9.44	G	317.082 352 75	−76.317 282 39	9.61	−37.85	−198.45	0.97	0.87	1.22	1.08	1.03	−11	−29	+20	+18	+11	−	1	+13	−20	−20	−17	3	1.25
104347	21 08 21.93	+39 40 16.5	8.30	G	317.091 378 02	+39.671 247 85	8.44	33.41	59.34	0.64	0.74	1.00	0.78	1.05	−21	+	8	−11	−	5	+16	−18	+14	−36	+24	−25	1	−1.19
104348	21 08 23.03	+13 25 23.8	7.92	H	317.095 959 96	+13.423 271 96	2.99	8.31	−2.02	0.81	0.64	1.00	0.99	0.66	+19	−15	−15	+16	−31	+25	−21	+	1	+12	+42	0	1.98
104349 H	21 08 23.87	−75 58 48.2	7.78	G	317.099 442 24	−75.980 063 26	A 10.80	62.33	−66.65	1.33	1.30	1.69	1.43	1.43	−12	−21	+	6	+26	−	7	+	1	−	6	−	9	−22	−26	2	0.52
104350	21 08 24.52	+24 07 09.3	8.18	H	317.102 159 26	+24.119 250 28	3.61	−12.32	−11.35	0.65	0.53	1.09	0.79	0.56	+	2	−	9	+	0	−35	+44	−19	+44	+33	+	8	−	5	0	0.82
104351	21 08 24.90	+05 39 00.7	12.39	3 G	317.103 762 91	+05.650 198 69	21.29	16.37	−190.89	4.68	4.28	5.25	7.17	5.69	+54	−25	−39	−62	−48	+43	−40	−66	+21	+51	0	2.46
104352 H	21 08 25.21	−69 14 01.4	8.27	H	317.105 035 93	−69.233 714 59	A 8.58	34.81	−36.60	0.92	0.92	1.21	0.96	1.00	−15	−	6	+13	+13	−	1	+	4	−	7	+	9	−	2	−38	2	1.13
104353	21 08 26.27	−14 54 15.6	8.49	H	317.109 478 60	−14.904 319 64	2.18	41.89	−4.52	1.01	0.56	1.19	1.29	0.49	+44	−10	−	7	−	1	−22	+31	−17	−40	+20	+55	0	−0.67
104354	21 08 26.54	+41 35 10.2	8.27	H	317.110 586 45	+41.586 176 91	1.80	3.03	3.31	0.52	0.56	0.73	0.59	0.63	−	9	−	6	−12	+12	+	2	−	8	+	2	−	4	+	2	−	5	1	−1.02
104355	21 08 26.74	+56 06 16.0	8.00	H	317.111 405 83	+56.104 450 44	4.98	11.05	9.91	0.54	0.51	0.61	0.56	0.50	−	4	+	6	+15	+11	+	0	+	1	+	2	−	6	+12	+	4	0	1.70
104356	21 08 27.65	+56 02 43.3	7.95	H	317.115 227 05	+56.045 347 49	2.02	−2.43	−4.68	0.52	0.50	0.60	0.57	0.52	+	0	−	9	+	7	+	5	−	5	−13	−	5	−	2	+	9	+	1	0	1.53
104357	21 08 28.15	+06 59 21.7	6.14	1 G	317.117 271 71	+06.989 354 04	3.92	−9.93	1.66	0.81	0.75	1.06	1.18	0.73	+29	−24	−53	−11	−22	+21	−21	−55	+37	+22	0	−1.17
104358	21 08 28.30	−26 29 59.5	9.14	H	317.117 897 25	−26.499 864 65	2.42	−4.95	−13.26	1.27	0.84	1.38	1.89	1.24	+11	−22	−26	−	9	−11	+14	−	5	+	3	−13	+13	0	2.15
104359	21 08 28.76	−53 16 00.2	8.88	H	317.119 845 57	−53.266 730 30	3.67	1.16	−8.12	1.14	0.84	1.31	1.89	1.14	+19	−19	−	5	−	7	−18	−14	−18	−15	+	5	−22	0	−0.74
104360	21 08 29.62	−26 36 25.8	8.21	H	317.123 399 35	−26.607 152 93	1.23	−1.65	−12.76	1.17	0.89	1.31	1.71	1.20	+21	−26	−34	+	6	−	8	+	4	−	9	+15	+	9	+12	0	0.76
104361	21 08 29.63	+47 15 25.4	7.91	H	317.123 442 79	+47.257 048 53	2.39	3.82	0.15	0.56	0.61	0.72	0.72	0.65	−12	+	1	+	1	+	8	−12	+	5	−12	−18	+10	−21	0	−0.92
104362	21 08 32.02	−24 12 18.6	7.57	H	317.133 416 81	−24.205 158 10	2.99	−2.51	−20.39	0.96	0.69	1.04	1.21	0.87	+	8	−13	−24	+11	−18	+16	−15	+18	−	3	+10	0	−0.10
104363	21 08 32.19	−33 31 57.1	8.18	H	317.134 110 04	−33.532 520 18	3.91	8.83	−13.45	1.02	0.74	1.31	1.38	0.55	+15	−16	−28	+	9	−26	+52	−23	−57	+24	+	6	0	−1.81
104364	21 08 32.71	−63 55 41.8	5.75	H	317.136 270 84	−63.928 271 12	6.67	−6.33	4.50	0.40	0.38	0.72	0.48	0.45	−45	−	4	+	3	+	2	+19	+12	+19	−	2	−19	−39	0	−0.82
104365	21 08 33.61	−21 11 36.7	5.30	G	317.140 053 80	−21.193 525 39	17.06	18.67	−59.22	0.87	0.63	1.00	1.13	0.87	+10	−	1	−20	−24	+12	+42	+15	+26	+22	+35	0	−0.24
104366	21 08 33.95	+62 07 20.2	9.99	H	317.141 449 83	+62.122 275 45	2.56	−8.29	−9.02	0.92	0.89	1.05	0.94	1.05	+	2	−	2	+15	−	9	+28	+18	+27	+	1	−	3	+32	0	1.53
104367	21 08 36.89	−21 40 58.8	7.89	H	317.153 720 50	−21.683 010 39	10.95	68.11	−12.48	1.00	0.68	1.05	1.28	0.90	+	9	−	6	−17	−31	+	5	+26	+	4	+17	+17	+25	0	−0.75
104368	21 08 37.31	+36 23 38.1	11.43	H	317.155 461 81	+36.393 913 37	10.02	72.80	−227.32	1.50	2.01	2.62	1.62	2.12	−23	+	1	+	2	−16	+15	−	7	+15	−20	+15	−25	1	−0.07
104369	21 08 38.22	+42 32 08.3	9.59	H	317.159 263 56	+42.535 640 64	20.06	68.45	186.18	0.76	0.81	1.05	0.90	0.86	−	5	+	6	+10	−	7	+	0	−23	+	2	−27	−14	+	2	0	−0.26
104370 H	21 08 38.75	−51 21 09.7	9.70	H	317.161 462 38	−51.352 686 42	A 13.95	1.89	9.09	3.39	2.69	3.66	4.25	2.16	+29	−13	−25	+	8	+	6	−32	−	5	−28	−	7	+16	0	0.04
104371 H	21 08 38.87	+30 12 20.5	5.60	1 H	317.161 969 97	+30.205 687 97	A 7.35	25.35	−20.78	0.49	0.54	0.70	0.51	0.51	−	3	+	8	−	2	+44	+22	+	0	+19	+25	−	2	+	4	2	0.71
104372	21 08 39.64	+43 49 44.6	8.09	H	317.165 185 97	+43.829 047 96	3.57	7.54	6.49	0.58	0.56	0.74	0.70	0.57	−12	+	3	+10	+	4	−	4	+	6	−	4	−13	−	1	−15	0	−0.40
104373	21 08 39.93	−02 44 12.2	9.15	H	317.166 363 22	−02.736 730 57	0.59	15.05	−4.73	1.12	0.67	1.28	1.39	0.75	+35	−25	−12	−25	−20	+32	−21	+19	+	2	+46	2	0.44
104374 H	21 08 41.27	−37 14 33.7	6.87	G	317.171 974 14	−37.242 689 33	A 5.42	17.89	−3.58	0.97	0.63	1.00	1.04	0.53	+42	−19	−17	−	7	−40	+26	−36	−36	+18	+	9	2	−0.43
104375	21 08 41.33	+73 41 52.0	8.69	G	317.172 206 95	+73.697 777 98	32.59	−322.56	−399.27	0.63	0.63	0.73	0.63	0.70	+	3	+	0	+12	−	9	+	7	−	2	+	8	−	1	−11	+10	1	−0.04
104376	21 08 41.78	−19 59 39.4	10.10	G	317.174 078 15	−19.994 277 84	11.23	−139.33	−228.79	1.68	1.26	2.09	2.47	1.44	+32	−	7	−11	+10	+	4	+45	+	9	+27	+22	+34	0	1.19
104377	21 08 42.55	+09 49 09.9	8.30	H	317.177 289 72	+09.819 405 56	1.27	9.97	−5.15	0.86	0.81	1.15	1.16	0.90	+20	−11	−50	−25	+	1	+	4	−	3	−39	+41	+14	0	−0.24
104378	21 08 43.53	−29 32 00.6	8.72	H	317.181 370 30	−29.533 490 26	4.49	18.71	−16.21	1.05	0.69	1.09	1.33	0.65	−	2	−	7	−21	+	8	−22	+25	−13	−38	+10	+	4	2	1.50
104379	21 08 43.82	+29 43 18.7	8.02	H	317.182 588 96	+29.721 856 59	−0.95	25.92	31.79	0.77	0.65	1.13	0.84	0.68	−18	−12	+	0	+	1	+26	−22	+24	+19	+	7	−15	4	2.08
104380	21 08 44.65	−06 59 11.3	8.11	H	317.186 051 50	−06.986 477 14	3.40	−6.62	7.65	0.91	0.56	1.16	1.45	0.56	+35	−10	−25	+	4	−18	+44	−	6	−16	+33	+50	0	1.41
104381	21 08 45.34	+33 37 19.6	8.08	H	317.188 901 84	+33.622 104 37	3.41	4.87	−0.60	0.43	0.60	0.92	0.56	0.76	−36	+	3	−12	−	6	+16	−17	+14	−	7	+23	−35	0	1.04
*104382	21 08 46.01	−88 57 23.4	5.45	1 G	317.191 725 47	−88.956 511 20	12.07	25.96	5.02	0.41	0.41	0.48	0.48	0.45	−	7	−	7	−11	+18	−	2	−11	−	5	+	4	+	3	−16	1	1.24
*104383 H	21 08 45.51	−04 25 36.7	9.45	G	317.189 643 68	−04.426 849 49	* 37.91	−75.36	−33.09	3.61	3.66	2.28	3.46	1.37	+27	−13	−12	+22	−25	+25	−	5	+16	+	8	+41	1	0.18
104384	21 08 46.41	+47 09 25.6	10.79	G	317.193 361 94	+47.157 115 09	14.84	423.05	−242.10	4.46	4.53	5.43	5.22	4.92	−	5	+	6	+	0	−	7	−	2	+	7	−	1	−25	+	7	0	3		
104385	21 08 47.69	−76 12 44.7	6.57	G	317.198 698 46	−76.212 426 90	3.46	−32.66	−17.55	0.51	0.52	0.69	0.61	0.65	−18	−15	+11	+15	+13	+	3	+11	−24	−22	−29	0	2.30						
104386	21 08 49.25	+11 40 15.9	8.56	1 H	317.205 201 78	+11.671 085 76	0.42	−4.43	−21.44	0.89	0.92	1.20	1.11	0.94	+31	−15	−48	−30	−	2	+	0	−11	−49	+43	+27	0	−0.82
104387	21 08 49.90	−18 43 37.7	8.14	H	317.207 929 16	−18.727 135 06	2.63	−7.62	−11.80	0.95	0.54	1.21	1.27	0.53	+42	−13	−13	+	4	−18	+50	−13	−12	+28	+50	0	−0.64
104388	21 08 51.36	+07 24 05.3	8.18	H	317.214 010 09	+07.401 461 59	1.39	5.64	−2.54	1.07	1.09	1.35	1.32	1.04	+46	−38	−50	−20	−24	+22	−28	−59	+38	+38	0	−1.44
104389	21 08 51.50	+01 47 15.2	7.05	H	317.214 577 34	+01.787 558 19	5.51	14.75	−7.14	0.79	0.61	0.91	0.91	0.65	+10	−22	−20	−34	+	7	+28	+	5	−34	+30	+28	0	−0.23
104390 H	21 08 52.81	+00 12 53.9	8.75	H	317.220 030 66	+00.214 974 72	A 14.65	108.02	−51.19	1.53	1.02	1.60	1.80	1.05	+52	−	1	+	0	−25	+	1	+	2	−	8	+18	+	1	+62	0	0.14
104391	21 08 53.00	−73 23 46.3	7.84	1 H	317.220 826 92	−73.396 201 59	4.36	33.98	−38.36	0.58	0.58	0.81	0.72	0.67	−18	−12	+10	−	6	−	1	+12	+	0	−14	−22	−26	0	−0.43
104392	21 08 53.69	−63 06 11.6	8.92	H	317.223 704 45	−63.103 214 87	3.82	33.51	−20.83	0.73	0.68	1.24	0.89	0.86	−32	−	4	+	3	+14	+	3	+15	+	5	+20	−14	−39	0	0.77
104393 H	21 08 55.53	+17 47 50.0	9.06	H	317.231 356 75	+17.797 214 23	A 1.72	−13.76	−6.37	2.92	1.90	3.18	3.55	2.05	−	4	−	7	−14	+15	+	2	−31	−	2	+31	−	8	+11	2	0.87
104394	21 08 56.02	−06 19 46.5	8.24	H	317.233 435 37	−06.329 573 74	5.62	−19.49	−26.12	0.90	0.54	1.14	1.49	0.54	+23	+	6	−22	+20	−26	+51	−	8	+	1	+18	+36	0	0.30
104395	21 08 57.45	−05 34 54.3	6.58	H	317.239 384 17	−05.581 751 34	4.92	−68.18	−51.28	0.80	0.45	0.89	1.17	0.46	+25	−24	−16	+	4	−26	+28	−17	+	3	+15	+31	0	0.38
104396	21 08 57.85	+47 16 15.6	6.97	H	317.241 041 41	+47.271 000 58	14.64	24.20	1.36	0.49	0.51	0.61	0.61	0.56	−18	+	1	+	0	+	5	−11	+	8	−10	−12	+	2	−21	0	−0.65
104397	21 08 58.07	+06 43 18.5	10.28	H	317.241 939 33	+06.721 803 03	B 17.48	−45.56	8.10	19.60	17.48	14.95	19.39	13.30	+29	−19	−43	−12	−15

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
104301	10.221	0.023	9.045	0.015		1.008	0.021	T	0.98	0.02	L	9.0986	0.0014	0.017	128		9.06	9.13					1							
104302	9.987	0.025	8.576	0.014	*	1.192	0.023	T	1.15	0.02	L *	8.5955	0.0016	0.014	106	*	8.57	8.62		C	21078+7123	H 1	2 C B	AB	189	0.918	0.040	3.62	0.21	
104303	7.585	0.007	7.529	0.008		0.056	0.010	T	0.07	0.01	L	7.5526	0.0010	0.010	100		7.54	7.57		C			1							S
104304	10.884	0.048	9.721	0.028	A	1.102	0.062	G	1.18	0.09	I *	9.7278	0.0028	0.025	114	*	9.69	9.78			21078+2945	I 1	2 C C	AB	10	4.776	0.093	3.85	0.41	G
104305	8.674	0.010	6.868	0.005		1.503	0.009	T	1.53	0.01	L	6.8370	0.0010	0.009	131		6.82	6.85					1 G							S
104306	9.297	0.017	8.045	0.011		1.068	0.016	T	1.03	0.01	L	8.1254	0.0015	0.011	78		8.10	8.15		C			1							S
104307	10.389	0.032	8.599	0.013		1.336	0.134	G	1.43	0.02	A	8.5884	0.0011	0.017	166		8.56	8.62					1							
104308	6.992	0.005	6.733	0.005		0.247	0.007	T	0.28	0.01	L	6.7642	0.0009	0.009	88		6.75	6.78		C			1							S
104309	10.618	0.030	8.723	0.011		1.574	0.025	T	1.59	0.03	L	8.6143	0.0024	0.025	194		8.58	8.66		U 2			1 G							
104310	8.902	0.019	8.329	0.018	*	0.536	0.023	T	0.61	0.02	L *	8.6003	0.0017	0.020	123	*	8.57	8.65		D	21079−1013	I 1	2 C A	AB	117	2.024	0.005	1.11	0.02	S
104311	9.724	0.020	9.167	0.019		0.541	0.007	G	0.65	0.07	B	9.2336	0.0016	0.015	118		9.21	9.26			21079−1211	I 1	1 S							
104312	9.066	0.013	8.561	0.012		0.485	0.013	T	0.56	0.01	L	8.5940	0.0022	0.017	115		8.57	8.63					1							S
104313	6.678	0.004	6.696	0.005		−0.015	0.006	T	0.01	0.01	L	6.7070	0.0008	0.009	109		6.69	6.72		C	21079−4856	I 1	1							S
104314	11.725	0.091	9.513	0.021		1.827	0.075	T	1.86	0.08	L	9.4560	0.0025	0.029	149		9.41	9.50		U			1 S							
104315	8.756	0.012	8.362	0.012		0.355	0.015	G	0.42	0.02	H	8.4341	0.0015	0.013	116		8.41	8.46		C			1							S
104316	7.566	0.004	7.731	0.006		−0.144	0.006	T	−0.14	0.01	L	7.7260	0.0008	0.011	267		7.70	7.75		C			1							S
104317	8.175	0.013	7.844	0.011		0.315	0.015	G	0.36	0.02	H	7.8891	0.0012	0.010	56		7.87	7.91		C			1							S
104318	8.873	0.020	8.094	0.017		0.692	0.020	T	0.75	0.02	L	8.1490	0.0019	0.014	54		8.13	8.17		C			1							S
104319	9.703	0.026	9.253	0.026		0.446	0.015	G	0.52	0.02	H	9.2619	0.0029	0.024	95		9.21	9.29					1 S							
104320	6.845	0.005	7.003	0.006		−0.133	0.002	G	−0.12	0.00	H	6.9806	0.0010	0.008	105		6.96	7.00					1							S
104321	9.850	0.023	7.911	0.010		1.644	0.021	T	1.93	0.07	O	7.8057	0.0034	0.024	103		7.77	7.84		U 2			1							S
104322	10.263	0.036	9.165	0.024		0.948	0.033	T	0.94	0.02	L	9.1477	0.0019	0.020	83		9.11	9.19		C			1							
104323	8.899	0.009	7.601	0.006		1.104	0.008	T	1.07	0.01	L	7.6384	0.0011	0.013	198		7.62	7.66		C			1 G							S
104324	6.889	0.006	6.757	0.007	*	0.127	0.008	T	0.14	0.01	L *	6.7752	0.0009	0.008	66	*	6.76	6.79		D	21080+0509	I 1	2 C A	AB	130	0.250	0.006	1.00	0.05	S
104325	7.868	0.009	7.438	0.009		0.413	0.010	G	0.48	0.01	H	7.4758	0.0011	0.007	76		7.46	7.49					1							S
104326	7.029	0.005	7.051	0.007		−0.031	0.002	G	−0.01	0.00	H	7.0616	0.0012	0.009	106		7.04	7.08		C			1							S
104327	8.162	0.009	7.772	0.008		0.369	0.011	T	0.43	0.01	L	7.8245	0.0010	0.012	121		7.80	7.85		C			1							S
104328	10.794	0.041	9.917	0.029		0.767	0.039	T	0.81	0.03	L	9.9888	0.0027	0.028	128		9.94	10.03		C			1 X S							
104329	11.327	0.052	9.976	0.024		1.160	0.015	G	1.26	0.03	I	9.9667	0.0017	0.026	207		9.92	10.01					1							G
104330	10.205	0.029	9.603	0.026		0.579	0.015	G	0.65	0.01	H	9.6545	0.0020	0.020	130		9.63	9.69		C			1							
104331	10.990	0.064	9.823	0.040		0.997	0.005	G	1.04	0.01	I	9.8545	0.0018	0.018	101		9.82	9.89		C			1 S							
104332	10.194	0.029	9.555	0.026		0.587	0.029	T	0.66	0.03	L	9.6722	0.0024	0.020	101		9.63	9.71		C			1							
104333	9.781	0.019	9.154	0.017		0.546	0.015	G	0.62	0.01	H	9.2391	0.0017	0.021	150		9.21	9.27		C			1							
104334	8.178	0.009	7.780	0.009		0.377	0.012	T	0.44	0.01	L	7.8276	0.0011	0.013	161		7.80	7.85		C			1							S
104335	11.102	0.056	10.604	0.058		0.480	0.062	T	0.55	0.07	L	10.7401	0.0032	0.030	105		10.69	10.79		C			1							G
104336	11.212	0.054	9.513	0.020		1.419	0.045	T	1.40	0.07	L	9.5617	0.0019	0.022	158		9.52	9.60					1							
104337	8.796	0.010	8.644	0.012		0.125	0.003	G	0.14	0.00	H	8.6829	0.0015	0.017	160		8.65	8.71					1							S
104338	7.182	0.005	6.906	0.006		0.263	0.007	T	0.30	0.01	L	6.9498	0.0010	0.010	127		6.93	6.97					1							S
104339	9.281	0.012	9.194	0.015		0.085	0.018	T	0.10	0.02	L	9.1907	0.0020	0.024	167		9.15	9.23					1 G							
104340	8.331	0.009	8.058	0.009		0.246	0.015	G	0.28	0.02	H	8.1007	0.0016	0.013	119		8.08	8.12		C			1							S
104341	8.353	0.009	8.128	0.010		0.209	0.013	T	0.23	0.01	L	8.1716	0.0011	0.011	99		8.15	8.19		C			1							S
104342	8.628	0.008	8.627	0.010		0.006	0.012	T	0.03	0.01	L	8.6458	0.0014	0.017	177		8.62	8.68					1							
104343	9.544	0.018	8.116	0.010		1.205	0.016	T	1.16	0.02	L	8.1708	0.0014	0.011	119		8.15	8.20		C			1							
104344	8.481	0.013	7.928	0.010		0.539	0.009	G	0.61	0.01	H	7.9879	0.0013	0.013	110		7.97	8.01		C			1							S
104345	7.595	0.006	7.492	0.007		0.100	0.009	T	0.11	0.01	L	7.5160	0.0014	0.012	121		7.50	7.54					1							S
104346	10.095	0.023	9.541	0.022		0.528	0.003	G	0.60	0.00	H	9.5634	0.0027	0.025	116		9.52	9.63					1							
104347	8.912	0.011	8.347	0.011		0.512	0.011	G	0.58	0.01	H	8.4072	0.0015	0.018	136		8.38	8.44					1 G							
104348	9.700	0.022	8.057	0.011		1.370	0.015	G	1.34	0.02	H	8.0647	0.0016	0.013	96		8.04	8.09					1							
104349	8.316	0.013	7.726	0.015	*	0.583	0.015	G	0.65	0.01	H *	7.9015	0.0015	0.016	133	*	7.88	7.93		D	21084−7559	I 1	2 C A	AB	309	1.812	0.002	0.37	0.01	S
104350	8.379	0.007	8.209	0.008		0.163	0.010	T	0.18	0.01	L	8.2415	0.0009	0.012	189		8.22	8.26		C			1							S
104351						1.348	0.020	G	1.41	0.14	K	12.6140	0.0134	0.125	62		12.08	12.79		U			1 G							G
104352	8.764	0.009	8.336	0.009	A	0.400	0.495	G	0.49	0.02	L *	8.3611	0.0026	0.025	191	*	8.32	8.40		D	21084−6914	I 1	2 C A	AB	200	1.224	0.015	2.83	0.09	S
104353	8.625	0.010	8.518	0.011		0.097	0.014	T	0.11	0.01	L	8.5305	0.0019	0.017	114		8.51	8.56			21084−1454	I 1	1							S
104354	8.304	0.007	8.274	0.009		0.032	0.011	T	0.05	0.01	L	8.2904	0.0014	0.015	147		8.27	8.32					1							
104355	8.192	0.008	8.016	0.009		0.169	0.011	T	0.18	0.01	L	8.0615	0.0014	0.013	116		8.04	8.09		C			1							
104356	8.354	0.010	7.982	0.010		0.390	0.015	G	0.46	0.02	H	8.0436	0.0010	0.011	120		8.03	8.07		C			1							S
104357	8.341	0.014	6.360	0.007		1.669	0.014	G	1.68	0.09	H	6.2422	0.0021	0.012	58		6.23	6.26		M			1							S
104358	10.229	0.039	9.196	0.027		0.899	0.036	T	0.90	0.03	L	9.2928	0.0021	0.012	60		9.27	9.32		C			1							
104359	10.318	0.031	9.017	0.018		1.106	0.028	T	1.07	0.03	L	9.0468	0.0023	0.019	83		9.02	9.08		C			1							
104360	10.231	0.042	8.404	0.018		1.520	0.036	T	1.56	0.05	L	8.3322	0.0033	0.018	61		8.29	8.37					1							
104361	7.821	0.008	7.894	0.011		−0.050	0.015	G	−0.03	0.01	H	7.9026	0.0017	0.014	117		7.88	7.92					1							S
104362	9.345	0.020	7.706	0.010		1.371	0.018	T	1.34	0.02	L	7.7173	0.0015	0.012	68		7.71	7.74		C			1							S
104363	9.770	0.027	8.313	0.015		1.228	0.024	T	1.19	0.02	L	8.3409	0.0014	0.014	79		8.32	8.37		C			1							
104364	7.282	0.004	5.890	0.002		1.180	0.000	G	1.14	0.00	H	5.9181	0.0005	0.007	265		5.91	5.93		C			1							S
104365						0.000	0.001	G	0.02	0.00	H	5.3239	0.0008	0.004	50		5.32	5.34		C	21086−2112	I 1	1							S
104366	10.614	0.040	10.073	0.040		0.507	0.051	T	0.58	0.05	L	10.1019	0.0034	0.025	102		10.05	10.15					1 S							G
104367	8.539	0.017	7.952	0.015		0.511	0.015	G	0.58	0.02	H	8.0067	0.0016	0.010	57		7.98	8.03					1							S
104368											T	11.5631	0.0049	0.065	163		11.47	11.68					1							G
104369	10.695	0.040	9.635	0.026		0.909	0.037	T	0.91	0.03	L	9.7315	0.0021	0.021	138		9.69	9.77		C			1							G
104370	9.663	0.040	9.085	0.039	*	0.543	0.041	T	0.62	0.04	L *	9.8080	0.0031	0.027	83	*	9.77	9.86		D	21086−5121	I 1	2 C A	AB	182	2.468	0.009	0.44	0.03	
104371	5.511	0.004	5.568	0.005	*	−0.048	0.005	T	−0.03	0.01	L *	5.5937	0.0021	0.026	170	*	5.55	5.63	1.43	P 1 A	21087+3012	I 1	2 C A	AB	305	3.422	0.005	2.54	0.02	S P
104372	7.990	0.009	8.057	0.011		−0.080	0.015	G	−0.06	0.02	H	8.0651	0.0014	0.014	114		8.04	8.09		C			1							
104373	10.262	0.035	9.237	0.024		0.893	0.032	T	0.90	0.02	L	9.3069	0.0021	0.016	93		9.28	9.34					1							
104374	6.796	0.004	6.874	0.005	*	−0.073	0.001	G	−0.05	0.00	H *	6.8600	0.0008	0.007	159	*	6.85	6.88		C	21087−3715	I 1	2 C A	AB	119	0.900	0.039	3.73	0.07	S
104375	9.757	0.021	8.781	0.016		0.832	0.013	G	0.87	0.01	H	8.8379	0.0017	0.015	113		8.81	8.86		C			1							
104376	11.379	0.130	10.323	0.082		0.995	0.005	G	1.04	0.01	I	10.2335	0.0034	0.020	42		10.20	10.27		C			1							
104377	9.893	0.034	8.481	0.019		1.193	0.031	T	1.15	0.03	L	8.4623	0.0018	0.014	75		8.43	8.48					1							
104378	10.019	0.033	8.831	0.020		1.018	0.030	T	0.99	0.02	L	8.8835	0.0018	0.016	76		8.86	8.92					1							
104379	9.967	0.024	8.209	0.011		1.465	0.021	T	1.47	0.03	L	8.1472	0.0016	0.015	131		8.12	8.18					1 S							
104380	9.650	0.022	8.227	0.012		1.201	0.020	T	1.16	0.02	L	8.2786	0.0014	0.012	91		8.25	8.30		C			1							S
104381	8.154	0.006	8.079	0.007		0.074	0.009	T	0.09	0.01	L	8.1114	0.0010	0.015	238		8.09	8.14					1							S
104382	5.786	0.004	5.483	0.003		0.283	0.005	G	0.32	0.01	H	5.5179	0.0020	0.019	127		5.49	5.55	0.10	P 1 A			1							S P
104383	10.961	0.053	9.556	0.025	*	1.150	0.015	G	1.36	0.02	A *	9.5353	0.0025	0.015	90	*	9.50	9.56		C	21088−0426	H 1	2 C A	AB	162	0.266	0.033	2.50	0.40	
104384						0.950	0.001	G	1.00	0.00	I	10.9616	0.0041	0.037	116		10.90	11.04		C			1 X							D
104385	8.163	0.009	6.716	0.005		1.229	0.003	G	1.19	0.00	H	6.7238	0.0009	0.010	127		6.71	6.74					1							S
104386	10.817	0.079	8.764	0.023		1.738	0.068	T	2.21	0.13	O	8.6208	0.0032	0.026	68		8.58	8.66		U			1							
104387	9.953	0.021	8.277	0.010		1.401	0.018	T	1.38	0.02	L	8.2850	0.0013	0.012	119		8.27	8.31		C			1							
104388	10.360	0.043	8.369	0.016		1.650	0.037	T	1.67	0.04	L	8.2896	0.0035	0.017	57		8.26	8.32					1							
104389	6.978	0.005	7.032	0.007		−0.058	0.002	G	−0.04	0.00	H	7.0358	0.0012	0.010	73		7.02	7.06					1							S
104390	9.834	0.023	8.989	0.018	A	1.000	0.495	G	0.80	0.05	L *	8.8954	0.0016	0.013	109	*	8.86	8.92		D	21089+0013	I 1	2 C A	AB	182	3.395	0.006	1.90	0.03	S
104391	8.132	0.008	7.854	0.008		0.262	0.012	T	0.29	0.01	L	7.9081	0.0022	0.022	143		7.88	7.95		U			1							S
104392	10.732	0.026	9.074	0.011		1.386	0.022	T	1.36	0.03	L	9.0671	0.0020	0.023	210		9.03	9.11					1							
104393	10.977	0.051	9.249	0.019	A	1.400	0.495	G	1.66	0.08	B *	9.1676	0.0019	0.019	128	*	9.13	9.19		R	21089+1748	I 1	2 C A	AB	17	1.064	0.024	2.42	0.17	
104394	8.506	0.011	8.254	0.012		0.240	0.015	T	0.27	0.02	L	8.3070	0.0012	0.010	92		8.29	8.32		C			1							S
104395	8.095	0.013	6.707	0.006		1.174	0.011	T	1.14	0.01	L	6.7452	0.0009	0.007	93		6.73	6.76		C			1							S
104396	7.436	0.006	7.018	0.006		0.395	0.008	T	0.46	0.01	L	7.0577	0.0011	0.009	122		7.05	7.07			21090+4716	I 1	1							S
104397						0.572	0.072	G	0.64	0.07	R	10.2136	0.1080			B				D	21090+0643	I 2	1 C I A							
104398	8.171	0.011	7.096	0.010		0.931	0.011	T	0.93	0.01	L	7.1431	0.0012	0.010	71		7.13	7.16			21090−2829	I 1	1							S
104399	8.796	0.016	8.411	0.016	A	0.393	0.015	G	0.46	0.02	H	8.5006	0.0294	0.025	57	A	8.40	8.53		D	21090+0643	I 2	1 C P A							S G
104400	9.330	0.015	8.982	0.016		0.337	0.020	T	0.39	0.03	L	9.0342	0.0020	0.021	114		8.99	9.07		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
104401	21 09 01.06	+07 35 20.6	7.43	H	317.254 435 73	+07.589 051 69		2.91	17.56	−2.29	0.90	0.90	1.12	1.06	0.87	+47	−42	−49	−28	−29	+30	−30	−60	+35	+39	0	−2.56
104402	21 09 01.46	−61 04 19.8	8.28	H	317.256 067 34	−61.072 158 48		4.52	33.50	−15.56	0.59	0.74	1.20	0.94	0.78	+17	−31	−23	−27	+21	−3	+23	−7	−24	−15	0	−0.14
104403	21 09 01.83	−45 00 42.6	8.21	H	317.257 632 24	−45.011 843 99		4.59	2.78	−5.74	0.97	0.76	1.21	1.04	0.64	+42	−23	−15	−26	−19	+11	−24	−48	+13	+23	2	−0.84
104404	21 09 02.43	+48 44 44.9	8.58	1 G	317.260 140 64	+48.745 793 86		1.41	5.76	1.43	0.64	0.64	0.77	0.79	0.74	+ 7	− 5	− 2	−33	− 7	+15	− 6	−12	+12	+ 1	0	0.75
104405	21 09 03.16	−10 48 33.7	8.02	H	317.263 186 12	−10.809 366 93		1.56	9.57	−11.49	0.88	0.52	1.02	1.20	0.52	+36	−21	−13	+ 7	− 8	+33	− 5	−22	+32	+56	0	−0.72
104406	21 09 03.21	+26 59 22.2	7.92	G	317.263 387 74	+26.989 493 78		12.02	24.54	56.66	0.56	0.50	0.85	0.63	0.52	+ 0	− 2	− 2	+15	+26	−19	+25	+44	− 2	− 3	0	0.79
104407	21 09 04.19	+45 59 12.4	8.90	G	317.267 438 40	+45.986 788 44		10.72	13.09	−23.30	0.68	0.68	0.84	0.74	0.74	− 7	+ 8	+ 1	+16	+ 3	+ 5	+ 4	−12	+ 8	− 5	0	0.41
104408	21 09 04.54	−55 17 36.3	8.37	H	317.268 921 20	−55.293 404 85		6.48	16.56	−5.04	0.82	0.69	1.11	1.06	0.72	+ 1	− 5	+ 9	+27	+ 4	+13	− 6	+ 9	− 3	−40	0	0.20
104409	21 09 04.83	−50 40 11.6	8.89	H	317.270 113 11	−50.669 884 31		3.69	18.98	−5.47	1.07	0.84	1.34	1.35	0.85	+26	−36	−38	+17	−12	+21	− 2	−27	+ 2	+21	0	−0.64
104410	21 09 05.10	+41 34 51.6	8.20	H	317.271 260 30	+41.581 007 60		2.22	1.39	−13.92	0.57	0.60	0.77	0.66	0.67	− 3	− 8	− 4	+16	+ 6	− 5	+ 8	− 1	− 4	+ 6	0	0.19
104411	21 09 05.47	−65 47 55.8	7.53	H	317.272 783 81	−65.798 820 39		7.88	21.02	−40.95	0.51	0.61	0.95	0.59	0.73	−38	− 4	− 8	− 7	+ 8	+16	+11	− 8	−19	−40	0	−0.10
104412	21 09 06.24	−30 51 48.1	8.69	H	317.275 994 61	−30.863 360 99		8.88	40.88	−34.80	1.04	0.66	1.10	1.43	0.57	+ 7	−20	−22	+26	−21	+20	−21	−36	+17	− 6	0	−0.19
104413	21 09 07.12	−27 06 27.4	7.84	H	317.279 672 33	−27.107 612 65		4.52	24.14	−6.83	0.94	0.69	1.14	1.23	0.58	+10	− 6	−50	−16	−28	+39	−10	−46	+24	+15	0	1.47
*104414	21 09 07.61	+78 39 47.5	7.49	H	317.281 719 71	+78.663 181 78		2.62	1.50	−7.79	0.52	0.47	0.55	0.57	0.51	− 3	− 7	+10	+27	+ 5	−12	+ 7	− 9	+19	− 1	0	0.72
*104415	21 09 07.48	−43 16 31.7	8.78	G	317.281 163 76	−43.275 465 61		4.20	18.63	−8.01	1.09	0.86	1.41	0.97	0.71	+56	−38	−18	−36	−33	+21	−34	−54	+ 6	+42	2	−1.12
104416 H	21 09 07.72	+19 05 48.2	11.13	H	317.282 181 05	+19.096 709 84	B	−0.38	−21.79	6.56	10.53	14.68	5.44	7.32	8.49	+53	− 3	+ 1	− 9	− 9	− 4	−14	−38	+ 7	+35	0	0.34
104417	21 09 08.32	+38 43 45.2	7.50	H	317.284 665 00	+38.729 212 01		1.69	2.50	−3.94	0.51	0.62	0.84	0.55	0.71	−14	− 6	− 2	+13	+ 4	−23	+ 2	−26	+32	−18	2	−1.50
104418	21 09 08.63	+35 02 36.6	8.35	H	317.285 947 36	+35.043 486 68		4.15	24.97	5.39	0.48	0.59	0.80	0.52	0.66	−19	+ 0	− 7	−17	+ 5	− 7	+ 5	−23	+17	− 8	1	0.45
104419	21 09 09.16	+23 43 42.1	9.69	H	317.288 186 67	+23.728 359 59		20.40	211.40	−13.58	0.88	0.81	1.60	1.11	0.94	+11	+10	− 1	−18	+25	−29	+25	− 1	+16	+ 9	0	−0.04
104420	21 09 10.33	−16 09 36.5	8.75	H	317.293 052 72	−16.160 144 76		3.29	−1.53	−38.61	1.09	0.62	1.25	1.42	0.58	+45	−20	− 4	−23	−33	+34	−30	−42	+19	+58	0	1.79
104421	21 09 10.59	+30 22 35.1	7.98	H	317.294 141 28	+30.376 427 94		12.75	113.52	11.18	0.56	0.62	0.93	0.69	0.65	+11	+ 6	− 7	+56	+25	− 4	+21	+35	+ 8	+ 5	0	2.54
104422	21 09 10.64	+60 53 40.3	8.67	H	317.294 348 68	+60.894 521 97		2.93	1.85	−20.85	0.67	0.64	0.75	0.70	0.71	− 2	− 8	+ 1	−17	+25	+12	+21	− 5	+12	+41	0	−0.02
104423	21 09 12.12	−23 37 36.7	7.08	H	317.300 503 85	−23.626 859 43		6.24	−6.78	8.97	0.86	0.57	0.92	1.01	0.59	+23	−22	−24	−23	−16	+19	−13	−23	+ 9	+23	0	−0.11
104424	21 09 12.22	−46 46 04.5	8.07	2 H	317.300 911 55	−46.767 921 80		1.89	2.10	0.47	0.90	0.72	1.15	1.01	0.69	+29	− 7	− 3	−17	− 9	+21	− 8	−42	+ 0	+32	0	1.24
104425	21 09 12.33	+57 12 09.3	8.07	H	317.301 377 87	+57.202 590 71		7.80	19.92	−21.52	0.58	0.53	0.62	0.61	0.55	−14	−10	+11	+23	+ 7	− 8	+ 7	+ 2	+15	− 7	0	0.33
104426	21 09 13.41	+54 21 12.6	9.77	H	317.305 856 62	+54.353 510 92		22.21	183.76	−69.47	0.91	0.91	1.06	1.08	1.00	−10	+ 9	+18	−24	+ 1	−20	+ 2	+ 1	+ 1	+ 1	1	0.22
104427	21 09 14.51	−10 45 44.1	8.95	H	317.310 449 54	−10.762 250 43		5.70	23.39	−24.12	1.06	0.62	1.32	1.63	0.59	+34	−14	−15	+17	−17	+49	− 5	−33	+39	+58	0	1.65
104428	21 09 15.13	−38 49 34.4	8.72	1 H	317.313 058 83	−38.826 233 95		−0.48	9.31	−28.09	1.07	0.70	1.18	1.56	0.63	+31	− 5	−20	+16	−40	+36	−45	−33	− 3	−12	0	−2.51
104429	21 09 15.41	−20 11 35.4	6.73	H	317.314 211 14	−20.193 161 02		5.17	34.22	−4.46	0.85	0.55	1.19	1.34	0.51	+24	− 1	−18	+ 4	−13	+61	− 3	−29	+43	+44	0	−0.65
104430	21 09 15.97	−00 14 05.7	6.65	H	317.316 539 14	−00.234 916 98		9.75	66.44	−2.53	0.83	0.44	0.86	1.19	0.50	+35	−10	+ 5	−32	−12	+ 8	−20	+18	+10	+53	0	−1.09
104431	21 09 16.66	−57 51 56.4	7.47	H	317.319 431 58	−57.865 671 69		4.68	−4.78	12.19	0.57	0.56	0.85	0.71	0.54	+ 1	− 2	−11	−15	+25	−11	+23	+ 7	+ 5	−15	0	−1.39
104432	21 09 17.00	−13 17 51.6	10.87	G	317.320 828 57	−13.297 655 32		82.33	710.44	−1995.17	2.16	1.22	2.40	3.24	1.07	+37	− 3	− 4	+ 0	−17	+13	−10	−50	+22	+59	0	−0.16
*104433	21 09 18.24	−04 57 10.4	8.35	H	317.325 984 79	−04.952 875 62		3.15	15.77	1.06	0.94	0.59	1.08	1.41	0.58	+37	−21	− 7	+ 9	−31	+17	−17	− 1	+12	+42	0	0.15
*104434	21 09 18.20	−37 55 59.2	6.86	H	317.325 814 43	−37.933 110 48		6.18	−3.18	7.82	0.84	0.49	0.91	1.27	0.47	+23	− 3	−21	+26	−45	+34	−49	−16	− 5	−25	0	−0.37
104435	21 09 19.21	−03 53 33.1	7.62	H	317.330 031 41	−03.892 524 08		16.67	−33.26	33.09	0.94	0.53	1.03	1.17	0.57	+37	+ 0	−11	−23	−20	+27	−20	+14	+ 2	+45	0	−0.35
104436	21 09 19.63	−82 01 37.7	6.98	H	317.331 772 02	−82.027 141 88		41.28	264.81	−48.34	0.49	0.42	0.58	0.60	0.49	+ 0	−15	− 7	−16	+11	+12	+13	− 3	− 5	−10	0	1.64
104437	21 09 19.71	−43 47 59.5	9.71	G	317.332 141 98	−43.799 871 64		5.94	60.99	−16.45	1.26	1.05	1.68	1.49	0.99	+39	−13	+ 2	−15	−17	+ 3	−19	−38	− 1	+25	0	−2.27
104438	21 09 21.15	+05 01 42.3	7.89	H	317.338 142 73	+05.028 412 70		2.48	−12.29	−29.96	0.92	0.87	1.10	1.22	0.96	+41	− 6	−33	−34	−36	+30	−28	−55	+24	+50	0	1.20
*104439	21 09 21.66	−32 01 24.8	7.78	H	317.340 264 17	−32.023 544 63		4.59	21.88	4.94	0.88	0.58	0.96	1.01	0.48	+11	−36	−21	+16	−20	+21	−23	−44	+24	+ 1	0	−1.26
*104440	21 09 21.52	−73 10 20.2	5.67	G	317.339 654 19	−73.172 269 94		53.38	461.31	−287.24	1.56	1.72	2.18	1.91	1.85	− 9	− 1	− 1	−20	− 1	− 1	+ 0	−41	−21	−14	2	
104441	21 09 22.31	−36 42 20.2	6.47	H	317.342 964 96	−36.705 615 95		13.53	32.54	−132.30	0.96	0.69	1.05	1.53	0.89	+26	−54	−44	−47	−36	+61	−34	−49	+44	+39	0	−0.68
104442	21 09 24.10	+04 09 43.1	8.63	H	317.350 435 67	+04.161 967 94		3.19	−12.26	−0.36	1.15	0.97	1.41	1.42	1.02	+37	−42	−44	+ 0	− 8	+ 6	−21	−51	+38	+25	0	−0.42
104443	21 09 24.39	+08 13 51.1	9.93	H	317.351 626 80	+08.230 873 91		0.81	−17.61	−12.62	1.84	1.48	2.26	2.30	1.33	+33	−38	−60	−30	−10	+21	−15	−51	+41	+22	0	−0.20
104444	21 09 25.07	−16 36 56.8	6.72	H	317.354 469 93	−16.615 777 97		−0.06	17.70	8.26	0.93	0.49	1.17	1.41	0.46	+42	−12	− 7	−12	−34	+50	−26	−48	+36	+64	0	−2.03
104445	21 09 27.19	−60 31 28.8	8.93	H	317.363 276 54	−60.524 671 49		11.85	59.63	−37.68	0.84	0.83	1.31	1.39	0.84	+ 3	−11	−17	−34	+27	−10	+19	− 5	−10	− 5	0	−0.92
104446 H	21 09 28.53	−33 10 51.8	10.30	H	317.368 881 88	−33.181 059 61	*	1.17	70.13	−1.11	6.35	7.26	3.74	4.10	1.62	− 2	+ 9	−28	− 8	−19	+42	− 2	−68	+28	+10	3	−1.51
104447	21 09 28.54	+28 20 10.2	9.45	H	317.368 911 92	+28.336 170 04		0.69	9.06	−24.79	0.86	0.74	1.26	0.96	0.77	+12	+ 3	+ 1	+39	+31	−17	+30	+37	+ 7	+ 7	1	0.15
*104448	21 09 28.84	+55 41 33.7	8.09	H	317.370 185 51	+55.692 706 07		5.00	10.57	6.53	0.52	0.55	0.63	0.54	0.53	+ 4	+ 8	+19	+ 7	+ 0	− 8	+ 3	− 5	+10	+ 7	0	0.98
*104449	21 09 28.80	+63 17 44.3	6.53	H	317.369 994 01	+63.295 649 43		3.85	9.68	7.64	0.47	0.42	0.50	0.48	0.44	− 6	− 1	+16	+ 8	+14	+ 2	+15	+ 2	+ 8	+10	1	0.05
104450	21 09 30.52	+01 34 06.1	8.26	H	317.377 165 77	+01.568 351 37		11.00	−11.83	27.59	0.94	0.81	1.25	1.23	0.99	+23	−23	−10	−17	+11	+41	+ 3	−19	+44	+48	0	−0.65
104451	21 09 31.85	+68 29 27.6	7.37	3 H	317.382 709 49	+68.491 000 19	*	4.76	−43.00	−45.14	0.62	0.59	0.75	0.78	0.66	− 5	+16	− 9	−17	+ 3	−16	+ 8	−32	+37	− 2	3	4.08
104452	21 09 32.93	−20 33 22.8	6.25	H	317.387 187 74	−20.556 331 40		18.57	118.49	−135.59	0.86	0.50	1.03	1.16	0.44	+ 1	+ 5	−26	−18	− 7	+49	+ 6	−41	+36	+29	0	−1.50
104453	21 09 33.37	−79 16 25.9	7.90	H	317.389 044 49	−79.273 855 67		16.72	−35.48	31.99	0.52	0.55	0.70	0.60	0.59	+ 3	−18	−16	+25	− 3	−13	− 8	− 1	− 3	−13	0	−0.09
104454	21 09 34.61	+45 44 18.6	7.66	H	317.394 218 41	+45.738 494 79		0.70	−1.75	−1.49	0.52	0.54	0.69	0.62	0.67	− 9	+19	− 6	+12	+ 2	+ 7	+ 2	−20	− 1	− 9	0	−0.87
104455	21 09 34.65	−21 02 45.5	8.39	H	317.394 356 10	−21.045 975 39		5.90	33.24	−0.82	1.14	0.71	1.32	1.37	0.65	+11	+ 7	−20	−22	− 9	+41	− 1	−37	+26	+33	0	−0.64
104456	21 09 35.06	−14 07 00.3	7.56	H	317.396 088 79	−14.116 754 82		1.81	2.63	12.12	0.95	0.54	1.03	1.16	0.44	+42	+ 3	+ 3	−23	−23	+16	−21	−54	+20	+55	0	0.07
104457	21 09 35.14	+22 56 04.2	8.22	H	317.396 404 68	+22.934 507 90		5.55	3.33	−32.73	0.72	0.65	1.05	0.82	0.86	+12	+ 2	+ 0	+26	+12	−16	+15	+18	+ 7	+28	3	1.30
104458	21 09 35.27	+75 13 40.2	6.89	H	317.396 948 51	+75.227 820 00		5.92	−15.94	−16.92	0.51	0.43	0.51	0.53	0.44	− 1	−15	+ 7	+11	+ 4	− 3	+ 4	− 9	+11	+ 8	3	1.89
104459	21 09 35.59	−11 22 18.0	4.50	G	317.398 303 36	−11.371 654 74		19.93	92.31	−15.76	0.69	0.38	0.77	0.97	0.37	+21	−12	− 2	+ 9	− 2	+28	+ 0	−21	+30	+46	0	−0.77
104460	21 09 35.75	−35 18 54.7	9.62	H	317.398 962 22	−35.315 204 45		9.22	114.64	−56.56	1.64	1.29	1.50	1.91	0.95	+13	+ 0	− 5	−43	−14	+20	−14	−78	+ 3	− 3	0	−1.32
104461	21 09 36.54	−10 00 00.3	10.57	G	317.402 241 73	−10.000 082 89		18.13	−1.10	−13.77	1.94	0.95	2.16	2.42	0.94	+34	−40	−19	+ 0	−13	+21	−14	−17	+27	+47	0	−0.27
104462	21 09 37.70	+65 31 08.5	10.19	H	317.407 073 23	+65.519 035 57		0.11	−4.53	−5.95	1.01	0.82	1.00	1.28	0.95	+ 0	−23	+12	+26	+10	+10	+ 8	+19	+ 9	+20	0	−0.02
104463	21 09 38.90	+42 25 59.6	7.82	H	317.412 081 40	+42.433 214 36		2.48	−12.32	−19.93	0.51	0.51	0.68	0.57	0.58	−11	− 1	+ 5	+ 2	+ 5	− 7	+ 6	−10	−17	− 3	0	0.38
104464	21 09 41.55	−65 05 20.1	9.56	H	317.423 124 42	−65.088 906 00		3.27	28.78	19.91	0.90	0.87	1.54	1.04	1.00	−22	− 7	− 6	+33	+ 7	− 4	+15	− 4	−26	− 1	0	0.03
104465	21 09 41.93	−12 37 54.6	9.28	H	317.424 722 07	−12.631 828 81		2.42	5.76	−14.00	1.47	0.78	1.57	2.15	0.71	+31	−13	+ 9	−20	−19	+ 1	−16	−50	+10	+59	0	−0.01
104466	21 09 42.20	+35 48 15.6	8.15	G	317.425 850 06	+35.804 333 64		1.44	21.73	1.01	0.54	0.64	0.88	0.57	0.69	−27	− 7	− 4	−32	+12	+ 2	+11	−28	+17	−32	0	−0.02
104467	21 09 43.00	−50 54 36.8	7.72	G	317.429 182 04	−50.910 234 15		10.89	90.15	−48.46	0.86	0.62	1.02	1.07	0.66	+23	−37	−33	+ 9	− 5	+12	+ 4	−17	− 8	+19	0	1.89
104468	21 09 43.06	+46 09 31.1	7.60	H	317.429 398 47	+46.158 646 82		15.38	25.85	7.88	0.52	0.52	0.65	0.57	0.56	− 9	+10	− 2	+10	+ 4	+ 7	+ 5	− 8	+ 5	− 8	0	0.48
104469	21 09 44.05	−44 12 35.3	6.53	H	317.433 526 28	−44.209 809 76		5.45	10.74	−4.64	0.72	0.58	0.89	0.82	0.54	+35	−17	−11	−17	−21	+17	−26	−42	+12	+11	0	0.08
104470	21 09 45.28	−53 02 05.5	9.47	H	317.438 674 68	−53.034 866 97		11.29	−28.09	−110.91	1.37	1.10	1.65	2.24	1.29	+13	+12	−22	+16	−22	+10	−32	−26	+ 2	−36	2	0.17
104471	21 09 45.89	+19 12 38.5	6.96	H	317.441 194 42	+19.210 702 95		23.24	−0.47	20.66	0.79	0.53	0.94	1.04	0.60	−17	+ 9	−12	−20	+19	− 9	+16	−10	+18	− 2	0	0.89
104472	21 09 47.38	+20 12 29.3	9.54	G	317.447 418 03	+20.208 135 31		−0.51	−9.47	−10.96	0.89	0.82	1.40	1.33	1.04	+ 8	−21	+13	+ 8	+20	+ 1	+17	+12	+ 0	+24	2	1.12
104473	21 09 48.30	−44 27 40.8	10.12	G	317.451 258 53	−44.461 320 96		4.59	5.28	7.44	1.32	1.07	1.66	1.42	0.95	+37	− 3	− 5	−13	−20	+ 7	−25	−44	+ 3	+14	2	1.00
104474	21 09 50.34	+21 55 54.6	9.05	H	317.459 764 51	+21.931 833 07		2.58	−14.87	−11.62	0.79	0.69	1.15	1.05	0.96	+ 3	+ 0	− 1	− 1	+ 6	−16	+ 5	+ 2	− 6	+27	0	2.35
104475	21 09 51.43	+62 45 47.4	8.49	H	317.464 276 76	+62.763 159 59		6.95	14.34	17.83	0.68	0.62	0.76	0.74	0.65	− 5	− 2	+17	− 4	+18	+17	+15	+ 0	+ 4	+16	0	−1.08
104476 H	21 09 51.57	−24 24 02.7	8.09	H	317.464 865 95	−24.400 740 16	*	19.28	−3.14	18.58	1.01	0.68	1.19	1.21	0.56	+30	−18	−22	− 7	−21	+32	−20	−48	+28	+29	0	−0.01
104477	21 09 52.01	+53 44 32.5	8.43	G	317.466 695 38	+53.742 351 22		12.15	−33.43	−29.02	0.59	0.58	0.69	0.59	0.58	+ 2	+13	+20	− 3	−10	−15	− 7	−17	− 5	+ 4	0	−0.88
104478	21 09 52.17	+16 09 27.4	8.02	2 H	317.467 370 66	+16.157 619 33		6.25	−110.48	−83.44	0.92	0.54	1.10	1.21	0.61	− 2	−14	− 1	+35	− 9	− 4	+ 1	+ 4	− 3	+25	2	1.52
104479	21 09 52.76	+44 12 01.2	7.45	H	317.469 831 02	+44.200 337 79		5.61	−27.72	48.32	0.65	0.55	0.74	0.84	0.60	−14	+16	− 7	−11	− 9	− 3	− 8	+ 1	− 5	−15	0	−2.07
104480	21 09 57.51	+11 06 26.9	8.56	H	317.489 619 45	+11.107 475 13		3.78	17.74	9.68	0.85	0.91	1.17	1.16	0.93	+16	− 5	−53	−21	+11	− 1	+ 3	−51	+47	+ 8	0	−0.24
104481	21 09 58.26	+02 56 37.0	6.44	G	317.492 732 58	+02.943 599 66		10.89	20.44	33.59	1.28	0.66	0.97	1.90	0.93	−26	− 2	−41	−69	+32	− 0	+41	−49	+23	−44	0	0.86
104482	21 09 58.55	−25 33 49.7	9.62	H	317.493 962 00	−25.563 798 16		6.33	75.49	45.49	1.23	0.77	1.30	1.52	0.68	+ 7	− 8	−19	− 8	−17	+16	−10	−46	+15	+17	0	−1.17
104483	21 09 58.62	+45 30 09.2	6.60	2 H	317.494 270 56	+45.502 554 74		2.98	7.60	0.10	0.50	0.47	0.61	0.62	0.55	−11	+ 3	−10	+28	+ 5	−12	+ 8	− 7	+ 7	+ 1	1	0.08
104484 H	21 09 59.12	+49 01 08.5	8.95	G	317.496 337 01	+49.019 021 80	A	−1.15	−2.71	−3.59	2.71	3.92	1.30	1.32	1.25	+37	− 9	+ 5	−12	− 1	+ 2	− 1	−11	+ 2	+ 2	1	−0.39
104485 H	21 09 59.14	+47 44 43.9	9.03	H	317.496 424 52	+47.745 531 63	A	0.95	−6.33	−8.30	2.05	1.90	1.58	1.78	1.50	+20	− 7	− 3	−10	− 5	− 1	− 5	−14	+ 8	−14	3	−0.17
104486	21 09 59.30	+26 36 54.7	8.13	H	317.497 081 12	+26.615 184 84		4.93	−43.00	29.96	0.56	0.50	0.84	0.66	0.52	− 1	+ 7	− 7	+ 6	+28	−16	+27	+49	− 1	− 1	0	2.66
104487	21 09 59.69	−22 31 34.3	8.28	H	317.498 691 71	−22.526 194 77		7.66	43.97	4.67	1.02	0.69	1.11	1.39	0.59	+16	− 8	−30	−16	−15	+16	−11	−49	+21	+21	0	−1.50
*104488	21 10 00.37	−53 03 16.6	11.65	G	317.501 533 95	−53.054 606 33		22.53	71.38	−155.31	2.63	2.18	3.17	4.31	2.57	+10	+ 3	−17	+19	−26	+13	−36	−25	+ 2	−39	0	0.53
*104489	21 10 00.36	+01 47 54.0	8.71	H	317.501 488 84	+01.798 341 70		5.14	9.55	−10.43	1.17	0.76	1.30	1.26	0.86	+10	−12	− 8	−38	+11	+29	+ 6	−23	+37	+34	0	−0.99
104490	21 10 00.81	+46 57 46.6	9.30	H	317.503 372 02	+46.962 954 66		2.43	4.67	0.17	0.74	0.76	0.91	0.93	0.87	−21	+ 0	− 2	− 8	+ 1	− 1	+ 1	−24	+ 5	−26	0	0.32
104491	21 10 01.12	+34 24 24.8	8.83	G	317.504 672 81	+34.406 885 13		1.35	2.21	−3.29	0.55	0.69	0.99	0.57	0.76	−28	+12	−12	+ 3	+ 4	−16	+ 5	− 7	+19	−26	0	−1.45
120250	21 10 01.55	−01 51 52.1	10.28	H	317.506 478 73	−01.864 465 12		14.36	226.95	−28.77	2.26	2.09	2.35	2.53	2.07	+16	+23	−37	−48	−23	+ 3	−12	−74	+33	+35	6	−0.88
104492	21 10 02.11	+32 12 20.8	7.24	H	317.508 810 27	+32.205 770 60		3.05	12.19	−6.44	0.49	0.52	0.84	0.60	0.60	−22	+10	−11	+29	+ 3	−12	+ 5	+ 8	+18	−15	0	0.16
104493	21 10 02.22	−13 10 35.9	10.58	G	317.509 258 16	−13.176 632 62		22.07	−8.02	59.49	1.95	1.12	2.22	2.87	1.00	+39	−14	−21	−15	−26	+28	−20	−53	+29	+57	0	0.25
104494	21 10 03.80	−14 16 08.1	8.57	H	317.515 839 92	−14.268 920 67		5.96	−17.94	18.61	1.14	0.66	1.27	1.58	0.54	+45	−16	− 6	− 2	−21	+ 3	−19	−55	+21	+57	0	0.41
104495	21 10 04.03	−62 34 46.4	9.86	H	317.516 809 66	−62.579 554 18		1.08	0.91	−2.42	1.75	1.73	3.12	2.18	2.05	− 8	− 6	− 3	+13	+11	− 3	+ 9	+ 7	− 2	−25	0	
104496	21 10 04.15	+30 26 31.0	9.97	H	317.517 296 59	+30.441 947 21		5.36	4.05	−26.94	1.89	2.22	3.26	2.29	2.31	+ 7	+ 6	− 4	+30	+19	− 9	+17	+11	+ 2	+ 8	1	
104497	21 10 04.39	−54 44 50.3	8.91	H	317.518 304 12	−54.747 298 36		5.19	15.71	−10.07	1.06	0.90	1.26	1.43	1.02	+12

No.	Tycho Magnitudes					Colour Indices					Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
104401	7.695	0.008	7.454	0.012		0.230	0.014	T	0.26	0.02	L	7.5001	0.0010	0.009	65		7.48	7.51		C			1							S
104402	9.898	0.017	8.412	0.009		1.251	0.015	T	1.21	0.01	L	8.4474	0.0014	0.015	203		8.42	8.48		C			1							
104403	9.350	0.016	8.296	0.011		0.915	0.015	T	0.91	0.01	L	8.3681	0.0016	0.014	103		8.34	8.39					1							
104404	8.474	0.009	8.573	0.013		−0.115	0.005	G	−0.10	0.01	H	8.5487	0.0024	0.020	118		8.52	8.58		U			1							
104405	9.358	0.017	8.135	0.011		1.045	0.016	T	1.02	0.01	L	8.1844	0.0016	0.014	111		8.17	8.21					1							
104406	8.459	0.010	7.998	0.008		0.435	0.012	T	0.50	0.01	L	8.0280	0.0008	0.012	193		8.01	8.05					1							S
104407	9.426	0.017	8.934	0.017		0.495	0.015	G	0.57	0.02	H	9.0012	0.0019	0.019	121		8.97	9.03					1							
104408	8.744	0.014	8.410	0.014		0.317	0.019	T	0.37	0.03	L	8.4502	0.0020	0.016	89		8.41	8.48		C			1							S
104409	10.345	0.039	9.004	0.022		1.137	0.035	T	1.10	0.04	L	9.0596	0.0026	0.019	76		9.04	9.09		C			1							
104410	9.703	0.016	8.313	0.009		1.176	0.014	T	1.14	0.01	L	8.3652	0.0017	0.015	150		8.34	8.39					1							
104411	7.696	0.006	7.540	0.006		0.142	0.008	T	0.16	0.01	L	7.5785	0.0012	0.015	189		7.56	7.61					1							S
104412	9.176	0.016	8.737	0.016		0.422	0.015	G	0.49	0.02	H	8.7848	0.0018	0.016	86		8.76	8.82		C			1							
104413	9.329	0.021	7.919	0.012		1.191	0.019	T	1.15	0.02	L	8.0002	0.0013	0.012	82		7.98	8.03		C			1							S
104414	7.615	0.007	7.498	0.009		0.113	0.011	T	0.13	0.01	L	7.5346	0.0012	0.010	114		7.52	7.55					1							S
104415	9.106	0.014	8.804	0.015		0.260	0.000	G	0.29	0.00	H	8.8607	0.0020	0.015	106		8.84	8.89					1							
104416	11.812	0.140	11.125	0.122	*	0.635	0.153	T	0.70	0.14	L	*	11.2564	0.0061	0.045	95	*	11.15	11.33		D	21091+1906	I 1	2 C	D	BA	281	0.664	0.009	0.03	0.04	G D
104417	9.117	0.012	7.605	0.007		1.271	0.011	T	1.23	0.01	L		7.6609	0.0014	0.014	153		7.64	7.69			21091+3844	I 1	1							
104418	8.593	0.007	8.360	0.008		0.222	0.010	T	0.24	0.01	L		8.4160	0.0012	0.014	187		8.39	8.44		C			1							S
104419	10.919	0.048	9.832	0.028		0.940	0.042	T	0.93	0.03	L		9.8474	0.0032	0.026	140		9.80	9.90		R			1							G
104420	9.227	0.013	8.793	0.014		0.424	0.015	T	0.49	0.02	L		8.8412	0.0014	0.015	119		8.82	8.87					1							
104421	8.615	0.009	8.039	0.009		0.541	0.009	T	0.61	0.01	L		8.1028	0.0012	0.015	172		8.08	8.13		C			1							S
104422	8.996	0.014	8.705	0.015		0.335	0.015	G	0.39	0.02	H		8.7473	0.0017	0.018	109		8.72	8.78					1							
104423	8.492	0.014	7.211	0.006		1.090	0.012	T	1.05	0.01	L		7.2489	0.0014	0.007	67		7.23	7.26		C			1							S
104424	10.133	0.027	8.332	0.012		1.530	0.024	T	2.73	0.04	O		8.0484	0.0055	0.050	98		7.95	8.17		U 2			1	S						S
104425	8.641	0.011	8.123	0.010		0.505	0.015	G	0.58	0.02	H		8.1768	0.0013	0.014	120		8.15	8.20		C			1							
104426	11.138	0.055	9.969	0.032		1.003	0.050	T	0.98	0.04	L		9.9268	0.0030	0.030	110		9.88	9.98		R			1							G
104427	9.489	0.021	8.990	0.020		0.469	0.026	T	0.54	0.03	L		9.0567	0.0019	0.016	102		9.03	9.08		C			1							
104428	10.787	0.044	8.927	0.017		1.579	0.039	T	2.11	0.10	O		8.7930	0.0020	0.022	111		8.76	8.83		U			1							
104429	8.008	0.013	6.839	0.007		1.003	0.012	T	0.98	0.01	L		6.8986	0.0011	0.007	65		6.89	6.91		C			1							S
104430	6.858	0.004	6.675	0.005		0.175	0.006	T	0.19	0.01	L		6.7121	0.0009	0.006	102		6.70	6.72					1							S
104431	7.891	0.007	7.507	0.007		0.364	0.009	T	0.43	0.01	L		7.5573	0.0015	0.013	125		7.53	7.58					1							S
104432						1.490	0.005	G	2.02	0.01	A		10.9460	0.0044	0.034	118		10.88	11.01					1							G
104433	8.485	0.010	8.366	0.012		0.115	0.015	T	0.13	0.01	L		8.3944	0.0012	0.012	98		8.37	8.42		C			1							S
104434	8.088	0.009	6.973	0.005		0.961	0.008	T	0.95	0.01	L		7.0215	0.0009	0.012	150		7.00	7.04					1							S
104435	8.361	0.010	7.686	0.009		0.625	0.011	T	0.69	0.01	L		7.7573	0.0015	0.011	100		7.74	7.78					1							S
104436	7.729	0.005	7.047	0.005		0.619	0.005	T	0.69	0.00	L		7.1151	0.0007	0.009	145		7.10	7.13					1							S
104437	10.249	0.029	9.818	0.030		0.435	0.012	G	0.50	0.01	H		9.8337	0.0033	0.025	107		9.80	9.88					1							
104438	9.790	0.031	8.065	0.014		1.439	0.027	T	1.43	0.04	L		8.0298	0.0019	0.012	72		8.00	8.05		C	21094+0502	I 1	1	S						S
104439	9.224	0.015	7.893	0.009		1.129	0.014	T	1.09	0.01	L		7.9525	0.0013	0.011	93		7.93	7.97		C			1							S
104440	6.381	0.005	5.736	0.004		0.590	0.042	G	0.67	0.02	A		5.7855	0.0007	0.006	135		5.77	5.80		C	21094−7310	I 1	1	X	S					S
104441	7.080	0.005	6.532	0.005		0.520	0.005	T	0.59	0.01	L		6.5786	0.0005	0.007	143		6.56	6.59		C			1	G						S
104442	10.090	0.040	8.770	0.023		1.121	0.036	T	1.08	0.04	L		8.8000	0.0027	0.014	58		8.77	8.83					1							
104443	11.322	0.090	9.941	0.042		1.169	0.078	T	1.13	0.07	L		10.0980	0.0032	0.020	57		10.00	10.13					1							G
104444	8.728	0.010	6.884	0.005		1.533	0.009	T	1.58	0.02	L		6.8357	0.0010	0.009	118		6.82	6.85					1							S
104445	9.685	0.017	8.983	0.015		0.634	0.017	T	0.70	0.01	L		9.0586	0.0020	0.023	153		9.03	9.12					1							
104446	10.996	0.060	10.303	0.052	*	0.640	0.065	T	0.70	0.06	L	*	10.4314	0.0033	0.028	92	*	10.36	10.47		C	21095−3311	H 1	2 C	A	AB	279	0.289	0.038	1.36	0.32	G
104447	9.314	0.014	9.428	0.020		−0.099	0.022	T	−0.08	0.03	L		9.4166	0.0020	0.021	157		9.39	9.46					1							
104448	8.091	0.008	8.074	0.009		0.020	0.011	T	0.04	0.01	L		8.1055	0.0016	0.014	126		8.09	8.13		C			1							
104449	6.380	0.004	6.507	0.004		−0.111	0.004	G	−0.10	0.01	H		6.4958	0.0010	0.008	119		6.48	6.51					1							S
104450	9.021	0.017	8.341	0.015		0.629	0.019	T	0.70	0.02	L		8.3935	0.0019	0.016	73		8.36	8.42		C			1							S
104451	8.759	0.012	7.484	0.008		1.097	0.012	T	3.66	0.50	O		6.9988	0.2096	1.405	105		5.26	8.44	400.70	P 1 B			1	V						G P
104452	6.706	0.005	6.297	0.004		0.385	0.008	G	0.45	0.01	H		6.3433	0.0009	0.007	71		6.33	6.36		C			1							S
104453	8.510	0.008	7.965	0.008		0.517	0.008	T	0.59	0.01	L		8.0160	0.0012	0.014	144		7.99	8.04					1							S
104454	7.617	0.006	7.648	0.008		−0.026	0.009	T	0.00	0.01	L		7.6639	0.0009	0.010	125		7.65	7.69					1	G						S
104455	9.935	0.042	8.527	0.022		1.190	0.037	T	1.15	0.03	L		8.5531	0.0026	0.015	77		8.53	8.59		C			1							
104456	9.570	0.016	7.725	0.007		1.534	0.014	T	1.58	0.03	L		7.6782	0.0012	0.011	123		7.66	7.70					1							S
104457	8.969	0.012	8.293	0.011		0.649	0.012	G	0.71	0.01	H		8.3522	0.0016	0.015	111		8.32	8.38					1							
104458	7.573	0.007	6.959	0.005		0.572	0.008	T	0.64	0.01	L		7.0192	0.0008	0.007	128		7.01	7.04					1							S
104459	5.715	0.003	4.618	0.002		0.926	0.039	G	0.92	0.02	A		4.6675	0.0006	0.005	106		4.66	4.68					1							S
104460	10.365	0.042	9.722	0.039		0.590	0.043	T	0.66	0.04	L		9.7505	0.0025	0.020	81		9.72	9.80					1							
104461	11.939	0.168	10.770	0.099		1.055	0.015	G	1.02	0.01	I		10.6734	0.0042	0.036	85		10.61	10.73		C			1							G
104462	10.392	0.032	10.149	0.041		0.232	0.049	T	0.26	0.06	L		10.2615	0.0029	0.026	113		10.23	10.30		C			1							G
104463	7.830	0.007	7.811	0.009		0.022	0.011	T	0.04	0.01	L		7.8370	0.0011	0.012	145		7.82	7.86		C			1							S
104464	10.288	0.022	9.607	0.019		0.618	0.022	T	0.69	0.02	L		9.6928	0.0026	0.030	160		9.64	9.76		C			1							
104465	10.312	0.035	9.350	0.025		0.833	0.033	T	0.85	0.02	L		9.4277	0.0016	0.015	108		9.40	9.45					1							
104466	9.418	0.012	8.256	0.008		1.010	0.015	G	0.99	0.01	H		8.3153	0.0013	0.015	182		8.29	8.34		C			1							
104467	8.443	0.013	7.777	0.009		0.624	0.015	G	0.69	0.01	H		7.8460	0.0011	0.011	80		7.82	7.87					1							S
104468	8.186	0.009	7.660	0.008		0.513	0.006	G	0.59	0.01	H		7.7164	0.0011	0.012	123		7.70	7.74					1							S
104469	8.011	0.008	6.660	0.004		1.145	0.007	T	1.11	0.01	L		6.6986	0.0009	0.007	109		6.69	6.71		C			1							S
104470	10.273	0.032	9.523	0.026		0.670	0.031	T	0.73	0.03	L		9.6001	0.0025	0.018	82		9.57	9.63		C			1							
104471	7.537	0.007	7.005	0.006		0.507	0.007	T	0.58	0.01	L		7.0684	0.0009	0.009	107		7.05	7.09					1							S
104472	9.300	0.017	9.460	0.026		−0.130	0.015	G	−0.12	0.02	H		9.4744	0.0020	0.020	99		9.44	9.51		C			1							
104473	10.624	0.036	10.193	0.038		0.360	0.015	G	0.42	0.02	H		10.2138	0.0027	0.023	107		10.18	10.26		C			1							
104474	9.378	0.016	9.080	0.017		0.283	0.022	T	0.32	0.03	L		9.1258	0.0015	0.020	107		9.10	9.17					1							
104475	8.997	0.013	8.538	0.013		0.433	0.017	T	0.50	0.02	L		8.5886	0.0016	0.013	110		8.56	8.61		C			1							S
104476	9.027	0.015	8.187	0.012	*	0.739	0.015	T	0.79	0.01	L	*	8.2254	0.0017	0.014	85	*	8.20	8.25			21099−2424	H 1	2 C	S A	AB	122	0.124	0.011	0.63	0.59	S
104477	8.950	0.013	8.472	0.012		0.493	0.015	G	0.57	0.02	H		8.5342	0.0016	0.012	111		8.52	8.55		C			1							
104478	8.939	0.015	8.104	0.012		0.751	0.015	T	0.79	0.01	L		8.1646	0.0063	0.068	107		8.12	8.30	3.40	P 1 A			1	S						S P
104479	8.823	0.013	7.553	0.008		1.082	0.012	T	1.04	0.01	L		7.6162	0.0013	0.013	107		7.59	7.64		C			1							
104480	8.819	0.017	8.603	0.019		0.206	0.024	T	0.23	0.03	L		8.6283	0.0020	0.012	66		8.61	8.65		C			1							
104481	6.882	0.005	6.490	0.005		0.375	0.009	G	0.44	0.01	H		6.5311	0.0009	0.005	66		6.52	6.55					1	G						S
104482	10.213	0.038	9.615	0.035		0.558	0.045	T	0.63	0.04	L		9.7432	0.0029	0.020	89		9.71	9.78		C			1							
104483	6.407	0.004	6.572	0.005		−0.144	0.006	T	−0.14	0.01	L		6.5511	0.0015	0.016	120		6.53	6.63	8.02	P 1 A			1							S P
104484	9.459	0.018	9.037	0.018	*	0.470	0.015	G	0.54	0.02	H	*	9.0655	0.0017	0.019	112	*	9.03	9.10		D	21100+4901	H 1	2 C	A	AB	27	0.339	0.009	1.39	0.11	
104485	9.235	0.015	9.106	0.018	*	0.125	0.022	T	0.14	0.02	L	*	9.0759	0.0017	0.025	115	*	9.04	9.10		D	21100+4745	I 1	2 C	A	AB	58	0.401	0.008	1.35	0.04	
104486	9.504	0.013	8.242	0.008		1.093	0.006	G	1.05	0.01	H		8.2937	0.0009	0.011	209		8.27	8.31		C			1	G						
104487	8.907	0.014	8.352	0.013		0.543	0.015	G	0.62	0.01	H		8.3955	0.0015	0.012	82		8.37	8.42		C			1							S
104488						1.290	0.015	G	1.48	0.03	I		11.7724	0.0098	0.061	81		11.67	11.87					1							G
104489	10.321	0.042	8.855	0.021		1.235	0.037	T	1.19	0.04	L		8.8726	0.0026	0.017	74		8.84	8.90		C			1							
104490	9.449	0.018	9.353	0.023		0.094	0.027	T	0.11	0.03	L		9.3333	0.0023	0.021	123		9.30	9.37					1							G
104491	8.679	0.007	8.777	0.010		−0.084	0.011	T	−0.06	0.01	L		8.7934	0.0016	0.019	195		8.76	8.82					1							
120250	11.692	0.117	10.379	0.056		0.990	0.005	G	1.03	0.01	H		10.4434	0.0062	0.034	45		10.39	10.52					1							G
104492	8.548	0.009	7.350	0.006		1.025	0.008	T	1.00	0.01	L		7.4115	0.0010	0.011	154		7.39	7.43		C			1							S
104493						1.110	0.015	G	1.07	0.02	I		10.6732	0.0031	0.029	105		10.63	10.71		C			1							G
104494	9.046	0.012	8.628	0.012		0.409	0.014	T	0.48	0.01	L		8.6604	0.0013	0.015	128		8.64	8.69		C			1							S
104495	11.116	0.043	9.972	0.026		0.983	0.039	T	0.96	0.03	L		10.0296	0.0026	0.029	187		9.99	10.08					1	X						
104496	10.849	0.042	10.189	0.037		0.612	0.047	T	0.68	0.04	L		10.1013	0.0026	0.026	165		10.04	10.14		C			1	X	S					G
104497	10.424	0.039	9.027	0.022		1.181	0.035	T	1.14	0.03	L		9.0797	0.0030	0.023	80		9.04	9.12		C			1							
104498	10.587	0.032	9.272	0.017		1.117	0.028	T	1.08	0.03	L		9.3407	0.0026	0.025	147		9.30	9.38		C			1							
104499	8.721	0.012	6.834	0.005		1.578	0.003	G	1.55	0.00	J		6.7766	0.0015	0.014	93		6.75	6.80		U			1							S
104500	9.331	0.013	8.964	0.013		0.358	0.016	T	0.42	0.02	L		9.0324	0.0019	0.023	155		8.99	9.06					1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																	Soln	
HIP	RA		Dec	V		α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	F1	F2
	h m s		±° ′ ″	mag		deg		deg	mas	mas/yr		mas		mas	mas/yr		α*	α*	δ	α*	δ	δ	π	$\mu_{\alpha*}$		%	
1 2	3		4	5	6 7	8		9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
*104501	21 10 07.44	−64 01 31.1	6.92	H	317.531 010 88	−64.025 317 82	8.01	−6.98	−56.33	0.46	0.46	0.81	0.56	0.54	−35	− 2	− 2	+ 3	+22	+10	+22	− 4	−17	−27	0	−0.79
104502	21 10 07.49	+65 41 10.5	7.76	H	317.531 203 67	+65.686 258 62	3.68	6.19	4.88	0.58	0.51	0.61	0.74	0.58	− 1	−24	+12	+14	+ 9	+ 7	+ 6	+15	+ 9	+23	1	0.11
*104503	21 10 08.24	+85 40 10.3	9.44	H	317.534 328 58	+85.669 519 95	1.10	−7.41	0.99	0.73	0.73	0.83	1.01	0.92	+ 1	− 9	+ 9	+ 6	− 3	+15	− 4	−14	+ 2	+ 3	0	0.43
*104504	21 10 07.81	−24 49 22.9	8.54	G	317.532 560 14	−24.823 018 10	18.87	176.90	−34.84	1.09	0.71	1.23	1.32	0.60	+17	+ 1	−21	−16	−23	+32	−14	−52	+20	+26	0	−1.17
*104505	21 10 08.06	−15 42 12.6	7.53	H	317.533 582 91	−15.703 499 75	9.89	−43.24	−78.46	0.91	0.52	1.02	1.19	0.45	+44	−14	+ 1	−17	−30	+21	−26	−52	+18	+59	0	−0.77
104506	21 10 08.42	+12 27 29.7	9.67	3 H	317.535 080 20	+12.458 253 82	−2.63	4.46	−5.64	1.29	1.08	1.68	1.56	1.09	+48	−34	−33	+ 3	−22	+37	−12	+ 1	+24	+63	2	−0.45
104507	21 10 09.67	+12 33 21.2	7.91	H	317.540 286 65	+12.555 896 30	0.32	4.24	−0.13	0.86	0.70	1.12	1.01	0.63	+43	−35	−42	− 4	−41	+38	−26	−20	+21	+53	0	1.07
104508	21 10 09.99	−43 22 57.7	6.56	G	317.541 640 20	−43.382 691 84	3.12	12.01	−14.20	0.71	0.57	0.96	0.72	0.53	+39	−33	− 6	−18	−13	+19	−10	−37	− 1	+43	2	−1.38
104509	21 10 10.14	+34 15 47.0	8.85	G	317.542 231 20	+34.263 046 42	−0.41	2.44	−1.41	0.58	0.70	1.08	0.60	0.78	−28	+23	−20	+ 6	+ 4	−16	+ 6	− 2	+23	−27	0	−0.75
104510	21 10 10.62	+08 04 01.2	10.26	H	317.544 267 78	+08.067 003 15	−2.07	2.23	0.54	2.94	2.68	3.55	3.58	2.46	+36	−29	−53	−30	−20	+22	−23	−64	+44	+32	0	
104511	21 10 11.01	−31 29 30.3	7.91	H	317.545 876 67	−31.491 748 68	5.67	42.03	−29.23	0.99	0.67	1.06	1.28	0.52	+10	−19	−30	+27	−24	+22	−26	−52	+26	− 4	0	−0.61
104512	21 10 12.04	+24 45 49.0	10.41	H	317.550 168 59	+24.763 622 24	1.45	1.40	1.81	1.14	0.98	1.78	1.53	1.02	+ 0	− 4	+19	−32	+41	+ 3	+35	+25	+14	+ 1	0	−0.08
104513	21 10 12.38	+10 44 19.9	8.28	G	317.551 565 84	+10.738 862 62	4.74	−4.52	4.59	0.90	0.88	1.16	1.08	0.91	+30	−40	−42	−19	− 5	+19	−15	−56	+40	+21	0	−0.62
104514	21 10 14.31	+20 44 36.5	8.14	H	317.559 617 34	+20.743 464 05	14.59	−91.90	67.30	0.61	0.62	1.03	0.91	0.87	+19	−10	− 2	− 2	+19	+ 2	+17	+15	−19	+35	0	1.40
104515	21 10 14.80	+59 34 58.2	9.41	H	317.561 652 21	+59.582 822 28	3.19	−4.02	−3.89	0.74	0.70	0.83	0.71	0.75	−10	+ 5	− 4	+ 2	+18	−14	+27	−24	+ 7	+16	1	1.17
104516	21 10 15.55	+53 33 47.2	5.75	H	317.564 802 72	+53.563 109 52	7.57	22.52	−3.70	0.43	0.40	0.49	0.44	0.41	− 5	+ 8	+20	− 6	− 9	−14	− 7	− 8	− 4	− 2	0	0.87
104517	21 10 15.92	+27 17 58.9	7.61	H	317.566 344 49	+27.299 700 00	4.70	−34.25	−12.76	0.51	0.43	0.80	0.61	0.44	−11	+ 8	− 3	+ 3	+26	−23	+24	+39	+ 2	−14	0	0.92
104518	21 10 16.56	+58 55 10.1	8.69	H	317.568 994 06	+58.919 483 77	1.91	−6.71	−9.99	0.69	0.66	0.82	0.78	0.79	− 9	+12	− 6	+ 3	+15	+ 3	+14	−21	− 8	− 3	0	−0.03
104520	21 10 18.72	+52 25 50.1	8.01	H	317.578 007 93	+52.430 572 15	13.34	100.67	43.19	0.60	0.56	0.69	0.70	0.64	− 6	−16	+ 5	− 9	+ 9	+ 2	+ 9	+10	−12	+ 2	0	0.86
104521 H	21 10 20.47	+10 07 55.0	4.70	G	317.585 296 17	+10.131 948 61	A 28.38	49.07	−151.85	0.74	0.72	0.90	0.90	0.64	+ 9	−17	−49	−23	+15	− 3	+ 1	−49	+51	− 1	1	0.10
104522	21 10 20.57	−53 42 14.3	9.76	H	317.585 726 72	−53.703 963 18	0.92	1.47	− 4.28	1.41	1.05	1.54	2.14	1.58	+12	−27	−12	+ 7	− 5	− 9	−11	− 3	+17	−23	0	0.86
104523	21 10 20.89	−32 51 00.6	7.25	H	317.587 026 95	−32.850 170 44	3.91	23.75	1.50	0.79	0.58	0.95	0.88	0.46	+19	−28	−21	−20	−16	+40	−18	−54	+25	+14	0	2.04
104524	21 10 22.48	−16 57 30.7	8.38	H	317.593 658 52	−16.958 520 12	3.10	−9.42	−34.79	1.16	0.58	1.40	1.60	0.52	+42	−11	− 1	− 2	−28	+40	−21	−43	+30	+61	0	0.62
104525	21 10 24.50	−59 24 27.8	6.96	H	317.602 096 65	−59.407 714 50	4.83	19.54	−9.68	0.58	0.53	0.81	0.71	0.52	+ 1	− 8	− 9	+ 3	+ 9	+ 3	+ 6	− 6	−12	−19	0	−1.14
104526 H	21 10 25.23	−54 34 25.3	7.07	1 G	317.605 107 91	−54.573 692 41	A 30.93	129.66	−26.86	1.51	1.32	1.43	1.57	1.13	+16	−24	− 7	+24	+14	− 6	+11	+11	+ 5	− 3	2	0.26
104527	21 10 27.42	+40 31 52.3	8.87	H	317.614 241 83	+40.531 203 73	0.17	−2.29	− 4.39	0.55	0.66	0.81	0.64	0.75	+ 0	− 8	+ 0	+ 7	− 2	− 5	− 3	+ 3	+ 7	− 4	0	−0.16
104528	21 10 28.36	−72 51 14.1	8.82	H	317.618 168 60	−72.853 905 33	1.55	−7.58	5.21	0.76	0.87	1.11	1.00	0.98	−13	−15	−10	− 7	+23	− 4	+21	−24	− 7	−14	0	0.06
104529	21 10 28.40	−48 19 07.4	8.62	H	317.618 337 36	−48.318 718 76	3.14	4.55	10.35	0.91	0.80	1.29	1.06	0.70	+35	−26	−21	−14	−14	+18	−19	−46	+15	+20	0	0.95
104530	21 10 28.55	−41 15 03.1	9.50	H	317.618 957 58	−41.250 871 73	5.65	−45.44	−9.66	1.09	0.91	1.43	0.96	0.75	+60	−28	−24	−51	−32	+ 7	−35	−53	+13	+52	0	2.76
104531	21 10 28.86	+15 15 09.2	8.07	H	317.620 254 53	+15.252 554 22	1.57	−7.82	−9.54	0.97	0.69	1.13	1.31	0.71	+15	+ 8	−16	+ 5	−21	+26	−11	− 9	+10	+35	0	0.87
104532	21 10 29.33	−28 29 27.8	7.74	H	317.622 192 66	−28.491 054 66	3.58	30.42	− 7.50	1.12	0.61	1.03	1.38	0.52	− 6	−14	−26	−46	+ 7	+15	+ 5	−51	+28	− 6	0	0.48
104533 H	21 10 30.35	+19 57 33.7	7.51	G	317.626 465 51	+19.959 369 82	A 5.91	−9.28	−19.52	1.83	1.29	2.15	2.31	1.20	+16	−21	+10	− 4	+ 4	−39	+ 7	− 6	+18	−24	3	1.23
104534	21 10 30.62	−22 28 39.0	7.42	H	317.627 587 77	−22.477 487 16	4.23	26.74	18.64	0.91	0.55	0.93	1.12	0.46	+13	−10	−20	−29	−12	+16	−10	−51	+23	+21	0	−0.61
104535	21 10 30.68	+03 07 12.5	10.84	G	317.627 825 38	+03.120 127 77	13.67	162.65	−154.05	2.30	1.56	2.58	2.93	1.58	− 1	+ 6	−36	−38	+30	−17	+19	−37	+45	+ 2	0	−0.76
104536 T	21 10 30.92	+22 27 25.7	7.70	G	317.628 843 93	+22.457 134 22	B 2.88	23.21	−11.91	9.67	9.14	5.72	5.56	5.46	+ 4	− 8	+ 7	+11	+ 0	−20	+ 3	−14	+ 8	+15	15	2.13
104537 H	21 10 30.96	+47 41 32.0	6.46	G	317.629 003 08	+47.692 232 84	A 2.17	−4.08	−3.66	0.57	0.58	0.64	0.67	0.55	−14	+10	− 9	+11	+ 2	+28	+ 4	−19	+21	− 9	6	0.36
104538	21 10 31.31	+10 02 56.0	6.07	G	317.630 476 57	+10.048 879 79	6.81	−0.23	17.23	1.05	0.67	1.06	1.25	0.81	+12	−42	−48	−54	+ 1	+25	+11	−47	+19	−15	2	−0.07
104539	21 10 32.06	+22 27 16.8	6.71	H	317.633 583 51	+22.454 664 35	A 1.61	22.87	−13.12	1.65	1.54	1.86	1.85	1.91	+ 5	− 8	+ 7	+10	+ 2	−20	+ 3	−12	+ 9	+14	15	2.13
104540	21 10 32.43	−18 19 50.6	8.17	H	317.635 126 09	−18.330 720 36	3.24	6.32	−14.51	0.92	0.52	1.20	1.15	0.45	+52	−20	−17	− 4	−23	+52	−21	−33	+39	+58	0	−0.28
104541	21 10 32.85	+36 47 46.0	7.60	G	317.636 893 54	+36.796 097 99	9.93	44.79	−40.97	0.44	0.56	0.75	0.45	0.59	−24	+ 4	− 4	−12	+ 8	− 9	+ 8	−24	+16	−24	0	−0.60
104542	21 10 33.51	+16 58 46.3	8.04	H	317.639 629 49	+16.979 535 33	4.49	29.13	9.46	0.78	0.58	1.07	0.99	0.68	+ 2	− 6	+ 4	+20	+ 5	+11	+ 8	+ 6	− 4	+26	0	0.31
104543	21 10 36.72	+66 09 29.6	7.14	H	317.653 019 33	+66.158 224 03	3.92	4.82	−17.80	0.50	0.46	0.54	0.63	0.50	−10	−18	+15	− 1	+ 7	+11	+ 2	+ 3	+18	+13	0	0.40
104544	21 10 36.80	−34 48 42.6	9.49	H	317.653 326 21	−34.811 838 12	7.11	4.83	−84.99	1.52	1.18	1.61	1.67	0.85	+22	−30	−12	−41	−22	+39	−23	−73	+11	+ 8	0	0.79
104545	21 10 37.08	−49 22 16.9	9.67	H	317.654 519 58	−49.371 354 58	2.57	19.52	− 7.31	1.18	1.03	1.46	1.85	1.08	+30	− 8	−18	+ 4	−11	+13	−10	−32	+ 4	+24	4	0.32
104546	21 10 37.44	−40 22 32.5	8.80	H	317.656 019 61	−40.375 696 63	2.70	9.72	−29.54	0.95	0.77	1.21	0.84	0.63	+59	−26	−24	−56	−34	+22	−35	−51	+24	+48	0	1.83
104547	21 10 38.39	+37 54 57.7	8.40	H	317.659 944 41	+37.916 018 59	2.41	5.07	1.44	0.54	0.72	0.95	0.58	0.82	−19	− 3	+ 0	−17	+10	−18	+ 9	−35	+18	−27	0	−0.97
104548	21 10 38.55	+38 57 40.4	7.53	H	317.660 609 17	+38.961 233 79	1.08	4.12	−13.08	0.46	0.55	0.75	0.49	0.58	−17	− 1	− 3	− 3	+ 0	−24	+ 0	−19	+20	−16	0	−0.14
104549	21 10 40.61	−23 18 40.6	8.05	G	317.669 206 67	−23.311 281 61	17.75	96.33	−102.76	1.00	0.61	1.07	1.13	0.49	+ 5	+ 4	−25	−26	−13	+30	− 3	−54	+25	+22	0	−0.14
104550	21 10 41.48	+37 29 52.6	8.20	H	317.672 832 65	+37.497 947 51	2.95	−0.22	−20.57	0.54	0.62	0.90	0.56	0.68	−18	+12	− 1	−25	+ 9	−22	+11	−26	+17	−19	0	−1.27
104551	21 10 42.46	−17 28 24.7	12.74	H	317.676 937 11	−17.473 517 34	B 5.02	−31.70	−51.85	277.22	133.34	2.77	4.04	1.40	+42	+ 5	+ 4	+10	− 1	+37	+ 0	− 6	+36	+53	1	0.55
104552	21 10 43.33	+38 49 27.3	8.64	H	317.680 524 29	+38.824 246 66	2.87	−9.79	−14.49	0.64	0.79	1.05	0.72	0.87	−15	− 8	− 5	+ 7	− 5	−15	− 7	−21	+26	−17	0	−1.84
104553	21 10 43.80	−17 28 32.2	8.89	H	317.682 508 34	−17.475 611 99	A 5.02	−31.70	−51.85	2.80	1.70	2.77	4.04	1.40	+41	−13	−18	− 9	−21	+37	−17	−36	+36	+53	1	0.55
104554	21 10 44.30	−10 12 34.0	8.28	H	317.684 578 11	−10.209 441 22	4.09	−1.37	− 8.82	1.08	0.55	1.23	1.47	0.62	+28	−33	−18	+ 7	−14	+34	−10	− 4	+28	+50	0	−0.62
104555 H	21 10 44.76	−39 58 30.1	7.77	H	317.686 496 48	−39.975 039 71	A 1.77	12.08	−38.97	1.14	0.86	1.25	1.13	0.66	+48	+14	−20	−11	−25	+31	−21	−31	+ 6	+22	1	0.26
104556	21 10 46.74	−28 37 44.8	9.22	H	317.694 766 63	−28.629 121 99	6.57	36.82	−24.60	3.86	2.88	4.22	4.86	2.24	+ 6	− 7	−39	−26	−22	+34	− 9	−64	+22	+10	0	
104557	21 10 46.87	−09 21 14.2	6.27	H	317.695 293 89	−09.353 931 25	9.41	116.83	−58.64	0.77	0.42	0.95	1.14	0.43	+27	−22	−16	− 1	−11	+47	− 8	−12	+36	+49	0	2.57
104558	21 10 48.01	+50 28 06.7	9.14	H	317.700 054 89	+50.468 536 82	4.65	10.92	4.28	0.73	0.75	0.88	0.93	0.89	+ 1	− 5	+ 5	+12	+ 6	− 7	+ 5	+ 2	+ 7	+ 0	0	−0.59
104559	21 10 48.12	−11 43 45.0	7.96	H	317.700 492 17	−11.729 175 99	2.62	−10.51	−18.83	0.92	0.53	1.05	1.34	0.52	+30	− 7	− 6	+13	−14	+31	− 4	−27	+28	+54	0	0.27
104560	21 10 48.18	−07 38 29.5	8.69	G	317.700 735 94	−07.641 529 56	15.60	235.22	−30.48	1.07	0.64	1.30	1.74	0.71	+33	− 3	− 6	+20	−14	+35	− 3	+ 7	+15	+49	0	2.04
104561	21 10 50.22	+39 12 22.1	8.20	H	317.709 234 67	+39.206 142 51	2.04	22.85	−18.68	0.58	0.73	0.95	0.65	0.77	−17	− 5	+ 3	+ 9	− 6	−19	− 6	−18	+19	−20	0	−1.11
104562	21 10 50.99	+66 42 34.1	7.34	H	317.712 452 93	+66.709 481 30	5.26	21.45	4.76	0.56	0.49	0.58	0.66	0.53	− 8	−18	+10	−11	+16	+15	+ 8	+ 2	+18	+16	0	1.29
104563	21 10 54.34	−48 10 00.8	8.90	H	317.726 423 62	−48.166 899 81	2.19	12.81	− 4.17	0.91	0.78	1.26	1.09	0.71	+23	−17	−27	−16	−15	+14	−16	−45	+19	+13	0	−0.70
104564	21 10 54.38	+49 08 31.4	10.58	3 H	317.726 564 99	+49.142 063 61	0.51	1.22	− 1.45	1.24	1.18	1.50	1.75	1.31	− 8	−12	− 2	− 6	−10	+12	− 8	−10	+ 0	−24	0	1.10
104565	21 10 54.92	+29 25 25.6	11.06	G	317.728 813 76	+29.423 789 25	31.55	−225.58	−295.82	1.49	1.42	2.57	1.72	1.46	−19	+20	− 5	−19	+28	−25	+28	+ 8	+15	−25	0	1.92
104566	21 10 57.11	+38 46 47.1	8.71	H	317.737 962 09	+38.779 760 12	1.67	1.74	− 2.89	0.61	0.74	0.99	0.67	0.81	−17	− 8	+ 0	+12	− 6	−15	− 7	−16	+22	−18	0	−1.60
104567	21 10 57.66	+60 13 16.4	9.31	H	317.740 266 87	+60.221 208 41	0.84	−2.60	− 4.28	0.74	0.75	0.88	0.72	0.80	+ 3	− 3	− 2	− 1	+14	− 8	+18	−14	−10	+27	0	2.01
104568	21 10 58.46	+55 16 24.8	8.73	H	317.743 569 89	+55.273 559 34	2.08	2.40	3.43	0.57	0.68	0.74	0.64	0.64	− 5	+ 3	+27	− 5	+ 2	− 7	+17	− 6	−11	− 8	+ 3	0	1.09
104569	21 10 59.09	+26 13 03.6	8.62	H	317.746 226 09	+26.217 657 62	2.03	−3.05	− 7.60	0.69	0.59	0.91	0.70	0.60	+ 4	+22	− 8	+ 5	+37	− 9	+31	+56	+ 3	+14	3	0.81
104570 H	21 10 59.31	+09 32 57.9	7.44	G	317.747 138 04	+09.549 424 29	A 5.62	21.11	5.76	2.33	2.86	2.33	2.52	2.83	+23	−16	−44	−19	−10	+ 7	−16	−44	+33	+34	0	1.46
104571	21 10 59.51	+28 24 50.8	9.23	1 H	317.747 970 63	+28.414 112 61	1.48	−5.53	− 2.67	0.75	0.63	1.17	0.82	0.63	−16	+19	−13	+14	+17	−26	+15	+29	+ 9	−15	0	0.49
104572	21 11 01.43	−40 32 21.4	8.52	H	317.755 964 96	−40.539 289 86	1.40	7.05	− 5.54	0.86	0.70	1.12	0.73	0.55	+57	−30	−38	−51	−28	+16	−30	−47	+26	+45	1	1.88
104573	21 11 01.78	+55 19 56.0	7.73	2 T	317.757 406 23	+55.332 227 51	1.89	0.35	− 4.01	0.48	0.55	0.61	0.51	0.55	− 1	+ 7	+27	+ 1	+ 1	−16	+ 7	−11	− 4	+ 9	0	1.26
104574	21 11 01.79	+01 01 47.2	9.05	H	317.757 471 54	+01.029 784 35	6.62	−11.52	−24.97	1.14	0.88	1.34	1.37	0.95	+15	−20	+ 4	−43	+ 8	+46	− 1	−31	+27	+43	0	0.24
104575	21 11 01.88	−24 49 39.7	8.02	H	317.757 836 56	−24.827 697 86	4.41	−8.76	−10.73	0.96	0.64	1.05	1.14	0.52	+19	− 1	−14	−14	−24	+23	−17	−56	+13	+28	0	−0.91
104576	21 11 02.70	+32 43 05.6	8.66	H	317.761 239 72	+32.718 213 73	1.99	3.58	− 1.28	0.54	0.61	0.99	0.66	0.68	−26	+10	− 7	+ 4	+ 4	−10	+ 3	+ 9	+15	− 8	0	0.21
104577	21 11 03.11	+03 55 10.6	7.60	H	317.762 966 63	+03.919 610 77	4.70	43.44	−21.12	0.89	0.70	1.11	1.22	0.68	+24	−27	−49	+ 1	+ 3	+10	− 9	−48	+46	+12	0	0.20
104578	21 11 03.14	−47 20 23.0	9.47	G	317.763 091 73	−47.339 715 00	3.74	20.40	− 2.60	1.14	0.82	1.36	1.22	0.77	+14	−18	− 7	−33	+ 4	+20	+ 2	−32	+11	+21	0	−0.48
104579	21 11 03.77	+36 17 58.5	6.53	H	317.765 695 36	+36.299 579 34	1.11	0.57	0.90	0.37	0.47	0.61	0.40	0.49	−27	+ 2	− 3	− 7	+ 9	− 9	+ 9	−23	+23	−27	1	0.15
104580	21 11 03.88	−63 41 05.4	8.65	1 H	317.766 177 12	−63.684 822 05	11.75	21.78	−33.54	0.62	0.60	1.16	0.70	0.71	−37	+10	−14	+28	+ 2	+16	+ 6	+16	−18	−27	0	0.27
104581 H	21 11 05.16	+17 03 41.1	10.09	H	317.771 508 50	+17.061 405 86	A 10.41	185.08	−37.50	2.69	2.04	3.22	2.91	2.12	+ 3	+16	+ 3	+ 7	+10	+ 6	+ 9	+10	− 7	+28	1	0.80
104582 H	21 11 07.90	−37 17 00.7	9.21	H	317.782 908 19	−37.283 538 75	A 2.25	17.26	3.62	2.42	1.56	2.43	2.56	1.25	+46	−26	−24	−20	−37	+28	−32	−30	+11	+22	0	0.70
104583	21 11 08.60	−35 54 40.8	8.98	H	317.785 837 58	−35.911 344 97	3.15	1.44	40.90	1.20	0.88	1.26	1.42	0.68	+10	−27	−25	+ 6	−22	+24	−25	−57	+18	− 9	0	−0.22
104584	21 11 09.17	+74 03 30.5	8.96	H	317.788 188 16	+74.058 462 91	A 4.53	13.02	11.24	1.32	1.36	1.41	1.24	1.49	+ 2	+17	+ 7	−29	+ 5	−16	+ 2	+11	−13	+12	1	2.22
104585	21 11 10.19	−27 08 57.3	9.80	H	317.792 451 03	−27.149 263 53	2.67	13.13	−40.34	1.34	0.97	1.68	1.94	0.76	+17	−21	−46	−14	−26	+43	−14	−53	+31	+14	0	1.57
104586	21 11 10.89	−26 28 57.1	8.56	H	317.795 368 39	−26.482 519 33	2.70	2.05	−52.28	1.09	0.66	1.21	1.24	0.54	+19	−36	−37	−16	− 9	+20	−12	−50	+28	+11	0	−0.24
104587	21 11 11.05	+45 27 23.9	7.83	H	317.796 058 24	+45.456 639 27	32.68	−239.21	−297.99	0.65	0.60	0.80	0.81	0.75	− 5	+ 9	− 7	+25	+ 5	−11	+10	− 9	+17	+ 7	1	−2.57
104588	21 11 11.76	+36 39 18.3	8.05	G	317.799 019 73	+36.655 082 86	7.75	23.87	−22.97	0.46	0.59	0.80	0.49	0.64	−26	+ 4	− 2	− 6	+ 8	−10	+ 8	−20	+17	−25	0	−0.51
104589 H	21 11 11.80	+56 20 28.3	8.44	H	317.799 168 21	+56.341 186 25	A 0.13	−3.44	− 5.48	1.78	1.71	1.81	1.70	1.53	− 1	−27	+ 5	+ 6	− 1	− 9	− 8	+ 5	+24	− 7	1	−0.29
104590	21 11 12.52	−42 38 24.9	9.61	G	317.802 150 35	−42.640 262 09	5.73	16.28	− 4.86	1.06	0.96	1.48	1.05	0.92	+46	−31	− 1	−23	−17	+17	−13	−40	− 6	+52	2	0.38
104591	21 11 14.49	−16 23 36.1	9.61	G	317.810 362 20	−16.393 348 42	0.86	−10.63	− 7.57	1.41	0.85	1.72	1.80	0.71	+48	− 9	+ 3	−23	−30	+45	−32	−58	+27	+62	0	0.23
*104592	21 11 15.56	+45 40 27.3	6.69	H	317.814 822 72	+45.674 238 67	1.58	−2.28	− 4.34	0.46	0.47	0.58	0.56	0.56	−10	+12	− 9	+16	+ 4	− 2	+ 9	−13	+ 2	+ 7	1	−1.05
*104593	21 11 15.49	+39 14 38.5	8.57	H	317.814 523 08	+39.244 040 07	5.72	3.12	− 9.30	0.61	0.76	1.00	0.69	0.82	− 9	− 2	+ 7	+14	+ 0	−14	+ 0	−10	+10	−12	0	−0.17
104594	21 11 15.80	+33 08 00.6	7.48	H	317.815 814 83	+33.133 505 33	5.27	24.74	4.93	0.40	0.52	0.82	0.51	0.58	−37	+ 4	−14	−12	+ 9	− 5	+ 5	+ 2	+15	−22	0	0.31
104595	21 11 16.25	−04 08 22.8	8.13	H	317.817 727 50	−04.139 653 76	3.97	18.89	1.27	0.95	0.53	1.07	1.19	0.54	+41	− 2	− 4	−17	−31	+31	−28	+ 3	+ 4	+46	2	1.78
104596 H	21 11 16.70	+33 31 25.9	11.48	H	317.819 589 41	+33.523 861 83	A 9.67	503.73	155.05	2.68	4.03	5.39	2.89	4.45	−40	− 6	+ 0	−12	+14	−24	+ 3	+ 5	+28	−24	1	2.32
104597	21 11 20.87	−72 32 39.4	6.18	G	317.836 945 48	−72.544 278 74	8.35	33.90	−30.45	0.45	0.47	0.65	0.57	0.64	−19	−16	+ 1	− 3	+20	− 5	+22	−10	−15	−26	0	0.19
104598	21 11 21.43	−65 37 44.4	10.07	H	317.839 291 25	−65.629 010 47	5.91	− 8.71	−17.55	0.92	0.92	1.47	1.09	1.09	−22	−18	−12	− 5	+13	+10	+17	− 3	−19	−17	0	0.03
104599	21 11 21.93	+41 11 06.6	7.41	H	317.841 383 59	+41.185 172 73	1.80	− 0.45	− 5.69	0.44	0.49	0.62	0.50	0.52	− 5	+ 2	+ 2	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
104501	7.202	0.003	6.943	0.004		0.270	0.015	G	0.23	0.02	A	6.9895	0.0007	0.010	214		6.97	7.01					1							S
104502	7.786	0.008	7.751	0.008		0.037	0.010	T	0.05	0.01	L	7.7755	0.0011	0.010	119		7.76	7.79		C			1							S
104503	9.699	0.020	9.475	0.023		0.214	0.029	T	0.24	0.03	L	9.5070	0.0023	0.018	114		9.47	9.53		C			1							
104504	9.303	0.018	8.597	0.015		0.622	0.002	G	0.69	0.00	H	8.6739	0.0025	0.018	88		8.65	8.72					1							S
104505	7.918	0.006	7.565	0.007		0.343	0.008	T	0.40	0.01	L	7.6131	0.0009	0.009	136		7.60	7.63		C			1							S
104506	12.137	0.177	9.882	0.037		1.904	0.149	T	1.96	0.56	Q	9.7528	0.0371	0.468	91		9.40	10.88		U 2			1							G
104507	9.938	0.026	8.071	0.011		1.552	0.022	T	1.57	0.02	L	8.0264	0.0016	0.012	95		8.01	8.05					1							
104508	6.468	0.004	6.559	0.005		−0.079	0.000	G	−0.06	0.00	H	6.5463	0.0006	0.006	112		6.53	6.56		D			1							S
104509	8.804	0.008	8.826	0.011		−0.015	0.012	T	0.01	0.01	L	8.8547	0.0014	0.019	202		8.83	8.89		C			1							
104510	10.156	0.042	10.252	0.068		−0.083	0.072	T	−0.06	0.08	L	10.2390	0.0036	0.026	59		10.17	10.29					1 X							G
104511	9.245	0.015	8.045	0.010		1.027	0.014	T	1.00	0.01	L	8.0780	0.0013	0.012	95		8.06	8.10		D			1							S
104512	10.512	0.034	10.513	0.054		0.004	0.059	T	0.02	0.06	L	10.4189	0.0029	0.030	139		10.36	10.47					1 S							G
104513	8.553	0.015	8.295	0.016		0.271	0.015	G	0.31	0.02	H	8.3565	0.0021	0.011	69		8.34	8.38		C			1							S
104514	8.726	0.010	8.203	0.009		0.534	0.003	G	0.61	0.00	H	8.2549	0.0012	0.014	130		8.23	8.28		C			1							S
104515	9.607	0.019	9.398	0.022		0.200	0.027	T	0.22	0.03	L	9.4696	0.0020	0.019	116		9.43	9.51					1							
104516	5.603	0.003	5.731	0.004		−0.111	0.004	T	−0.10	0.01	L	5.7140	0.0006	0.005	121		5.70	5.72		C			1							S
104517	8.921	0.010	7.726	0.007		1.023	0.010	T	1.00	0.01	L	7.7739	0.0010	0.012	201		7.76	7.79		C			1							
104518	9.916	0.023	8.802	0.015		0.960	0.021	T	0.95	0.02	L	8.8501	0.0015	0.016	114		8.82	8.88					1 G							
104520	8.592	0.011	8.065	0.010		0.516	0.006	G	0.59	0.01	H	8.1190	0.0014	0.010	109		8.10	8.13		C			1							
104521	5.060	0.004	4.741	0.003	A	0.262	0.005	G	0.26	0.02	A *	4.7812	0.0005	0.005	73	*	4.77	4.80		D	21104+1007	I 2	2 C B	AB	264	1.260	0.044	4.25	0.13	S
104522	11.651	0.116	9.943	0.039		1.437	0.089	T	1.45	0.09	L	9.8780	0.0031	0.033	77		9.82	9.93					1							
104523	8.483	0.012	7.345	0.007		0.979	0.011	T	0.96	0.01	L	7.4143	0.0008	0.008	104		7.40	7.43					1							S
104524	8.797	0.010	8.433	0.010		0.355	0.012	T	0.42	0.01	L	8.4663	0.0015	0.012	128		8.44	8.49		C			1							S
104525	7.212	0.005	6.992	0.006		0.210	0.007	T	0.23	0.01	L	7.0272	0.0012	0.012	98		7.01	7.05					1							S
104526	8.436	0.017	7.711	0.018	A	0.687	0.015	G	0.74	0.01	H *	7.1684	0.0027	0.018	81	*	7.14	7.19		U 2	21104−5434	I 1	2 C A	AB	131	3.964	0.003	0.21	0.01	S
104527	9.004	0.011	8.878	0.014		0.122	0.017	T	0.14	0.02	L	8.9198	0.0013	0.018	154		8.88	8.95					1							
104528	10.476	0.032	8.920	0.015		1.306	0.028	T	1.27	0.03	L	8.9756	0.0020	0.022	134		8.94	9.01					1							
104529	9.932	0.023	8.728	0.015		1.030	0.021	T	1.00	0.02	L	8.7880	0.0020	0.017	108		8.76	8.82		C			1							
104530	10.031	0.019	9.534	0.019		0.479	0.021	T	0.55	0.02	L	9.5998	0.0020	0.021	162		9.56	9.64		C			1							
104531	10.004	0.027	8.212	0.012		1.492	0.023	T	1.52	0.03	L	8.2014	0.0021	0.015	79		8.18	8.23		C			1							
104532	9.438	0.020	7.871	0.010		1.315	0.018	T	1.28	0.02	L	7.8967	0.0012	0.012	88		7.87	7.91					1							S
104533	7.985	0.010	7.494	0.010	*	0.493	0.015	G	0.57	0.02	H *	7.6102	0.0009	0.010	95	*	7.59	7.63		D	21105+1958	I 1	2 C A	AB	29	2.457	0.005	0.32	0.02	S
104534	8.583	0.011	7.521	0.008		0.921	0.010	T	0.92	0.01	L	7.5831	0.0010	0.011	98		7.57	7.60		C			1							S
104535						1.050	0.040	G	1.10	0.06	I	10.9830	0.0060	0.033	66		10.92	11.05		C			1							G
104536	7.854	0.009	7.660	0.013	B	0.170	0.015	G	0.19	0.01	H	7.6322	0.0303			B				D	21105+2227	I 2	1 C I A							S
104537	6.467	0.004	6.490	0.004	A	0.007	0.024	G	0.00	0.00	L *	6.4628	0.0010	0.007	124	*	6.45	6.48		D	21105+4741	I 1	2 C A	AB	313	1.232	0.007	2.53	0.03	S
104538	6.113	0.004	6.076	0.005		0.022	0.002	G	0.04	0.00	H	6.0868	0.0008	0.007	73		6.08	6.10			21104+1007	I 2	1 G							S
104539	6.701	0.004	6.671	0.007	A	0.028	0.007	T	0.04	0.01	L	6.7261	0.0165	0.084	112	A	6.59	6.86		D	21105+2227	I 2	1 C P A							S
104540	9.502	0.014	8.260	0.009		1.060	0.013	T	1.03	0.01	L	8.3414	0.0013	0.013	141		8.32	8.36		C			1							
104541	8.060	0.007	7.650	0.007		0.388	0.009	T	0.45	0.01	L	7.6893	0.0009	0.011	169		7.67	7.71		C			1							S
104542	9.629	0.018	8.138	0.010		1.208	0.015	G	1.17	0.01	H	8.2066	0.0017	0.016	115		8.18	8.24					1							
104543	8.716	0.011	7.262	0.006		1.226	0.010	T	1.18	0.01	L	7.3084	0.0012	0.009	121		7.29	7.33		C			1							S
104544	10.117	0.031	9.550	0.029		0.534	0.031	T	0.61	0.03	L	9.6058	0.0023	0.021	82		9.58	9.65		C			1							
104545	10.960	0.060	9.744	0.033		1.039	0.053	T	1.01	0.04	L	9.8410	0.0028	0.024	92		9.81	9.88		C			1							
104546	10.139	0.023	8.904	0.014		1.054	0.021	T	1.02	0.02	L	8.9715	0.0017	0.016	143		8.95	9.00		C			1							
104547	8.350	0.008	8.389	0.010		−0.031	0.012	T	−0.01	0.01	L	8.3963	0.0012	0.017	159		8.37	8.43					1							S
104548	7.463	0.006	7.519	0.007		−0.037	0.004	G	−0.01	0.00	H	7.5219	0.0012	0.012	154		7.50	7.55		C			1							S
104549	8.785	0.012	8.124	0.011		0.606	0.015	G	0.68	0.01	H	8.1769	0.0014	0.012	99		8.15	8.20					1							S
104550	9.517	0.016	8.300	0.010		1.040	0.015	T	1.01	0.01	L	8.3653	0.0013	0.015	161		8.34	8.39					1							
104551											T	12.5134	0.6912			B				D	21107−1729	I 2	1 C F C							
104552	10.073	0.024	8.758	0.014		1.117	0.022	T	1.08	0.02	L	8.8065	0.0018	0.020	160		8.77	8.86		C			1							
104553	9.376	0.020	8.980	0.021	A	0.387	0.024	T	0.45	0.03	L	8.9802	0.0327	0.025	125	A	8.94	9.02		D	21107−1729	I 2	1 C P C							
104554	9.540	0.023	8.412	0.015		0.971	0.021	T	0.96	0.02	L	8.4471	0.0019	0.015	84		8.42	8.47		C			1							S
104555	9.075	0.015	7.904	0.010	*	1.004	0.014	T	0.98	0.01	L *	7.9390	0.0012	0.011	97	*	7.92	7.96		C	21107−3959	H 1	2 C A	AB	188	0.818	0.030	3.61	0.10	S
104556	9.939	0.030	9.272	0.027		0.608	0.030	T	0.68	0.03	L	9.3478	0.0014	0.018	86		9.32	9.39					1 X							
104557	7.774	0.008	6.398	0.004		1.161	0.001	G	1.12	0.00	H	6.4368	0.0005	0.005	96		6.43	6.45					1							S
104558	9.388	0.015	9.123	0.017		0.252	0.021	T	0.28	0.03	L	9.2126	0.0022	0.021	109		9.18	9.26		C			1							
104559	9.688	0.022	8.094	0.011		1.336	0.019	T	1.30	0.02	L	8.1099	0.0015	0.013	101		8.09	8.13		C			1							
104560	9.461	0.040	8.783	0.035		0.593	0.003	G	0.66	0.00	H	8.8168	0.0012	0.012	85		8.79	8.85		C			1							
104561	9.683	0.018	8.314	0.011		1.159	0.017	T	1.12	0.01	L	8.3629	0.0017	0.016	147		8.34	8.39		C			1							
104562	8.593	0.010	7.437	0.007		0.993	0.010	T	0.97	0.01	L	7.5065	0.0013	0.011	112		7.49	7.52					1							S
104563	9.147	0.014	8.942	0.017		0.196	0.021	T	0.21	0.02	L	8.9620	0.0021	0.020	100		8.92	8.99		C			1							S
104564	11.955	0.172	10.886	0.104		0.926	0.153	T	0.92	0.11	L	10.7340	0.0459	0.283	100		10.40	11.09	7.25	P 1 A			1							G
104565						1.372	0.060	G	1.61	0.11	I	11.1221	0.0044	0.049	144		11.02	11.20					1 S							G
104566	8.706	0.009	8.699	0.012		0.011	0.014	T	0.03	0.01	L	8.7232	0.0018	0.019	153		8.70	8.76		C			1							
104567	9.566	0.018	9.317	0.021		0.150	0.015	G	0.17	0.01	H	9.3602	0.0022	0.019	111		9.33	9.39		C			1							
104568	8.741	0.010	8.719	0.012		0.025	0.014	T	0.04	0.01	L	8.7427	0.0015	0.017	128		8.72	8.77					1							
104569	8.596	0.008	8.609	0.010		−0.007	0.012	T	0.01	0.01	L	8.6322	0.0014	0.016	176		8.61	8.66		C			1							
104570	8.460	0.019	8.225	0.021	B	−0.300	0.495	G	0.21	0.08	S *	7.7389	0.0018	0.017	67	*	7.71	7.77		R	21110+0933	I 1	2 C A	AB	80	2.790	0.005	0.04	0.02	S
104571	9.129	0.013	9.205	0.018		−0.065	0.020	T	−0.04	0.02	L	9.2100	0.0021	0.022	162		9.17	9.25		U			1							
104572	8.951	0.011	8.555	0.011		0.375	0.014	T	0.44	0.01	L	8.6142	0.0014	0.017	159		8.59	8.65					1							S
104573	7.802	0.010	7.738	0.011		0.064	0.014	T	0.07	0.01	L	7.7500	0.0100	0.112	119		7.70	8.10	1.25	P 1 A			1							S
104574	9.664	0.027	9.155	0.025		0.478	0.033	T	0.55	0.04	L	9.1681	0.0027	0.023	73		9.14	9.21			21110+0102	I 1	1 S							
104575	9.232	0.017	8.120	0.011		0.958	0.016	T	0.95	0.01	L	8.1826	0.0017	0.014	107		8.16	8.21					1							
104576	8.713	0.010	8.671	0.012		0.043	0.014	T	0.06	0.01	L	8.6852	0.0016	0.018	187		8.66	8.72					1							
104577	9.194	0.019	7.723	0.011		1.239	0.017	T	1.20	0.02	L	7.7645	0.0008	0.008	67		7.75	7.78		D			1							S
104578	10.004	0.025	9.489	0.024		0.503	0.005	G	0.58	0.01	H	9.5815	0.0017	0.017	108		9.54	9.63		D			1							
104579	6.341	0.003	6.497	0.004		−0.134	0.004	T	−0.13	0.01	L	6.4820	0.0011	0.011	172		6.47	6.50					1							S P
104580	9.176	0.009	8.707	0.009		0.455	0.010	T	0.52	0.01	L	8.7481	0.0015	0.024	274		8.70	8.79		U			1							
104581	11.297	0.086	10.408	0.061	*	0.792	0.078	T	0.82	0.06	L *	10.2433	0.0033	0.029	99	*	10.19	10.28		D	21111+1704	M 1	2 C A	AB	257	1.091	0.010	1.11	0.04	G
104582	9.716	0.042	9.224	0.044	*	0.474	0.047	T	0.55	0.05	L *	9.3182	0.0022	0.024	113	*	9.28	9.41		D	21111−3717	I 1	2 C A	AB	239	5.233	0.012	1.52	0.04	S
104583	9.994	0.034	9.086	0.025		0.806	0.031	T	0.83	0.02	L	9.1292	0.0022	0.012	75		9.11	9.15		C			1							
104584	9.793	0.026	9.040	0.020	A	0.688	0.026	T	0.75	0.02	L	9.0981	0.0124	0.051	101	A	9.06	9.21		D	21112+7404	I 1	2 C A	AB	346	14.349	0.013	1.64	0.06	
104585	10.515	0.047	9.859	0.041		0.600	0.047	T	0.67	0.04	L	9.9250	0.0032	0.025	95		9.89	9.97					1							
104586	9.870	0.023	8.699	0.015		1.004	0.021	T	0.98	0.02	L	8.7288	0.0022	0.016	93		8.70	8.75					1							
104587	8.802	0.014	7.917	0.011		0.780	0.015	G	0.82	0.01	H	7.9744	0.0011	0.013	116		7.95	8.00					1							
104588	8.382	0.007	8.093	0.007		0.300	0.015	G	0.34	0.02	H	8.1240	0.0012	0.016	171		8.10	8.15					1							S
104589	9.041	0.020	8.705	0.022	*	0.319	0.028	T	0.37	0.04	L *	8.5198	0.0022	0.014	82	*	8.50	8.55		D	21112+5620	I 1	2 C A	AB	30	1.117	0.005	0.36	0.02	
104590	10.049	0.022	9.602	0.022		0.450	0.007	G	0.52	0.01	H	9.7123	0.0025	0.020	113		9.68	9.76		C			1							
104591	10.104	0.026	9.635	0.027		0.465	0.007	G	0.54	0.01	H	9.7110	0.0018	0.018	132		9.68	9.74		C			1							
104592	7.104	0.005	6.724	0.005		0.353	0.005	G	0.41	0.01	H	6.7726	0.0009	0.008	119		6.76	6.78		C			1							S
104593	9.190	0.012	8.619	0.011		0.534	0.014	T	0.61	0.01	L	8.6849	0.0017	0.018	153		8.65	8.72		C			1							
104594	8.684	0.007	7.577	0.005		0.955	0.007	T	0.94	0.01	L	7.6472	0.0009	0.011	271		7.63	7.67		C			1							S
104595	8.271	0.010	8.143	0.012		0.124	0.015	T	0.14	0.01	L	8.1759	0.0011	0.009	109		8.16	8.19					1							S
104596						1.416	0.400	G	1.71	1.02	I *	11.5692	0.0047	0.061	260	*	11.45	11.69		D	21113+3331	M 1	2 C C	AB	306	1.389	0.026	0.90	0.09	G
104597	7.590	0.005	6.300	0.003		1.087	0.002	G	1.05	0.00	H	6.3523	0.0007	0.007	148		6.34	6.37		C			1							S
104598	10.681	0.034	10.136	0.033		0.517	0.035	T	0.59	0.04	L	10.1846	0.0029	0.028	164		10.14	10.25		C			1							
104599	7.243	0.005	7.377	0.007		−0.115	0.007	T	−0.10	0.01	L	7.3717	0.0009	0.011	141		7.35	7.39					1							S
104600	9.701	0.019	8.760	0.014		0.830	0.018	T	0.85	0.01	L	8.8392	0.0018	0.015	128		8.82	8.87		C			1							

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Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
104601	21 11 22.54	+71 40 00.7	9.74		G	317.843 927 72	+71.666 869 78		8.65	220.30	234.53	0.94	0.98	1.07	1.21	0.95	−17	−26	+29	−12	+19	+15	+ 8	+ 6	+10	+ 2		0	1.43
*104602	21 11 23.38	−88 27 10.6	8.61		H	317.847 432 61	−88.452 939 92		3.05	3.61	4.28	0.64	0.66	0.75	0.76	0.76	−15	− 2	− 9	+22	− 1	−12	− 4	+ 9	+ 8	−24		1	0.26
*104603	21 11 22.70	+04 15 02.9	8.13		H	317.844 581 28	+04.250 802 22		3.96	4.65	0.59	0.96	0.77	1.25	1.28	0.78	+10	+ 0	−54	−13	− 6	+20	+ 4	−43	+45	+23		0	0.51
*104604 H	21 11 22.80	−52 20 21.5	6.98	2	G	317.845 020 64	−52.339 291 97	A	20.47	−16.30	18.40	2.21	1.70	2.08	2.17	1.38	−36	+ 3	−20	−24	− 4	+ 4	+ 0	−24	+15	−50		4	1.64
104605 H	21 11 24.18	+57 37 13.5	7.90	2	G	317.850 739 15	+57.620 418 55	*	1.66	−3.08	−4.62	2.11	0.90	0.69	0.66	0.66	−23	− 2	− 3	− 1	+10	−12	+ 5	+ 4	+ 6	+ 7		1	0.51
104606	21 11 24.67	+05 29 38.2	11.72		G	317.852 787 44	+05.493 932 74		20.68	−96.51	−75.95	3.21	2.89	3.47	4.06	3.19	+43	−15	−13	−34	−18	+18	−19	−44	+12	+45		0	0.67
104607	21 11 26.22	+27 33 12.8	7.76		H	317.859 262 87	+27.553 559 79		1.62	2.96	−8.45	0.53	0.43	0.84	0.63	0.43	−12	+11	− 4	+ 5	+29	−29	+27	+35	+ 8	−17		0	0.14
104608	21 11 26.42	+13 15 12.0	11.01		H	317.860 084 37	+13.253 328 24		3.39	2.54	8.91	1.68	1.33	2.19	2.18	1.33	+37	−15	−30	+ 9	−23	+33	−11	−14	+28	+54		4	−1.51
104609	21 11 27.73	+78 58 31.5	7.13		H	317.865 553 63	+78.975 407 58		1.45	8.00	2.40	0.51	0.45	0.52	0.57	0.51	− 1	−11	+11	+36	+ 1	− 9	+ 1	− 2	+ 9	− 1		0	−0.70
104610	21 11 28.45	−05 18 32.8	10.99		G	317.868 541 42	−05.309 101 91		29.64	111.16	−150.13	2.03	1.22	2.27	3.16	1.22	+27	−11	− 3	+19	−29	+27	−15	+10	+16	+34		0	−1.01
104611	21 11 28.72	+50 24 07.6	7.76		H	317.869 679 97	+50.402 098 68		5.78	21.98	13.84	0.56	0.59	0.70	0.71	0.71	− 6	− 4	+17	+19	− 1	−16	+ 1	+ 9	− 3	−11		0	1.09
104612 H	21 11 28.93	+21 44 01.0	9.69		H	317.870 550 85	+21.733 607 85	A	11.98	−75.13	−51.06	2.08	1.54	2.01	1.72	1.53	+13	− 1	+ 5	− 1	+12	− 7	+12	−12	+ 4	+24		1	0.33
104613	21 11 29.96	−45 04 27.7	10.19	3	H	317.874 842 78	−45.074 347 70		1.50	−71.47	−83.42	1.30	1.03	1.59	1.46	0.96	+34	+ 1	+10	−13	−18	− 8	−21	−38	− 6	+15		0	−0.26
104614 H	21 11 30.89	+41 14 29.1	8.02		G	317.878 725 42	+41.241 428 41	A	10.79	−7.66	−54.24	1.51	1.55	1.63	1.32	1.35	+ 2	− 4	+11	− 4	+ 2	−12	+ 7	+ 5	+14	+ 5		2	1.30
104615 H	21 11 32.40	+70 49 31.4	7.52		H	317.885 009 78	+70.825 397 53	A	9.36	16.08	−28.31	2.19	2.11	0.77	1.01	0.73	−61	− 9	+ 5	− 6	− 2	+ 2	+ 6	+ 3	+10	−18		1	−0.36
104616	21 11 33.06	−01 18 00.9	8.31		G	317.887 768 31	−01.300 237 70	A	8.23	62.33	12.39	2.13	1.02	1.67	2.56	1.12	+46	− 4	− 2	−50	−17	+18	−30	+12	+ 5	+63		2	0.25
104617	21 11 33.21	+26 20 01.1	8.65		H	317.888 382 99	+26.333 649 25		5.79	−16.93	−11.66	0.70	0.57	0.95	0.80	0.60	+ 5	+ 5	− 4	+ 8	+32	−15	+30	+41	+ 6	+ 5		2	0.81
104618	21 11 33.47	−02 08 56.7	7.71		H	317.889 472 82	−02.149 084 84		1.40	2.23	−9.83	0.91	0.54	0.96	1.26	0.59	+39	− 6	+ 0	−19	−31	+12	−27	+ 4	− 2	+49		0	0.65
104619 H	21 11 34.22	−23 06 45.9	8.25		H	317.892 571 11	−23.112 736 36	A	5.91	−9.67	−12.61	2.36	1.77	2.32	3.08	1.19	+16	− 8	−30	+ 8	−14	+ 8	−10	−52	+31	+14		7	1.12
104620	21 11 34.28	−56 31 01.8	6.93		H	317.892 848 13	−56.517 161 58		6.71	20.06	−15.79	0.64	0.50	0.86	0.72	0.47	− 3	−27	− 7	+ 1	+23	+ 9	+22	+ 1	−18	−25		0	−0.35
104621	21 11 35.97	−52 09 46.3	9.10		H	317.899 895 26	−52.162 869 42		4.92	16.46	−18.26	0.97	0.84	1.32	1.25	0.91	+10	+ 1	−16	−15	− 2	− 8	− 4	−26	+24	− 1		0	−0.29
*104622 H	21 11 36.47	−03 07 12.7	7.47		H	317.901 953 92	−03.120 194 61	A	3.55	18.39	−12.02	1.33	0.81	1.29	1.65	0.77	+30	−11	−27	−20	−37	+32	−30	+27	− 8	+41		0	−0.48
*104623	21 11 36.45	+05 42 10.1	11.62		G	317.901 870 54	+05.702 803 70		4.61	−7.12	−6.27	3.49	2.90	3.65	4.28	2.92	+34	−14	−19	−36	−20	+16	−20	−56	+15	+36		0	1.49
104624	21 11 37.48	−37 32 23.3	9.72		H	317.906 184 12	−37.539 811 25		6.11	11.91	−22.44	1.52	0.92	1.66	1.75	0.87	+41	−27	− 7	−11	−37	+18	−36	−30	+ 4	+15		4	−1.39
104625	21 11 37.75	−37 57 36.2	8.83		H	317.907 289 57	−37.960 068 03		8.68	19.59	−43.71	1.10	0.68	1.24	1.64	0.65	+33	− 2	−13	+17	−38	+36	−39	−19	+ 1	− 4		0	−0.43
104626	21 11 38.28	−00 52 15.9	7.89		H	317.909 516 62	−00.871 087 38		5.98	−6.13	−16.72	1.08	0.75	1.19	1.68	0.80	+29	+ 4	−28	−48	−14	−11	−19	−49	+32	+32		0	−2.25
104627	21 11 38.58	−48 46 24.7	8.33		H	317.910 757 93	−48.773 535 74		2.94	20.75	−13.49	0.84	0.74	1.15	1.08	0.71	+25	− 3	−21	+10	− 8	+25	− 5	−40	+13	+23		0	1.19
104628	21 11 38.92	+63 46 49.3	8.39		H	317.912 171 63	+63.780 349 91		3.07	−17.51	−15.86	0.62	0.61	0.68	0.66	0.66	+ 2	+ 5	+ 9	+17	+16	+ 4	+17	+13	+ 5	+15		1	−0.38
104629	21 11 39.26	+00 40 42.0	8.57		H	317.913 598 80	+00.678 336 21		7.07	18.36	6.37	0.93	0.81	1.12	1.21	1.05	+39	−14	−19	−27	−17	+31	−14	−29	+24	+58		0	0.59
104630	21 11 39.50	+53 44 46.4	7.09		H	317.914 593 61	+53.746 231 03		7.76	29.94	−3.80	0.47	0.51	0.58	0.48	0.49	− 2	+11	+26	− 2	−12	−15	− 8	−20	− 5	+ 0		0	0.38
104631	21 11 40.32	−34 51 00.4	10.21		H	317.918 008 02	−34.850 119 43		4.48	−32.92	−11.65	1.62	1.14	1.71	1.84	0.90	+16	−26	−21	−34	−18	+31	−16	−57	+15	+ 3		0	0.83
104632	21 11 40.37	+70 26 27.9	6.89		H	317.918 227 82	+70.441 076 76		6.56	22.80	28.49	0.54	0.46	0.55	0.71	0.51	−18	−20	+10	− 8	+ 7	+19	+ 4	− 5	+ 3	−20		1	1.79
104633	21 11 40.92	−46 36 10.8	10.27		H	317.920 500 51	−46.603 013 21		10.36	6.08	11.74	1.25	1.03	1.68	1.34	1.02	+27	−30	−10	−15	− 5	+26	− 2	−29	+ 3	+34		0	−0.33
104634	21 11 41.31	−14 28 20.6	6.47	1	H	317.922 144 29	−14.472 377 88		7.43	38.52	0.10	0.90	0.47	0.93	1.10	0.42	+33	+18	+13	−26	−22	+ 7	−19	−40	+ 9	+49		0	−0.34
104635	21 11 42.10	−66 20 40.1	9.92	2	H	317.925 428 09	−66.344 470 19		10.31	28.65	−25.14	1.60	2.06	3.12	1.72	2.48	−35	− 3	− 1	−27	− 1	− 5	+ 1	− 2	+ 4	−46		0	
104636	21 11 42.26	+06 43 40.1	10.00		H	317.926 091 65	+06.727 805 98		3.60	23.23	−18.85	1.51	1.55	1.69	2.24	1.70	+42	− 4	−25	−29	−31	+14	−28	−66	+29	+46		0	−3.31
104637	21 11 43.26	+23 35 05.8	8.40		H	317.930 260 97	+23.584 930 67		6.87	−34.24	0.50	0.61	0.62	1.11	0.77	0.86	+12	+ 2	−10	−20	+25	−21	+26	−13	+22	+19		0	−0.66
104638	21 11 44.52	+19 22 21.9	8.41		H	317.935 493 07	+19.372 744 35		3.12	0.07	−14.81	0.94	0.55	1.06	1.26	0.67	−26	− 3	− 3	− 5	+27	−19	+18	+18	+ 3	+ 5		0	1.29
104639	21 11 44.56	−35 53 54.9	8.51		H	317.935 678 67	−35.898 585 53		13.00	43.57	−16.38	1.06	0.70	1.08	1.31	0.63	− 4	−17	−14	− 3	− 9	+18	−10	−35	+11	−17		2	0.25
104640	21 11 46.99	+12 57 06.4	7.76		H	317.945 782 05	+12.951 776 83		1.18	−5.46	−1.42	0.87	0.72	1.18	1.16	0.71	+37	−22	−32	+ 6	−37	+42	−21	−27	+28	+54		0	0.67
104641	21 11 47.44	−07 57 43.6	8.48		H	317.947 677 90	−07.962 113 25		4.30	37.03	6.75	0.98	0.56	1.20	1.60	0.62	+27	− 3	−13	+19	−13	+44	− 2	+12	+23	+43		0	3.94
104642 H	21 11 48.24	+59 59 11.8	5.64		G	317.951 001 95	+59.986 619 23	A	0.36	−2.90	−3.58	0.66	0.65	0.67	0.59	0.59	+ 0	+ 7	−19	− 3	+13	−14	+13	−34	+ 3	+22		4	0.75
104643	21 11 48.53	+29 42 42.2	6.85	1	H	317.952 220 81	+29.711 712 43		2.43	−0.98	−11.14	0.48	0.46	0.75	0.52	0.48	−10	+ 7	−15	+ 9	+27	−22	+25	+27	+ 6	−12	1	−0.02
104644	21 11 49.40	−43 36 43.1	11.98		G	317.955 812 62	−43.611 973 08		69.76	215.97	−688.32	3.16	2.48	4.06	3.24	2.21	+54	−26	− 9	−35	−29	+ 3	−32	−46	+ 8	+32		4	0.29
104645	21 11 53.82	−45 19 52.1	11.95	2	G																								
104646	21 11 53.84	+32 05 53.7	11.31		H	317.974 338 31	+32.098 236 42		15.56	−140.69	−127.67	2.94	3.16	4.65	3.62	3.36	− 3	+ 7	+ 0	+19	+17	+ 1	+15	+ 7	+ 1	+ 1	1		
104647	21 11 54.75	+40 46 27.4	7.96		H	317.978 138 04	+40.774 288 94		2.88	−1.30	−6.75	0.48	0.52	0.68	0.52	0.54	− 6	− 2	− 7	+15	− 4	+ 5	− 4	+ 8	+ 5	− 6		0	−0.20
104648	21 11 54.83	+23 04 50.3	7.33		H	317.978 459 61	+23.080 634 96		5.55	−25.98	−38.76	0.57	0.53	0.99	0.65	0.71	+ 6	+ 4	+ 0	+17	+14	−22	+20	+ 2	+23	+17		0	0.07
104649	21 11 54.87	−37 38 00.4	10.18		H	317.978 611 82	−37.633 455 71		−0.72	−10.29	−9.49	1.60	1.01	1.77	1.87	0.91	+41	−20	− 6	− 9	−39	+26	−42	−36	+ 4	+11		3	−1.06
104650 H	21 11 56.22	−66 16 59.5	8.56		H	317.984 259 94	−66.283 208 18	*	2.43	11.92	−10.94	2.16	3.52	1.71	0.98	1.16	−31	− 2	−13	−27	+ 6	+ 8	+ 8	−16	−11	−37		1	−0.38
104651	21 11 56.43	−00 03 32.2	9.33		H	317.985 110 77	−00.058 957 43		1.78	5.81	−7.11	1.27	1.11	1.55	1.40	1.11	+45	−17	−39	−45	−27	+16	−27	−60	+33	+53		0	2.04
104652	21 11 56.78	+17 53 42.3	8.23		H	317.986 587 36	+17.895 071 63		2.23	−10.66	−8.07	0.92	0.58	1.15	1.16	0.69	−16	−13	+ 0	+15	+15	−18	+16	+ 4	+ 3	+ 4		0	0.21
104653	21 11 56.82	+30 37 08.7	6.54		H	317.986 769 21	+30.619 080 32		6.18	56.38	25.18	0.42	0.44	0.72	0.50	0.48	+ 2	+ 2	− 6	+40	+24	−10	+21	+25	+ 7	+ 0		2	0.29
104654	21 11 57.32	−11 30 43.4	8.88		H	317.988 833 67	−11.512 060 52		8.25	−12.67	−6.45	1.06	0.68	1.28	1.60	0.68	+45	− 6	− 1	+11	−25	+35	−13	−26	+23	+62		0	−0.40
104655	21 11 57.64	−51 03 45.5	8.61		H	317.990 157 51	−51.062 652 42		5.95	−19.40	−3.12	0.98	0.72	1.16	1.24	0.80	+17	−27	−24	+10	− 8	+13	− 4	−11	− 2	+ 9		0	−0.89
104656	21 11 58.04	+80 20 34.1	8.70		H	317.991 835 93	+80.342 794 80		2.60	20.83	14.79	0.64	0.60	0.67	0.75	0.67	−11	− 6	+13	+ 1	+13	+10	+11	−12	− 1	−10		0	0.78
104657 H	21 11 58.57	−05 48 49.0	7.56		H	317.994 056 12	−05.813 616 39	A	3.40	8.77	2.23	1.29	0.79	1.29	1.71	0.78	+30	−20	−15	+18	−21	+20	− 6	+26	+10	+40		1	−0.47
104658	21 11 58.81	−05 57 49.5	8.29		H	317.995 031 31	−05.963 751 29		4.38	13.43	−18.97	1.02	0.60	1.18	1.55	0.66	+17	− 9	+15	+27	−17	+35	−13	+21	+27	+38		0	0.40
104659	21 11 59.11	+17 43 47.8	7.37		H	317.996 278 99	+17.729 933 20		28.26	−121.58	−898.84	0.76	0.50	1.01	0.82	0.63	−16	−33	+ 1	+ 0	+ 5	−17	+ 9	− 6	− 9	+ 8		0	2.16
104660 H	21 11 59.24	+24 10 04.4	8.06		G	317.996 845 02	+24.167 900 23	A	17.95	438.91	109.88	1.02	0.91	1.44	1.18	1.06	+13	− 3	+ 4	−30	+28	+ 6	+27	+ 0	+21	+17		0	−0.32
104661	21 11 59.97	+35 38 41.7	7.63		H	317.999 860 07	+35.644 903 82		4.59	15.30	5.37	0.49	0.57	0.84	0.51	0.64	−30	−10	+ 4	−22	+13	+ 0	+11	−15	+20	−26		0	−0.74
104662 H	21 12 00.27	−57 37 25.7	9.11		H	318.001 117 18	−57.623 814 61	A	1.77	3.54	−16.62	2.26	2.16	2.84	2.14	1.65	+23	−13	−10	−14	+15	+13	+11	+ 9	−13	+ 4		3	1.24
104663	21 12 01.18	+08 46 38.5	8.69		H	318.004 928 34	+08.777 358 29		3.80	−4.31	−8.01	0.95	1.31	1.29	1.33	1.20	+47	−29	−57	−11	−38	+34	−39	−77	+45	+39		0	1.33
104664	21 12 02.66	−24 07 17.3	7.99		H	318.011 075 06	−24.121 468 25		2.44	18.33	6.14	0.92	0.54	0.97	1.10	0.45	+10	−20	−13	−28	− 8	+21	− 8	−51	+23	+24		0	0.85
104665	21 12 02.89	−20 19 58.7	8.02		H	318.012 041 59	−20.332 982 41		7.50	−1.02	−44.38	0.93	0.50	1.09	1.26	0.43	+46	− 7	− 9	−10	−36	+43	−30	−52	+24	+54		0	−1.28
104666	21 12 03.21	−61 15 19.8	8.75		G	318.013 382 91	−61.255 499 75		1.78	9.72	2.79	0.55	0.83	1.25	0.70	0.80	+30	−23	−21	+26	+29	−12	+21	+ 7	−12	+ 9		2	1.45
104667	21 12 03.86	+76 18 36.6	7.10		H	318.016 078 70	+76.310 155 68		6.08	11.40	9.03	0.58	0.48	0.58	0.71	0.47	+ 0	−23	+13	−29	+ 0	+26	− 5	−24	+12	− 7		3	2.59
104668	21 12 04.76	+01 38 01.2	7.74		H	318.019 852 88	+01.633 674 68		4.36	−12.43	−29.47	1.07	0.74	1.09	1.57	1.10	+22	−11	−23	−58	− 7	+16	− 1	−43	+25	+18		0	0.60
104669	21 12 04.88	+56 43 06.8	9.30	1	H	318.020 317 41	+56.718 556 38		0.27	−3.58	−4.79	0.72	0.79	0.87	0.82	0.77	−15	−12	+15	+ 5	+ 1	− 2	− 1	−12	+13	−14		0	0.41
104670	21 12 06.03	−14 33 29.6	7.64		H	318.025 125 09	−14.558 212 91		8.04	38.75	−1.51	1.00	0.56	1.07	1.24	0.49	+42	+10	+ 7	−27	−26	+ 6	−23	−42	+16	+52		0	1.90
104671	21 12 06.93	+45 42 12.6	7.83		G	318.028 891 03	+45.703 505 21		3.02	5.62	−0.65	0.57	0.57	0.70	0.69	0.70	−14	+15	− 8	+15	+ 9	+ 1	+16	−13	+ 8	+ 7		0	−2.40
*104672	21 12 07.48	+10 38 16.8	8.08		H	318.031 149 60	+10.637 988 39		12.56	172.18	−0.59	0.85	0.75	1.05	1.07	0.78	+32	−32	−40	−22	−18	+21	−19	−42	+31	+32		0	−1.01
*104673 H	21 12 07.39	−30 35 21.3	7.17		G	318.030 799 17	−30.589 236 82	A	11.20	−0.91	−33.36	1.20	0.99	1.24	1.31	0.69	+28	−38	−36	−25	−21	+20	−29	−51	+36	+11		3	−0.72
104674	21 12 09.63	+58 53 36.8	9.31	2	H	318.040 120 69	+58.893 567 65		0.85	−4.19	−2.98	0.89	0.89	1.03	0.96	1.10	− 6	+ 3	− 9	− 4	+19	−14	+26	−16	+ 1	+33		0	−0.04
104675	21 12 09.76	−42 03 13.6	8.33		G	318.040 649 39	−42.053 771 48		3.31	−9.51	2.29	0.86	0.72	1.13	0.84	0.72	+52	− 7	+ 8	−42	−24	+15	−25	−38	+ 0	+58		0	2.54
104676	21 12 10.68	+58 54 12.6	8.12		H	318.044 502 11	+58.903 487 56		1.40	−4.55	−1.87	0.57	0.58	0.66	0.62	0.72	− 4	+ 4	− 3	− 1	+19	−11	+26	−12	+ 1	+29		0	0.63
104677	21 12 12.25	+11 46 53.6	6.96		H	318.051 045 24	+11.781 542 81		0.88	5.51	−15.94	0.74	0.58	0.90	0.84	0.55	+46	−29	−31	−19	−32	+29	−27	−13	+18	+58		0	1.64
104678	21 12 12.87	+40 09 00.6	7.64		H	318.053 644 90	+40.150 172 45		3.50	−22.23	−28.03	0.49	0.55	0.72	0.56	0.58	− 7	+ 1	+ 7	+ 1	− 4	+ 1	− 3	+ 1	+ 3	− 6		0	0.17
104679	21 12 13.05	+19 03 25.4	9.92		H	318.054 394 16	+19.057 067 00		3.19	−13.24	−10.41	1.25	0.86	1.52	1.80	0.97	−16	+13	− 4	+ 3	+12	+ 6	+ 6	+25	+ 7	+ 5		0	−1.31
104680	21 12 13.67	−40 16 07.8	5.83		H	318.056 950 50	−40.268 828 40		30.90	57.41	−219.43	0.70	0.52	0.84	0.79	0.45	+51	−28	−38	−41	−32	+31	−20	−23	+15	+20		0	0.41
104681	21 12 16.85	+53 49 53.4	7.74		H	318.070 205 47	+53.831 511 85		3.49	18.74	14.77	0.57	0.60	0.70	0.58	0.61	− 4	+11	+22	− 4	− 8	−20	− 4	−22	− 7	− 2		0	0.85
104682	21 12 17.48	+72 28 17.8	8.50		G	318.072 841 08	+72.471 609 48		7.51	−7.84	4.81	0.64	0.58	0.67	0.74	0.62	− 5	− 3	+10	+19	+ 4	+10	+ 5	− 5	−13	+ 6		0	−0.41
104683	21 12 17.51	−27 54 16.2	7.92		H	318.072 938 40	−27.904 499 71		2.53	6.27	−14.47	0.94	0.61	1.08	1.13	0.47	+16	− 9	−25	−24	−16	+39	−11	−57	+28	+19		0	−1.03
104684	21 12 17.57	−08 21 25.0	8.95		H	318.073 225 46	−08.356 933 37		0.56	22.14	10.98	1.37	0.65	1.56	1.95	0.64	+23	−18	−23	+29	−19	+37	− 8	+ 1	+30	+35		0	3.16
104685	21 12 19.05	−70 09 41.5	8.05	1	H	318.079 369 12	−70.161 533 30		2.88	19.60	−22.17	0.62	0.72	1.00	0.77	0.89	−23	−10	−11	+22	−16	−17	−19	+18	− 2	−38		1	−0.47
104686	21 12 20.05	−04 33 36.7	8.37		H	318.083 531 19	−04.560 186 40		2.50	20.81	−15.60	1.09	0.60	1.20	1.81	0.57	+19	+ 6	−18	+26	−42	+38	−17	+18	+ 4	+31		0	−0.53
104687 H	21 12 22.56	−15 00 00.0	7.44		G	318.094 000 19	−15.000 004 22	A	20.87	78.03	−39.58	2.35	1.45	1.99	2.14	0.96	+33	+20	+ 3	−28	−18	+24	−14	−36	+22	+53		4	1.76
104688	21 12 22.60	+30 53 48.4	8.03	2	H	318.094 178 50	+30.896 780 75		−0.10	4.16	7.30	0.56	0.60	0.95	0.71	0.66	+12	− 3	− 4	+45	+23	−13	+19	+33	+ 6	+ 3		0	−0.48
104689	21 12 23.40	+42 21 22.3	8.68		H	318.097 514 21	+42.356 206 70		4.20	−2.57	−1.73	0.66	0.72	0.91	0.72	0.77	+ 0	−15	+ 5	+ 7	+14	− 2	+14	+ 2	+ 1	+ 9		0	1.04
104690	21 12 25.22	−76 56 02.8	8.67		H	318.105 101 73	−76.934 114 99		2.23	−7.93	−3.18	0.71	0.78	0.94	0.97	1.02	−12	− 5	+ 0	+ 8	+ 6	+ 8	+ 3	−27	−21	−25		0	−0.74
104691	21 12 25.80	−77 45 40.6	9.64	1	H	318.107 506 31	−77.761 274 66		4.34	2.93	−10.74	0.85	0.86	1.12	1.08	1.09	−17	+ 2	+12	+21	−16	+10	−17	+25	−10	−24		1	−0.22
104692	21 12 26.29	+67 27 37.7	8.47		H	318.109 561 80	+67.460 465 71		3.67	7.99	−2.20	0.65	0.58	0.68	0.82	0.68	− 1	−12	+13	− 8	+ 9	+ 0	+ 8	− 1	+ 6	+ 1		0	1.10
104693	21 12 26.55	−47 54 32.6	9.17		H	318.110 622 45	−47.909 052 23		4.86	−14.28	−29.85	1.06	0.88	1.40	1.16	0.77	+19	−22	− 7	−32	−10	+16	−11	−51	+ 6	+19		2	1.39
104694	21 12 27.86	+39 20 50.9	8.57		G	318.116 088 12	+39.347 467 14		1.56	1.93	−3.55	0.59	0.62	0.86	0.67	0.67	− 9	+ 0	− 3	+18	+ 2	− 7	+ 1	− 7	+ 2	−10		0	−0.92
104695	21 12 28.39	+44 31 54.2	7.74	1	H	318.118 291 60	+44.531 718 72		−0.62	−1.27	−6.08	0.63	0.53	0.74	0.82	0.57	− 5	+23	− 1	−25	− 5	− 1	+ 0	− 8	+14	− 6		0	0.78
104696	21 12 29.10	+33 14 21.8	7.28	1	H	318.121 266 78	+33.239 389 38		3.39	−16.58	−17.71	0.41	0.54	0.87	0.57	0.63	−40	− 4	− 4	−18	+13	− 4	+ 9	− 3	+19	−31		0	−0.40
*104697	21 12 29.35	+45 51 36.2	7.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
104601	10.427	0.036	9.840	0.033		0.540	0.015	G	0.61	0.02	H	9.8698	0.0039	0.028	102		9.80	9.91					1							G
104602	10.598	0.030	8.800	0.013		1.497	0.026	T	1.52	0.04	L	8.7326	0.0022	0.019	129		8.70	8.76					1							
104603	9.414	0.021	8.241	0.014		1.006	0.020	T	0.98	0.02	L	8.2997	0.0014	0.013	68		8.28	8.33		C			1							
104604	7.772	0.012	7.152	0.010	A	0.575	0.002	G	0.65	0.00	H *	7.1002	0.0019	0.025	92	*	7.08	7.19	0.89	P 1 A	21114−5220	I 1	2 C	A	AB	131	1.308	0.020	1.58	0.04	S P
104605	8.035	0.008	7.943	0.011	*	0.144	0.005	G	0.16	0.01	H *	7.9566	0.0013	0.019	116	*	7.92	7.99		U 2	21114+5737	M 1	2 C	A	AB	10	0.169	0.012	1.54	0.30	S
104606						1.262	0.002	G	1.32	0.14	K	11.9090	0.0082	0.067	63		11.76	12.00					1							G
104607	7.792	0.005	7.769	0.007		0.037	0.003	G	0.05	0.00	H	7.7830	0.0011	0.012	200		7.76	7.80					1							S
104608	11.430	0.119	11.119	0.143		−0.012	0.100	G	0.01	0.09	R	11.0134	0.0050	0.033	79		10.93	11.06					1							G
104609	7.169	0.005	7.134	0.006		0.037	0.007	T	0.05	0.01	L	7.1496	0.0011	0.009	122		7.13	7.18					1							S
104610						1.301	0.007	G	1.50	0.01	I	11.0889	0.0045	0.037	97		11.04	11.16		C			1							G
104611	9.084	0.013	7.851	0.008		1.053	0.012	T	1.02	0.01	L	7.9267	0.0013	0.011	111		7.90	7.94		C			1							
104612	10.779	0.046	9.835	0.032	*	0.833	0.042	T	0.85	0.03	L *	9.8480	0.0031	0.026	107	*	9.80	9.89		R	21115+2144	I 1	2 C	A	AB	77	0.485	0.012	1.72	0.06	
104613	10.270	0.029	9.974	0.035		0.281	0.048	T	0.32	0.06	L	10.2742	0.0664	0.413	94		9.37	10.47	0.48	P 1 A			1							G
104614	8.518	0.012	7.992	0.013	*	0.533	0.015	G	0.61	0.02	H *	8.1426	0.0017	0.014	140	*	8.11	8.17		D	21115+4115	I 1	2 C	A	AB	124	2.734	0.004	0.19	0.01	
104615	7.957	0.009	7.546	0.009	*	0.389	0.012	T	0.45	0.01	L *	7.6109	0.0012	0.010	112	*	7.60	7.63		D	21115+7050	H 1	2 C	A	AB	136	0.319	0.018	2.54	0.16	S
104616	8.834	0.018	8.343	0.017	A	0.480	0.015	G	0.55	0.02	H	8.4122	0.0071	0.016	78	A	8.38	8.44		C	21116−0118	I 1	2 C	B	AB	136	11.292	0.030	3.06	0.12	S
104617	9.435	0.013	8.719	0.011		0.630	0.015	G	0.70	0.01	H	8.7789	0.0014	0.017	174		8.76	8.81					1	S						
104618	8.012	0.009	7.737	0.010		0.262	0.013	T	0.29	0.02	L	7.7786	0.0013	0.010	96		7.76	7.81		C			1							S
104619	9.178	0.016	8.661	0.016	A						T *	8.2516	0.0022	0.023	106	*	8.22	8.35		D	21116−2307	I 1	2 C	A	AB	304	8.826	0.005	0.51	0.02	S
104620	8.363	0.011	7.054	0.007		1.112	0.010	T	1.07	0.02	A	7.0993	0.0013	0.010	95		7.08	7.12		C			1							S
104621	10.602	0.042	9.199	0.021		1.186	0.037	T	1.15	0.03	L	9.2647	0.0022	0.018	87		9.22	9.30		C			1							
104622	8.912	0.012	7.633	0.008	A	1.200	0.495	G	1.04	0.01	L *	7.6370	0.0010	0.009	111	*	7.62	7.65		D	21116−0307	I 1	2 C	A	AB	246	7.736	0.030	3.14	0.06	S
104623						1.763	0.020	G	1.90	0.15	K	11.7497	0.0084	0.063	56		11.63	11.85					1							D
104624	10.325	0.041	9.743	0.036		0.546	0.040	T	0.62	0.04	L	9.8364	0.0032	0.026	109		9.79	9.89					1							
104625	9.409	0.019	8.862	0.018		0.519	0.019	T	0.59	0.02	L	8.9412	0.0015	0.013	116		8.92	8.97		C			1							
104626	8.204	0.012	7.933	0.012		0.321	0.015	G	0.37	0.02	H	7.9661	0.0019	0.015	61		7.94	7.99					1							S
104627	9.900	0.024	8.473	0.013		1.205	0.021	T	1.16	0.02	L	8.4983	0.0021	0.019	99		8.48	8.53					1							
104628	9.620	0.018	8.496	0.012		0.968	0.017	T	0.95	0.01	L	8.5540	0.0016	0.013	120		8.53	8.58		C			1							
104629	8.692	0.013	8.589	0.016		0.100	0.019	T	0.11	0.02	L	8.6060	0.0021	0.017	81		8.58	8.65					1							
104630	7.110	0.005	7.095	0.006		0.019	0.007	T	0.04	0.01	L	7.1065	0.0008	0.008	113		7.09	7.12		C			1							S
104631	10.769	0.053	10.216	0.048		0.524	0.053	T	0.60	0.06	L	10.3227	0.0030	0.022	89		10.29	10.36		C			1							
104632	8.464	0.010	7.035	0.006		1.206	0.009	T	1.17	0.01	L	7.0524	0.0011	0.010	110		7.03	7.07					1							S
104633	11.126	0.055	10.313	0.045		0.718	0.054	T	0.77	0.04	L	10.4091	0.0029	0.033	100		10.34	10.47					1							
104634	6.829	0.006	6.496	0.005		0.316	0.007	T	0.36	0.01	L	6.5465	0.0024	0.021	102		6.52	6.58	0.10	P 1 A			1							S P
104635	10.449	0.020	9.957	0.019		0.474	0.021	T	0.55	0.02	L	10.0227	0.0048	0.076	253		9.83	10.12		U 2			1 X	S						
104636	10.515	0.056	9.894	0.051		0.578	0.066	T	0.65	0.06	L	10.1199	0.0040	0.026	57		10.06	10.17		C			1							G
104637	8.916	0.010	8.432	0.010		0.456	0.013	T	0.53	0.01	L	8.4959	0.0012	0.014	158		8.47	8.52		C			1							
104638	8.432	0.009	8.401	0.011		0.033	0.013	T	0.05	0.01	L	8.4262	0.0015	0.016	129		8.40	8.45					1							S
104639	9.065	0.020	8.559	0.019		0.486	0.021	T	0.56	0.02	L	8.6152	0.0024	0.016	68		8.59	8.65		C			1							S
104640	9.632	0.025	7.915	0.012		1.460	0.015	G	1.40	0.03	L	7.9005	0.0014	0.010	80		7.89	7.92		C			1							
104641	8.899	0.016	8.499	0.016		0.378	0.021	T	0.44	0.02	L	8.5692	0.0016	0.014	88		8.54	8.60		C			1							S
104642	5.762	0.009	5.728	0.010	*	0.110	0.009	G	0.12	0.01	H *	5.6772	0.0007	0.007	119	*	5.67	5.69		D	21118+5959	I 1	2 C	A	AB	215	1.035	0.002	0.61	0.01	S
104643	6.647	0.003	6.811	0.005		−0.143	0.005	T	−0.14	0.01	L	6.8013	0.0016	0.013	152		6.78	6.82	18.05	P 1 A	21118+2943	I 1	1							S
104644						1.586	0.008	G	2.26	0.02	A	12.0903	0.0094	0.071	98		11.98	12.22					1							G
104645						1.400	0.015	G	1.67	0.04	I	12.0850	0.0079	0.073	96		11.93	12.20		U										D G
104646											T	11.4531	0.0047	0.048	134		11.35	11.53					1 X							G
104647	7.805	0.007	7.937	0.008		−0.110	0.015	G	−0.09	0.02	H	7.9258	0.0014	0.014	158		7.90	7.95					1							S
104648	8.788	0.012	7.454	0.007		1.132	0.011	T	1.10	0.01	L	7.4956	0.0010	0.011	117		7.48	7.52					1							S
104649	10.566	0.047	10.219	0.056		0.336	0.066	T	0.39	0.09	L	10.2551	0.0028	0.023	107		10.22	10.30		C			1							
104650	9.609	0.011	8.645	0.008	*	0.847	0.010	T	0.86	0.01	L *	8.7159	0.0014	0.023	258	*	8.68	8.76		D	21119−6617	H 1	2 C	A	AB	88	0.270	0.022	2.30	0.24	
104651	10.796	0.058	9.477	0.030		1.120	0.051	T	1.08	0.05	L	9.4983	0.0020	0.013	69		9.48	9.52		C			1							
104652	8.485	0.010	8.271	0.012		0.204	0.015	T	0.22	0.02	L	8.2996	0.0014	0.013	111		8.28	8.32					1							S
104653	7.742	0.006	6.640	0.004		0.951	0.006	T	0.94	0.00	L	6.7039	0.0007	0.008	193		6.69	6.72		C			1							S
104654	9.572	0.021	8.934	0.019		0.593	0.025	T	0.66	0.02	L	9.0048	0.0018	0.015	99		8.98	9.04					1							
104655	9.058	0.016	8.635	0.016		0.400	0.021	T	0.47	0.02	L	8.7047	0.0020	0.017	80		8.68	8.74		C			1							S
104656	9.005	0.013	8.715	0.014		0.276	0.018	T	0.31	0.02	L	8.7754	0.0015	0.014	122		8.76	8.80		C			1							
104657	8.958	0.016	7.679	0.010	*	1.089	0.015	T	1.05	0.02	L *	7.7312	0.0016	0.011	101	*	7.72	7.75		D	21120−0549	I 1	2 C	A	AB	194	7.712	0.012	2.70	0.05	S
104658	8.448	0.011	8.310	0.013		0.133	0.016	T	0.15	0.02	L	8.3380	0.0014	0.016	96		8.31	8.37		C			1							S
104659	7.986	0.010	7.431	0.009		0.525	0.010	T	0.60	0.01	L	7.4849	0.0014	0.009	99		7.47	7.50					1							S
104660	8.819	0.010	8.167	0.009	A	0.595	0.017	G	0.67	0.02	H *	8.1728	0.0010	0.014	161	*	8.15	8.20		D	21120+2410	I 1	2 C	A	AB	197	1.429	0.008	2.03	0.04	S
104661	9.123	0.010	7.746	0.006		1.165	0.009	T	1.13	0.01	L	7.7975	0.0012	0.014	172		7.78	7.82					1							
104662	9.076	0.027	8.666	0.024	*	0.401	0.030	T	0.47	0.03	L *	9.2049	0.0019	0.019	137	*	9.17	9.23		D	21120−5737	I 1	2 C	A	AB	200	1.487	0.006	0.06	0.03	
104663	9.043	0.021	8.706	0.022		0.320	0.028	T	0.37	0.04	L	8.7730	0.0016	0.012	57		8.75	8.79		C			1							
104664	8.033	0.008	7.981	0.011		0.047	0.012	T	0.06	0.01	L	8.0068	0.0012	0.009	107		7.99	8.02		C			1							S
104665	8.633	0.007	8.077	0.007		0.526	0.007	T	0.60	0.01	L	8.1336	0.0012	0.010	158		8.11	8.15		C			1							S
104666	10.036	0.019	8.905	0.012		1.009	0.003	G	0.98	0.00	H	8.9322	0.0014	0.019	221		8.90	8.97		C			1							
104667	6.970	0.005	7.088	0.007		−0.102	0.008	T	−0.09	0.01	L	7.0712	0.0012	0.011	110		7.05	7.09			21121+7619	I 1	1							S
104668	9.462	0.020	7.888	0.011		1.320	0.018	T	1.28	0.02	L	7.8967	0.0013	0.011	75		7.88	7.92		C			1 G							S
104669	9.635	0.022	9.299	0.024		0.319	0.030	T	0.37	0.04	L	9.3751	0.0033	0.023	91		9.32	9.40		U			1							
104670	7.954	0.009	7.677	0.012		0.260	0.015	G	0.29	0.02	H	7.7149	0.0013	0.010	95		7.69	7.73		C			1							S
104671	7.704	0.009	7.796	0.011		−0.102	0.006	G	−0.09	0.01	H	7.8119	0.0011	0.013	122		7.79	7.83		D	21121+4542	I 1	1	S						S
104672	8.729	0.018	8.123	0.016		0.560	0.015	G	0.63	0.01	H	8.1990	0.0015	0.012	81		8.18	8.22		C	21121+1039	I 1	1							S
104673	7.630	0.008	7.155	0.009	*	0.441	0.004	G	0.51	0.00	H *	7.2719	0.0008	0.008	96	*	7.25	7.29		D	21121−3035	I 1	2 C	A	AB	232	2.072	0.008	2.03	0.02	S
104674	9.444	0.020	9.271	0.025		0.166	0.030	T	0.18	0.03	L	9.3630	0.0038	0.035	104		9.30	9.42		U 2	21122+5854	I 2	1							
104675	8.964	0.011	8.397	0.010		0.530	0.013	T	0.60	0.01	L	8.4407	0.0014	0.015	142		8.41	8.48		C			1							S
104676	8.310	0.010	8.128	0.011		0.174	0.014	T	0.19	0.02	L	8.1839	0.0017	0.012	104		8.16	8.20		C	21122+5854	I 2	1							
104677	9.122	0.014	7.160	0.006		1.627	0.012	T	1.65	0.01	L	7.0725	0.0013	0.011	106		7.05	7.09					1							S
104678	9.500	0.014	7.794	0.007		1.424	0.012	T	1.41	0.02	L	7.7792	0.0012	0.014	167		7.76	7.81					1							
104679	10.254	0.025	9.918	0.029		0.319	0.036	T	0.37	0.05	L	10.0002	0.0026	0.031	128		9.95	10.05		C			1							G
104680	6.349	0.004	5.875	0.004		0.450	0.004	G	0.52	0.00	H	5.9292	0.0006	0.006	108		5.92	5.94					1							S
104681	9.097	0.013	7.853	0.008		1.061	0.012	T	1.03	0.01	L	7.9098	0.0013	0.010	108		7.89	7.93		C			1							
104682	9.042	0.014	8.554	0.013		0.506	0.015	G	0.58	0.02	H	8.6084	0.0013	0.013	116		8.58	8.64					1							
104683	9.613	0.020	8.059	0.011		1.304	0.018	T	1.26	0.02	L	8.0784	0.0011	0.010	100		8.06	8.10		C			1							S
104684	10.363	0.040	9.054	0.022		1.082	0.010	G	1.04	0.01	H	9.1220	0.0020	0.013	81		9.10	9.14		C			1							
104685	9.771	0.017	8.192	0.009		1.324	0.015	T	1.29	0.02	L	8.2042	0.0019	0.017	161		8.17	8.23		M			1							
104686	9.585	0.018	8.475	0.012		0.957	0.017	T	0.94	0.01	L	8.5321	0.0013	0.013	121		8.51	8.55		C			1							S
104687	8.146	0.031	7.395	0.027	*	0.654	0.041	G	0.72	0.04	H *	7.5511	0.0021	0.014	96	*	7.52	7.58		D	21124−1500	I 1	2 C	A	AB	311	4.014	0.003	0.06	0.01	S
104688	10.233	0.025	8.242	0.010		1.687	0.022	T	2.16	0.06	O	8.1011	0.0020	0.023	177		8.07	8.14		U 2			1							
104689	9.948	0.020	8.800	0.013		0.986	0.019	T	0.97	0.01	L	8.8410	0.0018	0.018	134		8.81	8.88					1							
104690	9.956	0.022	8.774	0.014		1.013	0.020	T	0.99	0.02	L	8.8371	0.0025	0.020	117		8.80	8.87					1							
104691	10.188	0.022	9.668	0.021		0.498	0.023	T	0.57	0.02	L	9.7527	0.0026	0.026	136		9.70	9.80		U			1							
104692	9.966	0.026	8.582	0.014		1.171	0.023	T	1.13	0.02	L	8.6332	0.0016	0.011	98		8.62	8.65		C			1							
104693	10.622	0.040	9.303	0.022		1.120	0.036	T	1.08	0.04	L	9.3411	0.0024	0.018	109		9.31	9.37		C			1							
104694	8.531	0.008	8.533	0.011		0.000	0.015	G	0.02	0.01	H	8.5678	0.0014	0.020	158		8.54	8.60					1							
104695	7.997	0.008	7.778	0.010		0.209	0.012	T	0.23	0.01	L	7.8086	0.0023	0.018	116		7.78	7.84		U			1							S
104696	9.248	0.010	7.448	0.004		1.499	0.009	T	1.53	0.01	L	7.4103	0.0009	0.013	258		7.39	7.43		M			1							S
104697	9.068	0.014	7.923	0.009		1.000	0.015	G	0.98	0.01	H	7.9754	0.0016	0.012	114		7.95	8.00		C	21125+4552	I 1	1	S						
104698	9.944	0.032	8.684	0.019		1.074	0.029	T	1.04	0.02	L	8.7120	0.0017	0.014	67		8.69	8.75					1							
104699	7.189	0.004	7.329	0.006		−0.122	0.006	T	−0.11	0.01	L	7.3120	0.0010	0.011	162		7.29	7.33		C	21125+3834	I 1	1							S
104700	10.558	0.048	9.893	0.042		0.606	0.048	T	0.68	0.04	L	9.8824	0.0032	0.025	78		9.85	9.93		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
104701 H	21 12 31.11	+28 20 39.1	8.23	H	318.129 610 61	+28.344 205 32	*	9.74	23.84	−10.53	0.74	0.55	1.02	0.84	0.55	−17	+ 6	− 3	+34	+19	−20	+16	+40	+ 6	−19	1	1.41
104702	21 12 31.13	−61 57 38.2	9.95	H	318.129 694 14	−61.960 620 96		3.53	12.36	−16.80	1.25	1.39	2.37	1.40	1.55	+12	− 8	−13	+47	+20	− 3	+18	+18	−11	+ 3	0	
104703	21 12 31.16	+32 01 49.9	8.46	H	318.129 834 19	+32.030 516 06		0.01	3.12	−1.56	0.59	0.63	1.00	0.68	0.67	− 2	+ 5	+ 4	+35	+19	−22	+20	+18	+20	− 5	0	−0.47
104704 H	21 12 32.55	−41 48 24.7	8.83	H	318.135 625 83	−41.806 868 16	*	6.25	92.00	−92.03	6.13	2.06	2.01	1.48	1.23	+43	− 6	− 4	−20	−32	− 5	−13	−43	− 6	+68	1	−0.03
104705 H	21 12 34.55	−60 02 55.1	7.58	G	318.143 955 79	−60.048 652 25	A	6.38	13.30	−25.31	1.28	1.30	1.58	1.64	1.03	−13	+15	−41	− 4	+42	−39	+25	+16	+ 5	− 1	2	0.70
104706	21 12 35.01	−17 00 43.0	9.71	H	318.145 874 20	−17.011 944 09		3.41	4.99	−12.14	1.62	0.87	2.18	1.95	0.78	+50	−46	−28	−29	−28	+61	−31	−34	+45	+59	0	1.20
104707	21 12 35.46	+69 24 43.7	10.19	H	318.147 769 20	+69.412 139 10		3.29	7.45	−3.64	1.06	1.04	1.20	1.38	1.20	− 2	− 2	+20	+ 3	+12	−26	+16	+10	+13	+ 8	0	−1.19
104708	21 12 36.74	−21 00 42.9	7.91	H	318.153 094 16	−21.011 924 69		3.67	−19.32	−6.18	1.00	0.50	1.11	1.30	0.42	+51	− 7	− 8	−13	−42	+36	−35	−54	+18	+56	0	1.03
104709	21 12 37.33	+45 47 42.5	8.63	H	318.155 523 51	+45.795 140 54		1.42	0.27	−3.40	0.69	0.68	0.85	0.83	0.79	− 7	+11	+ 1	+24	+ 9	+ 4	+15	− 5	+10	+13	0	−1.37
104710	21 12 38.49	+18 07 56.4	8.89	H	318.160 377 45	+18.132 338 60		3.80	8.19	1.22	1.06	0.68	1.30	1.30	0.84	+ 1	−23	+10	+28	+18	−10	+24	+10	− 8	+29	2	1.55
104711	21 12 39.25	+44 04 07.5	7.89	H	318.163 546 93	+44.068 754 33		3.49	21.84	12.35	0.63	0.56	0.76	0.72	0.59	−13	+ 9	− 2	− 2	+ 2	− 3	+ 3	−18	+ 7	−13	0	−1.13
104712	21 12 39.46	−38 40 55.7	8.66	H	318.164 401 99	−38.682 144 57		2.07	−2.81	−8.80	1.09	0.67	1.26	1.69	0.65	+31	+ 2	−19	+22	−33	+38	−30	− 9	− 3	− 6	0	−1.32
104713	21 12 41.44	−15 50 54.3	8.55	H	318.172 681 14	−15.848 423 55		4.48	12.79	5.70	1.14	0.67	1.47	1.54	0.61	+45	+ 4	− 3	−13	−25	+51	−21	−41	+33	+59	0	0.47
104714	21 12 41.95	+46 13 37.6	9.25	H	318.174 787 86	+46.227 117 52		1.35	−0.41	−3.57	0.79	0.77	0.96	0.94	0.91	−12	+11	− 4	+10	+ 4	+ 4	+ 5	−15	− 9	− 2	0	−0.13
104715	21 12 44.33	+49 19 46.6	7.72	H	318.184 695 84	+49.329 613 26		3.92	9.52	2.36	0.56	0.53	0.68	0.68	0.56	−11	−19	+16	+ 2	− 8	−13	− 8	−10	+ 9	−23	1	0.25
104716	21 12 45.28	+84 15 31.2	6.90	H	318.188 675 16	+84.258 667 25		2.91	18.41	−4.08	0.52	0.48	0.58	0.59	0.56	+ 4	−27	− 4	− 5	− 1	− 1	+ 6	+ 1	−24	+ 9	0	0.42
104717	21 12 45.34	+02 38 34.0	6.98	H	318.188 920 67	+02.642 785 04		8.85	−27.73	−20.00	1.09	0.64	1.07	1.31	0.77	−14	+ 4	−32	−46	+20	+ 5	+18	−35	+45	+ 4	0	0.74
104718	21 12 46.80	−35 45 45.7	7.48	H	318.194 996 80	−35.762 707 77		4.73	29.60	−44.09	0.87	0.66	0.95	0.89	0.52	+14	−33	−29	−15	−21	+28	−18	−50	+18	+ 5	0	2.51
104719	21 12 47.25	+60 05 52.8	6.91	2 H	318.196 874 74	+60.098 010 33		0.31	−2.38	−3.76	0.49	0.47	0.55	0.48	0.50	− 6	+ 9	− 5	+ 9	+24	−14	+28	− 3	+ 0	+20	3	2.15
*104720	21 12 47.47	−07 09 23.3	8.25	H	318.197 806 69	−07.156 476 17		1.05	12.03	−1.93	1.03	0.64	1.37	1.93	0.61	+22	+ 1	−33	+29	−40	+60	−10	+ 1	+26	+37	0	0.95
*104721	21 12 47.46	−51 30 48.8	7.41	G	318.197 743 58	−51.513 566 20		18.72	37.32	−19.80	0.72	0.60	0.97	0.89	0.56	+16	−18	−28	− 2	−19	+27	−17	−36	+18	+ 4	0	0.86
104722	21 12 47.95	−26 42 10.6	8.15	H	318.199 777 12	−26.702 936 98		3.76	−4.94	−18.44	0.93	0.57	1.00	1.09	0.45	+16	−27	−33	−27	−15	+27	−15	−57	+33	+16	0	0.82
104723	21 12 50.18	+60 41 44.9	10.52	H	318.209 077 49	+60.695 797 70		0.91	−10.86	−7.60	1.04	0.99	1.18	1.05	1.07	+ 2	+ 0	+ 1	−10	+24	+ 6	+24	− 3	+10	+33	2	−0.11
104724	21 12 52.86	−64 07 14.8	8.37	H	318.220 242 12	−64.120 766 60		1.24	20.17	−2.64	0.68	0.67	1.18	0.86	0.79	−17	− 7	−11	− 2	+22	− 3	+21	− 5	−22	− 9	3	1.56
104725	21 12 53.22	+16 04 52.1	8.98	H	318.221 769 65	+16.081 139 20		0.40	7.02	3.72	1.06	0.98	1.27	1.41	0.96	+28	−19	−27	+17	−25	+25	−18	−37	+24	+31	0	0.09
104726	21 12 53.23	+07 41 33.0	7.41	G	318.221 806 47	+07.692 512 09		11.04	−59.11	−46.45	0.83	0.78	0.98	1.17	0.92	+17	−11	−25	−14	−12	+27	− 7	−47	+28	+27	0	−1.17
104727	21 12 53.34	+25 11 52.1	8.49	G	318.222 254 90	+25.197 809 63		8.39	39.59	−17.00	0.62	0.61	0.95	0.71	0.77	+16	+ 6	− 5	+ 1	+10	−17	+10	+ 6	− 1	+37	0	−1.99
104728	21 12 53.38	+35 47 51.8	6.75	H	318.222 432 36	+35.797 719 06		5.58	−22.53	−23.41	0.38	0.42	0.62	0.40	0.44	−26	− 4	+ 2	−22	+ 8	− 6	+ 7	−12	+15	−21	0	0.22
104729	21 12 53.90	+15 35 22.3	8.07	H	318.224 572 54	+15.589 540 41		7.50	48.56	39.62	0.89	0.68	1.09	1.24	0.69	+ 9	−10	−23	+14	−22	+19	−12	−23	+22	+24	4	1.52
104730	21 12 54.60	−66 55 44.6	9.27	1 H	318.227 519 68	−66.929 053 59		0.28	15.12	−18.40	0.70	0.86	1.31	0.77	0.95	−36	−19	+23	+ 7	− 8	− 6	− 9	+15	+14	−44	2	1.29
104731	21 12 55.41	+21 04 06.7	8.02	H	318.230 864 20	+21.068 519 41		4.38	26.86	−13.00	0.64	0.62	1.02	0.79	0.81	+ 6	− 3	− 7	+ 3	+14	−12	+13	+10	+ 3	+18	0	0.44
104732	21 12 56.18	+30 13 37.5	3.21	G	318.234 089 77	+30.227 081 28		21.62	6.87	−68.12	0.34	0.39	0.63	0.41	0.42	− 8	+ 0	−14	+23	+20	−20	+20	+ 7	−17	0	−1.81
104733	21 12 57.65	+30 48 33.3	7.32	H	318.240 208 97	+30.809 246 87		37.12	−18.95	109.77	0.46	0.50	0.80	0.58	0.54	+ 1	+ 1	− 4	+45	+19	− 5	+14	+29	+ 5	− 5	0	0.54
104734	21 12 59.19	+28 09 17.8	7.83	H	318.246 641 17	+28.154 945 48		3.71	−11.12	−45.46	0.66	0.52	0.95	0.78	0.52	−16	+10	+ 0	+22	+23	−21	+20	+37	+10	−19	0	0.54
104735	21 12 59.84	+02 48 09.2	7.73	H	318.249 315 36	+02.802 550 77		14.52	33.67	38.04	1.13	0.72	1.22	1.39	0.82	− 1	− 8	−35	−39	+16	+ 6	+10	−37	+48	+ 7	0	1.74
104736	21 13 00.18	+77 59 39.9	9.49	H	318.250 732 92	+77.994 429 45		5.01	14.08	41.01	0.70	0.71	0.77	0.80	0.78	+ 2	− 4	+ 4	+ 2	+17	− 8	+17	− 6	+ 4	+ 6	1	0.23
104737	21 13 02.34	+46 56 46.5	7.97	H	318.259 765 79	+46.946 238 07		3.41	0.37	−2.63	0.59	0.55	0.69	0.68	0.57	−17	+ 9	+ 2	+27	− 7	+ 7	− 9	− 4	+ 3	−25	0	−0.58
104738	21 13 02.93	−39 25 28.7	5.25	H	318.262 197 80	−39.424 643 94		29.96	187.36	−114.38	0.72	0.47	0.97	0.92	0.42	+50	−32	−43	−13	−46	+59	−35	−20	+13	+13	0	−1.21
104739	21 13 05.28	+58 03 13.8	8.36	H	318.271 987 68	+58.053 828 31		3.89	27.99	11.52	0.65	0.66	0.74	0.66	0.67	−14	+15	− 1	− 8	+18	−10	+23	−25	+17	+ 3	0	0.22
104740	21 13 08.07	−01 07 46.2	7.50	H	318.283 626 89	−01.129 510 56		2.71	−23.42	−3.58	1.29	0.71	1.15	1.82	0.79	+10	+24	−14	−60	− 6	−27	−10	−46	+14	+22	0	−0.84
104741	21 13 08.28	+39 41 24.1	8.92	H	318.284 519 59	+39.690 019 99		1.02	2.30	−3.89	0.62	0.63	0.86	0.66	0.65	− 8	+ 3	− 1	+12	+ 4	− 7	+ 4	+ 3	− 1	− 4	0	0.71
104742	21 13 09.41	+43 52 25.6	7.71	G	318.289 223 30	+43.873 784 39		0.61	−1.34	−2.85	0.55	0.56	0.70	0.64	0.57	−17	+10	+ 7	+13	− 2	− 2	− 5	−17	− 4	−29	0	−0.22
104743	21 13 13.70	−04 16 00.3	7.95	1 H	318.307 090 79	−04.266 742 71		8.50	4.29	5.62	0.93	0.48	1.03	1.14	0.50	+32	− 8	− 2	− 8	−24	+40	−24	+14	+19	+42	0	0.66
104744	21 13 13.78	−35 08 00.0	8.82	H	318.307 419 49	−35.133 343 46		2.29	−12.55	−8.56	1.23	0.86	1.40	1.39	0.71	+ 9	−24	−16	−27	−11	+40	− 8	−48	+11	+ 3	3	0.53
104745	21 13 14.09	+35 29 22.8	7.72	H	318.308 729 14	+35.489 663 82		1.62	−3.97	−11.56	0.45	0.51	0.78	0.50	0.56	−29	−11	+11	−26	+ 9	+ 1	+ 7	− 8	+12	−26	0	0.09
104746 H	21 13 14.63	−34 29 26.0	9.25	H	318.310 968 29	−34.490 561 46	A	11.41	48.25	−9.66	2.90	2.55	2.24	3.27	1.22	− 4	−18	−33	+ 2	−25	+34	−27	−28	+22	− 5	1	−0.15
104747	21 13 15.34	+33 41 35.2	7.27	1 H	318.313 915 94	+33.693 103 60		1.88	1.89	3.30	0.34	0.49	0.78	0.44	0.58	−40	+ 2	− 8	− 2	+11	− 8	+ 8	+ 2	+25	−28	0	0.80
104748 H	21 13 16.60	+16 55 08.4	7.31	G	318.319 146 83	+16.919 000 58	A	3.82	−20.22	5.46	0.99	0.97	1.13	1.16	0.88	+28	+ 2	−34	+ 5	−23	+26	−12	−56	+32	+39	1	0.63
104749	21 13 16.86	+37 06 07.2	8.22	H	318.320 243 71	+37.101 998 51		1.69	6.57	2.75	0.50	0.56	0.80	0.48	0.57	−21	+ 9	+ 1	− 4	+ 1	− 6	+ 1	+ 1	+ 0	−25	0	−0.97
104750	21 13 17.27	−27 37 08.6	5.41	H	318.321 946 76	−27.619 058 54		8.33	98.92	−112.77	0.80	0.50	0.88	1.17	0.60	+10	− 4	−32	−29	−12	+35	− 0	−12	+19	+ 7	0	−0.51
104751	21 13 18.83	−24 50 45.4	7.35	H	318.328 472 73	−24.845 949 13		2.39	18.19	−26.63	0.85	0.55	0.92	0.99	0.44	+18	−28	−29	− 8	−18	+22	−15	−58	+27	+24	0	0.87
104752	21 13 18.94	−36 25 24.7	5.97	G	318.328 905 17	−36.423 535 99		9.67	34.19	3.61	0.75	0.56	0.80	0.83	0.47	+15	−40	−27	+ 7	−23	+11	−26	−44	+15	− 7	0	0.94
104753	21 13 19.54	−33 44 38.5	9.64	H	318.331 425 44	−33.744 040 49		3.56	24.52	−4.06	1.23	1.00	1.52	1.42	0.79	+17	− 4	−35	−12	−36	+48	−24	−46	+ 9	+11	0	−0.30
104754	21 13 20.05	+40 27 27.5	8.94	G	318.333 538 89	+40.457 645 97		0.70	1.09	−8.26	0.63	0.67	0.90	0.70	0.70	− 9	+13	+ 8	+11	+ 1	− 3	+ 0	+11	− 3	+ 2	0	−2.76
104755	21 13 20.44	−70 07 34.4	5.06	2 H	318.335 160 15	−70.126 217 25		3.67	41.42	−20.34	0.41	0.41	0.62	0.49	0.47	−20	− 9	−18	+ 6	− 5	− 7	− 5	+10	− 9	−33	0	4.04
104756	21 13 21.60	+81 13 51.5	6.12	H	318.339 979 44	+81.230 960 71		6.37	−3.11	4.49	0.46	0.42	0.48	0.54	0.43	− 7	−10	+12	+ 4	+11	+ 1	+ 7	−17	+12	−14	0	−0.61
104757	21 13 21.73	+20 14 30.1	8.49	H	318.340 530 91	+20.241 697 84		3.57	−24.16	−13.98	0.74	0.60	1.06	1.07	0.75	−10	−18	+10	−19	+25	+13	+18	+ 4	+ 4	+ 4	0	2.41
104758	21 13 22.07	+52 40 01.9	8.64	H	318.341 939 80	+52.667 192 48		3.64	28.77	19.50	0.68	0.69	0.82	0.78	0.81	− 5	−20	+12	+ 0	+13	+ 3	+16	− 3	−13	+10	3	−1.27
104759	21 13 22.35	+11 12 41.6	8.18	H	318.343 117 49	+11.211 561 66		20.27	162.24	−16.19	0.83	0.67	1.03	0.95	0.68	+48	−33	−26	−28	−35	+31	−33	−20	+22	+62	4	0.42
104760	21 13 22.55	−28 46 58.6	8.60	G	318.343 942 12	−28.782 937 76		5.65	35.41	−10.86	1.40	0.72	1.22	1.55	0.61	+ 9	+17	−14	−54	− 7	+ 1	− 7	−48	+13	+16	0	−0.21
104761	21 13 22.59	−45 38 37.4	9.09	H	318.344 112 68	−45.643 723 13		4.48	0.85	10.54	1.10	0.90	1.39	1.29	0.90	+33	−22	−13	− 9	− 1	+ 2	− 2	−19	+ 3	+35	0	−0.21
104762	21 13 25.07	+20 17 42.1	9.99	H	318.354 441 33	+20.295 039 85		−3.09	−10.87	−37.06	1.01	0.88	1.57	1.54	1.06	− 4	−12	+13	−18	+29	+18	+20	+ 7	+ 2	+ 8	1	1.08
104763	21 13 25.10	+38 24 08.0	7.77	H	318.354 579 07	+38.402 220 49		2.08	5.12	−2.74	0.50	0.56	0.77	0.52	0.57	−12	− 2	+ 3	− 4	− 4	−17	− 4	+ 7	+ 7	− 9	1	−0.69
104764	21 13 25.21	−22 45 42.5	7.53	H	318.355 052 17	−22.761 801 25		16.72	−1.12	−17.31	0.86	0.59	0.95	1.06	0.49	+16	− 5	−22	−23	−13	+22	− 8	−57	+24	+30	0	−0.64
104765	21 13 26.43	+36 37 59.7	6.07	H	318.360 104 80	+36.633 261 73		1.83	0.44	0.60	0.35	0.38	0.53	0.36	0.39	−21	− 1	+ 5	− 5	+ 5	− 1	+ 5	− 3	+ 4	−17	0	0.16
104766	21 13 27.09	−22 32 45.6	8.01	G	318.362 893 76	−22.545 989 06		13.48	−15.40	−42.17	0.98	0.65	1.05	1.32	0.55	+12	− 2	−24	−23	−10	+15	− 6	−59	+27	+26	0	−1.98
104767 H	21 13 27.24	+07 13 04.9	7.24	H	318.363 492 09	+07.218 028 21	A	11.48	26.23	−5.57	1.25	1.45	1.22	1.58	1.33	+49	− 7	− 9	− 7	−15	+17	−25	−50	+18	+37	2	0.19
104768	21 13 27.73	−49 47 40.8	8.19	H	318.365 522 37	−49.794 667 65		12.90	−38.92	24.98	0.95	0.79	1.18	1.48	0.81	+34	−12	−33	+25	+17	+ 9	+16	− 4	+13	+39	4	0.60
104769	21 13 28.23	+32 47 21.8	9.92	H	318.367 607 25	+32.789 400 62		0.84	−11.90	−4.39	0.97	0.96	1.51	1.16	1.07	−22	+ 7	−13	+17	+13	−11	+10	+29	+11	−15	3	1.09
104770	21 13 28.74	+43 07 06.9	9.77	H	318.369 752 01	+43.118 571 91		−0.02	−5.96	−7.54	0.87	0.81	1.11	1.06	0.93	−19	− 9	+ 7	+ 3	+ 8	−18	+ 7	+ 6	+ 8	−10	0	−1.03
104771 H	21 13 28.77	+15 58 56.8	6.27	G	318.369 854 52	+15.982 451 22	*	11.17	36.00	−22.94	0.69	0.59	0.85	0.90	0.62	+14	−17	−30	+11	−21	+20	−16	−32	+30	+20	0	0.07
104772	21 13 28.92	+07 10 02.7	7.15	G	318.370 513 39	+07.167 412 04		10.51	27.57	−3.51	0.86	0.91	0.93	1.08	0.96	+38	−14	−12	−25	−30	+18	−27	−67	+ 9	+41	3	−0.29
104773	21 13 29.44	−47 33 02.5	6.87	1 H	318.372 672 12	−47.550 693 01		2.00	7.99	−1.21	0.79	0.55	0.93	0.87	0.52	+20	−17	−30	−38	− 8	+18	− 7	−35	+19	+25	2	0.60
104774	21 13 30.11	−05 54 41.4	7.31	H	318.375 438 10	−05.911 506 17		3.85	9.01	0.40	0.85	0.51	0.95	1.31	0.55	+22	−17	+ 5	+12	−28	+23	−20	+14	+20	+38	2	−1.68
104775	21 13 30.61	+62 53 18.8	8.85	H	318.377 558 89	+62.888 542 39		2.01	−3.58	−5.86	0.71	0.65	0.78	0.78	0.73	+ 5	+ 2	+18	+ 7	+15	+11	+15	+ 4	+10	+27	0	0.38
104776	21 13 32.61	−54 59 19.4	7.21	H	318.385 877 09	−54.988 734 14		3.49	5.40	−3.20	0.67	0.56	0.83	0.88	0.61	− 4	− 7	− 1	+51	−14	+22	−23	+33	−12	−45	0	−0.31
104777	21 13 34.24	−19 19 36.8	11.70	G	318.392 652 96	−19.326 891 99		11.85	−246.08	−1092.85	2.56	1.37	2.90	3.47	1.30	+36	− 7	− 5	+10	−33	+33	−22	−36	+16	+50	3	1.98
104778	21 13 34.44	+50 50 52.2	9.00	H	318.393 517 62	+50.847 828 39		3.39	10.65	5.54	0.73	0.76	0.89	0.95	0.87	+ 0	− 4	+13	+11	− 3	− 4	− 3	− 8	− 3	− 2	0	−0.15
104779	21 13 34.99	+46 58 02.1	8.33	H	318.395 784 21	+46.967 248 71		2.22	2.20	14.11	0.68	0.65	0.79	0.80	0.68	−22	+ 8	+ 9	+27	− 9	+ 4	−10	− 8	−23	− 5	2	0.59
104780	21 13 35.85	+14 41 21.8	9.78	H	318.399 371 43	+14.689 384 31		19.99	236.44	1.20	1.26	1.09	1.61	1.49	1.12	+36	−17	−27	−30	−18	+ 3	−22	−34	+27	+42	0	1.14
104781	21 13 36.10	+45 10 07.6	7.33	H	318.400 423 46	+45.168 770 98		2.68	0.27	−6.41	0.53	0.51	0.65	0.64	0.56	− 2	+12	− 8	− 3	− 5	− 1	− 5	−17	+ 0	− 2	0	0.33
104782	21 13 37.26	+22 37 34.3	9.83	H	318.405 249 00	+22.626 182 18		4.19	−6.93	−10.32	1.02	0.93	1.59	1.34	1.30	+ 4	− 4	+ 3	+31	+13	−25	+19	+18	+ 3	+27	3	0.64
104783	21 13 37.32	−06 27 57.0	7.29	H	318.405 485 77	−06.465 821 27		2.96	35.09	−14.12	0.94	0.52	1.04	1.46	0.52	+20	+ 0	+ 5	+31	−31	+34	−16	+ 4	+22	+37	0	−0.14
104784	21 13 39.29	+05 58 19.8	7.97	H	318.413 695 05	+05.972 174 01		4.15	14.48	−8.71	1.15	0.86	1.25	1.59	0.85	+15	−28	−32	+15	+ 9	− 6	− 4	−47	+32	+ 6	6	0.85
104785	21 13 39.50	−09 37 41.9	9.32	H	318.414 596 24	−09.628 300 61		9.53	−47.87	16.41	1.16	0.74	1.50	1.81	0.81	+38	−10	− 7	+ 4	− 4	+47	− 2	+ 7	+32	+56	0	2.30
104786	21 13 40.32	−50 35 38.0	8.31	H	318.417 982 85	−50.593 876 62		7.63	40.42	−20.82	0.90	0.71	1.13	1.09	0.68	+28	−26	−29	+11	− 6	+17	− 3	−20	+ 8	+21	0	0.81
104787	21 13 41.86	+45 36 41.3	7.52	H	318.424 408 65	+45.611 468 14		1.64	−0.92	−2.89	0.55	0.56	0.67	0.66	0.62	− 3	+ 3	+ 1	+18	+ 7	− 7	+11	−24	+ 1	+ 8	0	−0.85
104788 H	21 13 42.46	+64 24 15.1	6.38	H	318.426 915 72	+64.404 208 24	*	24.16	17.13	−105.43	0.46	0.41	0.48	0.54	0.45	− 7	+ 0	+13	+24	+ 2	− 2	+ 3	+ 1	+10	− 4	1	0.30
104789	21 13 43.73	+48 03 41.3	8.40	G	318.432 210 63	+48.061 463 77		4.04	5.67	−1.54	0.63	0.58	0.73	0.78	0.59	−13	− 1	+ 4	− 7	− 6	+19	− 5	−20	− 3	−17	1	1.73
104790	21 13 45.86	+52 34 28.7	9.21	H	318.441 083 01	+52.574 635 05		7.35	13.05	−5.49	0.84	0.83	0.99	1.00	0.98	− 5	−18	+14	− 4	+18	+ 0	+19	− 4	− 7	+15	0	−1.43
104791	21 13 47.13	+70 01 39.5	6.67	H	318.446 385 12	+70.027 642 58		8.88	0.89	−13.42	0.55	0.47	0.53	0.71	0.50	−20	−11	+14	−23	+19	+ 2	+16	−18	+ 7	−19	0	−0.78
104792	21 13 47.49	−17 33 56.8	8.05	H	318.447 861 82	−17.565 773 20		1.80	14.38	−42.85	1.01	0.53	1.24	1.42	0.51	+35	−22	−19	− 8	−15	+47	−12	−25	+36	+50	0	−0.49
104793	21 13 47.73	−50 55 26.9	8.84	H	318.448 886 89	−50.924 129 48		7.07	26.36	−35.87	0.96	0.73	1.13	1.15	0.74	+15	−18	−12	+ 7	− 8	+20	− 7	−17	+ 8	+13	0	1.59
104794	21 13 48.43	−43 07 47.3	7.14	H	318.451 793 13	−43.129 797 53		3.05	73.33	−41.44	0.63	0.54	0.90	0.62	0.49	+35	−31	− 8	−28	−14	+33	−14	−37	+11	+41	3	0.23
104795	21 13 49.25	−11 56 52.6	8.66	H	318.455 221 11	−11.947 941 43		0.18	−28.59	−10.53	1.06	0.66	1.23	1.48	0.63	+41	−24	−20	+ 5	−30	+30	−19	+17	+19	+46	0	−0.28
104796	21 13 49.54	−81 20 18.1	9.32	H	318.456 396 84	−81.338 358 17		7.74	16.20	3.97	0.74	0.70	0.93	0.87	0.84	+ 3	−26	−12	− 4	+ 7	+11	+ 5	− 1	+14	−11	0	−0.46
104797	21 13 49.97	−66 56 56.4	8.34	H	318.458 224 75	−66.949 003 57		1.14	4.46	−0.67	0.58	0.66	1.02	0.61	0.74	−37	−11	+12	− 3	− 7	− 2	− 6	+14	+ 6	−45	1	−0.22
104798	21 13 50.77	−60 21 02.6	8.75	H	318.461 545 44	−60.350 725 44		1.55	7.65	−7.54	0.99	0.96	1.45	1.46

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
104701	8.837	0.010	8.300	0.009	*	0.504	0.012	T	0.58	0.01	L *	8.3413	0.0013	0.015	193	*	8.32	8.37		D	21125+2821	I 1	2 C S A	AS	102	0.193	0.005	0.52	0.18	
104702	10.425	0.024	9.955	0.025		0.456	0.027	T	0.53	0.03	L	10.0500	0.0026	0.032	213		9.99	10.11					1 X S							
104703	8.407	0.008	8.444	0.011		−0.029	0.012	T	−0.01	0.01	L	8.4584	0.0015	0.015	150		8.43	8.49					1							
104704	9.619	0.015	8.918	0.013	*	0.633	0.015	T	0.70	0.01	L *	8.9660	0.0017	0.019	146	*	8.93	9.00		D	21125−4148	I 1	2 C A	AS	223	0.232	0.022	1.16	0.27	S
104705	7.966	0.009	7.627	0.010	*	0.331	0.001	G	0.39	0.00	H *	7.6514	0.0020	0.016	95	*	7.62	7.67		D	21126−6003	I 1	2 C A	AB	155	0.559	0.004	1.13	0.02	S
104706	10.259	0.034	9.790	0.034		0.455	0.038	T	0.52	0.04	L	9.8080	0.0027	0.018	94		9.78	9.85		C			1							
104707	11.634	0.104	10.327	0.049		1.111	0.090	T	1.07	0.09	L	10.3591	0.0030	0.031	107		10.31	10.41		C			1							G
104708	9.310	0.012	8.024	0.007		1.094	0.011	T	1.06	0.01	L	8.0770	0.0011	0.010	159		8.06	8.09					1							S
104709	8.562	0.011	8.605	0.014		−0.036	0.015	T	−0.01	0.01	L	8.6252	0.0023	0.017	117		8.60	8.65		C			1							D
104710	9.017	0.013	8.890	0.016		0.123	0.019	T	0.14	0.02	L	8.9342	0.0022	0.017	100		8.91	8.97		C			1							
104711	9.307	0.014	8.018	0.009		1.096	0.013	T	1.06	0.01	L	8.0559	0.0013	0.012	113		8.04	8.08		C			1							
104712	10.088	0.026	8.791	0.015		1.103	0.023	T	1.07	0.02	L	8.8268	0.0020	0.015	122		8.80	8.85					1							
104713	9.558	0.017	8.661	0.013		0.798	0.016	T	0.83	0.01	L	8.7001	0.0023	0.016	104		8.68	8.73					1							
104714	9.572	0.022	9.329	0.026		0.232	0.032	T	0.26	0.04	L	9.3170	0.0022	0.018	111		9.29	9.35		C			1							G
104715	7.885	0.009	7.739	0.009		0.140	0.012	T	0.15	0.01	L	7.7722	0.0013	0.010	102		7.75	7.80		C			1							S
104716	8.469	0.010	7.037	0.006		1.208	0.009	T	1.17	0.01	L	7.0636	0.0009	0.010	127		7.04	7.08					1							S
104717	7.194	0.007	7.004	0.009		0.182	0.011	T	0.20	0.01	L	7.0451	0.0012	0.008	65		7.03	7.07					1							S
104718	8.778	0.017	7.594	0.011		1.015	0.016	T	0.99	0.01	L	7.6506	0.0017	0.011	69		7.63	7.67					1							S
104719	9.610	0.018	6.867	0.005		2.306	0.015	T	3.91	0.04	O	6.4054	0.0099	0.071	106		6.28	6.54		U 2			1 S							S
104720	9.565	0.021	8.361	0.013		0.996	0.020	G	0.97	0.02	H	8.4191	0.0013	0.012	94		8.39	8.44		C			1							S
104721	7.951	0.009	7.448	0.009		0.443	0.009	G	0.51	0.01	H	7.5220	0.0013	0.013	83		7.50	7.54					1							S
104722	8.307	0.010	8.164	0.011		0.138	0.014	T	0.15	0.01	L	8.2020	0.0011	0.010	102		8.18	8.22					1							S
104723	10.786	0.049	10.581	0.064		0.196	0.076	T	0.21	0.09	L	10.5802	0.0028	0.027	98		10.53	10.65					1							G
104724	9.944	0.017	8.547	0.009		1.181	0.015	T	1.14	0.01	L	8.5361	0.0017	0.020	196		8.51	8.57					1 S							
104725	10.779	0.055	9.115	0.023		1.391	0.047	T	1.36	0.06	L	9.1270	0.0026	0.025	82		9.09	9.16					1 S							
104726	7.913	0.010	7.456	0.010		0.432	0.003	G	0.50	0.00	H	7.5172	0.0011	0.008	68		7.50	7.53					1							S
104727	9.066	0.012	8.520	0.012		0.523	0.015	G	0.60	0.02	H	8.5977	0.0014	0.012	136		8.57	8.62					1							
104728	6.941	0.004	6.774	0.004		0.160	0.005	T	0.18	0.01	L	6.8100	0.0008	0.010	182		6.80	6.83					1							S
104729	8.724	0.015	8.126	0.013		0.525	0.008	G	0.60	0.01	H	8.1807	0.0016	0.014	82		8.15	8.20					1							S
104730	11.211	0.040	9.459	0.015		1.461	0.034	T	1.47	0.05	L	9.3960	0.0023	0.032	255		9.35	9.45		U			1							
104731	9.324	0.013	8.126	0.009		1.025	0.012	T	1.00	0.01	L	8.1840	0.0014	0.015	134		8.16	8.21		C			1							
104732	4.469	0.002	3.312	0.001		0.990	0.000	G	0.97	0.00	H	3.3743	0.0003	0.004	174		3.37	3.38			21129+3014	I 1	1 G							S
104733	8.119	0.007	7.393	0.005		0.666	0.007	T	0.73	0.01	L	7.4621	0.0008	0.010	192		7.45	7.48					1							S
104734	9.758	0.014	7.991	0.007		1.472	0.012	T	1.49	0.02	L	7.9607	0.0008	0.014	182		7.94	7.98		D			1							
104735	8.224	0.012	7.796	0.014		0.458	0.015	G	0.53	0.02	H	7.8344	0.0016	0.009	62		7.81	7.86		C	21130+0248	I 1	1							S
104736	10.185	0.031	9.528	0.027		0.610	0.035	T	0.68	0.03	L	9.6200	0.0017	0.018	120		9.59	9.65		C			1							
104737	7.956	0.008	7.949	0.012		0.011	0.013	T	0.03	0.01	L	7.9825	0.0013	0.016	127		7.96	8.01					1							
104738	5.779	0.003	5.304	0.003		0.460	0.003	T	0.53	0.00	L	5.3540	0.0005	0.005	136		5.35	5.36		C			1							S
104739	9.930	0.025	8.508	0.014		1.201	0.022	T	1.16	0.02	L	8.5246	0.0019	0.015	107		8.50	8.55					1							
104740	9.530	0.020	7.671	0.009		1.545	0.017	T	1.61	0.04	L	7.6126	0.0015	0.015	70		7.59	7.64					1							S
104741	8.893	0.010	8.919	0.013		−0.019	0.015	T	0.00	0.01	L	8.9270	0.0020	0.023	173		8.89	8.96		C			1							
104742	7.866	0.007	7.733	0.009		0.155	0.007	G	0.17	0.01	H	7.7547	0.0012	0.012	113		7.73	7.77					1							S
104743	8.334	0.010	7.998	0.013		0.319	0.015	T	0.37	0.02	L	8.0304	0.0021	0.016	103		8.01	8.06		U 2			1							S
104744	9.151	0.017	8.848	0.018		0.289	0.026	T	0.33	0.03	L	8.8944	0.0021	0.017	76		8.86	8.93		C			1							
104745	7.641	0.006	7.711	0.006		−0.059	0.008	T	−0.04	0.01	L	7.7103	0.0009	0.011	184		7.69	7.73		C			1							S
104746	9.886	0.027	9.341	0.026	*	0.517	0.028	T	0.59	0.03	L *	9.3594	0.0036	0.024	74	*	9.31	9.39			21132−3429	H 1	2 C A	AB	165	0.350	0.015	2.14	0.11	
104747	7.150	0.004	7.257	0.004		−0.092	0.005	T	−0.07	0.01	L	7.2479	0.0014	0.018	273		7.22	7.28	20.94	P 1 A			1							S
104748	9.097	0.018	7.464	0.009	A	1.370	0.015	G	1.34	0.02	H *	7.4186	0.0013	0.009	80	*	7.40	7.44		D	21133+1655	I 1	2 C B	AB	242	2.761	0.058	3.46	0.15	S
104749	8.169	0.006	8.207	0.008		−0.041	0.001	G	−0.02	0.00	H	8.2169	0.0012	0.015	165		8.19	8.24					1							
104750	7.279	0.007	5.572	0.004		1.425	0.006	T	1.41	0.01	L	5.5486	0.0008	0.007	88		5.54	5.56					1 G							S
104751	9.060	0.013	7.472	0.007		1.331	0.012	T	1.29	0.01	L	7.5033	0.0010	0.008	110		7.49	7.52		C			1							S
104752	7.201	0.007	6.069	0.006		0.967	0.002	G	0.95	0.00	H	6.1300	0.0009	0.006	62		6.12	6.14		C			1							S
104753	11.027	0.060	9.753	0.032		1.085	0.053	T	1.05	0.04	L	9.8082	0.0019	0.019	81		9.77	9.83					1							
104754	8.957	0.010	8.957	0.013		0.005	0.015	T	0.03	0.01	L	8.9589	0.0021	0.023	163		8.92	9.00		C			1							
104755	7.104	0.005	5.258	0.003		1.578	0.004	G	2.03	0.05	F	5.1359	0.0025	0.026	151		5.10	5.17		U 2			1							S P
104756	6.240	0.003	6.130	0.005		0.092	0.003	G	0.10	0.00	H	6.1546	0.0006	0.005	118		6.15	6.16					1							S
104757	9.875	0.020	8.592	0.011		1.092	0.018	T	1.05	0.02	L	8.6554	0.0016	0.016	168		8.62	8.68		C			1							
104758	8.862	0.011	8.658	0.013		0.160	0.015	G	0.18	0.01	H	8.6929	0.0014	0.014	113		8.67	8.71		C			1							
104759	8.970	0.013	8.245	0.011		0.665	0.014	T	0.73	0.01	L	8.3174	0.0014	0.013	106		8.30	8.34					1							S
104760	9.165	0.016	8.655	0.015		0.481	0.015	G	0.55	0.02	H	8.7009	0.0020	0.013	83		8.67	8.73		C			1							S
104761	10.349	0.033	9.181	0.021		1.002	0.030	T	0.98	0.02	L	9.2513	0.0023	0.018	101		9.22	9.28		C			1							
104762	11.400	0.064	10.107	0.033		1.100	0.056	T	1.06	0.06	L	10.1582	0.0028	0.028	158		10.08	10.21		C			1 S							G
104763	9.490	0.014	7.905	0.007		1.329	0.012	T	1.29	0.01	L	7.9248	0.0013	0.017	168		7.90	7.95					1							
104764	8.042	0.008	7.581	0.008		0.433	0.015	G	0.50	0.02	H	7.6309	0.0012	0.011	103		7.61	7.64		C			1							S
104765	6.337	0.002	6.103	0.003		0.223	0.003	T	0.25	0.00	L	6.1409	0.0005	0.006	184		6.13	6.15		C			1							S
104766	8.613	0.011	8.073	0.010		0.519	0.015	G	0.59	0.02	H	8.1069	0.0017	0.014	95		8.09	8.13					1							S
104767	7.610	0.007	7.301	0.009	*	0.323	0.006	G	0.37	0.01	R *	7.3204	0.0014	0.009	74	*	7.31	7.34		D	21135+0712	I 2	2 C A	AB	352	0.615	0.004	1.64	0.02	S
104768	9.090	0.017	8.303	0.014		0.714	0.017	T	0.77	0.01	L	8.3380	0.0020	0.018	85		8.31	8.37		C			1							S
104769	10.300	0.027	9.876	0.028		0.401	0.036	T	0.47	0.04	L	10.0103	0.0025	0.029	164		9.96	10.06		C			1							G
104770	11.105	0.060	9.872	0.032		1.053	0.053	T	1.02	0.04	L	9.9437	0.0026	0.028	119		9.90	9.98					1							G
104771	6.559	0.004	6.297	0.005	*	0.238	0.001	G	0.27	0.00	H *	6.3370	0.0009	0.007	74	*	6.33	6.35		D	21135+1559	I 1	2 C S A	AB	126	0.135	0.007	0.08	0.38	S
104772	7.539	0.008	7.171	0.007		0.330	0.015	G	0.38	0.02	H	7.2289	0.0013	0.011	74		7.21	7.25		C	21135+0712	I 2	1							S
104773	8.995	0.013	7.072	0.006		1.631	0.012	T	2.03	0.04	O	6.9504	0.0018	0.016	106		6.92	6.98		U 2			1							S
104774	8.524	0.011	7.419	0.007		0.953	0.010	T	0.94	0.01	L	7.4694	0.0009	0.008	104		7.46	7.48		C			1							S
104775	9.257	0.016	8.851	0.016		0.384	0.021	T	0.45	0.02	L	8.9367	0.0019	0.016	118		8.91	8.97		C			1							
104776	9.044	0.013	7.361	0.007		1.406	0.012	T	1.38	0.01	L	7.3507	0.0012	0.011	101		7.33	7.37					1							S
104777						1.234	0.020	G	1.39	0.02	I	11.7945	0.0051	0.050	135		11.71	11.87					1							D
104778	9.174	0.014	9.017	0.017		0.120	0.015	G	0.13	0.01	H	9.0435	0.0021	0.021	110		9.00	9.07					1							
104779	9.544	0.016	8.420	0.011		0.968	0.015	T	0.95	0.01	L	8.4956	0.0017	0.016	121		8.47	8.52		C			1							
104780	10.938	0.058	9.799	0.037		1.611	0.218	G	2.63	0.54	I	9.7768	0.0043	0.024	75		9.71	9.81					1							
104781	8.430	0.012	7.422	0.008		0.887	0.015	G	0.89	0.01	H	7.4906	0.0010	0.009	118		7.48	7.51		C			1							S
104782	10.038	0.028	9.855	0.034		0.175	0.041	T	0.19	0.05	L	9.8917	0.0026	0.021	103		9.86	9.94		C			1							G
104783	9.110	0.016	7.419	0.008		1.412	0.014	T	1.39	0.02	L	7.4315	0.0010	0.009	86		7.41	7.45		C			1							S
104784	9.743	0.027	8.110	0.013		1.367	0.024	T	1.34	0.03	L	8.1150	0.0022	0.016	55		8.07	8.13		C			1							
104785	10.050	0.027	9.424	0.025		0.630	0.015	G	0.70	0.01	H	9.4556	0.0024	0.017	98		9.43	9.50					1							
104786	8.700	0.011	8.343	0.012		0.329	0.001	G	0.38	0.00	H	8.3928	0.0025	0.017	87		8.36	8.42					1							S
104787	7.350	0.005	7.480	0.008		−0.112	0.008	T	−0.10	0.01	L	7.4825	0.0014	0.012	116		7.47	7.50					1							S
104788	7.134	0.005	6.459	0.004	*	0.625	0.005	T	0.69	0.00	L *	6.5140	0.0005	0.005	127	*	6.51	6.52		D	21137+6424	I 1	2 C S A	AB	266	0.195	0.004	0.13	0.10	S
104789	8.398	0.009	8.398	0.011		0.030	0.015	G	0.05	0.01	H	8.4260	0.0017	0.016	126		8.40	8.45		C			1							
104790	9.721	0.018	9.230	0.018		0.462	0.023	T	0.53	0.02	L	9.3114	0.0020	0.020	102		9.28	9.34		C			1							
104791	7.784	0.006	6.773	0.004		0.882	0.005	T	0.89	0.00	L	6.8248	0.0011	0.010	116		6.81	6.84					1							S
104792	10.113	0.029	8.241	0.012		1.556	0.025	T	1.57	0.03	L	8.1681	0.0020	0.016	91		8.14	8.19					1							
104793	9.245	0.017	8.866	0.017		0.370	0.021	T	0.43	0.02	L	8.9234	0.0024	0.018	97		8.90	8.96		C			1							S
104794	8.873	0.011	7.294	0.006		1.324	0.010	T	1.29	0.01	L	7.2897	0.0011	0.011	123		7.27	7.31					1							S
104795	9.973	0.027	8.781	0.017		1.021	0.025	T	0.99	0.02	L	8.8316	0.0017	0.014	97		8.81	8.86		C			1							
104796	9.833	0.017	9.320	0.016		0.492	0.018	T	0.56	0.02	L	9.4283	0.0019	0.022	144		9.39	9.48		C			1							
104797	10.416	0.020	8.542	0.008		1.557	0.017	T	1.57	0.02	L	8.4632	0.0018	0.022	249		8.43	8.50					1							
104798	10.662	0.040	8.902	0.016		1.467	0.034	T	1.48	0.05	L	8.8826	0.0014	0.016	98		8.85	8.92		D			1							
104799	9.913	0.025	9.542	0.027		0.372	0.007	G	0.43	0.01	H	9.6189	0.0035	0.020	90		9.59	9.65					1							
104800	10.125	0.024	9.072	0.016		0.914	0.022	T	0.91	0.02	L	9.1401	0.0019	0.020	133		9.10	9.17					1 S							

| Number | Descriptor: epoch J1991.25 | | | | | Position: epoch J1991.25 | | | Par. | Proper Motion | | Standard Errors | | | | | Astrometric Correlations (%) | | | | | | | | | | | | | | | | | | | | | | Soln | |
|---|---|---

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
104801	9.690	0.016	8.096	0.008		1.336	0.014	T	1.30	0.02	L	8.1113	0.0013	0.014	163		8.09	8.14		C			1							
104802	9.469	0.017	9.129	0.018		0.323	0.023	T	0.37	0.03	L	9.2039	0.0023	0.021	124		9.17	9.24					1							
104803	9.489	0.015	9.184	0.016		0.306	0.015	G	0.35	0.02	H	9.2242	0.0018	0.021	128		9.19	9.27		C	21139+2432	I 1	1							
104804	9.664	0.016	8.112	0.008		1.303	0.014	T	1.26	0.01	L	8.1346	0.0012	0.014	146		8.11	8.16					1							
104805	8.591	0.010	7.201	0.006		1.176	0.009	T	1.14	0.01	L	7.2430	0.0013	0.009	104		7.23	7.26					1							S
104806	10.225	0.035	8.862	0.019		1.154	0.031	T	1.12	0.03	L	8.9115	0.0015	0.012	78		8.89	8.93		C			1							
104807	9.956	0.023	9.532	0.023		0.401	0.030	T	0.47	0.03	L	9.5897	0.0022	0.022	107		9.54	9.62					1							G
104808	9.491	0.019	9.039	0.019		0.426	0.025	T	0.49	0.03	L	9.0791	0.0023	0.016	90		9.05	9.11		C			1							
104809	8.227	0.010	7.448	0.008		0.689	0.002	G	0.75	0.00	H	7.5116	0.0022	0.017	81		7.49	7.54		U			1							S
104810	7.014	0.005	6.993	0.006		0.015	0.002	G	0.03	0.00	H	7.0105	0.0009	0.009	124		6.99	7.03					1							S
104811	9.161	0.014	8.669	0.013		0.463	0.017	T	0.53	0.02	L	8.7077	0.0014	0.015	126		8.68	8.73					1							
104812	7.353	0.008	7.185	0.010	*	0.161	0.012	T	0.18	0.01	L	* 7.1706	0.0009	0.008	108	*	7.16	7.18		D	21141+5818	I 1	2 C A	AB	4	0.746	0.002	0.23	0.01	S
104813	9.753	0.025	8.492	0.015		1.075	0.023	T	1.04	0.02	L	8.5442	0.0016	0.015	66		8.51	8.59					1							
104814	7.119	0.005	7.323	0.006		−0.176	0.007	T	−0.18	0.01	L	7.3001	0.0009	0.011	168		7.28	7.32		C			1							S
104815	11.681	0.127	10.421	0.066		0.950	0.020	G	1.00	0.02	I	10.4802	0.0042	0.033	60		10.41	10.54		C			1							G
104816	10.242	0.027	8.845	0.015		1.181	0.024	T	1.14	0.02	L	8.8666	0.0021	0.021	114		8.83	8.90		C			1							
104817	8.821	0.013	7.649	0.009		1.005	0.012	T	0.98	0.01	L	7.7172	0.0010	0.008	96		7.70	7.73		C			1							S
104818	8.230	0.013	8.116	0.016		0.111	0.019	T	0.12	0.02	L	8.1718	0.0018	0.014	60		8.16	8.20					1							S
104819	7.676	0.006	7.758	0.008		−0.070	0.009	T	−0.05	0.01	L	7.7445	0.0023	0.024	182		7.70	7.78		U 2	21142+3058	I 1	1							S
104820	10.440	0.049	8.655	0.019		1.501	0.045	T	1.53	0.07	L	8.6088	0.0026	0.019	75		8.58	8.65					1 S							
104821	9.686	0.024	8.025	0.012		1.390	0.015	G	1.32	0.03	L	8.0241	0.0015	0.012	79		8.00	8.05		C			1							
104822	7.583	0.005	6.297	0.003		1.105	0.003	G	0.95	0.03	C	6.3461	0.0008	0.008	166		6.33	6.36					1							S
104823	9.687	0.023	9.411	0.025		0.263	0.032	T	0.30	0.04	L	9.4834	0.0013	0.016	106		9.46	9.51		D			1							G
104824	8.934	0.013	7.827	0.009		0.955	0.012	T	0.94	0.01	L	7.8752	0.0011	0.009	120		7.86	7.89					1							S
104825	8.360	0.008	7.996	0.008		0.366	0.001	G	0.43	0.00	H	8.0616	0.0011	0.015	134		8.03	8.09					1							S
104826	10.977	0.056	9.451	0.025		1.282	0.048	T	1.24	0.05	L	9.3923	0.0021	0.018	94		9.36	9.42		C			1							
104827	11.359	0.078	9.958	0.034		1.184	0.067	T	1.14	0.06	L	10.1013	0.0023	0.020	94		10.07	10.13		C			1							
104828	9.467	0.019	9.148	0.020		0.303	0.026	T	0.35	0.04	L	9.1955	0.0029	0.021	101		9.17	9.23					1							
104829	9.082	0.013	7.945	0.009		0.974	0.015	G	0.96	0.01	H	8.0022	0.0015	0.012	119		7.98	8.03		C			1							S
104830	8.089	0.010	8.079	0.012		0.014	0.014	T	0.03	0.01	L	8.1021	0.0023	0.014	73		8.08	8.13					1							S
104831	7.972	0.011	7.796	0.012		0.169	0.015	T	0.18	0.01	L	7.8381	0.0015	0.010	64		7.82	7.87		C			1							S
104832	9.151	0.015	8.111	0.010	A	0.900	0.495	G	0.89	0.02	L	* 8.1434	0.0016	0.013	94	*	8.12	8.17		D	21143−5615	I 1	2 C B	AB	345	5.526	0.045	3.48	0.23	S
104833	9.846	0.026	9.474	0.028	C	0.420	0.072	G	0.46	0.09	R	8.2148	0.0224	0.168	105	–	8.10	8.58		D	21143−3835	I 2	1 C F B							S G
104834	9.193	0.014	7.884	0.009		1.112	0.013	T	1.07	0.01	L	7.9278	0.0011	0.013	109		7.90	7.96					1							S
104835	8.858	0.015	8.382	0.015	*	0.446	0.015	G	0.52	0.02	H	* 8.0982	0.0019	0.018	103	–	8.08	8.17		D	21143−3835	I 2	2 C P B	AB	252	0.851	0.009	0.80	0.04	S G
104836	9.746	0.019	8.960	0.016	*	0.698	0.019	T	0.75	0.02	L	* 8.9690	0.0022	0.020	114	*	8.94	9.01		D	21143−5831	I 1	2 C A	AB	25	0.605	0.003	0.46	0.02	
104837	8.816	0.007	8.588	0.008	A	0.100	0.140	G	0.20	0.03	L	* 8.5381	0.0016	0.023	270	*	8.50	8.59		U 2	21143+3333	I 1	2 C A	AB	0	5.054	0.015	2.45	0.06	
104838	8.176	0.010	6.997	0.006		1.011	0.009	T	0.99	0.01	L	7.0564	0.0011	0.010	104		7.04	7.07					1							S
104839	6.676	0.004	6.760	0.005		−0.068	0.006	G	−0.05	0.01	H	6.7542	0.0009	0.006	91		6.74	6.76		C			1							S
104840	8.474	0.008	7.951	0.009		0.500	0.009	T	0.57	0.01	L	8.0133	0.0014	0.013	146		7.99	8.04					1							S
104841	10.422	0.035	8.653	0.015		1.474	0.030	T	1.49	0.04	L	8.6433	0.0016	0.018	128		8.62	8.67		C			1							
104842	9.407	0.018	9.107	0.020		0.285	0.025	T	0.32	0.03	L	9.1670	0.0022	0.017	117		9.14	9.19		C			1							
104843	9.994	0.029	9.707	0.033		0.273	0.041	T	0.31	0.05	L	9.7574	0.0022	0.019	110		9.72	9.79		C			1							G
104844	8.104	0.016	7.245	0.016	*	0.796	0.020	G	0.83	0.01	H	* 7.2337	0.0015	0.013	144	*	7.21	7.25		R	21143+4109	I 1	2 C A	AB	117	1.348	0.003	0.26	0.01	S
104845	8.171	0.011	8.093	0.013		0.077	0.016	T	0.09	0.02	L	8.1040	0.0020	0.016	72		8.07	8.13					1							
104846	7.229	0.004	7.343	0.005		−0.099	0.006	T	−0.08	0.01	L	7.3436	0.0010	0.012	211		7.32	7.36			21144+3418	I 2	1							S
104847	7.790	0.007	7.618	0.009		0.165	0.011	T	0.18	0.01	L	7.6654	0.0011	0.011	130		7.65	7.68					1							S
104848	10.142	0.025	8.977	0.016		1.000	0.023	T	0.98	0.02	L	9.0258	0.0019	0.020	152		8.99	9.06					1							
104849	9.305	0.014	8.196	0.010		0.956	0.013	T	0.94	0.01	L	8.2707	0.0013	0.012	118		8.25	8.29		C			1							
104850	7.957	0.008	7.554	0.008		0.410	0.015	G	0.48	0.02	H	7.6027	0.0010	0.011	124		7.59	7.62		C			1							S
104851	8.645	0.013	8.019	0.012		0.578	0.015	G	0.65	0.01	H	8.0784	0.0017	0.010	72		8.06	8.10		C			1 X							S
104852	8.832	0.010	7.379	0.006		1.225	0.009	T	1.18	0.01	L	7.4174	0.0010	0.013	170		7.40	7.44					1							S
104853	8.259	0.010	8.040	0.011		0.209	0.014	T	0.23	0.02	L	8.0862	0.0021	0.014	81		8.06	8.12		C			1							S
104854	8.054	0.006	7.718	0.006		0.347	0.007	G	0.41	0.01	H	7.7641	0.0012	0.014	213		7.74	7.79					1							S
104855	8.290	0.007	8.100	0.008		0.179	0.015	G	0.20	0.02	H	8.1494	0.0011	0.013	210		8.12	8.18			21144+3418	I 2	1							
104856	11.391	0.061	10.105	0.031		0.900	0.003	G	0.94	0.00	I	10.1829	0.0031	0.035	150		10.11	10.25					1 S							
104857	9.227	0.016	7.688	0.008		1.293	0.014	T	1.25	0.01	L	7.7185	0.0020	0.014	95		7.70	7.74		C			1							S
104858	5.092	0.003	4.549	0.003	*	0.529	0.015	G	0.57	0.02	A	* 4.5929	0.0006	0.005	75	*	4.59	4.60		D	21145+1001	I 1	2 C S A	AB	0	0.167	0.010	0.33	0.32	S
104859	10.195	0.029	8.600	0.014		1.337	0.025	T	1.30	0.03	L	8.6439	0.0014	0.013	87		8.62	8.67		C			1							
104860	9.603	0.023	7.690	0.010		1.588	0.020	T	1.61	0.02	L	7.5809	0.0022	0.016	79		7.55	7.61		U	21145+0441	I 1	1							S
104861	9.275	0.019	8.347	0.014		0.837	0.015	G	0.86	0.01	H	8.3903	0.0028	0.021	79		8.34	8.43					1							
104862	8.938	0.010	8.960	0.013		−0.015	0.015	T	0.01	0.01	L	8.9646	0.0024	0.024	164		8.91	9.00					1							
104863	8.938	0.012	8.453	0.012		0.469	0.013	T	0.54	0.01	L	8.5267	0.0016	0.014	95		8.51	8.55		C			1							S
104864	9.151	0.015	8.475	0.013		0.614	0.015	T	0.68	0.01	L	8.5218	0.0022	0.020	101		8.48	8.55					1							S
104865	10.079	0.028	9.745	0.032	A	0.405	0.005	G	0.47	0.01	R	* 9.6811	0.0042	0.031	96	*	9.62	9.73		D	21146−5552	I 1	2 C A	AB	219	8.436	0.019	2.34	0.09	
104866	9.297	0.014	7.645	0.007		1.382	0.012	T	1.35	0.01	L	7.6551	0.0009	0.011	131		7.63	7.67					1							S
104867	8.987	0.010	7.759	0.006		1.049	0.009	T	1.02	0.01	L	7.7956	0.0012	0.011	173		7.77	7.82					1							
104868	9.858	0.019	8.067	0.009		1.491	0.017	T	1.51	0.03	L	8.0293	0.0013	0.013	144		8.01	8.05					1							S
104869	8.254	0.008	7.968	0.009		0.278	0.015	G	0.32	0.02	H	8.0027	0.0013	0.012	112		7.98	8.02		C			1							S
104870	10.281	0.040	9.724	0.038		0.529	0.015	G	0.60	0.02	H	9.7877	0.0030	0.020	74		9.74	9.82		C			1							
104871	9.144	0.014	7.106	0.006		1.688	0.012	T	1.71	0.01	L	6.9778	0.0020	0.016	110		6.95	7.00		U			1							S
104872	8.497	0.015	6.568	0.006		1.574	0.066	G	1.86	0.02	A	6.4696	0.0023	0.018	83		6.45	6.50		U 2			1							S
104873	8.862	0.015	7.788	0.011		0.930	0.014	T	0.92	0.01	L	7.8439	0.0011	0.010	74		7.83	7.86		C			1							S
104874	10.297	0.028	9.676	0.026		0.593	0.015	G	0.66	0.01	H	9.7789	0.0022	0.025	141		9.74	9.81		C			1							
104875	10.092	0.033	9.344	0.026		0.669	0.032	T	0.73	0.03	L	9.3950	0.0027	0.018	82		9.37	9.43		C			1							
104876	10.685	0.052	9.100	0.024		1.329	0.045	T	1.29	0.05	L	9.0573	0.0019	0.017	60		9.01	9.09					1							
104877	11.504	0.079	9.892	0.031		1.350	0.067	T	1.32	0.08	L	9.8331	0.0300	0.254	138		9.39	10.02	5.26	P 1 A			1							G
104878	7.559	0.007	7.459	0.009		0.092	0.020	G	0.10	0.02	H	7.4703	0.0016	0.013	84		7.45	7.49			21147−0050	I 1	1 S							S
104879	10.729	0.048	10.438	0.060		0.277	0.072	T	0.31	0.09	L	10.4051	0.0036	0.027	101		10.37	10.46					1							G
104880	10.078	0.029	9.367	0.024		0.641	0.028	T	0.71	0.03	L	9.4461	0.0022	0.016	81		9.43	9.48					1							
104881	10.306	0.030	9.099	0.019		1.032	0.028	T	1.00	0.02	L	9.1904	0.0029	0.017	104		9.16	9.21		C			1							
104882	8.131	0.013	7.842	0.014	*	0.272	0.003	G	0.31	0.00	H	* 7.9866	0.0015	0.010	83	*	7.97	8.01		D	21148−2555	I 1	2 C A	AB	300	2.075	0.003	0.27	0.01	S
104883	9.114	0.012	8.701	0.013		0.404	0.015	T	0.47	0.02	L	8.7594	0.0064	0.069	118		8.54	8.83		U 2 C			1							
104884	7.282	0.006	6.975	0.007		0.292	0.009	T	0.33	0.01	L	7.0218	0.0012	0.009	86		7.01	7.04		C			1							S
104885	9.710	0.023	8.803	0.018		0.790	0.023	T	0.82	0.02	L	8.8778	0.0020	0.014	66		8.85	8.90		C			1							
104886	8.173	0.008	7.080	0.007		0.944	0.008	T	0.93	0.01	L	7.1464	0.0010	0.008	120		7.13	7.16		C			1							S
104887	4.215	0.002	3.784	0.002	*	0.393	0.004	G	0.46	0.03	C	* 3.8228	0.0004	0.004	158	*	3.82	3.83		D	21148+3803	I 1	2 C A	AB	6	0.637	0.007	2.89	0.03	S
104888						0.549	0.012	G	0.62	0.01	H	12.5115	0.0094	0.069	79		12.29	12.73		U			1 X							D
104889	10.237	0.022	9.777	0.023		0.447	0.025	T	0.52	0.03	L	9.7794	0.0029	0.033	155		9.72	9.84		C			1 X							
104890	9.912	0.023	9.294	0.020		0.575	0.027	T	0.65	0.03	L	9.3321	0.0022	0.017	101		9.30	9.37					1							
104891	10.569	0.047	9.902	0.042		0.608	0.047	T	0.68	0.04	L	9.9488	0.0027	0.022	69		9.91	9.98		C			1							
104892	10.154	0.031	9.430	0.027		0.651	0.031	T	0.71	0.03	L	9.4989	0.0028	0.022	91		9.46	9.54		C			1							
104893	8.797	0.015	8.198	0.014		0.559	0.018	T	0.63	0.02	L	8.2469	0.0019	0.013	63		8.23	8.27		C			1							S
104894	9.190	0.017	7.881	0.010		1.090	0.013	G	1.05	0.01	H	7.8718	0.0235	0.113	78		7.82	8.09		U 2			1							S P
104895	10.514	0.043	9.306	0.025		1.033	0.039	T	1.01	0.03	L	9.3403	0.0071	0.058	74		9.26	9.50		U 2			1 S							
104896	10.503	0.039	9.757	0.032	*	0.667	0.038	T	0.73	0.03	L	* 9.8094	0.0029	0.016	77	*	9.77	9.85		D	21149−2921	H 1	2 C A	AB	27	0.392	0.022	2.20	0.10	
104897	7.969	0.008	7.440	0.009		0.496	0.011	T	0.57	0.01	L	7.4925	0.0007	0.008	98		7.48	7.51					1 G							S
104898	9.582	0.018	9.005	0.017		0.539	0.022	T	0.61	0.02	L	9.0768	0.0021	0.020	97		9.04	9.12					1							
104899	11.261	0.077	9.429	0.027		1.524	0.065	T	1.56	0.10	L	9.2959	0.0025	0.019	70		9.27	9.34		C			1							
104900	8.983	0.013	8.356	0.012		0.569	0.015	G	0.64	0.01	H	8.4294	0.0013	0.013	129		8.41	8.45		C			1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
104901	21 14 56.70	−59 18 42.1	7.75		H	318.736 269 91	−59.311 699 88		2.69	6.38	18.08	0.65	0.66	0.94	0.75	0.63	+15	−19	−15	−13	+13	+ 5	+13	+ 5	+ 0	+ 1	0	0.06
104902	21 14 57.03	−20 04 14.2	7.66		H	318.737 644 94	−20.070 623 36		3.62	26.43	6.40	0.94	0.52	1.17	1.24	0.53	+48	−11	−11	− 9	−29	+47	−23	−25	+22	+58	0	−0.44
104903	21 14 57.79	−20 47 20.1	8.08		H	318.740 804 89	−20.788 918 36		21.58	−38.23	−119.77	0.98	0.52	1.14	1.36	0.49	+46	−18	−13	− 1	−24	+33	−17	−22	+20	+54	0	−0.70
104904	21 14 58.19	−08 21 09.8	7.38		H	318.742 473 58	−08.352 725 19		6.90	35.32	−2.10	0.90	0.53	1.04	1.42	0.54	+15	− 8	−24	+33	−29	+46	−12	+19	+17	+22	0	2.41
104905	21 14 59.61	+07 41 17.0	8.45		H	318.748 357 98	+07.688 048 49		2.29	−1.98	−10.88	1.34	1.04	1.30	1.96	1.01	+15	− 7	+ 2	−15	−20	−13	−16	−66	+ 3	+17	0	−0.48
*104906	21 15 02.20	−30 58 59.2	7.40		H	318.759 162 99	−30.983 098 62		2.96	20.83	−41.13	0.82	0.58	0.95	1.02	0.50	+19	−19	−21	+ 4	−16	+31	−14	−40	+25	+18	0	−0.32
*104907	H 21 15 02.13	−49 05 51.1	6.84		H	318.758 858 93	−49.097 539 65	A	5.99	−18.63	− 7.28	0.93	0.76	1.09	1.05	0.63	+48	−44	−35	− 9	− 9	+ 3	− 9	−31	− 1	+41	3	0.34
104908	21 15 03.16	−21 48 55.1	7.23		H	318.763 160 02	−21.815 317 93		4.48	30.07	−13.10	0.89	0.45	0.99	1.07	0.43	+43	−10	−12	−23	−31	+36	−27	−28	+14	+50	0	−2.49
104909	21 15 03.50	−44 32 09.6	8.05		G	318.764 578 11	−44.536 005 71		7.00	−27.07	−24.53	0.84	0.68	1.09	0.96	0.65	+44	−19	−12	−18	−16	+11	−17	−33	+ 9	+41	0	1.10
104910	21 15 03.82	−05 33 06.4	6.98		H	318.765 915 85	−05.551 787 71		3.70	−25.01	−40.85	0.84	0.52	1.00	1.51	0.52	+26	+ 5	−10	+15	−41	+43	−20	+ 3	+17	+41	0	−0.07
104911	21 15 03.86	−02 34 19.0	7.08		H	318.766 068 01	−02.571 948 42		1.13	9.85	5.40	1.39	0.90	1.02	2.57	1.46	+18	−46	−22	−80	−13	+51	− 8	−76	+12	+ 8	0	1.23
104912	21 15 04.39	+62 28 15.1	9.40		H	318.768 295 38	+62.470 850 29		3.54	6.06	4.08	0.83	0.71	0.87	0.91	0.85	− 1	+ 2	+11	+ 5	+25	+13	+24	+12	+10	+30	0	−0.86
104913	21 15 05.59	+62 50 25.7	9.56		H	318.773 296 67	+62.840 481 94		14.51	123.01	260.87	0.82	0.76	0.89	0.91	0.94	+ 6	− 6	+ 7	− 2	+18	+ 4	+16	+ 7	+ 4	+34	1	−1.20
104914	21 15 06.62	−17 20 42.3	6.05		H	318.777 580 77	−17.345 090 06		8.85	−0.04	−19.86	0.74	0.43	0.95	0.99	0.44	+32	−24	−13	− 6	−14	+51	−11	−15	+33	+53	0	−0.72
104915	21 15 08.77	−18 06 14.1	9.01		H	318.786 549 86	−18.103 909 31		−0.72	13.09	−13.48	1.35	0.65	1.52	2.09	0.66	+21	+ 7	−14	+14	−15	+38	+ 0	−18	+24	+47	0	0.83
104916	21 15 09.05	−35 00 24.7	8.65		H	318.787 694 10	−35.006 855 97		1.77	16.10	−0.80	1.23	0.88	1.42	1.54	0.74	+16	−23	−30	− 7	−18	+31	−15	−41	+14	+ 1	3	2.05
104917	H 21 15 09.77	+55 30 34.8	8.11		H	318.790 689 05	+55.509 675 60	A	4.07	9.10	5.05	1.71	2.81	0.75	0.65	0.67	−49	−12	+ 6	+ 4	+ 0	−22	+ 3	− 5	+ 3	− 4	2	−0.35
104918	21 15 10.05	−15 07 31.9	8.17		H	318.791 875 61	−15.125 533 11		5.26	1.98	0.41	1.01	0.56	1.21	1.21	0.56	+35	+ 0	−10	−11	−10	+36	− 7	− 9	+33	+50	2	−0.33
*104919	21 15 10.89	+51 16 54.9	6.99		H	318.795 377 63	+51.281 914 43		5.74	−3.44	−4.74	0.54	0.50	0.63	0.66	0.54	− 7	−17	+10	+ 3	+ 7	+ 9	+ 7	−12	+ 4	+ 7	0	−0.23
*104920	21 15 10.87	+19 51 14.0	8.74		H	318.795 295 00	+19.853 884 90		3.74	10.58	−8.91	0.75	0.62	1.11	1.04	0.77	+ 2	−26	− 2	− 6	+16	−11	+12	−11	+ 4	+10	1	2.82
104921	H 21 15 11.62	+46 19 11.1	9.83		H	318.798 403 66	+46.319 746 73	A	1.67	−1.60	−4.58	1.64	1.44	1.72	1.92	1.57	−15	+14	+ 2	+30	+ 3	+10	+ 3	+ 3	−17	− 4	1	0.79
104922	21 15 11.71	−15 44 27.1	8.98		H	318.798 785 02	−15.740 857 15		11.42	−32.50	−143.75	1.19	0.70	1.52	1.49	0.66	+38	− 5	−18	−14	−15	+46	− 9	−15	+32	+48	0	1.47
104923	21 15 11.86	+18 37 09.3	7.93	2	H	318.799 437 05	+18.619 257 27		1.91	2.56	−15.81	0.90	0.81	1.10	1.11	0.87	+24	−12	−32	−19	−10	+ 4	−11	−19	+23	+26	2	0.72
104924	21 15 13.43	+29 29 34.7	8.85		H	318.805 937 72	+29.492 963 85		4.92	−8.02	−10.53	0.76	0.62	1.09	0.81	0.63	−20	+ 9	−18	+19	+26	−20	+22	+34	− 7	−18	2	−0.97
104925	21 15 14.31	−40 30 21.9	6.20		G	318.809 625 57	−40.506 079 96		5.59	101.68	6.12	0.85	0.57	0.88	0.95	0.52	+55	+10	− 5	−43	−47	+16	−41	−36	− 8	+27	0	−0.56
104926	21 15 14.75	−21 17 41.7	8.24		H	318.811 453 03	−21.294 914 89		14.62	76.53	−13.29	0.94	0.51	1.16	1.25	0.47	+51	− 7	−13	−13	−33	+50	−27	−28	+23	+54	0	−1.23
104927	21 15 17.05	−33 11 12.2	8.51		G	318.821 055 19	−33.186 712 02		3.11	8.47	−15.68	0.92	0.71	1.07	1.12	0.64	+23	−20	−17	− 3	−16	+30	−14	−39	+13	+19	2	2.19
104928	21 15 17.12	+43 48 12.2	9.42		H	318.821 344 81	+43.803 394 60		−0.53	−4.53	−3.66	0.77	0.74	0.97	0.92	0.87	−17	+ 0	− 5	+20	+12	−11	+12	−14	− 2	−16	0	−0.01
104929	21 15 17.25	−58 55 45.9	6.93		H	318.821 877 84	−58.929 425 86		6.83	49.25	−75.56	0.64	0.56	0.86	0.70	0.54	+ 8	−25	− 7	−17	+16	+10	+17	+ 6	− 3	− 4	0	1.03
104930	21 15 17.87	+00 04 35.4	11.54	3	H	318.824 479 16	+00.076 489 72		1.15	−42.05	−58.87	2.23	1.85	2.46	2.63	1.96	+24	−25	+ 1	−41	−18	+26	−16	−59	+ 3	+39	0	1.04
104931	21 15 18.47	+03 25 09.5	10.57		H	318.826 955 57	+03.419 314 89		−0.23	1.03	−8.88	1.64	1.67	2.05	2.45	1.74	+33	−16	−31	+ 6	−21	+31	−21	−65	+42	+36	0	0.08
*104932	H 21 15 20.21	−63 41 15.8	8.26		H	318.834 192 72	−63.687 725 29	A	6.00	−19.15	− 8.08	1.09	1.19	1.87	1.23	1.39	−14	− 7	− 4	+18	+14	− 2	+14	+14	− 6	−19	4	0.49
*104933	21 15 19.25	−56 33 33.6	9.77		H	318.830 191 96	−56.559 331 17		2.78	1.48	−31.60	1.39	0.94	1.62	1.92	1.10	−19	+13	−10	+30	− 3	+15	−11	+11	− 5	−56	0	0.20
*104934	21 15 19.88	−26 56 05.1	8.90		H	318.832 822 63	−26.934 748 07		4.55	55.80	53.37	1.11	0.70	1.20	1.35	0.58	+14	−10	−13	− 5	−13	+26	− 9	−50	+17	+21	0	−0.13
104935	21 15 22.55	+25 50 40.3	8.19		H	318.843 943 79	+25.844 537 74		0.33	11.81	6.05	0.67	0.63	0.96	0.78	0.74	+14	+14	−11	− 6	+11	−13	+12	− 5	+18	+24	0	0.90
104936	21 15 23.21	−33 01 11.6	8.91		H	318.846 727 02	−33.019 890 78		3.20	11.45	−34.39	1.03	0.75	1.15	1.17	0.65	+21	−20	−20	−15	−20	+26	−19	−42	+15	+12	0	2.24
104937	21 15 23.40	+10 23 40.1	9.03		H	318.847 506 68	+10.394 466 66		6.76	−101.24	−46.43	1.08	0.86	1.28	1.24	0.77	+52	−31	−15	−23	−48	+22	−41	−36	+21	+62	0	0.54
104938	21 15 23.78	−10 20 52.7	8.13		H	318.849 063 71	−10.347 974 42		3.16	12.93	26.80	0.96	0.55	1.16	1.38	0.58	+33	−20	−11	+ 0	−15	+41	−12	− 5	+30	+49	0	0.56
104939	21 15 23.85	−06 00 29.7	7.80		H	318.849 393 19	−06.008 252 69		4.37	21.32	−0.67	0.88	0.57	1.05	1.40	0.59	+32	−21	−23	+ 8	−31	+39	−14	+24	+13	+38	2	−1.04
104940	21 15 26.23	−62 22 36.5	9.75		H	318.859 275 83	−62.376 813 76		5.97	8.72	6.01	0.82	0.79	1.58	1.06	1.08	−25	+ 2	− 7	+26	+ 3	− 6	+ 4	+26	−11	−30	0	1.59
104941	21 15 27.19	+42 01 33.8	6.60		H	318.863 295 09	+42.026 065 31		14.61	59.58	130.26	0.43	0.46	0.61	0.52	0.51	−13	− 5	− 3	− 3	+ 9	− 2	+ 8	− 5	+11	− 8	1	−0.06
104942	21 15 28.35	−41 23 44.7	8.96		H	318.868 131 81	−41.395 755 41		7.84	−34.50	16.32	1.02	0.83	1.37	0.92	0.71	+65	−10	− 9	−46	−31	+ 0	−31	−40	+ 9	+58	0	0.30
104943	21 15 28.61	−35 42 53.7	8.24		H	318.869 227 76	−35.714 917 89		4.09	9.84	9.55	1.07	0.77	1.11	1.19	0.68	+10	− 5	−14	−32	−12	+23	− 9	−45	+ 1	+ 5	0	0.55
104944	21 15 29.27	−14 24 06.0	8.50		H	318.871 961 87	−14.401 671 16		4.56	−17.37	−35.29	1.15	0.60	1.34	1.74	0.62	+33	+ 4	− 7	+ 5	−18	+31	− 8	− 1	+27	+46	0	−0.43
104945	21 15 29.93	−74 24 46.4	9.19		H	318.874 708 61	−74.412 886 31		3.35	10.46	−3.41	0.77	0.90	1.15	0.89	1.08	−11	− 7	− 3	+ 0	+ 7	−14	+ 7	−15	+ 0	−10	0	−1.50
104946	21 15 30.37	−05 27 53.0	8.56		H	318.876 540 03	−05.464 713 77		13.96	102.41	−16.19	1.02	0.69	1.18	1.63	0.72	+43	− 8	− 9	+ 5	−24	+27	− 9	+22	+ 8	+48	0	−1.19
104947	21 15 30.90	−00 16 07.7	8.25		H	318.878 733 76	−00.268 797 87		4.55	12.41	8.85	1.03	0.93	1.17	1.25	0.99	+40	−12	−25	−41	−31	+21	−28	−65	+29	+52	0	1.56
104948	21 15 30.98	−41 37 46.9	9.72		H	318.879 100 33	−41.629 691 34		4.76	−2.47	−61.68	1.08	0.91	1.61	1.01	0.81	+60	+ 1	+ 8	−42	−22	− 3	−22	−31	+ 4	+55	3	0.53
104949	21 15 32.37	+23 30 30.0	8.89		H	318.884 878 79	+23.508 328 39		2.12	−11.42	−15.99	0.68	0.65	1.22	0.84	0.80	+17	− 8	+ 9	− 9	+18	−17	+19	− 2	+ 3	+29	3	0.87
104950	21 15 33.24	−51 00 45.1	8.48		H	318.888 481 25	−51.012 523 17		5.51	−13.68	−22.34	0.91	0.72	1.16	1.14	0.68	+19	−11	−16	+ 8	−23	+31	−21	−27	+ 6	+ 5	2	−0.32
104951	21 15 33.58	−37 21 43.2	9.94		H	318.889 904 29	−37.361 993 78		1.92	6.94	−6.18	1.33	1.11	1.54	1.53	0.94	+21	−27	−22	−20	− 7	+29	− 9	−41	+21	+13	0	−0.75
104952	21 15 34.01	+37 15 08.5	7.76		H	318.891 688 17	+37.252 360 68		−0.08	1.21	−1.75	0.44	0.48	0.69	0.45	0.48	−21	− 3	+ 7	− 4	+ 0	− 6	+ 0	+14	+ 4	−19	0	−0.18
104953	21 15 34.78	+74 37 20.6	8.57		H	318.894 909 61	+74.622 400 52		6.28	−3.37	− 9.62	0.64	0.61	0.70	0.70	0.73	+ 6	−12	− 8	+ 8	+16	−19	+16	+11	− 8	+24	1	1.83
*104954	21 15 34.86	−44 24 15.4	10.34		H	318.895 248 52	−44.404 279 53		1.72	67.09	−53.35	1.40	1.20	1.94	1.76	1.14	+45	−13	−16	− 8	−14	+ 8	−16	−29	+11	+33	0	−0.33
*104955	21 15 34.83	+36 48 25.7	8.17		H	318.895 109 18	+36.807 132 63		2.49	−5.71	− 7.04	0.52	0.55	0.81	0.51	0.54	−20	+ 5	+12	−10	+ 3	− 5	+ 3	+ 9	+ 1	−14	0	0.01
104956	21 15 34.95	−16 05 28.0	8.37		H	318.895 607 21	−16.091 124 76		5.91	−9.05	− 9.17	1.02	0.61	1.37	1.24	0.55	+44	−17	−30	−24	−16	+54	− 7	−12	+34	+53	0	0.23
*104957	21 15 35.66	+78 35 53.5	7.42		H	318.898 567 35	+78.598 191 24	A	4.06	9.84	5.00	1.30	1.21	1.02	1.29	1.12	+13	− 4	+ 5	+43	+ 4	+15	− 1	− 4	+15	− 1	2	0.47
*104958	21 15 35.54	+44 57 16.3	7.46		H	318.898 077 61	+44.954 522 84		2.66	10.57	2.12	0.54	0.49	0.64	0.64	0.50	− 5	+11	+ 3	+ 1	− 8	− 8	− 6	−20	+ 4	− 3	0	−3.88
104959	21 15 35.96	−39 27 09.7	8.62		H	318.899 843 18	−39.452 701 21		18.59	88.63	−25.20	1.28	0.73	1.41	1.72	0.69	+39	−31	−36	+17	−45	+36	−46	−11	+ 6	−13	0	−0.12
104960	21 15 36.61	+28 00 32.8	7.62		H	318.902 546 83	+28.009 115 64		8.48	−16.41	−45.56	0.60	0.50	0.91	0.71	0.57	−10	+17	−18	+15	+25	−29	+23	+22	+22	−17	0	−2.31
104961	21 15 37.10	+33 53 07.0	7.86		H	318.904 583 67	+33.885 284 59		1.61	17.02	−2.45	0.40	0.54	0.85	0.51	0.58	−33	+ 5	+ 6	+ 2	+ 6	− 5	+ 4	+11	+17	−18	1	0.68
104962	21 15 37.18	+47 58 26.4	6.45		H	318.904 896 22	+47.974 002 14		2.10	2.21	−2.83	0.44	0.44	0.54	0.57	0.47	−12	− 6	+ 3	−14	− 9	+17	− 7	−18	− 5	−19	0	0.39
104963	21 15 37.89	−20 39 06.1	5.17		H	318.907 877 14	−20.651 690 52		4.72	15.39	−2.24	0.73	0.39	0.82	0.92	0.39	+36	−10	−12	−19	−26	+36	−21	−25	+11	+47	2	−0.63
*104964	21 15 41.61	+78 36 13.0	9.62		H	318.923 371 38	+78.603 619 15	B	6.54	14.62	6.15	14.14	13.14	7.19	8.79	8.41	+ 8	−10	+ 8	+30	+ 6	−17	+ 3	− 4	+12	+ 3	2	0.47
*104965	21 15 41.09	−57 37 52.7	6.54		H	318.921 223 88	−57.631 318 07		10.54	25.48	−13.62	0.47	0.46	0.74	0.56	0.45	+11	− 8	−19	−17	+13	+ 5	+16	+ 9	− 6	− 4	0	0.14
*104966	H 21 15 41.20	+48 31 53.3	8.78		G	318.921 665 91	+48.531 484 08	A	1.24	−2.32	0.30	2.77	2.95	1.21	1.40	1.08	−59	+ 4	+ 1	+ 9	− 5	+ 3	− 6	−12	+11	−23	1	0.91
104967	21 15 42.23	+16 43 40.1	6.96		H	318.925 966 10	+16.727 799 80		8.08	−60.11	−82.02	0.68	0.58	0.84	0.93	0.60	+13	− 9	−33	− 3	−17	+15	−12	−25	+21	+17	2	0.90
104968	21 15 42.39	+77 00 44.1	5.92		H	318.926 631 97	+77.012 260 67		3.90	22.95	14.63	0.47	0.43	0.50	0.51	0.43	− 2	−14	+10	+ 1	− 4	+10	− 8	−23	+21	− 3	3	0.49
104969	21 15 42.58	+68 21 08.1	7.92	1	H	318.927 414 59	+68.352 256 15		13.31	12.74	−47.79	0.57	0.55	0.67	0.65	0.62	− 9	−10	+15	+15	+ 6	−21	+10	+ 3	− 7	− 4	3	1.47
104970	21 15 42.59	+34 55 02.2	9.52		H	318.927 468 56	+34.917 290 07		2.05	−2.41	−6.46	0.76	0.85	1.34	0.77	0.92	−18	− 9	+14	−11	+ 9	−19	+10	+22	+23	−19	1	0.49
104971	21 15 44.02	−67 39 53.8	10.44		H	318.933 416 40	−67.664 938 49		3.50	6.93	4.64	2.37	2.76	4.06	2.46	3.22	−38	−19	+ 9	+ 4	−19	−27	+ 7	−16	+21	+ 0	−52	2	
104972	21 15 44.58	+38 28 03.5	8.45		H	318.935 766 15	+38.467 639 07		1.59	−4.80	−12.57	0.59	0.63	0.92	0.64	0.62	− 8	+ 2	+ 5	− 2	− 3	−27	− 2	− 4	+15	−13	1	−0.18
104973	21 15 44.62	+35 38 53.6	9.29		H	318.935 919 87	+35.648 233 15		5.22	−29.36	−61.31	0.75	0.76	1.20	0.81	0.81	−19	+ 1	+ 2	−22	+15	+ 1	+10	+15	+11	− 4	0	−0.70
*104974	21 15 44.83	−15 10 17.4	5.31	2	H	318.936 781 69	−15.171 512 51		5.19	24.79	5.06	0.78	0.45	0.92	0.98	0.45	+29	−14	−16	−16	− 5	+40	− 5	− 4	+34	+48	0	1.05
*104975	21 15 44.74	−52 37 30.4	9.03		H	318.936 436 55	−52.625 117 98		5.80	31.50	−14.09	0.96	0.81	1.23	1.31	0.88	+14	+ 1	−17	− 7	+ 8	−11	+ 5	−19	+14	+17	0	0.38
104976	21 15 45.57	−49 13 43.8	9.40		H	318.939 893 23	−49.228 838 25		4.86	7.40	−44.23	1.10	0.92	1.49	1.38	0.84	+47	−45	−52	+ 9	+ 2	− 3	+ 3	−18	− 1	+42	0	−0.97
104977	21 15 45.68	+08 46 36.2	8.05		H	318.940 350 32	+08.776 710 68		4.63	12.71	−14.16	0.87	0.94	1.00	1.20	1.12	+40	−18	−21	−19	−27	+18	−23	−59	+14	+46	0	−0.79
*104978	H 21 15 45.84	−53 15 47.0	5.73		G	318.940 984 43	−53.263 049 98	*	8.22	35.09	−14.12	0.64	0.48	0.79	0.86	0.46	+14	− 3	−26	+ 4	+14	+ 1	+10	− 6	+ 4	− 4	0	0.67
*104979	21 15 45.83	+15 19 53.0	8.45		H	318.940 945 23	+15.331 386 59		5.04	21.71	− 4.22	0.90	0.74	1.07	1.30	0.73	+15	−16	−30	+22	−21	+ 7	−16	−35	+25	+17	0	−0.34
104980	21 15 46.76	−36 12 38.5	6.13		H	318.944 849 67	−36.210 693 94		3.78	29.39	− 6.28	0.71	0.54	0.81	0.73	0.45	+17	−37	−34	− 5	−23	+30	−18	−34	+17	+ 7	0	0.98
104981	21 15 47.17	+34 52 56.5	8.66		H	318.946 550 47	+34.882 348 71		2.32	8.66	2.25	0.52	0.64	0.95	0.54	0.67	−20	+ 0	+ 3	+ 1	+ 3	−11	+ 3	+23	+13	−19	0	−0.23
104982	21 15 48.12	+75 07 48.4	9.48		H	318.950 495 71	+75.130 097 72		7.01	123.98	10.92	0.85	0.77	0.88	0.88	0.91	+ 8	−20	+14	+11	+21	− 1	+22	+10	+ 4	+32	1	0.68
104983	21 15 48.52	+32 02 42.4	7.88		H	318.952 156 87	+32.045 105 72		10.28	2.79	−37.14	0.54	0.54	0.83	0.60	0.59	− 3	+ 9	+ 0	+39	+13	−19	+14	+12	+17	− 5	0	1.98
104984	H 21 15 48.80	+67 21 14.1	8.44	2	H	318.953 347 96	+67.353 912 82	A	4.38	13.67	0.77	1.16	1.07	1.13	1.40	1.01	−10	−11	+22	+10	+ 1	+14	+ 0	− 4	+19	+ 8	1	0.10
104985	21 15 48.98	−09 07 15.1	7.29		H	318.954 091 18	−09.120 871 53		3.75	18.26	− 4.70	0.95	0.54	1.13	1.61	0.58	+ 5	− 8	−27	+23	−38	+52	−21	+12	+28	+22	0	1.67
104986	21 15 49.32	−43 11 39.9	11.35	3	H	318.955 511 55	−43.194 422 32	*	−2.61	−4.20	− 8.81	2.64	2.33	3.32	2.38	1.97	+61	−45	−26	−51	−39	+38	−38	−58	+16	+53	0	−0.24
104987	21 15 49.40	+05 14 53.1	3.92		H	318.955 819 76	+05.248 073 90		17.51	59.63	−94.33	0.72	0.59	0.89	1.06	0.63	+ 4	+ 5	−25	− 7	+ 2	+40	+11	−45	+43	+24	0	−0.39
104988	21 15 51.04	−35 30 14.8	7.92		H	318.962 659 48	−35.504 120 61		−0.49	7.61	− 6.22	1.05	0.80	1.12	1.16	0.67	+25	−21	−26	−37	−22	+31	−18	−50	+ 9	+13	3	1.66
*104989	21 15 52.02	+47 06 51.6	9.58		H	318.966 729 29	+47.114 327 33		0.07	−7.94	− 5.16	0.83	0.75	1.01	0.99	0.86	− 7	+ 8	+ 4	+26	+ 4	+10	+ 2	+ 3	−20	−11	4	2.41
*104990	21 15 52.01	+19 42 51.3	7.32		H	318.966 712 80	+19.714 256 61		2.65	4.20	− 4.29	0.63	0.51	0.94	0.89	0.61	− 1	−14	+ 0	− 9	+14	+ 8	+11	−11	+ 8	+ 9	1	3.25
104991	21 15 52.10	+11 28 43.6	7.40		H	318.967 074 24	+11.478 787 43		3.28	−17.29	−34.12	0.81	0.64	1.00	0.99	0.63	+31	−11	−31	−12	−24	+26	−16	− 8	+ 4	+43	0	1.36
104992	21 15 52.13	+21 17 48.7	10.17		H	318.967 221 54	+21.296 851 93		14.92	121.46	17.71	0.97	0.76	1.40	1.21	0.93	− 7	+ 3	−14	+ 0	+12	−19	+ 8	+ 9	+13	+ 2	0	1.04
104993	21 15 52.54	−21 26 23.4	8.20		G	318.968 921 21	−21.439 822 20		4.90	30.90	−14.73	0.91	0.50	1.09	1.27	0.48	+46	−11	−22	−14	−39	+47	−29	−28	+17	+50	0	−2.56
104994	H 21 15 54.87	+28 57 46.4	10.41		H	318.978 635 86	+28.962 895 39	*	3.50	121.92	111.93	1.25	1.02	1.88	1.45	1.09	−20	+22	− 6	− 4	+35	−29	+36	+21	+23	−27	0	1.44
104995	21 15 55.03	−09 23 28.2	7.84		H	318.979 297 27	−09.391 166 89		2.33	6.05	10.88	0.97	0.58	1.14	1.47	0.61	+24	−14	−18	+ 4	−26	+39	−16	+ 7	+24	+32	0	0.94
104996	21 15 55.46	+03 41 47.4	8.94		H	318.981 103 75	+03.696 495 98		2.59	11.71	7.88	1.11	1.12	1.46	1.59	1.20	+30	− 5	−30	− 7	−22	+43	−13	−64	+44	+45	0	1.37
104997	21 15 55.61	−83 15 57.1	7.60		H	318.981 728 47	−83.265 863 10	A	3.93	− 8.18	−11.43	0.79	0.69	0

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
104901	8.898	0.013	7.840	0.009		0.918	0.012	T	0.92	0.01	L	7.9070	0.0017	0.014	105		7.89	7.94		C			1							S
104902	9.006	0.011	7.765	0.007		1.059	0.010	T	1.03	0.01	L	7.8247	0.0010	0.009	123		7.81	7.84					1							S
104903	8.961	0.012	8.154	0.010		0.714	0.012	T	0.77	0.01	L	8.2218	0.0012	0.013	138		8.20	8.24		C			1							S
104904	7.885	0.009	7.427	0.007		0.432	0.010	T	0.50	0.01	L	7.4731	0.0008	0.007	85		7.46	7.49					1							S
104905	10.533	0.069	8.682	0.027		1.539	0.059	T	1.59	0.13	L	8.5690	0.0018	0.014	53		8.55	8.60		C			1							
104906	8.939	0.015	7.523	0.009		1.183	0.020	G	1.14	0.02	H	7.5617	0.0012	0.009	77		7.55	7.58		C	21150−3059	I 1	1							S
104907	8.546	0.011	7.017	0.006	A	1.300	0.495	G	1.25	0.01	L *	6.9992	0.0009	0.008	97	*	6.98	7.01		D	21150−4906	I 1	2 C A	AB	348	1.100	0.013	3.04	0.07	S
104908	8.573	0.009	7.351	0.006		1.044	0.008	T	1.01	0.01	L	7.4016	0.0009	0.009	138		7.39	7.42		C			1							S
104909	8.476	0.010	8.099	0.010		0.357	0.013	T	0.42	0.01	L	8.1367	0.0015	0.014	108		8.12	8.16		C			1							S
104910	8.907	0.012	7.154	0.006		1.461	0.011	T	1.47	0.02	L	7.1157	0.0010	0.009	111		7.10	7.14					1							S
104911	7.271	0.006	7.108	0.009		0.156	0.010	T	0.17	0.01	L	7.1373	0.0010	0.006	61		7.12	7.15		C			1 G							S
104912	9.541	0.023	9.432	0.030		0.106	0.035	T	0.12	0.04	L	9.4391	0.0022	0.016	105		9.41	9.46					1							
104913	10.446	0.037	9.629	0.028		0.751	0.002	G	0.80	0.00	H	9.6990	0.0025	0.018	120		9.67	9.73		C			1							G
104914	7.290	0.006	6.158	0.005		0.978	0.000	G	0.96	0.00	H	6.2153	0.0007	0.006	93		6.20	6.23		C			1							S
104915	10.519	0.037	9.112	0.018		1.189	0.032	T	1.15	0.03	L	9.1783	0.0022	0.018	90		9.15	9.21		C			1							
104916	9.794	0.025	8.738	0.017		0.916	0.023	T	0.91	0.02	L	8.8087	0.0024	0.017	68		8.78	8.83					1							
104917	8.291	0.007	8.135	0.009	*	0.150	0.010	T	0.17	0.01	L *	8.1685	0.0014	0.014	139	*	8.15	8.20		D	21152+5531	I 1	2 C A	AB	158	0.306	0.004	1.12	0.07	
104918	8.452	0.011	8.204	0.013		0.236	0.016	T	0.26	0.02	L	8.2383	0.0017	0.011	77		8.22	8.26		C			1							S
104919	8.248	0.010	7.111	0.006		0.978	0.009	T	0.96	0.01	L	7.1596	0.0010	0.010	114		7.14	7.18		C	21152+5117	I 1	1							S
104920	8.804	0.010	8.741	0.012		0.063	0.015	T	0.07	0.02	L	8.7678	0.0017	0.018	143		8.74	8.80		C			1							
104921	10.045	0.028	9.924	0.038	*	0.117	0.044	T	0.13	0.04	L *	9.8751	0.0024	0.025	113	*	9.84	9.91		D	21152+4619	H 1	2 C A	AB	136	0.937	0.028	2.73	0.12	D
104922	9.783	0.025	9.046	0.021		0.660	0.025	T	0.72	0.02	L	9.1174	0.0024	0.019	76		9.10	9.15					1							S
104923	10.078	0.030	8.152	0.012		1.633	0.027	T	2.37	0.06	O	7.9662	0.0054	0.037	72		7.92	8.03		U 2			1 S							
104924	8.922	0.010	8.844	0.013		0.077	0.015	T	0.09	0.02	L	8.8816	0.0015	0.020	200		8.85	8.91		C			1							
104925	7.667	0.007	6.338	0.004		1.138	0.003	G	1.10	0.00	H	6.3688	0.0007	0.007	114		6.36	6.38		C			1							S
104926	9.015	0.011	8.300	0.009		0.644	0.011	T	0.71	0.01	L	8.3735	0.0013	0.011	150		8.35	8.39		C			1							S
104927	8.887	0.014	8.548	0.015		0.342	0.015	G	0.40	0.02	H	8.5854	0.0019	0.015	80		8.56	8.63					1							S
104928	9.590	0.019	9.459	0.025		0.126	0.029	T	0.14	0.03	L	9.4638	0.0020	0.021	125		9.43	9.49		C			1							G
104929	8.143	0.009	7.037	0.007		0.954	0.009	T	0.94	0.01	L	7.0915	0.0012	0.011	106		7.07	7.11					1							S
104930											T	11.6246	0.0717	0.434	59		10.63	11.84	0.46	P 1 A			1							G
104931	10.831	0.073	10.535	0.084		−0.072	0.100	G	−0.05	0.10	R	10.5539	0.0068	0.036	59		10.50	10.61					1							G
104932	8.803	0.010	8.256	0.010	*	0.519	0.010	T	0.59	0.01	L *	8.3699	0.0018	0.024	212	*	8.34	8.45		D	21153−6341	I 1	2 C A	AB	305	9.576	0.007	1.51	0.02	S
104933	11.127	0.062	9.883	0.032		1.061	0.054	T	1.03	0.04	L	9.9422	0.0025	0.024	90		9.90	10.00		C			1							
104934	9.617	0.024	9.008	0.021		0.566	0.024	T	0.64	0.02	L	9.0186	0.0023	0.017	83		8.99	9.05		C			1							
104935	9.966	0.020	8.362	0.010		1.344	0.018	T	1.31	0.02	L	8.3419	0.0017	0.020	126		8.31	8.37					1							
104936	9.392	0.020	8.957	0.020		0.424	0.023	T	0.49	0.02	L	9.0018	0.0020	0.015	77		8.97	9.03					1							
104937	9.413	0.024	9.083	0.026		0.402	0.015	G	0.47	0.02	H	9.1208	0.0020	0.016	82		9.10	9.15		C			1							
104938	9.615	0.022	8.264	0.013		1.145	0.020	T	1.11	0.02	L	8.2990	0.0009	0.009	87		8.28	8.32		C	21154−1020	I 1	1							
104939	9.136	0.014	7.916	0.009		1.043	0.013	T	1.01	0.01	L	7.9653	0.0011	0.009	111		7.95	7.98					1							S
104940	10.330	0.018	9.803	0.018		0.503	0.019	T	0.58	0.02	L	9.8631	0.0022	0.027	256		9.82	9.92					1							
104941	7.747	0.006	6.706	0.004		0.903	0.006	G	0.90	0.00	H	6.7611	0.0007	0.007	144		6.75	6.77					1							S
104942	9.588	0.013	9.003	0.012		0.548	0.013	T	0.62	0.01	L	9.0787	0.0017	0.017	169		9.05	9.11		C			1							S
104943	9.463	0.023	8.342	0.015		0.965	0.021	T	0.95	0.02	L	8.4083	0.0017	0.014	69		8.38	8.43		D			1							
104944	9.018	0.014	8.544	0.014		0.459	0.015	T	0.53	0.02	L	8.6066	0.0016	0.012	89		8.59	8.63					1							S
104945	10.338	0.024	9.273	0.017		0.923	0.022	T	0.92	0.02	L	9.3540	0.0023	0.028	146		9.31	9.40		C			1							
104946	9.292	0.017	8.616	0.015		0.625	0.019	T	0.69	0.02	L	8.6887	0.0012	0.013	103		8.67	8.71		C			1							
104947	9.456	0.020	8.364	0.014		0.944	0.019	T	0.93	0.01	L	8.4161	0.0020	0.012	79		8.40	8.44		C			1							
104948	10.411	0.024	9.718	0.021		0.627	0.024	T	0.69	0.02	L	9.8503	0.0020	0.024	177		9.81	9.89					1							
104949	10.182	0.022	8.990	0.014		1.021	0.020	T	0.99	0.02	L	9.0584	0.0016	0.019	169		9.03	9.09		C			1							
104950	9.046	0.015	8.538	0.014		0.477	0.019	T	0.55	0.02	L	8.5822	0.0012	0.016	92		8.55	8.61		D			1							S
104951	10.416	0.045	9.916	0.046		0.481	0.049	T	0.55	0.05	L	10.0473	0.0050	0.023	62		10.00	10.09					1							
104952	7.626	0.005	7.744	0.007		−0.102	0.008	T	−0.09	0.01	L	7.7249	0.0011	0.012	164		7.71	7.75			21156+3715	I 1	1							S
104953	9.071	0.014	8.627	0.014		0.419	0.018	T	0.49	0.02	L	8.6696	0.0014	0.013	110		8.65	8.69		C			1							
104954	11.261	0.068	10.302	0.045		0.844	0.061	T	0.86	0.04	L	10.4956	0.0037	0.026	100		10.45	10.54		C			1							G
104955	10.112	0.017	8.333	0.008		1.482	0.015	T	1.50	0.02	L	8.2977	0.0011	0.013	200		8.27	8.32					1							
104956	8.744	0.012	8.413	0.013		0.319	0.019	T	0.37	0.03	L	8.4522	0.0016	0.011	82		8.43	8.47		C			1							S
104957	7.456	0.006	7.421	0.007	A	0.037	0.008	T	0.05	0.01	L	7.4434	0.0101	0.013	120	A	7.40	7.46		D	21156+7836	I 2	1 C P C							S
104958	7.379	0.006	7.430	0.007		−0.070	0.015	G	−0.05	0.01	H	7.4422	0.0009	0.008	127		7.42	7.46		C			1							S
104959	9.356	0.017	8.684	0.015		0.611	0.017	T	0.68	0.01	L	8.7530	0.0015	0.016	118		8.73	8.78			21156−3928	I 1	1							S
104960	9.083	0.012	7.760	0.008		1.123	0.011	T	1.09	0.01	L	7.7925	0.0010	0.011	160		7.77	7.81		C			1							
104961	9.851	0.015	8.035	0.007		1.511	0.013	T	1.54	0.02	L	7.9781	0.0011	0.017	278		7.95	8.00					1							
104962	6.272	0.004	6.420	0.005		−0.129	0.006	T	−0.12	0.01	L	6.4102	0.0007	0.009	133		6.39	6.42					1							S
104963	6.660	0.004	5.287	0.003		1.161	0.003	G	1.12	0.00	H	5.3341	0.0007	0.005	124		5.32	5.34		C			1							S
104964	9.912	0.026	9.558	0.028	B	0.336	0.035	T	0.39	0.05	L	9.6270	0.0553			B				D	21156+7836	I 2	1 C I C							
104965	6.884	0.004	6.585	0.004		0.308	0.001	G	0.35	0.00	H	6.6198	0.0008	0.008	131		6.61	6.64					1							S
104966	9.179	0.013	8.823	0.014	*	0.400	0.015	G	0.47	0.02	H *	8.8687	0.0026	0.022	113	*	8.82	8.90		D	21157+4832	H 1	2 C A	AB	329	0.307	0.015	1.88	0.15	
104967	8.339	0.010	7.080	0.007		1.080	0.015	G	1.04	0.01	H	7.1271	0.0015	0.009	78		7.11	7.14		C			1							S
104968	7.932	0.009	6.091	0.004		1.531	0.008	T	1.58	0.02	L	6.0380	0.0009	0.007	107		6.03	6.05					1							S
104969	8.397	0.010	7.951	0.011		0.422	0.002	G	0.49	0.00	H	8.0161	0.0021	0.019	114		7.98	8.05		U			1 G							S
104970	10.692	0.037	9.621	0.023		0.927	0.033	T	0.92	0.02	L	9.6771	0.0026	0.030	213		9.63	9.73					1 S							G
104971	10.986	0.038	10.431	0.037		0.340	0.020	G	0.40	0.03	H	10.5203	0.0029	0.045	191		10.44	10.61					1 X							G
104972	10.352	0.023	8.627	0.010		1.439	0.020	T	1.43	0.03	L	8.5872	0.0020	0.023	179		8.55	8.63					1							
104973	9.910	0.017	9.331	0.016		0.541	0.021	T	0.61	0.02	L	9.4057	0.0017	0.022	181		9.36	9.45		C			1							
104974	7.418	0.008	5.515	0.004		1.639	0.016	G	2.36	0.05	F	5.3468	0.0029	0.020	65		5.32	5.39		U 2			1 S							S
104975	9.503	0.020	9.076	0.020		0.408	0.015	G	0.47	0.02	H	9.1256	0.0015	0.017	91		9.09	9.16		C			1							
104976	10.047	0.026	9.453	0.024		0.555	0.026	T	0.63	0.02	L	9.5183	0.0024	0.018	92		9.49	9.55		C			1							
104977	8.145	0.010	8.034	0.012		0.108	0.015	T	0.12	0.02	L	8.0875	0.0012	0.013	76		8.07	8.12		C			1							S
104978	5.971	0.004	5.758	0.003	*	0.191	0.005	G	0.21	0.01	H *	5.7886	0.0009	0.007	94	*	5.78	5.80		D	21158−5316	I 1	2 C S A	AB	64	0.140	0.005	0.47	0.28	S
104979	8.672	0.014	8.453	0.015		0.161	0.015	G	0.18	0.01	H	8.5071	0.0020	0.013	76		8.48	8.53		C			1							
104980	7.974	0.014	6.293	0.006		1.380	0.011	G	1.35	0.01	H	6.2804	0.0009	0.007	60		6.27	6.29		C			1							S
104981	8.732	0.009	8.672	0.011		0.060	0.013	T	0.07	0.01	L	8.6867	0.0014	0.021	210		8.66	8.72					1							
104982	10.324	0.033	9.523	0.027		0.709	0.033	T	0.76	0.03	L	9.6105	0.0030	0.023	110		9.58	9.65					1							
104983	8.294	0.008	7.922	0.008		0.376	0.015	G	0.44	0.02	H	7.9718	0.0012	0.012	158		7.95	8.00		C			1							S
104984	9.787	0.028	8.516	0.016	*	1.082	0.025	T	1.04	0.02	L *	8.6021	0.0020	0.019	97	*	8.57	8.66		U 2	21158+6721	I 1	2 C A	AB	354	8.081	0.007	1.81	0.04	
104985	8.588	0.012	7.412	0.008		1.008	0.011	T	0.98	0.01	L	7.4596	0.0014	0.009	87		7.44	7.47					1							S
104986											T	11.5156	0.0224	0.213	123		11.21	12.24		U 2			1 V							G P
104987	4.590	0.003	4.002	0.002		0.549	0.003	T	0.62	0.00	L	4.0423	0.0005	0.006	63		4.03	4.05			21158+0515	I 1	1							S G
104988	10.122	0.030	8.143	0.012		1.641	0.026	T	1.66	0.03	L	8.0259	0.0028	0.020	69		7.99	8.06					1							S
104989	9.756	0.019	9.617	0.024		0.134	0.029	T	0.15	0.03	L	9.6256	0.0020	0.022	128		9.59	9.67					1 G							G
104990	7.595	0.008	7.338	0.008		0.245	0.011	T	0.27	0.01	L	7.3857	0.0015	0.015	115		7.36	7.41					1							S
104991	8.688	0.013	7.514	0.009		1.007	0.012	T	0.98	0.01	L	7.5673	0.0012	0.009	85		7.55	7.59		C			1							S
104992	11.419	0.069	10.275	0.038		0.983	0.061	T	0.96	0.05	L	10.3355	0.0032	0.030	156		10.29	10.39		R			1							G
104993	8.645	0.009	8.232	0.009		0.402	0.015	G	0.47	0.02	H	8.2904	0.0014	0.013	149		8.27	8.31		C			1							S
104994	11.371	0.063	10.454	0.042	*	0.812	0.056	T	0.84	0.04	L *	10.5667	0.0027	0.034	177	*	10.51	10.62			21159+2858	H 1	2 C S C	AB	86	0.188	0.110	1.93	1.15	G
104995	8.264	0.012	7.880	0.012		0.362	0.015	G	0.42	0.02	H	7.9271	0.0012	0.010	83		7.91	7.94		C			1							S
104996	10.367	0.042	9.068	0.024		1.104	0.038	T	1.07	0.04	L	9.1081	0.0026	0.017	70		9.07	9.15					1							
104997	9.231	0.013	7.740	0.007	A	1.255	0.012	T	1.21	0.01	L	7.7642	0.0046	0.014	136	A	7.75	7.79		C	21159−8316	I 1	2 C D	AB	268	11.656	0.041	3.91	0.17	S D
104998	11.247	0.079	9.234	0.025		1.705	0.068	T	2.23	0.14	O	9.0813	0.0043	0.026	77		9.03	9.13					1							
104999	10.913	0.066	9.570	0.033		1.139	0.058	T	1.10	0.06	L	9.5613	0.0026	0.021	78		9.53	9.59		C			1							
105000	8.107	0.006	7.083	0.006		0.887	0.003	G	0.89	0.00	H	7.1374	0.0008	0.009	144		7.12	7.16		C			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
105001	21 15 57.91	+45 43 53.9	7.83	G	318.991 284 95	+45.731 637 20		2.31	3.25	−0.91	0.58	0.58	0.71	0.67	0.59	− 9	+ 5	+ 7	+ 8	+ 0	+ 7	+ 2	−25	− 9	− 2	0	−1.25
105002	21 15 59.61	−13 12 09.1	6.62	H	318.998 366 68	−13.202 532 28		5.05	12.82	−65.71	0.87	0.52	0.99	1.20	0.56	+36	−15	+ 7	− 2	−25	+12	−20	−12	+16	+52	0	0.33
105003	21 16 00.66	+64 32 12.2	8.93	H	319.002 767 07	+64.536 718 16		4.78	5.82	3.62	0.64	0.64	0.70	0.75	0.72	− 5	− 4	+13	+24	+ 6	+ 2	+ 6	+ 9	+ 9	+ 1	0	−0.18
*105004	21 16 01.81	+57 24 56.7	9.67	H	319.007 542 18	+57.415 752 87		2.72	4.04	9.32	0.73	0.75	0.86	0.80	0.76	− 6	+10	− 2	+ 0	+11	−11	+12	−13	+24	− 4	0	−1.19
*105005	21 16 01.78	+10 41 08.2	7.33	H	319.007 435 36	+10.685 614 38		1.03	−26.54	−17.92	0.81	0.62	0.93	0.98	0.60	+49	−19	− 8	−20	−38	+15	−33	−21	+14	+62	0	−0.26
105006	21 16 03.06	−62 43 03.9	9.92	H	319.012 763 13	−62.717 738 40		3.80	21.50	−29.30	0.88	0.84	1.57	1.04	1.04	−27	− 5	+ 6	+20	+10	+ 4	+11	+26	− 5	−27	1	0.54
105007	21 16 03.76	−58 30 30.7	9.23	H	319.015 665 08	−58.508 540 98		11.64	−74.27	−87.93	0.84	0.91	1.35	1.00	0.85	+ 8	+ 1	− 3	−13	+18	− 3	+17	+ 5	+ 8	−10	0	0.43
105008	21 16 07.50	+10 55 47.7	7.82	2 H	319.031 263 25	+10.929 916 68		0.72	−5.16	−20.14	0.86	0.74	1.01	1.04	0.71	+51	−22	−14	−15	−32	+18	−26	−21	+11	+58	0	0.92
105009 H	21 16 08.11	+41 01 09.3	9.46	H	319.033 808 96	+41.019 261 81	A	1.21	−3.15	−4.53	1.22	1.16	1.44	1.23	1.20	− 8	+ 2	+ 1	+21	+ 5	−17	+ 3	−12	+10	−13	0	−0.34
105010	21 16 09.61	+42 32 27.4	8.79	2 H	319.040 032 11	+42.540 937 22		0.46	−1.37	−3.68	0.69	0.64	0.91	0.82	0.69	−19	− 7	+12	+13	+ 8	− 6	+ 7	− 5	+18	−13	0	0.76
105011	21 16 09.91	+04 24 19.2	7.46	H	319.041 285 89	+04.405 329 57		5.67	12.27	−10.28	0.78	0.77	1.04	1.09	0.87	+28	−16	−28	−19	− 6	+44	− 3	−43	+41	+41	0	−0.34
105012	21 16 11.20	+50 43 25.6	9.10	H	319.046 674 58	+50.723 769 63		4.81	−3.77	13.86	0.74	0.80	0.93	0.93	0.87	− 2	+ 1	+17	+ 8	+ 1	− 9	− 1	−21	− 9	−12	0	−1.42
105013	21 16 11.33	−70 13 56.1	9.18	H	319.047 200 71	−70.232 261 36		8.11	19.42	−16.85	0.78	0.90	1.31	0.87	1.04	− 7	− 8	− 8	+ 7	− 6	− 9	− 5	+ 8	−14	−22	0	−0.46
105014	21 16 11.49	+37 24 12.3	8.82	H	319.047 872 05	+37.403 419 28		1.94	8.21	2.04	0.58	0.66	0.95	0.61	0.64	−20	+ 1	+10	− 3	+ 0	− 4	+ 0	+12	− 2	−18	0	−1.23
105015	21 16 12.19	+23 24 13.4	9.61	H	319.050 808 09	+23.403 710 10		−0.99	−21.37	−18.29	0.82	0.83	1.67	1.04	1.02	+19	−14	+ 4	−23	+24	−20	+23	− 8	− 1	+29	1	1.56
105016	21 16 17.00	+26 21 01.0	7.19	H	319.070 822 90	+26.350 280 42		0.81	11.12	4.11	0.55	0.54	0.84	0.67	0.69	+ 2	+ 9	−15	+ 6	+13	−12	+14	−10	+34	+ 2	0	0.67
105017	21 16 17.12	+44 14 17.5	6.36	H	319.071 318 71	+44.238 196 62		2.13	14.93	10.67	0.46	0.42	0.56	0.56	0.45	−17	+15	− 9	+ 6	+ 2	− 1	+ 0	− 9	− 3	−21	0	0.20
105018	21 16 17.63	+21 54 49.0	7.98	H	319.073 460 21	+21.913 598 07		3.22	−0.40	−16.38	0.71	0.54	0.94	0.87	0.66	−12	− 4	+ 1	+29	+ 1	−18	+ 1	+27	+ 7	+ 6	0	1.32
105019	21 16 17.78	−09 12 52.8	6.45	2 H	319.074 082 71	−09.214 664 22		1.78	−7.32	3.53	0.88	0.54	1.02	1.50	0.58	+21	+ 4	− 7	+ 8	−43	+40	−29	− 3	+14	+35	4	0.98
105020	21 16 19.15	+31 21 27.3	8.14	H	319.079 789 26	+31.357 589 88		3.83	1.93	−4.52	0.57	0.54	1.00	0.75	0.61	− 9	−18	− 4	+45	+20	−38	+ 8	+ 8	+27	−28	0	−0.71
105021	21 16 20.55	+39 05 46.1	8.26	G	319.085 634 83	+39.096 143 62		2.48	−1.74	−7.79	0.55	0.59	0.88	0.61	0.62	−15	+ 2	+ 6	+ 6	+ 4	−11	+ 4	− 1	+17	−22	0	−2.75
105022	21 16 21.83	+26 54 55.0	9.85	H	319.090 976 62	+26.915 288 95		0.22	3.79	5.95	1.04	1.10	1.64	1.26	1.29	+ 5	+ 7	−20	+ 9	+16	−21	+14	−24	+30	+ 0	0	0.88
105023	21 16 22.00	−40 20 04.2	9.32	G	319.091 653 08	−40.334 488 57		8.68	50.01	−11.48	1.29	0.87	1.49	1.61	0.81	+55	− 3	−22	−41	−47	+40	−36	−30	−17	+18	0	−1.13
105024	21 16 22.06	+52 28 53.7	8.23	H	319.091 914 08	+52.481 588 86		1.83	−6.29	−1.73	0.66	0.61	0.77	0.80	0.71	− 8	−15	+ 1	−10	+11	+15	+ 8	−12	+13	+ 7	0	−1.14
105025	21 16 22.31	−28 16 14.2	8.49	H	319.092 943 14	−28.270 624 67		10.25	75.34	−0.08	1.01	0.74	1.19	1.24	0.60	+13	+ 7	−38	−19	−21	+34	− 8	−54	+25	+20	0	−0.49
105026	21 16 22.70	−30 17 03.0	11.72	3 H	319.094 562 87	−30.284 167 71		−1.97	16.51	−7.58	2.48	1.91	3.17	3.27	1.60	+17	+11	−25	+ 3	−15	+45	− 5	−45	+28	+24	0	−0.69
105027	21 16 24.03	−49 26 23.3	9.55	G	319.100 111 01	−49.439 808 78		9.78	103.12	−188.13	1.33	0.98	1.70	1.96	1.32	+33	−35	−40	− 1	− 1	+ 2	− 5	−14	+ 8	+ 0	0	2.55
105028 H	21 16 25.36	−54 51 22.4	7.76	H	319.105 685 56	−54.856 233 11	*	11.95	13.54	11.98	0.72	0.55	0.86	0.94	0.61	−13	− 9	− 2	+49	−15	+ 2	−21	+38	− 3	−50	0	1.05
105029	21 16 26.13	−37 49 22.1	9.53	G	319.108 859 89	−37.822 804 11		14.12	87.69	−188.93	1.21	0.98	1.46	1.35	0.78	+23	−32	−42	−19	−17	+33	−17	−47	+32	+ 6	0	−0.11
105030	21 16 26.81	+48 47 32.9	7.50	H	319.111 700 41	+48.792 474 17		3.50	−10.44	−0.71	0.53	0.51	0.63	0.73	0.58	− 9	−12	+ 6	−12	−19	+11	−15	− 3	+ 0	−23	0	0.44
105031	21 16 26.93	−53 00 15.8	8.94	2 H	319.112 212 88	−53.004 396 53		3.91	12.29	−21.19	1.06	0.85	1.36	1.50	0.71	+25	−10	−36	+20	+33	−11	+22	− 4	− 2	+22	0	1.25
105032	21 16 27.22	+77 12 39.0	10.11	H	319.113 402 47	+77.210 828 46		6.23	15.23	− 7.42	0.86	0.86	0.94	0.95	0.89	− 3	− 4	+17	+ 2	+ 9	+ 6	+ 9	−24	+10	+ 5	1	1.11
105033	21 16 28.40	+53 18 42.2	9.12	H	319.118 312 78	+53.311 735 74		23.21	−159.54	−235.59	0.79	0.83	0.96	0.86	0.94	+ 1	− 4	+ 9	+14	+ 5	−20	+11	− 7	− 2	+18	0	1.38
105034	21 16 29.62	+42 15 06.6	6.23	H	319.123 411 31	+42.251 825 72		3.77	0.91	−15.73	0.43	0.42	0.58	0.52	0.46	−15	− 8	+ 4	+ 0	+ 4	− 1	+ 3	+ 5	+ 2	− 9	2	−0.65
105035	21 16 29.83	−09 09 28.3	7.44	H	319.124 279 44	−09.157 861 38		4.58	32.71	4.24	0.99	0.56	1.14	1.55	0.58	+10	− 4	−11	+31	−30	+45	−18	+16	+13	+21	2	0.72
105036	21 16 31.52	+52 32 06.1	8.99	G	319.131 324 86	+52.535 037 35		1.68	7.23	1.26	0.79	0.74	0.91	1.00	0.85	−11	−11	+ 3	− 6	+12	+16	+12	− 9	+ 1	+ 7	0	−0.77
105037 H	21 16 31.73	+45 54 27.9	10.16	H	319.132 226 57	+45.907 749 81	A	2.67	−0.03	−2.84	4.08	3.63	2.67	2.55	2.21	+27	+ 9	+ 1	+19	+ 0	+32	− 1	+ 1	−25	−13	1	−0.64
105038	21 16 32.38	+09 23 38.8	7.88	H	319.134 919 90	+09.394 115 01		61.83	146.48	−119.11	0.97	0.70	1.06	1.16	0.67	+43	−13	− 6	−21	−41	+12	−36	−25	+14	+54	0	−0.35
105039 H	21 16 33.09	+15 04 43.8	9.29	G	319.137 870 35	+15.078 840 05	*	5.53	6.19	− 7.43	1.15	0.98	1.45	1.65	0.96	+22	+ 4	−33	+ 2	−24	+13	−15	−33	+24	+29	0	0.25
105040 H	21 16 34.46	−00 37 18.1	7.31	G	319.143 576 48	−00.621 692 31	A	4.37	10.46	−11.52	1.48	1.36	1.45	1.52	1.29	+51	−13	−33	−21	−16	+12	−20	−50	+33	+54	3	0.64
105041	21 16 35.25	−27 45 53.0	10.63	H	319.146 879 94	−27.764 723 65		9.14	− 9.88	48.05	16.97	13.68	19.05	22.10	11.27	+25	−15	−22	− 8	−20	+21	−19	−56	+17	+19	0	
105042	21 16 35.91	−14 49 23.3	8.10	H	319.149 641 03	−14.823 148 40		2.81	10.04	2.12	0.91	0.57	1.10	1.22	0.57	+38	−19	−26	−14	−10	+35	− 6	+ 3	+27	+43	0	0.85
105043	21 16 37.84	+40 38 21.5	9.43	H	319.157 652 05	+40.639 293 39		2.03	− 0.98	− 6.78	0.65	0.72	0.97	0.78	0.84	+ 0	+ 8	− 3	+ 3	− 2	− 3	− 2	−10	+12	− 8	1	−0.14
105044	21 16 37.93	−36 10 24.1	8.09	H	319.158 031 29	−36.173 367 38		14.26	60.83	− 2.13	0.91	0.72	1.03	0.96	0.61	+20	−24	−21	−11	−15	+27	−13	−35	+13	+17	0	0.74
105045	21 16 38.20	−72 14 26.9	8.60	H	319.159 163 19	−72.240 812 24		0.70	−16.15	0.14	0.74	0.81	1.09	0.94	1.05	−19	− 8	−21	+ 6	+12	− 4	+13	+11	−10	−23	0	−1.42
105046	21 16 39.46	−01 36 27.8	6.48	H	319.164 406 67	−01.607 718 16		3.86	23.05	−16.94	0.94	0.61	0.97	1.21	0.69	− 1	+ 8	−21	−50	+22	− 2	+13	−35	+37	+18	0	1.60
105047	21 16 39.70	+36 19 16.5	7.37	H	319.165 407 84	+36.321 243 55		10.95	5.03	−24.32	0.41	0.45	0.65	0.45	0.45	−16	+ 5	+11	+ 2	+ 0	+ 3	+ 0	+ 6	+ 3	−12	3	−0.71
105048	21 16 39.74	−20 10 28.5	7.60	H	319.165 576 67	−20.174 571 59		3.95	−49.43	−70.29	0.87	0.49	1.02	1.06	0.47	+38	−20	−12	− 6	−25	+36	−20	−23	+11	+42	0	−1.37
105049 H	21 16 40.05	+07 30 53.2	7.42	G	319.166 878 36	+07.514 784 38	*	8.54	4.01	−42.16	0.96	0.71	1.03	1.30	0.78	− 6	− 1	−32	−16	+ 6	+14	+11	−41	+23	+ 2	0	−1.34
105050	21 16 41.48	−01 18 06.6	12.10	G	319.172 823 72	−01.301 830 45		−1.28	267.22	−252.01	3.38	2.45	3.46	4.46	2.70	+15	+20	−22	−60	− 3	−23	− 8	−60	+25	+30	0	−0.03
105051 H	21 16 43.29	−07 39 17.2	7.95	G	319.180 377 56	−07.654 777 63	A	6.53	5.49	6.55	3.44	1.64	2.63	3.86	1.19	+12	+11	−31	+47	−36	+48	−10	+27	+ 0	+26	1	−0.68
105052	21 16 43.58	−50 26 24.2	9.69	H	319.181 596 21	−50.440 058 53		5.39	−34.80	−0.71	1.15	0.99	1.55	1.55	0.99	+22	− 4	−24	+ 5	− 9	+10	− 8	−36	+16	+20	0	−1.00
105053	21 16 46.14	+05 15 07.8	7.85	G	319.192 259 45	+05.252 177 13		3.47	16.78	− 8.39	0.85	0.67	1.01	1.35	0.81	+ 3	− 6	−23	− 4	+ 5	+34	+ 9	−36	+30	+11	0	0.04
105054	21 16 46.43	+53 10 26.1	8.06	H	319.193 440 46	+53.173 914 75		2.92	0.96	3.60	0.60	0.60	0.70	0.64	0.65	+ 0	− 4	+ 6	+15	+ 8	−12	+12	− 3	+ 3	+19	1	1.67
105055	21 16 47.74	+12 20 02.7	8.60	H	319.198 902 97	+12.334 074 57		3.83	12.03	2.58	0.93	0.74	1.15	1.15	0.73	+26	−13	−28	+18	−22	+21	− 9	+ 1	+ 2	+40	0	1.75
105056	21 16 53.92	+27 15 28.9	8.23	G	319.224 678 22	+27.258 034 56		6.72	47.20	35.77	0.62	0.77	1.12	0.73	0.89	+ 1	+ 7	−29	+ 3	+10	−24	+ 7	−30	+36	+ 0	0	1.08
105057	21 16 54.73	+13 57 11.4	7.57	G	319.228 057 92	+13.953 172 81		1.36	3.68	2.10	0.80	0.63	1.00	0.86	0.64	+28	−37	−30	− 5	−15	+10	−18	−20	+24	+30	0	−1.12
105058 H	21 16 55.73	−28 36 16.8	9.67	2 H	319.232 203 83	−28.604 673 51	A	7.14	−77.69	−41.72	4.36	2.92	4.22	4.56	2.01	− 7	+ 2	−29	−34	− 1	+ 9	+ 2	−57	+26	+ 6	5	0.51
105059	21 16 58.23	+01 01 33.4	7.85	H	319.242 638 81	+01.025 934 73		4.38	24.64	−19.77	1.15	1.04	1.18	1.32	1.12	+35	+17	− 4	−52	−24	+ 4	−20	−63	+19	+46	0	0.76
105060	21 16 58.24	−10 08 05.9	7.04	H	319.242 647 07	−10.134 978 21		4.58	2.75	−17.70	0.80	0.55	0.98	1.37	0.60	+24	+ 0	−17	+ 8	−38	+42	−24	+ 3	+ 3	+28	0	0.36
105061	21 16 59.20	−56 18 25.8	9.43	H	319.246 652 33	−56.307 157 36		2.63	10.60	−22.87	1.21	0.85	1.43	1.70	0.95	−18	+18	−22	+ 9	+ 8	− 8	+ 7	+12	+15	−50	0	−0.84
105062	21 16 59.66	−46 03 43.7	10.04	H	319.248 571 94	−46.062 139 74		23.81	274.02	−194.87	1.19	1.04	1.60	1.40	0.97	+32	−27	−19	−14	−13	+ 1	−19	−31	+23	+13	4	0.09
105063	21 17 00.48	+22 39 24.8	8.55	H	319.252 006 71	+22.656 898 50		12.03	−21.77	−91.00	0.65	0.58	1.14	0.82	0.73	+15	− 2	− 6	− 8	+29	−18	+27	+ 4	+ 8	+25	0	−0.11
*105064	21 17 02.02	+53 59 51.4	6.12	H	319.258 396 86	+53.997 597 50		8.12	37.79	39.45	0.47	0.45	0.54	0.49	0.46	+ 4	+ 9	+ 4	− 7	+ 5	−14	+ 6	−13	+11	− 1	0	0.17
*105065	21 17 01.98	−44 02 20.8	10.65	G	319.258 236 61	−44.039 107 45		4.45	− 7.38	− 6.97	1.84	1.41	2.57	1.81	1.32	+49	−28	− 1	−27	− 8	+10	−20	−15	+ 7	+49	4	−1.61
105066	21 17 02.04	−01 04 38.5	8.08	H	319.258 493 85	−01.077 368 98		23.33	160.12	−23.94	1.17	1.05	1.32	1.56	1.15	+37	+ 5	−19	−44	−21	− 7	−22	−63	+25	+46	0	1.02
105067	21 17 02.61	−52 06 26.2	9.14	H	319.260 881 22	−52.107 276 88		1.74	12.67	− 4.07	1.00	0.89	1.40	1.44	0.84	+17	− 7	−38	− 1	− 8	− 6	−12	−27	+22	− 4	2	−0.25
105068 H	21 17 04.11	+43 11 36.9	8.62	H	319.267 141 85	+43.193 580 08	B	2.05	− 3.83	− 1.73	2.49	2.31	1.71	1.79	1.61	+ 0	+ 5	− 4	+ 5	+ 3	−19	+ 2	+ 2	+18	−40	1	−1.27
105069	21 17 04.68	+18 57 46.8	8.59	H	319.269 491 93	+18.962 990 69		3.19	49.18	11.19	1.09	0.88	1.30	1.52	1.00	+10	+ 8	−42	−34	+ 2	−13	− 2	−47	+40	+14	2	1.44
105070	21 17 04.89	+60 16 50.9	8.79	H	319.270 394 31	+60.280 798 62		4.44	−26.42	−40.94	0.66	0.66	0.77	0.66	0.69	− 1	+ 6	− 5	+ 8	+24	−11	+27	− 1	+ 3	+31	0	2.01
105071	21 17 06.59	+22 31 52.5	7.99	H	319.277 465 02	+22.531 247 87		6.44	− 8.59	−24.08	0.61	0.49	0.96	0.76	0.60	− 1	− 4	− 8	− 7	+19	−15	+16	+ 3	+ 9	+12	0	−0.12
105072 H	21 17 06.82	+35 46 10.3	7.96	H	319.278 415 82	+35.769 539 36	A	6.37	0.38	−23.68	1.15	1.34	1.66	1.02	1.27	−10	+ 6	+ 9	− 9	+ 6	− 3	+10	− 7	+ 4	−12	1	0.91
105073 H	21 17 08.22	−80 20 41.6	7.47	H	319.284 229 30	−80.344 886 19	A	4.18	13.36	−10.33	0.95	1.05	1.09	1.03	1.15	− 3	−16	− 3	− 7	−10	+ 2	− 9	+13	+ 1	− 9	4	0.47
105074	21 17 09.10	+81 45 41.4	7.65	H	319.287 930 14	+81.761 505 08		4.31	−33.62	17.18	0.57	0.51	0.59	0.65	0.53	− 6	−10	+13	− 1	+ 4	+ 3	+ 3	− 7	− 1	−13	0	−1.52
105075	21 17 10.66	−04 14 22.3	8.08	H	319.294 418 29	−04.239 536 47		0.49	10.54	2.09	0.95	0.69	1.20	1.27	0.79	+22	− 9	−11	− 8	−17	+51	−13	−22	+24	+39	0	1.55
105076	21 17 11.15	+32 09 57.6	8.94	H	319.296 442 80	+32.166 005 03		0.97	11.27	− 0.12	0.75	0.75	1.10	0.82	0.79	+ 4	+ 1	+ 8	+48	+20	−16	+22	+28	+10	+ 5	0	0.22
105077	21 17 12.11	+03 54 43.7	7.78	H	319.300 477 88	+03.912 129 21		3.39	− 2.60	−22.96	0.95	0.91	1.14	1.16	0.95	+33	−16	−31	−28	−10	+25	−10	−49	+30	+38	0	0.49
105078	21 17 12.38	−19 30 21.4	8.46	G	319.301 581 21	−19.505 950 53		5.49	19.13	−16.91	0.95	0.55	1.12	1.13	0.55	+32	−20	−21	− 8	−27	+38	−20	−14	+15	+41	0	0.07
105079	21 17 13.54	−13 16 44.3	6.41	H	319.306 428 11	−13.278 974 14		5.35	− 9.41	− 6.13	0.87	0.55	1.00	1.18	0.60	+31	−18	+17	+ 3	−29	+ 9	−23	−12	+14	+54	0	0.83
105080	21 17 14.23	+55 47 52.7	6.00	H	319.309 290 03	+55.797 968 66		2.21	16.78	13.32	0.45	0.44	0.53	0.49	0.45	−10	+ 5	+12	+14	− 8	−24	− 2	−13	+19	− 8	0	1.37
105081	21 17 14.83	+55 03 31.6	7.91	H	319.311 776 78	+55.058 767 12		4.48	11.83	9.94	0.51	0.53	0.62	0.53	0.50	− 5	+ 2	+15	−11	− 2	−14	+ 0	−12	+15	+ 0	2	−0.14
105082	21 17 14.92	+50 31 11.0	8.65	H	319.312 154 87	+50.519 717 94		4.05	30.60	14.48	0.59	0.62	0.72	0.73	0.69	+ 0	+ 1	− 2	− 1	+ 1	−15	− 2	−22	+ 6	−16	0	−0.45
105083	21 17 15.63	−21 44 28.5	7.96	H	319.315 112 72	−21.741 256 31		9.84	−86.25	−89.10	0.97	0.51	1.11	1.25	0.52	+41	+ 2	−10	−16	−29	+38	−24	−25	+13	+51	0	−0.32
105084	21 17 16.23	−22 04 30.6	8.48	H	319.317 641 88	−22.075 166 40		3.08	17.89	− 2.17	1.03	0.53	1.18	1.23	0.55	+55	−12	− 9	−24	−33	+34	−31	−15	+ 5	+55	0	−0.57
105085	21 17 16.39	−31 53 03.9	8.59	H	319.318 283 57	−31.884 419 36		1.50	− 2.63	−10.22	1.05	0.84	1.14	1.29	0.68	+25	−17	−16	+ 1	−32	+16	−30	−57	+15	+17	0	2.49
105086	21 17 16.79	−39 02 58.6	7.56	H	319.319 977 82	−39.049 617 97		16.43	31.78	40.23	0.98	0.70	1.15	1.40	0.60	+23	−12	−32	+17	−33	+34	−31	−27	+ 3	− 9	0	0.16
105087	21 17 17.62	+63 49 46.5	10.47	H	319.323 396 04	+63.829 579 54		4.03	−12.59	−10.42	0.95	0.91	1.03	1.10	1.16	− 1	+ 4	+ 3	+13	+11	+ 6	+14	+ 0	+ 8	+16	0	−0.53
105088	21 17 17.70	−48 42 26.4	8.50	1 H	319.323 739 13	−48.707 346 49		1.29	2.28	−13.57	0.95	0.86	1.38	1.19	0.72	+50	−44	−56	+15	+16	−14	+ 6	−11	+ 3	+39	0	−0.25
*105089	21 17 17.86	−19 47 36.4	8.65	H	319.324 422 03	−19.793 430 67		6.44	−26.78	− 4.81	1.07	0.65	1.24	1.34	0.59	+37	−15	−12	+ 6	−27	+34	−21	−28	+15	+40	0	−0.02
*105090	21 17 17.71	−38 51 52.5	6.69	G	319.323 796 76	−38.864 574 51		253.37	−3259.00	−1146.99	0.93	0.70	1.13	1.28	0.56	+12	−20	−40	+10	−25	+40	−18	−33	+14	− 9	0	0.75
105091	21 17 18.79	+58 36 41.4	6.42	1 G	319.328 309 25	+58.611 491 19		1.29	− 2.93	− 2.71	0.46	0.47	0.55	0.47	0.56	−11	+13	+ 5	+11	+10	− 1	+11	+ 5	+ 8	− 1	0	0.50
105092	21 17 19.28	+48 03 15.9	8.01	H	319.330 351 46	+48.054 425 83		1.80	1.69	− 6.71	0.63	0.62	0.78	0.77	0.64	− 7	+ 3	+ 5	−13	− 3	+22	− 3	−15	+ 0	− 9	0	−0.25
105093	21 17 20.34	+09 00 29.5	8.03	H	319.334 767 43	+09.008 199 64		7.47	25.73	2.84	0.93	0.74	1.02	1.17	0.71	+50	−15	− 7	−24	−47	+15	−39	−39	+ 7	+61	0	−0.23
105094	21 17 20.60	+46 04 25.3	8.30	H	319.335 830 96	+46.073 707 55		2.85	1.00	− 8.58	0.65	0.60	0.78	0.81	0.65	− 9	+13	+12	+32	+ 3	+17	− 4	− 9	−17	−18	1	−1.49
105095	21 17 21.26	−48 04 08.7	8.46	H	319.338 564 07	−48.069 078 74		5.12	11.68	11.13	0.88	0.71	1.17	1.12	0.72	+33	−27	−37	−13	+ 8	+ 2	+ 2	−11	+ 8	+43	0	2.39
*105096	21 17 21.30	+59 59 14.0	10.04	H	319.338 739 21	+59.987 214 87		2.54	0.56	−0.48	0.88	0.90	1.05	0.90	0.96	+ 5	+ 9	+ 0	+ 8	+22	− 4	+26	+ 2	+ 6	+37	1	1.68
*105097	21 17 21.28	+31 53 58.0	7.73	1 H	319.338 678 17	+31.899 452 92		6.62	17.76	−12.82	0.55	0.51	0.79	0.61	0.55	+ 0	+ 3	− 3	+48	+22

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
105001	7.784	0.008	7.808	0.009		−0.020	0.015	G	0.00	0.01	H	7.8350	0.0013	0.013	128		7.82	7.86		C			1							S
105002	8.012	0.009	6.740	0.006		1.093	0.002	G	1.05	0.00	H	6.7858	0.0007	0.006	83		6.78	6.80		C			1 S							S
105003	9.164	0.015	8.937	0.017		0.217	0.021	T	0.24	0.02	L	8.9988	0.0014	0.015	124		8.97	9.02					1							
105004	9.928	0.021	9.656	0.025		0.259	0.031	T	0.29	0.04	L	9.7396	0.0019	0.019	128		9.71	9.78		C			1							G
105005	9.147	0.016	7.476	0.008		1.397	0.014	T	1.37	0.02	L	7.4725	0.0013	0.010	93		7.45	7.49					1							S
105006	10.345	0.018	9.986	0.020		0.349	0.024	T	0.41	0.03	L	10.0040	0.0022	0.029	248		9.95	10.07		C			1 S							
105007	10.118	0.025	9.293	0.020		0.727	0.024	T	0.78	0.02	L	9.3661	0.0023	0.022	110		9.33	9.41					1							
105008	9.949	0.028	8.044	0.012		1.616	0.025	T	2.35	0.06	O	7.8611	0.0026	0.022	86		7.82	7.89		U 2			1							
105009	9.685	0.016	9.545	0.021	*	0.135	0.024	T	0.15	0.03	L *	9.5054	0.0019	0.024	150	*	9.46	9.55		D	21161+4101	M 1	2 C A	AB	278	0.788	0.010	2.24	0.04	G
105010	9.078	0.014	8.796	0.016		0.290	0.015	G	0.33	0.02	H	8.8687	0.0084	0.068	124		8.77	8.99		U 2 C			1							
105011	8.614	0.014	7.571	0.010		0.906	0.013	T	0.91	0.01	L	7.6188	0.0015	0.011	72		7.60	7.64		C			1							S
105012	9.750	0.022	9.141	0.020		0.567	0.026	T	0.64	0.02	L	9.2202	0.0020	0.018	102		9.19	9.26		C			1							
105013	9.524	0.015	9.181	0.016		0.332	0.024	T	0.39	0.03	L	9.2597	0.0025	0.028	145		9.21	9.30					1 S							
105014	9.195	0.010	8.876	0.011		0.303	0.014	T	0.35	0.02	L	8.8951	0.0018	0.018	167		8.87	8.93					1							
105015	11.070	0.045	9.725	0.022		1.140	0.039	T	1.10	0.04	L	9.7781	0.0021	0.022	171		9.74	9.81		C			1							
105016	7.725	0.007	7.239	0.007		0.457	0.015	G	0.53	0.02	H	7.2905	0.0012	0.010	119		7.27	7.31		C			1							S
105017	7.617	0.007	6.478	0.004		0.979	0.006	T	0.96	0.01	L	6.5230	0.0007	0.009	126		6.51	6.54		C			1							S
105018	9.523	0.014	8.107	0.008		1.196	0.013	T	1.16	0.01	L	8.1458	0.0015	0.017	161		8.12	8.17		C			1							S
105019	8.567	0.014	6.667	0.006		1.612	0.013	T	2.31	0.03	O	6.4925	0.0034	0.026	80		6.45	6.54	4.95	P 1 A	21163−0913	I 1	1 S							S P
105020	8.304	0.008	8.164	0.009		0.135	0.011	T	0.15	0.01	L	8.1917	0.0013	0.013	172		8.17	8.22		C			1							S
105021	8.281	0.008	8.273	0.010		0.022	0.010	G	0.04	0.01	H	8.2801	0.0015	0.018	173		8.25	8.32					1							
105022	11.666	0.109	10.002	0.039		1.391	0.091	T	1.36	0.11	L	9.9993	0.0023	0.025	99		9.94	10.04		C			1 S							G
105023	9.926	0.023	9.359	0.022		0.574	0.005	G	0.65	0.01	H	9.4374	0.0023	0.025	123		9.40	9.47					1							
105024	8.166	0.009	8.208	0.011		−0.020	0.015	G	0.00	0.01	H	8.2315	0.0010	0.014	103		8.21	8.25					1							
105025	8.954	0.015	8.543	0.015		0.441	0.015	G	0.51	0.02	H	8.5875	0.0014	0.011	77		8.57	8.62					1							S
105026											T	11.8098	0.0324	0.201	76		11.35	12.04	0.59	P 1 A			1							G
105027	10.357	0.033	9.646	0.028		0.640	0.015	G	0.70	0.01	H	9.6878	0.0033	0.026	95		9.64	9.74		C			1 G							
105028	8.764	0.012	7.854	0.009	*	0.807	0.011	T	0.83	0.01	L *	7.9133	0.0014	0.011	106	*	7.89	7.94		C	21164−5451	H 1	2 C S B	AB	271	0.191	0.036	2.72	1.39	S
105029	10.484	0.043	9.578	0.033		0.693	0.003	G	0.75	0.00	H	9.6821	0.0018	0.018	63		9.65	9.71		C			1							
105030	7.668	0.008	7.523	0.010		0.140	0.012	T	0.15	0.01	L	7.5485	0.0011	0.010	115		7.53	7.57		C			1							S
105031	10.112	0.032	9.007	0.021		0.953	0.030	T	0.94	0.02	L	9.0985	0.0028	0.024	89		9.04	9.14		U			1							
105032	10.675	0.055	10.143	0.050		0.499	0.067	T	0.57	0.07	L	10.2177	0.0026	0.023	108		10.18	10.25					1							G
105033	10.344	0.035	9.276	0.023		0.924	0.033	T	0.92	0.02	L	9.2709	0.0035	0.035	111		9.22	9.33		R			1							
105034	7.841	0.007	6.355	0.004		1.251	0.006	T	1.21	0.01	L	6.3908	0.0007	0.008	150		6.38	6.40		C			1							S
105035	7.477	0.007	7.432	0.009		0.033	0.002	G	0.05	0.00	H	7.4552	0.0009	0.009	82		7.44	7.47		C			1							S
105036	9.045	0.014	8.962	0.018		0.040	0.015	G	0.06	0.01	H	9.0315	0.0018	0.017	94		9.01	9.06					1							
105037	10.372	0.036	10.272	0.052	*	0.097	0.059	T	0.11	0.06	L *	10.1972	0.0027	0.026	123	*	10.14	10.24		C	21165+4554	H 1	2 C C	AB	51	0.433	0.040	2.48	0.22	G
105038	9.201	0.018	8.020	0.012		1.020	0.022	G	1.11	0.01	A	8.0502	0.0017	0.012	84		8.03	8.07					1							
105039	9.732	0.026	9.374	0.028	*	0.407	0.015	G	0.47	0.02	H *	9.4003	0.0022	0.018	72	*	9.36	9.44		C	21166+1505	H 1	2 C S A	AB	31	0.128	0.019	0.46	1.07	
105040	8.673	0.012	7.419	0.008	*	1.039	0.015	G	1.01	0.01	H *	7.4703	0.0013	0.010	74	*	7.45	7.49		D	21166−0037	H 1	2 C B	AB	112	0.596	0.040	3.88	0.20	S
105041	12.146	0.210	10.922	0.116		1.039	0.192	T	1.01	0.16	L	10.7781	0.0052	0.045	76		10.70	10.84		D	21166−2746	I 1	1 X S							G
105042	7.990	0.008	8.074	0.011		−0.074	0.002	G	−0.05	0.00	H	8.0811	0.0011	0.009	80		8.07	8.10					1							S
105043	9.483	0.015	9.433	0.020		0.051	0.023	T	0.06	0.02	L	9.4493	0.0016	0.024	156		9.40	9.49		C			1							G
105044	8.654	0.015	8.141	0.014		0.485	0.015	G	0.56	0.02	H	8.1996	0.0017	0.011	60		8.19	8.22		C			1							S
105045	10.501	0.027	8.747	0.012		1.462	0.023	T	1.47	0.04	L	8.7301	0.0020	0.022	158		8.70	8.77					1							
105046	7.723	0.008	6.594	0.005		0.981	0.003	G	0.96	0.00	H	6.6467	0.0010	0.006	76		6.64	6.66		C			1							S
105047	7.680	0.005	7.399	0.005		0.267	0.007	T	0.30	0.01	L	7.4444	0.0010	0.010	190		7.42	7.46					1							S
105048	9.171	0.016	7.723	0.009		1.221	0.014	T	1.18	0.01	L	7.7656	0.0010	0.011	111		7.75	7.78					1							S
105049	7.832	0.014	7.463	0.012	*	0.394	0.015	G	0.46	0.02	H *	7.5050	0.0021	0.014	57	*	7.48	7.53		C	21167+0731	H 1	2 C S A	AB	285	0.146	0.045	1.17	0.68	S
105050						1.100	0.020	G	1.18	0.03	I	11.7727	0.0050	0.061	70		11.68	11.90					1							G
105051	8.334	0.009	7.922	0.010	*	0.415	0.015	G	0.48	0.02	H *	8.0348	0.0011	0.011	115	*	8.01	8.06		D	21167−0739	I 1	2 C A	AB	171	2.788	0.004	0.18	0.01	S
105052	10.475	0.035	9.710	0.028		0.682	0.034	T	0.74	0.03	L	9.8211	0.0025	0.025	94		9.78	9.86		C			1							
105053	7.849	0.010	7.872	0.011		0.010	0.015	G	0.03	0.01	H	7.8613	0.0017	0.013	65		7.83	7.89		C			1							S
105054	8.308	0.009	8.099	0.010		0.200	0.013	T	0.22	0.01	L	8.1206	0.0020	0.013	110		8.10	8.14					1							
105055	9.907	0.035	8.732	0.023		1.008	0.033	T	0.98	0.03	L	8.7716	0.0023	0.017	79		8.74	8.80		C			1							
105056	9.498	0.019	8.339	0.012		1.003	0.005	G	0.98	0.00	H	8.3989	0.0018	0.016	107		8.37	8.43					1							
105057	7.450	0.008	7.546	0.011		−0.096	0.002	G	−0.08	0.00	H	7.5416	0.0017	0.012	82		7.53	7.57					1							S
105058	10.675	0.057	9.878	0.042	*	0.706	0.054	T	0.76	0.04	L *	9.8105	0.0161	0.115	80	*	9.76	10.17		U 2	21169−2836	I 1	2 C A	AB	90	1.069	0.011	0.49	0.04	P
105059	9.208	0.017	7.963	0.011		1.062	0.016	T	1.03	0.01	L	8.0138	0.0015	0.015	77		7.99	8.04					1							S
105060	7.121	0.006	7.037	0.007		0.069	0.002	G	0.08	0.00	H	7.0651	0.0007	0.007	81		7.05	7.08		C			1							S
105061	9.680	0.021	9.448	0.024		0.216	0.032	T	0.24	0.04	L	9.4935	0.0027	0.021	96		9.44	9.53					1							
105062	11.565	0.082	10.182	0.039		1.079	0.005	G	1.15	0.01	I	10.1755	0.0026	0.028	99		10.13	10.22		C			1							
105063	9.478	0.014	8.639	0.011		0.754	0.013	T	0.80	0.01	L	8.7005	0.0015	0.015	185		8.68	8.73		C			1							
105064	6.181	0.004	6.128	0.004		0.049	0.005	G	0.06	0.00	H	6.1440	0.0011	0.006	106		6.13	6.15					1							S
105065	11.264	0.060	10.642	0.058		0.597	0.020	G	0.67	0.02	H	10.8058	0.0049	0.038	96		10.74	10.85					1							G
105066	8.991	0.015	8.153	0.012		0.737	0.015	T	0.78	0.01	L	8.2163	0.0022	0.018	74		8.18	8.24					1							
105067	10.539	0.037	9.260	0.021		1.089	0.033	T	1.05	0.03	L	9.3032	0.0026	0.020	89		9.26	9.33		C			1							
105068	8.791	0.011	8.694	0.013	*	0.095	0.016	T	0.11	0.02	L *	8.6595	0.0023	0.016	121	*	8.63	8.69		D	21171+4312	I 1	2 C A	BA	322	0.412	0.003	0.12	0.02	
105069	10.078	0.032	8.707	0.018		1.161	0.029	T	1.12	0.03	L	8.7492	0.0028	0.019	67		8.72	8.78					1							
105070	9.223	0.013	8.839	0.014		0.364	0.018	T	0.43	0.02	L	8.8752	0.0016	0.019	123		8.85	8.90		C			1							
105071	8.550	0.008	8.045	0.007		0.485	0.015	G	0.56	0.02	H	8.0976	0.0013	0.014	182		8.07	8.12		C			1							S
105072	8.543	0.007	8.276	0.009	*	0.254	0.010	T	0.29	0.01	L *	8.0259	0.0012	0.015	195	*	8.01	8.06		D	21171+3546	I 1	2 C A	AB	251	1.250	0.004	0.35	0.02	S
105073	7.556	0.007	7.515	0.008	*	0.037	0.010	T	0.05	0.01	L *	7.4850	0.0009	0.011	141	*	7.46	7.51		D	21171−8021	I 1	2 C A	AB	358	0.708	0.003	0.99	0.01	S
105074	9.207	0.015	7.782	0.008		1.203	0.013	T	1.16	0.01	L	7.8102	0.0012	0.011	122		7.79	7.83					1							S
105075	9.702	0.033	8.200	0.017		1.263	0.029	T	1.22	0.03	L	8.2407	0.0016	0.010	53		8.22	8.26		C	21172−0414	I 1	1							
105076	10.149	0.022	9.053	0.014		0.947	0.020	T	0.94	0.01	L	9.1022	0.0020	0.024	160		9.07	9.14					1							
105077	9.109	0.019	7.897	0.012		1.036	0.018	T	1.01	0.01	L	7.9466	0.0012	0.013	70		7.93	7.97		D			1							S
105078	8.821	0.012	8.508	0.013		0.341	0.015	G	0.40	0.02	H	8.5406	0.0014	0.013	104		8.52	8.56		C			1							S
105079	6.451	0.004	6.413	0.004		0.035	0.005	T	0.05	0.00	L	6.4274	0.0008	0.005	80		6.42	6.44		C			1							S
105080	7.887	0.008	6.152	0.004		1.447	0.007	T	1.45	0.01	L	6.1374	0.0008	0.007	139		6.13	6.15					1							S
105081	8.065	0.009	7.924	0.010		0.136	0.013	T	0.15	0.01	L	7.9599	0.0015	0.013	128		7.94	7.98		C			1							S
105082	9.117	0.014	8.693	0.014		0.410	0.015	G	0.48	0.02	H	8.7407	0.0016	0.012	111		8.72	8.76		C			1							
105083	8.469	0.009	8.004	0.009		0.443	0.015	G	0.51	0.02	H	8.0594	0.0014	0.013	126		8.03	8.08					1							S
105084	9.916	0.020	8.587	0.011		1.128	0.018	T	1.09	0.02	L	8.6482	0.0012	0.012	140		8.63	8.67		C			1							
105085	9.840	0.039	8.666	0.024		1.007	0.036	T	0.98	0.03	L	8.7546	0.0021	0.013	75		8.73	8.78		C			1							
105086	8.191	0.012	7.617	0.011		0.549	0.015	G	0.62	0.01	H	7.6754	0.0023	0.012	69		7.66	7.70					1							S
105087	10.844	0.047	10.483	0.054		0.342	0.067	T	0.40	0.09	L	10.5493	0.0023	0.026	116		10.49	10.59		C			1							G
105088	10.637	0.038	8.702	0.014		1.640	0.033	T	2.02	0.09	O	8.5832	0.0031	0.026	103		8.54	8.62		U			1							
105089	9.282	0.017	8.717	0.016		0.533	0.017	T	0.61	0.02	L	8.7697	0.0016	0.013	98		8.75	8.80		C			1							S
105090						1.397	0.002	G	1.77	0.02	A	6.7530	0.0011	0.008	59		6.73	6.77		D			1							S
105091	6.622	0.004	6.448	0.004		0.194	0.006	G	0.21	0.01	H	6.4801	0.0029	0.020	110		6.45	6.51		U 2	21173+5837	I 1	1 G							S P
105092	9.777	0.017	8.126	0.009		1.381	0.015	T	1.35	0.02	L	8.1538	0.0015	0.015	141		8.13	8.19					1							
105093	8.181	0.009	8.042	0.011		0.134	0.013	T	0.15	0.01	L	8.0846	0.0018	0.014	86		8.06	8.10					1							S
105094	8.297	0.009	8.291	0.011		0.010	0.013	T	0.03	0.01	L	8.3087	0.0018	0.014	111		8.29	8.33		C			1							
105095	9.012	0.013	8.509	0.013		0.486	0.015	G	0.56	0.02	H	8.5669	0.0020	0.018	105		8.53	8.60					1							S
105096	10.378	0.030	10.060	0.037		0.302	0.045	T	0.35	0.06	L	10.1128	0.0022	0.024	116		10.07	10.15					1							G
105097	8.798	0.009	7.831	0.007		0.850	0.008	T	0.86	0.01	L	7.8873	0.0015	0.017	175		7.86	7.92		U			1							S
105098	8.804	0.011	7.542	0.007		1.075	0.010	T	1.04	0.01	L	7.5958	0.0014	0.012	108		7.57	7.61					1							S
105099	9.015	0.009	7.205	0.004		1.507	0.008	T	1.54	0.01	L	7.1864	0.0008	0.009	226		7.17	7.20		C			1							S
105100	9.937	0.019	8.525	0.010		1.193	0.017	T	1.15	0.01	L	8.5673	0.0018	0.016	154		8.54	8.59		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	$\alpha*$	δ	π	$\mu_{\alpha*}$	$\alpha*$	δ	π	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$												%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28											29	30
105101	21 17 23.18	+42 41 00.8	6.17	H	319.346 565 20	+42.683 567 12		2.83	9.72	2.24	0.47	0.43	0.60	0.57	0.48	−23	− 4	+ 4	− 5	+ 6	+ 6	+ 5	+ 0	+ 1	−17											3	−0.12
105102	21 17 24.95	+39 23 40.9	4.22	2 G	319.353 968 92	+39.394 690 16		0.72	0.43	−3.61	0.36	0.39	0.58	0.43	0.44	−18	+ 1	− 2	+15	− 8	−17	−10	+12	− 6	−10											0	−0.13
105103	21 17 25.10	+19 09 40.0	8.76	H	319.354 581 72	+19.161 107 31		1.68	10.64	8.29	2.10	1.88	2.63	2.71	2.00	+23	−24	−18	−27	− 9	+ 2	−14	−45	+22	+18											0	
105104	21 17 25.27	+08 14 02.7	6.99	H	319.355 288 50	+08.234 078 48		3.90	46.25	−6.42	0.77	0.73	0.90	1.07	0.77	+27	−13	−21	+ 1	− 4	+21	− 8	−52	+25	+23											0	−0.49
105105	21 17 25.38	−38 45 54.3	8.87	H	319.355 755 15	−38.765 084 87		4.61	9.15	−26.41	1.40	1.26	1.74	2.01	0.93	+24	−24	−53	− 7	−26	+31	−24	−54	+27	− 5											0	2.38
105106	21 17 25.62	−30 44 44.5	6.85	G	319.356 762 83	−30.745 681 49		5.60	14.94	−4.39	0.76	0.64	0.88	0.89	0.51	+34	−22	−22	−14	−27	+34	−30	−59	+23	+22											0	2.15
105107	21 17 25.87	−05 21 54.4	7.82	H	319.357 771 40	−05.365 110 19		4.35	15.77	16.07	0.92	0.69	1.08	1.47	0.83	+16	− 4	−24	+11	−17	+28	−11	−24	+31	+17											0	−0.77
105108	21 17 27.97	+56 45 46.7	7.53	H	319.366 559 82	+56.762 970 25		2.88	7.05	−5.49	0.56	0.52	0.62	0.62	0.53	−13	+ 4	+10	+ 6	+ 2	− 3	+ 4	−14	+18	− 8											0	0.18
105109	21 17 28.67	−47 01 58.9	8.61	H	319.369 439 82	−47.033 026 14		10.87	6.59	−104.51	0.87	0.71	1.18	0.97	0.70	+27	−27	−22	−23	−16	+32	−13	−33	+16	+27											0	0.91
105110	21 17 29.97	−57 33 02.6	8.32	H	319.374 868 13	−57.550 718 19		2.46	9.94	−5.26	0.66	0.69	1.11	0.80	0.65	+13	−15	−20	−24	+ 6	+ 1	+12	+13	−10	− 9											0	0.99
105111	21 17 32.55	+22 32 30.2	7.21	H	319.385 608 30	+22.541 723 16		10.41	3.98	−41.68	0.52	0.42	0.81	0.65	0.50	+ 3	− 1	− 7	−18	+24	−14	+20	− 3	+14	+11											0	0.28
*105112 H	21 17 33.73	+82 31 02.4	7.91	G	319.390 532 62	+82.517 342 39	A	12.82	8.82	78.81	1.41	1.31	1.29	1.95	1.16	+10	− 9	+15	− 7	−13	− 4	− 8	+ 4	−15	− 5											0	0.25
*105113	21 17 33.48	+60 06 01.7	9.27	G	319.389 490 72	+60.100 460 13		2.06	−5.51	−5.17	0.73	0.73	0.85	0.72	0.76	+ 5	+ 6	+ 0	+10	+22	− 6	+25	+ 3	+ 4	+36											0	0.88
105114	21 17 34.29	+31 09 17.4	8.18	H	319.392 867 19	+31.154 840 54		3.80	4.30	−3.34	0.61	0.55	0.95	0.77	0.57	− 7	−28	+ 3	+53	+15	−34	+ 7	+40	+ 8	−19											0	0.28
105115	21 17 34.96	−05 28 05.0	8.26	H	319.395 683 83	−05.468 066 38		4.10	15.53	−3.34	0.98	0.76	1.16	1.54	0.89	+18	−11	−29	+ 9	−12	+25	− 8	−20	+27	+14											0	−0.07
105116	21 17 36.35	+39 12 36.2	6.98	H	319.401 456 10	+39.210 061 04		11.64	29.95	−48.06	0.42	0.48	0.68	0.45	0.49	−20	+ 4	+ 1	− 2	+ 5	−13	+ 5	− 8	+13	−21											0	−1.63
*105117 H	21 17 36.78	+39 44 46.2	7.70	G	319.403 270 37	+39.746 156 26	A	4.81	27.22	6.09	0.78	0.86	1.06	0.82	0.81	− 4	+ 0	+13	+14	− 6	−13	− 2	+ 8	+11	−15											1	1.06
*105118	21 17 36.77	−34 04 41.4	9.26	H	319.403 214 22	−34.078 160 16		10.49	−29.54	−1.79	1.19	1.00	1.50	1.43	0.84	+28	−17	−31	−17	−20	+45	−11	−41	+18	+29											0	−0.68
105119	21 17 38.00	−50 06 04.1	8.74	H	319.408 331 38	−50.101 134 12		4.50	8.17	−3.90	1.02	0.81	1.31	1.43	0.76	+35	−20	−33	+ 2	−11	+16	−10	−28	+15	+26											0	0.67
105120	21 17 38.10	−05 46 55.8	7.44	G	319.408 731 59	−05.782 169 35		14.19	36.62	−61.29	0.82	0.60	0.97	1.29	0.67	+27	−12	−23	+22	−19	+39	− 7	+15	+17	+28											0	0.43
105121	21 17 38.54	−26 29 05.2	8.17	H	319.410 598 87	−26.484 786 66		3.30	13.25	−24.25	1.00	0.75	1.11	1.24	0.63	+26	−12	−10	−20	−24	+31	−20	−57	+14	+32											2	2.09
105122	21 17 39.10	+66 38 18.6	7.81	H	319.412 920 54	+66.638 502 94		2.83	−15.23	−13.45	0.62	0.55	0.66	0.79	0.64	− 7	−17	+13	− 6	+12	+16	+ 8	−12	+18	+13											0	0.36
105123 H	21 17 39.56	+33 45 30.3	8.11	H	319.414 822 72	+33.758 408 83	A	6.48	−9.07	−43.39	0.75	1.00	1.30	0.84	1.00	−32	+ 1	+ 4	− 6	+ 4	− 8	− 2	+15	+ 7	−10											0	1.30
105124	21 17 41.58	+20 00 22.1	7.45	H	319.423 230 56	+20.006 137 95		1.20	8.68	0.12	0.69	0.69	0.95	0.98	0.73	+42	−25	−14	−38	−21	+22	−18	−21	+ 2	+37											1	1.95
*105125	21 17 41.75	−59 48 56.5	11.17	G	319.423 968 96	−59.815 684 56		11.99	56.95	−52.56	1.89	1.60	2.49	2.39	1.87	+ 1	−30	−17	+10	+13	− 3	+16	+ 5	−21	− 5											0	−1.14
*105126	21 17 41.65	−33 59 50.8	8.28	G	319.423 555 75	−33.997 449 33		6.08	20.69	−10.09	0.95	0.80	1.18	1.06	0.65	+30	−25	−34	−20	−21	+39	−11	−40	+10	+25											0	−1.68
105127	21 17 42.09	−60 59 09.4	8.03	H	319.425 379 36	−60.985 933 87		2.65	2.27	0.47	0.59	0.65	1.11	1.04	0.79	− 8	−16	−11	−32	+38	−12	+36	+17	−25	−18											0	−0.62
105128	21 17 42.75	+20 30 19.4	7.97	1 H	319.428 127 30	+20.505 380 50		3.59	14.01	−12.60	0.61	0.57	0.94	0.77	0.69	+16	−13	− 4	+ 6	+13	− 3	+11	+22	− 4	+27											1	1.08
105129	21 17 44.81	+22 23 17.9	8.06	G	319.436 687 72	+22.388 295 23		10.26	51.50	53.72	0.61	0.49	0.94	0.76	0.57	− 3	− 6	+ 0	− 5	+16	−11	+14	− 4	+ 6	+ 8											0	−2.50
105130	21 17 50.99	+52 28 33.4	7.64	H	319.462 473 68	+52.475 949 09		8.76	−15.91	−36.73	0.56	0.56	0.68	0.69	0.61	− 7	−12	+ 6	− 4	+ 7	+15	+ 7	−13	+ 0	+11											0	−0.88
105131	21 17 51.63	−15 53 27.7	8.41	G	319.465 139 24	−15.891 038 87		8.76	0.05	−28.74	1.00	0.60	1.24	1.24	0.61	+30	− 7	−31	−13	−13	+39	− 5	− 9	+33	+45											0	1.04
105132	21 17 51.82	−42 02 48.0	9.18	G	319.465 927 91	−42.046 667 25		2.24	6.24	−8.67	0.92	0.79	1.31	0.86	0.73	+63	−17	−13	−46	−27	+17	−27	−34	+21	+56											0	1.14
105133	21 17 52.56	−48 43 05.0	6.54	H	319.469 003 10	−48.718 054 67		7.55	−19.76	−86.04	0.66	0.58	0.93	0.81	0.52	+40	−39	−51	+ 8	+10	− 4	+ 8	−11	+ 0	+36											0	1.15
105134	21 17 52.69	+51 12 26.2	8.33	H	319.469 555 60	+51.207 276 79		6.29	17.14	4.53	0.57	0.63	0.74	0.71	0.68	−10	−14	+18	+ 4	+ 4	+ 1	+ 4	−19	+ 4	− 2											0	1.25
105135	21 17 53.10	+14 32 18.9	7.95	G	319.471 268 76	+14.538 575 43		6.04	7.00	12.91	0.82	0.65	1.00	1.10	0.67	+16	− 3	−35	− 8	−12	+14	− 8	−14	+23	+22											0	−0.56
105136	21 17 54.50	+24 17 27.0	10.41	H	319.477 067 61	+24.290 842 86		1.28	−4.42	−11.02	1.17	0.96	1.61	1.49	1.17	−13	+ 5	+ 6	−35	+30	+ 9	+25	−17	+11	+ 8											2	−0.34
105137	21 17 54.86	+68 33 56.2	8.44	H	319.478 594 65	+68.565 610 97		2.16	−13.74	−15.90	0.61	0.62	0.68	0.72	0.63	+ 0	+ 0	+14	+16	+10	−16	+11	− 1	+ 6	− 2											3	−1.10
105138	21 17 55.07	+34 53 48.8	4.41	2 H	319.479 449 55	+34.896 881 20		3.62	11.96	6.85	0.32	0.38	0.56	0.36	0.41	−26	+ 5	+ 4	+ 0	+ 4	− 7	+ 4	+15	+10	−18											0	0.56
105139	21 17 56.08	−10 48 54.0	9.52	H	319.483 678 01	−10.815 011 95		10.44	−10.08	−40.85	1.41	0.96	1.59	2.07	1.07	+23	−21	+ 5	+ 7	−33	+13	−25	+ 9	+ 5	+31											0	−0.68
105140	21 17 56.25	−32 10 20.9	4.71	G	319.484 360 63	−32.172 485 51		19.76	55.46	−22.12	0.81	0.57	0.88	1.15	0.48	+ 3	− 1	−22	+31	−25	+32	−19	−39	+17	+ 0											6	3.54
105141	21 17 56.63	+17 37 41.6	7.85	H	319.485 948 55	+17.628 213 30		3.16	3.00	−1.13	0.87	0.73	1.19	0.98	0.87	+22	−38	−38	−10	−14	+ 6	−25	−42	+36	+13											0	1.62
105142	21 17 56.76	+57 20 19.3	8.62	H	319.486 481 51	+57.338 703 23		2.94	4.26	6.93	0.60	0.60	0.71	0.61	0.62	− 2	+ 3	+ 7	+ 0	+14	− 8	+15	− 2	+20	+13											0	−0.25
105143	21 17 57.28	−17 59 06.5	5.40	H	319.488 652 36	−17.985 136 35		5.63	15.57	−0.68	0.81	0.42	0.95	1.05	0.40	+27	−26	−29	+ 5	−28	+44	−15	−19	+22	+41											0	0.12
105144	21 17 58.31	+82 01 08.0	7.43	H	319.492 941 49	+82.018 893 76		3.61	16.68	−3.07	0.58	0.50	0.60	0.70	0.51	− 9	− 9	+16	+ 6	− 3	+13	− 6	− 5	− 1	−20											0	−0.80
*105145	21 18 00.09	−85 12 04.1	7.01	H	319.500 384 49	−85.201 141 68		5.99	60.79	−19.93	0.49	0.48	0.59	0.56	0.52	− 1	−15	− 5	+10	− 3	− 4	− 2	− 2	−11	−10											2	−1.19
*105146 H	21 18 00.06	+30 49 19.4	8.13	H	319.500 262 07	+30.822 054 57	*	4.18	−12.40	−11.33	1.07	1.05	1.13	0.85	0.75	− 3	−20	+10	+60	+21	−28	+16	+43	+12	+ 5											1	−0.53
105147	21 18 00.29	+30 19 26.5	8.19	H	319.501 208 12	+30.324 023 88		2.28	0.46	−4.88	0.51	0.50	0.85	0.61	0.51	− 2	− 3	+ 2	+46	+24	−15	+19	+39	+ 8	− 8											1	−0.68
105148	21 18 00.47	−64 40 53.4	6.32	H	319.501 939 98	−64.681 510 68		5.91	16.97	−28.55	0.41	0.39	0.66	0.50	0.47	−15	−10	−10	+16	+ 4	− 4	+ 4	+15	− 6	−16											0	1.15
105149	21 18 00.77	−22 02 43.2	9.33	H	319.503 191 18	−22.045 342 29		9.28	−10.62	−31.32	1.36	0.77	1.57	1.67	0.73	+51	+ 0	−17	−27	−39	+35	−33	−28	− 1	+49											0	1.05
105150	21 18 01.52	+22 41 58.1	9.21	H	319.506 348 94	+22.699 486 00		2.71	7.64	−2.85	0.70	0.61	1.31	0.88	0.79	+ 3	+ 7	− 5	−20	+25	−22	+25	−11	+11	+ 9											0	−2.81
105151	21 18 02.29	−30 48 35.3	9.71	H	319.509 556 81	−30.809 807 21		8.72	35.59	11.48	1.35	1.13	1.45	1.50	0.92	+34	− 8	−15	−24	−31	+23	−30	−61	+11	+24											2	1.30
105152	21 18 02.70	+00 09 43.3	8.15	H	319.511 255 00	+00.162 033 47		52.03	469.12	−186.83	1.15	1.17	1.23	1.29	1.26	+50	−36	−30	−54	−39	+35	−35	−66	+23	+58											0	0.33
105153	21 18 02.90	+46 51 26.3	7.04	H	319.512 094 97	+46.857 296 33		3.60	7.46	2.60	0.48	0.50	0.62	0.59	0.57	−13	+ 7	+12	+23	+ 5	+ 0	+ 3	+10	−17	− 7											1	0.38
105154	21 18 03.18	+63 08 35.3	9.49	H	319.513 242 65	+63.143 125 89		5.77	−13.99	−7.93	0.80	0.81	0.91	0.86	0.93	+13	+ 0	+16	+14	+18	+ 5	+22	+ 2	+14	+40											2	−0.67
105155	21 18 04.66	−02 08 30.6	7.47	H	319.519 420 43	−02.141 828 72		4.71	30.77	−19.37	1.00	0.78	1.09	1.24	0.92	+ 2	+ 6	−23	−44	+10	+17	+12	−47	+42	+26											0	1.41
105156	21 18 05.11	−29 30 47.0	8.47	H	319.521 310 00	−29.513 050 66		21.09	55.64	−136.83	1.34	0.91	1.59	1.53	0.70	+24	−29	−44	−54	−25	+54	−17	−64	+48	+30											5	0.68
105157	21 18 06.23	−38 24 10.3	9.28	H	319.525 953 89	−38.402 859 42		9.87	−4.00	−55.97	1.63	1.27	1.82	1.77	0.95	+18	−25	−48	−35	−17	+25	−13	−51	+26	+ 2											0	−0.61
105158	21 18 07.29	+40 26 23.1	8.90	H	319.530 354 52	+40.439 748 50		0.97	−0.64	−4.02	0.63	0.67	0.92	0.68	0.69	− 5	+ 4	+ 5	+ 6	+ 6	−11	+ 7	+ 1	+13	− 8											0	−0.59
105159	21 18 10.29	+16 09 03.1	9.33	H	319.542 863 86	+16.150 858 98		18.77	126.73	−244.07	1.02	0.96	1.34	1.31	0.98	+33	−16	−29	+ 5	−22	+31	−15	−40	+31	+39											0	1.40
105160	21 18 10.31	+39 21 17.0	8.67	G	319.542 942 05	+39.354 718 54		10.16	114.27	29.59	0.63	0.70	1.01	0.71	0.75	−18	+ 3	+ 2	+ 9	+ 7	−12	+ 7	− 3	+14	−21											0	0.37
105161	21 18 10.64	+22 06 51.4	7.21	H	319.544 340 80	+22.114 274 46		9.58	−7.78	−32.13	0.52	0.43	0.78	0.63	0.51	+ 4	− 3	− 9	+10	+15	−19	+14	+ 4	+11	+13											0	−1.56
105162 H	21 18 10.88	+30 35 21.6	8.07	2 H	319.545 330 88	+30.589 344 18	A	4.73	2.58	−6.25	1.19	1.09	1.59	1.23	0.96	− 1	−30	+10	+57	+11	−35	+ 2	+30	+11	−22											0	1.02
105163	21 18 10.99	+51 17 27.2	8.97	H	319.545 772 14	+51.290 881 98		1.63	−2.49	−0.94	0.79	0.78	0.95	0.89	0.79	− 6	−19	+19	− 5	+ 5	− 4	+ 4	−22	+ 7	+ 1											1	0.23
105164	21 18 11.07	−04 31 10.2	5.83	H	319.546 108 28	−04.519 511 58		3.33	11.82	13.69	0.75	0.54	0.86	1.01	0.69	+ 6	− 3	−12	− 5	+ 1	+40	+ 6	− 6	+27	+26											0	0.87
105165	21 18 11.37	−18 41 15.6	8.76	H	319.547 389 43	−18.687 666 39		4.63	−33.79	−35.01	1.01	0.62	1.17	1.57	0.57	+32	−14	−29	−16	−41	+43	−27	−33	+26	+39											0	1.37
105166 H	21 18 12.11	+49 55 54.3	8.27	H	319.550 463 02	+49.931 753 81	A	5.69	14.66	2.49	1.83	1.61	1.25	1.51	1.13	+31	− 7	+ 8	− 6	+ 4	−13	+ 2	+ 0	+ 7	− 4											1	−0.13
105167	21 18 13.67	−71 00 29.9	9.05	2 H	319.556 959 52	−71.008 297 59		1.68	24.18	−7.76	0.77	0.96	1.32	0.85	1.09	−17	− 2	−45	− 7	+10	−11	+ 8	− 1	+ 0	−29											0	−0.16
105168	21 18 15.64	−17 27 44.2	7.07	H	319.565 152 51	−17.462 272 33		9.65	38.58	2.62	0.84	0.47	0.98	1.04	0.47	+35	−16	−17	−17	−24	+37	−19	−19	+14	+46											0	−0.66
105169	21 18 16.20	−75 20 48.0	6.61	H	319.567 507 35	−75.346 666 42		8.61	20.46	−36.37	0.45	0.45	0.61	0.47	0.51	− 8	− 7	− 7	+10	+15	− 7	+16	+ 1	−10	−11											1	1.29
105170	21 18 16.76	+10 14 56.1	7.16	H	319.569 834 80	+10.248 908 40		4.57	136.00	59.99	0.76	0.58	0.87	1.00	0.61	+34	−21	−12	− 9	−30	+15	−24	− 9	+11	+48											0	0.21
105171	21 18 17.52	−55 07 46.8	8.66	H	319.573 017 61	−55.129 680 23		4.07	−21.93	−4.85	0.94	0.71	1.15	1.25	0.79	−13	−19	− 2	+39	−15	− 5	−19	+33	+ 8	−50											0	0.82
105172	21 18 17.72	+61 47 16.1	7.55	H	319.573 852 88	+61.787 805 63		4.34	−53.63	−9.66	0.88	0.73	0.96	0.95	0.81	−12	−14	+15	−20	+13	+25	+ 8	−16	+20	+25											0	
105173	21 18 18.07	−25 42 39.2	8.74	H	319.575 282 74	−25.710 893 17		7.59	20.22	−24.20	1.04	0.70	1.13	1.32	0.58	+15	− 9	−16	+16	−19	+24	−12	−45	+17	+22											0	1.60
105174 H	21 18 22.09	+05 18 12.6	9.19	H	319.592 055 88	+05.303 510 60	*	6.05	6.46	−5.68	1.36	1.21	1.64	1.90	1.24	+33	−18	−34	+10	+ 0	+17	− 8	−54	+36	+27											0	0.98
105175	21 18 22.65	−34 56 11.3	10.49	H	319.594 364 80	−34.936 472 24		1.20	8.20	−4.66	1.83	1.32	1.94	2.23	1.19	+14	+ 3	−11	−17	−18	+24	−14	−45	+ 1	+11											0	−0.37
105176	21 18 23.45	−46 14 52.1	7.74	H	319.597 726 07	−46.247 794 34		2.89	43.17	−17.55	0.85	0.64	1.06	0.99	0.65	+26	−26	−16	−21	−16	+17	−18	−28	+19	+14											0	−0.84
105177	21 18 24.08	−72 08 45.5	8.80	H	319.600 343 24	−72.145 976 97		14.82	63.29	−33.14	0.71	0.79	1.10	0.87	0.95	−17	− 9	−29	+ 8	+ 3	−13	+ 1	+ 8	−12	−22											0	−1.49
*105178	21 18 25.40	−73 01 35.5	7.36	H	319.605 828 80	−73.026 529 24		4.01	12.66	−5.29	0.54	0.60	0.76	0.69	0.73	−17	− 7	− 7	−14	+ 0	+ 3	+ 0	−18	− 2	−39											0	−1.06
*105179	21 18 25.24	+17 43 15.0	7.46	H	319.605 165 47	+17.720 836 57		3.83	34.95	−0.55	0.78	0.71	0.98	1.02	0.75	+13	−19	−42	− 5	−17	+11	−18	−46	+34	+ 5											0	−0.03
105180	21 18 25.54	−45 17 24.6	7.43	H	319.606 436 23	−45.290 168 76		2.95	22.54	−5.82	0.65	0.53	0.85	0.73	0.53	+30	−17	−13	−13	− 8	+21	− 7	−21	+11	+33											0	−1.22
105181	21 18 26.15	−20 20 07.5	6.62	G	319.608 960 63	−20.335 412 34		4.82	−24.02	−27.78	0.73	0.44	0.89	0.92	0.47	+39	−18	−15	− 8	−22	+41	−18	− 8	+18	+48											2	−0.46
105182	21 18 26.93	+54 10 25.7	7.46	H	319.612 228 07	+54.173 802 36		3.54	−2.24	−14.03	0.64	0.58	0.73	0.73	0.59	+ 2	+21	+ 7	−17	+ 8	−20	+11	−14	+12	− 5											0	−1.25
105183	21 18 27.05	−03 40 48.8	7.76	G	319.612 702 19	−03.680 212 05		8.63	58.06	5.58	0.90	0.82	1.06	1.48	1.05	+27	− 1	−11	+ 6	−24	+32	−17	−42	+18	+36											0	0.77
105184	21 18 27.08	−43 20 04.9	6.75	G	319.612 814 75	−43.334 702 65		42.04	242.07	21.98	0.62	0.56	0.90	0.58	0.52	+49	−39	−12	−26	−15	+33	−14	−30	+11	+54											0	−0.64
105185	21 18 27.15	−47 00 07.8	6.96	H	319.613 130 88	−47.002 163 81		2.83	78.33	−57.00	0.71	0.58	0.93	0.79	0.59	+32	−25	−26	−23	−16	+24	−15	−27	+22	+28											0	0.67
105186	21 18 27.18	+43 56 45.5	5.04	1 H	319.613 256 95	+43.945 966 90		−0.05	4.52	−9.07	0.42	0.41	0.55	0.52	0.46	−23	+11	+ 0	+11	+ 7	+ 0	+ 7	−11	+ 4	−22											0	−1.35
105187 H	21 18 27.51	+66 13 27.7	10.71	G	319.614 609 26	+66.224 359 97	A	10.63	152.70	213.19	2.44	2.36	2.42	2.95	2.60	−19	−30	+17	−11	+15	+18	+ 9	− 5	+14	− 4											3	0.15
105188	21 18 27.71	+08 54 27.0	8.71	H	319.615 474 83	+08.907 497 90		11.13	−148.01	−68.43	1.11	0.80	1.16	1.41	0.80	+52	−26	−24	−27	−48	+21	−39	−32	+ 8	+63											0	−1.81
105189	21 18 30.06	−12 15 54.7	7.96	G	319.625 243 17	−12.265 201 16		14.36	40.78	−19.82	0.92	0.61	1.08	1.41	0.68	+45	+ 1	− 5	+ 1	−27	+27	−17	− 9	+10	+57											0	−0.13
105190 H	21 18 30.70	+80 21 11.5	7.35	G	319.627 932 68	+80.353 207 03	A	11.80	160.36	107.32	0.98	0.85	0.83	0.95	0.71	− 7	+ 3	+ 2	− 3	+19	+ 0	+19	−15	+11	+ 3											2	0.79
105191	21 18 31.61	−68 36 02.2	9.16	H	319.631 703 74	−68.600 619 57		1.43	−20.91	−0.57	0.75	0.86	1.25	0.83	1.00	−23	−19	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
105101	6.041	0.003	6.151	0.003		−0.094	0.004	T	−0.08	0.01	L	6.1435	0.0008	0.007	131		6.13	6.16				1							S
105102	4.366	0.002	4.265	0.002		0.098	0.003	T	0.25	0.03	C	4.2677	0.0012	0.019	153		4.25	4.31		U 2		1 G							S
105103	10.230	0.036	8.910	0.021		1.121	0.033	T	1.08	0.03	L	8.9214	0.0025	0.015	75		8.90	8.94		C		1 X							
105104	8.717	0.013	7.142	0.007		1.321	0.012	T	1.28	0.01	L	7.1434	0.0018	0.012	70		7.13	7.16		R		1							S
105105	10.474	0.049	8.951	0.023		1.280	0.043	T	1.24	0.04	L	9.0293	0.0028	0.024	55		9.00	9.07				1							
105106	8.373	0.013	6.992	0.007		1.171	0.015	G	1.13	0.01	H	7.0142	0.0013	0.008	77		7.00	7.03		C		1							S
105107	9.013	0.017	7.961	0.012		0.913	0.016	T	0.91	0.01	L	7.9807	0.0014	0.009	59		7.97	8.00		C		1							S
105108	7.482	0.005	7.529	0.007		−0.010	0.015	G	0.01	0.01	H	7.5319	0.0010	0.011	112		7.52	7.55		D		1							S
105109	9.233	0.015	8.666	0.014		0.534	0.015	T	0.61	0.02	L	8.7307	0.0016	0.016	98		8.70	8.77		C		1							
105110	9.743	0.017	8.455	0.011		1.096	0.016	T	1.06	0.02	L	8.4905	0.0014	0.016	129		8.46	8.52				1							
105111	7.767	0.005	7.255	0.005		0.481	0.006	T	0.55	0.01	L	7.3164	0.0006	0.007	189		7.30	7.33				1							S
105112	8.389	0.013	7.850	0.013	*	0.551	0.015	G	0.62	0.01	H	*	8.0212	0.0012	0.011	115	*	8.01	8.05		D	21176+8231	I 1	2 C	A	AB	311	1.909	0.002	0.19	0.01	S
105113	9.608	0.016	9.302	0.018		0.350	0.015	G	0.41	0.02	H	9.3624	0.0017	0.018	116		9.33	9.39		C		1							
105114	8.265	0.007	8.186	0.008		0.078	0.010	T	0.09	0.01	L	8.2086	0.0014	0.013	178		8.19	8.24				1							S
105115	10.457	0.044	8.493	0.015		1.629	0.037	T	1.65	0.04	L	8.3665	0.0023	0.017	58		8.35	8.40				1							
105116	7.382	0.005	7.021	0.005		0.355	0.015	G	0.42	0.02	H	7.0681	0.0008	0.009	164		7.05	7.08				1							S
105117	8.130	0.010	7.703	0.009	*	0.403	0.004	G	0.47	0.00	H	*	7.8091	0.0014	0.014	158	*	7.78	7.83		D	21176+3945	I 1	2 C	A	AB	234	2.879	0.005	1.87	0.03	S
105118	9.913	0.031	9.367	0.030		0.518	0.032	T	0.59	0.03	L	9.3763	0.0034	0.025	70		9.34	9.42				1							
105119	10.055	0.025	8.844	0.016		1.036	0.023	T	1.01	0.02	L	8.9057	0.0023	0.018	95		8.87	8.94		C		1							
105120	7.958	0.008	7.500	0.009		0.432	0.011	T	0.50	0.01	L	7.5358	0.0010	0.009	77		7.52	7.55		C		1							S
105121	9.467	0.020	8.257	0.013		1.035	0.019	T	1.01	0.02	L	8.3402	0.0016	0.011	75		8.31	8.36		C		1							S
105122	8.923	0.012	7.899	0.008		0.892	0.011	T	0.90	0.01	L	7.9664	0.0014	0.014	125		7.95	8.00				1							S
105123	8.700	0.007	8.261	0.007	*	0.414	0.009	T	0.48	0.01	L	*	8.2071	0.0010	0.016	277	*	8.18	8.24		D	21177+3345	I 1	2 C	A	AB	124	1.017	0.003	1.09	0.01	S
105124	8.772	0.011	7.572	0.007		1.027	0.010	T	1.00	0.01	L	7.6115	0.0018	0.015	113		7.59	7.64				1							S
105125						1.180	0.015	G	1.33	0.02	A	11.3298	0.0053	0.043	98		11.25	11.40		C		1							G
105126	8.796	0.014	8.315	0.013		0.458	0.015	G	0.53	0.02	H	8.3749	0.0022	0.015	72		8.35	8.40		C		1							S
105127	9.667	0.014	8.160	0.008		1.267	0.013	T	1.23	0.01	L	8.1852	0.0013	0.017	198		8.16	8.21				1							S
105128	8.262	0.009	7.991	0.012		0.258	0.014	T	0.29	0.02	L	8.0443	0.0017	0.018	119		8.01	8.08		U		1							S
105129	8.627	0.008	8.115	0.007		0.495	0.015	G	0.57	0.02	H	8.1711	0.0012	0.016	202		8.14	8.19				1							S
105130	8.022	0.010	7.659	0.009		0.344	0.013	T	0.40	0.02	L	7.7221	0.0015	0.011	105		7.70	7.74		C		1							S
105131	8.966	0.015	8.454	0.015		0.486	0.015	G	0.56	0.02	H	8.5185	0.0014	0.014	73		8.49	8.54				1							S
105132	10.526	0.025	9.308	0.015		1.051	0.005	G	1.02	0.00	H	9.3543	0.0016	0.017	186		9.32	9.38		C		1							
105133	8.051	0.009	6.667	0.005		1.171	0.008	T	1.13	0.01	L	6.7052	0.0010	0.009	105		6.69	6.72		C		1							S
105134	8.626	0.011	8.360	0.012		0.230	0.015	G	0.26	0.02	H	8.3977	0.0016	0.015	110		8.37	8.43				1							
105135	8.210	0.010	7.973	0.013		0.252	0.015	G	0.28	0.02	H	8.0205	0.0012	0.011	84		8.00	8.05		C		1							S
105136	12.217	0.174	10.518	0.056		1.419	0.144	T	1.40	0.23	L	10.5521	0.0037	0.030	129		10.51	10.61		C		1							G
105137	9.775	0.022	8.551	0.014		1.040	0.015	G	1.01	0.01	H	8.6048	0.0013	0.013	111		8.58	8.63		C		1							
105138	4.281	0.007	4.401	0.008		−0.103	0.009	T	−0.09	0.01	L	4.3744	0.0037	0.107	196		4.14	4.41		U 2 C	21179+3454	I 1	1 G							S
105139	10.901	0.057	9.603	0.029		1.104	0.050	T	1.07	0.05	L	9.6854	0.0025	0.018	71		9.66	9.73				1							
105140	4.815	0.003	4.729	0.003		0.070	0.010	G	0.09	0.02	A	4.7454	0.0006	0.004	72		4.74	4.76		C		1							S
105141	8.207	0.012	7.876	0.011		0.314	0.015	T	0.36	0.02	L	7.9245	0.0013	0.011	73		7.91	7.94		C		1 G							S
105142	8.765	0.009	8.646	0.011		0.115	0.013	T	0.13	0.01	L	8.6655	0.0017	0.015	135		8.64	8.70		C		1							
105143	5.242	0.003	5.378	0.003		−0.118	0.004	T	−0.10	0.01	L	5.3607	0.0005	0.004	80		5.35	5.37		C		1							S
105144	8.810	0.012	7.538	0.007		1.083	0.011	T	1.05	0.01	L	7.5951	0.0010	0.010	127		7.58	7.61		C		1							S
105145	8.413	0.008	7.134	0.006		1.089	0.008	T	1.05	0.01	L	7.1812	0.0010	0.009	133		7.17	7.20		C		1							S
105146	8.315	0.007	8.160	0.008	*	0.149	0.010	T	0.16	0.01	L	*	8.1852	0.0010	0.014	210	*	8.16	8.21		D	21180+3049	I 1	2 C	A	BA	199	0.221	0.003	0.17	0.05	
105147	8.048	0.006	8.162	0.008		−0.103	0.003	G	−0.09	0.00	H		8.1595	0.0009	0.012	232		8.14	8.18				1							
105148	6.238	0.002	6.311	0.003		−0.064	0.002	G	−0.04	0.00	H		6.3086	0.0006	0.007	177		6.30	6.32		C		1							S
105149	9.993	0.022	9.394	0.021		0.573	0.003	G	0.65	0.00	H		9.4518	0.0029	0.022	117		9.42	9.48			21180−2203	I 1	1						
105150	9.341	0.012	9.218	0.015		0.119	0.018	T	0.13	0.02	L		9.2538	0.0018	0.019	193		9.22	9.29				1							
105151	10.429	0.046	9.803	0.041		0.578	0.046	T	0.65	0.04	L		9.8340	0.0035	0.022	73		9.80	9.87		C		1							
105152	9.487	0.021	8.273	0.013		0.990	0.015	G	1.08	0.01	A		8.3155	0.0021	0.013	67		8.29	8.33		C	21181+0010	I 1	1						
105153	6.915	0.004	7.016	0.006		−0.087	0.006	T	−0.07	0.01	L		7.0129	0.0009	0.008	114		7.00	7.03		C		1							S
105154	9.807	0.025	9.570	0.029		0.226	0.036	T	0.25	0.04	L		9.5604	0.0020	0.019	119		9.53	9.59		C		1							G
105155	9.060	0.017	7.609	0.010		1.223	0.015	T	1.18	0.01	L		7.6385	0.0020	0.013	71		7.61	7.66				1							S
105156	9.296	0.021	8.550	0.018		0.667	0.021	T	0.73	0.02	L		8.6080	0.0023	0.016	67		8.57	8.64		C	21181−2931	I 1	1						
105157	10.180	0.039	9.375	0.030		0.712	0.038	T	0.77	0.03	L		9.4239	0.0032	0.021	56		9.39	9.46		C			1						
105158	9.089	0.012	8.907	0.014		0.174	0.017	T	0.19	0.02	L		8.9599	0.0019	0.019	146		8.92	8.99		C			1						
105159	10.305	0.035	9.379	0.026		0.790	0.020	G	0.83	0.02	R		9.4677	0.0016	0.014	75		9.44	9.50		D			1						
105160	9.266	0.018	8.745	0.017		0.500	0.015	G	0.57	0.02	H		8.7851	0.0017	0.020	158		8.75	8.82					1						
105161	7.508	0.005	7.243	0.005		0.252	0.007	T	0.28	0.01	L		7.2818	0.0013	0.014	186		7.26	7.31				1							S
105162	8.378	0.007	8.133	0.008	A	0.400	0.495	G	0.23	0.02	L	*	8.1353	0.0056	0.047	232	*	8.07	8.19	0.59	P 1 A	21182+3035	I 1	2 C	A	AB	210	3.677	0.032	3.35	0.12	S P
105163	10.763	0.041	9.113	0.018		1.380	0.035	T	1.35	0.04	L		9.1167	0.0021	0.016	102		9.09	9.14					1						
105164	5.659	0.003	5.802	0.004		−0.130	0.005	G	−0.12	0.01	H		5.7858	0.0007	0.006	51		5.77	5.79		C			1						S
105165	9.355	0.017	8.800	0.016		0.525	0.017	T	0.60	0.02	L		8.8708	0.0016	0.012	83		8.85	8.90					1						
105166	8.444	0.008	8.299	0.009	*	0.140	0.011	T	0.15	0.01	L	*	8.3187	0.0015	0.013	122	*	8.30	8.34		D	21182+4956	I 1	2 C	A	AB	246	0.357	0.007	1.65	0.05	
105167	10.685	0.032	9.194	0.015		1.255	0.028	T	1.21	0.03	L		9.2145	0.0033	0.033	163		9.17	9.28		U			1	S						
105168	7.477	0.006	7.098	0.006		0.339	0.005	G	0.40	0.01	H		7.1567	0.0013	0.009	99		7.14	7.17					1						S
105169	6.645	0.004	6.610	0.004		0.032	0.005	T	0.05	0.00	L		6.6296	0.0005	0.007	153		6.62	6.64		C			1						S
105170	8.448	0.011	7.277	0.007		1.004	0.010	T	0.98	0.01	L		7.3286	0.0009	0.010	97		7.31	7.36		C			1						S
105171	9.414	0.016	8.738	0.014		0.614	0.016	T	0.68	0.01	L		8.7950	0.0023	0.017	100		8.77	8.83		C			1						S
105172	8.960	0.013	7.677	0.008		1.092	0.012	T	1.05	0.01	L		7.7176	0.0011	0.011	101		7.70	7.74		C			1 X						S
105173	9.473	0.020	8.777	0.017		0.630	0.020	T	0.70	0.02	L		8.8696	0.0016	0.014	75		8.84	8.89		C			1						
105174	9.745	0.028	9.246	0.028	*	0.481	0.008	G	0.55	0.01	H	*	9.2915	0.0028	0.016	58	*	9.26	9.33		D	21184+0518	H 1	2 C	S A	AB	9	0.179	0.008	0.22	0.32	
105175	10.914	0.075	10.666	0.096		0.405	0.107	G	0.47	0.12	R		10.5797	0.0052	0.030	71		10.51	10.64		C			1						G
105176	9.451	0.018	7.885	0.009		1.314	0.016	T	1.28	0.02	L		7.8931	0.0011	0.011	106		7.87	7.91		C			1						S
105177	9.430	0.014	8.868	0.013		0.530	0.014	T	0.60	0.01	L		8.9136	0.0020	0.022	160		8.87	8.95		C			1						
105178	9.086	0.012	7.509	0.006		1.322	0.011	T	1.28	0.01	L		7.5125	0.0013	0.015	146		7.49	7.54					1						S
105179	8.896	0.014	7.565	0.009		1.110	0.015	G	1.07	0.02	H		7.6253	0.0011	0.009	76		7.61	7.64		C			1						S
105180	7.651	0.006	7.452	0.007		0.177	0.002	G	0.19	0.00	H		7.4901	0.0010	0.009	114		7.47	7.50		C			1						S
105181	7.966	0.009	6.745	0.005		1.043	0.001	G	1.01	0.00	H		6.7901	0.0009	0.007	104		6.78	6.80		C			1						S
105182	9.234	0.015	7.593	0.008		1.373	0.013	T	1.34	0.02	L		7.6099	0.0019	0.013	104		7.59	7.63					1						S
105183	8.170	0.012	7.840	0.011		0.313	0.015	T	0.36	0.02	L		7.8527	0.0014	0.009	58		7.83	7.87		C			1						S
105184	7.541	0.006	6.831	0.004		0.637	0.001	G	0.69	0.02	A		6.8776	0.0007	0.008	131		6.87	6.89		C			1						S
105185	8.801	0.012	7.137	0.006		1.391	0.011	T	1.36	0.01	L		7.1057	0.0012	0.009	103		7.09	7.12		C			1						S
105186	4.965	0.002	5.037	0.002		−0.061	0.003	T	−0.04	0.00	L		5.0231	0.0010	0.010	139		5.00	5.03		U 2 C			1						S
105187	11.963	0.128	11.012	0.087	*	0.930	0.020	G	0.98	0.02	I	*	10.8521	0.0030	0.035	122	*	10.78	10.93		D	21185+6613	H 1	2 C	A	AB	144	0.790	0.011	1.30	0.04	G
105188	9.479	0.019	8.802	0.016		0.626	0.021	T	0.69	0.02	L		8.8438	0.0018	0.013	95		8.83	8.88					1						
105189	8.613	0.011	8.023	0.010		0.526	0.010	G	0.60	0.01	H		8.0761	0.0013	0.012	92		8.06	8.10		C			1						S
105190	7.898	0.014	7.362	0.014	*	0.509	0.012	G	0.58	0.01	H	*	7.5017	0.0008	0.010	125	*	7.49	7.52		D	21185+8021	I 1	2 C	A	AB	271	2.064	0.002	0.80	0.01	S
105191	10.766	0.033	9.275	0.016		1.255	0.029	T	1.21	0.03	L		9.3166	0.0022	0.026	179		9.27	9.36					1						
105192	7.847	0.010	7.395	0.009		0.440	0.011	T	0.51	0.01	L		7.4373	0.0016	0.010	76		7.43	7.47					1						S
105193	8.495	0.014	6.678	0.008		1.543	0.013	T	2.65	0.03	O		6.4225	0.0035	0.046	98		6.37	6.51		U 2			1	S					S
105194	9.555	0.020	8.137	0.012		1.198	0.018	T	1.16	0.02	L		8.1784	0.0008	0.011	90		8.16	8.19		C			1						
105195	9.996	0.029	9.276	0.025		0.648	0.029	T	0.71	0.03	L		9.3666	0.0016	0.016	80		9.34	9.39					1						
105196	10.220	0.018	9.019	0.011		1.028	0.016	T	1.00	0.01	L		9.0944	0.0017	0.025	229		9.05	9.15					1						
105197	11.422	0.066	10.071	0.033		1.145	0.058	T	1.11	0.05	L		10.1334	0.0034	0.032	121		10.07	10.19					1						G
105198	8.999	0.017	8.425	0.015		0.532	0.003	G	0.60	0.00	H		8.4641	0.0017	0.012	57		8.45	8.48		C			1						S
105199	2.762	0.002	2.492	0.002		0.257	0.003	T	0.26	0.01	G		2.5141	0.0004	0.004	104		2.51	2.52			21186+6236	I 1	1						S
105200	7.742	0.009	7.079	0.008	*	0.605	0.009	T	0.67	0.01	L	*	7.1435	0.0010	0.009	83	*	7.13	7.16		D	21186+1134	I 1	2 C	B	AB	268	0.230	0.018	1.57	0.25	S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	mas/yr 13	mas 14	15	mas 16	mas/yr 17	18	19	20	21	22	23	24	25	26	27	28	% 29	30
105201	21 18 35.79	+06 07 43.5	10.45	H	319.649 136 53	+06.128 756 29	7.70	37.62	−96.68	1.55	1.50	2.09	2.31	1.70	+26	+ 1	−32	+ 5	− 3	+34	+ 3	−44	+50	+36	0	0.00
105202	21 18 37.09	+08 57 35.1	7.27	H	319.654 555 95	+08.959 759 55	23.78	141.19	−42.33	0.81	0.61	0.91	1.05	0.60	+47	−10	−14	−20	−50	+19	−39	−31	+ 3	+60	0	−1.94
105203	21 18 37.31	−03 07 56.3	8.42	H	319.655 477 46	−03.132 308 69	−2.01	−2.08	−36.90	0.96	0.92	1.27	1.42	1.13	+29	+ 4	−20	− 7	−20	+47	− 8	−44	+37	+48	0	0.69
105204	21 18 39.07	−08 02 22.2	9.83	H	319.662 788 43	−08.039 508 36	26.71	317.61	−34.75	1.47	1.06	2.04	2.74	1.05	+24	+15	−41	+12	−53	+54	−26	+18	−14	+30	0	0.37
105205	21 18 39.53	+24 39 34.2	6.61	H	319.664 699 95	+24.659 498 23	2.79	−2.64	−16.29	0.53	0.47	0.82	0.57	0.64	+ 0	+28	−15	+ 3	+18	−18	+24	− 5	+ 8	+31	1	−1.13
105206	21 18 39.76	−44 19 26.8	9.50	G	319.665 668 27	−44.324 118 45	3.59	28.77	−11.30	1.25	0.94	1.72	1.26	0.92	+41	−32	−13	−25	− 7	+ 9	− 7	−22	+ 3	+46	0	0.31
*105207	21 18 40.40	−60 55 58.1	9.32	H	319.668 321 60	−60.932 810 48	9.07	116.95	−52.17	0.73	0.83	1.47	1.30	1.00	− 2	− 7	−19	−23	+33	−24	+31	+31	−14	−19	0	0.05
*105208	21 18 40.38	+50 10 56.8	7.74	H	319.668 263 43	+50.182 447 37	4.35	−0.54	−2.19	0.61	0.56	0.69	0.77	0.63	− 5	+ 7	+ 1	+13	+ 2	− 6	− 6	−26	+ 3	−26	0	−1.11
105209 H	21 18 40.58	+21 17 47.2	9.11	H	319.669 095 46	+21.296 447 01 *	4.79	−1.57	−17.00	0.86	0.69	1.25	1.09	0.79	+ 4	− 5	− 2	+35	+ 1	−32	+ 5	+ 5	+13	+16	0	0.49
105210	21 18 40.91	+44 14 20.3	9.18	H	319.670 453 73	+44.238 959 29	−0.85	1.82	−0.35	0.74	0.67	0.93	0.88	0.68	−10	+ 4	+ 8	+16	+15	− 2	+14	− 3	+ 4	− 4	1	−0.75
105211	21 18 42.41	+16 19 16.2	8.69	H	319.676 716 13	+16.321 162 88	3.10	−14.67	−26.48	0.90	0.80	1.15	1.12	0.81	+28	−26	−29	− 6	−14	+13	−16	−38	+27	+27	4	0.85
*105212	21 18 43.49	−01 32 03.0	9.71	H	319.681 198 08	−01.534 155 86	1.77	−4.85	−36.75	1.75	1.47	1.97	2.27	1.60	+23	+17	−22	−51	− 4	− 9	− 6	−58	+34	+34	0	2.22
*105213	21 18 43.47	+36 36 08.1	8.46	G	319.681 121 90	+36.602 258 48	0.48	1.89	−1.83	0.50	0.60	0.83	0.52	0.62	−19	+ 1	+10	− 6	+13	− 2	+11	+11	+ 8	− 5	0	0.92
105214	21 18 43.73	−61 21 06.2	6.60	G	319.682 193 40	−61.351 720 58	32.10	469.94	−445.89	0.39	0.41	0.76	0.52	0.54	+ 5	−14	−12	+44	+19	− 9	+18	+25	− 8	− 9	0	0.20
105215	21 18 43.94	+34 20 48.6	8.92	H	319.683 081 20	+34.346 845 22	1.51	−0.45	−0.87	0.56	0.70	1.05	0.62	0.76	−28	+ 3	+ 8	+13	+ 4	− 9	+ 3	+21	+ 0	− 9	0	−0.71
105216	21 18 44.45	+09 58 18.0	8.69	H	319.685 201 29	+09.971 657 16	2.77	15.43	8.87	1.09	0.78	1.15	1.35	0.71	+32	− 9	+ 6	+ 3	− 46	+ 9	−34	−25	+ 7	+49	0	0.57
105217	21 18 44.64	−23 48 28.1	8.73	H	319.686 005 69	−23.807 798 50	5.34	−8.24	−12.60	1.02	0.61	1.18	1.26	0.54	+46	−29	−36	−21	−38	+42	−25	−16	+12	+36	0	−0.77
105218	21 18 45.32	−02 08 12.6	8.11	H	319.688 843 88	−02.136 840 01	7.14	−23.86	−17.89	1.31	0.83	1.14	1.51	0.97	−20	+ 2	− 7	−60	+29	+17	+24	−44	+27	+11	2	0.03
105219	21 18 45.42	+50 04 09.7	6.96 1 G		319.689 244 13	+50.069 351 96	1.91	7.77	−2.11	0.52	0.51	0.62	0.63	0.57	− 3	− 7	− 4	+ 1	+ 2	−14	− 2	−23	+10	−18	0	0.43
105220	21 18 45.57	−57 01 34.4	10.22	H	319.689 859 49	−57.026 229 87	0.90	15.33	11.80	1.15	1.02	1.58	1.34	1.14	+17	−27	−22	−38	+10	+ 0	+23	+20	− 9	−11	0	−0.14
105221	21 18 46.11	+15 15 33.4	8.41	G	319.692 122 42	+15.259 288 80	4.27	17.67	16.32	0.89	0.75	1.07	1.17	0.74	+23	−13	−32	+13	−21	+13	−18	−39	+22	+22	0	1.75
105222	21 18 49.85	+58 55 33.9	8.24	H	319.707 696 48	+58.926 089 38	1.53	−2.95	−3.09	0.60	0.57	0.70	0.58	0.56	+ 1	+15	+ 7	+ 2	+11	− 1	+15	− 7	+17	+14	0	1.11
105223	21 18 51.30	+65 59 21.7	7.39	H	319.713 737 02	+65.989 353 58	5.77	−26.43	−6.96	0.59	0.52	0.63	0.73	0.60	− 5	−15	+ 2	− 2	+ 7	+15	+ 4	−12	+25	+15	0	−0.12
105224	21 18 52.01	+11 12 12.0	5.97 1 G		319.716 721 73	+11.203 335 27	2.60	21.12	15.51	0.69	0.51	0.77	0.78	0.54	+35	− 4	−12	−26	−28	+10	−27	−26	+ 7	+49	0	0.89
105225	21 18 52.13	−06 26 21.0	8.17	H	319.717 210 10	−06.439 160 02	−0.25	19.66	−14.92	0.93	0.73	1.17	1.65	0.85	+22	− 3	−35	+23	−19	+44	+ 0	+26	+12	+24	0	0.45
105226	21 18 53.01	−33 02 46.6	8.85	H	319.720 891 95	−33.046 269 54	4.06	16.40	−10.90	1.08	0.84	1.22	1.22	0.75	+25	−35	−18	+15	− 9	+17	−11	−33	+15	+19	0	0.31
105227	21 18 53.94	−63 02 57.3	7.91 1 H		319.724 765 43	−63.049 243 94	4.93	44.76	−44.45	0.51	0.50	0.91	0.65	0.58	−14	−17	− 2	+10	+18	+ 5	+17	+11	− 7	−14	4	−0.65
105228	21 18 54.32	−28 45 56.4	6.40	G	319.726 336 11	−28.765 658 47	8.08	−212.64	−66.68	0.81	0.52	0.92	0.98	0.44	+17	− 4	−25	−30	−11	+36	− 5	−40	+30	+23	0	−1.77
105229	21 18 55.33	+41 02 25.9	6.15	H	319.730 555 59	+41.040 529 46	1.92	−5.39	−4.72	0.39	0.42	0.58	0.41	0.42	−17	+ 4	+ 2	− 9	− 1	+ 7	− 1	− 8	− 2	−21	0	1.06
105230	21 18 55.43	+54 12 51.1	11.97 3 G																						
105231	21 18 57.06	+13 33 57.7	7.87	H	319.737 740 26	+13.566 015 64	6.06	−33.89	−18.99	0.79	0.64	1.00	0.95	0.64	+22	−23	−32	− 2	−12	+ 0	−13	−13	+15	+24	0	−0.29
105232	21 18 58.13	+26 13 49.9	8.45	H	319.742 218 92	+26.230 522 50	24.48	132.88	9.20	0.71	0.63	1.05	0.96	0.82	− 9	+14	− 8	+ 0	+12	−16	+14	−10	+24	− 2	3	1.16
*105233	21 18 58.21	−66 22 27.6	9.07	H	319.742 539 11	−66.374 335 11	2.07	3.86	−10.22	0.69	0.73	1.17	0.71	0.82	−35	− 5	− 3	−26	+ 1	+ 9	+ 4	− 2	−20	−43	0	1.67
*105234	21 18 58.21	+32 10 50.9	7.11	H	319.742 530 39	+32.180 796 15	1.80	10.42	−10.06	0.46	0.44	0.68	0.51	0.45	− 6	+ 1	− 1	+36	+19	−15	+18	+19	+ 5	− 6	1	−1.28
105235 H	21 18 59.61	−07 19 46.4	8.20	G	319.748 362 87	−07.329 565 34 *	2.13	6.98	2.04	2.12	1.30	1.51	2.36	0.98	+10	+ 4	− 5	+42	−33	+27	−12	+25	+19	+21	1	−1.18
105236	21 18 59.79	−07 08 20.0	8.27	H	319.749 114 48	−07.138 877 47	0.71	29.84	−14.21	1.15	0.64	1.17	1.61	0.77	+ 2	−20	+ 8	+24	−21	+23	−23	+39	+28	+26	0	−0.77
105237	21 19 00.03	+39 44 57.6	6.68	H	319.750 112 23	+39.749 323 59	7.02	14.87	7.25	0.39	0.47	0.61	0.42	0.49	−22	− 5	+ 9	+ 3	− 6	−13	− 5	−11	+ 6	−24	0	0.47
105238	21 19 00.20	+26 05 24.3	8.38	G	319.750 814 78	+26.090 095 68	6.70	−22.46	−19.10	0.75	0.68	1.10	0.98	0.87	−15	+11	− 6	−31	+23	−20	+20	− 7	+18	− 5	6	0.11
105239	21 19 00.99	−36 13 50.9	9.57	H	319.754 139 03	−36.230 797 60	3.34	26.45	−29.70	1.48	1.08	1.74	1.73	0.88	+19	− 9	−34	−26	−14	+37	− 7	−41	+25	+14	0	1.68
105240	21 19 01.78	+29 44 35.3	7.30	H	319.757 428 13	+29.743 148 08	3.34	2.17	−6.38	0.48	0.45	0.71	0.54	0.49	− 8	+ 4	+ 3	+13	+22	−23	+24	+36	+16	−12	0	−0.21
105241	21 19 02.55	+03 14 31.1	9.81	H	319.760 628 28	+03.241 965 70	7.25	17.41	−6.56	1.85	1.69	2.16	2.68	2.46	+54	−33	−25	−34	−39	+26	−24	−62	− 5	+54	0	1.17
105242	21 19 03.00	−44 16 46.5	8.67	H	319.762 517 43	−44.279 594 23	8.82	−13.67	−89.05	1.01	0.82	1.49	0.99	0.71	+47	−39	−28	−23	−11	+13	−14	−30	+12	+36	7	−0.44
*105243	21 19 03.14	−07 52 42.7	10.16	G	319.763 068 90	−07.878 522 37	15.49	303.57	−6.24	1.75	1.11	1.94	2.62	1.21	+32	+11	+12	+12	−34	+11	−23	+15	− 6	+42	0	−0.67
*105244	21 19 03.13	−32 21 21.9	6.96	H	319.763 054 97	−32.356 071 08	2.63	−20.65	−25.82	0.93	0.65	0.99	1.26	0.55	+ 6	− 8	−28	+34	−24	+30	−21	−37	+13	− 4	3	1.26
105245	21 19 03.29	+04 39 30.7	9.77	H	319.763 707 49	+04.658 541 38	5.07	−22.57	−53.33	1.37	1.17	1.64	1.90	1.63	+30	−14	− 6	− 1	+11	+35	+16	− 5	+ 7	+51	0	0.11
105246	21 19 03.51	+34 55 09.0	8.02	H	319.764 613 91	+34.919 174 68	3.13	3.24	−0.82	0.48	0.55	0.85	0.53	0.61	−22	+ 3	− 3	− 6	+17	−14	+16	+ 1	+16	−15	1	−0.49
105247	21 19 03.84	+25 28 48.1	8.76	H	319.765 981 53	+25.480 033 09	0.91	6.84	−7.76	0.68	0.64	1.10	0.80	0.87	+ 7	+18	− 8	+ 3	+17	−32	+21	+ 6	+22	+21	3	0.89
105248	21 19 05.42	−21 16 43.1	8.73	H	319.772 583 33	−21.278 652 16	4.23	16.72	−12.03	1.11	0.62	1.27	1.41	0.59	+36	−16	−12	−10	−29	+34	−23	−22	+11	+40	0	−0.93
105249	21 19 05.85	−33 55 07.2	9.09 2 H		319.774 362 73	−33.918 673 32	2.61	98.43	−78.98	1.07	0.91	1.26	1.21	0.79	+19	−16	− 4	−18	−16	+35	−15	−48	− 1	+14	0	−1.32
105250 H	21 19 07.36	+61 51 30.5	6.66	H	319.780 671 29	+61.858 462 83 *	−0.70	−1.67	−4.99	1.23	1.02	0.70	0.75	0.59	−22	− 4	+ 9	−42	+18	+22	+16	−32	+23	+14	1	1.31
105251	21 19 07.50	−44 11 55.7	8.36	H	319.781 268 43	−44.198 816 45	11.03	88.99	−11.07	0.92	0.70	1.25	0.97	0.69	+43	−30	−16	−24	− 8	+12	− 8	−21	+ 4	+46	0	−0.02
105252 H	21 19 09.62	−30 18 10.1	9.55	G	319.790 065 93	−30.302 794 87 A	11.63	296.54	−0.94	2.78	2.20	3.01	3.38	1.68	+40	+ 4	−39	−23	−41	+40	−28	−61	+28	+33	1	0.47
105253	21 19 09.72	+02 05 15.5	8.69	H	319.790 512 88	+02.087 635 79	4.61	4.77	−2.73	2.04	1.13	1.49	3.07	1.73	+34	+ 7	− 6	−72	−27	−14	−17	−64	− 1	+26	0	3.11
105254	21 19 11.21	+17 49 20.6	6.70	H	319.796 709 39	+17.822 384 33	19.11	−3.04	−65.80	0.67	0.52	0.80	0.84	0.54	+13	−22	−25	−10	−13	+ 4	+15	−27	+29	+12	0	2.54
105255	21 19 12.53	+22 22 40.4	7.55	H	319.802 227 60	+22.377 887 63	2.67	−23.21	−20.32	0.56	0.49	0.92	0.71	0.58	− 3	− 3	−20	−22	+25	−15	+20	−24	+20	+ 1	0	−0.06
105256	21 19 14.93	−16 10 46.1	6.91	H	319.812 206 56	−16.179 469 28	3.36	17.07	−32.03	0.85	0.49	0.95	1.07	0.52	+20	− 7	−21	−20	−12	+33	− 9	− 6	+23	+38	0	−0.98
105257	21 19 15.28	+61 57 44.7	9.00	H	319.813 651 19	+61.962 410 27	−0.11	−4.78	−5.24	0.76	0.68	0.84	0.82	0.73	− 7	−11	− 2	−13	+15	+19	+13	−12	+16	+20	0	0.19
105258	21 19 15.41	−09 34 43.6	8.15	G	319.814 188 51	−09.578 786 07	8.29	11.44	−1.79	1.06	0.70	1.41	1.86	0.69	+31	+10	−18	+14	−42	+56	−21	+10	+13	+37	0	−1.19
105259 H	21 19 15.69	+58 37 24.6	5.51 2 H		319.815 383 11	+58.623 509 94 A	0.89	−3.55	−3.28	1.07	1.07	1.15	0.98	0.94	− 9	+ 6	+10	−17	+16	+ 7	+19	−18	+16	+ 5	4	8.21
105260	21 19 18.17	−39 20 53.2	7.49	H	319.825 691 74	−39.348 119 68	3.17	16.70	−9.46	0.96	0.86	1.09	1.35	0.73	+20	+ 2	−16	+15	−33	+35	−29	−49	+ 0	+ 9	0	−0.20
105261	21 19 18.40	−00 33 16.6	11.57	G	319.826 652 35	−00.554 606 08	24.49	−247.27	−286.67	2.64	2.43	3.16	3.08	2.61	+29	−10	+22	−36	− 8	+32	−13	−46	+ 3	+47	0	−0.06
105262	21 19 18.52	−73 17 54.4	9.04	H	319.827 157 75	−73.298 435 44	7.43	46.74	−26.78	0.75	0.82	1.03	0.95	1.02	−18	−13	− 4	−19	+ 4	+ 8	+ 5	−20	− 5	−46	0	0.01
105263	21 19 18.75	−65 57 40.8	9.60	H	319.828 123 24	−65.961 337 43	6.05	44.60	−94.82	0.72	0.78	1.22	0.77	0.93	−35	−10	− 9	−22	− 1	+ 9	+ 1	− 4	− 4	−47	0	−0.57
105264	21 19 19.82	+38 48 23.7	6.99	H	319.832 568 15	+38.806 583 78	−0.22	1.56	−2.94	0.40	0.48	0.68	0.44	0.49	−20	− 3	+18	+ 3	− 4	−21	− 1	− 6	+ 8	−23	0	−1.71
105265	21 19 20.44	−35 14 55.2	10.60	H	319.835 165 23	−35.248 674 78	5.93	26.07	−10.60	1.95	1.42	2.14	2.49	1.23	+18	−16	−19	−12	−11	+21	−11	−42	+12	+ 8	0	0.52
*105266	21 19 20.54	−47 03 16.2	6.66	H	319.835 564 74	−47.054 496 13	7.34	−1.55	−37.57	0.72	0.55	0.93	0.78	0.54	+30	−31	−32	−22	− 9	+29	− 7	−22	+22	+27	0	0.77
*105267	21 19 20.48	−13 02 52.6	6.88	H	319.835 353 67	−13.047 943 57	3.93	33.16	−1.18	0.77	0.52	0.93	1.09	0.61	+43	−24	−12	+ 5	− 6	+36	− 4	+14	+24	+58	0	−1.30
*105268	21 19 22.21	+64 52 18.6	5.19 2 H		319.842 554 44	+64.871 842 31	3.02	5.08	5.31	0.46	0.44	0.50	0.51	0.47	− 6	−12	+12	+29	+ 8	− 6	+ 8	− 4	+24	+ 2	1	0.53
*105269	21 19 22.18	+38 14 14.9	5.89 2 T		319.842 418 18	+38.237 481 56 *	0.93	−0.18	−3.33	0.41	0.46	0.66	0.47	0.53	−14	+ 0	+ 4	−12	+ 3	−22	+ 3	− 4	+25	−13	2	−0.95
105270	21 19 22.88	+15 01 30.7	10.66	H	319.845 325 57	+15.025 208 13	1.54	−7.36	−15.71	1.79	1.51	2.12	2.60	1.63	+30	−15	−25	+12	− 6	+ 4	− 9	−26	+26	+25	0	1.71
105271	21 19 23.46	−54 12 43.8	9.96	H	319.847 760 06	−54.212 154 79	2.87	29.32	−0.71	1.33	0.93	1.53	1.69	0.85	+ 8	−15	−10	+28	+32	−11	+24	+26	−12	−13	2	0.63
105272	21 19 24.25	−49 23 54.4	7.76	H	319.851 031 30	−49.398 449 91	5.22	16.77	−12.48	0.77	0.62	0.99	0.94	0.60	+27	−18	−30	+ 3	− 4	+14	− 2	−23	+10	+25	0	−0.61
105273	21 19 24.47	+52 19 27.8	7.32	G	319.851 968 42	+52.324 400 08	3.23	3.38	−4.52	0.56	0.55	0.67	0.67	0.61	− 6	− 9	− 2	−10	+ 4	+17	+ 3	−12	+14	+ 8	0	−1.50
105274	21 19 24.84	−84 45 22.4	7.76	H	319.853 501 36	−84.756 224 45	15.20	91.81	−68.75	0.52	0.54	0.67	0.59	0.56	+ 1	− 9	−13	+10	− 3	+ 1	− 2	+ 3	−11	−13	1	−0.27
105275	21 19 25.05	+58 19 35.4	6.99	H	319.854 393 36	+58.326 495 69	4.32	22.79	24.50	0.50	0.50	0.59	0.47	0.46	− 6	+18	+13	− 1	+14	− 3	+19	−19	+21	+ 2	0	−0.23
105276	21 19 25.08	−62 09 10.1	8.86	H	319.854 495 16	−62.152 814 26	9.21	−15.75	−9.16	0.58	0.59	1.14	0.67	0.72	−19	+ 2	− 1	+46	− 1	+ 6	+ 0	+40	− 1	−17	0	0.13
105277	21 19 25.97	+49 36 52.6	8.76	G	319.858 199 71	+49.614 620 03	3.84	24.55	10.75	0.67	0.61	0.75	0.87	0.70	+ 1	−12	− 8	−28	− 4	− 1	− 4	−22	+ 9	−14	0	−0.86
105278	21 19 26.34	+53 28 58.0	8.61	H	319.859 736 65	+53.482 771 61	2.09	−1.14	−8.12	0.70	0.71	0.84	0.79	0.78	+ 2	− 3	+ 8	+12	+ 5	−16	+ 7	+ 3	− 1	+14	0	0.13
105279	21 19 26.81	+58 53 28.3	7.89	H	319.861 694 62	+58.891 201 34	3.74	−13.62	−24.60	0.56	0.53	0.66	0.54	0.50	+ 2	+13	+ 5	+ 4	+ 9	+ 1	+12	−16	+23	+ 6	1	1.20
105280	21 19 27.72	+52 19 29.2	10.27	H	319.865 514 66	+52.324 779 69	4.14	0.91	−1.72	4.34	4.51	5.24	5.03	5.05	− 6	−19	− 7	−16	+ 3	+17	+ 4	−35	+16	+13	1	
105281	21 19 28.44	−49 11 51.5	9.71	G	319.868 515 98	−49.197 634 01	6.02	26.49	−10.13	1.15	0.94	1.53	1.42	0.93	+20	−27	−32	+11	− 5	+ 9	− 1	−14	+ 5	+21	0	−1.81
105282	21 19 28.74	+49 30 37.0	5.75	H	319.869 739 52	+49.510 289 20	6.08	14.52	1.98	0.45	0.40	0.51	0.59	0.47	− 9	−12	− 4	−21	− 3	− 1	− 3	−18	+10	−26	0	−1.30
105283	21 19 29.13	−41 03 09.9	7.81	H	319.871 359 79	−41.052 761 99	10.07	−19.62	−8.72	0.80	0.54	0.86	0.95	0.53	+48	+ 0	− 8	−38	−33	+22	−25	−21	+ 4	+23	0	−0.74
105284	21 19 31.60	−23 46 19.4	8.48	H	319.881 661 01	−23.772 052 97	2.11	1.05	−66.44	0.99	0.56	1.16	1.22	0.52	+48	− 9	− 5	−15	−28	+40	−25	−15	+17	+45	0	0.29
105285	21 19 32.42	−15 07 01.0	11.38 2 H		319.885 092 17	−15.116 937 59	2.97	−17.60	−18.41	2.17	1.32	2.52	3.26	1.47	+23	− 3	−18	+ 7	−18	+32	−10	+ 6	+21	+33	5	−0.57
105286	21 19 33.25	−53 36 43.2	8.97	H	319.888 548 48	−53.611 999 16	1.15	2.78	−6.59	1.03	0.66	1.29	1.15	0.60	− 6	+15	−10	+ 3	+20	+ 9	+18	+ 9	− 2	−25	0	0.72
105287	21 19 33.55	−14 23 02.5	9.30	H	319.889 800 80	−14.384 021 17	1.08	−5.01	−35.93	1.28	0.78	1.66	1.92	0.86	+34	−10	−14	+ 6	−11	+49	− 5	+ 2	+34	+51	0	−0.72
105288 H	21 19 35.03	+14 21 13.0	8.17	G	319.895 950 40	+14.353 612 58 A	4.21	9.53	5.80	1.61	1.17	1.53	1.82	1.01	+40	+ 5	−21	+ 9	−16	+13	− 4	−19	+22	+38	1	−0.78
105289 H	21 19 35.97	−39 28 35.7	8.91	H	319.899 861 16	−39.476 590 88 A	2.16	7.08	−21.71	1.97	1.78	2.08	2.51	1.40	+37	− 7	−25	+ 3	−31	+43	−28	−53	+10	+19	4	0.00
105290	21 19 36.00	+49 13 16.3	7.70	G	319.900 020 24	+49.221 201 47	11.09	−76.03	−78.71	0.63	0.52	0.70	0.89	0.58	−16	− 7	+ 6	− 6	−11	+ 7	−10	+ 6	−12	−32	1	0.09
105291	21 19 36.47	−54 33 32.2	8.06	G	319.901 962 01	−54.558 951 33	9.17	15.68	−1.14	0.79	0.55	0.94	1.01	0.55	− 2	− 9	−11	+30	+10	− 2	+ 3	+20	− 2	−31	0	1.29
105292	21 19 36.74	−16 46 37.5	9.08	H	319.903 067 40	−16.777 076 44	2.55	−4.44	−6.02	1.17	0.69	1.44	1.43	0.69	+33	+ 1	−24	−20	−29	+44	−22	−12	+10	+42	2	−0.71
105293	21 19 37.90	−34 32 58.8	9.10	H	319.907 905 73	−34.549 676 26	2.01	−2.38	−4.41	1.31	1.16	1.47	1.50	0.98	+38	+ 3	−19	−22	−37	+33	−35	−59	− 1	+26	0	1.45
*105294	21 19 38.22	−70 04 41.8	9.18	H	319.909 266 63	−70.078 281 39	3.49	42.94	−41.81	0.78	0.87	1.24	0.97	1.17	−16	−10	− 4	+22	− 7	−11	− 3	+ 0	−15	− 1	0	2.10
*105295 H	21 19 39.35	+09 31 31.2	6.99	H	319.913 957 16	+09.525 325 89 A	4.70	20.79	−13.65	1.32	0.94	1.26	1.60	0.87	+46	+ 0	− 4	+ 0	−35	+16	−19	−12	− 2	+61	1	0.80
*105296	21 19 38.13	−32 26 21.9	13.78	H																						
105297	21 19 40.30	−60 30 07.3	9.77	H	319.917 904 83	−60.502 017 60	3.95	−5.12	0.14	1.27	1.03	1.86	1.86	1.05	−19	− 1	−37	− 4	+46	−39	+29	+13	−21	− 7	0	0.46
105298	21 19 40.76	+53 03 29.2	6.82	H	319.919 841 42	+53.058 107 85	5.74	8.96	−0.44	0.51	0.49	0.59	0.58	0.55	+ 0	− 8	− 5	+ 9	+ 5	− 9	+ 6	− 5	+ 7	+13	0	−0.52
*105299	21 19 40.84	+53 18 44.2	8.95	H	319.920 171 74	+53.312 276 71	2.86	−9.59	−7.90	0.75	0.72	0.88	0.83	0.80	+ 4	−14	+ 9	+18	− 1	−22	+ 3	+ 1	+ 5	+19	1	−0.16
*105300 H	21 19 40.76	+33 15 14.6	8.23	H	319.919 842 12	+33.254 056 94 A	5.74

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
105201	11.469	0.098	10.488	0.067		0.848	0.092	T	0.89	0.10	L	10.5926	0.0039	0.030	65		10.54	10.70		C			1							G
105202	7.835	0.008	7.315	0.007		0.488	0.010	T	0.56	0.01	L	7.3782	0.0008	0.010	95		7.36	7.40					1							S
105203	9.875	0.029	8.551	0.017		1.124	0.026	T	1.09	0.03	L	8.5905	0.0024	0.012	59		8.57	8.62		C			1							
105204	11.319	0.076	9.949	0.034		1.111	0.014	G	1.19	0.02	I	9.9572	0.0023	0.019	108		9.93	9.99		C			1							
105205	7.858	0.007	6.731	0.005		0.970	0.007	T	0.95	0.01	L	6.7789	0.0008	0.008	133		6.77	6.80		C			1							S
105206	9.714	0.019	9.478	0.023		0.170	0.015	G	0.19	0.01	H	9.5614	0.0025	0.023	110		9.53	9.61		C			1							
105207	9.801	0.015	9.352	0.016		0.437	0.017	T	0.51	0.02	L	9.4169	0.0017	0.023	195		9.38	9.46		C			1							
105208	8.912	0.011	7.830	0.008		0.936	0.010	T	0.93	0.01	L	7.9034	0.0014	0.015	126		7.88	7.93					1							
105209	9.621	0.017	9.124	0.017	*	0.467	0.022	T	0.54	0.02	L	*	9.2127	0.0022	0.018	117	*	9.19	9.26		C	21187+2118	H 1	2 C S A	AB	349	0.146	0.010	0.61	0.45	
105210	9.198	0.020	9.215	0.028		−0.011	0.032	T	0.01	0.03	L		9.1893	0.0019	0.021	132		9.16	9.22		C			1							
105211	10.869	0.064	8.865	0.021		1.661	0.054	T	1.68	0.06	L		8.8004	0.0022	0.014	75		8.77	8.83		C			1							
105212	11.240	0.079	9.800	0.034		1.280	0.011	G	1.25	0.01	J		9.8655	0.0036	0.026	66		9.84	9.91					1							
105213	8.367	0.007	8.470	0.009		−0.089	0.010	T	−0.07	0.01	L		8.4489	0.0014	0.016	179		8.43	8.48					1							
105214	7.448	0.003	6.666	0.003		0.689	0.008	G	0.73	0.02	A		6.7293	0.0007	0.009	281		6.72	6.75					1 G							S
105215	11.005	0.037	9.114	0.012		1.571	0.031	T	1.59	0.03	L		9.0365	0.0014	0.021	233		9.00	9.07					1							
105216	10.079	0.031	8.841	0.018		1.057	0.028	T	1.02	0.02	L		8.8618	0.0017	0.018	97		8.84	8.90		C			1							
105217	9.100	0.011	8.762	0.012		0.326	0.018	T	0.38	0.02	L		8.8152	0.0018	0.021	133		8.78	8.84			21187−2348	I 1	1							
105218	9.249	0.018	8.222	0.013		0.894	0.017	T	0.90	0.01	L		8.2722	0.0023	0.013	76		8.25	8.29					1							S
105219	9.391	0.015	7.201	0.006		1.809	0.013	T	1.84	0.01	L		7.0489	0.0015	0.013	131		7.03	7.07		U 2			1							S
105220	10.747	0.042	10.173	0.039		0.540	0.042	T	0.61	0.04	L		10.3372	0.0032	0.027	108		10.29	10.38					1							
105221	8.646	0.014	8.450	0.016		0.230	0.015	G	0.26	0.02	H		8.4684	0.0019	0.013	81		8.44	8.49		C			1							
105222	8.368	0.009	8.273	0.011		0.093	0.013	T	0.11	0.01	L		8.2794	0.0015	0.013	105		8.26	8.30		C			1							
105223	8.603	0.010	7.482	0.007		0.965	0.010	T	0.95	0.01	L		7.5522	0.0012	0.012	122		7.53	7.58					1							S
105224	8.104	0.011	6.161	0.005		1.612	0.010	T	1.63	0.01	L		6.0669	0.0023	0.017	92		6.04	6.09		U 2			1							S P
105225	9.784	0.026	8.303	0.014		1.247	0.023	T	1.21	0.02	L		8.3354	0.0019	0.015	70		8.31	8.36		C			1							
105226	10.386	0.042	8.967	0.022		1.198	0.037	T	1.16	0.04	L		9.0105	0.0022	0.020	68		8.98	9.05					1							
105227	8.222	0.008	7.942	0.008		0.266	0.011	T	0.30	0.01	L		7.9864	0.0012	0.018	200		7.96	8.02		M			1							S
105228	7.628	0.007	6.517	0.005		0.966	0.002	G	0.95	0.00	H		6.5654	0.0013	0.008	77		6.55	6.58		C			1							S
105229	6.450	0.003	6.180	0.004		0.257	0.005	T	0.29	0.01	L		6.2201	0.0005	0.007	159		6.21	6.23		C	21190+4102	I 1	1							S
105230						0.250	0.020	G	0.28	0.03	H		12.2639	0.0245	0.209	90		12.08	12.89		U 2			S							G
105231	9.219	0.018	7.983	0.012		1.050	0.015	G	1.02	0.01	H		8.0365	0.0014	0.012	87		8.02	8.06		C			1							
105232	9.405	0.015	8.513	0.012		0.750	0.015	G	0.79	0.01	H		8.5936	0.0023	0.020	119		8.57	8.63					1							
105233	10.288	0.019	9.155	0.012		0.975	0.017	T	0.96	0.01	L		9.2327	0.0016	0.027	254		9.19	9.29					1							
105234	8.904	0.009	7.250	0.005		1.383	0.008	T	1.36	0.01	L		7.2572	0.0009	0.009	182		7.24	7.27		C			1							S
105235	9.218	0.019	8.317	0.015	*	0.798	0.015	G	0.83	0.01	H	*	8.3404	0.0008	0.012	97	*	8.32	8.36		D	21190−0720	H 1	2 C A	AB	193	0.298	0.004	0.79	0.04	S
105236	9.947	0.031	8.406	0.015		1.294	0.027	T	1.25	0.03	L		8.4240	0.0013	0.012	84		8.40	8.44					1							S
105237	6.635	0.004	6.671	0.004		−0.028	0.005	T	−0.01	0.01	L		6.6812	0.0009	0.010	158		6.66	6.70			21190+3945	I 1	1							S
105238	8.818	0.011	8.427	0.011		0.370	0.014	T	0.43	0.01	L		8.4629	0.0019	0.016	129		8.44	8.49					1							
105239	10.015	0.032	9.558	0.034		0.444	0.037	T	0.51	0.04	L		9.6668	0.0030	0.020	72		9.62	9.70					1							
105240	7.249	0.005	7.290	0.006		−0.033	0.007	T	−0.01	0.01	L		7.2961	0.0008	0.009	164		7.28	7.31		C			1							S
105241	11.443	0.094	9.916	0.039		1.340	0.015	G	1.31	0.01	J		9.9615	0.0038	0.029	60		9.90	10.01		C			1 G							
105242	9.252	0.015	8.721	0.015		0.506	0.016	T	0.58	0.02	L		8.7864	0.0022	0.016	107		8.76	8.81		C			1							S
105243	11.523	0.100	10.246	0.049		1.008	0.006	G	1.05	0.01	I		10.3026	0.0034	0.023	97		10.25	10.33		C			1							
105244	8.846	0.020	7.119	0.010		1.441	0.018	T	1.44	0.03	L		7.0986	0.0009	0.008	69		7.08	7.11					1							S
105245	10.377	0.043	9.808	0.042		0.532	0.053	T	0.60	0.06	L		9.8834	0.0026	0.021	61		9.85	9.92		C			1							
105246	9.379	0.015	8.137	0.010		1.060	0.014	T	1.03	0.01	L		8.1884	0.0011	0.015	204		8.16	8.22					1							
105247	8.766	0.010	8.768	0.012		0.010	0.015	G	0.03	0.01	H		8.7738	0.0016	0.017	138		8.75	8.80		C			1							
105248	9.941	0.024	8.834	0.015		0.955	0.022	T	0.94	0.02	L		8.8977	0.0018	0.018	112		8.87	8.93		C			1							
105249	9.330	0.019	9.124	0.022		0.197	0.027	T	0.22	0.03	L		9.1573	0.0069	0.036	72		9.09	9.20	0.31	P 1 A			1							
105250	6.972	0.005	6.715	0.006	*	0.305	0.005	G	0.35	0.01	H	*	6.7306	0.0007	0.005	103	*	6.72	6.74		D	21192+6152	I 1	2 C A	AD	300	0.281	0.011	2.26	0.12	S
105251	8.919	0.013	8.403	0.012		0.461	0.002	G	0.53	0.00	H		8.4663	0.0016	0.013	112		8.44	8.49		C			1							S
105252	10.386	0.041	9.586	0.032	*	0.740	0.005	G	0.79	0.01	H	*	9.6895	0.0028	0.019	73	*	9.65	9.72		D	21192−3018	I 1	2 C A	AB	247	0.808	0.028	2.20	0.07	
105253	9.018	0.019	8.697	0.021		0.305	0.026	T	0.35	0.04	L		8.7723	0.0029	0.015	60		8.75	8.80		C			1 G							
105254	7.126	0.006	6.739	0.007		0.366	0.009	T	0.43	0.01	L		6.7804	0.0006	0.006	84		6.77	6.79		D			1							S
105255	9.338	0.011	7.716	0.006		1.358	0.010	T	1.33	0.01	L		7.7027	0.0012	0.013	201		7.68	7.72		C			1							S
105256	8.106	0.012	6.999	0.006		0.955	0.010	T	0.94	0.01	L		7.0765	0.0008	0.006	80		7.07	7.09		D			1 S							S
105257	9.216	0.018	9.037	0.021		0.171	0.026	T	0.19	0.03	L		9.0615	0.0020	0.020	104		9.03	9.09		C			1							
105258	8.715	0.013	8.224	0.012		0.505	0.015	G	0.58	0.02	H		8.2506	0.0013	0.009	85		8.24	8.27			21193−0935	I 1	1 S							S
105259	7.108	0.008	5.791	0.004	*	1.114	0.007	T	1.08	0.01	L	*	5.6430	0.0038	0.028	116	*	5.62	5.69		U 2	21193+5838	I 1	2 C D	AB	44	4.661	0.035	3.57	0.27	S D
105260	9.497	0.024	7.643	0.011		1.541	0.021	T	1.60	0.05	L		7.6055	0.0013	0.011	56		7.59	7.62					1							S
105261						1.409	0.006	G	1.69	0.01	I		11.6626	0.0045	0.035	52		11.61	11.73		D			1							D
105262	9.670	0.016	9.099	0.015		0.537	0.016	T	0.61	0.02	L		9.1578	0.0022	0.024	152		9.12	9.21					1							
105263	10.057	0.015	9.657	0.016		0.391	0.018	T	0.46	0.02	L		9.6912	0.0024	0.033	267		9.64	9.75					1 S							
105264	7.594	0.005	7.045	0.006		0.514	0.007	T	0.59	0.01	L		7.1000	0.0010	0.009	157		7.08	7.12					1							S
105265	11.266	0.081	10.579	0.068		0.635	0.087	T	0.70	0.08	L		10.7330	0.0043	0.031	65		10.67	10.78		C			1							G
105266	8.029	0.009	6.778	0.006		1.067	0.008	T	1.03	0.01	L		6.8272	0.0009	0.008	102		6.81	6.84			21193−4703	I 1	1							S
105267	7.145	0.006	6.917	0.006		0.212	0.008	T	0.23	0.01	L		6.9499	0.0006	0.007	74		6.94	6.96			21193−1303	I 1	1							S
105268	5.126	0.003	5.180	0.003		−0.045	0.004	T	−0.02	0.00	L		5.1790	0.0016	0.017	119		5.04	5.21		U 2 C			1							S
105269	6.481	0.007	5.942	0.006		0.505	0.008	T	0.58	0.01	L		6.0080	0.0068	0.062	178		5.91	6.06	3.33	P 1 A	21194+3814	I 1	1 V							S
105270	11.030	0.069	10.517	0.070		0.504	0.072	G	0.58	0.08	R		10.7692	0.0049	0.036	74		10.70	10.84		C			1							G
105271	10.412	0.031	9.984	0.033		0.418	0.037	T	0.48	0.04	L		10.0577	0.0023	0.025	107		10.02	10.11					1							
105272	8.921	0.012	7.853	0.009		0.910	0.020	G	0.91	0.02	A		7.9191	0.0017	0.013	110		7.90	7.94		C			1							S
105273	7.327	0.005	7.310	0.008		−0.018	0.004	G	0.00	0.00	H		7.3426	0.0010	0.010	110		7.32	7.36		D	21194+5219	I 2	1							S
105274	8.325	0.010	7.801	0.010		0.501	0.011	T	0.57	0.01	L		7.8666	0.0010	0.010	126		7.84	7.89					1							S
105275	8.708	0.010	7.134	0.006		1.320	0.009	T	1.28	0.01	L		7.1412	0.0010	0.010	113		7.12	7.16		C			1							S
105276	9.737	0.011	8.923	0.009		0.719	0.011	T	0.77	0.01	L		8.9971	0.0011	0.019	296		8.96	9.04					1							
105277	9.128	0.012	8.817	0.013		0.310	0.015	G	0.36	0.02	H		8.8391	0.0021	0.016	124		8.81	8.86					1							
105278	8.624	0.010	8.619	0.013		0.009	0.015	T	0.03	0.01	L		8.6221	0.0016	0.014	119		8.60	8.65		C			1							
105279	7.923	0.007	7.899	0.011		0.027	0.012	T	0.04	0.01	L		7.9099	0.0013	0.011	106		7.89	7.94					1							S
105280	10.691	0.055	10.188	0.054							T		10.4115	0.0108	0.095	107		10.16	10.52		D	21194+5219	I 2	1 X S							
105281	10.248	0.027	9.728	0.026		0.506	0.005	G	0.58	0.01	H		9.8329	0.0032	0.025	103		9.79	9.87		C			1							
105282	5.586	0.002	5.725	0.003		−0.119	0.003	T	−0.10	0.00	L		5.7120	0.0005	0.004	132		5.70	5.72		C			1							S
105283	8.207	0.008	7.838	0.011		0.343	0.013	G	0.40	0.02	H		7.8892	0.0011	0.013	130		7.86	7.91		C			1							S
105284	10.012	0.020	8.628	0.011		1.171	0.018	T	1.13	0.02	L		8.6486	0.0016	0.015	137		8.62	8.68			21195−2346	I 1	1 S							
105285	11.466	0.110	11.337	0.162		0.125	0.183	T	0.14	0.19	L		11.4199	0.0544	0.230	83		11.11	11.69	0.27	P 1 A			1 S							G P
105286	10.320	0.051	9.096	0.031		1.039	0.048	T	1.01	0.04	L		9.1119	0.0021	0.019	107		9.08	9.14		C			1							
105287	10.591	0.057	9.475	0.034		0.962	0.052	T	0.95	0.04	L		9.4640	0.0018	0.017	68		9.44	9.51		C			1							
105288	9.285	0.018	8.248	0.013	*	0.880	0.015	G	0.89	0.01	H	*	8.2830	0.0018	0.012	84	*	8.26	8.31		D	21196+1421	I 1	2 C A	AB	60	0.570	0.009	1.64	0.03	
105289	10.202	0.038	9.060	0.025	A	1.000	0.495	G	0.93	0.04	L	*	9.0707	0.0027	0.014	54	*	9.04	9.10		C	21196−3929	I 1	2 C A	AB	57	3.867	0.035	2.77	0.13	
105290	8.408	0.009	7.750	0.008		0.610	0.010	T	0.68	0.01	L		7.8191	0.0012	0.014	131		7.79	7.85		C			1							S
105291	8.493	0.010	8.092	0.010		0.408	0.015	G	0.47	0.02	H		8.1532	0.0017	0.013	109		8.13	8.18					1							S
105292	9.164	0.017	9.116	0.022		0.049	0.026	T	0.06	0.02	L		9.1007	0.0026	0.017	84		9.08	9.14					1							
105293	10.401	0.048	9.151	0.027		1.066	0.043	T	1.03	0.04	L		9.2672	0.0026	0.018	63		9.24	9.30		C			1							
105294	9.639	0.016	9.199	0.016		0.415	0.021	T	0.48	0.02	L		9.2727	0.0029	0.025	165		9.23	9.33					1 G							
105295	7.165	0.011	6.971	0.014	*	0.186	0.017	T	0.20	0.02	L	*	7.0528	0.0010	0.009	96	*	7.04	7.07		D	21197+0931	I 1	2 C A	AB	188	2.735	0.003	0.69	0.01	S
105296											T		13.9026	0.2641	0.000	1		13.90	13.90			21197−3227	I 1	S							G G
105297	10.137	0.027	9.811	0.030		0.313	0.044	T	0.36	0.06	L		9.8459	0.0029	0.026	124		9.80	9.90		C			1							
105298	8.143	0.010	6.950	0.007		1.022	0.010	T	1.00	0.01	L		6.9863	0.0007	0.008	117		6.97	7.00		D	21197+5304	I 1	1							S
105299	8.999	0.013	8.937	0.016		0.060	0.015	G	0.07	0.01	H		8.9731	0.0021	0.017	117		8.94	9.00		C			1							
105300	8.785	0.015	8.138	0.012	*	0.600	0.016	T	0.67	0.01	L	*	8.3610	0.0016	0.016	187	*	8.34	8.39		D	21197+3315	I 1	2 C A	AB	36	2.063	0.004	1.52	0.02	S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
*105301	21 19 40.83	−05 29 13.4	8.13	H	319.920 144 95	−05.487 050 00		7.62	17.45	−15.99	0.91	0.73	1.07	1.13	0.87	+11	−10	−28	−15	− 2	+28	+ 3	−29	+34	+23	0	2.66
105302	21 19 42.26	−02 52 42.5	7.93	H	319.926 069 90	−02.878 483 61		5.33	80.21	−26.93	0.96	0.85	1.21	1.29	1.17	+30	−20	−28	−34	−20	+43	−10	−49	+42	+63	0	0.67
105303	21 19 42.76	+55 27 00.2	7.19	2 H	319.928 146 36	+55.450 057 62		3.21	19.11	5.31	0.50	0.53	0.62	0.57	0.51	− 8	+ 0	+15	+16	− 8	−27	− 2	−13	+15	− 8	0	1.23
105304	21 19 43.00	−38 20 43.9	9.76	H	319.929 186 12	−38.345 519 20		0.11	9.89	−2.89	1.69	1.50	1.88	1.75	1.16	+39	−37	−30	−28	−32	+29	−31	−59	+13	+21	6	1.04
105305	21 19 43.28	+30 02 50.5	7.94	H	319.930 354 07	+30.047 362 87		7.72	12.41	8.52	0.56	0.53	0.91	0.68	0.57	− 8	− 0	+ 4	+48	+13	−16	+13	+42	+13	−11	0	1.15
105306	21 19 43.46	−50 43 20.6	10.72	G	319.931 100 85	−50.722 392 48		5.34	90.85	−49.36	1.62	1.37	2.06	2.03	1.29	+28	− 9	−17	− 7	−20	+24	−20	−43	+12	+17	3	0.68
105307	21 19 44.07	−82 12 19.4	8.19	1 H	319.933 614 93	−82.205 397 28		5.44	11.28	8.47	0.59	0.53	0.73	0.69	0.70	+ 0	−17	+ 5	−13	+ 5	+ 7	+12	+22	− 7	−17	1	0.37
105308	21 19 44.20	+56 12 00.3	7.94	H	319.934 186 63	+56.200 094 27		3.56	50.89	57.63	0.59	0.61	0.70	0.67	0.59	−16	− 5	+25	+ 7	− 6	−17	− 2	−13	+ 5	−16	1	−0.07
105309	21 19 44.94	+53 57 05.4	8.07	G	319.937 248 76	+53.951 506 30		1.83	2.36	−4.28	0.71	0.67	0.82	0.80	0.75	+ 6	+19	+11	− 4	+14	−23	+18	+ 5	+ 7	+ 9	0	−0.53
105310	21 19 45.10	+27 48 21.8	8.89	H	319.937 917 94	+27.806 065 31		6.02	−2.42	−24.69	0.91	0.96	1.29	1.06	1.08	+24	+ 5	− 6	+32	+11	−13	+ 8	−42	+37	+13	0	2.17
105311	21 19 45.76	−40 03 23.1	8.24	H	319.940 677 49	−40.056 410 19		0.49	17.61	−7.43	1.02	0.64	1.27	1.48	0.63	+28	− 8	− 9	+ 9	−28	+47	−29	−17	+ 5	+ 4	0	−2.53
105312 H	21 19 46.00	−26 21 07.2	6.56	G	319.941 683 40	−26.352 011 00	A	53.40	−582.35	−357.67	1.08	0.87	1.09	1.11	0.62	+23	− 3	−26	+ 7	−28	+22	−17	−44	+17	+26	1	0.48
105313	21 19 46.84	−75 50 45.5	8.13	H	319.945 180 11	−75.845 982 65		2.60	28.45	−17.85	0.60	0.64	0.84	0.65	0.66	−10	− 6	−14	+ 3	+14	+ 1	+13	−14	−17	−12	0	0.15
105314	21 19 47.23	−33 41 02.9	10.22	H	319.946 773 89	−33.684 148 18		3.16	14.31	−6.32	1.32	1.20	1.50	1.54	1.07	+29	−13	−14	−19	−21	+25	−21	−50	+ 6	+21	0	−0.31
105315	21 19 48.63	−14 01 03.1	7.03	H	319.952 606 46	−14.017 515 00		3.82	22.28	0.26	0.86	0.46	1.02	1.03	0.50	+35	−39	−22	− 2	−12	+35	−12	+ 3	+26	+48	0	−1.40
105316	21 19 48.81	−78 24 24.6	9.09	H	319.953 383 63	−78.406 825 07		4.22	−7.66	−17.10	0.74	0.74	0.98	0.80	0.90	− 3	−15	+12	+31	− 2	−19	− 3	+22	+18	−18	0	0.78
105317	21 19 48.91	+27 30 16.4	8.30	H	319.953 805 09	+27.504 556 56		12.73	99.69	19.30	0.72	0.73	1.17	0.85	0.88	+ 3	+ 9	−28	+22	+21	−26	+19	−35	+51	− 5	0	0.54
105318	21 19 51.42	−27 12 32.9	7.07	G	319.964 247 86	−27.209 137 48		6.22	9.40	−1.76	0.83	0.54	0.91	0.99	0.51	+17	−14	−22	−16	−10	+29	− 7	−33	+26	+30	3	−0.49
105319 H	21 19 51.88	−53 26 57.4	4.39	G	319.966 182 53	−53.449 264 34	A	33.58	107.37	−67.12	0.81	0.56	0.76	0.82	0.44	− 1	+13	− 9	+18	+17	+ 6	+14	+22	− 1	−26	1	0.85
105320 H	21 19 54.35	+53 19 19.6	8.10	H	319.976 443 95	+53.322 113 35	A	2.81	7.60	4.58	1.12	1.14	1.00	0.93	0.95	+11	−13	+ 3	+15	+ 1	−27	+ 9	− 2	− 9	+27	2	0.34
105321	21 19 57.99	+48 38 05.0	7.89	H	319.991 634 38	+48.634 729 14		1.68	0.38	2.23	0.65	0.58	0.75	0.84	0.62	−16	−15	+10	−17	+ 0	+ 7	− 1	−20	+13	−27	1	−0.27
105322	21 19 58.77	−45 28 43.4	8.11	G	319.994 874 86	−45.478 718 63		3.96	45.99	−11.78	0.74	0.61	0.97	0.87	0.60	+34	−21	−21	−20	−18	+19	−16	−35	+ 9	+31	2	−0.07
105323	21 20 00.02	−29 20 57.6	8.33	G	320.000 085 99	−29.349 341 54		12.35	53.50	27.17	1.13	0.74	1.15	1.24	0.60	+18	+ 0	−20	−41	−16	+27	−12	−56	+23	+20	0	−2.43
*105324 H	21 20 02.42	−27 18 15.8	8.06	2 H	320.010 065 63	−27.304 389 13	A	14.41	90.70	−28.63	2.81	1.75	2.36	2.71	1.57	+22	−30	−16	−31	− 8	+23	−11	−25	+ 1	+13	11	1.53
*105325	21 20 01.97	−12 59 11.0	8.52	1 H	320.008 221 88	−12.986 398 35		0.41	11.58	4.33	0.99	0.69	1.19	1.41	0.70	+44	−13	−14	+ 9	−22	+36	−12	− 2	+19	+48	0	−2.14
105326	21 20 04.09	+12 57 46.2	7.20	2 H	320.017 025 55	+12.962 833 50		4.43	9.49	2.63	0.93	0.59	1.05	1.09	0.62	+16	−19	−20	− 1	− 6	− 9	−11	−22	+25	+17	2	2.42
105327	21 20 04.77	−42 40 43.1	8.22	G	320.019 882 30	−42.678 646 77		18.22	133.05	−19.52	0.80	0.70	1.14	0.73	0.63	+66	−29	−18	−46	−31	+29	−30	−37	+19	+61	1	1.29
105328	21 20 05.04	−69 00 38.9	7.98	H	320.020 994 39	−69.010 798 80		1.01	2.64	4.51	0.57	0.61	0.89	0.66	0.76	−23	−17	+ 2	+ 3	− 2	− 5	+ 0	+ 0	−13	−31	0	0.02
105329	21 20 05.91	−10 28 22.9	8.89	H	320.024 635 99	−10.473 027 25		3.84	15.68	−6.72	1.20	0.89	1.56	2.10	1.11	+27	+10	− 6	+25	−18	+48	−10	+38	+10	+44	0	0.15
105330	21 20 06.56	−34 35 37.3	8.41	H	320.027 353 74	−34.593 682 86		1.52	20.06	−1.86	1.11	0.96	1.43	1.37	0.84	+24	− 4	−25	− 4	−19	+47	− 9	−37	+ 7	+24	0	0.74
105331	21 20 07.57	+69 34 05.7	7.68	H	320.031 543 94	+69.568 243 93		10.79	6.68	−13.12	0.58	0.52	0.60	0.79	0.59	−13	− 7	+19	− 7	+ 5	− 3	+ 6	− 8	− 6	−26	0	0.94
105332	21 20 08.04	+45 03 24.9	9.08	H	320.033 507 33	+45.056 915 07		0.74	1.88	−0.57	0.74	0.72	0.97	0.85	0.76	− 7	+ 3	+12	− 5	+ 8	+17	+ 6	− 3	+11	+15	0	−0.93
105333 H	21 20 09.16	−13 30 08.4	7.22	G	320.038 184 70	−13.502 322 21	*	0.83	8.81	3.21	0.92	0.53	1.07	1.04	0.54	+45	−43	−22	+ 8	− 2	+24	− 2	+13	+18	+48	0	−0.95
105334	21 20 09.48	−45 01 18.8	6.15	2 H	320.039 511 49	−45.021 899 94		1.75	1.02	3.00	0.61	0.50	0.80	0.62	0.46	+41	−28	−25	−25	−14	+21	−14	−35	+18	+44	0	−1.51
105335	21 20 09.87	+35 35 56.4	8.22	G	320.041 124 91	+35.599 009 55		7.27	29.18	−4.38	0.50	0.59	0.86	0.52	0.63	−21	− 5	+ 5	−13	+15	+ 9	+14	+ 2	+11	−17	1	0.34
105336	21 20 10.46	−67 39 06.4	10.90	G	320.043 563 89	−67.651 776 67		50.15	−429.14	87.68	1.86	2.17	3.31	2.01	2.33	−19	−13	− 7	− 6	+ 2	− 2	+ 3	− 4	−10	−27	0	
105337	21 20 11.16	+79 46 02.5	9.11	2 H	320.046 515 13	+79.767 348 12		1.77	−10.52	3.86	0.76	0.73	0.82	0.90	0.81	+ 0	−15	+10	+21	+ 8	+ 0	+ 8	− 8	+ 9	+ 6	0	−0.67
105338	21 20 11.68	−35 51 57.0	9.76	H	320.048 657 62	−35.865 836 26		7.40	64.61	−9.31	5.28	3.89	5.34	5.67	3.25	+15	−21	−27	−49	−14	+33	− 8	−54	+11	+ 6	0	
105339	21 20 12.47	+61 07 37.4	9.54	G	320.051 952 22	+61.127 046 01		0.76	3.70	4.27	0.87	0.80	0.96	0.87	0.82	−10	−17	+ 6	−18	+18	+13	+17	−17	+ 7	+19	0	2.25
105340	21 20 13.33	−31 59 34.4	9.02	H	320.055 548 12	−31.992 882 28		4.50	12.09	10.52	1.07	0.76	1.22	1.38	0.72	+12	+ 6	−10	+11	−13	+33	− 6	−32	+12	+20	3	0.51
105341	21 20 13.93	−19 51 01.9	9.09	H	320.058 036 06	−19.850 531 77		61.04	−173.35	−721.75	1.12	0.68	1.31	1.42	0.72	+29	−11	−13	− 5	−25	+35	−20	− 9	+17	+40	0	0.50
105342 H	21 20 14.02	+60 37 51.2	7.37	H	320.058 414 79	+60.630 882 03	A	1.05	−4.69	−3.99	1.12	1.11	1.13	1.06	1.07	+13	− 3	+13	−11	+19	+17	+19	−16	+10	+25	2	1.70
*105343 H	21 20 14.15	+54 11 02.0	7.97	H	320.058 970 79	+54.183 891 78	A	0.58	3.58	1.98	2.06	3.26	1.15	1.19	1.03	− 2	+16	− 2	− 6	+14	−26	+16	+ 1	− 4	+13	4	1.12
*105344	21 20 14.07	+22 01 34.2	6.29	H	320.058 627 83	+22.026 172 25		6.05	4.00	5.61	0.44	0.44	0.80	0.54	0.53	+ 7	+ 1	−34	+ 3	+22	−28	+16	−18	+28	+ 8	2	−0.72
105345	21 20 14.65	+36 48 24.3	8.27	1 H	320.061 060 92	+36.806 754 85		1.89	5.41	−2.62	0.56	0.65	1.00	0.60	0.70	−26	− 2	+12	− 7	+ 9	−16	+10	+ 5	+12	−20	0	0.47
105346	21 20 14.97	+36 18 38.6	8.83	H	320.062 389 25	+36.310 730 89		0.81	−2.26	−2.92	0.61	0.68	0.99	0.64	0.71	−19	+ 1	+11	− 4	+15	+ 2	+15	− 1	+15	− 9	0	1.61
105347	21 20 16.61	−55 47 27.6	8.29	2 H	320.069 225 03	−55.791 001 40		1.83	−1.74	−0.62	0.90	0.72	1.13	1.20	0.74	− 2	− 2	− 3	+33	− 4	+13	− 8	+23	+ 5	−35	0	−0.85
105348	21 20 17.61	+06 32 35.3	8.73	H	320.073 376 22	+06.543 135 05		5.64	10.23	9.77	1.11	0.88	1.32	1.39	0.93	+15	+ 2	−20	−13	+ 5	+25	+ 7	−38	+40	+25	0	−0.56
105349	21 20 18.74	−01 30 18.0	8.07	H	320.078 093 72	−01.504 994 92		0.41	8.47	6.30	1.05	0.79	1.29	1.34	1.03	− 1	+20	−37	−27	+18	+ 5	+25	−31	+51	+24	0	−0.28
105350	21 20 20.02	+16 48 40.8	7.55	G	320.083 407 79	+16.811 341 40		14.61	−10.40	83.94	1.07	0.68	1.34	1.24	0.69	+31	−44	−44	−22	−11	+ 4	−22	−18	+22	+21	0	0.52
105351	21 20 20.22	−36 47 18.0	8.87	H	320.084 255 32	−36.788 334 84		6.78	8.35	14.85	1.36	1.13	1.76	1.50	0.81	+36	−38	−60	−18	−28	+40	−21	−50	+36	+19	0	1.78
105352	21 20 20.54	+33 29 07.7	6.93	H	320.085 572 80	+33.485 458 52		4.57	9.50	−10.70	0.34	0.43	0.65	0.42	0.45	−13	+ 1	+ 9	+ 1	+20	− 1	+16	+12	+ 9	− 5	1	1.36
105353	21 20 21.81	−47 17 53.3	8.95	H	320.090 859 21	−47.298 135 33		1.93	30.00	−26.21	1.05	0.86	1.53	1.15	0.82	+43	−46	−56	−12	−11	+21	+ 2	−14	+ 1	+36	0	1.05
105354	21 20 21.83	−40 27 55.6	7.87	G	320.090 951 75	−40.465 434 12		14.36	15.07	−52.22	0.92	0.58	1.15	1.18	0.55	+40	−20	−17	−21	−36	+51	−32	−23	+ 2	+ 7	0	−0.81
105355	21 20 22.49	+19 13 15.2	8.27	H	320.093 704 83	+19.220 895 87		3.82	31.45	−2.71	0.75	0.66	0.99	1.01	0.65	+30	−32	−25	−21	−14	+11	−17	−30	+19	+19	0	2.12
105356	21 20 25.03	−29 56 06.9	8.91	H	320.104 311 94	−29.935 239 27		3.83	22.33	−53.33	1.24	0.94	1.33	1.72	0.82	+33	− 9	−29	−19	−35	+27	−27	−53	+16	+35	0	−0.42
105357	21 20 25.42	+60 41 14.2	6.73	H	320.105 931 09	+60.687 266 32		13.25	5.39	−16.68	0.48	0.48	0.54	0.50	0.50	−10	− 2	+11	+ 2	+26	+ 5	+29	− 9	+ 3	+19	2	0.01
105358	21 20 25.80	−59 13 26.9	8.53	H	320.107 513 48	−59.224 148 56		7.31	37.61	−6.29	0.87	0.80	1.20	1.01	0.94	+15	−34	−22	−11	+ 9	+ 0	+19	+13	− 4	− 7	0	−0.04
105359	21 20 25.89	−02 03 40.8	8.51	G	320.107 883 03	−02.061 324 32		19.97	−107.56	−263.42	3.99	1.86	1.34	7.89	2.90	−42	+13	−18	−94	+56	−13	+51	−86	+18	−55	0	0.73
105360	21 20 26.52	+12 08 29.8	7.58	G	320.110 506 56	+12.141 614 25		10.07	37.63	−35.97	0.81	0.59	0.92	1.11	0.67	+23	−15	−12	+ 6	−11	+20	− 7	−14	+17	+39	0	−0.99
105361	21 20 26.93	+47 52 33.6	8.89	H	320.112 192 13	+47.876 008 44		2.93	−0.17	−4.37	0.66	0.67	0.84	0.76	0.82	− 9	− 7	− 9	− 1	+14	− 1	+14	+14	−24	+ 1	0	−1.40
105362 H	21 20 27.20	−47 32 07.1	9.60	H	320.113 324 37	−47.535 305 95	A	5.68	23.64	−40.13	3.80	4.42	3.13	3.06	2.37	+ 0	−30	−40	−13	− 9	+ 7	− 7	−20	− 4	+46	2	−1.23
105363	21 20 27.85	+61 07 12.8	8.65	G	320.116 038 82	+61.120 224 59		2.74	4.73	3.00	0.70	0.67	0.79	0.73	0.72	−11	−11	+ 6	−20	+21	+14	+19	−17	+ 8	+19	0	1.52
105364	21 20 30.34	+09 17 21.1	9.92	H	320.126 401 42	+09.289 206 42		4.22	−4.26	−7.86	1.46	1.05	1.68	1.78	1.08	+35	−32	−22	+ 7	−31	+ 1	−22	− 7	+ 2	+49	0	−0.89
105365	21 20 30.63	+11 36 00.6	9.26	H	320.127 635 62	+11.600 169 01		6.34	3.84	−14.61	1.14	0.78	1.26	1.51	0.84	+20	− 9	− 9	+22	−27	+24	−14	−15	+15	+43	0	0.30
105366	21 20 31.66	+01 14 05.3	7.97	H	320.131 899 41	+01.234 818 95		1.94	15.70	−0.08	1.22	0.83	1.21	1.42	0.97	+24	+ 3	−14	−48	− 5	−11	− 8	−40	+ 4	+39	2	0.98
105367	21 20 31.87	−43 34 36.3	8.50	H	320.132 792 06	−43.576 759 05		2.28	10.43	−4.01	0.77	0.65	1.12	0.78	0.67	+49	−34	−18	−17	− 6	+34	− 5	−11	+17	+54	1	−0.46
105368	21 20 32.66	−23 36 23.5	10.56	H	320.136 069 21	−23.606 541 35		21.08	−154.63	−416.14	1.61	0.94	1.82	1.92	0.88	+42	−23	−20	−21	−30	+37	−23	−15	+12	+38	3	−1.26
105369	21 20 32.90	+45 28 03.1	9.10	2 T	320.137 097 23	+45.467 514 19		0.84	−3.90	−4.31	0.74	0.72	0.94	0.96	0.89	−21	+ 5	− 5	+13	− 9	+23	− 9	+ 2	−19	−26	0	−1.30
105370	21 20 33.50	+60 45 23.2	6.11	H	320.139 578 91	+60.756 453 63		7.60	−43.02	−19.80	0.47	0.47	0.53	0.49	0.50	−12	− 2	+ 9	− 1	+28	+ 2	+29	− 7	+ 1	+17	1	1.09
105371 H	21 20 33.52	+13 10 01.3	8.07	G	320.139 660 31	+13.167 034 24	*	11.59	50.88	−38.24	1.51	3.93	1.62	1.62	1.15	+43	− 8	+ 1	−20	−20	+ 1	−24	−36	− 1	+46	5	−0.28
105372	21 20 34.38	+62 31 37.4	8.15	H	320.143 260 51	+62.527 049 74		11.08	17.87	1.94	0.59	0.60	0.71	0.62	0.61	− 7	− 2	+10	− 2	+18	+18	+17	−20	+24	+10	5	1.02
105373	21 20 35.70	+28 49 59.0	7.54	G	320.148 733 88	+28.833 053 71		7.14	−4.97	6.68	0.61	0.55	0.88	0.71	0.65	− 4	+14	−10	− 8	+22	−19	+22	+ 1	+24	+ 0	0	0.28
105374	21 20 36.65	+30 07 52.9	8.24	H	320.152 707 17	+30.131 368 16		2.93	4.55	−1.74	0.56	0.58	0.97	0.70	0.59	− 6	− 4	+14	+44	+14	−11	+10	+29	+17	− 8	0	1.76
105375	21 20 37.32	+08 12 42.1	7.87	H	320.155 490 95	+08.211 699 01		4.13	−15.22	−16.75	0.77	0.62	0.98	1.06	0.67	+38	−16	−28	+ 2	−15	+35	− 8	+20	+15	+56	3	−1.06
105376	21 20 38.16	+26 15 00.8	7.34	H	320.158 990 44	+26.250 213 46		2.96	−18.61	−33.83	0.57	0.55	0.87	0.71	0.69	− 8	+13	− 9	+ 4	+ 4	−15	+ 7	−19	+18	+ 2	2	0.62
105377	21 20 38.31	−26 39 56.6	8.90	H	320.159 641 12	−26.665 712 91		7.99	62.33	−49.25	1.14	0.78	1.31	1.35	0.68	+18	−12	−26	−21	−17	+40	−10	−36	+22	+29	0	−0.80
105378	21 20 38.73	−57 50 55.6	7.80	G	320.161 395 35	−57.848 783 44		6.53	6.06	8.54	0.60	0.65	1.02	0.77	0.60	+ 5	+10	−34	−11	+ 9	−10	+10	+ 5	+ 3	−21	3	−0.77
105379	21 20 41.93	−22 23 12.6	7.85	H	320.174 720 52	−22.386 841 38		2.79	4.57	−0.03	0.88	0.53	1.06	1.10	0.46	+44	−33	−43	−37	+40	+53	−27	−25	+25	+36	0	0.89
105380	21 20 45.16	+67 13 15.1	7.64	H	320.188 182 42	+67.220 860 79		3.63	8.68	10.64	0.62	0.52	0.66	0.72	0.62	−16	−37	+22	+ 7	+12	+10	+ 7	+ 1	+15	+20	0	−0.25
*105381	21 20 45.64	+53 22 41.6	8.92	H	320.190 149 94	+53.378 224 63		4.18	9.56	0.84	0.77	0.70	0.88	0.86	0.82	− 1	−16	+ 1	+ 8	+ 5	−13	+ 3	+ 8	+12	+11	0	−0.97
*105382 H	21 20 45.58	−40 48 34.2	4.80	1 H	320.189 931 53	−40.809 508 52	*	17.49	76.18	17.66	3.14	0.37	0.89	1.13	0.65	+10	− 9	−22	−21	−42	+42	− 4	−37	− 2	+29	9	1.09
105383	21 20 45.83	+18 50 14.2	8.35	H	320.190 941 74	+18.837 273 33		5.86	−26.09	−93.92	0.86	0.63	0.98	1.17	0.65	+16	−15	−22	−31	−11	+ 5	−11	−20	+18	+11	0	2.54
105384	21 20 46.61	−38 46 53.6	7.84	G	320.194 211 25	−38.781 561 45		27.49	−22.96	49.40	1.02	0.94	1.18	1.29	0.76	+26	+ 4	− 7	− 7	−27	+32	−24	−58	+ 2	+22	0	−0.16
105385	21 20 46.86	−12 53 10.1	7.75	H	320.195 255 45	−12.886 140 93		3.41	10.88	−22.69	0.90	0.60	1.14	1.37	0.57	+38	−14	−31	+13	−29	+45	−12	− 2	+18	+38	0	−1.41
105386	21 20 48.94	−59 47 29.4	8.96	H	320.203 909 02	−59.791 493 77		5.23	−8.33	−16.48	0.89	0.82	1.22	1.07	0.85	+ 8	−28	−30	− 8	+14	−11	+13	− 8	−15	+ 8	0	1.29
105387	21 20 49.13	−11 20 58.5	8.07	H	320.204 722 01	−11.349 584 12		2.58	29.67	2.26	0.96	0.65	1.15	1.57	0.73	+33	− 9	+ 0	− 4	−36	+34	−28	+ 4	+18	+43	0	0.06
105388	21 20 49.93	−53 02 02.3	8.65	2 H	320.208 030 12	−53.033 977 41		21.81	30.00	−94.36	0.97	0.64	1.17	1.16	0.60	− 5	+15	− 4	− 2	+28	+ 0	+25	+10	+ 5	−29	0	1.37
*105389	21 20 50.07	−09 09 05.9	7.45	2 H	320.208 629 57	−09.151 627 19		1.60	−18.99	−23.19	0.92	0.69	1.14	1.60	0.70	+28	− 2	−26	+22	−41	+41	−14	+25	− 4	+33	0	−1.34
*105390 H	21 20 50.01	+32 27 08.4	6.45	H	320.208 385 13	+32.452 330 66	A	13.65	58.60	−45.18	1.03	0.98	1.16	0.92	0.79	− 9	+ 2	−16	+14	+23	−15	+16	− 5	− 6	−18	0	1.48
105391	21 20 50.94	−45 48 39.1	7.46	G	320.212 259 57	−45.810 869 77		18.76	−96.24	−3.00	0.70	0.54	0.92	0.77	0.53	+30	−23	−22	−10	+ 1	+25	+ 4	−15	+13	+40	0	−0.44
105392	21 20 51.81	−37 04 41.1	9.84	H	320.215 862 84	−37.078 092 74		11.26	−18.08	20.47	1.54	1.38	1.84	1.69	1.04	+45	−38	−54	−20	−22	+18	−31	−53	+37	+14	0	1.18
105393	21 20 51.84	−51 02 39.3	10.63	G	320.215 987 87	−51.044 258 72		15.21	203.85	−141.07	1.48	1.34	1.91	1.85	1.21	+34	−17	−28	− 2	−16	+18	−16	−41	+10	+23	2	−0.26
105394 H	21 20 52.42	−36 39 24.0	9.07	H	320.218 430 53	−36.656 676 66	A	3.42	17.52	−3.09	1.92	1.69	2.14	1.90	1.24	+43	−34	−56	−30	−26	+31	−25	−55	+35	+26	2	0.05
105395	21 20 53.07	−30 57 19.1	7.61	H	320.221 118 25	−30.955 292 98		3.63	29.00	0.42	0.88	0.67	1.00	1.09	0.59	+19	− 2	−29	+ 1	−22	+25	−14	−39	+14	+18	0	0.94
105396	21 20 53.16	−26 36 54.9	8.56	H	320.221 515 92	−26.615 258 76		4.36	1.93	−1.81	0.98	0.70	1.18	1.19	0.60	+29	−17	−32	−19	−25	+43	−16	−40	+26	+35	0	−0.18
105397 H	21 20 53.72	+41 26 31.6	7.65	G	320.223 822 82	+41.442 119 59	A	1.66	−12.43	−20.63	0.79	0.85	1.04	0.81	0.80	−10	+ 1	+16	− 2	+ 1	− 1	+ 4	− 2	+ 2	−19	1	−0.09
105398	21 20 55.45	+40 01 55.3	7.81	1 H	320.231 056 69	+40.032 027 84		4.04

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
105301	8.785	0.015	8.189	0.014		0.544	0.015	G	0.62	0.01	H	8.2454	0.0015	0.012	58		8.22	8.27		C			1							S
105302	9.065	0.017	8.023	0.012		0.906	0.016	T	0.91	0.01	L	8.0886	0.0012	0.009	74		8.07	8.11		C			1							S
105303	9.197	0.013	7.471	0.006		1.468	0.012	T	3.20	0.05	O	7.0220	0.0171	0.139	128		6.72	7.22		U 2 C			1 S							
105304	10.189	0.039	9.722	0.039		0.453	0.043	T	0.52	0.05	L	9.8597	0.0031	0.024	54		9.81	9.90					1							
105305	8.438	0.008	7.991	0.007		0.422	0.010	T	0.49	0.01	L	8.0336	0.0012	0.012	197		8.01	8.05		C			1 G							S
105306	11.485	0.099	10.857	0.088		0.680	0.020	G	0.74	0.02	H	10.8842	0.0041	0.035	98		10.78	10.94					1							G
105307	8.571	0.009	8.237	0.009		0.317	0.012	T	0.37	0.02	L	8.2717	0.0020	0.023	140		8.23	8.31		U			1							S
105308	9.308	0.014	8.055	0.009		1.068	0.013	T	1.03	0.01	L	8.1077	0.0013	0.013	124		8.09	8.13		C			1							
105309	8.367	0.009	8.112	0.010		0.253	0.005	G	0.28	0.01	H	8.1341	0.0017	0.015	110		8.12	8.16		C			1							
105310	9.474	0.015	8.932	0.014		0.508	0.018	T	0.58	0.02	L	8.9983	0.0020	0.022	119		8.97	9.04		C			1 S							
105311	10.208	0.033	8.421	0.015		1.488	0.029	T	1.51	0.04	L	8.3666	0.0019	0.015	84		8.34	8.39					1							
105312	7.495	0.007	6.681	0.006	A	0.737	0.018	G	0.85	0.02	A *	6.6973	0.0011	0.009	78 *		6.68	6.72		C	21198−2621	I 1	2 C A	AB	270	1.914	0.017	2.99	0.06	S
105313	9.859	0.018	8.289	0.009		1.317	0.016	T	1.28	0.02	L	8.2856	0.0016	0.017	147		8.25	8.32					1							
105314	10.791	0.061	10.143	0.053		0.601	0.070	T	0.67	0.06	L	10.3481	0.0039	0.026	70		10.31	10.40		C			1							
105315	7.068	0.006	7.026	0.007		0.038	0.008	T	0.05	0.01	L	7.0493	0.0009	0.007	77		7.04	7.06		C			1							S
105316	10.957	0.043	9.257	0.017		1.419	0.037	T	1.40	0.06	L	9.2316	0.0023	0.023	133		9.17	9.27					1							
105317	8.937	0.011	8.363	0.010		0.540	0.011	T	0.61	0.01	L	8.4212	0.0024	0.020	118		8.39	8.45					1							
105318	7.071	0.008	7.059	0.006		0.002	0.001	G	0.02	0.00	H	7.0818	0.0010	0.007	72		7.07	7.09		C			1							S
105319	4.624	0.003	4.403	0.003	*	0.191	0.004	G	0.21	0.02	A *	4.4458	0.0006	0.005	116 *		4.44	4.46		D	21199−5327	I 1	2 C A	AB	272	6.708	0.008	2.64	0.03	S
105320	8.104	0.008	8.101	0.010	*	0.007	0.012	T	0.03	0.01	L *	8.1059	0.0015	0.012	122 *		8.09	8.12		D	21199+5319	I 1	2 C A	AB	196	0.478	0.005	1.69	0.03	
105321	9.070	0.012	8.000	0.009		0.927	0.011	T	0.92	0.01	L	8.0468	0.0012	0.014	132		8.02	8.07		C			1							S
105322	8.951	0.012	8.203	0.010		0.669	0.012	T	0.73	0.01	L	8.2457	0.0014	0.014	113		8.22	8.26					1							S
105323	9.065	0.019	8.407	0.017		0.609	0.015	G	0.68	0.01	H	8.4510	0.0018	0.014	65		8.43	8.48		C			1							S
105324	8.640	0.028	7.959	0.025	*	0.618	0.029	T	0.69	0.03	L *	8.1977	0.0082	0.086	73 *		8.15	8.54		U 2	21200−2718	I 1	2 C A	AB	90	2.245	0.005	0.09	0.01	S W
105325	10.760	0.048	8.722	0.016		1.725	0.042	T	2.09	0.10	O	8.5982	0.0029	0.021	87		8.57	8.64		U			1							
105326	9.339	0.020	7.399	0.009		1.645	0.018	T	1.97	0.06	O	7.2875	0.0029	0.020	69		7.26	7.33		U 2			1 S							S
105327	8.907	0.010	8.285	0.009		0.561	0.006	G	0.63	0.01	H	8.3448	0.0009	0.013	174		8.32	8.37					1							S
105328	9.964	0.019	8.143	0.009		1.515	0.017	T	1.55	0.03	L	8.1000	0.0015	0.016	170		8.08	8.13					1							S
105329	10.394	0.036	9.010	0.019		1.171	0.032	T	1.13	0.03	L	9.0595	0.0023	0.017	86		9.03	9.08		C			1							
105330	9.619	0.026	8.534	0.018		0.938	0.024	T	0.93	0.02	L	8.5751	0.0021	0.019	66		8.55	8.61		D			1 S							S
105331	8.047	0.009	7.735	0.010		0.324	0.003	G	0.38	0.00	H	7.7641	0.0011	0.009	113		7.75	7.79		C			1							S
105332	9.122	0.015	9.076	0.020		0.047	0.023	T	0.06	0.02	L	9.1023	0.0023	0.021	113		9.07	9.14					1							
105333	7.119	0.006	7.192	0.008	*	−0.080	0.002	G	−0.06	0.00	H *	7.2073	0.0009	0.009	81 *		7.19	7.22		C	21202−1330	H 1	2 C S A	AB	164	0.149	0.011	1.67	0.30	S
105334	9.407	0.016	6.397	0.004		2.387	0.012	T	2.44	0.01	L	6.1702	0.0195	0.168	109		5.95	6.35		U 2			1 S							S
105335	8.922	0.009	8.265	0.008		0.606	0.015	G	0.68	0.01	H	8.3413	0.0014	0.017	195		8.31	8.37					1							
105336						1.450	0.020	G	2.04	0.02	A	10.9683	0.0035	0.047	188		10.90	11.06					1 X							G
105337	10.942	0.045	9.368	0.020		1.343	0.041	T	3.39	0.07	O	8.8756	0.0116	0.089	127		8.74	8.99		U 2 C			1 S							
105338	10.635	0.049	9.757	0.038		0.768	0.048	T	0.81	0.03	L	9.8986	0.0030	0.022	71		9.85	9.92		C			1 X							
105339	9.767	0.024	9.572	0.029		0.210	0.015	G	0.23	0.02	H	9.6086	0.0028	0.020	100		9.57	9.65		C			1							G
105340	9.405	0.025	9.036	0.027		0.350	0.034	T	0.41	0.05	L	9.1004	0.0025	0.019	68		9.08	9.14		C			1							
105341	10.888	0.050	9.239	0.020		1.340	0.010	G	1.60	0.01	A	9.1883	0.0019	0.017	98		9.16	9.21		C			1							
105342	9.702	0.019	7.592	0.007	A	1.600	0.495	G	1.81	0.10	N *	7.4688	0.0016	0.013	120 *		7.45	7.49		D	21202+6038	I 1	2 C A	AB	213	1.290	0.033	3.16	0.13	S
105343	8.103	0.009	7.983	0.011	*	0.116	0.013	T	0.13	0.01	L *	8.0108	0.0017	0.012	108 *		7.99	8.03		D	21202+5411	H 1	2 C A	AB	179	0.319	0.009	1.84	0.12	
105344	6.150	0.003	6.272	0.003		−0.106	0.004	T	−0.09	0.01	L	6.2598	0.0007	0.007	179		6.25	6.27		C			1							S
105345	10.548	0.028	8.482	0.010		1.748	0.024	T	2.30	0.05	O	8.3223	0.0024	0.024	171		8.29	8.36		U			1 S							
105346	9.007	0.010	8.834	0.011		0.166	0.014	T	0.18	0.01	L	8.8848	0.0020	0.021	172		8.85	8.91					1							
105347	10.632	0.041	8.489	0.013		1.812	0.035	T	2.28	0.08	O	8.3450	0.0040	0.027	99		8.31	8.39		U 2			1							
105348	9.078	0.016	8.777	0.018		0.286	0.023	T	0.33	0.03	L	8.8036	0.0033	0.018	72		8.78	8.84		C			1							
105349	9.188	0.016	8.194	0.012		0.870	0.015	T	0.88	0.01	L	8.2241	0.0015	0.012	76		8.21	8.25		D	21203−0130	I 1	1							S
105350	8.105	0.012	7.616	0.011		0.460	0.015	T	0.53	0.02	L	7.6496	0.0014	0.011	75		7.64	7.67		C			1 G							S
105351	9.307	0.022	8.934	0.024		0.364	0.028	T	0.43	0.03	L	8.9564	0.0028	0.016	53		8.92	8.98		C			1							
105352	6.951	0.003	6.927	0.003		0.027	0.004	T	0.04	0.00	L	6.9418	0.0005	0.008	226		6.93	6.96					1							S
105353	9.459	0.018	9.019	0.018		0.415	0.023	T	0.48	0.02	L	9.0409	0.0017	0.017	90		9.01	9.07					1							
105354	8.399	0.011	7.951	0.011		0.445	0.017	G	0.51	0.02	H	7.9797	0.0012	0.009	92		7.96	8.00					1							S
105355	8.494	0.009	8.296	0.011		0.189	0.013	T	0.21	0.01	L	8.3365	0.0016	0.013	102		8.32	8.36		C			1							S
105356	9.569	0.025	9.011	0.024		0.527	0.026	T	0.60	0.03	L	9.0267	0.0024	0.015	63		9.00	9.05		C			1							
105357	7.323	0.006	6.785	0.006		0.504	0.008	T	0.58	0.01	L	6.8399	0.0010	0.008	118		6.83	6.85		C	21204+6041	I 1	1							S
105358	8.994	0.013	8.571	0.013		0.413	0.015	T	0.48	0.02	L	8.6283	0.0026	0.019	103		8.59	8.66					1 G							S
105359	9.381	0.018	8.587	0.014		0.712	0.002	G	0.76	0.00	H	8.6452	0.0015	0.012	77		8.62	8.67					1 G							S
105360	7.946	0.009	7.593	0.008		0.336	0.013	G	0.39	0.02	H	7.6511	0.0014	0.013	80		7.63	7.68					1							S
105361	8.959	0.013	8.917	0.017		0.043	0.020	T	0.06	0.02	L	8.9089	0.0021	0.019	113		8.87	8.95					1							
105362	10.458	0.036	9.703	0.029	*	0.674	0.005	G	0.73	0.00	R *	9.7343	0.0029	0.019	93 *		9.70	9.78		D	21205−4732	I 1	2 C A	AB	142	0.319	0.005	0.10	0.06	
105363	8.693	0.011	8.630	0.014		0.050	0.015	G	0.06	0.01	H	8.6745	0.0017	0.017	108		8.65	8.70		C	21205+6107	I 1	1							
105364	11.199	0.078	10.035	0.042		0.999	0.069	T	0.98	0.06	L	10.0821	0.0024	0.022	86		10.04	10.12					1							
105365	9.675	0.026	9.237	0.026		0.413	0.034	T	0.48	0.04	L	9.3529	0.0024	0.015	80		9.32	9.38		C			1							
105366	9.301	0.022	8.122	0.015		1.011	0.021	T	0.99	0.02	L	8.1365	0.0013	0.012	64		8.12	8.18		C			1							S
105367	8.609	0.009	8.507	0.011		0.090	0.015	G	0.10	0.02	H	8.5358	0.0016	0.014	138		8.51	8.56					1							S
105368	11.991	0.140	10.722	0.072		1.024	0.001	G	1.07	0.00	I	10.7028	0.0028	0.027	120		10.65	10.75		C			1							G
105369	10.358	0.035	9.209	0.021		0.987	0.032	T	0.97	0.03	L	9.2668	0.0236	0.164	120		9.04	9.42	3.28	P 1 A			1 S							
105370	7.392	0.005	6.220	0.004		1.005	0.005	T	0.98	0.00	L	6.2781	0.0006	0.006	111		6.27	6.29					1							S
105371	8.779	0.015	8.137	0.013	*	0.601	0.015	G	0.67	0.01	H *	8.1945	0.0022	0.012	70 *		8.18	8.22			21206+1310	H 1	2 C B	AB	324	0.225	0.029	2.73	0.57	S
105372	8.688	0.013	8.221	0.013		0.480	0.015	G	0.55	0.02	H	8.2612	0.0016	0.014	111		8.24	8.29		C			1							
105373	8.136	0.008	7.597	0.008		0.533	0.015	G	0.61	0.02	H	7.6559	0.0009	0.010	104		7.63	7.68					1							S
105374	9.671	0.016	8.355	0.010		1.118	0.015	T	1.08	0.02	L	8.4102	0.0012	0.016	190		8.38	8.43					1							
105375	8.150	0.008	7.892	0.009		0.246	0.011	T	0.28	0.01	L	7.9420	0.0011	0.011	112		7.92	7.97		C			1							S
105376	9.328	0.014	7.502	0.007		1.519	0.012	T	1.55	0.02	L	7.4585	0.0011	0.013	122		7.44	7.48					1							S
105377	9.538	0.021	8.956	0.020		0.546	0.021	T	0.62	0.02	L	9.0167	0.0023	0.016	76		8.99	9.05		C			1							
105378	8.137	0.009	7.835	0.008		0.283	0.008	G	0.32	0.01	H	7.8695	0.0017	0.017	120		7.85	7.90					1							S
105379	9.045	0.015	7.955	0.010		0.942	0.014	T	0.93	0.01	L	8.0107	0.0010	0.010	97		7.99	8.03		C			1							S
105380	7.642	0.007	7.628	0.008		0.018	0.010	T	0.04	0.01	L	7.6586	0.0012	0.012	102		7.64	7.68					1							S
105381	9.015	0.013	8.912	0.015		0.100	0.019	T	0.11	0.02	L	8.9629	0.0020	0.019	114		8.94	8.99		C			1							
105382	4.865	0.002	4.814	0.002	*	0.029	0.026	G	0.07	0.02	A *	4.8278	0.0013	0.008	111 *		4.82	4.84	2.12	P 1 A	21208−4049	H 1	2 C B	AB	1	0.142	0.023	2.49	0.44	S P
105383	8.697	0.013	8.375	0.014		0.306	0.018	T	0.35	0.02	L	8.4266	0.0017	0.014	91		8.39	8.44					1							
105384	8.694	0.015	7.942	0.013		0.687	0.005	G	0.74	0.00	H	7.9878	0.0024	0.017	56		7.97	8.02					1							S
105385	9.319	0.018	7.895	0.011		1.202	0.017	T	1.16	0.02	L	7.9105	0.0010	0.010	93		7.90	7.93		D			1							S
105386	9.785	0.022	9.046	0.019		0.677	0.023	T	0.74	0.02	L	9.0948	0.0023	0.015	89		9.06	9.12		C			1							
105387	9.419	0.020	8.190	0.012		1.050	0.018	T	1.02	0.01	L	8.2402	0.0014	0.011	73		8.23	8.25		C			1							
105388	9.506	0.019	8.738	0.016		0.690	0.015	G	0.75	0.01	H	8.7826	0.0082	0.049	115		8.73	8.86		U 2 C			1							S
105389	9.522	0.019	7.610	0.008		1.587	0.016	T	1.61	0.02	L	7.5702	0.0031	0.034	99		7.50	7.61		U 2			1							S
105390	7.401	0.006	6.498	0.005	*	0.802	0.006	T	0.83	0.00	L *	6.5977	0.0007	0.007	167 *		6.58	6.61		D	21209+3227	I 1	2 C A	AB	23	2.315	0.002	0.30	0.01	S
105391	8.181	0.008	7.529	0.007		0.614	0.015	G	0.68	0.01	H	7.5822	0.0016	0.014	122		7.56	7.61					1							S
105392	10.674	0.063	9.862	0.047		0.717	0.060	T	0.77	0.04	L	9.9732	0.0031	0.019	59		9.93	9.99		C			1							
105393	11.745	0.116	10.613	0.069		0.808	0.003	G	0.89	0.02	A	10.7798	0.0051	0.039	91		10.73	10.85					1							G
105394	9.482	0.025	9.133	0.027	A	0.300	0.495	G	0.37	0.08	L *	9.1456	0.0031	0.020	61 *		9.11	9.17			21209−3639	I 1	2 C C	AB	150	5.602	0.048	3.97	0.42	
105395	8.763	0.015	7.710	0.011		0.914	0.014	T	0.91	0.01	L	7.7680	0.0012	0.010	69		7.75	7.78		C			1							S
105396	9.280	0.017	8.652	0.015		0.579	0.017	T	0.65	0.02	L	8.6831	0.0018	0.014	81		8.66	8.70		C			1							
105397	8.868	0.010	7.679	0.006	A	0.713	0.126	G	0.99	0.01	L *	7.7153	0.0015	0.014	146 *		7.70	7.74			21209+4127	I 1	2 C A	AB	50	2.176	0.021	3.49	0.13	S
105398	9.841	0.017	8.005	0.008		1.527	0.015	T	1.57	0.03	L	7.9343	0.0019	0.019	162		7.90	7.96		U	21209+4002	I 1	1							
105399	8.443	0.014	7.866	0.010	A						T *	7.8239	0.0018	0.016	69 *		7.79	7.84		D	21209+0307	I 1	2 C A	AB	144	1.610	0.009	2.06	0.06	S
105400	10.133	0.038	8.264	0.016		1.553	0.033	T	1.57	0.03	L	8.1428	0.0026	0.018	69		8.12	8.19			21209−3054	I 1	1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	%	
	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18											29	30
105401	21 20 57.62	−67 07 09.2	8.98	H	320.240 089 13	−67.119 231 93	1.03	9.83	−8.46	0.71	0.93	1.37	0.73	0.94	−29	+10	−20	−12	+ 9	+ 5	+ 9	+ 0	−13	−28	1	1.57
105402	21 20 58.42	−32 01 24.3	8.92	H	320.243 425 14	−32.023 403 45	3.26	−13.07	−5.22	5.18	4.10	5.61	6.05	3.61	+18	−12	−24	−24	−11	+14	−10	−46	+13	+17	0	
105403	21 20 58.78	−51 50 23.5	8.34	H	320.244 903 86	−51.839 854 63	2.87	−6.98	−25.92	0.91	0.66	1.11	1.12	0.58	+20	−13	−22	+26	+27	+ 1	+22	− 2	− 4	+18	0	−0.95
105404	21 20 59.78	−52 28 39.2	8.89	2 H	320.249 064 13	−52.477 543 06	21.72	30.75	−107.93	1.70	1.21	1.45	2.36	1.12	− 9	+ 5	−27	−44	+53	−31	+66	+ 6	+19	−51	0	1.36
105405	21 21 00.37	−62 20 58.1	8.51	H	320.251 548 89	−62.349 479 62	3.54	−42.42	−3.08	0.55	0.58	1.09	0.68	0.69	−26	− 6	+ 0	+33	− 4	+ 1	− 4	+29	− 2	−27	0	−0.99
*105406	21 21 01.44	+40 20 44.1	6.39	H	320.255 993 53	+40.345 574 30	37.64	−18.89	−208.92	0.37	0.42	0.59	0.43	0.47	−16	+ 7	− 1	+ 5	− 5	−11	− 7	+ 5	−13	−11	1	−1.77
*105407	21 21 01.43	−21 27 01.0	9.29	H	320.255 971 75	−21.450 276 94	3.22	−10.11	−3.37	1.25	0.74	1.50	1.46	0.67	+48	−41	−41	−42	−33	+51	−22	−20	+20	+43	0	−1.40
105408	21 21 02.24	−46 51 09.1	8.89	G	320.259 336 97	−46.852 525 66	16.05	83.74	−46.50	1.10	0.89	1.46	1.23	1.01	+37	−44	−35	− 7	+ 0	+ 2	+ 3	−16	− 4	+36	0	−0.29
105409	21 21 02.65	+00 40 28.2	8.02	G	320.261 034 21	+00.674 505 89	8.96	45.40	−43.77	1.02	0.73	1.10	1.26	0.84	+11	+ 7	−25	−34	+12	+ 2	+11	−26	+23	+27	0	2.33
105410	21 21 03.14	−20 49 15.8	7.21	H	320.263 075 97	−20.821 045 95	11.94	21.03	−73.12	1.07	0.70	0.99	1.47	0.83	+30	−38	−34	−56	−37	+51	−37	−47	+30	+48	0	−0.77
105411	21 21 04.24	+23 51 22.5	5.58	H	320.267 662 29	+23.856 258 29	11.63	243.57	−120.04	0.50	0.39	0.73	0.59	0.49	−25	+13	−22	−19	+21	+ 7	+25	−14	+13	− 7	3	−1.68
105412	21 21 04.33	−04 33 36.5	5.87	G	320.268 024 28	−04.560 152 14	9.69	−12.89	11.04	0.71	0.52	0.86	0.97	0.62	+ 4	−10	−24	− 3	− 4	+49	+ 6	−13	+25	+18	0	0.19
105413	21 21 04.80	+07 21 16.4	5.81	1 H	320.270 002 30	+07.354 546 10	3.08	41.25	−17.88	0.72	0.46	0.84	1.06	0.49	+20	− 7	−20	+22	−28	+43	−10	−10	+31	+49	0	−0.09
105414	21 21 04.88	+46 21 10.6	8.11	H	320.270 314 55	+46.352 946 39	4.38	−47.57	−14.33	0.67	0.63	0.81	0.81	0.75	−26	+16	− 2	+28	− 6	+ 6	− 8	− 8	+ 0	−33	1	0.11
105415	21 21 05.39	+56 32 30.2	7.60	H	320.272 439 24	+56.541 719 70	3.53	−1.74	−4.64	0.56	0.51	0.62	0.61	0.51	−12	− 1	+12	−12	+ 3	−17	+ 5	−17	+13	− 7	0	0.28
105416	21 21 07.91	+14 00 25.6	9.69	G	320.282 978 27	+14.007 098 31	3.42	−85.76	−160.15	1.26	1.03	1.53	1.59	1.08	+29	+ 8	−17	−26	−13	−19	−14	−18	+15	+26	0	0.29
105417	21 21 08.69	−26 24 06.8	8.32	H	320.286 203 76	−26.401 898 57	3.09	−0.69	0.97	1.04	0.60	1.25	1.39	0.54	+30	− 2	−21	+ 5	−30	+48	−19	−21	+19	+33	0	0.55
105418 H	21 21 09.23	−27 43 50.7	8.66	H	320.288 451 11	−27.730 741 92 *	8.06	29.63	10.91	2.51	3.19	1.62	1.69	0.85	+18	− 4	−29	+ 3	−31	+45	−19	−47	+27	+17	1	−0.40
105419	21 21 09.46	+41 58 49.1	7.93	H	320.289 433 81	+41.980 297 06	3.56	8.10	−6.55	0.53	0.57	0.77	0.65	0.64	−18	−11	+ 5	+ 6	+ 2	+ 9	+ 2	+ 4	− 2	−19	0	−0.24
105420	21 21 10.54	+59 03 05.1	8.25	H	320.293 898 46	+59.051 416 87	4.54	8.48	−3.29	0.60	0.59	0.74	0.56	0.55	− 5	+16	+10	−14	+17	− 5	+23	−18	+24	+16	0	0.16
105421 H	21 21 11.88	+44 48 45.9	9.66	H	320.299 510 41	+44.812 760 36 A	2.97	5.83	2.50	1.26	1.12	1.37	1.43	1.20	− 2	+14	+ 1	− 3	+ 7	− 4	+ 8	−14	+22	+ 3	0	−1.35
105422	21 21 14.54	−50 00 36.6	8.58	H	320.310 565 31	−50.010 175 57	3.00	13.84	0.34	0.95	0.90	1.26	1.11	0.80	+28	+ 3	−27	−12	−20	+22	−15	−50	+22	+31	0	2.78
105423	21 21 14.71	+54 35 59.0	8.19	1 H	320.311 271 64	+54.599 724 41	7.53	−3.14	11.77	0.59	0.55	0.69	0.72	0.61	− 4	+11	− 2	−12	+11	−25	+10	− 1	+ 6	+ 7	0	−0.52
105424	21 21 16.18	−08 16 00.3	8.00	H	320.317 415 67	−08.266 759 06	13.06	−64.09	−60.58	1.05	0.80	1.27	1.65	0.82	+46	+10	− 5	+13	−26	+37	−11	+11	+ 2	+43	0	−1.18
105425	21 21 16.60	−49 56 16.3	6.40	H	320.319 178 13	−49.937 854 61	8.95	−2.34	−161.95	0.64	0.57	0.86	0.78	0.52	+27	−13	−29	−16	−21	+28	−16	−44	+19	+26	2	0.84
105426	21 21 17.90	−77 15 38.7	8.99	H	320.324 587 57	−77.260 760 59	5.22	25.44	−22.34	0.71	0.71	0.94	0.89	0.78	− 8	− 6	+ 6	+ 6	− 6	− 6	+ 9	− 8	− 3	− 5	−28	0	−0.29
105427	21 21 19.74	−41 21 17.7	8.10	1 H	320.332 236 97	−41.354 923 25	1.91	−11.94	−1.85	1.05	0.73	1.09	1.12	0.66	+63	− 7	− 8	−43	−46	+18	−40	−34	+ 6	+36	0	0.17
*105428 H	21 21 21.02	−84 18 35.3	7.50	G	320.337 580 78	−84.309 816 55 A	4.44	21.89	−15.43	1.40	1.19	1.42	1.20	1.04	− 2	−26	−21	+13	− 7	− 2	−11	− 1	+11	−19	2	1.19
*105429 H	21 21 20.09	+60 41 57.6	8.77	G	320.333 698 23	+60.699 347 16 A	2.31	2.63	−13.19	1.76	1.76	1.73	1.90	1.82	−13	− 5	+17	− 6	+21	+12	+26	−20	+ 2	+20	1	−0.53
*105430	21 21 20.44	+46 43 47.3	6.73	H	320.335 151 93	+46.729 799 43	11.29	35.05	11.93	0.46	0.46	0.57	0.55	0.51	−15	+ 7	− 6	+20	− 8	+ 0	−10	− 7	−10	−20	0	−0.91
105431	21 21 21.56	+10 19 56.6	6.72	H	320.339 833 56	+10.332 378 22 +	21.54	41.29	−40.89	1.28	0.56	0.82	0.86	0.66	+20	+23	−17	−43	−25	− 1	−47	−16	−12	+59	0	−0.02
105432	21 21 21.93	+32 36 46.0	6.05	H	320.341 368 09	+32.612 768 05	5.39	14.40	−14.29	0.40	0.39	0.63	0.48	0.40	−16	− 9	− 1	+26	+25	−19	+20	+10	+ 1	−25	0	1.65
105433	21 21 22.17	+02 58 27.1	7.09	H	320.342 371 20	+02.974 191 38	2.83	20.26	−16.52	0.93	0.77	1.03	1.30	0.97	+28	− 4	−23	− 7	−25	+18	−16	−47	+20	+43	0	0.07
105434	21 21 22.46	−38 10 29.1	8.47	H	320.343 585 47	−38.174 762 07	12.07	68.83	48.83	1.12	1.01	1.22	1.35	0.86	+34	−14	−10	−12	−27	+21	−27	−56	+ 5	+25	0	2.51
105435	21 21 22.88	+22 53 21.6	7.34	H	320.345 354 06	+22.889 327 96	4.52	−7.05	−0.11	0.49	0.45	0.89	0.59	0.55	− 3	− 2	−26	− 7	+24	−18	+19	−25	+34	− 3	0	0.39
105436	21 21 23.28	−19 31 40.0	8.92	H	320.346 994 17	−19.527 786 11	2.75	20.25	1.22	1.07	0.67	1.27	1.64	0.74	+33	−13	−18	+ 2	−15	+34	− 7	− 4	+22	+52	0	1.10
105437	21 21 23.58	+35 44 10.6	8.76	3 T	320.348 266 38	+35.736 289 78	4.16	11.83	−3.80	0.55	0.65	0.98	0.59	0.68	−23	− 2	+12	− 4	+12	+12	+10	+ 2	+16	−22	0	0.12
105438 H	21 21 23.69	+02 53 14.6	7.41	H	320.348 725 13	+02.887 390 61 A	4.32	3.62	−4.46	2.78	2.46	2.52	2.93	2.35	+36	− 6	−30	−12	−25	+19	−22	−55	+38	+49	2	1.89
105439	21 21 23.71	−51 45 08.6	6.75	H	320.348 791 61	−51.752 398 17	20.85	−123.20	−90.21	0.64	0.46	0.80	0.76	0.42	+14	− 9	−14	+21	+18	+14	+15	+ 1	− 7	+ 4	0	0.49
105440	21 21 23.94	+65 34 20.5	10.39	H	320.349 747 91	+65.572 355 09	−0.44	−7.87	−7.96	1.14	0.97	1.16	1.42	1.04	− 7	−11	+15	+ 2	+ 2	+ 6	+ 1	−18	+11	+ 0	1	−0.57
105441	21 21 24.35	−66 54 56.5	8.97	2 H	320.351 465 01	−66.915 689 05	32.52	95.51	−102.11	0.69	0.91	1.34	0.71	0.93	−33	+12	−22	−11	+ 8	+ 2	+ 7	+ 4	−14	−31	0	0.07
105442 H	21 21 24.43	−69 24 13.5	8.68	H	320.351 792 67	−69.403 739 71 A	8.37	21.40	−47.22	1.92	2.10	2.85	2.11	2.57	− 9	−21	− 1	+ 1	− 8	+13	+10	+14	−35	−38	1	0.53
*105443	21 21 27.59	+69 42 38.9	8.41	H	320.364 977 27	+69.710 818 43	6.68	13.95	37.43	0.69	0.62	0.69	0.97	0.73	−16	− 3	+10	−20	+ 8	− 9	+ 9	−22	+ 0	−32	0	1.48
*105444	21 21 27.56	+21 19 00.2	7.88	H	320.364 824 80	+21.316 718 85	4.73	−16.40	−3.18	0.72	0.85	1.19	0.85	0.85	+27	−17	−58	+20	+ 8	−27	−17	−43	+48	+ 2	0	1.14
105445 H	21 21 28.02	−66 40 00.5	7.93	1 H	320.366 743 90	−66.666 797 23 A	5.57	−8.62	11.16	0.82	0.86	1.28	0.77	0.81	−36	+17	− 1	− 8	+ 6	+ 8	+ 2	− 6	−21	−22	3	0.63
105446 H	21 21 28.94	−24 42 26.3	8.56	H	320.370 562 65	−24.707 299 24 B	−0.33	−35.47	8.81	3.46	1.79	2.92	3.00	1.42	+32	+ 0	− 5	− 8	−13	+49	− 9	+11	+ 8	+63	2	0.79
105447	21 21 29.12	+48 10 02.4	7.18	1 H	320.371 348 39	+48.167 320 42	3.89	41.73	40.89	0.50	0.50	0.63	0.65	0.58	− 5	+ 4	− 2	− 7	+ 4	−10	+ 3	− 3	− 9	− 6	0	0.04
105448	21 21 29.54	+41 53 58.0	8.96	1 H	320.373 094 60	+41.899 454 13	0.28	−5.39	−9.40	0.65	0.70	0.94	0.77	0.76	−18	− 5	+ 8	+16	+ 1	+ 2	+ 1	+ 5	+ 8	−14	0	−1.04
105449	21 21 29.96	−64 04 07.1	9.12	H	320.374 838 14	−64.068 632 62	4.06	1.01	−16.40	0.73	0.74	1.27	0.89	0.84	− 5	− 3	−19	+19	+ 6	+12	+ 8	+23	−13	− 4	0	−1.18
105450	21 21 30.09	−53 21 02.6	8.52	1 H	320.375 394 90	−53.350 734 42	2.82	23.42	−26.46	0.91	0.65	1.16	1.19	0.58	+ 7	+12	−20	+17	+32	−17	+22	+24	+ 3	−16	3	−0.19
105451	21 21 30.23	−11 27 29.6	7.80	H	320.375 966 16	−11.458 229 73	13.86	59.92	−54.00	0.86	0.57	1.06	1.39	0.59	+33	−11	−18	− 2	−38	+44	−25	+ 1	+19	+36	2	0.04
105452	21 21 30.66	−42 57 05.2	8.05	G	320.377 743 31	−42.951 448 89	0.82	5.05	−18.17	0.78	0.68	1.07	0.77	0.71	+63	−30	−23	−37	−22	+20	−21	−26	+13	+65	0	0.05
105453	21 21 32.41	+40 58 30.1	8.64	H	320.385 029 88	+40.975 021 74	3.84	4.82	−2.94	0.63	0.61	0.91	0.68	0.63	−15	+ 2	+ 8	+ 2	+ 4	− 2	+ 4	+ 2	+ 6	−14	1	−0.38
105454	21 21 33.77	+27 00 20.7	9.38	H	320.390 705 77	+27.005 761 60	10.17	49.51	32.73	0.79	0.77	1.28	0.94	0.86	+ 1	+11	+ 6	+12	+ 2	−24	+ 9	−15	+26	+ 3	1	0.49
105455	21 21 34.42	+28 33 53.5	8.34	H	320.393 407 47	+28.564 848 02	6.57	−39.73	−69.19	0.79	0.66	1.09	0.96	0.77	+ 4	+18	+ 1	− 1	+12	−21	+15	− 8	+17	+ 9	0	0.63
105456	21 21 35.66	+33 53 48.2	9.92	H	320.398 592 80	+33.896 724 74	−2.12	−2.69	−13.55	0.70	0.95	1.42	0.73	0.92	−20	+ 5	+10	+ 3	+12	+ 0	+12	− 3	− 8	− 6	0	0.40
105457	21 21 38.94	+06 12 19.8	10.08	G	320.412 234 59	+06.205 505 69	4.29	118.11	42.66	1.33	1.26	1.71	1.80	1.45	+40	−24	−30	− 6	−13	+33	− 9	−30	+29	+48	2	0.52
105458 H	21 21 39.63	−46 07 20.1	9.12	H	320.415 127 75	−46.122 261 57 *	2.77	18.86	3.38	4.65	3.86	2.06	1.96	1.33	+50	−25	−24	−13	− 5	− 3	− 9	−22	+ 3	+44	3	−0.02
105459	21 21 39.71	+50 50 16.0	8.09	G	320.415 452 59	+50.837 786 87	3.34	7.80	3.43	0.61	0.59	0.74	0.65	0.64	−17	−18	+ 9	− 4	+ 0	−14	+ 2	− 4	− 4	−15	0	0.19
105460	21 21 39.73	−04 29 11.8	7.76	H	320.415 556 88	−04.486 623 65	4.76	16.63	−16.04	0.84	0.63	0.96	1.19	0.86	+ 7	− 5	−15	−10	+ 8	+37	+11	− 7	+31	+21	0	0.02
105461	21 21 40.76	−49 52 34.1	9.18	H	320.419 852 59	−49.876 132 28	16.93	−3.62	−59.99	1.03	0.99	1.49	1.35	0.92	+36	−19	−29	−14	−27	+30	−25	−47	+23	+24	2	1.32
105462	21 21 41.44	−35 45 15.4	9.55	H	320.422 681 46	−35.754 289 79	7.46	−28.27	−18.73	1.53	1.14	1.89	1.98	0.98	+20	−24	−42	−23	−10	+34	− 6	−39	+32	+ 3	0	0.09
105463	21 21 43.53	+64 21 52.4	7.36	H	320.431 358 70	+64.364 559 12	3.90	−5.55	11.63	0.53	0.50	0.57	0.64	0.62	− 3	− 9	+ 8	+28	+ 7	− 4	+10	− 1	+13	+10	0	−0.04
105464	21 21 43.87	−30 08 55.2	8.89	2 H	320.432 810 47	−30.148 676 09	2.57	9.23	−9.73	1.23	0.84	1.30	1.43	0.69	+15	− 9	−17	−26	−16	+30	−11	−47	+10	+20	0	0.09
105465	21 21 44.15	−18 44 07.4	7.97	G	320.433 957 51	−18.735 383 91	6.64	−26.15	−28.96	0.95	0.53	1.06	1.34	0.58	+21	− 8	−12	+ 9	−19	+33	−11	− 2	+18	+40	2	0.59
105466	21 21 44.72	+03 04 40.7	7.53	H	320.436 340 90	+03.077 960 43	4.15	19.24	−9.49	1.04	0.83	1.12	1.34	1.02	+27	+ 6	−25	−40	−21	+16	−16	−47	+23	+43	0	0.37
105467 H	21 21 45.80	+43 08 38.3	8.12	H	320.440 851 32	+43.143 982 11 A	2.75	−11.02	−18.47	0.98	0.87	1.10	1.10	0.88	−14	+ 5	+ 6	+ 6	+ 3	−11	+ 3	− 3	+12	−19	0	0.77
105468	21 21 45.95	−64 24 34.7	7.70	2 H	320.441 476 46	−64.409 646 55	2.09	11.42	−3.95	0.55	0.52	0.87	0.73	0.58	−16	− 3	−14	+ 8	+13	+10	+12	+19	− 8	−12	0	−1.18
105469	21 21 46.49	−03 11 57.7	8.42	H	320.443 720 08	−03.199 352 97	−0.30	11.65	−7.12	0.98	0.78	1.18	1.14	0.90	+18	−18	−29	−34	− 3	+35	+ 4	−45	+35	+43	0	0.59
105470	21 21 46.62	−43 24 01.0	8.00	2 H	320.444 267 86	−43.400 287 31	0.90	0.28	−6.56	0.70	0.61	1.01	0.66	0.60	+50	−36	−17	−27	−15	+33	−13	−25	+11	+51	0	0.44
105471	21 21 47.22	+30 47 05.3	8.45	H	320.446 761 21	+30.784 795 15	0.84	−1.61	3.97	0.66	0.64	1.12	0.89	0.63	−15	−17	+14	+51	+ 8	−22	− 1	+28	+14	−26	1	−3.03
105472	21 21 47.59	+02 01 38.5	7.47	H	320.448 298 16	+02.027 351 58 A	0.91	−0.21	−7.94	2.12	1.60	1.78	2.66	1.69	+23	+ 7	−26	−32	− 2	−13	− 6	−44	+25	+30	0	1.51
105473	21 21 47.97	−36 25 02.1	9.12	H	320.449 864 05	−36.417 263 21	3.03	16.49	8.98	1.48	1.27	1.82	1.66	0.97	+41	−43	−58	−49	−31	+51	−17	−49	+29	+22	0	−0.50
105474	21 21 48.08	−15 58 37.7	8.50	H	320.450 334 95	−15.977 132 81	1.34	11.13	−1.20	1.14	0.63	1.26	1.41	0.66	+29	−10	−22	−19	−16	+24	−14	− 7	+14	+42	0	0.50
105475	21 21 48.10	+02 01 59.8	9.35	H	320.450 428 50	+02.033 279 33 B	−4.66	8.78	−4.72	38.69	22.63	12.42	20.11	10.82	+21	+ 3	−28	−15	+ 5	−19	− 3	−37	+21	+26	0	1.51
105476	21 21 49.09	−29 09 57.7	6.53	H	320.454 548 70	−29.166 018 09	2.70	13.28	−21.86	0.88	0.60	0.93	1.04	0.51	+26	− 2	−26	−35	−23	+27	−18	−47	+21	+29	0	0.01
105477	21 21 49.51	−48 47 47.2	8.33	H	320.456 304 87	−48.796 436 24	6.28	31.47	−74.76	0.82	0.68	1.11	1.01	0.66	+24	−13	−19	−13	− 9	+19	− 7	−30	+ 6	+23	0	1.83
105478	21 21 50.31	+01 21 42.0	6.79	H	320.459 624 19	+01.361 666 21	9.92	17.53	−19.81	1.22	0.69	1.08	1.53	0.85	+ 7	+24	−10	−55	− 2	−23	− 6	−40	+ 5	+27	0	0.62
105479	21 21 50.50	−61 07 52.7	8.95	H	320.460 410 17	−61.131 317 12	1.82	60.02	−46.81	0.61	0.70	1.29	0.96	0.80	−14	− 8	−11	− 9	+25	− 9	+20	+26	− 1	−25	0	0.27
105480	21 21 50.70	−73 51 19.5	8.47	H	320.461 230 38	−73.855 420 00	8.40	16.01	−13.88	0.65	0.67	0.88	0.84	0.83	−23	−12	+ 6	+ 0	−12	+ 8	−12	+ 7	+ 6	−33	0	−0.47
105481	21 21 51.01	−16 16 24.4	7.45	G	320.462 539 39	−16.273 451 61	14.85	117.37	−168.08	0.98	0.56	1.09	1.15	0.60	+35	+ 2	−10	−20	−23	+25	−22	−11	+10	+47	0	1.11
105482	21 21 52.28	+24 40 20.7	8.27	H	320.467 843 46	+24.672 416 39	2.51	17.34	−9.59	0.63	0.56	0.95	0.70	0.74	−11	+20	−21	− 3	+16	− 8	+22	−15	+14	+16	0	−2.53
105483	21 21 53.55	−04 10 26.4	8.03	G	320.473 128 14	−04.173 991 46	25.22	221.62	−125.30	0.88	0.67	1.05	1.23	0.75	+13	− 3	−28	− 2	+ 7	+28	+11	−24	+30	+19	0	1.00
105484	21 21 54.69	+25 48 55.1	8.18	G	320.477 888 28	+25.815 307 74	2.58	−2.85	1.58	0.66	0.57	0.95	0.86	0.65	−10	− 2	+11	+ 1	+ 7	− 7	+ 9	−13	+ 5	+ 5	2	−1.65
105485	21 21 54.73	+37 27 33.2	11.82	3 H	320.478 023 82	+37.459 208 83 *	7.96	−1.42	−3.29	1.91	2.07	3.03	1.73	2.42	−18	+ 8	+ 3	−13	+11	− 9	+ 1	− 1	+24	+ 8	2	3.78
105486	21 21 55.91	−07 31 15.5	8.27	H	320.482 977 72	−07.520 968 77	4.34	−14.88	−16.47	1.15	0.89	1.27	1.79	1.08	+21	− 3	+ 4	+16	−15	+12	−16	−32	+11	+16	0	−0.19
105487	21 21 57.55	+23 49 18.5	10.26	H	320.489 780 26	+23.821 811 99 B	3.79	6.79	−10.04	9.62	8.44	5.80	6.04	4.92	−11	− 3	− 7	−39	+31	+ 2	+24	−40	+23	−12	4	1.55
105488	21 21 57.61	+27 27 09.0	10.51	G	320.490 047 02	+27.452 513 18	10.90	204.31	153.37	1.18	1.11	1.70	1.40	1.35	+13	+ 4	+13	+20	+ 9	−17	+14	+ 5	+11	+18	2	2.71
105489	21 21 57.89	+23 49 30.7	8.85	G	320.491 216 27	+23.825 204 75 A	2.64	1.08	−6.40	2.03	1.68	2.22	2.48	1.83	−14	+ 2	−10	−43	+31	− 2	+27	−43	+26	−10	4	1.55
105490	21 21 58.33	+72 03 33.2	7.09	H	320.493 040 40	+72.059 228 04	4.82	4.87	−12.23	0.49	0.44	0.51	0.61	0.49	− 5	− 6	− 4	+ 9	+ 8	+11	+ 8	−12	+ 9	+ 3	0	0.53
105491	21 21 58.65	−09 19 40.3	6.81	H	320.494 374 21	−09.327 859 66	6.68	12.00	−45.52	0.93	0.63	1.12	1.62	0.60	+24	+22	− 5	+26	−49	+46	−30	− 9	+ 1	+34	0	−1.33
105492	21 21 58.74	+18 06 29.2	8.79	H	320.494 767 85	+18.108 117 76	2.31	9.98	−3.59	1.07	0.77	1.14	1.40	0.81	+13	−10	−20	−39	− 5	+13	− 6	−31	+23	+17	0	−0.10
105493	21 21 59.11	+17 12 37.9	7.56	H	320.496 290 77	+17.210 521 49	1.75	−15.37	−21.88	0.82	0.62	1.00	0.91	0.65	+22	−40	−29	+ 4	− 8	− 9	−21	−31	+32	+10	0	2.97
105494	21 21 59.65	−50 10 58.8	7.51	H	320.498 550 60	−50.183 010 96	3.71	37.42	−33.74	0.83	0.76	1.07	0.96	0.64	+31	−17	−37	−24	−22	+27	−18	−53	+24	+32	0	1.85
105495 H	21 22 00.02	−37 33 15.8	9.03	H	320.500 068 32	−37.554 392 57 A	7.38	0.59	−6.59	1.90	1.80	1.91	2.00	1.33	+54	−23	−32	−27	−30	+ 9	−33	−54	+15	+28	1	0.02
*105496	21 22 00.41	+31 06 02.8	10.67	G	320.501 705 40	+31.100 784 21	24.43	375.04	177.31	1.20	1.17	1.94	1.43	1.22	− 9	−12	+ 9	+46	+12	−13	+14	+37	+ 5	−15	0	−0.56
*105497	21 22 00.38	+49 23 19.3	5.68	H	320.501 603 30	+49.388 698 74	9.93	37.46	61.45	0.50	0.43	0.55	0.66	0.50	−12	−11	− 5	−37	− 6	+ 8	+ 0	− 5	+ 5	−27	0	−1.86
105498	21 22 00.82	−15 09 33.0	10.46	3 H	320.503 422 96	−15.159 164 17	2.93	1.92	−17.35	1.96	1.20	2.27	2.53	1.35	+30	+34	+ 8	+17	−17

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
105401	11.032	0.036	9.154	0.013		1.560	0.030	T	1.58	0.03	L	9.0997	0.0027	0.030	206		9.05	9.15					1 S							
105402	10.106	0.037	8.996	0.024		0.957	0.034	T	0.94	0.03	L	9.0819	0.0018	0.016	63		9.06	9.12		D			1 X							
105403	10.252	0.031	8.496	0.013		1.464	0.027	T	1.47	0.04	L	8.4730	0.0013	0.015	92		8.45	8.50		C			1							
105404	9.991	0.023	9.002	0.017		0.854	0.022	T	0.87	0.02	L	9.0277	0.0045	0.058	106		8.97	9.25	0.44	P 1 A			1 G							
105405	9.873	0.013	8.631	0.008		1.060	0.012	T	1.03	0.01	L	8.6776	0.0014	0.018	269		8.65	8.71		C			1							
105406	7.050	0.004	6.455	0.004		0.533	0.010	G	0.63	0.03	C	6.5075	0.0007	0.008	160		6.49	6.52					1 G							S
105407	11.200	0.066	9.438	0.024		1.469	0.056	T	1.48	0.08	L	9.4215	0.0022	0.018	90		9.39	9.46					1							
105408	9.644	0.021	9.004	0.019		0.627	0.005	G	0.69	0.00	H	9.0386	0.0019	0.017	88		9.01	9.06		C			1							
105409	8.583	0.014	8.077	0.014		0.488	0.015	G	0.56	0.02	H	8.1173	0.0016	0.011	68		8.09	8.14		C			1							S
105410	7.659	0.009	7.243	0.008		0.391	0.008	G	0.46	0.01	H	7.3002	0.0008	0.006	98		7.29	7.31		C			1 G							S
105411	6.954	0.004	5.705	0.002		1.057	0.001	G	1.09	0.06	F	5.7487	0.0005	0.006	173		5.74	5.76		C			1							S
105412	7.021	0.007	5.964	0.005		0.912	0.001	G	0.91	0.00	H	6.0275	0.0012	0.007	60		6.02	6.04		C			1							S
105413	7.975	0.010	6.013	0.004		1.663	0.009	T	2.04	0.03	O	5.8904	0.0021	0.014	78		5.86	5.91		U 2			1							S
105414	9.516	0.016	8.230	0.010		1.094	0.015	T	1.06	0.02	L	8.2751	0.0009	0.014	110		8.25	8.30		D			1							
105415	7.686	0.007	7.609	0.010		0.076	0.011	T	0.09	0.01	L	7.6329	0.0010	0.011	121		7.62	7.66					1							S
105416	10.275	0.046	9.803	0.049		0.549	0.021	G	0.62	0.02	H	9.8004	0.0028	0.022	74		9.77	9.84		C			1							
105417	9.681	0.023	8.444	0.015		1.061	0.015	G	1.03	0.01	K	8.4884	0.0016	0.014	95		8.46	8.52					1							
105418	8.984	0.016	8.696	0.017	*	0.273	0.024	T	0.31	0.03	L *	8.7308	0.0014	0.011	70	*	8.72	8.76		C	21212−2744	H 1	2 C C	AB	46	0.258	0.064	2.96	0.75	S
105419	8.063	0.008	7.937	0.008		0.122	0.011	T	0.14	0.01	L	7.9774	0.0011	0.013	140		7.95	8.00		C			1							S
105420	9.513	0.018	8.353	0.012		1.020	0.015	G	0.99	0.01	K	8.4199	0.0017	0.014	107		8.40	8.44		C			1							
105421	9.892	0.025	9.636	0.031	A	0.200	0.495	G	0.23	0.15	L *	9.7238	0.0017	0.023	113	*	9.68	9.76		C	21212+4449	I 1	2 C C	AB	308	5.390	0.077	3.58	0.32	G
105422	9.914	0.024	8.708	0.015		1.032	0.022	T	1.00	0.02	L	8.7472	0.0018	0.015	98		8.71	8.77		C			1							
105423	8.540	0.011	8.222	0.012		0.302	0.015	T	0.35	0.02	L	8.2655	0.0025	0.020	119		8.23	8.30		U			1							
105424	8.643	0.014	8.065	0.013		0.564	0.015	G	0.64	0.01	H	8.1209	0.0013	0.010	74		8.10	8.14					1							S
105425	8.148	0.009	6.549	0.006		1.327	0.000	G	1.24	0.06	F	6.5566	0.0009	0.007	102		6.54	6.57		C			1							S
105426	9.444	0.015	9.023	0.015		0.411	0.017	T	0.48	0.02	L	9.0812	0.0018	0.021	126		9.05	9.13		C			1							
105427	10.240	0.030	8.294	0.012		1.650	0.027	T	2.00	0.07	O	8.1783	0.0017	0.022	126		8.14	8.21		U			1							S
105428	7.853	0.022	7.438	0.022	*	0.387	0.015	G	0.45	0.02	H *	7.5791	0.0011	0.011	137	*	7.56	7.60		D	21213−8419	I 1	2 C A	AB	261	3.168	0.002	0.04	0.01	S
105429	8.871	0.021	8.537	0.022	*	0.300	0.015	G	0.34	0.02	H *	8.8508	0.0022	0.018	102	*	8.82	8.88		D	21213+6042	I 1	2 C A	AB	301	1.699	0.003	0.48	0.02	
105430	6.935	0.005	6.751	0.005		0.176	0.007	T	0.19	0.01	L	6.7920	0.0008	0.009	124		6.77	6.81					1							S
105431	7.338	0.007	6.776	0.005		0.535	0.006	G	0.61	0.01	H	6.8320	0.0009	0.009	85		6.82	6.85		D	21214+1020	I 1	1 O							S
105432	6.119	0.003	6.050	0.003		0.062	0.004	T	0.07	0.00	L	6.0723	0.0006	0.006	164		6.06	6.08		C			1							S
105433	8.315	0.011	7.193	0.008		0.966	0.011	T	0.95	0.01	L	7.2494	0.0012	0.009	72		7.22	7.26		C			1							S
105434	9.023	0.016	8.516	0.016		0.458	0.002	G	0.53	0.00	H	8.5750	0.0020	0.011	60		8.56	8.61					1							S
105435	7.607	0.005	7.365	0.005		0.231	0.007	T	0.26	0.01	L	7.4051	0.0010	0.010	175		7.39	7.42		C			1							S
105436	8.875	0.013	8.911	0.017		−0.030	0.019	T	−0.01	0.02	L	8.9174	0.0021	0.015	90		8.88	8.95		C			1							
105437	8.834	0.008	8.763	0.010		0.064	0.011	T	0.07	0.01	L	8.7559	0.0097	0.135	192		8.67	9.18	0.65	P 1 A			1							
105438	8.831	0.017	7.546	0.011	*	1.093	0.016	T	1.05	0.02	L *	7.5740	0.0016	0.013	69	*	7.55	7.59		D	21214+0253	I 1	2 C A	AB	234	0.662	0.003	0.05	0.01	S
105439	7.541	0.006	6.830	0.005		0.654	0.006	T	0.72	0.01	L	6.8897	0.0008	0.007	96		6.88	6.90					1							S
105440	10.546	0.039	10.529	0.060		0.020	0.066	T	0.04	0.06	L	10.4007	0.0021	0.021	105		10.37	10.45					1							G
105441	10.225	0.020	9.038	0.012		1.010	0.019	T	1.05	0.02	L	9.1074	0.0037	0.050	204		9.03	9.20		U 2 C	21214−6655	I 1	1 S							
105442	9.407	0.014	8.928	0.014	*	0.463	0.015	T	0.53	0.02	L *	8.7812	0.0022	0.023	169	*	8.74	8.82		D	21214−6924	I 1	2 C A	AB	245	0.934	0.003	0.40	0.02	
105443	9.566	0.018	8.511	0.012		0.915	0.016	T	0.91	0.01	L	8.5725	0.0017	0.015	106		8.55	8.59		C			1							
105444	9.517	0.018	8.028	0.010		1.253	0.016	T	1.21	0.02	L	8.0447	0.0015	0.012	96		8.02	8.07		C			1							
105445	8.236	0.006	7.959	0.006	A	0.100	0.495	G	0.25	0.02	L *	7.9952	0.0012	0.017	230	*	7.97	8.03		U	21215−6640	I 1	2 C D	AB	126	2.459	0.071	4.25	0.27	S D
105446	8.789	0.017	8.378	0.016	*	0.402	0.019	T	0.47	0.02	L *	8.6507	0.0013	0.012	141	*	8.63	8.68		D	21214−2442	I 1	2 C B	BA	199	1.821	0.001	0.02	0.01	S
105447	9.273	0.016	7.446	0.007		1.520	0.014	T	1.56	0.02	L	7.2870	0.0018	0.017	125		7.26	7.31		U 2			1							S
105448	9.007	0.011	8.957	0.014		0.051	0.017	T	0.06	0.01	L	8.9852	0.0028	0.028	141		8.93	9.03	6.27	P 1 A			1							
105449	9.521	0.013	9.154	0.014		0.358	0.017	T	0.42	0.02	L	9.2043	0.0019	0.024	186		9.16	9.24					1							
105450	8.902	0.019	8.556	0.020		0.328	0.026	T	0.38	0.04	L	8.6052	0.0018	0.019	112		8.57	8.64		U			1							S
105451	8.294	0.012	7.845	0.011		0.424	0.015	T	0.49	0.02	L	7.8898	0.0009	0.006	79		7.87	7.90					1							S
105452	9.756	0.016	8.194	0.008		1.318	0.003	G	1.28	0.00	H	8.2101	0.0013	0.014	166		8.18	8.23					1							S
105453	8.782	0.010	8.670	0.012		0.109	0.015	T	0.12	0.02	L	8.6864	0.0016	0.017	148		8.65	8.72		C			1							
105454	10.142	0.024	9.436	0.020		0.650	0.025	T	0.71	0.02	L	9.5197	0.0021	0.025	136		9.47	9.56					1							
105455	9.282	0.015	8.409	0.012		0.740	0.015	G	0.79	0.01	H	8.4787	0.0025	0.022	101		8.45	8.52					1							
105456	11.276	0.045	10.034	0.024		1.060	0.040	T	1.03	0.03	L	10.0853	0.0024	0.033	254		10.02	10.14					1 S							G
105457	10.902	0.070	10.091	0.051		0.612	0.007	G	0.68	0.01	H	10.2009	0.0037	0.031	71		10.15	10.25		C			1							G
105458	10.605	0.033	9.248	0.018	*	1.150	0.030	T	1.11	0.03	L *	9.2908	0.0023	0.016	112	*	9.26	9.32			21217−4607	H 1	2 C B	AB	43	0.287	0.059	2.57	0.56	
105459	8.047	0.008	8.072	0.011		−0.010	0.015	G	0.01	0.01	H	8.1027	0.0012	0.015	106		8.08	8.13		C			1							
105460	9.490	0.024	7.922	0.012		1.315	0.021	T	1.28	0.02	L	7.9200	0.0020	0.012	61		7.90	7.94		C			1							S
105461	10.007	0.025	9.243	0.021		0.681	0.025	T	0.74	0.02	L	9.3142	0.0022	0.023	97		9.28	9.34					1							
105462	10.219	0.038	9.575	0.035		0.591	0.038	T	0.66	0.04	L	9.6749	0.0034	0.023	57		9.64	9.71		C			1							
105463	9.134	0.014	7.505	0.007		1.363	0.012	T	1.33	0.01	L	7.5150	0.0010	0.009	113		7.50	7.53		C			1							S
105464	10.956	0.056	9.197	0.023		1.495	0.050	T	3.25	0.06	O	8.7230	0.0063	0.051	71		8.59	9.04		U 2 C			1 S							P
105465	8.775	0.013	8.015	0.011		0.669	0.015	G	0.73	0.01	H	8.1001	0.0015	0.009	83		8.08	8.12		C			1							S
105466	8.722	0.016	7.645	0.011		0.932	0.015	T	0.93	0.01	L	7.6899	0.0016	0.011	77		7.67	7.72					1							S
105467	8.088	0.009	8.020	0.013	*	0.068	0.015	T	0.08	0.02	L *	8.1492	0.0013	0.014	123	*	8.12	8.18		D	21218+4309	I 1	2 C A	AB	357	2.247	0.008	2.10	0.03	S
105468	9.870	0.017	7.902	0.007		1.668	0.015	T	2.12	0.04	O	7.7658	0.0028	0.032	189		7.72	7.83		U 2			1							S
105469	9.912	0.031	8.546	0.017		1.157	0.028	T	1.12	0.03	L	8.5868	0.0017	0.012	76		8.56	8.61					1							
105470	10.108	0.021	8.193	0.008		1.624	0.019	T	1.95	0.05	O	8.0851	0.0019	0.022	154		8.05	8.13		U 2			1							S
105471	10.608	0.031	8.662	0.011		1.614	0.026	T	1.64	0.03	L	8.5592	0.0015	0.020	195		8.53	8.60					1							
105472	7.970	0.011	7.479	0.011	A	0.462	0.015	T	0.53	0.02	L	7.5684	0.0253	0.044	63	A	7.48	7.61		D	21218+0202	I 2	1 C P A							S
105473	10.275	0.038	9.235	0.025		0.904	0.034	T	0.91	0.03	L	9.2762	0.0033	0.021	60		9.24	9.31		C			1							
105474	10.772	0.055	8.703	0.017		1.751	0.047	T	2.12	0.11	O	8.5775	0.0026	0.020	85		8.54	8.60					1							
105475	9.184	0.024	9.040	0.028	B	0.139	0.035	T	0.15	0.04	L	9.2621	0.0922			B				D	21218+0202	I 2	1 C I A							
105476	8.324	0.014	6.687	0.005		1.370	0.012	T	1.34	0.01	L	6.6818	0.0010	0.009	75		6.66	6.70		C			1							S
105477	8.918	0.012	8.367	0.012		0.491	0.002	G	0.56	0.00	H	8.4403	0.0015	0.014	105		8.42	8.46		C			1							S
105478	7.222	0.007	6.835	0.006		0.366	0.009	T	0.43	0.01	L	6.8775	0.0014	0.009	60		6.86	6.89		C			1							S
105479	10.418	0.020	9.071	0.011		1.125	0.003	G	1.09	0.00	H	9.1153	0.0016	0.022	260		9.08	9.17		C			1							
105480	8.900	0.010	8.509	0.011		0.382	0.013	T	0.45	0.01	L	8.5566	0.0014	0.019	155		8.53	8.59		C			1							S
105481	8.190	0.011	7.503	0.009		0.613	0.006	G	0.68	0.01	H	7.5821	0.0008	0.009	71		7.57	7.60		D			1							S
105482	8.538	0.008	8.301	0.009		0.226	0.011	T	0.25	0.01	L	8.3409	0.0013	0.013	149		8.31	8.38		C			1							S
105483	8.997	0.015	8.101	0.012		0.762	0.002	G	0.81	0.00	H	8.1746	0.0013	0.012	72		8.15	8.20		C			1							
105484	8.443	0.008	8.208	0.009		0.227	0.013	G	0.25	0.01	H	8.2439	0.0013	0.012	123		8.22	8.27		C			1							S
105485											T	11.9906	0.0532	0.523	171		11.14	12.63	21.36	P 1 A			1 V							D
105486	9.636	0.030	8.392	0.018		1.061	0.027	T	1.03	0.02	L	8.4321	0.0023	0.011	46		8.39	8.45					1							
105487	10.815	0.047	10.332	0.049	B	0.455	0.062	T	0.52	0.07	L	10.3992	0.0245			B				D	21220+2349	I 2	1 C I A							
105488	11.034	0.049	10.504	0.050		0.530	0.020	G	0.60	0.02	H	10.6009	0.0036	0.038	139		10.52	10.67					1 S							G
105489	9.087	0.011	8.841	0.012	A	0.276	0.015	G	0.31	0.02	H	8.8945	0.0069	0.037	157	A	8.86	8.98		D	21220+2349	I 2	1 C P A							
105490	7.224	0.006	7.114	0.006		0.107	0.008	T	0.12	0.01	L	7.1303	0.0010	0.009	125		7.12	7.15					1							S
105491	8.359	0.010	6.945	0.006		1.194	0.009	T	1.15	0.01	L	6.9751	0.0010	0.009	90		6.96	6.99					1							S
105492	10.050	0.029	8.898	0.019		0.990	0.027	T	0.97	0.02	L	8.9545	0.0025	0.016	76		8.93	8.98		C			1							
105493	9.366	0.019	7.691	0.010		1.480	0.015	G	1.50	0.02	H	7.6884	0.0015	0.011	85		7.67	7.71		C			1							S
105494	8.698	0.011	7.635	0.008		0.921	0.010	T	0.92	0.01	L	7.6756	0.0014	0.013	96		7.66	7.70		C			1							S
105495	9.504	0.023	9.092	0.024	*	0.403	0.027	T	0.47	0.03	L *	9.1244	0.0030	0.018	61	*	9.09	9.15		C	21220−3733	I 1	2 C A	AB	172	0.911	0.018	2.65	0.08	
105496	12.472	0.207	10.728	0.062		1.210	0.020	G	1.35	0.04	I	10.7868	0.0037	0.037	191		10.72	10.84					1 G							G
105497	7.091	0.004	5.800	0.003		1.100	0.002	G	1.06	0.00	H	5.8472	0.0006	0.006	124		5.84	5.86					1							S
105498						1.500	0.510	G	2.91	1.20	Q	10.3973	0.2900	0.963	64		9.32	11.77	266.10	P 1 A			1							G
105499	8.262	0.008	8.121	0.010		0.136	0.012	T	0.15	0.01	L	8.1620	0.0008	0.010	117		8.14	8.18					1							S
105500	8.109	0.008	6.816	0.008		1.100	0.009	T	1.06	0.01	L	6.8570	0.0013	0.008	68		6.85	6.87					1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
105501	21 22 04.39	−51 52 31.7	7.17	H	320.518 307 68	−51.875 482 97		5.18	8.07	1.58	0.67	0.47	0.81	0.79	0.43	+20	− 7	−13	+27	+27	+ 9	+22	+14	− 6	+ 6	0	0.11
105502	21 22 05.13	+19 48 15.7	4.08	H	320.521 391 18	+19.804 355 81		21.19	105.94	62.61	0.62	0.60	0.87	0.82	0.64	+21	−32	−42	−40	− 8	+25	−13	−56	+41	+11	0	−0.65
105503	21 22 07.38	+08 47 04.8	9.72	H	320.530 732 98	+08.784 668 31		2.56	1.40	3.83	1.35	1.03	1.68	1.83	1.09	+35	−20	−19	+14	−14	+32	− 6	+ 5	+23	+55	0	−0.25
105504	21 22 07.81	−10 30 47.8	10.21	H	320.532 530 46	−10.513 285 69		20.70	−43.37	−11.46	2.91	1.28	2.33	3.11	1.74	+42	−13	− 4	− 1	−37	+44	−63	−12	+29	+46	4	1.88
105505 H	21 22 08.11	−38 17 50.6	10.11	H	320.533 811 25	−38.297 402 32 *		1.76	4.51	−4.13	1.86	1.55	2.03	2.24	1.40	+24	− 8	+ 4	−21	−16	+ 9	−16	−46	− 5	+16	0	−0.48
*105506	21 22 08.48	−51 21 17.9	9.76	G	320.535 315 12	−51.354 978 35		22.77	205.98	−103.06	1.22	0.94	1.48	1.48	0.92	+22	−16	−12	+19	+21	+10	+19	+ 5	−14	+12	2	−0.05
*105507	21 22 08.47	+57 20 04.9	8.06	H	320.535 275 16	+57.334 705 03		2.48	41.19	7.80	0.60	0.56	0.68	0.62	0.58	+ 2	+ 1	+ 6	−12	+ 7	−11	+ 8	−16	+15	+18	0	0.05
105508	21 22 09.44	+56 40 49.2	9.15	H	320.539 325 23	+56.680 328 94		3.87	−0.30	−10.16	0.78	0.85	0.94	0.82	0.82	+ 5	− 3	+17	+ 1	− 9	−21	− 3	−30	+ 0	+13	1	0.91
105509	21 22 11.92	−68 38 30.5	8.35	H	320.549 658 02	−68.641 813 24		1.42	19.21	−6.52	0.64	0.68	1.07	0.77	0.87	−26	−19	+ 5	+ 1	− 5	−15	− 1	+ 0	−15	−40	0	−0.13
105510	21 22 11.92	+25 00 23.7	9.24	H	320.549 659 64	+25.006 571 31		19.94	−123.26	70.27	0.87	0.72	1.26	0.99	0.82	−13	+16	+ 2	+ 8	+14	− 2	+21	−14	+16	+ 9	0	−0.36
105511	21 22 12.55	−83 12 34.4	7.19	H	320.552 276 00	−83.209 555 61		14.28	7.03	−63.72	0.50	0.46	0.62	0.58	0.55	+ 7	−20	− 5	− 5	+23	− 8	+24	− 7	− 1	−10	0	1.32
105512	21 22 12.91	+04 29 18.8	7.67	H	320.553 806 98	+04.488 568 34		9.26	30.68	1.69	0.94	0.80	1.08	1.53	0.97	+26	− 9	−33	−12	−25	+21	−17	−46	+16	+32	0	0.11
105513	21 22 12.98	+66 00 10.0	9.50	H	320.554 072 59	+66.002 782 54		2.69	−0.36	1.84	0.83	0.78	0.90	1.09	0.84	−14	−19	+14	−15	+ 4	+20	+ 0	−17	+11	− 5	0	0.27
105514	21 22 14.08	−80 06 49.3	7.65	H	320.558 683 54	−80.113 706 23		11.58	240.35	−105.70	0.56	0.55	0.71	0.72	0.63	− 7	−15	−12	+11	−13	+ 1	−12	+14	− 2	−17	0	0.70
105515	21 22 14.78	−16 50 04.4	4.28	1 G	320.561 572 61	−16.834 555 21		15.13	30.83	5.26	0.76	0.45	0.80	0.94	0.53	+22	− 2	−12	−27	− 7	+10	−12	+ 4	+ 2	+41	2	−0.64
105517	21 22 16.09	+20 00 57.4	8.70	G	320.567 026 60	+20.015 942 13		8.27	13.12	5.32	0.69	0.82	1.10	0.94	0.93	+29	−18	−40	−22	−12	+20	−12	−53	+37	+28	0	0.75
105518	21 22 16.24	−71 34 16.6	7.10	2 H	320.567 669 92	−71.571 285 09		3.02	−6.09	−13.44	0.49	0.55	0.74	0.57	0.67	−18	− 5	−16	+ 4	+ 8	−11	+ 7	+ 4	− 5	−18	2	0.50
105519 H	21 22 16.47	−14 55 10.6	8.27	G	320.568 627 73	−14.919 600 87 A		5.83	−20.92	−1.84	1.90	1.08	1.86	2.30	1.08	+31	−13	−17	+12	−33	+28	−19	−19	+19	+50	1	0.42
105520	21 22 18.45	+29 15 00.7	8.95	H	320.576 869 26	+29.250 184 63		2.61	−0.14	−5.90	0.81	0.76	1.13	0.95	0.82	+ 6	+ 6	+ 2	+ 8	+ 7	−28	+ 8	+ 7	+ 2	+14	0	−1.50
105521	21 22 18.77	+05 01 24.9	8.23	G	320.578 192 49	+05.023 594 26		15.95	183.97	1.30	1.18	0.88	1.26	1.90	1.15	+22	+ 5	−20	− 6	−14	+ 9	− 7	−43	+23	+39	0	−1.88
105522 H	21 22 20.42	+57 33 54.6	8.10	G	320.585 087 85	+57.565 163 56 A		10.50	76.68	27.78	0.93	0.93	1.01	0.94	0.87	− 1	+11	+10	−16	+14	−24	+16	−10	+ 7	+22	0	−0.18
105523	21 22 20.51	−65 49 18.0	10.48	H	320.585 448 43	−65.821 672 49		1.22	20.46	9.68	0.92	0.99	1.60	1.02	1.23	−38	−14	+ 0	−21	− 6	− 2	− 4	+ 3	+ 1	−50	0	0.96
105524	21 22 20.55	+56 24 58.2	9.54	H	320.585 614 29	+56.416 174 00		2.56	11.19	9.21	0.83	0.82	0.96	0.92	0.80	− 8	+ 8	+16	+ 6	+ 2	−12	+ 3	−19	+ 2	−10	0	−1.30
105525	21 22 20.97	−54 52 14.9	9.70	H	320.587 379 05	−54.870 793 39		4.84	19.80	−67.17	1.17	0.98	1.47	1.42	0.93	+17	+ 0	−11	+15	+27	− 3	+23	+22	+ 4	+ 0	0	0.21
105526	21 22 21.31	+77 05 25.2	6.56	H	320.588 788 32	+77.090 326 07		7.12	−14.34	−27.72	0.45	0.41	0.48	0.50	0.42	+ 0	− 6	+ 5	− 8	− 3	+ 9	− 5	−28	+25	− 1	0	0.32
105527	21 22 23.06	−59 51 49.7	7.57	H	320.596 069 17	−59.863 799 33		3.74	56.56	−46.67	0.74	0.58	1.01	0.92	0.58	− 5	− 9	−29	+20	+34	−14	+28	+21	−25	+10	0	0.26
105528	21 22 24.05	+25 03 00.2	8.76	H	320.600 200 29	+25.050 061 12		1.12	7.00	3.11	0.71	0.65	1.12	0.87	0.84	− 9	− 1	−10	+ 1	+15	−28	+13	+ 5	− 6	+10	0	−0.99
105529	21 22 24.09	−25 09 50.8	9.26	H	320.600 375 23	−25.164 112 07		2.75	40.54	−25.49	1.07	0.56	1.15	1.23	0.56	+54	−11	− 5	−34	−35	+31	−31	− 6	+ 1	+48	0	0.75
105530	21 22 24.79	+37 09 53.2	7.64	H	320.603 270 99	+37.164 779 16		12.00	−3.13	−2.57	0.51	0.56	0.86	0.56	0.61	−26	+ 0	+10	− 5	+ 7	− 8	+ 8	+ 3	+18	−28	0	−0.81
105531	21 22 25.99	+52 17 53.9	8.69	G	320.608 279 73	+52.298 313 31		3.19	9.53	7.99	0.78	0.73	0.90	0.87	0.79	− 4	− 4	+ 4	−13	− 1	+ 3	− 2	− 6	+14	+ 7	1	0.48
105532	21 22 26.32	−85 32 26.4	8.21	H	320.609 665 75	−85.540 678 64		5.94	−3.42	5.47	0.58	0.59	0.71	0.72	0.70	− 4	−14	+ 2	+ 2	+ 0	+ 3	+ 2	−10	−13	− 4	1	−2.02
105533	21 22 26.63	+10 52 25.3	9.91	H	320.610 976 33	+10.873 683 21		48.28	−56.75	31.97	1.38	1.11	1.61	1.53	1.25	+44	+ 3	−12	−29	−23	− 3	−26	−17	−14	+59	0	0.21
105534	21 22 26.76	−03 07 48.3	6.67	G	320.611 510 34	−03.130 096 34		10.19	−43.14	−14.87	1.03	0.61	0.93	1.12	0.68	−13	− 4	−19	−54	+32	+21	+27	−24	+32	+14	0	0.19
105535	21 22 28.08	+52 18 16.8	8.92	G	320.616 990 90	+52.304 670 71		2.85	9.77	7.76	0.85	0.81	0.99	0.96	0.86	+ 2	− 2	+ 0	− 4	+ 1	− 1	+ 1	− 5	+ 8	+13	3	−1.65
105536	21 22 28.44	+03 45 11.8	7.87	H	320.618 510 40	+03.753 288 40		2.71	29.94	6.54	1.17	0.78	1.11	1.43	0.94	+16	+ 2	−15	−49	− 8	+10	− 9	−39	+11	+35	0	1.46
105537	21 22 28.46	+33 51 39.8	8.55	H	320.618 592 26	+33.861 068 88		0.63	−0.02	−5.96	0.44	0.60	0.92	0.51	0.65	−15	+12	− 5	+13	+12	−16	+10	+23	+ 4	− 9	1	1.11
105538 H	21 22 28.64	+08 27 16.1	8.57	H	320.619 342 44	+08.454 459 74 A		1.70	−0.24	−5.55	5.35	3.19	1.66	1.80	1.06	+79	+ 4	+ 7	+ 8	− 3	+28	+ 1	+ 3	+19	+68	2	0.35
105539	21 22 28.71	+42 23 46.5	9.19	2 H	320.619 638 08	+42.396 256 13		1.21	−6.45	−7.29	0.79	0.73	1.04	0.98	0.82	−18	+ 1	+ 1	+ 7	+10	− 4	+ 9	− 4	+13	−18	0	0.49
105540 H	21 22 28.95	+49 29 29.1	6.85	H	320.620 628 26	+49.491 420 73 *		3.43	12.22	−8.54	0.49	0.42	0.55	0.69	0.48	−12	−10	− 3	−29	− 7	+12	− 1	− 6	+ 5	−28	0	0.67
105541	21 22 30.92	−44 08 43.2	8.63	H	320.628 829 03	−44.145 324 92		11.31	−76.08	−34.83	0.90	0.71	1.24	0.92	0.69	+48	−41	−28	−31	−21	+28	−20	−33	+17	+42	0	0.36
105542	21 22 31.94	+12 37 50.6	10.40	H	320.633 101 94	+12.630 711 26		4.68	−19.21	−4.60	1.74	1.26	2.03	2.43	1.62	+20	+ 0	+ 5	− 5	−18	−18	−16	− 7	+ 0	+38	0	−0.12
105543 H	21 22 33.38	+38 45 41.5	8.45	H	320.639 084 18	+38.761 520 12 *		2.21	1.22	−20.05	0.59	0.63	0.95	0.59	0.62	−13	+ 8	+14	− 7	+ 3	−18	+ 7	− 2	+23	−19	0	0.05
105544	21 22 33.57	+07 47 41.2	7.77	H	320.639 889 17	+07.794 789 60		4.45	−9.64	−17.17	0.80	0.59	1.01	1.17	0.64	+29	+ 3	−12	+25	−14	+49	− 2	+26	+25	+56	0	−0.11
105545	21 22 34.77	+56 30 47.6	9.36	H	320.644 891 65	+56.513 224 50		1.40	−3.10	−3.58	0.84	0.83	0.97	0.94	0.83	−10	+ 5	+18	− 1	+ 5	− 9	+ 7	−18	+ 0	− 8	1	−0.10
105546	21 22 35.18	−17 30 57.7	9.62	G	320.646 602 20	−17.516 025 57		15.80	82.94	−231.15	1.30	0.88	1.66	1.67	0.95	+41	−21	−39	−25	−26	+45	−15	+ 6	+14	+46	2	2.32
105547	21 22 35.80	−55 47 01.0	7.45	G	320.649 158 75	−55.783 610 66		15.97	30.38	−21.62	0.73	0.56	0.85	0.99	0.62	+ 9	− 6	− 2	+39	− 1	+15	− 7	+19	+ 1	−18	2	2.60
105548	21 22 35.92	+02 55 06.7	6.53	H	320.649 674 81	+02.918 532 47		3.75	24.49	−8.65	0.92	0.72	1.00	1.17	0.87	+25	+12	−14	−22	−19	+11	−13	−48	+ 8	+41	0	1.52
105549	21 22 37.01	−01 01 12.6	8.32	H	320.654 190 21	−01.020 175 39		3.10	22.80	4.58	0.93	0.78	1.14	1.13	0.98	+30	−21	−21	−31	−10	+44	− 6	−34	+34	+56	0	−0.21
105550	21 22 37.02	−05 37 59.7	6.93	1 H	320.654 253 13	−05.633 251 76		3.83	−8.84	−26.30	0.87	0.62	0.98	1.05	0.80	+13	−11	−16	−16	− 5	+33	− 2	−16	+21	+32	0	2.33
105551	21 22 37.17	+13 28 44.7	9.54	H	320.654 874 21	+13.479 094 82		1.27	11.65	2.67	1.22	1.12	1.54	1.43	1.29	+31	− 7	− 6	−21	− 9	−16	−11	−29	+14	+36	2	1.40
105552	21 22 37.60	+16 33 22.5	8.76	H	320.656 645 87	+16.556 249 93		3.63	1.71	1.46	1.07	0.76	1.21	1.46	0.82	+17	−20	−23	− 4	− 5	−11	−11	−14	+22	+13	0	0.59
105553	21 22 39.41	−38 12 19.8	9.95	H	320.664 207 25	−38.205 491 41		3.97	11.24	−13.88	1.48	1.29	1.75	1.68	1.19	+24	+ 1	+ 4	− 8	−15	+21	−15	−40	− 5	+22	0	1.02
105554	21 22 40.58	−56 10 07.6	8.65	H	320.669 064 00	−56.168 768 28		0.60	−0.30	−2.80	1.08	0.79	1.29	1.56	0.79	+16	−17	−23	+25	+ 7	−10	− 2	+ 6	− 7	−22	0	−3.61
105555	21 22 41.79	+47 36 58.4	8.55	G	320.674 140 97	+47.616 209 08		3.16	16.34	−1.21	0.58	0.61	0.75	0.73	0.73	− 2	− 3	+ 3	+ 5	+ 5	− 5	+ 5	−14	−12	− 6	1	−0.08
105556	21 22 41.86	−55 28 15.4	10.43	H	320.674 427 05	−55.470 944 15		6.70	12.89	−15.26	1.57	1.12	1.87	1.86	1.11	+10	−14	−12	+32	+ 7	+ 7	+ 3	+11	− 8	−15	2	0.85
105557	21 22 42.00	+76 33 17.0	6.85	H	320.674 999 41	+76.554 727 83		25.67	−128.62	135.69	0.52	0.45	0.54	0.57	0.46	− 2	−13	+12	+ 9	+ 2	+ 5	+ 0	−16	+17	+ 2	0	−0.75
105558	21 22 42.03	+30 18 35.5	6.07	H	320.675 133 22	+30.309 864 01		8.71	38.64	7.54	0.40	0.46	0.67	0.52	0.49	− 6	− 4	+ 2	+42	+ 0	−12	+ 3	+ 0	+ 5	+ 2	0	0.20
105559	21 22 43.04	+54 13 50.5	7.88	H	320.679 312 94	+54.230 680 86		3.02	4.22	−10.06	0.61	0.57	0.67	0.64	0.62	−10	+18	+ 2	−15	+23	−10	+21	− 5	+ 0	+ 9	0	0.23
105560	21 22 45.28	−48 27 25.3	6.95	H	320.688 683 59	−48.457 025 16		6.39	−1.05	−156.58	0.71	0.57	0.94	0.91	0.54	+21	−13	−34	−19	− 3	+14	− 2	−24	+11	+24	2	0.89
105561	21 22 46.84	+38 38 03.6	6.63	H	320.695 164 71	+38.634 321 27		5.02	−6.92	−19.11	0.39	0.43	0.61	0.41	0.44	−20	+ 8	+ 7	−10	− 2	−17	+ 0	− 4	+11	−24	0	1.33
105562	21 22 48.62	+40 55 57.4	7.12	2 H	320.702 594 44	+40.932 611 31		7.29	−24.27	−24.91	0.50	0.52	0.73	0.52	0.52	−20	+ 3	+ 4	−13	− 7	− 8	− 6	+ 0	+ 4	−28	0	1.53
105563	21 22 49.42	−03 32 47.5	7.91	H	320.705 910 32	−03.546 538 90		2.44	23.00	−28.03	0.91	0.64	1.04	1.10	0.78	+11	−16	−23	−27	+10	+32	+10	−20	+37	+34	0	2.19
105564	21 22 50.65	+19 04 49.9	8.33	H	320.711 045 96	+19.080 527 74		1.96	1.43	−4.62	0.77	0.88	1.16	0.99	0.87	+41	−30	−41	−26	−14	+21	−21	−52	+36	+26	0	1.33
105565	21 22 51.15	+40 41 50.1	7.53	2 H	320.713 118 09	+40.697 259 24		3.24	0.73	−6.45	0.47	0.48	0.68	0.49	0.48	−19	+12	+ 1	−12	− 4	− 4	− 3	+ 1	+ 4	−23	0	−0.19
105566	21 22 51.16	−33 40 05.5	8.29	H	320.713 165 32	−33.668 198 59		3.85	19.63	−10.55	0.89	0.74	1.04	1.04	0.66	+23	−24	−16	+ 0	−13	+28	−12	−33	+13	+21	2	0.18
105567	21 22 51.76	−57 46 04.0	7.63	G	320.715 683 64	−57.767 777 93		9.85	32.14	8.91	0.55	0.60	0.93	0.67	0.59	+15	−10	−22	−28	+ 9	− 4	+15	+16	+ 5	−11	5	0.61
105568	21 22 52.77	−39 10 28.5	9.68	H	320.719 859 07	−39.174 585 61		4.29	42.96	−30.40	1.46	1.24	1.76	2.26	1.07	+14	+ 7	−27	+11	−23	+41	−14	−44	+21	+ 8	0	−0.78
105569	21 22 52.98	−87 02 54.0	8.87	H	320.720 754 56	−87.048 338 48 C		3.20	130.11	−90.02	5.14	4.86	4.45	5.18	4.83	−15	−21	+ 7	−13	− 1	+10	− 1	−20	+ 0	−16	17	3.86
105570	21 22 53.58	+06 48 40.0	5.16	H	320.723 257 39	+06.811 113 38		9.06	52.66	11.15	0.77	0.49	0.88	1.06	0.54	+21	− 5	−26	+22	−21	+34	− 7	+11	+16	+48	2	−0.57
105571	21 22 54.09	+18 03 43.1	7.72	H	320.725 360 99	+18.061 961 71		3.25	3.60	−11.28	0.87	0.63	0.96	1.09	0.62	+18	−25	−34	−34	− 7	+13	− 8	−36	+18	+14	0	−0.09
*105572	21 22 54.70	+55 39 01.4	8.79	H	320.727 896 07	+55.650 394 03		1.68	−4.59	−5.62	0.69	0.71	0.83	0.83	0.75	− 5	+ 2	+12	+21	− 6	−19	− 4	− 6	− 9	− 7	0	0.13
*105573	21 22 54.69	+38 42 30.6	7.29	H	320.727 894 73	+38.708 487 54		1.29	19.37	10.00	0.47	0.50	0.73	0.47	0.51	−22	+ 6	+10	−10	+ 0	−15	+ 2	+ 6	+14	−25	1	1.31
105574	21 22 56.27	−09 19 09.4	5.99	1 H	320.734 464 34	−09.319 272 97		4.53	−27.44	−23.40	0.88	0.60	1.08	1.59	0.57	+24	+21	−12	+25	−51	+53	−31	−23	+ 7	+33	0	0.43
120159	21 22 59.03	−80 04 52.8	13.57	H																							
105575	21 22 59.20	−06 13 57.6	7.79	2 H	320.746 682 82	−06.232 658 49		2.98	9.36	3.21	0.95	0.79	1.08	1.41	0.98	+36	− 7	− 9	−12	−19	+15	−18	−23	+23	+33	0	0.55
105576	21 23 00.47	−22 40 08.6	5.63	1 H	320.751 964 52	−22.669 048 92		4.89	36.82	0.39	0.69	0.41	0.81	0.83	0.39	+35	−15	−19	−21	−28	+45	−22	−18	+15	+33	0	0.10
105577 H	21 23 02.87	−51 56 32.2	7.66	G	320.761 965 60	−51.942 283 76 A		12.51	−40.87	−37.25	1.42	1.00	1.42	1.51	0.81	+23	− 9	− 3	+37	+31	− 2	+24	+29	− 4	− 3	1	0.72
105578 H	21 23 03.15	−28 05 56.3	8.66	H	320.763 134 24	−28.098 969 41 *		2.30	0.38	8.72	1.03	0.70	1.15	1.21	0.61	+23	−11	−23	− 9	−16	+23	−12	−35	+23	+29	0	−0.35
105579 H	21 23 05.00	+28 57 18.3	8.94	H	320.770 839 47	+28.955 095 32 A		4.35	6.26	−6.55	1.62	1.40	1.88	1.61	1.39	+13	+15	− 1	+ 7	+ 5	−12	+ 9	− 3	+20	+ 1	1	1.49
105580	21 23 06.24	−30 48 43.9	7.82	H	320.775 994 65	−30.812 183 56		14.84	343.91	99.62	0.89	0.66	1.06	1.15	0.59	+25	−15	−27	+ 9	− 5	+34	+ 2	−18	+19	+31	0	−1.27
105581	21 23 06.80	−85 38 19.5	7.22	2 H	320.778 319 71	−85.638 762 38		2.09	−6.82	7.32	0.54	0.53	0.64	0.68	0.63	− 8	−14	+ 9	− 4	+ 3	+ 6	+ 4	−13	−12	−13	0	0.65
105582 H	21 23 07.06	+31 43 36.7	8.99	1 H	320.779 435 99	+31.726 849 50 A		4.72	−7.48	−11.17	1.28	1.25	1.70	1.34	1.18	− 6	+10	+ 4	+43	+14	−12	+11	+33	+13	−16	1	1.74
105583	21 23 07.82	+16 29 48.2	7.62	H	320.782 596 18	+16.496 730 45		3.32	13.51	7.90	0.89	0.64	0.98	1.10	0.69	+17	−24	−16	− 4	−11	− 3	−11	−16	+ 5	+16	0	−0.39
105584 H	21 23 08.20	+48 31 08.3	7.78	2 G	320.784 182 09	+48.518 986 11 A		11.40	107.75	−25.80	1.11	1.03	0.97	1.25	0.98	+ 0	− 4	+ 2	+ 4	+13	−12	+ 7	+12	−11	− 3	2	0.16
105585	21 23 08.57	−87 03 07.5	8.80	H	320.785 702 41	−87.052 087 63 A		19.10	103.04	−87.76	8.38	7.53	5.70	6.71	5.85	−11	−26	+11	− 1	− 1	+ 8	− 2	−12	− 2	−15	17	3.86
105586	21 23 09.17	+29 38 22.8	7.81	G	320.788 218 36	+29.639 657 50		11.45	7.84	−144.03	0.65	0.58	0.86	0.76	0.62	+ 0	+ 6	+ 1	+22	+ 8	−10	+ 9	+ 3	+10	+ 6	0	−0.39
105587	21 23 10.36	+58 59 00.1	9.55	H	320.793 172 06	+58.983 352 65 A		0.07	−1.85	−5.66	1.27	1.39	1.46	1.17	1.31	+ 6	+22	+ 9	− 9	+16	− 1	+21	−14	+17	+30	1	0.58
105588	21 23 10.43	−00 46 22.7	7.56	H	320.793 454 87	−00.772 960 46		4.45	−2.99	−23.42	0.84	0.66	1.02	1.08	0.81	+18	−16	−14	−31	− 3	+45	− 1	−28	+29	+43	2	0.20
105589	21 23 11.40	−10 35 17.7	8.40	H	320.797 519 86	−10.588 240 04		10.37	78.64	−4.85	1.10	0.76	1.49	1.82	0.70	+41	− 9	−27	+ 5	−46	+56	−22	+ 2	+20	+44	0	0.62
105590	21 23 12.85	−41 15 05.4	10.15	H	320.803 538 84	−41.251 493 87		0.56	19.31	−13.85	1.75	1.16	1.86	2.20	1.17	+51	− 3	− 5	−47	−39	+29	−34	−35	−10	+31	0	0.29
105591	21 23 13.51	+05 10 06.6	9.02	H	320.806 307 48	+05.168 508 47		4.61	12.95	9.24	1.27	1.16	1.57	1.96	1.25	+36	− 9	−42	+ 1	−20	+20	−14	−50	+25	+42	0	−0.01
105592	21 23 13.95	−29 33 15.7	9.97	H	320.808 130 00	−29.554 356 02		2.72	9.76	5.44	1.80	1.13	1.81	1.81	1.04	+14	+19	−16	−35	−18	+19	−15	−40	+ 1	+25	0	1.22
105593	21 23 15.42	−29 04 24.6	9.08	H	320.814 266 30	−29.073 502 20		7.31	62.02	−116.12	1.19	0.82	1.25	1.55	0.74	+20	+ 3	−19	−26	−19	+20	−14	−42	+ 8	+26	0	−0.69
105594	21 23 17.40	+64 59 58.5	7.59	H	320.822 492 28	+64.999 572 02		4.03	7.86	−3.25	0.55	0.52	0.59	0.65	0.55	− 6	−14	+18	+24	+13	+ 0	+13	−10	+12	+ 4	2	−0.60
105595	21 23 17.52	+39 20 58.8	7.34	H	320.822 994 09	+39.349 667 08		6.10	13.82	−4.72	0.41	0.47	0.63	0.45	0.49	−13	+ 1	+ 8	+ 5	+ 0	− 4	+ 0	+ 0	+10	−14	0	−1.60
105596	21 23 18.77	+29 48 47.5	7.62	H	320.828 202 13	+29.813 194 84		5.18	53.23	2.84	0.64	0.59	0.88	0.76	0.60	+ 0	+ 5	+ 1	+33	+ 3	− 7	+ 7	−13	− 1	+ 9	0	−0.42
105597	21 23 19.33	+09 27 12.1	7.73	H	320.830 553 60	+09.453 361 86		6.11	−16.38	−33.83	0.78	0.63	0.93	0.99	0.71	+35	−18	− 7	+ 3	− 3	+21	− 4	+ 6	+18	+47	0	1.43
105598	21 23 19.80	−30 15 37.5	10.39	H	320.832 501 41	−30.260 427 68		−0.60	−12.91	−36.81	1.77	1.29	2.12	2.03	1.12	+ 8	+13	−35	−13	−17	+35	− 4	−29	+13	+20	0	0.64
105599	21 23 19.82	+50 40 04.1	8.30	H	320.832 593 82	+50.667 798 89		2.72	19.03	3.61	0.63	0.60	0.76	0.69	0.61	−22	−14	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
105501	7.398	0.006	7.197	0.007		0.185	0.009	T	0.20	0.01	L	7.2358	0.0012	0.009	94		7.22	7.25					1							S
105502	5.515	0.002	4.211	0.002		1.108	0.002	T	1.05	0.03	G	4.2483	0.0004	0.004	111		4.24	4.26			21221+1949	I 1	1							S
105503	10.909	0.056	9.823	0.035		0.939	0.050	T	0.93	0.04	L	9.8813	0.0029	0.027	89		9.83	9.91					1							
105504	12.068	0.175	10.443	0.062		1.255	0.015	G	1.31	0.14	K	10.3294	0.0029	0.028	100		10.28	10.37					1 G							G
105505	10.653	0.053	10.131	0.054	*	0.499	0.057	T	0.57	0.06	L *	10.2233	0.0056	0.026	59	*	10.18	10.26			21221−3818	H 1	2 C S A	AB	137	0.177	0.022	0.28	0.48	
105506	11.117	0.068	9.841	0.036		1.022	0.003	G	1.07	0.00	I	9.8987	0.0035	0.024	93		9.85	9.93			21221−5121	I 1	1							
105507	9.886	0.022	8.212	0.011		1.399	0.019	T	1.38	0.02	L	8.1994	0.0013	0.012	117		8.18	8.22		C			1							
105508	9.339	0.016	9.159	0.018		0.172	0.023	T	0.19	0.02	L	9.2084	0.0020	0.020	114		9.17	9.24		C			1							
105509	10.071	0.020	8.503	0.010		1.315	0.018	T	1.28	0.02	L	8.5029	0.0016	0.019	174		8.47	8.54		C			1							
105510	10.298	0.026	9.359	0.019		0.829	0.024	T	0.85	0.02	L	9.3943	0.0026	0.030	146		9.36	9.45		R			1							
105511	7.594	0.006	7.236	0.007		0.339	0.009	T	0.40	0.01	L	7.2738	0.0013	0.010	127		7.26	7.29					1 G							S
105512	7.858	0.009	7.683	0.011		0.168	0.013	T	0.18	0.01	L	7.7250	0.0011	0.009	64		7.71	7.74					1							S
105513	9.764	0.022	9.547	0.026		0.207	0.032	T	0.23	0.04	L	9.5630	0.0019	0.019	114		9.53	9.60		C			1							
105514	8.705	0.010	7.759	0.008		0.834	0.010	T	0.85	0.01	L	7.8047	0.0010	0.013	134		7.78	7.83			21225−8006	I 2	1							S
105515	5.424	0.004	4.392	0.003		0.888	0.031	G	0.89	0.02	A	4.4388	0.0009	0.010	71		4.43	4.46		U 2			1							S P
105517	9.211	0.018	8.753	0.018		0.435	0.023	G	0.50	0.02	H	8.7915	0.0016	0.014	108		8.77	8.82		C			1							
105518	9.217	0.011	7.310	0.005		1.617	0.010	T	2.12	0.03	O	7.1733	0.0019	0.023	167		7.14	7.21		U 2			1							S
105519	8.645	0.021	8.119	0.018	*	0.477	0.005	G	0.55	0.01	H *	8.3850	0.0017	0.015	94	*	8.36	8.44		D	21223−1455	I 1	2 C A	AB	109	1.978	0.006	1.15	0.02	S
105520	9.153	0.013	8.971	0.015		0.174	0.019	T	0.19	0.02	L	9.0108	0.0023	0.021	114		8.97	9.05					1							
105521	9.081	0.018	8.303	0.015		0.663	0.002	G	0.72	0.00	H	8.3711	0.0019	0.012	57		8.35	8.40		C			1							S
105522	8.825	0.012	8.185	0.011	A	0.560	0.015	G	0.63	0.01	H *	8.2258	0.0013	0.013	108	*	8.21	8.26		D	21223+5734	I 1	2 C A	AB	6	1.118	0.013	2.49	0.05	
105523	10.912	0.030	10.454	0.031		0.432	0.040	T	0.50	0.04	L	10.5755	0.0028	0.035	255		10.51	10.64					1 S							G
105524	9.874	0.022	9.560	0.025		0.298	0.031	T	0.34	0.04	L	9.6129	0.0023	0.021	117		9.58	9.65		C			1							G
105525	10.807	0.045	9.806	0.030		0.875	0.040	T	0.88	0.03	L	9.8634	0.0022	0.021	102		9.82	9.90					1							
105526	6.659	0.004	6.569	0.005		0.088	0.006	T	0.10	0.01	L	6.5988	0.0006	0.006	118		6.59	6.61		C			1							S
105527	9.132	0.014	7.723	0.008		1.190	0.013	T	1.15	0.01	L	7.7386	0.0013	0.013	127		7.72	7.76			21224−5952	I 1	1							S
105528	9.943	0.020	8.861	0.013		0.936	0.018	T	0.93	0.01	L	8.9166	0.0019	0.019	146		8.88	8.94		C			1							
105529	9.666	0.016	9.338	0.017		0.316	0.025	T	0.36	0.03	L	9.3425	0.0015	0.014	138		9.32	9.36		C			1							
105530	8.092	0.007	7.685	0.006		0.385	0.009	T	0.45	0.01	L	7.7335	0.0012	0.014	180		7.71	7.76		C			1							S
105531	8.758	0.012	8.655	0.014		0.040	0.015	G	0.06	0.01	H	8.7077	0.0022	0.021	116		8.68	8.74		D	21224+5218	I 2	1							
105532	8.627	0.010	8.234	0.010		0.372	0.013	T	0.43	0.01	L	8.3000	0.0012	0.014	125		8.28	8.32		C			1							S
105533	11.829	0.145	10.070	0.049		1.495	0.126	T	1.77	0.21	K	10.0083	0.0036	0.026	72		9.96	10.06					1							
105534	7.123	0.006	6.716	0.006		0.384	0.009	G	0.44	0.03	C	6.7608	0.0014	0.009	73		6.75	6.78		C			1							S
105535	9.029	0.014	8.904	0.017		0.130	0.015	G	0.14	0.01	H	8.9747	0.0022	0.019	116		8.93	9.01		D	21224+5218	I 2	1							
105536	9.224	0.018	7.999	0.012		1.047	0.017	T	1.02	0.01	L	8.0423	0.0016	0.011	71		8.02	8.07		C			1							S
105537	8.684	0.007	8.564	0.009		0.116	0.011	T	0.13	0.01	L	8.5952	0.0012	0.017	252		8.57	8.63					1							S
105538	10.078	0.029	8.687	0.016	*	1.176	0.026	T	1.14	0.02	L *	8.7418	0.0017	0.014	94	*	8.71	8.77		D	21225+0827	I 1	2 C A	AB	59	0.345	0.006	0.08	0.10	
105539	13.877	0.705	9.653	0.023		2.600	0.510	G	2.60	0.52	J	9.1871	0.0193	0.168	126		8.99	9.59	399.00	P 1 A			1 S							
105540	6.894	0.005	6.850	0.005	*	0.029	0.004	G	0.05	0.00	H *	6.8634	0.0008	0.007	130	*	6.85	6.87		D	21225+4929	H 1	2 C S A	AB	113	0.196	0.031	2.31	0.34	S
105541	9.462	0.015	8.696	0.012		0.682	0.015	T	0.74	0.01	L	8.7683	0.0020	0.019	130		8.74	8.80					1							
105542	11.226	0.075	10.459	0.062		0.699	0.076	T	0.76	0.06	L	10.5387	0.0039	0.033	69		10.47	10.61					1							G
105543	8.896	0.010	8.477	0.010	*	0.396	0.013	T	0.46	0.01	L *	8.5429	0.0017	0.015	155	*	8.52	8.57			21226+3846	H 1	2 C S B	AB	35	0.141	0.049	1.95	0.85	
105544	8.981	0.013	7.868	0.009		0.959	0.012	T	0.95	0.01	L	7.9369	0.0012	0.011	115		7.91	7.96		C			1							
105545	9.789	0.024	9.419	0.026		0.390	0.015	G	0.46	0.02	H	9.4520	0.0027	0.024	123		9.42	9.48					1							G
105546	10.643	0.046	9.757	0.035		0.841	0.003	G	0.88	0.00	H	9.7795	0.0022	0.021	82		9.74	9.82					1							
105547	7.999	0.009	7.537	0.009		0.456	0.012	G	0.53	0.01	H	7.5549	0.0009	0.012	92		7.53	7.57		D	21226−5547	I 1	1 S							S
105548	7.318	0.009	6.617	0.007		0.651	0.001	G	0.71	0.00	H	6.6671	0.0011	0.009	70		6.65	6.68					1							S
105549	8.657	0.013	8.329	0.013		0.311	0.017	T	0.36	0.02	L	8.3986	0.0019	0.015	70		8.38	8.43		C			1							S
105550	9.058	0.019	7.151	0.009		1.583	0.017	T	1.60	0.02	L	7.0436	0.0023	0.016	43		7.01	7.06		U 2			1 S							S
105551	11.015	0.070	9.733	0.038		1.091	0.062	T	1.05	0.06	L	9.7063	0.0030	0.021	66		9.64	9.74		C			1							
105552	10.716	0.056	8.935	0.022		1.484	0.048	T	1.50	0.07	L	8.8872	0.0031	0.024	74		8.83	8.92					1							
105553	10.344	0.038	9.942	0.041		0.393	0.047	T	0.46	0.05	L	10.0400	0.0028	0.027	57		10.00	10.08		C			1							
105554	10.623	0.044	8.841	0.018		1.484	0.038	T	1.50	0.06	L	8.7757	0.0023	0.020	81		8.74	8.80					1							
105555	8.759	0.012	8.536	0.013		0.170	0.015	G	0.19	0.01	H	8.5986	0.0012	0.013	128		8.58	8.62		C			1							
105556	11.249	0.073	10.422	0.055		0.729	0.070	T	0.78	0.05	L	10.5635	0.0048	0.035	95		10.49	10.62					1							G
105557	7.628	0.006	6.934	0.007		0.640	0.008	T	0.70	0.01	L	6.9876	0.0007	0.008	128		6.97	7.00					1							S
105558	7.458	0.005	6.185	0.003		1.079	0.001	G	1.04	0.00	H	6.2422	0.0006	0.006	161		6.23	6.25		C			1							S
105559	7.901	0.008	7.875	0.009		0.024	0.011	T	0.04	0.01	L	7.8907	0.0018	0.016	123		7.86	7.91					1							S
105560	8.531	0.010	7.084	0.006		1.220	0.009	T	1.18	0.01	L	7.1124	0.0012	0.011	113		7.10	7.13					1							S
105561	6.661	0.004	6.629	0.004		0.028	0.004	G	0.04	0.00	H	6.6461	0.0007	0.007	157		6.63	6.66		C			1							S
105562	8.643	0.010	7.253	0.006		1.191	0.010	T	3.96	0.03	O	6.5831	0.0104	0.098	141		6.31	6.73		U 2			1 S							
105563	9.282	0.021	8.045	0.013		1.056	0.019	T	1.02	0.02	L	8.0819	0.0017	0.013	77		8.06	8.10		C			1							
105564	9.533	0.019	8.417	0.013		0.962	0.018	T	0.95	0.01	L	8.4927	0.0015	0.011	100		8.48	8.51		C			1							
105565	7.599	0.007	7.549	0.007		0.045	0.009	T	0.06	0.01	L	7.5572	0.0020	0.028	149		7.52	7.62		U 2			1							S
105566	9.545	0.025	8.413	0.017		0.974	0.024	T	0.96	0.02	L	8.4558	0.0020	0.015	69		8.43	8.48					1							
105567	8.066	0.007	7.654	0.008		0.389	0.003	G	0.45	0.00	H	7.7155	0.0008	0.012	125		7.70	7.74		C			1							S
105568	10.170	0.037	9.631	0.036		0.513	0.039	T	0.59	0.04	L	9.7964	0.0038	0.022	52		9.75	9.83		C			1							
105569	9.795	0.020	8.996	0.016	C	0.746	0.003	G	0.79	0.00	H	9.0187	0.0330	0.233	124	C	8.70	9.38		D	21230−8703	I 2	1 C P A							
105570	5.236	0.002	5.165	0.003		0.064	0.003	T	0.07	0.00	L	5.1828	0.0005	0.004	91		5.17	5.20		C	21229+0649	I 1	1							S
105571	7.799	0.010	7.721	0.011		0.065	0.015	G	0.07	0.02	H	7.7477	0.0009	0.010	78		7.73	7.76		C			1							S
105572	9.163	0.014	8.816	0.015		0.329	0.019	T	0.38	0.03	L	8.8694	0.0017	0.016	127		8.85	8.90		C			1							
105573	8.610	0.008	7.383	0.005		1.048	0.007	T	1.02	0.01	L	7.4554	0.0012	0.012	159		7.43	7.48					1							S
105574	7.982	0.009	6.160	0.005		1.516	0.008	T	1.55	0.01	L	6.1051	0.0013	0.010	78		6.09	6.12		M			1							S
120159						1.044	0.020	G	1.10	0.02	I	13.7083	2.6423	2.681	2		10.26	17.16			21225−8006	I 2	S							G
105575	9.875	0.030	8.037	0.013		1.561	0.027	T	2.65	0.05	O	7.7795	0.0100	0.054	50		7.67	7.87		U 2			1 S							S
105576	7.747	0.007	5.811	0.004		1.641	0.007	T	1.84	0.04	O	5.7197	0.0037	0.019	97		5.70	5.76		U 2			1							S
105577	8.519	0.011	7.810	0.009	A	0.642	0.002	G	0.71	0.00	H *	7.8007	0.0016	0.012	107	*	7.78	7.82		D	21230−5157	I 1	2 C A	AB	278	1.186	0.010	1.64	0.03	S
105578	9.008	0.017	8.679	0.019	*	0.317	0.027	T	0.37	0.04	L *	8.7418	0.0022	0.016	66	*	8.71	8.76		C	21231−2806	H 1	2 C S B	AB	140	0.149	0.130	2.56	1.53	
105579	9.338	0.020	8.916	0.021	*	0.399	0.027	T	0.46	0.03	L *	9.0258	0.0030	0.026	118	*	8.99	9.06		D	21231+2857	I 1	2 C A	AB	330	7.212	0.008	1.52	0.05	
105580	8.536	0.016	7.877	0.014		0.581	0.011	G	0.65	0.01	H	7.9465	0.0017	0.013	71		7.93	7.97		C			1							S
105581	9.571	0.017	7.501	0.007		1.713	0.015	T	1.74	0.01	L	7.3225	0.0049	0.055	117		7.23	7.41		U 2			1 S							S P
105582	11.309	0.051	9.248	0.015	A	1.670	0.143	G	1.80	0.21	K *	9.0833	0.0026	0.025	198	*	9.05	9.13		U	21231+3144	H 1	2 C C	AB	329	4.797	0.066	3.79	0.28	
105583	9.644	0.022	7.768	0.010		1.520	0.010	G	1.58	0.08	L	7.7406	0.0015	0.012	76		7.71	7.76		C			1							S
105584	8.274	0.011	7.862	0.010	*	0.441	0.004	G	0.51	0.00	H *	7.8808	0.0017	0.019	128	*	7.85	8.04	2.63	P 1 A	21231+4831	H 1	2 C A	AB	59	0.473	0.007	2.14	0.04	S
105585	9.584	0.018	8.740	0.014	A	0.758	0.017	T	0.80	0.01	L	9.0320	0.0331			A				D	21230−8703	I 2	1 C I A							
105586	8.557	0.010	7.883	0.008		0.632	0.015	G	0.70	0.01	H	7.9404	0.0014	0.017	120		7.92	7.98					1							S
105587	10.149	0.032	9.620	0.030	A	0.496	0.040	T	0.57	0.04	L	9.6644	0.0122	0.026	99	A	9.61	9.71		C	21232+5859	H 1	2 C D	AB	27	13.093	0.106	3.77	0.38	G D
105588	9.296	0.019	7.687	0.010		1.348	0.017	T	1.31	0.02	L	7.7100	0.0015	0.011	73		7.69	7.73		C			1							S
105589	9.132	0.015	8.482	0.013		0.603	0.017	T	0.67	0.01	L	8.5338	0.0013	0.011	100		8.52	8.55		D			1 S							S
105590	10.806	0.052	10.155	0.048		0.596	0.053	T	0.67	0.05	L	10.2776	0.0031	0.026	89		10.23	10.33		C			1							
105591	10.350	0.049	9.087	0.028		1.160	0.040	G	1.12	0.04	K	9.1898	0.0020	0.011	52		9.17	9.21		C			1							
105592	10.682	0.051	10.076	0.049		0.563	0.052	T	0.64	0.05	L	10.0932	0.0032	0.029	68		10.05	10.14		C			1							
105593	9.779	0.026	9.164	0.023		0.570	0.026	T	0.64	0.02	L	9.2049	0.0022	0.019	77		9.17	9.24		C			1							
105594	7.563	0.007	7.578	0.009		−0.009	0.010	T	0.01	0.01	L	7.5965	0.0010	0.011	112		7.58	7.61		C			1							S
105595	7.319	0.004	7.328	0.005		−0.024	0.005	G	0.01	0.00	L	7.3497	0.0010	0.011	165		7.33	7.37		C			1							S
105596	9.007	0.014	7.732	0.008		1.086	0.013	T	1.05	0.01	L	7.7909	0.0014	0.012	115		7.77	7.81					1							
105597	8.112	0.009	7.760	0.010		0.334	0.013	T	0.39	0.02	L	7.8091	0.0012	0.013	90		7.79	7.84		C			1							S
105598	11.298	0.083	10.238	0.051		0.909	0.076	T	0.91	0.06	L	10.5328	0.0052	0.030	59		10.49	10.59		C			1							
105599	9.497	0.018	8.394	0.012		0.951	0.017	T	0.94	0.01	L	8.4607	0.0015	0.014	114		8.44	8.48		C			1							
105600	9.236	0.014	8.432	0.011		0.727	0.014	T	0.78	0.01	L	8.4915	0.0012	0.014	124		8.47	8.51					1 S							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
105601	21 23 20.71	−34 32 34.4	10.91		G	320.836 295 36	−34.542 889 47		−1.97	5.61	1.92	1.84	1.63	2.31	2.13	1.39	+20	−13	−20	−22	− 9	+42	− 7	−43	+21	+19		2	1.55
*105602	21 23 20.90	+44 31 05.9	7.17		H	320.837 097 29	+44.518 306 46		1.04	−0.22	−6.08	0.52	0.47	0.65	0.57	0.51	−12	+25	− 1	+ 7	+16	− 3	+20	− 5	+21	− 2		0	−1.63
*105603	21 23 20.90	−13 30 48.4	7.56		H	320.837 083 06	−13.513 440 67		3.46	5.77	9.90	0.79	0.55	0.92	1.20	0.66	+24	− 9	− 8	+18	−18	+36	−12	+26	+21	+37		0	−0.83
105604	21 23 21.31	−19 40 52.9	8.83		H	320.838 786 78	−19.681 368 66		5.58	4.99	−40.44	1.06	0.63	1.20	1.48	0.67	+28	−12	−14	−12	−24	+30	−19	−11	+21	+37		0	0.98
105605	21 23 21.71	+66 57 14.4	9.99		H	320.840 441 38	+66.954 011 11		4.14	23.51	9.69	0.99	0.88	1.05	1.28	0.96	−19	−14	+21	+ 8	+ 6	+17	+ 2	+ 3	+ 9	+ 0		0	1.22
105606	21 23 22.62	−41 33 07.8	7.61		H	320.844 259 42	−41.552 163 30		26.53	−72.62	−144.18	0.88	0.60	1.03	1.07	0.59	+53	+ 5	− 4	−26	−32	+21	−29	−24	−12	+32		0	2.30
105607	21 23 22.99	+37 24 23.3	6.55		H	320.845 786 11	+37.406 481 96		9.23	52.59	25.79	0.39	0.44	0.66	0.39	0.46	−24	− 1	+ 7	− 2	+ 5	−14	+ 6	+ 8	+17	−22		0	−0.48
105608	21 23 23.73	+02 45 58.6	7.27		H	320.848 884 85	+02.766 285 63		8.76	16.13	−13.97	0.95	0.73	1.08	1.20	0.80	+34	− 7	−25	− 5	−15	+15	−11	−36	+18	+39		0	0.13
105609	21 23 24.97	−57 40 10.5	8.77		H	320.854 054 48	−57.669 570 47		0.13	−5.87	−10.64	0.77	0.81	1.16	0.92	0.88	+12	−15	−23	−23	+13	+ 2	+17	+19	− 2	− 2		4	0.77
105610	21 23 25.25	+65 02 02.6	7.32		H	320.855 203 18	+65.034 055 04		4.83	8.20	−2.59	0.54	0.50	0.57	0.63	0.53	− 4	−12	+15	+24	+12	+ 1	+11	− 8	+13	+ 2		2	0.50
105611	21 23 25.50	−18 17 11.2	9.20		H	320.856 235 12	−18.286 450 30		6.28	10.37	12.46	1.18	0.70	1.36	1.53	0.81	+21	−10	− 4	− 2	−16	+32	−17	+11	+16	+32		0	0.60
105612	21 23 27.06	−75 29 38.7	7.88		G	320.862 770 76	−75.494 074 87		29.21	31.19	105.50	0.58	0.56	0.75	0.64	0.66	− 8	− 7	−12	− 6	+20	+ 0	+21	− 9	−11	−15		2	−0.34
105613	21 23 28.41	+31 06 58.5	7.35	1	H	320.868 385 01	+31.116 252 32		2.88	1.69	−11.74	0.48	0.49	0.80	0.59	0.51	− 9	− 1	+ 1	+42	+13	−17	+10	+20	+17	−13		0	−0.28
105614	21 23 28.81	+09 55 55.0	8.57	2	G	320.870 036 18	+09.931 944 54		2.23	0.43	−8.34	0.83	0.76	1.08	1.06	0.82	+37	− 8	−28	− 4	− 4	+26	+ 1	+ 7	+15	+50		0	−1.06
105615	21 23 28.87	+00 50 41.9	10.45		H	320.870 272 04	+00.844 964 73		3.90	12.35	−20.93	2.12	1.35	2.13	2.38	1.62	+12	+ 4	−13	−42	+ 4	− 1	+ 3	−31	+16	+32		0	−0.04
105616	21 23 29.06	−32 47 16.5	8.77		H	320.871 101 48	−32.787 903 93		2.55	−11.40	−8.65	1.07	0.84	1.17	1.47	0.70	+18	+ 0	−11	+25	−24	+23	−13	−48	+ 3	+25		0	1.33
105617	H 21 23 29.36	+50 31 25.4	8.09		G	320.872 334 50	+50.523 710 03	A	10.99	−73.28	−63.75	0.87	0.79	0.90	0.88	0.76	− 6	−15	+24	+ 8	+ 5	− 8	+ 8	+ 3	− 3	+ 6		2	−0.83
105618	21 23 30.44	+73 57 15.1	9.33		H	320.876 851 54	+73.954 198 97		2.51	−9.20	−11.23	0.69	0.71	0.86	0.68	0.75	+ 0	+11	+15	−21	+ 0	−22	+ 3	− 6	+12	+ 5		0	0.37
105619	21 23 31.79	−40 15 15.8	7.66		G	320.882 450 90	−40.254 386 73		4.10	21.47	−47.53	0.95	0.66	0.97	1.23	0.60	− 5	− 5	− 8	+24	−18	+33	−13	−41	− 5	− 9		0	0.87
105620	21 23 32.48	−33 40 15.8	8.99	1	H	320.885 326 27	−33.671 055 28		15.98	149.96	25.77	1.06	0.87	1.22	1.16	0.75	+37	−32	−29	−14	−19	+15	−26	−43	+28	+20		4	0.77
105621	21 23 34.56	+59 51 05.5	9.31		G	320.894 015 27	+59.851 517 95		1.60	−3.90	−3.29	0.74	0.74	0.89	0.68	0.74	+13	+21	+14	+16	+20	+ 3	+28	− 7	+20	+28		0	1.30
105622	21 23 35.21	+46 14 54.6	12.15	2	G	320.896 708 00	+46.248 511 41		−0.37	−2.52	−5.83	2.35	2.17	2.88	3.13	2.60	−16	+21	−11	+18	− 2	+ 8	+ 0	− 7	+ 9	−16		1	0.80
105623	21 23 35.38	+14 03 00.7	6.76	2	T	320.897 432 23	+14.050 196 94		−0.90	5.19	−8.52	0.77	0.56	0.87	1.00	0.62	+24	+ 7	− 7	−18	−14	−13	−14	− 5	+ 1	+30		4	0.94
105624	21 23 35.51	+40 01 07.0	7.20		H	320.897 950 56	+40.018 599 52		7.24	28.94	7.37	0.39	0.44	0.58	0.42	0.46	−12	+ 5	+ 0	+ 8	− 5	− 5	− 5	− 4	+ 1	−17		0	−0.90
105625	H 21 23 35.71	+64 55 38.0	8.18		G	320.898 805 84	+64.927 208 90	A	4.29	8.80	12.08	1.40	1.20	1.15	1.25	1.01	+ 2	−16	+19	+22	+18	− 7	+22	+ 0	+12	+17		2	2.12
105626	21 23 37.14	+20 47 36.9	9.78		H	320.904 734 56	+20.793 589 58		10.27	−16.79	−56.15	2.47	2.79	3.65	3.03	2.97	+33	−22	−33	+ 2	− 6	−24	−20	−45	+25	+19		0	
105627	21 23 38.29	−56 33 08.6	10.18		H	320.909 544 10	−56.552 394 66		0.66	1.50	−26.92	1.46	1.09	1.85	2.13	1.17	+ 9	− 7	−21	− 1	+13	−30	+11	+15	+ 1	−27		4	1.38
*105628	21 23 39.92	−85 17 17.8	7.89		H	320.916 331 42	−85.288 285 05		5.59	13.09	−25.75	0.55	0.55	0.68	0.67	0.63	+ 0	−12	− 3	+11	− 1	+ 2	+ 0	−10	−14	− 3		0	−0.24
*105629	21 23 39.83	−55 32 33.6	7.47		H	320.915 978 74	−55.542 677 05		19.10	119.65	−139.80	0.70	0.58	0.85	0.86	0.58	+26	−11	− 5	+31	+17	+18	+13	+15	+ 2	+ 9		0	−0.52
105630	H 21 23 40.12	+55 17 38.8	7.86		H	320.917 171 91	+55.294 121 13	A	2.81	−5.55	−17.54	0.90	0.95	0.99	0.98	0.94	− 4	+ 5	+ 0	− 5	+11	−19	+ 9	− 3	−12	+11		1	0.76
105631	21 23 40.53	−39 46 43.3	7.47		G	320.918 865 94	−39.778 702 28		10.76	39.61	−39.05	0.83	0.72	0.99	1.16	0.63	+15	−15	−31	+10	−25	+39	−22	−39	+ 7	− 8		0	−0.28
105632	21 23 41.48	−35 41 08.0	10.44		H	320.922 832 56	−35.685 558 28		−0.01	45.69	−10.69	2.18	1.85	2.91	2.47	1.31	+42	−46	−63	−26	−26	+39	−26	−56	+43	+19		0	1.05
105633	21 23 41.86	−12 03 36.5	8.01		H	320.924 415 07	−12.060 149 97		0.33	17.42	−7.78	0.94	0.56	1.07	1.37	0.58	+21	−18	−17	+26	−29	+39	−16	+22	+21	+29		0	−0.52
105634	H 21 23 43.57	+04 21 54.1	8.43		G	320.931 562 14	+04.365 033 95	A	4.05	38.10	6.24	2.11	1.71	2.04	2.83	1.95	+36	− 5	−16	−17	−19	+ 7	−18	−52	+15	+53		1	1.65
105635	21 23 44.99	+69 32 04.1	6.93		H	320.937 470 36	+69.534 464 63		2.98	−7.84	−10.24	0.55	0.51	0.55	0.74	0.59	−24	− 1	+10	− 8	+23	−12	+19	−29	+11	−40		0	0.64
105636	21 23 46.73	+01 40 51.8	7.28		H	320.944 714 10	+01.681 062 27		5.49	1.83	12.11	0.97	0.69	1.03	1.29	0.82	+10	−10	− 9	−14	+12	+ 5	+ 7	−29	+29	+15		0	0.39
105637	21 23 48.39	+37 21 05.4	6.46		H	320.951 636 45	+37.351 497 82		3.54	−5.95	−6.86	0.39	0.45	0.67	0.40	0.47	−24	+ 5	+ 7	+ 2	+ 5	−11	+ 6	+ 1	+20	−22		0	−0.10
105638	21 23 48.76	−40 42 05.1	12.37		H	320.953 180 62	−40.701 421 79		21.01	31.43	−3.56	5.37	4.47	6.29	6.90	6.51	+14	+54	+50	−42	+33	+33	+ 2	−61	−23	− 4		4	2.56
105639	21 23 49.01	+01 36 59.7	8.95		H	320.954 208 38	+01.616 595 06		15.55	−54.49	−87.87	1.45	0.94	1.53	2.21	1.23	+15	+17	−17	−18	+16	−16	+13	− 1	+24	+21		0	1.23
105640	H 21 23 50.18	+47 09 52.4	7.08		H	320.959 072 85	+47.164 562 89	A	0.27	−2.67	−4.66	0.87	0.92	0.82	0.81	0.78	+ 7	+ 9	+ 7	+ 5	− 8	− 2	− 8	−14	− 6	− 2		1	−0.74
*105641	21 23 50.92	−06 35 02.2	7.62		G	320.962 163 89	−06.583 942 92		16.86	−127.90	−3.25	0.88	0.78	1.06	1.30	0.80	+43	−13	−18	+ 2	−27	+34	−28	−43	+26	+33		0	0.12
*105642	21 23 50.80	+57 56 25.1	7.70		H	320.961 685 47	+57.940 298 55		3.15	−36.80	−28.72	0.60	0.59	0.70	0.62	0.63	−10	+14	+ 7	− 6	+18	−10	+21	− 5	+18	+ 3		0	1.04
105643	21 23 52.28	−64 24 18.7	8.10		H	320.967 814 17	−64.405 189 35		11.73	12.10	31.07	0.62	0.54	0.98	0.80	0.62	−19	−10	−11	+ 4	+13	+17	+14	+20	−18	−15		3	−1.29
105644	H 21 23 52.40	+83 17 00.0	8.59		H	320.968 316 23	+83.283 342 56	*	6.19	22.09	−7.67	0.63	0.57	0.66	0.78	0.62	− 3	− 7	+10	− 1	−16	+ 0	−13	−11	− 2	+ 5		0	0.54
105645	21 23 54.71	+21 55 50.9	8.03		G	320.977 964 48	+21.930 795 54		2.10	−9.33	−6.65	0.58	0.89	1.05	0.66	0.97	+41	−17	−46	−21	+ 0	− 7	−16	−66	+46	+21		0	1.05
105646	21 23 55.86	−25 12 08.7	6.47		G	320.982 743 93	−25.202 428 15		3.67	58.02	−23.10	0.73	0.42	0.84	0.86	0.41	+35	− 6	− 9	−29	−24	+43	−21	−10	+19	+34		0	0.19
105647	21 23 55.89	−44 16 46.4	10.10		H	320.982 865 90	−44.279 544 08		6.49	−7.10	−6.57	1.33	1.09	1.85	1.30	1.00	+53	−38	−29	−39	−31	+24	−30	−41	+18	+44		0	1.17
105648	21 23 56.11	−44 23 29.7	11.30	2	H	320.983 810 97	−44.391 589 44		12.93	47.29	−67.90	3.65	2.73	4.94	3.49	2.67	+42	−40	−29	−37	−21	+19	−22	−34	+16	+39		0	
105649	21 23 56.64	+63 52 59.6	9.70		H	320.985 987 78	+63.883 222 17		2.63	20.92	0.50	0.83	0.81	0.92	1.01	0.90	− 4	+ 5	+ 3	+23	+ 6	+11	+12	− 5	+16	+19		0	0.87
105650	21 23 57.99	+51 39 25.8	7.10		H	320.991 605 34	+51.657 174 06		2.41	8.27	4.09	0.50	0.47	0.58	0.54	0.47	−10	− 5	+ 9	− 2	+ 1	+ 2	+ 1	− 8	− 6	−13		0	−1.60
105651	21 23 58.11	+35 09 59.5	9.26		H	320.992 116 86	+35.166 522 40		1.48	−0.33	−5.36	0.55	0.67	1.00	0.58	0.70	−23	− 1	+15	− 8	+12	− 5	+12	+ 4	+ 9	−15		1	−0.09
105652	21 23 58.74	+24 16 26.7	5.70		H	320.994 750 47	+24.274 091 55		18.05	136.43	18.11	0.48	0.37	0.65	0.55	0.41	−13	+ 9	−17	− 4	+ 5	+ 5	+ 7	− 8	+ 5	+ 8		0	−1.62
105653	21 24 00.24	+18 16 43.9	9.18	2	H	321.001 014 95	+18.278 858 98		1.44	0.43	−13.10	1.21	1.06	1.50	1.63	1.09	− 4	+ 2	−49	−33	+15	−21	+ 6	−58	+35	− 5		0	−0.58
105654	21 24 02.20	+39 09 33.7	8.94		H	321.009 147 72	+39.159 350 98		1.65	6.90	−2.20	0.65	0.67	0.97	0.69	0.66	−10	+ 6	+ 9	+ 6	+ 1	− 1	+ 0	− 7	+15	−25		1	−0.08
105655	H 21 24 02.87	+52 26 56.9	8.11	1	G	321.011 942 47	+52.449 142 17	A	1.32	0.97	−1.05	1.03	0.99	1.08	1.01	0.94	+ 1	−13	+ 8	− 7	+ 5	− 4	+ 5	+ 1	− 1	+ 9		0	2.25
105656	21 24 03.67	−40 01 48.0	7.36		H	321.015 291 30	−40.030 005 73		14.26	−39.05	−31.50	0.82	0.68	0.93	1.18	0.63	+11	− 6	−21	+11	−21	+38	−19	−41	+ 5	− 5		0	−0.87
105657	21 24 04.07	+52 04 49.3	8.71		H	321.016 968 77	+52.080 347 45		1.96	4.28	2.21	0.73	0.69	0.87	0.83	0.72	− 6	−13	+11	− 7	+ 7	+15	+ 5	− 5	+ 0	+ 6		0	0.57
105658	21 24 05.61	+47 42 23.5	8.01		G	321.023 361 68	+47.706 535 43		3.11	−7.48	−19.96	0.54	0.55	0.68	0.65	0.60	−10	+ 2	+ 3	+ 4	+ 3	− 7	+ 3	−12	−14	− 4		0	−3.71
105659	21 24 05.98	+48 33 25.0	7.53		H	321.024 927 83	+48.556 954 53		2.80	−8.28	−21.90	0.56	0.51	0.66	0.84	0.61	− 5	− 6	− 3	+ 0	+ 3	+ 6	+ 2	+10	− 2	− 3		0	−2.53
105660	21 24 07.42	+25 18 44.6	6.20		H	321.030 933 62	+25.312 401 51		5.33	39.37	9.03	0.44	0.36	0.63	0.54	0.44	−11	+ 6	− 2	+11	+ 9	−13	+11	+ 7	+ 2	+ 8		0	−0.18
105661	21 24 07.55	−01 54 55.7	9.69		G	321.031 437 66	−01.915 461 68		13.36	163.89	−5.52	1.35	1.12	1.70	1.79	1.54	+15	− 6	−32	−19	+ 0	+18	+ 8	−36	+35	+47		3	0.05
105662	21 24 07.94	−22 44 49.5	6.38		H	321.033 081 02	−22.747 070 85		6.85	−21.59	−12.35	0.72	0.46	0.85	1.07	0.58	+28	−15	−22	−20	−25	+44	−19	+17	+13	+32		0	−0.54
105663	21 24 08.40	−19 37 14.6	9.29		H	321.035 011 83	−19.620 722 10		6.65	9.08	−36.94	1.46	0.85	1.63	2.12	0.81	+30	−17	−34	−23	−26	+26	−17	−10	+18	+25		4	0.17
105664	21 24 08.86	−64 47 56.8	8.46		H	321.036 929 95	−64.799 104 67		1.97	23.99	−20.18	0.65	0.61	1.02	0.83	0.72	−19	+ 1	−16	+ 3	+10	+ 0	+ 9	+12	− 5	−18		0	−0.74
105665	21 24 09.60	−20 51 05.6	5.38		H	321.039 992 38	−20.851 560 19		14.31	−7.69	−126.94	0.75	0.46	0.91	0.82	0.42	+38	−26	−18	−23	−21	+45	−18	−10	+23	+39		0	−0.32
105666	21 24 10.06	+48 49 09.4	7.41		H	321.041 931 39	+48.819 280 65		7.63	44.99	27.70	0.56	0.50	0.65	0.89	0.59	+ 2	+ 5	− 4	+ 4	+ 6	+ 4	+ 5	+11	+ 4	− 2		1	−2.50
105667	21 24 10.99	−06 44 37.7	8.17		G	321.045 777 33	−06.743 797 14		3.95	24.43	3.87	1.55	0.82	1.26	1.61	1.21	+24	−36	−14	−10	−24	+24	−14	−32	+10	+40		0	−0.53
105668	21 24 11.44	−12 52 41.3	5.48		G	321.047 660 53	−12.878 130 20		20.80	91.67	8.96	0.77	0.51	0.91	1.26	0.59	+14	− 2	−14	+30	−25	+47	−12	+23	+33	+30		0	−0.70
105669	21 24 11.62	+50 26 09.8	7.46		H	321.048 401 59	+50.436 068 35		1.35	−4.49	−6.16	0.55	0.52	0.65	0.60	0.55	− 8	− 8	+ 9	−10	+ 2	− 6	+ 2	− 7	+ 4	− 9		1	−0.20
105670	21 24 12.20	+47 12 23.4	8.91		G	321.050 813 78	+47.206 493 41		1.68	3.21	1.42	0.64	0.63	0.82	0.81	0.75	− 9	+ 3	+ 2	+ 7	− 5	+ 9	− 5	+ 4	− 4	−25		1	−2.33
105671	21 24 12.74	+35 01 35.4	8.53		H	321.053 083 30	+35.026 512 21		3.12	4.90	−13.44	0.51	0.64	1.06	0.59	0.69	−29	−11	+20	− 3	+10	−15	+ 7	+18	+10	−10		1	0.27
105672	H 21 24 13.41	−19 47 36.4	9.12		H	321.055 860 71	−19.793 443 30	A	6.92	45.68	−0.65	3.26	2.24	3.17	3.57	1.89	+52	−35	−31	− 9	−22	+12	−23	−21	+ 8	+31		1	1.47
105673	21 24 13.85	+36 25 40.7	8.88		H	321.057 697 38	+36.427 980 92		1.46	0.60	−2.65	0.66	0.76	1.13	0.71	0.82	−25	+ 0	+13	− 4	+ 4	− 9	+ 5	+11	+24	−20		0	0.29
105674	H 21 24 14.96	−25 33 40.0	7.91		H	321.062 348 97	−25.561 123 09	A	6.62	25.09	−21.60	1.25	0.77	1.31	1.32	0.69	+36	−16	− 4	−16	−23	+40	−22	− 8	+13	+31		0	−0.97
105675	21 24 15.24	−58 41 32.1	8.68		H	321.063 519 40	−58.692 259 55		39.39	−102.08	−19.58	0.79	0.86	1.26	1.13	0.92	+11	− 4	−26	−13	+11	−17	+ 8	+12	+ 4	+ 2		0	0.70
105676	21 24 16.13	+37 39 44.2	7.80		H	321.067 211 67	+37.662 289 39		19.68	145.38	8.34	0.47	0.56	0.82	0.53	0.64	−30	+ 0	+ 3	+ 7	− 4	−17	− 3	+ 9	+ 4	−25		2	1.67
105677	21 24 16.53	+62 59 36.5	7.44		H	321.068 893 08	+62.993 459 06		4.41	8.08	8.41	0.53	0.50	0.58	0.54	0.54	+ 1	− 4	+ 5	+21	+14	+ 4	+16	+ 3	+16	+16		1	−0.37
105678	21 24 16.73	−69 44 01.9	6.28	3	H	321.069 726 56	−69.733 863 84		2.76	9.39	−7.43	0.47	0.50	0.71	0.54	0.65	−18	−19	+ 3	+ 0	− 4	− 7	− 2	+ 1	−13	−27		1	−0.39
105679	21 24 17.73	−46 41 34.6	12.45	2	G	321.073 872 08	−46.692 956 14		37.22	736.95	−51.41	3.48	2.77	4.70	3.72	2.84	+50	−46	−37	−15	− 7	− 5	− 3	−17	−13	+47		0	−1.29
105680	21 24 19.24	+61 16 17.0	8.79		H	321.080 170 87	+61.271 377 05		0.45	−0.75	−3.10	0.75	0.73	0.86	0.81	0.84	− 3	−15	+ 9	+ 2	+20	+ 5	+23	− 4	− 6	+28		0	1.87
105681	21 24 19.46	+35 18 52.6	8.47		H	321.081 098 78	+35.314 615 50		4.39	7.11	−23.09	0.53	0.65	0.95	0.55	0.65	−24	−11	+17	−16	+17	+ 0	+11	+11	+11	− 8		0	−1.62
105682	H 21 24 19.75	+03 43 00.8	9.27		G	321.082 282 08	+03.716 890 96	A	9.21	29.80	−88.41	5.28	3.36	3.23	4.11	2.87	+62	− 5	−11	−11	− 4	+14	− 1	−15	+28	+49		1	−0.26
105683	21 24 20.74	−24 25 20.8	6.73		H	321.086 428 51	−24.422 437 30		14.23	40.32	−26.26	0.76	0.43	0.85	0.89	0.41	+27	− 3	− 8	−14	−20	+36	−17	−11	+14	+28		0	0.46
105684	21 24 20.77	−16 03 43.9	8.70		H	321.086 550 31	−16.062 191 74		3.50	11.94	1.24	1.04	0.70	1.23	1.39	0.76	+48	−13	−24	−18	−22	+24	−17	− 9	+ 7	+56		0	3.58
105685	21 24 20.80	−46 36 52.8	6.30		H	321.086 678 54	−46.614 671 13		10.39	48.18	−14.57	0.67	0.55	0.88	0.71	0.53	+39	−45	−43	−12	− 1	+ 6	+ 3	−17	− 1	+42		0	1.16
105686	21 24 21.67	−37 51 13.8	12.29	2	H	321.090 272 49	−37.853 830 22		14.27	7.79	−6.24	5.15	4.42	6.07	6.43	4.02	+18	+16	−15	+10	−18	+24	−17	−41	+ 6	+ 8		3	0.32
105687	21 24 21.85	+55 36 22.8	9.19		H	321.091 022 10	+55.606 339 58		6.47	12.58	−2.08	0.76	0.75	0.91	0.94	0.85	− 4	− 4	+ 2	+10	+ 2	−21	+ 2	− 3	+ 7	− 4		0	0.46
105688	21 24 22.66	+30 56 11.8	6.73		H	321.094 399 66	+30.936 617 02		6.09	35.48	6.61	0.42	0.47	0.67	0.52	0.52	− 3	− 3	−13	+35	+ 2	−13	+ 5	− 8	+12	+ 7		0	0.77
105689	21 24 23.11	+24 31 42.3	6.35		H	321.096 300 45	+24.528 417 24		6.42	34.94	−9.96	0.47	0.39	0.71	0.53	0.45	− 5	+11	−15	− 7	+12	−13	+10	− 2	+ 3	+11		1	−1.18
105690	21 24 23.26	+56 21 41.7	8.83	2	H	321.096 905 90	+56.361 573 86		1.88	−4.42	−2.93	0.77	0.72	0.87	0.87	0.74	− 9	+ 7	− 4	− 1	+ 4	−15	+ 5	−13	+ 6	+ 3		0	1.03
105691	21 24 23.89	+69 59 35.4	7.76		H	321.099 558 04	+69.993 161 17		5.75	21.99	15.75	0.58	0.54	0.60	0.72	0.58	−15	+ 8	+ 8	−15	+12	−10	+12	−27	+15	−26		0	0.61
105692	H 21 24 24.08	−54 34 39.6	9.13		H	321.100 331 60	−54.577 671 77	A	6.14	49.95	−73.84	1.92	1.41	2.06	2.08	1.16	+16	+10	+ 2	+19	+24	+ 7	+18	+13	+ 6	+ 1		1	0.21
105693	21 24 24.13	+36 33 01.1	10.23		G	321.100 536 66	+36.550 318 96		2.94	0.53	−1.28	0.97	1.07	1.61	1.03	1.12	−20	+ 0	+15	− 6	+19	− 9	+18	+10	+18	−13		1	−1.08
105694	21 24 24.48	+75 58 17.7	7.22		H	321.101 992 27	+75.971 573 63		5.75	37.77	2.48	0.60	0.51	0.61	0.72	0.59	− 3	−22	+14	+11	+20	+ 7	+18	+ 2	+ 1	+ 9		0	0.82
105695	21 24 24.52	+10 10 27.1	6.33		G	321.102 175 54	+10.174 202 66		9.47	70.85	20.13	0.63	0.53	0.78	0.78	0.59	+31	−19	−25	−11	−18	+26	−12	− 9	+16	+49		0	−0.58
105696	H 21 24 24.80	−41 00 24.1	5.76		H	321.103 328 31	−41.006 694 89	A	7.04	26.40	−0.23	2.59	1.94	1.11	1.36	0.81

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags		AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61		62	63	64	65	66	67	68-70
105601	12.040	0.190	11.230	0.137		0.941	0.005	G	0.99	0.01	I	11.0909	0.0045	0.042	68		10.91	11.16					1 S								G G
105602	7.383	0.006	7.191	0.006		0.184	0.008	T	0.20	0.01	L	7.2312	0.0009	0.010	129		7.21	7.25		C			1								S
105603	8.714	0.011	7.653	0.008		0.920	0.010	T	0.92	0.01	L	7.7207	0.0009	0.007	94		7.71	7.74		D			1								S
105604	9.366	0.017	8.862	0.017		0.484	0.018	T	0.56	0.02	L	8.9340	0.0022	0.017	95		8.91	8.96					1								S
105605	10.483	0.044	10.084	0.051		0.377	0.062	T	0.44	0.07	L	10.0784	0.0025	0.021	107		10.03	10.10					1 S								G
105606	8.550	0.011	7.687	0.008		0.741	0.003	G	0.79	0.00	H	7.7528	0.0011	0.009	118		7.74	7.77		C			1								S
105607	7.152	0.004	6.608	0.004		0.510	0.005	T	0.58	0.01	L	6.6656	0.0007	0.009	187		6.65	6.68		C	21237+3722	I 2	1								S
105608	7.528	0.009	7.298	0.009		0.213	0.015	G	0.24	0.02	H	7.3372	0.0013	0.012	65		7.32	7.36		C			1								S
105609	10.855	0.040	8.950	0.015		1.616	0.035	T	1.79	0.10	O	8.8659	0.0024	0.021	127		8.83	8.91					1								
105610	7.261	0.006	7.308	0.006		−0.038	0.008	T	−0.02	0.01	L	7.3201	0.0010	0.009	114		7.30	7.33		C			1								S
105611	9.596	0.019	9.244	0.021		0.334	0.026	T	0.39	0.04	L	9.2861	0.0029	0.019	74		9.25	9.32					1								
105612	8.751	0.010	7.976	0.008		0.687	0.015	G	0.74	0.01	H	8.0228	0.0014	0.015	149		8.00	8.05					1								S
105613	9.519	0.016	7.537	0.007		1.643	0.014	T	1.67	0.01	L	7.4566	0.0012	0.015	178		7.43	7.48		M			1 S								S
105614	8.274	0.009	8.507	0.013		−0.200	0.015	G	−0.21	0.02	H	8.4963	0.0046	0.029	92		8.45	8.54	0.17	P 1 A			1								
105615	11.944	0.176	10.619	0.078		1.125	0.151	T	1.09	0.16	L	10.6148	0.0044	0.038	60		10.57	10.70		C			1								G
105616	9.798	0.028	8.833	0.021		0.848	0.026	T	0.86	0.02	L	8.9245	0.0023	0.014	59		8.90	8.96		C			1								
105617	8.792	0.011	8.174	0.010	A	0.569	0.009	G	0.64	0.01	H *	8.2084	0.0015	0.011	121	*	8.19	8.23		D	21235+5031	I 1	2 C A		AB	260	2.250	0.012	2.87	0.07	
105618	10.038	0.024	9.407	0.022		0.587	0.028	T	0.66	0.03	L	9.4593	0.0018	0.018	109		9.42	9.49		C			1								
105619	8.000	0.011	7.694	0.013		0.315	0.015	G	0.36	0.02	H	7.7382	0.0015	0.010	61		7.72	7.76		C			1								S
105620	9.870	0.030	9.088	0.025		0.695	0.030	T	0.75	0.03	L	9.1310	0.0042	0.024	67		9.10	9.18		U			1								
105621	9.514	0.019	9.350	0.023		0.190	0.015	G	0.21	0.02	H	9.3564	0.0023	0.018	101		9.33	9.38					1								
105622						2.420	0.020	G	2.42	0.02	J	12.3931	0.0085	0.097	110		12.17	12.52		U			1								D
105623	6.656	0.007	6.745	0.007		−0.109	0.001	G	−0.09	0.00	H	6.7465	0.0071	0.045	74		6.64	6.79		U 2			1								S
105624	7.375	0.004	7.223	0.005		0.146	0.006	T	0.16	0.01	L	7.2581	0.0008	0.010	172		7.24	7.27		C			1								S
105625	8.303	0.012	8.109	0.014	*	0.140	0.015	G	0.15	0.01	H *	8.1990	0.0019	0.012	109	*	8.18	8.22		D	21236+6456	I 1	2 C A		AB	144	6.395	0.009	1.84	0.04	S
105626	10.621	0.044	9.896	0.036		0.665	0.046	T	0.73	0.04	L	9.9173	0.0032	0.031	102		9.86	9.97					1 X								G
105627	10.824	0.056	10.114	0.048		0.640	0.056	T	0.70	0.05	L	10.3121	0.0026	0.029	81		10.27	10.36		C			1								
105628	8.044	0.008	7.907	0.009		0.124	0.011	T	0.14	0.01	L	7.9406	0.0010	0.010	129		7.92	7.96		C			1								S
105629	8.101	0.009	7.522	0.009		0.546	0.004	G	0.62	0.00	H	7.5887	0.0017	0.011	96		7.57	7.61		C			1								S
105630	8.107	0.010	7.932	0.012	*	0.168	0.015	T	0.18	0.01	L *	7.9127	0.0015	0.012	121	*	7.89	7.93		D	21237+5518	I 1	2 C A		AB	348	0.765	0.003	1.17	0.01	S
105631	7.923	0.013	7.509	0.011		0.410	0.015	G	0.48	0.02	H	7.5592	0.0012	0.009	56		7.54	7.57		C			1								S
105632	11.102	0.081	10.457	0.073		0.599	0.094	T	0.67	0.08	L	10.5631	0.0048	0.032	51		10.48	10.61		C			1								G
105633	7.856	0.008	7.979	0.013		−0.116	0.003	G	−0.10	0.00	H	7.9750	0.0013	0.011	82		7.95	8.00					1								S
105634	8.764	0.021	8.337	0.019	*	0.387	0.015	G	0.45	0.02	H *	8.4892	0.0024	0.015	60	*	8.45	8.52		D	21237+0422	I 1	2 C A		AB	104	2.784	0.005	0.62	0.02	S
105635	6.933	0.004	6.924	0.006		0.013	0.007	T	0.03	0.01	L	6.9402	0.0007	0.007	114		6.93	6.95		C			1								S
105636	8.607	0.016	7.385	0.010		1.044	0.015	T	1.01	0.01	L	7.4464	0.0013	0.010	60		7.43	7.47		C			1								S
105637	8.376	0.007	6.609	0.004		1.472	0.006	T	1.49	0.01	L	6.5870	0.0007	0.010	195		6.57	6.61			21237+3722	I 2	1								S
105638						1.500	0.510	G	2.50	0.72	K	12.3836	0.5462	1.408	36		9.63	13.08					1 S								D
105639	10.001	0.034	9.032	0.025		0.851	0.031	T	0.87	0.02	L	9.0948	0.0045	0.020	62		9.06	9.14					1								
105640	7.590	0.007	7.143	0.006	*	0.422	0.008	T	0.49	0.01	L *	7.1732	0.0009	0.010	129	*	7.16	7.19		D	21238+4710	I 1	2 C A		AB	27	0.448	0.003	1.23	0.02	S
105641	8.161	0.016	7.657	0.013		0.501	0.015	G	0.57	0.02	H	7.7264	0.0022	0.011	58		7.71	7.74			21239−0635	I 1	1								S
105642	9.090	0.014	7.821	0.009		1.081	0.013	T	1.04	0.01	L	7.8712	0.0016	0.013	104		7.85	7.90		C			1								
105643	8.524	0.007	8.145	0.008		0.370	0.009	T	0.43	0.01	L	8.1868	0.0013	0.016	184		8.17	8.22					1								S
105644	9.122	0.013	8.642	0.013	*	0.452	0.016	T	0.52	0.02	L *	8.6901	0.0016	0.014	116	*	8.67	8.71			21239+8317	H 1	2 C S B		AB	335	0.180	0.036	2.19	0.72	
105645	7.899	0.006	7.995	0.008		−0.095	0.015	G	−0.08	0.02	H	7.9981	0.0013	0.013	150		7.98	8.02					1								S
105646	7.928	0.006	6.603	0.004		1.123	0.002	G	1.09	0.00	H	6.6421	0.0007	0.006	123		6.63	6.65		C			1								S
105647	10.571	0.031	10.114	0.032		0.444	0.035	T	0.51	0.04	L	10.1947	0.0029	0.029	134		10.14	10.24					1								
105648						1.613	0.082	G	2.63	0.20	I	11.2948	0.0073	0.075	121		11.17	11.39		U 2			1 X								G
105649	10.059	0.030	9.806	0.036		0.241	0.044	T	0.27	0.06	L	9.7755	0.0022	0.023	101		9.74	9.82					1								G
105650	6.978	0.004	7.078	0.005		−0.086	0.006	T	−0.07	0.01	L	7.0779	0.0008	0.008	126		7.06	7.09					1								S
105651	9.202	0.011	9.261	0.016		−0.040	0.015	G	−0.02	0.01	H	9.2582	0.0019	0.024	219		9.21	9.30					1								
105652	6.091	0.003	5.736	0.003		0.314	0.004	G	0.36	0.01	H	5.7807	0.0005	0.005	138		5.77	5.79			21240+2417	I 1	1								S
105653	10.273	0.038	9.266	0.026		0.879	0.034	T	0.89	0.03	L	9.3388	0.0221	0.153	70		9.20	9.56	2.41	P 1 A			1								P
105654	8.924	0.009	8.915	0.012		0.013	0.014	T	0.03	0.01	L	8.9504	0.0026	0.025	163		8.91	8.99					1								
105655	8.106	0.008	8.089	0.010	A	0.010	0.015	G	0.01	0.01	L *	8.0996	0.0019	0.015	126	*	8.07	8.13		M	21240+5227	I 1	2 C D		AB	48	8.176	0.041	3.78	0.19	D
105656	7.837	0.010	7.408	0.010		0.412	0.016	G	0.48	0.02	H	7.4530	0.0014	0.008	58		7.43	7.47		C			1								S
105657	10.534	0.035	8.874	0.016		1.388	0.030	T	1.36	0.04	L	8.8584	0.0017	0.016	127		8.83	8.89		C			1								
105658	8.014	0.006	7.989	0.010		0.017	0.008	G	0.04	0.01	H	8.0199	0.0012	0.013	130		7.99	8.04		C			1								
105659	7.486	0.007	7.522	0.008		−0.065	0.005	G	−0.04	0.01	H	7.5173	0.0014	0.011	123		7.50	7.54					1								S
105660	6.231	0.002	6.203	0.003		0.026	0.003	T	0.04	0.00	L	6.2182	0.0006	0.007	176		6.21	6.23		C	21241+2519	I 1	1								S
105661	10.598	0.058	9.742	0.044		0.735	0.003	G	0.78	0.00	H	9.8346	0.0026	0.018	58		9.80	9.88		C			1								
105662	7.665	0.007	6.495	0.004		1.026	0.007	G	1.00	0.01	H	6.5451	0.0010	0.007	103		6.54	6.56					1 G								S
105663	9.805	0.022	9.331	0.021		0.459	0.024	T	0.53	0.03	L	9.3962	0.0025	0.018	76		9.38	9.44		C			1								S
105664	10.380	0.024	8.641	0.011		1.450	0.021	T	1.45	0.03	L	8.5981	0.0018	0.021	200		8.57	8.65					1								
105665	6.888	0.004	5.497	0.003		1.176	0.004	T	1.14	0.00	L	5.5439	0.0006	0.005	77		5.54	5.55		C			1								S
105666	7.569	0.006	7.423	0.008		0.125	0.005	G	0.14	0.01	H	7.4580	0.0009	0.009	117		7.44	7.47					1								S
105667	8.723	0.015	8.230	0.014		0.493	0.015	G	0.57	0.02	H	8.2797	0.0016	0.011	59		8.26	8.30		C			1 G								S
105668	5.816	0.003	5.516	0.004		0.297	0.005	G	0.34	0.01	H	5.5576	0.0006	0.005	80		5.55	5.57		C	21242−1253	I 1	1								S
105669	9.248	0.016	7.609	0.008		1.458	0.025	G	1.58	0.04	E	7.5816	0.0010	0.011	121		7.57	7.60					1								S
105670	9.054	0.013	8.903	0.015		0.120	0.015	G	0.13	0.01	H	8.9486	0.0012	0.014	130		8.92	8.98					1								
105671	8.907	0.009	8.554	0.009		0.335	0.012	T	0.39	0.02	L	8.6070	0.0016	0.022	228		8.57	8.64					1								S
105672	9.343	0.032	8.748	0.023	*	0.555	0.029	T	0.63	0.03	L *	9.2354	0.0025	0.030	76	*	9.20	9.34		R	21242−1948	I 1	2 C A		AB	84	2.576	0.008	0.56	0.03	S
105673	8.849	0.009	8.888	0.012		−0.031	0.014	T	−0.01	0.01	L	8.8806	0.0021	0.025	191		8.84	8.92					1 S								G
105674	8.205	0.010	7.960	0.011	*	0.229	0.015	T	0.25	0.02	L *	7.9773	0.0011	0.013	120	*	7.96	8.00		D	21243−2534	I 1	2 C A		AB	214	0.832	0.009	2.17	0.03	S
105675	10.044	0.022	8.791	0.014		1.063	0.021	T	1.03	0.02	L	8.8217	0.0022	0.023	109		8.78	8.87					1								
105676	8.608	0.008	7.871	0.006		0.675	0.008	T	0.73	0.01	L	7.9416	0.0011	0.014	193		7.92	7.96		C			1 G								S
105677	7.475	0.006	7.434	0.007		0.043	0.009	T	0.06	0.01	L	7.4597	0.0012	0.010	112		7.44	7.48		C			1								S
105678	10.014	0.029	6.703	0.006		2.607	0.022	T	2.67	0.02	L	6.2662	0.0226	0.226	162		6.05	6.72		U 2 C			1 S								S
105679						1.520	0.015	G	2.28	0.02	A	12.5382	0.0098	0.106	105		12.33	12.73		U			1								G
105680	8.941	0.014	8.834	0.017		0.281	0.015	G	0.32	0.02	H	8.8590	0.0023	0.020	95		8.83	8.89					1								
105681	9.681	0.013	8.587	0.009		0.945	0.012	T	0.94	0.01	L	8.6300	0.0015	0.022	218		8.60	8.67					1								
105682	10.111	0.031	9.307	0.024	*	0.730	0.015	G	0.78	0.01	H *	9.3573	0.0036	0.025	65	*	9.31	9.41		D	21243+0343	I 1	2 C A		AB	254	0.390	0.007	0.30	0.08	
105683	7.136	0.005	6.770	0.004		0.357	0.006	T	0.42	0.01	L	6.8107	0.0007	0.007	104		6.80	6.82		C			1								S
105684	8.640	0.013	8.696	0.017		−0.046	0.019	T	−0.02	0.02	L	8.6905	0.0013	0.014	79		8.66	8.71					1								
105685	6.585	0.003	6.334	0.004		0.235	0.005	T	0.26	0.01	L	6.3741	0.0008	0.006	109		6.36	6.38		C			1								S
105686						0.580	0.071	G	0.65	0.07	R	12.4114	0.0197	0.121	62		12.22	12.55		U			1 S								G
105687	9.544	0.017	9.189	0.019		0.337	0.024	T	0.39	0.03	L	9.2689	0.0021	0.021	117		9.23	9.30					1								
105688	6.950	0.003	6.750	0.004		0.191	0.005	T	0.21	0.01	L	6.7893	0.0005	0.008	142		6.78	6.80		C			1								S
105689	7.698	0.007	6.459	0.004		1.057	0.006	T	1.02	0.01	L	6.5144	0.0008	0.007	152		6.50	6.53					1								S
105690	9.429	0.017	8.932	0.016		0.467	0.021	T	0.54	0.02	L	8.9325	0.0025	0.128	119		8.90	9.24	4.93	P 1 A			1								
105691	7.866	0.008	7.758	0.011		0.105	0.013	T	0.12	0.01	L	7.8017	0.0010	0.012	113		7.78	7.82		C			1								S
105692	10.156	0.026	9.366	0.021	A	0.700	0.495	G	0.70	0.03	L *	9.2620	0.0023	0.022	102	*	9.22	9.29		D	21244−5435	I 1	2 C A		AB	353	3.505	0.010	1.86	0.06	
105693	10.208	0.022	10.148	0.032		0.045	0.005	G	0.06	0.00	H	10.2800	0.0030	0.037	189		10.20	10.34					1 S								G
105694	8.595	0.010	7.341	0.007		1.069	0.010	T	1.03	0.01	L	7.3907	0.0010	0.009	119		7.38	7.41		C			1								S
105695	6.902	0.005	6.375	0.005		0.474	0.002	G	0.55	0.00	H	6.4342	0.0009	0.008	93		6.42	6.45		C			1 G								S
105696	5.721	0.004	5.765	0.005	*	−0.036	0.005	T	−0.01	0.01	L *	5.7614	0.0010	0.006	60	*	5.75	5.77		D	21245−4100	I 1	2 C A		AB	234	0.301	0.005	0.64	0.05	S
105697	10.620	0.048	9.811	0.036		0.780	0.002	G	0.82	0.00	H	9.8278	0.0029	0.024	70		9.78	9.87		C			1								
105698	9.380	0.012	8.761	0.011		0.573	0.012	T	0.65	0.01	L	8.8119	0.0011	0.020	185		8.78	8.85					1								S
105699	8.115	0.010	7.600	0.011		0.493	0.011	T	0.57	0.01	L	7.6106	0.0063	0.082	116		7.55	7.80		U 2 C			1 S								S
105700	9.367	0.030	8.871	0.029	*	0.466	0.038	T	0.54	0.04	L *	9.5384	0.0023	0.025	143	*	9.47	9.57		D	21245+3015	I 1	2 C A		BA	311	1.512	0.010	0.13	0.03	

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
105701	21 24 31.07	+36 29 54.6	9.70		G	321.129 473 17	+36.498 498 96		2.56	0.20	−2.36	0.77	0.83	1.23	0.82	0.91	−22	+ 5	+ 5	−14	+17	− 7	+18	− 3	+21	−19	0	−0.11
105702	21 24 32.55	+32 57 24.8	8.09		H	321.135 609 68	+32.956 893 13		0.34	11.22	−2.51	0.61	0.52	0.89	0.67	0.51	−23	−13	+11	+21	+24	−15	+23	+17	+ 0	−25	0	1.34
105703	21 24 33.97	+26 10 28.4	5.67		H	321.141 556 70	+26.174 544 72		14.84	48.93	6.42	0.47	0.39	0.67	0.58	0.46	− 7	+ 0	+ 4	− 6	+14	−13	+14	− 5	− 1	+ 5	1	0.49
105704	21 24 34.04	+34 15 47.7	8.74		H	321.141 850 79	+34.263 246 38		0.55	16.76	6.95	0.50	0.64	0.98	0.56	0.67	−19	+ 3	+ 2	− 1	+16	−15	+15	+13	+10	−14	0	0.73
105705	21 24 35.97	−06 42 54.7	7.14		G	321.149 875 94	−06.715 185 92		10.65	−28.81	−54.17	0.81	0.72	0.94	1.17	0.80	+39	−13	− 4	− 2	−27	+24	−29	−46	+19	+34	0	1.99
105706	21 24 36.64	+53 21 48.4	8.25		G	321.152 668 96	+53.363 449 03		2.95	−20.26	−14.98	0.63	0.61	0.74	0.70	0.68	+ 8	− 6	− 2	− 6	+ 1	−10	− 1	− 4	+10	+24	0	−1.40
105707	21 24 36.71	+32 07 23.8	11.09		H	321.152 961 45	+32.123 271 61		23.06	−155.90	−118.88	1.51	1.37	2.48	1.96	1.50	−19	+ 0	+ 9	+24	+27	−24	+22	+15	+24	−36	0	1.29
105708	21 24 38.23	−61 11 14.2	7.96		H	321.159 280 03	−61.187 279 11		2.92	−4.64	−3.38	0.45	0.47	0.97	0.64	0.53	−21	−11	+ 4	−14	+18	+ 1	+15	+20	+ 1	−27	2	−1.48
105709	21 24 39.56	+44 17 30.6	8.05		H	321.164 835 97	+44.291 840 43		0.87	7.45	7.25	0.58	0.58	0.76	0.68	0.65	−11	+12	− 3	+ 7	+ 7	− 9	+ 9	− 1	+12	− 2	0	−1.28
105710	21 24 39.63	+14 28 34.9	7.60		H	321.165 140 36	+14.476 361 84		2.52	−12.77	−26.01	0.90	0.66	0.98	1.32	0.70	+10	+10	−14	+35	−24	+20	−14	− 9	+ 3	+14	0	0.33
105711	21 24 39.78	−34 58 03.0	7.07		H	321.165 754 60	−34.967 486 13		3.07	7.65	−21.35	0.84	0.76	1.26	1.10	0.58	+34	−27	−58	−20	−41	+62	−16	−38	+30	+29	0	0.71
105712	21 24 40.42	−68 13 41.7	6.98	1	H	321.168 418 80	−68.228 245 29	+	48.86	140.88	169.39	1.83	1.22	0.81	3.09	1.65	+54	+18	+17	−29	+ 8	−17	−22	+22	−14	+83	0	1.06
105713	H 21 24 40.46	+21 15 54.8	9.13		H	321.168 593 08	+21.265 233 48	A	4.56	−26.06	−8.69	1.31	1.69	2.24	1.67	2.06	+17	− 5	−57	−28	+14	−18	+ 1	−60	+55	+13	0	0.31
105714	21 24 40.91	−47 39 46.4	10.23		G	321.170 443 08	−47.662 898 27		2.76	27.25	−19.72	1.35	1.11	1.87	1.56	1.16	+25	−23	−27	− 5	−15	+26	− 5	−20	− 4	+27	0	1.64
105715	H 21 24 41.47	−04 20 26.9	8.22		G	321.172 807 40	−04.340 804 33	*	6.06	7.09	−70.37	0.87	0.70	1.11	1.11	0.79	+21	− 2	−17	−18	+ 1	+37	+ 5	−36	+38	+40	0	1.96
105716	21 24 41.51	−48 09 44.3	9.86		G	321.172 961 37	−48.162 300 34		5.53	−7.11	9.05	1.23	0.98	1.60	1.52	1.00	+29	− 4	−12	−23	−14	+12	−13	−33	− 3	+32	0	−0.58
105717	21 24 42.80	−05 34 52.4	7.21		H	321.178 352 27	−05.581 210 49		5.92	29.51	−39.78	0.91	0.66	1.00	1.11	0.79	+19	+ 0	−11	−32	−11	+32	− 8	−34	+ 7	+30	0	1.36
105718	21 24 45.44	+36 29 10.1	9.05		G	321.189 324 47	+36.486 139 73		3.73	1.42	−8.67	0.78	0.84	1.25	0.81	0.79	−28	+ 0	+ 7	−21	+15	− 5	+14	−14	+16	−20	0	−0.80
105719	21 24 45.81	−57 15 25.4	7.18		H	321.190 871 05	−57.257 063 09		3.93	36.72	−48.28	0.62	0.57	0.87	0.72	0.61	+ 9	−26	−17	−32	+ 5	+ 9	+14	+16	+ 3	−17	0	1.95
*105720	21 24 46.68	−80 52 17.2	9.56		H	321.194 501 03	−80.871 432 12		4.06	45.32	28.73	0.88	0.84	1.08	1.02	0.93	−12	−22	− 3	+ 5	− 7	+ 1	− 9	+ 7	+11	−14	1	1.25
*105721	21 24 46.54	−41 59 45.2	8.32		H	321.193 901 04	−41.995 899 55		4.15	16.75	−9.76	0.96	0.62	1.10	1.03	0.65	+51	−26	−10	−23	−24	+11	−23	−14	+10	+42	0	0.54
105722	21 24 47.21	+49 23 30.6	8.02		G	321.196 700 47	+49.391 825 07		4.84	−11.88	−19.53	0.59	0.52	0.68	0.84	0.63	− 3	− 8	− 6	−25	− 7	+ 1	− 1	+10	+ 1	−18	0	−0.52
105723	21 24 47.66	−27 03 14.7	9.62		G	321.198 568 38	−27.054 091 67		11.13	8.68	80.89	1.26	0.72	1.53	1.47	0.67	+53	+ 1	− 1	−19	−31	+46	−29	− 6	+ 6	+41	0	1.71
105724	21 24 48.09	+25 52 49.7	7.07		H	321.200 390 27	+25.880 464 55		5.27	14.21	−1.97	0.52	0.42	0.73	0.70	0.50	− 9	+ 0	+ 6	− 1	+17	− 6	+14	+10	− 2	+ 8	0	−0.34
105725	21 24 48.47	+39 02 24.4	8.25		H	321.201 947 36	+39.040 106 22		2.19	3.93	1.23	0.59	0.66	0.94	0.63	0.67	−13	+ 6	+16	+ 4	− 2	− 1	− 2	− 8	+17	−26	0	−0.51
105726	21 24 49.18	+26 37 50.3	8.44		H	321.204 900 63	+26.630 627 98		4.98	−4.20	−31.00	0.68	0.59	1.10	0.85	0.75	+ 5	− 2	+ 5	+21	+10	−32	+14	+13	−16	+24	1	−1.38
105727	21 24 49.40	+80 31 29.5	5.97		H	321.205 837 22	+80.524 853 97		9.18	42.61	−11.38	0.43	0.40	0.46	0.50	0.40	−12	−12	+21	+ 4	+12	+ 5	+ 9	− 7	+ 5	−11	0	0.04
105728	21 24 50.88	−52 43 37.8	8.90		H	321.211 983 15	−52.727 163 65		0.99	22.24	−6.23	0.94	0.70	1.32	1.14	0.60	− 4	+18	−12	+ 7	+25	−12	+16	+ 4	+ 3	−20	0	−0.08
105729	21 24 51.68	−03 23 53.6	6.38		H	321.215 328 53	−03.398 235 10		14.03	−6.64	−50.25	0.99	0.58	0.89	1.08	0.63	−22	− 1	−19	−59	+32	+16	+28	−42	+39	+ 3	0	−0.25
105730	21 24 52.29	−61 57 30.5	11.06		H	321.217 884 76	−61.958 484 77		−1.91	−82.58	−146.85	1.03	1.23	2.40	1.21	1.40	−13	− 4	− 9	+45	− 1	+ 4	− 1	+33	− 9	−18	0	2.97
105731	21 24 54.02	−31 54 47.7	9.61		H	321.225 086 90	−31.913 241 19		5.39	24.58	11.47	1.24	0.96	1.44	1.46	0.86	+30	− 6	−14	−15	−17	+30	−14	−32	+12	+31	0	−1.24
105732	H 21 24 54.98	+57 33 46.3	9.44		H	321.229 073 68	+57.562 856 32	A	1.94	17.78	17.92	1.66	1.70	1.69	1.50	1.41	+14	+18	+13	−20	− 3	−27	+ 1	−17	+ 8	+30	0	−0.41
105733	21 24 55.45	+49 19 23.4	6.57		H	321.231 060 31	+49.323 157 97		5.73	−18.21	−12.15	0.48	0.43	0.55	0.65	0.47	−14	−14	− 4	−24	− 2	+ 5	+ 1	− 7	+ 6	−25	0	−0.57
105734	21 24 56.53	−08 10 46.3	7.78		H	321.235 549 04	−08.179 528 07		11.28	115.31	120.57	1.37	0.83	1.24	1.53	1.26	+33	−42	− 1	−28	−43	+36	−37	−59	+13	+51	0	1.67
105735	21 24 56.83	−18 57 07.7	9.00		H	321.236 790 87	−18.952 144 80		4.90	−18.20	12.24	1.45	0.72	1.42	1.82	0.73	− 4	− 6	−23	+33	−40	+32	−31	+10	+ 5	+ 0	0	−0.36
105736	21 24 58.16	−49 35 36.9	9.53		H	321.242 332 02	−49.593 585 00		0.02	17.71	−1.09	1.08	1.11	1.45	1.26	1.03	+44	−23	−26	− 3	−24	+12	−30	−46	+16	+23	0	−0.80
105737	21 24 59.29	−37 15 50.8	10.37		H	321.247 055 62	−37.264 119 07		5.10	1.08	−64.02	1.79	1.56	2.01	2.01	1.33	+38	−11	−30	−17	−32	+26	−28	−48	− 1	+25	0	−0.11
105738	21 24 59.75	+27 25 04.8	6.99		H	321.248 969 83	+27.418 009 95		3.30	4.12	−4.11	0.50	0.43	0.75	0.59	0.49	+ 2	+11	+ 5	+14	+ 4	−23	+ 7	− 1	+ 2	+11	0	−0.57
105739	21 25 00.36	+33 41 15.1	8.38	2	T	321.251 495 10	+33.687 540 76		5.44	−2.19	−23.32	0.48	0.61	0.95	0.57	0.62	−18	+ 0	− 4	+12	+18	−11	+14	+22	+ 0	−16	0	1.30
105740	21 25 01.76	−23 19 06.7	9.92		G	321.257 336 16	−23.318 526 49		20.71	119.37	−153.15	1.46	0.85	1.61	1.67	0.83	+34	− 9	−12	−29	−31	+39	−28	−14	+ 7	+31	0	−1.94
105741	21 25 02.44	+44 27 06.4	8.88	2	H	321.260 182 98	+44.451 778 28		0.96	−0.74	−2.70	0.76	0.69	0.95	0.88	0.78	−22	+29	−13	+ 8	+13	−10	+21	−20	+26	− 8	1	−0.28
105742	21 25 02.61	−67 37 23.9	8.76		H	321.260 864 26	−67.623 307 79		11.45	−24.87	−37.60	0.64	0.79	1.10	0.69	0.89	−22	− 5	−16	− 6	+ 7	+ 3	+ 9	+13	− 4	−28	2	0.06
105743	21 25 04.09	+09 22 49.9	9.29		H	321.267 045 71	+09.380 534 17	C	6.53	22.09	4.95	9.82	10.85	1.50	1.62	1.15	+43	+ 3	+ 2	+ 1	+ 1	+16	− 2	− 1	+18	+46	5	4.09
105744	21 25 04.24	+13 11 59.4	8.61		H	321.267 685 14	+13.199 836 27		7.36	87.27	33.60	1.01	0.79	1.15	1.31	0.95	+17	+ 0	−13	−16	−23	− 4	−21	−27	+ 0	+35	2	−1.03
105745	21 25 04.86	+44 04 28.7	9.96		H	321.270 244 74	+44.074 652 35		4.37	−38.89	−34.15	1.05	0.92	1.42	1.19	1.04	−14	+21	− 4	+20	+ 2	−16	+ 8	−13	+35	−19	0	−0.46
105746	21 25 04.90	−76 31 32.9	7.96		H	321.270 399 14	−76.525 806 21		9.85	59.20	−18.48	0.61	0.59	0.80	0.75	0.62	−11	− 4	−15	+ 8	+10	+ 3	+ 9	− 1	− 2	−16	1	0.00
105747	H 21 25 05.66	+09 23 02.6	7.43		H	321.273 598 50	+09.384 054 40	*	6.53	22.09	4.95	5.79	13.17	1.50	1.62	1.15	+78	+ 3	+ 2	+ 5	+ 1	+16	− 3	− 1	+18	+46	5	4.09
105748	21 25 06.60	−45 00 55.7	8.63		H	321.277 511 90	−45.015 461 69		1.28	0.94	−42.15	0.85	0.73	1.27	0.91	0.69	+46	−36	−35	−20	−12	+20	−12	−27	+19	+49	0	0.86
105749	H 21 25 06.96	+52 28 30.6	8.49		H	321.279 011 63	+52.475 161 48	A	5.78	53.30	−11.81	0.98	0.95	1.04	1.01	0.89	− 7	−15	+ 9	− 7	+ 2	+ 8	+ 4	−11	− 3	+10	1	−0.97
105750	21 25 07.09	−01 59 19.0	7.95		H	321.279 550 52	−01.988 624 94		3.39	23.49	−10.12	0.96	0.69	1.12	1.09	0.80	+ 4	+ 5	−46	−33	+15	+ 5	+17	−21	+31	+23	2	0.10
105751	21 25 07.16	+60 17 32.4	8.89		H	321.279 825 41	+60.292 320 88		2.01	6.30	−1.78	0.69	0.73	0.85	0.67	0.71	− 3	+10	+21	+ 7	+22	+ 8	+25	−11	+10	+15	0	1.31
105752	21 25 07.24	+55 21 05.4	8.31		H	321.280 158 68	+55.351 511 06		2.12	−14.52	0.75	0.64	0.67	0.78	0.81	0.80	+ 0	− 6	− 2	+ 3	− 4	−14	− 4	− 5	+ 7	+ 8	6	−0.34
105753	H 21 25 09.47	+18 27 45.5	7.74		G	321.289 475 19	+18.462 629 95	A	5.33	8.41	−4.74	1.09	1.10	1.31	1.35	1.14	+40	−11	−21	+ 1	− 7	−15	−16	−47	+13	+15	0	0.22
105754	21 25 10.49	−16 24 07.7	9.36		H	321.293 697 78	−16.402 141 44		3.12	−21.08	−2.06	1.28	0.87	1.48	1.70	0.99	+30	+ 9	− 6	+ 4	−17	+29	−14	+10	+ 7	+41	4	0.43
105755	21 25 10.54	−55 25 54.7	8.99		H	321.293 911 79	−55.431 858 73		2.36	−4.11	−17.91	1.01	0.84	1.29	1.25	0.82	+19	−19	−14	+26	+15	− 3	+12	+ 0	−12	+ 7	0	0.89
105756	21 25 11.11	−00 15 08.8	9.44		H	321.296 273 32	−00.252 453 25		0.91	2.57	−2.85	1.16	0.95	1.39	1.53	1.30	+30	−16	−26	−26	− 1	+31	+ 1	−21	+32	+54	0	1.05
105757	21 25 11.32	−26 06 16.7	9.04		H	321.297 156 22	−26.104 631 74		0.61	−5.97	2.70	1.06	0.61	1.23	1.20	0.63	+44	−21	+ 0	−15	−20	+31	−20	+10	+15	+42	4	1.49
105758	21 25 12.26	+58 10 00.6	8.16		H	321.301 074 57	+58.166 821 07		2.91	20.54	7.34	0.63	0.67	0.79	0.64	0.69	− 6	+15	+ 9	− 7	+10	− 6	+14	−11	+18	+11	0	0.82
105759	21 25 12.80	−13 29 36.7	8.16		H	321.303 337 36	−13.493 537 99		4.14	17.88	5.21	0.93	0.61	1.02	1.47	0.70	+13	+ 2	−24	+14	−39	+30	−26	+12	− 1	+26	0	0.82
105760	21 25 12.90	+16 00 05.5	9.14		H	321.303 770 02	+16.001 532 80		11.72	−5.06	−34.71	1.13	0.89	1.30	1.60	0.90	+20	−16	−14	+ 8	−20	− 2	−14	−28	+ 0	+23	0	0.93
105761	21 25 13.02	−09 44 53.3	5.71		H	321.304 238 75	−09.748 140 11		11.82	16.65	−169.45	1.79	0.62	1.08	1.76	0.78	−29	− 3	−26	+52	−38	+50	− 9	−10	+23	+10	3	−0.99
105762	21 25 13.71	+41 04 37.3	8.13		G	321.307 139 11	+41.077 029 18		5.91	30.64	26.53	0.56	0.59	0.86	0.59	0.65	−23	− 2	+ 6	− 3	− 2	−11	− 3	− 5	+28	−31	2	0.13
105763	21 25 15.10	+42 10 05.5	9.34		H	321.312 918 00	+42.168 190 20		4.34	52.07	22.71	0.78	0.77	1.11	0.97	0.87	−19	−13	+13	+ 7	− 4	− 3	− 7	− 2	+16	−35	1	1.09
105764	21 25 15.75	−34 51 23.6	6.92		H	321.315 611 53	−34.856 557 94		11.51	13.74	−71.09	0.87	0.75	1.19	0.89	0.52	+49	−50	−62	−31	−34	+50	−21	−42	+32	+33	0	1.35
105765	21 25 16.09	+24 29 29.4	7.84		H	321.317 023 57	+24.491 495 70		4.13	−4.81	−1.98	0.57	0.48	0.86	0.62	0.56	− 5	+13	−12	− 6	+13	−13	+10	+ 9	− 3	+18	0	−1.40
105766	21 25 16.73	+70 28 38.8	7.26		G	321.319 692 71	+70.477 443 96		38.86	41.22	39.59	0.56	0.53	0.58	0.64	0.55	−16	+ 0	− 4	−14	+14	− 1	+13	−28	+20	−17	0	0.35
105767	21 25 16.96	−03 33 23.7	5.48		H	321.320 687 20	−03.556 577 86		7.99	−12.39	−69.77	0.77	0.52	0.84	0.86	0.56	− 2	−20	−20	−44	+18	+33	+15	−36	+38	+19	0	0.14
105768	21 25 18.01	−71 47 56.7	6.09		H	321.325 053 14	−71.799 072 57		6.14	17.40	4.88	0.41	0.45	0.62	0.49	0.55	−19	− 6	−18	+ 1	+ 6	−13	+ 5	+10	− 4	−20	0	−0.63
105769	21 25 19.39	+46 42 51.2	5.59	1	H	321.330 784 55	+46.714 224 33		29.14	188.61	48.20	0.40	0.39	0.50	0.48	0.43	−14	+ 8	+ 9	+15	− 2	+10	− 6	− 8	−12	−24	0	0.19
105770	H 21 25 19.98	+29 27 42.1	7.27		H	321.333 262 69	+29.461 706 29	A	2.77	11.68	−0.55	2.66	1.66	0.95	0.88	0.71	− 7	+11	− 8	+ 6	+10	−10	+11	− 6	+10	+ 5	2	0.29
105771	21 25 20.37	+46 03 24.8	7.64		H	321.334 871 72	+46.056 883 19		5.05	19.78	−3.37	0.63	0.57	0.77	0.85	0.64	− 3	+19	− 4	+41	+10	+26	+ 9	+ 4	+11	− 6	0	−2.07
105772	21 25 20.44	−24 03 35.4	8.19		H	321.335 172 87	−24.059 833 98		5.36	4.00	5.63	0.99	0.59	1.13	1.19	0.53	+37	−12	−15	−16	−31	+37	−25	−17	+23	+30	0	0.52
105773	21 25 20.71	+34 44 38.2	7.95		H	321.336 299 08	+34.743 937 04		17.47	38.31	13.36	0.45	0.57	0.84	0.50	0.60	−25	−10	+12	− 9	+20	− 4	+16	+20	− 9	−10	1	−0.40
105774	21 25 20.74	+04 56 34.2	9.69		H	321.336 400 74	+04.942 834 45		9.38	50.74	6.65	1.58	1.06	1.72	2.61	1.36	+35	+11	− 6	+ 5	−23	+14	−13	− 8	− 2	+64	0	1.37
105775	21 25 21.64	+42 47 03.1	7.55		H	321.340 161 32	+42.784 202 91		0.72	−0.25	−3.38	0.58	0.51	0.79	0.70	0.58	−18	+ 0	+ 8	+ 0	+10	−15	+10	+ 0	+25	−23	1	0.95
105776	21 25 22.46	+25 52 28.4	9.99		H	321.343 598 31	+25.874 548 90		0.08	−2.35	−7.73	0.91	0.70	1.25	1.33	0.88	−14	+ 6	−15	−20	+26	−15	+18	+ 9	− 5	+ 1	0	−0.57
105777	21 25 23.14	+51 07 57.8	7.80		G	321.346 397 86	+51.132 724 35		3.43	−11.88	−19.59	0.55	0.53	0.65	0.62	0.56	− 9	− 1	+ 5	+12	+ 1	− 1	+ 1	− 5	− 6	−13	0	−0.56
105778	21 25 23.27	−65 16 23.0	8.55		H	321.346 939 25	−65.273 043 88		2.68	26.20	−18.57	0.59	0.67	1.12	0.69	0.85	−33	− 2	− 5	+ 0	−16	−11	−14	+18	+ 8	−52	0	0.95
105779	21 25 23.46	−45 09 42.7	6.83		H	321.347 733 22	−45.161 866 26		6.57	18.14	−15.69	0.62	0.55	0.92	0.71	0.51	+43	−31	−38	−10	− 6	+21	− 5	−24	+20	+46	0	1.42
105780	21 25 24.24	−58 56 16.7	8.18		H	321.351 014 40	−58.937 967 65		−0.27	24.50	−3.62	0.71	0.66	1.06	0.97	0.74	+ 3	−17	−18	− 7	+20	− 8	+19	+34	− 9	− 3	0	2.21
105781	21 25 24.33	−72 35 43.2	7.32		H	321.351 368 59	−72.595 337 20		4.86	−13.78	−30.37	0.56	0.54	0.75	0.69	0.65	−17	−11	− 5	−27	− 3	− 4	+ 1	+ 0	+ 4	−36	0	−0.39
105782	21 25 24.90	−14 16 38.4	6.85		G	321.353 763 01	−14.277 339 20		1.80	12.92	−1.11	0.79	0.50	0.88	1.05	0.56	+28	−29	−24	+ 5	−36	+26	−27	+ 4	+ 9	+33	0	0.31
105783	21 25 26.37	+17 46 08.9	9.22		H	321.359 879 63	+17.769 138 13		6.26	4.47	−4.19	1.26	1.00	1.33	1.66	1.13	−15	−15	−22	−29	+17	+13	+17	−49	+18	−12	0	0.93
105784	21 25 26.93	+11 20 46.0	8.24		H	321.362 195 79	+11.346 100 25		3.43	−1.49	−22.00	1.92	1.50	2.24	2.60	1.61	+25	− 6	−12	− 4	−14	+ 7	−12	−26	+12	+29	0	
105785	21 25 27.73	+09 37 48.9	8.17		H	321.365 534 39	+09.630 261 82		2.68	2.27	−3.58	0.89	0.76	1.10	1.07	0.80	+37	− 8	−10	− 2	− 5	+33	− 4	− 1	+25	+48	0	−0.43
105786	21 25 27.95	−45 48 14.9	8.30		H	321.366 473 65	−45.804 140 36		5.25	36.76	−15.96	0.83	0.78	1.22	0.94	0.68	+54	−42	−52	+ 0	+ 0	+ 5	+ 3	−14	+ 1	+54	0	0.88
105787	21 25 28.05	+39 26 39.6	8.72		H	321.366 895 21	+39.444 334 54		9.33	52.27	16.33	0.61	0.69	0.96	0.61	0.70	− 9	+13	+ 8	+ 5	+ 1	− 1	+ 3	− 4	+19	−18	2	−2.04
105788	21 25 28.34	−41 42 07.4	7.57	3	H	321.368 091 39	−41.702 046 76		3.28	21.20	1.58	0.89	0.68	1.00	1.06	0.69	+39	+ 4	− 4	−28	−12	+15	−10	−12	+ 8	+29	0	−0.89
105789	21 25 28.76	−23 34 52.1	8.50		G	321.369 825 96	−23.581 129 90		13.08	−130.95	−170.89	0.99	0.61	1.14	1.12	0.59	+39	− 3	− 3	−24	−28	+37	−26	−10	+13	+35	0	−0.06
105790	21 25 29.05	−69 15 55.6	8.95		G	321.371 022 88	−69.265 447 72		9.88	2.20	−227.11	0.75	0.87	1.23	0.82	1.09	−21	−17	+ 1	− 8	+ 7	− 9	− 4	+ 2	− 9	+35	0	0.52
105791	21 25 29.10	+27 12 39.9	8.28		H	321.371 247 58	+27.211 082 72		35.83	−149.21	−164.88	0.70	0.59	1.06	0.86	0.75	+ 0	−14	+ 6	+26	+11	−32	+17	+17	−20	+26	1	0.73
105792	H 21 25 30.78	+02 02 35.0	7.53		H	321.378 235 30	+02.043 058 31	*	5.36	7.23	−17.99	4.35	18.49	1.29	1.63	1.06	−87	+ 6	−10	+ 2	+ 6	+19	+ 9	− 7	+35	+36	9	−0.62
105793	21 25 32.30	+11 39 01.7	7.64		G	321.384 577 87	+11.650 482 22		11.33	80.69	5.75	0.79	0.63	0.91	1.06	0.67	+17	−15	−27	+17	−26	+20	−16	−16	+ 1	+20	0	2.70
105794	21 25 32.58	+58 17 19.2	10.25		H	321.385 730 70	+58.288 664 74		3.03	−3.47	−6.57	1.05	1.14	1.33	1.10	1.15	− 3	+ 9	+28	+ 2	+20	+11	+20	− 8	+ 5	+17	0	−1.50
105795	21 25 32.74	+54 29 24.6	8.80		H	321.386 397 49	+54.490 161 19		1.97	4.64	1.99	0.69	0.61	0.76	0.73	0.65	+ 0	+ 9	+ 8	+14	+ 9	−15	+14	+ 4	+10	+14	0	−0.30
105796	21 25 33.09	−43 00 28.1	10.83		G	321.387 879 51	−43.007 814 91		3.44	−100.69	−17.82	1.30	1.12	1.85	1.36	1.20	+61	−26	−13	−41	−24	+24	−24	−26	+14	+60	0	−1.32
105797	21 25 33.47	−00 59 06.7	8.82		H	321.389 456 82	−00.985 207 49		4.08	4.07	11.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
105701	9.622	0.015	9.649	0.021		0.012	0.032	G	0.03	0.03	H	9.6894	0.0021	0.028	192		9.63	9.74					1							D
105702	10.104	0.021	8.258	0.008		1.535	0.018	T	1.58	0.04	L	8.2041	0.0013	0.015	196		8.18	8.23		C			1							
105703	6.048	0.003	5.708	0.002		0.323	0.003	T	0.37	0.00	L	5.7469	0.0006	0.006	142		5.74	5.76		C			1							S
105704	8.957	0.010	8.782	0.012		0.168	0.015	T	0.18	0.01	L	8.8019	0.0013	0.018	214		8.77	8.83					1							
105705	7.550	0.008	7.189	0.011		0.342	0.013	T	0.40	0.02	L	7.2193	0.0011	0.006	58		7.20	7.23					1							S
105706	8.644	0.012	8.261	0.012		0.347	0.014	G	0.41	0.02	H	8.3371	0.0017	0.018	120		8.31	8.37					1							
105707											T	11.2321	0.0041	0.049	184		11.14	11.30					1	S						G
105708	9.297	0.009	8.076	0.006		1.043	0.008	T	1.01	0.01	L	8.1286	0.0009	0.015	276		8.10	8.15		C			1							S
105709	9.557	0.015	8.170	0.009		1.200	0.015	G	1.16	0.01	H	8.2090	0.0016	0.012	137		8.19	8.24					1							
105710	9.026	0.015	7.720	0.009		1.110	0.014	T	1.07	0.01	L	7.7731	0.0017	0.013	72		7.75	7.80		C			1							S
105711	8.553	0.013	7.203	0.008		1.144	0.012	T	1.11	0.01	L	7.2419	0.0013	0.008	64		7.23	7.26		C	21247−3458	I 1	1							S
105712	7.879	0.006	7.065	0.005		0.723	0.008	G	0.77	0.01	H	7.1203	0.0017	0.018	185		7.09	7.15		U 2			1 O							S
105713	9.730	0.019	9.196	0.018	A	0.600	0.495	G	0.50	0.05	L *	9.2228	0.0016	0.018	139	*	9.19	9.25		C	21247+2116	I 1	2 C A	AB	106	2.076	0.020	2.95	0.11	
105714	10.804	0.045	10.282	0.045		0.530	0.020	G	0.60	0.02	H	10.3574	0.0042	0.031	102		10.31	10.40					1							
105715	8.934	0.014	8.290	0.012	*	0.599	0.015	G	0.67	0.01	H *	8.3361	0.0016	0.013	84	*	8.31	8.36		C	21247−0420	H 1	2 C S B	AB	2	0.123	0.011	0.74	0.73	S
105716	10.025	0.023	9.849	0.029		0.182	0.005	G	0.20	0.01	H	9.9207	0.0029	0.029	100		9.87	9.96					1							
105717	8.652	0.016	7.327	0.010		1.125	0.015	T	1.09	0.02	L	7.3767	0.0020	0.009	51		7.36	7.39					1							S
105718	10.437	0.025	9.177	0.015		1.085	0.025	G	1.05	0.02	H	9.2174	0.0023	0.026	193		9.18	9.27					1							G
105719	7.448	0.006	7.217	0.006		0.238	0.003	G	0.27	0.00	H	7.2491	0.0013	0.010	110		7.23	7.26		C			1							S
105720	10.278	0.023	9.621	0.020		0.600	0.023	T	0.67	0.02	L	9.6932	0.0025	0.028	146		9.65	9.74					1 S							
105721	8.903	0.013	8.371	0.012		0.503	0.015	G	0.58	0.02	H	8.4359	0.0016	0.015	119		8.42	8.46					1							S
105722	8.154	0.008	8.036	0.010		0.097	0.006	G	0.11	0.01	H	8.0597	0.0012	0.011	135		8.04	8.08					1							
105723	10.631	0.034	9.761	0.024		0.750	0.020	G	0.79	0.02	H	9.7696	0.0018	0.016	130		9.74	9.80					1							
105724	7.113	0.004	7.065	0.005		0.049	0.006	T	0.06	0.01	L	7.0925	0.0009	0.008	158		7.08	7.11		C			1							S
105725	10.072	0.018	8.390	0.008		1.405	0.016	T	1.38	0.02	L	8.3981	0.0017	0.019	162		8.36	8.43					1							
105726	10.064	0.023	8.598	0.012		1.235	0.020	T	1.19	0.02	L	8.6059	0.0016	0.018	142		8.57	8.63					1							
105727	7.170	0.005	6.069	0.003		0.950	0.005	T	0.94	0.00	L	6.1296	0.0007	0.006	127		6.12	6.14					1							S
105728	10.849	0.049	9.052	0.018		1.496	0.041	T	1.52	0.06	L	9.0204	0.0024	0.027	112		8.98	9.07					1							
105729	6.783	0.006	6.422	0.006		0.334	0.002	G	0.39	0.00	H	6.4613	0.0014	0.008	77		6.45	6.47					1							S
105730	11.758	0.072	11.136	0.068		0.579	0.086	T	0.65	0.08	L	11.1871	0.0039	0.052	264		11.09	11.28					1							G
105731	9.986	0.031	9.641	0.034		0.334	0.041	T	0.39	0.06	L	9.6864	0.0036	0.023	63		9.64	9.73		C			1							
105732	9.873	0.024	9.466	0.025	*	0.385	0.032	T	0.45	0.04	L *	9.5227	0.0022	0.017	102	*	9.49	9.55		D	21249+5734	I 1	2 C A	AB	220	0.520	0.007	1.42	0.03	G
105733	6.565	0.004	6.567	0.005		0.003	0.006	T	0.02	0.01	L	6.5767	0.0006	0.006	134		6.57	6.59			21249+4919	I 1	1							S
105734	8.442	0.016	7.829	0.012		0.558	0.015	G	0.63	0.01	H	7.8958	0.0018	0.009	56		7.88	7.92		C			1 G							S
105735	9.459	0.021	9.055	0.022		0.395	0.025	T	0.46	0.03	L	9.0890	0.0032	0.020	65		9.06	9.13					1							S
105736	11.131	0.057	9.665	0.025		1.235	0.049	T	1.19	0.05	L	9.6996	0.0025	0.022	98		9.66	9.73		C			1							
105737	11.374	0.093	10.511	0.075		0.772	0.090	T	0.81	0.06	L	10.5218	0.0026	0.024	56		10.48	10.57		D			1							
105738	6.889	0.005	6.978	0.005		−0.082	0.004	G	−0.06	0.01	H	6.9727	0.0008	0.010	138		6.96	6.99					1							S
105739	8.894	0.008	8.427	0.008		0.453	0.009	T	0.52	0.01	L	8.4671	0.0151	0.149	237		8.33	8.70	0.79	P 1 A			1							
105740	11.242	0.078	10.080	0.042		0.989	0.017	G	1.03	0.01	I	10.0627	0.0025	0.025	90		10.02	10.10					1							
105741	9.449	0.017	8.952	0.016		0.544	0.005	G	0.62	0.01	H	9.0025	0.0031	0.027	122		8.96	9.04		U 2			1							
105742	9.452	0.012	8.815	0.011		0.586	0.012	T	0.66	0.01	L	8.8901	0.0018	0.021	193		8.85	8.93		C			1							
105743	9.716	0.026	9.301	0.027	C	0.361	0.072	G	0.42	0.08	R	9.3760	0.0261	0.212	77	−	8.85	9.56		D	21251+0923	I 2	1 C F B							G
105744	9.361	0.021	8.690	0.018		0.621	0.023	T	0.69	0.02	L	8.7436	0.0016	0.015	77		8.72	8.76		C			1							
105745	10.595	0.033	10.071	0.034		0.540	0.000	G	0.61	0.00	H	10.0790	0.0030	0.035	140		10.02	10.15					1							G
105746	8.406	0.008	8.006	0.008		0.398	0.015	G	0.46	0.02	H	8.0541	0.0014	0.013	122		8.03	8.08		C			1							S
105747	7.621	0.006	7.432	0.008	*	0.000	0.495	G	0.14	0.02	L *	7.4787	0.0022	0.013	82	−	7.44	7.50		D	21251+0923	I 2	2 C P B	AB	201	0.140	0.008	0.13	0.79	S G
105748	10.342	0.028	8.783	0.014		1.308	0.025	T	1.27	0.03	L	8.7866	0.0017	0.014	125		8.76	8.81		C			1							
105749	9.250	0.016	8.563	0.014	*	0.635	0.017	T	0.70	0.01	L *	8.6194	0.0017	0.015	122	*	8.60	8.64		C	21251+5229	I 1	2 C A	AB	324	0.854	0.022	3.22	0.10	
105750	8.120	0.012	7.975	0.015		0.136	0.015	G	0.15	0.01	H	7.9998	0.0017	0.013	60		7.98	8.02		C			1							S
105751	10.383	0.031	9.033	0.017		1.144	0.028	T	1.11	0.03	L	9.0621	0.0019	0.017	102		9.03	9.09					1							
105752	9.716	0.020	8.438	0.013		1.088	0.019	T	1.05	0.02	L	8.4771	0.0017	0.014	110		8.45	8.50					1							
105753	7.785	0.008	7.734	0.010	*	0.040	0.015	G	0.06	0.01	H *	7.7519	0.0012	0.012	94	*	7.73	7.77		D	21252+1828	I 1	2 C A	AB	235	0.603	0.010	2.29	0.04	S
105754	9.609	0.023	9.364	0.026		0.229	0.035	T	0.25	0.04	L	9.4263	0.0027	0.020	79		9.38	9.45					1							
105755	10.693	0.045	9.161	0.021		1.287	0.039	T	1.25	0.04	L	9.1461	0.0024	0.020	94		9.12	9.18					1							
105756	9.543	0.024	9.458	0.031		0.083	0.037	T	0.10	0.04	L	9.4750	0.0019	0.017	63		9.44	9.50		C			1 S							
105757	11.139	0.053	9.236	0.018		1.580	0.044	T	1.60	0.04	L	9.1612	0.0021	0.019	111		9.12	9.19					1 S							
105758	9.781	0.020	8.293	0.011		1.252	0.018	T	1.21	0.02	L	8.3182	0.0019	0.016	112		8.29	8.35		C			1							
105759	8.665	0.013	8.233	0.013		0.422	0.015	T	0.49	0.02	L	8.2549	0.0012	0.010	87		8.24	8.28					1							S
105760	9.911	0.028	9.234	0.025		0.626	0.031	T	0.69	0.03	L	9.2767	0.0018	0.022	76		9.24	9.31		C			1							
105761	5.965	0.005	5.740	0.005		0.208	0.004	G	0.23	0.01	H	5.7775	0.0010	0.005	52		5.77	5.79		C			1 G							S
105762	8.626	0.009	8.169	0.009		0.438	0.015	G	0.51	0.02	H	8.2253	0.0012	0.013	150		8.20	8.25					1							
105763	10.085	0.025	9.412	0.023		0.623	0.028	T	0.69	0.03	L	9.4738	0.0021	0.021	127		9.43	9.51		C			1							
105764	7.501	0.009	6.970	0.008		0.506	0.009	T	0.58	0.01	L	7.0302	0.0008	0.006	69		7.02	7.04		C			1							S
105765	8.071	0.007	7.851	0.010		0.210	0.011	T	0.23	0.01	L	7.9017	0.0009	0.008	134		7.89	7.92					1							S
105766	7.997	0.011	7.359	0.008		0.619	0.015	G	0.69	0.01	H	7.3988	0.0008	0.008	110		7.38	7.42		C			1							S
105767	7.405	0.007	5.649	0.004		1.451	0.011	G	1.45	0.02	H	5.6151	0.0013	0.008	75		5.60	5.63					1							S
105768	7.749	0.007	6.230	0.003		1.265	0.005	G	1.22	0.01	H	6.2492	0.0009	0.008	155		6.24	6.27			21253−7148	I 1	1							S
105769	5.978	0.003	5.632	0.003		0.335	0.004	T	0.39	0.01	L	5.6710	0.0007	0.008	134		5.65	5.69		M			1							S
105770	7.886	0.007	7.348	0.007	*	0.504	0.009	T	0.58	0.01	L *	7.3834	0.0009	0.010	121	*	7.36	7.40		D	21253+2928	I 1	2 C A	AB	274	0.323	0.004	1.14	0.06	S
105771	8.910	0.013	7.742	0.008		1.002	0.012	T	0.98	0.01	L	7.8036	0.0012	0.014	129		7.78	7.82		C			1							
105772	9.305	0.015	8.286	0.011		0.888	0.014	T	0.89	0.01	L	8.3501	0.0022	0.015	96		8.33	8.37					1							
105773	8.468	0.007	7.991	0.007		0.449	0.009	T	0.52	0.01	L	8.0553	0.0011	0.015	222		8.03	8.08					1							S
105774	10.305	0.043	9.740	0.041		0.529	0.053	T	0.60	0.06	L	9.8048	0.0037	0.022	65		9.76	9.85					1							
105775	8.166	0.009	7.616	0.008		0.515	0.011	T	0.59	0.01	L	7.6668	0.0013	0.013	132		7.64	7.69					1							S
105776	9.874	0.019	9.957	0.031		−0.071	0.033	T	−0.05	0.03	L	9.9692	0.0021	0.024	164		9.92	10.01		C			1							G
105777	8.018	0.008	7.830	0.007		0.170	0.015	G	0.19	0.01	H	7.8560	0.0012	0.014	121		7.84	7.88					1							S
105778	10.528	0.034	8.728	0.014		1.499	0.029	T	1.53	0.04	L	8.6710	0.0015	0.021	249		8.63	8.71					1							
105779	6.975	0.004	6.839	0.005		0.111	0.002	G	0.12	0.00	H	6.8737	0.0008	0.008	123		6.86	6.89		C			1							S
105780	9.693	0.017	8.317	0.010		1.165	0.015	T	1.13	0.01	L	8.3474	0.0018	0.016	141		8.32	8.37			21254−5856	I 1	1							
105781	8.476	0.010	7.427	0.006		0.911	0.009	T	0.91	0.01	L	7.4826	0.0011	0.013	146		7.46	7.51		C			1							S
105782	6.912	0.005	6.849	0.005		0.043	0.002	G	0.06	0.00	H	6.8822	0.0008	0.005	77		6.87	6.90					1							S
105783	10.472	0.045	9.327	0.027		1.000	0.040	G	0.98	0.03	R	9.3896	0.0032	0.020	79		9.35	9.42		C			1							
105784	8.847	0.016	8.297	0.015		0.515	0.020	T	0.59	0.02	L	8.3524	0.0015	0.010	72		8.33	8.37		C	21255+1121	I 1	1 X S							S
105785	9.958	0.026	8.336	0.013		1.358	0.023	T	1.33	0.03	L	8.3201	0.0022	0.018	87		8.29	8.35					1							
105786	9.379	0.016	8.384	0.012		0.870	0.015	T	0.88	0.01	L	8.4550	0.0016	0.015	108		8.43	8.48					1							
105787	9.240	0.011	8.757	0.011		0.455	0.014	T	0.52	0.01	L	8.8173	0.0017	0.020	171		8.78	8.85					1							
105788	9.663	0.024	7.817	0.011		1.567	0.022	T	2.66	0.07	O	7.5564	0.0234	0.238	88		7.28	7.90		U 2			1 S							S
105789	9.163	0.016	8.566	0.014		0.556	0.002	G	0.63	0.00	H	8.6226	0.0014	0.015	95		8.60	8.65		C			1							S
105790	9.967	0.020	9.023	0.014		0.837	0.003	G	0.86	0.00	H	9.0958	0.0020	0.022	155		9.05	9.13					1							
105791	9.341	0.015	8.386	0.011		0.828	0.014	T	0.87	0.01	L	8.4157	0.0019	0.018	136		8.39	8.45					1							
105792	7.568	0.009	7.533	0.011	−	0.010	0.400	G	0.04	0.01	L *	7.5445	0.0021	0.014	64	−	7.53	7.58			21255+0203	I 1	3 C C							S G
105793	8.094	0.011	7.677	0.010		0.418	0.004	G	0.48	0.00	H	7.7309	0.0010	0.008	71		7.71	7.74					1							S
105794	10.477	0.035	10.269	0.047		0.199	0.055	T	0.22	0.06	L	10.3086	0.0030	0.032	106		10.25	10.37					1							G
105795	8.820	0.011	8.782	0.014		0.040	0.016	T	0.06	0.01	L	8.8218	0.0013	0.015	125		8.80	8.86		C			1							
105796	11.383	0.054	11.031	0.065		0.630	0.020	G	0.70	0.02	H	10.9886	0.0028	0.036	222		10.92	11.05		C			1							G
105797	9.487	0.022	8.893	0.019		0.554	0.026	T	0.63	0.02	L	8.9413	0.0021	0.013	69		8.92	8.97		C			1							
105798	7.757	0.007	7.647	0.008		0.107	0.010	T	0.12	0.01	L	7.6919	0.0012	0.009	108		7.67	7.71		C	21256+5814	I 1	1							S
105799	9.573	0.029	8.897	0.025		0.614	0.029	T	0.68	0.03	L	8.9424	0.0021	0.013	56		8.91	8.96		C			1							
105800	9.718	0.024	7.783	0.010		1.606	0.021	T	1.63	0.02	L	7.7112	0.0019	0.017	67		7.69	7.74		U			1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
105801	21 25 36.09	+65 51 26.1	8.91	H	321.400 389 81	+65.857 243 29	8.21	17.73	6.33	0.82	0.77	0.88	1.05	0.82	– 7	–12	+17	– 3	+13	+10	+ 9	–10	+ 7	+ 4	1	–1.65
105802	21 25 38.17	+66 42 51.1	8.87	H	321.409 022 35	+66.714 184 87	0.93	–2.96	–6.69	0.78	0.72	0.85	1.03	0.80	–13	–19	+13	–12	+ 8	+18	+ 2	–12	+15	– 4	3	–0.35
105803	21 25 38.60	–63 52 11.2	8.47	H	321.410 852 73	–63.869 785 12	3.17	26.44	24.61	0.61	0.61	1.01	0.76	0.71	–14	– 8	– 9	+22	+ 6	+ 5	+ 8	+10	–11	– 4	0	0.22
105804	21 25 39.03	–39 11 12.9	9.34	H	321.412 642 63	–39.186 927 91	1.02	3.17	–13.23	1.23	1.03	1.43	1.47	0.87	+20	–24	–31	– 7	–18	+26	–18	–42	+20	+ 1	0	–0.75
105805	21 25 39.58	–10 31 13.2	9.18	H	321.414 907 09	–10.520 326 41	3.59	–15.02	0.04	1.29	0.86	1.68	2.15	0.93	+23	+ 0	–26	+27	–22	+56	– 4	+21	+16	+31	0	–0.05
105806	21 25 41.42	–21 39 46.3	8.43	H	321.422 600 02	–21.662 847 86	9.62	–27.98	–3.87	0.93	0.58	1.14	1.12	0.58	+29	–12	–12	– 4	–23	+46	–19	–14	+16	+36	0	–1.33
105807	21 25 41.60	+65 18 30.0	9.22	H	321.423 347 15	+65.308 323 76	2.69	5.82	2.06	0.97	0.83	0.97	1.20	0.97	– 2	–10	+12	+22	+17	– 1	+17	+ 9	+ 8	+10	0	0.61
105808	21 25 42.99	–18 35 14.2	8.14	H	321.429 116 36	–18.587 288 89	1.10	27.17	–20.74	1.02	0.59	1.14	1.17	0.63	+28	–34	–23	–17	–15	+28	–15	+ 1	+16	+39	0	–1.22
105809	21 25 43.73	–29 52 03.1	9.18	H	321.432 197 63	–29.867 521 89	–1.01	–2.71	–11.20	1.35	0.92	1.51	1.46	0.82	+ 9	+11	–25	–23	–10	+31	– 2	–31	+11	+23	0	1.86
105810	21 25 46.39	+15 37 04.0	6.80	H	321.443 293 81	+15.617 770 12	2.62	–20.13	–21.37	0.77	0.69	0.93	1.01	0.77	+18	–16	–33	+ 9	–10	+13	– 7	–45	+23	+22	4	1.11
*105811	21 25 47.02	+36 40 02.7	5.93	1 H	321.445 917 40	+36.667 407 68	1.18	6.91	–8.89	0.35	0.40	0.58	0.38	0.43	–26	+ 2	+ 3	– 4	+11	– 6	+11	+ 8	+14	–17	0	–0.35
*105812	21 25 46.98	+52 51 42.6	7.68	H	321.445 739 77	+52.861 846 97	3.47	13.17	11.06	0.59	0.57	0.70	0.64	0.59	+ 2	– 8	+19	+ 9	– 7	– 7	– 6	+ 0	+14	+ 9	0	–1.09
105813	21 25 47.80	+33 28 55.9	8.31	2 H	321.449 172 12	+33.482 185 09	2.60	–12.64	–10.81	0.60	0.73	1.13	0.70	0.76	–18	+ 6	+ 1	+ 5	+19	– 8	+17	+25	+ 8	–20	0	
105814	21 25 48.38	–25 14 16.3	7.59	H	321.451 589 67	–25.237 865 15	4.01	59.20	3.68	0.81	0.48	0.94	0.95	0.48	+35	– 6	–11	–24	–15	+42	–12	+ 3	+19	+39	0	0.29
105815	21 25 48.54	–23 49 19.4	6.51	H	321.452 260 86	–23.822 059 59	4.81	16.03	–15.73	0.76	0.45	0.85	0.87	0.44	+29	– 9	– 6	–22	–23	+37	–20	– 1	+16	+27	0	1.02
105816	21 25 49.77	–35 50 11.8	7.76	H	321.457 382 81	–35.836 607 96	0.59	–9.99	–12.82	1.07	0.73	1.11	1.23	0.63	+22	–11	–30	–33	–19	+24	–14	–41	+14	+18	0	1.80
105817	21 25 50.04	+38 30 58.4	8.49	H	321.458 516 32	+38.516 223 45	3.30	–3.61	3.05	0.54	0.59	0.87	0.57	0.62	–30	+10	+ 2	–11	+ 9	–15	+12	–10	+22	–25	1	0.58
105818	21 25 50.78	–43 46 40.9	7.93	H	321.461 574 30	–43.778 032 18	8.50	–0.93	–46.33	0.69	0.56	1.07	1.08	0.87	+53	–40	–26	–21	–21	+45	–21	–19	+19	+25	0	0.00
105819	21 25 51.55	+00 32 03.5	6.45	G	321.464 812 41	+00.534 306 05	11.46	50.00	13.84	0.93	0.57	0.99	1.18	0.77	– 1	– 9	–27	–25	+16	+22	+15	–10	+37	+21	0	0.73
105820	21 25 54.87	–70 43 03.6	7.79	H	321.478 614 35	–70.717 668 41	3.10	15.44	–2.03	0.58	0.64	0.85	0.68	0.79	–26	– 2	–18	+14	– 2	+ 4	+ 2	+ 1	– 4	–24	0	0.17
105821	21 25 56.02	–31 10 57.5	9.48	H	321.483 432 73	–31.182 634 66	20.22	–26.05	–58.71	1.23	0.99	1.42	1.49	0.87	+32	– 9	–16	– 7	–23	+29	–18	–36	+10	+32	0	–0.17
105822	21 25 57.72	–55 53 17.4	8.02	H	321.490 520 12	–55.888 154 59	1.02	3.65	–16.41	0.76	0.74	1.03	0.96	0.74	+26	–13	–12	+24	+10	+ 4	+ 5	+ 2	– 7	+ 2	0	0.03
105823	21 25 58.43	+38 45 53.2	8.90	H	321.493 469 56	+38.764 791 50	3.61	–2.24	–15.30	0.68	0.73	1.04	0.79	0.81	–17	+13	+ 3	+11	+ 4	–17	+ 5	+ 8	+13	–22	2	1.67
105824 H	21 25 59.21	+41 11 39.9	9.61	H	321.496 724 16	+41.194 424 52 *	3.53	–2.72	–0.21	2.05	3.22	1.57	1.22	1.21	–22	– 7	+ 7	+ 3	+ 6	– 7	+ 8	+ 0	+17	–28	2	1.35
105825 H	21 26 01.01	+49 50 24.8	8.97	G	321.504 199 27	+49.840 217 71 *	1.49	–6.84	–11.75	1.81	1.26	1.05	1.15	0.90	– 5	–16	+ 3	–39	+ 0	– 5	– 3	–16	+17	+ 7	0	0.10
105826	21 26 01.21	+44 23 40.4	7.87	G	321.505 022 18	+44.394 545 74	7.89	–12.66	–29.11	0.58	0.52	0.73	0.69	0.57	–26	+25	+ 4	– 3	+ 8	–10	+13	– 7	+20	–23	0	0.08
105827	21 26 02.33	+12 50 24.5	9.07	H	321.509 726 33	+12.840 126 81	4.10	6.56	–16.12	1.10	0.85	1.27	1.34	0.91	+28	– 3	+ 6	–10	–27	–15	–23	–23	–11	+37	0	–0.68
105828	21 26 04.03	–53 08 29.1	8.70	H	321.516 801 98	–53.141 409 98	3.50	–13.69	1.61	0.93	0.77	1.23	1.22	0.64	+18	–13	–32	+ 7	+41	–24	+27	+15	+ 0	+10	0	–0.19
105829	21 26 04.62	+47 39 13.6	8.41	H	321.519 244 41	+47.653 781 79	3.72	1.58	–3.73	0.58	0.60	0.76	0.73	0.72	–10	+ 2	+13	– 2	– 6	+ 2	– 5	+ 7	– 9	–23	0	–1.47
105830	21 26 07.22	–58 05 39.3	8.42	H	321.530 080 73	–58.094 262 03	1.20	–8.38	12.09	0.78	0.77	1.14	1.01	0.91	+ 4	–15	–23	–20	– 6	– 4	– 3	+16	– 1	– 7	0	0.21
105831	21 26 07.29	–24 29 03.0	7.22	H	321.530 391 55	–24.484 172 31	7.03	–49.23	–19.76	0.78	0.47	0.90	0.90	0.44	+32	–11	–22	–29	–23	+42	–16	–12	+22	+33	0	1.39
105832	21 26 07.34	–51 05 56.8	8.81	H	321.530 598 90	–51.099 097 24	1.39	47.79	–17.44	0.98	0.74	1.30	1.12	0.62	+25	+14	– 8	+32	+43	+15	+34	+28	–14	+16	0	–0.88
105833	21 26 07.42	+18 03 54.4	6.83	H	321.530 921 10	+18.065 102 54	3.32	2.23	–1.99	0.83	0.72	0.95	1.11	0.78	–11	+ 6	–39	–34	+22	–20	+15	–59	+32	–23	0	0.08
105834	21 26 07.81	–51 44 54.0	8.53	H	321.532 528 51	–51.748 343 43	5.83	–22.13	–87.33	0.88	0.65	1.13	0.97	0.53	+19	+ 0	– 1	+26	+36	+16	+29	+19	–12	+ 6	0	–0.07
105835	21 26 09.23	+13 44 22.5	9.72	H	321.538 468 88	+13.739 569 81	0.17	17.22	1.07	1.38	1.12	1.56	1.99	1.29	+28	+23	–13	–32	–30	–14	–28	–43	– 1	+36	0	0.18
105836	21 26 12.54	+56 30 32.4	7.83	H	321.552 254 47	+56.509 004 50	3.25	–0.82	12.14	0.57	0.63	0.72	0.59	0.67	–11	+ 2	– 4	– 2	+ 7	–21	+11	–17	+ 6	+11	3	0.73
105837	21 26 12.81	–65 59 16.7	9.24	1 H	321.553 370 21	–65.987 981 64	7.01	21.23	5.80	0.68	0.87	1.38	0.78	1.07	–34	–10	+29	– 7	–24	–16	–15	+29	+ 5	–50	0	0.20
105838	21 26 13.21	–57 56 59.8	8.84	H	321.555 023 20	–57.949 934 21	9.44	26.39	–50.78	0.74	0.89	1.17	1.00	1.05	+15	– 8	–24	–14	+ 9	– 4	+10	+29	+ 5	+ 6	3	–0.54
105839	21 26 14.23	–21 49 48.5	7.86	H	321.559 273 56	–21.830 136 80	2.84	6.04	–1.87	0.90	0.58	1.10	1.14	0.60	+29	–11	–10	– 6	–21	+43	–18	– 8	+22	+36	0	–1.00
*105840	21 26 15.44	+79 48 16.9	8.65	H	321.564 327 28	+79.804 683 33	4.41	10.48	12.07	0.63	0.63	0.69	0.78	0.64	– 3	–12	+15	+ 1	+15	+ 9	+10	–17	+ 7	– 3	0	0.97
*105841	21 26 15.44	–54 39 38.0	6.10	H	321.564 325 91	–54.660 553 59	15.68	1.24	38.69	0.63	0.47	0.77	0.75	0.43	+12	– 1	– 7	+10	+10	+23	+ 8	– 6	+ 3	+ 0	2	0.36
105842 H	21 26 15.64	–68 06 00.5	8.87	H	321.565 179 60	–68.100 143 35 A	3.00	10.47	–6.31	1.05	1.23	1.60	1.11	1.22	–32	–22	+15	+14	–14	+ 0	–16	+ 4	+ 2	–46	0	–0.57
105843	21 26 16.53	+61 34 15.3	8.88	H	321.568 867 20	+61.570 919 88	1.00	–3.74	–5.79	0.74	0.69	0.83	0.84	0.78	– 4	+ 2	+ 3	– 5	+13	+ 9	+14	– 9	+ 8	+24	1	2.05
105844	21 26 16.57	–18 08 57.8	8.51	H	321.569 043 61	–18.149 386 88	1.58	–7.19	–13.51	1.06	0.75	1.25	1.28	0.73	+43	–19	–34	–34	–32	+39	–25	–26	+17	+49	0	–2.10
105845	21 26 17.26	–27 10 10.9	9.21	H	321.571 926 53	–27.169 691 59	11.13	–4.43	–77.75	1.17	0.66	1.24	1.40	0.67	+56	–10	–10	–34	–43	+31	–38	–16	– 5	+47	5	–2.05
105846	21 26 17.61	+35 50 21.5	7.77	2 H	321.573 388 86	+35.839 317 48	4.46	–19.07	–28.21	0.48	0.54	0.81	0.52	0.57	–19	+ 7	+ 0	+ 5	+ 8	– 1	+ 8	+10	+10	–16	0	–0.73
105847	21 26 18.08	+10 08 41.6	7.51	H	321.575 332 24	+10.144 889 29	5.25	13.45	7.65	0.75	0.67	0.94	0.87	0.75	+32	–15	– 5	–11	– 1	+27	– 6	+ 7	+23	+48	0	0.00
105848	21 26 18.87	+19 09 25.4	10.42	H	321.578 631 84	+19.157 060 47	8.44	–163.35	–42.32	1.13	1.41	1.72	1.55	1.51	+35	–25	–26	–36	–12	+27	–17	–63	+20	+27	2	–0.75
105849	21 26 19.08	+68 38 58.4	10.60	H	321.579 495 64	+68.649 543 86	14.91	124.56	124.59	1.11	1.05	1.19	1.56	1.49	– 8	– 4	– 2	+ 7	+18	–16	+20	+ 0	–13	+ 6	3	1.23
105850	21 26 19.18	+41 22 17.8	8.44	H	321.579 932 90	+41.371 597 39	2.75	–5.53	–7.14	0.58	0.62	0.87	0.69	0.70	–20	– 8	+11	+13	– 1	+ 0	– 6	– 8	+15	–33	0	–0.82
105851	21 26 20.41	–38 01 02.2	8.80	H	321.585 049 79	–38.017 291 44	0.91	1.23	2.03	1.18	0.95	1.38	1.45	0.82	+22	– 9	–25	+ 9	–18	+25	–17	–38	+22	+12	3	0.89
105852	21 26 21.19	+08 58 08.2	9.81	H	321.588 311 19	+08.968 957 18	4.61	4.97	–19.27	1.44	1.27	1.60	2.07	1.47	+43	– 3	– 7	+23	+ 6	+12	+10	+26	+ 2	+53	0	0.11
105853	21 26 22.00	–20 59 56.7	7.22	H	321.591 655 26	–20.999 075 71	5.36	26.42	–10.41	0.80	0.50	0.92	0.92	0.50	+23	–17	–16	–16	–19	+43	–16	– 2	+19	+32	0	–0.07
105854	21 26 22.75	–37 49 45.9	5.64	H	321.594 792 20	–37.829 402 89	11.82	167.05	–10.91	0.68	0.57	0.80	0.81	0.52	+27	–25	–13	+12	–14	+25	–16	–32	+17	+22	0	1.19
105855	21 26 23.32	+73 39 54.2	9.21	G	321.597 157 74	+73.665 065 77	11.51	–9.75	–41.20	0.72	0.74	0.87	0.74	0.78	– 5	+ 4	+ 6	–19	+ 0	–21	+ 3	–23	+24	– 4	0	–0.47
105856	21 26 25.07	–12 05 42.0	6.70	G	321.604 446 03	–12.094 999 54	13.62	28.48	–203.71	0.75	0.49	0.91	1.15	0.61	+26	–18	– 9	+ 3	–20	+44	–20	+27	+24	+47	0	–0.70
105857	21 26 25.74	+43 07 10.2	8.31	G	321.607 235 73	+43.119 490 86	12.19	22.55	–38.35	0.67	0.59	0.90	0.80	0.64	–18	+18	+ 0	–18	+15	–23	+19	– 7	+33	–20	0	–0.44
*105858	21 26 26.49	–65 22 05.3	4.21	G	321.610 383 85	–65.368 144 38	108.50	81.08	800.68	0.33	0.36	0.59	0.37	0.39	–32	+ 2	–13	–10	+ 1	+ 0	+ 2	+ 1	– 9	–40	1	–1.88
*105859	21 26 26.49	–10 55 03.0	7.95	H	321.610 355 15	–10.917 504 31	1.57	–2.67	–16.22	0.98	0.62	1.26	1.67	0.66	+14	– 3	–31	+26	–33	+58	–13	+12	+20	+24	0	0.32
*105860	21 26 26.61	+19 22 32.2	6.08	H	321.610 886 64	+19.375 597 88	21.72	80.23	17.28	0.58	0.52	0.78	0.78	0.57	+15	–25	–12	–31	– 3	+21	– 1	–32	– 1	+ 7	0	0.43
*105861	21 26 27.06	–15 14 42.9	7.97	H	321.612 770 59	–15.245 243 59	5.99	–27.88	10.73	1.06	0.62	1.17	1.40	0.62	+20	–19	–15	+13	–41	+36	–31	–14	+20	+31	0	0.69
*105862 H	21 26 26.26	–20 25 29.1	8.80	H	321.609 420 09	–20.424 756 85 A	4.14	0.92	–9.80	2.53	1.63	1.89	2.51	1.41	+46	+ 4	–11	–51	–38	+18	–32	–25	+ 4	+29	9	–0.74
105863	21 26 27.20	–44 13 24.9	10.70	H	321.613 338 62	–44.223 593 58	18.63	71.18	–10.39	1.79	1.53	2.72	1.88	1.57	+63	–41	–34	–27	–26	+30	–21	–23	+13	+53	0	1.99
105864	21 26 27.99	+01 06 13.5	6.12	H	321.616 619 04	+01.103 751 93	20.89	110.49	–161.72	0.84	0.57	0.88	1.24	0.77	+ 5	– 1	–14	–13	+18	+ 4	+17	–22	+26	+26	0	–1.61
105865	21 26 28.29	–36 26 34.7	7.80	H	321.617 875 27	–36.442 985 35	5.45	48.15	–37.36	0.94	0.74	1.01	1.08	0.68	+29	–12	–12	–30	–23	+23	–19	–47	– 5	+28	0	0.14
105866	21 26 28.37	+49 16 48.8	7.97	2 H	321.618 218 86	+49.280 236 01	3.89	4.44	0.73	0.60	0.55	0.71	0.86	0.58	–14	+ 1	+ 5	–21	+ 4	–11	+ 2	+11	+ 3	– 7	0	–0.48
105867	21 26 29.08	+52 44 52.7	7.60	H	321.621 155 52	+52.747 969 62	4.80	11.89	–5.84	0.51	0.55	0.63	0.58	0.55	– 4	–10	+12	+ 4	–13	– 6	–12	–17	+14	+ 1	0	0.55
105868	21 26 29.13	+46 42 36.4	8.76	H	321.621 369 43	+46.710 120 33	–0.86	–1.33	–3.99	0.69	0.66	0.84	0.86	0.72	–16	+ 5	+ 2	+20	– 2	+10	– 4	–15	– 5	–21	0	–2.21
105869	21 26 29.83	–28 21 07.9	9.52	H	321.624 297 52	–28.352 188 13	1.43	5.18	–13.60	1.29	0.69	1.39	1.46	0.73	+39	–18	+ 4	–17	–26	+19	–25	+ 4	+ 1	+39	0	0.37
105870 H	21 26 29.85	–70 07 38.4	8.65	H	321.624 371 03	–70.127 334 83 A	5.85	24.27	–44.35	1.28	1.34	1.54	1.35	1.44	–19	–12	+ 5	+14	+ 1	– 7	– 4	– 7	+ 3	–35	1	0.40
*105871	21 26 30.48	–85 43 21.5	8.88	G	321.627 015 63	–85.722 631 29	8.05	167.71	–61.94	0.78	0.72	0.90	1.02	0.81	– 6	–17	– 2	– 8	+ 1	+ 9	+ 3	– 2	–11	– 5	0	0.12
*105872	21 26 30.33	–31 11 24.3	9.38	H	321.626 360 98	–31.190 070 76	12.87	–117.70	25.15	1.21	1.04	1.37	1.50	0.92	+29	– 6	–11	–13	–25	+23	–22	–48	+ 0	+26	0	1.48
105873	21 26 30.80	–30 27 39.7	9.38	H	321.628 347 11	–30.461 027 83	12.62	–14.88	–14.77	1.70	0.97	1.62	1.89	0.88	+ 1	+23	–11	–40	+ 1	+20	+ 3	–32	+13	+13	3	2.19
105874	21 26 31.68	+33 35 10.4	7.99	H	321.631 989 24	+33.586 220 08	10.42	4.13	–71.37	0.44	0.57	0.87	0.53	0.58	–19	+ 8	– 3	+15	+21	– 4	+16	+41	+ 1	–21	2	0.95
105875	21 26 34.74	+22 56 59.4	8.43	H	321.644 735 88	+22.949 820 79	1.77	–5.70	–8.42	0.67	0.62	0.97	0.74	0.69	+23	–18	–10	–20	– 3	– 3	– 3	–30	+ 0	+23	2	0.89
105876	21 26 35.32	–80 40 57.1	8.14	G	321.647 161 07	–80.682 515 50	8.93	–29.54	15.52	0.58	0.59	0.75	0.68	0.69	– 7	–17	–15	+11	– 2	– 7	– 6	+18	+13	– 9	1	1.83
105877	21 26 35.47	–06 00 04.7	8.03	H	321.647 776 80	–06.001 312 78	3.89	1.81	–13.63	1.10	0.72	1.26	1.32	0.80	+14	+ 4	+ 1	–27	–10	+47	–10	–37	+23	+31	0	–0.13
105878	21 26 35.91	–44 50 47.4	7.87	G	321.649 604 51	–44.846 504 41	8.76	–77.94	–27.78	0.87	0.74	1.33	0.88	0.68	+61	–52	–51	–10	– 1	+10	– 2	–10	+10	+54	0	0.96
105879	21 26 37.17	–46 04 01.2	7.21	H	321.654 861 26	–46.066 991 79	15.20	38.67	–108.77	0.69	0.57	0.93	1.04	0.77	+42	–42	–44	–20	– 4	+10	– 7	–25	+12	+ 1	0	1.83
105880	21 26 37.78	+20 42 46.2	7.68	H	321.657 426 49	+20.712 832 05	6.49	–1.83	–28.32	0.58	0.56	0.84	0.71	0.62	+35	– 7	–17	– 2	+ 7	–20	+ 3	–12	+11	+32	0	–0.04
105881	21 26 40.03	–22 24 41.0	3.77	H	321.666 782 12	–22.411 378 38	8.19	–2.61	18.88	0.77	0.45	0.90	0.96	0.42	+32	– 7	–16	–16	–27	+43	–21	–21	+19	+33	0	0.50
105882 H	21 26 41.14	+13 41 17.8	7.12	2 H	321.671 400 08	+13.688 290 78 A	4.37	–2.31	–10.65	1.64	1.36	1.67	2.31	1.37	+47	+20	+ 7	–27	–27	–29	–37	–53	–16	+41	1	1.56
105883	21 26 41.46	+59 06 14.4	9.85	G	321.672 764 85	+59.104 007 03	–0.71	–2.46	–1.55	0.88	0.89	1.06	0.86	0.94	+ 9	+14	+ 9	+ 4	+23	– 5	+27	+ 3	+11	+34	0	–1.41
105884	21 26 41.52	–30 29 20.0	7.88	H	321.673 010 94	–30.488 877 74	2.97	29.97	–42.58	1.20	0.71	1.11	1.35	0.62	+ 4	+14	–17	–47	+ 2	+10	+ 1	–36	+11	+18	0	0.37
105885	21 26 42.48	+03 44 14.2	10.50	G	321.676 979 43	+03.737 271 14	34.92	–41.37	–53.06	1.81	1.54	2.11	2.71	2.16	+34	+12	+11	+ 0	+ 3	+30	+ 4	–18	+ 6	+50	0	–0.08
105886	21 26 42.57	+31 54 24.0	8.48	H	321.677 375 36	+31.906 667 40	1.33	14.67	5.16	0.62	0.62	0.96	0.81	0.76	–13	+ 6	–10	+27	+ 7	–18	+ 7	+ 1	+24	–13	0	0.35
105887	21 26 42.80	–29 00 46.4	8.16	H	321.678 322 87	–29.012 899 97	3.79	–21.15	–75.98	1.08	0.55	1.24	1.44	0.53	+38	+ 1	–14	– 1	–26	+40	–17	+ 2	+ 2	+34	0	1.56
105888	21 26 42.81	+05 26 32.1	8.49	G	321.678 365 43	+05.442 238 59	13.02	167.09	–246.66	0.98	0.71	1.11	1.42	0.84	+45	– 1	– 2	–13	–25	+22	–23	+ 0	+ 7	+66	0	–0.63
105889	21 26 44.03	+28 22 51.9	10.10	H	321.683 457 38	+28.381 096 30	2.74	1.99	–13.63	1.17	1.00	1.70	1.32	1.33	+ 2	+13	– 9	–10	+23	–20	+23	+ 6	+ 3	+19	0	–0.07
105890	21 26 44.10	+03 35 11.0	8.97	H	321.683 743 87	+03.586 393 87	1.52	–13.33	–11.07	1.25	0.99	1.40	1.79	1.36	+30	+ 8	– 2	–11	– 3	+24	+ 0	–28	+ 2	+48	0	0.60
105891	21 26 44.95	+52 53 54.7	6.01	1 H	321.687 311 83	+52.898 524 89	7.38	15.62	5.02	0.41	0.43	0.50	0.43	0.43	+ 2	– 9	– 2	–15	– 9	– 6	–11	–17	+20	+ 6	0	–0.06
105892	21 26 45.08	–17 16 12.3	8.30	H	321.687 833 64	–17.270 096 62	9.70	8.25	–40.71	1.10	0.66	1.23	1.28	0.70	+38	+ 3	–11	–26	–31	+27	–29	–27	+ 6	+53	2	–0.97
105893	21 26 46.57	+43 48 44.4	7.47	H	321.694 030 10	+43.812 343 19	0.45	–1.25	–1.35	0.50	0.47	0.71	0.60	0.56	–13	+19	+ 2	+ 2	+ 3	– 8	+ 3	+ 8	+ 2	–17	1	–0.41
105894	21 26 47.68	+37 31 03.7	7.76	H	321.698 647 93	+37.517 687 39	2.96	–0.83	–21.44	0.46	0.53	0.80	0.49	0.59	–20	+ 6	– 3	– 1	+ 9	–16	+10	+ 1	+29	–11	1	1.11
105895	21 26 50.37	+22 09 49.8	8.01	H	321.709 866 63	+22.163 821 64	3.93	9.71	–14.49	0.62	0.61	0.97	0.73	0.65	+17	+ 4	–16	–12	+ 4	– 6	+ 3	–34	+14	+14	2	1.33
105896	21 26 50.92	+07 55 14.0	7.92	H	321.712 185 05	+07.920 552 60	1.88	1.53	–21.23	0.85	0.75	1.02	1.10	0.81	+48	–12	–14	–14	–28	+15	–23	–20	+ 5	+57	0	1.86
105897	21 26 51.14	–48 56 50.4	9.66	G	321.713 076 45	–48.947 336 71	6.47	21.42	–41.17	1.07	0.97	1.52	1.36	0.95	+39	–29	–28	–14	– 3	+ 2	– 7	–22	+ 8	+32	0	0.03
105898	21 26 51.57	+48 50 06.4	5.29	H	321.714 874 81	+48.835 105 21	8.37	57.95	26.02	0.47	0.39	0.53	0.66	0.45	–11	– 3	+ 1	–22	+ 2	–15	+ 2	+ 2	+ 6	–13	0	–2.25
105899	21 26 51.59	–02 44 10.4	8.92	G	321.714 938 81	–02.736 234 02	14.03	179.81	–46.16	1.21	1.02	1.66	1.74	1.05	+19	– 5	–47	–26	+21	–14	+ 6	–38	+50	+ 5	5	0.22
105900	21 26 52.62	–35 01 08.7	8.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
105801	9.462	0.018	8.959	0.017		0.473	0.022	T	0.54	0.02	L	9.0100	0.0017	0.016	108		8.98	9.03		C			1							
105802	10.240	0.034	9.022	0.020		1.041	0.031	T	1.01	0.03	L	9.0364	0.0015	0.014	107		9.01	9.06					1							
105803	9.663	0.014	8.584	0.010		0.934	0.013	T	0.93	0.01	L	8.6269	0.0018	0.017	191		8.59	8.66					1							
105804	10.608	0.047	9.354	0.027		0.740	0.040	G	0.79	0.03	R	9.4881	0.0027	0.020	65		9.45	9.52		C			1							
105805	9.549	0.032	9.203	0.034		0.328	0.044	T	0.38	0.06	L	9.2635	0.0029	0.015	61		9.23	9.30		C			1							
105806	8.889	0.013	8.471	0.013		0.409	0.015	T	0.48	0.02	L	8.5247	0.0014	0.012	91		8.50	8.55					1							S
105807	9.481	0.019	9.214	0.021		0.254	0.027	T	0.29	0.03	L	9.2890	0.0022	0.020	106		9.25	9.33		C			1							
105808	9.702	0.022	8.273	0.013		1.206	0.020	T	1.17	0.02	L	8.3068	0.0017	0.011	80		8.28	8.32		C			1							
105809	10.898	0.076	9.284	0.030		1.352	0.064	T	1.32	0.07	L	9.3352	0.0025	0.019	64		9.29	9.37		C			1							
105810	8.835	0.014	6.971	0.006		1.549	0.012	T	1.61	0.03	L	6.9193	0.0010	0.011	72		6.90	6.94					1							S
105811	5.780	0.002	5.903	0.003		0.033	0.015	G	−0.12	0.03	C	5.8889	0.0012	0.015	200		5.87	5.92		U 2	21258+3640	I 1	1							S P
105812	9.687	0.021	7.832	0.009		1.542	0.018	T	1.60	0.04	L	7.7944	0.0014	0.013	123		7.77	7.82					1							
105813	8.366	0.007	8.324	0.008		0.043	0.010	T	0.06	0.01	L	8.3290	0.0014	0.019	257		8.30	8.37		U 2	21258+3329	I 1	1 X							S
105814	8.838	0.012	7.706	0.008		0.974	0.011	T	0.96	0.01	L	7.7560	0.0014	0.011	111		7.74	7.78		C			1							S
105815	7.793	0.007	6.611	0.004		1.019	0.002	G	0.99	0.00	H	6.6733	0.0008	0.006	94		6.66	6.69		C			1							S
105816	9.176	0.019	7.871	0.012		1.109	0.018	T	1.07	0.02	L	7.9306	0.0012	0.009	58		7.92	7.95					1							S
105817	8.668	0.008	8.502	0.009		0.159	0.011	T	0.18	0.01	L	8.5477	0.0016	0.017	186		8.52	8.58					1							
105818	8.400	0.010	7.959	0.008		0.416	0.012	T	0.48	0.01	L	8.0188	0.0011	0.013	176		8.00	8.04		C			1 G							S
105819	6.646	0.006	6.483	0.005		0.162	0.010	G	0.18	0.01	H	6.5050	0.0006	0.006	62		6.50	6.52		C			1							S
105820	9.210	0.012	7.918	0.007		1.099	0.011	T	1.06	0.01	L	7.9606	0.0017	0.017	158		7.93	7.99					1 G							S
105821	10.613	0.051	9.619	0.033		0.858	0.047	T	0.90	0.05	L	9.6194	0.0027	0.019	69		9.59	9.66					1							
105822	9.800	0.027	8.159	0.014		1.373	0.024	T	1.34	0.03	L	8.1700	0.0014	0.015	88		8.15	8.19					1							S
105823	9.505	0.013	8.933	0.012		0.535	0.016	T	0.61	0.02	L	9.0179	0.0017	0.020	160		8.98	9.06		C			1							
105824	10.972	0.046	9.738	0.025	*	1.054	0.041	T	1.02	0.03	L *	9.7745	0.0025	0.023	156	*	9.72	9.82			21260+4112	H 1	2 C	C	AB	260	0.233	0.083	2.96	0.69	G
105825	9.118	0.015	8.996	0.018	*	0.116	0.009	G	0.13	0.01	H *	9.0060	0.0015	0.015	116	*	8.98	9.04		D	21260+4950	H 1	2 C	A	AB	203	0.214	0.006	0.66	0.16	
105826	8.136	0.007	7.903	0.009		0.213	0.003	G	0.24	0.00	H	7.9352	0.0012	0.013	128		7.91	7.95					1							S
105827	9.317	0.021	9.095	0.025		0.212	0.031	T	0.23	0.04	L	9.1429	0.0028	0.019	67		9.09	9.17		C			1							
105828	10.637	0.039	8.846	0.015		1.491	0.033	T	1.51	0.05	L	8.8267	0.0022	0.020	99		8.79	8.86					1							
105829	8.462	0.009	8.412	0.011		0.051	0.013	T	0.06	0.01	L	8.4316	0.0012	0.013	143		8.41	8.46		C			1							
105830	9.623	0.017	8.532	0.012		0.943	0.016	T	0.93	0.01	L	8.5796	0.0025	0.020	111		8.54	8.62					1							
105831	8.493	0.011	7.326	0.008		1.001	0.011	T	0.98	0.01	L	7.3853	0.0011	0.010	98		7.37	7.40		C			1							S
105832	10.093	0.023	8.906	0.014		1.017	0.021	T	0.99	0.02	L	8.9725	0.0018	0.016	116		8.95	9.01		C			1							
105833	6.807	0.005	6.827	0.006		−0.014	0.007	T	0.01	0.01	L	6.8344	0.0013	0.012	86		6.82	6.85					1							S
105834	9.932	0.022	8.629	0.013		1.107	0.020	T	1.07	0.02	L	8.7033	0.0025	0.017	115		8.67	8.74					1							
105835	11.197	0.078	9.769	0.034		1.205	0.067	T	1.16	0.07	L	9.8797	0.0043	0.027	79		9.83	9.91					1							
105836	9.649	0.018	7.958	0.009		1.412	0.016	T	1.39	0.02	L	7.9684	0.0016	0.015	119		7.95	7.99		C			1							
105837	9.853	0.014	9.285	0.013		0.535	0.014	T	0.61	0.01	L	9.3607	0.0021	0.028	238		9.31	9.41		U			1							
105838	9.373	0.015	8.894	0.015		0.463	0.016	T	0.53	0.02	L	8.9388	0.0026	0.021	116		8.90	8.98					1							
105839	9.712	0.022	8.016	0.011		1.416	0.019	T	1.40	0.03	L	8.0008	0.0015	0.012	90		7.98	8.02					1							S
105840	10.148	0.027	8.768	0.015		1.160	0.015	G	1.12	0.01	H	8.8170	0.0018	0.016	113		8.79	8.85		C			1							
105841	6.518	0.004	6.131	0.004		0.366	0.005	T	0.43	0.01	L	6.1844	0.0006	0.006	84		6.17	6.20					1							S
105842	8.889	0.010	8.902	0.012	A	−0.100	0.495	G	−0.01	0.04	L *	8.8638	0.0020	0.020	185	*	8.83	8.90			21263−6806	I 1	2 C	A	AB	131	4.676	0.024	2.99	0.12	
105843	9.153	0.016	8.896	0.018		0.245	0.023	T	0.27	0.03	L	8.9527	0.0020	0.018	102		8.92	8.98					1							
105844	10.390	0.035	8.689	0.015		1.420	0.030	T	1.40	0.05	L	8.6467	0.0019	0.016	83		8.62	8.68		C			1							
105845	9.931	0.023	9.308	0.020		0.576	0.023	T	0.65	0.02	L	9.3368	0.0014	0.015	131		9.31	9.36					1							
105846	9.738	0.015	8.039	0.007		1.446	0.014	T	2.94	0.02	O	7.6922	0.0039	0.083	190		7.57	7.78		U 2			1	S						
105847	8.684	0.013	7.614	0.009		0.927	0.012	T	0.92	0.01	L	7.6661	0.0016	0.013	81		7.64	7.68		C			1							S
105848	11.207	0.076	10.511	0.061		0.642	0.080	T	0.71	0.07	L	10.5498	0.0031	0.027	108		10.50	10.58					1							G
105849	11.775	0.112	10.859	0.081		0.797	0.107	T	0.83	0.08	L	10.7416	0.0033	0.029	107		10.69	10.79		C			1							G
105850	8.666	0.009	8.457	0.010		0.200	0.013	T	0.22	0.01	L	8.5061	0.0015	0.017	163		8.48	8.54					1							S
105851	10.557	0.044	8.950	0.021		1.346	0.038	T	1.31	0.04	L	8.9502	0.0029	0.022	67		8.90	8.99			21263−3801	I 1	1							
105852	11.368	0.079	9.906	0.037		1.232	0.069	T	1.19	0.07	L	9.9808	0.0034	0.029	77		9.93	10.04		C			1							
105853	8.695	0.012	7.350	0.008		1.140	0.011	T	1.10	0.01	L	7.3911	0.0011	0.008	81		7.38	7.40		C			1							S
105854	7.185	0.006	5.769	0.004		1.185	0.003	G	1.15	0.00	K	5.8025	0.0010	0.006	65		5.79	5.81					1							S
105855	9.967	0.023	9.249	0.020		0.595	0.003	G	0.67	0.00	H	9.3512	0.0024	0.020	108		9.32	9.38		C			1							
105856	8.009	0.008	6.809	0.005		1.022	0.002	G	1.00	0.00	H	6.8603	0.0008	0.007	102		6.85	6.87		C			1							S
105857	8.917	0.011	8.383	0.011		0.501	0.014	T	0.57	0.01	L	8.4226	0.0017	0.015	129		8.40	8.45					1							
105858	4.806	0.003	4.284	0.003		0.494	0.020	G	0.61	0.02	A	4.3296	0.0003	0.005	258		4.32	4.34					1							S
105859	9.160	0.018	8.058	0.013		0.951	0.017	T	0.94	0.01	L	8.1106	0.0022	0.012	76		8.09	8.13					1							
105860	6.355	0.004	6.101	0.004		0.235	0.009	G	0.23	0.03	C	6.1429	0.0007	0.008	106		6.13	6.16					1							S P
105861	9.496	0.022	8.115	0.013		1.169	0.020	T	1.13	0.02	L	8.1329	0.0015	0.011	84		8.12	8.15		C			1							S
105862	9.133	0.015	9.014	0.019	A	0.072	0.100	G	0.05	0.03	L *	8.8167	0.0016	0.011	61	−	8.79	8.85		D	21265−2026	I 1	3 C	C						S G
105863	12.484	0.217	10.891	0.078		1.335	0.182	T	1.30	0.21	L	10.8489	0.0038	0.045	147		10.77	10.93					1							G
105864	6.669	0.005	6.169	0.005		0.481	0.005	T	0.55	0.01	L	6.2246	0.0008	0.007	66		6.22	6.23		C			1							S
105865	9.360	0.019	7.921	0.011		1.214	0.017	T	1.17	0.02	L	7.9649	0.0012	0.010	63		7.95	7.98		C			1							S
105866	7.823	0.009	7.937	0.009		−0.116	0.005	G	−0.10	0.01	H	7.9339	0.0032	0.038	118		7.87	7.97	1.28	P 1 A	21265+4917	I 1	1							
105867	7.569	0.006	7.599	0.009		−0.023	0.010	T	0.00	0.01	L	7.6025	0.0012	0.009	117		7.59	7.62		C	21265+5245	I 1	1							S
105868	9.023	0.014	8.812	0.016		0.202	0.020	T	0.22	0.02	L	8.8215	0.0018	0.020	130		8.80	8.85					1							
105869	11.026	0.043	9.671	0.022		1.148	0.038	T	1.11	0.03	L	9.6851	0.0023	0.017	117		9.65	9.71					1							
105870	9.248	0.012	8.776	0.012	A	0.400	0.495	G	0.53	0.03	L *	8.7565	0.0019	0.019	157	*	8.72	8.79			21265−7008	I 1	2 C	A	AB	23	2.569	0.027	2.64	0.09	
105871	10.081	0.023	8.978	0.015		0.921	0.003	G	0.97	0.00	I	9.0339	0.0022	0.020	124		9.00	9.07					1							
105872	10.445	0.043	9.407	0.028		0.892	0.040	T	0.90	0.03	L	9.5214	0.0026	0.017	64		9.49	9.54		C			1							
105873	10.251	0.041	9.371	0.030		0.770	0.039	T	0.81	0.03	L	9.5184	0.0034	0.022	57		9.48	9.56		C			1							
105874	8.460	0.007	8.035	0.007		0.401	0.009	T	0.47	0.01	L	8.0858	0.0010	0.015	256		8.06	8.11		C			1							S
105875	9.797	0.020	8.552	0.012		1.062	0.018	T	1.03	0.01	L	8.5972	0.0014	0.013	116		8.57	8.63		C			1							
105876	8.926	0.010	8.225	0.009		0.633	0.010	T	0.70	0.01	L	8.2762	0.0015	0.016	146		8.25	8.30		C			1							S
105877	9.360	0.023	8.140	0.015		1.043	0.021	T	1.01	0.02	L	8.2013	0.0028	0.014	51		8.18	8.23					1	S						S
105878	8.436	0.009	7.954	0.008		0.457	0.014	G	0.53	0.01	H	7.9905	0.0009	0.009	121		7.97	8.01		C			1							S
105879	7.843	0.007	7.269	0.007		0.540	0.007	T	0.61	0.01	L	7.3287	0.0010	0.009	118		7.32	7.34		C	21266−4604	I 1	1 G							S
105880	7.813	0.007	7.690	0.008		0.120	0.020	G	0.13	0.02	H	7.7227	0.0010	0.011	124		7.70	7.74		C			1							S
105881	5.026	0.002	3.859	0.002		1.002	0.009	G	0.88	0.02	A	3.9246	0.0006	0.004	89		3.92	3.93		C	21267−2225	I 1	1							S
105882	7.222	0.012	7.057	0.016	*	0.158	0.019	T	0.17	0.02	L *	7.1731	0.0096	0.068	78	*	7.09	7.27	0.73	P 1 A	21267+1341	I 1	2 C	A	AB	217	3.458	0.010	1.77	0.05	S
105883	10.339	0.031	9.854	0.033		0.450	0.015	G	0.52	0.02	H	9.9471	0.0022	0.021	111		9.90	9.98		C			1							G
105884	9.332	0.022	8.015	0.013		1.118	0.020	T	1.08	0.02	L	8.0521	0.0020	0.011	60		8.03	8.07		C			1							S
105885	12.338	0.220	10.723	0.080		1.369	0.016	G	1.68	0.01	A	10.5667	0.0045	0.031	64		10.36	10.62					1							G
105886	8.476	0.009	8.480	0.011		0.001	0.013	T	0.02	0.01	L	8.4937	0.0018	0.015	141		8.47	8.52		C			1							
105887	9.550	0.017	8.285	0.011		1.078	0.016	T	1.04	0.01	L	8.3281	0.0013	0.012	111		8.31	8.35		C			1							
105888	9.173	0.013	8.547	0.012		0.572	0.012	G	0.64	0.01	H	8.6182	0.0012	0.013	105		8.60	8.65		C			1							
105889	12.092	0.150	10.233	0.044		1.545	0.124	T	1.61	0.27	L	10.2256	0.0033	0.035	125		10.17	10.27					1	S						G
105890	10.460	0.039	9.095	0.021		1.156	0.035	T	1.12	0.03	L	9.1343	0.0028	0.021	64		9.10	9.17			21267+0335	I 1	1							
105891	5.851	0.003	5.978	0.004		−0.109	0.004	T	−0.09	0.01	L	5.9731	0.0015	0.012	121		5.95	5.99		U 2			1							S
105892	8.891	0.014	8.369	0.013		0.499	0.014	T	0.57	0.01	L	8.4100	0.0014	0.011	78		8.39	8.44					1							S
105893	7.477	0.005	7.469	0.006		0.012	0.007	T	0.03	0.01	L	7.4805	0.0010	0.010	141		7.46	7.50					1 G							S
105894	9.651	0.019	7.916	0.009		1.447	0.017	T	1.45	0.03	L	7.8993	0.0014	0.013	189		7.88	7.92		C	21268+3731	I 1	1							
105895	9.689	0.017	8.155	0.009		1.289	0.015	T	1.25	0.02	L	8.1725	0.0012	0.013	135		8.15	8.20		C			1							
105896	9.202	0.016	8.039	0.011		0.998	0.015	T	0.98	0.01	L	8.0867	0.0016	0.011	72		8.07	8.12		C			1							
105897	10.079	0.023	9.758	0.027		0.441	0.005	G	0.51	0.01	H	9.7629	0.0021	0.018	113		9.73	9.80					1							
105898	5.416	0.003	5.305	0.003		0.108	0.004	T	0.12	0.00	L	5.3320	0.0006	0.005	119		5.33	5.34		C			1							S
105899	9.573	0.024	8.976	0.022		0.580	0.003	G	0.65	0.00	H	9.0485	0.0022	0.016	64		9.02	9.08		C			1							
105900	9.775	0.027	8.494	0.017		1.090	0.025	T	1.05	0.03	L	8.5160	0.0017	0.013	65		8.50	8.54		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
105901	21 26 54.13	−33 54 35.7	9.00	H	321.725 551 21	−33.909 916 08	1.59	−3.60	1.95	1.13	0.93	1.43	1.28	0.73	+38	−38	−56	+ 7	−22	+29	−21	−40	+35	+22	0	0.85
105902	21 26 54.71	+10 40 04.3	6.97	H	321.727 945 52	+10.667 864 05	10.71	56.46	−8.54	0.79	0.54	0.92	0.93	0.62	+13	−24	+ 2	+ 7	− 5	+10	− 9	+ 2	+23	+31	2	0.89
105903	21 26 55.43	+63 35 09.1	7.62	H	321.730 956 93	+63.585 860 71	6.53	−51.28	−35.92	0.55	0.47	0.56	0.61	0.58	− 7	+ 0	+ 2	+34	+ 3	+ 1	+ 2	+ 4	+ 2	+ 0	0	−1.00
105904	21 26 56.37	+39 39 31.4	8.27	H	321.734 882 82	+39.658 730 38	10.63	67.61	12.63	0.52	0.58	0.81	0.53	0.63	−16	+14	+ 4	+ 3	+ 3	− 5	+ 6	− 3	+22	−22	0	−1.18
105905	21 26 57.76	−56 07 32.2	8.65	G	321.740 670 96	−56.125 602 49	43.12	662.19	138.83	0.91	0.74	1.17	1.10	0.71	+ 5	−20	− 4	+25	+ 1	+12	− 4	− 7	− 7	−18	0	1.37
105906	21 26 57.88	+81 44 31.6	8.06	H	321.741 177 70	+81.742 114 68	21.28	213.25	119.66	0.65	0.63	0.70	1.17	0.71	+ 9	−16	+22	+ 5	+ 4	− 4	+ 6	+ 4	−10	−35	0	−0.60
105907	21 26 58.68	−09 59 37.6	8.72	H	321.744 511 18	−09.993 775 06	0.86	1.48	−27.00	1.18	0.90	1.53	2.24	1.01	+23	+ 1	−37	+21	− 6	+44	+ 9	+10	+13	+ 7	3	−1.36
105908	21 26 59.64	+56 11 00.0	9.49	H	321.748 485 88	+56.183 331 50	1.90	14.29	7.89	0.83	0.85	0.99	0.91	0.96	− 6	+ 6	− 7	+ 5	+16	−12	+19	− 8	+ 3	+19	0	0.17
105909	21 27 00.88	+43 13 51.1	7.62	H	321.753 686 78	+43.230 850 28	5.50	−21.48	−14.87	0.53	0.51	0.73	0.62	0.54	−14	+12	+ 5	− 8	+ 9	−10	+10	− 8	+18	−11	0	1.00
105910	21 27 01.04	+39 20 39.1	8.84	H	321.754 312 64	+39.344 189 34	3.52	−4.42	−2.18	0.64	0.76	1.06	0.66	0.79	−11	+13	+15	+ 0	+ 1	− 7	+ 4	+ 1	+18	−22	0	−0.27
*105911	21 27 01.11	−44 48 32.5	7.49	H	321.754 627 52	−44.809 017 66	42.52	264.07	184.71	0.88	0.71	1.29	1.28	0.97	+62	−54	−51	−11	+ 1	+11	+ 2	− 1	+12	+18	0	−0.01
*105912	21 27 01.10	−31 56 20.4	8.80	G	321.754 595 93	−31.938 997 69	0.27	10.16	−11.22	0.98	0.77	1.10	1.11	0.67	+22	− 7	−27	−11	−25	+28	−19	−44	+14	+21	0	0.94
105913 H	21 27 01.66	−42 32 52.7	5.50	G	321.756 923 85	−42.547 965 63 A	18.57	−49.29	14.46	0.71	0.54	0.76	0.69	0.51	+63	+ 1	+ 7	−41	−37	+ 5	−35	−27	+ 7	+45	1	−0.61
105914	21 27 03.12	−19 03 29.1	7.78	2 H	321.763 003 72	−19.058 084 95	1.61	26.54	−38.99	1.02	0.65	1.26	1.17	0.58	+40	−31	−31	−26	−33	+48	−28	−25	+34	+39	0	−1.20
105915	21 27 04.40	−62 39 13.7	9.21	2 H	321.768 338 15	−62.653 819 03	4.04	−28.71	6.65	0.76	0.76	1.35	0.99	0.85	− 8	−10	−23	+32	+ 5	− 7	+ 2	+20	− 7	−16	3	0.29
105916	21 27 04.76	−50 15 51.7	11.17	H	321.769 812 60	−50.264 348 17	4.38	−50.03	−40.03	1.76	1.36	2.26	2.37	1.22	+28	−11	−25	+35	+35	− 9	+25	+28	−18	+ 8	0	0.44
105917	21 27 05.65	−16 26 00.8	9.59	H	321.773 541 96	−16.433 548 77	1.14	21.30	−6.64	1.34	0.82	1.57	1.78	0.93	+30	+ 1	−14	−14	−29	+37	−25	−11	+16	+45	0	1.94
105918	21 27 06.66	+16 07 27.8	6.72	1 H	321.777 758 16	+16.124 387 38	29.56	−79.74	−96.55	0.83	0.75	0.96	1.13	0.88	+15	− 6	−24	−18	+ 1	−14	− 2	−57	+19	+18	2	1.17
105919	21 27 06.98	+02 35 48.8	9.24	H	321.779 063 95	+02.596 898 86	2.92	6.53	1.76	1.16	1.06	1.40	1.52	1.33	+35	−24	−30	−13	−13	+20	−12	−42	+29	+44	0	−2.42
105920	21 27 07.82	+61 09 34.8	9.58	H	321.782 599 79	+61.159 677 40	2.44	9.76	3.81	0.81	0.81	0.96	0.83	0.79	− 4	− 1	+27	− 5	+20	+15	+17	− 6	+10	+15	1	1.27
105921	21 27 08.66	+36 55 32.3	7.67	H	321.786 096 79	+36.925 651 00	3.15	−0.26	−20.58	0.51	0.56	0.85	0.54	0.63	−27	+ 5	− 2	− 1	+19	−13	+19	+ 5	+22	−10	0	2.32
105922	21 27 10.57	+06 54 40.7	7.28	H	321.794 032 23	+06.911 298 33	0.80	−2.50	2.73	0.82	0.66	0.95	1.18	0.72	+37	− 4	−20	+10	−34	+25	−18	−23	+10	+56	0	0.22
105923	21 27 11.32	+11 59 56.7	8.91	H	321.797 183 88	+11.999 080 17	2.99	7.43	−12.81	1.18	0.86	1.37	1.46	0.93	+28	−13	+ 7	+26	+ 0	+ 7	+ 4	− 4	+ 1	+40	0	1.28
105924	21 27 13.31	−19 18 42.5	8.22	H	321.805 457 78	−19.311 806 98	4.84	11.23	2.10	1.13	0.66	1.31	1.48	0.63	+23	−21	−27	+ 5	−34	+44	−24	−15	+25	+28	0	−1.55
105925	21 27 13.42	+56 12 30.2	9.02	H	321.805 929 17	+56.208 393 73	1.65	−2.32	−3.46	0.77	0.75	0.90	0.86	0.84	−11	+13	− 9	+ 0	+13	−10	+15	− 6	+14	+10	1	−0.03
105926	21 27 14.59	−01 43 49.5	9.39	H	321.810 789 23	−01.730 429 15	0.78	−1.21	−17.54	1.17	0.93	1.47	1.39	1.04	+19	−15	− 6	−25	+ 9	+48	+ 9	−17	+28	+39	0	0.66
105927	21 27 14.64	+27 40 48.9	11.46	H	321.810 983 85	+27.680 252 04	11.65	−46.81	−165.66	1.89	1.68	2.86	2.44	2.07	− 5	+11	− 9	+ 6	+20	−11	+20	− 4	+ 2	+10	7	0.06
105928	21 27 14.83	−21 11 46.1	5.78	G	321.811 811 13	−21.196 127 74	7.05	−24.64	−33.95	0.75	0.46	0.84	0.85	0.46	+21	−14	−23	−15	−24	+40	−18	− 9	+10	+26	0	−0.80
105929	21 27 14.96	−47 30 05.8	9.82	H	321.812 324 07	−47.501 602 74	14.58	−69.05	26.34	1.32	1.08	1.81	1.49	1.15	+33	−26	−11	−16	−12	+22	−11	−24	+ 7	+39	2	1.41
105930	21 27 15.85	−34 54 10.3	8.00	H	321.816 050 51	−34.902 862 43	0.21	4.42	−29.05	0.92	0.74	1.10	1.02	0.61	+23	−21	−37	−27	−16	+36	− 6	−33	+10	+20	0	1.12
105931	21 27 15.89	−08 47 22.2	7.52	H	321.816 224 06	−08.789 510 13	13.80	−11.63	−34.42	0.84	0.65	1.06	1.27	0.75	+27	− 8	−28	+10	−22	+39	−15	−27	+29	+29	3	−1.54
105932	21 27 16.84	−06 50 35.9	11.09	G	321.820 166 20	−06.843 301 92	61.57	24.98	−403.33	2.29	1.82	2.61	3.50	2.18	+32	+ 1	− 2	−17	−21	+17	−18	−33	+27	+32	0	−2.18
105933	21 27 16.96	+05 23 30.0	6.78	H	321.820 656 72	+05.391 671 08	10.90	−44.41	−39.67	0.82	0.54	0.89	1.09	0.60	+50	+ 7	+ 0	−20	−31	+ 9	−29	−11	− 8	+67	0	0.32
105934 H	21 27 16.99	+59 53 29.8	9.16	2 G	321.820 790 65	+59.891 601 59 A	−0.56	−3.90	−3.82	5.02	3.89	1.36	1.11	1.18	+55	+ 5	+15	+ 7	+14	+ 4	+13	+ 7	+ 2	+50	0	−0.61
105935	21 27 17.38	−51 07 56.6	8.32	H	321.822 419 17	−51.132 382 09	1.66	16.76	13.48	0.89	0.62	1.15	0.97	0.52	+27	− 5	+ 1	+33	+41	+21	+36	+31	−15	+14	0	−2.24
105936	21 27 17.39	+00 40 47.2	8.74	H	321.822 463 39	+00.679 774 16	5.70	1.36	0.43	1.33	0.83	1.45	1.85	0.96	+ 2	+23	−28	−32	+20	−17	+18	−33	+39	+ 7	0	−0.54
105937	21 27 17.63	+12 12 52.8	8.88	H	321.823 471 96	+12.214 658 21	4.05	−2.27	−0.10	1.37	0.91	1.66	1.74	0.94	+19	+ 3	+20	−29	−15	−28	−11	−27	−14	+28	0	−0.77
105938 H	21 27 18.16	−32 22 14.8	8.33	G	321.825 655 07	−32.370 770 08 A	13.12	−9.82	10.06	2.36	1.92	2.05	2.02	1.38	+15	+ 1	−23	−29	−17	+18	−13	−50	+ 8	+21	2	−0.66
105939	21 27 19.76	−09 01 55.2	8.75	H	321.832 346 62	−09.032 004 51	5.40	−19.55	−15.28	1.11	0.96	1.38	1.75	1.16	+31	− 9	−30	+15	−16	+30	−10	−15	+28	+27	0	1.63
105940	21 27 20.16	−32 17 48.8	9.03	H	321.834 000 83	−32.296 892 38	2.96	21.78	−37.24	1.05	0.84	1.24	1.23	0.75	+26	−20	−28	−10	−20	+33	−14	−38	+16	+25	0	0.70
105941	21 27 20.81	−43 55 28.7	9.04	H	321.836 705 38	−43.924 650 91	5.89	39.03	−56.95	0.97	0.84	1.46	0.96	0.90	+66	−41	−25	−35	−24	+34	−21	−20	+15	+65	0	−0.51
105942	21 27 21.36	+37 07 00.5	5.30	H	321.839 017 66	+37.116 791 96	1.84	2.49	2.66	0.33	0.39	0.56	0.36	0.42	−24	+ 4	+ 0	− 2	+ 9	−15	+ 9	+ 5	+16	−20	1	−0.08
105943	21 27 21.82	+16 20 36.8	8.66	H	321.840 923 23	+16.343 544 19	4.89	10.08	−8.18	1.06	0.97	1.31	1.32	1.02	+22	−17	−30	+10	− 7	−17	−15	−63	+25	+13	0	2.11
105944	21 27 21.97	+48 10 26.7	8.54	G	321.841 526 97	+48.174 079 91	2.28	3.98	−2.75	0.66	0.60	0.79	0.86	0.64	−15	+ 4	+15	+ 1	−10	−13	− 6	− 8	+ 9	−23	0	−2.04
105945	21 27 22.43	−37 06 25.3	8.45	H	321.843 462 01	−37.107 034 79	1.82	4.55	−4.60	1.06	0.77	1.19	1.32	0.75	+18	−13	−13	+13	− 9	+29	− 3	−19	+ 7	+25	0	0.13
105946 H	21 27 23.22	−13 35 15.3	7.11	G	321.846 766 29	−13.587 595 54 *	2.18	11.64	0.49	0.87	0.53	0.92	1.43	0.54	+ 9	+21	−13	+22	−49	+33	−32	+ 5	+ 0	+19	2	−0.93
105947 H	21 27 23.25	−07 00 56.1	7.53	G	321.846 863 96	−07.015 596 39 *	17.11	12.65	−91.93	0.99	0.77	1.13	1.49	0.89	+30	− 4	+ 1	−13	−27	+14	−24	−36	+31	+29	0	0.93
105948	21 27 25.21	−23 36 57.1	7.73	H	321.855 036 94	−23.615 869 11	4.76	39.65	8.98	0.89	0.53	1.03	1.04	0.51	+30	− 7	−13	−28	−18	+44	−15	−14	+16	+34	0	0.81
105949	21 27 25.30	+59 45 00.4	6.11	2 H	321.855 426 35	+59.750 113 87	3.32	−21.73	−16.04	0.44	0.46	0.52	0.42	0.43	− 3	+ 9	+11	+24	+19	− 2	+23	+ 0	+18	+ 7	0	1.17
105950	21 27 27.24	+64 36 11.8	9.37	H	321.863 500 27	+64.603 265 02	2.83	−6.32	−3.33	0.86	0.85	0.95	1.05	0.99	+ 0	−11	+ 9	+15	+11	− 2	+ 9	+ 7	+14	+ 9	1	1.10
105951	21 27 27.98	+36 15 13.6	8.03	H	321.866 589 89	+36.253 779 38	4.81	13.72	−36.15	0.54	0.57	0.91	0.58	0.64	−22	+ 2	+ 0	−13	+15	− 6	+15	+15	+10	−19	0	−0.85
105952	21 27 27.99	+24 19 53.0	8.61	H	321.866 606 96	+24.331 395 10	−0.19	17.13	−2.30	0.74	0.72	1.00	0.82	0.75	+30	+ 1	−10	− 1	− 6	−14	− 7	−24	+ 0	+33	0	−1.17
105953	21 27 29.20	−20 12 45.2	7.84	H	321.871 686 75	−20.212 554 74	7.09	−30.90	−82.16	0.91	0.62	1.07	1.14	0.58	+28	−12	−27	−15	−30	+42	−20	−16	+17	+23	0	−0.50
105954	21 27 29.40	−30 50 45.3	7.83	H	321.872 515 05	−30.845 906 65	2.20	−3.78	12.67	1.06	0.77	1.16	1.21	0.69	+37	−14	−35	−27	−34	+24	−26	−30	− 4	+25	0	−0.89
105955	21 27 29.57	+47 48 08.8	7.49	H	321.873 216 82	+47.802 436 32	3.14	−7.86	−20.38	0.48	0.49	0.61	0.61	0.57	−10	+ 2	+ 5	− 1	−10	− 9	− 9	− 2	− 5	−27	0	−0.85
*105956	21 27 30.42	+27 52 26.6	7.49	H	321.876 752 19	+27.874 068 26	3.74	5.15	1.77	0.69	0.55	1.02	0.78	0.65	−27	+33	−25	−20	+22	−19	+15	− 9	− 5	− 1	0	−0.37
*105957 H	21 27 30.41	−20 16 04.0	8.73	H	321.876 722 62	−20.267 785 78 A	5.28	−10.02	−29.71	1.78	1.23	1.82	2.16	1.13	+33	− 5	−24	− 1	−27	+33	−20	− 5	+24	+23	1	0.40
105958	21 27 30.62	+10 34 04.4	8.84	2 H	321.877 580 91	+10.567 883 80	0.46	12.15	−1.44	1.18	0.92	1.35	1.53	1.12	+32	−13	− 1	+24	+13	+ 3	+14	+22	− 2	+47	3	1.54
105959	21 27 30.98	+46 24 59.7	7.63	H	321.879 100 70	+46.416 573 95	3.54	23.83	6.42	0.63	0.54	0.73	0.85	0.61	− 5	+12	+ 5	+33	+10	+20	+10	+ 2	+13	+ 0	1	−0.75
105960	21 27 32.61	+59 17 40.9	9.11	2 H	321.885 869 36	+59.294 686 09	0.33	−2.63	−3.18	0.72	0.75	0.89	0.70	0.79	+10	+19	+10	+13	+24	− 5	+29	+ 8	+14	+36	0	−2.02
105961	21 27 32.79	−47 55 59.3	9.03	G	321.886 645 29	−47.933 135 99	6.85	29.51	−6.48	1.03	0.90	1.45	1.19	0.86	+40	−17	−20	−28	−29	+31	−25	−42	+ 7	+36	0	1.67
105962	21 27 33.14	−27 43 42.4	7.54	H	321.888 069 25	−27.728 453 39	7.30	56.86	−64.03	0.83	0.47	0.94	0.95	0.50	+43	−14	−12	−20	−27	+34	−22	+ 9	− 4	+37	0	−0.56
105963	21 27 33.15	+34 01 30.2	11.06	2 H	321.888 133 87	+34.025 059 87	33.69	−277.29	−182.43	2.29	2.97	4.52	2.33	3.08	−22	+ 4	− 4	−19	+23	− 8	+22	+ 7	− 1	−16	1	
105964	21 27 33.45	−32 52 28.8	8.15	H	321.889 384 64	−32.874 662 13	1.97	36.34	−43.56	0.94	0.74	1.19	1.23	0.61	+26	−15	−45	+17	−21	+40	− 6	−32	+25	+28	0	1.06
105965	21 27 38.49	−11 40 00.4	7.03	H	321.910 392 95	−11.666 788 17	8.34	24.19	−57.86	0.80	0.54	1.00	1.36	0.62	+18	− 3	−25	+11	−35	+53	−21	+ 9	+18	+31	0	0.14
105966	21 27 40.03	+27 36 30.8	5.39	H	321.916 791 63	+27.608 543 56	17.96	41.75	20.44	0.48	0.40	0.71	0.58	0.49	−16	+10	− 7	− 9	+15	−13	+14	−11	− 8	+ 2	1	0.03
105967	21 27 41.42	−46 51 59.2	8.78	H	321.922 593 80	−46.866 446 19	5.42	67.86	−58.56	0.87	0.84	1.19	1.06	0.86	+40	−23	−21	−15	−10	− 2	−11	−30	+ 0	+40	2	2.10
105968	21 27 41.87	+08 24 17.6	8.56	H	321.924 449 72	+08.404 890 88	4.91	−12.60	−10.66	1.06	0.83	1.20	1.38	0.90	+40	−14	− 7	+ 4	−22	+ 0	−17	−33	+ 7	+47	0	−0.28
105969	21 27 42.75	+57 19 19.7	8.26	H	321.928 126 36	+57.322 135 92	16.61	200.64	−93.14	1.47	1.51	1.78	1.56	1.52	− 4	+ 4	+ 2	−15	+ 3	−12	+ 6	−29	+15	+13	0	
105970	21 27 45.02	−08 21 35.3	7.99	H	321.937 574 14	−08.359 817 22	5.70	−0.87	−5.96	1.03	0.72	1.22	1.56	0.83	+32	−16	−27	+20	−12	+27	− 8	− 7	+17	+22	0	1.63
105971	21 27 45.05	+31 47 43.0	7.79	H	321.937 689 79	+31.795 287 94	2.64	0.67	−10.82	0.58	0.60	0.85	0.75	0.76	− 5	− 2	−11	+34	+ 5	− 8	+ 5	+18	+ 1	− 3	1	−1.38
105972	21 27 46.16	+66 48 32.9	5.42	H	321.942 322 34	+66.809 146 13	4.23	−10.22	−20.72	0.44	0.41	0.48	0.58	0.47	−11	−13	+ 9	− 9	+ 4	+12	+ 1	−24	+17	− 2	0	0.74
105973	21 27 46.46	−81 57 55.9	8.49	H	321.943 600 16	−81.965 522 70	5.02	−17.35	−4.83	0.65	0.59	0.79	0.80	0.77	+ 0	−22	+ 4	+ 0	+ 8	+16	+10	+14	− 8	− 8	1	−1.53
105974	21 27 46.69	−73 12 10.5	8.96	H	321.944 536 79	−73.202 911 19	2.93	−6.57	6.53	0.76	0.85	1.06	1.03	1.05	−21	− 2	− 4	−20	− 1	− 8	+ 4	− 3	+15	−44	0	1.46
105975	21 27 47.02	−38 52 06.4	8.60	H	321.945 934 38	−38.868 456 16	1.78	13.95	−12.56	1.05	0.84	1.20	1.19	0.75	+23	− 6	−24	−15	−24	+32	−19	−40	+18	+20	0	−0.01
105976	21 27 47.17	−59 21 48.4	7.86	G	321.946 559 61	−59.363 455 29	7.47	29.11	−33.17	0.64	0.58	1.00	0.86	0.66	+ 4	−15	−14	+11	+29	−13	+27	+48	−19	+ 0	0	−1.08
*105977 H	21 27 48.20	−38 59 54.6	9.07	H	321.950 828 34	−38.998 506 59 A	7.20	35.26	12.90	5.17	3.36	4.74	6.25	2.77	+12	−11	−44	−11	− 6	− 6	− 7	−17	− 6	+16	1	0.43
*105978	21 27 48.13	+21 44 08.9	7.15	H	321.950 549 50	+21.735 807 17	6.75	31.96	29.68	0.55	0.48	0.80	0.65	0.51	+20	− 9	−20	−17	+ 3	− 9	+ 0	−23	+12	+16	1	1.26
105979	21 27 48.33	+67 40 03.6	10.26	H	321.951 354 68	+67.667 666 46	12.96	36.57	−8.06	1.08	1.04	1.21	1.40	1.19	− 3	−17	+ 5	+ 3	+ 3	+18	+ 1	−10	+18	+ 9	0	0.60
105980	21 27 48.51	−49 15 47.6	8.65	H	321.952 121 59	−49.263 212 78	3.39	−9.47	−11.95	0.84	0.66	1.20	0.95	0.60	+20	−14	−14	− 4	+ 5	+18	+ 7	+ 2	− 4	+ 1	0	0.37
105981	21 27 50.41	+64 00 49.5	7.40	H	321.960 028 66	+64.013 741 17	12.23	37.66	41.13	0.51	0.47	0.54	0.58	0.51	+ 0	−11	+ 7	+34	+ 6	− 6	+ 7	− 1	+17	+ 8	0	−0.55
105982	21 27 52.34	+20 06 30.2	8.60	H	321.968 099 46	+20.108 401 75	3.84	13.12	−7.13	0.81	0.67	1.10	0.95	0.69	+19	−11	−10	+24	− 8	−36	−11	−18	+11	+16	0	−0.50
105983	21 27 52.93	−00 28 33.1	9.80	H	321.970 528 55	−00.475 848 92	−0.17	29.15	−7.87	1.45	1.00	1.67	1.80	1.13	+ 9	+16	−22	−12	+12	+26	+21	−11	+41	+21	0	1.29
105984	21 27 53.67	+35 24 33.0	7.12	H	321.973 615 00	+35.409 154 29	10.62	8.31	2.15	0.38	0.45	0.67	0.47	0.49	−27	+ 2	− 7	+ 6	+11	− 6	+ 7	+16	− 8	−16	1	2.15
105985	21 27 54.17	−02 25 40.8	8.36	H	321.975 692 33	−02.428 004 78	0.82	6.63	−13.46	1.01	0.82	1.29	1.28	0.91	+10	− 2	−32	−24	− 1	+26	+ 4	−53	+51	+26	0	−1.38
105986	21 27 54.32	+46 33 41.5	6.86	H	321.976 347 64	+46.561 516 25	0.78	−0.35	−1.53	0.50	0.43	0.59	0.64	0.49	− 7	+20	+ 1	+33	+ 6	+24	+ 7	− 1	+11	− 5	1	−2.14
105987	21 27 55.02	−36 14 19.0	9.74	H	321.979 233 95	−36.238 622 70	5.19	10.96	9.40	1.46	1.03	1.51	1.81	0.93	+22	− 2	−13	−29	−19	+ 9	−17	−44	− 1	+18	0	1.43
105988	21 27 58.55	+64 36 49.2	8.89	H	321.993 953 25	+64.613 671 83	3.54	10.84	−2.79	0.73	0.67	0.78	0.87	0.76	+ 1	−12	+ 8	+17	+11	+ 0	+10	+ 1	+14	+10	0	−1.51
105989	21 27 59.42	+63 22 02.0	9.68	H	321.997 566 42	+63.367 232 06	2.75	−9.66	−16.06	0.78	0.78	0.86	0.86	0.90	+ 4	+ 7	+ 2	+29	+13	+ 6	+17	+13	+11	+23	0	1.94
105990 H	21 27 59.77	+53 17 21.4	7.18	H	321.999 021 93	+53.289 289 39 A	5.24	22.60	−1.83	0.77	0.75	0.69	0.65	0.60	+18	− 6	+ 4	−16	+ 0	−14	+ 1	−10	+18	+27	2	−0.44
105991	21 27 59.86	−66 47 37.2	7.64	H	321.999 407 71	−66.793 674 19	3.22	−0.88	−6.27	0.46	0.53	0.81	0.53	0.61	−23	+ 6	−11	− 4	+ 4	− 4	+ 4	+11	−16	−26	0	−0.35
105992	21 28 00.96	+64 23 15.0	8.84	H	322.004 005 03	+64.387 513 80	25.85	197.88	137.32	0.72	0.70	0.79	0.88	0.78	+ 8	+ 3	+12	+11	+ 9	−10	+12	− 4	+13	+20	1	−0.53
105993	21 28 01.31	−03 07 40.7	10.17	G	322.005 443 35	−03.127 977 19	2.11	18.48	−24.54	1.82	1.36	2.03	2.49	1.44	+29	+12	−18	−51	−11	−11	−12	−53	+38	+24	0	−0.15
105994	21 28 02.07	−05 37 11.4	8.89	H	322.008 639 39	−05.619 831 72	5.24	18.83	1.41	0.98	0.84	1.21	1.31	1.01	+42	−13	− 9	−31	−18	+42	−18	−45	+37	+60	4	−0.02
105995	21 28 02.63	+03 10 49.5	7.54	H	322.010 962 92	+03.180 416 19	5.84	42.24	−38.28	0.85	0.64	1.03	1.19	0.71	+18	− 8	−31	−21	− 5	+33	+ 1	−29	+33	+29	0	−0.21
105996 H	21 28 03.49	+04 40 02.3	9.44	H	322.014 554 67	+04.667 294 50 *	−0.79	−28.61	−35.46	1.39	1.00	1.53	2.20	1.20	+44	+13	+10	+20	− 9	+ 4	+ 1	+15	− 9	+68	0	−0.04
105997 H	21 28 03.77	−14 49 59.3	9.41	H	322.015 698 86	−14.833 145 59 A	2.13	32.10	5.96	2.25	1.33	2.02	2.60	1.31	+ 6	− 6	− 7	+28	−42	+29	−32	+ 2	+10	+18	1	−0.37
105998	21 28 04.98	+62 05 47.4	6.70	H	322.020 754 26	+62.096 501 13	4.65	−10.67	−8.28	0.54	0.49	0.60	0.62	0.56	+ 0	−24	+ 9	+10	+20	+14	+16	+11	+12	+25	1	−1.61
105999	21 28 05.06	−11 55 42.5	8.31	H	322.021 068 83	−11.928 459 75	3.67	23.01	−13.51	1.09	0.71	1.23	1.67	0.70	+15	− 1	−20	+23	−49	+46	−35	− 8	+ 8	+19	0	−1.30
106000	21 28 06.78	−44 26 16.9	8.16	H	322

No.	Tycho Magnitudes					Colour Indices					Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
105901	10.365	0.044	9.152	0.026		1.037	0.040	T	1.01	0.03	L	9.1707	0.0020	0.019	58		9.13	9.21		C			1							
105902	7.408	0.007	7.004	0.007		0.382	0.009	T	0.45	0.01	L	7.0588	0.0013	0.008	69		7.05	7.08		C			1							S
105903	7.807	0.009	7.640	0.008		0.160	0.011	T	0.18	0.01	L	7.6723	0.0009	0.008	111		7.66	7.69		C			1 G							S
105904	9.066	0.010	8.344	0.009		0.663	0.011	T	0.72	0.01	L	8.4062	0.0014	0.017	171		8.38	8.44					1							
105905	9.816	0.024	8.804	0.017		0.924	0.015	G	1.02	0.02	A	8.7959	0.0021	0.017	83		8.77	8.83					1							
105906	9.048	0.013	8.129	0.010		0.800	0.013	T	0.83	0.01	L	8.1990	0.0015	0.013	125		8.17	8.22		C			1 G							S
105907	10.714	0.063	8.889	0.023		1.518	0.053	T	1.55	0.08	L	8.8495	0.0020	0.016	55		8.83	8.89		D			1 S							
105908	9.799	0.022	9.493	0.025		0.291	0.031	T	0.33	0.04	L	9.5650	0.0025	0.022	116		9.53	9.60					1							G
105909	7.702	0.006	7.629	0.007		0.072	0.009	T	0.08	0.01	L	7.6533	0.0012	0.012	131		7.63	7.68					1							S
105910	10.700	0.031	9.001	0.013		1.419	0.027	T	1.40	0.04	L	8.9786	0.0024	0.024	162		8.94	9.01		R			1							
105911	8.616	0.010	7.579	0.007		0.876	0.038	G	0.90	0.02	A	7.6315	0.0014	0.012	123		7.61	7.65		C			1 G							S
105912	8.615	0.013	8.721	0.017		−0.143	0.003	G	−0.14	0.00	H	8.7544	0.0030	0.019	65		8.73	8.79					1							
105913	6.049	0.004	5.622	0.005	A	0.392	0.002	G	0.40	0.03	C *	5.5984	0.0005	0.006	146	*	5.59	5.61		D	21270−4233	I 1	2 C	A	AB	149	2.907	0.004	2.61	0.02	S
105914	9.782	0.028	7.953	0.012		1.522	0.024	T	1.56	0.04	L	7.9023	0.0060	0.029	61		7.86	7.95		U 2			1							S
105915	9.732	0.014	9.266	0.014		0.452	0.015	T	0.52	0.02	L	9.3106	0.0029	0.035	197		9.26	9.40		U 2			1 S							
105916	11.791	0.124	11.226	0.123		0.660	0.020	G	0.72	0.02	H	11.3053	0.0049	0.039	106		11.24	11.37					1							G
105917	11.075	0.065	9.648	0.029		1.205	0.056	T	1.16	0.06	L	9.7579	0.0026	0.020	88		9.73	9.79		C			1							
105918	7.338	0.007	6.778	0.005		0.529	0.006	T	0.60	0.01	L	6.8333	0.0014	0.011	78		6.82	6.85		M			1							S
105919	10.530	0.043	9.349	0.026		1.012	0.039	T	0.99	0.03	L	9.4052	0.0029	0.017	63		9.36	9.44		C			1							
105920	9.882	0.024	9.625	0.028		0.245	0.035	T	0.27	0.04	L	9.6564	0.0024	0.020	109		9.63	9.69		C			1							G
105921	9.262	0.017	7.809	0.009		1.225	0.015	T	1.18	0.01	L	7.8295	0.0012	0.014	194		7.81	7.86		C			1							
105922	8.810	0.015	7.411	0.009		1.183	0.014	T	1.14	0.01	L	7.4422	0.0013	0.010	74		7.42	7.45					1							S
105923	9.355	0.019	8.977	0.020		0.358	0.026	T	0.42	0.03	L	8.9953	0.0027	0.015	66		8.97	9.02		C			1							
105924	9.668	0.026	8.309	0.015		1.151	0.024	T	1.11	0.02	L	8.3825	0.0012	0.010	63		8.37	8.40					1							
105925	9.571	0.019	9.070	0.018		0.482	0.020	T	0.55	0.02	L	9.1302	0.0021	0.018	116		9.11	9.17		C			1							
105926	10.845	0.061	9.530	0.030		1.134	0.007	G	1.10	0.01	I	9.5228	0.0027	0.016	71		9.49	9.55		C			1							
105927											T	11.5951	0.0052	0.054	132		11.44	11.67					1 S							G
105928	7.668	0.008	5.941	0.003		1.440	0.001	G	1.41	0.03	C	5.9227	0.0009	0.007	78		5.91	5.93		C			1							S
105929	10.785	0.045	9.900	0.032		0.755	0.005	G	0.80	0.01	H	9.9578	0.0029	0.030	102		9.91	9.99					1							
105930	9.893	0.031	8.130	0.013		1.469	0.027	T	1.48	0.04	L	8.1313	0.0019	0.014	66		8.11	8.15		C			1							S
105931	7.875	0.012	7.549	0.013		0.285	0.015	G	0.32	0.02	H	7.5897	0.0008	0.007	45		7.58	7.61		C			1							S
105932						1.500	0.008	G	1.97	0.01	A	11.1792	0.0049	0.033	49		11.11	11.23		C			1							G
105933	7.166	0.004	6.812	0.004		0.336	0.005	T	0.39	0.01	L	6.8600	0.0010	0.008	107		6.85	6.87		C			1							S
105934	9.457	0.020	9.222	0.023	*	0.300	0.015	G	0.34	0.02	H *	9.2490	0.0060	0.039	86	*	9.19	9.30	1.23	P 1 A	21273+5953	I 1	2 C	A	AB	53	0.337	0.014	1.74	0.18	
105935	10.057	0.022	8.485	0.011		1.319	0.019	T	1.28	0.02	L	8.4792	0.0012	0.014	118		8.45	8.50					1							
105936	9.164	0.024	8.770	0.024		0.373	0.031	T	0.44	0.03	L	8.8269	0.0020	0.013	68		8.79	8.85					1							
105937	10.265	0.038	8.996	0.022		1.081	0.034	T	1.04	0.03	L	9.0478	0.0032	0.017	57		9.02	9.08					1							
105938	9.350	0.023	8.630	0.019	A	0.654	0.015	G	0.72	0.01	H *	8.4673	0.0019	0.013	69	*	8.44	8.49		D	21273−3222	I 1	2 C	A	AB	279	1.297	0.009	0.50	0.02	S
105939	10.176	0.057	8.908	0.033		1.080	0.051	T	1.04	0.04	L	8.9214	0.0024	0.015	48		8.90	8.94		C			1							
105940	9.385	0.022	9.095	0.024		0.275	0.034	T	0.31	0.04	L	9.1055	0.0030	0.019	69		9.08	9.14			21273−3218	I 1	1							
105941	9.632	0.015	9.075	0.014		0.527	0.015	T	0.60	0.02	L	9.1515	0.0020	0.018	169		9.12	9.19		C			1							
105942	5.111	0.002	5.274	0.002		−0.140	0.002	T	−0.13	0.00	L	5.2566	0.0004	0.005	204		5.25	5.27		C			1							S
105943	9.045	0.015	8.701	0.016		0.326	0.020	T	0.38	0.03	L	8.7396	0.0029	0.017	77		8.71	8.77					1							
105944	8.502	0.010	8.543	0.013		−0.030	0.015	G	−0.01	0.01	H	8.5358	0.0017	0.015	131		8.50	8.56					1							
105945	10.448	0.042	8.635	0.017		1.509	0.036	T	1.54	0.05	L	8.5745	0.0031	0.019	71		8.55	8.61		C			1							
105946	7.006	0.006	7.097	0.008	*	−0.088	0.003	G	−0.07	0.00	H *	7.0880	0.0008	0.007	94	*	7.08	7.10		D	21274−1335	H 1	2 C S	B	AB	354	0.127	0.013	2.07	0.37	S
105947	8.236	0.013	7.591	0.010	*	0.599	0.015	G	0.67	0.01	H *	7.6540	0.0018	0.009	49	*	7.64	7.67		C	21274−0701	H 1	2 C S	A	AB	172	0.127	0.019	1.17	0.60	S
105948	9.620	0.019	7.893	0.009		1.441	0.017	T	1.44	0.03	L	7.8687	0.0010	0.012	91		7.85	7.89		C			1							S
105949	8.373	0.011	6.341	0.006		1.720	0.010	T	2.58	0.03	O	6.1093	0.0069	0.050	97		6.04	6.19		U 2	21274+5945	I 1	1 S							S
105950	9.531	0.018	9.373	0.021		0.152	0.026	T	0.17	0.03	L	9.4271	0.0029	0.022	115		9.39	9.47		C			1							
105951	9.703	0.013	8.180	0.007		1.280	0.012	T	1.24	0.01	L	8.1928	0.0013	0.016	193		8.16	8.22					1							
105952	10.325	0.029	8.761	0.015		1.312	0.026	T	1.27	0.03	L	8.7655	0.0015	0.016	115		8.74	8.80					1							
105953	9.172	0.015	7.943	0.010		1.050	0.014	T	1.02	0.01	L	8.0113	0.0015	0.011	83		7.99	8.03		C			1							S
105954	9.598	0.021	7.955	0.011		1.375	0.019	T	1.35	0.02	L	7.9824	0.0017	0.013	66		7.96	8.01		C			1							S
105955	7.528	0.006	7.479	0.007		0.050	0.009	T	0.06	0.01	L	7.5131	0.0010	0.008	142		7.49	7.53		C			1							S
105956	9.484	0.018	7.656	0.008		1.521	0.016	T	1.56	0.02	L	7.6074	0.0015	0.011	139		7.59	7.63					1							S
105957	9.368	0.016	8.834	0.016	A	0.400	0.495	G	0.58	0.02	L *	8.8381	0.0013	0.012	87	*	8.81	8.86		D	21275−2016	I 1	2 C	A	AB	195	2.914	0.034	3.12	0.13	S
105958	11.096	0.069	9.046	0.022		1.735	0.060	T	2.24	0.12	O	8.8954	0.0035	0.031	60		8.83	8.94		U 2			1							
105959	9.031	0.015	7.764	0.009		1.079	0.014	T	1.04	0.01	L	7.7962	0.0015	0.013	122		7.77	7.82					1							
105960	9.629	0.019	9.183	0.019		0.520	0.015	G	0.59	0.02	H	9.2235	0.0041	0.042	106		9.17	9.28	1.91	P 1 A			1							
105961	9.720	0.021	9.073	0.018		0.639	0.007	G	0.70	0.01	H	9.1632	0.0025	0.019	89		9.13	9.20		C			1							
105962	8.735	0.010	7.652	0.007		0.937	0.009	T	0.93	0.01	L	7.7051	0.0009	0.008	129		7.69	7.72		C			1							S
105963						1.785	0.200	G	2.25	0.16	S	11.1168	0.0047	0.053	258		11.02	11.19		R 2			1 X							G
105964	9.581	0.022	8.274	0.013		1.111	0.020	T	1.07	0.02	L	8.3214	0.0015	0.010	74		8.30	8.34					1							
105965	7.558	0.008	7.086	0.008		0.457	0.009	T	0.53	0.01	L	7.1322	0.0009	0.007	92		7.12	7.14		C			1							S
105966	5.448	0.002	5.394	0.002		0.049	0.003	T	0.06	0.00	L	5.4101	0.0006	0.006	144		5.40	5.42		C			1							S
105967	10.238	0.026	8.870	0.015		1.158	0.024	T	1.26	0.04	L	8.9013	0.0020	0.020	107		8.87	8.94					1							
105968	8.979	0.017	8.587	0.017		0.333	0.015	G	0.39	0.02	H	8.6431	0.0020	0.012	71		8.62	8.67		C			1							
105969	9.038	0.013	8.307	0.011		0.643	0.005	G	0.71	0.00	H	8.3955	0.0011	0.013	106		8.37	8.41					1 X							
105970	10.001	0.038	8.191	0.017		1.537	0.034	T	2.06	0.10	O	8.0680	0.0021	0.012	47		8.05	8.09		C			1							
105971	9.504	0.017	7.938	0.009		1.314	0.015	T	1.28	0.02	L	7.9491	0.0014	0.013	131		7.93	7.97		C			1							
105972	5.282	0.003	5.397	0.003		−0.099	0.004	T	−0.08	0.01	L	5.3893	0.0007	0.006	105		5.38	5.40					1							S
105973	9.096	0.012	8.547	0.011		0.526	0.015	G	0.60	0.02	H	8.6049	0.0015	0.017	133		8.58	8.63		C			1							
105974	10.118	0.019	9.063	0.013		0.915	0.017	T	0.91	0.01	L	9.1206	0.0024	0.021	161		9.08	9.16					1 S							
105975	9.835	0.027	8.696	0.018		0.979	0.025	T	0.96	0.02	L	8.7698	0.0018	0.014	65		8.74	8.80		C			1							
105976	8.289	0.007	7.913	0.008		0.356	0.010	T	0.42	0.01	L	7.9442	0.0013	0.014	179		7.92	7.97		C			1 S							S
105977	10.101	0.034	9.586	0.032	A						T *	9.1802	0.0025	0.017	67	*	9.15	9.21		D	21278−3900	I 1	2 C	B	AB	121	4.104	0.008	0.08	0.04	
105978	8.321	0.007	7.257	0.005		0.922	0.007	T	0.92	0.01	L	7.3091	0.0006	0.010	144		7.29	7.33		D			1							S
105979	11.238	0.056	10.321	0.042		0.798	0.054	T	0.84	0.06	L	10.3976	0.0031	0.031	117		10.35	10.46		C			1							G
105980	9.831	0.018	8.753	0.012		0.933	0.016	T	0.93	0.01	L	8.8101	0.0016	0.013	127		8.79	8.84		C			1							
105981	7.966	0.009	7.442	0.008		0.496	0.015	G	0.57	0.02	H	7.5063	0.0008	0.009	118		7.49	7.52		C			1							S
105982	9.853	0.022	8.697	0.015		0.993	0.021	T	0.97	0.02	L	8.7694	0.0019	0.016	110		8.74	8.81		C			1							
105983	11.368	0.094	9.909	0.040		1.230	0.080	T	1.19	0.08	L	9.9669	0.0039	0.026	67		9.91	10.00					1							
105984	7.355	0.004	7.139	0.004		0.206	0.005	T	0.23	0.01	L	7.1872	0.0008	0.010	217		7.17	7.20		C			1							S
105985	9.822	0.025	8.473	0.014		1.143	0.022	T	1.11	0.02	L	8.5300	0.0017	0.012	74		8.52	8.56		C			1							
105986	6.749	0.004	6.841	0.006		−0.079	0.006	T	−0.06	0.01	L	6.8428	0.0008	0.008	127		6.83	6.86					1							S
105987	10.286	0.043	9.747	0.041		0.505	0.053	T	0.58	0.06	L	9.8544	0.0043	0.021	60		9.83	9.90					1							
105988	9.090	0.014	8.904	0.016		0.178	0.020	T	0.20	0.02	L	8.9471	0.0018	0.015	115		8.92	8.98		C			1							
105989	10.174	0.031	9.753	0.033		0.398	0.042	T	0.46	0.05	L	9.7731	0.0021	0.017	105		9.74	9.81		C			1							G
105990	7.178	0.005	7.185	0.007	*	−0.002	0.008	T	0.02	0.01	L *	7.1901	0.0009	0.009	113	*	7.18	7.20		D	21280+5317	H 1	2 C	A	AB	33	0.464	0.008	2.61	0.03	S
105991	8.852	0.009	7.745	0.006		0.955	0.008	T	0.94	0.01	L	7.8061	0.0011	0.015	198		7.78	7.84					1							S
105992	9.904	0.024	8.922	0.017		0.840	0.015	G	0.88	0.01	H	8.9853	0.0022	0.021	112		8.96	9.02					1							
105993	11.009	0.069	10.198	0.050		0.719	0.015	G	0.77	0.01	H	10.3018	0.0042	0.035	68		10.25	10.37					1							G
105994	9.260	0.021	8.930	0.023		0.313	0.029	T	0.36	0.04	L	8.9682	0.0021	0.018	66		8.95	9.00					1							
105995	8.133	0.010	7.602	0.011		0.524	0.015	G	0.60	0.02	H	7.6537	0.0014	0.012	75		7.64	7.68					1							S
105996	10.036	0.030	9.486	0.030	*	0.515	0.038	T	0.59	0.04	L *	9.5536	0.0023	0.017	82	*	9.52	9.58		D	21281+0440	H 1	2 C S	A	AB	189	0.172	0.007	0.18	0.30	
105997	10.780	0.056	9.610	0.032	A						T *	9.5696	0.0020	0.023	86	*	9.53	9.61		D	21281−1450	I 1	2 C	A	AB	278	1.057	0.033	2.77	0.10	
105998	7.965	0.008	6.803	0.005		0.997	0.007	T	0.98	0.01	L	6.8639	0.0011	0.009	112		6.85	6.88					1							S
105999	10.174	0.033	8.475	0.015		1.419	0.029	T	1.40	0.05	L	8.4562	0.0011	0.015	89		8.43	8.48		D			1							
106000	9.372	0.015	8.271	0.010		0.960	0.015	G	0.95	0.01	H	8.3281	0.0014	0.016	143		8.31	8.35		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	13	mas 14	15	mas 16	mas/yr 17	18	19	20	21	22	23	24	25	26	27	28	29	30
*106001	21 28 07.31	+62 23 30.6	9.88	H	322.030 451 63	+62.391 820 09	2.30	8.22	6.80	0.84	0.82	0.95	1.01	1.04	+ 4	− 1	− 2	− 6	+18	+11	+13	+16	+ 6	+32	1	−1.39
*106002	21 28 07.28	+45 34 40.2	8.60	G	322.030 329 73	+45.577 828 69	12.25	−1.00	−40.32	0.73	0.59	0.87	1.07	0.65	−12	+ 8	+ 8	+25	− 2	+20	− 4	+ 5	+ 8	−17	0	−0.20
106003	21 28 08.16	+32 13 30.5	5.75	H	322.033 995 11	+32.225 136 77	22.41	134.05	79.39	0.43	0.46	0.65	0.49	0.54	−11	+ 4	− 6	+18	+12	−12	+15	− 2	+10	− 2	0	−1.54
106004	21 28 10.50	−52 18 08.6	6.79	H	322.043 747 15	−52.302 386 77	3.44	40.99	−4.07	0.62	0.48	0.82	0.71	0.41	+14	− 9	−16	+18	+20	+13	+17	+ 7	−10	− 2	0	1.87
106005	21 28 11.63	+10 36 37.9	8.73	G	322.048 471 62	+10.610 527 76	21.79	117.86	20.23	1.16	0.81	1.28	1.54	0.91	+17	−17	−13	−11	+ 6	+12	+ 4	−13	+14	+26	0	1.05
106006	21 28 12.18	−21 43 32.1	7.99	G	322.050 750 67	−21.725 595 52	21.14	41.58	−271.22	0.89	0.56	1.06	1.03	0.55	+31	−25	− 8	−22	−31	+47	−32	−19	+20	+33	0	−0.46
106007	21 28 13.94	−11 34 05.4	6.61	G	322.058 075 93	−11.568 173 50	28.41	16.21	−43.84	0.79	0.53	0.98	1.33	0.59	+12	− 4	−31	+ 9	−33	+52	−18	− 6	+19	+14	2	−0.02
106008	21 28 14.19	+58 03 28.2	9.61	H	322.059 129 18	+58.057 840 27	2.74	4.12	7.58	0.90	0.92	1.08	0.93	0.94	− 8	+ 5	+ 0	−12	+ 9	− 6	+11	−18	+ 8	+ 9	0	0.86
106009	21 28 14.86	+47 57 14.1	8.07	1 H	322.061 899 42	+47.953 928 05	3.03	7.42	2.46	0.54	0.54	0.68	0.71	0.61	−15	+ 0	+15	−	3	− 5	−10	−	3	− 4	+ 1	−27	1	−0.23
106010	21 28 17.67	−42 36 56.3	9.59	G	322.073 627 91	−42.615 645 53	6.32	62.32	−4.04	1.07	0.83	1.25	1.12	0.80	+48	−19	−18	−45	−31	+ 7	−31	−40	+12	+39	0	0.11
106011	21 28 18.82	−02 36 43.0	7.55	H	322.078 435 71	−02.611 953 95	5.27	−10.75	−58.22	0.92	0.66	1.09	1.12	0.73	+ 2	+ 5	−35	−34	+14	+12	+16	−43	+49	+13	0	−0.62
106012	21 28 19.34	−26 32 15.6	7.87	H	322.080 595 47	−26.537 674 84	4.30	19.36	−10.40	0.86	0.55	0.94	0.98	0.55	+40	−22	−14	−19	−24	+22	−21	− 8	+ 6	+39	2	2.17
106013	21 28 19.87	−52 49 14.6	9.09	2 H	322.082 792 69	−52.820 711 70	3.22	11.37	0.09	0.96	0.86	1.36	1.18	0.70	+12	+10	−28	+ 1	+22	− 8	+14	−18	+18	+ 5	0	0.11
106014	21 28 20.62	+61 00 13.7	8.42	H	322.085 898 69	+61.003 808 97	2.62	30.20	9.03	0.67	0.64	0.77	0.68	0.65	+ 1	+ 5	+25	− 5	+26	+18	+23	+ 2	+15	+13	2	0.30
*106015	21 28 21.65	−02 53 07.1	6.88	H	322.090 212 78	−02.885 314 29	2.21	10.28	−19.13	0.89	0.65	1.04	1.17	0.71	− 3	+10	−35	−40	+27	− 6	+21	−42	+49	+ 3	0	−0.71
*106016	21 28 21.65	−17 15 28.2	8.83	H	322.090 200 92	−17.257 823 31	4.10	−4.84	−14.46	1.11	0.67	1.31	1.26	0.68	+35	−19	−29	−23	−26	+37	−22	− 7	+23	+42	0	0.66
106017	21 28 22.80	−29 22 31.5	11.12	H	322.094 983 22	−29.375 408 23	2.00	193.87	−135.17	1.95	1.11	2.27	2.43	1.12	+46	− 4	+ 3	−17	−25	+34	−22	+ 8	− 3	+35	0	−0.77
106018	21 28 23.21	+50 34 01.4	8.39	H	322.096 698 51	+50.567 064 13	0.76	3.00	0.40	0.62	0.59	0.73	0.69	0.65	−18	−15	+11	− 5	+ 3	+ 0	+ 2	− 7	+ 5	−22	0	0.71
106019	21 28 23.79	−43 42 58.5	10.32	H	322.099 139 40	−43.716 240 70	2.47	−8.25	11.84	1.35	1.23	2.11	1.38	1.26	+68	−41	−27	−40	−30	+36	−25	−27	+12	+59	0	0.16
106020	21 28 24.45	+50 59 22.0	8.74	H	322.101 863 56	+50.989 436 60	1.32	−1.66	−10.92	0.69	0.71	0.85	0.77	0.69	−16	−13	+23	−12	+ 2	− 6	+ 3	−24	− 1	−16	0	−0.37
106021	21 28 24.83	+08 11 44.6	6.39	2 H	322.103 473 96	+08.195 711 32	3.60	6.89	−27.25	0.84	0.62	0.98	1.15	0.70	+38	− 6	− 9	−12	−22	− 7	−18	−20	−15	+49	0	1.37
106022	21 28 27.60	+67 52 39.1	8.73	H	322.114 979 74	+67.877 537 32	2.15	−2.80	−3.38	0.71	0.69	0.77	0.92	0.77	−	5	−14	+ 5	+ 6	+ 4	− 4	+ 8	−27	− 2	+ 8	0	1.04
106023	21 28 27.67	+41 52 33.4	8.63	H	322.115 297 91	+41.875 946 00	2.56	3.64	−2.59	0.62	0.62	0.88	0.72	0.70	−22	− 7	+ 2	− 4	+ 0	+ 4	+ 0	− 3	+ 2	−33	0	0.28
106024	21 28 28.22	+76 24 12.7	7.59	2 H	322.117 566 85	+76.403 528 28	5.03	−3.46	−12.97	0.54	0.48	0.56	0.63	0.58	+	5	−17	+	5	+14	+16	−	2	+17	+	1	+	7	+21	0	0.37
106025	21 28 28.28	−23 37 05.2	8.89	H	322.117 819 54	−23.618 104 44	7.16	−19.00	14.88	1.01	0.69	1.31	1.24	0.66	+35	− 9	−22	−17	−20	+52	−12	− 9	+20	+37	0	0.02
106026	21 28 28.55	−45 49 40.5	9.53	H	322.118 978 98	−45.827 911 06	3.36	0.34	−25.30	1.01	0.90	1.43	1.13	0.93	+51	−44	−41	− 3	− 5	− 1	− 3	−16	− 2	+50	3	1.63
106027	21 28 31.06	−18 40 00.8	9.54	H	322.129 420 44	−18.666 879 59	−0.64	0.97	−12.29	1.22	0.80	1.40	1.49	0.78	+38	−17	−23	−34	−23	+39	−19	−21	+24	+39	0	−0.41
106028	21 28 31.67	+50 26 43.4	7.37	H	322.131 954 93	+50.445 395 62	5.88	−10.61	−14.22	0.52	0.45	0.59	0.57	0.48	−17	−12	+ 6	− 4	+ 3	+ 0	+ 1	−12	+ 9	−22	0	0.07
106029	21 28 32.14	−50 44 41.3	8.85	H	322.133 916 49	−50.744 819 03	3.38	24.12	−19.70	1.09	0.73	1.39	1.29	0.64	+17	+32	− 3	+28	+35	+ 7	+27	+29	+ 2	+ 1	0	1.99
106030 H	21 28 32.54	+87 00 06.2	8.40	H	322.135 583 18	+87.001 735 13 A	3.66	13.81	17.33	1.79	1.10	1.01	1.04	0.94	+ 8	−10	+12	−20	−19	−14	−12	−20	− 8	+28	2	−0.69
106031	21 28 35.44	−04 09 48.5	9.51	H	322.147 654 30	−04.163 459 31	3.08	−6.20	−19.06	1.51	1.12	1.71	1.56	1.10	+23	−12	+ 4	−46	+ 1	+39	− 3	−47	+25	+38	0	0.62
106032	21 28 39.58	+70 33 38.5	3.23	1 H	322.164 895 95	+70.560 694 81	5.48	12.60	8.73	0.47	0.44	0.47	0.55	0.49	−21	+ 0	+ 3	−19	+14	−14	+15	−38	+10	−23	0	1.38
106033	21 28 41.09	+26 24 42.1	7.59	H	322.171 188 63	+26.411 683 53	5.22	33.48	−5.03	0.60	0.50	0.92	0.73	0.59	−13	+ 5	−22	+ 7	+15	−30	+11	− 9	+24	− 8	0	0.03
106034	21 28 41.18	−25 38 38.6	7.81	G	322.171 565 05	−25.644 055 26	5.09	26.74	0.43	0.84	0.55	0.92	0.95	0.57	+41	− 5	−13	−36	−25	+32	−22	−10	+ 3	+39	0	0.67
106035	21 28 41.31	−71 07 48.8	9.48	H	322.172 110 30	−71.130 225 29	7.01	28.15	4.38	0.80	0.95	1.23	0.88	1.26	−12	− 6	−20	−16	+10	− 7	+12	+30	− 8	−16	0	2.04
106036	21 28 42.26	+25 55 17.0	6.56	H	322.176 089 70	+25.921 380 08	3.33	19.29	−14.38	0.58	0.43	0.76	0.78	0.49	−11	+ 9	−19	−21	+17	−15	+13	− 6	+ 9	− 4	0	0.52
106037	21 28 42.32	+24 40 12.3	7.48	G	322.176 351 94	+24.670 083 80	7.53	36.42	19.26	0.57	0.56	0.78	0.65	0.59	+25	− 8	−21	+ 4	− 4	− 9	− 6	−21	+ 6	+25	0	−0.30
106038 H	21 28 43.07	+49 52 06.5	9.09	H	322.179 468 36	+49.868 481 85 A	1.82	11.78	9.31	1.50	1.31	1.56	1.70	1.32	−13	−14	+ 6	−39	+12	− 8	+ 6	−18	+16	+ 0	1	0.99
106039	21 28 43.32	−21 48 25.8	4.50	G	322.180 483 46	−21.807 166 59	18.18	133.97	−5.47	0.76	0.45	0.89	0.90	0.45	+12	−27	− 3	− 8	−17	+46	−22	+ 1	+25	+22	2	0.07
106040	21 28 43.41	+26 34 10.6	7.80	H	322.180 861 74	+26.569 605 14	16.51	65.69	76.96	0.61	0.51	0.92	0.73	0.62	− 9	− 2	−19	+23	+10	−29	− 9	−12	+12	+ 0	0	3.01
106041	21 28 43.76	+32 56 48.2	8.62	H	322.182 330 84	+32.946 724 26	3.59	3.04	−5.36	0.65	0.59	0.90	0.72	0.64	−11	+12	− 9	+30	+29	− 8	+27	+27	+ 5	−15	0	0.35
106042	21 28 44.17	+50 49 33.2	8.27	G	322.184 051 81	+50.825 889 90	0.21	−0.59	−3.11	0.63	0.59	0.73	0.70	0.61	−22	−10	+ 9	+ 1	+ 4	− 3	+ 4	−14	+ 0	−26	1	−0.59
106043	21 28 44.44	−47 15 41.6	12.20	2 G	322.185 162 07	−47.261 562 42	26.72	−13.48	−57.74	2.97	2.69	3.91	3.37	2.74	+44	−12	−10	−27	−21	+ 4	−21	−35	+ 5	+40	0	0.68
106044	21 28 44.79	−69 30 19.0	5.47	2 H	322.186 613 78	−69.505 273 20	8.23	82.31	−46.41	0.43	0.44	0.64	0.49	0.51	−18	−18	− 5	+ 1	− 6	−10	− 5	− 4	−10	−25	1	−0.81
106045	21 28 46.12	−40 42 00.8	9.14	G	322.192 146 84	−40.700 221 33	9.18	−16.27	−5.96	1.21	0.94	1.38	1.85	0.89	+25	−12	−37	+20	−20	+41	− 8	−35	+23	+28	0	−0.62
106046	21 28 46.66	−28 12 07.0	9.68	G	322.194 411 29	−28.201 956 03	5.33	−129.40	−102.07	1.24	0.71	1.40	1.43	0.74	+35	−11	− 4	−26	−12	+38	−13	+ 6	+ 7	+36	0	2.08
106047	21 28 47.11	+65 37 08.0	10.43	H	322.196 279 59	+65.618 891 92	10.58	151.32	206.13	1.39	1.26	1.42	1.69	1.50	−	7	− 7	+12	+20	+16	+ 3	+19	− 6	+11	+ 8	1	1.28
106048 H	21 28 47.17	+77 56 07.0	7.26	H	322.196 524 42	+77.935 269 41 A	4.54	−8.99	−17.93	0.66	0.63	0.65	0.70	0.63	−	4	−16	+11	+11	+ 8	−11	+ 5	−12	+17	− 8	0	−0.26
106049	21 28 48.52	+49 47 42.4	6.79	G	322.202 157 40	+49.795 105 16	7.87	−11.59	−4.03	0.51	0.45	0.59	0.63	0.51	−11	−22	+ 3	−28	+ 9	+ 1	+ 4	+ 5	− 2	+ 2	0	−1.52
106050	21 28 50.05	−14 49 34.1	9.15	H	322.208 521 62	−14.826 127 26	9.27	−20.67	−99.89	1.29	0.80	1.38	1.75	0.88	+16	− 9	+ 2	+25	−34	+20	−27	+10	+ 8	+25	2	0.91
106051	21 28 50.50	−79 55 32.5	7.36	H	322.210 433 47	−79.925 685 74	5.41	10.15	−16.24	0.56	0.52	0.69	0.71	0.58	−	5	−29	− 8	+17	−10	− 1	−10	+ 8	+ 5	−12	0	1.22
106052	21 28 52.72	+55 25 07.2	6.14	H	322.219 674 77	+55.418 667 82	3.51	15.68	14.14	0.43	0.48	0.54	0.49	0.51	+	0	−	3	+	3	+	5	+	8	+23	+	6	+	6	+16	+10	0	1.86
*106053 H	21 28 52.79	+11 05 05.2	6.65	G	322.219 960 92	+11.084 787 66 A	7.92	74.24	17.10	1.67	1.29	1.49	1.67	1.15	+30	+ 2	+ 1	+23	+ 0	+ 5	+ 6	+ 3	+ 1	+44	4	1.62
*106054	21 28 52.76	+07 45 25.5	8.75	H	322.219 845 72	+07.757 097 14	2.16	10.34	−5.73	1.05	0.93	1.24	1.42	1.02	+42	+ 5	− 3	+ 2	−26	+12	−21	−19	−19	+44	0	1.99
106055	21 28 52.92	−08 59 26.5	7.16	H	322.220 511 30	−08.990 701 32	10.77	23.42	−46.36	0.86	0.66	1.10	1.28	0.76	+25	− 4	−39	+15	+ 1	+27	+10	+ 3	+29	+20	0	−0.84
106056	21 28 53.81	−37 24 14.9	7.70	H	322.224 210 63	−37.404 148 54	4.72	72.07	−48.76	0.83	0.70	1.03	0.91	0.59	+31	−20	−38	−19	−26	+42	−17	−40	+24	+28	0	2.33
106057	21 28 54.08	−77 57 40.0	9.82	H	322.225 332 21	−77.961 118 16	2.93	7.00	6.82	0.81	0.86	1.11	0.96	0.94	−10	−18	− 5	+10	− 9	− 4	− 9	+24	+10	−22	0	0.52
106058	21 28 57.04	+17 20 15.4	8.79	H	322.237 680 25	+17.337 619 21	2.44	−0.93	−1.11	1.04	0.80	1.21	1.43	0.84	+20	− 7	− 8	− 9	− 6	+15	− 4	−15	+ 0	+20	0	0.74
106059 H	21 28 57.76	+58 44 23.3	7.94	G	322.240 676 44	+58.739 795 49 *	0.97	−1.21	−2.92	0.64	0.67	0.79	0.62	0.66	+ 7	+ 2	+ 1	− 2	+23	− 4	+24	− 7	+19	+31	0	−0.09
106060	21 28 58.30	+13 03 33.5	8.16	H	322.242 896 80	+13.059 301 97	5.46	18.21	−9.18	0.86	0.80	1.11	1.08	0.96	+29	− 3	−29	− 5	− 2	− 7	− 4	−33	+29	+31	0	0.90
106061	21 28 58.72	+40 28 06.6	8.36	H	322.244 672 07	+40.468 502 15	2.17	3.54	−19.75	0.57	0.61	0.87	0.62	0.69	−	7	− 2	+15	+ 1	+ 7	− 9	+ 8	+ 6	+13	− 4	0	−2.12
106062	21 28 59.76	+22 10 45.9	5.84	2 H	322.248 988 03	+22.179 404 00	5.41	33.24	13.06	0.48	0.42	0.69	0.52	0.47	+15	− 9	−14	− 5	+ 0	−16	− 2	−27	+ 7	+15	1	1.25
106063	21 28 59.82	−71 32 23.0	8.84	H	322.249 268 89	−71.539 730 56	2.28	20.16	−24.27	0.75	0.80	1.11	0.90	1.03	−12	−17	− 9	+ 4	+ 2	−15	+ 2	+15	+ 0	−21	0	0.10
106064	21 28 59.92	+17 54 21.3	6.42	H	322.249 678 11	+17.905 908 02	5.99	−9.12	0.61	0.74	0.50	0.82	1.09	0.55	+13	− 4	−13	−29	+ 5	−10	+ 2	− 5	+ 5	+ 9	0	−0.37
106065	21 29 00.08	−53 42 21.1	6.39	G	322.250 319 10	−53.705 850 19	9.03	70.11	−25.53	0.62	0.52	0.84	0.79	0.43	+10	− 1	−30	− 5	+24	− 6	+15	−16	+ 7	+ 5	0	0.25
106066	21 29 03.02	+61 25 59.2	7.09	H	322.262 571 03	+61.433 109 03	13.41	−41.55	4.58	0.51	0.49	0.58	0.53	0.49	−10	+10	+15	+ 5	+19	+10	+20	− 3	+13	+ 0	0	0.26
106067	21 29 03.73	−31 14 18.7	6.52	H	322.265 540 98	−31.238 530 96	8.65	16.40	−11.50	0.73	0.45	0.85	0.86	0.42	+32	−18	−29	− 8	−28	+37	−16	+ 0	− 5	+21	2	1.27
106068	21 29 04.13	−13 47 51.9	8.94	H	322.267 215 63	−13.797 752 70	5.67	−8.54	−16.95	1.33	0.85	1.48	2.16	0.80	+ 6	+25	−29	+39	−55	+49	−31	+ 9	− 4	+20	0	−0.53
106069	21 29 04.62	+40 18 15.8	7.83	H	322.269 267 13	+40.304 387 97	6.66	37.27	26.04	0.46	0.50	0.70	0.52	0.59	−10	+ 5	+ 3	+ 8	+ 5	−12	+ 7	+13	+19	−11	0	−0.60
106070	21 29 05.23	−19 32 28.2	8.93	H	322.271 779 15	−19.541 173 12	2.44	13.03	−7.86	1.24	0.67	1.37	1.56	0.66	+15	−15	−22	+ 8	−28	+37	−21	− 7	+26	+25	0	−1.82
106071	21 29 06.34	+44 55 23.1	6.94	1 G	322.276 404 16	+44.923 085 55	2.06	−2.82	−3.28	0.51	0.44	0.61	0.64	0.50	−21	+19	− 2	+22	+ 2	+ 8	+ 2	+12	+ 6	−24	0	1.96
106072	21 29 06.42	+19 29 05.0	10.87	G	322.276 740 27	+19.484 726 56	23.38	−210.77	−161.97	1.48	1.23	1.86	1.94	1.37	+15	− 3	+ 0	+ 0	− 7	− 3	− 6	−10	− 4	+15	0	1.49
106073	21 29 06.69	+53 47 39.1	8.45	G	322.277 893 65	+53.794 201 25	8.34	57.77	37.49	0.73	0.61	0.78	0.78	0.61	−	6	+15	+ 1	−33	+15	−10	+14	−12	+16	+ 2	1	−2.99
106074 H	21 29 06.95	+12 11 02.8	11.17	G	322.278 942 87	+12.184 122 13 A	19.71	155.31	−460.79	9.17	5.66	8.49	9.79	6.69	+33	−17	−14	+ 5	+ 1	+12	+ 1	−23	+22	+26	1	0.64
106075	21 29 11.86	+11 57 11.0	7.31	H	322.299 426 07	+11.953 054 45	4.54	56.88	−60.82	0.96	0.73	1.23	1.32	0.95	−	1	+	3	−35	−	7	+13	−	9	+11	−38	+51	+	5	2	−0.23
106076	21 29 12.97	−47 59 50.9	9.67	H	322.304 024 61	−47.997 463 65	5.42	25.94	−24.16	1.01	0.86	1.53	1.18	0.77	+25	−21	−25	−12	− 6	+26	+ 0	−11	+ 0	+10	0	0.99
106077	21 29 13.86	−41 24 57.3	8.88	2 H	322.307 737 12	−41.415 902 83	2.92	−6.83	−8.58	1.23	0.83	1.25	1.84	0.78	−	7	−10	−23	−48	+ 6	+40	+11	−40	+ 4	− 2	0	−0.78
106078	21 29 14.42	−50 19 00.4	7.33	G	322.310 080 79	−50.316 782 83	19.05	61.03	−25.00	0.73	0.50	0.97	0.89	0.45	+10	+ 9	+ 3	+26	+22	+21	+16	+28	− 7	−13	0	0.16
106079	21 29 14.84	+44 20 17.3	7.62	2 H	322.311 839 01	+44.338 130 48	1.96	3.76	−1.66	0.51	0.48	0.65	0.57	0.51	−25	+24	−14	+16	+ 1	+ 2	+ 3	− 2	+ 6	−20	1	−0.42
106080	21 29 15.19	+25 26 42.1	8.68	H	322.313 311 15	+25.445 028 27	17.76	−105.03	−194.29	0.78	0.84	1.15	1.02	0.89	+22	− 1	−42	− 8	− 5	+ 8	− 5	−43	+36	+16	0	0.06
106081	21 29 15.41	+28 35 00.0	6.75	G	322.314 202 26	+28.583 346 20	10.25	−32.81	−143.07	0.53	0.46	0.78	0.59	0.56	−	9	+	9	−	7	+13	+	8	−21	+10	+	4	+	1	+14	0	1.49
106082	21 29 16.08	+34 58 21.4	8.31	H	322.316 997 15	+34.972 609 71	2.33	1.17	−8.70	0.46	0.56	0.87	0.52	0.59	−18	+ 2	− 5	+ 2	+ 5	−11	+22	+19	−12	− 7	0	−2.47
106083 H	21 29 19.28	−38 49 39.9	8.17	H	322.330 347 76	−38.827 753 61 A	7.64	10.32	18.92	1.42	1.15	1.42	1.62	1.06	+23	−17	− 9	− 5	− 4	+ 5	− 6	−27	− 1	+30	2	0.93
106084	21 29 19.58	+65 56 59.7	9.04	H	322.331 604 04	+65.949 913 81	1.04	0.42	−0.17	0.87	0.82	0.93	1.15	0.98	−10	−12	+10	+ 2	+16	+ 7	+14	− 7	+10	+10	0	−2.20
106085	21 29 20.54	+67 03 03.6	6.91	G	322.335 601 40	+67.050 986 69	5.46	24.11	21.85	1.05	1.04	1.15	1.35	1.14	−	8	+	8	+12	−12	+	2	+	8	+	2	−29	+14	+	4	0	
*106086	21 29 22.53	+01 08 13.2	8.39	H	322.343 889 83	+01.136 996 38	3.19	8.59	3.39	1.15	0.84	1.29	1.66	0.90	+12	− 1	−15	+14	+15	+15	+ 9	−37	+38	+11	0	−1.41
*106087	21 29 22.53	−10 19 25.0	10.22	H	322.343 876 65	−10.323 624 49	4.43	12.84	7.21	1.56	1.17	1.93	3.02	1.33	+15	+10	−27	+21	−16	+43	− 9	−18	+23	+ 0	0	−0.98
106088	21 29 22.57	+05 24 28.0	8.29	H	322.344 056 95	+05.407 773 62	4.64	1.13	−7.71	0.99	0.81	1.20	1.36	0.93	+51	− 7	−13	−13	−28	+25	−22	−19	+ 2	+64	0	0.18
106089	21 29 23.14	−12 46 18.0	9.34	G	322.346 407 36	−12.771 656 26	1.36	−12.92	−10.98	1.24	0.81	1.36	1.75	0.91	+33	−17	− 3	− 7	−46	+27	−39	−16	+14	+46	0	−1.05
106090	21 29 25.63	+38 39 10.4	8.28	2 H	322.356 773 71	+38.652 885 08	0.99	−7.70	−2.79	0.57	0.65	0.96	0.73	0.82	−22	+ 5	+ 6	− 4	+14	−14	+16	− 7	+30	−17	0	−0.08
106091	21 29 26.14	+29 21 48.9	9.02	H	322.358 936 46	+29.363 580 96	2.25	−30.01	−16.82	0.89	0.81	1.32	1.10	1.05	−13	+ 1	− 1	+28	+ 3	−23	+ 8	+ 9	− 2	+ 9	0	−1.15
106092	21 29 26.83	+46 53 43.7	9.69	H	322.361 797 09	+46.895 461 37	0.49	−1.69	−4.26	0.88	0.82	1.09	1.13	0.92	−10	− 3	+ 8	+23	+ 9	+14	+ 6	+ 1	− 3	−11	0	0.78
106093	21 29 26.91	+46 32 25.2	5.22	H	322.362 137 95	+46.540 331 79	14.58	43.33	104.05	0.44	0.39	0.54	0.59	0.43	−10	+12	+ 4	+25	+ 4	+ 4	+ 1	+ 4	+ 0	−17	0	−0.44
106094	21 29 27.41	−31 59 39.9	8.57	H	322.364 211 82	−31.994 406 93	0.40	16.52	4.88	1.01	0.71	1.22	1.24	0.68	+41	−27	−32	− 2	− 9	+34	− 1	+ 9	+14	+35	0	−0.25
106095	21 29 28.21	−03 30 55.0	8.28	H	322.367 557 56	−03.515 266 71	−0.24	−0.56	−47.03	1.17	0.89	1.38	1.58	0.94	+25	+11	−25	−45	+ 5	−10	− 1	−42	+39	+24	0	−1.18
106096	21 29 30.35	−63 32 22.0	8.85	H	322.376 439 33	−63.539 455 53	6.92	28.22	−88.37	0.77	0.80	1.30	0.95	0.94	−10	−12	−23	+32	+ 3	− 1	+ 3	+15	− 3	−10	0	−0.12
106097	21 29 30.69	+21 28 30.5	8.64	H	322.377 874 40	+21.475 132 64	14.62	−9.79	−89.07	0.72	0.68	1.08	0.82	0.73	+29	− 3	−10	− 5	+ 1	−12	− 3	−32	+15	+22	1	−0.63
106098	21 29 30.99	−38 05 09.0	7.44	H	322.379 104 49	−38.085 824 68	10.61	38.85	−37.91	0.75

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
106001	10.183	0.028	9.941	0.033		0.231	0.041	T	0.26	0.05	L	9.9512	0.0020	0.021	104		9.90	9.99		C			1							G
106002	9.364	0.015	8.657	0.013		0.620	0.015	G	0.69	0.01	H	8.7383	0.0020	0.016	121		8.71	8.77					1							
106003	6.132	0.003	5.788	0.003		0.333	0.005	T	0.39	0.01	L	5.8333	0.0009	0.009	133		5.82	5.85					1							S
106004	8.376	0.009	6.920	0.006		1.233	0.002	G	1.19	0.00	H	6.9508	0.0008	0.009	105		6.93	6.97		C			1							S
106005	9.861	0.030	8.812	0.020		0.864	0.003	G	0.91	0.00	H	8.8867	0.0022	0.015	65		8.86	8.91		C			1							
106006	8.882	0.018	8.088	0.015		0.697	0.022	G	0.75	0.02	H	8.1331	0.0013	0.008	75		8.12	8.15					1							S
106007	7.180	0.007	6.684	0.008		0.490	0.010	G	0.56	0.01	H	6.7227	0.0008	0.006	75		6.71	6.74		C			1							S
106008	9.952	0.024	9.669	0.029		0.269	0.035	T	0.30	0.04	L	9.6844	0.0022	0.023	113		9.64	9.72					1							G
106009	7.980	0.008	8.080	0.010		−0.090	0.010	G	−0.07	0.01	H	8.0461	0.0026	0.023	138		8.01	8.08	1.02	P 1 A			1							
106010	10.235	0.031	9.630	0.029		0.579	0.005	G	0.65	0.01	H	9.7164	0.0022	0.019	122		9.69	9.75		C			1							
106011	9.198	0.017	7.666	0.009		1.287	0.015	T	1.25	0.02	L	7.7107	0.0011	0.010	80		7.69	7.72		C			1							S
106012	9.394	0.016	8.000	0.009		1.179	0.014	T	1.14	0.01	L	8.0373	0.0011	0.009	94		8.02	8.05					1							S
106013	10.403	0.031	9.254	0.020		1.005	0.009	G	0.98	0.01	H	9.2537	0.0064	0.052	93		9.20	9.35	2.21	P 1 A			1	S						P
106014	9.866	0.021	8.550	0.013		1.118	0.019	T	1.08	0.02	L	8.5857	0.0019	0.014	117		8.56	8.61					1							
106015	8.358	0.016	7.011	0.009		1.142	0.014	T	1.11	0.01	L	7.0445	0.0012	0.008	77		7.03	7.06		C			1							S
106016	8.996	0.017	8.831	0.020		0.151	0.025	T	0.17	0.03	L	8.8876	0.0019	0.016	77		8.86	8.92		C	21284−1715	I 1	1							
106017	12.014	0.143	11.173	0.096		0.672	0.009	G	0.73	0.01	H	11.2563	0.0042	0.032	122		11.21	11.30		C			1							G
106018	8.655	0.011	8.394	0.012		0.249	0.015	T	0.28	0.02	L	8.4596	0.0020	0.016	127		8.43	8.48					1							
106019	10.869	0.034	10.316	0.033		0.524	0.035	T	0.60	0.04	L	10.4371	0.0027	0.034	202		10.38	10.50					1							
106020	9.958	0.024	8.863	0.016		0.946	0.022	T	0.94	0.02	L	8.9045	0.0018	0.019	123		8.87	8.94					1							
106021	8.528	0.014	6.588	0.006		1.640	0.014	G	2.09	0.05	F	6.4584	0.0030	0.017	61		6.42	6.49		U 2			1	S						S
106022	10.546	0.029	8.863	0.013		1.406	0.025	T	1.38	0.03	L	8.8773	0.0015	0.015	127		8.85	8.91		C			1							
106023	8.648	0.009	8.650	0.012		0.003	0.014	T	0.02	0.01	L	8.6424	0.0018	0.017	150		8.61	8.68					1							
106024	8.039	0.010	7.641	0.010		0.389	0.012	T	0.45	0.01	L	7.6748	0.0015	0.081	121		7.66	8.12		P 1 A			1							S
106025	9.950	0.024	8.993	0.018		0.842	0.022	T	0.86	0.02	L	9.0398	0.0018	0.014	84		9.01	9.07		C			1							
106026	10.050	0.024	9.606	0.024		0.433	0.027	T	0.50	0.03	L	9.6265	0.0021	0.018	113		9.59	9.66		C			1							
106027	10.981	0.055	9.693	0.029		1.096	0.049	T	1.06	0.05	L	9.7121	0.0022	0.018	86		9.68	9.74					1							
106028	7.357	0.007	7.356	0.007		0.006	0.009	T	0.03	0.01	L	7.3785	0.0009	0.008	119		7.36	7.40		C			1							S
106029	10.208	0.026	8.956	0.015		1.068	0.023	T	1.03	0.02	L	9.0231	0.0020	0.015	110		8.98	9.05					1							
106030	8.673	0.010	8.417	0.011	*	0.244	0.014	T	0.27	0.02	L	* 8.4678	0.0019	0.018	128	*	8.44	8.50			21285+8700	H 1	2 C	B	AB	277	0.415	0.032	3.45	0.18	
106031	10.888	0.065	9.553	0.033		1.500	0.040	G	1.50	0.10	R	9.6389	0.0039	0.029	60		9.57	9.68					1							
106032	2.958	0.003	3.195	0.003		−0.201	0.003	G	−0.25	0.03	C	3.1438	0.0022	0.013	82		3.12	3.17	0.19	P 1 A	21287+7034	I 1	1							S P
106033	9.182	0.011	7.728	0.006		1.240	0.015	G	1.20	0.01	H	7.7524	0.0011	0.013	163		7.72	7.77		C			1							S
106034	7.949	0.007	7.851	0.011		0.105	0.003	G	0.12	0.00	H	7.8560	0.0011	0.010	93		7.84	7.87					1							S
106035	9.954	0.020	9.478	0.020		0.461	0.022	T	0.53	0.02	L	9.5806	0.0029	0.026	143		9.53	9.63					1							
106036	8.247	0.009	6.708	0.005		1.293	0.008	T	1.25	0.01	L	6.7165	0.0010	0.009	141		6.70	6.73		C			1							S
106037	7.761	0.007	7.520	0.007		0.240	0.008	G	0.27	0.01	H	7.5471	0.0009	0.012	125		7.53	7.57					1							S
106038	9.401	0.025	9.059	0.028	*	0.324	0.035	T	0.38	0.05	L	* 9.1748	0.0039	0.039	111	*	9.14	9.26		D	21287+4952	I 1	2 C	A	AB	254	9.086	0.006	1.03	0.02	
106039	5.640	0.004	4.606	0.003		0.889	0.032	G	0.89	0.02	A	4.6603	0.0005	0.004	73		4.65	4.67		C			1							S
106040	8.394	0.008	7.862	0.007		0.499	0.010	T	0.57	0.01	L	7.9133	0.0012	0.014	162		7.89	7.94		C			1							S
106041	8.658	0.010	8.628	0.012		0.032	0.014	T	0.05	0.01	L	8.6424	0.0013	0.015	177		8.62	8.67		C			1							
106042	9.736	0.020	8.394	0.012		1.232	0.024	G	1.19	0.02	H	8.3819	0.0016	0.015	128		8.35	8.40		C			1							
106043						1.420	0.015	G	1.92	0.02	A	12.3932	0.0139	0.096	94		12.16	12.57		U			1							G
106044	7.355	0.010	5.762	0.011		1.553	0.022	G	3.13	0.05	F	5.3361	0.0053	0.113	167		5.21	5.57		U 2			1	S						S
106045	9.612	0.028	9.162	0.029		0.410	0.015	G	0.48	0.02	H	9.2373	0.0025	0.016	48		9.21	9.25		C			1							
106046	10.571	0.037	9.722	0.027		0.661	0.002	G	0.72	0.00	H	9.8278	0.0022	0.019	116		9.79	9.86		C			1							
106047	11.612	0.110	10.628	0.071		0.850	0.102	T	0.89	0.10	L	10.5619	0.0047	0.036	102		10.50	10.62					1							G
106048	8.842	0.010	7.422	0.006	A	1.500	0.495	G	1.18	0.02	L	* 7.4274	0.0011	0.011	134	*	7.41	7.44		D	21288+7756	I 1	2 C	A	AB	193	2.641	0.019	3.33	0.06	S
106049	7.131	0.006	6.798	0.005		0.287	0.005	G	0.33	0.01	H	6.8557	0.0010	0.009	120		6.84	6.87					1							S
106050	9.897	0.026	9.199	0.023		0.631	0.026	T	0.70	0.02	L	9.2819	0.0022	0.016	84		9.25	9.32			21288−1450	I 1	1							
106051	8.765	0.010	7.474	0.006		1.098	0.009	T	1.06	0.01	L	7.5314	0.0010	0.013	138		7.51	7.55		C			1							S
106052	6.257	0.003	6.154	0.003		0.100	0.004	T	0.11	0.00	L	6.1802	0.0005	0.006	110		6.17	6.19					1							S
106053	7.759	0.029	7.340	0.033	B	0.380	0.015	G	0.44	0.02	H	* 6.7275	0.0009	0.009	74	*	6.71	6.74		D	21289+1106	I 1	2 C	A	AB	266	1.787	0.003	0.01	0.01	S
106054	8.860	0.017	8.775	0.020		0.083	0.024	T	0.10	0.03	L	8.7874	0.0023	0.020	63		8.77	8.82					1							
106055	8.600	0.015	7.288	0.009		1.114	0.014	T	1.08	0.01	L	7.3264	0.0016	0.008	54		7.31	7.34		C			1							S
106056	9.219	0.018	7.843	0.011		1.165	0.017	T	1.13	0.01	L	7.8613	0.0012	0.010	69		7.85	7.88		C			1							S
106057	10.196	0.025	9.853	0.028		0.332	0.041	T	0.39	0.06	L	9.9064	0.0024	0.025	135		9.86	9.96		C			1							
106058	10.534	0.040	8.927	0.019		1.346	0.035	T	1.31	0.04	L	8.9385	0.0023	0.019	82		8.91	8.97					1							
106059	8.886	0.012	8.069	0.010	*	0.806	0.015	G	0.83	0.01	H	* 8.0926	0.0020	0.015	114	*	8.07	8.12			21290+5844	M 1	2 C	S D	AC	200	0.115	0.043	1.24	1.06	S D
106060	9.395	0.020	8.275	0.013		1.037	0.015	G	1.01	0.01	H	8.3242	0.0016	0.014	81		8.30	8.35		C			1							S
106061	10.483	0.028	8.526	0.010		1.623	0.024	T	1.64	0.03	L	8.4679	0.0013	0.016	158		8.44	8.50		C			1							
106062	7.700	0.010	6.093	0.008		1.370	0.011	T	2.94	0.03	O	5.7663	0.0047	0.064	117		5.65	5.84		U 2	21290+2211	I 1	1	S						S P
106063	10.273	0.026	8.945	0.015		1.127	0.023	T	1.09	0.02	L	9.0038	0.0020	0.024	145		8.96	9.06					1							
106064	8.234	0.010	6.567	0.005		1.393	0.009	T	1.37	0.01	L	6.5608	0.0008	0.007	101		6.55	6.58					1							S
106065	7.859	0.008	6.510	0.005		1.140	0.000	G	1.10	0.00	H	6.5609	0.0008	0.007	97		6.55	6.58		C			1							S
106066	7.703	0.007	7.150	0.007		0.519	0.006	G	0.59	0.01	H	7.2027	0.0010	0.008	116		7.19	7.22		C			1							S
106067	6.571	0.004	6.524	0.004		0.036	0.006	G	0.05	0.01	H	6.5419	0.0006	0.006	110		6.53	6.55		C			1							S
106068	9.432	0.017	8.986	0.018		0.434	0.020	T	0.50	0.02	L	9.0378	0.0022	0.018	106		9.01	9.07					1							S
106069	8.082	0.007	7.852	0.008		0.219	0.010	T	0.24	0.01	L	7.8968	0.0012	0.012	164		7.88	7.92					1							S
106070	9.063	0.015	8.976	0.019		0.078	0.022	T	0.09	0.02	L	8.9627	0.0021	0.013	75		8.94	8.99		C	21291−1932	I 1	1							S
106071	7.215	0.005	6.971	0.006		0.250	0.003	G	0.28	0.00	H	7.0036	0.0019	0.015	124		6.98	7.03		U 2	21291+4455	I 1	1							S
106072						1.305	0.025	G	1.50	0.04	I	10.9820	0.0043	0.038	116		10.92	11.06					1							G
106073	8.933	0.013	8.478	0.012		0.430	0.015	G	0.50	0.02	H	8.5463	0.0013	0.014	114		8.53	8.57		C			1							
106074						1.060	0.042	G	1.12	0.06	I	* 11.2885	0.0075	0.043	65	*	11.22	11.36		D	21291+1211	I 1	2 C	C	AC	44	1.348	0.073	1.49	0.22	G
106075	8.989	0.016	7.469	0.009		1.278	0.014	T	1.24	0.01	L	7.4691	0.0014	0.011	76		7.45	7.49					1							S
106076	10.151	0.028	9.715	0.029		0.425	0.032	T	0.49	0.03	L	9.7671	0.0027	0.019	100		9.74	9.81		C			1							
106077	10.649	0.048	9.133	0.023		1.295	0.044	T	3.32	0.08	O	8.6857	0.0104	0.069	57		8.61	8.82		U 2	21292−4125	I 1	1	S						P
106078	8.148	0.008	7.405	0.007		0.663	0.004	G	0.72	0.00	H	7.4699	0.0012	0.012	122		7.45	7.49		C			1							S
106079	7.599	0.007	7.626	0.009		−0.020	0.015	G	0.00	0.01	H	7.6276	0.0033	0.035	126		7.56	7.67		U 2 C			1							S
106080	9.463	0.016	8.736	0.013		0.610	0.015	G	0.68	0.01	H	8.8079	0.0019	0.018	110		8.77	8.85		C			1							
106081	8.155	0.008	6.872	0.005		1.086	0.002	G	1.05	0.00	H	6.9142	0.0010	0.010	136		6.90	6.93					1							S
106082	8.494	0.008	8.320	0.009		0.167	0.011	T	0.18	0.01	L	8.3688	0.0013	0.017	216		8.34	8.39		C			1							S
106083	8.687	0.015	8.243	0.015	A	0.441	0.100	G	0.48	0.04	L	* 8.2662	0.0022	0.017	64	*	8.24	8.29		D	21293−3850	I 1	2 C	A	AB	26	7.143	0.025	2.84	0.10	S
106084	9.278	0.017	9.089	0.020		0.181	0.025	T	0.20	0.03	L	9.1046	0.0029	0.021	98		9.07	9.13		C			1							
106085	6.942	0.005	6.922	0.006		0.012	0.014	G	0.03	0.01	H	6.9019	0.0026	0.025	111		6.87	6.94		R	21293+6703	I 1	1 X	S						S
106086	8.665	0.017	8.421	0.019		0.233	0.024	T	0.26	0.03	L	8.4574	0.0033	0.018	54		8.42	8.49					1							S
106087	10.620	0.053	10.303	0.066		0.509	0.072	G	0.58	0.08	R	10.3326	0.0039	0.022	65		10.28	10.37					1							G
106088	8.396	0.010	8.301	0.012		0.093	0.015	T	0.11	0.02	L	8.3287	0.0017	0.013	82		8.30	8.35					1							S
106089	10.705	0.055	9.465	0.030		1.089	0.015	G	1.05	0.02	I	9.5318	0.0020	0.018	92		9.50	9.57		C			1							
106090	10.470	0.025	8.489	0.009		1.678	0.022	T	2.09	0.05	O	8.3590	0.0021	0.022	176		8.32	8.40		U 2			1							
106091	10.386	0.032	9.126	0.019		1.074	0.029	T	1.04	0.02	L	9.1929	0.0025	0.023	118		9.15	9.23					1							
106092	9.826	0.024	9.735	0.032		0.089	0.037	T	0.10	0.04	L	9.7234	0.0033	0.029	123		9.68	9.78					1							G
106093	6.452	0.004	5.332	0.003		0.965	0.004	T	0.95	0.00	L	5.3850	0.0005	0.005	123		5.38	5.39					1							S
106094	10.197	0.033	8.732	0.017		1.234	0.029	T	1.19	0.03	L	8.7298	0.0024	0.016	85		8.69	8.76		C			1							
106095	9.424	0.019	8.405	0.014		0.888	0.018	T	0.89	0.01	L	8.4426	0.0029	0.015	61		8.42	8.47		C			1							S
106096	10.052	0.018	8.958	0.012		0.945	0.017	T	0.94	0.01	L	9.0128	0.0022	0.026	168		8.98	9.06					1							
106097	9.421	0.015	8.718	0.013		0.648	0.016	T	0.71	0.01	L	8.7758	0.0015	0.018	148		8.74	8.80		C			1							
106098	8.142	0.012	7.504	0.011		0.587	0.012	T	0.66	0.01	L	7.5645	0.0011	0.010	72		7.54	7.59		C			1							S
106099	9.643	0.015	9.204	0.015		0.428	0.017	T	0.50	0.02	L	9.2622	0.0020	0.021	142		9.23	9.30		C			1							
106100	10.307	0.024	9.527	0.020		0.693	0.024	T	0.75	0.02	L	9.5969	0.0024	0.022	133		9.56	9.64		C			1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
106101	21 29 32.44	−19 46 06.8	8.84		H	322.385 187 44	−19.768 563 80		7.34	−33.14	−80.34	1.22	0.63	1.26	1.40	0.59	+10	−	4	−	8	+11	−30	+30	−25	−15	+17	+17	0	0.04
106102	21 29 33.01	−27 08 03.5	9.08		H	322.387 549 03	−27.134 316 99		16.64	95.28	154.44	1.07	0.68	1.20	1.27	0.70	+35	−17	−	9	−	2	−25	+20	−20	−	3	−	4	+33	0	1.39
106103	21 29 34.49	+06 34 53.0	6.41		H	322.393 724 78	+06.581 386 94		3.96	4.50	−3.46	0.82	0.61	0.93	1.15	0.68	+33	+11	+	3	+	3	−34	+11	−23	−29	−	5	+52	0	1.15
106104	21 29 34.56	+11 41 23.5	9.33		H	322.393 979 97	+11.689 847 23		4.14	34.17	−21.18	1.38	1.18	1.72	1.73	1.50	+21	−11	+	6	+15	+	9	+12	+	8	+	0	+27	+38	2	0.79
106105	21 29 35.54	−57 21 08.6	9.99	2	H	322.398 096 08	−57.352 388 88		0.27	−19.71	4.75	1.09	0.93	1.52	1.41	1.05	+	8	−27	−18	−19	+16	−	4	+18	+29	−14	+	1	0	−0.35
106106	21 29 36.20	+17 38 32.6	10.33		G	322.400 815 36	+17.642 376 00		148.29	1008.09	376.21	1.97	1.09	1.85	2.90	1.13	+14	−	5	−	6	−39	−	7	−	7	−	7	+	9	+	2	+14	0	−0.21
106107	21 29 36.44	+30 43 43.7	8.96		H	322.401 832 53	+30.728 795 03		2.39	9.78	−3.62	0.61	0.76	1.08	0.74	0.89	+	3	−	6	+	3	+39	−	7	−19	−	2	−	3	+	4	+14	0	−1.59
106108	H 21 29 36.72	+46 25 35.2	6.72		H	322.403 005 99	+46.426 453 77	A	2.48	8.27	2.47	0.90	0.90	0.73	0.78	0.60	+20	+	8	+	2	+26	+	8	+20	+11	−	8	+	7	−	8	2	−0.19
106109	21 29 37.31	+33 47 43.7	8.44		H	322.405 460 08	+33.795 460 76		0.28	10.02	−2.95	0.51	0.68	1.08	0.60	0.71	−23	+	5	+	4	−	8	+33	−	1	+30	+23	+	4	−25	2	0.67
106110	21 29 37.43	+06 52 46.8	7.50		H	322.405 951 20	+06.879 672 56		2.34	36.47	−15.61	0.86	0.71	1.03	1.23	0.87	+43	+	9	+	4	+	0	−21	+10	−16	−13	−	8	+60	0	−0.95
106111	21 29 38.55	−41 47 54.4	8.87		H	322.410 607 60	−41.798 440 78		3.64	22.05	−45.06	1.44	0.79	1.12	1.67	0.72	−21	−	8	−26	−67	+15	+24	+17	−45	+	8	−11		0	0.91
106112	21 29 38.92	+26 12 38.0	8.41		H	322.412 185 53	+26.210 551 53		1.59	−10.69	−17.26	0.71	0.60	1.07	0.88	0.70	−10	+10	−13	−11	+17	−20	+14	−	1	+12	−	2		0	1.86
106113	21 29 39.21	+46 07 55.8	7.70		H	322.413 371 56	+46.132 155 02		8.65	66.24	16.82	0.57	0.50	0.69	0.78	0.57	−15	+13	+	2	+21	+	5	+24	+	4	+	4	+	4	−15	0	−2.72
106114	H 21 29 39.72	+13 55 39.8	8.68		H	322.415 509 74	+13.927 725 01	A	3.42	14.12	−7.80	1.90	1.51	2.04	2.37	1.54	+36	+13	−24	−15	−	1	−32	−12	−39	+	3	+35		1	0.19
106115	21 29 40.15	−14 01 36.4	6.86		H	322.417 279 66	−14.026 776 04		3.06	15.10	−67.71	0.89	0.56	0.99	1.45	0.60	+11	+14	−23	+28	−47	+41	−28	+12	−	1	+28		0	−1.23
106116	21 29 40.21	−38 20 44.8	8.20		G	322.417 547 84	−38.345 787 33		8.68	98.14	17.48	0.95	0.82	1.13	1.16	0.67	+28	−21	−42	−	2	−27	+26	−21	−46	+16	+19		5	1.43
106117	21 29 40.99	+65 55 28.8	9.69		H	322.420 787 79	+65.924 660 30		1.59	−0.58	3.53	0.95	0.89	1.02	1.27	1.07	−10	−13	+	8	+	2	+16	+	8	+13	−	4	+13	+13	0	1.03
106118	21 29 41.48	−49 43 27.1	10.27		H	322.422 815 63	−49.724 198 42		5.36	−10.93	−7.43	1.20	0.99	1.67	1.44	0.91	+29	−11	−21	+28	+32	−	3	+29	+37	−20	+11		0	0.31
106119	21 29 41.54	+36 47 54.6	8.34		H	322.423 064 12	+36.798 509 60		9.99	33.72	48.44	0.54	0.65	1.00	0.56	0.72	−20	+	3	+	3	−	7	+13	−20	+15	+	4	+11	−14	0	−0.78
106120	21 29 43.20	+16 11 53.4	8.69		H	322.430 016 66	+16.198 174 97		5.23	−13.51	−4.49	1.01	0.67	1.11	1.25	0.70	+17	−	3	−	5	−	1	−	9	−18	−	8	−14	+	4	+21	2	0.68
106121	21 29 46.41	+60 22 43.2	7.45		H	322.443 373 34	+60.378 661 79		1.37	−0.85	−3.30	0.55	0.56	0.65	0.55	0.51	−	2	+	7	+26	−	2	+30	+17	+27	−	6	+14	+	8	0	1.19
106122	21 29 46.46	+45 53 37.1	7.93		G	322.443 583 37	+45.893 634 08		33.60	426.57	352.04	0.62	0.58	0.78	0.85	0.62	−12	+	9	+10	+29	+	6	+22	+	2	+	0	+	3	−15	0	−0.91
106123	21 29 49.72	−37 41 32.7	7.26		H	322.457 173 58	−37.692 415 37		11.72	−65.42	−74.06	0.77	0.60	0.90	0.93	0.57	+15	−	4	−16	+	7	−11	+35	−	3	−24	+	4	+24		0	2.56
*106124	21 29 50.19	+52 56 07.9	9.48		H																									
*106125	21 29 50.10	+32 07 00.0	8.52		H	322.458 732 57	+32.116 659 16		3.84	−3.27	20.27	0.67	0.76	1.15	0.81	0.91	−13	+14	−25	+19	+11	−16	+12	−18	+27	−	9		0	−1.50
*106126	21 29 50.15	−18 20 58.6	9.48		H	322.458 962 54	−18.349 618 91		2.74	19.57	10.89	1.17	0.77	1.40	1.42	0.75	+25	−14	−23	−14	−27	+40	−19	−	6	+28	+23		2	−0.72
106127	21 29 51.01	+67 00 34.0	10.36		H	322.462 552 83	+67.009 443 22		1.26	7.62	0.45	1.09	0.91	1.12	1.41	0.97	−	7	−14	−11	−	2	+	2	+19	+	2	−26	+21	−	1	0	−0.65
106128	21 29 51.43	−43 30 26.3	6.96		H	322.464 287 33	−43.507 315 40		3.96	55.87	−46.74	0.69	0.55	1.03	0.59	0.52	+66	−55	−37	−41	−23	+39	−19	−15	+20	+60		0	−0.71
106129	21 29 51.45	−40 24 03.1	8.47		G	322.464 361 59	−40.400 850 69		6.75	18.42	−10.61	1.12	0.82	1.28	1.62	0.75	+12	+	8	−29	+36	−22	+42	−	7	−24	+18	+19		0	0.76
106130	21 29 51.62	−55 01 01.1	11.56	2	G	322.465 083 68	−55.016 979 17		20.99	91.78	−32.73	3.81	2.97	4.82	4.64	2.72	+12	−	6	−18	+10	+17	−	6	+12	−13	−	7	+	5	2	
106131	21 29 51.80	+01 36 21.3	8.69		H	322.465 830 13	+01.605 908 14		2.91	7.96	−1.27	1.10	0.87	1.29	1.59	0.89	+28	−18	−28	+29	+	1	+28	−	9	−46	+41	+21		0	0.43
106132	21 29 52.95	+52 56 01.8	7.25		H	322.470 630 93	+52.933 830 54		5.51	5.18	4.72	0.52	0.49	0.60	0.53	0.50	−	3	−	7	−	6	−11	−	9	−	4	−10	−16	+17	+	2	0	−0.81
106133	21 29 53.27	+36 10 41.4	7.69		H	322.471 966 20	+36.178 168 59		5.93	54.34	39.42	0.51	0.55	0.90	0.55	0.60	−38	−	2	−	3	−27	+27	−10	+26	−	6	+10	−36		1	−1.69
106134	21 29 53.47	+57 48 57.2	9.33	2	H	322.472 777 28	+57.815 886 64		2.64	−4.38	−3.29	0.83	0.80	0.96	0.88	0.84	−	7	+	2	−	2	−17	+	7	−10	+	7	−19	+	9	+	8	0	−0.22
106135	21 29 53.82	+51 51 03.4	9.27		H	322.474 267 29	+51.850 936 95		0.14	5.00	2.25	0.79	0.78	0.95	0.92	0.83	−10	−11	+	9	−	7	−	3	−	1	−	2	−16	+	7	−	4	0	−0.90
106136	21 29 53.95	+20 56 54.3	7.70	1	H	322.474 786 86	+20.948 404 06		3.18	18.98	−14.51	0.64	0.59	0.90	0.78	0.64	+37	−15	−19	−30	+	5	−12	−	1	−27	+12	+27		0	−1.51
106137	21 29 54.03	−14 13 26.9	9.96		H	322.475 145 51	−14.224 126 56		1.15	4.31	−4.67	1.76	1.09	2.06	2.79	1.11	+16	+	3	−28	+20	−53	+46	−34	+	7	+	2	+26		4	−0.68
106138	21 29 55.05	−54 46 42.6	8.79		H	322.479 384 58	−54.778 513 31		7.92	38.67	−63.48	1.03	0.94	1.32	1.45	0.87	+26	−	4	−26	+20	+38	−19	+27	+11	−19	+38		0	−1.23
106139	21 29 56.78	−15 09 26.5	8.62		H	322.486 587 97	−15.157 349 33		9.10	−50.61	−33.05	1.20	0.70	1.32	1.61	0.72	+21	−14	−12	+14	−42	+27	−34	+	4	+21	+23		0	−0.84
106140	21 29 56.88	+23 38 19.8	4.52	1	H	322.486 998 59	+23.638 829 22		7.37	24.39	3.52	0.53	0.43	0.64	0.59	0.45	+18	+	2	−16	−17	−	7	−	3	−	7	−17	+	0	+24	0	−1.09
106141	21 29 57.68	+32 48 36.4	7.78	2	H	322.490 337 54	+32.810 098 34		2.23	2.14	1.82	0.52	0.57	0.77	0.60	0.68	−	6	+	7	−21	+24	+	6	−11	+10	−	6	+	8	+11	0	0.03
106142	21 29 58.25	−08 36 05.3	9.21		H	322.492 715 03	−08.601 473 15		0.56	12.76	6.56	1.29	1.02	1.58	2.04	1.25	+24	−11	−36	+26	−12	+36	−	2	−	4	+22	+23		0	1.23
106143	21 29 59.55	−19 08 51.8	6.57		H	322.498 145 03	−19.147 720 17		7.51	33.29	−44.05	0.76	0.48	0.89	0.89	0.46	+31	−16	−16	−24	−20	+39	−18	−18	+27	+37		0	−0.35
106144	21 29 59.81	+41 30 37.8	7.34	1	H	322.499 201 84	+41.510 509 14		6.23	−13.09	−23.83	0.45	0.48	0.66	0.53	0.54	−24	−14	+12	−	2	+	3	+	5	+	3	−	3	+	0	−29	1	−0.37
106145	21 30 00.89	+45 29 39.1	6.95	2	H	322.503 709 77	+45.494 193 16		2.07	2.98	−2.91	0.51	0.44	0.63	0.67	0.48	−14	+13	+	4	+23	+	1	+19	+	0	+	2	+	4	−16	0	−0.64
106146	21 30 01.51	−07 17 36.8	8.84		H	322.506 273 02	−07.293 543 52		2.45	−4.55	−6.24	1.19	0.96	1.44	1.79	1.18	+32	−20	−28	−	3	−12	+28	−10	−15	+33	+29		0	0.01
106147	21 30 02.15	−12 30 34.0	9.11		G	322.508 945 01	−12.509 436 75		55.38	1015.17	−260.51	1.23	0.92	1.42	1.99	0.93	+32	−16	−31	+	1	−51	+40	−36	−26	+	7	+28		0	−0.90
106148	21 30 04.17	−56 16 40.2	8.41		H	322.517 363 34	−56.277 819 46		6.58	10.07	−5.44	0.84	0.66	1.00	0.99	0.59	+24	−13	−24	+31	+18	+19	+21	+	8	−	1	+23		3	2.98
106149	21 30 04.42	−30 07 11.5	9.22		H	322.518 424 58	−30.119 847 73		4.05	26.46	−24.86	1.25	0.65	1.31	1.43	0.65	+53	−10	−12	−35	−39	+35	−32	+	1	−	4	+40		2	0.52
106150	21 30 04.96	−52 08 05.5	7.73		H	322.520 677 27	−52.134 863 06		3.86	34.27	−34.73	0.70	0.57	0.89	0.78	0.50	+19	−16	−18	+16	+	7	+19	+	9	+	0	−	9	+	7	0	0.68
106151	21 30 06.04	+35 28 20.7	7.29		H	322.525 172 12	+35.472 426 36		3.13	−7.42	−5.17	0.38	0.47	0.71	0.44	0.51	−25	+	4	−14	−	5	+23	−20	+18	+	9	+	1	−	8	0	−0.16
106152	21 30 06.86	+18 34 42.8	7.42		H	322.528 584 03	+18.578 547 56		5.69	−17.36	−12.72	0.62	0.53	0.82	0.87	0.58	+24	−18	−12	−17	+	0	+20	+	1	−	3	+	2	+19	0	−0.41
106153	H 21 30 07.00	+30 50 21.1	8.43		H	322.529 167 56	+30.839 192 31	*	5.40	−5.13	−5.61	1.73	1.25	1.16	0.91	1.04	+	5	+	9	−	7	+48	+	5	+	7	+11	+	1	+	7	+24	1	0.23
106154	21 30 07.23	−16 42 35.4	9.40		H	322.530 144 58	−16.709 819 70		−0.10	14.44	−4.74	1.22	0.92	1.43	1.60	0.85	+47	−16	−20	−20	−43	+40	−34	−22	+14	+34		2	−0.88
106155	21 30 07.71	+29 53 25.1	8.32		H	322.532 119 61	+29.890 306 66		4.78	3.97	1.13	0.60	0.59	1.05	0.75	0.76	−	6	−	6	+	1	+38	+	5	−25	+	8	+15	+16	+	4	0	−0.04
106156	21 30 08.13	+15 00 48.9	8.91		H	322.533 855 52	+15.013 570 13		7.77	85.18	48.63	1.12	0.86	1.26	1.70	0.93	+23	+	9	−	8	+29	−17	+24	−	8	−17	−	1	+28	0	1.07
106157	21 30 08.51	+12 16 15.7	7.62		G	322.535 450 18	+12.271 037 63		16.50	−108.87	−143.02	0.97	0.64	1.09	1.24	0.81	+	4	−	8	−28	+	3	+	5	+	7	+	6	−33	+38	+17	0	−0.23
106158	21 30 10.83	−45 34 37.4	8.33		H	322.545 110 54	−45.577 065 83		0.75	−2.18	−16.32	0.80	0.75	1.19	0.95	0.74	+50	−33	−41	−	9	−13	+10	−	8	−24	+	3	+52		0	0.98
106159	21 30 12.02	−44 04 28.7	7.34		H	322.550 068 70	−44.074 637 89		5.15	−12.01	−1.27	0.69	0.57	1.05	0.64	0.58	+69	−60	−47	−28	−19	+33	−	9	−	8	+	8	+62		0	0.01
106160	21 30 12.62	+23 55 29.7	8.12		H	322.552 591 40	+23.924 905 49		4.45	−32.84	−53.26	0.76	0.70	1.00	0.82	0.72	+15	+	9	−38	−20	−	5	−	3	−	4	−39	+22	+23	0	−3.08
106161	21 30 14.17	−01 32 04.1	8.06		H	322.559 042 87	−01.534 465 40		6.19	25.02	−11.56	0.91	0.66	1.09	1.17	0.81	+	6	−	2	−19	−25	+	8	+41	+13	−20	+41	+31	0	0.89
106162	21 30 14.74	+02 27 19.4	7.86		G	322.561 430 27	+02.455 393 91		8.19	69.97	16.10	0.89	0.58	1.12	1.17	0.62	+33	−	4	+	0	−12	−13	+49	−15	−	4	+29	+53		0	1.84
106163	21 30 15.17	−04 30 07.0	7.60		H	322.562 198 79	−04.501 932 69		8.38	46.86	−2.31	0.91	0.78	1.08	1.25	1.13	+42	−	9	−	3	−18	+	0	+34	+	0	−15	+24	+67	0	0.55
106164	21 30 15.51	−53 08 56.5	8.23		G	322.564 625 71	−53.149 036 52		10.20	−60.32	−31.70	0.85	0.68	1.19	0.98	0.54	+	5	+24	−30	+11	+20	+	2	+17	−14	+13	+	7	0	0.07
106165	21 30 17.39	−16 18 16.9	8.60		H	322.572 476 57	−16.304 682 33		2.00	−5.48	−1.80	1.18	0.78	1.36	1.47	0.77	+28	−27	−18	+11	−39	+33	−32	+	1	+20	+26		0	−0.85
106166	21 30 17.46	+60 28 07.3	9.17		H	322.572 759 49	+60.468 683 71		0.84	−2.00	−6.40	0.82	0.84	0.97	0.83	0.77	+	0	−	2	+20	−	2	+30	+16	+25	+	5	+11	+17	0	−0.21
106167	21 30 17.74	+71 41 02.6	8.48		H	322.573 917 39	+71.684 068 70		4.28	14.95	18.64	0.65	0.63	0.70	0.82	0.66	−10	−18	+	6	−	3	+14	+20	+11	−28	+	7	−	2	0	−0.63
106168	21 30 18.06	+47 10 19.0	8.45		G	322.575 256 47	+47.171 949 39		12.23	−16.06	−4.83	0.62	0.66	0.83	0.77	0.70	−14	−	7	+16	+	0	+	7	+	8	+	5	+10	+	4	−21	0	−0.54
106169	21 30 18.40	+02 47 35.7	8.05		H	322.576 687 10	+02.793 248 91		6.25	41.80	9.70	0.83	0.54	0.97	1.18	0.62	+29	−14	−	5	−18	−	6	+39	−12	+	7	+23	+55		0	0.57
106170	21 30 18.94	+48 23 27.2	7.36		H	322.578 928 23	+48.390 892 78		3.22	−7.69	−20.26	0.57	0.52	0.71	0.70	0.64	−22	+	4	+	8	−18	−	6	−13	−	4	−10	−16	−22	0	−0.21
106171	21 30 20.31	+52 57 28.6	6.02		H	322.584 620 74	+52.957 958 02		6.80	21.00	16.65	0.42	0.44	0.51	0.44	0.45	+	2	−11	−14	−17	−10	−	5	−12	−24	+22	+	6	0	−0.25
106172	21 30 21.01	+51 37 28.3	10.97		G	322.587 541 86	+51.624 541 07		0.33	0.98	0.22	1.44	1.40	1.70	1.56	1.44	−14	−	5	+	7	−10	+	6	−	6	+16	+13	−	8	0	−0.17
106173	21 30 21.29	+14 52 04.6	9.04		G	322.588 689 56	+14.867 944 89		6.43	−9.94	−6.17	1.07	0.83	1.22	1.49	0.92	+32	−	3	−	8	+17	−11	+14	−	7	−26	+11	+37	0	−0.49
106174	H 21 30 21.54	+35 03 40.5	8.73		H	322.589 748 15	+35.061 241 39	B	1.57	0.73	2.00	1.45	1.80	2.17	1.36	1.53	−	8	+	2	−10	+	8	+18	−29	+19	+15	+	0	−	1	1	−0.31
*106175	21 30 21.48	+51 36 36.5	10.27		H	322.589 484 78	+51.610 148 72		1.86	−3.81	−2.35	1.24	1.19	1.45	1.34	1.22	−15	−	5	+	7	−14	+	7	−	6	+	7	−17	+11	−	7	0	0.59
106176	21 30 21.73	−52 44 15.0	8.62		H	322.590 524 07	−52.737 506 58		11.38	31.14	−78.93	0.90	0.74	1.17	1.10	0.64	+19	+	2	−20	+21	+17	+	9	+11	+	2	+	3	+	0	0	1.59
106177	21 30 22.11	+08 05 58.7	10.31		H	322.592 114 10	+08.099 633 46		13.84	−14.90	17.82	1.82	1.25	1.97	2.63	1.38	+30	+	4	+	3	+14	−20	−17	−12	−10	−10	+42		0	2.94
106178	H 21 30 22.28	−60 27 50.7	9.08		H	322.592 839 41	−60.464 073 28	A	5.06	−18.71	−27.78	2.19	1.78	2.80	2.61	1.91	−31	+14	+	4	+	9	−	8	+	1	−	1	+28	+10	−53	0	−0.35
106179	21 30 22.50	−63 49 54.5	9.00		H	322.593 746 23	−63.831 814 80		2.76	−15.66	−37.35	0.80	0.84	1.35	0.98	0.95	−10	−13	−21	+21	+	7	−	9	+	9	−	2	−	6	+	1	0	0.13
106180	21 30 23.29	−28 50 23.5	8.77		H	322.597 027 97	−28.839 869 71		1.94	−8.99	−23.12	1.07	0.66	1.24	1.25	0.69	+35	−10	−	8	−12	−22	+39	−20	+	1	+13	+37		2	2.03
106181	H 21 30 23.55	−24 25 38.8	8.40		H	322.598 105 12	−24.427 436 48	A	3.32	10.49	−9.50	1.61	1.09	1.67	1.68	1.03	+46	−12	−20	−10	−19	+32	−12	−	3	+	2	+48		1	−0.47
106182	21 30 23.83	+28 59 19.7	8.27		G	322.599 276 08	+28.988 811 68		6.64	38.33	0.36	0.66	0.58	0.98	0.77	0.74	−11	+	6	−	3	+25	+	6	−17	+10	+	9	−	2	+11	0	0.33
106183	21 30 24.96	−60 12 24.7	7.70	2	H	322.603 980 74	−60.206 856 44		6.16	39.06	−33.95	0.59	0.49	0.94	0.80	0.57	−30	+	9	−	8	+11	+	0	+10	+	0	+29	−	1	−36	0	−0.07
106184	21 30 25.83	+44 52 29.9	6.77		H	322.607 643 86	+44.874 978 99		8.15	7.53	5.62	0.49	0.43	0.60	0.60	0.48	−22	+27	−	7	+20	+	2	+	6	+	3	−	5	+	7	−21	1	1.55
106185	21 30 26.03	−25 11 35.6	7.31		H	322.608 445 88	−25.193 229 39		2.02	−7.32	−20.51	0.90	0.56	1.00	1.04	0.55	+42	−17	−21	−21	−23	+27	−18	−10	+	8	+43		0	0.96
106186	21 30 26.10	+58 18 58.1	8.88	1	H	322.608 750 07	+58.316 139 81		3.41	−1.83	−6.81	0.70	0.70	0.85	0.68	0.69	−	5	+17	−	3	−18	+12	−10	+14	−21	+14	+19		0	−0.07
106187	21 30 29.93	+46 32 09.0	8.30		H	322.624 721 64	+46.535 826 14		4.80	−0.59	5.89	0.67	0.62	0.84	0.85	0.69	−10	+16	+	0	+34	+	6	+30	+	3	+	2	−	5	−16	0	1.01
106188	21 30 30.73	−35 59 51.6	8.28		H	322.628 059 32	−35.997 675 41		3.57	31.11	19.35	1.02	0.81	1.25	1.18	0.69	+23	−13	−34	−12	−26	+43	−16	−37	+22	+25		0	−1.05
106189	21 30 30.86	+26 39 25.1	9.44		H	322.628 595 71	+26.656 966 13		5.14	54.18	9.62	0.82	0.72	1.27	0.95	0.86	−10	−	1	−14	+20	+10	−23	+11	−14	+14	−	2		1	1.03
106190	21 30 32.98	−74 11 28.0	9.15		H	322.637 414 58	−74.191 110 78		2.10	15.06	−12.98	0.76	0.80	1.08	0.93	1.02	−15	−	4	+	5	+	4	+	0	−	8	+	0	+11	+	30	0	−0.26
106191	H 21 30 35.00	+42 12 40.5	8.17		H	322.645 851 43	+42.211 242 94	A	5.83	−4.93	−6.22	0.94	0.93	1.20	0.99	0.97	−	9	−15	+	6	+	6	−	4	−12	−	6	+	3	+18	−21	1	−0.15
106192	21 30 35.25	+38 25 59.5	8.84		H	322.646 888 34	+38.433 204 92		1.33	−2.29	−6.07	0.61	0.71	1.03	0.70	0.85	−26	−	4	+10	−	2	−	1	−13	+	0	+17	+28	−34	0	−0.80
106193	21 30 35.93	+68 17 35.7	7.04		H	322.649 708 99	+68.293 245 57		5.55	−5.78	5.24	0.51	0.49	0.55	0.63	0.58	−16	−10	−	4	+	6	+	3	+	9	−	2	−24	+18	−10	1	2.39
106194	21 30 35.96	+61 53 02.8	7.79		H	322.649 830 22	+61.884 113 20		3.21	5.52	5.49	0.58	0.52	0.64	0.63	0.55	−	6	−	6	+20	+	9	+13	+	6	+12	−	3	+12	+	6	1	−1.28
106195	H 21 30 36.03	+07 10 25.5	7.83		H	322.650 112 47	+07.173 743 79	A	5.36	−15.25	−8.01	1.36	1.06	1.38	1.66	1.12	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
106101	9.456	0.019	8.897	0.018		0.528	0.019	T	0.60	0.02	L	8.9563	0.0020	0.015	73		8.93	8.98		C			1							
106102	9.813	0.021	9.171	0.019		0.590	0.021	T	0.66	0.02	L	9.2016	0.0015	0.015	91		9.17	9.23		C			1							
106103	7.936	0.011	6.542	0.006		1.179	0.010	T	1.14	0.01	L	6.5800	0.0010	0.010	75		6.56	6.60					1							S
106104	10.751	0.054	9.464	0.029		1.095	0.048	T	1.06	0.05	L	9.4982	0.0034	0.025	73		9.45	9.57					1							
106105	10.526	0.032	10.000	0.030		0.502	0.033	T	0.57	0.04	L	10.1035	0.0028	0.031	126		10.04	10.17		U			1							
106106	12.280	0.183	10.511	0.062		1.620	0.007	G	2.65	0.02	I	10.2974	0.0049	0.034	83		10.25	10.38					1							G
106107	9.171	0.012	8.988	0.014		0.175	0.017	T	0.19	0.02	L	9.0239	0.0018	0.020	155		8.99	9.06		C			1							
106108	6.905	0.006	6.752	0.005	*	0.147	0.008	T	0.16	0.01	L *	6.7767	0.0011	0.010	134	*	6.76	6.79			21296+4626	H 1	2 C	C	AB	217	0.404	0.041	4.04	0.20	S
106109	10.522	0.024	8.620	0.009		1.579	0.020	T	1.60	0.02	L	8.5544	0.0014	0.019	271		8.52	8.59					1							
106110	9.159	0.017	7.635	0.009		1.281	0.015	T	1.24	0.02	L	7.6574	0.0014	0.012	85		7.64	7.68		C			1							S
106111	9.479	0.020	8.946	0.019		0.508	0.021	T	0.58	0.02	L	8.9784	0.0031	0.018	58		8.95	9.01					1							S
106112	10.054	0.022	8.559	0.012		1.258	0.020	T	1.22	0.02	L	8.5742	0.0016	0.018	141		8.54	8.60		C			1							
106113	8.138	0.010	7.748	0.010		0.399	0.003	G	0.46	0.00	H	7.7952	0.0016	0.013	123		7.77	7.82					1							S
106114	8.915	0.016	8.742	0.018	*	0.166	0.023	T	0.18	0.02	L *	8.7343	0.0026	0.016	74	*	8.69	8.77		D	21297+1356	I 1	2 C	A	AB	224	0.879	0.014	1.97	0.05	
106115	8.819	0.012	7.020	0.006		1.498	0.011	T	1.52	0.02	L	6.9881	0.0012	0.009	112		6.98	7.00		C			1							S
106116	8.642	0.016	8.221	0.016		0.433	0.015	G	0.50	0.02	H	8.2905	0.0016	0.010	64		8.27	8.31					1							S
106117	9.916	0.026	9.767	0.033		0.143	0.039	T	0.16	0.04	L	9.7407	0.0022	0.020	97		9.71	9.78		C			1							G
106118	11.398	0.062	10.407	0.043		0.856	0.059	T	0.87	0.04	L	10.4174	0.0031	0.029	130		10.36	10.47					1							
106119	8.909	0.010	8.382	0.009		0.495	0.012	T	0.57	0.01	L	8.4492	0.0015	0.018	186		8.42	8.48					1							
106120	9.209	0.016	8.721	0.016		0.459	0.021	T	0.53	0.02	L	8.7904	0.0015	0.016	87		8.76	8.81		C			1							
106121	7.641	0.008	7.482	0.010		0.170	0.015	G	0.19	0.01	H	7.5053	0.0013	0.009	96		7.49	7.53		C			1							S
106122	8.874	0.013	7.986	0.010		0.759	0.002	G	0.80	0.00	H	8.0583	0.0009	0.013	120		8.04	8.09					1							
106123	7.765	0.012	7.313	0.012		0.440	0.013	T	0.51	0.01	L	7.3536	0.0013	0.010	68		7.34	7.38		C			1							S
106124						0.597	0.107	G	0.67	0.10	R	9.6100	0.0317	0.280	113		8.58	9.76		D	21299+5256	I 2		S						G
106125	10.104	0.025	8.650	0.013		1.226	0.022	T	1.18	0.02	L	8.6806	0.0018	0.016	141		8.65	8.71		C			1							
106126	9.747	0.023	9.529	0.028		0.202	0.036	T	0.22	0.04	L	9.5445	0.0017	0.017	84		9.51	9.57		C			1							
106127	10.543	0.058	10.342	0.078		0.192	0.091	T	0.21	0.10	L	10.4241	0.0029	0.024	109		10.38	10.47		C			1							G
106128	8.302	0.006	7.079	0.004		1.045	0.006	T	1.02	0.01	L	7.1246	0.0007	0.010	207		7.11	7.14					1							S
106129	9.719	0.025	8.595	0.017		0.990	0.015	G	0.97	0.01	H	8.6289	0.0022	0.015	56		8.60	8.66		C			1							
106130						1.380	0.015	G	1.73	0.02	A	11.6526	0.0079	0.055	82		11.43	11.73		U			1 X	S						G
106131	9.117	0.018	8.706	0.019		0.376	0.015	G	0.44	0.02	H	8.7820	0.0016	0.013	60		8.75	8.80		D			1							
106132	7.225	0.006	7.226	0.006		0.117	0.140	G	0.00	0.01	L	7.2552	0.0011	0.011	120		7.23	7.27		D	21299+5256	I 2	1	S						S
106133	8.944	0.010	7.799	0.007		0.984	0.010	T	0.96	0.01	L	7.8547	0.0011	0.014	220		7.83	7.88		C			1							S
106134	9.609	0.017	9.347	0.019		0.285	0.009	G	0.32	0.01	H	9.4079	0.0023	0.023	117		9.37	9.46		U			1							G
106135	9.627	0.021	9.321	0.024		0.350	0.015	G	0.41	0.02	H	9.3537	0.0022	0.022	112		9.32	9.40					1							G
106136	9.791	0.018	7.894	0.008		1.576	0.016	T	1.59	0.02	L	7.8146	0.0014	0.016	194		7.79	7.84		M			1							S
106137	11.370	0.075	10.117	0.040		1.068	0.066	T	1.03	0.05	L	10.1274	0.0025	0.028	105		10.09	10.16		C			1							
106138	9.278	0.017	8.838	0.017		0.429	0.019	T	0.50	0.02	L	8.8851	0.0024	0.018	85		8.85	8.93		C			1							
106139	9.271	0.019	8.696	0.018		0.540	0.019	T	0.61	0.02	L	8.7415	0.0021	0.016	79		8.71	8.77		C			1							S
106140	6.600	0.005	4.706	0.003		1.618	0.008	G	1.82	0.03	C	4.6178	0.0008	0.009	116		4.60	4.64		U 2	21299+2338	I 1	1							S
106141	7.706	0.006	7.771	0.008		−0.055	0.009	T	−0.03	0.01	L	7.7675	0.0023	0.024	137		7.74	7.81		U 2			1							S
106142	10.541	0.046	9.324	0.027		1.040	0.042	T	1.01	0.03	L	9.3748	0.0036	0.019	57		9.34	9.41		C			1							
106143	7.057	0.006	6.625	0.005		0.413	0.008	G	0.48	0.01	H	6.6692	0.0008	0.007	81		6.66	6.69		C			1							S
106144	7.601	0.006	7.372	0.006		0.218	0.008	T	0.24	0.01	L	7.4068	0.0014	0.016	159		7.38	7.43		M			1							S
106145	6.893	0.005	6.940	0.006		−0.040	0.015	G	−0.02	0.01	H	6.9496	0.0046	0.040	122		6.89	7.02		U 2			1							S P
106146	10.497	0.047	8.967	0.022		1.285	0.041	T	1.24	0.04	L	8.9990	0.0016	0.013	47		8.97	9.02		C			1							
106147	10.750	0.079	9.279	0.040		1.261	0.015	G	1.50	0.00	A	9.1845	0.0023	0.016	72		9.15	9.21					1							
106148	8.720	0.011	8.435	0.012		0.270	0.017	T	0.30	0.02	L	8.4798	0.0020	0.016	102		8.46	8.51		C			1							S
106149	9.798	0.018	9.284	0.017		0.493	0.019	T	0.57	0.02	L	9.3299	0.0014	0.015	136		9.30	9.36					1							
106150	7.924	0.008	7.742	0.009		0.167	0.012	T	0.18	0.01	L	7.7906	0.0013	0.013	100		7.77	7.81		C			1							S
106151	7.302	0.004	7.291	0.005		0.015	0.006	T	0.03	0.01	L	7.3055	0.0008	0.011	217		7.29	7.33					1							S
106152	7.729	0.006	7.449	0.008		0.278	0.015	G	0.32	0.02	H	7.4945	0.0009	0.010	125		7.48	7.51		C			1							S
106153	8.815	0.010	8.462	0.011	*	0.335	0.014	T	0.39	0.02	L *	8.5093	0.0014	0.018	159	*	8.48	8.54		D	21301+3050	I 1	2 C	A	AB	349	0.217	0.011	1.50	0.22	S
106154	11.140	0.075	9.523	0.031		1.354	0.064	T	1.32	0.07	L	9.5570	0.0025	0.016	72		9.53	9.58					1							
106155	8.378	0.008	8.319	0.010		0.059	0.012	T	0.07	0.01	L	8.3454	0.0014	0.015	142		8.32	8.38					1							
106156	9.440	0.018	8.973	0.018		0.440	0.023	T	0.51	0.02	L	9.0094	0.0029	0.023	84		8.96	9.06		C	21301+1501	I 1	1							
106157	8.235	0.013	7.699	0.011		0.503	0.015	T	0.58	0.02	L	7.7390	0.0020	0.011	78		7.72	7.76					1							S
106158	9.758	0.019	8.475	0.011		1.092	0.017	T	1.05	0.02	L	8.4965	0.0011	0.014	129		8.48	8.53		C			1							
106159	8.623	0.008	7.458	0.006		1.000	0.008	T	0.98	0.01	L	7.5093	0.0008	0.010	204		7.49	7.53		C			1							S
106160	8.578	0.010	8.137	0.010		0.416	0.013	T	0.48	0.01	L	8.2110	0.0014	0.016	121		8.18	8.24					1							S
106161	8.300	0.011	8.085	0.012		0.205	0.015	T	0.23	0.02	L	8.1307	0.0019	0.012	73		8.11	8.15		C			1							S
106162	8.366	0.012	7.915	0.010		0.440	0.015	G	0.51	0.02	H	7.9567	0.0011	0.011	91		7.94	7.98		C			1							S
106163	7.848	0.009	7.624	0.012		0.214	0.014	T	0.24	0.02	L	7.6710	0.0012	0.013	58		7.65	7.69		C			1							S
106164	8.772	0.012	8.278	0.011		0.473	0.015	G	0.54	0.02	H	8.3326	0.0019	0.016	99		8.31	8.36					1							S
106165	10.035	0.028	8.729	0.017		1.110	0.026	T	1.07	0.03	L	8.7674	0.0014	0.013	78		8.75	8.79		C			1							
106166	9.411	0.024	9.174	0.028		0.226	0.035	T	0.25	0.04	L	9.2364	0.0023	0.018	99		9.20	9.27		C			1							
106167	8.547	0.009	8.478	0.011		0.069	0.013	T	0.08	0.01	L	8.5141	0.0012	0.016	125		8.49	8.55		C			1							
106168	9.052	0.014	8.503	0.013		0.490	0.015	G	0.56	0.02	H	8.5589	0.0016	0.018	135		8.53	8.59					1							
106169	8.401	0.010	8.079	0.011		0.327	0.001	G	0.38	0.00	H	8.1337	0.0012	0.010	91		8.11	8.15					1							S
106170	7.327	0.006	7.361	0.007		−0.028	0.008	T	−0.01	0.01	L	7.3612	0.0015	0.011	124		7.35	7.38					1 G							S
106171	6.117	0.003	6.028	0.003		0.080	0.004	T	0.09	0.00	L	6.0563	0.0007	0.006	114		6.05	6.07		C			1							S
106172	11.871	0.134	10.844	0.081		0.650	0.015	G	0.71	0.01	H	11.2134	0.0060	0.044	118		11.13	11.29					1							D
106173	9.611	0.021	9.105	0.021		0.450	0.020	G	0.52	0.02	H	9.1355	0.0028	0.017	80		9.10	9.17					1							
106174	8.436	0.027	8.327	0.023	*	0.106	0.033	T	0.12	0.04	L *	8.7717	0.0015	0.017	209	*	8.74	8.80		D	21304+3504	I 1	2 C	A	BA	198	1.307	0.006	0.48	0.02	
106175	12.247	0.189	10.490	0.058		1.890	0.015	G	1.87	0.01	J	10.3580	0.0031	0.038	120		10.31	10.41					1							D
106176	9.862	0.022	8.724	0.015		0.979	0.021	T	0.96	0.02	L	8.7887	0.0019	0.016	97		8.76	8.82		C			1							
106177	11.588	0.140	10.474	0.077		1.062	0.002	G	1.03	0.00	J	10.4788	0.0053	0.030	59		10.43	10.54		C			1							G
106178	9.436	0.017	8.787	0.015	*	0.595	0.017	T	0.67	0.02	L *	9.2103	0.0021	0.025	171	*	9.16	9.26		D	21304−6028	I 1	2 C	A	AB	232	2.748	0.006	0.80	0.03	
106179	10.699	0.030	9.155	0.014		1.297	0.026	T	1.26	0.03	L	9.1595	0.0019	0.025	169		9.11	9.21					1							
106180	10.066	0.023	8.870	0.015		1.024	0.021	T	1.00	0.02	L	8.9332	0.0016	0.017	100		8.90	8.97					1							
106181	9.644	0.022	8.560	0.014	A	1.600	0.495	G	0.91	0.02	L *	8.5570	0.0017	0.014	89	*	8.53	8.58		D	21304−2426	I 1	2 C	A	AB	253	1.482	0.013	1.97	0.04	
106182	8.746	0.011	8.322	0.011		0.407	0.015	G	0.47	0.02	H	8.3649	0.0014	0.015	137		8.34	8.39					1							
106183	8.767	0.009	7.815	0.007		0.838	0.008	T	0.86	0.01	L	7.8551	0.0017	0.023	190		7.80	7.89		U 2	21304−6012	I 1	1							S
106184	7.145	0.004	6.797	0.004		0.330	0.005	T	0.38	0.01	L	6.8493	0.0007	0.007	120		6.84	6.86					1							S
106185	9.400	0.020	7.497	0.009		1.540	0.015	G	1.72	0.09	N	7.4144	0.0010	0.010	80		7.40	7.43		C			1							S
106186	9.142	0.013	8.872	0.014		0.257	0.018	T	0.29	0.02	L	8.9514	0.0033	0.028	117		8.92	9.01		U			1							
106187	8.567	0.011	8.325	0.013		0.231	0.016	T	0.26	0.02	L	8.3692	0.0017	0.016	128		8.35	8.40		C			1							
106188	9.700	0.026	8.422	0.016		1.088	0.024	T	1.05	0.03	L	8.4470	0.0023	0.016	63		8.42	8.47		C			1							
106189	10.200	0.025	9.529	0.022		0.621	0.028	T	0.69	0.03	L	9.5758	0.0023	0.023	141		9.51	9.61					1							
106190	10.513	0.029	9.224	0.017		1.096	0.026	T	1.06	0.03	L	9.3199	0.0020	0.023	149		9.28	9.38		C			1							
106191	8.531	0.013	8.187	0.015	*	0.326	0.019	T	0.38	0.03	L *	8.2459	0.0019	0.017	148	*	8.22	8.27		D	21306+4213	I 1	2 C	A	AB	327	6.287	0.019	2.98	0.07	S
106192	8.882	0.009	8.849	0.011		0.035	0.013	T	0.05	0.01	L	8.8584	0.0017	0.021	175		8.83	8.90		C			1	S						
106193	6.993	0.004	7.026	0.005		−0.026	0.006	T	0.00	0.01	L	7.0398	0.0009	0.009	126		7.02	7.06		C			1							S
106194	7.934	0.008	7.806	0.009		0.124	0.011	T	0.14	0.01	L	7.8358	0.0011	0.010	117		7.82	7.85		C			1							S
106195	8.406	0.011	7.917	0.012	A	0.200	0.495	G	0.52	0.03	L *	7.9350	0.0017	0.014	87	*	7.91	7.96		D	21306+0710	I 1	2 C	A	AB	105	1.103	0.024	2.87	0.11	S
106196	9.071	0.010	8.490	0.009		0.545	0.010	T	0.62	0.01	L	8.5525	0.0014	0.018	176		8.52	8.59					1							S
106197	10.819	0.049	10.367	0.055		0.426	0.068	T	0.49	0.07	L	10.5715	0.0028	0.027	115		10.52	10.62		C			1							G
106198	9.431	0.015	7.878	0.008		1.304	0.013	T	1.26	0.01	L	7.8905	0.0011	0.012	124		7.87	7.91		C			1							
106199	8.202	0.009	6.766	0.006		1.202	0.001	G	1.16	0.00	K	6.7907	0.0009	0.007	112		6.78	6.80					1							S
106200	8.551	0.010	8.267	0.011		0.270	0.014	T	0.30	0.02	L	8.2989	0.0050	0.059	115		8.26	8.48	8.22	P 1 A			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
106201	21 30 40.91	+73 28 39.0	8.05	H	322.670 454 78	+73.477 493 16	2.52	6.51	10.87	0.60	0.58	0.70	0.61	0.62	– 1	–12	– 2	–15	+ 6	– 8	+ 3	–19	+29	+ 6	0	–1.03
106202	21 30 41.91	+60 22 54.0	8.97	2 H	322.674 642 84	+60.381 662 01	0.89	–1.83	–2.71	0.77	0.74	0.89	0.78	0.69	– 2	+ 3	+15	– 5	+27	+14	+24	– 2	+13	+11	0	0.69
106203 H	21 30 42.42	–38 38 17.0	7.49	G	322.676 754 38	–38.638 062 72	A 9.47	–8.17	–51.12	1.05	0.91	1.09	1.21	0.79	+22	+12	+ 2	+ 4	– 8	+11	– 7	–32	+ 2	+24	1	0.36
106204	21 30 42.46	–24 10 06.0	10.67	G	322.676 898 39	–24.168 335 65	22.86	–240.47	–115.86	1.65	1.07	1.88	1.91	1.14	+40	–18	–14	–34	–21	+39	–20	– 7	+14	+44	0	–2.37
106205	21 30 44.21	+70 59 58.8	8.20	H	322.684 210 20	+70.999 666 96	5.82	7.50	–14.50	0.67	0.61	0.71	0.79	0.65	–13	–29	+12	–11	+14	+10	+ 7	–30	+14	–12	0	–0.11
106206	21 30 44.24	–25 42 35.0	7.17	H	322.684 337 93	–25.709 711 02	3.27	–3.88	9.21	0.78	0.53	0.86	0.89	0.53	+43	– 7	–16	–32	–21	+25	–18	–10	+ 1	+44	0	1.32
106207	21 30 44.50	–49 28 57.6	8.85	H	322.685 424 50	–49.482 654 72	4.09	–6.77	–19.27	0.94	0.76	1.30	1.11	0.67	+25	–10	– 8	+21	+36	+ 5	+33	+42	–16	+11	1	1.51
106208	21 30 44.67	–30 57 20.8	10.85	G	322.686 133 84	–30.955 785 95	18.51	7.70	–209.80	2.09	1.07	2.38	2.49	1.09	+40	– 1	– 9	–23	–22	+47	–16	+15	+ 7	+33	4	1.88
106209	21 30 45.28	–75 12 09.2	7.66	H	322.688 658 02	–75.202 553 03	3.46	9.73	2.96	0.58	0.57	0.77	0.65	0.68	–10	–13	– 4	+10	+ 7	–18	+ 7	+20	+ 9	–20	0	1.22
106210	21 30 45.93	+57 12 00.2	8.84	G	322.691 369 87	+57.200 055 92	4.25	–3.43	–5.02	0.68	0.64	0.80	0.72	0.66	– 8	+ 5	– 4	– 8	+16	–23	+15	– 8	+10	+ 6	0	0.70
106211	21 30 46.98	+47 40 11.7	8.11	2 H	322.695 732 54	+47.669 914 96	–0.61	35.75	–0.25	1.17	1.20	1.52	1.51	1.39	– 8	–12	+ 4	+ 4	– 1	+ 1	– 3	–10	+ 3	–19	2	
106212	21 30 47.25	+02 28 46.9	8.16	H	322.696 883 13	+02.479 706 38	2.39	–3.00	–16.80	0.87	0.63	1.17	1.17	0.63	+37	–11	– 2	–14	–12	+53	–15	+ 2	+27	+52	2	0.56
106213	21 30 47.74	–62 10 02.7	7.14	H	322.698 907 67	–62.167 408 25	25.55	153.56	–80.34	0.38	0.42	0.76	0.43	0.48	– 8	–18	–11	+30	+ 6	– 2	+ 9	+12	–13	– 4	1	0.68
106214	21 30 47.75	–44 14 02.7	9.52	G	322.698 952 12	–44.234 070 53	3.99	52.51	–31.00	1.08	0.93	1.60	1.01	0.95	+71	–59	–48	–29	–18	+33	– 8	– 6	+10	+65	0	–0.43
106215	21 30 48.55	+31 57 27.9	6.96	H	322.702 288 12	+31.957 762 24	5.02	29.59	20.76	0.45	0.49	0.71	0.51	0.59	–16	+18	–27	+15	+13	–14	+16	–17	+20	– 5	0	0.35
106216	21 30 48.67	+37 57 59.2	7.77	H	322.702 775 03	+37.966 446 01	1.23	14.00	4.37	0.42	0.49	0.73	0.48	0.59	–12	– 3	+ 5	+ 2	+ 8	–14	+ 8	+ 4	+23	–12	2	2.60
106217	21 30 50.77	–62 14 21.2	9.06	H	322.711 537 85	–62.239 209 19	–1.24	–7.87	2.13	0.67	0.75	1.28	0.79	0.85	+ 3	–20	–14	+28	+16	– 7	+16	+23	– 9	+ 5	0	1.09
106218	21 30 51.06	+36 53 21.4	10.66	G	322.712 767 39	+36.889 268 42	20.60	299.15	143.78	1.07	1.24	1.98	1.12	1.32	–19	– 3	+ 8	+ 1	+ 3	–13	+ 5	+16	+17	–25	1	0.83
106219	21 30 53.26	+24 46 51.7	8.26	2 H	322.721 914 28	+24.781 035 59	2.71	31.40	19.12	0.65	0.63	0.92	0.77	0.67	+12	+ 6	–36	– 8	– 1	–19	– 7	–31	+20	+11	0	–0.49
106220	21 30 53.40	+30 33 43.3	8.78	H	322.722 516 27	+30.562 035 72	4.09	–4.76	–39.00	0.62	0.63	1.00	0.82	0.89	+ 0	+ 2	– 5	+31	+10	–23	+14	+ 9	+19	+13	0	–1.18
106221	21 30 53.71	+10 09 24.1	7.79	H	322.723 786 69	+10.156 705 75	3.70	–10.23	–12.96	0.95	0.80	1.14	1.17	0.97	+36	–34	–32	–10	– 7	– 7	–16	–43	+24	+32	0	–2.24
106222	21 30 56.41	+12 33 19.4	8.43	2 H	322.735 055 72	+12.555 375 26	1.00	6.21	–5.41	0.99	0.72	1.17	1.24	0.85	+14	– 7	–28	–12	+ 4	– 4	+ 0	–16	+26	+24	0	–0.65
106223	21 30 57.06	+16 34 15.9	8.36	2 G	322.737 762 89	+16.571 080 76	6.70	–31.43	–36.62	0.98	0.63	1.04	1.17	0.66	+15	– 5	+ 1	–15	– 6	– 7	– 6	–12	– 5	+21	2	1.42
106224 H	21 30 57.70	–36 32 49.7	7.63	G	322.740 433 19	–36.547 134 52	A 9.66	–13.97	25.60	2.83	2.45	1.39	1.57	0.95	+21	–15	–16	–15	– 7	+22	– 3	–16	+ 8	+31	1	0.30
106225	21 30 59.09	–33 24 09.9	9.42	H	322.746 199 59	–33.402 756 51	4.76	–8.03	–14.66	1.32	0.95	1.53	1.52	0.78	+41	–39	–41	+ 1	–29	+20	–24	–19	+12	+17	0	–1.96
106226	21 30 59.13	+70 49 23.6	6.97	2 H	322.746 389 23	+70.823 224 95	5.61	9.93	–3.95	0.50	0.50	0.54	0.62	0.56	–20	– 7	+18	–10	+11	– 1	+ 9	–23	+13	–25	0	0.90
106227	21 30 59.29	+60 27 34.0	5.53	H	322.747 056 97	+60.459 440 15	1.36	–1.68	–3.31	0.44	0.43	0.50	0.44	0.41	– 5	+ 7	+19	+ 7	+26	+ 9	+25	–10	+13	– 5	0	0.45
106228	21 31 00.58	+56 56 44.0	9.18	H	322.752 424 57	+56.945 554 36	4.93	–3.46	–8.00	0.67	0.68	0.82	0.74	0.75	– 9	+ 1	– 4	+10	+15	–25	+19	– 5	+ 9	+15	0	–0.03
106229	21 31 00.84	–27 08 23.5	8.75	H	322.753 488 25	–27.139 847 25	0.67	–13.82	–37.47	1.13	0.70	1.29	1.42	0.71	+27	–20	–12	+16	–15	+24	–12	+17	+21	+27	0	0.23
106230	21 31 01.20	+59 25 05.0	6.86	1 H	322.754 989 66	+59.418 064 89	20.19	137.24	42.13	0.45	0.48	0.57	0.44	0.46	– 3	+10	+ 7	+ 8	+ 8	+ 3	+14	–13	+21	+16	0	–1.66
106231	21 31 01.63	+23 20 08.6	9.23	2 H	322.756 785 51	+23.335 733 66	39.91	134.06	–144.83	0.90	0.81	1.18	1.01	0.93	+15	+ 3	–24	–32	– 3	+16	+ 2	–35	+22	+26	0	0.19
106232	21 31 01.96	+11 22 25.9	7.99	2 H	322.758 170 14	+11.373 854 31	1.69	1.52	–27.71	0.94	0.77	1.21	1.25	0.91	+25	–14	–35	+ 8	– 7	+ 9	– 6	–34	+35	+32	0	1.64
106233	21 31 03.21	+30 08 02.8	8.16	G	322.763 357 95	+30.134 105 12	10.78	27.50	18.22	0.60	0.61	1.03	0.78	0.72	– 2	– 6	–14	+53	+ 2	–25	+ 1	–12	+17	– 1	0	1.12
106234	21 31 03.24	–50 50 48.5	8.38	2 H	322.763 499 63	–50.846 814 08	8.66	53.08	–42.77	0.89	0.66	1.21	1.00	0.57	+20	+19	+ 4	+15	+18	+21	+11	+10	–10	– 1	0	–0.82
106235	21 31 03.39	+43 06 23.1	8.68	H	322.764 127 27	+43.106 407 70	0.33	0.24	0.55	0.70	0.62	0.89	0.83	0.68	–10	+14	– 1	–14	+ 2	–20	+ 5	– 1	+17	–20	0	1.01
106236	21 31 04.33	–01 43 56.1	8.52	H	322.768 053 50	–01.732 242 29	4.34	9.47	–12.56	0.99	0.97	1.22	1.23	1.05	+33	– 8	+ 4	–21	+ 6	+44	+ 2	–25	+19	+42	0	0.67
106237	21 31 06.13	–56 57 21.4	8.42	H	322.775 524 27	–56.955 952 65	1.84	8.37	3.75	1.01	0.68	1.20	1.38	0.66	+ 9	–18	–27	+16	+38	–26	+28	+17	–16	+15	0	0.37
106238	21 31 07.46	+51 14 57.8	8.81	G	322.781 092 45	+51.249 385 85	1.28	3.93	–3.58	0.67	0.64	0.79	0.72	0.66	–14	– 9	+ 3	+ 3	+ 7	– 3	+ 6	+ 0	+11	–11	0	0.80
106239	21 31 07.58	+26 02 48.1	8.03	G	322.781 589 77	+26.046 689 80	0.49	45.61	–2.07	0.73	0.77	1.04	0.89	0.79	+22	– 4	–13	+ 7	– 7	–15	–13	–39	+12	+11	0	0.85
106240	21 31 08.28	+30 16 43.7	7.54	H	322.784 500 35	+30.278 816 74	3.05	23.47	–4.60	0.51	0.54	0.87	0.64	0.67	+ 0	– 7	–16	+48	+ 4	–14	+ 9	+ 0	+13	+14	0	–0.12
106241	21 31 09.03	+28 21 58.6	8.20	H	322.787 636 75	+28.366 274 83	3.93	–5.35	–10.75	0.65	0.56	0.97	0.72	0.66	–17	+10	– 1	+24	+ 6	–20	+14	– 3	+ 7	+ 3	0	–0.05
106242	21 31 09.23	+05 34 45.1	8.12	2 H	322.788 449 84	+05.579 190 99	0.17	4.44	–2.50	1.13	0.69	1.26	1.40	0.70	+28	+10	–13	+10	–22	+30	–12	– 7	+17	+46	0	0.98
*106243	21 31 09.62	+12 08 15.0	6.10	G	322.790 073 71	+12.137 513 09	7.82	18.11	–15.74	0.74	0.49	0.82	0.94	0.56	+14	–14	–17	+ 8	+ 2	+ 7	+ 1	–17	+24	+21	0	–0.57
*106244	21 31 09.61	+73 39 46.0	8.48	H	322.790 023 95	+73.662 787 73	3.93	6.27	11.40	0.58	0.59	0.70	0.58	0.60	– 8	– 2	+ 7	–14	+ 5	–10	+ 6	–14	+21	– 1	1	–1.36
106245	21 31 09.90	+53 55 02.5	9.29	H	322.791 269 39	+53.917 367 54	3.74	4.11	–6.03	0.81	0.71	0.91	0.97	0.78	– 5	+18	– 8	–29	+ 7	–17	+ 6	– 2	+15	+ 1	0	–1.63
106246	21 31 10.02	–59 24 24.3	7.89	H	322.791 739 84	–59.406 745 84	3.34	–30.32	4.09	0.67	0.64	1.05	0.89	0.74	+ 1	–10	– 2	+ 5	+29	–10	+29	+57	– 8	– 4	0	1.04
106247	21 31 11.01	–55 16 51.1	8.60	G	322.795 857 75	–55.280 851 35	9.53	62.52	–112.07	0.85	0.72	1.08	1.02	0.66	+10	+ 3	–20	+35	+15	+ 2	+10	+ 6	+ 5	+ 0	0	0.42
106248	21 31 11.58	+38 45 30.5	8.09	H	322.798 242 11	+38.758 464 19	2.34	–11.24	–12.92	0.55	0.65	0.92	0.60	0.71	–23	+ 0	+17	+ 0	+ 7	– 6	+ 7	+ 4	+16	–19	0	–1.03
106249	21 31 12.34	+20 17 18.2	8.91	H	322.801 436 70	+20.288 396 60	5.38	–32.30	–60.02	0.73	0.70	1.18	0.90	0.77	+35	– 3	–26	–10	+10	–35	+ 0	–29	+19	+23	0	0.94
106250	21 31 13.72	+41 32 20.5	8.65	H	322.807 149 66	+41.539 014 05	0.70	–3.24	–4.61	0.63	0.66	0.93	0.74	0.79	–24	– 9	+ 5	+15	+ 0	+ 6	+ 0	+15	– 3	–29	0	0.17
106251 H	21 31 15.02	–17 15 35.6	8.37	G	322.812 603 96	–17.259 880 13	A 3.62	7.11	–26.99	1.33	0.96	1.42	1.58	0.92	+42	–12	–32	–11	–40	+41	–29	–19	+17	+41	1	–0.32
106252	21 31 15.10	+35 52 24.7	7.55	H	322.812 916 33	+35.873 532 77	4.38	–1.11	–6.98	0.46	0.53	0.84	0.51	0.60	–34	– 3	+ 3	–13	+16	–12	+14	+ 9	+ 7	–26	1	0.84
106253	21 31 17.72	+28 19 18.7	9.78	G	322.823 812 59	+28.321 855 22	–0.12	–2.05	–3.10	0.92	0.76	1.33	1.11	0.92	–14	+ 1	– 8	+16	+11	–26	+14	– 8	+10	– 1	0	1.49
106254	21 31 17.79	+13 30 47.6	8.82	H	322.824 137 03	+13.513 216 73	4.62	–10.49	–18.16	1.09	0.69	1.17	1.58	0.74	+19	+19	–12	+16	+ 6	+15	+ 9	+ 6	+11	+27	0	1.06
106255	21 31 17.92	–09 47 25.9	11.96	G	322.824 670 99	–09.790 531 73	124.82	1161.80	–54.19	26.12	20.79	28.85	38.28	22.41	+21	– 9	–31	–25	– 7	– 1	–13	–51	+31	+ 1	0		
106256	21 31 18.16	+52 11 43.5	6.69	H	322.825 683 00	+52.195 406 00	6.82	29.39	56.03	0.46	0.45	0.55	0.51	0.48	–12	+ 1	+ 0	+ 9	–10	– 5	– 8	– 5	+ 8	– 6	0	0.59
106257	21 31 18.28	–66 59 20.7	10.00	H	322.826 164 41	–66.989 096 00	6.71	0.17	–3.71	1.94	2.27	3.34	2.00	2.47	–21	+ 4	–17	–22	+ 1	– 4	+ 3	+ 5	– 4	–31	0	
106258	21 31 18.92	+03 49 06.1	7.01	H	322.828 819 31	+03.818 368 34	9.39	86.34	–11.78	0.92	0.50	0.96	1.30	0.54	+17	+ 1	– 3	+26	–28	+31	–12	– 6	+26	+48	0	0.90
106259	21 31 21.83	–83 02 01.3	6.95	H	322.840 964 12	–83.033 687 36	9.00	–11.51	16.64	0.48	0.45	0.59	0.57	0.57	+16	–23	– 7	+ 4	+16	– 7	+19	+18	– 5	+ 0	5	0.48
106260	21 31 22.36	+22 44 30.9	7.58	H	322.843 185 61	+22.741 914 70	4.48	–5.26	1.71	0.60	0.58	0.88	0.67	0.64	+18	–14	–20	–16	– 3	+ 5	– 5	–42	+20	+16	0	–0.57
106261	21 31 22.57	–33 53 25.0	9.40	H	322.844 042 51	–33.890 268 71	3.38	6.74	–4.75	1.39	1.06	1.47	1.67	0.93	+27	–12	–15	+10	–33	+ 3	–29	–44	– 4	+22	0	0.92
106262 H	21 31 23.18	+48 21 23.5	7.79	G	322.846 588 38	+48.356 541 57	* 3.06	–7.78	–20.73	1.12	1.59	0.82	0.93	0.72	+ 8	+ 6	+ 3	– 9	– 1	–10	– 3	– 9	+ 5	–19	5	–0.39
106263 H	21 31 23.31	+40 03 54.6	7.44	G	322.847 110 78	+40.065 162 51	A 11.02	–22.84	–30.10	0.65	0.72	0.93	0.66	0.77	– 2	+ 0	– 6	+ 4	+10	–14	+ 9	+ 6	+14	– 9	1	–0.27
106264 H	21 31 25.46	–19 14 15.0	7.15	H	322.856 094 07	–19.237 506 62	A 9.10	60.46	–14.20	1.25	0.82	1.24	1.36	0.75	+41	+10	– 7	–13	–32	+36	–20	+ 3	+ 9	+34	3	0.31
106265 H	21 31 25.95	+57 53 56.5	9.51	G	322.858 120 57	+57.899 034 46	A 2.92	–1.61	–3.32	1.44	1.36	1.51	1.37	1.28	– 4	+ 3	–13	–27	+10	– 8	+11	–21	+10	+19	1	–0.67
106266	21 31 27.19	+47 15 44.9	8.35	H	322.863 278 83	+47.262 461 30	3.88	–1.17	6.84	0.63	0.59	0.77	0.80	0.68	–15	+ 2	+ 2	+19	+ 4	+ 5	+ 3	+ 6	+11	–17	0	–0.69
106267	21 31 27.46	+52 37 11.5	6.17	G	322.864 430 46	+52.619 859 67	2.84	0.62	–1.65	0.43	0.43	0.52	0.48	0.45	– 5	+ 1	– 5	– 8	– 9	– 8	– 8	– 9	+16	+ 2	1	0.72
106268 H	21 31 27.96	–08 44 34.7	8.96	H	322.866 486 98	–08.742 970 41	* 2.98	9.51	–14.82	1.19	0.93	1.52	1.88	1.01	+26	– 5	–33	+ 9	–10	+21	–10	–29	+43	+ 6	0	2.84
*106269	21 31 29.25	–69 48 41.7	9.45	H	322.871 860 30	–69.811 583 74	0.63	1.86	–10.66	0.85	0.92	1.23	1.02	1.16	–11	–15	– 3	+ 0	+ 6	– 8	+ 7	+ 5	+ 3	–25	0	–1.58
*106270	21 31 30.53	+48 16 41.6	7.98	G	322.877 217 48	+48.278 224 62	2.60	–8.93	–19.99	0.59	0.55	0.73	0.78	0.64	–14	+ 8	+ 1	– 6	– 3	–18	– 2	– 7	+12	–27	0	0.43
*106271 H	21 31 28.75	–38 33 23.0	9.47	G	322.869 779 26	–38.556 375 35	A 14.41	42.15	–35.86	7.16	6.20	3.98	8.11	4.45	+41	–23	+ 4	–72	–30	+20	–38	–82	– 8	+38	4	–0.43
106272	21 31 32.21	+34 32 50.0	8.77	H	322.884 214 81	+34.547 212 43	4.06	12.32	14.51	0.53	0.66	1.04	0.56	0.68	–19	+10	– 6	+ 6	+34	–19	+33	+26	+10	–18	1	–0.10
106273	21 31 32.24	–22 00 39.9	8.01	H	322.884 320 84	–22.011 093 63	3.20	–1.55	–19.45	0.91	0.58	1.10	1.01	0.61	+23	–26	– 6	–20	–15	+46	–19	+ 3	+23	+35	2	–0.01
106274	21 31 32.33	+72 03 01.9	8.40	G	322.884 693 79	+72.050 519 66	7.50	16.49	15.34	0.58	0.59	0.65	0.72	0.81	+ 6	–12	– 3	+ 5	– 4	+ 7	– 3	–23	+ 1	+20	0	–0.26
106275	21 31 32.38	+49 40 13.1	8.35	H	322.884 899 81	+49.670 308 32	2.21	6.04	–18.23	0.69	0.59	0.76	0.91	0.71	–14	+ 0	– 1	–40	+14	–15	+ 5	+12	+ 9	+ 2	0	–1.05
106276	21 31 32.95	+65 37 05.4	10.33	H	322.887 307 69	+65.618 173 29	1.46	–3.74	–10.76	1.26	1.18	1.32	1.54	1.38	– 6	– 9	+11	+18	+22	+ 1	+23	– 3	+14	+11	5	0.36
106277	21 31 33.30	–63 02 55.4	7.91	H	322.888 730 46	–63.048 716 91	1.97	–5.43	–10.68	0.59	0.56	0.95	0.77	0.70	–15	– 8	–11	+ 9	+10	+ 5	+10	+10	– 3	–14	0	–1.08
106278	21 31 33.52	–05 34 16.2	2.90	1 G	322.889 669 51	–05.571 155 93	5.33	22.79	–6.70	0.77	0.52	0.94	1.06	0.67	+19	–11	–17	–11	+ 8	+34	+ 8	–20	+41	+44	0	2.11
106279	21 31 34.25	+06 32 02.7	8.63	H	322.892 726 50	+06.534 088 20	6.96	48.66	–16.18	1.11	0.82	1.25	1.38	0.84	+40	+ 2	+12	– 9	–13	+20	–14	–20	+ 8	+45	0	–0.20
106280	21 31 34.44	–09 44 39.9	7.40	H	322.893 484 59	–09.744 406 38	9.35	–120.34	–121.77	0.87	0.65	0.97	1.34	0.75	+14	– 3	–24	+ 6	–20	+23	–17	–31	+25	+ 6	0	0.20
106281	21 31 34.95	–11 56 16.8	8.54	H	322.895 617 33	–11.938 011 37	9.16	14.14	–33.40	1.11	0.90	1.45	2.01	1.01	+23	– 3	–36	+10	–39	+55	–26	–39	+23	+22	0	–0.61
106282	21 31 35.75	+12 54 27.0	8.92	H	322.898 947 33	+12.907 511 12	2.41	–4.59	–22.81	1.13	0.84	1.35	1.44	0.93	+20	+10	–19	–19	+ 2	– 3	+ 3	–13	+26	+22	0	0.35
106283	21 31 36.69	+11 53 23.1	9.54	H	322.902 864 42	+11.889 744 63	2.01	34.49	2.68	1.43	0.99	1.62	1.88	1.14	+24	–10	–25	+ 6	+ 2	+ 0	+ 2	–23	+20	+32	0	0.29
106284	21 31 36.91	+42 42 02.7	7.22	H	322.903 788 17	+42.700 759 69	2.17	–0.51	–1.48	0.47	0.48	0.67	0.55	0.53	–22	+ 0	+ 5	– 1	– 8	– 4	– 7	+ 3	+10	–33	0	1.10
106285	21 31 38.41	+57 30 09.4	7.41	1 G	322.910 047 78	+57.502 598 37	2.63	–4.79	–2.68	0.53	0.52	0.63	0.55	0.53	– 4	+ 7	+ 0	–12	+16	–19	+17	–15	+13	+13	0	0.38
106286	21 31 39.12	+64 49 07.8	10.36	H	322.912 991 54	+64.818 841 75	31.72	224.53	171.04	1.25	1.17	1.34	1.60	1.28	– 6	–12	+16	+19	+ 9	+ 8	+ 4	–11	+15	– 4	0	0.84
106287	21 31 39.17	–35 04 38.9	8.18	G	322.913 225 81	–35.077 481 27	6.58	4.18	–16.64	0.88	0.78	1.13	1.04	0.71	+36	–15	–33	–12	–29	+44	–17	–38	+21	+44	0	2.04
106288	21 31 39.50	–45 54 03.2	9.02	G	322.914 592 60	–45.900 884 96	15.51	338.63	20.17	0.97	0.87	1.31	1.04	0.87	+57	–27	–23	–22	–20	+10	–19	–30	+ 6	+58	0	3.20
106289	21 31 39.87	–25 18 03.9	7.88	H	322.916 107 39	–25.301 086 05	7.16	26.05	–15.55	0.89	0.63	0.99	1.05	0.59	+45	– 3	– 9	–25	–35	+32	–31	–25	+ 6	+39	0	–0.59
106290	21 31 40.47	+05 11 40.8	11.33	G	322.918 631 42	+05.194 677 63	–21.69	–20.25	0.12	13.12	9.46	15.18	16.48	10.34	+42	– 4	– 1	–22	–17	+28	–18	–17	+18	+57	2	
106291	21 31 41.03	+14 27 56.0	9.25	H	322.920 971 78	+14.465 561 24	6.58	–11.65	–33.01	1.21	0.85	1.36	1.57	0.90	+32	+13	+10	+32	+ 6	+29	+ 8	–18	+ 7	+39	0	–0.30
106292	21 31 41.27	+39 07 37.8	8.59	H	322.921 969 18	+39.127 171 17	4.06	3.42	–14.88	0.59	0.66	0.95	0.63	0.73	–22	+10	+ 6	+ 1	+ 2	– 1	+ 4	+ 5	+15	–19	0	–0.37
106293	21 31 42.39	+48 35 04.8	6.84	H	322.926 629 29	+48.584 665 41	3.46	–7.88	–19.33	0.48	0.46	0.59	0.58	0.49	–15	+10	+ 6	–21	+ 0	–20	+ 3	–11	+ 9	–24	0	0.14
106294	21 31 42.73	+72 02 16.2	7.89	G	322.928 055 84	+72.037 830 32	6.86	15.09	11.90	0.54	0.53	0.60	0.64	0.58	+ 1	– 9	– 5	+ 7	+ 2	+14	+ 3	–20	+19	+12	0	–2.22
106295	21 31 43.03	+06 45 01.5	7.86	H	322.929 295 67	+06.750 425 06	3.20	23.53	0.55	0.95	0.74	1.09	1.28	0.72	+34	– 8	–11	+ 1	–28	+22	–21	–20	+ 7	+35	2	0.96
106296	21 31 44.50	+22 14 08.7	9.55	H	322.935 407 08	+22.235 753 09	21.33	–101.36	–27.79	1.00	0.89	1.46	1.17	0.97	+18	– 8	–32	+ 3	+ 6	–13	+ 3	–39	+ 9	+18	2	–1.12
106297	21 31 44.66	+48 29 03.8	7.65	G	322.936 071 64	+48.484 400 52	3.77	–7.86	–19.23	0.56	0.53	0.70	0.71	0.60	– 9	+ 6	+ 8	– 6	– 6	–17	– 4	– 9	+11	–21	0	0.25
106298	21 31 45.30	–37 06 31.8	9.41	H	322.938 767 63	–37.108 822 88	9.19	47.71	59.27	1.34	0.96	1.42	1.51	0.91	+15	+ 1	–25	–31	–13	+21	– 8	–30	+ 6	+16	0	1.65
106299

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
106201	10.129	0.023	8.233	0.010		1.575	0.020	T	1.59	0.02	L	8.1657	0.0019	0.014	112		8.14	8.19					1							
106202	9.153	0.020	9.017	0.025		0.131	0.030	T	0.15	0.03	L	9.0142	0.0046	0.032	99		8.97	9.06		U 2			1							
106203	8.062	0.011	7.554	0.011	*	0.508	0.015	G	0.58	0.02	H	*	7.5990	0.0021	0.012	60	*	7.58	7.62		C	21307−3838	I 1	2 C	A	AB	45	0.900	0.018	2.98	0.05	S
106204	11.708	0.118	10.812	0.089		1.224	0.004	G	1.38	0.01	I		10.7519	0.0036	0.028	91		10.71	10.80		C			1							G
106205	8.416	0.010	8.241	0.012		0.168	0.015	T	0.18	0.01	L		8.2622	0.0013	0.012	108		8.25	8.29					1							
106206	8.837	0.013	7.305	0.007		1.287	0.012	T	1.25	0.01	L		7.3233	0.0014	0.010	90		7.31	7.34					1							S
106207	9.313	0.013	8.888	0.014		0.415	0.016	T	0.48	0.02	L		8.9391	0.0021	0.019	139		8.91	8.96					1							
106208						1.206	0.008	G	1.35	0.01	I		10.9830	0.0035	0.033	116		10.93	11.03		C			1							G
106209	8.990	0.011	7.782	0.007		1.033	0.010	T	1.01	0.01	L		7.8273	0.0012	0.014	143		7.80	7.85		C			1							S
106210	9.033	0.011	8.879	0.014		0.182	0.004	G	0.20	0.01	H		8.8792	0.0015	0.016	115		8.85	8.90		C			1							D
106211	10.169	0.030	8.376	0.012		1.523	0.027	T	2.75	0.04	O		8.0867	0.0037	0.036	130		8.02	8.15		U 2			1 X	S						
106212	9.804	0.024	8.284	0.012		1.278	0.021	T	1.24	0.02	L		8.3209	0.0014	0.013	99		8.30	8.34		C			1							
106213	7.868	0.005	7.211	0.005		0.596	0.004	G	0.67	0.00	H		7.2728	0.0007	0.010	250		7.25	7.29					1							S
106214	10.099	0.020	9.589	0.020		0.573	0.007	G	0.65	0.01	H		9.6444	0.0019	0.022	191		9.61	9.69					1							
106215	7.296	0.005	6.984	0.005		0.296	0.007	T	0.34	0.01	L		7.0343	0.0009	0.009	147		7.02	7.05					1							S
106216	8.032	0.006	7.803	0.007		0.218	0.009	T	0.24	0.01	L		7.8394	0.0010	0.015	185		7.81	7.87					1							S
106217	10.679	0.027	9.170	0.013		1.269	0.024	T	1.23	0.03	L		9.2163	0.0020	0.025	232		9.18	9.27					1							
106218	12.217	0.135	10.773	0.058		1.030	0.020	G	1.08	0.02	I		10.8585	0.0039	0.042	179		10.80	10.93		C			1	S						G
106219	8.666	0.010	8.285	0.010		0.363	0.015	G	0.42	0.02	H		8.3487	0.0042	0.036	129		8.30	8.40		U 2			1							S
106220	8.818	0.009	8.774	0.012		0.045	0.014	T	0.06	0.01	L		8.8057	0.0018	0.020	158		8.77	8.85					1							
106221	8.932	0.019	7.885	0.013		0.920	0.015	G	0.92	0.01	H		7.9514	0.0018	0.009	61		7.94	7.97		C			1							S
106222	10.675	0.050	8.634	0.016		1.728	0.043	T	2.13	0.10	O		8.5027	0.0022	0.024	87		8.47	8.56		U 2			1							
106223	8.742	0.011	8.412	0.012		0.313	0.015	T	0.36	0.02	L		8.4339	0.0028	0.026	92		8.39	8.48		U 2			1							S
106224	8.086	0.010	7.688	0.008	*	0.380	0.017	G	0.44	0.02	H	*	7.7188	0.0020	0.011	62	*	7.70	7.74		D	21310−3633	I 1	2 C	A	AS	35	0.349	0.004	0.38	0.05	S
106225	10.690	0.057	9.524	0.033		1.000	0.040	G	0.98	0.03	R		9.5876	0.0024	0.018	66		9.56	9.62		C			1							
106226	7.088	0.015	6.995	0.015		0.084	0.019	T	0.10	0.02	L		6.9998	0.0114	0.131	102		6.94	7.33	0.94	P 1 A			1							S
106227	5.650	0.003	5.545	0.003		0.102	0.004	T	0.12	0.00	L		5.5688	0.0007	0.007	110		5.55	5.58					1							S
106228	9.429	0.016	9.200	0.018		0.218	0.023	T	0.24	0.03	L		9.2506	0.0021	0.021	124		9.22	9.29					1							
106229	10.202	0.033	8.888	0.019		1.116	0.030	T	1.08	0.03	L		8.9177	0.0022	0.019	82		8.89	8.95		C			1							
106230	7.692	0.006	6.947	0.006		0.681	0.007	T	0.74	0.01	L		6.9979	0.0018	0.018	111		6.98	7.03		U 2			1							S
106231	10.571	0.040	9.351	0.023		1.050	0.015	G	1.10	0.02	I		9.3701	0.0035	0.041	133		9.30	9.44		U 2			1							P
106232	10.123	0.027	8.207	0.011		1.625	0.024	T	2.21	0.06	O		8.0530	0.0049	0.045	80		8.00	8.11		U 2			1							S P
106233	8.625	0.009	8.224	0.009		0.379	0.012	T	0.44	0.01	L		8.2551	0.0016	0.017	163		8.23	8.29					1							S
106234	8.991	0.013	8.432	0.012		0.508	0.003	G	0.58	0.00	H		8.4902	0.0019	0.019	99		8.46	8.53		U			1							S
106235	8.602	0.010	8.687	0.013		−0.060	0.015	G	−0.04	0.01	H		8.6656	0.0023	0.020	126		8.62	8.69					1							
106236	9.152	0.021	8.574	0.019		0.543	0.015	G	0.62	0.01	H		8.6339	0.0025	0.017	68		8.61	8.68		C			1							S
106237	9.646	0.019	8.508	0.013		0.979	0.018	T	0.96	0.01	L		8.5871	0.0020	0.020	113		8.55	8.62		C			1							
106238	8.917	0.011	8.796	0.013		0.069	0.008	G	0.08	0.01	H		8.8410	0.0023	0.018	132		8.81	8.87					1							
106239	9.780	0.021	8.178	0.011		1.361	0.010	G	1.33	0.01	H		8.1945	0.0017	0.016	109		8.16	8.22		C			1							
106240	9.207	0.012	7.680	0.007		1.283	0.011	T	1.24	0.01	L		7.7001	0.0012	0.012	169		7.68	7.72		C			1							S
106241	9.634	0.016	8.335	0.010		1.104	0.015	T	1.07	0.02	L		8.3737	0.0018	0.018	146		8.34	8.40					1							
106242	10.214	0.041	8.342	0.016		1.589	0.036	T	2.41	0.07	O		8.1474	0.0056	0.029	77		8.10	8.20		U 2			1							
106243	6.039	0.005	6.095	0.004		−0.047	0.004	G	−0.03	0.00	H		6.0960	0.0009	0.006	78		6.09	6.11		C			1							S
106244	8.656	0.010	8.482	0.012		0.167	0.015	T	0.18	0.01	L		8.5361	0.0018	0.016	116		8.51	8.56		C			1							
106245	9.412	0.019	9.316	0.025		0.094	0.029	T	0.11	0.03	L		9.3286	0.0022	0.020	112		9.30	9.37		C			1							G
106246	9.724	0.015	8.059	0.007		1.392	0.013	T	1.37	0.02	L		8.0410	0.0014	0.015	164		8.01	8.07					1							S
106247	9.249	0.016	8.650	0.015		0.563	0.015	G	0.64	0.01	H		8.7169	0.0017	0.020	95		8.68	8.76					1							S
106248	9.762	0.015	8.240	0.008		1.279	0.013	T	1.24	0.01	L		8.2448	0.0016	0.019	172		8.22	8.27					1							
106249	9.329	0.012	8.943	0.012		0.365	0.016	T	0.43	0.02	L		8.9936	0.0016	0.017	172		8.95	9.02		C			1							
106250	8.707	0.009	8.649	0.011		0.058	0.013	T	0.07	0.01	L		8.6759	0.0020	0.020	155		8.65	8.71					1							
106251	8.739	0.013	8.449	0.015	A	0.320	0.061	G	0.29	0.04	L	*	8.4661	0.0020	0.013	81	*	8.45	8.49			21312−1716	I 1	2 C	B	AB	121	3.042	0.043	4.05	0.23	S
106252	8.756	0.009	7.660	0.006		0.950	0.015	G	0.94	0.01	H		7.7173	0.0009	0.011	204		7.70	7.74		C			1							
106253	9.700	0.018	9.797	0.028		−0.010	0.015	G	0.01	0.01	H		9.7516	0.0029	0.033	150		9.70	9.80					1							G
106254	9.034	0.014	8.851	0.016		0.175	0.020	T	0.19	0.02	L		8.8790	0.0027	0.019	85		8.84	8.92					1							
106255						1.703	0.046	G	2.99	0.00	A		11.9473	0.0112	0.053	59		11.81	12.04					1 X							G X
106256	7.908	0.008	6.792	0.005		0.962	0.007	T	0.95	0.01	L		6.8496	0.0010	0.008	127		6.84	6.87					1							S
106257	10.635	0.027	10.051	0.025		0.547	0.027	T	0.62	0.03	L		10.1217	0.0037	0.038	186		10.06	10.20					1 X	S						
106258	7.250	0.006	7.033	0.006		0.207	0.008	T	0.23	0.01	L		7.0715	0.0019	0.012	88		7.05	7.10					1							S
106259	7.092	0.005	6.965	0.005		0.115	0.007	T	0.13	0.01	L		6.9942	0.0008	0.007	131		6.98	7.01					1							S
106260	8.827	0.011	7.690	0.008		0.978	0.011	T	0.96	0.01	L		7.7450	0.0009	0.009	128		7.73	7.76					1							S
106261	10.727	0.050	9.508	0.028		1.042	0.045	T	1.01	0.04	L		9.5707	0.0029	0.026	63		9.53	9.61		C			1							
106262	7.882	0.009	7.864	0.011	*	0.024	0.021	G	0.04	0.02	H	*	7.8691	0.0013	0.012	125	*	7.85	7.89		D	21314+4821	M 1	2 C	A	AB	292	0.194	0.014	1.66	0.27	S
106263	7.984	0.006	7.531	0.006	A	0.488	0.015	G	0.51	0.01	L	*	7.5427	0.0009	0.009	175	*	7.53	7.56		D	21314+4004	I 1	2 C	A	AB	13	2.896	0.018	3.47	0.11	S
106264	7.545	0.007	7.198	0.006	A	−0.300	0.495	G	0.37	0.02	L	*	7.2264	0.0009	0.009	95	*	7.21	7.25		C	21314−1914	I 1	2 C	D	AB	184	2.162	0.038	3.99	0.21	S	D
106265	9.791	0.019	9.644	0.024	A	0.223	0.004	G	0.25	0.01	H	*	9.5982	0.0026	0.021	119	*	9.57	9.63		C	21314+5754	I 1	2 C	C	AB	85	3.431	0.043	3.14	0.18	G
106266	8.655	0.011	8.382	0.012		0.273	0.015	G	0.31	0.02	H		8.4179	0.0015	0.017	130		8.39	8.45					1							
106267	7.274	0.006	6.272	0.004		0.900	0.005	G	0.90	0.00	H		6.3185	0.0006	0.007	129		6.31	6.33		C			1							S
106268	10.470	0.047	9.107	0.025	*	1.154	0.042	T	1.12	0.04	L	*	9.1271	0.0032	0.022	70	*	9.09	9.17		C	21315−0845	H 1	2 C	S A	AB	316	0.191	0.021	1.63	0.41	
106269	10.575	0.030	9.589	0.021		0.864	0.027	T	0.88	0.02	L		9.6122	0.0023	0.028	156		9.56	9.67		C			1							
106270	8.028	0.009	7.987	0.012		0.065	0.008	G	0.07	0.01	H		8.0123	0.0010	0.010	124		8.00	8.03		C	21315+4817	I 1	1	S						
106271	11.305	0.085	9.888	0.040	A	1.190	0.042	G	1.15	0.04	R	*	9.5789	0.0035	0.026	37	*	9.51	9.61		D	21315−3834	I 1	2 C	A	AB	344	4.917	0.014	1.15	0.07	
106272	9.242	0.010	8.821	0.010		0.423	0.015	G	0.49	0.02	H		8.8659	0.0011	0.018	262		8.83	8.90					1							
106273	9.576	0.022	8.141	0.012		1.211	0.020	T	1.17	0.02	L		8.1764	0.0013	0.013	79		8.15	8.19		C			1							S
106274	8.783	0.011	8.434	0.011		0.331	0.015	T	0.39	0.02	L		8.4830	0.0015	0.015	127		8.46	8.51		C			1 G							
106275	8.509	0.010	8.358	0.011		0.145	0.014	T	0.16	0.01	L		8.4076	0.0011	0.010	115		8.39	8.43					1							
106276	10.727	0.051	10.426	0.063		0.286	0.076	T	0.33	0.10	L		10.4057	0.0044	0.037	98		10.33	10.47					1							G
106277	9.436	0.013	8.037	0.007		1.183	0.012	T	1.14	0.01	L		8.0714	0.0017	0.016	177		8.05	8.10					1							S
106278	3.949	0.002	2.986	0.002		0.828	0.010	G	0.82	0.02	A		3.0404	0.0006	0.004	71		3.03	3.05		M	21316−0534	I 1	1							S
106279	9.348	0.018	8.726	0.016		0.579	0.021	T	0.65	0.02	L		8.7549	0.0028	0.022	78		8.72	8.79					1							S
106280	8.451	0.013	7.482	0.009		0.860	0.015	G	0.87	0.01	H		7.5568	0.0014	0.010	63		7.54	7.58					1							S
106281	9.060	0.017	8.583	0.017		0.462	0.019	T	0.53	0.02	L		8.6441	0.0023	0.014	52		8.63	8.67		C			1							S
106282	10.379	0.033	9.025	0.018		1.147	0.029	T	1.11	0.03	L		9.0868	0.0029	0.022	89		9.04	9.12		C			1							
106283	11.165	0.072	9.663	0.031		1.263	0.062	T	1.22	0.06	L		9.6981	0.0036	0.024	76		9.65	9.73					1							
106284	7.170	0.005	7.215	0.006		−0.036	0.007	T	−0.01	0.01	L		7.2203	0.0009	0.012	141		7.20	7.24					1							S
106285	8.012	0.009	7.486	0.006		0.551	0.009	G	0.62	0.01	H		7.5151	0.0023	0.019	124		7.48	7.54		U 2 C			1							S
106286	11.963	0.146	10.566	0.063		1.500	0.495	G	2.07	3.83	I		10.4181	0.0045	0.032	95		10.36	10.48					1							G
106287	8.626	0.012	8.193	0.012		0.344	0.015	G	0.40	0.02	H		8.2718	0.0019	0.013	72		8.25	8.29		C			1							S
106288	9.780	0.018	9.060	0.016		0.649	0.008	G	0.71	0.01	H		9.1525	0.0016	0.018	119		9.12	9.18		C			1							
106289	8.517	0.012	7.936	0.011		0.561	0.015	G	0.63	0.01	H		7.9970	0.0011	0.010	86		7.98	8.01		C			1							S
106290						1.464	0.003	G	1.53	0.14	K		13.3009	0.0782	0.379	39		12.19	13.63					1 X	S						D
106291	9.674	0.022	9.296	0.024		0.358	0.030	T	0.42	0.03	L		9.3384	0.0022	0.020	83		9.31	9.38		C			1							
106292	8.886	0.009	8.616	0.010		0.247	0.015	G	0.28	0.02	H		8.6581	0.0016	0.016	161		8.63	8.69		C			1							
106293	6.794	0.005	6.834	0.006		−0.023	0.005	G	0.00	0.01	H		6.8404	0.0010	0.008	124		6.83	6.86		C			1							S
106294	8.260	0.010	7.924	0.011		0.319	0.014	T	0.37	0.02	L		7.9742	0.0011	0.011	126		7.95	8.00					1							S
106295	9.049	0.014	7.957	0.010		0.944	0.013	T	0.93	0.01	L		8.0226	0.0020	0.018	82		8.00	8.06					1							S
106296	10.584	0.040	9.625	0.026		0.831	0.037	T	0.87	0.04	L		9.6855	0.0027	0.026	114		9.64	9.74					1							
106297	7.652	0.008	7.646	0.009		0.011	0.005	G	0.03	0.01	H		7.6747	0.0011	0.010	120		7.66	7.69		C			1							S P
106298	9.960	0.032	9.402	0.031		0.527	0.033	T	0.60	0.04	L		9.5242	0.0019	0.016	58		9.50	9.56		D			1							
106299						0.888	0.010	G	0.93	0.01	H		12.0581	0.0102	0.066	63		11.91	12.19					1							G
106300	9.378	0.012	8.107	0.007		1.082	0.011	T	1.04	0.01	L		8.1427	0.0012	0.016	230		8.12	8.17					1 G							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
106301	21 31 47.76	+19 06 49.2	8.40	H	322.949 012 12	+19.113 654 04	2.21	−1.73	−19.18	0.84	0.64	1.03	1.12	0.71	+15	−12	−19	−32	+ 2	+ 5	+ 0	−28	+17	+11	2	2.43
106302	21 31 48.10	+41 44 38.1	7.90	H	322.950 425 62	+41.743 914 10	5.72	16.50	−8.09	0.55	0.55	0.76	0.63	0.63	−25	− 4	+ 3	−11	+ 0	+ 3	+ 1	+11	+ 8	−33	0	−0.69
106303 H	21 31 48.94	+33 48 56.3	7.80	G	322.953 906 29	+33.815 628 09 A	4.63	−0.45	−2.01	1.09	1.42	1.79	1.05	1.23	−18	+ 1	+ 9	+ 0	+23	+ 4	+21	+12	+15	−12	2	2.00
106304	21 31 49.48	−31 32 51.7	7.90	H	322.956 181 88	−31.547 688 60	9.29	11.58	−0.39	0.85	0.52	1.13	1.05	0.48	+45	−22	−31	− 9	−27	+56	−10	+13	+ 8	+29	0	−0.66
106305	21 31 49.75	+33 38 00.1	8.84	H	322.957 293 20	+33.633 349 74	28.80	419.65	150.97	0.60	0.77	1.22	0.73	0.85	−22	+ 7	− 3	− 7	+29	− 4	+27	+ 7	+18	−23	2	1.66
106306	21 31 50.15	+23 50 42.6	6.43	H	322.958 941 97	+23.845 161 95	6.31	8.81	7.07	0.55	0.49	0.68	0.61	0.51	+18	+10	−15	− 7	−11	+ 2	− 9	−42	+13	+22	0	−0.88
106307	21 31 50.31	+61 44 31.4	8.75	1 G	322.959 638 97	+61.742 065 45	2.24	9.62	1.75	0.74	0.69	0.88	0.83	0.71	− 1	+10	+19	+ 3	+12	+23	+ 9	− 8	+19	+ 7	6	1.63
106308	21 31 50.49	−59 44 05.6	10.08	1 G	322.960 360 89	−59.734 881 45	13.11	−97.77	−298.68	1.07	0.93	1.75	1.39	1.11	−15	−15	+13	− 6	+14	− 1	+16	+32	+ 1	−24	1	1.71
106309	21 31 51.30	+25 13 05.2	7.96	H	322.963 739 36	+25.218 115 32	5.47	9.44	36.01	0.65	0.62	0.85	0.80	0.65	+17	− 6	−25	+ 4	−10	− 9	−15	−38	+15	+ 9	1	1.36
106310	21 31 51.33	−25 24 45.7	7.24	H	322.963 892 54	−25.412 689 80	11.34	12.29	−9.65	0.81	0.53	0.89	0.92	0.54	+27	− 8	−18	−14	−20	+26	−16	− 3	+ 2	+29	0	−1.07
106311	21 31 54.13	−75 15 47.9	8.94	H	322.975 522 60	−75.263 301 79	12.40	233.91	−152.91	0.74	0.82	1.04	0.97	1.02	+ 6	− 7	−12	− 4	+12	−18	+16	+19	+16	−31	0	0.93
106312	21 31 55.02	+05 17 35.7	7.30	H	322.979 234 21	+05.293 248 27	3.57	5.25	−10.68	0.90	0.59	1.05	1.18	0.62	+21	+ 4	−10	+ 3	−19	+37	−11	− 7	+24	+39	2	1.05
106313	21 31 55.28	−58 45 00.5	8.32	H	322.980 350 55	−58.750 133 25	7.45	21.04	−1.83	0.73	0.62	1.18	1.00	0.70	−13	+ 8	−20	−13	+31	−18	+24	+51	−17	−11	0	0.74
106314	21 31 56.01	+69 39 25.9	8.21	H	322.983 360 97	+69.657 202 16	5.69	20.92	5.42	0.64	0.62	0.67	0.77	0.70	−16	−15	+19	+17	+20	−11	+23	−12	+ 5	− 3	0	−0.36
106315	21 31 56.13	+18 24 37.0	8.12	H	322.983 864 67	+18.410 285 66	8.72	0.07	−30.80	0.72	0.68	1.01	0.98	0.71	+35	−18	−18	−23	−10	+26	− 7	−23	− 2	+26	0	1.39
106316	21 32 00.74	−58 48 54.3	8.01	3 H	323.003 064 37	−58.815 094 69	2.41	5.65	−9.73	0.73	0.61	1.17	1.01	0.73	−13	+ 2	−17	+ 1	+21	−14	+18	+51	−21	−17	2	−1.12
106317	21 32 00.74	−30 23 58.0	11.81	G	323.003 074 41	−30.399 450 58	22.32	146.66	−99.38	2.76	1.63	3.30	3.39	1.71	+39	− 9	−11	−21	−20	+46	−14	+18	+ 4	+32	0	−2.04
106318	21 32 00.95	−43 19 50.8	10.01	H	323.003 971 84	−43.330 789 96	1.23	35.06	−61.69	1.33	1.22	1.90	1.43	1.26	+58	−39	−41	−22	+ 0	+11	+ 1	+ 6	+ 6	+53	0	0.62
106319	21 32 02.10	−36 58 18.4	9.86	H	323.008 754 30	−36.971 783 36	9.13	−40.15	14.87	1.37	1.06	1.51	1.58	0.96	+26	−19	−22	−32	−17	+30	−13	−36	+ 8	+20	0	0.28
106320	21 32 02.86	−84 48 36.0	6.42	G	323.011 928 11	−84.809 996 75	4.89	31.31	−29.78	0.45	0.41	0.54	0.51	0.43	+ 5	−14	−13	+ 5	+ 3	− 1	+ 3	− 5	− 8	− 7	1	−0.11
106321	21 32 03.76	+25 27 29.4	9.84	H	323.015 655 78	+25.458 163 71	3.75	−14.68	−30.05	1.24	1.04	1.60	1.85	1.13	+16	− 1	−35	−47	− 9	− 1	− 7	−37	+34	+ 3	2	−0.15
106322	21 32 03.87	+54 00 56.0	8.18	G	323.016 144 11	+54.015 548 81	1.65	2.08	2.58	0.63	0.59	0.74	0.70	0.61	− 5	+16	− 2	−14	+ 0	−17	+ 1	− 8	+ 9	− 1	0	−1.83
106323	21 32 04.59	+34 12 06.2	7.49	G	323.019 140 89	+34.201 723 00	10.63	25.35	−2.94	0.38	0.51	0.78	0.44	0.52	−23	+ 3	+ 0	− 9	+37	− 5	+34	+23	+ 2	−22	2	0.99
106324	21 32 05.05	−00 42 54.6	9.78	H	323.021 040 01	−00.715 169 90	5.35	15.07	1.16	1.35	1.03	1.67	1.74	1.20	+14	− 3	−30	−14	+ 4	+26	+10	−33	+39	+30	0	0.79
106325	21 32 05.20	−01 32 34.2	8.26	G	323.021 646 21	−01.542 832 41	7.34	−2.63	−25.26	1.09	0.84	1.22	1.41	1.03	+17	+ 1	−24	−22	+21	+18	+22	−11	+27	+37	0	1.67
106326	21 32 05.59	+43 43 55.7	8.90	H	323.023 291 27	+43.732 138 30	0.26	5.18	−9.22	0.67	0.74	0.95	0.77	0.86	−15	+13	−24	+14	+ 2	− 7	+ 0	+ 9	− 3	− 8	0	−0.47
106327	21 32 05.86	−41 10 45.6	5.29	H	323.024 421 35	−41.179 336 40	8.51	19.29	10.69	0.73	0.58	0.93	1.02	0.48	+10	− 9	−44	+ 8	−28	+45	−11	−39	+21	+14	0	−0.16
106328	21 32 06.41	+19 58 34.3	9.55	H	323.026 704 31	+19.976 198 01	2.51	−8.21	−6.25	0.87	0.92	1.36	1.06	1.04	+43	− 3	− 8	+ 1	− 6	−38	−10	−42	− 1	+40	0	−0.18
*106329	21 32 06.75	+48 42 59.4	8.54	H	323.028 113 38	+48.716 493 37	3.92	−7.23	−18.40	0.64	0.63	0.79	0.86	0.70	−12	+ 9	+ 3	−10	− 9	− 5	− 7	+ 1	− 2	−21	0	1.07
*106330	21 32 06.75	+08 26 31.2	9.08	H	323.028 110 37	+08.441 993 32	2.24	−10.80	−4.75	1.19	0.88	1.30	1.56	0.99	+24	− 6	−12	+19	−26	+19	−17	−27	+19	+37	2	−0.30
106331	21 32 08.18	−72 10 55.7	8.80	G	323.034 097 04	−72.182 149 09	3.39	66.93	−18.04	0.70	0.75	0.98	0.83	0.87	−18	− 9	− 4	−13	−14	− 6	−10	+12	+15	−37	0	−0.16
106332	21 32 08.54	+03 43 03.7	8.59	H	323.035 568 19	+03.717 706 24	5.10	13.59	0.25	1.19	0.68	1.30	1.59	0.70	+28	− 1	− 1	+29	−12	+31	− 3	− 1	+30	+47	0	0.26
106333	21 32 10.50	+50 26 08.6	8.44	H	323.043 732 41	+50.435 719 79	3.81	−14.36	−22.43	0.66	0.61	0.78	0.76	0.67	−10	−18	+ 7	−11	+ 9	+ 3	+ 6	− 3	+ 8	+ 0	0	0.75
106334	21 32 10.58	+14 22 01.4	8.40	H	323.044 087 15	+14.367 055 97	4.44	7.40	5.10	0.99	0.68	1.12	1.27	0.72	+25	+ 5	+ 0	+31	+ 3	+29	+ 7	−14	+12	+33	0	−0.71
*106335	21 32 11.69	+00 13 17.9	9.72	H	323.048 689 87	+00.221 634 03	20.26	415.31	27.96	1.84	1.25	2.00	2.51	1.43	− 9	+14	−31	−36	+31	−17	+25	−41	+45	− 6	0	1.15
*106336	21 32 11.52	−40 11 51.7	8.28	G	323.047 989 94	−40.197 701 61	15.46	−17.89	−180.02	0.85	0.74	1.08	1.23	0.65	+11	+ 4	−37	+13	−30	+45	−17	−39	+21	+ 9	0	−0.54
106337 H	21 32 11.80	+10 54 39.0	7.24	1 G	323.049 175 77	+10.910 823 86 *	3.40	4.37	1.83	1.12	0.97	1.04	1.22	0.75	+43	−21	−27	−13	−14	− 7	−23	−26	+12	+46	2	0.11
106338	21 32 12.75	−57 18 12.0	8.89	H	323.053 119 02	−57.303 334 80	6.30	7.10	16.82	0.87	0.62	1.22	1.09	0.68	− 5	−12	−14	−17	+31	−11	+24	+33	−23	+ 8	0	1.60
106339	21 32 13.53	+74 50 36.8	9.61	H	323.056 377 82	+74.843 554 36	2.66	19.90	31.54	0.84	0.79	0.89	0.95	0.86	+ 3	− 5	+11	+17	+ 9	− 5	+10	−10	+ 1	+ 7	1	2.00
106340	21 32 14.58	−33 56 40.6	5.97	H	323.060 729 52	−33.944 612 93	7.92	−5.81	−4.04	0.82	0.52	0.90	0.99	0.53	+30	−15	− 6	+ 0	−28	− 2	−22	− 2	−13	+25	0	0.57
*106341	21 32 14.74	+46 15 26.1	7.38	H	323.061 422 97	+46.257 256 48	3.24	6.13	−0.10	0.53	0.50	0.67	0.70	0.59	−10	+16	− 2	+25	+ 6	+27	+ 5	− 3	+ 2	−14	0	−1.90
*106342	21 32 14.65	−65 18 07.8	8.31	H	323.061 043 42	−65.302 158 60	3.06	14.18	−4.33	0.54	0.65	1.05	0.58	0.70	−33	+ 2	− 5	−17	− 2	− 1	− 1	− 5	− 8	−42	0	−1.24
106343	21 32 14.78	+64 59 04.3	9.85	H	323.061 581 73	+64.984 530 08	3.50	7.45	−8.10	1.09	1.09	1.19	1.29	1.13	−14	−15	+23	+14	+18	+ 5	+15	−12	+ 9	− 5	0	0.35
106344 H	21 32 15.38	−59 35 34.8	9.52	H	323.064 086 30	−59.592 994 58 A	8.43	32.08	−19.29	2.70	2.36	3.30	2.73	2.01	−12	− 5	+11	−13	+10	+10	+ 5	+19	− 1	−34	0	0.05
106345 H	21 32 15.77	−48 51 12.7	8.25	H	323.065 722 29	−48.853 518 79 A	6.38	46.76	−43.72	1.44	1.26	1.41	1.20	0.73	+20	− 9	−15	+13	+30	−21	+34	+36	−17	+17	1	0.26
106346	21 32 17.08	+48 26 37.9	6.58	H	323.071 146 23	+48.443 872 89	2.77	−5.34	−17.88	0.45	0.44	0.57	0.57	0.48	−14	+ 9	+11	−11	− 7	−18	− 4	+ 5	+ 0	−23	0	1.01
106347	21 32 18.58	−12 04 17.5	10.55	H	323.077 436 40	−12.071 532 02	−1.54	4.49	−15.34	2.17	1.41	2.42	3.59	1.75	+ 0	+18	−23	+15	−16	+38	− 6	−14	+ 6	+ 1	0	1.30
106348	21 32 19.41	−47 14 00.2	8.83	H	323.080 886 18	−47.233 376 87	5.72	30.85	−8.60	0.75	0.60	1.09	0.78	0.53	+22	−18	− 9	− 6	+16	+ 7	+17	+17	− 3	+ 9	0	0.11
106349 H	21 32 20.72	+59 34 21.2	8.07	H	323.086 349 67	+59.572 543 16 *	1.59	−2.31	−2.81	0.57	0.55	0.69	0.58	0.56	− 4	+ 6	+10	+ 8	+11	+ 7	+16	−10	+24	+18	4	−0.56
106350	21 32 21.17	−20 58 09.1	11.39	H	323.088 194 94	−20.969 203 13	30.64	−288.39	−124.13	2.74	1.86	3.15	3.48	1.84	+31	− 5	− 6	−11	−16	+21	−13	− 3	+13	+29	0	−2.92
106351	21 32 22.09	−12 16 02.2	6.73	1 G	323.092 043 65	−12.267 291 53	2.26	33.66	−7.83	0.85	0.59	1.02	1.44	0.68	+12	+ 4	−19	− 5	−16	+45	− 8	−24	+15	+ 4	0	−0.52
106352	21 32 23.09	+20 59 45.8	9.59	H	323.096 196 60	+20.996 054 64	3.26	8.09	−3.78	0.94	0.79	1.29	1.19	0.88	+16	− 9	−18	−28	+ 9	−13	+ 4	−30	+ 7	+ 9	0	1.16
106353	21 32 23.68	−20 57 25.6	8.45	G	323.098 683 46	−20.957 119 34	37.10	−278.51	−124.68	1.06	0.71	1.26	1.34	0.67	+36	−17	−22	− 7	−23	+29	−17	− 5	+22	+31	0	1.13
106354	21 32 25.33	−15 42 33.3	8.93	H	323.105 546 93	−15.709 261 51	5.52	79.28	34.32	1.16	0.79	1.27	1.37	0.69	+46	−34	−19	−13	−50	+25	−44	−18	+25	+33	0	−0.55
106355	21 32 27.00	+23 23 40.5	6.69	H	323.112 486 05	+23.394 575 73	5.37	28.41	3.66	0.54	0.44	0.68	0.57	0.51	+14	+13	−20	−10	+ 2	− 5	+ 4	−23	+16	+25	1	−0.26
106356	21 32 28.70	+01 00 47.2	8.31	G	323.119 577 84	+01.013 103 94	16.43	−278.88	−332.52	1.13	0.67	1.23	1.68	0.73	+19	− 3	− 8	+29	− 7	+34	+ 2	+ 5	+28	+43	0	−0.64
106357	21 32 29.85	+07 11 43.2	8.65	H	323.124 381 37	+07.195 340 29	2.03	28.88	−6.15	1.00	0.76	1.11	1.29	0.89	+35	−21	− 6	− 8	+18	+16	−16	−19	+ 9	+45	0	−0.35
106358	21 32 29.87	+57 32 18.2	8.10	H	323.124 442 31	+57.538 379 65	4.57	−27.83	−15.61	0.65	0.67	0.79	0.65	0.65	− 1	+11	+10	−11	+20	−15	+23	−11	+13	+17	0	−0.17
106359	21 32 30.12	−06 18 31.5	7.93	H	323.125 480 97	−06.308 736 52	4.32	−15.88	−15.78	0.86	0.76	1.12	1.08	0.84	+30	−20	−18	−30	− 8	+48	− 7	−50	+42	+51	0	3.30
106360	21 32 30.28	−73 53 34.4	7.83	2 H	323.126 171 26	−73.892 902 05	1.24	19.65	−23.81	0.60	0.58	0.78	0.82	0.71	−16	− 6	+ 1	− 1	+ 1	+ 3	+ 3	+21	+ 0	−26	1	0.28
106361	21 32 32.28	+11 51 02.6	7.72	H	323.134 505 40	+11.850 710 01	2.21	16.43	−2.51	0.91	0.57	0.95	1.14	0.59	+21	−15	+ 1	+ 9	− 4	+ 0	− 4	−16	+ 7	+26	0	−0.43
106362	21 32 32.44	+04 52 23.8	7.30	H	323.135 166 97	+04.873 284 44	10.15	25.15	−12.03	0.81	0.56	0.99	1.09	0.60	+26	+ 1	− 6	+ 8	−15	+40	− 9	− 3	+28	+47	0	−1.90
106363	21 32 33.22	−24 35 25.6	6.43	H	323.138 410 01	−24.590 432 87	14.42	68.94	6.21	0.78	0.49	0.86	0.87	0.48	+31	−11	−18	−29	−27	+35	−23	−17	+ 6	+28	0	−0.60
106364	21 32 33.97	−45 42 01.0	9.41	G	323.141 545 45	−45.700 281 44	2.92	−26.45	2.87	1.00	0.85	1.47	1.22	0.94	+45	−18	− 8	− 9	−11	+13	−10	−17	+ 4	+50	0	−0.02
106365	21 32 35.50	−10 32 48.0	8.86	H	323.147 908 47	−10.546 656 37	7.86	20.69	−33.37	1.13	0.91	1.28	1.77	1.01	+31	− 2	− 5	+12	−28	+32	−28	−34	+10	+20	0	0.31
106366	21 32 35.93	+53 48 23.5	8.78	H	323.149 715 21	+53.806 519 06	0.95	2.56	3.10	0.80	0.68	0.85	0.97	0.71	− 3	+ 1	− 9	−39	+ 3	+ 0	− 2	− 9	+12	− 5	0	−0.31
106367	21 32 36.93	−65 48 40.6	8.24	H	323.153 873 37	−65.811 288 69	3.72	9.24	−12.51	0.55	0.64	1.02	0.65	0.79	−23	−11	+ 3	−13	− 3	− 2	+ 1	+ 3	− 5	−38	0	−0.74
106368	21 32 37.06	−24 09 15.3	8.23	H	323.154 399 32	−24.154 263 18	12.39	−20.75	−117.12	0.95	0.64	1.09	1.08	0.74	+33	+ 0	−17	−17	−30	+32	−28	+ 7	−13	+31	0	−0.24
106369	21 32 37.74	−34 20 37.3	8.48	H	323.157 259 24	−34.343 691 54	14.13	139.58	−35.16	0.96	0.62	1.08	1.08	0.61	+26	−16	+ 3	+ 6	−22	+ 9	−20	+ 1	+ 6	+19	0	−0.28
106370	21 32 38.66	−58 09 12.8	10.14	H	323.161 074 54	−58.153 545 85	7.09	7.68	0.27	1.07	0.93	1.85	1.41	1.08	−11	−11	−17	−24	+38	−17	+29	+46	−27	+ 1	0	0.63
106371	21 32 39.01	−21 46 35.4	8.76	H	323.162 557 72	−21.776 490 81	6.42	23.72	1.89	0.99	0.62	1.19	1.20	0.66	+25	− 1	−11	−13	−12	+44	− 9	− 1	+11	+37	0	0.23
106372 H	21 32 39.76	−43 17 53.9	9.60	H	323.165 664 18	−43.298 298 16 A	2.16	2.05	−10.09	1.83	1.80	2.37	1.87	1.57	+58	−37	−49	−32	−13	+12	−12	−27	+ 9	+47	2	0.23
106373	21 32 39.96	+42 17 44.4	6.92	H	323.166 481 63	+42.295 676 03	4.96	2.71	−57.20	0.47	0.48	0.68	0.50	0.54	−25	− 4	+ 4	− 7	− 1	− 1	+ 1	+ 0	+18	−35	0	0.01
106374	21 32 40.28	−14 28 03.7	9.23	H	323.167 823 15	−14.467 697 08	0.95	0.50	−7.25	1.29	1.02	1.44	1.99	0.81	+39	+ 7	−12	+ 8	−58	+38	−41	−22	+ 3	+30	0	0.73
106375	21 32 40.45	−01 36 29.6	7.63	H	323.168 537 32	−01.608 234 01	3.48	−4.17	−37.35	0.95	0.77	1.12	1.25	0.90	+31	− 3	− 9	−21	− 4	+29	− 3	−32	+26	+41	0	0.49
106376	21 32 41.21	−69 29 23.3	7.53	H	323.171 720 10	−69.489 794 59	3.27	−2.41	−17.26	0.55	0.56	0.81	0.60	0.62	−23	−22	− 8	−10	− 7	− 5	− 6	+ 3	− 5	−24	1	0.28
106377 H	21 32 41.24	+54 58 41.1	8.88	H	323.171 824 78	+54.978 082 21 A	3.98	12.01	12.84	2.34	2.26	1.55	1.46	1.39	+ 4	− 2	+ 7	+19	+ 0	−25	+ 9	+ 0	+18	+ 9	1	0.85
106378	21 32 45.96	+38 52 59.8	9.15	H	323.191 486 84	+38.883 273 90	4.47	42.52	15.73	0.72	0.79	1.11	0.77	0.84	−17	+20	− 5	+15	+ 3	− 2	+ 5	+ 8	+ 8	−17	0	1.84
106379	21 32 46.30	+35 45 55.1	8.57	2 H	323.192 931 08	+35.765 294 01	7.29	8.60	14.87	0.61	0.64	1.05	0.74	0.70	−34	+ 0	+ 2	− 4	+20	−19	+16	+22	+10	−27	0	−1.08
106380	21 32 47.15	−13 27 32.9	9.38	H	323.196 449 35	−13.459 135 65	3.71	−7.19	−6.16	1.44	0.97	1.46	2.36	1.12	+ 2	− 4	− 6	+ 5	−16	+26	−17	−36	+ 8	−14	0	1.82
106381	21 32 48.06	+36 19 46.8	8.92	H	323.200 246 58	+36.329 672 44	3.20	19.66	5.82	0.63	0.70	1.11	0.69	0.72	−37	−13	+ 3	−24	+26	− 4	+21	− 1	+ 4	−26	1	0.55
106382	21 32 48.90	−18 34 43.5	9.11	H	323.203 769 77	−18.578 759 52	0.32	14.14	−1.98	1.15	0.75	1.31	1.30	0.79	+28	−17	− 5	−20	−17	+28	−19	+ 4	+23	+33	0	0.07
*106383 H	21 32 49.61	+58 39 29.6	8.14	H	323.206 726 58	+58.658 226 06 A	2.96	9.10	3.54	1.05	1.05	1.07	0.78	0.81	− 5	+ 6	− 7	−19	+13	− 9	+11	−15	+14	+14	3	2.32
*106384	21 32 49.39	+40 36 33.5	9.42	1 H	323.205 792 21	+40.609 299 79	3.34	21.74	7.38	0.78	0.80	1.18	0.82	0.87	−20	−20	+20	+ 8	+10	− 5	+ 7	+ 9	+15	−26	2	−0.86
*106385 H	21 32 49.50	−00 52 59.2	9.93	H	323.206 232 62	−00.883 123 48 A	3.86	−11.07	−11.26	3.51	5.03	3.49	4.07	3.13	+20	+ 1	− 9	−10	− 4	+22	+ 2	−23	+13	+45	1	0.06
106386 H	21 32 49.66	+39 04 20.1	8.81	G	323.206 901 84	+39.072 247 12 *	0.44	−6.36	−9.96	1.39	1.44	1.44	1.12	1.17	− 2	+ 5	+16	+11	+ 8	−10	+11	+ 9	+ 5	+ 7	1	−0.57
106387 H	21 32 50.41	−51 03 01.1	10.25	H	323.210 028 20	−51.050 304 20 B	3.00	−11.62	−1.74	5.10	3.74	3.88	3.63	2.54	+24	+ 0	−11	+ 9	+ 3	+ 6	− 4	− 5	− 3	−17	1	0.97
106388	21 32 50.76	+32 46 36.1	7.41	H	323.211 509 00	+32.776 684 80	2.53	6.42	−2.33	0.49	0.50	0.73	0.56	0.60	−14	+11	−14	+29	+ 2	− 8	+ 8	− 5	+14	+ 5	1	0.01
106389	21 32 51.79	−64 08 59.7	7.20	1 H	323.215 773 65	−64.149 911 11	4.78	30.35	−20.92	0.50	0.48	0.79	0.59	0.57	−17	− 2	− 1	+18	− 7	+ 4	− 6	+ 8	−14	−17	1	0.96
106390	21 32 53.51	+40 24 26.8	7.27	H	323.222 949 28	+40.407 449 85	3.83	4.52	−14.82	0.46	0.51	0.70	0.52	0.58	−19	+ 1	− 1	+ 1	+ 2	+ 1	+ 3	+ 2	+10	−32	0	−0.65
106391	21 32 54.23	−76 53 53.7	10.19	G	323.225 948 95	−76.898 236 85	27.82	−264.13	−205.12	1.16	1.00	1.44	1.44	1.06	− 7	+ 0	− 4	− 8	− 9	+ 4	− 7	− 8	−14	−17	3	2.35
106392	21 32 56.24	−69 26 58.4	9.11	H	323.234 334 89	−69.449 563 83	4.64	19.24	−1.49	0.82	0.86	1.26	0.89	0.88	− 8	−14	−13	− 9	+ 2	−12	+ 0	−16	+ 3	−17	1	0.92
106393	21 32 56.58	+49 58 39.4	5.77	H	323.235 740 46	+49.977 600 64	6.86	15.81	11.86	0.46	0.43	0.54	0.59	0.50	−19	−15	+ 0	−19	+ 6	+ 5	+ 4	− 5	+ 3	−10	1	−0.07
106394 H	21 32 57.25	+24 07 38.2	8.54	1 G	323.238 525 72	+24.127 270 14 A	26.18	334.76	51.36	1.56	1.36	1.81	1.60	1.44	+32	+ 5	−11	−10	− 7	−15	− 9	−51	+25	+19	0	0.31
106395 H	21 32 58.33	+20 42 41.7	7.02	G	323.243 056 14	+20.711 581 79 A	18.41	−12.08	−39.12	1.31	1.35	1.46	1.31	1.11	+36	− 1	− 1	−23	− 9	− 8	−15	−49	+ 7	+24	0	1.42
106396	21 32 58.74	+44 58 41.5	9.78	2 H	323.244 761 31	+44.978 186 45	6.24	16.68	−9.82	0.98	0.91	1.27	1.25	1.18	−15	+18	− 3	+21	+ 2	+10	− 3	+ 6	−17	−30	6	0.83
106397	21 32 59.12	+12 32 22.8	7.34	H	323.246 352 68	+12.539 665 03	4.66	29.99	−27.81	0.80	0.58	0.92	1.00	0.60	+23	−10	− 8	− 7	− 6	+ 0	− 7	−13	+16	+22	0	−0.33
106398	21 32 59.43	−59 42 00.0	7.72	H	323.247 606 18	−59.700 012 66	5.66	22.56	−18.34	0.60	0.48	0.91	0.76	0.57	−26	−16	+ 9	− 3	+ 5	+ 5	+ 6	+32	+ 2	−31	0	−0.54
106399 H	21 33 00.49	−47 37 43.5	9.14	H	323.252 058 40	−47.628 737 51 A	5.36	12.33	−50.71	1.70	1.33	2.04	1.64

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags		AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61		62	63	64	65	66	67	68-70
106301	9.711	0.021	8.498	0.013		1.037	0.019	T	1.01	0.02	L	8.5721	0.0014	0.016	109		8.55	8.61		C			1								
106302	8.315	0.009	7.932	0.010		0.363	0.012	T	0.42	0.01	L	7.9833	0.0016	0.013	149		7.96	8.01					1								S
106303	7.995	0.012	7.730	0.014	*	0.273	0.015	G	0.31	0.02	H	* 7.8562	0.0011	0.015	248	*	7.84	7.89		D	21318+3349	I 1	2 C	A	AB	9	3.827	0.003	0.11	0.01	S
106304	8.405	0.009	7.936	0.010		0.442	0.012	T	0.51	0.01	L	8.0035	0.0010	0.010	122		7.99	8.02		C			1								S
106305	10.093	0.022	8.975	0.014		0.955	0.021	T	0.94	0.01	L	8.9907	0.0015	0.020	231		8.96	9.03		C			1								
106306	7.786	0.007	6.538	0.004		1.064	0.006	T	1.03	0.01	L	6.6025	0.0010	0.010	131		6.59	6.62					1								S
106307	9.034	0.013	8.784	0.015		0.217	0.014	G	0.24	0.02	H	8.8047	0.0030	0.026	108		8.76	8.84		U			1	S							
106308	11.077	0.040	10.168	0.029		0.726	0.003	G	0.77	0.00	H	10.2016	0.0027	0.033	173		10.13	10.26		U			1								
106309	8.060	0.008	7.953	0.010		0.104	0.012	T	0.12	0.01	L	8.0011	0.0015	0.012	121		7.98	8.02					1								S
106310	7.500	0.007	7.266	0.008		0.223	0.010	T	0.25	0.01	L	7.3064	0.0010	0.011	81		7.29	7.33		C			1								S
106311	9.679	0.017	9.005	0.015		0.618	0.002	G	0.69	0.00	H	9.0674	0.0015	0.020	135		9.03	9.10		C			1	G							
106312	8.984	0.014	7.449	0.008		1.289	0.013	T	1.25	0.01	L	7.4598	0.0014	0.011	87		7.44	7.48		C			1								S
106313	8.791	0.009	8.351	0.009		0.429	0.010	T	0.50	0.01	L	8.4156	0.0012	0.013	177		8.39	8.44					1								S
106314	8.491	0.010	8.228	0.011		0.250	0.014	T	0.28	0.02	L	8.2853	0.0013	0.013	112		8.27	8.31		C			1	S							
106315	8.588	0.011	8.159	0.011		0.405	0.014	T	0.47	0.01	L	8.2092	0.0014	0.013	109		8.18	8.23					1								S
106316	10.239	0.022	8.287	0.009		1.654	0.020	T	2.83	0.06	O	7.9648	0.0211	0.188	169		7.87	8.52		U 2 C			1	S							
106317						1.414	0.014	G	1.71	0.04	I	11.9336	0.0074	0.052	106		11.84	12.05					1								G
106318	10.892	0.044	10.051	0.034		0.756	0.042	T	0.80	0.03	L	10.1525	0.0025	0.028	124		10.10	10.20					1	S							
106319	10.502	0.048	9.945	0.046		0.527	0.049	T	0.60	0.05	L	9.9714	0.0031	0.024	64		9.94	10.01		C			1								
106320	8.250	0.009	6.575	0.004		1.405	0.002	G	1.38	0.00	H	6.5656	0.0008	0.008	131		6.55	6.58		C			1	S							S
106321	10.568	0.042	9.902	0.037		0.617	0.047	T	0.69	0.04	L	9.9756	0.0031	0.027	100		9.92	10.02					1								G
106322	8.203	0.010	8.166	0.012		0.050	0.015	G	0.06	0.01	H	8.1940	0.0012	0.012	109		8.17	8.22					1								
106323	7.888	0.005	7.525	0.005		0.363	0.009	G	0.42	0.01	H	7.5846	0.0008	0.014	288		7.56	7.60			21320+3412	I 1	1								S
106324	10.323	0.044	9.806	0.044		0.486	0.056	T	0.56	0.06	L	9.8835	0.0034	0.019	61		9.86	9.91		C			1								
106325	8.803	0.017	8.304	0.016		0.496	0.015	G	0.57	0.02	H	8.3640	0.0020	0.015	63		8.33	8.40		C			1								S
106326	10.174	0.026	9.009	0.016		1.000	0.024	T	0.98	0.02	L	9.0624	0.0016	0.018	114		9.02	9.09		C			1								
106327	6.726	0.007	5.417	0.004		1.109	0.002	G	1.07	0.00	H	5.4585	0.0007	0.006	62		5.45	5.47					1								S
106328	11.824	0.085	9.750	0.023		1.755	0.073	T	1.77	0.21	K	9.6524	0.0023	0.025	170		9.61	9.70					1								
106329	8.575	0.012	8.538	0.015		0.012	0.004	G	0.03	0.00	H	8.5547	0.0014	0.017	132		8.52	8.58					1								G
106330	10.201	0.036	9.149	0.024		0.913	0.033	T	0.91	0.02	L	9.2407	0.0026	0.019	76		9.21	9.28		C			1	S							
106331	9.395	0.013	8.831	0.012		0.531	0.015	G	0.60	0.02	H	8.9036	0.0019	0.021	152		8.87	8.94					1								
106332	9.896	0.024	8.726	0.016		1.004	0.022	T	0.98	0.02	L	8.7596	0.0026	0.017	83		8.74	8.79		C			1								
106333	8.681	0.011	8.469	0.012		0.216	0.015	G	0.24	0.02	H	8.5046	0.0018	0.013	104		8.49	8.52					1								
106334	8.740	0.012	8.426	0.013		0.306	0.015	G	0.35	0.02	H	8.4760	0.0020	0.015	86		8.45	8.50		C			1								
106335	10.979	0.082	9.840	0.046		0.954	0.006	G	1.00	0.01	I	9.8617	0.0062	0.034	55		9.79	9.92			21322+0014	I 1	1								
106336	9.153	0.016	8.370	0.013		0.717	0.002	G	0.77	0.00	H	8.4262	0.0015	0.013	68		8.40	8.45			21322−4012	I 1	1	S							
106337	7.171	0.006	7.225	0.007	*	−0.045	0.003	G	−0.02	0.00	H	* 7.2191	0.0018	0.018	84	*	7.19	7.25		U	21322+1055	H 1	2 C	A	AB	247	0.252	0.015	1.64	0.22	S
106338	9.346	0.012	8.920	0.013		0.402	0.016	T	0.47	0.02	L	8.9836	0.0014	0.017	149		8.96	9.01		C			1								
106339	10.212	0.028	9.667	0.027		0.511	0.035	T	0.58	0.04	L	9.7231	0.0022	0.024	108		9.69	9.76					1								
106340	6.046	0.004	5.971	0.004		0.051	0.002	G	0.06	0.00	H	5.9935	0.0005	0.005	83		5.99	6.00		C	21322−3357	I 1	1								S
106341	7.326	0.005	7.377	0.007		−0.042	0.008	T	−0.02	0.01	L	7.3743	0.0011	0.011	125		7.36	7.39					1								
106342	9.474	0.011	8.416	0.008		0.918	0.010	T	0.92	0.01	L	8.4744	0.0014	0.019	251		8.44	8.51					1								
106343	10.244	0.033	9.843	0.036		0.379	0.045	T	0.44	0.05	L	9.9414	0.0034	0.026	99		9.90	9.99					1								G
106344	10.584	0.029	9.879	0.024	*	0.636	0.029	T	0.70	0.03	L	* 9.6497	0.0023	0.025	180	*	9.60	9.69		D	21323−5936	I 1	2 C	A	AB	197	1.110	0.008	0.39	0.03	
106345	8.556	0.009	8.305	0.010	*	0.239	0.012	T	0.27	0.01	L	* 8.3182	0.0016	0.013	119	*	8.30	8.34		D	21323−4851	I 1	2 C	A	AB	0	0.401	0.008	2.36	0.05	S
106346	6.570	0.004	6.572	0.005		−0.001	0.004	G	0.02	0.00	H	6.5880	0.0008	0.007	125		6.58	6.60		C			1								S
106347	12.092	0.193	10.685	0.084		1.060	0.020	G	1.03	0.02	I	10.6946	0.0052	0.031	54		10.64	10.75		C			1								G
106348	9.195	0.013	8.833	0.013		0.343	0.017	T	0.40	0.02	L	8.9139	0.0018	0.016	137		8.89	8.94		C			1								
106349	8.546	0.010	8.124	0.010	*	0.412	0.011	T	0.48	0.01	L	* 8.1662	0.0016	0.016	111	*	8.14	8.19			21323+5934	H 1	2 C S	B	AB	304	0.134	0.028	1.73	0.97	
106350											T	11.5299	0.0069	0.060	85		11.42	11.61			21324−2058	I 2	1	S							G
106351	8.867	0.015	6.924	0.007		1.613	0.013	G	1.62	0.09	H	6.8356	0.0029	0.017	63		6.81	6.86		U 2			1								S
106352	9.865	0.020	9.590	0.023		0.262	0.029	T	0.29	0.04	L	9.6656	0.0020	0.023	158		9.62	9.72		C			1								
106353	9.590	0.019	8.533	0.013		0.878	0.002	G	0.92	0.00	H	8.5956	0.0016	0.013	90		8.56	8.62		C	21324−2058	I 2	1								
106354	9.265	0.021	8.960	0.023		0.291	0.033	T	0.33	0.04	L	9.0060	0.0021	0.016	80		8.98	9.03		C			1								S
106355	6.601	0.004	6.678	0.004		−0.066	0.005	T	−0.04	0.01	L	6.6719	0.0006	0.006	129		6.66	6.68		C			1								S
106356	9.053	0.014	8.377	0.013		0.610	0.008	G	0.68	0.01	H	8.4191	0.0019	0.016	78		8.39	8.44		C			1								S
106357	9.890	0.024	8.768	0.016		0.966	0.022	T	0.95	0.02	L	8.8135	0.0024	0.017	87		8.78	8.85					1								
106358	9.454	0.015	8.207	0.010		1.064	0.014	T	1.03	0.01	L	8.2629	0.0017	0.017	120		8.23	8.30		C			1								
106359	9.226	0.020	8.021	0.013		1.031	0.019	T	1.00	0.02	L	8.0932	0.0012	0.011	72		8.07	8.11					1								S
106360	9.946	0.019	8.061	0.008		1.599	0.017	T	2.47	0.04	O	7.8505	0.0065	0.058	158		7.77	7.93		U 2			1								P
106361	9.542	0.022	7.912	0.012		1.364	0.020	T	1.33	0.02	L	7.8743	0.0017	0.013	83		7.85	7.90		C			1	S							S
106362	7.578	0.007	7.323	0.007		0.231	0.015	G	0.26	0.02	H	7.3658	0.0013	0.010	96		7.35	7.38			21325+0452	I 1	1								S
106363	6.684	0.004	6.459	0.005		0.200	0.002	G	0.22	0.00	H	6.4978	0.0006	0.005	83		6.49	6.51		C			1								S
106364	9.992	0.021	9.473	0.021		0.548	0.005	G	0.62	0.01	H	9.5337	0.0015	0.020	124		9.50	9.57		C			1								
106365	9.521	0.024	8.899	0.021		0.579	0.028	T	0.65	0.03	L	8.9818	0.0016	0.017	59		8.95	9.03		D			1								
106366	9.129	0.017	8.799	0.018		0.313	0.023	T	0.36	0.03	L	8.8538	0.0015	0.016	108		8.83	8.88		D			1								
106367	9.585	0.012	8.348	0.008		1.056	0.011	T	1.02	0.01	L	8.4088	0.0013	0.018	225		8.38	8.44		C			1								
106368	8.823	0.014	8.286	0.013		0.511	0.014	T	0.58	0.01	L	8.3472	0.0011	0.011	75		8.32	8.37		D			1	S							S
106369	9.164	0.016	8.538	0.015		0.578	0.016	T	0.65	0.01	L	8.6075	0.0020	0.014	85		8.59	8.63		C			1								S
106370	10.705	0.029	10.107	0.027		0.558	0.029	T	0.63	0.03	L	10.2571	0.0031	0.033	195		10.21	10.31					1								
106371	9.182	0.016	8.776	0.017		0.397	0.019	T	0.46	0.02	L	8.8508	0.0019	0.012	85		8.83	8.87		C			1								S
106372	10.197	0.028	9.683	0.028	*	0.511	0.005	G	0.58	0.01	R	* 9.7164	0.0020	0.023	102	*	9.68	9.75		D	21327−4318	I 1	2 C	A	AB	181	0.799	0.017	2.29	0.06	
106373	8.371	0.011	7.034	0.006		1.134	0.010	T	1.10	0.01	L	7.0893	0.0011	0.009	142		7.07	7.11					1								S
106374	9.588	0.021	9.243	0.023		0.334	0.028	T	0.39	0.04	L	9.3129	0.0027	0.021	89		9.28	9.35					1								
106375	9.702	0.025	7.816	0.011		1.600	0.023	T	1.85	0.07	O	7.7233	0.0022	0.013	63		7.69	7.75		C			1								S
106376	9.108	0.011	7.656	0.006		1.220	0.015	G	1.18	0.01	H	7.6937	0.0012	0.014	166		7.67	7.72					1								S
106377	10.129	0.025	9.012	0.017	*	0.962	0.023	T	0.95	0.02	L	* 9.0441	0.0021	0.016	114	*	9.01	9.07		D	21327+5459	H 1	2 C	A	AB	4	0.362	0.010	1.92	0.07	
106378	9.714	0.016	9.167	0.016		0.512	0.020	T	0.58	0.02	L	9.2614	0.0024	0.028	169		9.22	9.31					1								
106379	8.997	0.011	8.608	0.012		0.364	0.015	G	0.43	0.02	H	8.6570	0.0016	0.021	212		8.62	8.69		U 2	21328+3546	I 1	1								
106380	11.091	0.080	9.473	0.031		1.355	0.068	T	1.32	0.08	L	9.5295	0.0030	0.019	54		9.49	9.57		C			1								
106381	9.220	0.011	8.958	0.012		0.249	0.015	T	0.28	0.02	L	8.9867	0.0016	0.024	218		8.94	9.03					1	S							
106382	9.169	0.016	9.118	0.021		0.046	0.023	T	0.06	0.02	L	9.1356	0.0020	0.016	69		9.11	9.18		C			1								
106383	8.196	0.009	8.091	0.012	*	0.102	0.014	T	0.12	0.01	L	* 8.1824	0.0022	0.017	115	*	8.15	8.21		D	21328+5840	I 1	2 C	A	AB	290	7.623	0.004	1.23	0.02	
106384	9.735	0.020	9.437	0.022		0.283	0.028	T	0.32	0.04	L	9.4960	0.0023	0.028	140		9.44	9.55		U			1								
106385	10.606	0.051	10.052	0.047	*	0.519	0.062	T	0.59	0.07	L	* 10.0379	0.0032	0.028	60	*	9.99	10.09		D	21328−0053	H 1	2 C	A	AB	358	0.359	0.024	2.33	0.25	
106386	9.041	0.010	8.847	0.012	*	0.180	0.015	G	0.20	0.02	H	* 8.8685	0.0020	0.023	170	*	8.83	8.91		D	21328+3904	I 1	2 C	A	AB	235	0.282	0.005	0.85	0.07	
106387	10.974	0.061	10.362	0.055	*	0.568	0.061	T	0.64	0.06	L	* 10.3763	0.0037	0.027	91	*	10.33	10.42		D	21328−5103	I 1	2 C	A	BA	131	0.926	0.007	0.12	0.03	
106388	7.329	0.005	7.405	0.006		−0.055	0.003	G	−0.03	0.00	H	7.4013	0.0009	0.009	132		7.39	7.42		C			1								S
106389	9.083	0.011	7.372	0.006		1.428	0.010	T	1.42	0.02	L	7.3431	0.0012	0.014	168		7.32	7.37		M			1								S
106390	8.433	0.011	7.369	0.005		0.922	0.009	T	0.92	0.01	L	7.4298	0.0010	0.010	157		7.41	7.45		C			1								S
106391	11.496	0.073	10.261	0.039		1.037	0.015	G	1.09	0.02	I	10.3121	0.0029	0.031	126		10.26	10.37					1								G
106392	10.189	0.022	9.193	0.015		0.871	0.020	T	0.88	0.01	L	9.2697	0.0022	0.025	156		9.23	9.31					1								
106393	5.725	0.003	5.763	0.003		−0.042	0.001	G	−0.02	0.00	H	5.7612	0.0005	0.005	109		5.75	5.77		C			1								S
106394	9.625	0.019	8.674	0.014	*	0.835	0.025	G	0.88	0.02	H	* 8.6945	0.0031	0.023	122	*	8.65	8.74		U	21330+2408	H 1	2 C	A	AB	249	0.646	0.026	2.74	0.08	
106395						0.529	0.015	G	0.60	0.02	H	* 7.1197	0.0011	0.011	161	*	7.10	7.14		D	21330+2043	I 1	2 C	A	AB	353	3.261	0.002	0.38	0.01	S
106396	10.415	0.034	9.891	0.034		0.492	0.043	T	0.56	0.04	L	9.8852	0.0050	0.041	114		9.80	9.94		U 2			1								G
106397	9.228	0.018	7.497	0.009		1.444	0.016	T	1.44	0.03	L	7.4773	0.0019	0.012	82		7.45	7.50					1								S
106398	7.806	0.005	7.719	0.007		0.078	0.008	T	0.09	0.01	L	7.7516	0.0009	0.012	181		7.73	7.78		C			1								S
106399	9.787	0.017	9.230	0.016	A	0.700	0.495	G	0.58	0.02	L	* 9.2518	0.0014	0.017	135	*	9.23	9.28		D	21330−4738	I 1	2 C	B	AB	307	1.517	0.032	3.10	0.18	
106400	10.828	0.051	9.450	0.025		1.163	0.046	T	1.27	0.08	L	9.4677	0.0033	0.037	109		9.41	9.52		U 2			1								

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
106401	21 33 02.43	+17 43 22.4	7.98	2 H	323.260 144 28	+17.722 875 48		1.86	14.75	−1.07	0.81	0.60	1.00	1.16	0.65	+21	+ 9	−20	−34	− 6	− 1	− 6	−24	+11	+16		3	−0.18
106402	21 33 02.47	+09 51 28.4	9.04	H	323.260 307 32	+09.857 893 97		2.68	3.51	−4.33	1.16	0.83	1.31	1.39	0.83	+33	−27	−14	− 8	−16	− 7	−19	−50	+12	+31		0	−1.72
106403	21 33 02.73	+30 21 35.0	8.11	H	323.261 385 49	+30.359 725 47		7.50	155.07	6.85	0.52	0.58	0.94	0.67	0.69	−	4	− 8	−16	+45	− 1	−24	+ 3	−13	+ 8	+ 8	1	−1.83
106404	21 33 03.72	−26 58 35.0	8.32	H	323.265 505 01	−26.976 379 74		2.90	27.50	6.56	0.93	0.57	1.00	1.05	0.58	+25	−16	− 8	−30	−12	+29	−12	− 5	+10	+29		2	1.01
106405	21 33 04.99	+54 06 48.3	9.54	H	323.270 793 55	+54.113 427 21		4.97	−0.02	−12.43	0.88	0.83	1.05	1.04	0.87	−	4	+13	+ 4	−17	− 6	−21	− 4	− 5	+ 5	− 6	0	−1.76
106406	21 33 06.78	−78 32 35.2	7.46	H	323.278 262 76	−78.543 123 51		5.77	−7.48	8.42	0.50	0.52	0.67	0.58	0.58	−	3	−19	−13	+18	− 1	−18	− 3	+19	+ 4	−21	0	0.36
106407	21 33 08.74	+40 49 28.7	7.78	H	323.286 397 68	+40.824 645 24		34.76	138.15	−137.85	0.50	0.55	0.76	0.59	0.65	−13	+ 1	+ 1	+ 0	+ 4	+ 5	+ 4	+ 0	+ 5	−29		0	−0.80
106408	21 33 09.72	+06 25 28.0	9.84	H	323.290 497 27	+06.424 434 07		−1.87	8.64	−3.11	1.29	1.10	1.57	1.85	1.21	+41	− 2	−12	− 3	−22	+29	−15	−17	+13	+49		0	0.86
106409	21 33 10.12	+48 18 12.4	6.83	H	323.292 157 41	+48.303 455 50		5.04	−8.62	−20.83	0.53	0.47	0.67	0.67	0.57	−19	+ 3	+10	− 7	− 5	−19	− 1	+ 3	− 3	−21		3	3.17
106410	21 33 10.22	−67 39 45.5	8.96	H	323.292 584 91	−67.662 631 75		3.47	10.44	−21.06	0.71	0.87	1.18	0.79	0.92	−19	− 7	−13	+ 3	+ 0	−12	− 1	+ 5	+ 8	−28		0	−0.22
106411 H	21 33 10.45	−41 19 28.8	9.70	2 H	323.293 556 58	−41.324 665 71	A	3.17	−9.32	−23.60	3.44	2.47	3.57	4.10	2.03	−	2	− 1	−51	−11	−15	+36	+ 1	−37	+24	−30	1	1.75
106412	21 33 11.06	+04 33 47.4	7.22	H	323.296 067 24	+04.563 178 61		5.19	54.81	0.72	0.81	0.59	0.98	1.07	0.61	+34	+ 6	+ 3	+12	−11	+38	− 6	+ 4	+27	+49		0	−1.56
106413	21 33 11.29	+47 47 25.4	8.40	H	323.297 046 23	+47.790 383 09		3.64	9.56	−3.70	0.58	0.59	0.73	0.73	0.72	−11	+ 0	+ 4	+ 4	+ 1	− 9	+ 3	+29	+ 8	−22		0	0.68
106414	21 33 12.19	−20 40 32.1	8.49	H	323.300 780 47	−20.675 586 05		9.38	10.59	23.02	1.19	0.74	1.43	1.43	0.66	+39	−28	−35	+ 1	−32	+37	−23	−17	+24	+37		0	0.97
106415	21 33 12.85	−18 34 03.9	8.51	H	323.303 560 39	−18.567 755 45		0.67	−10.30	−4.94	1.13	0.72	1.27	1.41	0.73	+23	− 3	−17	− 4	−34	+32	−27	− 5	+11	+19		2	0.39
106416	21 33 12.88	+53 35 25.8	7.77	H	323.303 671 85	+53.590 491 03		4.79	−15.76	4.55	0.70	0.57	0.72	0.77	0.58	+	0	−11	−12	−47	− 2	+ 7	− 2	−12	+12	− 1	0	−1.39
106417	21 33 13.53	+22 44 24.3	12.15	2 H	323.306 394 00	+22.740 092 44		−0.42	−1.37	−4.43	2.14	2.01	2.87	2.32	2.26	+24	−10	− 9	−18	+ 2	+ 2	+ 2	−35	+ 8	+23		2	−0.96
106418	21 33 16.83	+72 57 36.8	8.16	G	323.320 134 57	+72.960 230 59		10.96	44.64	40.82	0.55	0.55	0.61	0.66	0.69	+15	−13	− 6	+17	+14	− 7	+16	+ 9	− 2	+40		0	−1.49
106419	21 33 17.62	−52 44 15.9	6.43	H	323.323 422 32	−52.737 739 02		3.74	−9.72	−14.02	0.58	0.50	0.77	0.69	0.44	+17	− 6	− 5	+ 3	+ 8	+24	+ 6	−12	+ 7	+14		0	−0.47
106420	21 33 17.89	+45 51 14.5	6.27	1 H	323.324 527 08	+45.854 023 71		2.17	−2.34	−3.98	0.48	0.45	0.61	0.64	0.54	−14	+ 4	− 1	+19	+ 2	+30	+ 2	+18	− 5	−13		1	−0.54
106421	21 33 20.61	−45 59 07.9	9.13	G	323.335 871 72	−45.985 538 66		6.58	−56.00	−78.38	0.92	0.80	1.40	1.04	0.77	+45	− 9	− 2	− 1	− 5	+ 6	− 5	− 8	− 2	+38		3	1.32
106422	21 33 20.66	+33 48 08.4	7.57	H	323.336 102 69	+33.802 339 04		3.68	−10.14	4.29	0.41	0.58	0.86	0.50	0.65	−17	− 4	− 5	−19	+23	+ 4	+19	+ 9	+ 7	− 7		0	1.08
*106423 H	21 33 21.10	+30 57 43.4	10.01	H	323.337 914 19	+30.962 057 14	A	7.60	100.40	37.66	2.68	2.15	2.75	2.63	2.07	+	0	+ 1	−15	+54	− 1	− 4	− 4	−26	+32	− 8	1	−0.15
*106424	21 33 21.07	−80 02 21.5	6.47	H	323.337 785 86	−80.039 307 88		9.05	22.52	−22.09	0.45	0.47	0.57	0.59	0.54	−	4	−16	− 6	+13	+ 2	+ 7	+ 1	+14	+ 7	− 2	0	1.70
106425	21 33 21.13	+21 35 25.0	7.21	H	323.338 036 47	+21.590 287 74		4.67	61.52	1.13	0.57	0.52	0.82	0.66	0.57	+16	+ 1	−13	−12	+ 2	−13	+ 0	−41	+ 7	+14		2	0.05
106426	21 33 21.17	+01 05 03.4	7.91	H	323.338 197 71	+01.084 273 52		9.82	52.78	−70.42	0.99	0.56	1.07	1.39	0.61	+25	−15	−18	+31	− 7	+32	+ 4	+18	+21	+46		0	0.41
106427	21 33 23.05	+03 16 46.0	8.45	1 H	323.346 045 86	+03.279 442 54		1.64	8.77	−12.58	1.14	0.69	1.26	1.60	0.71	+34	+ 7	+ 8	+28	− 3	+35	+ 4	+14	+26	+51		0	−0.57
106428	21 33 23.15	−39 26 04.8	9.17	G	323.346 452 29	−39.434 671 20		6.92	99.54	−155.71	1.02	0.85	1.19	1.25	0.85	+19	−16	−22	− 3	− 8	+31	− 3	−25	+13	+22		2	−0.50
106429	21 33 23.53	−44 50 55.3	5.57	H	323.348 054 00	−44.848 694 60		5.24	−18.92	−2.29	0.56	0.46	0.83	0.56	0.49	+60	−50	−32	−24	−18	+33	−12	− 5	+10	+53		3	1.45
106430	21 33 24.99	+56 33 35.1	9.17	H	323.354 118 65	+56.559 755 27		3.52	8.93	1.48	0.70	0.66	0.82	0.78	0.72	−	9	+ 5	+ 2	+11	+13	−21	+18	− 3	+12	+13	3	0.42
106431	21 33 25.44	−21 16 34.6	8.53	H	323.356 020 22	−21.276 277 86		3.13	19.60	−27.25	0.98	0.67	1.23	1.30	0.69	+32	− 2	−17	− 6	−16	+44	− 8	+ 1	+26	+40		0	0.87
106432	21 33 27.28	−54 09 18.4	8.63	H	323.363 653 53	−54.155 118 36		7.90	−5.99	−1.40	1.01	0.83	1.32	1.42	0.69	+22	+ 5	−38	+ 9	+36	−25	+20	+ 9	− 9	+32		0	−0.08
106433	21 33 27.70	−42 49 15.3	10.08	H	323.365 418 93	−42.820 904 84		12.84	−26.96	2.58	1.76	1.32	1.80	2.04	1.25	+	3	−13	−51	−46	+19	+ 9	+12	− 4	+16	+22	0	2.42
106434 H	21 33 28.18	−61 43 56.5	9.12	H	323.367 401 13	−61.732 355 22	A	4.22	2.89	−9.58	0.80	1.10	1.73	0.86	1.13	+10	−23	−10	+10	+17	− 3	+19	+19	−11	+ 1		2	0.00
106435	21 33 28.66	+42 58 18.7	8.10	H	323.369 407 65	+42.971 855 26		1.70	2.65	−0.24	0.61	0.53	0.80	0.69	0.62	−24	+20	− 9	−14	+ 0	−12	+ 4	+ 7	+16	−33		0	0.28
106436	21 33 29.22	−58 12 19.7	8.68	G	323.371 749 17	−58.205 469 18		5.76	−13.61	12.05	0.68	0.65	1.25	0.91	0.73	−	8	− 8	− 8	−16	+36	−13	+28	+49	−18	+ 2	1	0.25
106437	21 33 29.45	+23 02 58.5	8.09	1 G	323.372 725 51	+23.049 584 72		2.38	19.37	−6.02	0.64	0.59	0.83	0.72	0.68	+18	− 2	− 7	−11	− 8	+ 2	− 6	−42	+ 4	+24		1	−1.31
106438	21 33 30.85	−27 53 24.4	7.65	H	323.378 539 81	−27.890 103 23		21.19	201.73	−65.31	0.84	0.54	0.95	0.96	0.53	+35	−10	−15	−17	−33	+32	−28	−12	− 1	+27		0	−2.07
106439 H	21 33 31.36	−02 30 20.7	10.67	H	323.380 671 38	−02.505 755 02	A	22.92	175.47	−95.37	3.43	2.39	3.57	4.25	2.94	+10	−17	−20	−28	− 2	+33	+ 4	−29	+22	+44		1	1.84
106440	21 33 34.02	−49 00 25.3	8.66	G	323.391 734 48	−49.007 018 00		202.53	−46.18	−818.01	0.90	0.77	1.33	1.12	0.71	+22	− 9	−18	+ 5	+36	−13	+30	+33	−20	+18		0	0.22
106441	21 33 34.32	−13 27 00.2	7.61	H	323.392 983 86	−13.450 066 84		4.47	22.04	−8.80	1.01	0.64	1.11	1.43	0.75	+13	− 6	− 6	−13	−11	+19	− 9	− 8	+26	+ 4		0	0.02
106442	21 33 34.64	−75 24 45.7	8.32	H	323.394 326 92	−75.412 708 25		14.88	47.33	−49.52	0.63	0.65	0.86	0.70	0.79	−	3	−12	− 6	+ 3	+ 4	− 8	+ 7	+24	+ 4	−17	0	1.18
106443	21 33 34.65	−37 53 11.9	9.33	H	323.394 371 58	−37.886 627 49		0.63	1.32	−14.29	1.26	1.10	1.45	1.52	1.05	+34	− 5	−11	− 6	−13	+31	−11	−35	+ 3	+32		0	−0.58
106444	21 33 35.31	−09 39 38.0	7.87	G	323.397 110 20	−09.660 560 60		3.23	1.26	−10.26	0.89	0.69	1.00	1.33	0.93	+24	+ 1	− 4	+21	−20	+30	−17	−17	+ 3	+26		0	−0.14
106445	21 33 35.46	−50 17 54.7	8.64	H	323.397 763 90	−50.298 536 57		3.77	22.55	−12.89	0.85	0.71	1.16	1.05	0.65	+19	− 3	+ 1	+14	+ 8	+15	+ 3	− 2	− 7	− 7		2	−0.48
106446	21 33 35.70	+27 36 09.7	7.86	H	323.398 767 40	+27.602 696 05		1.72	18.20	−4.00	0.69	0.63	1.04	0.81	0.72	−29	+24	−37	−24	+26	−24	+27	−49	+41	−25		0	1.90
106447	21 33 36.43	+00 23 44.2	12.14	G	323.401 789 16	+00.395 603 05		−1.57	243.86	−32.29	4.37	2.40	4.54	6.40	2.88	+19	−19	− 2	− 6	−17	+19	−18	+ 5	+19	+49		0	2.63
106448	21 33 37.80	−57 04 55.1	8.15	G	323.407 502 07	−57.081 959 67		1.70	10.19	−18.40	0.84	0.57	1.11	1.15	0.59	+	3	− 8	−21	+ 7	+44	−13	+31	+35	−24	+23	0	0.32
106449	21 33 37.95	−07 34 53.0	10.83	G	323.408 114 70	−07.581 400 52		15.79	−100.99	35.80	2.04	1.56	2.50	2.65	1.77	+22	−19	−26	−26	+ 2	+32	+ 1	−44	+41	+40		0	0.37
106450 H	21 33 38.37	+60 20 06.7	7.55	H	323.409 882 98	+60.335 183 80	A	3.36	9.75	0.34	0.78	0.74	0.81	0.77	0.74	+	4	+ 4	+ 8	−12	+23	+18	+23	− 6	+29	+30	0	0.57
106451 H	21 33 38.49	+15 34 56.1	8.90	H	323.410 393 07	+15.582 248 20	A	6.26	5.56	−8.61	1.84	1.33	1.89	2.20	1.23	+29	+ 1	−13	−11	− 5	−36	− 9	−36	+31	+23		1	0.92
106452	21 33 38.84	−34 56 45.3	8.04	G	323.411 822 06	−34.945 922 13		16.50	83.38	−176.07	0.87	0.55	1.06	1.01	0.57	+30	− 4	− 5	− 2	−13	+40	−11	+13	+ 3	+23		0	1.64
106453	21 33 39.29	−09 08 03.8	8.81	H	323.413 710 77	−09.134 386 75		3.14	−16.05	−11.31	1.22	1.01	1.31	1.85	1.14	+31	−19	−28	+23	−35	+26	−34	−46	+18	+20		3	0.20
106454 H	21 33 39.42	−21 58 09.2	8.90	H	323.414 264 99	−21.969 225 54	A	11.09	−63.77	−84.40	3.05	1.58	2.12	2.18	1.27	+38	−14	−20	−14	−13	+49	− 5	− 2	+17	+52		1	0.81
106455	21 33 39.42	−06 22 25.6	8.21	H	323.414 266 85	−06.373 785 62		5.78	−5.84	−24.01	0.99	0.74	1.23	1.15	0.77	+21	−12	−32	−29	+ 5	+33	+ 7	−34	+46	+34		2	2.59
106456 H	21 33 40.23	−16 12 02.5	7.18	H	323.417 613 10	−16.200 704 86	A	14.57	32.25	−111.41	1.27	0.75	1.22	1.35	0.70	+23	−13	− 7	+20	−39	+32	−33	+15	+25	+25		1	−0.62
106457	21 33 41.71	+58 11 45.1	7.88	H	323.423 792 50	+58.195 866 65		8.88	−4.90	13.01	0.57	0.56	0.69	0.54	0.56	+	3	+12	− 1	−15	+ 8	−12	+13	−26	+22	+22	0	0.25
106458	21 33 42.96	−35 24 17.0	9.81	H	323.428 986 56	−35.404 728 32		0.97	−8.08	−1.62	1.35	0.95	1.65	1.55	0.91	+28	− 8	−17	−18	−18	+43	−12	−10	+ 9	+25		0	0.83
106459 H	21 33 43.50	−49 59 12.1	10.26	H	323.431 255 53	−49.986 681 10	A	7.47	−3.29	9.50	9.89	7.51	2.70	2.11	1.82	−	3	− 2	+ 1	+ 2	+ 3	+ 0	+ 1	− 2	− 7	+28	0	−0.31
106460	21 33 43.78	+10 54 06.6	8.59	H	323.432 399 89	+10.901 840 98		5.19	−15.96	−19.07	1.06	0.78	1.22	1.41	0.90	+32	−15	+ 8	+ 6	− 6	+ 1	− 1	−21	−12	+45	7	0.52
106461	21 33 44.92	−02 22 10.2	8.66	H	323.437 178 95	−02.369 494 43		1.34	5.93	0.30	1.11	0.87	1.33	1.35	1.07	+31	−12	− 4	−26	− 2	+37	− 2	−24	+22	+50		0	0.03
106462 H	21 33 45.82	+54 18 57.6	7.56	G	323.440 900 42	+54.315 987 84	A	2.78	−7.43	−8.50	1.48	1.26	0.91	0.87	0.75	+33	− 2	+ 5	+ 2	− 5	−17	− 6	− 3	+13	− 1		1	0.14
*106463	21 33 46.51	−87 11 13.5	8.47	H	323.443 779 49	−87.187 080 91		2.99	8.67	1.76	0.69	0.69	0.82	0.81	0.74	−12	−22	+28	− 9	+ 4	+ 4	+ 5	−30	−12	−11		0	0.17
*106464	21 33 46.31	−05 25 06.6	7.77	H	323.442 971 42	−05.418 490 83		9.05	8.28	−51.80	0.79	0.63	1.00	1.01	0.74	+25	− 7	−16	−16	+ 6	+34	+ 6	−29	+43	+43		0	−0.03
106465	21 33 47.07	+33 12 52.1	7.95	H	323.446 110 96	+33.214 460 87		3.57	9.30	−2.36	0.54	0.58	0.85	0.60	0.68	−12	+ 5	− 5	− 1	+ 4	+ 2	+ 6	− 3	+13	+ 3		0	−0.05
106466	21 33 47.78	+52 41 21.1	8.63	H	323.449 065 35	+52.689 182 50		2.95	−28.59	−18.64	0.68	0.69	0.83	0.77	0.74	−	2	− 1	−11	− 1	− 8	− 7	− 8	− 7	+15	+ 6	0	1.06
106467	21 33 49.35	−29 28 03.8	8.33	H	323.455 644 13	−29.467 731 85		4.67	7.83	−19.28	1.10	0.65	1.29	1.27	0.66	+21	−18	−23	− 3	−24	+44	−16	+11	+10	+17		0	1.23
106468	21 33 49.80	−35 26 10.2	10.56	G	323.457 514 47	−35.436 158 65		6.45	−70.61	−464.43	1.59	1.10	1.98	1.83	1.04	+32	− 7	−19	−20	−22	+45	−14	− 8	+ 8	+24		0	0.88
106469	21 33 50.32	+15 41 13.5	8.06	H	323.459 660 00	+15.687 075 68		2.30	−7.55	−2.69	1.08	0.64	1.10	1.39	0.69	+	4	−10	− 5	+16	−11	−10	− 8	−14	+ 7	+11	0	1.45
106470	21 33 52.70	−17 52 06.1	9.02	H	323.469 585 95	−17.868 374 97		1.41	7.73	−14.30	1.15	0.72	1.37	1.38	0.80	+24	+ 7	− 9	− 9	−26	+44	−24	+ 2	+18	+34		0	−0.48
106471	21 33 53.23	+10 40 56.6	8.00	H	323.471 806 00	+10.682 395 97		3.27	1.61	−6.58	0.90	0.66	1.03	1.20	0.72	+33	−16	− 5	+16	−15	+ 7	− 8	−27	+ 2	+43		0	0.77
106472	21 33 54.00	+52 43 50.0	10.13	G	323.475 013 41	+52.730 568 64		1.93	−7.98	−3.84	0.93	0.95	1.14	1.08	1.02	−	3	− 5	−11	+ 5	− 8	−10	− 9	− 6	+14	+ 6	0	−1.02
106473	21 33 54.29	+32 52 10.0	8.41	H	323.476 194 88	+32.869 431 79		14.16	62.03	−99.67	0.69	0.67	0.97	0.76	0.79	−	8	+17	− 6	+39	− 3	−10	+ 7	− 5	+14	+10	1	0.42
106474	21 33 54.47	−82 40 59.1	6.35	H	323.476 965 49	−82.683 078 34		4.01	22.61	−2.50	0.42	0.42	0.54	0.52	0.52	+	5	−20	+ 3	+ 5	+10	− 4	+11	+ 4	− 7	− 8	0	−1.21
106475	21 33 54.71	−12 08 15.9	8.75	H	323.477 977 58	−12.137 741 64		2.94	−41.40	−0.83	1.34	0.94	1.69	2.48	1.02	+	2	+18	−41	+34	−40	+55	−20	−26	+26	+ 4	0	−0.38
106476 H	21 33 55.42	+50 45 04.0	8.70	2 H	323.480 919 25	+50.751 105 94	A	0.38	−1.73	−1.26	2.07	1.95	2.07	1.90	1.87	−	5	−24	+ 4	−13	+10	+ 3	+ 9	+ 5	− 7	+15	3	1.70
106477	21 33 55.44	+00 13 27.9	8.40	H	323.481 001 45	+00.224 423 74		0.84	5.25	8.35	1.38	0.82	1.46	1.89	0.88	+40	−30	−19	+22	+17	+14	+14	+36	+13	+53		0	1.48
106478	21 33 56.49	+59 27 51.2	8.62	H	323.485 375 98	+59.464 218 97		3.60	3.83	5.14	0.64	0.62	0.76	0.65	0.68	−	2	+ 3	+ 1	+ 2	+13	+ 6	+18	−16	+21	+21	3	1.19
106479 H	21 33 57.13	+60 29 24.7	8.81	2 H	323.488 028 99	+60.490 191 00	*	0.67	−1.90	−3.64	1.94	3.15	1.23	1.18	1.07	+	1	− 1	−10	−19	+20	+10	+20	−13	+22	+22	0	2.29
106480	21 33 58.44	+17 26 42.6	7.61	H	323.493 485 40	+17.445 154 10		2.28	−15.32	−17.74	0.82	0.60	0.97	1.20	0.65	+19	+10	−10	−38	− 5	− 8	− 7	−32	+ 5	+16		3	1.14
106481	21 33 58.87	+45 35 31.4	3.98	1 H	323.495 303 61	+45.592 065 64		26.20	−24.48	−93.88	0.40	0.38	0.51	0.51	0.45	−18	+16	+ 9	+15	+ 5	+19	+ 1	+10	− 9	−22		0	−0.58
106482	21 34 00.17	−43 51 48.4	9.59	H	323.500 701 95	−43.863 455 18		9.38	177.21	−58.95	1.06	0.89	1.56	0.98	0.97	+54	−46	−31	−33	−13	+24	−11	− 7	+10	+58		1	−0.25
106483	21 34 01.37	−46 36 38.2	6.91	H	323.505 700 38	−46.610 613 99		6.67	7.81	−46.57	0.57	0.46	0.85	0.61	0.40	+30	− 8	−10	+ 3	+22	+ 6	+20	+19	− 5	+26		0	−0.83
106484	21 34 02.62	+02 16 47.0	7.70	H	323.510 918 07	+02.279 723 84		3.22	91.31	−34.79	0.85	0.63	1.05	1.11	0.65	+39	−11	− 4	+ 1	+ 6	+41	+ 4	+30	+15	+53		2	−0.48
106485 H	21 34 03.24	+47 17 41.3	9.34	H	323.513 489 21	+47.294 813 68	A	1.37	−3.23	−2.44	2.73	2.41	1.35	1.47	1.42	+25	− 2	−22	+13	− 2	+ 6	− 2	+20	−13	−26		1	−0.02
106486	21 34 05.46	−30 05 30.8	8.57	G	323.522 733 39	−30.091 886 79		6.33	11.95	−11.54	1.02	0.67	1.38	1.31	0.63	+36	−20	−25	−15	−23	+57	−10	+ 8	+18	+27		0	0.85
106487	21 34 07.08	+28 57 22.6	9.18	H	323.529 479 54	+28.956 284 53		3.85	−0.68	−2.70	0.85	0.74	1.22	1.07	0.91	−20	− 1	−10	+31	+ 0	−19	+ 2	− 1	+ 9	−12		0	−0.18
106488	21 34 07.61	−04 22 05.4	6.69	H	323.531 715 44	−04.368 170 78		11.19	49.52	3.74	1.01	0.65	1.02	1.16	0.75	+	5	+12	−16	−50	+ 7	+12	+ 9	−42	+41	+23	0	0.57
106489	21 34 08.50	+24 05 27.3	8.60	G	323.535 396 37	+24.090 905 84		1.77	0.59	−13.71	0.78	0.72	1.07	0.90	0.83	+15	+ 9	−23	+ 6	− 6	−12	− 7	−50	+27	+13		0	−2.41
106490	21 34 09.15	−27 54 03.7	8.20	G	323.538 107 57	−27.901 032 54		8.11	63.25	−70.21	0.89	0.56	1.03	1.05	0.57	+35	− 1	−12	−11	−28	+33	−23	−11	− 5	+34		0	−0.67
106491	21 34 10.61	+63 45 03.9	7.28	H	323.544 192 81	+63.751 091 79		5.97	26.52	25.64	0.53	0.48	0.56	0.59	0.51	−	5	+ 1	+ 4	+35	+ 3	− 3	+ 6	− 2	+18	+ 4	0	0.68
106492	21 34 10.98	+55 47 26.2	9.83	H	323.545 750 04	+55.790 616 17		2.36	2.64	−3.55	0.90	0.83	1.04	0.95	0.91	+	7	+13	+ 8	+ 0	+22	− 7	+24	+ 7	+14	+27	0	2.60
106493	21 34 11.60	+64 00 16.8	7.89	H	323.548 340 22	+64.004 661 54		4.02	3.68	−9.16	0.58	0.53	0.61	0.67	0.55	+	0	− 6	+ 0	+36	+ 5	− 7	+ 8	− 8	+12	+ 9	0	1.06
106494	21 34 13.21	+07 21 00.1	9.89	H	323.555 040 89	+07.350 041 42		−0.59	−3.43	−8.27	1.66	1.47	1.80	2.19	1.38	+40	−11	− 9	+ 9	−40	+15	−35	−53	+27	+40		4	0.49
106495	21 34 15.09	−03 24 37.9	6.85	H	323.562 868 24	−03.410 532 97		4.98	−6.50	−22.75	0.94	0.74	1.05	1.29	0.87	+29	+ 9	−24	−47	−19	+13	−14	−56	+40	+40		0	−0.39
106496	21 34 16.21	−51 59 03.5	7.97	H	323.567 556 42	−51.984 294 74		5.16	4.28	−41.88	0.79	0.63	1.04	0.93	0.58	+21	−14	− 2	+15	+13	+23	+12	+ 7	−11	+ 7		0	0.52
106497	21 34 16.56	−13 29 01.5	7

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
106401	10.214	0.026	8.211	0.010		1.660	0.022	T	1.68	0.02	L	8.0870	0.0026	0.025	101		8.05	8.12		U 2			1							
106402	11.141	0.087	9.156	0.025		1.560	0.040	G	1.69	0.16	K	9.1451	0.0017	0.013	69		9.11	9.16		C			1							
106403	8.595	0.008	8.157	0.008		0.413	0.010	T	0.48	0.01	L	8.2013	0.0011	0.015	184		8.18	8.23					1							S
106404	9.684	0.021	8.430	0.013		1.069	0.019	T	1.03	0.02	L	8.4836	0.0014	0.011	80		8.47	8.50					1							
106405	9.794	0.028	9.595	0.035		0.190	0.042	T	0.21	0.05	L	9.6062	0.0027	0.024	106		9.56	9.64					1							G
106406	8.792	0.010	7.587	0.007		1.031	0.010	T	1.00	0.01	L	7.6303	0.0011	0.012	149		7.61	7.65					1							S
106407	8.787	0.011	7.854	0.008		0.810	0.011	T	0.84	0.01	L	7.9207	0.0011	0.015	146		7.90	7.94					1							
106408	12.402	0.213	10.015	0.040		2.013	0.179	T	1.76	0.15	K	9.9410	0.0029	0.028	90		9.90	9.99		C			1							
106409	6.813	0.004	6.829	0.006		−0.015	0.002	G	0.01	0.00	H	6.8319	0.0008	0.008	126		6.82	6.85		C			1 G							S
106410	10.607	0.027	9.079	0.013		1.284	0.024	T	1.24	0.03	L	9.1192	0.0026	0.026	183		9.08	9.17					1							
106411	10.687	0.055	10.052	0.049	A						T *	9.8330	0.0090	0.041	59	*	9.79	9.90		U 2	21332−4119	I 1	2 C	A	AB	62	5.945	0.015	0.87	0.04	
106412	8.518	0.011	7.328	0.007		1.019	0.010	T	0.99	0.01	L	7.3904	0.0010	0.011	90		7.37	7.41		C			1							S
106413	8.403	0.010	8.388	0.012		0.019	0.014	T	0.04	0.01	L	8.4109	0.0012	0.013	125		8.39	8.44					1							
106414	9.753	0.024	8.606	0.016		1.025	0.015	G	1.00	0.01	H	8.6586	0.0020	0.014	76		8.63	8.68		C			1							
106415	10.617	0.047	8.712	0.017		1.616	0.041	T	2.05	0.10	O	8.5866	0.0015	0.019	73		8.55	8.62					1							
106416	9.056	0.013	7.867	0.009		1.010	0.015	G	0.99	0.01	H	7.9342	0.0015	0.010	107		7.91	7.95					1							
106417						0.000	0.250	G	0.02	0.23	R	12.1583	0.0327	0.210	115		11.79	12.40	0.11	P 1 A			1							D P
106418	8.647	0.010	8.208	0.010		0.436	0.015	G	0.50	0.02	H	8.2614	0.0014	0.014	127		8.24	8.29		C			1							S
106419	8.359	0.009	6.585	0.004		1.481	0.001	G	1.50	0.00	H	6.5551	0.0010	0.008	97		6.54	6.57		C			1							S
106420	8.599	0.012	6.443	0.005		1.805	0.008	G	1.79	0.01	J	6.3694	0.0016	0.014	121		6.35	6.40		U 2			1							S
106421	9.812	0.018	9.186	0.017		0.626	0.005	G	0.69	0.00	H	9.2700	0.0014	0.017	125		9.24	9.30		C			1							
106422	9.259	0.012	7.702	0.006		1.307	0.011	T	1.27	0.01	L	7.7272	0.0010	0.013	223		7.71	7.75		C			1							S
106423	10.853	0.041	10.052	0.031	*	0.725	0.039	T	0.78	0.03	L *	10.1563	0.0025	0.031	142	*	10.08	10.21		D	21333+3058	I 1	2 C	A	AP	270	0.564	0.014	2.05	0.09	G
106424	6.523	0.004	6.474	0.004		0.044	0.005	T	0.06	0.00	L	6.4907	0.0009	0.009	137		6.48	6.50		C	21334−8002	I 1	1							S
106425	9.010	0.012	7.360	0.006		1.380	0.011	T	1.35	0.01	L	7.3605	0.0008	0.009	149		7.34	7.38		C			1							S
106426	8.560	0.011	7.978	0.010		0.544	0.013	T	0.62	0.01	L	8.0273	0.0014	0.011	91		8.01	8.05		C			1							S
106427	10.549	0.039	8.636	0.014		1.588	0.033	T	1.61	0.03	L	8.5697	0.0025	0.021	86		8.54	8.62		U			1							
106428	9.838	0.028	9.242	0.026		0.562	0.002	G	0.64	0.00	H	9.2964	0.0033	0.021	60		9.27	9.33		C			1							
106429	6.917	0.004	5.688	0.002		1.044	0.004	G	1.02	0.02	A	5.7380	0.0005	0.006	192		5.73	5.75					1							S
106430	11.895	0.111	9.458	0.020		2.054	0.093	T	2.02	0.23	K	9.2470	0.0022	0.017	116		9.21	9.28					1							
106431	8.698	0.012	8.539	0.014		0.153	0.017	T	0.17	0.02	L	8.5839	0.0020	0.017	93		8.55	8.61					1							S
106432	9.137	0.016	8.671	0.016		0.439	0.021	T	0.51	0.02	L	8.7319	0.0016	0.018	89		8.70	8.76					1							
106433	10.999	0.064	10.070	0.044		0.807	0.060	T	0.83	0.04	L	10.2247	0.0041	0.026	56		10.17	10.28		C			1							
106434	9.670	0.011	9.191	0.011	A	0.500	0.495	G	0.45	0.03	L *	9.2129	0.0014	0.021	287	*	9.17	9.25		C	21335−6144	I 1	2 C	C	AB	326	3.378	0.043	3.68	0.15	
106435	8.046	0.007	8.086	0.008		−0.032	0.010	T	−0.01	0.01	L	8.0998	0.0016	0.016	137		8.08	8.13					1							
106436	9.242	0.011	8.725	0.010		0.510	0.003	G	0.58	0.00	H	8.7908	0.0016	0.017	194		8.77	8.82		C			1							
106437	8.469	0.009	8.089	0.009		0.359	0.015	G	0.42	0.02	H	8.1592	0.0018	0.017	133		8.13	8.19		M			1							S
106438	8.439	0.015	7.699	0.008		0.656	0.006	G	0.72	0.01	H	7.7816	0.0011	0.011	94		7.77	7.80		C			1							S
106439						1.610	0.197	G	2.63	0.49	I *	10.6624	0.0045	0.031	68	*	10.61	10.72		D	21335−0230	H 1	2 C	A	AB	115	1.618	0.015	1.58	0.10	G
106440	10.580	0.038	8.875	0.016		1.521	0.099	G	2.18	0.00	A	8.7047	0.0019	0.015	100		8.68	8.73					1							
106441	9.040	0.021	7.728	0.013		1.075	0.015	G	1.04	0.01	H	7.7753	0.0021	0.009	56		7.75	7.79					1							S
106442	9.077	0.012	8.385	0.010		0.622	0.015	G	0.69	0.01	H	8.4521	0.0016	0.016	142		8.43	8.48		C			1							S
106443	10.755	0.048	9.431	0.027		1.124	0.043	T	1.09	0.04	L	9.5014	0.0029	0.022	60		9.47	9.55		C			1							
106444	7.763	0.011	7.864	0.012		−0.067	0.011	G	−0.04	0.01	H	7.8613	0.0007	0.010	50		7.84	7.88		D			1							S
106445	10.086	0.024	8.762	0.014		1.124	0.022	T	1.09	0.02	L	8.8129	0.0014	0.015	110		8.79	8.84		D			1							
106446	9.914	0.025	8.047	0.011		1.552	0.022	T	1.57	0.02	L	7.9826	0.0011	0.014	131		7.96	8.01					1							
106447						0.462	0.091	G	0.53	0.10	H	12.3006	0.0110	0.084	53		12.04	12.40					1							G
106448	9.780	0.018	8.285	0.010		1.232	0.020	G	1.13	0.02	A	8.3385	0.0011	0.013	140		8.32	8.37		C			1							
106449	11.672	0.121	10.710	0.084		1.010	0.015	G	1.06	0.02	I	10.9603	0.0040	0.031	80		10.90	11.00		C			1							G
106450	7.752	0.008	7.596	0.009	A	0.137	0.140	G	0.13	0.02	L *	7.5911	0.0013	0.011	114	*	7.57	7.61		D	21336+6020	I 1	2 C	A	AB	262	1.126	0.011	2.63	0.04	S
106451	9.308	0.019	8.901	0.019	*	0.385	0.025	T	0.45	0.03	L *	8.9845	0.0024	0.021	76	*	8.96	9.03			21336+1535	H 1	2 C	B	AB	316	0.600	0.028	3.26	0.14	
106452	8.777	0.011	8.103	0.010		0.591	0.008	G	0.66	0.01	H	8.1726	0.0014	0.011	102		8.16	8.19		C			1							S
106453	9.079	0.019	8.861	0.021		0.208	0.027	T	0.23	0.03	L	8.8812	0.0029	0.016	53		8.85	8.91		C			1							S
106454	9.529	0.021	8.963	0.020	*	0.534	0.021	T	0.61	0.02	L *	9.0184	0.0016	0.015	83	*	8.99	9.04		D	21337−2158	H 1	2 C	A	AB	92	0.422	0.027	2.61	0.15	S
106455	9.446	0.022	8.303	0.015		0.983	0.021	T	0.96	0.02	L	8.3719	0.0018	0.016	71		8.35	8.40					1							
106456	7.742	0.008	7.243	0.008	*	0.457	0.012	G	0.53	0.01	H *	7.2801	0.0011	0.007	77	*	7.26	7.29		D	21337−1612	I 1	2 C	A	AB	20	0.873	0.011	2.55	0.03	S
106457	8.168	0.008	7.903	0.008		0.249	0.012	T	0.28	0.01	L	7.9529	0.0012	0.012	133		7.93	7.97					1							
106458	11.331	0.074	9.941	0.034		1.210	0.015	G	1.17	0.01	H	9.9691	0.0038	0.029	97		9.93	10.01					1							
106459	10.928	0.046	10.396	0.048	*	0.507	0.049	T	0.58	0.05	L *	10.3582	0.0047	0.035	116	*	10.31	10.41		D	21337−4959	I 1	2 C	A	AS	197	0.310	0.007	0.09	0.13	
106460	10.119	0.031	8.701	0.017		1.198	0.028	T	1.16	0.03	L	8.7534	0.0019	0.015	80		8.72	8.78		C			1							
106461	9.403	0.019	8.718	0.016		0.609	0.015	G	0.68	0.01	H	8.7909	0.0026	0.017	71		8.76	8.82		C			1							
106462	7.742	0.008	7.570	0.009	*	0.140	0.015	G	0.15	0.01	H *	7.6018	0.0014	0.011	104	*	7.59	7.62			21338+5419	H 1	2 C	C	AB	41	0.379	0.046	3.61	0.18	S
106463	9.862	0.021	8.598	0.013		1.077	0.019	T	1.04	0.02	L	8.6376	0.0014	0.015	117		8.61	8.66		C			1							
106464	8.116	0.011	7.802	0.011		0.298	0.015	T	0.34	0.02	L	7.8417	0.0013	0.010	72		7.83	7.86		C			1							S
106465	7.968	0.007	7.956	0.009		0.016	0.011	T	0.04	0.01	L	7.9634	0.0015	0.014	138		7.94	7.99					1							S
106466	10.032	0.023	8.754	0.013		1.088	0.021	T	1.05	0.02	L	8.7970	0.0022	0.018	130		8.77	8.82					1							
106467	9.623	0.019	8.423	0.012		1.027	0.018	T	1.00	0.01	L	8.4968	0.0011	0.012	87		8.48	8.52					1							
106468	10.939	0.051	10.665	0.067		0.405	0.022	G	0.47	0.02	H	10.6682	0.0030	0.028	100		10.61	10.72		C			1							G
106469	10.014	0.028	8.214	0.012		1.499	0.024	T	1.53	0.04	L	8.1867	0.0018	0.018	70		8.15	8.21					1							
106470	10.526	0.048	9.202	0.025		1.124	0.042	T	1.09	0.04	L	9.1894	0.0017	0.017	79		9.16	9.22		C			1							
106471	9.919	0.029	8.154	0.013		1.471	0.025	T	1.48	0.04	L	8.1330	0.0019	0.013	86		8.10	8.15					1							
106472	10.384	0.031	10.197	0.043		0.260	0.015	G	0.29	0.02	H	10.2047	0.0029	0.029	132		10.15	10.25		C			1							G
106473	9.197	0.014	8.499	0.012		0.644	0.015	T	0.71	0.01	L	8.5488	0.0015	0.015	133		8.52	8.57		C			1							S
106474	6.457	0.004	6.366	0.004		0.089	0.005	T	0.10	0.01	L	6.3876	0.0008	0.008	136		6.37	6.40					1							S
106475	10.024	0.034	8.856	0.022		1.002	0.032	T	0.98	0.03	L	8.9129	0.0031	0.016	59		8.89	8.94		C			1							
106476	8.892	0.017	8.642	0.021	*	0.238	0.025	T	0.27	0.03	L *	8.7641	0.0027	0.051	106	*	8.74	8.88	1.96	P 1 A	21339+5045	H 1	2 C	A	AB	347	5.389	0.005	0.06	0.02	
106477	9.888	0.030	8.515	0.017		1.162	0.027	T	1.12	0.02	L	8.5644	0.0028	0.020	66		8.54	8.60					1							
106478	9.123	0.013	8.673	0.013		0.441	0.003	G	0.51	0.00	H	8.7211	0.0020	0.018	115		8.70	8.75					1							
106479	9.203	0.016	8.869	0.017	*	0.317	0.021	T	0.37	0.03	L *	8.8842	0.0031	0.029	110	*	8.83	8.93		U 2	21340+6029	H 1	2 C	A	AB	280	0.212	0.022	1.64	0.31	
106480	9.391	0.015	7.759	0.008		1.366	0.013	T	1.33	0.02	L	7.7671	0.0012	0.012	115		7.75	7.79					1							S
106481	5.105	0.003	4.089	0.002		0.885	0.004	G	0.94	0.03	C	4.1415	0.0006	0.006	121		4.13	4.15		M			1							S
106482	10.324	0.024	9.655	0.021		0.618	0.003	G	0.69	0.00	H	9.7163	0.0029	0.026	148		9.68	9.76					1							
106483	8.311	0.008	7.036	0.005		1.086	0.007	T	1.05	0.01	L	7.0825	0.0007	0.009	159		7.07	7.10		C			1							S
106484	8.978	0.015	7.816	0.010		0.997	0.014	T	0.98	0.01	L	7.8687	0.0014	0.012	89		7.85	7.89		C			1							S
106485	9.470	0.018	9.371	0.023	*	0.097	0.027	T	0.11	0.03	L *	9.3758	0.0020	0.021	132	*	9.34	9.41		D	21341+4718	H 1	2 C	A	AB	51	0.353	0.018	2.24	0.14	G
106486	9.257	0.017	8.604	0.015		0.554	0.015	G	0.63	0.01	H	8.6971	0.0019	0.014	97		8.68	8.72		C			1							S
106487	10.614	0.031	9.268	0.016		1.141	0.027	T	1.10	0.03	L	9.3511	0.0018	0.025	161		9.30	9.40		C			1							
106488	6.983	0.006	6.718	0.006		0.252	0.008	T	0.28	0.01	L	6.7626	0.0015	0.009	64		6.75	6.78			21341−0422	I 1	1							S
106489	9.003	0.013	8.616	0.013		0.362	0.015	G	0.42	0.02	H	8.6973	0.0019	0.017	122		8.67	8.73		C			1							
106490	8.875	0.012	8.250	0.011		0.555	0.015	G	0.63	0.01	H	8.3201	0.0016	0.011	99		8.30	8.34					1							S
106491	7.617	0.007	7.320	0.006		0.282	0.009	T	0.32	0.01	L	7.3576	0.0013	0.011	129		7.34	7.37		C			1							S
106492	10.121	0.025	9.794	0.029		0.310	0.036	T	0.36	0.05	L	9.9063	0.0027	0.025	120		9.86	9.94		C			1							G
106493	8.052	0.008	7.912	0.010		0.135	0.012	T	0.15	0.01	L	7.9375	0.0010	0.011	118		7.92	7.96		C	21342+6400	I 1	1							S
106494	12.078	0.209	10.084	0.052		1.689	0.177	T	1.72	0.17	K	9.9899	0.0036	0.033	67		9.92	10.05		C			1							
106495	8.331	0.013	6.947	0.007		1.171	0.012	T	1.13	0.01	L	7.0119	0.0010	0.008	70		7.00	7.03		C			1							S
106496	9.378	0.017	8.116	0.011		1.075	0.016	T	1.04	0.01	L	8.1379	0.0012	0.011	89		8.12	8.15		D			1							S
106497	9.032	0.021	7.810	0.013		1.039	0.015	G	1.01	0.01	H	7.8865	0.0069	0.050	55		7.78	7.96		U 2			1							S
106498	8.440	0.008	8.282	0.009		0.152	0.011	T	0.17	0.01	L	8.3190	0.0011	0.016	223		8.29	8.36					1							S
106499	9.975	0.019	8.387	0.009		1.331	0.017	T	1.29	0.02	L	8.3867	0.0017	0.016	154		8.36	8.41					1							
106500	7.740	0.009	6.454	0.005		1.093	0.003	G	1.05	0.00	H	6.4957	0.0010	0.006	55		6.48	6.51		C			1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
106501	21 34 17.40	−66 14 42.8	9.38	H	323.572 507 91	−66.245 233 43	6.35	36.60	−31.32	0.73	0.84	1.31	0.79	0.97	−24	−13	− 8	− 8	− 5	− 6	− 2	+16	+ 0	−38	0	2.08
106502	21 34 18.16	+28 16 44.5	10.13	H	323.575 668 22	+28.279 026 10	17.98	164.65	119.80	1.14	0.95	1.70	1.32	1.15	−25	+10	−27	+13	+16	−22	+18	−11	+23	− 8	0	−0.20
106503	21 34 18.44	+75 26 05.5	10.06	H	323.576 817 45	+75.434 858 23	4.28	20.35	45.46	0.98	0.86	0.99	1.24	1.02	− 6	−15	+ 2	−14	+ 9	+13	+10	−27	− 5	− 1	0	−0.24
106504	21 34 18.49	+55 10 33.2	8.98	H	323.577 038 10	+55.175 882 87	4.27	−20.42	−18.28	0.67	0.68	0.84	0.77	0.73	− 1	+ 5	+ 9	−12	+ 9	−20	+10	+ 0	+23	+ 5	0	0.89
106505	21 34 19.35	+05 40 59.7	11.85	G	323.580 637 13	+05.683 238 54	15.63	136.69	−9.83	3.54	2.27	3.97	5.45	2.58	+25	+14	− 8	+25	−13	+16	+ 0	−18	+27	+40	0	−0.15
106506	21 34 19.52	−69 51 39.6	8.15	H	323.581 314 38	−69.861 010 07	5.90	16.37	−74.36	0.63	0.64	0.91	0.72	0.70	− 7	−24	− 8	+ 0	+ 8	+ 1	+ 8	+11	− 2	− 8	0	−0.72
106507	21 34 20.28	+45 59 43.4	7.99	G	323.584 492 14	+45.995 398 31	2.45	0.01	−2.43	0.55	0.49	0.68	0.73	0.62	− 5	+15	− 8	+24	+ 6	+20	+ 7	+ 6	− 2	− 6	0	−0.64
106508	21 34 20.53	+19 18 26.4	8.23	G	323.585 559 20	+19.307 335 49	1.41	5.26	1.02	0.63	0.65	0.93	0.74	0.67	+48	+ 1	− 4	− 1	− 8	−32	−14	−44	+ 0	+38	0	0.47
106509	21 34 21.04	−63 38 36.9	8.95	H	323.587 664 87	−63.643 581 23	2.32	2.03	−11.74	0.80	0.86	1.38	1.01	1.19	− 8	− 9	− 9	+25	+ 1	+ 6	+ 3	+29	−14	− 7	0	−0.20
106510	21 34 21.09	−07 44 46.5	10.70	H	323.587 867 80	−07.746 239 26	21.02	−27.68	67.87	2.02	1.63	2.46	2.80	1.84	+27	−13	−26	−28	− 6	+32	− 6	−48	+42	+40	0	2.56
106511	21 34 22.18	−10 55 15.0	9.52	H	323.592 420 52	−10.920 839 58	2.59	−10.33	3.53	1.38	1.06	1.58	2.21	1.32	+21	−11	−23	+13	−22	+27	−18	−20	+18	+13	0	0.14
106512	21 34 23.43	+13 55 11.9	8.18	G	323.597 622 03	+13.919 977 55	16.12	−96.04	−49.99	1.11	0.61	1.18	1.41	0.66	+14	+17	−17	+40	+ 3	+25	+12	−17	+29	+23	0	0.42
106513	21 34 23.61	+12 15 25.7	8.05	H	323.598 355 03	+12.257 144 23	15.78	−69.03	−138.88	0.88	0.65	0.98	1.08	0.65	+30	− 1	− 2	− 8	−15	− 5	−14	−29	+ 8	+28	2	−0.12
106514	21 34 24.96	+26 58 55.6	10.85	H	323.604 001 22	+26.982 122 53	0.92	8.04	7.15	2.41	2.71	3.50	2.88	3.00	+15	− 4	−27	−17	− 3	− 7	− 7	−50	+12	+ 8	0	
106515	21 34 25.84	+66 43 35.5	6.95	H	323.607 670 59	+66.726 523 43	5.58	−25.77	−31.29	0.55	0.51	0.60	0.72	0.58	+ 0	−19	+ 8	− 1	+12	+17	+ 7	−17	+21	+19	1	1.49
106516	21 34 26.19	+10 26 04.9	8.11	H	323.609 104 93	+10.434 704 38	5.94	−2.37	−8.56	0.91	0.65	0.97	1.21	0.66	+19	−13	− 4	+21	−28	+10	−18	−29	+ 6	+28	0	1.38
106517	21 34 26.40	+52 16 09.5	8.96	H	323.610 006 34	+52.269 300 96	1.77	−4.15	−7.85	0.72	0.70	0.86	0.76	0.76	− 9	+ 9	− 6	+12	−11	− 7	−10	− 2	+10	− 7	0	1.06
106518	21 34 27.46	+51 41 54.5	6.17	H	323.614 416 42	+51.698 469 53	2.00	3.71	−1.81	0.42	0.44	0.53	0.45	0.46	−12	+ 1	− 4	+ 9	− 6	−12	− 6	− 2	+10	−12	0	1.16
106519 H	21 34 29.71	+09 29 59.7	7.91	G	323.623 802 12	+09.499 905 17 A	14.62	49.66	−88.92	1.41	0.90	1.35	1.57	0.96	+ 8	+23	+13	−25	+ 6	+16	+ 0	−13	+ 9	+29	1	1.42
106520	21 34 29.84	−24 57 00.8	9.07	H	323.624 332 94	−24.950 208 86	4.76	19.52	18.06	1.04	0.66	1.15	1.14	0.70	+19	− 4	− 5	−25	−14	+31	−13	+12	+ 8	+19	0	0.04
106521	21 34 32.28	+62 18 27.9	8.70	G	323.634 502 67	+62.307 760 47	0.82	−4.05	−2.45	0.63	0.61	0.73	0.71	0.64	− 9	+ 5	+13	− 3	+12	+ 6	+14	−15	+24	+ 9	1	1.36
106522	21 34 32.52	−17 48 47.9	9.79	H	323.635 487 68	−17.813 305 69	2.51	10.52	−0.83	1.26	0.90	1.54	1.49	0.97	+42	− 3	+ 2	−22	−25	+38	−27	− 3	+21	+47	0	−0.06
106523	21 34 32.70	−52 12 37.0	8.36	H	323.636 248 12	−52.210 290 52	2.04	5.68	−8.59	0.87	0.70	1.13	1.04	0.64	+22	+ 1	+ 6	+22	+14	+28	+10	+ 7	+ 0	+12	0	1.67
106524	21 34 32.80	+59 06 29.7	9.13	H	323.636 649 05	+59.108 247 96 B	9.74	21.71	12.29	9.18	9.96	4.72	6.12	6.66	− 8	+ 2	+ 2	−12	+ 8	+ 0	+10	−25	+16	+ 8	12	2.05
106525	21 34 33.41	−14 37 43.6	9.01	H	323.639 212 03	−14.628 785 22	0.93	1.25	0.74	1.35	1.03	1.45	2.26	0.99	+16	−12	−26	+19	−52	+28	−33	+ 8	+14	+11	0	0.56
106526	21 34 33.60	+10 55 09.1	7.81	H	323.639 985 98	+10.919 190 22	4.25	−7.82	−0.78	0.95	0.63	0.97	1.27	0.63	+17	−10	+ 3	+ 3	−19	+ 6	−13	−36	− 4	+23	0	0.94
106527	21 34 33.97	+22 45 16.7	6.45	H	323.641 530 36	+22.754 651 42	14.45	11.73	−53.45	0.52	0.50	0.73	0.55	0.56	+16	+ 1	−29	− 2	− 4	− 5	− 3	−47	+24	+19	0	−0.50
106528	21 34 34.20	−53 14 13.8	9.22	2 H	323.642 483 67	−53.237 170 39	−1.17	−1.44	−0.99	1.05	0.89	1.48	1.38	0.78	+21	+11	−25	+17	+24	−18	+14	+ 9	− 7	+17	0	−0.52
106529	21 34 34.42	+55 05 21.3	9.01	H	323.643 400 45	+55.089 241 45	0.35	−0.44	−2.33	0.67	0.71	0.86	0.76	0.73	+ 0	+ 3	+14	− 1	+ 6	−23	+ 9	− 1	+17	+ 7	0	−1.80
106530	21 34 34.85	+59 06 23.8	8.39	G	323.645 218 22	+59.106 609 90 A	7.83	16.47	3.59	2.56	2.47	2.35	2.20	2.30	− 3	− 2	+ 3	−15	+ 3	+ 1	+ 5	−29	+17	+12	12	2.05
106531	21 34 35.23	−59 10 13.2	8.76	G	323.646 781 61	−59.170 332 58	8.49	94.98	−158.67	0.86	0.63	1.26	1.16	0.73	−28	+ 6	+ 6	− 2	+14	− 5	+11	+20	− 5	−29	0	0.12
106532	21 34 35.91	+05 23 05.2	8.67	H	323.649 620 20	+05.384 784 12	3.03	−16.54	−17.04	1.50	0.85	1.56	2.16	1.03	+12	+ 5	−10	+35	−19	+23	− 2	−16	+30	+40	0	−0.07
106533	21 34 36.39	+02 15 27.2	8.66	H	323.651 643 16	+02.257 554 91	−0.68	−2.34	−3.64	1.01	0.70	1.20	1.42	0.79	+28	− 7	− 5	−14	+ 4	+39	− 1	+20	+17	+48	0	−0.77
106534	21 34 37.63	+05 13 06.1	10.78	G	323.656 806 77	+05.218 360 01	19.70	112.34	−17.02	2.51	1.48	2.66	3.57	1.68	+21	− 1	− 5	+38	−13	+17	+ 1	− 5	+27	+43	0	0.59
106535	21 34 37.95	+42 24 16.6	7.61	H	323.658 122 20	+42.404 612 63	2.80	5.31	−5.77	0.51	0.55	0.78	0.58	0.64	−19	− 2	+ 8	+ 0	− 2	− 8	− 1	+ 6	+30	−31	2	−1.58
106536	21 34 38.05	+49 31 35.3	7.84	G	323.658 529 50	+49.526 471 56	0.67	−3.73	−1.71	0.63	0.55	0.71	0.81	0.58	−12	− 5	+13	−36	− 2	− 3	+ 0	− 3	+ 3	−14	0	−0.03
106537	21 34 38.46	−68 51 15.0	8.16	H	323.660 237 35	−68.854 179 40	5.84	2.16	−8.94	0.59	0.56	0.86	0.66	0.59	−19	− 5	−12	− 2	− 1	−10	− 2	+ 0	− 7	−15	0	−0.23
106538	21 34 38.99	+66 46 20.4	7.03	H	323.662 464 25	+66.772 325 95	3.11	−3.31	−18.55	0.53	0.52	0.59	0.70	0.57	+ 2	−17	+ 8	− 6	+12	+18	+ 8	−21	+19	+19	1	0.57
106539	21 34 39.27	−07 23 32.1	7.94	G	323.663 631 28	−07.392 236 78	5.87	28.39	4.69	0.95	0.64	1.07	1.11	0.76	+ 7	−20	− 4	−37	+ 8	+45	+ 7	−38	+31	+39	0	1.40
106540	21 34 39.59	−28 53 16.9	8.22	H	323.664 954 47	−28.888 028 28	3.52	−7.87	−24.01	0.95	0.59	1.08	1.03	0.58	+35	−20	−25	−30	−24	+37	−15	+ 6	+ 0	+26	0	−0.31
106541	21 34 40.01	−36 38 49.1	6.88	H	323.666 717 10	−36.646 973 85	5.00	5.20	−8.42	0.90	0.56	0.95	1.08	0.60	+29	−14	−13	−20	−19	+20	−16	− 6	− 5	+29	2	1.32
106542	21 34 40.20	−35 52 52.0	9.99	H	323.667 507 75	−35.881 120 41	5.87	66.91	−31.87	1.46	0.96	1.74	1.62	0.93	+38	−10	−20	−24	−21	+37	−11	+ 7	−11	+24	0	1.70
106543	21 34 41.67	−39 31 39.8	8.31	H	323.673 624 70	−39.527 709 10	12.52	7.14	−64.55	0.87	0.70	1.00	1.03	0.71	+14	−18	−22	− 3	− 9	+25	− 3	−23	+ 8	+23	0	1.26
106544	21 34 42.76	+01 49 45.1	6.41	2 H	323.678 171 51	+01.829 188 95	2.10	13.22	−11.36	0.78	0.53	0.92	1.01	0.60	+32	−14	− 7	− 5	+ 4	+34	− 3	+33	+16	+54	2	−0.14
106545	21 34 43.27	−09 05 12.9	7.70	H	323.680 279 65	−09.086 930 01	3.77	17.05	−20.91	0.97	0.75	1.11	1.49	0.92	+26	−21	−29	+10	− 9	+ 8	−11	− 8	+21	+ 8	0	−0.78
106546	21 34 43.28	−49 33 39.1	11.13	G	323.680 334 18	−49.560 863 28	23.24	182.70	−96.88	1.71	1.47	2.52	1.89	1.36	+21	− 7	+ 5	− 9	+ 9	+ 4	+10	+ 8	+ 0	+ 7	0	0.15
106547	21 34 44.09	−53 20 54.7	9.21	H	323.683 691 65	−53.348 534 37	5.61	27.67	5.80	1.04	0.94	1.47	1.34	0.82	+32	+13	−21	+11	+37	−17	+24	+20	−11	+34	0	1.12
106548	21 34 44.42	+39 30 51.9	8.65	H	323.685 096 52	+39.514 410 75	1.25	3.41	−4.82	0.67	0.73	1.06	0.73	0.82	−21	+28	−16	− 5	+ 9	− 6	+12	− 2	+17	−14	0	−0.62
106549	21 34 45.05	−32 37 30.4	9.24	H	323.687 713 25	−32.625 116 95	0.43	19.71	−27.30	1.20	0.65	1.34	1.38	0.67	+43	+ 4	+ 4	− 6	−24	+18	−23	+ 5	−12	+35	0	0.39
106550	21 34 45.89	+18 19 44.0	6.47	H	323.691 204 31	+18.328 901 66	4.43	37.01	11.38	0.64	0.50	0.79	0.89	0.55	+23	− 2	− 8	−23	− 9	+ 2	−10	−39	+ 8	+17	0	−0.26
*106551	21 34 46.48	+38 32 01.8	4.87	H	323.693 655 89	+38.533 826 84	12.76	116.80	93.30	0.33	0.38	0.53	0.38	0.42	−26	+13	+ 0	+ 2	− 2	− 6	− 1	+ 7	+ 2	−31	0	2.13
*106552	21 34 46.46	+39 03 01.1	10.23	H	323.693 575 29	+39.050 314 49	14.99	−155.18	−122.21	0.99	1.21	1.61	1.01	1.23	−12	+17	+13	− 4	+ 4	− 2	+ 4	−11	+ 5	+17	0	0.45
106553	21 34 46.74	−81 55 36.6	7.76	G	323.694 751 96	−81.926 842 35	8.50	67.63	−27.66	0.53	0.52	0.66	0.66	0.64	− 3	−15	+ 3	+ 5	+ 5	+13	+ 6	+18	− 2	−10	1	−0.55
106554	21 34 46.99	+19 56 11.1	6.89	H	323.695 795 44	+19.936 408 17	3.26	−11.70	−7.28	0.52	0.49	0.77	0.61	0.55	+35	+ 1	−14	−15	+ 1	−29	− 3	−37	+10	+31	0	−0.68
106555	21 34 48.49	−26 07 37.9	10.35	G	323.702 048 95	−26.127 191 07	17.24	122.18	−296.74	1.32	0.92	1.62	1.65	0.99	+28	+ 6	−11	− 1	− 8	+42	− 3	+ 8	+10	+36	0	1.81
*106556	21 34 50.86	+89 13 22.5	9.83	G	323.711 923 55	+89.222 916 60	4.07	11.05	13.41	0.86	0.80	0.96	1.09	0.96	− 4	−18	+22	−11	+12	+ 7	+ 7	+ 2	+ 7	+13	0	0.35
*106557	21 34 49.91	+51 32 10.9	12.01	H	323.707 952 31	+51.536 347 69	57.37	456.12	310.81	2.09	2.18	2.59	2.39	2.48	− 7	−10	− 3	− 2	+11	− 4	+10	+13	− 2	+ 0	1	2.08
*106558	21 34 50.19	+35 52 30.5	8.07	H	323.709 143 19	+35.875 131 42	3.22	36.79	33.17	0.52	0.58	0.93	0.61	0.63	−30	− 1	− 1	−10	+29	−11	+25	+16	+ 3	−22	1	−1.31
106559	21 34 51.07	−20 05 03.8	5.70	H	323.712 787 77	−20.084 381 79	36.86	−28.98	44.40	0.75	0.49	0.91	0.91	0.54	+29	−13	−18	−11	−12	+37	−10	+11	+22	+38	0	0.56
106560	21 34 51.49	−49 47 34.1	8.12	G	323.714 543 98	−49.792 795 08	24.09	−581.50	−116.15	1.17	0.86	1.10	1.35	0.74	− 1	− 3	+ 3	−36	+28	+10	+32	+26	+11	−24	0	2.27
106561	21 34 51.95	−20 26 42.9	8.07	1 H	323.716 438 68	−20.445 259 06	2.69	−0.38	−26.67	1.12	0.61	1.23	1.40	0.65	+ 8	− 7	−17	+22	−24	+41	−16	+ 8	+21	+27	0	1.14
106562	21 34 52.68	−72 10 25.3	9.48	H	323.719 507 57	−72.173 684 46	5.04	40.41	−58.34	0.81	0.84	1.14	0.99	0.98	−14	− 9	− 8	−12	− 3	− 7	− 2	+ 8	+11	−25	3	0.73
106563	21 34 52.96	+18 55 01.9	7.94	H	323.720 653 56	+18.917 182 51	4.79	−9.91	−35.70	0.63	0.62	0.90	0.79	0.69	+39	− 5	−10	− 7	− 7	−21	−12	−44	+ 0	+36	0	0.65
106564	21 34 52.99	−29 41 45.9	6.42	H	323.720 801 15	−29.696 080 94	4.69	14.34	−15.02	0.85	0.51	0.95	0.93	0.45	+32	−35	−42	−17	−37	+35	−20	+ 8	− 4	+ 7	0	2.50
106565	21 34 52.99	+02 42 10.2	11.83	H	323.720 804 65	+02.702 826 86 *	−4.01	−14.15	3.15	8.59	6.10	14.27	19.70	10.52	+45	− 9	−49	−49	−29	+37	−39	+ 4	+ 2	+79	0	2.00
106566	21 34 53.27	−51 49 37.3	6.72	G	323.721 970 77	−51.827 015 91	7.80	−211.41	−66.17	0.66	0.54	0.88	0.78	0.49	+27	− 3	+ 8	+21	+27	+33	+22	+15	+ 0	+21	0	0.81
*106567	21 34 54.98	−46 13 57.8	9.95	H	323.729 101 01	−46.232 729 39	7.29	26.31	9.91	1.05	0.86	1.65	1.08	0.78	+36	−14	− 6	+ 6	+14	+ 3	+18	+32	+ 0	+20	0	−1.02
*106568	21 34 54.98	−20 15 09.2	6.74	H	323.729 062 70	−20.252 562 97	17.99	−0.92	−63.97	0.79	0.50	0.94	0.96	0.56	+27	−19	−16	− 5	−11	+36	−11	+13	+22	+38	0	0.69
106569	21 34 55.51	+25 54 02.2	8.86	G	323.731 295 39	+25.900 613 76	−1.42	−3.43	−6.32	0.85	0.82	1.24	1.04	0.99	+ 7	+11	−29	−16	− 4	−14	− 5	−47	+35	+ 0	0	0.62
106570	21 34 56.71	+42 38 38.6	9.59	H	323.736 300 84	+42.644 050 80	1.07	−0.11	−2.63	0.84	0.75	1.13	0.91	0.81	−12	+ 5	+15	+ 6	+ 1	− 6	+ 4	+15	+21	−19	2	0.09
106571	21 35 00.42	+47 05 23.7	7.83	H	323.751 767 69	+47.089 912 97	3.37	7.63	−0.38	0.58	0.54	0.67	0.80	0.69	−17	− 2	+ 1	+29	− 3	+ 1	− 4	+25	+ 5	−25	0	−0.41
106572	21 35 01.95	+31 47 01.9	7.44	G	323.758 109 05	+31.783 873 39	3.86	7.87	−0.28	0.49	0.49	0.75	0.57	0.57	−12	+ 8	−17	+ 6	+ 9	− 5	+11	−17	+ 8	+ 0	1	1.35
106573	21 35 02.00	−44 59 55.1	8.47	H	323.758 329 54	−44.998 638 87	10.47	−1.56	−33.94	0.70	0.57	1.19	0.75	0.56	+46	−15	− 3	−17	+ 2	+13	+ 5	+15	− 4	+38	7	1.31
106574	21 35 02.69	+34 35 45.6	10.54	2 H	323.761 205 61	+34.595 992 47	4.42	−28.37	−19.29	0.91	1.11	1.78	0.96	1.21	−14	+ 7	+ 0	+ 1	+28	−20	+30	+25	+19	−17	1	−0.32
106575	21 35 03.57	−38 47 41.0	8.98	H	323.764 861 38	−38.794 718 52	5.70	−38.19	−40.86	0.94	0.82	1.12	1.19	0.86	+19	−11	−26	+17	−10	+23	− 4	−15	+17	+23	0	2.17
106576	21 35 04.76	−27 36 43.9	9.11	G	323.769 840 59	−27.612 204 94	2.52	9.41	−7.86	1.09	0.68	1.22	1.36	0.67	+31	−20	−11	+ 2	−29	+24	−23	− 5	+ 8	+26	0	−2.94
*106577	21 35 05.86	−54 35 03.4	8.97	H	323.774 422 96	−54.584 276 29	13.41	70.15	−34.96	1.01	0.71	1.24	1.42	0.74	+11	+ 8	−20	+15	+29	− 3	+24	+35	−11	+ 1	0	−0.80
*106578	21 35 08.64	+43 42 11.8	6.81	H	323.785 994 76	+43.703 288 87	2.61	1.86	4.83	0.43	0.42	0.58	0.49	0.48	−25	+11	−15	− 8	−11	+13	− 8	+ 5	− 5	−35	0	0.58
*106579	21 35 09.76	+18 18 21.8	9.52	2 H	323.790 652 70	+18.306 060 23	2.83	3.94	−9.27	1.06	0.83	1.28	1.36	0.95	+19	−13	+ 2	−31	−11	+14	− 9	−38	−12	+24	2	0.69
*106580	21 35 10.64	−36 39 31.6	8.97	H	323.794 325 07	−36.658 783 24	6.15	19.43	−14.56	1.25	0.75	1.41	1.39	0.77	+39	−11	− 2	−22	−13	+28	−12	+ 9	− 2	+35	0	0.17
*106581	21 35 05.49	+28 27 01.9	9.60	H	323.772 859 25	+28.450 515 14	16.66	170.76	51.89	1.32	0.97	1.72	1.81	1.26	−46	−12	+ 1	−45	+39	− 1	+38	−45	− 2	−36	0	1.74
106582 H	21 35 11.97	+21 24 14.9	7.17	H	323.799 873 00	+21.404 136 78 A	10.58	41.11	−8.63	0.87	0.78	1.20	1.07	0.81	+16	+ 8	−39	−22	+ 7	−21	+ 0	−49	+44	+ 3	1	0.04
106583	21 35 12.80	+78 37 28.2	7.49	3 H	323.803 351 51	+78.624 494 29 *	2.41	9.31	1.32	0.59	0.51	0.61	0.75	0.55	− 5	− 1	+ 5	+ 7	+ 5	− 4	+ 2	−24	+15	− 8	8	3.63
106584	21 35 13.18	−14 35 55.3	9.83	H	323.804 922 39	−14.598 685 59	1.02	9.95	−0.13	1.66	1.03	1.93	2.87	0.97	− 5	+27	−35	+44	−44	+54	−26	−11	+20	− 9	0	−1.04
106585	21 35 13.66	+65 35 15.6	7.97	H	323.806 900 25	+65.587 673 21	3.06	5.22	−2.74	0.63	0.59	0.65	0.76	0.65	− 9	+ 6	+ 9	+14	+23	+ 4	+23	−13	+ 7	− 3	1	−1.45
106586	21 35 13.67	−34 19 46.0	6.86	H	323.806 946 98	−34.329 438 84	18.78	36.52	−112.56	0.78	0.44	0.86	0.96	0.44	+29	− 9	− 3	+11	−19	+23	−14	+16	+ 7	+22	2	−0.37
106587	21 35 14.27	+26 15 58.7	8.64	H	323.809 456 91	+26.266 315 90	2.51	−4.24	−7.34	0.70	0.74	1.02	0.84	0.82	+14	+ 0	−21	− 9	− 8	−11	−11	−52	+26	+ 8	0	0.32
106588	21 35 14.98	−64 48 06.7	10.07	G	323.812 419 42	−64.801 866 55	7.99	163.44	−202.95	0.77	0.87	1.43	0.86	1.05	−20	−14	−12	−22	− 8	+11	− 1	+ 1	−14	−46	3	0.38
106589	21 35 15.21	+35 11 20.9	8.32	H	323.813 389 73	+35.189 140 33	5.39	8.74	−10.01	0.51	0.59	0.93	0.54	0.62	−16	+ 1	− 3	+11	+34	−24	+35	+29	+10	−18	0	1.72
106590	21 35 15.91	−23 27 15.4	6.39	H	323.816 279 70	−23.454 278 27	8.47	78.05	−14.26	0.79	0.53	0.93	0.94	0.54	+33	−13	−16	− 7	−30	+34	−24	+ 0	+ 4	+33	0	1.28
106591	21 35 17.53	−25 19 05.2	7.96	G	323.823 032 89	−25.318 113 05	16.03	69.17	13.81	0.89	0.59	1.00	1.06	0.64	+20	− 6	−12	− 7	−20	+30	−15	+18	+10	+16	0	0.06
106592	21 35 17.63	−03 58 59.9	5.79	H	323.823 443 04	−03.983 292 91	7.39	−9.59	−4.80	0.87	0.61	0.97	1.17	0.68	+ 4	+17	−29	−44	+14	− 4	+14	−48	+48	+ 4	2	1.25
106593	21 35 18.56	+16 11 50.6	8.56	H	323.827 319 04	+16.197 385 98	2.51	−22.57	−23.90	1.03	0.70	1.13	1.23	0.78	+ 4	−21	+ 8	+ 1	− 4	+ 4	− 2	−31	+ 7	+17	0	2.53
106594	21 35 18.99	−19 14 40.9	7.95	H	323.829 111 29	−19.244 693 29	12.83	−20.88	−21.87	0.88	0.60	1.09	1.09	0.70	+29	− 5	− 3	−12	−13	+41	−15	+18	+28	+39	0	0.00
106595	21 35 19.02	+28 11 51.7	6.25	H	323.829 268 31	+28.197 687 44	13.90	138.92	−33.22	0.50	0.45	0.73	0.56	0.52	−13	+ 3	−26	+18	+ 3	+24	+ 2	−27	+21	− 5	0	0.67
106596 H	21 35 20.07	+52 10 10.5	9.19	G	323.833 628 90	+52.169 580 03 A	−0.70	−3.93	−5.19	1.56	1.52	1.64	1.52	1.45	+ 0	+11	−11	+10	− 4	−14	−10	+ 3	+ 8	− 4	2	0.72
106597	21 35 20.22	+34 50 09.0	8.33	H	323.834 260 24	+34.835 840 95	6.38	−3.16	−1.88	0.51	0.61	0.94	0.55	0.67	−16	+ 6	−12	+16	+27	−24	+27	+32	+11	−16	2	1.70
106598	21 35 20.57	−04 41 27.0	8.69	H	323.835 708 09	−04.690 832 78	4.23	−7.75	−5.01	1.44	0.90	1.34	1.56	1.00	−18	+17	−24	−56	+26	+ 3	+28	−49	+42	+ 2	0	−0.73
106599	21 35 22.32	+60 54 13.4	10.72	H	323.843 002 51	+60.903 714 32	−0.81	−1.27	−1.90	1.14	1.09	1.28	1.22	1.15	− 2	− 2	+ 1	+ 5	+25	+ 5	+29	−14

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
106501	10.010	0.016	9.418	0.015		0.553	0.016	T	0.63	0.01	L	9.5033	0.0020	0.028	205		9.44	9.56					1							
106502	11.153	0.050	10.190	0.034		0.847	0.045	T	0.86	0.03	L	10.2851	0.0026	0.030	133		10.22	10.33		C			1 S							G
106503	10.753	0.052	10.089	0.045		0.615	0.058	T	0.68	0.05	L	10.1888	0.0026	0.023	95		10.14	10.22		C			1							G
106504	9.268	0.014	8.993	0.016		0.262	0.020	T	0.29	0.03	L	9.0490	0.0021	0.017	125		9.02	9.08		C			1							
106505						1.193	0.020	G	1.15	0.02	H	12.0386	0.0082	0.056	68		11.94	12.17					1							G
106506	9.581	0.015	8.289	0.009		1.099	0.014	T	1.06	0.01	L	8.3204	0.0016	0.015	160		8.29	8.35					1							
106507	7.877	0.008	7.952	0.010		−0.060	0.015	G	−0.04	0.01	H	7.9666	0.0010	0.010	126		7.95	7.99		C			1							
106508	8.088	0.006	8.213	0.008		−0.104	0.003	G	−0.09	0.00	H	8.2098	0.0015	0.015	180		8.18	8.24					1							S
106509	10.320	0.023	9.062	0.014		1.072	0.021	T	1.04	0.02	L	9.1138	0.0024	0.027	160		9.05	9.15					1							
106510	12.139	0.216	10.845	0.099		1.150	0.015	G	1.11	0.01	H	10.8357	0.0059	0.041	81		10.77	10.91					1 S							G
106511	11.179	0.070	9.665	0.034		1.273	0.061	T	1.23	0.06	L	9.6862	0.0036	0.018	57		9.66	9.74		C			1							
106512	8.924	0.014	8.247	0.012		0.602	0.015	G	0.67	0.01	H	8.2963	0.0021	0.016	77		8.27	8.32		C			1							S
106513	8.688	0.014	8.110	0.013		0.528	0.015	G	0.60	0.02	H	8.1671	0.0015	0.012	81		8.14	8.18		C			1							S
106514	11.739	0.104	10.909	0.077		0.747	0.098	T	0.79	0.07	L	11.0048	0.0054	0.033	98		10.93	11.06		C			1 X S							G
106515	8.372	0.011	7.064	0.007		1.111	0.010	T	1.07	0.01	L	7.1143	0.0012	0.012	115		7.10	7.13			21345+6645	I 2	1							S
106516	8.534	0.012	8.150	0.012		0.371	0.012	G	0.43	0.01	H	8.1946	0.0013	0.013	91		8.16	8.22					1							S
106517	9.055	0.014	8.969	0.017		0.090	0.015	G	0.10	0.02	H	8.9982	0.0022	0.019	121		8.97	9.03					1							
106518	6.140	0.003	6.162	0.004		−0.015	0.005	T	0.01	0.01	L	6.1703	0.0007	0.006	128		6.16	6.18					1							S
106519						0.581	0.015	G	0.65	0.01	H *	7.8916	0.0015	0.013	87	*	7.88	7.92		D	21345+0930	I 1	2 C A	AB	239	7.156	0.012	2.31	0.05	S
106520	9.566	0.020	9.105	0.020		0.448	0.022	T	0.52	0.02	L	9.1687	0.0022	0.019	83		9.14	9.21		C			1							
106521	8.930	0.013	8.735	0.015		0.250	0.015	G	0.28	0.02	H	8.7578	0.0020	0.016	113		8.73	8.78		C			1							
106522	10.068	0.035	9.892	0.043		0.161	0.053	T	0.18	0.06	L	9.8511	0.0030	0.020	74		9.82	9.89		C			1							
106523	10.160	0.029	8.499	0.014		1.389	0.025	T	1.36	0.03	L	8.5056	0.0015	0.014	95		8.48	8.54		C			1							
106524	9.632	0.022	9.092	0.021	B	0.506	0.027	T	0.58	0.03	L	9.3487	0.0381			B				D	21346+5906	I 2	1 C I A							
106525	11.219	0.090	9.186	0.027		1.721	0.077	T	1.77	0.20	O	9.1119	0.0042	0.021	57		9.08	9.17					1							
106526	9.486	0.021	7.963	0.012		1.280	0.019	T	1.24	0.02	L	7.9707	0.0015	0.013	88		7.94	8.00					1							
106527	7.063	0.004	6.523	0.004		0.513	0.004	T	0.59	0.00	L	6.5674	0.0006	0.008	141		6.55	6.58		C			1							S
106528	11.301	0.071	9.397	0.022		1.615	0.061	T	1.73	0.16	O	9.3223	0.0042	0.032	105		9.28	9.38		U			1							
106529	9.346	0.016	9.036	0.018		0.294	0.023	T	0.34	0.03	L	9.0881	0.0021	0.017	121		9.06	9.11					1							
106530	8.979	0.015	8.417	0.014	A	0.493	0.015	G	0.57	0.02	H	8.4984	0.0263	0.134	115	A	8.32	8.70		D	21346+5906	I 2	1 C P A							
106531	9.298	0.012	8.816	0.012		0.432	0.001	G	0.50	0.00	H	8.8639	0.0017	0.020	167		8.83	8.90		C			1							
106532	10.230	0.035	8.810	0.018		1.199	0.031	T	1.16	0.03	L	8.8314	0.0023	0.017	69		8.80	8.88		C			1							
106533	10.415	0.038	8.774	0.017		1.373	0.033	T	1.34	0.04	L	8.8087	0.0021	0.015	73		8.78	8.83		C			1							
106534						1.204	0.003	G	1.16	0.00	H	10.9170	0.0049	0.037	65		10.85	10.99					1							G
106535	7.816	0.007	7.631	0.007		0.170	0.015	G	0.19	0.01	H	7.6684	0.0012	0.012	144		7.65	7.69					1							S
106536	8.029	0.010	7.828	0.011		0.190	0.015	G	0.21	0.02	H	7.8881	0.0014	0.013	117		7.87	7.91		C			1							S
106537	8.585	0.008	8.196	0.008		0.380	0.010	T	0.44	0.01	L	8.2470	0.0017	0.018	168		8.22	8.28					1							S
106538	8.728	0.011	7.173	0.006		1.305	0.010	T	1.27	0.01	L	7.1851	0.0010	0.009	111		7.17	7.20		C	21345+6645	I 2	1							S
106539	8.325	0.013	7.998	0.013		0.344	0.015	G	0.40	0.02	H	8.0198	0.0019	0.017	85		7.99	8.05			21347−0724	I 1	1							S
106540	10.055	0.024	8.392	0.011		1.390	0.021	T	1.36	0.03	L	8.3680	0.0016	0.012	96		8.35	8.39					1							S
106541	8.385	0.014	7.016	0.007		1.159	0.012	T	1.12	0.01	L	7.0495	0.0017	0.010	70		7.03	7.07		C			1							S
106542	10.615	0.040	10.069	0.040		0.512	0.051	T	0.58	0.05	L	10.0988	0.0031	0.024	91		10.07	10.14		C			1							
106543	8.998	0.017	8.370	0.015		0.584	0.020	T	0.66	0.02	L	8.4318	0.0020	0.013	57		8.41	8.45		C			1							S
106544	8.318	0.014	6.677	0.011		1.398	0.015	T	3.05	0.05	O	6.2986	0.0152	0.073	77		6.23	6.47		U 2			1 S							S
106545	9.078	0.020	7.829	0.013		1.065	0.019	T	1.03	0.02	L	7.8728	0.0017	0.012	55		7.85	7.92		C			1							S
106546						1.290	0.007	G	1.48	0.01	I	11.2472	0.0055	0.043	103		11.16	11.33					1							G
106547	9.788	0.021	9.257	0.020		0.506	0.022	T	0.58	0.02	L	9.3175	0.0019	0.021	101		9.27	9.36					1							
106548	10.176	0.020	8.759	0.011		1.197	0.018	T	1.16	0.02	L	8.8114	0.0021	0.023	177		8.77	8.85					1							
106549	10.946	0.043	9.379	0.019		1.315	0.037	T	1.28	0.04	L	9.3956	0.0016	0.014	123		9.37	9.43					1							
106550	8.109	0.008	6.619	0.005		1.254	0.007	T	1.21	0.01	L	6.6359	0.0010	0.010	125		6.62	6.65					1							S
106551	6.279	0.003	4.993	0.002		1.085	0.001	G	1.06	0.03	C	5.0402	0.0005	0.005	184		5.03	5.05		C			1							S
106552	11.497	0.067	10.313	0.036		1.015	0.059	T	0.99	0.05	L	10.3915	0.0038	0.046	183		10.30	10.46		R			1							G
106553	8.065	0.007	7.773	0.008		0.278	0.010	T	0.32	0.01	L	7.8262	0.0010	0.012	144		7.80	7.85		C			1							S
106554	8.156	0.007	7.002	0.005		0.991	0.007	T	0.97	0.01	L	7.0579	0.0007	0.010	198		7.04	7.08		C			1							S
106555	11.359	0.073	10.255	0.044		0.805	0.003	G	0.85	0.00	H	10.4892	0.0025	0.021	93		10.46	10.53		C			1							
106556	10.115	0.026	9.843	0.030		0.238	0.015	G	0.27	0.02	H	9.9080	0.0020	0.021	108		9.87	9.94		C			1							
106557						1.800	0.495	G	3.14	1.65	I	11.8719	0.0081	0.061	108		11.77	11.97					1							G
106558	9.794	0.016	8.218	0.008		1.322	0.014	T	1.28	0.02	L	8.2212	0.0014	0.016	215		8.19	8.25		C			1							
106559	6.181	0.004	5.748	0.004		0.423	0.005	T	0.49	0.01	L	5.7931	0.0007	0.004	72		5.79	5.80					1							S
106560	8.869	0.012	8.195	0.010		0.622	0.009	G	0.69	0.01	H	8.2568	0.0014	0.013	102		8.24	8.28		C			1 G							S
106561	10.183	0.035	8.286	0.014		1.609	0.031	T	2.23	0.07	O	8.1278	0.0025	0.024	69		8.09	8.17		U			1							
106562	10.106	0.021	9.479	0.019		0.579	0.021	T	0.65	0.02	L	9.6044	0.0023	0.027	160		9.56	9.65		C			1							
106563	8.431	0.008	7.991	0.008		0.453	0.003	G	0.52	0.00	H	8.0388	0.0012	0.013	169		8.01	8.06		C			1							S
106564	6.287	0.004	6.414	0.005		−0.097	0.001	G	−0.08	0.00	H	6.3963	0.0008	0.005	85		6.39	6.41		C			1							S
106565						1.500	0.510	G	1.53	0.76	K	11.9542	0.0731	0.677	37		11.08	12.94					1 V							D P
106566	7.836	0.008	6.827	0.006		0.885	0.002	G	0.89	0.00	H	6.8793	0.0010	0.010	85		6.86	6.89		C			1							S
106567	10.759	0.033	10.053	0.029		0.637	0.033	T	0.70	0.03	L	10.0812	0.0026	0.025	153		10.03	10.13		C			1							
106568	7.314	0.007	6.793	0.006		0.498	0.007	T	0.57	0.01	L	6.8456	0.0009	0.008	72		6.84	6.86		C			1							S
106569	11.029	0.046	8.952	0.015		0.720	0.126	G	1.72	0.09	S	8.8994	0.0035	0.029	120		8.86	8.95		R			1 S							
106570	9.520	0.017	9.562	0.025		−0.034	0.028	T	−0.01	0.03	L	9.5847	0.0031	0.028	138		9.52	9.63					1							G
106571	7.761	0.007	7.814	0.010		−0.050	0.015	G	−0.03	0.01	H	7.8166	0.0014	0.012	122		7.79	7.84		C			1							S
106572	7.504	0.006	7.449	0.007		0.046	0.004	G	0.06	0.00	H	7.4639	0.0008	0.008	131		7.45	7.48					1							S
106573	9.114	0.011	8.520	0.010		0.534	0.011	G	0.61	0.01	H	8.5822	0.0012	0.016	188		8.56	8.61					1							S
106574	10.979	0.036	10.576	0.042		0.394	0.046	T	0.46	0.05	L	10.6380	0.0205	0.237	245		10.47	11.04	0.47	P 1 A			1 S							G
106575	9.713	0.022	9.016	0.019		0.630	0.022	T	0.70	0.02	L	9.1097	0.0036	0.028	66		9.07	9.15					1							
106576	9.106	0.014	9.069	0.018		0.041	0.002	G	0.06	0.00	H	9.1143	0.0018	0.015	91		9.09	9.14		C			1							
106577	9.729	0.021	9.074	0.019		0.599	0.021	T	0.67	0.02	L	9.0997	0.0016	0.018	117		9.06	9.13					1							
106578	6.669	0.004	6.789	0.005		−0.104	0.006	T	−0.09	0.01	L	6.7814	0.0007	0.007	133		6.77	6.79					1							S
106579	11.608	0.080	9.785	0.026		1.548	0.069	T	2.04	0.55	K	9.5930	0.0079	0.068	122		9.50	9.73		U 2			1 S							P
106580	10.398	0.036	9.123	0.021		1.086	0.033	T	1.05	0.03	L	9.1371	0.0020	0.018	86		9.11	9.17		C			1							
106581	10.781	0.041	9.693	0.026		0.940	0.037	T	0.93	0.03	L	9.7627	0.0026	0.024	120		9.72	9.81		C			1							
106582	7.834	0.009	7.301	0.009	A	0.100	0.495	G	0.57	0.03	L *	7.2812	0.0009	0.008	140	*	7.27	7.29		D	21352+2124	I 1	2 C A	AB	333	1.098	0.004	1.63	0.02	S
106583	13.135	0.406	8.286	0.011		2.700	0.510	G	2.70	0.52	J	7.4679	0.0451	0.627	116		6.38	8.23	486.00	P 1 B			1 V							P
106584	10.087	0.037	9.856	0.046		0.220	0.055	T	0.24	0.06	L	9.8996	0.0037	0.019	51		9.85	9.93		C			1							
106585	8.014	0.008	7.969	0.012		0.046	0.013	T	0.06	0.01	L	7.9863	0.0017	0.013	110		7.97	8.01		C			1							S
106586	7.428	0.004	6.915	0.005		0.492	0.005	T	0.56	0.01	L	6.9731	0.0006	0.006	126		6.96	6.98		C			1							S
106587	8.757	0.011	8.639	0.014		0.114	0.017	T	0.13	0.02	L	8.6882	0.0019	0.018	128		8.66	8.72		C			1							
106588	10.847	0.030	10.118	0.025		0.645	0.005	G	0.71	0.00	H	10.2000	0.0024	0.034	228		10.15	10.26					1							
106589	8.636	0.007	8.345	0.008		0.277	0.010	T	0.31	0.01	L	8.3914	0.0012	0.016	259		8.36	8.42		C			1							
106590	7.804	0.009	6.510	0.004		1.098	0.003	G	1.06	0.00	H	6.5530	0.0010	0.007	81		6.54	6.57		C			1							S
106591	8.521	0.011	8.015	0.010		0.486	0.011	T	0.56	0.01	L	8.0582	0.0013	0.010	82		8.04	8.08		C			1							S
106592	7.212	0.009	5.901	0.006		1.110	0.000	G	1.07	0.00	H	5.9559	0.0011	0.007	71		5.95	5.97		C			1							S
106593	9.898	0.022	8.683	0.014		1.039	0.020	T	1.01	0.02	L	8.7315	0.0021	0.015	96		8.70	8.76					1							
106594	8.441	0.012	7.996	0.013		0.432	0.015	G	0.50	0.02	H	8.0519	0.0011	0.012	75		8.04	8.07		C			1							S
106595	6.668	0.004	6.291	0.004		0.357	0.005	T	0.42	0.01	L	6.3374	0.0007	0.007	133		6.33	6.35		C			1							S
106596	9.354	0.017	9.265	0.021	A	0.110	0.015	G	0.12	0.01	H *	9.2220	0.0029	0.020	121	*	9.19	9.26		D	21354+5210	I 1	2 C A	AB	264	3.571	0.018	2.44	0.12	
106597	8.426	0.006	8.338	0.008		0.086	0.009	T	0.10	0.01	L	8.3695	0.0012	0.016	254		8.34	8.40		C			1							S
106598	9.822	0.028	8.820	0.020		0.876	0.026	T	0.89	0.02	L	8.8492	0.0028	0.018	63		8.82	8.88					1							
106599	12.589	0.243	10.691	0.070		1.576	0.201	T	1.59	0.21	L	10.8319	0.0039	0.032	108		10.78	10.89		C			1							G Y
106600	10.267	0.033	8.252	0.012		1.706	0.029	T	2.04	0.08	O	8.1338	0.0047	0.036	81		8.07	8.19		U 2			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas			mas/yr												%	
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
106601	21 35 23.22	+00 58 32.6	7.27	H	323.846 755 53	+00.975 733 98	16.59	−99.92	−84.36	0.93	0.52	1.05	1.31	0.56	+23	+ 1	− 5	+28	−10	+42	+ 0	+21	+29	+51	0	1.63
106602 H	21 35 24.36	−51 04 11.6	9.80	H	323.851 515 01	−51.069 892 05 A	3.68	9.51	−9.31	3.33	2.73	3.43	2.89	1.86	+35	− 1	− 1	+24	+14	+ 7	+12	+16	−10	+14	0	0.82
106603	21 35 25.80	−00 58 52.6	10.24	H	323.857 483 22	−00.981 273 83	3.56	25.87	19.70	1.76	1.09	1.97	2.20	1.20	+37	−13	− 4	−21	− 8	+26	−11	− 7	+20	+52	0	0.93
106604	21 35 25.91	+68 13 09.3	6.47	1 H	323.857 957 50	+68.219 251 48	5.28	17.80	15.72	0.48	0.42	0.49	0.62	0.50	−20	− 6	+ 3	− 6	+ 4	+ 4	+ 3	−10	+15	−23	0	0.75
106605 H	21 35 27.03	+24 27 07.9	6.22	H	323.862 619 65	+24.452 186 95 A	4.73	11.99	−10.83	1.19	1.33	0.72	0.68	0.57	−26	− 1	−18	− 2	+ 1	− 4	− 1	−31	+38	− 5	1	−0.14
106606	21 35 29.15	+48 29 37.3	8.70	H	323.871 439 50	+48.493 705 82	3.68	−0.64	−5.88	0.66	0.70	0.89	0.82	0.85	−18	+ 3	+10	− 3	− 4	−11	− 2	+13	+11	−22	0	−0.49
106607	21 35 29.26	+18 58 02.2	7.94	H	323.871 911 74	+18.967 289 20	9.03	15.13	−25.38	0.64	0.65	0.92	0.78	0.69	+44	− 1	− 2	− 9	− 9	−23	−14	−46	+ 0	+34	0	0.44
106608	21 35 32.41	+40 11 45.5	8.92	H	323.885 032 97	+40.195 965 67	3.52	7.73	−2.91	0.71	0.76	1.07	0.83	0.85	−20	− 6	+ 6	+ 4	+10	−11	+ 9	+ 8	+20	−24	0	−1.38
106609	21 35 32.52	−11 46 54.2	11.08	H	323.885 490 78	−11.781 734 08	8.56	10.39	−6.86	4.52	2.77	5.48	8.65	2.93	+ 4	+18	+ 3	+24	− 5	+55	−15	−27	+11	−20	7	1.99
106610	21 35 34.14	−11 47 22.3	8.60	G	323.892 269 93	−11.789 516 61	7.04	33.97	−1.76	1.76	0.98	1.94	3.20	1.15	− 9	+28	− 9	+45	−22	+56	−18	− 6	+13	−13	0	−0.80
106611	21 35 34.20	+23 58 39.3	7.64	H	323.892 489 63	+23.977 586 16	4.66	7.58	14.13	0.68	0.59	0.90	0.82	0.67	+ 9	+ 8	−27	−12	− 8	−13	−10	−46	+24	+ 5	0	−0.28
106612 H	21 35 34.90	+34 46 20.1	8.77	H	323.895 402 97	+34.772 247 96 A	3.35	6.68	12.90	0.98	1.23	1.54	0.91	1.08	−17	+19	− 2	+ 8	+24	−15	+33	+ 4	+24	−13	0	0.23
106613	21 35 39.57	+53 08 54.8	8.84	H	323.914 865 60	+53.148 545 64	1.91	2.08	−0.27	0.73	0.75	0.88	0.85	0.80	−12	+ 1	− 6	−17	+ 1	− 6	+ 0	−15	+ 6	+ 2	1	−1.35
106614	21 35 39.69	+40 08 04.4	8.17	H	323.915 375 08	+40.134 564 71	6.22	19.55	16.54	0.53	0.59	0.82	0.62	0.68	−22	+ 0	− 4	+14	+ 1	− 2	+ 1	+12	+14	−26	0	−2.17
106615	21 35 40.55	−59 41 35.3	7.84	H	323.918 944 46	−59.693 136 97	12.25	−24.90	−26.79	0.64	0.53	1.02	0.80	0.62	−29	−16	+ 8	−13	+11	+15	+11	+ 2	−10	−29	1	2.29
106616	21 35 40.76	+45 51 26.6	8.75	H	323.919 828 55	+45.857 380 35	−0.33	−6.04	−7.13	0.75	0.76	1.01	0.96	0.93	−13	+14	+ 6	+31	− 3	+29	− 5	− 3	− 5	−13	0	−1.21
106617	21 35 40.98	−09 59 03.5	8.31	H	323.920 738 69	−09.984 296 11	4.91	−9.08	−17.80	1.12	0.79	1.30	1.84	0.90	+13	+ 8	−25	+14	−15	+31	− 9	−26	+22	+ 4	0	0.49
106618	21 35 42.29	−62 58 07.1	7.52	H	323.926 192 77	−62.968 645 05	6.03	65.08	−61.27	0.51	0.53	0.89	0.61	0.60	− 9	−13	−12	+23	+ 9	+ 6	+13	+ 2	−13	− 3	0	0.77
106619	21 35 42.44	−42 02 09.1	9.21	H	323.926 851 33	−42.035 857 00	10.05	4.56	−43.44	1.38	0.94	1.43	2.16	0.96	− 3	− 6	−38	−45	+15	+28	+10	−13	+20	+25	0	0.71
106620	21 35 44.48	+29 44 44.0	8.15	2 H	323.935 320 62	+29.745 552 21	1.82	0.76	−10.91	0.55	0.52	0.90	0.67	0.64	−15	− 4	− 9	+37	− 1	−21	+ 2	+ 4	+10	− 3	0	−0.79
106621	21 35 44.93	−16 39 20.2	8.77	H	323.937 201 96	−16.655 605 62	4.29	−14.71	−33.19	2.27	1.57	2.52	3.02	1.59	+32	−10	− 9	+ 0	−42	+26	−34	− 3	+11	+33	0	
106622	21 35 45.74	+31 00 34.9	7.91	H	323.940 574 89	+31.009 682 26	3.21	26.00	11.19	0.53	0.57	0.88	0.71	0.69	−10	+ 1	−19	+40	− 9	− 4	− 6	−14	+ 0	− 3	1	0.58
106623	21 35 46.67	−32 27 41.1	9.61	H	323.944 477 18	−32.461 423 59	5.38	−8.45	−20.25	1.23	0.77	1.44	1.40	0.78	+36	− 2	− 1	− 6	−29	+27	−26	+ 5	−10	+21	0	1.43
106624	21 35 47.06	−57 09 24.9	8.70	H	323.946 066 42	−57.156 909 16	2.24	80.48	−22.20	0.96	0.58	1.26	1.30	0.65	−11	−10	−13	− 1	+37	−22	+24	+36	−29	+16	1	0.27
106625	21 35 48.85	+17 29 53.9	7.89	H	323.953 548 22	+17.498 298 05	2.38	14.80	−2.44	0.86	0.63	1.04	1.26	0.68	+32	+12	− 3	−40	−18	−14	−19	−46	+ 2	+26	0	0.08
106626	21 35 50.18	+50 46 48.6	8.74	G	323.959 086 51	+50.780 157 83	−0.03	−2.09	−6.06	0.68	0.66	0.83	0.77	0.77	− 7	−13	+ 4	− 5	+ 6	+ 2	+ 3	+12	+ 3	+ 9	0	1.55
106627	21 35 51.16	−62 30 49.9	8.94	H	323.963 162 96	−62.513 862 52	1.63	11.96	−15.70	0.65	0.69	1.10	0.80	0.83	+ 3	−17	−13	+19	+10	+ 4	+13	+ 6	−13	+ 0	0	1.05
106628	21 35 51.66	+47 54 42.8	9.11	2 G	323.965 245 36	+47.911 878 69	0.60	−2.71	−3.62	0.72	0.75	0.93	0.87	0.90	−16	−11	+ 0	+ 8	+ 4	−11	+ 2	+12	+13	−26	0	0.16
106629	21 35 52.30	+37 49 48.8	9.03	H	323.967 934 94	+37.830 225 62	−0.48	0.28	−3.07	0.64	0.70	1.12	0.79	0.83	−22	− 5	− 7	+20	+ 6	−35	+ 2	+ 8	+25	−31	0	−0.11
106630	21 35 52.47	+23 57 53.3	7.28	H	323.968 622 13	+23.964 803 96	5.21	27.31	5.07	0.67	0.54	0.85	0.80	0.63	+ 8	+ 0	−15	+ 2	− 7	−16	− 9	−37	+27	+ 3	1	−1.82
106631	21 35 52.66	−15 41 46.6	8.77	H	323.969 418 21	−15.696 266 52	2.84	−4.42	−29.89	1.12	0.73	1.23	1.51	0.76	+18	−12	−16	+17	−40	+30	−30	+13	+17	+21	2	−0.43
106632	21 35 55.56	+00 40 51.5	8.75	H	323.981 514 55	+00.680 980 67 A	14.48	−144.64	51.42	3.09	1.93	2.57	3.59	1.76	+39	−11	− 6	+13	−16	+16	− 8	+ 3	+ 9	+55	9	2.16
106633	21 35 55.90	+00 40 41.3	10.00	H	323.982 920 53	+00.678 138 55 B	18.93	−141.79	54.26	11.93	7.40	7.85	10.81	5.24	+41	−13	− 2	+ 9	−20	+17	−11	− 2	+ 9	+56	9	2.16
106634	21 35 55.98	−51 22 08.4	10.20	H	323.983 251 19	−51.368 986 70	8.34	17.21	−2.04	1.43	1.22	1.97	1.83	1.11	+26	+ 4	− 5	+29	+20	+17	+15	+12	− 1	+10	2	0.24
106635	21 35 56.44	+26 22 10.6	9.25	G	323.985 154 92	+26.369 598 39 A	3.86	40.18	9.10	3.92	3.37	3.65	3.99	3.29	+23	− 2	−16	−12	−14	−24	−22	−62	+22	+ 8	18	2.30
106636	21 35 56.50	+49 53 15.4	9.61	H	323.985 423 09	+49.887 622 88	0.74	−2.46	−6.47	0.86	0.82	1.05	1.09	1.03	− 9	−17	+ 8	−24	+ 4	− 9	− 2	+20	− 3	+ 8	2	0.76
106637	21 35 57.32	+26 22 11.7	9.27	G	323.988 825 11	+26.369 905 16 B	−0.56	34.78	6.23	7.33	6.63	3.94	5.22	4.99	+17	−16	−14	+ 9	− 9	−29	−20	−47	+27	+ 6	18	2.30
106638	21 35 58.88	−61 00 09.7	9.04	H	323.995 330 65	−61.002 703 86	3.49	2.00	4.38	0.83	0.71	1.36	1.29	0.82	−20	+ 4	−25	−18	+23	− 1	+18	+12	− 7	−20	1	0.50
106639	21 36 00.13	−46 40 57.8	12.57	H	324.000 521 74	−46.682 715 50 B	1.22	−2.98	−5.26	48.21	33.80	4.00	3.14	2.10	+31	+ 3	+14	+ 1	− 1	+ 4	− 4	+ 2	− 3	+12	2	1.54
106640	21 36 00.51	−46 41 08.5	10.25	H	324.002 112 37	−46.685 683 87 A	1.22	−2.98	−5.26	3.49	2.77	4.00	3.14	2.10	+28	−24	−15	+ 8	+12	+ 4	+15	+24	− 3	+12	2	1.54
106641	21 36 01.73	+87 47 01.6	8.37	H	324.007 222 40	+87.783 782 87	10.07	38.77	40.81	0.75	0.62	0.75	0.93	0.75	+15	− 2	+19	+ 8	− 2	−10	− 5	− 3	− 0	+21	0	−0.28
106642	21 36 02.44	+45 22 28.5	5.96	3 H	324.010 175 60	+45.374 586 83	5.28	64.44	1.85	0.49	0.48	0.63	0.61	0.59	−11	+13	+ 2	+20	+ 3	+14	+ 0	+ 4	−12	−20	0	1.11
106643	21 36 05.09	+15 04 56.0	6.50	H	324.021 198 68	+15.082 209 68	7.30	−82.80	−88.95	0.72	0.49	0.83	1.01	0.52	+ 9	− 1	−14	+ 4	+ 1	+16	+ 1	−34	+27	+13	2	1.16
106644	21 36 06.57	−67 20 01.6	8.45	H	324.027 357 42	−67.333 769 60	1.44	−8.40	−9.34	0.65	0.68	0.99	0.72	0.78	−28	+ 1	− 6	+ 6	−15	− 6	−12	+31	+ 1	−38	0	−0.51
106645	21 36 08.47	+03 13 50.4	12.05	3 H	324.035 298 25	+03.230 672 45	−0.53	−39.84	−47.04	2.60	1.80	2.97	3.94	2.11	+23	− 4	−19	+26	+ 0	+22	+ 5	+10	+25	+33	2	0.84
106646	21 36 08.54	+41 55 57.1	7.81	H	324.035 583 82	+41.932 524 48	1.11	1.91	−4.34	0.57	0.61	0.88	0.61	0.68	−21	−15	+16	− 9	+ 8	− 5	+ 4	− 5	+29	−21	0	−0.80
106647	21 36 08.89	+37 52 35.3	8.02	H	324.037 041 67	+37.876 461 46	1.17	15.59	9.93	0.47	0.54	0.82	0.52	0.60	−26	− 4	− 2	+ 8	+13	−21	+13	+ 3	+10	−21	0	0.54
106648	21 36 09.23	+63 42 03.3	7.90	H	324.038 442 43	+63.700 925 38	3.20	16.68	2.63	0.59	0.55	0.62	0.67	0.56	− 3	+ 5	+ 4	+41	+ 3	+ 0	+ 8	−11	+13	+ 7	0	0.17
106649	21 36 09.38	−77 18 13.3	12.16	3 H	324.039 070 17	−77.303 690 94	5.77	−3.83	−29.41	2.98	3.00	3.79	3.93	3.54	−19	+ 1	− 7	− 6	−15	+ 0	− 9	+14	+19	−36	3	−0.18
106650	21 36 09.42	+48 40 02.2	8.75	G	324.039 269 93	+48.667 267 68	2.14	8.27	4.47	0.71	0.71	0.92	0.90	0.83	−17	+ 3	+12	− 2	− 2	−12	+ 0	+ 4	+13	−20	0	−0.75
106651	21 36 09.73	+50 30 07.3	7.16	H	324.040 525 17	+50.502 024 87	4.84	28.52	21.03	0.52	0.52	0.65	0.57	0.62	−14	−10	+ 6	− 8	+ 8	+ 3	+ 5	+16	− 7	+ 4	1	0.02
106652	21 36 09.85	−47 57 18.5	8.81	2 H	324.041 031 38	−47.955 146 17	3.41	13.21	−9.01	0.91	0.72	1.18	0.89	0.65	+35	−28	−20	+ 2	+37	− 3	+34	+35	−14	+41	0	−1.17
106653	21 36 10.42	−13 52 06.2	9.31	3 H	324.043 403 72	−13.868 392 33	0.65	5.05	−3.87	1.37	1.15	1.68	1.87	1.18	+45	−28	−27	−13	−24	+32	−31	−41	+37	+22	0	2.56
*106654	21 36 10.90	−26 10 17.2	5.73	H	324.045 433 29	−26.171 457 12	18.57	107.81	−24.30	0.68	0.47	0.79	0.79	0.47	+33	− 7	−22	−18	−26	+35	−19	+ 1	+ 0	+29	2	1.64
*106655	21 36 10.82	−01 18 18.3	9.95	H	324.045 087 19	−01.305 087 34	3.22	19.62	−33.73	1.54	0.97	1.78	2.11	1.08	+37	− 3	−19	−22	−21	+33	−16	−17	+24	+54	0	0.01
106656	21 36 11.37	+44 25 37.9	8.90	H	324.047 375 07	+44.427 184 65	2.53	1.02	−3.46	0.71	0.70	0.95	0.86	0.81	−13	+14	−13	+ 7	− 2	− 5	− 5	+ 2	−13	−19	0	2.75
106657	21 36 12.84	+38 46 29.8	7.93	H	324.053 485 93	+38.774 953 44	6.24	55.91	−25.12	0.50	0.56	0.82	0.57	0.64	−17	+12	+ 4	+12	+ 0	−12	+ 0	+ 7	− 0	−14	0	0.13
106658	21 36 13.33	+50 40 44.7	7.27	H	324.055 522 71	+50.679 083 68	1.65	4.16	−2.99	0.51	0.51	0.64	0.57	0.60	−16	−17	+ 4	− 8	+ 6	+ 0	+ 3	+19	− 8	+ 2	0	0.11
106659 H	21 36 13.80	+51 39 18.5	8.28	H	324.057 505 11	+51.655 138 81 A	4.80	20.54	−6.66	0.93	1.12	0.96	0.85	0.92	− 5	− 9	−11	+14	+10	−14	+ 9	+22	+ 2	+ 6	1	−1.07
*106660	21 36 14.03	+06 08 14.1	7.72	G	324.058 461 08	+06.137 243 95	2.91	13.38	−9.94	0.80	0.62	0.98	1.17	0.74	+26	+ 4	− 2	+12	− 7	+31	− 2	− 9	+22	+42	0	−0.22
*106661 H	21 36 14.02	+30 03 19.0	6.36	G	324.058 405 94	+30.055 276 42 A	9.14	−52.47	59.73	0.55	0.54	0.79	0.57	0.63	−10	−14	+ 2	+41	− 1	−29	+ 5	− 4	+ 2	+ 5	2	0.20
106662	21 36 14.20	+44 45 45.0	9.43	1 H	324.059 152 57	+44.762 503 85	1.34	−0.20	−3.77	0.83	0.73	1.05	1.08	0.87	− 5	+23	+ 2	+22	− 3	− 4	− 6	+10	− 2	−23	1	1.40
106663	21 36 14.67	−33 42 27.3	9.84	H	324.061 136 13	−33.707 576 45	5.15	−13.77	−7.87	1.26	0.72	1.61	1.65	0.74	+29	+13	+ 1	+18	−19	+51	−17	+23	+ 2	+15	0	0.74
106664	21 36 14.80	+08 36 57.0	8.94	H	324.061 677 65	+08.615 834 62	0.08	16.86	−1.30	0.97	0.81	1.15	1.19	0.87	+41	− 3	+12	− 6	+ 1	+22	− 2	+ 0	+ 2	+50	0	−0.62
106665	21 36 15.90	+49 20 56.8	8.68	G	324.066 235 62	+49.349 109 73	0.79	−3.07	−3.55	0.73	0.70	0.87	0.96	0.85	−13	− 7	+10	−40	− 3	− 2	+ 1	+ 2	+ 1	−21	0	1.25
106666	21 36 17.02	+09 47 04.7	7.85	H	324.070 923 63	+09.784 647 90	4.99	−8.54	−30.79	0.95	0.62	1.04	1.24	0.64	+26	− 4	+ 5	− 5	−19	−10	−15	−24	+ 9	+33	0	−1.03
106667 H	21 36 17.06	+16 27 23.3	9.02	H	324.071 083 49	+16.456 483 98 A	4.93	−11.99	−40.08	5.81	6.33	3.91	4.34	3.02	+23	+ 0	− 4	− 6	− 6	+ 3	− 5	−27	+23	+13	0	1.39
106668	21 36 17.33	−54 25 52.3	9.25	H	324.072 188 51	−54.431 206 55	13.22	33.87	−24.40	1.08	0.74	1.35	1.43	0.80	+ 4	+ 2	+ 2	+ 9	+16	+ 0	+18	+42	+ 1	−12	0	−0.10
106669	21 36 17.75	−37 16 01.6	9.44	H	324.073 943 20	−37.267 120 42	8.11	40.03	−82.63	1.20	0.71	1.31	1.53	0.80	+25	−13	+ 0	−15	− 6	+25	− 7	+22	+ 6	+28	2	0.12
106670	21 36 17.93	+48 38 29.1	8.62	H	324.074 697 81	+48.641 408 96	2.31	7.44	2.42	0.67	0.65	0.85	0.82	0.76	−18	+ 1	+10	+ 0	− 2	−10	− 1	+ 6	+13	−22	0	0.36
106671	21 36 20.17	−35 10 45.7	7.92	2 H	324.084 033 77	−35.179 369 58	3.55	18.42	−4.83	0.83	0.50	0.96	0.96	0.54	+30	− 7	+10	− 8	− 9	+21	−11	+23	+ 0	+32	0	0.04
106672	21 36 21.83	−29 17 07.9	9.97	G	324.090 939 16	−29.285 535 06	7.73	35.93	−48.90	12.85	8.50	13.75	14.16	7.55	+39	−25	−32	−42	−29	+30	−19	−21	+ 5	+27	0	
106673	21 36 22.24	−18 23 31.6	7.90	H	324.092 684 14	−18.392 108 11	9.49	−16.30	−0.90	0.92	0.67	1.15	1.12	0.73	+43	+ 9	+ 1	− 8	−23	+40	−22	+ 5	+21	+46	0	−0.23
106674	21 36 22.99	+29 32 23.2	8.24	H	324.095 775 80	+29.539 782 33	9.35	9.25	−20.28	0.72	0.57	0.99	0.87	0.68	−31	+ 5	−13	+ 9	+11	−20	+12	− 7	+11	−16	0	−0.51
106675	21 36 23.29	−40 19 48.7	7.16	2 H	324.097 020 92	−40.330 207 40	2.57	−8.86	−8.46	0.80	0.70	1.07	1.03	0.59	+ 7	− 2	−48	− 4	−30	+43	−10	−32	+19	+12	0	2.16
106676 H	21 36 24.11	−40 40 46.6	8.57	G	324.100 441 09	−40.679 598 27 A	8.09	−9.61	5.93	2.65	3.21	1.85	2.13	1.39	+17	− 2	−18	+ 7	−15	+35	−14	−17	+16	+11	0	−1.15
106677	21 36 25.16	+07 52 58.6	7.68	H	324.104 847 37	+07.882 933 99	6.23	−17.96	−91.84	1.59	1.23	1.86	1.90	1.32	+32	− 6	−21	− 9	−17	+20	−12	−30	+16	+43	0	
106678	21 36 25.83	+18 38 04.5	8.62	H	324.107 628 27	+18.634 581 08	13.55	208.57	103.07	0.80	0.70	1.05	1.10	0.80	+35	−14	− 8	−34	− 9	− 8	−15	−52	+ 9	+29	0	1.37
106679	21 36 27.80	−38 37 16.1	8.91	H	324.115 812 90	−38.621 138 23	6.24	−44.93	−3.13	0.87	0.73	1.12	1.06	0.69	+25	− 9	−26	+ 4	−22	+41	−14	−17	+20	+23	0	1.14
106680	21 36 28.41	−37 54 51.3	9.82	H	324.118 395 40	−37.914 237 41	1.33	−1.18	−7.94	1.24	0.88	1.53	1.45	0.92	+35	−14	−11	− 8	+ 1	+43	+ 4	+24	+ 9	+38	0	1.82
106681	21 36 28.51	−56 22 44.0	8.71	H	324.118 805 36	−56.378 880 70	1.43	1.19	−8.38	0.95	0.60	1.15	1.23	0.64	+20	−16	−11	+40	+42	+ 5	+40	+40	−16	+35	0	1.22
106682	21 36 30.03	−03 06 43.0	10.81	G	324.125 110 08	−03.111 932 11	4.41	−12.33	−7.33	1.91	1.37	2.25	2.26	1.55	+33	−25	−17	−41	−19	+45	−20	−48	+38	+49	0	1.67
106683	21 36 31.44	−54 11 28.0	8.63	G	324.130 998 63	−54.191 119 16	2.25	−8.87	−3.16	0.93	0.65	1.21	1.13	0.66	+ 2	+ 4	− 1	+ 3	+27	− 7	+23	+40	+ 1	+ 4	0	−0.83
106684	21 36 32.29	+20 31 41.8	10.47	H	324.134 549 54	+20.528 288 93	3.79	−8.68	−1.42	1.36	1.50	1.96	1.80	1.65	+27	−26	−29	−33	− 2	+ 7	−13	−70	+27	+16	0	0.14
106685	21 36 32.38	−43 50 51.1	7.98	H	324.134 915 39	−43.847 528 51	5.47	−1.56	6.09	0.72	0.64	1.09	0.72	0.59	+31	−35	−19	−25	+ 8	+11	+11	− 2	−10	+26	0	−1.66
106686	21 36 32.60	−05 03 09.0	6.93	H	324.135 835 97	−05.052 495 93	3.85	−2.59	−10.57	0.89	0.56	0.97	0.99	0.64	− 3	+ 7	−37	−43	+19	+14	+23	−28	+46	+18	0	0.87
106687	21 36 33.02	+39 28 44.3	8.55	H	324.137 567 22	+39.478 972 56	3.28	9.21	−24.17	0.69	0.70	1.03	0.73	0.77	−21	+ 8	+ 2	− 6	+14	−10	+14	+12	+13	−18	0	−1.25
106688	21 36 33.05	+33 14 03.8	7.44	H	324.137 709 79	+33.234 402 14	5.11	−19.86	−23.66	0.49	0.59	0.87	0.57	0.72	−17	+14	−24	+ 0	+ 4	+ 2	+ 9	−20	+23	− 5	1	−0.07
106689	21 36 33.61	+64 32 10.6	8.83	H	324.140 054 43	+64.536 281 76	2.04	−4.02	−2.96	0.70	0.70	0.78	0.86	0.71	−16	−22	+20	+ 4	+16	+ 7	+12	−19	+ 6	− 6	1	0.92
106690	21 36 33.79	+32 06 09.8	7.99	2 H	324.140 782 58	+32.102 720 35	2.69	27.93	26.84	0.57	0.61	0.92	0.66	0.76	−16	+ 8	−20	+24	+ 2	−19	+ 3	− 1	+ 2	+ 2	0	1.31
106691	21 36 34.34	+15 41 34.9	8.17	H	324.143 069 00	+15.693 030 78	5.63	9.29	−6.50	0.97	0.59	1.07	1.15	0.63	+ 6	−19	− 3	+ 3	+ 4	+ 4	+ 1	−39	+25	+14	0	2.01
106692	21 36 35.62	+32 25 43.1	7.84	H	324.148 428 64	+32.428 639 07	3.04	3.56	−0.87	0.58	0.61	0.87	0.66	0.74	− 7	+10	−11	+37	− 4	−16	+ 2	− 6	+14	+ 6	0	0.15
106693	21 36 36.65	−09 02 48.3	8.00	H	324.152 694 72	−09.046 751 26	4.31	18.43	−35.57	1.01	0.66	1.23	1.35	0.78	+25	− 9	−23	−17	+ 1	+12	− 3	−28	+44	+31	0	1.67
*106694 H	21 36 38.73	+39 27 21.9	10.17	2 G	324.161 368 49	+39.456 093 14 A	46.80	−207.32	−157.45	2.80	2.63	3.37	2.27	2.14	−15	+23	− 6	−12	+22	−11	+21	−11	+17	−13	4	0.81
*106695	21 36 37.80	−33 05 45.9	8.84	H	324.157 516 10	−33.096 088 42	−1.46	−3.97	−6.92	1.03	0.66	1.19	1.14	0.66	+38	−12	− 3	−20	−21	+29	−17	+13	+ 6	+28	0	−0.01
106696	21 36 40.85	−50 50 41.6	7.14	G	324.170 217 40	−50.844 900 39	67.85	424.07	−199.27	0.68	0.55	0.92	0.84	0.50	+14	+ 3	− 8	+13	+ 5	+20	+ 5	+ 8	+ 6	− 5	0	0.86
106697	21 36 43.27	+11 52 10.2	8.27	H	324.180 287 29	+11.869 503 74	3.39	−2.99	−7.87	0.97	0.70	1.09	1.22	0.73	+29	− 2	− 4	−11	−17	−18	−17	−36	+11	+28	0	−2.42
106698	21 36 43.34	−13 27 33.3	8.67	H	324.180 601 43	−13.459 261 72	5.19	−27.38	−34.66	1.05	0.94	1.41	1.73

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
106601	7.950	0.008	7.338	0.008		0.570	0.010	T	0.64	0.01	L	7.3890	0.0011	0.009	91		7.38	7.41		C			1							S
106602	11.200	0.068	10.189	0.045	A						T *	9.9544	0.0037	0.033	90	*	9.89	10.01		D	21354−5104	I 1	2 C A	AB	3	9.305	0.017	1.22	0.05	
106603	11.829	0.139	10.378	0.059		1.223	0.119	T	1.18	0.12	L	10.3936	0.0045	0.027	70		10.36	10.45		C			1							G
106604	6.361	0.004	6.457	0.005		−0.083	0.006	T	−0.06	0.01	L	6.4480	0.0033	0.024	116		6.41	6.47	8.34	P 1 A			1							S
106605	6.403	0.003	6.248	0.003	*	0.141	0.004	T	0.16	0.00	L *	6.2741	0.0010	0.007	133	*	6.26	6.29		D	21355+2427	I 1	2 C A	AB	303	0.301	0.002	0.45	0.02	S
106606	8.747	0.012	8.702	0.015		0.046	0.018	T	0.06	0.01	L	8.7240	0.0020	0.016	116		8.70	8.75					1							
106607	8.490	0.007	7.994	0.007		0.468	0.015	G	0.54	0.02	H	8.0477	0.0010	0.013	186		8.03	8.08					1							S
106608	11.214	0.059	9.177	0.018		1.687	0.049	T	1.71	0.05	L	9.0305	0.0017	0.021	167		8.99	9.07					1 S							
106609	11.941	0.214	11.008	0.145							T	11.2222	0.0107	0.052	51		11.06	11.29		D	21356−1147	I 2	1							
106610	9.065	0.020	8.662	0.020		0.427	0.100	G	0.38	0.07	L	8.7083	0.0040	0.018	56		8.67	8.73		D	21356−1147	I 2	1							S
106611	8.848	0.013	7.734	0.009		0.960	0.012	T	0.95	0.01	L	7.8069	0.0013	0.012	121		7.79	7.83					1							
106612	9.964	0.017	8.891	0.011	*	0.929	0.015	T	0.92	0.01	L *	8.9362	0.0016	0.022	241	*	8.90	8.97		D	21356+3446	M 1	2 C A	AB	171	0.635	0.011	2.44	0.05	
106613	8.907	0.011	8.831	0.014		0.080	0.015	G	0.06	0.01	L	8.8618	0.0020	0.017	120		8.83	8.89		C			1							
106614	8.677	0.009	8.216	0.009		0.435	0.012	T	0.50	0.01	L	8.2692	0.0015	0.015	172		8.24	8.29					1							S
106615	8.573	0.007	7.922	0.006		0.596	0.007	T	0.67	0.01	L	7.9705	0.0013	0.016	184		7.94	8.00		C			1 S							S
106616	10.574	0.037	8.897	0.016		1.401	0.032	T	1.38	0.04	L	8.8977	0.0018	0.019	132		8.87	8.93		C			1							
106617	9.732	0.026	8.443	0.016		1.096	0.024	T	1.06	0.03	L	8.4792	0.0015	0.012	57		8.46	8.51		C			1							
106618	8.732	0.009	7.636	0.006		0.947	0.008	T	0.94	0.01	L	7.6811	0.0012	0.012	168		7.66	7.70		C			1							S
106619	9.831	0.027	9.249	0.026		0.546	0.028	T	0.62	0.03	L	9.3279	0.0022	0.016	46		9.30	9.42		C			1							S
106620	8.128	0.007	8.156	0.009		−0.023	0.010	T	0.00	0.01	L	8.1513	0.0031	0.032	182		8.11	8.23		U 2			1							S
106621	10.285	0.035	8.928	0.019		1.150	0.031	T	1.11	0.03	L	8.9346	0.0019	0.015	94		8.90	8.95		D			1 X S							
106622	9.691	0.017	8.063	0.009		1.363	0.015	T	1.33	0.02	L	8.0564	0.0009	0.012	151		8.03	8.08		C	21358+3101	I 1	1							
106623	10.602	0.037	9.701	0.026		0.786	0.035	T	0.82	0.03	L	9.7495	0.0023	0.023	104		9.72	9.79		C			1							
106624	10.104	0.021	8.811	0.013		1.100	0.019	T	1.06	0.02	L	8.8689	0.0012	0.015	141		8.84	8.90		C			1							
106625	9.685	0.016	8.047	0.008		1.371	0.014	T	1.34	0.02	L	8.0410	0.0015	0.014	135		8.02	8.07		C			1							
106626	8.743	0.014	8.743	0.017		0.022	0.015	G	0.04	0.01	H	8.7650	0.0019	0.016	103		8.74	8.79		C			1							
106627	10.357	0.023	9.038	0.013		1.120	0.021	T	1.08	0.02	L	9.1053	0.0021	0.026	192		9.06	9.14					1 S							
106628	9.863	0.022	9.222	0.020		0.680	0.015	G	0.74	0.01	H	9.2044	0.0046	0.044	136		9.11	9.27		U 2			1							
106629	8.897	0.009	8.979	0.012		−0.070	0.014	T	−0.05	0.01	L	9.0094	0.0017	0.021	172		8.97	9.05					1							
106630	8.596	0.011	7.386	0.007		1.035	0.010	T	1.01	0.01	L	7.4513	0.0017	0.015	122		7.43	7.47					1							S
106631	10.104	0.028	8.885	0.017		1.042	0.026	T	1.01	0.02	L	8.9339	0.0018	0.013	98		8.90	8.96					1							
106632	9.466	0.023	8.830	0.020	A	0.591	0.026	T	0.66	0.02	L	8.8781	0.0076	0.046	88	A	8.84	8.98		D	21359+0041	I 2	1 C P A							
106633	10.928	0.063	9.976	0.042	B	0.838	0.056	T	0.86	0.04	L	10.2292	0.0220			B				D	21359+0041	I 2	1 C I A							
106634	10.873	0.049	10.245	0.043		0.579	0.048	T	0.65	0.04	L	10.3288	0.0029	0.028	95		10.28	10.38		C			1							
106635	9.811	0.026	9.231	0.025	A	0.586	0.015	G	0.66	0.01	H	9.3912	0.0199			A				D	21359+2622	I 2	1 C I A							
106636	9.684	0.023	9.622	0.032		0.062	0.037	T	0.07	0.04	L	9.6339	0.0028	0.026	107		9.60	9.68					1							G
106637	9.834	0.028	9.254	0.026	B	0.570	0.015	G	0.64	0.01	H	9.3748	0.0198	0.136	123	B	9.30	9.77		D	21359+2622	I 2	1 C P A							
106638	10.236	0.022	9.139	0.015		0.947	0.020	T	0.94	0.01	L	9.2008	0.0022	0.022	173		9.15	9.24		C			1							
106639											T	12.7629	0.0769			B				D	21360−4641	I 2	1 C F A							
106640	10.629	0.028	10.272	0.033	A	0.347	0.038	T	0.41	0.05	L	10.3276	0.0089	0.041	153	A	10.26	10.39		D	21360−4641	I 2	1 C P A							
106641	8.907	0.012	8.409	0.012		0.468	0.015	T	0.54	0.02	L	8.4712	0.0015	0.013	103		8.45	8.49		C			1 G							S
106642	7.727	0.026	6.156	0.033		1.341	0.035	T	3.88	0.12	O	5.4594	0.0417	0.299	115		4.99	5.84	132.00	P 1 B			1 S							S P
106643	7.698	0.008	6.610	0.005		0.940	0.007	T	0.93	0.01	L	6.6666	0.0011	0.011	98		6.65	6.69					1							S
106644	9.571	0.014	8.530	0.010		0.905	0.013	T	0.91	0.01	L	8.6056	0.0017	0.019	183		8.57	8.64					1							
106645											T	12.1384	0.0853	0.443	66		11.14	12.36	0.54	P 1 A			1							
106646	8.872	0.010	7.900	0.007		0.853	0.009	T	0.87	0.01	L	7.9623	0.0014	0.015	150		7.94	7.99		C			1							S
106647	7.968	0.006	8.008	0.007		−0.032	0.008	T	−0.01	0.01	L	8.0173	0.0012	0.014	191		8.00	8.05					1							S
106648	8.115	0.009	7.910	0.009		0.196	0.012	T	0.21	0.01	L	7.9667	0.0017	0.013	117		7.94	7.99		C			1							S
106649											T	12.2481	0.0571	0.412	126		11.46	12.68	0.56	P 1 A			1 S							D
106650	8.780	0.012	8.779	0.015		0.040	0.015	G	0.06	0.01	H	8.7756	0.0016	0.015	111		8.75	8.80		C			1							
106651	7.174	0.006	7.157	0.008		0.020	0.009	T	0.04	0.01	L	7.1706	0.0012	0.010	102		7.16	7.18		C	21362+5030	I 1	1							S
106652	10.665	0.036	9.046	0.016		1.380	0.032	T	2.87	0.06	O	8.7419	0.0124	0.090	129		8.55	8.86		U 2			1							P
106653	11.177	0.098	9.584	0.041		1.359	0.088	T	3.55	0.15	O	9.0208	0.0380	0.241	48		8.85	9.61		U 2			1 S							
106654	6.008	0.004	5.762	0.004		0.234	0.005	T	0.26	0.01	L	5.7970	0.0006	0.005	85		5.78	5.81		C	21362−2610	I 1	1							S
106655	11.386	0.087	10.168	0.047		1.041	0.077	T	1.01	0.06	L	10.1182	0.0030	0.023	75		10.08	10.16		C			1							
106656	8.954	0.012	8.914	0.016		0.042	0.019	T	0.06	0.01	L	8.9242	0.0028	0.024	117		8.89	8.95					1							
106657	9.489	0.014	8.045	0.008		1.218	0.013	T	1.18	0.01	L	8.0912	0.0011	0.015	196		8.07	8.12					1 G							
106658	7.147	0.005	7.247	0.007		−0.086	0.008	T	−0.07	0.01	L	7.2479	0.0011	0.009	101		7.23	7.26					1							S
106659	8.418	0.009	8.297	0.011	*	0.117	0.013	T	0.13	0.01	L *	8.3224	0.0016	0.012	115	*	8.30	8.34		D	21362+5139	H 1	2 C A	AB	22	0.562	0.012	2.93	0.08	
106660	9.345	0.020	7.858	0.011		1.275	0.010	G	1.23	0.01	H	7.8784	0.0017	0.012	87		7.86	7.91					1							S
106661	7.548	0.005	6.358	0.003	A	1.240	0.351	G	0.99	0.00	L *	6.3902	0.0005	0.007	200	*	6.38	6.40		D	21362+3003	I 1	2 C A	AB	89	1.791	0.011	3.69	0.06	S
106662	9.511	0.018	9.434	0.024		0.076	0.028	T	0.09	0.03	L	9.4637	0.0030	0.031	115		9.42	9.51	1.68	P 1 A			1							G
106663	10.481	0.031	9.891	0.029		0.552	0.031	T	0.62	0.03	L	9.9589	0.0021	0.020	125		9.92	9.99		C			1							
106664	10.614	0.049	9.080	0.022		1.160	0.040	G	1.12	0.04	R	9.1024	0.0028	0.022	88		9.05	9.13		C			1							
106665	8.859	0.013	8.743	0.016		0.168	0.004	G	0.18	0.00	H	8.7381	0.0014	0.016	105		8.71	8.76					1							
106666	8.979	0.014	7.948	0.010		0.897	0.013	T	0.90	0.01	L	8.0085	0.0015	0.014	90		7.99	8.03		C			1							S
106667	10.388	0.035	9.140	0.020	*	1.064	0.031	T	1.03	0.03	L *	9.1866	0.0025	0.021	108	*	9.14	9.23		D	21363+1627	H 1	2 C A	AB	262	0.388	0.027	1.65	0.11	
106668	10.012	0.021	9.316	0.018		0.630	0.021	T	0.70	0.02	L	9.3828	0.0022	0.022	134		9.35	9.42					1							
106669	10.093	0.026	9.509	0.024		0.547	0.026	T	0.62	0.02	L	9.5567	0.0018	0.015	91		9.54	9.58		C			1							
106670	8.589	0.011	8.617	0.014		−0.030	0.015	G	−0.01	0.01	H	8.6240	0.0017	0.016	107		8.60	8.65		C			1							
106671	10.137	0.025	8.129	0.009		1.701	0.022	T	2.22	0.05	O	7.9779	0.0030	0.032	125		7.92	8.01		U 2			1							
106672	10.503	0.043	10.040	0.044		0.440	0.020	G	0.51	0.02	H	10.0656	0.0034	0.019	73		10.04	10.09		C			1 X							G
106673	8.390	0.014	7.944	0.011		0.415	0.015	G	0.48	0.02	H	7.9900	0.0015	0.010	73		7.97	8.01		C			1							S
106674	8.721	0.010	8.277	0.010		0.433	0.011	T	0.50	0.01	L	8.3361	0.0014	0.015	150		8.30	8.36					1							
106675	9.266	0.018	7.335	0.008		1.637	0.016	T	1.78	0.06	O	7.2527	0.0021	0.017	63		7.21	7.28		U 2			1							S
106676	9.219	0.018	8.624	0.017	*	0.520	0.015	G	0.59	0.02	H *	8.6869	0.0019	0.011	61	*	8.67	8.71		D	21364−4041	I 1	2 C A	AS	190	0.342	0.004	0.03	0.05	S
106677	9.079	0.016	7.790	0.010		1.096	0.015	T	1.06	0.02	L	7.8426	0.0015	0.013	81		7.82	7.86		C	21364+0753	I 1	1 X							
106678	9.472	0.012	8.682	0.010		0.690	0.020	G	0.75	0.02	H	8.7632	0.0016	0.018	182		8.73	8.79					1							
106679	9.453	0.019	8.947	0.018		0.486	0.020	T	0.56	0.02	L	9.0158	0.0019	0.014	78		8.98	9.05		C			1							
106680	10.287	0.032	9.836	0.033		0.439	0.036	T	0.51	0.04	L	9.9180	0.0018	0.017	87		9.88	9.96		D			1							
106681	9.877	0.017	8.823	0.012		0.915	0.016	T	0.91	0.01	L	8.8690	0.0017	0.018	154		8.84	8.89					1							
106682	11.130	0.085	10.612	0.081		0.264	0.015	G	0.30	0.02	H	10.8901	0.0032	0.030	57		10.85	10.95		C			1							G
106683	9.078	0.012	8.670	0.012		0.364	0.015	G	0.43	0.02	H	8.7146	0.0014	0.019	134		8.69	8.75					1							S
106684	11.343	0.058	10.629	0.052		0.657	0.063	T	0.72	0.06	L	10.6032	0.0041	0.034	144		10.54	10.67		C			1							G
106685	9.153	0.014	8.096	0.010		0.917	0.013	T	0.92	0.01	L	8.1404	0.0009	0.012	113		8.12	8.16		C			1							S
106686	8.564	0.014	7.054	0.008		1.270	0.013	T	1.23	0.01	L	7.0865	0.0017	0.010	70		7.07	7.10		C			1							S
106687	9.084	0.010	8.589	0.010		0.466	0.013	T	0.54	0.01	L	8.6533	0.0019	0.021	172		8.62	8.69		C			1							
106688	8.947	0.013	7.580	0.008		1.158	0.012	T	1.12	0.01	L	7.6088	0.0008	0.011	151		7.59	7.63		C			1							S
106689	8.958	0.013	8.837	0.016		0.117	0.019	T	0.13	0.02	L	8.8772	0.0020	0.015	104		8.85	8.91		C			1							
106690	10.459	0.034	8.259	0.011		1.859	0.029	T	3.10	0.06	O	7.8717	0.0150	0.129	127		7.58	8.09		U 2 C			1 S							
106691	8.379	0.009	8.207	0.010		0.165	0.013	T	0.18	0.01	L	8.2281	0.0013	0.013	110		8.20	8.25					1							S
106692	9.977	0.021	8.041	0.009		1.606	0.018	T	1.63	0.02	L	7.9492	0.0020	0.016	136		7.92	7.98					1							
106693	9.515	0.021	8.126	0.012		1.175	0.019	T	1.14	0.02	L	8.1624	0.0014	0.014	73		8.14	8.20		D			1							S
106694	11.954	0.113	10.424	0.043	A	1.433	0.024	G	1.75	0.06	I *	10.2573	0.0050	0.068	154	*	10.18	10.65		U 2	21366+3927	I 1	2 C A	AB	284	1.783	0.017	1.71	0.08	G
106695	11.009	0.051	8.981	0.016		1.680	0.043	T	1.70	0.04	L	8.9573	0.0020	0.016	103		8.93	8.99		C			1 S							
106696	8.271	0.009	7.249	0.007		0.879	0.008	G	0.94	0.02	A	7.2873	0.0016	0.013	100		7.27	7.31					1							S
106697	10.116	0.028	8.433	0.013		1.406	0.024	T	1.38	0.03	L	8.4181	0.0019	0.016	94		8.38	8.44					1							S
106698	9.034	0.020	8.706	0.022		0.316	0.032	T	0.36	0.04	L	8.7535	0.0021	0.012	50		8.73	8.77		C			1							S
106699	9.391	0.021	8.054	0.013		1.134	0.019	T	1.10	0.02	L	8.0988	0.0014	0.009	74		8.08	8.12					1							S
106700	9.802	0.018	9.066	0.015		0.660	0.018	T	0.72	0.01	L	9.1349	0.0014	0.016	131		9.11	9.16					1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
106701 H	21 36 47.56	−30 43 28.7	8.03	G	324.198 167 71	−30.724 625 45	*	20.20	110.78	−24.23	0.98	0.64	1.14	1.13	0.63	+28	−14	−25	−25	−22	+42	−13	+ 7	+12	+24		0	−0.10
106702	21 36 47.68	−06 00 17.3	8.21	G	324.198 654 22	−06.004 813 58		10.18	27.30	−44.74	0.87	0.63	1.05	1.13	0.80	+21	−12	−22	− 9	+14	+30	+14	−10	+40	+43		0	0.68
106703	21 36 48.75	−33 02 52.4	6.10	H	324.203 121 78	−33.047 891 85		13.76	74.04	− 1.89	0.69	0.48	0.84	0.81	0.50	+31	−17	− 8	+ 0	−18	+34	−15	+10	+ 1	+24		0	0.01
106704	21 36 50.80	−60 26 24.6	10.09	H	324.211 662 28	−60.440 166 59		27.94	154.71	1.83	1.03	0.89	1.60	1.34	1.07	−13	−16	−10	+ 7	+11	+11	+13	+10	−13	−12		0	0.79
106705	21 36 51.59	−35 53 09.2	8.67	H	324.214 941 60	−35.885 895 97		15.09	81.82	−15.26	0.97	0.66	1.21	1.34	1.02	+36	+ 0	+ 8	−14	+ 1	+34	−10	+43	+ 4	+41		0	1.03
106706	21 36 52.60	+55 34 27.8	9.03	H	324.219 155 93	+55.574 382 44		2.57	−27.28	4.30	0.81	0.86	1.02	0.88	0.95	− 1	+17	− 5	−11	+18	−12	+20	−12	+15	+17		0	−1.39
106707	21 36 53.36	+05 48 54.5	7.62	H	324.222 327 31	+05.815 142 99		17.46	−90.10	−117.83	0.89	0.60	1.02	1.25	0.74	+24	+ 0	+ 1	+13	+10	+32	+ 9	+13	+19	+43		0	−0.22
106708	21 36 53.84	+33 43 06.2	8.04	H	324.224 320 90	+33.718 388 86		5.99	31.43	35.76	0.44	0.60	0.95	0.54	0.74	−13	− 1	−23	−18	+13	+ 7	+13	−14	+21	+ 4		0	0.46
106709	21 36 55.05	−10 10 28.2	7.32	G	324.229 392 78	−10.174 490 21		14.11	33.14	− 6.84	0.86	0.61	1.02	1.31	0.78	+20	− 4	−16	+11	− 8	+31	− 4	− 7	+26	+21		0	−1.03
106710	21 36 56.47	−15 23 50.1	8.76	H	324.235 283 71	−15.397 258 58		1.66	−27.75	11.85	1.15	0.77	1.26	1.83	0.83	+ 1	+18	−18	+34	−37	+34	−21	+25	+17	− 1		5	0.29
106711	21 36 56.98	+40 24 48.6	5.04	H	324.237 404 34	+40.413 490 52	+	15.79	− 1.50	12.47	0.92	1.71	0.61	0.47	0.56	+41	−13	−22	+ 2	−17	+ 4	− 5	+ 1	+ 8	−20		0	−1.84
106712	21 36 57.06	+68 11 07.3	8.28	2 H	324.237 735 89	+68.185 372 21		0.84	− 1.06	− 3.68	0.60	0.58	0.66	0.78	0.69	−15	−20	+ 0	− 9	+ 5	+10	+ 1	−18	+13	−21		0	0.58
106713	21 36 57.52	+54 38 16.1	8.03	H	324.239 669 71	+54.637 799 66		2.32	7.36	0.47	0.59	0.60	0.78	0.65	0.63	− 5	− 3	+ 6	+ 2	− 6	−34	− 4	−10	+22	−12		3	−0.83
106714	21 36 58.02	−35 53 02.8	7.36	H	324.241 737 68	−35.884 122 77		14.95	89.99	−10.35	0.77	0.48	0.93	0.89	0.53	+39	− 1	+ 5	−12	− 5	+33	− 9	+23	− 3	+40		2	1.97
106715	21 36 58.54	−18 44 37.2	6.90	H	324.243 923 30	−18.743 673 45		4.78	49.09	−46.28	0.77	0.54	0.93	0.92	0.62	+32	−14	− 9	−15	−12	+34	−14	+21	+23	+40		0	−0.55
*106716	21 36 59.65	+58 08 24.7	8.52	2 H	324.248 530 65	+58.140 185 40		2.14	− 6.67	− 7.41	0.68	0.67	0.82	0.71	0.72	+ 6	+ 7	+ 0	− 7	+18	− 8	+21	−13	+15	+38		0	−0.45
*106717	21 36 59.63	−45 43 33.3	8.15	H	324.248 451 74	−45.725 915 90		3.89	2.44	−19.41	0.70	0.58	1.24	0.75	0.53	+45	−27	− 1	+ 6	+ 7	+10	+17	+39	− 1	+17		1	0.03
106718	21 36 59.78	−44 53 30.7	8.75	H	324.249 076 78	−44.891 869 53		2.37	−25.69	−10.72	0.70	0.63	1.28	0.67	0.58	+49	−28	+ 5	− 8	+15	+26	+19	+33	+ 1	+39		1	−0.65
106719	21 37 00.22	−28 36 32.5	7.63	H	324.250 896 90	−28.609 021 67		3.87	6.10	2.07	0.84	0.58	1.08	0.98	0.54	+33	−27	−38	−12	−19	+44	− 6	+ 9	+14	+26		0	−0.43
106720	21 37 03.18	+19 46 58.3	7.25	1 H	324.263 257 93	+19.782 869 46		5.11	− 6.02	−55.42	0.61	0.58	0.87	0.71	0.62	+36	+ 3	−10	− 1	−13	−25	−20	−63	+17	+25		0	−1.32
106721	21 37 03.53	−51 19 51.5	9.20	H	324.264 709 26	−51.330 982 29		5.05	78.49	−36.82	1.10	0.93	1.45	1.41	0.88	+32	+ 1	− 7	+32	+26	+12	+23	+26	+ 4	+23		0	0.42
106722	21 37 04.17	−41 32 14.4	8.66	H	324.267 366 45	−41.537 322 87		4.09	18.75	− 9.69	1.34	0.87	1.53	2.24	0.92	+10	+ 9	−38	+40	− 1	+47	+29	−13	+36	+50		0	0.75
106723	21 37 04.82	−19 27 57.6	4.51	2 T	324.270 094 87	−19.466 013 52		4.92	13.48	0.81	0.74	0.52	0.91	0.92	0.60	+29	−20	−13	− 8	−15	+41	−15	+26	+24	+36		0	−1.63
106724	21 37 06.37	−40 40 52.7	8.60	G	324.276 550 64	−40.681 307 75		2.13	−33.03	−41.11	1.07	0.88	1.42	1.56	0.77	+ 4	+ 2	−44	+17	−24	+46	− 5	−29	+29	+13		3	1.10
106725	21 37 06.53	+11 43 10.1	7.24	H	324.277 199 32	+11.719 470 35		5.32	22.59	9.02	0.74	0.54	0.84	0.97	0.59	+25	+ 1	+ 2	− 3	−19	−16	−15	−35	+ 6	+29		0	−1.79
106726	21 37 06.58	+53 22 36.3	7.82	H	324.277 433 25	+53.376 762 43		2.85	− 8.50	−22.27	0.65	0.59	0.74	0.80	0.68	−14	−20	− 6	−34	+ 4	+ 8	+ 1	−13	+13	−12		0	−0.70
106727	21 37 06.82	−07 48 57.1	8.52	H	324.278 431 00	−07.815 868 89		0.27	− 9.72	− 7.16	1.11	0.74	1.20	1.27	0.84	+31	−17	−13	−41	− 7	+31	− 9	−35	+28	+47		2	0.48
106728	21 37 07.51	−30 33 30.8	8.40	H	324.281 271 14	−30.558 568 17		3.23	−24.43	−23.62	1.05	0.64	1.17	1.24	0.64	+42	−21	−24	−34	−35	+40	−24	+ 5	+ 3	+29		0	0.98
106729	21 37 09.06	−21 02 21.9	9.23	H	324.287 752 03	−21.039 406 87		5.36	8.62	11.69	1.33	0.82	1.48	1.75	0.87	+19	− 8	−23	+18	−39	+32	−28	− 5	+15	+28		0	1.41
106730	21 37 10.37	+62 18 14.3	7.16	G	324.293 197 68	+62.303 964 68		6.41	44.16	115.38	0.48	0.47	0.55	0.50	0.47	− 6	+ 8	+ 6	+15	+ 7	+ 8	+12	−16	+24	+ 8		1	0.69
106731	21 37 12.30	+04 25 20.6	9.31	H	324.301 257 96	+04.422 388 84		3.41	14.12	12.58	1.20	0.96	1.40	1.49	1.06	+37	− 9	− 6	+24	+ 9	+26	+10	+32	+12	+50		0	−0.90
106732	21 37 13.57	+86 26 29.0	8.96	G	324.306 546 44	+86.441 394 29		4.79	13.67	16.97	0.64	0.66	0.73	0.75	0.77	+ 4	+ 3	+ 2	+15	+ 5	−10	+ 4	+26	−12	+ 7		0	−0.56
106733 H	21 37 13.93	+66 04 12.1	8.23	H	324.308 037 07	+66.070 022 13	*	3.42	− 8.31	− 4.74	0.65	0.65	0.71	0.84	0.70	− 2	+ 0	+14	+20	+17	+10	+15	−11	+12	+ 4		0	2.75
106734	21 37 16.59	−76 30 58.4	8.97	H	324.319 104 30	−76.516 227 63		4.35	17.91	−13.50	0.72	0.73	0.98	0.82	0.77	− 6	−16	− 9	− 2	+ 1	+ 2	+ 0	+ 2	+12	−15		1	1.52
106735	21 37 17.78	+51 03 51.1	7.22	1 H	324.324 072 40	+51.064 203 16		−0.56	− 2.49	− 6.20	0.54	0.56	0.67	0.63	0.64	−16	+ 1	− 6	−18	+11	−10	+ 9	− 4	+ 1	− 5		0	1.40
106736	21 37 18.56	+29 28 21.8	8.27	H	324.327 338 50	+29.472 708 58		7.97	1.87	0.16	0.77	0.57	1.07	0.96	0.71	−28	+15	−20	+ 7	+18	−25	+18	− 9	+28	−22		1	1.22
106737	21 37 18.62	+61 06 20.0	8.16	H	324.327 571 12	+61.105 560 52		4.37	25.27	15.92	0.63	0.57	0.67	0.69	0.58	− 3	+ 4	+ 8	+26	+22	+ 5	+21	− 9	+10	+ 1		0	−1.00
106738	21 37 18.98	+63 12 36.0	9.11	H	324.329 086 61	+63.209 987 46		8.00	13.26	5.86	0.75	0.66	0.79	0.88	0.71	− 5	+ 5	− 2	+36	+ 8	+13	+15	− 9	+21	+16		0	−0.63
106739	21 37 20.00	−11 27 38.5	7.34	2 H	324.333 353 74	−11.460 686 81		1.86	−2.23	− 9.26	0.91	0.66	1.02	1.38	0.71	+18	− 5	−15	+10	−19	+26	−18	−15	+16	− 3		0	0.61
106740	21 37 20.91	+13 28 28.5	10.37	3 H	324.337 109 49	+13.474 596 37		2.05	0.60	− 4.63	1.56	1.03	1.75	1.98	1.09	+25	+18	− 9	+23	− 8	+31	+ 2	−36	+28	+37		3	−1.25
106741	21 37 21.08	−18 26 27.3	7.19	H	324.337 822 38	−18.440 924 06		19.02	56.33	−104.48	0.80	0.57	0.99	1.02	0.64	+31	− 7	−10	− 3	−15	+37	−13	+28	+23	+39		0	−0.72
106742	21 37 21.54	+35 19 39.7	7.08	H	324.339 732 49	+35.327 706 25		5.32	−14.01	−39.34	0.40	0.46	0.72	0.46	0.51	−13	+ 1	−17	+14	+33	−24	+30	+23	+ 6	−19		0	−0.54
106743	21 37 23.36	−23 22 32.6	9.87	G	324.347 329 07	−23.375 722 64		15.01	37.50	167.51	1.36	0.85	1.55	1.48	0.86	+21	−20	+ 0	−19	−17	+32	−20	− 4	+10	+29		0	−0.86
106744	21 37 23.59	−65 18 42.0	8.51	H	324.348 292 92	−65.311 655 16		3.58	12.24	9.25	0.62	0.75	1.18	0.68	0.84	−34	+ 9	−19	−16	− 2	+ 2	+ 1	+ 6	− 3	−44		1	0.20
106745	21 37 23.98	+34 36 10.5	7.76	H	324.349 905 86	+34.602 921 58		8.40	77.46	33.83	0.43	0.58	0.86	0.51	0.66	−11	+ 8	−24	− 5	+ 8	−11	+ 7	− 9	+12	+ 5		1	1.32
106746	21 37 24.84	+25 20 48.2	8.09	H	324.353 480 30	+25.346 721 83		2.47	−21.24	−48.09	0.75	0.57	0.88	0.96	0.65	+ 5	+14	−15	−31	− 4	−11	− 3	−41	+16	+ 0		0	−0.25
106747	21 37 24.93	−30 45 41.8	8.63	H	324.353 894 12	−30.761 610 06		5.18	− 9.30	−14.31	1.16	0.77	1.28	1.32	0.79	+49	−12	−19	−39	−31	+31	−24	+ 3	− 5	+40		0	0.76
106748 H	21 37 25.34	+75 13 19.4	7.99	H	324.355 600 32	+75.222 062 28	A	4.56	4.20	17.47	1.08	0.90	0.94	1.10	0.89	−19	−16	+12	−17	− 2	+ 5	+ 4	−27	− 2	+ 5		1	−0.11
106749	21 37 25.81	−27 38 04.9	9.04	G	324.357 530 05	−27.634 682 50		18.61	342.27	−208.03	1.07	0.68	1.23	1.19	0.69	+30	−27	−26	−20	−18	+30	−13	+ 8	+11	+27		0	−2.20
106750 H	21 37 26.75	−68 10 44.8	9.14	H	324.361 473 58	−68.179 119 73	B	8.00	30.17	−31.84	4.14	4.89	5.34	4.73	5.65	−16	+ 0	− 3	+ 2	− 3	− 1	− 4	− 8	+10	−43		1	2.05
106751	21 37 26.88	+07 32 13.2	9.88	H	324.361 999 16	+07.536 995 71		1.97	− 6.15	− 3.82	1.24	0.90	1.41	1.63	1.05	+41	− 1	+10	+24	+ 8	+ 6	+12	+ 0	+ 8	+58		0	−0.03
106752	21 37 27.88	+44 41 47.8	6.19	H	324.366 146 26	+44.696 614 51		4.93	− 1.01	−26.68	0.46	0.42	0.60	0.59	0.54	−20	+29	− 4	− 4	− 1	+ 0	− 2	+ 2	− 7	−35		1	0.37
106753	21 37 28.05	+20 22 04.5	7.91	H	324.366 854 57	+20.367 913 26		2.05	9.76	− 1.97	0.80	0.61	0.94	1.08	0.64	+22	−15	− 4	−39	− 5	+16	−12	−65	+ 7	+14		0	−0.17
106754	21 37 28.13	+51 45 45.0	10.45	2 H	324.367 213 51	+51.762 492 61		0.10	− 4.57	− 4.82	1.14	1.33	1.52	1.35	1.67	+ 4	− 5	−22	+19	+15	−19	+13	+11	+ 7	+15		0	−1.05
106755	21 37 29.12	+04 40 56.8	6.54	H	324.371 326 40	+04.682 458 18		8.99	−11.23	− 1.05	0.85	0.56	0.94	1.19	0.63	+24	+16	+ 4	+23	+14	+40	+15	+32	+21	+36		7	0.98
106756	21 37 30.74	+01 39 04.1	9.21	G	324.378 103 15	+01.651 151 27		4.24	24.47	16.07	1.18	0.96	1.42	1.50	1.11	+43	−14	+12	− 7	+18	+38	+ 3	+39	+25	+65		0	1.13
106757	21 37 30.96	+67 11 03.5	9.85	H	324.379 013 41	+67.184 310 03		4.34	4.00	− 8.78	0.95	0.89	1.02	1.21	1.03	− 5	− 8	+25	+29	+ 7	− 1	+ 9	+11	+12	+10		0	0.31
106758	21 37 33.77	−00 23 25.8	6.22	H	324.390 720 99	−00.390 494 06		8.18	−22.89	−27.76	0.98	0.51	0.99	1.36	0.52	+32	− 7	+ 9	−17	−31	+17	−28	+ 1	+21	+54		0	1.39
*106759	21 37 34.12	−24 27 09.0	8.06	H	324.392 159 05	−24.452 498 36		10.66	−23.09	−35.88	0.87	0.55	1.02	1.03	0.59	+21	− 5	−11	−14	−12	+45	−11	+ 8	+20	+34		0	1.31
*106760	21 37 34.11	+11 11 12.8	8.17	H	324.392 131 53	+11.186 900 43		3.10	−14.89	−20.43	1.05	0.66	1.16	1.46	0.75	+24	+10	−10	−12	−12	−26	−13	−27	+ 3	+31		0	−0.13
106761	21 37 34.40	−11 01 27.1	8.46	H	324.393 320 06	−11.024 197 12		3.04	− 6.55	−11.41	1.12	0.79	1.24	1.67	0.97	+15	− 5	− 4	+ 8	−14	+10	−12	+ 1	+25	+ 5		0	−0.67
106762 H	21 37 34.70	+55 45 48.7	9.23	H	324.394 571 97	+55.763 533 43	A	1.37	− 4.36	−16.79	1.20	1.16	1.32	1.15	1.21	− 2	+18	− 1	+ 3	+13	− 6	+18	− 6	+13	+27		1	0.27
106763	21 37 35.56	+55 46 29.5	9.06	H	324.398 185 59	+55.774 852 37		2.23	− 4.27	−16.29	0.78	0.78	0.98	0.83	0.88	− 1	+24	− 1	− 2	+18	−13	+23	− 5	+18	+18		0	−2.26
106764	21 37 36.14	−20 25 54.6	8.03	2 H	324.400 600 97	−20.431 824 55		8.48	10.95	−39.23	0.91	0.61	1.06	1.09	0.74	+23	−11	− 4	−14	−11	+29	−16	+27	+19	+36		2	0.78
106765	21 37 36.49	+81 24 02.6	10.13	H	324.402 036 19	+81.400 734 88		2.68	− 0.68	−12.76	0.88	0.80	0.95	1.08	0.91	− 6	− 9	+19	+ 8	+ 8	+16	+ 6	− 8	−16	−11		0	−1.32
106766	21 37 37.03	−66 27 43.6	8.92	H	324.404 299 97	−66.462 098 73		3.10	− 1.76	−34.93	0.71	0.75	1.19	0.75	0.79	−28	−11	− 1	−14	+ 0	− 1	+ 2	+ 0	− 2	−36		0	−0.96
106767	21 37 37.32	+46 00 56.3	9.24	H	324.405 512 05	+46.015 650 38		0.98	− 1.52	− 3.53	0.78	0.77	1.02	1.08	0.89	−16	+17	+ 1	+23	− 6	+23	− 7	+10	− 3	−19		0	−0.65
106768	21 37 37.67	−19 13 51.7	7.45	H	324.406 942 44	−19.231 016 24		4.96	12.97	0.69	0.79	0.57	0.97	1.00	0.68	+25	−16	− 1	− 9	−10	+38	−17	+34	+30	+38		0	−0.33
106769	21 37 38.71	+01 15 53.3	8.39	H	324.411 281 13	+01.264 802 14		3.43	33.05	7.81	0.96	0.71	1.17	1.25	0.74	+44	+ 2	− 3	−12	−12	+40	−11	−10	+25	+54		2	1.49
106770	21 37 38.77	+58 45 30.1	7.67	G	324.411 543 39	+58.758 360 24		2.41	− 2.50	− 7.35	0.50	0.50	0.60	0.50	0.51	+ 2	+10	+ 3	+ 0	+ 5	−12	+10	−24	+13	+16		1	−0.51
106771 H	21 37 38.81	+54 02 31.9	6.16	G	324.411 723 83	+54.042 193 99	*	5.04	− 4.90	− 0.74	0.96	0.65	0.63	0.56	0.57	+ 3	− 7	+13	−10	−10	−16	− 8	−11	+14	+ 9		2	−0.34
106772	21 37 39.93	+64 58 51.3	9.62	H	324.416 357 20	+64.980 911 30		0.08	−15.29	− 1.42	1.07	0.99	1.14	1.28	0.97	−14	−18	+22	+10	+12	+ 9	+ 9	−12	+ 1	−10		0	−0.77
106773	21 37 40.41	−46 02 29.3	8.92	H	324.418 375 62	−46.041 479 27		8.92	37.39	−24.35	0.83	0.69	1.48	0.95	0.65	+47	−28	− 7	+18	+ 9	+17	+20	+44	− 8	+14		0	1.12
106774 H	21 37 40.93	+57 33 37.5	8.25	H	324.420 550 58	+57.560 427 15	A	0.34	1.70	− 7.73	1.69	1.87	1.82	1.56	1.89	−14	+ 2	−11	−18	+32	− 4	+20	−15	+ 7	+34		11	2.78
106775	21 37 41.66	+15 12 57.8	7.44	H	324.423 585 06	+15.216 054 69		2.34	− 1.11	−31.15	0.90	0.51	0.93	1.13	0.55	+ 6	− 3	−14	− 1	+ 0	+ 6	+ 1	−47	+30	+11		2	2.30
106776	21 37 41.96	+22 42 42.1	10.31	H	324.424 841 67	+22.711 707 31		1.46	5.00	− 2.09	1.05	0.98	1.50	1.16	1.13	+19	+ 5	−11	−20	−10	− 4	−10	−55	+17	+18		0	−2.38
*106777	21 37 42.24	−49 19 16.0	8.37	H	324.425 986 53	−49.321 109 38		4.85	17.37	− 6.04	0.82	0.70	1.24	0.90	0.59	+22	−12	−18	− 8	+ 8	− 2	+ 7	+ 9	+ 5	+ 7		0	0.14
*106778	21 37 42.22	−23 41 42.3	8.22	H	324.425 896 46	−23.695 069 83		1.77	24.21	−10.13	1.00	0.64	1.19	1.19	0.65	+27	−19	−22	− 1	−18	+36	−13	+ 8	+17	+33		0	−0.09
106779	21 37 42.45	−06 32 41.4	8.62	H	324.426 875 71	−06.544 824 86		5.53	4.59	− 5.04	0.95	0.84	1.17	1.26	0.97	+39	−20	−21	−12	− 6	+34	− 6	−29	+32	+47		0	−0.14
106780	21 37 42.90	+33 59 15.7	9.75	1 H	324.428 730 23	+33.987 700 16		3.45	27.85	9.38	0.65	1.04	1.37	0.75	1.16	+ 1	+ 3	−34	−15	+16	−18	+12	−17	+ 1	+24		0	1.29
106781	21 37 43.08	+06 37 44.6	7.66	G	324.429 512 84	+06.629 043 29		11.53	57.49	3.56	0.95	0.65	1.05	1.15	0.73	+35	−16	− 9	+18	+13	+25	+20	+21	+21	+46		0	2.08
106782	21 37 43.19	−45 35 08.1	7.20	H	324.429 967 67	−45.585 580 38		19.45	−16.98	−130.63	0.55	0.46	0.97	0.54	0.41	+40	−26	+ 2	− 2	+18	+25	+20	+32	− 2	+29		0	1.34
106783	21 37 43.61	+06 37 06.2	6.19	G	324.431 713 88	+06.618 396 15		12.68	57.92	− 2.09	0.67	0.47	0.77	0.86	0.51	+25	−10	+ 5	+16	+13	+27	+ 9	+22	+22	+40		0	0.91
106784	21 37 43.62	+21 57 28.3	8.72	H	324.431 754 41	+21.957 868 64		0.72	− 6.62	− 1.69	0.80	0.68	1.13	0.88	0.75	+25	− 1	− 2	− 1	− 7	+ 3	− 9	−54	+10	+22		0	−0.41
106785	21 37 44.82	−45 49 28.6	10.34	G	324.436 761 85	−45.824 600 31		1.99	13.05	−26.29	1.16	0.95	2.06	1.26	0.88	+42	−31	−10	+ 5	+ 4	+ 8	+14	+34	− 6	+12		0	0.50
106786	21 37 45.04	−07 51 14.9	4.68	G	324.437 675 22	−07.854 142 12		18.26	114.29	−24.44	0.82	0.54	0.84	0.95	0.63	+13	−15	− 4	−47	− 2	+33	− 5	−41	+29	+37		0	−1.27
106787	21 37 45.37	+19 19 06.9	5.46	H	324.439 034 80	+19.318 574 81		10.15	99.51	13.43	0.49	0.45	0.72	0.58	0.48	+34	+12	− 8	−15	− 9	−26	−13	−59	+19	+24		1	0.66
106788	21 37 46.50	+15 03 28.4	8.28	G	324.443 764 05	+15.057 876 01		9.85	18.69	−19.37	0.94	0.61	1.05	1.23	0.63	+16	−11	−10	+ 5	− 4	+18	− 6	−49	+27	+20		3	1.94
106789	21 37 48.44	−16 15 08.1	8.48	H	324.451 841 83	−16.252 244 28		5.35	14.43	− 1.18	1.06	0.70	1.24	1.34	0.77	+29	−14	− 1	− 4	−33	+26	−31	+11	+28	+33		0	0.39
106790	21 37 48.66	+39 19 01.8	6.76	G	324.452 730 83	+39.317 174 73		6.41	17.74	0.42	0.41	0.46	0.67	0.43	0.51	−25	+19	+ 1	− 7	+ 6	− 5	+ 7	+ 7	+ 4	− 9		0	−0.56
*106791 H	21 37 49.15	−68 28 06.7	9.22	H	324.454 808 58	−68.468 516 68	*	7.38	− 9.59	15.99	0.80	0.84	1.25	0.94	1.02	−14	−17	− 5	+ 5	− 9	−18	− 7	+25	+10	−33		0	2.81
*106792	21 37 49.11	−25 12 00.6	11.11	G	324.454 611 76	−25.200 170 20		20.58	208.00	−158.23	2.05	1.47	2.44	2.38	1.58	+36	− 2	− 4	−26	−15	+36	−15	+ 3	+13	+39		0	0.20
106793	21 37 49.80	−48 19 35.4	9.10	H	324.457 498 96	−48.326 498 82		0.21	8.73	− 1.16	0.96	0.83	1.34	1.02	0.76	+43	− 3	+ 5	+11	+31	+18	+29	+36	+ 0	+38		0	−1.61
106794	21 37 49.91	+53 04 48.5	10.57	H	324.457 958 58	+53.080 152 69		33.02	311.18	51.28	1.21	1.29	1.50	1.46	1.64	−14	− 5	− 8	−19	+ 4	+ 3	+ 4	−19	− 1	+ 4		3	−1.63
106795	21 37 50.27	−09 35 48.5	8.11	H	324.459 443 09	−09.596 800 60		5.40	− 7.59	−14.17	0.96	0.69	1.18	1.30	0.77	+23	−10	− 1	+ 7	− 5	+35	− 8	−26	+36	+33		0	−0.05
106796	21 37 50.47	−05 13 57.3	8.33	H	324.460 276 22	−05.232 589 53		2.73	35.78	11.43	1.17	0.75	1.20	1.28	0.90	+ 1	+ 2	−30	−45	+22	+16	+22	−22	+41	+28		0	−1.26
106797	21 37 51.84	−58 20 38.0	9.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
106701	8.924	0.014	8.142	0.011	*	0.699	0.015	G	0.76	0.01	H *	8.1747	0.0013	0.015	95	*	8.15	8.20			21368−3043	I 1	2 C S A	AB	155	0.121	0.007	0.50	0.42	S
106702	8.576	0.011	8.238	0.011		0.338	0.015	G	0.39	0.02	H	8.2936	0.0018	0.015	79		8.27	8.32		C			1							S
106703	6.374	0.003	6.132	0.004		0.226	0.005	T	0.25	0.01	L	6.1672	0.0007	0.006	102		6.16	6.18		C			1							S
106704	11.799	0.083	10.159	0.030		1.379	0.074	T	1.62	0.14	L	10.1957	0.0028	0.035	164		10.14	10.27					1							
106705	9.502	0.015	8.708	0.012		0.704	0.015	T	0.76	0.01	L	8.8069	0.0017	0.015	129		8.78	8.84					1 G							S
106706	10.726	0.044	9.159	0.020		1.315	0.038	T	1.28	0.04	L	9.1815	0.0019	0.021	113		9.15	9.22					1							
106707	8.292	0.011	7.692	0.010		0.560	0.013	T	0.63	0.01	L	7.7456	0.0012	0.009	77		7.73	7.79					1							S
106708	8.436	0.008	8.079	0.008		0.338	0.011	T	0.39	0.01	L	8.1216	0.0013	0.018	216		8.09	8.15					1							S
106709	7.726	0.009	7.344	0.007		0.374	0.015	G	0.44	0.02	H	7.4017	0.0013	0.009	66		7.39	7.42		C			1							S
106710	10.031	0.029	8.850	0.018		1.012	0.027	T	0.99	0.02	L	8.9236	0.0022	0.019	73		8.89	8.96					1							
106711	5.285	0.002	5.071	0.002		0.198	0.003	T	0.22	0.00	L	5.1006	0.0003	0.005	162		5.09	5.11		C			1 O							S
106712	8.426	0.009	8.279	0.011		0.134	0.013	T	0.15	0.01	L	8.3245	0.0028	0.033	121		8.19	8.36		U 2 C			1							
106713	8.081	0.008	8.039	0.009		0.043	0.011	T	0.06	0.01	L	8.0520	0.0013	0.011	117		8.03	8.08		C			1							S
106714	7.832	0.007	7.398	0.006		0.424	0.007	T	0.49	0.01	L	7.4520	0.0010	0.008	130		7.44	7.46		C			1							S
106715	8.770	0.019	7.049	0.010		1.436	0.017	T	1.43	0.03	L	7.0348	0.0009	0.007	66		7.02	7.05		C			1							S
106716	9.005	0.013	8.571	0.013		0.431	0.014	G	0.50	0.01	H	8.6138	0.0028	0.027	106		8.56	8.66		U 2			1							
106717	9.498	0.013	8.262	0.008		1.055	0.012	T	1.02	0.01	L	8.3183	0.0011	0.014	198		8.30	8.35		C			1							S
106718	10.254	0.020	8.864	0.011		1.176	0.018	T	1.14	0.02	L	8.9172	0.0012	0.014	184		8.89	8.94		C			1							
106719	8.890	0.013	7.732	0.009		0.994	0.012	T	0.97	0.01	L	7.7998	0.0007	0.010	87		7.78	7.82		D			1							S
106720	8.476	0.009	7.372	0.005		0.952	0.008	T	0.94	0.01	L	7.4162	0.0011	0.016	171		7.39	7.44		U 2			1							S
106721	9.832	0.022	9.230	0.020		0.560	0.022	T	0.63	0.02	L	9.3221	0.0026	0.018	96		9.29	9.36		C			1							
106722	9.914	0.034	8.747	0.022		1.001	0.032	T	0.98	0.03	L	8.8221	0.0022	0.017	48		8.80	8.86		C			1							
106723	4.279	0.008	4.483	0.007		−0.180	0.120	G	−0.17	0.02	A	4.4457	0.0086	0.058	81		4.40	4.56		U 2 C	21371−1928	I 1	1							S
106724	10.110	0.033	8.760	0.019		1.144	0.030	T	1.11	0.03	L	8.7690	0.0026	0.014	63		8.75	8.80		C			1							S
106725	7.355	0.007	7.242	0.009		0.110	0.011	T	0.12	0.01	L	7.2837	0.0011	0.010	98		7.26	7.30		C			1							S
106726	7.787	0.009	7.802	0.010		−0.009	0.012	T	0.01	0.01	L	7.8246	0.0013	0.013	110		7.81	7.85		C			1							S
106727	10.349	0.052	8.719	0.023		1.364	0.045	T	1.33	0.05	L	8.6693	0.0017	0.015	72		8.64	8.69		C			1							
106728	9.693	0.022	8.506	0.014		1.017	0.020	T	0.99	0.02	L	8.5629	0.0015	0.012	93		8.55	8.58		C			1							
106729	10.592	0.059	9.371	0.033		1.043	0.053	T	1.01	0.04	L	9.3998	0.0034	0.016	61		9.38	9.43		C			1							
106730	8.386	0.011	7.267	0.007		0.968	0.004	G	0.95	0.00	H	7.3004	0.0011	0.009	113		7.29	7.31		C			1							S
106731	9.913	0.028	9.356	0.025		0.521	0.033	T	0.59	0.04	L	9.4276	0.0022	0.020	75		9.40	9.47		C			1 S							
106732	9.148	0.013	8.967	0.016		0.159	0.015	G	0.18	0.01	H	9.0254	0.0016	0.015	133		9.00	9.06		C			1							
106733	9.523	0.016	8.353	0.010	*	1.004	0.015	T	0.98	0.01	L *	8.3995	0.0014	0.016	113	*	8.37	8.43		C	21372+6604	H 1	2 C S B	AB	235	0.108	0.029	0.84	1.08	
106734	9.329	0.014	8.986	0.014		0.332	0.022	T	0.39	0.03	L	9.0524	0.0025	0.023	140		9.00	9.09					1							
106735	9.571	0.021	7.397	0.008		1.837	0.019	T	2.14	0.05	O	7.2875	0.0020	0.016	99		7.26	7.31		U			1							S
106736	8.757	0.011	8.328	0.011		0.415	0.015	G	0.48	0.02	H	8.3683	0.0014	0.014	140		8.35	8.40		C			1							
106737	8.416	0.009	8.176	0.010		0.208	0.015	G	0.23	0.02	H	8.2234	0.0015	0.013	108		8.20	8.25		C			1							
106738	9.663	0.018	9.124	0.017		0.505	0.022	T	0.58	0.02	L	9.2184	0.0019	0.017	107		9.19	9.25		C			1							
106739	9.514	0.025	7.547	0.011		1.667	0.023	T	2.17	0.07	O	7.4028	0.0077	0.034	52		7.34	7.44		U 2 C			1							S P
106740	10.600	0.039	10.404	0.053		0.187	0.062	T	0.21	0.07	L	10.4339	0.0067	0.056	90		10.37	12.66		P 1 A			1							G
106741	7.654	0.008	7.235	0.009		0.396	0.011	T	0.46	0.01	L	7.2781	0.0012	0.009	78		7.26	7.30					1							S
106742	8.429	0.007	7.202	0.005		1.048	0.007	T	1.02	0.01	L	7.2500	0.0007	0.011	233		7.23	7.27					1							S
106743	11.103	0.061	9.954	0.037		0.883	0.005	G	0.93	0.01	H	10.0190	0.0036	0.019	74		9.99	10.04		C			1							
106744	9.730	0.014	8.604	0.009		0.969	0.013	T	0.95	0.01	L	8.6710	0.0018	0.023	226		8.63	8.71		C			1							
106745	8.401	0.008	7.828	0.006		0.536	0.009	T	0.61	0.01	L	7.8742	0.0012	0.014	199		7.85	7.89					1							S
106746	9.457	0.016	8.203	0.010		1.069	0.015	T	1.03	0.01	L	8.2608	0.0010	0.011	137		8.24	8.29		C			1							
106747	10.651	0.039	8.798	0.015		1.541	0.033	T	1.60	0.07	L	8.7505	0.0017	0.014	88		8.73	8.77		C			1							
106748	8.252	0.009	8.080	0.010	A	0.700	0.495	G	0.17	0.04	L *	8.0463	0.0013	0.013	101	*	8.02	8.07		D	21374+7513	I 1	2 C A	AB	126	1.252	0.009	1.82	0.03	S
106749	9.730	0.024	9.086	0.021		0.532	0.013	G	0.60	0.01	H	9.1635	0.0020	0.015	80		9.14	9.20		C			1							
106750	9.365	0.023	8.791	0.021	*	0.540	0.023	T	0.61	0.02	L *	9.2553	0.0023	0.027	173	*	9.21	9.31		D	21374−6811	I 1	2 C A	BA	354	1.857	0.007	0.08	0.03	
106751	9.745	0.022	9.837	0.033		−0.079	0.036	T	−0.06	0.04	L	9.8613	0.0026	0.020	84		9.79	9.90					1							
106752	6.452	0.004	6.223	0.004		0.218	0.005	T	0.24	0.01	L	6.2614	0.0008	0.007	123		6.25	6.27		C			1							S
106753	9.248	0.013	8.021	0.008		1.048	0.012	T	1.02	0.01	L	8.0727	0.0013	0.013	180		8.05	8.10					1							
106754	11.790	0.125	10.533	0.061		1.071	0.109	T	1.04	0.09	L	10.6121	0.0335	0.230	113		10.35	10.88	6.12	P 1 A			1							G
106755	6.925	0.005	6.580	0.005		0.327	0.007	T	0.38	0.01	L	6.6199	0.0009	0.007	66		6.61	6.64		C			1							S
106756	9.864	0.032	9.293	0.030		0.558	0.005	G	0.63	0.01	H	9.3239	0.0021	0.014	75		9.28	9.35		C			1							
106757	10.192	0.031	9.845	0.034		0.329	0.043	T	0.38	0.06	L	9.9311	0.0023	0.022	103		9.88	9.98		C			1							G
106758	6.296	0.003	6.224	0.005		0.056	0.003	G	0.08	0.03	C	6.2491	0.0008	0.005	83		6.24	6.26			21376−0023	I 1	1							S
106759	8.630	0.012	8.116	0.012		0.493	0.013	T	0.57	0.01	L	8.1636	0.0009	0.008	78		8.15	8.18					1							S
106760	9.688	0.021	8.278	0.012		1.191	0.019	T	1.15	0.02	L	8.3342	0.0021	0.015	87		8.30	8.36		C			1							S
106761	10.585	0.049	8.676	0.018		1.585	0.041	T	1.60	0.04	L	8.5716	0.0021	0.015	61		8.54	8.60		C			1							
106762	9.503	0.018	9.262	0.021	*	0.230	0.026	T	0.26	0.03	L *	9.2992	0.0021	0.020	104	*	9.27	9.33		D	21376+5546	I 2	2 C A	AB	308	0.999	0.010	2.22	0.05	
106763	9.380	0.018	9.055	0.020		0.309	0.025	T	0.35	0.03	L	9.1431	0.0023	0.017	104		9.11	9.17			21376+5546	I 2	1							
106764	8.582	0.013	8.122	0.013		0.447	0.014	T	0.52	0.01	L	8.1355	0.0044	0.034	63		8.10	8.30	1.47	P 1 A			1 S							
106765	11.940	0.118	10.187	0.040		1.461	0.099	T	1.47	0.16	L	10.2641	0.0023	0.023	116		10.21	10.30					1 S							G
106766	10.449	0.023	9.038	0.012		1.192	0.020	T	1.15	0.02	L	9.0840	0.0022	0.024	204		9.05	9.12					1							
106767	9.561	0.018	9.257	0.020		0.289	0.025	T	0.33	0.03	L	9.3173	0.0023	0.025	122		9.28	9.35					1							
106768	7.333	0.008	7.432	0.008		−0.085	0.010	T	−0.07	0.01	L	7.4282	0.0007	0.007	76		7.41	7.44		C			1							S
106769	8.887	0.014	8.424	0.014		0.436	0.018	T	0.50	0.02	L	8.4914	0.0016	0.014	74		8.46	8.52					1							S
106770	7.813	0.007	7.683	0.007		0.110	0.015	G	0.12	0.01	H	7.7134	0.0010	0.012	121		7.69	7.73					1							S
106771	7.428	0.006	6.279	0.004	*	0.991	0.001	G	0.97	0.00	H *	6.3173	0.0008	0.008	113	*	6.30	6.33		D	21376+5403	H 1	2 C A	AB	220	0.212	0.007	1.56	0.11	S
106772	9.770	0.023	9.625	0.030		0.140	0.035	T	0.15	0.04	L	9.6774	0.0030	0.026	103		9.64	9.72					1							G
106773	9.560	0.013	9.003	0.013		0.527	0.014	T	0.60	0.01	L	9.0356	0.0015	0.018	179		9.01	9.06					1							S
106774	8.618	0.014	8.343	0.017	*						T *	8.3299	0.0019	0.015	104	−	8.30	8.35		D	21377+5734	I 1	3 C A							G
106775	8.636	0.010	7.542	0.007		0.945	0.009	T	0.94	0.01	L	7.6018	0.0006	0.010	118		7.58	7.62					1							S
106776	10.810	0.041	10.369	0.044		0.416	0.055	T	0.48	0.06	L	10.4039	0.0027	0.029	151		10.34	10.45		C			1							G
106777	9.636	0.019	8.468	0.013		1.002	0.018	T	0.98	0.01	L	8.5389	0.0021	0.015	106		8.51	8.56					1							S
106778	9.720	0.024	8.347	0.014		1.162	0.022	T	1.12	0.02	L	8.3887	0.0012	0.011	78		8.37	8.41		C			1							
106779	10.221	0.038	8.738	0.019		1.249	0.033	T	1.21	0.03	L	8.7818	0.0018	0.018	77		8.75	8.81					1							
106780	10.294	0.022	9.785	0.022		0.478	0.028	T	0.55	0.03	L	9.8549	0.0019	0.032	229		9.80	9.92		U			1							G
106781	8.069	0.011	7.657	0.013		0.368	0.012	G	0.43	0.01	H	7.7507	0.0020	0.013	82		7.73	7.77		C	21378+0637	I 2	1 G							S
106782	7.735	0.005	7.245	0.005		0.473	0.005	T	0.54	0.01	L	7.3001	0.0008	0.010	200		7.28	7.32		C			1							S
106783	6.222	0.004	6.182	0.005		0.046	0.006	G	0.06	0.01	H	6.2077	0.0010	0.006	85		6.20	6.22		C	21378+0637	I 2	1							S
106784	10.537	0.032	8.849	0.014		1.410	0.028	T	1.39	0.03	L	8.8541	0.0016	0.020	166		8.82	8.89					1							
106785	11.043	0.040	10.458	0.037		0.570	0.020	G	0.64	0.02	H	10.4817	0.0024	0.030	198		10.43	10.54		C			1 S							
106786	4.907	0.004	4.708	0.003		0.175	0.006	G	0.19	0.02	A	4.7431	0.0013	0.008	74		4.73	4.76					1							S
106787	5.828	0.002	5.490	0.002		0.321	0.003	T	0.37	0.00	L	5.5357	0.0004	0.006	232		5.53	5.54		C			1							S
106788	8.714	0.010	8.335	0.011		0.359	0.014	T	0.42	0.01	L	8.3641	0.0018	0.018	117		8.33	8.41		C			1							S
106789	9.661	0.024	8.614	0.017		0.909	0.022	T	0.91	0.02	L	8.6429	0.0014	0.010	79		8.62	8.66					1							
106790	6.704	0.004	6.748	0.004		−0.035	0.000	G	−0.01	0.00	H	6.7499	0.0008	0.010	184		6.73	6.77		C			1							S
106791	9.752	0.016	9.263	0.016	*	0.472	0.018	T	0.54	0.02	L *	9.3261	0.0021	0.024	168	*	9.28	9.37			21378−6828	H 1	2 C S A	AB	75	0.155	0.013	0.13	0.38	
106792						1.298	0.009	G	1.49	0.01	I	11.1824	0.0059	0.035	74		11.11	11.26		C			1							G
106793	11.050	0.054	9.203	0.018		1.536	0.045	T	1.59	0.10	L	9.2220	0.0019	0.018	123		9.19	9.25					1							
106794	11.967	0.148	10.777	0.081		1.012	0.134	T	1.06	0.16	L	10.7074	0.0037	0.032	116		10.65	10.76		C			1							G
106795	8.559	0.012	8.149	0.012		0.388	0.016	T	0.45	0.02	L	8.2045	0.0018	0.013	78		8.19	8.23		C			1							S
106796	9.581	0.025	8.443	0.017		0.979	0.024	T	0.96	0.02	L	8.4959	0.0015	0.013	68		8.47	8.53					1							S
106797	11.804	0.077	9.950	0.023		1.560	0.069	T	1.58	0.07	L	9.8878	0.0026	0.029	177		9.84	9.93		R			1 S							
106798	9.874	0.020	8.615	0.012		1.073	0.018	T	1.04	0.01	L	8.6423	0.0017	0.018	140		8.61	8.68					1							
106799	11.529	0.089	10.674	0.068		0.720	0.020	G	0.77	0.02	H	10.7490	0.0034	0.026	108		10.69	10.79		C			1							G
106800	8.357	0.011	8.433	0.015		−0.065	0.017	T	−0.04	0.02	L	8.4358	0.0015	0.013	82		8.42	8.46		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
106801	21 37 55.23	+62 04 55.0	4.76	1 H	324.480 111 67	+62.081 946 67		0.72	−1.90	−2.84	0.44	0.41	0.49	0.47	0.39	−11	+ 4	+13	+10	+13	+10	+11	−13	+15	− 9	1	0.50
106802	21 37 55.46	+33 12 01.2	7.37	H	324.481 095 05	+33.200 337 69		6.21	90.57	53.10	0.53	0.55	0.84	0.58	0.67	−14	+14	−18	−	3	+	8	+	0	+10	−	4	+	6	+	1	1	0.19
106803	21 37 55.89	−63 42 42.1	10.63	G	324.482 886 67	−63.711 685 32		47.58	−175.49	−99.65	3.13	3.06	5.17	3.70	3.21	−12	−	1	−17	−16	−	1	+	1	+	0	−	7	−10	−15	0	
106804	21 37 56.03	+21 02 28.3	8.17	H	324.483 467 62	+21.041 201 30		8.13	54.05	79.63	0.69	0.58	1.01	0.82	0.65	+20	+13	−16	−	9	−	6	−	3	−	5	−55	+26	+16	0	0.67
106805	21 37 56.31	−17 12 34.7	7.28	H	324.484 627 33	−17.209 633 47		4.58	31.03	−20.11	0.88	0.62	1.02	1.14	0.72	+16	−24	+	0	+17	−28	+31	−30	+33	+30	+33		0	1.01
106806	21 37 56.96	−74 40 39.4	9.24	H	324.487 330 25	−74.677 604 94		5.23	54.80	−41.19	0.77	0.77	1.06	0.94	0.91	−	8	−13	−17	+12	+12	−21	+	7	+	9	+	5	−22	0	1.67
106807	21 37 57.56	−23 04 05.7	8.62	H	324.489 843 76	−23.068 243 77		9.12	−28.31	−57.39	1.04	0.65	1.18	1.10	0.66	+22	−13	−	8	−24	−17	+39	−18	−	2	+	8	+28	0	−0.17
106809	21 37 58.09	−62 15 15.5	8.24	H	324.492 023 91	−62.254 297 56		4.15	25.34	−30.39	0.53	0.59	0.99	0.65	0.70	−	3	−18	+	3	+25	+	8	+	7	+	9	+12	−	6	+	0	0	−1.80
106810 H	21 37 58.35	+41 52 50.9	8.88	H	324.493 113 05	+41.880 804 34	A	2.17	0.48	−2.67	1.34	1.38	1.76	1.29	1.40	−	8	−11	+14	−15	+14	−11	+15	+	2	+25	−	8	0	0.18
*106811 H	21 38 00.07	+27 43 26.1	9.83	G	324.500 306 74	+27.723 925 64	*	76.07	472.04	−75.30	5.23	13.15	2.53	2.28	1.86	+85	+	3	−	3	−16	−	4	−19	−	1	−	7	+30	−	6	0	0.27
*106812	21 37 59.37	+48 29 13.8	7.57	2 G	324.497 392 69	+48.487 178 63	A	1.36	−2.52	−3.61	0.95	0.99	1.14	1.08	1.11	−23	−	9	−	8	+	3	+	4	−23	+	3	−	9	+15	−17	3	1.16
*106813	21 37 59.40	−34 40 44.3	8.46	H	324.497 506 85	−34.678 981 74		2.70	−6.43	−3.83	1.02	0.63	1.12	1.23	0.68	+23	−18	+	2	+14	−17	+	9	−13	+16	−	3	+25	0	0.43
106814	21 38 00.76	+29 51 27.5	8.15	G	324.503 172 56	+29.857 636 47		3.16	4.59	−4.27	0.51	0.55	0.93	0.62	0.67	−17	+12	−12	+37	−	2	−10	+	5	+	0	+18	−	2	0	−0.16
106815	21 38 01.24	+41 04 53.5	7.16	H	324.505 146 22	+41.081 523 60		3.46	−13.40	−64.16	0.46	0.48	0.68	0.54	0.58	−21	+	2	+	5	+	2	+	5	−	1	+	5	+	6	+22	−34	0	0.55
106816	21 38 01.53	−44 55 12.7	9.33	H	324.506 387 81	−44.920 195 55		5.08	15.39	−41.85	0.79	0.71	1.47	0.75	0.64	+46	−26	+	4	−	5	+17	+22	+23	+36	−	5	+31	1	−0.48
106817	21 38 02.26	−00 45 31.7	9.41	H	324.509 428 35	−00.758 815 00		3.02	−9.39	−2.66	1.47	0.84	1.50	2.09	0.92	+46	−	6	+	4	−34	−29	−	2	−31	−	4	+	9	+63	0	0.38
106818	21 38 02.80	−64 49 26.9	6.22	H	324.511 685 71	−64.824 144 93		5.52	31.86	−9.21	0.38	0.43	0.68	0.44	0.49	−38	+	0	−11	−	2	−17	+	9	−12	+21	−12	−54	2	0.42
106819 H	21 38 02.94	+50 37 03.3	9.24	G	324.512 255 21	+50.617 592 39	B	0.83	−2.33	−2.44	2.03	2.17	2.37	2.29	2.57	+	2	−	3	+	7	−	4	+	0	+	3	+	0	−14	+	0	+16	1	1.46
106820	21 38 03.53	+65 22 27.4	7.93	H	324.514 714 61	+65.374 278 60		4.48	44.99	26.37	0.67	0.59	0.66	0.75	0.59	−12	−	3	+	8	+14	+26	+	7	+26	−16	+	5	+	0	1	−0.45
106821	21 38 04.55	+33 07 28.0	7.51	H	324.518 959 61	+33.124 442 17		3.19	19.86	−12.41	0.55	0.55	0.85	0.60	0.66	−15	+14	−18	+	5	+	6	+	2	+	8	−	3	−	1	−	1	0	1.24
106822	21 38 04.75	−37 09 51.0	8.03	H	324.519 806 04	−37.164 161 34		3.06	18.38	1.31	0.95	0.57	1.07	1.31	0.69	+30	−10	+	6	+	1	+14	+33	+	7	+51	+12	+43	0	0.01
106823	21 38 06.35	+38 59 32.8	8.86	H	324.526 451 20	+38.992 437 85		1.40	−2.21	−4.56	0.66	0.75	1.07	0.69	0.80	−25	+15	−13	+	8	+10	−14	+	9	+	5	+	1	−20	0	−0.93
106824	21 38 08.39	−31 44 14.2	8.56	G	324.534 955 97	−31.737 284 99		11.07	23.46	−82.19	1.08	0.62	1.12	1.17	0.67	+34	+	5	−12	−37	−28	+25	−27	+	7	−11	+31	0	−0.22
106825	21 38 08.69	−02 18 08.9	8.62	G	324.536 228 73	−02.302 468 74		27.21	−464.69	−281.19	1.15	0.72	1.23	1.52	0.77	+46	+	5	+	3	−29	−	7	+18	−13	+15	+15	+60	0	−1.01
106826	21 38 10.58	−25 26 42.5	7.35	H	324.544 090 54	−25.445 151 28		6.33	3.66	−0.67	0.84	0.56	0.89	0.91	0.56	+31	−14	−24	−31	−31	+21	−26	−	6	−	2	+26	0	1.41
106827	21 38 10.73	−43 25 59.4	8.49	H	324.544 695 90	−43.433 167 08		3.43	−4.91	−5.91	1.05	0.70	1.12	1.29	0.63	−14	+	9	−20	−32	+30	−22	+20	+23	+	5	−	8	0	−0.51
106828 H	21 38 10.91	−10 53 40.8	8.92	G	324.545 455 75	−10.894 676 57	A	11.37	202.92	119.26	2.06	1.46	2.10	2.84	1.52	+17	+	6	−24	−25	−	6	+22	+	3	−16	+26	+	4	1	0.78
106829	21 38 13.94	−14 54 36.2	7.20	H	324.558 097 02	−14.910 060 13		5.89	26.77	29.50	0.81	0.60	0.91	1.27	0.72	+11	+	0	−	9	+17	−17	+25	−15	+	2	+22	−	7	0	−1.11
106830	21 38 14.06	+59 10 03.1	9.55	G	324.558 585 26	+59.167 534 69		−0.97	−4.76	−4.30	0.77	0.76	0.90	0.79	0.82	+	1	+	6	+	3	−	4	+	6	−	4	+11	−25	+	7	+18	0	0.11
106831	21 38 15.40	−13 32 00.4	8.29	H	324.564 148 84	−13.533 445 58		5.65	44.18	−5.28	1.67	1.25	1.36	6.17	2.24	+12	−42	−39	−13	−23	+11	−16	−33	+32	−57	0	1.53
106832	21 38 15.47	+05 48 20.7	11.23	H	324.564 438 77	+05.805 743 47		−0.92	1.59	−1.56	2.51	1.75	2.85	3.19	1.97	+33	−	5	−	8	+10	+10	+27	+11	+	9	+11	+46	2	−0.21
106833	21 38 16.55	−12 02 41.5	8.10	H	324.568 952 06	−12.044 863 29		6.19	−12.67	−26.77	1.15	0.84	1.38	2.07	0.83	+	8	+	2	−30	+35	−41	+49	−38	−18	+27	−15	3	0.66
106834	21 38 16.97	−69 37 48.4	6.78	H	324.570 701 70	−69.630 119 48		5.01	31.12	−21.75	0.46	0.42	0.63	0.51	0.47	−16	−18	−	3	+13	+	0	−	9	+	0	+15	+	0	−18	0	−0.62
106835 H	21 38 17.78	+23 35 54.5	9.30	H	324.574 069 15	+23.598 477 95	*	5.11	13.84	5.40	2.78	2.07	1.80	1.85	1.44	+	1	+	4	+	2	+	4	−19	−24	−19	−58	+	9	+26	1	−0.18
106836	21 38 18.51	−63 20 33.7	8.51	H	324.577 112 95	−63.342 702 09		1.87	12.49	−13.36	0.69	0.75	1.26	0.91	0.77	−14	−	5	−25	−	2	+15	−10	+13	−	6	−24	−	1	0	1.05
106837	21 38 22.05	−09 15 15.3	8.50	H	324.591 893 29	−09.254 242 17		12.78	15.70	−31.32	1.07	0.75	1.35	1.44	0.90	+23	−10	−22	−12	+	4	+17	−	1	−29	+50	+31	0	−0.62
106838	21 38 23.47	+04 16 50.5	8.41	H	324.597 781 03	+04.280 683 34		3.25	−8.32	−26.12	0.91	0.66	1.11	1.24	0.72	+29	+	8	−	3	+23	−	2	+41	+	5	+	9	+29	+44	0	3.41
106839	21 38 23.75	+10 11 04.4	8.04	G	324.598 951 54	+10.184 565 49		3.90	−11.50	−15.31	0.90	0.65	1.00	1.27	0.72	+30	−18	−	1	+19	−	6	+16	−	3	−23	+	7	+37	2	0.61
106840	21 38 24.20	−29 38 25.9	7.81	H	324.600 837 70	−29.640 538 33		7.95	35.84	19.37	0.98	0.59	1.15	1.02	0.57	+33	−36	−32	−33	−22	+44	−15	+	4	+20	+30		5	1.96
106841	21 38 24.63	+08 35 04.9	8.22	H	324.602 625 96	+08.584 688 49		3.99	−11.03	−7.19	0.91	0.60	0.95	1.10	0.73	+10	−11	−	7	−36	+15	+24	+11	−16	+22	+28		0	1.69
106842	21 38 26.06	−07 32 54.4	9.23	H	324.608 571 58	−07.548 446 36		4.17	39.53	−65.79	1.29	0.97	1.44	1.42	1.04	+19	−12	−	5	−42	−12	+44	−10	−54	+26	+42		0	−1.99
106843	21 38 26.29	+56 58 25.5	7.43	H	324.609 528 51	+56.973 752 48		2.00	−3.41	−5.98	0.82	0.79	0.97	0.89	0.89	−	1	+	0	−	8	−	1	+23	−	8	+25	−	9	+15	+34	1	
106844	21 38 26.46	+49 26 13.3	8.66	H	324.610 270 67	+49.437 033 01		3.87	7.76	−0.36	0.69	0.74	0.90	0.87	0.90	−18	−	9	+20	−36	+	3	−	2	+	1	−	6	+11	−13	0	−0.73
106845	21 38 27.05	−50 48 43.0	10.25	G	324.612 688 51	−50.811 943 89		8.65	31.46	−30.46	1.34	1.16	1.78	1.97	1.12	+28	+	3	−	3	+34	+15	+12	+12	+30	+	8	+	2	0	−0.19
*106846	21 38 27.47	−81 20 27.9	9.90	G	324.614 449 89	−81.341 070 83		6.22	−103.48	−328.47	0.92	0.86	1.13	1.02	0.94	−	2	−16	+	2	+	6	−	1	−	6	+	0	+	3	−	1	−	1	2	0.42
*106847 H	21 38 27.30	+43 17 26.9	7.46	H	324.613 746 79	+43.290 792 21	A	4.49	0.77	2.61	0.97	0.97	1.23	1.00	0.98	−22	+24	−12	+11	+	7	+13	+12	−	9	+	8	−18	3	−0.10
106848	21 38 28.78	+49 47 43.1	7.03	H	324.619 913 08	+49.795 305 22		3.49	−6.97	−17.37	0.55	0.54	0.69	0.63	0.64	−11	−17	+	5	−36	+	1	+10	−	4	−	8	+14	−	3	0	−0.08
106849	21 38 29.02	+48 42 49.1	7.48	H	324.620 927 56	+48.713 625 93		3.96	−8.16	−13.28	0.58	0.64	0.78	0.70	0.76	−23	+	3	+10	−	8	+	6	−20	+	9	+	8	+12	−29	0	0.07
106850	21 38 29.80	+13 41 03.0	7.57	H	324.624 159 50	+13.684 176 26		1.61	−10.59	−9.38	0.98	0.59	0.98	1.45	0.65	+22	+	6	+	0	+33	−11	+22	−	3	−53	+18	+33	0	−0.97
106851	21 38 29.99	+39 30 38.7	8.22	H	324.624 977 80	+39.510 761 49		2.66	14.81	1.60	0.64	0.73	1.08	0.68	0.77	−26	+20	+10	−14	+11	−16	+15	−	1	+13	−30	2	−1.28
106852	21 38 30.91	+27 41 18.7	8.93	H	324.628 780 93	+27.688 519 97		2.75	1.86	−9.77	0.82	0.84	1.12	0.93	0.96	−	3	−	5	−19	−	1	−	5	−	9	−	5	−46	+11	+	1	2	0.73
106853	21 38 31.49	−27 53 38.1	7.65	H	324.631 207 62	−27.893 903 71		8.30	24.56	−9.89	0.93	0.58	1.10	1.02	0.56	+32	−41	−33	+	3	−17	+26	−15	+17	+22	+19	0	0.08
106854	21 38 31.55	+17 59 59.8	8.91	H	324.631 453 84	+17.999 933 56		6.62	3.85	0.44	0.90	0.72	1.17	1.21	0.79	+26	−16	−	3	−31	+	0	+12	−	7	−50	+12	+22	1	−0.47
106855	21 38 31.79	−68 02 52.5	10.31	2 H	324.632 471 48	−68.047 914 61		9.33	173.47	−65.75	1.27	1.36	1.92	1.37	1.49	−22	−	2	−	6	−	6	−	2	−	9	−	2	+	0	+22	−31	0	2.16
106856	21 38 31.87	+05 46 18.0	5.66	H	324.632 807 32	+05.771 672 81		18.74	112.64	28.64	0.66	0.43	0.75	0.94	0.47	+21	+	6	+	9	+21	+	4	+34	+	5	+11	+18	+34	0	1.31
106857	21 38 31.94	−02 00 54.6	8.67	H	324.633 095 69	−02.015 174 36		4.11	11.36	−5.94	1.16	0.79	1.33	1.62	0.82	+52	+	5	+	7	−	8	+	2	+35	+	0	+27	+21	+62	0	0.51
*106858	21 38 33.63	−59 30 30.8	10.29	H	324.640 134 33	−59.508 555 19		−1.31	−16.54	9.92	1.03	0.87	1.66	1.34	1.03	−25	−	4	−	1	−	5	+	0	+	5	+	0	+12	+	0	−28	0	1.11
*106859	21 38 33.61	−16 51 49.8	8.33	H	324.640 028 02	−16.863 845 70		5.89	12.58	−46.84	1.07	0.71	1.22	1.38	0.81	+	9	−	7	+19	+25	−30	+27	−34	+28	+28	+24	0	0.74
106860	21 38 33.92	+53 43 22.9	9.39	H	324.641 317 38	+53.723 020 67		−0.82	−3.83	−4.65	0.89	0.83	1.06	1.17	1.09	−11	−	8	−10	−23	+	2	−16	−	4	+	2	+16	−	5	0	−0.04
106861	21 38 34.26	−80 29 33.5	9.77	H	324.642 741 14	−80.492 626 98		5.74	16.75	−10.50	0.89	0.86	1.12	0.99	0.99	−	7	−18	−16	+	8	−	2	−	8	−	5	+	0	+	7	−	7	0	0.41
106862	21 38 36.14	+46 49 45.7	8.77	H	324.650 603 96	+46.829 360 18		3.18	22.69	1.17	0.80	0.73	0.95	1.07	1.05	−19	+	5	+	6	+35	+	3	−	1	+	3	+15	+27	−26	0	−0.13
106863	21 38 36.38	+53 34 49.0	7.10	G	324.651 589 34	+53.580 270 27		3.88	12.83	17.85	0.55	0.54	0.67	0.71	0.72	−	0	+	0	−11	−32	−	5	−15	−	8	−20	+	4	+	6	0	−0.53
106864 H	21 38 37.76	−51 27 36.8	9.26	H	324.657 312 83	−51.460 225 33	A	5.70	−11.84	2.48	1.69	1.21	1.99	1.71	1.06	+	9	+14	−	2	+20	+18	+	6	+13	+32	−11	+	6	0	−0.24
106865	21 38 38.92	−03 34 58.8	8.32	H	324.662 185 81	−03.582 992 49		3.06	−7.12	−3.18	1.00	0.70	1.10	1.32	0.73	+42	−11	−	9	−	4	+22	+20	+15	+38	+17	+54	0	0.15
106866	21 38 40.58	−42 42 39.4	9.31	H	324.669 079 44	−42.710 954 25		12.94	−21.79	24.14	1.45	0.91	1.39	1.86	0.80	−12	−	6	−25	−32	+38	−	6	+28	+19	−11	−	7	0	0.41
106867	21 38 40.63	+18 58 32.1	8.03	H	324.669 302 49	+18.975 595 32		3.71	5.87	−1.73	0.58	0.58	0.85	0.68	0.61	+46	+	8	+	0	−15	−18	−27	−22	−60	+	7	+37	0	0.54
106868	21 38 40.73	−18 41 29.2	8.39	G	324.669 711 14	−18.691 432 56		21.10	−38.03	−268.89	1.04	0.71	1.28	1.20	0.85	+24	−	3	+12	−	2	−10	+32	−20	+33	+31	+42	0	−1.48
106869	21 38 41.21	+64 23 08.2	7.23	H	324.671 701 20	+64.385 610 29		3.37	3.49	−1.03	0.54	0.50	0.58	0.69	0.56	−10	−11	+	9	+11	+	5	+	9	+	5	−	8	+	0	−	4	0	0.11
106870	21 38 41.24	−04 09 01.2	6.73	2 H	324.671 830 95	−04.150 326 48		2.52	−10.94	−30.23	0.87	0.56	0.96	1.21	0.63	+	0	+	7	−32	−29	+23	+	5	+20	−21	+43	+11	0	−0.39
106871	21 38 41.45	−41 02 52.2	8.13	H	324.672 724 53	−41.047 831 20		7.25	19.94	2.71	1.08	0.64	1.16	1.64	0.69	+26	+	1	−14	+40	+10	+39	+20	+23	+16	+42	0	−0.35
106872	21 38 45.16	+25 29 55.7	6.18	G	324.688 181 28	+25.498 817 99		7.83	−1.97	4.74	0.56	0.43	0.67	0.70	0.48	+	0	+	1	−18	−24	−	2	−	8	−	3	−45	+19	−	5	0	−0.11
106873	21 38 45.77	+24 23 53.5	8.16	1 H	324.690 707 56	+24.398 180 68		0.90	6.42	−7.78	0.65	0.56	0.87	0.76	0.62	+12	+	1	−11	−	6	−10	−	4	−12	−56	+14	+	7	0	0.47
106874	21 38 47.70	+65 23 46.1	10.43	H	324.698 747 86	+65.396 130 50		2.62	−1.41	−2.70	1.19	1.14	1.29	1.38	1.13	−	9	−	8	+28	+11	+17	+	5	+16	−14	+	6	+	0	0	1.47
106875	21 38 48.88	+52 30 31.4	8.35	H	324.703 668 80	+52.508 712 28		2.08	−0.91	−4.81	0.59	0.62	0.76	0.63	0.69	−13	+	9	−20	+	2	+	0	−	6	+	0	−	1	+19	−	5	0	1.39
106876	21 38 50.51	−19 37 31.3	7.25	H	324.710 470 89	−19.625 370 58		13.29	61.18	−12.06	0.81	0.63	0.97	1.03	0.83	+28	−13	−	2	−	9	+	2	+34	−11	+45	+22	+48	0	−0.23
106877	21 38 50.88	+37 13 16.6	10.18	H	324.711 991 35	+37.221 284 23		2.98	−0.01	−17.63	0.94	1.04	1.85	0.98	1.24	−30	+	0	+14	−	3	+11	−30	+15	+12	+39	−35	0	0.19
106878 H	21 38 51.21	+64 46 10.7	10.06	H	324.713 363 86	+64.769 631 54	A	1.68	−6.60	−4.56	2.36	2.12	2.24	2.76	2.13	−	7	−11	+17	−	1	+	9	+	6	+	7	−10	−	4	+	0	2	0.94
106879	21 38 51.44	+38 55 29.5	8.95	G	324.714 336 11	+38.924 868 04		0.96	−7.28	−12.40	0.62	0.77	1.07	0.70	0.87	−21	+16	−	4	+	8	+	8	−13	+	9	+	6	+	4	−13	0	0.04
106880	21 38 54.68	−31 54 33.4	8.26	G	324.727 850 85	−31.909 264 89		12.80	59.84	−13.15	0.88	0.63	1.11	1.02	0.62	+33	+	9	−17	−	9	−26	+46	−19	+	7	−	5	+23	0	−0.27
106881	21 38 56.15	−79 26 33.1	6.17	H	324.733 969 95	−79.442 517 99		16.64	70.81	−26.91	0.44	0.44	0.56	0.54	0.51	+	0	−24	−13	+16	−	3	−	2	−	4	+	7	+	3	−	7	0	0.66
106882	21 38 56.17	+80 40 39.0	8.91	H	324.734 048 55	+80.677 503 03		23.72	144.57	160.12	0.68	0.66	0.75	0.79	0.67	+	1	−16	+15	+	3	+	8	+	8	+	5	−	9	+	0	−	1	0	0.81
106883 H	21 38 56.32	+36 22 53.2	8.49	H	324.734 653 09	+36.381 438 98	A	4.40	−7.32	−10.90	1.06	1.25	1.67	1.08	1.22	−22	−	3	+	0	+12	+21	−17	+22	+26	+15	−28	2	0.00
106884	21 38 56.72	+57 29 39.2	8.02	G	324.736 342 13	+57.494 217 74	D	2.78	−1.71	−5.04	29.78	32.08	0.79	0.70	0.76	+14	−10	−17	+	4	+	4	−	5	+	5	+	3	+10	+38	3	−0.92
106885	21 38 57.31	+43 53 23.7	9.38	H	324.738 805 92	+43.889 927 13		1.86	−0.12	0.26	0.78	0.76	1.04	0.93	0.92	−14	+	9	−	9	+	2	−11	+	5	−	8	+	3	+14	−28	0	0.49
106886	21 38 57.62	+57 29 20.6	5.74	1 G	324.740 084 34	+57.489 049 68	A	2.78	−1.71	−5.04	0.68	0.76	0.79	0.70	0.76	−	1	−	2	−	6	−19	+15	−	5	+16	−24	+10	+38	3	−0.92
106887	21 38 57.83	−24 26 59.1	7.51	H	324.740 973 95	−24.449 760 07		1.00	8.90	−33.72	0.85	0.55	1.01	0.99	0.57	+23	−	8	−19	−12	−16	+41	−11	+11	+10	+33		0	2.25
106888	21 38 58.19	+70 27 46.7	8.03	G	324.742 467 38	+70.462 976 63		9.41	38.34	−39.10	0.64	0.58	0.65	0.90	0.76	−17	+	0	+	6	−16	+21	−	9	+21	−17	−	2	−	8	3	−1.14
106889	21 38 58.69	−62 09 58.0	9.33	H	324.744 526 87	−62.166 107 51		3.48	−3.06	−20.12	0.68	0.81	1.23	0.83	1.05	+16	−20	−10	+28	+18	−	1	+20	+22	−13	+10		0	0.71
106890	21 38 58.89	+57 29 14.7	8.10	3 G	324.745 390 56	+57.487 409 74	C	2.78	−1.71	−5.04	10.86	11.97	0.79	0.70	0.76	+19	−	7	−	6	−30	−13	−	5	−14	−27	+10	+38	3	−0.92
106891	21 38 59.03	+17 08 00.6	9.19	H	324.745 943 76	+17.133 502 28		0.74	−7.21	−10.79	0.99	0.78	1.41	1.55	0.85	+12	+10	−22	−32	+10	−	4	+	5	−54	+42	−	1	0	0.54
106892	21 38 59.13	+61 48 05.5	8.90	H	324.746 365 72	+61.801 524 04		2.19	13.36	0.59	0.71	0.70	0.80	0.76	0.71	−11	−	1	+	3	+	7	+19	+	7	+20	−17	+16	−	2	1	0.73
106893	21 38 59.14	+41 50 41.5	9.54	H	324.746 414 06	+41.844 853 49		0.17	11.12	5.06	0.85	0.95	1.30	0.96	1.02	−16	+	4	+	4	+12	+14	−	4	+13	+	3	+17	−21	2	−0.54
106894	21 39 00.22	−54 51 52.5	8.94	H	324.750 899 06	−54.864 576 90		4.45	15.07	−2.44	1.08	0.65	1.38	1.36	0.72	+	2	+13	+	3	+11	+27	+	9	+20	+40	−18	+	3	0	0.64
106895	21 39 00.92	+09 53 17.9	7.86	H	324.753 821 61	+09.888 301 95		3.27	0.56	−48.64	0.91	0.66	1.05	1.29	0.77	+26	+	1	−17	+11	−	3	+10	+	1	−25	+19	+36	0	2.63
106896	21 39 01.04	+61 33 22.2	8.68	G	324.754 344 32	+61.556 155 25		0.94	−1.09	−1.90	0.67	0.66	0.74	0.71	0.65	−	5	−	1	+	9	+22	+20	+	8	+21	−	8	+	9	+	4	1	0.34
106897	21 39 01.11	+20 15 55.6	5.77	1 H	324.754 636 04	+20.265 453 57		25.57	122.57	−1.14	0.69

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T	σ	V_T	σ		B–V	σ		V–I	σ		Hp	σ	s	N		Max	Min	P		CCDM		Flags	AB	θ	ρ	σ_ρ	ΔHp	σ	Flags
	mag	mag	mag	mag		mag	mag		mag	mag		mag	mag	mag			mag	mag	days						°	″	″	mag	mag	
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
106801	5.069	0.003	4.811	0.003		0.246	0.004	T	0.38	0.03	C	4.8436	0.0025	0.016	105		4.82	4.87		U 2			1							S
106802	8.742	0.010	7.486	0.007		1.056	0.005	G	1.02	0.00	H	7.5352	0.0012	0.012	138		7.51	7.55		C			1							S
106803	12.389	0.183	10.830	0.069		1.420	0.015	G	2.00	0.02	A	10.7017	0.0042	0.049	163		10.62	10.79					1 X							G
106804	8.942	0.010	8.240	0.009		0.647	0.011	T	0.71	0.01	L	8.3028	0.0014	0.015	176		8.28	8.33					1							S
106805	9.078	0.016	7.418	0.008		1.388	0.014	T	1.36	0.02	L	7.4236	0.0011	0.009	97		7.41	7.44		C			1							S
106806	9.676	0.018	9.281	0.019		0.386	0.022	T	0.45	0.02	L	9.3300	0.0018	0.018	137		9.30	9.36					1							
106807	9.147	0.018	8.674	0.017		0.453	0.015	G	0.52	0.02	H	8.7209	0.0012	0.013	72		8.69	8.74		D			1							S
106809	9.357	0.011	8.334	0.008		0.891	0.010	T	0.90	0.01	L	8.4027	0.0013	0.019	208		8.37	8.45					1							
106810	9.012	0.011	8.942	0.014	*	0.069	0.017	T	0.08	0.02	L *	8.9035	0.0015	0.019	142	*	8.87	8.95		D	21380+4153	I 1	2 C A	AB	46	0.894	0.007	1.68	0.03	
106811	11.776	0.113	10.083	0.041	*	1.495	0.009	G	1.52	0.01	I *	9.9431	0.0038	0.031	116	*	9.89	10.00			21380+2743	I 1	2 C C	AC	109	0.167	0.059	1.58	1.07	G
106812	7.652	0.009	7.617	0.011	A	0.070	0.015	G	0.08	0.02	H	7.6519	0.0105	0.057	115	A	7.60	7.75	1.23	P 1 A	21380+4829	I 1	2 C A	AB	36	11.462	0.022	3.02	0.13	S
106813	10.293	0.030	8.597	0.013		1.416	0.026	T	1.40	0.04	L	8.6003	0.0014	0.013	107		8.58	8.62		C			1							
106814	8.089	0.007	8.137	0.008		−0.038	0.004	G	−0.02	0.00	H	8.1468	0.0009	0.012	173		8.13	8.17					1							S
106815	9.144	0.011	7.326	0.005		1.513	0.010	T	1.55	0.01	L	7.2818	0.0013	0.012	156		7.26	7.30					1							S
106816	10.047	0.018	9.375	0.016		0.611	0.018	T	0.68	0.02	L	9.4590	0.0015	0.020	182		9.43	9.49					1							
106817	9.568	0.021	9.394	0.026		0.159	0.032	T	0.18	0.03	L	9.4676	0.0024	0.019	80		9.43	9.51					1							
106818	6.244	0.002	6.216	0.002		0.021	0.003	G	0.04	0.00	H	6.2320	0.0006	0.008	239		6.22	6.25					1							S
106819	9.408	0.021	9.424	0.029	*	0.010	0.015	G	0.03	0.01	H *	9.2238	0.0025	0.021	95	*	9.20	9.25		D	21380+5037	M 1	2 C A	BA	235	1.032	0.004	0.29	0.02	G
106820	9.310	0.015	8.039	0.009		1.082	0.014	T	1.04	0.01	L	8.1016	0.0013	0.012	117		8.08	8.13		C			1							S
106821	8.807	0.012	7.608	0.008		1.026	0.011	T	1.00	0.01	L	7.6772	0.0015	0.013	132		7.66	7.70					1							S
106822	9.412	0.015	8.154	0.009		1.072	0.014	T	1.04	0.01	L	8.1997	0.0012	0.011	119		8.18	8.23		C			1							
106823	9.068	0.010	8.872	0.011		0.187	0.014	T	0.21	0.02	L	8.9182	0.0019	0.024	187		8.88	8.96					1							
106824	9.215	0.015	8.623	0.014		0.546	0.015	G	0.62	0.01	H	8.6667	0.0014	0.012	84		8.65	8.69		C			1							S
106825	9.698	0.021	8.725	0.015		0.844	0.013	G	0.89	0.01	H	8.7767	0.0017	0.014	84		8.75	8.80					1							
106826	8.500	0.012	7.460	0.008		0.904	0.011	T	0.91	0.01	L	7.5072	0.0011	0.009	83		7.49	7.52		C			1							S
106827	9.949	0.024	8.595	0.014		1.147	0.022	T	1.11	0.02	L	8.6574	0.0015	0.011	73		8.64	8.68		C			1							S
106828	9.841	0.041	9.132	0.035	A	0.599	0.003	G	0.67	0.00	H *	9.0661	0.0042	0.024	58	*	9.03	9.15		D	21382−1054	I 1	2 C A	AB	88	2.271	0.011	1.73	0.04	
106829	8.532	0.013	7.311	0.008		1.043	0.012	T	1.01	0.01	L	7.3704	0.0014	0.009	55		7.36	7.39		C			1							S
106830	10.319	0.030	9.674	0.027		0.670	0.015	G	0.73	0.01	H	9.7059	0.0020	0.020	123		9.67	9.74		C			1							G
106831	8.215	0.012	8.262	0.015		−0.040	0.017	T	−0.02	0.02	L	8.2847	0.0020	0.013	54		8.25	8.30		C			1 G							S
106832						1.631	0.082	G	2.06	0.23	K	11.3083	0.0084	0.049	72		11.23	11.41					1							G
106833	9.607	0.037	8.218	0.021		1.175	0.033	T	1.14	0.03	L	8.2684	0.0019	0.010	41		8.25	8.30		C			1							
106834	6.655	0.003	6.750	0.005		−0.095	0.005	G	−0.08	0.01	H	6.7487	0.0007	0.009	160		6.73	6.76					1							S
106835	9.685	0.018	9.318	0.019	*	0.348	0.024	T	0.41	0.03	L *	9.3785	0.0019	0.022	158	*	9.34	9.43		D	21383+2336	I 1	2 C A	AS	46	0.251	0.008	0.05	0.13	
106836	10.621	0.031	8.716	0.012		1.616	0.027	T	2.15	0.07	O	8.5737	0.0023	0.023	165		8.54	8.62					1							
106837	9.077	0.017	8.563	0.016		0.483	0.021	T	0.55	0.02	L	8.6075	0.0026	0.017	81		8.58	8.63					1							S
106838	9.124	0.015	8.480	0.014		0.598	0.018	T	0.67	0.02	L	8.5362	0.0018	0.016	83		8.51	8.56					1 S							S
106839	8.352	0.011	8.083	0.012		0.285	0.015	G	0.32	0.02	H	8.1056	0.0020	0.015	88		8.08	8.13		C			1							S
106840	8.171	0.010	7.839	0.011		0.315	0.014	T	0.36	0.02	L	7.8835	0.0013	0.009	72		7.87	7.90		C			1							S
106841	8.351	0.011	8.225	0.013		0.122	0.016	T	0.14	0.02	L	8.2654	0.0012	0.009	79		8.25	8.29					1							S
106842	10.724	0.074	9.350	0.039		1.163	0.066	T	1.12	0.06	L	9.3944	0.0029	0.026	69		9.35	9.43					1							
106843	7.537	0.006	7.455	0.007		0.074	0.008	T	0.09	0.01	L	7.4615	0.0017	0.013	119		7.44	7.48			21384+5658	I 1	1 X							S
106844	8.630	0.011	8.661	0.014		−0.030	0.015	G	−0.01	0.01	H	8.6593	0.0018	0.015	103		8.64	8.68					1							
106845	10.909	0.056	10.310	0.051		0.650	0.020	G	0.71	0.02	H	10.4108	0.0041	0.034	94		10.36	10.46					1							
106846	10.584	0.034	9.965	0.030		0.574	0.005	G	0.65	0.01	H	10.0248	0.0026	0.025	135		9.98	10.07		C			1							
106847	9.044	0.012	7.668	0.007	A	0.500	0.495	G	1.11	0.02	L *	7.6247	0.0016	0.014	129	*	7.60	7.65		D	21385+4317	I 1	2 C A	AB	71	1.525	0.009	2.27	0.05	
106848	8.050	0.009	7.117	0.006		0.822	0.004	G	0.84	0.00	H	7.1843	0.0013	0.009	105		7.17	7.20					1							S
106849	9.503	0.021	7.650	0.009		1.541	0.018	T	1.60	0.04	L	7.5956	0.0011	0.013	109		7.57	7.61					1							
106850	9.727	0.020	7.754	0.008		1.636	0.017	T	1.66	0.02	L	7.6804	0.0014	0.016	118		7.65	7.71					1							S
106851	9.787	0.016	8.348	0.009		1.214	0.014	T	1.17	0.01	L	8.3838	0.0017	0.018	175		8.35	8.42		C			1							
106852	8.915	0.012	8.913	0.015		0.007	0.018	T	0.03	0.02	L	8.9373	0.0024	0.024	119		8.90	8.98					1							
106853	8.154	0.008	7.692	0.009		0.449	0.009	T	0.52	0.01	L	7.7466	0.0017	0.010	69		7.73	7.76					1							S
106854	10.048	0.021	8.990	0.014		0.918	0.019	T	0.92	0.01	L	9.0759	0.0019	0.021	162		9.04	9.10					1							
106855	11.421	0.059	10.371	0.037		0.610	0.020	G	0.68	0.02	H	10.4365	0.0040	0.053	167		10.33	10.51		U			1 S							G
106856	5.973	0.004	5.694	0.004		0.265	0.005	T	0.30	0.01	L	5.7321	0.0009	0.006	82		5.72	5.74		C	21385+0546	I 1	1							S
106857	10.082	0.028	8.796	0.016		1.094	0.025	T	1.06	0.03	L	8.8378	0.0017	0.015	92		8.80	8.86					1							
106858	10.967	0.035	10.310	0.032		0.600	0.035	T	0.67	0.03	L	10.4154	0.0024	0.031	180		10.35	10.47					1							
106859	9.780	0.026	8.460	0.016		1.127	0.020	G	1.09	0.02	H	8.4974	0.0011	0.010	78		8.48	8.52					1							
106860	9.481	0.018	9.360	0.023		0.117	0.027	T	0.13	0.03	L	9.4309	0.0019	0.019	108		9.40	9.47		C			1							G
106861	10.402	0.026	9.828	0.024		0.540	0.026	T	0.61	0.03	L	9.8851	0.0032	0.030	145		9.84	9.94					1							
106862	9.985	0.023	8.879	0.015		0.954	0.021	T	0.94	0.01	L	8.9304	0.0019	0.019	107		8.90	8.96		C			1							
106863	7.413	0.006	7.102	0.006		0.295	0.008	T	0.34	0.01	L	7.1658	0.0012	0.009	118		7.15	7.18		C			1 G							S
106864	9.813	0.021	9.380	0.022	A	0.500	0.495	G	0.52	0.04	L *	9.3635	0.0020	0.021	131	*	9.33	9.39		D	21386−5128	I 1	2 C A	AB	178	1.638	0.009	2.02	0.05	
106865	9.615	0.024	8.434	0.016		1.012	0.022	T	0.99	0.02	L	8.4873	0.0011	0.012	74		8.46	8.52					1							
106866	9.980	0.029	9.362	0.026		0.572	0.029	T	0.64	0.03	L	9.4323	0.0040	0.027	72		9.39	9.47					1							
106867	8.081	0.006	8.024	0.007		0.057	0.009	T	0.07	0.01	L	8.0599	0.0011	0.014	219		8.03	8.09					1							S
106868	9.193	0.016	8.472	0.014		0.641	0.003	G	0.71	0.00	H	8.5194	0.0020	0.012	78		8.50	8.54		C			1							S
106869	9.415	0.016	7.429	0.007		1.646	0.014	T	1.67	0.01	L	7.3386	0.0012	0.013	109		7.32	7.36					1							S
106870	8.846	0.015	6.950	0.007		1.608	0.014	T	2.31	0.04	O	6.7768	0.0030	0.031	68		6.74	6.83		U 2			1 S							S
106871	8.388	0.012	8.151	0.013		0.226	0.017	T	0.25	0.02	L	8.1964	0.0018	0.012	76		8.17	8.22					1							S
106872	7.500	0.006	6.312	0.004		1.026	0.004	G	1.00	0.00	H	6.3558	0.0008	0.008	141		6.34	6.37		C			1							S
106873	8.026	0.007	8.136	0.009		−0.095	0.010	T	−0.08	0.01	L	8.1321	0.0014	0.019	181		8.10	8.16		U			1							S
106874	10.869	0.053	10.469	0.054		0.378	0.070	T	0.44	0.08	L	10.5150	0.0032	0.033	111		10.47	10.56		C			1							G
106875	8.391	0.011	8.369	0.013		0.030	0.015	G	0.05	0.01	H	8.3719	0.0014	0.012	114		8.35	8.39		C			1							
106876	7.874	0.009	7.316	0.008		0.527	0.009	T	0.60	0.01	L	7.3673	0.0012	0.008	79		7.35	7.38		C			1							S
106877	10.621	0.030	10.240	0.033		0.361	0.041	T	0.42	0.04	L	10.2693	0.0032	0.046	211		10.20	10.35					1 S							G
106878	10.505	0.038	10.339	0.052	A	0.247	0.141	G	0.28	0.18	R *	10.1286	0.0043	0.027	99	*	10.08	10.18		D	21389+6446	I 1	2 C A	AB	46	5.369	0.010	1.35	0.05	G
106879	9.040	0.010	8.987	0.013		0.075	0.005	G	0.09	0.01	H	8.9810	0.0023	0.021	183		8.94	9.02					1							
106880	8.850	0.012	8.317	0.012		0.500	0.015	G	0.57	0.02	H	8.3664	0.0017	0.014	87		8.35	8.39		C			1							S
106881	6.717	0.003	6.228	0.004		0.460	0.005	T	0.53	0.01	L	6.2746	0.0009	0.007	142		6.26	6.29					1							S
106882	9.999	0.023	8.993	0.017		0.867	0.022	T	0.91	0.02	L	9.0556	0.0021	0.018	122		9.02	9.09					1							
106883	8.747	0.010	8.431	0.011	*	0.318	0.015	G	0.37	0.02	H *	8.5688	0.0014	0.019	243	*	8.54	8.60		D	21389+3623	I 1	2 C A	AB	160	7.932	0.005	1.43	0.02	
106884	8.051	0.013	7.896	0.016	D	0.200	0.040	G	0.06	0.03	L	6.9716	0.1082	0.748	104	−	5.89	7.77		D	21390+5729	I 3	1 C F C							G
106885	9.380	0.013	9.391	0.018		−0.005	0.020	T	0.02	0.02	L	9.3895	0.0023	0.021	130		9.36	9.43		C			1							G
106886	5.887	0.005	5.712	0.004	A	0.200	0.010	G	0.15	0.01	L	5.6455	0.0021	0.016	114	−	5.62	5.67		U 2	21390+5729	I 3	1 C P C							S G
106887	9.107	0.014	7.636	0.008		1.239	0.013	T	1.20	0.01	L	7.6758	0.0013	0.009	79		7.66	7.70		C			1							S
106888	8.660	0.011	8.100	0.010		0.529	0.011	T	0.60	0.01	L	8.1476	0.0012	0.012	108		8.12	8.17		C			1							S
106889	10.655	0.026	9.447	0.016		1.033	0.024	T	1.01	0.02	L	9.4962	0.0023	0.030	211		9.45	9.55					1							
106890	8.150	0.016	7.940	0.019	C	0.240	0.040	G	0.27	0.05	R	5.7161	0.0151	0.163	114	−	5.66	6.49		U 2	21390+5729	I 3	1 C F C							Y
106891	11.524	0.070	9.429	0.018		1.772	0.060	T	1.77	0.21	K	9.2880	0.0020	0.020	140		9.25	9.32		C			1							
106892	10.687	0.045	9.049	0.019		1.382	0.015	G	1.35	0.02	H	9.0417	0.0014	0.018	106		9.02	9.07		C			1							
106893	10.889	0.047	9.710	0.027		1.011	0.042	T	0.99	0.03	L	9.7094	0.0029	0.026	146		9.66	9.74					1 S							G
106894	10.532	0.027	9.059	0.014		1.241	0.024	T	1.20	0.02	L	9.1048	0.0017	0.021	144		9.08	9.15					1							
106895	9.193	0.019	7.960	0.012		1.053	0.018	T	1.02	0.01	L	8.0304	0.0016	0.012	79		8.01	8.06					1							
106896	8.838	0.012	8.678	0.014		0.178	0.003	G	0.20	0.00	H	8.7302	0.0016	0.013	102		8.70	8.75					1							
106897	6.139	0.003	5.812	0.003		0.314	0.005	T	0.36	0.01	L	5.8499	0.0018	0.020	166		5.82	5.88	0.41	P 1 A			1							S
106898	9.098	0.016	9.179	0.022		−0.069	0.025	T	−0.05	0.03	L	9.1172	0.0022	0.016	105		9.09	9.14					1							
106899	10.263	0.019	9.693	0.018		0.537	0.019	T	0.61	0.02	L	9.7806	0.0033	0.033	197		9.72	9.85					1							
106900	9.774	0.019	7.826	0.008		1.616	0.016	T	1.64	0.02	L	7.7387	0.0016	0.021	116		7.70	7.76		U 2			1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\mu_{\alpha*}$	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
106901	21 39 03.50	+26 17 58.5	8.76	H		324.764 569 53	+26.299 577 65		2.93	−45.99	−64.89	0.78	0.79	1.14	0.89	0.90	+ 4	+11	− 9	+ 1	− 9	− 3	− 9	−54	+14	+ 3	0	0.60
106902	21 39 03.54	+11 38 58.3	8.18	H		324.764 764 16	+11.649 516 03		2.79	26.15	6.49	0.97	0.70	1.12	1.30	0.79	+32	+12	− 1	−26	−17	−31	−17	−44	− 2	+38	0	−1.88
106903 H	21 39 04.14	+20 36 05.6	7.99	G		324.767 231 22	+20.601 562 55	A	4.86	40.87	12.49	1.04	0.87	1.28	1.26	0.88	+20	+ 8	−14	−26	+ 2	−10	− 4	−50	+26	+ 4	1	0.10
106904	21 39 04.53	−59 00 34.1	10.19	H		324.768 876 56	−59.009 482 92		12.99	−48.81	−186.45	1.11	0.94	1.89	1.37	1.00	−25	+ 7	−15	−43	+23	− 6	+18	− 5	+ 3	−17	2	−0.89
106905	21 39 04.75	+56 56 59.4	9.13	G		324.769 803 11	+56.949 843 54		2.36	− 2.76	− 6.23	0.73	0.78	0.93	0.79	0.87	− 9	+ 6	−17	− 2	+30	−16	+30	− 5	+16	+29	3	2.80
106906	21 39 04.93	+45 00 52.1	8.44	H		324.770 530 85	+45.014 485 14		0.85	− 0.68	− 0.89	0.64	0.65	0.88	0.81	0.86	−23	+14	− 1	+11	+ 5	+ 4	+ 4	+ 6	− 2	−36	0	−1.90
106907	21 39 06.07	−33 40 43.5	6.28	H		324.775 274 99	−33.678 751 73		22.16	71.63	−42.75	0.67	0.46	0.81	0.80	0.49	+33	−19	− 8	− 4	−13	+35	−11	+11	+ 7	+31	0	1.51
106908	21 39 06.61	+36 02 38.7	8.49	H		324.777 556 95	+36.044 073 16		1.34	− 0.68	− 0.60	0.58	0.61	1.03	0.66	0.70	−13	+ 4	− 8	+14	+36	−23	+35	+16	+20	−19	0	0.17
106909	21 39 07.34	+08 09 53.2	9.85	H		324.780 572 84	+08.164 770 19		7.09	22.87	−33.08	1.41	1.18	1.66	1.84	1.40	+31	− 5	+ 4	− 4	+22	+21	+17	+10	+16	+49	0	1.26
106910	21 39 08.67	−44 19 05.9	10.20	H		324.786 131 41	−44.318 293 75		6.90	7.41	17.58	1.12	0.97	1.82	1.09	0.86	+18	−14	+ 9	−29	+22	+14	+22	+24	+ 4	+14	0	0.78
106911	21 39 08.69	−21 42 49.6	7.63	H		324.786 201 29	−21.713 783 04		4.51	33.64	− 4.30	0.85	0.57	0.98	1.03	0.60	+27	+ 0	− 3	− 3	−26	+25	−23	− 2	+15	+33	4	−0.23
106912	21 39 09.56	+16 04 56.6	9.87	H		324.789 848 48	+16.082 375 48		1.39	− 9.28	−18.33	1.32	0.95	1.52	1.85	1.01	+17	−14	−18	+18	− 8	+19	−10	−61	+31	+18	0	0.67
106913	21 39 09.90	−27 18 22.9	6.75	H		324.791 244 50	−27.306 368 02		39.13	384.53	−83.82	0.70	0.52	0.83	0.82	0.56	+27	−11	−25	−22	−18	+38	− 8	+28	+10	+22	0	0.39
106914	21 39 09.91	+71 18 32.6	7.12	H		324.791 274 78	+71.309 061 45		15.82	106.20	−82.21	0.52	0.48	0.55	0.63	0.49	− 9	−13	+15	−11	+10	+10	+ 8	−16	+ 3	+ 3	0	0.92
106915	21 39 10.35	+31 41 36.0	8.35	G		324.793 115 98	+31.693 344 51		9.64	−29.07	−51.66	0.61	0.63	0.95	0.73	0.74	−10	− 4	− 9	+32	− 7	−19	− 5	−20	− 3	− 1	0	0.19
106916	21 39 10.47	+64 47 56.7	9.48	H		324.793 633 18	+64.799 075 29		3.04	− 1.17	− 7.36	0.94	0.87	1.02	1.19	0.90	−12	−18	+18	+ 3	+13	+ 8	+11	−16	− 5	− 5	0	0.25
106917	21 39 10.55	−46 05 51.4	10.18	G		324.793 959 05	−46.097 623 33		3.77	76.39	− 9.93	1.04	0.93	1.70	1.20	0.90	+46	−31	−12	+14	+ 6	+ 5	+14	+33	− 8	+20	0	0.41
106918	21 39 12.86	+53 40 44.9	8.97	H		324.803 590 75	+53.679 140 51		0.95	7.00	7.00	0.89	0.85	1.06	1.11	1.06	−14	−10	− 3	−23	+ 0	−11	− 3	− 3	+21	−13	0	−2.00
106919	21 39 14.08	+57 48 04.8	10.23	H		324.808 679 65	+57.801 330 76		0.88	− 6.16	− 5.10	1.20	1.26	1.49	1.33	1.37	− 1	+11	− 5	− 5	+24	−10	+24	− 6	+ 4	+37	0	−0.56
106920	21 39 14.58	−74 28 55.0	8.34	H		324.810 768 77	−74.481 944 11		7.10	69.27	−58.87	0.65	0.60	0.85	0.78	0.69	− 9	−16	−10	+16	+ 6	−11	+ 4	+12	− 2	−21	1	1.52
106921	21 39 14.91	+46 10 31.5	7.61	H		324.812 106 02	+46.175 425 24		3.33	6.89	0.38	0.54	0.52	0.73	0.77	0.69	−14	+12	− 8	+12	− 4	+28	− 1	+14	+ 3	−18	0	−1.04
106922	21 39 15.19	−13 53 41.0	7.25	H		324.813 273 50	−13.894 718 39		9.68	29.88	−58.14	0.92	0.62	1.00	1.47	0.70	+ 4	− 9	−15	+23	−24	+37	−24	− 3	+11	−18	0	0.38
*106923 H	21 39 17.08	+43 12 01.4	11.67	H		324.821 177 05	+43.200 381 75	A	6.28	137.12	133.87	4.63	5.03	5.89	4.43	4.41	−12	+33	− 8	−14	− 5	+10	+ 4	−12	+20	− 8	11	1.10
*106924	21 39 16.60	+60 16 59.8	10.36	H		324.819 165 16	+60.283 267 33		15.20	−381.55	233.17	1.06	1.00	1.21	1.13	1.02	−14	+ 0	+ 0	−15	+19	+17	+20	−25	+21	+12	0	1.09
106925	21 39 17.32	−36 49 33.8	9.64	H		324.822 158 34	−36.826 068 37		4.02	48.51	−37.01	1.28	0.74	1.54	1.54	0.81	+32	− 6	− 7	−10	− 1	+42	+ 1	+40	+ 0	+30	1	−1.00
106926	21 39 17.53	+52 21 44.9	7.53	H		324.823 040 43	+52.362 485 31		0.84	− 6.09	− 5.43	0.49	0.50	0.61	0.50	0.56	− 7	+13	−10	+ 4	+ 7	−12	+ 7	+ 8	+13	− 2	0	1.39
106927	21 39 18.34	+42 01 27.7	8.90	G		324.826 422 81	+42.024 355 82		3.60	2.76	− 6.28	0.70	0.75	1.04	0.77	0.84	−20	− 7	+ 1	+ 5	+ 8	− 6	+ 6	+14	+27	−27	0	−2.16
106928	21 39 19.32	−35 00 15.6	8.77	2 H		324.830 508 81	−35.004 331 22		0.21	− 2.36	− 7.81	1.04	0.65	1.23	1.17	0.72	+28	−28	+10	+ 8	− 5	+ 2	− 4	+35	+ 1	+32	0	−0.38
106929	21 39 19.96	−30 18 15.9	7.46	2 H		324.833 165 46	−30.304 416 65		2.67	− 6.81	− 1.07	1.10	0.65	1.20	1.44	0.67	+25	− 5	− 4	+ 2	−27	+14	−20	− 4	−10	+27	3	3.30
106930	21 39 20.24	+22 28 25.8	9.27	H		324.834 349 63	+22.473 822 61		−0.36	−11.55	− 9.60	0.87	0.81	1.18	0.91	0.86	+25	+13	− 7	−27	−18	+ 1	−16	−67	+16	+24	0	−0.82
106931	21 39 20.83	−37 08 27.2	8.07	G		324.836 796 44	−37.140 884 68		24.81	129.30	−65.98	0.90	0.49	1.03	1.10	0.54	+25	−17	− 6	−18	−10	+41	− 9	+31	+ 4	+24	0	−1.56
106932	21 39 22.46	+24 29 40.4	7.16	H		324.843 592 70	+24.494 564 40		1.41	9.07	3.24	0.61	0.49	0.76	0.72	0.56	+ 7	+ 2	−15	− 8	− 6	−11	− 9	−59	+17	+ 1	0	0.67
106933	21 39 24.96	+40 38 13.6	8.07	H		324.854 014 58	+40.637 112 54		1.17	1.25	− 1.96	0.50	0.55	0.75	0.59	0.64	−24	+ 0	+11	+ 1	+ 8	− 8	+ 9	+10	+11	−32	0	−0.20
106934	21 39 25.02	+31 31 59.6	8.69	G		324.854 231 87	+31.533 208 60		7.40	18.22	27.52	0.66	0.60	1.00	0.84	0.73	−26	+ 5	−25	+26	+ 6	−17	+ 6	+ 3	+ 8	− 9	0	−0.57
106935	21 39 25.91	+26 35 29.1	8.38	H		324.857 973 92	+26.591 411 05		1.89	−15.73	− 6.02	0.75	0.64	1.02	0.81	0.71	− 7	+23	−14	−15	− 4	+ 4	+ 0	−46	+14	+ 0	0	−1.23
106936	21 39 27.11	−33 38 17.0	8.98	H		324.862 972 89	−33.638 044 41		2.53	25.23	− 5.89	0.99	0.66	1.15	1.17	0.74	+30	− 6	− 6	− 9	−14	+22	−12	+25	− 5	+27	0	−0.28
106937	21 39 27.41	+57 29 00.9	8.32	H		324.864 200 69	+57.483 569 50		4.17	− 3.37	− 5.15	0.66	0.71	0.82	0.70	0.75	−12	− 2	+ 2	− 1	+22	−15	+29	−19	+ 2	+26	1	2.19
106938	21 39 28.09	−10 34 36.4	6.07	H		324.867 056 40	−10.576 769 13		10.22	27.36	−52.30	0.76	0.60	0.91	1.08	0.60	+26	− 1	− 7	+ 7	−14	+36	−18	−31	+23	+11	0	−0.70
106939 H	21 39 28.82	+54 37 33.2	9.17	H		324.870 093 63	+54.625 881 76	A	1.25	− 0.07	− 2.70	1.20	1.24	1.41	1.21	1.25	+10	− 8	− 8	− 9	+ 0	−23	+ 0	−12	− 1	+19	0	0.81
106940 H	21 39 30.24	+30 09 22.2	8.29	H		324.876 010 91	+30.156 162 86	*	4.40	23.86	5.29	0.57	0.58	0.93	0.73	0.67	−18	− 1	−21	+55	−12	−12	− 9	− 6	+ 5	−10	0	0.56
106941	21 39 30.88	+56 35 38.9	8.87	H		324.878 680 66	+56.594 143 86		2.69	− 2.45	3.43	0.71	0.69	0.86	0.75	0.77	− 3	+13	+ 2	+ 6	+23	−14	+25	+11	+10	+23	0	0.50
106942 H	21 39 31.39	−00 03 04.1	6.66	G		324.880 794 13	−00.051 140 59	A	23.13	237.72	12.68	1.74	1.26	1.45	1.80	0.99	+46	− 5	−12	+ 9	−23	+ 8	−12	−29	+ 9	+58	2	0.54
106943 H	21 39 33.11	−46 19 22.0	9.03	H		324.887 941 95	−46.322 777 96	*	4.75	40.02	−44.23	0.85	0.75	1.31	0.99	0.73	+49	−18	− 1	+22	+15	+12	+20	+37	− 4	+28	0	−0.19
106944	21 39 33.28	+02 14 37.5	5.10	H		324.888 687 07	+02.243 762 98		13.55	−32.70	−84.17	0.78	0.51	0.88	1.13	0.51	+32	+14	+11	+12	− 9	+32	− 5	+10	+17	+42	0	2.15
106945 H	21 39 33.32	−08 12 42.2	8.93	H		324.888 820 66	−08.211 714 87	*	2.01	− 1.31	− 9.39	1.41	0.80	1.41	1.56	0.92	+ 0	− 3	−12	−47	+15	+28	+13	−30	+39	+27	0	3.29
106946	21 39 35.31	−56 19 59.0	10.17	H		324.897 130 82	−56.333 051 80		2.14	− 1.92	− 0.35	1.32	1.00	1.82	1.57	1.24	+21	−34	−17	+42	+37	−12	+41	+51	−36	+34	0	1.76
106947	21 39 36.44	+23 15 54.1	9.51	G		324.901 828 90	+23.265 024 96		17.66	32.18	204.77	1.08	0.83	1.44	1.39	0.93	+ 4	+16	−37	− 6	− 3	− 9	− 2	−62	+40	+ 1	1	0.96
106948	21 39 36.99	+71 25 34.5	8.20	H		324.904 116 94	+71.426 240 97		5.41	21.58	16.63	0.62	0.56	0.66	0.70	0.57	+ 3	−27	+ 8	− 4	− 1	+ 6	+ 0	−17	+ 0	+16	0	0.52
106949	21 39 37.66	+24 19 26.1	8.97	H		324.906 915 84	+24.323 912 99		19.91	34.79	− 2.29	0.81	0.76	1.14	0.99	0.85	+17	− 6	−23	− 5	− 9	− 2	−15	−63	+31	+ 7	0	0.02
106950	21 39 38.66	−09 05 02.3	8.66	H		324.911 077 41	−09.083 971 15		2.83	33.47	−33.95	0.98	0.83	1.25	1.41	0.97	+34	− 8	− 2	−12	+ 8	+39	+ 3	−32	+39	+55	0	−0.20
106951	21 39 39.19	−12 37 20.2	8.48	H		324.913 271 01	−12.622 278 70		15.21	140.91	36.95	1.17	0.77	1.28	2.01	0.86	− 6	+ 3	−33	+40	−38	+49	−32	+ 0	+ 8	−24	0	0.99
106952	21 39 39.61	−39 12 23.1	8.14	H		324.915 050 88	−39.206 412 88		4.66	−35.27	−23.95	0.86	0.52	1.00	1.02	0.55	+21	−15	− 5	+ 2	−12	+18	− 8	+30	+ 0	+15	0	0.94
106953	21 39 40.27	+17 58 09.3	8.45	H		324.917 786 40	+17.969 240 33		7.01	−14.97	− 4.33	0.73	0.63	1.02	0.99	0.66	+33	− 9	−13	−25	+ 7	+12	− 4	−45	+27	+21	0	−0.52
106954	21 39 40.84	−51 34 21.4	7.70	1 H		324.920 155 37	−51.572 600 83		5.16	10.39	−15.12	0.73	0.47	1.00	0.89	0.49	+14	+12	+ 4	+19	+20	+19	+16	+39	− 7	+12	0	0.80
106955	21 39 42.47	−42 26 44.1	6.64	H		324.926 961 58	−42.445 594 57		4.50	11.87	2.91	0.83	0.47	0.85	0.93	0.45	− 4	+11	−29	−29	+23	+ 2	+17	+46	−20	+ 4	0	2.08
106956 H	21 39 44.44	+58 14 44.0	9.14	G		324.935 160 43	+58.245 566 01	A	2.15	− 2.45	− 2.69	1.22	1.21	1.35	1.26	1.28	+ 4	+ 6	− 4	−16	+15	−21	+15	−12	+ 4	+35	4	1.18
106957	21 39 45.40	+29 11 09.4	8.99	H		324.939 174 51	+29.185 936 66		1.88	− 0.33	−12.88	0.94	0.91	1.26	1.03	0.99	+ 1	+ 7	−11	− 7	−10	− 6	−10	−47	+ 6	+ 2	0	−1.04
106958	21 39 45.63	+02 08 21.1	7.60	H		324.940 114 35	+02.139 198 85		6.17	34.41	−10.35	0.91	0.62	1.02	1.31	0.64	+39	+10	+ 6	+17	− 1	+30	+ 4	+20	+14	+48	0	2.43
106959	21 39 48.02	+29 56 38.3	8.35	H		324.950 092 59	+29.943 982 50		4.38	6.10	− 4.49	0.57	0.55	0.94	0.71	0.64	−16	−13	− 5	+55	−12	−23	− 7	−16	+13	− 8	0	−0.98
106960 H	21 39 48.69	+37 49 25.0	9.81	H		324.952 887 41	+37.823 607 04	B	6.65	− 1.89	4.07	4.34	4.48	4.31	2.43	3.49	−62	− 3	+ 5	+ 4	+ 7	− 6	+ 3	− 5	+15	−41	3	0.34
106961	21 39 48.89	−16 00 21.0	9.72	2 H		324.953 704 81	−16.005 837 76		5.22	44.45	− 2.15	1.34	1.02	1.56	1.97	1.17	+25	+ 3	− 9	− 3	−15	+23	−10	− 6	+20	+ 8	0	−0.22
106962	21 39 48.97	+06 49 13.5	9.06	H		324.954 039 43	+06.820 424 17		5.17	10.74	1.94	1.20	0.70	1.28	1.60	0.84	+35	+21	− 3	+41	+23	+32	+32	+10	+39	+53	0	0.65
106963	21 39 49.01	+52 01 21.1	8.92	H		324.954 193 87	+52.022 530 03		2.54	1.78	1.84	0.71	0.75	0.91	0.78	0.82	− 4	+12	− 7	+19	+ 5	−26	+ 5	+ 7	+ 5	+ 4	0	−0.75
106964	21 39 49.73	+65 44 00.8	9.11	2 H		324.957 206 34	+65.733 552 60		3.49	− 7.85	− 6.95	0.81	0.78	0.88	1.01	0.81	− 9	− 2	+16	+12	+16	+ 8	+14	−13	+13	− 4	0	−0.75
106965	21 39 50.51	−50 29 29.7	7.85	H		324.960 460 60	−50.491 590 54		7.39	−37.15	−48.61	0.70	0.49	0.96	0.87	0.49	+17	+ 2	−11	+17	+13	+20	+14	+36	+12	+ 9	0	−0.69
*106966 H	21 39 51.18	+68 07 50.7	8.78	H		324.963 242 86	+68.130 747 74	A	2.02	− 4.31	− 7.75	1.58	1.55	1.49	1.79	1.67	−17	− 7	+12	−20	+13	− 5	+10	−16	+13	−28	1	1.04
*106967	21 39 51.07	−08 13 22.2	8.57	H		324.962 800 13	−08.222 845 27		3.46	11.33	− 2.46	1.03	0.78	1.26	1.24	0.84	+19	−16	− 1	−28	+ 5	+45	+ 1	−36	+32	+40	0	1.27
106968	21 39 52.08	−43 07 55.2	6.73	G		324.967 009 29	−43.132 006 16		6.31	−22.94	4.53	0.94	0.47	0.84	1.32	0.50	+ 3	+19	−19	−57	+ 4	−20	+36	+41	− 4	−40	0	1.07
106969	21 39 53.72	+39 30 53.8	6.98	H		324.973 854 06	+39.514 940 62		9.65	49.25	4.97	0.42	0.48	0.69	0.47	0.56	−26	+14	− 4	− 9	+ 4	− 9	+ 5	+ 0	+ 3	−29	1	1.13
106970	21 39 53.96	+44 25 55.7	6.77	H		324.974 848 26	+44.432 144 67		3.01	7.82	− 0.91	0.46	0.48	0.64	0.59	0.65	−23	+15	− 5	+ 4	− 4	− 8	− 5	− 4	+14	−47	0	0.80
106971	21 39 54.06	−44 39 56.6	9.75	H		324.975 268 53	−44.665 730 13		8.72	− 8.03	−41.70	1.03	0.83	1.69	1.50	0.77	+34	−39	−12	−31	+ 6	+35	+38	+42	−25	−29	0	1.20
106972 H	21 39 54.19	+27 36 45.4	11.62	G		324.975 808 29	+27.612 621 52	*	39.78	280.77	−230.38	9.08	6.94	3.70	3.41	2.78	+12	+ 5	− 1	− 3	−10	−17	− 4	−27	+18	− 6	2	0.73
106973	21 39 55.11	+51 28 36.8	6.74	H		324.979 631 21	+51.476 878 64		1.74	− 1.51	−11.24	0.45	0.49	0.58	0.51	0.57	−10	+ 4	− 9	+13	+ 3	−16	+ 4	− 5	+ 2	+ 4	0	0.56
*106974	21 39 55.57	+49 07 58.0	7.14	G		324.981 551 38	+49.132 779 94		2.70	9.51	1.46	0.50	0.53	0.65	0.64	0.66	−22	+ 0	− 2	−15	+ 8	−14	+ 8	+ 3	+10	−24	0	−0.96
*106975	21 39 55.43	−25 13 27.1	8.08	H		324.980 961 77	−25.224 199 31		3.27	55.06	−74.14	0.88	0.63	1.05	0.99	0.61	+37	−12	−26	−21	−30	+36	−22	−12	+ 2	+34	0	0.48
106976	21 39 56.10	−35 50 33.2	8.36	G		324.983 754 55	−35.842 545 19		5.13	39.29	−14.42	0.89	0.59	1.15	1.01	0.65	+33	−19	− 8	+ 0	+ 2	+44	+ 3	+34	+ 3	+34	0	−2.00
106977	21 39 57.00	−23 11 56.7	8.62	H		324.987 511 01	−23.199 074 47		4.27	16.64	1.81	0.98	0.63	1.17	1.15	0.73	+16	+ 0	+ 1	− 5	− 8	+44	−14	+22	+21	+32	2	−0.40
106978 H	21 39 59.74	−52 21 32.5	6.20	2 G		324.998 899 09	−52.359 026 26	*	5.17	−18.75	6.71	0.60	0.40	0.73	0.75	0.43	+19	− 4	−10	+29	+21	+12	+21	+39	−13	+20	0	1.23
106979	21 40 00.51	+55 09 07.5	9.14	H		325.002 113 97	+55.152 084 91		4.39	− 8.17	− 9.22	0.75	0.80	0.98	0.81	0.84	− 1	+10	− 5	−18	+14	−25	+12	−11	− 4	+15	0	−0.65
106980	21 40 01.20	+53 58 08.4	7.59	H		325.004 981 10	+53.969 009 31		0.49	− 2.62	− 4.10	0.57	0.58	0.72	0.66	0.68	− 3	− 6	− 8	−17	− 6	−20	− 9	−16	+19	+ 8	0	−0.31
106981	21 40 01.86	+09 11 05.0	6.96	3 H		325.007 732 30	+09.184 720 65		7.61	44.03	13.49	0.74	0.57	0.91	0.91	0.69	+29	−20	+ 6	+16	− 3	+10	+ 0	−26	+18	+47	0	1.22
106982	21 40 02.39	−40 29 37.2	9.11	H		325.009 952 82	−40.493 675 84		4.18	5.85	6.66	1.19	0.77	1.38	1.67	0.94	+31	− 3	+ 1	− 6	+22	+37	+13	+59	+ 7	+44	0	2.86
106983	21 40 04.36	+46 16 18.2	8.81	H		325.018 161 83	+46.271 719 67	A	3.06	14.64	1.74	1.13	1.01	1.26	1.38	1.11	−24	+ 4	−12	+25	− 7	+10	−10	− 8	+23	−39	2	−0.29
106984	21 40 05.09	+12 05 32.8	9.30	H		325.021 204 10	+12.092 443 41		4.32	−21.88	−19.40	1.33	0.85	1.42	1.92	0.95	+27	+24	+ 0	−46	−10	−38	−13	−51	+ 2	+29	0	0.54
106985	21 40 05.34	−16 39 44.1	3.69	H		325.022 259 35	−16.662 253 43	+	23.48	187.39	−22.33	1.34	0.77	1.10	1.87	1.72	+52	−48	−18	−60	−44	+44	−76	−49	+46	+68	3	−2.16
106986	21 40 05.41	−57 26 30.9	7.06	H		325.022 521 87	−57.441 902 87		6.27	30.89	−60.92	0.55	0.47	0.88	0.66	0.50	+ 3	−23	− 1	− 1	+39	+ 0	+35	+24	−23	+18	0	2.32
106987	21 40 05.69	+05 41 05.8	8.76	H		325.023 723 16	+05.684 940 78		6.90	16.75	− 9.73	1.06	0.75	1.21	1.42	0.83	+27	− 1	+ 1	+12	+19	+27	+17	+ 9	+26	+41	0	0.53
106988	21 40 06.09	−11 19 41.9	9.40	G		325.025 371 88	−11.328 291 95		5.04	12.69	− 5.30	1.11	1.04	1.48	1.69	1.20	+39	− 7	−32	− 8	− 9	+30	− 5	−24	+42	+23	0	0.94
106989	21 40 06.34	−34 34 28.7	9.84	H		325.026 429 26	−34.574 651 98		3.52	18.01	−17.61	1.36	0.89	1.54	1.85	1.00	+22	− 4	−14	+21	−28	+22	−19	+26	−15	+ 6	0	−0.15
106990	21 40 06.53	−50 08 41.2	9.97	H		325.027 224 22	−50.144 766 99		10.14	−30.39	−35.49	1.08	0.87	1.58	1.19	0.86	+25	−14	−12	+ 6	+17	+ 4	+20	+33	+13	−20	+18	0	0.66
106991	21 40 07.04	+01 10 29.4	8.08	H		325.029 334 92	+01.174 819 54		1.20	4.06	−30.41	0.95	0.68	1.09	1.21	0.75	+35	− 4	+ 3	−23	− 2	+32	− 7	+ 7	+23	+48	0	−0.17
106992	21 40 07.97	+26 59 28.8	9.79	H		325.033 214 03	+26.991 321 25		3.50	6.37	− 7.46	1.10	0.88	1.46	1.20	0.97	−16	+29	−20	−21	+ 1	+ 9	+ 9	−49	+19	− 5	4	1.13
106993	21 40 08.03	−56 59 23.1	9.61	2 H		325.033 439 60	−56.989 755 51		−1.93	14.04	− 9.90	1.26	0.88	1.63	1.82	1.05	+10	−22	−12	+32	+36	−10	+33	+44	−28	+15	0	1.81
106994	21 40 09.05	+26 00 09.4	9.20	H		325.037 695 80	+26.002 599 44		1.81	− 2.05	6.88	0.90	0.71	1.20	1.05	0.79	− 2	+ 7	−24	− 9	− 5	−15	− 7	−52	+31	− 9	0	−1.20
106995	21 40 09.87	−62 48 22.3	8.19	H		325.041 108 85	−62.806 197 19		10.29	−67.38	−17.72	0.54	0.56	0.99	0.66	0.63	+ 6	−20	−18	+33	+13	− 2	+15	+23	−19	+ 3	0	0.86
106996	21 40 10.60	−38 53 29.0	8.76	H		325.044 157 97	−38.891 398 39		2.84	1.48	− 7.76	0.92	0.57	1.10	1.05	0.62	+28	− 7	− 6	−11

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T	σ	V_T	σ		B–V	σ		V–I	σ		Hp	σ	s	N		Max	Min	P		CCDM		Flags	AB	θ	ρ	σ_ρ	ΔHp	σ	Flags
	mag	mag	mag	mag		mag	mag		mag	mag		mag	mag	mag			mag	mag	days						°	″	″	mag	mag	
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
106901	10.104	0.026	8.848	0.016		1.071	0.024	T	1.04	0.02	L	8.9299	0.0014	0.018	140		8.90	8.96		C			1							
106902	9.663	0.022	8.314	0.013		1.143	0.020	T	1.11	0.02	L	8.3472	0.0017	0.016	103		8.32	8.37		C			1							S
106903	8.607	0.009	8.046	0.008	A	0.558	0.015	G	0.63	0.01	H	* 8.0571	0.0010	0.013	178	*	8.03	8.09		D	21391+2036	I 1	2 C A	AB	277	8.042	0.018	3.07	0.07	S
106904	10.999	0.037	10.289	0.032		0.640	0.037	T	0.70	0.03	L	10.3195	0.0033	0.035	182		10.26	10.37					1							
106905	9.378	0.016	9.190	0.019		0.245	0.015	G	0.27	0.02	H	9.1966	0.0021	0.018	107		9.16	9.23					1							D
106906	9.975	0.022	8.591	0.012		1.171	0.020	T	1.13	0.02	L	8.6069	0.0017	0.015	125		8.57	8.63		C			1							
106907	7.478	0.006	6.379	0.004		0.949	0.006	T	0.94	0.00	L	6.4403	0.0010	0.008	92		6.43	6.45		C			1							S
106908	10.714	0.031	8.684	0.010		1.719	0.027	T	1.99	0.07	O	8.5758	0.0014	0.020	222		8.54	8.61					1							
106909	10.734	0.048	9.851	0.034		0.787	0.044	T	0.82	0.03	L	10.0004	0.0042	0.029	76		9.93	10.05		C			1							
106910	10.770	0.032	10.269	0.032		0.482	0.035	T	0.55	0.04	L	10.3047	0.0028	0.026	141		10.26	10.35		C			1							
106911	9.137	0.018	7.756	0.011		1.169	0.017	T	1.13	0.01	L	7.7932	0.0014	0.014	76		7.77	7.82					1							S
106912	11.677	0.081	9.995	0.029		1.405	0.068	T	1.38	0.08	L	10.0099	0.0028	0.023	119		9.97	10.05		C			1							
106913	7.510	0.008	6.807	0.005		0.623	0.005	G	0.67	0.02	A	6.8771	0.0010	0.007	81		6.87	6.89		C			1							S
106914	7.671	0.007	7.184	0.006		0.476	0.015	G	0.55	0.02	H	7.2306	0.0008	0.008	111		7.22	7.25		C			1							S
106915	8.853	0.012	8.392	0.011		0.461	0.015	G	0.53	0.02	H	8.4508	0.0015	0.017	158		8.42	8.49		C			1							
106916	9.531	0.020	9.501	0.026		0.032	0.030	T	0.05	0.02	L	9.5032	0.0020	0.021	99		9.47	9.53					1							G
106917	9.870	0.017	10.158	0.030		−0.241	0.019	G	−0.26	0.02	H	10.1174	0.0022	0.024	186		10.06	10.15					1							
106918	9.129	0.015	8.982	0.019		0.141	0.023	T	0.16	0.02	L	9.0187	0.0024	0.020	108		8.98	9.06					1							
106919	10.399	0.039	10.195	0.052		0.195	0.061	T	0.21	0.07	L	10.2903	0.0038	0.028	98		10.24	10.36					1							G
106920	8.894	0.011	8.384	0.010		0.479	0.013	T	0.55	0.01	L	8.4479	0.0016	0.016	144		8.42	8.48		C			1							S
106921	7.713	0.008	7.627	0.009		0.084	0.011	T	0.10	0.01	L	7.6465	0.0011	0.012	125		7.63	7.67		C			1							S
106922	8.601	0.014	7.351	0.009		1.066	0.013	T	1.03	0.01	L	7.4175	0.0013	0.009	56		7.40	7.43		C			1							S
106923						1.386	0.243	G	1.64	0.45	I *	11.7723	0.0095	0.088	116	*	11.61	11.92		D	21393+4312	I 1	2 C D	AB	275	6.833	0.018	0.49	0.10	G D
106924	11.123	0.053	10.533	0.052		0.551	0.066	T	0.62	0.06	L	10.4807	0.0028	0.035	121		10.43	10.55					1							G
106925	10.356	0.029	9.779	0.027		0.542	0.029	T	0.62	0.03	L	9.7611	0.0026	0.023	130		9.71	9.80					1							
106926	7.553	0.006	7.529	0.008		0.027	0.009	T	0.04	0.01	L	7.5509	0.0009	0.008	111		7.54	7.57					1							S
106927	9.180	0.014	8.913	0.016		0.291	0.015	G	0.33	0.02	H	8.9669	0.0025	0.020	138		8.93	9.00					1							
106928	11.086	0.052	8.949	0.016		1.807	0.045	T	2.09	0.11	O	8.8405	0.0033	0.021	101		8.79	8.87		U 2			1							
106929	9.478	0.019	7.701	0.009		1.510	0.017	T	2.66	0.04	O	7.4458	0.0106	0.069	64		7.40	7.58	3.01	P 1 A	21393−3018	I 1	1 S							S
106930	10.634	0.033	9.387	0.017		1.064	0.029	T	1.03	0.02	L	9.4445	0.0020	0.020	153		9.41	9.47					1							
106931	8.925	0.012	8.150	0.010		0.684	0.015	G	0.74	0.01	H	8.2124	0.0011	0.014	139		8.19	8.23		C			1							S
106932	9.079	0.010	7.304	0.005		1.479	0.009	T	1.50	0.01	L	7.2884	0.0007	0.009	178		7.27	7.30		C			1							S
106933	8.063	0.006	8.060	0.008		0.007	0.009	T	0.03	0.01	L	8.0784	0.0012	0.016	164		8.05	8.11					1							S
106934	9.342	0.015	8.738	0.013		0.583	0.015	G	0.65	0.01	H	8.8107	0.0014	0.017	161		8.79	8.85		C			1							
106935	10.228	0.026	8.533	0.012		1.416	0.023	T	1.40	0.04	L	8.5306	0.0017	0.016	146		8.50	8.56					1 S							
106936	10.282	0.033	9.086	0.020		1.024	0.030	T	1.00	0.03	L	9.1428	0.0014	0.015	92		9.12	9.17		C			1							
106937	8.728	0.012	8.392	0.013		0.367	0.005	G	0.43	0.01	H	8.4107	0.0024	0.020	117		8.38	8.44			21395+5729	I 1	1 S							
106938	7.408	0.009	6.185	0.007		1.034	0.002	G	1.01	0.00	H	6.2344	0.0011	0.007	50		6.22	6.25		C			1							S
106939	9.844	0.020	9.314	0.020	A	0.269	0.180	G	0.51	0.04	L *	9.2673	0.0023	0.018	117	*	9.24	9.30		D	21395+5438	I 1	2 C A	AB	309	8.314	0.019	2.64	0.07	
106940	8.629	0.008	8.319	0.009	*	0.294	0.011	T	0.34	0.01	L *	8.3625	0.0015	0.015	208	*	8.33	8.39			21395+3009	I 1	2 C S A	AB	239	0.142	0.011	1.10	0.37	
106941	9.144	0.016	8.880	0.018		0.251	0.023	T	0.28	0.03	L	8.9449	0.0021	0.017	101		8.92	8.98		C			1							
106942	7.254	0.007	6.715	0.006	*	0.514	0.008	G	0.59	0.01	H *	6.7581	0.0012	0.007	69	*	6.75	6.77		D	21395−0003	I 1	2 C A	AB	261	0.482	0.003	0.67	0.02	S
106943	9.417	0.013	9.054	0.014	*	0.354	0.017	T	0.42	0.02	L *	9.1168	0.0019	0.020	167	*	9.08	9.15			21396−4619	H 1	2 C S A	AB	214	0.175	0.041	1.79	0.72	
106944	6.425	0.004	5.215	0.003		1.034	0.005	G	1.01	0.02	A	5.2671	0.0006	0.006	74		5.26	5.28			21396+0215	I 1	1							S
106945	10.298	0.041	9.020	0.023	*	1.088	0.037	T	1.05	0.04	L *	9.0951	0.0026	0.017	73	*	9.06	9.11			21396−0813	H 1	2 C S B	AB	329	0.194	0.055	2.02	0.76	
106946	10.614	0.031	10.180	0.033		0.410	0.042	T	0.48	0.05	L	10.2600	0.0028	0.031	131		10.19	10.31					1							
106947	10.435	0.027	9.584	0.021		0.756	0.014	G	0.80	0.01	H	9.6480	0.0019	0.023	150		9.62	9.68		C			1							
106948	8.452	0.012	8.235	0.013		0.207	0.017	T	0.23	0.02	L	8.2692	0.0012	0.014	118		8.25	8.29		C			1							S
106949	9.772	0.016	9.049	0.014		0.664	0.017	T	0.73	0.01	L	9.1081	0.0015	0.019	180		9.06	9.14		C			1							
106950	9.000	0.016	8.698	0.018		0.287	0.023	T	0.33	0.03	L	8.7330	0.0014	0.012	88		8.71	8.76		C			1							
106951	9.225	0.020	8.545	0.018		0.617	0.020	T	0.69	0.02	L	8.6068	0.0026	0.013	52		8.58	8.62		C	21397−1237	I 1	1							S
106952	9.481	0.014	8.265	0.009		1.039	0.013	T	1.01	0.01	L	8.3065	0.0013	0.014	133		8.29	8.33		C			1							S
106953	8.623	0.009	8.463	0.011		0.150	0.020	G	0.17	0.02	H	8.5016	0.0013	0.015	164		8.48	8.53		C			1							
106954	8.055	0.007	7.724	0.007		0.319	0.011	T	0.37	0.01	L	7.7835	0.0016	0.018	149		7.76	7.81		U 2			1							S
106955	6.957	0.005	6.670	0.004		0.273	0.006	T	0.31	0.01	L	6.7102	0.0009	0.008	113		6.70	6.73		C			1							S
106956	9.427	0.021	9.151	0.024	A	0.212	0.400	G	0.28	0.06	L *	9.1367	0.0025	0.020	105	*	9.11	9.17		D	21397+5815	I 1	2 C A	AB	37	8.128	0.022	2.76	0.09	
106957	10.555	0.041	9.107	0.020		1.221	0.036	T	1.18	0.04	L	9.1524	0.0018	0.015	105		9.13	9.19		D			1							
106958	8.911	0.013	7.687	0.009		1.039	0.013	T	1.01	0.01	L	7.7436	0.0012	0.009	75		7.73	7.76		C			1							S
106959	8.692	0.009	8.389	0.010		0.305	0.015	G	0.35	0.02	H	8.4312	0.0015	0.016	184		8.41	8.46		C			1							
106960	10.679	0.032	10.188	0.033	*	0.462	0.042	T	0.53	0.04	L *	9.9102	0.0030	0.034	205	*	9.85	9.98		D	21398+3749	I 1	2 C A	BA	87	1.147	0.009	0.15	0.03	G
106961	10.909	0.074	9.897	0.049		0.883	0.066	T	0.89	0.05	L	9.8749	0.0122	0.076	55		9.78	10.03	2.96	P 1 A			1							P
106962	9.044	0.017	9.042	0.022		0.007	0.026	T	0.03	0.02	L	9.0754	0.0021	0.016	73		9.05	9.10		D			1							
106963	10.214	0.031	9.033	0.019		1.012	0.028	T	0.99	0.02	L	9.0819	0.0022	0.023	115		9.05	9.13		R			1							
106964	9.367	0.015	9.130	0.017		0.226	0.021	T	0.25	0.02	L	9.1779	0.0022	0.022	109		9.14	9.29	1.52	P 1 A			1							
106965	8.171	0.007	7.877	0.008		0.280	0.010	T	0.32	0.01	L	7.9225	0.0012	0.012	146		7.90	7.94					1							S
106966	8.721	0.027	8.508	0.029	*	0.203	0.038	T	0.22	0.04	L *	8.8509	0.0018	0.014	107	*	8.83	8.88		D	21399+6808	I 1	2 C A	AB	253	1.475	0.006	0.87	0.03	
106967	8.736	0.014	8.588	0.016		0.142	0.020	T	0.16	0.02	L	8.6231	0.0024	0.012	69		8.60	8.64		C			1							
106968	8.041	0.008	6.869	0.005		1.024	0.008	G	0.98	0.02	A	6.9119	0.0009	0.008	116		6.90	6.93		C			1 G							S
106969	7.296	0.005	7.007	0.005		0.275	0.007	T	0.31	0.01	L	7.0524	0.0009	0.011	175		7.04	7.07			21399+3931	I 1	1							S
106970	6.708	0.004	6.742	0.005		−0.053	0.004	G	−0.03	0.00	H	6.7574	0.0008	0.008	126		6.74	6.77					1							S
106971	10.370	0.022	9.780	0.020		0.552	0.022	T	0.62	0.02	L	9.8708	0.0019	0.020	174		9.84	9.91					1 G							
106972						1.515	0.020	G	2.19	0.15	I *	11.6545	0.0063	0.057	134	*	11.52	11.74			21399+2737	H 1	2 C C	AB	135	0.248	0.121	1.27	1.15	G
106973	8.432	0.012	6.875	0.006		1.324	0.009	G	1.29	0.01	H	6.8915	0.0008	0.008	115		6.88	6.91		C			1							S
106974	8.690	0.012	7.254	0.007		1.218	0.001	G	1.18	0.00	H	7.2980	0.0011	0.009	117		7.28	7.31		C	21399+4908	I 1	1							S
106975	9.524	0.019	8.208	0.011		1.118	0.017	T	1.08	0.02	L	8.2484	0.0016	0.010	83		8.23	8.26		C			1							
106976	8.815	0.010	8.402	0.010		0.412	0.015	G	0.48	0.02	H	8.4619	0.0012	0.012	112		8.44	8.48		C			1							S
106977	8.829	0.015	8.647	0.017		0.167	0.022	T	0.18	0.02	L	8.6763	0.0020	0.015	78		8.65	8.71					1							
106978	6.911	0.005	6.265	0.004	*	0.584	0.003	G	0.67	0.02	A *	6.3185	0.0009	0.010	152	*	6.31	6.37		U 2	21400−5222	H 1	2 C S A	AB	321	0.109	0.004	0.42	0.31	S
106979	9.394	0.017	9.141	0.019		0.241	0.024	T	0.27	0.03	L	9.2067	0.0021	0.020	119		9.17	9.24		C			1							
106980	7.680	0.008	7.601	0.009		0.078	0.011	T	0.09	0.01	L	7.6179	0.0012	0.009	109		7.60	7.63		C			1							S
106981	7.124	0.012	6.992	0.015		0.120	0.018	T	0.13	0.02	L	7.0074	0.0017	0.065	78		6.99	7.57	2.63	P 1 A			1 S							S
106982	10.279	0.025	9.217	0.017		0.921	0.023	T	0.92	0.02	L	9.2731	0.0022	0.016	105		9.25	9.31		C			1							
106983	8.877	0.011	8.839	0.015	A	0.040	0.018	T	0.06	0.01	L	8.8302	0.0102	0.019	110	A	8.80	8.88			21401+4616	H 1	2 C D	AB	141	16.230	0.055	3.28	0.20	D
106984	10.507	0.033	9.410	0.021		0.947	0.030	T	0.94	0.02	L	9.4606	0.0023	0.023	113		9.41	9.49		C			1							
106985	4.082	0.003	3.718	0.003		0.320	0.002	G	0.32	0.02	A	3.7660	0.0005	0.004	68		3.76	3.77		C			1 O							S
106986	8.616	0.009	7.200	0.005		1.196	0.008	T	1.16	0.01	L	7.2256	0.0009	0.009	138		7.21	7.24					1							S
106987	9.270	0.020	8.762	0.020		0.477	0.026	T	0.55	0.03	L	8.8610	0.0015	0.013	75		8.84	8.89		D			1							
106988	9.381	0.023	9.466	0.033		−0.075	0.003	G	−0.05	0.00	H	9.4035	0.0042	0.025	49		9.35	9.46					1							
106989	10.435	0.034	9.917	0.033		0.496	0.036	T	0.57	0.04	L	9.9525	0.0030	0.020	96		9.92	9.98		C			1							
106990	10.749	0.033	10.066	0.030		0.720	0.020	G	0.77	0.02	H	10.1074	0.0028	0.028	147		10.05	10.15					1							
106991	10.180	0.034	8.240	0.013		1.633	0.031	T	1.66	0.03	L	8.1735	0.0012	0.011	72		8.15	8.19					1							
106992	9.984	0.025	9.779	0.031		0.196	0.037	T	0.21	0.04	L	9.8534	0.0026	0.029	141		9.80	9.90		C			1							G
106993	11.766	0.093	9.781	0.027		1.645	0.077	T	1.67	0.08	L	9.7231	0.0041	0.035	120		9.68	9.78		U			1							
106994	11.096	0.049	9.348	0.019		1.457	0.042	T	1.46	0.07	L	9.3335	0.0018	0.022	169		9.30	9.38					1							
106995	8.687	0.008	8.238	0.008		0.443	0.015	G	0.51	0.02	H	8.2851	0.0012	0.018	181		8.26	8.31		C			1							S
106996	10.067	0.020	8.864	0.012		1.029	0.018	T	1.00	0.01	L	8.9219	0.0019	0.015	134		8.89	8.95					1							
106997	9.438	0.018	8.808	0.016		0.581	0.018	T	0.65	0.02	L	8.8434	0.0017	0.014	79		8.82	8.87		C			1							S
106998	11.739	0.089	11.054	0.077	B	1.365	0.044	G	0.57	0.12	S *	10.7018	0.0038	0.046	224	*	10.63	10.78		R	21402+3703	M 1	2 C B	BA	21	2.983	0.006	0.10	0.03	G G
106999	7.171	0.007	5.284	0.003		1.601	0.006	T	1.92	0.02	O	5.1800	0.0016	0.015	115		5.16	5.20		U 2	21401+4316	I 1	1 S							S
107000	7.093	0.006	7.132	0.008		−0.064	0.005	G	−0.04	0.01	H	7.1456	0.0009	0.009	115		7.13	7.16		C			1							S

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Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	mas/yr 13	mas 14	mas 15	mas 16	mas/yr 17	mas/yr 18	19	20	21	22	23	24	25	26	27	28	29	30
107001	21 40 11.80	−09 47 39.5	7.61	G	325.049 186 18	−09.794 309 78	18.46	68.10	−164.80	0.91	0.72	1.10	1.09	0.71	+38	−11	−17	−26	− 2	+16	−10	−46	+38	+37	0	0.61
107002	21 40 12.19	+36 25 53.0	8.16	H	325.050 774 38	+36.431 389 25	1.57	7.12	−6.54	0.55	0.62	1.04	0.63	0.71	−26	+ 0	− 2	+14	+26	−24	+25	+28	+23	−30	0	−0.22
107003 H	21 40 16.29	+03 44 13.4	8.41	H	325.067 869 14	+03.737 054 29 A	8.03	57.38	16.10	1.57	1.08	1.59	1.80	1.04	+37	+ 4	+ 0	− 3	+ 7	− 2	+ 4	− 2	+16	+45	0	0.33
107004 H	21 40 18.64	+68 23 21.8	8.52	H	325.077 682 34	+68.389 385 02 A	4.88	17.93	10.61	1.14	1.10	1.10	1.36	1.15	−14	−17	+20	−17	+ 6	+16	+ 2	− 6	+ 7	+ 3	0	0.48
107005	21 40 18.69	+74 01 43.5	10.06	H	325.077 875 22	+74.028 748 33	4.43	31.81	5.81	0.86	0.91	1.03	0.86	1.09	+ 4	+ 8	+ 9	−15	+ 9	− 3	+ 8	+12	+ 1	+15	0	−0.75
107006 H	21 40 18.72	−44 24 17.8	8.90	H	325.077 997 45	−44.404 948 96 A	4.92	21.57	−11.36	1.48	1.11	2.11	1.38	0.93	+21	−22	− 3	−21	+21	+ 6	+26	+52	−19	+16	3	0.71
107007	21 40 20.27	−06 22 07.9	7.94	1 H	325.084 471 44	−06.368 867 22	5.13	3.47	2.26	0.90	0.77	0.98	1.10	0.89	+31	−14	−17	−41	−24	+34	−21	−59	+28	+47	0	0.33
107008	21 40 21.14	+17 18 36.9	8.57	H	325.088 085 82	+17.310 254 01	2.99	17.49	9.92	0.83	0.65	1.15	1.21	0.73	+11	− 4	− 4	−18	+14	+32	+11	−33	+19	+18	0	−0.05
107009	21 40 22.02	−06 48 47.6	7.94	H	325.091 732 56	−06.813 215 65	5.86	−16.50	−13.52	0.92	0.75	1.13	1.22	0.78	+29	− 4	−13	−17	− 6	+30	− 8	−41	+39	+31	0	−0.35
107010	21 40 23.14	−71 30 11.5	7.43	H	325.096 408 29	−71.503 201 16	20.10	387.46	−54.37	0.51	0.51	0.71	0.59	0.57	−20	+ 2	−12	−11	−10	−10	− 8	+ 8	+12	−35	3	0.85
107011	21 40 23.26	+13 40 36.8	9.75	H	325.096 931 84	+13.676 899 14	11.13	191.18	−122.97	1.43	0.98	1.44	2.19	1.02	+30	+10	− 5	+38	− 8	+16	− 5	−56	+ 9	+33	0	−1.01
107012	21 40 24.30	+54 01 47.5	8.94	H	325.101 247 98	+54.029 849 68	0.53	−4.87	−2.95	0.79	0.77	0.97	0.93	0.90	− 4	+ 2	− 1	−13	− 7	−18	− 8	− 8	+15	+ 4	0	−1.79
107013	21 40 24.48	+34 12 36.6	8.54	H	325.101 981 38	+34.210 173 48	3.82	38.64	4.33	0.46	0.67	1.00	0.56	0.81	− 6	+ 7	−15	− 9	+ 3	− 7	+ 6	−28	+25	+ 8	0	0.81
107014	21 40 24.88	+14 10 18.7	9.56	H	325.103 663 47	+14.171 859 53	15.94	6.16	244.90	1.39	0.92	1.48	2.07	1.00	+28	+ 6	− 7	+ 8	− 8	− 5	− 7	−50	+ 9	+31	2	0.63
107015	21 40 25.85	−06 58 30.2	7.01	H	325.107 712 37	−06.975 067 52	8.26	6.71	−4.10	0.80	0.63	0.96	1.07	0.77	+25	− 9	−13	−20	+ 3	+31	+ 2	−26	+37	+41	0	−0.76
107016	21 40 26.16	−09 59 22.6	8.19	H	325.109 020 55	−09.989 598 30	2.55	15.19	5.00	1.09	1.04	1.24	1.26	0.95	+54	− 9	−12	−32	−24	+18	−33	−67	+30	+46	2	0.43
107017	21 40 26.35	−52 33 04.5	9.93	H	325.109 807 87	−52.551 255 64	3.78	−39.46	38.14	1.21	0.85	1.50	1.61	1.03	+31	−17	−14	+39	+32	− 7	+33	+69	−28	+30	0	0.25
107018	21 40 27.28	−37 43 40.3	9.50	G	325.113 649 57	−37.727 865 14	12.81	270.41	−54.01	1.17	0.61	1.34	1.37	0.67	+20	−27	− 5	−16	−23	+29	−16	+29	− 4	+ 8	0	−0.47
107019	21 40 27.34	−34 32 04.5	6.71	H	325.113 922 21	−34.534 571 13	6.63	−56.54	−104.07	0.76	0.47	0.87	0.99	0.52	+28	− 6	−10	+16	−11	+24	− 6	+23	− 6	+27	0	0.49
107020	21 40 27.63	−02 01 02.3	8.54	G	325.115 121 32	−02.017 308 21	24.66	221.24	−111.83	1.08	0.65	1.20	1.41	0.70	+31	−10	−12	−16	− 2	+32	− 5	+14	+19	+50	0	−1.04
107021	21 40 29.36	−41 11 02.4	7.03	H	325.122 323 67	−41.183 990 24	6.12	−11.31	9.04	0.87	0.50	0.94	1.13	0.53	+12	−18	−31	+36	− 6	+20	+ 7	+61	−27	− 5	2	0.08
107022	21 40 30.07	−74 04 29.3	7.07	G	325.125 287 90	−74.074 796 89	45.17	−139.09	211.92	0.50	0.50	0.67	0.67	0.57	−14	− 1	−17	− 1	+ 2	− 1	+ 3	+16	− 2	−25	0	1.09
107023	21 40 31.64	−29 13 53.0	9.43	H	325.131 814 31	−29.231 401 25	3.32	5.80	−24.49	1.32	0.88	1.60	1.47	0.85	+46	−19	−26	−30	−35	+43	−26	− 2	+ 5	+35	0	0.95
107024	21 40 31.96	−02 30 59.4	7.79	H	325.133 149 94	−02.516 506 18	5.60	53.89	14.78	0.91	0.58	1.08	1.25	0.59	+36	− 5	−11	−14	+ 2	+49	+ 0	+38	+23	+52	0	0.84
107025	21 40 32.08	+70 47 09.7	7.16	H	325.133 657 14	+70.786 032 90	2.76	−7.10	6.93	0.54	0.48	0.56	0.69	0.58	− 7	−10	+10	+ 5	+ 7	−14	+10	− 3	−10	+ 6	0	0.86
107026	21 40 32.38	+59 45 09.7	6.90	H	325.134 931 73	+59.752 693 24	4.67	55.33	25.20	0.50	0.47	0.56	0.51	0.46	−12	+ 4	+ 3	− 5	+21	+ 7	+22	−15	+ 4	+ 3	0	0.86
107027	21 40 33.38	−17 36 00.5	9.38	2 G	325.139 093 62	−17.600 130 09	−0.94	−5.63	−10.68	1.21	0.84	1.33	1.67	1.04	+14	−10	+ 6	+35	−17	+27	−17	+42	+23	+35	0	−1.57
107028	21 40 33.47	+10 36 44.1	6.90	H	325.139 476 52	+10.612 249 45	2.55	−1.72	−8.95	0.77	0.53	0.87	1.06	0.59	+27	+ 0	− 8	+16	− 5	+18	− 2	−52	+27	+36	0	−0.38
107029	21 40 33.60	−72 27 45.4	9.23	H	325.139 988 77	−72.462 611 50	7.36	36.89	−20.71	0.80	0.78	1.10	0.94	0.84	−18	−18	−12	−16	− 2	+ 3	− 3	− 4	+10	+18	0	0.84
107030	21 40 33.69	−55 44 16.8	6.33	H	325.140 383 07	−55.738 000 29	4.70	18.50	9.44	0.58	0.41	0.78	0.76	0.50	+14	−12	− 3	+34	+22	+ 8	+24	+29	−29	+22	0	1.26
107031	21 40 34.43	+09 46 26.2	10.86	G	325.143 463 36	+09.773 948 37	14.93	7.16	−95.34	1.87	1.51	2.22	2.79	1.81	+29	− 9	+ 9	+11	− 2	+22	+ 1	−46	+ 9	+44	4	2.57
107032	21 40 34.77	−18 53 44.3	7.34	1 H	325.144 878 74	−18.895 634 31	3.60	−1.60	−4.21	0.84	0.60	1.01	1.00	0.71	+34	− 6	− 4	−13	−24	+34	−27	+ 9	+15	+44	0	0.71
107033	21 40 36.77	+01 14 33.0	8.78	H	325.153 200 63	+01.242 488 40	2.03	−1.43	1.08	1.04	0.74	1.23	1.34	0.79	+38	−10	−11	−20	−10	+38	− 9	+ 6	+18	+48	0	1.02
107034	21 40 37.96	+23 11 17.9	8.03	1 H	325.158 151 00	+23.188 295 86	2.34	17.95	−12.10	0.82	0.65	1.02	0.96	0.70	+16	+11	−22	+14	−13	+ 0	−11	−57	+33	+14	0	0.42
107035	21 40 38.94	−39 47 27.3	9.37	H	325.162 253 74	−39.790 930 21	10.14	88.70	−91.12	1.19	0.68	1.32	1.56	0.81	+26	−23	− 3	+ 8	+11	+17	+ 9	+52	− 2	+34	2	2.21
107036	21 40 39.10	+54 19 29.0	8.53	3 H	325.162 919 81	+54.324 731 73	4.05	−8.27	−12.44	1.09	1.00	1.33	1.16	1.08	+ 1	+ 5	−11	−12	+ 3	−18	+ 0	− 7	+ 4	+21	0	−2.46
107037	21 40 41.33	−23 54 22.4	8.37	H	325.172 196 60	−23.906 217 91	−1.62	−6.47	9.58	0.93	0.60	1.11	1.05	0.63	+29	−10	−13	−14	−26	+40	−24	− 4	+11	+35	0	1.21
107038	21 40 42.74	+84 20 00.0	8.37	H	325.178 099 89	+84.333 337 18	34.61	344.54	60.93	0.58	0.53	0.63	0.71	0.57	−10	−16	+19	−10	− 5	− 2	− 2	− 8	−11	− 8	0	−2.43
107039	21 40 42.88	−48 42 58.0	7.64	H	325.178 648 87	−48.716 122 00	12.46	53.79	−42.11	0.70	0.46	0.98	0.72	0.45	+21	− 6	− 4	−13	+16	+19	+19	+33	− 8	+15	0	−0.39
107040	21 40 42.96	+28 45 20.1	7.41	H	325.179 017 74	+28.755 592 04	19.95	132.88	32.39	0.58	0.58	0.80	0.64	0.64	− 8	+ 6	−17	+12	−12	−20	−13	−47	+15	− 5	0	1.62
107041	21 40 43.30	+54 52 19.7	6.16	H	325.180 413 73	+54.872 142 37	4.64	8.02	2.96	0.46	0.48	0.58	0.49	0.50	− 3	+ 3	− 1	−25	+ 6	−22	+ 6	−24	+10	+ 6	0	−1.22
107042	21 40 43.36	−31 15 17.7	11.35	G	325.180 650 44	−31.254 911 20	20.79	238.27	−126.20	2.25	1.49	2.68	2.63	1.56	+33	+ 2	− 6	−17	−17	+35	−14	+ 5	+ 2	+30	0	−1.38
107043	21 40 45.75	−55 20 19.5	8.53	H	325.190 606 55	−55.338 741 35	2.28	8.77	−2.73	0.93	0.70	1.26	1.33	0.81	+27	− 9	−20	+43	+35	+ 1	+33	+41	−31	+28	1	1.08
107044 H	21 40 46.10	−46 11 04.8	8.61	H	325.192 085 24	−46.184 656 45 A	4.63	−10.14	−54.32	1.21	1.01	1.61	1.20	0.88	+50	−10	+ 8	+23	+26	+ 2	+35	+62	− 7	+41	1	−0.50
107045	21 40 47.03	−77 00 56.0	8.47	H	325.195 960 30	−77.015 544 25	2.20	−14.90	13.72	0.69	0.67	0.87	0.86	0.72	−12	− 5	−17	− 7	+ 1	+11	+ 2	−16	+ 7	−17	2	0.69
107046	21 40 48.23	+03 53 48.8	6.83	H	325.200 959 74	+03.896 902 19	4.90	5.12	6.27	0.76	0.52	0.90	1.05	0.58	+18	+ 7	− 9	+ 8	+ 2	+41	+ 8	− 4	+31	+33	2	0.18
107047	21 40 48.67	−31 02 12.1	8.99	H	325.202 803 67	−31.036 691 50	0.96	0.41	4.22	1.21	0.80	1.42	1.42	0.80	+37	−11	−16	−24	−25	+37	−17	+ 5	+ 6	+25	0	−0.35
107048	21 40 49.23	+32 48 46.2	8.37	H	325.205 122 23	+32.812 846 14	2.29	5.15	0.21	0.68	0.63	1.06	0.84	0.77	−22	+16	−19	+24	− 1	− 4	+ 1	−16	− 7	−11	0	1.57
107049	21 40 49.51	+55 21 22.4	7.92	H	325.206 282 28	+55.356 221 41	2.09	7.01	−8.70	0.62	0.63	0.77	0.66	0.66	− 4	+ 4	+ 3	−25	+13	−22	+13	−20	− 1	+ 5	0	0.13
107050	21 40 51.71	+53 06 40.8	10.10	H	325.215 443 07	+53.111 345 18	2.43	0.29	−12.34	1.04	1.01	1.22	1.32	1.18	−11	− 4	+ 1	−28	+ 6	+ 3	+ 7	− 6	+17	−17	0	0.16
107051 H	21 40 52.93	+19 15 26.2	8.13	H	325.220 538 02	+19.257 263 96 A	3.41	10.96	−6.67	1.35	1.35	1.66	1.41	1.32	+50	+11	+ 5	−18	−17	−29	−21	−54	+13	+28	1	0.08
107052	21 40 53.41	−22 46 53.8	9.78	G	325.222 546 44	−22.781 624 31	5.63	62.24	−6.89	1.20	0.84	1.51	1.46	0.95	+27	+ 2	−10	− 3	− 1	+43	+ 1	+23	+25	+41	2	1.99
107053	21 40 53.48	+39 01 58.7	8.76	H	325.222 850 32	+39.032 985 82	2.06	8.72	−5.12	0.66	0.82	1.17	0.75	0.95	−26	+ 8	−10	− 2	+19	−15	+20	− 7	+12	−14	2	0.23
107054	21 40 55.65	−34 31 12.8	7.91	2 H	325.231 863 41	−34.520 210 23	2.34	6.81	−7.18	0.95	0.62	1.09	1.32	0.71	+17	+ 2	−18	+31	−20	+35	−11	+39	− 9	+ 9	0	−0.17
107055	21 40 57.42	+70 32 21.1	8.33	H	325.239 256 64	+70.539 188 71	18.82	144.49	87.44	0.66	0.63	0.71	0.84	0.66	+ 0	− 9	+14	+ 6	+17	−12	+16	− 6	− 2	+ 5	0	0.01
107056	21 40 57.65	−09 08 31.4	7.65	H	325.240 193 24	−09.142 056 90	2.84	14.19	−3.55	0.98	0.64	1.06	1.29	0.67	+20	− 4	−20	−39	+ 2	+16	+ 0	−36	+36	+20	0	0.64
107057	21 40 57.91	−47 35 36.8	10.28	H	325.241 299 38	−47.593 566 58	4.26	−7.10	3.44	1.15	0.90	1.83	1.22	0.91	+42	− 4	+16	+ 8	+30	− 2	+32	+49	−10	+41	0	0.82
107058	21 40 59.39	−31 55 23.0	8.17	H	325.247 474 04	−31.923 049 59	3.89	19.19	7.01	0.95	0.56	1.09	1.11	0.59	+25	+ 0	− 6	−22	− 4	+39	− 3	+15	+12	+30	0	−0.30
107059	21 41 00.34	+30 17 50.5	7.16	H	325.251 405 75	+30.297 366 34	2.38	−7.12	−6.89	0.45	0.50	0.76	0.58	0.58	−11	− 1	−17	+51	−14	− 6	−13	−26	+13	− 9	0	0.02
107060 H	21 41 00.63	+29 20 25.6	8.30	G	325.252 622 80	+29.340 438 93 A	8.91	69.54	−18.06	2.42	2.21	2.14	1.66	1.83	+ 1	+12	− 2	− 6	−17	−23	−15	−48	+ 4	+13	1	−0.38
107061	21 41 00.94	−70 48 25.3	7.99	G	325.253 936 15	−70.807 028 92	10.96	−8.39	−20.64	0.56	0.55	0.78	0.65	0.61	−19	− 8	− 9	+ 8	− 3	− 2	− 3	+12	− 3	−19	0	0.91
107062	21 41 01.42	+11 15 48.0	9.16	H	325.255 896 94	+11.263 326 97	30.96	−72.91	−112.71	1.23	0.85	1.40	1.71	0.92	+40	−21	−24	+ 9	− 7	−21	−14	−60	+16	+38	2	−0.02
107063	21 41 02.21	+05 01 14.3	7.23	H	325.259 202 17	+05.020 646 93	8.13	49.35	−4.74	0.88	0.51	0.98	1.23	0.56	+15	+10	−12	+11	+ 4	+24	+10	−17	+37	+29	0	−1.65
107064	21 41 03.14	+22 11 41.3	7.36	1 H	325.263 089 94	+22.194 815 56	0.92	27.36	−1.32	0.60	0.59	0.82	0.63	0.63	+32	+ 6	− 6	− 5	−13	− 9	−14	−49	+11	+29	3	0.43
*107065	21 41 03.82	−57 44 17.4	7.83	H	325.265 901 35	−57.738 161 83	1.81	34.21	−5.00	0.61	0.53	0.99	0.74	0.55	−18	− 2	− 6	−13	+32	+ 0	+25	+ 9	−14	− 1	1	0.84
*107066	21 41 03.78	+34 40 30.5	6.93	H	325.265 758 67	+34.675 151 68	2.83	3.70	−2.82	0.38	0.48	0.73	0.45	0.59	−15	+ 9	−17	−12	+13	−19	+13	−17	+23	− 3	0	3.05
107067	21 41 03.96	−35 38 42.1	8.58	H	325.266 498 22	−35.645 027 15	9.79	−11.33	23.27	0.90	0.61	1.07	1.09	0.72	+23	−18	− 4	+ 0	− 3	+34	− 5	+25	+ 2	+31	2	−0.16
107068 H	21 41 04.87	−18 44 22.5	10.74	G	325.270 298 76	−18.739 573 44 A	20.01	−194.91	−118.96	2.95	2.31	3.17	3.21	2.28	+53	− 4	− 1	−14	−25	+37	−25	+ 5	+23	+54	0	−1.57
107069	21 41 05.27	+47 49 42.5	8.51	H	325.271 948 48	+47.828 465 51	10.04	9.24	−25.22	0.62	0.66	0.84	0.75	0.82	−20	− 8	− 5	− 3	+10	−13	+ 7	+ 2	+20	−22	1	−0.02
107070	21 41 05.97	+26 45 03.2	7.45	H	325.274 885 46	+26.750 887 47	37.19	342.96	−91.14	0.70	0.59	0.89	0.73	0.62	−19	+27	−27	−14	− 2	+ 6	+10	−66	+29	− 6	0	−0.30
107071	21 41 07.34	−10 46 50.7	8.59	H	325.280 565 99	−10.780 750 61	8.09	−29.08	−13.68	1.07	0.73	1.38	1.32	0.81	+16	+ 1	−37	−32	+ 7	+17	+ 9	−40	+55	+25	0	−0.15
107072	21 41 07.41	+01 18 30.2	7.93	H	325.280 865 60	+01.308 388 13	10.08	72.03	36.92	0.84	0.60	1.02	1.17	0.64	+39	− 1	− 5	− 3	− 8	+40	− 6	+10	+20	+50	0	1.56
107073	21 41 07.89	−47 29 36.5	9.00	H	325.282 856 72	−47.493 468 85	1.01	19.60	−0.20	0.87	0.71	1.43	0.94	0.72	+39	− 3	+15	+10	+32	− 2	+32	+54	− 9	+41	0	−0.26
107074	21 41 09.05	−42 25 31.7	10.47	H	325.287 708 44	−42.425 459 90	3.16	30.59	−6.69	1.82	0.86	1.92	2.20	0.98	+ 1	+13	−23	−31	− 1	+17	+ 8	+60	−35	−16	2	1.54
107075	21 41 10.15	+47 32 42.7	7.28	H	325.292 311 61	+47.545 191 12	5.41	21.43	−4.01	0.49	0.54	0.65	0.61	0.69	−19	− 3	− 3	+13	+ 9	−12	+ 9	+17	+15	−18	0	−1.01
107076	21 41 16.37	+48 20 02.6	8.27	H	325.318 208 14	+48.334 066 80	3.17	16.41	56.99	0.65	0.65	0.84	0.81	0.84	−20	+ 8	− 7	+12	+ 0	− 8	+ 1	+ 7	+24	−30	0	0.19
107077	21 41 16.60	+62 55 08.9	9.19	H	325.319 161 33	+62.919 148 08	3.34	7.82	4.84	0.77	0.71	0.86	0.87	0.70	+ 2	+ 2	− 4	+18	− 6	+19	− 3	−18	+26	+10	0	−0.42
107078	21 41 16.79	+24 46 24.5	11.24	3 H	325.319 960 95	+24.773 473 08	2.10	−1.87	−5.58	1.59	1.45	2.06	2.04	1.52	+ 8	− 2	− 6	−12	−13	− 6	−15	−64	+19	+ 0	0	0.72
107079	21 41 18.66	−35 35 06.2	6.92	H	325.327 742 21	−35.585 042 23	2.75	−9.66	4.04	0.72	0.52	0.85	0.87	0.62	+30	−23	+ 0	+ 7	+11	+27	+ 6	+38	+ 9	+41	2	−1.34
107080 H	21 41 18.85	+39 28 26.4	8.02	H	325.328 531 91	+39.474 004 66 A	4.11	2.29	−7.41	0.90	1.04	1.33	0.96	1.10	−27	− 4	−11	−10	+ 1	−11	+ 2	−11	+12	−29	2	−0.09
107081	21 41 19.11	−72 32 44.2	8.59	1 H	325.329 619 74	−72.545 616 55	1.10	12.71	−2.13	0.69	0.67	0.95	0.81	0.73	−14	−19	− 4	−22	− 2	− 1	− 3	− 3	+ 5	−13	0	−1.33
107082	21 41 20.15	−13 56 07.4	9.53	G	325.333 947 38	−13.935 387 87	3.95	−1.71	−7.14	1.22	0.98	1.53	2.15	1.34	+26	− 8	−19	+ 4	− 7	+44	+ 2	+10	+ 9	+21	0	0.29
107083	21 41 21.47	+69 41 34.1	7.88	3 H	325.339 447 50	+69.692 797 07	6.53	23.30	4.12	0.57	0.51	0.58	0.68	0.55	−19	−12	+ 4	+ 5	+ 8	− 3	+ 8	− 9	− 3	−17	0	1.21
107084	21 41 22.86	+21 56 38.5	6.99	H	325.345 258 44	+21.944 031 15	6.79	1.58	−9.62	0.57	0.53	0.74	0.61	0.58	+24	− 2	− 8	−17	− 8	+ 8	− 8	−48	+13	+24	0	−0.50
107085	21 41 23.89	+12 45 20.9	8.33	H	325.349 532 09	+12.755 802 08	3.70	−13.95	−19.17	1.23	0.66	1.27	1.61	0.77	+21	+37	+ 3	− 3	− 8	+ 6	+ 1	−39	+12	+38	0	0.46
107086	21 41 24.75	+18 42 15.9	8.41	H	325.353 112 63	+18.704 404 01	0.89	9.43	6.28	0.72	0.83	1.10	0.87	0.90	+46	+ 0	−32	+ 5	+17	−14	+ 9	−17	+34	+32	0	−0.13
107087	21 41 27.34	+16 36 17.6	9.79	H	325.363 908 22	+16.604 880 88	4.81	0.57	−3.76	1.25	1.01	1.48	1.93	1.22	+11	+13	−13	−27	+13	+ 4	+12	+ 5	+ 6	+ 8	0	−1.30
107088	21 41 28.10	−14 50 29.1	7.18	H	325.367 075 05	−14.841 410 85	10.96	4.13	19.14	0.96	0.65	1.02	1.43	0.80	+ 9	−13	− 4	+22	− 8	+19	−10	+ 9	+19	− 4	0	0.78
107089	21 41 28.47	−77 23 22.1	3.73	H	325.368 638 01	−77.389 462 15	47.22	64.83	−240.38	2.29	2.18	2.90	2.63	2.12	− 8	− 1	−19	− 2	− 5	+11	− 4	−23	−10	−17	0	
107090	21 41 28.97	+16 27 45.0	9.22	H	325.370 694 05	+16.462 500 53	1.20	35.99	0.59	1.32	0.98	1.38	1.83	1.12	+12	+16	− 7	−48	+10	− 3	+11	+ 6	+11	+ 9	0	−2.15
107091	21 41 30.41	−21 55 43.0	7.66	H	325.376 688 36	−21.928 619 27	5.66	76.73	−15.68	0.86	0.57	0.99	1.07	0.65	+11	−13	− 7	+19	−24	+25	−23	+27	+24	+13	0	−1.05
107092	21 41 31.70	−48 07 43.3	8.85	H	325.382 092 31	−48.128 682 11 A	4.08	13.75	−18.65	2.14	1.59	2.29	2.07	1.33	+30	−13	+ 6	− 2	+11	+ 8	+18	+45	− 7	+14	1	1.67
*107093	21 41 32.89	−21 39 47.2	7.91	H	325.387 057 76	−21.663 102 93	2.72	15.28	−22.06	1.17	0.69	1.07	1.46	0.78	−12	−14	−16	+49	−40	+15	−35	+34	+ 7	− 8	0	0.26
*107094	21 41 32.88	−48 07 47.8	11.87	H	325.387 011 44	−48.129 957 92 B	4.08	13.75	−18.65	40.07	37.00	2.29	2.07	1.33	+28	+ 2	+ 5	+ 0	+ 4	+ 8	+ 3	− 3	− 7	+14	1	1.67
107095	21 41 32.93	−14 02 48.7	5.16	1 H	325.387 220 04	−14.046 860 40	30.73	−122.06	−308.64	0.78	0.53	0.92	1.29	0.66	+12	− 8	−17	+ 3	−10	+42	− 4	+ 9	+17	+ 2	0	1.64
107096	21 41 33.36	−41 37 58.7	9.92	H	325.388 994 49	−41.632 958 62	1.63	24.50	6.02	1.58	0.80	1.57	2.19	0.89	+ 3	− 3	−12	+31	− 4	+ 6	+ 1	+62	−22	−10	3	−0.67
107097	21 41 34.27	+40 48 19.2	6.07	H	325.392 786 10	+40.805 337 57	7.16	−17.45	−47.70	0.38	0.41	0.57	0.44	0.53	−32	+ 0	− 4	−11	+10	− 8	+12	− 2	+11	−42	0	−1.06
107098	21 41 37.34	−14 39 53.8	11.45	G	325.405 596 97	−14.664 931 60	19.84	223.69	152.33	2.71	1.88	3.10	4.02	2.18	+21	−14	−15	+ 7	−16

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
107001	8.300	0.013	7.675	0.010		0.576	0.015	G	0.65	0.01	H	7.7219	0.0012	0.009	77		7.71	7.74		C			1							S
107002	9.465	0.012	8.278	0.008		1.017	0.011	T	0.99	0.01	L	8.3294	0.0013	0.018	253		8.30	8.36					1							S
107003	8.866	0.019	8.414	0.020	*	0.426	0.026	T	0.49	0.03	L *	8.5090	0.0019	0.017	84	*	8.48	8.56		D	21403+0344	I 1	2 C	A	AB	174	6.490	0.010	2.37	0.05	S
107004	8.809	0.012	8.617	0.014	A	0.500	0.495	G	0.14	0.06	L *	8.5649	0.0017	0.012	109	*	8.54	8.58		D	21403+6823	I 1	2 C	A	AB	147	1.267	0.006	1.27	0.02	P
107005	10.751	0.042	10.118	0.037		0.588	0.049	T	0.66	0.04	L	10.1875	0.0026	0.025	120		10.14	10.23		C			1							G
107006	10.314	0.023	9.035	0.013	A						T *	9.0687	0.0012	0.016	180	*	9.04	9.09		D	21403−4424	I 1	2 C	B	AB	262	1.703	0.038	3.16	0.14	
107007	10.074	0.032	8.154	0.013		1.628	0.028	T	2.20	0.07	O	8.0015	0.0031	0.021	70		7.96	8.03		U			1							S
107008	10.524	0.036	8.730	0.014		1.494	0.031	T	1.52	0.05	L	8.6936	0.0017	0.022	132		8.66	8.72					1							
107009	9.203	0.016	8.029	0.011		1.007	0.015	T	0.98	0.01	L	8.1099	0.0018	0.012	74		8.09	8.13		C			1							S
107010	8.064	0.007	7.495	0.005		0.536	0.006	T	0.61	0.01	L	7.5507	0.0009	0.012	155		7.53	7.57		C			1							S
107011	10.530	0.039	9.825	0.033		0.649	0.042	T	0.71	0.04	L	9.8840	0.0026	0.028	99		9.84	9.93					1							
107012	9.126	0.013	8.932	0.016		0.186	0.019	T	0.20	0.02	L	9.0030	0.0023	0.019	110		8.97	9.03		C			1							
107013	8.854	0.008	8.570	0.009		0.270	0.011	T	0.30	0.01	L	8.6150	0.0011	0.016	226		8.59	8.65					1							
107014	10.479	0.034	9.615	0.025		0.757	0.032	T	0.80	0.03	L	9.6921	0.0022	0.023	94		9.65	9.73		C			1							
107015	8.359	0.013	7.132	0.006		1.048	0.011	T	1.02	0.01	L	7.1768	0.0010	0.008	76		7.16	7.19		C			1							S
107016	9.616	0.027	8.313	0.016		1.107	0.025	T	1.07	0.03	L	8.3531	0.0017	0.014	67		8.34	8.38		C			1							
107017	10.555	0.028	9.978	0.026		0.539	0.034	T	0.61	0.04	L	10.0485	0.0025	0.024	146		10.00	10.08					1							
107018	10.287	0.025	9.567	0.021		0.659	0.003	G	0.72	0.00	H	9.6386	0.0020	0.017	120		9.61	9.67		C			1							
107019	8.083	0.008	6.809	0.006		1.085	0.008	T	1.05	0.01	L	6.8747	0.0010	0.008	98		6.86	6.89					1							S
107020	9.406	0.021	8.637	0.018		0.672	0.001	G	0.73	0.00	H	8.6881	0.0017	0.015	82		8.66	8.71		C			1							S
107021	8.324	0.010	7.130	0.005		1.022	0.009	T	1.00	0.01	L	7.1923	0.0011	0.010	127		7.18	7.21					1							S
107022	8.006	0.006	7.146	0.004		0.755	0.002	G	0.80	0.00	H	7.2046	0.0010	0.011	154		7.19	7.22					1							S
107023	10.853	0.047	9.536	0.026		1.118	0.042	T	1.08	0.04	L	9.5972	0.0028	0.022	83		9.56	9.63		C			1							
107024	9.494	0.021	7.938	0.011		1.306	0.019	T	1.27	0.02	L	7.9459	0.0015	0.013	97		7.93	7.98					1							S
107025	8.867	0.013	7.301	0.007		1.314	0.012	T	1.28	0.01	L	7.3117	0.0009	0.009	106		7.30	7.33					1							S
107026	8.158	0.009	7.009	0.004		0.987	0.008	T	0.97	0.01	L	7.0613	0.0010	0.011	129		7.04	7.08					1							S
107027	9.190	0.016	9.347	0.024		−0.147	0.015	G	−0.14	0.02	H	9.3384	0.0032	0.030	86		9.29	9.39		U 2			1							
107028	8.398	0.013	7.043	0.007		1.148	0.012	T	1.11	0.01	L	7.0714	0.0008	0.006	101		7.06	7.09		C			1							S
107029	9.868	0.018	9.261	0.016		0.564	0.018	T	0.64	0.02	L	9.3478	0.0019	0.020	136		9.31	9.38					1							
107030	7.690	0.005	6.452	0.003		1.060	0.001	G	1.03	0.00	H	6.5015	0.0007	0.007	137		6.49	6.52					1							S
107031						1.123	0.003	G	1.09	0.00	H	11.0143	0.0051	0.035	80		10.96	11.08		C			1							G
107032	9.426	0.020	7.527	0.009		1.577	0.017	T	1.60	0.02	L	7.4593	0.0028	0.016	81		7.44	7.49		U			1							S
107033	10.142	0.033	8.849	0.019		1.095	0.031	T	1.06	0.03	L	8.9207	0.0023	0.016	85		8.90	8.95		C			1							
107034	10.204	0.023	8.249	0.009		1.622	0.020	T	1.64	0.02	L	8.1461	0.0018	0.018	137		8.11	8.18		U			1							
107035	10.116	0.021	9.445	0.018		0.669	0.005	G	0.73	0.00	H	9.5096	0.0018	0.018	125		9.48	9.54		C			1							
107036	10.458	0.036	8.718	0.015		1.480	0.032	T	4.33	0.09	O	7.7784	0.0404	0.343	100		7.12	8.14	234.20	P 1 B	21407+5420	I 1	1	S							G P
107037	10.314	0.032	8.546	0.014		1.473	0.028	T	1.49	0.04	L	8.5007	0.0022	0.014	84		8.48	8.53					1							
107038	9.506	0.018	8.499	0.013		0.868	0.017	T	0.91	0.02	L	8.5143	0.0015	0.014	126		8.49	8.54		C			1							
107039	8.304	0.008	7.693	0.007		0.555	0.001	G	0.63	0.00	H	7.7556	0.0012	0.013	173		7.74	7.78					1							S
107040	8.164	0.008	7.474	0.007		0.600	0.015	G	0.67	0.01	H	7.5366	0.0008	0.009	132		7.52	7.56					1							S
107041	7.600	0.006	6.286	0.004		1.116	0.006	T	1.08	0.01	L	6.3244	0.0006	0.005	118		6.31	6.33		C			1							S
107042						1.231	0.008	G	1.39	0.01	I	11.4681	0.0062	0.048	87		11.40	11.55		C			1							G
107043	10.556	0.031	8.733	0.013		1.517	0.027	T	1.55	0.04	L	8.6496	0.0021	0.020	132		8.62	8.68					1							
107044	10.248	0.021	8.834	0.011	A	1.300	0.495	G	1.04	0.02	L *	8.7750	0.0013	0.017	233	*	8.74	8.81			21408−4611	I 1	2 C	A	AB	309	3.216	0.008	2.57	0.04	
107045	10.409	0.035	8.657	0.015		1.461	0.030	T	1.47	0.05	L	8.6067	0.0020	0.019	140		8.58	8.64					1							
107046	8.802	0.013	6.989	0.006		1.509	0.011	T	1.54	0.02	L	6.9536	0.0015	0.010	92		6.93	6.97					1							S
107047	10.680	0.058	9.105	0.026		1.321	0.050	T	1.28	0.06	L	9.1419	0.0026	0.018	82		9.11	9.16		C	21408−3102	I 1	1							
107048	9.947	0.021	8.490	0.011		1.228	0.019	T	1.19	0.02	L	8.5317	0.0013	0.015	122		8.50	8.56		C			1							
107049	9.248	0.015	8.050	0.010		1.025	0.014	T	1.00	0.01	L	8.0870	0.0015	0.012	118		8.07	8.11					1	S						
107050	10.398	0.039	10.080	0.045		0.302	0.056	T	0.35	0.08	L	10.1742	0.0030	0.025	110		10.13	10.21		C			1							G
107051	8.179	0.009	8.137	0.011	A	0.172	0.150	G	0.02	0.01	L *	8.1342	0.0012	0.012	119	*	8.11	8.16			21409+1915	H 1	2 C	B	AB	67	1.115	0.074	3.67	0.12	S
107052	10.267	0.031	9.899	0.035		0.454	0.022	G	0.52	0.02	H	9.9083	0.0023	0.022	84		9.87	9.95		C			1							
107053	9.545	0.013	8.858	0.011		0.635	0.014	T	0.70	0.01	L	8.8889	0.0017	0.021	169		8.85	8.93		C			1							
107054	9.973	0.024	8.184	0.011		1.520	0.022	T	2.88	0.04	O	7.8459	0.0064	0.088	99		7.72	8.08		U 2 C			1	S						
107055	9.122	0.013	8.413	0.011		0.653	0.014	T	0.72	0.01	L	8.4705	0.0015	0.014	110		8.44	8.50		C			1							
107056	8.774	0.015	7.751	0.010		0.891	0.013	T	0.90	0.01	L	7.8062	0.0015	0.010	76		7.79	7.82		C			1							S
107057	10.882	0.035	10.322	0.035		0.529	0.037	T	0.60	0.04	L	10.3956	0.0023	0.028	166		10.34	10.44					1							
107058	9.805	0.023	8.305	0.012		1.262	0.020	T	1.22	0.02	L	8.3334	0.0015	0.012	88		8.30	8.35		C			1							
107059	9.032	0.010	7.313	0.005		1.435	0.009	T	1.43	0.01	L	7.2958	0.0008	0.009	196		7.28	7.32					1							S
107060	9.003	0.013	8.362	0.011	*	0.560	0.015	G	0.63	0.01	H *	8.3958	0.0019	0.016	116	*	8.36	8.43		D	21410+2920	I 1	2 C	A	AB	193	0.379	0.003	0.70	0.03	
107061	8.492	0.008	8.043	0.008		0.450	0.009	G	0.52	0.01	H	8.0864	0.0014	0.014	170		8.06	8.11		C			1							S
107062	10.465	0.037	9.283	0.022		1.006	0.034	T	1.05	0.04	L	9.2965	0.0026	0.018	92		9.26	9.32					1							
107063	7.437	0.007	7.241	0.007		0.158	0.015	G	0.17	0.01	H	7.2817	0.0011	0.012	68		7.27	7.30		C			1							S
107064	9.459	0.015	7.568	0.007		1.604	0.014	T	2.13	0.04	O	7.4285	0.0017	0.016	135		7.40	7.46		U			1							S
107065	9.513	0.014	7.970	0.007		1.296	0.012	T	1.26	0.01	L	7.9828	0.0012	0.015	174		7.96	8.01			21411−5744	I 1	1	S						S
107066	8.835	0.009	7.076	0.004		1.466	0.008	T	1.48	0.01	L	7.0647	0.0007	0.009	192		7.05	7.08		C			1							S
107067	9.034	0.013	8.602	0.013		0.422	0.015	T	0.49	0.02	L	8.6735	0.0018	0.016	101		8.65	8.70		C			1							S
107068	12.466	0.310	10.988	0.130	*	1.105	0.008	G	1.18	0.01	I *	10.8517	0.0043	0.033	90	*	10.81	10.92			21411−1844	H 1	2 C	C	AB	182	0.728	0.041	2.67	0.14	G
107069	9.073	0.012	8.546	0.012		0.495	0.015	T	0.57	0.02	L	8.6167	0.0014	0.016	134		8.59	8.65					1							
107070	8.308	0.008	7.526	0.006		0.686	0.009	G	0.74	0.01	H	7.5836	0.0010	0.013	167		7.56	7.61		C			1							S
107071	9.013	0.019	8.640	0.019		0.353	0.025	T	0.41	0.03	L	8.6734	0.0024	0.013	64		8.65	8.70					1							S
107072	8.503	0.012	7.962	0.011		0.514	0.012	T	0.59	0.01	L	8.0446	0.0013	0.010	79		8.03	8.06					1							S
107073	10.676	0.029	9.161	0.014		1.274	0.025	T	1.23	0.03	L	9.1563	0.0019	0.020	170		9.12	9.19					1							
107074	11.175	0.046	10.543	0.042		0.582	0.046	T	0.65	0.04	L	10.5913	0.0031	0.024	126		10.54	10.63					1							G
107075	8.554	0.009	7.389	0.006		1.000	0.008	T	0.98	0.01	L	7.4448	0.0009	0.010	138		7.43	7.46		C			1							S
107076	9.792	0.019	8.397	0.011		1.179	0.017	T	1.14	0.01	L	8.4327	0.0017	0.017	115		8.41	8.46		C			1							
107077	9.365	0.017	9.225	0.021		0.135	0.025	T	0.15	0.03	L	9.2405	0.0020	0.017	106		9.20	9.27		C			1							
107078											T	11.3656	0.0349	0.346	135		10.75	11.71	0.47	P 1 A			1							G
107079	8.564	0.010	7.045	0.006		1.277	0.009	T	1.24	0.01	L	7.0752	0.0011	0.007	99		7.06	7.10		C			1							S
107080	9.205	0.023	8.028	0.012	*	1.009	0.020	T	0.98	0.02	L *	8.1914	0.0016	0.018	164	*	8.16	8.22		D	21413+3928	I 1	2 C	A	AB	181	3.640	0.011	2.25	0.05	
107081	10.766	0.037	8.789	0.013		1.675	0.032	T	2.05	0.08	O	8.6661	0.0022	0.024	136		8.63	8.71		U			1							
107082	9.898	0.038	9.627	0.044		0.347	0.015	G	0.41	0.02	H	9.6150	0.0041	0.021	56		9.58	9.65					1							
107083	7.961	0.010	7.884	0.011		0.069	0.013	T	0.08	0.01	L	7.9051	0.0014	0.017	114		7.89	8.02		P 1 A			1							
107084	7.131	0.006	7.006	0.006		0.121	0.008	T	0.14	0.01	L	7.0383	0.0007	0.007	121		7.03	7.05		C			1							S
107085	9.843	0.025	8.427	0.013		1.196	0.022	T	1.16	0.02	L	8.4936	0.0020	0.018	94		8.46	8.53					1							
107086	9.646	0.018	8.518	0.012		0.971	0.017	T	0.96	0.01	L	8.5737	0.0012	0.011	118		8.55	8.60		C			1							
107087	11.383	0.084	9.853	0.035		1.285	0.072	T	1.24	0.07	L	9.9455	0.0026	0.024	83		9.91	9.98		C			1							
107088	7.612	0.010	7.223	0.009		0.362	0.015	G	0.42	0.02	H	7.2660	0.0016	0.010	54		7.25	7.28		C	21415−1450	I 1	1							S
107089	5.023	0.003	3.848	0.002		1.008	0.003	T	0.98	0.02	A	3.8981	0.0004	0.004	133		3.89	3.91			21415−7723	I 1	1	X						S D
107090	10.669	0.042	9.337	0.022		1.120	0.020	G	1.08	0.02	I	9.3613	0.0030	0.021	80		9.32	9.41		C			1							
107091	9.056	0.016	7.769	0.010		1.095	0.015	T	1.06	0.02	L	7.8287	0.0017	0.009	75		7.81	7.85		C			1							S
107092	9.400	0.012	8.891	0.012	A	0.489	0.013	T	0.56	0.01	L	8.9532	0.0067	0.021	181	A	8.91	8.99		D	21415−4808	I 2	1 C	P A						
107093	9.826	0.028	8.076	0.013		1.459	0.024	T	1.47	0.04	L	8.0439	0.0021	0.011	70		8.03	8.07		C			1							S
107094						1.800	0.495	G	1.78	0.51	J	11.9387	0.0989			B				D	21415−4808	I 2	1 C	F A						
107095	5.983	0.005	5.236	0.003		0.672	0.003	G	0.73	0.04	E	5.2938	0.0020	0.009	56		5.28	5.31		M			1							S P
107096	10.479	0.025	9.960	0.025		0.480	0.005	G	0.55	0.01	H	10.0221	0.0022	0.021	138		9.99	10.05		C			1							
107097	6.161	0.003	6.087	0.003		0.068	0.004	G	0.12	0.03	C	6.1119	0.0005	0.006	162		6.10	6.12		C	21415+4048	I 1	1							S
107098						1.016	0.008	G	1.06	0.01	I	11.6027	0.0069	0.054	51		11.50	11.66					1							G
107099	8.690	0.016	8.359	0.017		0.270	0.020	G	0.30	0.03	H	8.3355	0.0026	0.136	73		8.29	8.68	2.98	P 1 A			1							S
107100	7.369	0.007	7.051	0.006		0.302	0.009	T	0.35	0.01	L	7.0958	0.0011	0.009	96		7.07	7.12					1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
107101	21 41 38.76	−01 55 55.3	8.65	H	325.411 492 93	−01.932 027 70		5.39	33.73	−10.53	1.18	0.68	1.27	1.45	0.74	+19	−18	−14	−14	+ 6	+26	+ 1	+14	+23	+37	2	1.03
107102	21 41 39.16	+21 19 07.6	8.73	H	325.413 151 16	+21.318 776 09		3.14	10.20	−9.03	0.80	0.80	1.03	0.85	0.89	+34	+ 3	− 9	− 3	+ 0	+ 0	+ 0	−21	+17	+32	0	−2.11
107103	21 41 39.36	−32 31 51.1	6.87	H	325.413 987 84	−32.530 853 87		5.99	60.57	−62.59	0.76	0.53	0.98	0.95	0.52	+32	+ 0	−20	− 6	−27	+50	−18	− 5	+ 4	+27	0	−1.93
107104	21 41 40.65	−64 08 37.9	8.34	H	325.419 391 56	−64.143 872 49		7.40	7.29	16.84	0.52	0.56	0.97	0.58	0.57	−23	+ 0	−12	+ 1	− 8	+17	− 6	− 3	−20	−29	0	0.24
107105	21 41 41.70	+15 02 32.4	7.21	H	325.423 739 28	+15.042 324 12		3.56	22.97	−54.43	0.90	0.64	0.97	1.12	0.72	+18	−24	− 4	+14	−11	− 5	− 8	−19	+ 3	+24	0	0.24
107106	21 41 43.36	−53 05 08.3	8.77	H	325.430 654 60	−53.085 634 09		2.12	8.81	−19.83	0.89	0.66	1.24	1.18	0.75	+25	+ 3	+10	+28	+32	+ 9	+27	+57	− 9	+27	3	−0.50
107107 H	21 41 43.68	+06 25 15.0	8.27	G	325.432 008 45	+06.420 831 78	A	18.23	45.33	0.32	1.54	1.10	1.62	1.81	1.15	+37	+ 3	−17	−18	− 2	+11	+ 0	−24	+27	+44	4	0.97
107108	21 41 44.78	−15 37 10.1	11.31	G	325.436 591 96	−15.619 472 82		14.92	−140.46	−178.43	2.41	1.69	2.68	3.78	2.02	+17	−12	−12	+10	−15	+21	−13	+ 1	+17	+ 2	0	−1.20
107109	21 41 45.79	−35 34 29.6	8.84	H	325.440 798 34	−35.574 880 17		2.92	−22.04	−15.65	1.00	0.72	1.18	1.11	0.82	+28	−28	− 3	− 3	− 3	+23	− 6	+25	+ 9	+31	0	0.35
*107110	21 41 45.91	+49 17 58.0	7.75	G	325.441 275 69	+49.299 436 67		5.94	−52.70	−97.35	0.60	0.57	0.73	0.71	0.75	−21	− 5	− 2	−25	+16	−10	+15	− 5	+23	−21	0	−0.63
*107111	21 41 45.90	−19 48 23.0	7.02	H	325.441 260 60	−19.806 381 55		5.78	8.00	−7.67	0.81	0.54	0.90	0.94	0.62	+25	+ 7	+ 9	− 6	−28	+21	−31	+ 4	+ 9	+32	0	−0.88
107112	21 41 46.22	−25 06 05.5	6.51	H	325.442 596 10	−25.101 528 51		3.50	−13.68	4.98	0.78	0.51	0.89	0.88	0.52	+25	−19	−30	−22	−18	+36	−11	+ 3	+ 4	+30	0	−1.23
107113 H	21 41 46.76	−45 45 29.8	8.45	H	325.444 836 00	−45.758 271 76	*	5.25	1.95	7.61	1.81	1.13	1.63	1.07	0.80	+50	−20	− 6	+10	+28	+ 5	+36	+70	−28	+39	2	−0.78
107114	21 41 46.97	+32 04 56.1	8.81	H	325.445 713 33	+32.082 248 08		3.16	−3.85	−5.56	0.65	0.62	0.99	0.79	0.76	−23	− 5	− 8	+33	− 6	−20	− 1	−22	+12	−10	0	1.05
107115	21 41 47.29	−40 40 53.8	8.78	H	325.447 035 20	−40.681 621 67		5.02	73.36	−31.08	1.08	0.61	1.24	1.35	0.65	+10	+ 0	−28	+16	+ 2	+24	+10	+65	−32	− 1	0	1.41
107116	21 41 48.76	+40 31 32.1	8.15	H	325.453 178 66	+40.525 575 22		2.90	4.40	−3.88	0.48	0.55	0.76	0.55	0.66	−26	+ 4	+ 3	+ 0	+ 7	− 4	+ 8	− 4	+ 5	−36	0	0.01
107117	21 41 49.38	−58 49 56.9	8.92	H	325.455 756 69	−58.832 476 50		3.74	24.89	−58.61	0.80	0.64	1.30	0.97	0.67	−21	− 5	− 7	−27	+19	+15	+15	+ 3	− 7	−10	1	1.11
107118	21 41 54.40	+07 22 20.2	9.19	H	325.476 687 24	+07.372 268 12		5.28	62.36	−7.00	1.02	0.77	1.28	1.31	0.89	+29	− 4	− 7	+13	+ 4	+33	+ 6	−23	+36	+43	0	1.57
107119	21 41 55.08	+71 18 40.3	4.55	H	325.479 483 73	+71.311 186 95		18.55	119.48	94.49	0.43	0.41	0.46	0.49	0.41	− 8	− 3	+13	+ 6	+ 5	− 7	+ 6	− 9	+ 2	− 3	0	0.67
107120	21 41 56.44	+00 20 45.8	7.66	G	325.485 149 95	+00.346 066 80		8.60	50.79	−6.73	0.93	0.63	1.03	1.13	0.65	+42	− 9	+ 7	+ 1	+ 9	+14	+ 6	+25	+ 2	+52	2	2.68
107121	21 41 57.94	+33 02 24.0	8.50	H	325.491 425 27	+33.039 994 79		1.87	1.25	−0.63	0.68	0.69	1.08	0.80	0.83	−19	+ 7	−16	−12	+ 7	+ 2	+10	−29	+ 0	− 7	0	1.37
107122	21 41 58.33	−17 13 18.9	7.18	H	325.493 040 66	−17.221 907 87		13.89	230.97	55.29	0.88	0.60	0.99	1.24	0.81	+19	−16	− 9	+10	− 4	+29	− 6	+26	+17	+31	0	0.32
107123	21 41 58.53	+58 30 00.3	8.80	H	325.493 894 76	+58.500 070 13		1.48	−5.11	−4.86	0.69	0.65	0.80	0.79	0.80	+14	− 3	−11	+11	+17	−17	+20	+ 1	+ 0	+43	0	0.24
*107124	21 41 59.15	−24 39 11.6	8.26	H	325.496 450 17	−24.653 215 32		6.11	−21.48	−1.20	1.01	0.72	1.25	1.18	0.71	+31	−12	−24	− 4	−25	+40	−16	+ 5	− 2	+32	0	1.07
*107125	21 41 59.09	+42 34 08.8	7.96	G	325.496 215 94	+42.569 109 80		10.00	35.51	3.97	0.61	0.64	0.88	0.70	0.74	−30	+16	− 9	+ 4	+ 7	+11	+11	+11	+16	−29	0	0.01
107126	21 41 59.94	+18 56 20.2	7.26	H	325.499 746 50	+18.938 937 85		5.05	−36.10	−46.92	0.63	0.62	0.91	0.72	0.66	+39	+16	− 3	+ 7	+ 9	−23	+11	− 1	+25	+27	0	0.83
107127	21 42 00.45	−12 14 58.7	7.93	H	325.501 885 89	−12.249 635 87		6.72	3.07	11.31	0.94	0.64	1.00	1.38	0.75	+ 4	−10	−12	+17	−10	+25	−11	− 2	+19	− 8	0	−1.63
107128	21 42 00.64	−23 15 45.5	5.24	H	325.502 662 07	−23.262 625 57		13.18	91.12	−95.50	0.71	0.48	0.80	0.79	0.48	+29	−11	−32	−24	−30	+30	−22	− 3	− 3	+26	0	1.65
107129	21 42 01.08	+35 30 36.7	5.98	2 H	325.504 500 32	+35.510 195 72		1.63	5.45	1.94	0.38	0.47	0.73	0.44	0.62	−15	+ 2	−18	−15	+12	−17	+11	−28	+34	− 4	0	−1.43
107130 H	21 42 02.26	−29 40 19.5	9.18	H	325.509 411 11	−29.672 095 71	*	2.79	−11.14	−9.08	1.09	0.71	1.27	1.14	0.75	+34	− 8	− 1	−26	−21	+32	−23	+ 3	+ 6	+34	0	1.77
107131	21 42 02.60	+13 17 20.9	8.12	H	325.510 850 67	+13.289 140 36		4.31	14.15	−7.67	1.22	0.75	1.22	2.16	0.88	+13	+ 8	−15	+29	−16	+ 0	− 1	−45	+ 6	+34	0	−0.12
107132	21 42 03.85	+36 52 52.1	7.89	H	325.516 043 37	+36.881 134 18		3.37	16.31	4.77	0.52	0.56	1.00	0.61	0.68	−38	+10	−18	+ 1	+30	−31	+29	+ 0	+35	−48	2	−0.79
*107133	21 42 04.08	−30 35 38.7	10.52	G	325.516 981 60	−30.594 097 03		32.99	−58.11	13.43	1.82	1.02	2.13	2.49	1.06	+17	+ 5	− 4	+21	−20	+43	−16	+ 7	+13	+17	0	−0.18
*107134	21 42 04.03	−27 41 25.4	7.64	H	325.516 808 28	−27.690 400 89		4.41	−66.61	−111.35	0.88	0.63	1.11	1.10	0.65	+32	−11	−34	−15	−20	+39	− 8	+12	+20	+32	0	0.25
107135	21 42 04.26	−25 51 36.2	7.23	2 H	325.517 750 00	−25.860 044 08		0.37	−0.60	−15.46	0.85	0.61	1.06	0.96	0.60	+29	−13	−36	−17	+ 1	+33	+10	+25	+ 2	+35	0	−1.30
*107136	21 42 05.66	+51 11 22.7	4.69	H	325.523 582 01	+51.189 627 10		1.94	5.25	−2.11	0.40	0.45	0.53	0.45	0.53	− 9	+11	− 4	+ 3	+ 0	−19	+ 1	− 5	+ 3	+ 9	1	0.08
*107137	21 42 05.64	−37 02 52.6	8.46	H	325.523 511 94	−37.047 952 70		1.65	7.93	9.08	1.02	0.60	1.24	1.19	0.61	+34	−13	−25	−20	−25	+39	−13	+13	−15	+20	0	−1.70
*107138	21 42 05.64	+52 17 31.4	7.04	G	325.523 490 80	+52.292 062 91		5.24	15.60	13.96	0.48	0.53	0.63	0.52	0.62	− 2	+17	−14	+ 7	+16	−18	+16	+13	+12	+12	0	−1.01
107139	21 42 05.90	+21 13 46.6	8.57	H	325.524 589 21	+21.229 607 76		0.28	−1.43	−1.93	0.76	0.85	1.04	0.84	0.87	+34	+ 9	−12	−11	− 9	+ 2	−10	−32	+12	+29	2	−1.29
107140	21 42 08.35	+45 45 56.7	6.11	2 H	325.534 807 68	+45.765 745 35		4.82	0.55	−19.84	0.46	0.50	0.62	0.58	0.64	−19	+12	− 3	+34	−12	+10	−15	+ 9	+ 2	−32	1	0.09
107141 H	21 42 08.43	+44 13 34.5	9.26	H	325.535 113 30	+44.226 250 64	A	−1.39	−4.42	−5.36	2.88	2.06	2.60	3.03	2.19	− 3	+19	−21	+11	+12	+ 0	+15	− 4	+40	−17	1	−0.47
107142	21 42 08.72	+04 50 04.2	7.36	H	325.536 328 69	+04.834 495 28		3.99	−39.54	−17.29	0.91	0.50	0.96	1.25	0.56	+14	+ 7	− 9	+15	+11	+23	+14	− 2	+33	+29	0	1.42
107143	21 42 09.98	−41 07 27.2	8.82	G	325.541 596 00	−41.124 220 92		42.40	238.72	−293.03	3.10	1.82	3.35	4.52	1.97	+27	+15	−10	+36	+19	+28	+21	+66	−16	+17	3	
107144	21 42 10.12	+01 17 07.0	5.66	G	325.542 147 06	+01.285 273 44		2.06	−5.89	−8.31	0.72	0.53	0.89	1.03	0.60	+41	+ 4	− 2	− 7	−21	+42	−17	−23	+24	+56	0	1.55
107145	21 42 11.23	+10 16 47.5	10.28	H	325.546 806 00	+10.279 861 25		9.79	102.03	−86.99	1.80	1.19	2.00	2.30	1.38	+25	+12	+ 3	+ 7	− 4	+15	+ 2	−36	+21	+36	0	1.08
107146	21 42 11.26	+08 24 53.5	8.39	H	325.546 910 32	+08.414 866 85		2.04	34.78	9.43	0.91	0.67	1.09	1.07	0.76	+30	− 1	+ 1	−13	+ 2	+24	+ 2	−33	+27	+42	0	1.60
*107147	21 42 11.69	−27 28 14.6	8.62	H	325.548 711 64	−27.470 714 65		1.17	−5.24	−12.87	1.04	0.80	1.37	1.25	0.73	+46	−13	−38	−33	−40	+55	−23	−18	+18	+39	0	1.41
*107148	21 42 11.69	−08 43 42.5	8.79	H	325.548 691 54	−08.728 476 53		4.08	7.96	−6.86	1.17	0.99	1.40	1.39	0.99	+29	−21	+ 2	−27	− 1	+38	− 9	−46	+23	+38	0	1.29
107149	21 42 12.55	−32 30 23.8	7.09	H	325.552 283 47	−32.506 607 05		4.73	−7.19	5.57	0.76	0.51	0.93	0.94	0.55	+30	+ 5	− 7	− 2	−14	+40	−12	+ 6	− 3	+28	0	0.57
107150	21 42 14.76	+39 31 34.6	7.36	H	325.561 510 60	+39.526 291 29		4.33	33.53	16.08	0.47	0.57	0.81	0.56	0.71	−32	+ 6	− 8	− 2	+ 9	−10	+ 9	− 2	+ 8	−39	0	0.55
107151	21 42 15.44	+05 40 48.5	5.30	1 H	325.564 354 06	+05.680 151 44		6.25	11.21	−5.78	0.66	0.45	0.80	0.89	0.51	+22	− 5	−10	+18	+ 3	+36	+ 5	−17	+41	+36	0	−1.96
107152	21 42 16.66	−57 36 46.8	8.36	H	325.569 408 33	−57.612 991 50		26.72	−103.64	16.50	0.68	0.54	1.13	0.81	0.57	−19	− 1	+ 2	−12	+27	+ 6	+21	+ 9	−17	− 2	0	2.07
107153 H	21 42 18.45	+05 54 43.0	7.58	H	325.576 869 81	+05.911 943 40	*	5.92	−5.15	13.86	1.40	1.34	1.16	1.38	0.88	+34	− 3	−14	−13	− 2	+17	− 4	−37	+37	+25	1	1.15
107154	21 42 19.16	−04 20 24.4	8.51	H	325.579 820 68	−04.340 104 36		5.04	17.64	1.91	0.98	0.61	1.04	1.23	0.61	+40	+20	+10	−20	+ 1	+12	− 5	+34	+ 4	+50	0	0.17
107155	21 42 20.13	−41 12 33.3	8.73	H	325.583 874 64	−41.209 243 32		7.27	28.94	−47.31	1.14	0.60	1.21	1.45	0.65	+19	−15	−21	+42	+ 3	+ 9	+14	+69	−32	+ 0	0	−1.88
107156	21 42 20.25	+43 34 03.3	9.80	H	325.584 359 16	+43.567 586 36		2.80	−6.94	−1.33	0.62	0.67	0.90	0.74	0.85	−15	+11	+ 0	+15	− 7	+ 5	− 7	+ 6	+17	−30	0	−0.65
*107157	21 42 20.77	+11 49 06.6	9.75	2 H	325.586 547 46	+11.818 495 33		2.41	−6.45	−17.62	1.40	1.10	1.68	2.06	1.19	+36	+ 3	−14	−28	− 5	−29	−12	−34	+ 0	+36	2	0.09
*107158	21 42 20.75	−05 38 22.7	8.96	1 H	325.586 473 22	−05.639 632 95		4.12	−26.42	−32.47	1.28	0.76	1.31	1.54	0.77	+41	+ 1	− 1	−40	+ 4	+ 7	− 7	+28	+ 6	+54	0	−1.59
107159	21 42 21.09	+50 51 28.9	7.24	G	325.587 875 67	+50.858 031 32		2.38	2.03	−2.72	0.49	0.51	0.63	0.56	0.62	− 5	+ 5	− 6	−14	+ 3	+ 1	+ 3	−11	+13	+ 9	0	−0.30
107160	21 42 21.82	−50 05 37.0	7.62	H	325.590 905 21	−50.093 621 57		13.21	82.65	4.59	0.70	0.45	1.00	0.77	0.47	+17	− 2	+ 6	− 2	+20	+21	+17	+35	−10	+19	0	−0.19
107161	21 42 22.72	+34 04 08.5	8.36	2 H	325.594 672 58	+34.069 037 35		−1.81	9.91	5.81	0.44	0.76	1.07	0.57	0.92	+ 4	+ 0	−25	− 2	− 1	−14	+ 0	−45	+30	+12	0	0.70
107162 H	21 42 22.94	+41 04 37.3	5.73	H	325.595 586 07	+41.077 023 04	*	8.76	23.38	−1.60	0.40	0.42	0.61	0.44	0.51	−32	+ 7	− 6	− 9	+11	−10	+13	+ 1	+14	−37	1	0.56
107163	21 42 23.29	+28 42 31.3	8.97	H	325.597 061 07	+28.708 704 37		3.63	16.52	−0.69	0.86	0.78	1.16	0.95	0.83	− 9	+19	−13	+ 2	−13	− 1	−10	−56	+12	− 6	0	1.59
107164	21 42 24.19	+57 44 09.8	6.90	1 H	325.600 780 11	+57.736 064 95		2.01	−2.71	−4.75	0.48	0.49	0.58	0.52	0.54	+ 3	+ 3	− 9	+ 9	+26	−20	+28	+ 0	− 1	+34	1	1.15
107165	21 42 24.29	+31 29 41.0	9.03	H	325.601 221 71	+31.494 730 16		1.05	−3.55	−4.30	0.70	0.68	1.10	0.88	0.86	−25	+ 5	−16	+28	+ 3	−13	+ 7	−33	+23	−18	0	−0.68
107166	21 42 26.31	+66 21 43.9	7.97	H	325.609 620 04	+66.362 197 58		5.59	13.92	12.25	0.60	0.58	0.65	0.76	0.58	− 3	− 5	+18	+21	+16	+ 8	+10	−14	− 8	− 9	0	2.55
107167	21 42 28.23	−08 27 54.3	8.13	G	325.617 621 85	−08.465 070 19		7.63	−31.16	−13.01	1.29	0.74	1.22	1.33	0.77	− 1	−10	+ 1	−56	+18	+34	+13	−34	+30	+19	0	1.97
107168	21 42 28.31	+41 49 15.4	8.07	G	325.617 953 66	+41.820 936 28		8.75	45.25	5.15	0.57	0.58	0.87	0.63	0.70	−34	− 1	− 5	− 4	+10	− 9	+ 9	+ 3	+31	−37	0	−1.93
107169	21 42 28.55	+08 55 52.0	8.19	H	325.618 940 06	+08.931 108 27		4.49	−11.32	−16.37	0.93	0.62	1.08	1.12	0.66	+31	−14	+ 4	+23	+ 1	+14	+ 0	−35	+25	+39	4	1.66
107170	21 42 29.08	−37 55 59.6	7.57	H	325.621 146 71	−37.933 217 72	A	2.84	5.19	−13.18	2.18	1.30	1.92	2.38	1.17	+30	−20	−10	−13	−18	+19	− 9	+23	−15	+21	2	1.56
107171 H	21 42 29.44	−59 59 30.8	9.52	H	325.622 660 18	−59.991 880 06	A	7.87	21.11	−24.48	1.76	1.53	2.34	1.82	1.36	− 5	−13	−21	+ 0	+17	+ 7	+13	+13	− 2	+ 3	1	−0.09
107172	21 42 30.51	−37 55 49.7	9.57	H	325.627 111 81	−37.930 459 63	B	17.92	−9.00	−6.89	28.68	13.57	10.90	20.15	8.53	+27	−18	− 7	−25	−18	+15	−13	+14	−11	+22	2	1.56
107173	21 42 32.95	+10 49 27.6	6.06	1 H	325.637 281 08	+10.824 344 51		4.68	17.39	−12.57	0.71	0.47	0.81	0.85	0.51	+21	− 7	− 5	+ 6	+ 2	− 5	+ 1	−30	+23	+ 4	0	0.50
*107174	21 42 33.02	+42 26 16.5	10.88	H	325.637 577 48	+42.437 905 94	B	14.31	−31.69	25.39	36.19	43.59	18.42	26.88	37.05	−32	+ 0	+ 5	+11	− 1	+ 0	− 1	+ 6	+26	−37	0	0.01
*107175	21 42 32.96	+17 50 33.3	10.94	G	325.637 312 57	+17.842 581 18		22.13	264.96	−109.69	1.53	1.33	1.93	2.30	1.56	+29	−15	−23	−32	+20	+ 4	+11	−15	+18	+23	0	−0.70
107176	21 42 33.27	−15 45 41.7	7.99	H	325.638 626 47	−15.761 574 27		2.25	17.00	−23.44	0.98	0.83	1.18	1.62	1.09	+29	− 4	−15	+16	− 2	+22	+ 3	+18	+30	+13	0	0.35
107177 H	21 42 33.41	+41 02 51.0	7.55	H	325.639 211 06	+41.047 494 48	A	8.82	26.14	−0.05	1.76	1.99	1.50	1.05	1.38	−25	+ 4	− 3	+ 3	+ 9	−13	+11	+ 4	+17	− 3	1	−0.79
107178	21 42 33.52	−44 13 00.4	8.82	H	325.639 665 29	−44.216 769 08		2.09	25.71	2.10	1.01	0.54	1.24	0.93	0.56	+ 8	−18	− 1	−29	+ 2	+28	+ 7	+49	− 7	+ 1	0	1.51
107179	21 42 33.60	+58 14 39.2	9.73	2 H	325.640 011 68	+58.244 233 17		0.07	−5.11	−4.33	0.97	0.97	1.19	1.09	1.16	+14	− 1	− 6	+ 5	+20	−23	+21	+ 5	−10	+48	0	−0.05
107180	21 42 34.15	+42 26 26.7	7.46	H	325.642 302 63	+42.440 743 13	A	6.40	4.66	−11.68	1.11	1.17	1.22	1.16	1.30	−32	+ 3	+ 6	+19	− 2	+ 1	− 1	+15	+19	−37	0	0.01
107181 H	21 42 35.53	+02 33 19.5	11.37	G	325.648 047 26	+02.555 421 04	A	16.95	103.88	−0.56	13.56	6.73	7.77	10.59	5.25	+43	− 7	− 7	+16	− 3	+12	+ 1	−15	+24	+59	2	0.76
107182	21 42 36.82	−12 02 32.6	8.77	H	325.653 418 94	−12.042 398 43		3.76	7.37	−5.21	1.00	0.77	1.21	1.49	0.94	+19	− 2	−11	+ 7	− 1	+26	+ 0	− 2	+36	+ 8	0	−0.27
107183	21 42 36.95	+13 24 34.5	10.38	2 H	325.653 972 12	+13.409 572 63		0.81	−1.68	−8.02	1.98	1.71	2.15	3.16	1.95	+31	− 1	−28	+41	−10	+25	+ 2	+ 5	− 5	+30	0	3.35
107184	21 42 36.99	+10 12 28.1	7.47	H	325.654 145 65	+10.207 798 25		6.60	8.60	−16.15	0.90	0.56	1.05	1.28	0.66	+11	+21	−14	+19	+ 1	+23	+14	−34	+40	+29	0	−0.18
107185	21 42 38.57	−70 19 01.6	8.95	1 H	325.660 727 23	−70.317 105 43		1.08	15.31	−8.11	0.70	0.80	0.99	0.80	0.85	+ 0	−18	−10	+25	+15	− 7	+11	+31	+ 5	+ 1	0	1.54
107186	21 42 38.81	+49 36 01.0	6.10	H	325.661 700 56	+49.600 264 84		3.75	3.03	−3.30	0.49	0.49	0.61	0.61	0.69	−20	−12	− 4	−36	+10	+11	+ 9	−17	+12	−19	0	−2.06
107187	21 42 39.21	−47 29 41.1	9.49	H	325.663 367 40	−47.494 755 76		8.17	62.64	−38.58	0.91	0.68	1.54	1.06	0.74	+35	−18	+ 1	+ 8	+20	− 4	+26	+55	−17	+29	1	1.07
107188	21 42 39.42	−18 51 58.7	4.72	G	325.664 238 45	−18.866 301 05		11.22	145.90	−9.05	0.66	0.49	0.79	0.79	0.55	+36	− 1	− 2	− 6	−25	+28	−27	+12	+ 3	+42	0	0.78
107189	21 42 39.53	+53 15 01.0	7.96	H	325.664 708 32	+53.250 277 59		1.77	3.23	−3.93	0.60	0.58	0.71	0.66	0.64	−14	− 8	− 7	−13	+ 9	− 4	+ 6	−14	+21	− 5	0	0.84
107190	21 42 40.12	−02 17 53.0	8.48	H	325.667 173 17	−02.298 054 90		9.02	115.79	−127.70	1.17	0.65	1.21	1.44	0.68	+16	− 2	+ 5	−16	+11	+29	+ 4	+20	+26	+33	0	−0.04
107191	21 42 40.56	+63 43 17.6	6.88	H	325.668 994 26	+63.721 564 23		27.78	−149.40	−78.50	0.48	0.44	0.51	0.54	0.45	−12	− 2	+ 2	+27	− 3	+12	− 4	− 7	+12	−12	0	−0.67
107192	21 42 43.24	+64 39 56.2	9.10	H	325.680 183 42	+64.665 617 29		3.26	12.10	3.44	0.73	0.72	0.82	0.97	0.78	−16	−12	+14	+ 4	+15	+ 3	+11	+ 0	+ 7	− 2	0	−0.47
107193	21 42 43.31	+47 07 52.9	8.70	G	325.680 447 12	+47.131 374 23		4.74	−9.60	−4.22	0.67	0.73	0.89	0.83	0.88	−13	+ 2	+ 2	+17	− 2	− 9	− 3	+ 0	+12	−17	0	−0.85
107194	21 42 44.26	+36 16 58.4	9.60	H	325.684 425 44	+36.282 878 72		2.95	16.47	6.32	0.76	0.86	1.43	0.91	1.03	− 8	+ 7	−21	+13	+36	−31	+32	− 1	+34	−19	0	0.25
107195	21 42 44.35	−35 34 55.0	8.34	H	325.684 794 06	−35.581 956 14		2.33	−11.35	−14.96	0.96	0.61	1.09	1.09	0.70	+11	−25	− 9	+15	−14	+13	−15	+32	+12	+ 5	0	1.75
107196	21 42 44.70	+22 28 34.6	8.97	2 H	325.686 257 11	+22.476 275 77		1.00	−7.36	−10.29	0.92	0.99	1.22	1.04	1.18	+32	+ 0	−27	+ 2	−10	+ 0	−11	−43	+28	+31	0	−0.29
107197	21 42 45.37	+59 16 15.0	6.10	H	325.689 050 06	+59.270 840 85		1.34	−4.33	1.44	0.45	0.42	0.52	0.46	0.42	− 2	+ 6	+ 5	+ 7	+13	− 8	+16	− 6	− 3	+18	1	−0.85
*107198	21 42 46.05	+50 10 02.6	7.57	H	325.691 881 04	+50.167 383 01	

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
107101	9.312	0.020	8.718	0.019		0.554	0.024	T	0.63	0.02	L	8.7715	0.0021	0.018	73		8.75	8.80		C			1							
107102	8.810	0.012	8.727	0.015		0.082	0.018	T	0.09	0.02	L	8.7655	0.0021	0.017	100		8.74	8.79		C			1							
107103	8.197	0.009	6.978	0.006		1.042	0.008	T	1.01	0.01	L	7.0396	0.0008	0.007	92		7.03	7.06		C			1							S
107104	8.718	0.008	8.367	0.008		0.341	0.010	T	0.40	0.01	L	8.4221	0.0016	0.022	222		8.39	8.46					1							S
107105	9.146	0.021	7.363	0.011		1.485	0.019	T	1.50	0.03	L	7.3398	0.0014	0.012	60		7.32	7.36					1							S
107106	10.635	0.027	8.927	0.012		1.426	0.023	T	1.41	0.04	L	8.9049	0.0016	0.019	169		8.87	8.94		C			1							
107107	9.222	0.018	8.424	0.015	A	0.720	0.126	G	0.73	0.03	L *	8.4423	0.0035	0.027	77	*	8.40	8.48		D	21417+0625	I 1	2 C A	AB	207	3.184	0.020	2.77	0.09	S
107108						1.011	0.009	G	1.06	0.01	I	11.4804	0.0041	0.038	58		11.41	11.57		D			1							G
107109	9.301	0.020	8.880	0.021		0.411	0.024	T	0.48	0.03	L	8.9376	0.0017	0.021	94		8.91	8.98		C	21418−3535	I 1	1							
107110	9.174	0.016	7.864	0.010		1.113	0.015	T	1.08	0.02	L	7.9182	0.0012	0.011	124		7.90	7.94		C			1							
107111	8.630	0.014	7.158	0.008		1.240	0.013	T	1.20	0.01	L	7.1848	0.0015	0.009	77		7.17	7.21					1							S
107112	8.031	0.009	6.636	0.005		1.185	0.006	G	1.15	0.01	H	6.6721	0.0013	0.008	78		6.66	6.69					1							S
107113	8.777	0.008	8.463	0.008	*	0.280	0.004	G	0.32	0.01	H *	8.5222	0.0010	0.013	225	*	8.50	8.55		D	21418−4545	H 1	2 C A	AB	237	0.299	0.023	2.08	0.23	S
107114	10.830	0.040	8.991	0.015		1.530	0.034	T	1.57	0.07	L	8.9303	0.0016	0.019	170		8.90	8.96					1							
107115	10.028	0.018	8.895	0.012		0.975	0.017	T	0.96	0.01	L	8.9408	0.0017	0.013	153		8.92	8.97					1							
107116	8.143	0.006	8.154	0.008		−0.005	0.009	T	0.02	0.01	L	8.1620	0.0013	0.014	170		8.14	8.19					1							S
107117	10.400	0.022	9.042	0.012		1.150	0.020	T	1.11	0.02	L	9.0884	0.0016	0.022	188		9.05	9.13		C			1							
107118	9.726	0.024	9.237	0.023		0.460	0.030	T	0.53	0.03	L	9.2899	0.0026	0.019	80		9.27	9.33		C			1							
107119	5.980	0.003	4.663	0.002		1.108	0.004	G	1.07	0.03	C	4.7136	0.0005	0.005	111		4.71	4.72		C			1							S
107120	8.243	0.013	7.726	0.011		0.491	0.006	G	0.58	0.02	A	7.7670	0.0013	0.009	69		7.75	7.78					1							S
107121	10.034	0.022	8.610	0.012		1.202	0.020	T	1.16	0.02	L	8.6548	0.0023	0.017	135		8.63	8.68					1							
107122	8.427	0.014	7.302	0.009		0.973	0.002	G	1.02	0.00	I	7.3445	0.0012	0.006	55		7.33	7.36		C			1							S
107123	8.889	0.014	8.618	0.015		−0.300	0.015	G	−0.33	0.02	H	8.6780	0.0020	0.019	116		8.65	8.71					1 S							
107124						1.066	0.134	G	0.99	0.02	L	8.4254	0.0021	0.016	80		8.40	8.46			21420−2439	I 1	1 S							
107125	8.606	0.009	8.030	0.008		0.538	0.011	T	0.61	0.01	L	8.0800	0.0013	0.016	119		8.05	8.11		C			1							S
107126	8.617	0.011	7.371	0.007		1.063	0.010	T	1.03	0.01	L	7.4237	0.0013	0.011	101		7.40	7.44			21420+1856	I 1	1							S
107127	8.201	0.013	7.938	0.016		0.250	0.019	T	0.28	0.02	L	7.9998	0.0018	0.011	49		7.98	8.02		C			1							S
107128	6.495	0.004	5.348	0.003		0.991	0.002	G	0.97	0.00	H	5.4033	0.0007	0.006	85		5.39	5.42		C	21420−2316	I 1	1							S
107129	9.442	0.013	6.277	0.003		2.500	0.010	T	2.56	0.01	L	5.9822	0.0107	0.152	182		5.79	6.16		U 2			1 S							S P
107130	10.838	0.050	9.343	0.023	*	1.258	0.043	T	1.22	0.04	L *	9.3397	0.0021	0.016	91	*	9.32	9.37		C	21420−2940	H 1	2 C S C	AB	350	0.115	0.069	0.72	1.78	
107131	9.930	0.027	8.289	0.014		1.373	0.024	T	1.34	0.03	L	8.2722	0.0012	0.015	82		8.25	8.29		C			1							
107132	9.531	0.013	8.011	0.007		1.278	0.012	T	1.24	0.01	L	8.0462	0.0012	0.014	252		8.02	8.07		C			1							
107133	12.495	0.230	10.698	0.073		1.295	0.015	G	1.49	0.03	I	10.5713	0.0036	0.026	72		10.53	10.61		C			1							G
107134	9.037	0.015	7.772	0.010		1.078	0.014	T	1.04	0.01	L	7.8113	0.0013	0.010	92		7.79	7.84		C			1							S
107135	9.325	0.018	7.430	0.008		1.607	0.016	T	2.05	0.05	O	7.3043	0.0036	0.037	80		7.27	7.40		U 2			1 S							S
107136	4.523	0.002	4.660	0.002		−0.119	0.010	G	−0.12	0.03	C	4.6443	0.0007	0.006	122		4.63	4.65					1							S
107137	9.713	0.019	8.577	0.012		0.977	0.017	T	0.96	0.01	L	8.6282	0.0018	0.018	113		8.59	8.65		C			1							
107138	8.249	0.009	7.123	0.007		0.950	0.015	G	0.94	0.01	H	7.1959	0.0011	0.008	117		7.18	7.21		C			1							S
107139	9.809	0.022	8.671	0.014		0.979	0.020	T	0.96	0.02	L	8.7354	0.0017	0.014	94		8.71	8.76		C			1							
107140	8.040	0.011	6.379	0.009		1.415	0.012	T	3.00	0.04	O	6.0163	0.0087	0.074	109		5.90	6.12		U 2			1 S							S
107141	9.492	0.014	9.309	0.017	*	0.175	0.021	T	0.19	0.02	L *	9.3196	0.0029	0.026	130	*	9.26	9.36		D	21421+4414	I 1	2 C A	AB	78	0.491	0.005	0.60	0.02	
107142	8.786	0.016	7.487	0.010		1.104	0.015	T	1.07	0.02	L	7.5295	0.0013	0.010	75		7.51	7.55					1							S
107143	10.206	0.020	8.961	0.012		1.054	0.019	G	1.18	0.00	A	8.9561	0.0012	0.016	159		8.93	8.99					1 X							
107144	7.563	0.009	5.816	0.005		1.446	0.008	G	1.44	0.01	I	5.8103	0.0010	0.007	77		5.80	5.83					1							S
107145	11.311	0.063	10.383	0.045		0.807	0.060	T	0.83	0.04	L	10.4199	0.0034	0.033	96		10.35	10.47		C			1							G
107146	10.134	0.027	8.523	0.013		1.349	0.024	T	1.31	0.03	L	8.5450	0.0018	0.018	100		8.51	8.58					1							
107147	9.999	0.026	8.718	0.015		1.090	0.023	T	1.05	0.02	L	8.7856	0.0019	0.016	84		8.76	8.81		C			1							
107148	9.312	0.023	8.828	0.023		0.456	0.030	T	0.53	0.03	L	8.8882	0.0025	0.017	66		8.86	8.91					1							S
107149	8.665	0.011	7.210	0.006		1.227	0.010	T	1.19	0.01	L	7.2478	0.0011	0.009	87		7.23	7.26		C			1							S
107150	9.010	0.011	7.513	0.006		1.260	0.010	T	1.22	0.01	L	7.5258	0.0012	0.013	178		7.50	7.55					1							S
107151	7.454	0.007	5.504	0.004		1.653	0.007	T	2.03	0.03	O	5.3834	0.0019	0.015	90		5.37	5.41		U 2			1							S
107152	9.307	0.012	8.445	0.009		0.756	0.012	T	0.80	0.01	L	8.4979	0.0015	0.018	168		8.47	8.53		C			1							
107153	7.959	0.008	7.621	0.007	*	0.321	0.010	T	0.37	0.01	L *	7.6605	0.0013	0.012	94	*	7.64	7.68		D	21423+0555	I 1	2 C A	AB	145	0.205	0.004	0.17	0.09	S
107154	8.745	0.013	8.524	0.015		0.211	0.019	T	0.23	0.02	L	8.5716	0.0016	0.013	82		8.55	8.60					1							S
107155	9.321	0.012	8.801	0.011		0.506	0.004	G	0.58	0.00	H	8.8463	0.0011	0.014	160		8.82	8.87					1							S
107156	10.265	0.030	9.852	0.033		0.404	0.037	T	0.47	0.04	L	9.8934	0.0016	0.013	131		9.87	9.91					1							G Y
107157	11.866	0.126	9.957	0.036		1.619	0.108	T	2.11	0.26	K	9.8211	0.0055	0.036	83		9.72	9.87		U			1							
107158	10.477	0.041	9.110	0.022		1.158	0.036	T	1.12	0.03	L	9.1221	0.0026	0.021	85		9.08	9.17		U			1							
107159	7.164	0.005	7.232	0.007		−0.050	0.015	G	−0.03	0.01	H	7.2309	0.0015	0.011	117		7.21	7.25					1							S
107160	8.505	0.007	7.702	0.006		0.727	0.007	T	0.78	0.01	L	7.7652	0.0010	0.012	179		7.75	7.79					1							S
107161	10.529	0.024	8.644	0.009		1.599	0.021	T	2.83	0.03	O	8.3210	0.0050	0.076	225		8.16	8.39		U 2			1 S							
107162	5.799	0.003	5.738	0.003	*	0.055	0.004	T	0.07	0.00	L *	5.7583	0.0005	0.007	158	*	5.75	5.77		D	21424+4105	I 1	2 C S A	AB	355	0.189	0.003	0.39	0.07	S
107163	10.043	0.030	9.116	0.021		0.820	0.027	T	0.84	0.02	L	9.1231	0.0016	0.019	169		9.09	9.17		C			1							
107164	7.097	0.005	6.941	0.006		0.142	0.007	T	0.16	0.01	L	6.9481	0.0017	0.014	114		6.93	6.97		U			1							S
107165	11.260	0.052	9.174	0.015		1.726	0.043	T	1.75	0.04	L	9.1304	0.0022	0.021	182		9.09	9.18					1							
107166	8.174	0.010	7.973	0.010		0.170	0.015	G	0.19	0.01	H	8.0311	0.0011	0.012	117		8.01	8.06					1							S
107167	8.598	0.016	8.136	0.016		0.420	0.015	G	0.49	0.02	H	8.2179	0.0018	0.013	61		8.20	8.24					1							S
107168	8.505	0.008	8.110	0.008		0.374	0.010	T	0.44	0.01	L	8.1610	0.0016	0.018	156		8.14	8.20					1							
107169	9.365	0.016	8.305	0.011		0.919	0.015	T	0.92	0.01	L	8.3528	0.0019	0.014	103		8.33	8.38					1							
107170	7.881	0.008	7.584	0.008	A	0.282	0.012	T	0.32	0.01	L	7.6486	0.0160	0.042	113	A	7.58	7.71		D	21425−3756	I 2	1 C P A							S
107171	10.136	0.021	9.640	0.021	*	0.466	0.027	T	0.54	0.03	L *	9.6285	0.0022	0.032	159	*	9.57	9.68		D	21425−6000	H 1	2 C B	AB	71	0.642	0.023	2.80	0.15	
107172	9.669	0.021	9.299	0.022	B	0.351	0.028	T	0.41	0.03	L	9.3282	0.0602			B				D	21425−3756	I 2	1 C I A							
107173	5.905	0.003	6.040	0.004		−0.115	0.002	G	−0.10	0.00	H	6.0245	0.0019	0.015	100		6.00	6.05		U 2			1							S P
107174	11.083	0.067	10.555	0.067	B	0.495	0.086	T	0.57	0.09	L	11.0857	0.1374			B				D	21426+4226	I 2	1 C I A							
107175						1.189	0.035	G	1.31	0.06	I	11.0772	0.0033	0.035	128		11.02	11.14		C			1							G
107176	9.499	0.023	8.108	0.014		1.176	0.021	T	1.14	0.02	L	8.1615	0.0021	0.017	58		8.13	8.18					1							S
107177	7.977	0.008	7.591	0.007	*	0.365	0.010	T	0.43	0.01	L *	7.6387	0.0010	0.012	168	*	7.62	7.66		D	21426+4103	I 1	2 C A	AB	203	0.369	0.002	0.06	0.02	S
107178	10.141	0.019	8.968	0.012		1.006	0.018	T	0.98	0.01	L	8.9839	0.0015	0.016	165		8.96	9.01		C			1							
107179	10.106	0.034	9.789	0.040		0.340	0.015	G	0.40	0.02	H	9.8168	0.0042	0.038	110		9.75	9.89		U 2			1							G
107180	7.639	0.006	7.481	0.007	A	0.152	0.008	T	0.17	0.01	L	7.5104	0.0058	0.017	136	A	7.49	7.54		D	21426+4226	I 2	1 C P A							S
107181						1.308	0.020	G	1.37	0.14	K *	11.5071	0.0076	0.051	69	*	11.37	11.56			21426+0233	H 1	2 C C	AB	42	0.395	0.071	1.52	0.29	G
107182	10.429	0.045	8.867	0.022		1.311	0.039	T	1.27	0.04	L	8.9224	0.0026	0.019	61		8.90	8.96		C			1							
107183	12.108	0.194	10.561	0.080		0.728	0.126	G	0.78	0.09	R	10.5235	0.0064	0.054	59		10.43	10.61		U 2			1 S							G
107184	8.707	0.012	7.581	0.008		0.969	0.011	T	0.95	0.01	L	7.6305	0.0013	0.013	105		7.61	7.66					1							S
107185	11.124	0.043	9.134	0.014		1.686	0.037	T	1.85	0.10	O	9.0448	0.0024	0.024	162		9.00	9.10		U			1							
107186	7.361	0.006	6.208	0.004		0.993	0.005	G	0.97	0.00	H	6.2658	0.0007	0.006	131		6.26	6.28		C			1 G							S
107187	10.257	0.019	9.569	0.016		0.672	0.005	G	0.73	0.00	H	9.6251	0.0017	0.020	196		9.59	9.66		C			1							
107188	5.849	0.002	4.830	0.002		0.868	0.026	G	0.91	0.02	A	4.8794	0.0004	0.005	110		4.87	4.90					1							S
107189	8.036	0.008	7.961	0.011		0.080	0.015	G	0.09	0.02	H	7.9921	0.0015	0.016	124		7.97	8.02					1							
107190	9.566	0.022	8.578	0.016		0.865	0.020	T	0.88	0.01	L	8.6338	0.0022	0.013	74		8.61	8.67		C			1							S
107191	7.477	0.005	6.937	0.005		0.531	0.003	G	0.60	0.00	H	6.9931	0.0008	0.009	114		6.98	7.01		C			1							S
107192	9.279	0.017	9.125	0.021		0.148	0.025	T	0.16	0.03	L	9.1550	0.0023	0.019	107		9.13	9.19		C			1							
107193	9.292	0.014	8.759	0.014		0.480	0.015	G	0.55	0.02	H	8.8005	0.0016	0.019	115		8.78	8.84		C			1							
107194	11.573	0.063	9.768	0.020		1.503	0.052	T	1.53	0.08	L	9.7259	0.0020	0.027	208		9.69	9.79					1							G
107195	9.710	0.022	8.450	0.014		1.074	0.020	T	1.04	0.02	L	8.5089	0.0017	0.016	93		8.48	8.54		C	21428−3535	I 1	1							
107196	11.034	0.052	9.248	0.020		1.518	0.046	T	3.16	0.10	O	8.8064	0.0325	0.210	94		8.56	9.07		U 2 C			1 S							P
107197	7.851	0.007	6.240	0.004		1.349	0.006	T	1.31	0.01	L	6.2504	0.0008	0.009	125		6.24	6.27					1							S
107198	8.936	0.013	7.676	0.008		1.074	0.012	T	1.04	0.01	L	7.7345	0.0014	0.011	118		7.71	7.75		C			1							
107199	9.675	0.020	9.080	0.019	*	0.590	0.015	G	0.66	0.01	H *	9.1253	0.0023	0.019	113	*	9.09	9.16			21428+6018	H 1	2 C S C	AB	282	0.140	0.039	1.61	0.92	
107200	10.110	0.030	9.095	0.020		0.885	0.027	T	0.89	0.02	L	9.1482	0.0021	0.015	84		9.12	9.19					1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr											%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
*107201	21 42 47.33	−50 59 32.9	9.06		H	325.697 216 85	−50.992 474 68		2.17	4.45	−12.40	1.00	0.60	1.36	1.26	0.68	+14	+ 9	+ 7	+22	+13	+ 4	+12	+50	−16	+11	0	1.47
*107202	21 42 48.35	+24 03 09.4	9.49	2	H	325.701 472 47	+24.052 605 71		0.00	9.69	1.22	1.04	1.04	1.45	1.27	1.14	+17	− 2	−12	− 2	− 2	+ 6	− 4	−22	+41	+ 8	0	−0.16
*107203	21 42 48.51	−44 57 25.4	9.72		G	325.702 135 94	−44.957 063 65		4.74	−30.08	−0.27	0.83	0.64	1.37	0.78	0.69	+34	−30	− 7	−24	+18	+20	+25	+52	−15	+29	0	−1.15
*107204	21 42 48.80	−25 59 50.2	8.67		H	325.703 321 22	−25.997 274 19		8.35	−79.69	−23.98	1.03	0.69	1.29	1.14	0.66	+28	−20	−35	−24	−10	+40	+ 0	+ 5	+16	+33	0	0.04
*107205	21 42 49.20	+69 03 13.3	7.55		H	325.705 014 70	+69.053 700 55		2.20	8.02	−9.80	0.56	0.50	0.58	0.68	0.52	−26	−19	+17	− 7	+15	+10	+12	−18	+ 2	−26	0	3.33
*107206	H 21 42 49.27	−51 06 30.5	10.07		H	325.705 272 69	−51.108 463 78	A	0.66	−20.77	8.39	5.07	3.35	4.94	5.52	2.68	+18	+ 8	− 9	+15	− 3	+17	+ 2	+32	−27	−16	1	1.40
*107207	21 42 46.01	+66 05 13.7	10.83		H	325.691 728 95	+66.087 149 52		2.98	10.97	6.80	7.62	9.16	6.11	9.88	8.79	+ 3	−19	−33	−76	− 3	+19	− 4	−85	+42	+ 4	0	
107208	H 21 42 50.75	−48 25 58.3	9.13		H	325.711 466 94	−48.432 865 48	A	8.09	−90.52	−24.05	2.29	1.66	2.39	2.05	1.25	+16	−13	− 5	+ 1	+ 4	+ 7	+16	+48	−16	+ 6	2	−0.02
107209	21 42 52.10	+57 01 01.1	9.41		G	325.717 102 55	+57.016 965 34		2.03	−1.76	−5.45	2.30	2.33	2.70	2.49	2.50	− 1	+12	− 3	−13	+16	− 2	+21	−25	+11	+35	0	
107210	21 42 53.04	−18 18 11.3	9.43		H	325.720 998 96	−18.303 139 84		6.41	−17.25	−8.51	1.26	0.93	1.40	1.65	0.91	+38	−11	− 7	− 8	−50	+29	−43	−15	+18	+35	7	0.56
107211	21 42 53.17	+53 46 03.2	7.89		H	325.721 547 42	+53.767 567 65		3.48	15.23	−1.28	0.62	0.60	0.77	0.69	0.67	− 2	− 6	− 1	−16	− 5	−15	− 7	−16	+27	+ 3	2	1.14
107212	H 21 42 53.90	−02 25 26.9	8.49		H	325.724 586 70	−02.424 131 84	B	6.50	23.04	−32.58	4.03	3.04	2.80	3.65	2.31	−19	+ 4	+ 0	− 6	+14	+ 0	+ 5	+20	+ 7	+66	2	−0.34
107213	21 42 54.04	+55 31 26.1	8.09		H	325.725 150 99	+55.523 908 75		0.76	−2.62	1.17	0.62	0.56	0.72	0.66	0.58	− 4	+10	+ 0	−24	+10	−27	+11	−21	+ 5	+ 1	0	−0.72
107214	21 42 54.65	+23 19 18.4	6.98		H	325.727 709 75	+23.321 770 67		4.75	1.04	−12.30	0.75	0.61	0.92	0.87	0.77	+25	+ 9	−13	+20	+ 5	− 5	+ 7	−12	+42	+19	2	1.49
107215	21 42 56.02	+54 33 42.9	6.96		H	325.733 426 65	+54.561 930 01		4.80	28.40	−20.62	0.53	0.52	0.66	0.58	0.56	+ 4	− 1	− 5	−21	+ 3	−18	+ 0	−10	− 1	+28	1	−0.35
107216	21 42 56.07	+37 54 17.6	7.44		H	325.733 645 74	+37.904 886 33		5.60	42.85	15.92	0.42	0.48	0.75	0.45	0.54	−32	+15	−11	+ 9	+16	−10	+18	+ 5	+20	−25	0	−2.08
107217	21 42 56.60	+39 35 08.7	8.57		H	325.735 841 97	+39.585 759 93		2.54	−29.96	−52.54	0.64	0.75	1.11	0.75	0.91	−25	+ 3	− 4	+ 1	+ 6	−16	+ 6	+ 7	+10	−33	0	−1.17
107218	21 42 57.10	+38 11 04.7	8.15		H	325.737 918 68	+38.184 630 94		10.15	−68.83	−57.20	0.54	0.60	0.96	0.56	0.66	−30	+17	−10	+ 6	+17	− 6	+21	− 9	+21	−25	0	−0.62
107219	21 42 58.35	−69 11 42.1	9.11		H	325.743 140 35	−69.195 029 87		12.27	−98.56	−23.91	0.82	0.87	1.30	0.94	1.04	−13	− 5	−17	+ 0	− 8	−17	− 9	+28	+ 8	−25	0	1.05
107220	21 42 58.87	−13 40 22.2	9.30		H	325.745 301 32	−13.672 834 48		7.44	−10.71	−70.61	1.33	1.14	1.64	2.15	1.18	+34	−10	−33	−15	−24	+37	−18	−36	+23	+ 8	0	1.79
107221	21 42 58.94	+20 59 42.7	8.99		H	325.745 589 84	+20.995 181 15		2.68	2.82	−8.17	0.92	1.03	1.30	1.00	1.06	+31	+ 8	−22	− 7	− 8	− 1	− 7	−36	+22	+30	0	−1.04
107222	21 42 59.28	−23 10 13.7	7.55		H	325.747 001 96	−23.170 472 89		2.43	10.59	2.48	0.87	0.64	0.98	0.97	0.64	+39	−16	−27	−25	−40	+28	−32	− 5	− 6	+25	2	−0.05
107223	21 43 01.16	+72 36 31.0	9.38		H	325.754 851 12	+72.608 606 57		3.54	−6.04	−3.18	0.77	0.75	0.85	0.91	0.73	− 3	−11	+11	−11	+ 2	− 2	+ 0	−12	+13	+ 2	0	0.43
107224	21 43 01.50	−33 15 32.6	9.04		H	325.756 248 47	−33.259 047 30		6.49	−57.63	−8.11	1.09	0.72	1.31	1.25	0.78	+32	−13	− 6	+ 4	− 8	+25	− 6	+21	+ 2	+33	0	−2.48
107225	21 43 02.01	−43 29 45.4	6.67		H	325.758 354 18	−43.495 947 01		26.56	206.36	−62.61	0.84	0.40	0.81	0.91	0.41	+ 9	+ 6	+ 2	−40	+ 0	+ 8	+11	+45	− 1	− 7	1	0.65
107226	21 43 02.20	+37 13 09.9	8.50	1	H	325.759 147 70	+37.219 406 61		5.00	4.05	−15.22	0.57	0.66	1.10	0.62	0.74	−45	+ 9	−17	−12	+34	−26	+33	− 7	+27	−43	1	0.36
107227	21 43 03.21	−32 38 09.1	9.56		H	325.763 390 63	−32.635 873 21		5.55	46.92	−10.73	1.25	0.83	1.56	1.51	0.89	+36	− 1	−19	−13	−22	+36	−16	+ 4	−14	+31	4	−0.07
107228	21 43 03.48	+55 12 32.7	8.35		H	325.764 515 75	+55.209 093 90		18.43	292.04	91.59	0.68	0.64	0.83	0.77	0.71	− 2	− 3	+ 4	−17	+11	−23	+12	−15	− 4	+ 8	1	−1.36
107229	21 43 03.57	−02 01 58.8	8.48		H	325.764 884 59	−02.032 993 56		3.83	−0.65	−7.29	1.10	0.66	1.21	1.39	0.69	+21	− 2	+ 4	+ 5	+ 3	+28	+ 1	+28	+32	+33	0	−1.67
107230	21 43 04.13	+72 19 12.7	5.18		H	325.767 190 16	+72.320 182 58		13.19	−43.24	−40.59	0.42	0.40	0.46	0.49	0.40	−11	−11	+ 5	− 1	+ 1	+15	+ 0	− 9	+ 9	− 1	0	0.00
107231	21 43 04.28	−48 11 22.0	8.28	2	T	325.767 839 28	−48.189 448 22		4.42	−69.15	−18.96	0.72	0.49	1.05	0.77	0.53	+31	−22	+ 1	− 1	+15	+11	+19	+47	− 9	+25	0	0.01
107232	21 43 04.40	−14 23 59.1	5.88		G	325.768 334 46	−14.399 758 85		7.97	−3.75	20.35	0.73	0.53	0.92	1.27	0.65	+16	− 3	−10	+ 1	−10	+51	− 7	−12	+19	+10	0	1.22
107233	21 43 05.14	+63 10 49.1	9.46		H	325.771 417 88	+63.180 298 65		26.39	203.51	198.94	0.91	0.78	0.99	1.09	0.91	− 5	+ 1	+ 3	+ 4	− 5	+15	− 5	−10	+24	− 1	3	−0.76
107234	21 43 05.70	+62 01 55.6	8.19		H	325.773 764 09	+62.032 111 92		4.93	26.91	18.86	0.61	0.56	0.64	0.68	0.60	− 2	+ 4	− 3	+30	+18	+ 6	+21	+ 8	+ 0	+14	0	2.41
107235	21 43 06.48	+41 09 18.0	5.51	1	H	325.777 011 84	+41.154 999 69		5.55	−15.96	−12.20	0.40	0.42	0.62	0.45	0.54	−32	+14	−13	+ 0	+ 6	−11	+ 8	− 2	+19	−40	1	0.04
107236	21 43 08.39	+74 26 44.5	10.10		H	325.784 937 69	+74.445 703 19		10.05	109.32	216.29	0.87	0.89	1.03	0.97	1.05	+ 0	+10	+12	−19	+ 5	−16	+ 5	+ 2	− 7	+ 9	1	0.30
107237	21 43 09.26	+25 31 30.5	7.68		G	325.788 595 03	+25.525 146 93		6.28	14.49	−12.81	0.70	0.59	0.86	0.81	0.63	+ 8	− 2	−24	−10	−10	+ 7	− 8	−46	+28	+ 8	2	−0.83
107238	21 43 13.48	−19 37 15.4	6.23		H	325.806 177 07	−19.620 931 03		9.06	83.15	−12.44	0.68	0.50	0.79	0.78	0.57	+35	− 5	− 4	−15	−24	+21	−26	+ 5	+ 9	+43	0	−0.04
107239	21 43 15.06	−84 08 35.9	8.88		H	325.812 760 84	−84.143 301 28		16.56	−19.96	−118.48	0.66	0.67	0.89	0.75	0.73	+12	−18	−10	−10	+11	− 6	+ 8	−25	−11	−10	1	0.11
*107240	H 21 43 15.43	−43 26 43.7	9.54		G	325.814 271 61	−43.445 464 74	A	7.18	17.91	−36.75	1.86	1.11	1.74	1.93	0.95	+10	+11	+ 7	−29	−16	+ 0	+ 6	+55	+ 2	−22	1	−0.48
*107241	H 21 43 15.41	+51 00 12.1	8.23		H	325.814 201 92	+51.003 355 79	A	0.56	−2.67	−8.65	1.03	1.07	1.21	1.10	1.12	− 2	+ 5	− 3	−18	+ 5	− 2	+ 4	−16	+28	+18	1	0.37
107242	H 21 43 16.33	+38 01 03.0	7.67	2	H	325.818 057 88	+38.017 509 44	*	0.41	−6.26	−8.25	0.46	0.56	0.84	0.47	0.61	−26	+ 9	− 3	+ 9	+24	−12	+27	+ 7	+17	−18	2	0.33
107243	21 43 16.37	−49 38 20.7	8.98		H	325.818 203 52	−49.639 094 71		2.47	11.52	−9.75	0.87	0.59	1.24	0.96	0.65	+25	+ 2	+10	− 8	+24	+ 3	+23	+57	− 7	+26	0	−0.55
107244	21 43 18.08	+52 24 30.2	7.56		G	325.825 353 79	+52.408 399 70		3.38	17.38	26.89	0.57	0.55	0.69	0.62	0.64	− 8	+11	− 9	+ 7	+ 6	− 5	+ 7	+ 1	+ 1	− 1	0	1.10
107245	21 43 18.34	+05 06 32.2	8.36		H	325.826 431 09	+05.108 946 56		4.70	−22.27	−40.68	0.96	0.64	1.11	1.25	0.74	+27	− 5	− 9	+12	− 6	+29	− 1	−28	+35	+41	0	0.12
107246	21 43 18.37	+12 31 06.7	7.85		G	325.826 544 49	+12.518 534 13		20.97	73.97	−75.04	1.08	0.84	1.22	1.50	0.88	+23	+25	−20	+ 7	− 5	+ 5	− 2	+22	− 8	+25	0	−0.80
107247	21 43 20.13	−43 23 28.9	8.87		H	325.833 874 12	−43.391 349 24		6.26	22.38	−76.04	1.18	0.60	1.17	1.20	0.66	+16	+ 7	− 7	−37	+ 6	+ 9	+14	+61	−13	+ 5	0	1.72
107248	21 43 20.72	−24 08 28.7	7.17		H	325.836 344 50	−24.141 307 06		2.64	12.03	−11.97	0.80	0.56	0.95	0.89	0.58	+25	−21	−40	− 6	−23	+26	−13	+12	−12	+25	0	2.00
107249	21 43 21.33	+68 14 58.6	9.41		H	325.838 869 84	+68.249 622 05		3.50	5.05	6.79	0.78	0.80	0.86	1.08	0.82	−17	−18	+20	−19	+22	+ 3	+18	−19	−10	− 7	0	1.57
107250	21 43 24.47	+57 01 23.4	8.91		G	325.851 942 86	+57.023 167 50		0.85	−2.52	−5.34	0.68	0.66	0.79	0.76	0.74	+ 0	− 4	− 5	− 7	+27	− 4	+25	− 1	+ 6	+30	2	2.46
107251	21 43 24.90	−07 24 29.7	8.34		H	325.853 744 53	−07.408 258 22		5.88	3.19	2.30	1.02	0.63	1.11	1.29	0.60	+38	+ 7	+ 9	−27	− 3	+21	− 6	+15	+15	+43	0	1.40
107252	21 43 25.25	+01 48 03.5	8.34		H	325.855 224 53	+01.800 976 05		8.30	146.71	−26.57	0.97	0.67	1.13	1.44	0.73	+39	+11	− 1	+ 9	−15	+33	− 7	−18	+22	+52	0	1.00
107253	21 43 25.63	+38 17 01.0	5.69		G	325.856 778 86	+38.283 600 55		11.97	34.65	−4.91	0.33	0.40	0.60	0.35	0.47	−33	+25	−22	+ 5	+12	− 8	+15	+ 2	+19	−31	0	−0.66
107254	21 43 25.99	+23 53 05.4	9.22		H	325.858 285 02	+23.884 840 28		0.76	−3.54	−10.10	1.06	1.05	1.30	1.22	1.24	+36	−18	−13	+ 4	+ 3	+ 6	− 3	−15	+28	+27	0	−0.09
107255	21 43 26.71	+16 01 32.9	8.74		H	325.861 310 42	+16.025 800 29		2.46	−5.51	−20.47	1.07	0.97	1.30	1.68	1.36	+27	− 5	−25	−21	+ 7	+14	+ 8	+19	−18	+31	0	1.43
*107256	H 21 43 27.29	+44 48 32.6	9.91		H	325.863 713 89	+44.809 067 46	A	1.07	1.83	−0.04	2.92	2.85	3.60	3.14	3.53	+ 2	+15	− 8	+16	+ 7	− 1	+13	+19	+27	−12	13	2.34
*107257	21 43 27.04	+26 03 33.9	8.66		H	325.862 662 65	+26.059 425 58		3.10	−6.75	−11.92	0.85	0.77	1.18	0.95	0.79	− 7	+19	−38	−13	+ 3	− 3	+ 7	−47	+31	− 3	2	1.32
107258	21 43 29.90	+19 38 08.4	7.42		G	325.874 579 85	+19.635 668 25		11.82	−66.22	−76.94	0.67	0.59	0.82	0.83	0.72	+27	+ 2	+ 0	− 6	+16	+ 1	+15	− 4	+20	+29	0	0.79
107259	21 43 30.45	+58 46 48.2	4.23	2	H	325.876 895 61	+58.780 053 08		0.62	5.24	−2.88	0.45	0.43	0.52	0.48	0.49	+ 4	+ 7	+ 4	+12	+15	−13	+17	+ 8	− 7	+30	4	1.34
107260	21 43 31.70	−26 42 59.0	8.87		H	325.882 062 53	−26.716 386 93		7.33	75.34	−8.82	1.09	0.79	1.45	1.29	0.71	+37	−21	−45	−21	−25	+44	−10	− 8	+22	+36	0	−0.68
107261	21 43 31.82	−31 14 55.6	7.48		H	325.882 601 66	−31.248 778 41		4.59	7.82	−16.78	0.85	0.55	1.05	1.02	0.59	+25	− 1	−18	− 5	−10	+38	− 5	+18	+10	+33	0	2.10
107262	21 43 32.20	−48 51 20.8	8.50		H	325.884 153 31	−48.855 775 98		7.00	8.58	−41.76	0.81	0.52	1.17	0.88	0.58	+25	−11	+ 2	− 9	+23	+20	+22	+50	−16	+27	0	−1.41
107263	21 43 32.36	−17 23 12.7	8.05	2	H	325.884 847 92	−17.386 873 89		4.38	3.25	−5.09	1.05	0.75	1.21	1.44	0.89	+22	−17	−10	−12	−16	+18	−20	−22	+36	+ 5	0	0.69
107264	21 43 33.65	−68 03 53.2	7.20	2	H	325.890 213 53	−68.064 773 20		1.51	4.35	11.30	0.50	0.51	0.76	0.56	0.58	−24	− 1	− 5	− 9	+ 0	+ 4	+ 0	+ 5	−10	−21	0	−1.04
107265	21 43 35.23	−74 00 17.2	9.32		H	325.896 792 67	−74.004 773 24		2.36	9.46	−17.85	0.81	0.82	1.08	1.02	0.97	− 1	−19	− 8	− 3	+10	− 3	+ 7	− 1	+ 7	−22	2	0.18
107266	21 43 35.34	−09 59 36.1	8.28		H	325.897 237 69	−09.993 369 61		10.47	−14.63	5.37	0.97	0.72	1.27	1.33	0.79	+32	−19	−30	−10	+15	+30	+ 6	−23	+49	+39	0	0.45
107267	21 43 36.24	−83 04 22.2	7.80		H	325.900 994 69	−83.072 830 70		1.49	19.36	−25.53	0.59	0.52	0.71	0.68	0.58	+ 7	−18	+ 2	−14	+ 5	− 2	+ 5	−15	− 7	−12	0	2.12
107268	21 43 36.63	+38 18 16.7	6.99		H	325.902 623 73	+38.304 627 47		8.86	25.17	−26.66	0.38	0.43	0.68	0.41	0.53	−29	+18	−17	+ 0	+14	− 9	+17	+ 4	+20	−29	0	−1.38
107269	21 43 37.39	−38 08 35.4	8.43		H	325.905 790 74	−38.143 154 58		0.42	9.92	−14.21	0.98	0.62	1.15	1.15	0.65	+24	−10	− 9	− 8	− 2	+34	+ 1	+22	− 1	+23	0	−1.29
107270	21 43 39.48	+00 32 06.4	7.04		H	325.914 482 60	+00.535 111 79		3.90	45.71	−4.59	0.74	0.53	0.88	0.96	0.57	+36	+ 2	− 5	− 1	+ 2	+35	+ 2	+16	+15	+49	0	0.34
107271	21 43 39.79	+07 31 43.7	6.47		H	325.915 772 50	+07.528 794 15		7.65	−28.04	−56.51	0.72	0.49	0.84	0.87	0.53	+15	−16	− 8	−24	+10	+38	+ 7	−38	+32	+28	0	1.81
107272	21 43 41.30	+58 14 23.3	8.75		G	325.922 093 52	+58.239 811 88		0.60	−1.82	−3.51	0.67	0.67	0.80	0.73	0.76	+ 8	+ 1	− 1	+11	+16	−16	+21	− 2	− 1	+37	0	1.11
107273	21 43 42.07	−08 58 35.0	9.93		G	325.925 283 89	−08.976 382 17		16.60	169.79	−80.44	1.76	1.22	2.10	1.95	1.14	+44	−41	−19	−31	−11	+38	−20	−29	+33	+43	0	0.54
*107274	21 43 44.74	−38 09 35.3	10.12		H	325.936 404 86	−38.159 811 48		4.66	−20.52	1.92	1.47	0.83	1.73	1.72	0.89	+18	−13	−10	− 3	+ 4	+30	+ 8	+41	− 9	+15	0	−0.68
*107275	21 43 44.72	−61 24 14.5	8.70		H	325.936 324 82	−61.404 019 30		2.75	−2.88	−11.19	0.56	0.72	1.30	0.75	0.76	− 1	− 9	−28	+17	+ 9	+ 1	+ 8	+14	−18	−10	1	0.39
107276	21 43 45.15	+62 46 17.6	8.59		H	325.938 124 89	+62.771 543 47		1.60	−2.70	−2.42	0.65	0.59	0.69	0.74	0.60	+ 3	+ 4	+ 4	+27	+ 5	+ 9	+ 5	− 5	+ 9	+ 7	1	1.53
*107277	21 43 46.16	−57 22 05.9	7.35		H	325.942 316 60	−57.368 293 52		5.73	50.75	−48.59	0.63	0.48	0.96	0.77	0.53	−17	− 3	− 8	−24	+24	+ 2	+19	+17	−23	− 8	0	0.46
*107278	21 43 45.98	−61 39 46.0	8.64		H	325.941 592 16	−61.662 767 82		3.11	26.72	−9.73	0.53	0.72	1.23	0.68	0.80	− 1	−13	−19	+29	+ 8	+ 1	+ 7	+24	− 6	− 9	1	0.52
*107279	21 43 46.05	+15 49 35.2	8.83		H	325.941 885 92	+15.826 447 85		8.08	49.16	16.03	1.14	1.08	1.37	1.60	1.44	+39	−22	−32	−17	+18	−25	+15	+29	−24	+40	0	1.56
107280	21 43 46.29	+11 06 05.2	7.13		H	325.942 893 31	+11.101 430 68		2.63	−18.82	−15.84	0.78	0.63	0.91	1.09	0.72	+20	+10	−10	− 4	+12	− 3	+12	+11	+23	+17	0	1.37
107281	21 43 48.71	−53 58 38.2	7.94		H	325.952 978 74	−53.977 280 01		7.26	−0.57	15.44	0.73	0.56	0.97	1.00	0.59	+22	+ 6	+ 1	+11	+32	+ 5	+26	+44	− 9	+25	0	−1.15
107282	21 43 49.66	−39 22 32.7	9.15		H	325.956 910 02	−39.375 758 80		2.85	14.05	−1.74	1.01	0.73	1.19	1.16	0.73	+30	−19	−22	+29	+21	+15	+29	+63	−26	+19	0	0.16
107283	21 43 50.52	+50 55 40.1	8.46		H	325.960 483 99	+50.927 812 87		1.66	−21.67	12.11	0.66	0.67	0.85	0.79	0.82	+ 0	− 1	+ 2	−18	+ 6	− 3	+ 2	+ 0	+24	+16	0	−2.40
107284	21 43 52.02	+24 07 24.6	8.50		H	325.966 736 52	+24.123 511 05		2.18	−8.51	−11.78	0.77	0.84	1.06	0.92	0.91	+16	+ 2	−31	−17	+ 1	− 1	+ 1	−19	+23	+12	0	2.51
107285	21 43 52.07	−63 24 31.1	8.39		H	325.966 966 74	−63.408 634 45		5.75	−14.39	1.00	0.57	0.58	1.01	0.77	0.62	−14	+ 2	−21	−13	+ 4	+ 4	+ 5	− 4	− 9	−22	0	0.88
107286	21 43 52.70	+45 37 02.9	9.63		H	325.969 580 74	+45.617 470 01		0.59	−5.22	−8.01	0.90	0.88	1.19	1.14	1.20	−19	+15	− 7	+37	−12	− 3	−12	+11	+25	−31	0	−2.16
107287	21 43 53.20	−68 53 55.4	8.97		H	325.971 685 19	−68.898 723 05		0.74	30.35	−7.00	1.77	1.82	2.66	2.08	2.00	−22	− 1	−20	− 6	+ 0	−11	− 1	+ 2	+ 6	−33	0	
107288	H 21 43 54.25	+27 50 48.8	7.46		G	325.976 052 33	+27.846 881 99	B	12.12	100.89	−1.44	3.41	2.25	1.07	1.32	1.26	+ 5	+ 1	−13	+26	−25	+ 3	− 8	−43	+24	− 3	1	0.73
107289	21 43 54.72	−54 29 59.7	7.10	1	H	325.978 007 39	−54.499 909 23		2.56	−0.23	−11.29	0.67	0.51	0.88	0.89	0.55	+25	− 1	−19	+15	+44	−17	+33	+44	−24	+44	0	−0.17
107290	21 43 54.85	+19 55 10.3	9.24		H	325.978 556 97	+19.919 524 04		2.47	20.34	11.80	0.99	0.97	1.24	1.35	1.08	+31	− 3	+ 4	−23	+13	+17	+ 8	−13	+15	+26	2	−0.01
107291	21 43 55.92	+47 27 37.0	9.56		H	325.982 989 37	+47.460 266 86		−0.76	−1.70	−8.65	0.86	0.85	1.11	1.08	1.05	−10	−13	+10	+16	+ 3	− 1	+ 2	+15	+ 9	−13	0	0.03
107292	21 43 56.22	−42 10 23.8	8.75		G	325.984 238 39	−42.173 269 92		4.72	42.17	−23.61	1.06	0.52	1.19	1.47	0.57	+ 4	+ 4	− 4	−13	+ 5	− 5	+20	+ 5	+58	−28	−19	0	2.06
107293	21 43 56.51	+54 35 12.5	10.58		H	325.985 438 03	+54.586 811 51		1.57	−0.25	−2.99	1.18	1.15	1.43	1.33	1.24	+ 5	+ 1	− 7	−27	+ 1	− 1	− 1	−21	+ 9	+28	0	−0.14
*107294	21 43 57.28	+27 23 25.4	10.05		G	325.988 666 73	+27.390 387 03		9.19	−238.75	−159.67	1.18	1.18	1.70	1.41	1.29	+ 2	− 4	−31	+30	− 5	−21	−18	−70	+47	−18	0	−0.50
*107295	21 43 57.28	−46 36 49.0	9.22		H	325.988 650 08	−46.613 619 45		21.68	−29.94	15.69	0.84	0.65	1.36	0.99	0.72	+46	− 8	+ 6	+29	+31	+ 6	+35	+63	−16	+40	1	−0.08
107296	21 43 57.97	−34 42 36.3	10.24		H	325.991 542 92	−34.710 087 01		5.21	19.06	5.60	1.40	1.00	1.77	2.02	1.07	+26	+ 2	−18	+23	−15	+48	− 5	+15	+13	+28	0	0.61
107297	21 43 58.12	+22 48 55.4	6.43		H	325.992 169

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
107201	11.033	0.039	9.211	0.014		1.516	0.033	T	1.55	0.05	L	9.1866	0.0016	0.018	176		9.16	9.22		C			1							
107202	11.899	0.128	9.726	0.029		1.837	0.108	T	2.11	0.26	K	9.5635	0.0049	0.046	86		9.50	9.65		U 2			1							
107203	10.183	0.016	9.724	0.016		0.448	0.005	G	0.52	0.01	H	9.8270	0.0014	0.015	222		9.80	9.86		C			1							
107204	9.451	0.019	8.741	0.016		0.640	0.019	T	0.70	0.02	L	8.8025	0.0015	0.012	80		8.77	8.82		C			1							S
107205	9.607	0.017	7.715	0.008		1.572	0.015	T	1.59	0.01	L	7.6647	0.0011	0.009	107		7.64	7.68		C			1							
107206	10.399	0.033	9.793	0.031	*	0.565	0.039	T	0.64	0.04	L *	10.1927	0.0019	0.028	178	*	10.14	10.26		D	21428−5107	I 1	2 C A	AB	98	5.603	0.010	0.42	0.02	
107207	11.260	0.067	10.793	0.076		0.429	0.044	G	0.50	0.05	H	10.9240	0.0075	0.042	49		10.85	10.98		C			1 X S							G Y
107208	9.877	0.015	9.231	0.013	*	0.641	0.005	G	0.71	0.00	R *	9.2669	0.0017	0.018	183	*	9.24	9.30		D	21428−4826	I 1	2 C A	AB	299	0.452	0.007	1.47	0.04	
107209	9.617	0.016	9.419	0.019		0.207	0.004	G	0.23	0.01	H	9.4741	0.0016	0.017	119		9.44	9.51		C			1 X							G
107210	9.970	0.029	9.506	0.029		0.450	0.032	T	0.52	0.03	L	9.5328	0.0020	0.018	83		9.48	9.56					1							
107211	9.234	0.014	8.006	0.009		1.046	0.009	G	1.02	0.01	H	8.0537	0.0012	0.011	121		8.04	8.07		C			1							
107212	9.181	0.018	8.618	0.017	*	0.527	0.022	T	0.60	0.02	L *	8.6064	0.0015	0.014	76	*	8.58	8.65		D	21429−0225	I 1	2 C A	BA	232	0.649	0.004	0.07	0.01	S
107213	8.361	0.009	8.122	0.010		0.228	0.013	T	0.25	0.02	L	8.1537	0.0015	0.013	119		8.13	8.18		C			1							
107214	8.400	0.013	7.101	0.007		1.104	0.012	T	1.07	0.01	L	7.1473	0.0009	0.008	77		7.13	7.16		C			1							S
107215	8.650	0.010	7.112	0.006		1.292	0.009	T	1.25	0.01	L	7.1132	0.0010	0.008	119		7.10	7.13					1							S
107216	7.733	0.005	7.467	0.005		0.253	0.007	T	0.28	0.01	L	7.5084	0.0009	0.011	239		7.49	7.53		C			1							S
107217	10.145	0.020	8.695	0.011		1.223	0.018	T	1.18	0.02	L	8.7366	0.0016	0.021	173		8.70	8.77					1							
107218	8.915	0.009	8.241	0.008		0.624	0.010	T	0.69	0.01	L	8.2858	0.0014	0.017	208		8.26	8.32					1							S
107219	9.839	0.020	9.186	0.017		0.597	0.020	T	0.67	0.02	L	9.2375	0.0025	0.024	137		9.19	9.29					1							
107220	9.900	0.033	9.369	0.031		0.521	0.003	G	0.59	0.00	H	9.4174	0.0030	0.017	56		9.38	9.48		C			1							
107221	10.851	0.057	9.140	0.022		1.428	0.048	T	1.42	0.08	L	9.1273	0.0020	0.024	86		9.10	9.17		C			1							
107222	9.270	0.018	7.708	0.010		1.280	0.015	G	1.24	0.02	H	7.7100	0.0015	0.010	82		7.69	7.72					1							S
107223	11.167	0.058	9.563	0.024		1.344	0.049	T	1.31	0.06	L	9.5345	0.0022	0.020	114		9.50	9.57					1							
107224	9.893	0.029	9.125	0.024		0.684	0.029	T	0.74	0.02	L	9.1805	0.0020	0.014	95		9.15	9.21					1							
107225	7.329	0.004	6.730	0.003		0.559	0.004	T	0.63	0.00	L	6.7921	0.0007	0.007	162		6.78	6.81		C			1							S
107226	8.977	0.009	8.540	0.009		0.413	0.012	T	0.48	0.01	L	8.5926	0.0018	0.023	235		8.56	8.64		U			1							
107227	10.089	0.030	9.611	0.030		0.463	0.033	T	0.53	0.04	L	9.6669	0.0018	0.022	92		9.63	9.70		C			1							
107228	8.985	0.013	8.428	0.012		0.596	0.015	G	0.67	0.01	H	8.4743	0.0017	0.014	116		8.45	8.51					1							
107229	9.702	0.025	8.619	0.017		0.937	0.023	T	0.93	0.02	L	8.6472	0.0020	0.015	81		8.61	8.67		C			1							
107230	6.540	0.004	5.294	0.003		1.063	0.004	T	1.03	0.00	L	5.3447	0.0005	0.005	123		5.34	5.35		C			1							S
107231	8.589	0.007	8.308	0.008		0.267	0.010	T	0.30	0.01	L	8.4250	0.0192	0.208	189		8.04	8.57	0.15	P 1 A			1							S P
107232	6.189	0.005	5.913	0.005		0.255	0.005	G	0.29	0.01	H	5.9541	0.0010	0.007	52		5.94	5.97		C			1							S
107233	10.831	0.054	9.583	0.029		1.059	0.049	T	1.12	0.07	L	9.5873	0.0029	0.022	96		9.55	9.62		C			1							G
107234	8.369	0.008	8.215	0.010		0.148	0.012	T	0.16	0.01	L	8.2431	0.0011	0.011	120		8.23	8.27					1							S
107235	7.613	0.006	5.709	0.004		1.615	0.006	T	1.96	0.03	O	5.5992	0.0014	0.013	154		5.58	5.62		U 2			1							S
107236	10.898	0.047	10.111	0.037		0.710	0.015	G	0.76	0.01	H	10.2401	0.0032	0.022	124		10.21	10.28					1							G
107237	7.905	0.008	7.708	0.009		0.180	0.015	G	0.20	0.02	H	7.7335	0.0010	0.012	123		7.71	7.76					1							S
107238	6.542	0.005	6.252	0.005		0.269	0.003	G	0.26	0.03	C	6.2957	0.0006	0.007	78		6.29	6.31					1							S
107239	9.676	0.017	8.939	0.014		0.660	0.017	T	0.72	0.01	L	9.0113	0.0016	0.017	135		8.98	9.04					1							
107240	10.168	0.019	9.586	0.018	*	0.549	0.005	G	0.62	0.01	H *	9.6620	0.0019	0.020	163	*	9.64	9.70			21433−4327	H 1	2 C D	AB	185	0.485	0.049	3.84	0.21	D
107241	9.164	0.026	8.204	0.017	*	0.844	0.023	T	0.86	0.02	L *	8.3819	0.0018	0.016	128	*	8.36	8.41		D	21433+5100	I 1	2 C A	AB	139	1.785	0.005	1.53	0.02	
107242	13.319	0.406	8.436	0.009	*	2.450	0.510	G	2.45	0.52	J *	7.6924	0.0073	0.106	221	*	7.45	7.83	231.00	P 1 A	21434+3801	I 1	2 C S B	AC	245	0.149	0.007	0.36	0.24	D
107243	10.951	0.034	9.148	0.013		1.501	0.029	T	1.53	0.04	L	9.1108	0.0013	0.019	177		9.08	9.14					1							
107244	9.423	0.017	7.724	0.008		1.419	0.015	T	1.40	0.02	L	7.6941	0.0016	0.012	113		7.67	7.71		C			1							
107245	9.871	0.024	8.498	0.014		1.162	0.022	T	1.12	0.02	L	8.5264	0.0016	0.015	98		8.50	8.55					1							
107246	8.654	0.015	7.908	0.013		0.654	0.015	G	0.72	0.01	H	7.9843	0.0014	0.012	50		7.96	8.02					1							S
107247	10.156	0.019	8.964	0.012		1.021	0.018	T	1.07	0.02	L	9.0136	0.0013	0.017	162		8.98	9.05		C			1							
107248	8.375	0.012	7.275	0.008		0.950	0.011	T	0.94	0.01	L	7.3283	0.0010	0.007	77		7.32	7.35		C			1							S
107249	9.524	0.018	9.412	0.023		0.109	0.027	T	0.12	0.03	L	9.4501	0.0018	0.015	101		9.42	9.48		C			1							
107250	9.187	0.014	8.939	0.015		0.259	0.024	G	0.29	0.03	H	8.9883	0.0016	0.017	124		8.95	9.01		C			1							G
107251	9.647	0.020	8.470	0.013		1.009	0.019	T	0.98	0.01	L	8.5066	0.0014	0.009	88		8.49	8.53					1							
107252	9.428	0.020	8.414	0.014		0.873	0.019	T	0.88	0.01	L	8.4797	0.0016	0.010	76		8.46	8.50		C			1							
107253	5.695	0.002	5.699	0.003		−0.010	0.042	G	0.01	0.00	L	5.7095	0.0005	0.006	209		5.70	5.72		D	21435+3818	I 2	1							S
107254	9.684	0.022	9.256	0.022		0.404	0.029	T	0.47	0.03	L	9.3108	0.0025	0.020	82		9.26	9.34		C	21434+2353	I 1	1							
107255	10.930	0.054	8.947	0.019		1.680	0.047	T	2.15	0.11	O	8.8067	0.0024	0.021	69		8.77	8.83					1							
107256	10.488	0.037	9.837	0.033	*	0.604	0.042	T	0.67	0.04	L *	10.0357	0.0221	0.239	102	*	9.93	10.84		D	21434+4449	I 1	2 C C	AS	192	0.690	0.012	1.16	0.09	G
107257	9.868	0.024	8.747	0.016		0.965	0.022	T	0.95	0.02	L	8.8250	0.0016	0.018	129		8.79	8.86					1							
107258	7.778	0.008	7.437	0.008		0.323	0.011	T	0.37	0.01	L	7.4933	0.0012	0.010	90		7.48	7.51		C			1							S
107259	6.944	0.021	4.279	0.022		2.242	0.025	T	3.57	0.10	O	3.9123	0.0291	0.204	105		3.62	4.14		U 2 B	21435+5847	I 1	1 S							S P
107260	9.599	0.021	8.937	0.018		0.604	0.021	T	0.67	0.02	L	9.0024	0.0022	0.015	79		8.98	9.03		C			1							
107261	8.848	0.014	7.608	0.009		1.058	0.013	T	1.02	0.01	L	7.6482	0.0013	0.013	83		7.63	7.68		C			1							S
107262	9.050	0.010	8.539	0.009		0.490	0.010	T	0.56	0.01	L	8.6124	0.0010	0.014	189		8.59	8.63		C			1							S
107263	10.083	0.033	8.234	0.014		1.537	0.028	T	1.59	0.06	L	8.1699	0.0049	0.028	55		8.13	8.21		U 2			1							
107264	9.342	0.012	7.405	0.005		1.642	0.011	T	2.15	0.03	O	7.2627	0.0032	0.028	176		7.22	7.31		U 2			1							S
107265	10.762	0.034	9.386	0.018		1.165	0.030	T	1.13	0.03	L	9.4866	0.0026	0.024	150		9.45	9.55					1							
107266	8.770	0.015	8.300	0.015		0.443	0.019	T	0.51	0.02	L	8.3830	0.0015	0.012	69		8.37	8.41		C			1							S
107267	9.610	0.017	7.968	0.008		1.374	0.015	T	1.34	0.02	L	7.9528	0.0012	0.012	128		7.94	7.97		C			1 S							S
107268	7.108	0.004	6.998	0.005		0.107	0.006	T	0.12	0.01	L	7.0311	0.0009	0.009	206		7.02	7.05		C	21435+3818	I 2	1							S
107269	10.329	0.029	8.567	0.013		1.469	0.025	T	1.48	0.04	L	8.5620	0.0016	0.017	112		8.53	8.59					1							
107270	8.267	0.011	7.137	0.007		0.972	0.010	T	0.96	0.01	L	7.2059	0.0011	0.010	79		7.19	7.23		C			1							S
107271	7.914	0.006	6.602	0.004		1.114	0.006	T	1.08	0.01	L	6.6410	0.0008	0.008	109		6.63	6.66		C			1							S
107272	8.941	0.012	8.785	0.015		0.170	0.015	G	0.19	0.01	H	8.8078	0.0016	0.015	127		8.79	8.84		C			1 S							
107273	11.064	0.075	10.031	0.049		0.903	0.003	G	0.95	0.00	I	10.0794	0.0037	0.025	70		10.04	10.16					1							
107274	10.735	0.040	10.099	0.035		0.591	0.046	T	0.66	0.04	L	10.2479	0.0031	0.024	108		10.20	10.28		C			1							
107275	10.428	0.020	8.846	0.010		1.326	0.018	T	1.29	0.02	L	8.8553	0.0019	0.023	237		8.82	8.90					1							
107276	8.823	0.011	8.605	0.013		0.202	0.017	T	0.22	0.02	L	8.6554	0.0017	0.013	122		8.64	8.68		C			1							
107277	8.933	0.011	7.490	0.006		1.217	0.010	T	1.18	0.01	L	7.5131	0.0011	0.011	152		7.50	7.53		C	21439−5719	I 3	1							S
107278	10.443	0.020	8.779	0.009		1.391	0.017	T	1.36	0.02	L	8.7808	0.0015	0.021	272		8.75	8.82		C			1 S							
107279	9.906	0.031	8.912	0.022		0.870	0.028	T	0.88	0.02	L	8.9835	0.0018	0.018	60		8.94	9.01					1							
107280	9.232	0.017	7.297	0.008		1.606	0.015	T	1.63	0.01	L	7.2437	0.0019	0.013	68		7.23	7.27					1							S
107281	8.526	0.009	7.995	0.008		0.506	0.009	T	0.58	0.01	L	8.0516	0.0016	0.017	142		8.03	8.09					1							S
107282	10.349	0.025	9.254	0.016		0.946	0.023	T	0.94	0.02	L	9.3140	0.0020	0.020	138		9.28	9.34		C			1							
107283	10.189	0.039	8.634	0.018		1.305	0.034	T	1.27	0.04	L	8.6158	0.0016	0.014	116		8.59	8.64		C			1							
107284	9.867	0.025	8.631	0.015		1.055	0.023	T	1.02	0.02	L	8.6710	0.0019	0.014	85		8.65	8.70		C			1 S							
107285	8.936	0.009	8.442	0.008		0.465	0.011	T	0.54	0.01	L	8.4965	0.0013	0.019	204		8.46	8.53		C			1							S
107286	11.078	0.057	9.696	0.026		1.169	0.049	T	1.13	0.04	L	9.7982	0.0026	0.024	114		9.75	9.84					1							G
107287	10.494	0.030	9.118	0.016		1.165	0.027	T	1.13	0.02	L	9.1321	0.0022	0.024	146		9.09	9.17					1 X							
107288	7.989	0.006	7.511	0.006	*	0.450	0.016	G	0.52	0.02	H *	7.5502	0.0008	0.010	150	*	7.54	7.56		D	21439+2751	I 1	2 C A	BA	245	0.307	0.004	0.11	0.05	S
107289	9.211	0.013	7.306	0.006		1.616	0.012	T	2.12	0.04	O	7.1696	0.0015	0.016	131		7.14	7.20		U 2			1							S
107290	9.676	0.020	9.259	0.021		0.394	0.027	T	0.46	0.03	L	9.3338	0.0021	0.015	87		9.30	9.36		C			1							
107291	10.924	0.048	9.686	0.027		1.057	0.043	T	1.02	0.04	L	9.7284	0.0020	0.022	134		9.69	9.76					1							G
107292	9.198	0.012	8.793	0.013		0.393	0.009	G	0.46	0.01	H	8.8525	0.0014	0.014	154		8.83	8.88		C			1							
107293	10.869	0.055	10.573	0.070		0.281	0.083	T	0.32	0.10	L	10.6594	0.0036	0.029	118		10.61	10.71					1							G
107294	10.643	0.036	10.099	0.034		0.480	0.020	G	0.55	0.02	H	10.1748	0.0024	0.027	134		10.13	10.23		C			1							G
107295	10.258	0.017	9.298	0.012		0.831	0.016	T	0.85	0.01	L	9.3618	0.0018	0.021	248		9.33	9.40		C			1							
107296	10.890	0.053	10.341	0.052		0.514	0.066	T	0.59	0.07	L	10.3543	0.0037	0.028	96		10.31	10.39		C			1							
107297	8.113	0.008	6.571	0.006		1.295	0.008	T	1.25	0.01	L	6.5890	0.0009	0.006	83		6.58	6.60					1 G							S
107298	9.545	0.012	9.087	0.013		0.432	0.016	T	0.50	0.02	L	9.1599	0.0020	0.021	192		9.12	9.20		C			1							
107299	7.063	0.004	6.548	0.004		0.484	0.005	T	0.56	0.01	L	6.6002	0.0006	0.008	147		6.59	6.62		C	21439−5719	I 3	1							S
107300	7.412	0.005	6.904	0.004		0.477	0.006	T	0.55	0.01	L	6.9676	0.0006	0.008	144		6.95	6.98			21439−5719	I 3	1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
107301 H	21 44 00.64	+03 34 54.6	9.19	H	326.002 653 63	+03.581 836 43 A	2.49	8.07	0.45	2.24	1.72	2.48	3.04	1.94	+35	− 8	−25	−10	+ 4	+ 2	+ 1	−16	+24	+48	1	1.40
107302	21 44 00.98	−14 44 57.8	5.96	G	326.004 078 15	−14.749 395 50	19.08	−22.48	10.31	0.73	0.55	0.95	1.23	0.68	+24	−12	−15	+11	−11	+53	− 6	+ 0	+13	+16	0	0.45
*107303	21 44 01.37	−55 03 24.2	7.68	H	326.005 712 80	−55.056 709 09	1.98	32.51	−35.14	0.85	0.57	1.08	1.18	0.67	+26	− 2	−20	+26	+44	−11	+33	+56	−29	+47	0	0.68
*107304	21 44 01.36	−19 30 31.1	8.10	H	326.005 661 23	−19.508 626 40	3.03	10.33	−12.58	0.95	0.64	1.12	1.10	0.73	+27	−13	−11	+12	−24	+23	−24	+24	+ 7	+36	0	−0.24
107305	21 44 01.55	−27 53 35.9	9.19	G	326.006 470 01	−27.893 293 41	11.96	143.29	−144.33	1.11	0.80	1.32	1.25	0.77	+43	+ 0	−21	−23	−37	+36	−30	−15	+ 0	+35	0	0.61
107306	21 44 02.27	+46 49 53.5	8.69	H	326.009 463 57	+46.831 521 13	5.89	−48.55	−35.67	0.73	0.64	0.90	0.90	0.77	−19	+15	−24	+ 5	+ 1	− 6	+ 3	+ 3	+18	−26	0	−0.09
107307	21 44 02.27	−06 53 40.3	11.29	G	326.009 465 13	−06.894 541 17	10.39	25.78	−193.67	2.49	1.56	2.86	3.14	1.57	+31	− 9	+19	−22	+15	+38	− 3	+41	+24	+52	0	−1.52
107308	21 44 02.94	+33 20 06.9	8.45	G	326.012 245 56	+33.335 239 17	4.12	7.11	−2.67	0.50	0.62	1.05	0.55	0.81	− 9	− 6	−18	−21	+ 9	−10	+ 9	−29	+13	+ 6	0	0.51
107309	21 44 03.31	−75 28 52.2	9.55	H	326.013 781 93	−75.481 174 67	12.23	40.16	−27.06	0.86	0.78	1.11	0.99	0.88	−12	− 6	− 6	+ 7	−11	− 8	−12	+ 1	+ 0	−21	0	0.15
107310 H	21 44 08.40	+28 44 35.6	4.49	H	326.035 018 74	+28.743 222 28 A	44.64	260.33	−242.73	0.64	0.62	0.69	0.61	0.57	+ 0	+14	−17	−27	−14	+ 2	− 7	−74	+28	+ 3	1	0.76
107311	21 44 08.61	+25 10 43.8	7.83	H	326.035 877 50	+25.178 825 32	6.80	35.54	6.53	0.77	0.70	0.94	0.94	0.82	+ 7	+ 7	−17	+ 2	+ 4	−12	+ 4	−14	+33	+ 6	0	2.13
107312	21 44 09.05	−18 37 42.6	9.81	G	326.037 701 86	−18.628 494 62	14.62	−22.28	−180.07	1.36	1.03	1.61	1.81	1.09	+37	−11	−17	− 3	−41	+39	−34	− 2	+11	+37	0	−0.90
107313	21 44 09.18	+26 31 09.0	8.40	H	326.038 245 16	+26.519 162 65	17.70	203.45	55.40	0.81	0.82	1.21	0.84	0.86	−19	+34	−51	− 6	+ 6	− 7	+18	−59	+47	− 6	2	1.78
107314	21 44 10.22	+25 19 58.4	9.48	G	326.042 588 57	+25.332 883 82	22.39	−359.01	−506.62	1.21	1.11	1.41	1.43	1.18	+11	+ 7	−30	− 4	+ 4	+ 6	+ 6	−44	+29	+13	0	0.48
107315	21 44 11.14	+09 52 30.0	2.38	1 G	326.046 418 08	+09.875 007 91	4.85	30.02	1.38	0.74	0.45	0.84	1.12	0.49	+14	+13	+ 4	+39	+12	+47	+12	− 6	+36	+26	0	−0.50
107316 H	21 44 13.02	+55 12 37.8	9.34	H	326.054 232 75	+55.210 498 75 A	1.34	−2.48	−3.34	1.45	1.44	1.66	1.59	1.40	+ 1	+ 1	− 5	−18	+ 4	−19	+ 2	−17	+ 1	+15	0	−0.05
107317	21 44 13.18	+06 38 30.7	12.06	G	326.054 918 55	+06.641 867 05	47.30	−326.46	−166.90	3.50	2.14	3.84	4.56	2.37	+29	− 3	−10	+16	+ 5	+ 8	+ 4	−38	+34	+34	3	−1.96
107318	21 44 14.04	−33 27 07.3	9.51	H	326.058 517 16	−33.452 015 50	9.94	77.17	8.41	1.21	0.82	1.36	1.36	0.90	+27	−23	−12	− 2	−11	+15	− 9	+17	+ 1	+26	0	−0.32
107319	21 44 14.23	−07 09 29.1	8.08	H	326.059 275 17	−07.158 079 67	2.57	−27.51	−32.72	1.04	0.61	1.10	1.29	0.54	+33	+ 0	+15	−24	−20	+ 8	−15	+18	+11	+33	0	1.35
107320	21 44 14.40	−62 06 51.0	7.09	H	326.060 009 62	−62.114 160 00	9.37	55.30	−21.28	0.39	0.47	0.81	0.47	0.53	− 3	−19	−20	+32	+ 2	− 1	+ 3	+22	−13	−12	0	−0.90
107321	21 44 17.14	+49 16 08.6	7.54	G	326.071 436 49	+49.269 061 55	3.18	8.59	−8.85	0.52	0.53	0.66	0.58	0.59	−23	+ 1	+ 0	−17	+14	− 3	+13	+ 0	+ 8	−19	0	0.07
107322 H	21 44 17.33	+60 54 46.1	7.38	H	326.072 198 31	+60.912 798 81 A	9.51	−0.86	−40.81	1.03	0.90	1.00	1.02	0.90	− 9	−18	− 7	−12	+18	+ 9	+21	− 7	− 8	+21	0	1.01
107323	21 44 18.01	−55 28 22.9	6.88	2 H	326.075 042 84	−55.473 019 24	3.56	30.71	−23.80	0.64	0.46	0.84	0.79	0.50	+19	−13	−23	+37	+29	− 6	+28	+44	−32	+27	0	0.41
107324	21 44 18.90	−15 58 17.5	7.52	H	326.078 740 20	−15.971 540 57	9.08	33.76	−45.87	0.85	0.62	0.98	1.35	0.78	+15	− 2	−11	+14	− 9	+29	− 7	− 4	+28	+ 5	0	−0.66
107325	21 44 18.96	+83 04 42.0	8.28	H	326.079 001 33	+83.078 338 74	0.34	9.12	4.67	0.62	0.59	0.67	0.70	0.57	+ 6	− 7	+11	− 5	−17	− 2	−16	−13	+ 9	− 4	0	0.85
107326	21 44 19.18	+28 46 54.2	6.89	H	326.079 932 65	+28.781 733 95	12.99	0.48	−53.38	0.60	0.57	0.82	0.66	0.65	−12	+ 0	−26	+ 5	− 1	−12	− 6	−66	+38	−19	1	2.65
107327	21 44 20.42	−55 51 13.1	9.40	H	326.085 091 76	−55.853 643 72	2.10	23.07	−21.54	1.19	0.85	1.44	1.58	1.00	+17	−13	−23	+47	+19	− 5	+20	+60	−30	+14	0	0.19
107328	21 44 20.65	+77 03 10.4	10.34	H	326.086 026 96	+77.052 886 91	10.54	90.36	63.61	1.00	0.88	1.03	1.18	1.16	+16	−17	−11	+13	+15	− 8	+14	+14	+ 1	+27	0	−1.51
107329	21 44 20.79	+35 15 18.2	8.59	H	326.086 618 04	+35.255 059 32	0.93	15.83	7.35	0.53	0.66	1.01	0.60	0.83	−18	+ 9	−22	− 8	+18	−23	+21	−35	+27	− 3	0	−1.18
107330	21 44 21.52	+57 44 14.3	9.00	H	326.089 659 45	+57.737 315 03	2.64	2.08	2.70	0.73	0.71	0.86	0.78	0.80	+ 4	+ 7	−10	+ 8	+25	−11	+28	+ 0	+11	+32	1	1.37
107331	21 44 21.69	+17 02 43.1	7.89	H	326.090 370 18	+17.045 294 65	6.64	34.83	−8.06	0.74	0.67	0.98	1.08	0.85	+40	−25	−23	−13	+23	+ 1	+19	+ 1	− 1	+36	0	0.78
107332	21 44 21.80	+39 14 43.5	8.91	H	326.090 825 66	+39.245 424 71	2.39	−22.17	−8.92	0.67	0.76	1.18	0.84	0.97	−23	+15	− 8	+ 8	+11	−18	+12	− 1	+24	−31	0	0.35
107333	21 44 22.04	+00 08 07.5	9.19	H	326.091 850 63	+00.135 409 88	6.08	37.05	4.10	1.19	0.76	1.36	1.39	0.77	+36	− 5	− 3	+15	+ 0	+30	+ 1	+ 2	+22	+46	0	1.56
107334	21 44 22.38	+84 02 18.5	7.11	H	326.093 248 90	+84.038 463 28	10.76	83.10	33.90	0.54	0.46	0.55	0.62	0.46	− 3	− 7	+20	−18	−10	+ 5	− 8	− 7	− 7	−12	0	0.66
107335	21 44 23.41	+29 15 56.8	7.13	H	326.097 521 35	+29.265 790 73	5.18	−33.27	−74.74	0.65	0.58	0.88	0.68	0.64	−17	+ 6	−24	+22	−13	−24	−12	−64	+41	−19	0	−0.27
107336	21 44 23.88	−04 43 51.2	6.66	G	326.099 492 84	−04.730 885 17	9.24	−25.64	−4.72	0.77	0.45	0.83	0.91	0.45	+30	+15	+11	−24	+ 3	+26	− 4	+22	+13	+42	0	−0.44
107337	21 44 23.92	−11 46 22.6	8.56	H	326.099 671 13	−11.772 933 37	0.69	41.64	−31.81	1.05	0.71	1.24	1.43	0.87	+19	+ 5	−14	−15	+19	+23	+18	−16	+42	+39	4	−0.41
107338	21 44 24.27	−48 18 28.1	8.46	H	326.101 120 67	−48.307 818 63	3.19	9.98	−9.53	0.80	0.58	1.18	0.89	0.66	+38	−23	−12	+ 7	+25	+ 3	+28	+54	−23	+37	0	−2.62
107339	21 44 25.43	+46 51 46.0	6.61	H	326.105 944 55	+46.862 772 27	20.90	−11.75	23.78	0.50	0.48	0.64	0.63	0.56	−19	+ 8	+ 0	+12	− 2	− 1	+ 4	+13	−25	0	−1.53
107340	21 44 25.47	+35 36 34.4	8.87	H	326.106 136 72	+35.609 558 89	0.93	−16.48	−21.42	0.62	0.77	1.22	0.70	0.98	+ 1	+ 7	−20	+ 4	+ 4	−16	+ 8	−26	+32	+13	1	−2.11
107341	21 44 26.73	+30 18 48.1	7.76	H	326.111 393 86	+30.313 351 74	1.26	−1.84	−6.48	0.49	0.64	0.90	0.65	0.69	− 7	+14	−37	+36	−20	+20	−13	−63	+29	− 4	0	−1.16
107342 H	21 44 26.88	+06 06 40.9	11.58	G	326.112 002 72	+06.111 369 40 A	−0.97	−41.10	−14.44	21.21	10.46	11.36	14.27	6.11	−19	+ 6	+ 0	+ 4	+ 0	+49	+ 0	−17	+47	+55	10	1.38
107343	21 44 28.44	+29 11 38.6	7.25	H	326.118 497 35	+29.194 057 83	5.69	28.42	−2.42	0.62	0.55	0.85	0.64	0.65	−11	+ 1	−12	+27	−16	−20	−14	−57	+37	−11	1	−0.18
107344	21 44 29.41	−38 33 07.7	6.28	H	326.122 546 15	−38.552 135 92	4.17	81.42	−162.06	0.69	0.52	0.79	0.76	0.52	+38	−22	− 6	+28	+33	+21	+37	+68	−13	+31	0	0.46
*107345	21 44 30.07	−60 58 38.1	11.72	G	326.125 302 88	−60.977 244 08	23.66	41.20	−91.61	1.90	1.49	2.85	2.50	1.66	−11	−17	−19	− 4	+ 6	+ 2	+ 7	+23	−18	−12	0	−1.01
*107346	21 44 30.01	+41 35 50.5	9.65	G	326.125 039 38	+41.597 362 27	49.27	−62.14	42.28	0.87	0.98	1.43	0.99	1.17	−32	− 1	− 3	− 3	+ 9	−25	+ 8	+ 6	+26	−38	0	−0.70
*107347	21 44 30.01	−50 16 48.6	9.57	H	326.125 061 57	−50.280 153 10	5.28	2.93	−49.18	0.98	0.68	1.45	1.14	0.78	+19	− 1	+14	+ 4	+19	+ 6	+19	+55	−12	+19	0	1.33
107348	21 44 30.69	+17 21 00.2	4.34	H	326.127 877 16	+17.350 043 52	3.62	7.90	−10.75	0.62	0.52	0.74	0.79	0.67	+30	−20	−21	−24	+25	+ 4	+24	+ 0	+ 7	+29	0	−0.76
107349	21 44 31.18	−65 03 33.8	10.16	2 H	326.129 932 17	−65.059 395 99	0.23	4.54	−4.50	1.01	1.15	1.68	1.08	1.18	−15	− 2	−21	−14	+ 7	+ 4	− 4	+ 4	− 8	−35	2	0.76
107350	21 44 31.19	+14 46 20.0	5.96	H	326.129 960 19	+14.772 214 91	54.37	231.08	−113.45	0.85	0.60	0.85	1.08	0.67	+11	−12	−13	+ 2	−15	− 5	−14	−16	− 2	+11	0	0.20
107351	21 44 32.47	−24 54 37.3	7.32	G	326.135 304 61	−24.910 360 64	8.87	18.28	−80.26	0.81	0.58	1.10	1.06	0.59	+24	−14	−34	+14	−22	+52	− 7	+19	+14	+27	0	2.61
107352	21 44 32.52	−05 30 04.2	9.02	2 H	326.135 518 92	−05.501 157 24	1.67	17.10	−10.93	1.26	0.76	1.32	1.81	0.73	+34	+14	+ 6	−24	− 1	+ 2	+ 0	+31	+ 4	+36	0	−0.49
107353	21 44 34.01	+59 03 25.7	9.47	2 H	326.141 720 15	+59.057 149 28	−0.33	0.22	0.38	0.82	0.72	0.89	0.89	0.81	+ 8	+ 3	+ 0	+ 2	+18	− 3	+19	+ 0	− 5	+33	0	0.37
107354 H	21 44 38.70	+25 38 42.0	4.14	G	326.161 267 55	+25.645 002 84 *	28.34	46.66	13.47	1.82	1.83	0.88	0.84	0.80	+24	− 2	−27	−39	+16	− 8	+12	−51	+40	−25	13	0.61
107355	21 44 38.89	+58 13 32.3	6.80	H	326.162 058 25	+58.225 639 67	5.50	67.35	24.10	0.49	0.47	0.57	0.52	0.52	+ 7	+ 4	− 3	+12	+16	−16	+20	+ 0	+ 0	+31	0	2.16
107356 H	21 44 40.05	−35 36 56.5	8.30	H	326.166 880 79	−35.615 692 33 A	10.73	73.05	−81.71	1.33	0.90	1.39	1.39	0.83	+27	−28	−28	+ 6	−17	+23	−11	+12	+ 3	+11	1	−0.37
107357	21 44 41.06	+63 15 31.6	9.26	H	326.171 083 67	+63.258 769 44	5.24	9.73	3.33	0.77	0.66	0.85	0.89	0.74	− 2	− 7	+12	+ 8	+ 3	+ 6	+ 0	+ 1	+28	+ 3	1	2.10
107358	21 44 41.72	−48 50 02.3	8.03	H	326.173 818 58	−48.833 961 61	4.00	20.81	−6.67	0.80	0.48	1.06	0.82	0.51	+22	− 6	+ 6	−12	+17	+18	+15	+42	−10	+24	0	0.03
107359	21 44 41.98	−16 31 37.0	8.56	H	326.174 897 68	−16.526 944 89	6.70	−57.71	−30.86	1.16	0.78	1.39	2.02	1.02	+14	− 3	−11	− 6	−15	+ 4	− 7	+ 1	+45	−19	0	−0.21
107360	21 44 42.29	−48 06 15.0	9.35	G	326.176 202 64	−48.104 159 91	2.89	−2.67	11.97	0.97	0.66	1.48	1.01	0.73	+32	−28	−11	+ 2	+19	− 4	+23	+45	−25	+34	0	0.62
107361	21 44 44.15	+43 25 45.2	7.52	1 H	326.183 956 32	+43.429 226 18	1.60	−5.52	−4.12	0.54	0.53	0.76	0.63	0.62	−14	+23	+ 2	+ 8	+ 1	+10	+ 5	+15	+12	−25	0	−0.96
107362	21 44 44.80	−42 07 46.4	8.03	H	326.186 671 16	−42.129 568 11	16.11	−8.10	2.38	1.04	0.53	1.17	1.39	0.57	+ 3	+14	− 2	+25	− 7	+31	− 4	+55	−16	−12	1	0.83
107363	21 44 45.10	+49 30 46.4	8.64	H	326.187 933 52	+49.512 892 86 A	3.28	−12.70	−7.99	1.61	1.57	1.54	1.72	1.64	−14	−12	+18	− 1	+21	+20	+17	− 2	+ 8	− 2	2	−0.01
107364	21 44 46.05	+49 31 13.5	9.08	H	326.191 886 55	+49.520 420 92 B	1.61	12.75	3.26	3.10	3.28	2.03	2.41	2.44	−24	−13	+17	−15	+16	+17	+12	−13	+ 1	−10	2	−0.01
107365	21 44 46.56	−06 21 08.6	8.26	H	326.194 017 51	−06.352 399 60	3.30	15.05	1.80	1.14	0.57	1.11	1.24	0.55	+34	+ 6	+16	−44	+ 0	+17	−14	+25	+ 6	+50	0	1.56
107366	21 44 47.74	−51 44 05.5	10.30	H	326.198 917 48	−51.734 865 25	6.98	−2.65	−32.64	1.43	0.94	1.77	2.03	1.07	+26	+ 3	− 4	+45	+24	+ 8	+22	+54	−20	+24	0	2.15
107367 H	21 44 48.20	+02 59 31.7	6.98	H	326.200 817 63	+02.992 129 36 A	3.32	16.28	−10.04	1.05	0.80	1.13	1.42	0.96	+44	− 7	−20	− 7	−11	+ 7	− 8	−26	+24	+62	1	0.53
107368	21 44 48.50	+39 32 34.7	8.62	H	326.202 074 01	+39.542 985 87	3.04	−24.35	−16.41	0.65	0.72	1.13	0.75	0.93	−30	+ 9	− 9	− 7	+17	−17	+19	− 5	+27	−34	0	0.73
107369	21 44 50.01	−56 19 40.5	9.68	G	326.208 387 51	−56.327 902 87	6.21	48.66	−208.86	1.11	1.02	1.44	1.40	1.04	+32	−19	−34	+44	+45	−14	+41	+55	−27	+38	3	1.04
107370	21 44 50.03	−32 41 39.6	8.68	H	326.208 451 03	−32.694 322 31	14.95	81.19	−41.36	1.05	0.69	1.27	1.31	0.74	+30	+ 1	−22	−17	−19	+41	−12	+ 7	− 4	+29	0	0.56
107371	21 44 50.95	+24 51 48.1	8.25	G	326.212 310 73	+24.863 355 83	5.70	12.03	−36.97	0.79	0.82	1.03	0.94	0.86	+18	+ 8	−29	+ 1	− 5	+ 1	− 3	−37	+38	+15	0	−1.45
107372	21 44 51.81	−42 17 08.2	8.77	H	326.215 872 18	−42.285 620 22	6.31	−16.90	−34.55	1.18	0.59	1.30	1.76	0.65	+ 8	+ 7	− 1	− 5	− 4	+26	+ 4	+51	−13	−11	0	1.35
107373	21 44 52.39	−10 12 47.9	8.77	H	326.218 290 77	−10.213 299 54	2.58	−3.92	−5.94	1.14	0.74	1.30	1.59	0.75	+34	−14	−14	− 9	+19	+20	+12	+18	+24	+38	0	0.71
107374	21 44 53.28	+62 27 38.1	5.94	G	326.222 014 08	+62.460 574 29	1.62	−2.98	−2.80	0.46	0.41	0.48	0.49	0.41	+ 0	+10	+10	+31	+ 8	+ 4	+10	− 5	+ 9	+ 4	0	1.14
107375	21 44 53.67	+13 03 44.7	8.98	H	326.223 643 11	+13.062 409 45	2.60	−10.77	−7.40	1.38	0.99	1.25	2.07	0.99	+ 7	+ 7	−23	+55	−27	+18	−21	+ 6	− 4	− 3	0	−1.63
107376	21 44 54.11	+44 17 14.6	11.43	2 H	326.225 442 65	+44.287 400 17	37.05	−140.62	−652.24	1.79	1.99	2.50	2.41	2.53	−21	+ 5	+12	− 3	+ 5	+ 9	+ 6	+12	− 2	−36	3	2.31
107377	21 44 54.33	−57 25 31.0	9.93	G	326.226 378 90	−57.425 275 73	7.47	188.53	−93.35	1.07	0.83	1.68	1.41	0.98	− 8	+ 6	+ 1	−27	+ 8	+ 4	+ 9	+30	− 9	−12	0	1.48
107378	21 44 54.99	+16 37 09.7	9.11	H	326.229 107 17	+16.619 373 96	1.66	4.35	0.44	0.93	0.79	1.19	1.42	1.14	+34	− 8	− 6	−31	+18	−13	+14	+ 2	−18	+42	0	1.22
107379	21 44 55.30	−09 02 10.9	7.04	H	326.230 395 95	−09.036 366 72	3.90	49.01	19.29	0.88	0.49	0.98	1.03	0.49	+31	−25	+ 3	−22	+12	+33	+ 1	+29	+14	+47	0	1.46
107380	21 44 56.79	−33 01 32.0	4.35	H	326.236 615 90	−33.025 553 06	15.93	31.79	−94.00	0.67	0.49	0.80	0.81	0.54	+32	−14	−17	− 1	− 7	+32	− 3	+24	+ 2	+35	0	−0.42
107381	21 44 58.88	−37 24 07.6	9.98	G	326.245 330 65	−37.402 113 97	5.34	180.86	−63.48	1.33	0.78	1.56	1.62	0.80	+ 7	− 8	− 5	− 5	− 5	+28	+ 2	+38	− 5	− 8	0	−0.73
107382	21 45 00.25	−09 04 56.7	5.10	G	326.251 028 76	−09.082 424 43	4.08	12.96	−1.65	0.77	0.45	0.89	0.96	0.45	+29	−22	+13	−25	+19	+43	+ 1	+32	+26	+50	0	0.80
107383 H	21 45 00.40	+55 53 38.0	8.65	H	326.251 687 24	+55.893 888 79 A	2.18	24.82	6.89	1.27	1.25	1.26	1.08	0.98	+12	− 7	−16	− 9	− 1	−16	− 1	−27	+12	+31	2	0.37
107384	21 45 00.50	−26 29 26.8	7.52	H	326.252 080 38	−26.490 774 39	3.28	20.48	−2.00	0.91	0.65	1.12	1.11	0.63	+33	−21	−33	−15	−30	+43	−20	− 6	+22	+32	0	−1.82
107385	21 45 00.59	−52 27 52.5	9.79	1 H	326.252 444 52	−52.464 572 23	25.12	−12.49	151.95	1.11	0.84	1.35	1.49	0.89	+25	−13	− 9	+25	+25	+10	+24	+35	− 9	+24	0	0.92
107386	21 45 00.70	−61 50 55.2	8.12	G	326.252 901 12	−61.848 668 33	7.54	−12.67	2.73	0.42	0.57	1.03	0.52	0.66	+ 2	−19	−19	+32	+ 8	+ 0	+10	+25	−20	− 8	1	1.23
107387	21 45 01.36	+29 33 42.0	9.89	2 H	326.255 655 58	+29.561 678 69	−0.28	−4.08	−4.07	0.89	0.90	1.58	1.11	1.13	+ 2	−23	−34	+48	−11	−30	−32	−61	+61	−24	0	1.05
107388	21 45 01.46	+03 13 50.2	9.10	H	326.256 092 73	+03.230 608 29	16.31	29.79	−171.27	1.12	0.84	1.30	1.70	1.00	+36	+ 3	− 5	− 5	− 2	+24	− 2	−16	+11	+45	0	1.43
107389	21 45 01.80	−38 46 08.8	9.74	H	326.257 486 83	−38.769 109 06	5.02	−6.75	7.78	1.36	0.83	1.59	1.51	0.84	+22	−10	−18	+16	+18	+25	+24	+63	−25	+14	0	1.09
107390	21 45 04.60	+12 41 55.1	9.70	3 H	326.269 181 53	+12.698 633 54	3.05	−8.17	−12.47	3.60	1.98	4.62	4.00	2.21	+57	−82	−71	−35	−43	+55	−31	−16	+35	+34	0	−1.79
*107391	21 45 05.03	+30 24 32.2	8.87	H	326.270 958 20	+30.408 937 46	5.48	23.77	−6.74	0.63	0.85	1.14	0.85	0.94	− 1	+ 4	−29	+31	−22	+18	−19	−69	+30	− 1	0	−1.73
*107392	21 45 05.03	−22 33 50.3	7.35	H	326.270 969 20	−22.563 972 40	6.31	15.78	−35.15	0.77	0.53	0.88	0.91	0.56	+22	−18	−22	+ 5	−33	+24	−27	+14	+ 4	+15	0	1.30
*107393	21 45 04.95	+19 53 37.4	11.82	H	326.270 618 20	+19.893 721 04	31.11	−14.68	−245.39	2.64	3.03	3.93	3.77	4.39	+37	− 7	−39	−20	+19	− 3	+18	− 5	+30	+36	0	0.65
107394	21 45 09.10	+22 53 46.7	8.28	H	326.287 900 38	+22.896 303 89	4.51	31.49	33.17	0.80	0.84	1.03	0.95	0.91	+29	+ 4	−23	+ 3	−14	+ 0	−16	−40	+24	+20	0	−0.10
107395	21 45 10.24	−00 30 28.5	11.19	G	326.292 658 62	−00.507 904 02	17.55	2.14	−138.28	2.45	1.50	2.85	3.37	1.60	+23	+ 5	−21	+16	+ 3	+14	+ 5	−22	+43	+23	0	−1.23
107396	21 45 11.36	+54 30 32.9	8.88	1 G	326.297 320 46	+54.509 142 47 A	4.64	−1.33	1.39	1.23	1.20	1.38	1.23	1.19	+ 7	+ 0	−10	−19	− 4	+ 8	− 3	−20	+15	+30	2	0.36
107397	21 45 12.00	−50 26 47.0	8.32	H	326.300 007 56	−50.446 386 47	15.46	−43.89	−77.35	0.80	0.53	1.11	0.93	0.58	+20	− 1	− 3	+12	+13	+ 9	+13	+40	−23	+15	0	−1.01
107398	21 45 12.40	+52 16 03.3	6.40	1 H	326.301 670 40	+52.267 578 75	1.20	−2.37	−0.76	0.47	0.49	0.57	0.50	0.56	− 5	+ 2	− 1	+ 4	+10	−14	+12	− 2	+ 2	+ 7	0	0.98
107399	21 45 13.48	−31 39 10.3	9.22	H	326.306 149 42	−31.652 872 39	4.87	−33.56	−44.89	1.14	0.78	1.36	1.29	0.85	+34	− 5	−21	−26	−17	+31	−15	+10	− 8	+36	0	0.56

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
107301	9.391	0.018	9.222	0.021	A	0.174	0.004	G	0.14	0.07	B *		9.2359	0.0016	0.019	79	*	9.21	9.26		D	21440+0335	I 1	2 C B	AB	220	1.091	0.046	2.83	0.14	
107302	6.222	0.006	5.983	0.006		0.219	0.010	G	0.23	0.03	C		6.0136	0.0009	0.005	47		6.01	6.03		C			1							S
107303	9.601	0.016	7.849	0.008		1.461	0.014	T	1.47	0.02	L		7.8168	0.0016	0.014	135		7.79	7.84					1							S
107304	9.385	0.019	8.216	0.012		1.003	0.018	T	0.98	0.01	L		8.2649	0.0015	0.013	100		8.24	8.29					1							S
107305	9.968	0.026	9.258	0.021		0.609	0.002	G	0.68	0.00	H		9.3272	0.0018	0.017	87		9.31	9.37		C			1							
107306	9.053	0.013	8.709	0.014		0.326	0.018	T	0.38	0.02	L		8.7660	0.0016	0.019	120		8.74	8.80					1							
107307						1.170	0.013	G	1.28	0.02	I		11.4251	0.0061	0.043	89		11.35	11.50		C			1							G
107308	9.004	0.011	8.505	0.010		0.486	0.015	G	0.56	0.02	H		8.5531	0.0010	0.015	200		8.53	8.58		C			1							
107309	10.262	0.025	9.609	0.022		0.597	0.025	T	0.67	0.02	L		9.6744	0.0022	0.027	141		9.62	9.73					1							
107310	4.930	0.007	4.392	0.006	*	0.512	0.007	T	0.58	0.01	L *		4.6029	0.0004	0.005	161	*	4.60	4.61		D	21442+2845	I 2	2 C A	AB	302	2.002	0.003	1.45	0.01	S
107311	8.193	0.010	7.875	0.011		0.302	0.014	T	0.35	0.02	L		7.9084	0.0015	0.014	80		7.89	7.93					1							S
107312	10.902	0.079	9.698	0.045		0.920	0.004	G	0.96	0.00	I		9.9580	0.0032	0.025	86		9.92	9.99		C			1							
107313	9.235	0.017	8.459	0.014		0.690	0.017	T	0.75	0.01	L		8.5394	0.0015	0.015	109		8.51	8.58			21440+2631	I 1	1							
107314	10.390	0.048	9.530	0.035		0.781	0.009	G	0.82	0.01	H		9.6098	0.0032	0.027	87		9.55	9.65		C			1							
107315	4.402	0.003	2.569	0.004		1.520	0.510	G	1.42	0.02	A		2.5460	0.0012	0.015	78		2.53	2.57		U 2	21441+0953	I 1	1 S							S P
107316	9.539	0.019	9.395	0.025	A	0.000	0.495	G	0.10	0.09	L *		9.3724	0.0020	0.019	120	*	9.34	9.40			21442+5513	I 1	2 C B	AB	174	3.767	0.040	3.17	0.18	G
107317						1.522	0.021	G	2.24	0.16	I		12.1420	0.0072	0.067	111		12.01	12.27					1							G
107318	10.273	0.034	9.545	0.029		0.654	0.034	T	0.72	0.03	L		9.6466	0.0017	0.020	93		9.61	9.68					1							
107319	9.495	0.019	8.204	0.011		1.098	0.017	T	1.06	0.02	L		8.2472	0.0015	0.012	91		8.23	8.27					1							S
107320	7.483	0.004	7.125	0.004		0.362	0.004	G	0.42	0.00	H		7.1723	0.0008	0.012	228		7.15	7.19					1							S
107321	7.421	0.007	7.513	0.008		−0.090	0.015	G	−0.07	0.02	H		7.5141	0.0011	0.011	140		7.50	7.54		C			1							S
107322	8.285	0.010	7.473	0.008	A	0.731	0.126	G	0.75	0.01	L *		7.5195	0.0008	0.009	118	*	7.50	7.53		D	21443+6055	I 1	2 C C	AB	315	2.375	0.061	3.96	0.18	S
107323	8.987	0.011	7.093	0.005		1.607	0.010	T	2.27	0.03	O		6.9273	0.0024	0.030	138		6.88	6.97		U 2			1							S
107324	7.762	0.010	7.544	0.007		0.202	0.012	T	0.22	0.01	L		7.5834	0.0016	0.010	59		7.56	7.60		C			1							S
107325	10.188	0.027	8.413	0.012		1.479	0.023	T	1.50	0.03	L		8.4063	0.0041	0.039	121		8.35	8.45		R			1 S							
107326	7.333	0.005	6.936	0.005		0.411	0.015	G	0.48	0.02	H		6.9882	0.0011	0.008	161		6.97	7.01			21442+2845	I 2	1							S
107327	10.710	0.037	9.517	0.021		1.022	0.033	T	1.00	0.03	L		9.5667	0.0023	0.021	133		9.53	9.61					1							
107328	11.462	0.076	10.369	0.049		0.935	0.071	T	0.98	0.08	L		10.4855	0.0021	0.022	98		10.45	10.52		D			1							G
107329	8.598	0.008	8.579	0.010		0.022	0.012	T	0.04	0.01	L		8.6045	0.0014	0.018	195		8.57	8.64					1							
107330	9.306	0.015	9.030	0.016		0.263	0.021	T	0.30	0.03	L		9.0754	0.0020	0.019	123		9.05	9.11		C			1							G
107331	8.152	0.008	7.928	0.010		0.259	0.001	G	0.29	0.00	H		7.9621	0.0012	0.014	126		7.94	7.98					1							S
107332	10.276	0.023	9.036	0.014		1.058	0.021	T	1.02	0.02	L		9.0749	0.0017	0.021	187		9.03	9.11		C			1 S							
107333	9.638	0.022	9.220	0.023		0.409	0.026	T	0.48	0.03	L		9.2816	0.0027	0.018	78		9.26	9.31					1							
107334	7.438	0.006	7.157	0.007		0.267	0.009	T	0.30	0.01	L		7.1867	0.0010	0.009	135		7.17	7.20					1							S
107335	8.534	0.009	7.249	0.006		1.093	0.008	T	1.05	0.01	L		7.2996	0.0011	0.010	169		7.28	7.32					1							S
107336	6.746	0.005	6.683	0.005		0.068	0.002	G	0.08	0.00	H		6.6950	0.0008	0.007	84		6.68	6.71					1							S
107337	9.664	0.023	8.653	0.016		1.001	0.015	G	0.98	0.01	H		8.7013	0.0020	0.016	86		8.68	8.73		C			1							S
107338	9.672	0.013	8.571	0.009		0.950	0.012	T	0.94	0.01	L		8.6265	0.0013	0.017	201		8.60	8.65					1							
107339	7.096	0.005	6.658	0.004		0.413	0.006	T	0.48	0.01	L		6.7021	0.0007	0.009	116		6.69	6.72		C			1							S
107340	10.135	0.022	8.968	0.013		1.001	0.020	T	0.98	0.02	L		9.0323	0.0018	0.021	188		9.00	9.07		C			1							
107341	9.881	0.018	7.958	0.008		1.596	0.016	T	1.62	0.02	L		7.8752	0.0012	0.016	206		7.85	7.90					1							
107342						1.286	0.008	G	1.34	0.14	K *		11.7238	0.0043	0.053	114	*	11.57	11.82		D	21445+0607	H 1	2 C B	AB	82	1.204	0.029	0.07	0.06	G
107343	7.253	0.004	7.252	0.006		0.006	0.007	T	0.03	0.01	L		7.2609	0.0009	0.011	168		7.24	7.28		C			1							S
107344	7.737	0.006	6.406	0.004		1.129	0.006	T	1.09	0.01	L		6.4447	0.0006	0.006	126		6.43	6.45		C			1							S
107345						1.400	0.015	G	1.84	0.02	A		11.7428	0.0055	0.051	138		11.66	11.86					1							G
107346	11.503	0.076	9.871	0.028		1.334	0.005	G	1.55	0.01	I		9.7317	0.0019	0.026	138		9.68	9.79					1 S							G
107347	10.910	0.036	9.689	0.020		1.037	0.033	T	1.01	0.03	L		9.7153	0.0017	0.019	200		9.68	9.76		C			1							
107348	5.815	0.002	4.465	0.002		1.161	0.005	G	1.05	0.03	C		4.5102	0.0006	0.006	126		4.50	4.52					1							S
107349	11.894	0.091	10.186	0.028		2.545	0.400	G	2.54	0.41	J		10.1742	0.0051	0.073	210		10.09	10.32		U 2			1							
107350	6.658	0.006	6.022	0.005		0.587	0.003	G	0.66	0.00	H		6.0841	0.0016	0.010	58		6.07	6.10					1							S
107351	7.889	0.010	7.377	0.008		0.490	0.015	G	0.56	0.02	H		7.4233	0.0009	0.007	79		7.41	7.44					1							S
107352	11.264	0.073	9.249	0.021		1.669	0.060	T	1.69	0.06	L		9.1303	0.0040	0.032	85		9.08	9.17		U			1							
107353	9.754	0.021	9.457	0.025		0.247	0.006	G	0.28	0.01	H		9.5352	0.0031	0.034	115		9.48	9.59		U 2			1 S							G
107354	4.661	0.002	4.200	0.002	*	0.425	0.009	G	0.48	0.03	C *		4.2347	0.0006	0.004	95	*	4.23	4.25		D	21446+2539	I 1	2 C A	AB	285	0.174	0.005	0.10	0.11	S
107355	8.149	0.009	6.915	0.005		1.054	0.008	T	1.02	0.01	L		6.9652	0.0009	0.009	130		6.95	6.98					1							
107356	9.220	0.016	8.415	0.013	A	0.664	0.096	G	0.77	0.02	L *		8.4466	0.0020	0.016	95	*	8.42	8.48			21447−3537	I 1	2 C A	AB	85	4.451	0.035	3.24	0.09	S
107357	9.689	0.021	9.306	0.022		0.363	0.028	T	0.42	0.03	L		9.3419	0.0025	0.017	107		9.32	9.37					1							
107358	10.131	0.019	8.214	0.008		1.591	0.016	T	1.61	0.02	L		8.1508	0.0013	0.016	203		8.12	8.17					1							
107359	9.665	0.029	8.646	0.020		0.888	0.026	T	0.89	0.02	L		8.7198	0.0021	0.015	52		8.67	8.75					1							S
107360	10.737	0.027	9.483	0.016		1.036	0.004	G	1.01	0.00	I		9.5267	0.0017	0.021	209		9.49	9.56		C			1							
107361	9.830	0.018	7.758	0.007		1.715	0.015	T	1.74	0.01	L		7.6207	0.0021	0.019	149		7.59	7.65		U			1							
107362	8.730	0.010	8.101	0.009		0.580	0.010	T	0.65	0.01	L		8.1597	0.0019	0.015	129		8.13	8.18					1							S
107363	8.657	0.013	8.622	0.017	A	0.037	0.019	T	0.05	0.01	L		8.6624	0.0070	0.020	133	A	8.61	8.70		D	21448+4931	I 2	1 C P B							
107364	9.244	0.021	9.101	0.026	B	0.138	0.031	T	0.15	0.03	L		9.1427	0.0090			B				D	21448+4931	I 2	1 C I B							
107365	8.248	0.010	8.251	0.013		0.002	0.015	T	0.02	0.01	L		8.2668	0.0017	0.013	85		8.25	8.29					1							S
107366	11.014	0.042	10.349	0.036		0.606	0.042	T	0.68	0.04	L		10.4318	0.0029	0.032	141		10.38	10.48		C			1							
107367	8.950	0.015	7.160	0.007	A	0.900	0.495	G	1.57	0.05	M *		7.0997	0.0018	0.011	85	*	7.08	7.12		D	21448+0300	I 1	2 C A	AB	244	1.776	0.022	3.24	0.08	S
107368	10.031	0.020	8.751	0.012		1.089	0.018	T	1.05	0.02	L		8.7931	0.0020	0.021	178		8.76	8.83					1							
107369	10.585	0.030	9.731	0.022		0.704	0.003	G	0.76	0.00	H		9.8269	0.0032	0.030	145		9.77	9.89					1							
107370	9.533	0.028	8.781	0.022		0.672	0.027	T	0.73	0.02	L		8.8165	0.0020	0.017	88		8.79	8.85		C			1							
107371	8.665	0.011	8.269	0.011		0.380	0.015	G	0.44	0.02	H		8.3259	0.0020	0.018	93		8.31	8.35		C			1							S
107372	9.404	0.014	8.823	0.013		0.515	0.008	G	0.59	0.01	H		8.8824	0.0018	0.017	124		8.85	8.91		C			1							
107373	10.680	0.055	8.951	0.022		1.442	0.047	T	1.44	0.07	L		8.9094	0.0033	0.021	79		8.88	8.94					1							
107374	6.250	0.003	5.983	0.003		0.312	0.007	G	0.35	0.03	C		6.0161	0.0006	0.007	130		6.00	6.03			21449+6228	I 1	1							S
107375	9.345	0.020	8.992	0.022		0.335	0.028	T	0.39	0.04	L		9.0646	0.0027	0.018	51		9.04	9.10		C			1							
107376											T		11.5052	0.0097	0.081	119		11.34	11.63		U			1 S							G
107377	10.689	0.032	10.041	0.028		0.610	0.005	G	0.68	0.00	H		10.0570	0.0027	0.027	154		10.02	10.10		C			1 S							
107378	9.056	0.012	9.096	0.016		−0.032	0.018	T	−0.01	0.02	L		9.1071	0.0015	0.016	127		9.08	9.14		C			1							
107379	8.850	0.014	7.182	0.007		1.410	0.015	G	1.39	0.02	H		7.1858	0.0009	0.008	84		7.17	7.20					1							S
107380	4.294	0.002	4.332	0.002		−0.053	0.005	G	−0.05	0.02	A		4.3337	0.0004	0.004	88		4.33	4.34		C	21449−3302	I 1	1							S
107381	10.751	0.043	10.076	0.037		0.637	0.005	G	0.70	0.00	H		10.1190	0.0025	0.025	115		10.08	10.17		C			1							
107382	6.503	0.004	5.203	0.003		1.108	0.001	G	1.02	0.03	C		5.2628	0.0009	0.006	85		5.25	5.27					1							S
107383	9.987	0.022	8.787	0.014	*	1.027	0.020	T	1.00	0.02	L *		8.8124	0.0014	0.015	110	*	8.79	8.84		D	21450+5554	H 1	2 C A	AB	214	0.571	0.011	2.41	0.06	
107384	9.574	0.021	7.688	0.009		1.567	0.018	T	1.59	0.02	L		7.6337	0.0012	0.013	77		7.61	7.66		C			1							S
107385	11.097	0.054	9.969	0.031		0.963	0.049	T	1.01	0.04	L		9.9356	0.0028	0.025	147		9.87	9.98		U			1 S							
107386	8.476	0.006	8.146	0.007		0.324	0.015	G	0.38	0.02	H		8.1980	0.0012	0.017	291		8.17	8.23					1							S
107387	9.738	0.016	9.865	0.027		−0.110	0.028	T	−0.09	0.03	L		9.8552	0.0027	0.031	190		9.81	9.92		U			1							G
107388	10.003	0.028	9.184	0.022		0.703	0.003	G	0.75	0.00	H		9.2411	0.0030	0.018	78		9.21	9.27					1							
107389	10.334	0.026	9.806	0.025		0.504	0.027	T	0.58	0.03	L		9.8495	0.0031	0.019	121		9.81	9.88					1							
107390						1.500	0.510	G	5.00	0.96	Q		8.6052	0.0418	0.684	20		8.53	10.97	330.70	P 1 B			1 S							G P
107391	9.583	0.015	8.929	0.013		0.607	0.017	T	0.68	0.01	L		8.9981	0.0016	0.020	213		8.96	9.03		C			1							
107392	7.810	0.008	7.398	0.009		0.397	0.015	G	0.46	0.02	H		7.4410	0.0011	0.007	84		7.43	7.46		C			1							S
107393											T		11.9690	0.0087	0.063	78		11.87	12.10					1 S							G
107394	8.459	0.011	8.306	0.013		0.161	0.015	G	0.18	0.01	H		8.3359	0.0027	0.016	74		8.31	8.37		C			1							S
107395						1.202	0.012	G	1.34	0.02	I		11.3083	0.0070	0.041	71		11.23	11.38		C			1							G
107396	9.380	0.017	8.910	0.017	A	0.436	0.039	G	0.50	0.04	H		8.9966	0.0278	0.030	115	A	8.94	9.04		U	21452+5431	H 1	2 C D	AB	61	19.791	0.067	2.68	0.30	D
107397	9.109	0.011	8.394	0.010		0.657	0.012	T	0.72	0.01	L		8.4613	0.0014	0.015	176		8.44	8.49					1							S
107398	8.867	0.012	6.619	0.004		1.901	0.000	G	1.92	0.09	H		6.4881	0.0019	0.015	122		6.46	6.51		U 2			1							S
107399	10.106	0.028	9.313	0.022		0.703	0.027	T	0.76	0.02	L		9.3613	0.0018	0.018	77		9.33	9.40		C	21452−3139	I 1	1 S							
107400	12.267	0.237	10.757	0.101		1.243	0.197	G	1.20	0.19	R		10.7687	0.0054	0.041	72		10.66	10.84					1 X S							G

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
107401	21 45 13.66	+14 55 13.3	9.26	H	326.306 912 19	+14.920 373 08		−0.49	4.12	−6.50	1.36	1.19	1.65	1.81	1.54	+27	−12	− 5	− 4	+ 0	−31	+ 1	− 1	−28	+36	0	−0.41
107402	21 45 14.53	+53 30 36.5	8.97	H	326.310 536 95	+53.510 129 06		1.83	9.77	2.53	0.67	0.71	0.88	0.78	0.76	− 9	+ 1	−14	− 9	+ 6	−11	+ 4	−10	+20	+ 8	0	−0.25
107403	21 45 15.98	−26 50 38.7	11.12	G	326.316 572 10	−26.844 091 53		15.21	−172.08	−172.45	1.99	1.47	2.41	2.34	1.55	+42	−11	−22	−19	−26	+31	−21	− 4	+ 0	+41	0	−1.99
107404	21 45 17.15	−13 40 52.1	11.92	H	326.321 456 17	−13.681 140 88	B	−15.75	8.72	33.92	72.32	66.44	42.52	64.28	42.85	+37	+ 2	−23	+ 5	− 9	+41	− 2	− 9	+24	+27	2	0.60
107405	21 45 17.42	−47 10 30.1	9.18	H	326.322 570 29	−47.175 024 45		6.13	−14.16	−22.89	0.78	0.58	1.23	0.93	0.63	+34	−10	− 2	+11	+ 2	+10	+11	+48	−14	+15	1	0.31
107406	21 45 17.79	−46 27 20.0	9.08	H	326.324 105 40	−46.455 553 80		7.41	−28.81	−31.40	0.77	0.64	1.38	0.93	0.72	+44	−22	+ 4	+16	+27	+ 7	+32	+61	−11	+38	0	−0.58
107407	21 45 18.39	−13 40 33.4	8.58	H	326.326 609 26	−13.675 944 37	A	0.50	−2.77	3.58	2.98	2.49	2.91	4.40	2.72	+40	−19	−28	+14	−16	+31	−16	−20	+29	+28	2	0.60
107408	21 45 18.65	+65 49 59.1	10.73	G	326.327 700 44	+65.833 084 68		−1.13	2.99	−4.71	1.33	1.25	1.42	1.75	1.40	− 1	+ 1	+ 8	+11	+11	+ 5	+ 8	− 7	+ 6	− 9	0	−0.37
107409	21 45 18.67	−49 29 56.0	6.46	G	326.327 794 80	−49.498 876 70		7.82	71.18	47.71	0.62	0.39	0.83	0.64	0.40	+24	+ 6	+ 4	−17	+18	+16	+14	+35	− 1	+30	0	−1.06
107410	21 45 20.92	+32 46 50.6	7.64	H	326.337 176 13	+32.780 712 09		9.09	19.20	−17.00	0.59	0.52	0.87	0.73	0.67	−37	+24	−26	+10	+11	+ 3	+20	−28	+22	−22	1	−0.73
107411	21 45 21.18	+26 59 58.3	7.30	H	326.338 255 52	+26.999 517 50		4.33	6.34	2.77	0.58	0.71	0.88	0.62	0.69	+ 6	+ 3	−45	− 4	+ 3	− 4	+ 2	−35	+38	+ 8	9	1.42
107412	21 45 21.85	−12 47 00.1	6.69	H	326.341 036 47	−12.783 353 31		25.70	93.55	0.40	0.78	0.50	0.87	1.10	0.62	+11	+ 5	− 1	+ 7	+ 9	+30	+10	+ 0	+32	+21	0	1.00
107413	21 45 22.35	−00 12 38.0	8.21	H	326.343 138 55	−00.210 552 71		2.70	−23.72	−25.08	0.94	0.66	1.17	1.13	0.68	+37	−13	−18	− 1	−11	+36	− 8	−23	+35	+46	0	1.40
107414	21 45 22.71	−29 04 58.2	10.47	G	326.344 605 02	−29.082 834 68		5.28	2.62	−3.14	1.51	1.05	1.91	1.84	1.05	+22	+ 2	−16	+ 6	−31	+47	−25	+ 5	+ 9	+13	0	−1.06
107415	21 45 23.54	−41 59 01.7	9.13	H	326.348 072 94	−41.983 806 86		3.40	53.05	−57.09	1.36	0.71	1.50	1.82	0.75	+ 2	+14	− 2	+34	−13	+29	− 9	+54	−12	−15	0	1.08
107416	21 45 25.03	−67 06 12.8	8.14	1 H	326.354 288 02	−67.103 548 44		1.20	−2.38	−1.90	0.58	0.59	0.89	0.67	0.63	−17	−11	− 8	− 5	+ 8	+ 6	+ 9	− 5	− 9	−19	1	−0.22
107417	21 45 25.90	−50 35 55.4	9.81	H	326.357 918 26	−50.598 710 36		3.13	6.92	−2.57	1.07	0.80	1.61	1.29	0.90	+20	− 8	+ 5	+10	+14	+ 1	+14	+38	−17	+23	1	1.07
107418	21 45 26.93	+61 07 14.9	4.25	1 H	326.362 205 34	+61.120 810 43		0.64	−3.08	−1.86	0.43	0.40	0.47	0.43	0.39	−12	+ 3	+17	+14	+13	− 1	+15	− 3	− 4	− 3	2	1.96
107419	21 45 27.36	+24 32 13.4	8.48	H	326.363 982 45	+24.537 063 93		5.44	−10.25	−13.88	0.83	0.91	1.13	1.00	1.08	+16	+ 5	−37	− 1	+ 8	−10	+ 7	−18	+19	+25	0	0.34
107420	21 45 27.93	+72 09 58.5	7.50	H	326.366 366 55	+72.166 256 26		3.16	−14.38	−5.55	0.49	0.48	0.55	0.57	0.48	− 6	−17	+ 4	− 4	+ 1	+ 8	+ 0	−10	+12	+11	0	−1.50
107421	21 45 27.95	+34 14 25.0	11.77	2 H	326.366 474 24	+34.240 279 30		9.64	141.20	113.89	1.77	2.29	3.76	2.12	3.02	− 1	− 3	−19	+ 2	+ 2	−21	− 1	−16	+28	+ 6	3	2.04
107422	21 45 28.65	−13 38 31.3	8.92	H	326.369 383 45	−13.642 014 45		12.75	33.84	−21.52	1.45	0.84	1.69	2.66	1.14	+ 2	+ 9	−13	+ 8	+ 4	+46	+14	+25	+32	+ 6	0	0.42
107423	21 45 28.81	−71 00 31.8	6.02	H	326.370 021 72	−71.008 821 72		4.40	13.09	−11.43	0.42	0.40	0.57	0.45	0.43	−17	−13	+ 0	− 7	− 5	+ 5	− 5	+ 2	+ 4	−25	0	1.14
107424	21 45 28.96	−02 57 00.4	8.28	G	326.370 661 93	−02.950 098 76		8.05	14.94	−14.54	0.95	0.59	1.03	1.26	0.65	+28	+12	− 5	−14	− 9	+11	− 9	+ 2	+ 8	+40	0	−1.62
107425	21 45 28.99	−28 07 36.7	7.38	H	326.370 776 24	−28.126 847 75		3.34	18.32	−18.05	0.81	0.55	0.92	0.87	0.56	+34	− 4	−10	−31	−21	+27	−19	− 6	− 5	+30	0	1.28
107426 H	21 45 29.39	+67 45 04.7	8.31	H	326.372 446 43	+67.751 308 63	A	0.62	3.45	−0.84	1.84	1.56	1.26	1.83	1.18	−14	−15	+23	+ 1	+17	+ 5	+ 9	+13	+ 1	+ 7	1	−1.16
107427	21 45 29.68	−21 33 29.9	10.95	H	326.373 650 17	−21.558 295 12		47.82	122.84	−94.80	26.65	20.18	32.04	30.80	21.64	+39	−17	−16	−27	−29	+39	−26	+ 4	+14	+37	5	
107428	21 45 30.52	−08 24 35.1	10.39	G	326.377 180 16	−08.409 750 16		−0.40	−0.76	−17.00	1.98	1.03	2.12	2.10	0.97	+31	−17	−16	−40	− 8	+39	− 8	+12	+ 9	+38	0	−0.22
107429	21 45 30.65	+40 25 31.1	8.84	H	326.377 704 99	+40.425 292 53		3.66	−1.01	−7.03	0.64	0.74	1.05	0.72	0.89	−12	+ 2	−12	+11	+15	−15	+15	+11	− 9	0	0.21
107430	21 45 30.74	+32 34 52.5	9.64	H	326.378 098 72	+32.581 242 66		3.20	4.71	−1.71	0.85	0.68	1.25	1.05	0.92	−38	+27	−17	+30	+ 4	+ 0	+16	−16	+26	−23	0	−0.38
107431	21 45 33.44	−28 43 28.8	7.64	H	326.389 328 19	−28.724 678 77		15.35	100.67	−32.23	0.86	0.59	1.00	1.05	0.60	+26	− 3	+ 1	+ 1	−22	+27	−20	− 5	+17	+25	0	0.22
107432	21 45 34.24	+37 24 03.2	8.52	H	326.392 657 27	+37.400 895 04		2.11	4.59	−5.39	0.51	0.60	1.00	0.57	0.70	−40	+ 9	−14	+ 3	+25	−17	+26	+ 5	+22	−47	0	0.40
107433	21 45 34.70	−43 56 26.5	10.43	H	326.394 604 12	−43.940 699 75		5.05	28.33	−7.33	1.56	0.91	1.67	1.88	1.00	+10	− 3	− 1	−20	+ 4	+ 4	+11	+51	− 8	− 2	0	0.18
107434	21 45 34.87	−04 25 57.5	8.19	H	326.395 301 53	−04.432 649 14		5.34	−10.88	−0.94	0.91	0.60	1.02	1.13	0.64	+33	−19	+ 2	−26	+ 6	+29	− 1	+17	+ 6	+45	0	0.80
107435	21 45 35.46	+60 30 45.3	8.98	H	326.397 747 31	+60.512 589 81		2.76	8.07	34.82	0.73	0.72	0.86	0.79	0.75	−15	− 8	+10	− 8	+ 8	+ 6	+ 9	−17	+ 7	+ 4	1	0.55
107436	21 45 36.39	+33 06 51.5	8.21	G	326.401 623 88	+33.114 314 14		5.98	−11.34	−20.93	0.58	0.60	1.05	0.58	0.75	−30	+16	−29	−27	+19	−12	+21	−27	+31	−10	2	2.07
107437	21 45 38.03	+42 09 57.4	8.23	H	326.408 472 78	+42.165 949 93		3.93	−11.27	9.37	0.62	0.66	0.92	0.73	0.79	−36	+12	−12	+14	− 3	− 1	+ 0	+11	+21	−42	0	0.40
107438 H	21 45 38.47	−34 50 47.2	9.74	H	326.410 285 18	−34.846 456 49	*	7.43	107.92	14.05	3.64	1.88	2.23	2.15	1.20	− 5	+12	−21	+10	−11	+42	+ 7	+18	− 6	+ 5	1	−0.23
107439	21 45 40.03	−44 08 23.3	8.49	H	326.416 775 67	−44.139 795 36		2.97	31.56	−11.38	1.06	0.56	1.11	1.22	0.60	+ 6	− 6	− 3	−22	+ 0	+13	+ 7	+45	− 7	− 5	2	1.81
107440	21 45 40.79	+41 24 38.9	9.15	H	326.419 963 72	+41.410 799 78		1.38	6.42	−0.83	0.75	0.80	1.20	0.86	0.96	−32	+ 0	−13	+ 8	+ 8	+33	+ 4	− 3	+25	−41	0	1.13
107441	21 45 41.39	−46 25 21.9	10.06	H	326.422 467 52	−46.422 754 89		1.54	14.45	−36.27	1.02	0.78	1.66	1.16	0.84	+34	−16	+12	+11	+15	+15	+19	+54	− 2	+26	2	0.22
107442	21 45 42.37	+62 18 30.0	7.48	H	326.426 537 47	+62.308 346 82		0.68	−2.32	−4.12	0.54	0.48	0.56	0.59	0.52	+ 4	+ 1	+ 7	+36	+13	− 4	+16	+ 8	+ 5	+12	0	0.95
107443	21 45 44.06	−69 21 49.3	7.87	2 H	326.433 598 51	−69.363 693 14		10.12	28.90	−14.65	0.60	0.58	0.86	0.72	0.70	−10	− 9	+ 0	+12	+ 0	−12	+ 0	+30	− 4	−11	1	−0.13
107444	21 45 44.09	+01 40 09.8	8.62	H	326.433 703 91	+01.669 397 24		0.18	12.50	−9.88	1.04	0.66	1.19	1.47	0.78	+24	+ 7	−14	+23	−16	+36	− 2	−20	+36	+48	0	1.01
107445	21 45 44.45	+35 51 26.2	6.44	H	326.435 195 86	+35.857 283 91		6.53	91.76	11.06	0.41	0.45	0.71	0.48	0.58	− 5	+ 1	−23	− 5	+ 1	−19	− 2	−25	+25	+ 4	1	0.22
107446	21 45 44.68	+28 52 18.3	8.26	H	326.436 148 99	+28.871 762 61		3.82	−8.63	−7.12	0.82	0.66	1.02	0.86	0.72	−18	+18	−26	+24	−10	− 6	− 1	−53	+39	−11	0	−0.78
107447	21 45 46.11	+07 59 15.2	7.23	H	326.442 139 12	+07.987 544 85		13.22	−77.60	3.53	0.72	0.56	0.88	0.86	0.62	+18	− 7	−14	− 4	+ 2	+29	+ 5	−30	+31	+31	0	1.10
107448	21 45 48.26	+15 45 27.9	7.70	H	326.451 091 62	+15.757 740 15		4.99	47.59	−15.64	0.85	0.75	1.00	1.25	0.82	+37	− 9	−15	−32	−11	+20	−11	−28	+10	+26	0	0.08
107449	21 45 48.35	+74 34 44.7	8.45	H	326.451 452 94	+74.579 084 05		3.10	−4.25	−0.88	0.64	0.57	0.68	0.77	0.67	−16	+ 3	+ 9	−17	+ 7	−15	+ 8	− 5	+10	−11	1	−0.79
107450	21 45 48.36	−15 08 00.1	8.77	H	326.451 480 71	−15.133 356 76		7.97	26.02	−36.73	1.22	0.83	1.42	2.03	1.10	+10	+13	− 5	+16	− 1	+43	+ 2	+ 2	+19	+ 5	0	−0.86
107451	21 45 49.02	+28 37 23.6	8.69	H	326.454 263 45	+28.623 214 36		5.29	8.88	−8.97	0.82	0.88	1.08	0.93	0.90	− 3	+16	− 9	+16	− 9	+ 7	− 7	−65	+21	− 5	0	−0.04
107452	21 45 49.83	−59 47 40.5	9.65	H	326.457 622 54	−59.794 590 73		7.55	−102.39	−76.27	0.92	0.89	1.61	1.18	0.87	− 9	− 5	−35	−17	+13	+ 3	+13	+ 5	+18	− 7	0	−0.86
107453	21 45 49.98	−41 13 47.0	8.89	H	326.458 240 41	−41.229 723 25		4.66	33.16	−28.22	1.09	0.68	1.43	1.29	0.71	+12	+16	−16	+20	− 6	+33	− 2	+52	−29	− 3	0	2.52
107454 H	21 45 51.20	−17 59 13.9	8.47	H	326.463 337 01	−17.987 204 43	A	18.94	52.70	−178.78	1.58	1.17	1.65	1.99	1.21	+44	−14	−23	− 8	− 8	+19	− 3	+ 1	+ 1	+26	1	0.39
107455	21 45 51.71	+53 41 34.6	9.53	H	326.465 441 64	+53.692 944 03		2.09	1.55	3.50	0.77	0.74	0.96	0.89	0.82	+ 2	+ 1	−12	−11	− 1	−13	− 3	− 7	+21	+ 8	0	−1.06
107456	21 45 52.16	+50 17 33.0	9.02	2 H	326.467 351 72	+50.292 486 45		1.01	−1.02	−1.88	0.75	0.71	0.93	0.88	0.81	−12	− 5	− 3	− 8	+ 1	+ 5	+ 0	− 6	+12	− 3	0	0.54
107457	21 45 52.43	+70 20 52.3	8.00	H	326.468 461 52	+70.347 865 56		26.33	120.47	80.63	0.58	0.50	0.59	0.74	0.56	−13	− 4	+ 8	− 6	+ 8	+ 0	+ 7	−11	+ 3	−18	0	1.27
107458 H	21 45 52.68	−36 39 31.4	10.30	H	326.469 480 11	−36.658 734 67	A	0.80	−1.70	−13.08	3.87	2.61	3.11	3.57	1.64	+13	+ 1	− 1	− 6	−19	+26	− 3	+34	−18	−32	0	−0.95
107459	21 45 53.33	+78 13 58.5	7.17	H	326.472 202 60	+78.232 917 78		4.12	−2.90	−15.14	0.45	0.45	0.50	0.52	0.48	− 1	− 3	+ 6	+16	− 5	− 2	− 4	− 1	+12	+ 6	0	0.34
107460	21 45 53.42	−54 01 11.1	9.82	G	326.472 583 05	−54.019 749 71		8.25	78.20	−223.51	1.16	1.00	1.74	1.73	1.07	+20	−10	−30	+19	+44	−27	+31	+52	−33	+34	0	−1.12
107461 H	21 45 54.14	+11 52 36.6	8.79	H	326.475 600 79	+11.876 831 79	*	7.23	−80.14	−84.91	1.16	0.94	1.35	1.46	1.10	+20	+26	−13	−27	+ 6	−10	+ 8	+ 4	+20	+25	0	0.79
107462	21 45 56.45	+25 35 00.4	6.57	H	326.485 227 47	+25.583 433 33		5.04	13.18	−5.87	0.64	0.59	0.78	0.72	0.67	+ 4	+12	−33	−28	+ 4	+ 9	+10	−27	+31	+18	0	0.34
107463	21 45 57.53	−53 06 20.2	9.17	H	326.489 688 14	−53.105 613 27		6.94	−1.65	−10.72	0.96	0.74	1.30	1.47	0.83	+14	− 5	+ 2	+16	+ 9	−14	+19	+48	− 2	−11	0	0.76
107464 H	21 45 59.78	+36 25 53.7	8.89	H	326.499 080 50	+36.431 571 93	A	3.08	−41.14	−31.13	1.26	1.69	1.90	1.20	1.43	− 7	+12	−13	+ 5	+ 6	−15	+12	−18	+42	− 7	1	−0.26
107465	21 46 00.23	+50 54 37.9	9.39	G	326.500 977 46	+50.910 526 48		6.60	−22.55	75.23	0.81	0.88	1.07	0.96	1.12	+ 6	+ 0	+ 3	−18	−11	− 7	−12	− 6	+25	+13	0	0.15
107466	21 46 01.82	+59 31 34.8	9.41	H	326.507 592 02	+59.526 344 54		0.16	12.33	21.81	0.90	0.88	0.96	1.00	1.02	− 3	+13	+16	− 3	+22	+ 9	+15	−11	−22	− 6	0	3.32
107467	21 46 02.07	−36 45 45.8	9.88	H	326.508 613 68	−36.762 722 03		3.52	9.91	13.24	1.20	0.80	1.51	1.34	0.80	+ 9	− 8	−14	− 4	− 6	+38	+ 5	+48	−15	− 5	0	1.84
107468	21 46 02.27	+45 06 21.0	9.17	H	326.509 440 96	+45.105 838 84	A	1.26	−0.62	−0.41	1.34	1.27	1.54	1.38	1.49	− 5	+23	− 5	+21	− 4	− 3	+ 0	+11	+18	−13	1	0.60
107469	21 46 02.82	+50 40 26.9	7.03	G	326.511 739 36	+50.674 141 01		2.89	10.88	4.07	0.52	0.48	0.64	0.59	0.56	− 7	− 1	− 2	−23	− 1	+ 8	− 2	−15	+18	+ 4	0	−0.42
107470	21 46 03.13	−32 19 26.9	8.71	H	326.513 038 98	−32.324 149 29		3.24	27.61	5.37	1.16	0.69	1.30	1.23	0.76	+10	+19	−18	−12	− 9	+28	−10	+19	−10	+20	0	−0.25
107471	21 46 03.69	+42 23 21.3	8.64	G	326.515 392 96	+42.389 237 72		5.14	38.05	19.56	0.65	0.66	0.93	0.74	0.83	−31	+ 8	− 8	+25	− 5	+ 3	− 3	+10	+20	−35	0	−2.58
107472	21 46 04.36	+22 56 56.0	5.29	1 G	326.518 160 71	+22.948 885 49		2.89	9.07	−2.35	0.63	0.57	0.78	0.75	0.68	+22	+ 5	−26	− 3	− 4	−15	− 7	−39	+30	+17	0	0.27
107473	21 46 04.65	+79 01 06.9	7.82	2 H	326.519 365 67	+79.018 573 10		1.87	18.08	−2.28	0.55	0.53	0.60	0.61	0.54	− 7	−15	+ 5	+14	− 3	− 2	− 5	−16	+14	− 9	0	0.62
107474	21 46 04.70	+65 56 25.3	8.46	G	326.519 577 96	+65.940 351 53		3.45	24.95	13.77	0.65	0.63	0.71	0.87	0.69	− 7	+ 1	+16	+19	+11	+12	+ 6	−10	− 6	−15	1	−0.71
107475	21 46 07.48	−06 17 56.2	8.41	H	326.531 155 43	−06.298 940 40		1.35	28.86	−3.11	1.18	0.62	1.15	1.29	0.59	+29	− 1	− 3	−46	− 1	+17	− 3	+ 9	+15	+33	2	0.73
107476	21 46 08.58	−54 18 46.2	11.25	G	326.535 734 89	−54.312 826 12		20.79	148.12	99.08	2.01	1.43	2.88	2.82	1.68	+17	−15	−27	+ 9	+36	−29	+25	+49	−40	+39	3	0.30
107477	21 46 09.21	+80 42 34.9	8.31	1 H	326.538 362 53	+80.709 705 01		5.32	26.46	8.47	0.62	0.56	0.71	0.71	0.67	− 7	−26	+ 8	+ 4	+ 4	− 2	+ 9	+ 4	−23	− 5	0	0.40
107478	21 46 09.35	−15 14 39.2	9.43	2 G	326.538 943 26	−15.244 231 63		3.75	−1.29	−59.85	1.57	0.92	1.86	2.78	1.18	+ 4	+11	− 6	+ 4	− 9	+35	+ 0	+ 5	+34	−10	0	0.06
107479	21 46 09.61	−45 09 17.4	8.98	G	326.540 046 57	−45.154 836 01		4.46	15.05	−7.16	0.88	0.76	1.26	0.81	0.88	+39	−25	−10	− 8	+36	+ 7	+39	+69	−21	+40	0	0.13
107480	21 46 11.07	+57 47 33.7	9.53	G	326.546 107 16	+57.792 701 42	A	2.55	−3.73	−4.16	2.87	2.66	2.51	2.71	2.69	+ 3	+ 0	− 6	− 3	+22	− 4	+25	− 9	+ 8	+36	4	2.55
107481	21 46 11.65	+57 47 52.9	10.23	H	326.548 524 85	+57.798 037 30	B	8.68	5.32	6.56	19.57	17.12	5.37	12.78	11.59	+ 4	+ 0	− 4	+ 1	+26	− 2	+29	− 5	+10	+32	4	2.55
107482	21 46 12.32	+15 59 54.1	9.11	H	326.551 316 59	+15.998 365 21		1.45	1.85	−7.33	1.26	1.15	1.52	1.99	1.47	+22	+15	−17	−58	+10	−27	− 2	−45	− 6	+23	0	−1.10
107483	21 46 12.69	+37 23 23.8	8.42	H	326.552 858 18	+37.389 950 48		1.27	4.69	−3.00	0.52	0.62	1.04	0.59	0.73	−42	+10	−11	+ 0	+25	−21	+26	+ 0	+30	−47	0	−0.18
107484	21 46 13.05	−24 49 02.0	7.85	H	326.554 356 83	−24.817 222 55		4.74	−23.57	−7.21	0.90	0.62	1.22	1.26	0.67	+28	−13	−27	+16	−21	+54	− 9	+ 3	+37	+40	0	1.13
107485	21 46 14.59	−47 24 11.2	7.66	H	326.560 796 44	−47.403 123 54		2.11	−11.41	−5.74	0.62	0.48	1.03	0.69	0.48	+41	−21	− 9	+ 6	+ 4	+ 9	+10	+33	− 7	+27	0	−0.57
107486	21 46 14.71	−71 05 04.9	8.28	H	326.561 287 21	−71.084 691 49		3.45	12.39	−10.80	0.59	0.59	0.82	0.62	0.62	−13	− 5	− 7	− 8	−11	+ 4	−11	− 6	+ 3	−23	0	−1.25
107487	21 46 16.26	−09 16 33.4	6.00	2 H	326.567 744 21	−09.275 954 20		2.64	17.60	7.85	0.79	0.44	0.85	0.92	0.43	+23	−26	+ 8	−28	+17	+35	+ 1	+36	+14	+44	1	1.16
107488	21 46 16.59	+43 03 38.7	6.52	H	326.569 132 48	+43.060 748 86		2.51	15.84	9.11	0.45	0.44	0.63	0.50	0.54	−23	+23	− 6	+ 9	−10	+13	− 4	+17	+ 9	−42	1	0.57
107489	21 46 16.81	+25 56 04.9	7.80	2 H	326.570 040 65	+25.934 699 66		1.69	−5.37	−13.60	0.72	0.76	1.05	0.81	0.91	+ 2	+15	−36	−17	+15	− 6	+19	−28	+42	+ 5	0	−0.30
107490	21 46 17.63	−65 18 28.4	9.25	2 H	326.573 466 13	−65.307 888 17		1.47	11.65	−2.53	0.79	0.82	1.26	0.84	0.86	−18	− 2	−10	−30	+ 8	+ 4	+10	−16	−12	−26	0	−0.25
107491	21 46 18.02	−12 35 54.9	7.54	H	326.575 073 19	−12.598 594 19		3.65	26.17	−23.94	0.83	0.53	0.96	1.10	0.55	+38	− 7	+ 3	− 1	+11	+19	+ 7	+14	+17	+45	0	−1.69
107492	21 46 18.74	+46 27 10.9	9.10	H	326.578 093 34	+46.453 034 91		−0.19	−2.79	−3.68	0.75	0.74	1.04	0.97	0.90	−16	+12	+ 5	+ 9	− 4	+ 2	+ 0	+ 1	+26	−17	0	0.60
107493	21 46 19.30	−34 00 37.8	10.15	H	326.580 420 96	−34.010 493 31		3.21	26.80	−57.64	1.49	0.99	1.68	1.70	1.14	+17	−19	− 9	−18	− 3	+28	− 5	+23	+12	+24	0	2.91
107494	21 46 19.45	+14 37 55.9	10.88	H	326.581 045 71	+14.632 200 56		19.05	−114.08	−137.71	2.02	1.78	2.33	2.60	2.20	+29	−11	−15	− 5	−12	−14	−13	−28	−10	+30	0	0.46
107495	21 46 19.46	+09 20 32.7	7.69	H	326.581 076 40	+09.342 415 45		2.22	13.10	0.96	0.77	0.59	0.95	1.16	0.69	+ 2	+10	−15	+31	−16	+49	− 4	−11	+33	+18	0	1.21
107496	21 46 19.73	−62 32 58.9	6.91	H	326.582 221 42	−62.549 703 61		5.78	39.69	−37.45	0.42	0.44	0.74	0.51	0.50	− 6	−22	−13	+27	+ 0	− 4	+ 2	+20	−14	−14	1	−0.23
107497	21 46 20.93	+48 02 27.8	9.33	H	326.587 191 30	+48.041 059 82		2.11	−1.60	−2.52	0.77	0.74	0.96	1.04	0.97	−18	−12	+ 2	+15	+ 3	− 7	+ 2	+ 5	+ 4	−19	1	0.18
107498	21 46 21.47	+22 56 46.8	7.62	H	326.589 456 82	+22.946 334 80		7.61	1.68	−17.07	0.89	1.02	0.96	1.16	1.44	+39	+ 2	−20	− 3	−37	+ 0	−34	+70	+17	+47

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
107401	10.536	0.042	9.370	0.026		1.000	0.038	T	0.98	0.03	L	9.4240	0.0027	0.019	60		9.38	9.45		D			1							
107402	9.010	0.012	8.947	0.015		0.063	0.018	T	0.07	0.02	L	8.9976	0.0020	0.016	125		8.97	9.03		C			1							
107403						0.872	0.005	G	0.92	0.01	H	11.2631	0.0044	0.029	76		11.20	11.32		C			1							G
107404	12.091	0.261	11.800	0.307	B						T	11.9057	0.2767			B				D	21453−1341	I 2	1 C I C							D
107405	9.743	0.014	9.233	0.013		0.489	0.014	T	0.56	0.01	L	9.2835	0.0014	0.019	252		9.25	9.32					1							
107406	9.681	0.013	9.123	0.012		0.527	0.013	T	0.60	0.01	L	9.1906	0.0016	0.017	221		9.16	9.22		C			1							S
107407	10.333	0.045	8.711	0.021	A	1.358	0.039	T	1.33	0.04	L	8.7300	0.0207	0.020	49	A	8.70	8.76		R	21453−1341	I 2	1 C P C							
107408	12.651	0.337	11.153	0.138		1.309	0.008	G	1.27	0.01	H	10.9090	0.0031	0.033	104		10.85	10.97		C			1							D
107409	7.947	0.006	6.599	0.004		1.148	0.003	G	1.15	0.02	A	6.6236	0.0007	0.009	192		6.61	6.64		C			1							S
107410	7.967	0.006	7.677	0.006		0.276	0.008	T	0.31	0.01	L	7.7180	0.0008	0.012	198		7.70	7.74					1							S
107411	7.246	0.006	7.298	0.009		−0.039	0.015	G	−0.02	0.01	H	7.2993	0.0014	0.010	83		7.28	7.32					1							S
107412	7.194	0.007	6.728	0.008		0.439	0.007	G	0.51	0.01	H	6.7861	0.0011	0.007	60		6.77	6.80		C			1							S
107413	9.551	0.019	8.294	0.012		1.066	0.018	T	1.03	0.01	L	8.3494	0.0014	0.014	82		8.33	8.38		C			1							
107414	11.064	0.067	10.443	0.059		0.521	0.015	G	0.59	0.02	H	10.5942	0.0041	0.030	73		10.51	10.64		C			1							G
107415	10.431	0.029	9.235	0.017		1.024	0.026	T	1.07	0.03	L	9.2657	0.0022	0.019	118		9.23	9.29		C			1							
107416	10.313	0.022	8.344	0.009		1.668	0.020	T	2.01	0.06	O	8.2271	0.0023	0.022	194		8.19	8.27		U			1							
107417	10.414	0.028	9.892	0.027		0.499	0.029	T	0.57	0.03	L	9.9202	0.0029	0.027	171		9.87	9.97					1							
107418	4.861	0.003	4.357	0.003		0.474	0.004	T	0.73	0.03	C	4.3911	0.0014	0.013	115		4.37	4.42		U 2			1							S
107419	9.026	0.014	8.529	0.014		0.503	0.015	G	0.58	0.02	H	8.5868	0.0018	0.018	89		8.56	8.63		C			1							
107420	7.633	0.006	7.517	0.007		0.112	0.009	T	0.13	0.01	L	7.5396	0.0010	0.010	125		7.51	7.55		C			1							S
107421											T	11.9059	0.0069	0.084	191		11.74	12.05		U			1 S							G
107422	9.603	0.028	8.983	0.025		0.574	0.028	T	0.65	0.03	L	9.0390	0.0027	0.018	48		9.00	9.07		C			1							
107423	5.897	0.002	6.000	0.003		−0.099	0.003	G	−0.08	0.00	H	5.9956	0.0006	0.006	156		5.99	6.01					1							S
107424	8.759	0.015	8.313	0.014		0.400	0.015	G	0.47	0.02	H	8.3756	0.0018	0.013	78		8.34	8.42		C			1							S
107425	9.370	0.018	7.555	0.008		1.510	0.016	T	1.54	0.02	L	7.5008	0.0012	0.012	87		7.48	7.52					1							S
107426	8.426	0.010	8.339	0.011	*	0.085	0.014	T	0.10	0.01	L	* 8.3406	0.0017	0.015	107	*	8.32	8.37		D	21455+6745	I 1	2 C A	AB	276	0.372	0.002	0.35	0.02	
107427	11.619	0.130	11.143	0.140		0.448	0.174	T	0.52	0.18	L	11.0451	0.0036	0.035	75		10.98	11.11					1 X							G G
107428	11.596	0.116	10.482	0.069		0.978	0.058	G	0.96	0.05	H	10.5479	0.0043	0.032	81		10.50	10.60					1							G
107429	10.129	0.019	8.941	0.012		1.018	0.018	T	0.99	0.01	L	9.0078	0.0019	0.021	172		8.97	9.04					1							
107430	9.916	0.018	9.663	0.020		0.241	0.025	T	0.27	0.03	L	9.7126	0.0020	0.024	187		9.67	9.76		C			1							G
107431	8.160	0.012	7.692	0.010		0.454	0.012	T	0.52	0.01	L	7.7428	0.0012	0.010	77		7.73	7.76		C			1							S
107432	8.420	0.007	8.514	0.009		−0.081	0.010	T	−0.06	0.01	L	8.4988	0.0014	0.019	261		8.47	8.53					1							S
107433	11.029	0.042	10.488	0.042		0.580	0.020	G	0.65	0.02	H	10.5559	0.0023	0.025	134		10.51	10.60					1							
107434	8.395	0.011	8.216	0.012		0.171	0.015	T	0.19	0.01	L	8.2533	0.0013	0.012	76		8.24	8.30					1							S
107435	10.545	0.035	9.116	0.018		1.206	0.031	T	1.17	0.03	L	9.1402	0.0016	0.014	113		9.12	9.17		C			1							
107436	8.756	0.009	8.269	0.008		0.486	0.015	G	0.56	0.02	H	8.3079	0.0014	0.015	214		8.28	8.34			21456+3307	I 1	1							S
107437	9.476	0.013	8.341	0.009		0.976	0.012	T	0.96	0.01	L	8.3927	0.0014	0.014	147		8.37	8.42					1							
107438	10.450	0.036	9.796	0.031	*	0.607	0.041	T	0.68	0.04	L	* 9.8740	0.0031	0.021	89	*	9.84	9.91		C	21456−3451	H 1	2 C D	AB	42	0.241	0.058	2.14	0.43	D
107439	10.305	0.025	8.657	0.011		1.378	0.022	T	1.35	0.03	L	8.6426	0.0013	0.015	126		8.62	8.67		C			1							
107440	9.220	0.012	9.139	0.015		0.080	0.018	T	0.09	0.02	L	9.1805	0.0019	0.020	141		9.15	9.22		C			1							
107441	10.451	0.023	10.103	0.026		0.337	0.031	T	0.39	0.04	L	10.1348	0.0020	0.024	202		10.09	10.18					1							
107442	7.740	0.007	7.515	0.008		0.246	0.005	G	0.28	0.01	H	7.5522	0.0009	0.011	121		7.54	7.57		C			1							S
107443	8.263	0.008	7.905	0.009		0.380	0.001	G	0.44	0.00	H	7.9551	0.0026	0.024	141		7.91	7.99		U 2			1							S
107444	10.069	0.029	8.720	0.017		1.143	0.026	T	1.11	0.02	L	8.7858	0.0020	0.015	82		8.75	8.82					1							
107445	7.717	0.005	6.555	0.004		0.997	0.005	T	0.98	0.00	L	6.6058	0.0006	0.007	182		6.59	6.62		C			1							S
107446	8.421	0.012	8.278	0.013		0.138	0.017	T	0.15	0.02	L	8.3140	0.0017	0.015	139		8.29	8.34		C			1							
107447	8.417	0.013	7.331	0.009		0.939	0.012	T	0.93	0.01	L	7.3923	0.0009	0.010	94		7.37	7.41					1							S
107448	8.925	0.015	7.801	0.010		0.968	0.014	T	0.95	0.01	L	7.8662	0.0012	0.014	82		7.84	7.89			21458+1546	I 1	1							S
107449	11.001	0.049	8.704	0.014		1.895	0.041	T	1.93	0.04	L	8.5336	0.0023	0.020	113		8.49	8.57		R			1 S							
107450	9.670	0.032	8.854	0.026		0.721	0.031	T	0.77	0.02	L	8.9072	0.0035	0.018	50		8.88	8.96		C			1							S
107451	8.733	0.015	8.711	0.019		0.025	0.022	T	0.04	0.02	L	8.7023	0.0023	0.021	134		8.67	8.73					1							
107452	10.530	0.026	9.749	0.021		0.694	0.025	T	0.75	0.02	L	9.7905	0.0026	0.033	153		9.74	9.86					1							
107453	9.785	0.018	8.955	0.014		0.731	0.017	T	0.78	0.01	L	9.0239	0.0019	0.020	118		8.99	9.06			21458−4114	I 1	1							S
107454	9.381	0.023	8.551	0.018	A	1.000	0.495	G	0.72	0.03	L	* 8.6072	0.0024	0.015	50	*	8.59	8.64		D	21459−1759	I 1	2 C A	AB	58	1.784	0.030	3.09	0.12	S
107455	9.731	0.018	9.545	0.023		0.178	0.027	T	0.20	0.03	L	9.5917	0.0025	0.021	122		9.56	9.63		C			1							G
107456	9.378	0.020	9.062	0.022		0.330	0.015	G	0.38	0.02	H	9.1012	0.0048	0.044	103		9.02	9.17		U 2			1							
107457	8.883	0.011	8.079	0.009		0.727	0.011	T	0.78	0.01	L	8.1459	0.0015	0.012	123		8.13	8.17		C			1							S
107458	11.014	0.050	10.374	0.043	*	0.594	0.057	T	0.66	0.05	L	* 10.4312	0.0030	0.026	114	*	10.36	10.47		D	21459−3640	I 1	2 C A	AB	108	0.458	0.010	0.93	0.04	
107459	7.141	0.005	7.168	0.006		−0.020	0.007	T	0.00	0.01	L	7.1746	0.0008	0.008	120		7.16	7.20		C			1							S
107460	10.535	0.029	9.900	0.026		0.599	0.013	G	0.67	0.01	H	9.9560	0.0028	0.030	135		9.89	10.00					1							
107461	9.591	0.027	8.840	0.022	*	0.686	0.028	T	0.74	0.02	L	* 8.9281	0.0023	0.019	55	*	8.86	8.97		D	21459+1153	I 1	2 C S A	BA	236	0.164	0.012	0.17	0.71	
107462	6.462	0.004	6.556	0.005		−0.081	0.006	T	−0.06	0.01	L	6.5440	0.0012	0.008	83		6.53	6.56					1							S
107463	9.689	0.018	9.191	0.017		0.480	0.019	T	0.55	0.02	L	9.2737	0.0021	0.016	128		9.24	9.31					1 G							
107464	9.514	0.015	8.951	0.014	*	0.527	0.019	T	0.60	0.02	L	* 9.0035	0.0027	0.026	170	*	8.96	9.04		D	21460+3626	H 1	2 C A	AB	179	0.463	0.010	2.10	0.06	
107465	10.441	0.036	9.498	0.025		0.800	0.015	G	0.83	0.01	H	9.5425	0.0023	0.021	115		9.51	9.58		C			1							G
107466	9.596	0.020	9.439	0.026		0.151	0.031	T	0.17	0.03	L	9.4632	0.0022	0.020	109		9.42	9.49		C			1 G							G
107467	10.431	0.032	9.976	0.033		0.443	0.036	T	0.51	0.04	L	9.9770	0.0029	0.020	108		9.94	10.01					1							
107468	9.210	0.015	9.192	0.020	A	0.021	0.023	T	0.04	0.02	L	9.1831	0.0078	0.020	119	A	9.16	9.22		C	21460+4506	I 1	2 C A	AB	55	10.029	0.034	3.14	0.14	
107469	6.949	0.005	7.026	0.006		−0.059	0.001	G	−0.04	0.00	H	7.0198	0.0008	0.009	115		7.00	7.03		C			1							S
107470	9.961	0.027	8.823	0.018		0.979	0.025	T	0.96	0.02	L	8.8791	0.0019	0.016	68		8.86	8.91					1							
107471	9.082	0.010	8.706	0.011		0.396	0.004	G	0.46	0.00	H	8.7239	0.0020	0.019	164		8.69	8.76					1							
107472	7.038	0.007	5.427	0.004		1.381	0.006	G	1.35	0.01	H	5.4378	0.0013	0.010	70		5.43	5.46		M			1							S
107473	10.244	0.026	8.058	0.009		1.847	0.023	T	2.74	0.05	O	7.7998	0.0155	0.149	118		7.68	8.06		U 2 C			1 S							P
107474	8.670	0.011	8.472	0.012		0.190	0.010	G	0.21	0.01	H	8.5080	0.0019	0.016	109		8.48	8.53					1 S							
107475	10.041	0.032	8.537	0.016		1.265	0.028	T	1.22	0.03	L	8.5760	0.0022	0.017	81		8.55	8.60					1 S							
107476						1.310	0.015	G	1.51	0.02	I	11.3663	0.0058	0.052	129		11.27	11.45					1							G
107477	8.659	0.011	8.334	0.011		0.309	0.015	T	0.35	0.02	L	8.3851	0.0016	0.017	127		8.35	8.41		U			1 G							
107478	11.563	0.148	9.628	0.044		1.643	0.034	G	2.71	0.08	I	9.6204	0.0115	0.048	50		9.55	9.70		U 2			1							
107479	10.488	0.023	9.100	0.012		1.167	0.002	G	1.13	0.00	I	9.1529	0.0017	0.019	184		9.13	9.19		C			1							
107480	10.010	0.023	9.601	0.025	A	0.450	0.015	G	0.52	0.02	H	9.6921	0.0248	0.092	131	A	9.48	9.80		D	21462+5748	I 2	1 C P A							G
107481	10.706	0.044	10.192	0.044	B	0.483	0.056	T	0.55	0.06	L	10.4181	0.0421			B				D	21462+5748	I 2	1 C I A							
107482	10.981	0.054	9.283	0.020		1.418	0.045	T	1.40	0.07	L	9.2518	0.0021	0.016	100		9.22	9.28					1							
107483	8.374	0.006	8.416	0.008		−0.034	0.009	T	−0.01	0.01	L	8.4126	0.0013	0.017	240		8.38	8.44					1							S
107484	8.181	0.009	7.877	0.012		0.289	0.014	T	0.33	0.02	L	7.9272	0.0011	0.009	79		7.91	7.95		C			1							S
107485	9.634	0.013	7.824	0.006		1.494	0.020	G	1.54	0.02	A	7.7828	0.0011	0.014	220		7.76	7.81					1							S
107486	8.227	0.008	8.271	0.010		−0.037	0.011	T	−0.01	0.01	L	8.2771	0.0014	0.017	157		8.25	8.31		C			1							S
107487	8.135	0.010	6.214	0.006		1.629	0.010	T	2.24	0.05	O	6.0539	0.0076	0.040	88		5.96	6.08	30.59	P 1 A			1 S							S
107488	6.854	0.004	6.561	0.004		0.278	0.006	T	0.32	0.01	L	6.5960	0.0005	0.006	144		6.58	6.61					1							S
107489	9.816	0.026	7.963	0.011		1.541	0.022	T	1.60	0.05	L	7.9167	0.0038	0.027	83		7.88	7.96		U 2			1							
107490	13.024	0.277	9.579	0.018		2.450	0.510	G	2.45	0.52	J	9.2781	0.0103	0.126	204		9.01	9.44	284.40	P 1 A			1							
107491	8.810	0.016	7.654	0.011		0.993	0.015	T	0.97	0.01	L	7.7026	0.0015	0.012	95		7.68	7.72					1							S
107492	9.088	0.014	9.097	0.019		−0.004	0.022	T	0.02	0.02	L	9.1119	0.0026	0.024	108		9.07	9.15					1							
107493	10.994	0.056	10.261	0.046		0.672	0.058	T	0.73	0.05	L	10.2898	0.0043	0.030	85		10.24	10.33		C	21463−3401	I 1	1 S							
107494						1.640	0.143	G	2.70	0.35	I	10.8640	0.0055	0.032	52		10.80	10.93		C			1							G
107495	7.586	0.009	7.669	0.011		−0.076	0.002	G	−0.06	0.00	H	7.6708	0.0020	0.013	60		7.65	7.70					1							S
107496	8.405	0.009	7.039	0.004		1.157	0.008	T	1.12	0.02	A	7.0729	0.0008	0.010	190		7.05	7.09		C			1							S
107497	9.374	0.016	9.320	0.021		0.055	0.025	T	0.07	0.02	L	9.3552	0.0021	0.020	126		9.32	9.40		C			1							G
107498	7.989	0.012	7.658	0.011		0.314	0.015	T	0.36	0.02	L	7.7021	0.0016	0.013	70		7.68	7.73					1 G							S
107499	11.382	0.064	10.294	0.038		0.860	0.005	G	0.90	0.01	H	10.3809	0.0028	0.021	129		10.34	10.42					1							
107500	9.991	0.023	9.370	0.021		0.574	0.023	T	0.65	0.02	L	9.3666	0.0131	0.189	121		9.28	9.83	4.23	P 1 A			1							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π δ	π $\mu_{\alpha*}$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	δ $\alpha*$	δ δ	δ π	δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s	±° ′ ″	mag	6 7	deg 8	deg 9 10	mas 11	mas/yr 12	13	mas 14	15	mas 16	mas/yr 17	18	19	20	21	22	23	24	25	26	27	28	29	30
107501	21 46 22.88	−04 07 39.5	7.91	H	326.595 335 97	−04.127 651 92	5.00	12.93	−24.10	0.86	0.59	1.01	1.06	0.61	+35	−10	− 1	−17	− 5	+32	− 7	− 6	+21	+41	0	0.91
107502	21 46 23.84	+25 33 48.1	6.28	H	326.599 349 72	+25.563 372 64	8.72	162.41	53.97	0.67	0.61	0.78	0.83	0.71	+ 4	− 3	−25	−39	+ 5	+22	+ 9	−33	+23	+14	0	0.71
107503	21 46 23.93	−68 41 02.0	7.67	2 H	326.599 721 26	−68.683 886 31	2.24	−10.02	−2.94	0.58	0.56	0.87	0.67	0.69	− 9	− 4	− 7	+ 2	− 7	+ 0	− 6	+ 7	−15	−19	0	−0.35
107504	21 46 24.12	−32 42 52.7	6.76	H	326.600 482 09	−32.714 637 15	5.01	31.00	−25.35	0.74	0.52	0.92	0.92	0.58	+24	+ 1	−20	+ 0	− 8	+43	− 2	+20	+ 1	+31	0	−0.39
107505	21 46 24.18	−39 15 48.3	8.64	H	326.600 759 10	−39.263 406 69	2.05	31.34	10.81	0.96	0.70	1.25	1.04	0.70	+27	−21	−30	+16	+16	+20	+30	+67	−38	+ 9	0	−0.29
107506	21 46 25.52	+39 51 02.3	8.28	H	326.606 319 64	+39.850 648 51	4.13	6.69	−4.84	0.50	0.55	0.84	0.64	0.72	−27	+ 0	+ 4	− 5	+11	− 7	+12	+ 4	+15	−37	0	0.22
107507	21 46 26.33	−42 56 14.3	8.44	H	326.609 694 34	−42.937 295 57	3.54	−4.33	−4.13	0.98	0.56	1.09	1.21	0.57	+12	+19	−12	−25	− 4	+17	+ 4	+40	− 6	+ 1	1	2.03
107508	21 46 26.46	−10 49 13.2	8.69	H	326.610 264 83	−10.820 344 74	8.57	−37.02	−67.62	1.03	0.58	1.15	1.37	0.59	+36	−17	− 1	− 6	+17	+22	+ 9	+28	+12	+48	2	0.38
107509	21 46 27.45	−17 55 23.8	7.47	H	326.614 390 22	−17.923 277 22	8.10	−13.55	−114.13	0.94	0.66	1.02	1.26	0.82	+17	−25	−14	−13	− 9	+ 8	−12	−11	+24	+ 2	0	−0.82
107510	21 46 28.36	+34 16 22.0	8.08	H	326.618 178 88	+34.272 784 59	1.66	28.96	−17.48	0.46	0.60	0.93	0.57	0.75	+ 0	− 4	−12	−11	− 5	−18	− 6	−35	+25	+ 7	0	0.56
107511	21 46 28.49	+21 50 02.1	8.57	H	326.618 723 80	+21.833 928 99	2.14	10.90	3.48	0.76	0.95	1.08	0.93	1.48	+40	− 3	−20	− 1	−19	− 6	−11	−45	+14	+55	0	−0.35
107512 H	21 46 28.79	+22 10 28.1	7.06	H	326.619 960 87	+22.174 474 28 *	5.51	6.08	−6.33	0.61	0.70	0.83	0.67	0.96	+34	+ 9	−25	+ 3	−14	− 8	− 9	−36	+14	+51	0	1.71
107513	21 46 29.22	+76 28 22.8	8.53	H	326.621 731 85	+76.472 994 13	3.57	−3.73	7.51	0.60	0.56	0.64	0.69	0.63	+ 0	− 7	− 9	+ 8	+ 1	+ 4	+ 1	+ 0	+ 4	+ 3	0	−0.77
107514 H	21 46 30.88	−38 43 18.2	8.28	H	326.628 674 64	−38.721 728 60 A	7.19	−14.44	−0.21	1.38	1.05	1.40	1.32	0.87	+27	−13	−24	+16	+10	+ 5	+21	+64	−26	+15	0	0.01
107515	21 46 31.13	+03 58 23.7	10.06	H	326.629 714 37	+03.973 260 59	3.18	−3.92	−6.49	1.67	1.06	1.95	2.54	1.40	+38	− 7	−21	+13	−17	+26	− 2	−53	+43	+63	0	1.57
107516	21 46 31.83	−02 12 46.1	6.52	3 H	326.632 637 40	−02.212 806 02 *	7.39	26.95	20.47	1.11	0.65	1.19	1.40	0.67	+33	+ 4	+11	−37	− 9	− 4	−17	−25	+22	+39	5	1.56
107517	21 46 32.08	−11 21 57.4	5.57	H	326.633 667 45	−11.365 932 01	11.10	30.36	−9.25	0.72	0.41	0.80	0.90	0.42	+37	− 3	+ 8	− 7	+18	+16	+11	+25	+15	+49	2	−0.54
107518	21 46 32.19	+26 45 13.5	8.45	G	326.634 117 40	+26.753 749 08	6.97	−11.05	2.76	0.89	0.78	1.12	0.92	0.84	+ 1	+25	−16	+11	+ 9	+ 0	+16	− 5	+33	+ 6	2	1.87
107519	21 46 32.30	+48 37 30.2	8.25	H	326.634 581 95	+48.625 054 44	3.39	−11.86	−7.36	0.57	0.56	0.72	0.66	0.63	−21	+ 4	+ 3	− 7	+13	−17	+14	− 3	+17	−24	0	1.26
107520	21 46 32.35	+52 30 23.9	8.40	H	326.634 781 77	+52.506 650 66	0.62	0.54	−8.55	0.71	0.62	0.82	0.85	0.75	− 5	+ 1	+ 1	+ 8	+ 8	−19	+ 9	− 7	+10	+ 1	0	−1.56
107521	21 46 34.39	+52 07 27.0	7.59	H	326.643 283 38	+52.124 155 09	−0.62	−2.02	−2.89	0.52	0.52	0.63	0.56	0.60	+ 5	+11	+ 2	+11	+14	−18	+15	+11	+ 0	+19	0	−0.78
107522 H	21 46 35.68	−57 42 04.3	8.77	G	326.648 682 07	−57.701 181 54 *	52.56	88.92	−905.46	2.20	1.76	1.88	1.92	1.59	− 8	+ 2	− 1	−11	+ 1	+ 6	+ 1	− 2	+ 3	−48	3	0.68
107523	21 46 35.73	−57 59 48.2	9.04	2 G	326.648 880 75	−57.996 729 94	2.17	−12.12	−15.50	0.75	0.67	1.34	0.95	0.74	−10	−10	+ 3	−19	+ 7	+ 6	+ 6	+20	− 1	−10	2	−0.28
107524	21 46 37.49	−17 07 21.7	10.91	2 G	326.656 213 93	−17.122 703 61	4.24	156.88	−55.35	2.12	1.58	2.25	3.13	1.76	+25	− 2	+ 2	−17	−20	+ 8	−19	−28	+12	+ 1	0	0.60
107525	21 46 37.89	−67 35 46.7	7.21	1 H	326.657 863 71	−67.596 295 88	4.14	13.88	−18.63	0.45	0.46	0.71	0.50	0.47	−22	− 4	−17	−15	+ 9	+ 6	+10	− 8	−15	−20	1	0.44
107526	21 46 41.13	−08 26 36.7	8.51	H	326.671 367 89	−08.443 540 71	5.08	0.95	4.44	1.03	0.62	1.20	1.23	0.63	+30	− 7	+11	−20	+18	+43	+ 3	+42	+25	+51	0	0.77
107527	21 46 42.07	−11 41 51.1	6.99	H	326.675 297 14	−11.697 526 42	16.08	35.50	−131.13	0.76	0.45	0.87	1.01	0.45	+34	− 8	+13	− 5	+22	+27	+11	+26	+17	+51	3	−0.54
107528	21 46 43.36	+19 28 37.5	7.54	H	326.680 669 18	+19.477 096 00	13.18	1.03	−1.80	0.72	0.66	0.91	1.00	0.98	+18	−14	−15	−19	+19	+12	+20	− 9	+15	+24	0	1.09
107529	21 46 44.04	−08 00 25.5	8.24	H	326.683 482 59	−08.007 084 91	5.93	17.96	−41.62	0.92	0.57	1.07	1.13	0.51	+35	−12	− 7	− 8	− 7	+34	− 4	+15	+17	+36	4	2.89
107530	21 46 44.89	−22 29 00.4	8.98	2 H	326.687 043 24	−22.483 435 29	1.03	−0.47	−14.81	1.24	0.86	1.35	1.59	0.93	+19	−18	−16	+24	−32	+17	−26	+14	+ 6	+15	0	1.89
107531	21 46 46.23	+13 43 10.6	6.67	H	326.692 611 57	+13.719 605 63	7.76	28.10	4.68	0.78	0.71	0.88	1.10	0.81	+21	+ 4	−15	+ 4	−22	+20	−18	−39	+21	+21	0	−0.30
107532	21 46 46.36	+37 39 28.8	7.26	2 H	326.693 171 11	+37.658 002 25	3.12	29.48	−5.07	0.42	0.51	0.85	0.43	0.58	−42	+22	−15	+ 4	+22	−19	+27	+ 2	+32	−41	0	0.58
107533 H	21 46 47.61	+49 18 34.5	4.23	1 G	326.698 357 94	+49.309 574 80 *	2.82	3.61	−1.86	0.42	0.41	0.52	0.45	0.44	−22	+ 0	+ 6	−16	+13	− 4	+12	− 5	+ 9	−12	3	0.64
107534	21 46 47.95	−56 27 19.0	9.49	H	326.699 783 71	−56.455 272 53	3.27	−7.97	18.22	1.01	0.84	1.33	1.26	0.89	+11	−11	− 9	+33	+24	+ 4	+22	+41	− 8	+15	3	0.11
107535	21 46 48.47	−35 42 26.1	8.39	H	326.701 957 83	−35.707 237 66	4.62	14.56	−1.40	0.84	0.58	1.03	0.92	0.53	+18	−30	− 4	+24	− 8	+15	− 1	+41	− 4	− 1	0	0.50
107536	21 46 48.92	+32 59 45.1	8.13	H	326.703 817 34	+32.995 864 00	7.24	−1.26	−35.81	0.61	0.54	0.93	0.61	0.64	−33	+19	−21	−14	+13	−11	+16	−18	+21	−15	1	−0.29
107537	21 46 48.98	+27 14 17.0	9.02	H	326.704 087 18	+27.238 045 21	3.77	−9.67	−10.53	0.89	0.83	1.14	1.01	0.89	+11	−10	−30	+22	+ 9	−32	− 4	−18	+29	− 3	0	1.15
107538	21 46 50.82	+55 20 07.2	9.66	G	326.711 762 02	+55.335 341 81	0.47	−1.98	−2.98	1.00	0.97	1.20	1.18	0.97	−11	+ 4	+11	−26	+ 5	−19	+ 6	−25	+ 0	+ 3	1	−0.56
107539	21 46 51.78	−08 28 12.8	7.92	H	326.715 768 18	−08.470 235 51	3.45	−16.24	−18.72	0.94	0.54	1.03	1.07	0.54	+27	−11	+ 0	−25	+ 8	+35	− 1	+31	+13	+42	0	0.77
107540	21 46 51.99	+30 06 05.4	8.21	H	326.716 604 66	+30.101 506 88	2.54	−2.62	−16.55	0.58	0.60	0.93	0.76	0.68	− 7	+17	−15	+40	−15	+22	−11	−50	+24	− 5	0	−0.55
107541	21 46 52.13	+19 55 24.4	7.13	H	326.717 209 99	+19.923 447 80	2.20	15.67	60.65	0.72	0.65	0.87	0.97	0.98	+10	− 4	−14	−35	+21	+ 9	+22	− 6	+21	+16	0	0.28
107542	21 46 52.23	−46 23 22.5	7.54	G	326.717 632 80	−46.389 570 27	3.69	28.73	−12.82	0.63	0.48	1.05	0.64	0.46	+39	−27	− 4	−13	+12	+21	+14	+33	+ 1	+34	2	−1.02
107543	21 46 53.16	+05 23 33.0	10.85	G	326.721 498 54	+05.392 508 75	−1.41	−0.68	−3.07	1.68	1.33	2.02	2.44	1.59	+42	−12	−29	+15	−13	+26	− 4	−47	+34	+57	0	0.52
107544 H	21 46 53.50	+00 51 03.4	7.74	G	326.722 901 14	+00.850 957 45 A	8.28	−21.72	−71.09	2.71	1.49	2.44	2.69	1.32	+44	+ 8	−15	+ 6	+ 9	+16	+11	− 7	+37	+52	1	0.85
107545	21 46 55.56	+55 53 54.5	9.52	H	326.731 490 36	+55.898 459 13	1.76	11.59	10.89	0.86	0.77	1.01	0.89	0.74	+ 0	+17	+ 3	−21	+ 5	−25	+ 7	−28	+ 0	+14	0	0.45
107546	21 46 56.06	+69 59 48.2	8.99	H	326.733 564 66	+69.996 730 29	3.43	−7.87	−4.62	0.77	0.73	0.84	0.94	0.73	−13	− 5	+27	+ 3	+ 9	+ 4	+ 7	−17	− 8	−19	3	0.24
107547	21 46 56.25	+21 17 50.9	8.60	H	326.734 382 76	+21.297 461 79	4.70	11.25	−10.58	0.77	0.84	1.07	0.94	1.39	+33	−10	−14	+ 4	− 4	+ 7	+10	−32	+11	+53	0	0.43
107548	21 46 56.56	+30 43 17.3	9.05	H	326.735 659 33	+30.721 466 87	1.69	10.30	−13.80	0.79	0.84	1.31	1.03	0.94	− 7	+12	−18	+28	−16	+10	−14	−59	+29	−11	0	−1.01
107549	21 46 58.85	+07 10 31.5	7.59	H	326.745 195 81	+07.175 421 46	1.17	14.19	− 3.06	0.95	0.60	0.99	1.14	0.75	− 3	− 5	+17	−30	+18	+34	+20	− 9	+34	+22	2	0.74
107550	21 46 58.92	+23 40 37.6	8.14	H	326.745 495 75	+23.677 107 43	3.09	−18.99	−23.99	0.80	0.92	1.04	0.97	1.09	+25	− 8	−22	− 8	−12	− 4	−14	−44	+ 6	+23	0	0.11
107551	21 46 59.14	−44 51 05.8	10.10	H	326.746 422 37	−44.851 610 96	12.96	24.73	−60.26	1.18	0.95	1.72	1.17	1.06	+33	−14	− 2	− 4	+31	+ 5	+31	+58	−16	+36	0	−0.07
107552	21 46 59.55	−25 04 24.1	8.16	H	326.748 114 18	−25.073 364 44	12.22	21.18	−71.71	1.01	0.68	1.27	1.24	0.65	+27	−21	−38	+ 9	−35	+44	−22	− 3	+20	+28	0	0.62
107553	21 46 59.84	+37 58 24.7	10.27	H	326.749 343 86	+37.973 527 65	1.56	−4.21	− 6.21	0.92	1.13	1.79	0.89	1.30	−35	+29	−18	+ 3	+19	− 5	+28	+13	+28	−33	0	2.15
107554 H	21 47 00.65	+47 59 02.5	8.13	H	326.752 728 18	+47.984 025 04 A	4.28	9.28	−10.29	0.89	0.93	1.07	1.04	0.98	− 8	−19	+23	+12	+ 0	− 8	+ 2	− 2	− 5	− 6	2	0.32
107555	21 47 00.87	+70 09 03.4	6.45	H	326.753 615 84	+70.150 943 28	6.62	−10.46	−25.07	0.45	0.43	0.47	0.55	0.44	−17	− 3	+18	− 3	+ 8	− 1	+ 7	−21	− 1	−23	1	0.27
107556	21 47 02.29	−16 07 35.6	2.85	2 G	326.759 521 99	−16.126 565 95	84.58	263.26	−296.23	0.80	0.59	0.88	1.23	0.67	+18	−10	−22	+ 7	−16	+23	−16	−23	+13	− 3	0	−1.36
107557	21 47 02.32	+43 19 18.6	8.33	H	326.759 668 94	+43.321 841 13	3.31	1.46	1.59	0.62	0.61	0.88	0.79	0.78	−24	+19	+ 8	+11	− 7	+ 1	− 3	+15	+18	−47	0	1.18
107558	21 47 04.70	+17 11 38.7	6.18	H	326.769 567 90	+17.194 074 81	19.90	103.75	−13.93	0.63	0.62	0.80	0.87	0.78	+38	−16	−21	−31	− 7	+ 1	−13	−48	+17	+30	0	0.77
107559	21 47 05.14	+07 08 27.4	8.62	H	326.771 434 97	+07.140 952 48	0.84	9.36	−13.94	1.04	0.93	1.30	1.32	1.09	+22	−14	− 7	−10	− 1	+42	+ 1	−17	+16	+36	0	−0.09
107560	21 47 05.36	+53 18 20.3	8.81	H	326.772 328 88	+53.305 644 12	1.57	5.67	−0.96	0.71	0.68	0.85	0.80	0.72	−12	− 5	−15	−15	+12	− 9	+ 9	−12	+16	+ 4	0	−1.13
107561	21 47 06.21	−62 12 56.5	7.92	H	326.775 884 95	−62.215 683 95	9.55	−12.62	1.08	0.47	0.54	0.95	0.57	0.62	+ 0	−23	−15	+26	+ 4	+ 1	+ 7	+ 7	−18	− 9	1	0.41
107562 H	21 47 06.64	−21 39 31.1	9.39	H	326.777 652 36	−21.658 649 30 A	5.91	14.85	4.74	3.96	2.52	2.63	2.70	1.75	+35	− 2	−12	− 4	−23	+25	− 9	+12	+ 0	+33	1	0.43
107563	21 47 07.58	+55 03 22.5	9.87	H	326.781 567 56	+55.056 244 17	0.76	1.82	− 0.06	1.05	0.94	1.18	1.19	0.95	− 9	+ 0	+ 7	−41	+ 9	−12	+ 6	−25	+ 0	+ 9	0	−0.69
107564	21 47 08.00	−02 17 32.1	7.65	H	326.783 324 35	−02.292 247 38	10.51	111.70	−76.91	1.01	0.53	0.99	1.25	0.58	+16	+12	+ 0	−25	+ 2	+ 1	+ 0	− 7	+14	+30	0	−0.50
107565	21 47 09.38	−40 58 36.5	10.25	H	326.789 085 56	−40.976 808 01	−0.37	−8.10	3.17	1.38	0.85	1.65	1.65	0.93	+ 7	+ 5	−17	− 6	− 4	+ 20	− 2	+42	−19	+ 3	3	1.49
107566 H	21 47 09.83	+24 08 42.1	7.52	H	326.790 946 18	+24.145 017 54 A	3.56	−42.18	10.46	1.39	1.25	1.42	1.25	1.20	+18	+ 4	−22	+ 6	+ 8	−19	+ 2	−18	+40	+ 2	0	0.35
107567	21 47 10.29	−14 30 49.8	7.68	G	326.792 895 45	−14.513 846 63	11.46	38.74	−3.96	0.88	0.55	1.14	1.63	0.59	+15	+ 2	+ 0	− 3	+ 3	+58	+ 0	+14	+18	+12	0	0.39
107568	21 47 10.33	+04 24 10.8	7.62	H	326.793 057 94	+04.403 002 09	5.12	6.58	−17.42	0.91	0.62	1.08	1.36	0.76	+42	+12	− 3	+21	− 5	+35	+ 6	−35	+37	+60	0	1.07
107569	21 47 10.84	−14 40 59.3	8.81	H	326.795 160 16	−14.683 140 40	3.66	−14.00	− 4.30	1.15	0.86	1.39	1.92	1.02	+17	− 9	− 1	+ 4	− 3	+33	− 8	− 8	+30	− 2	0	−0.50
107570	21 47 11.89	−52 40 10.4	8.82	H	326.799 527 14	−52.669 556 32	1.35	−2.92	−18.49	0.92	0.66	1.20	1.18	0.68	+14	− 6	+10	+29	+13	+12	+12	+34	−11	+ 8	0	−0.47
107571	21 47 12.00	+23 51 16.1	9.13	2 H	326.800 016 10	+23.854 460 11	5.20	1.48	4.87	1.06	1.34	1.38	1.26	1.59	+31	+ 2	−22	−10	−14	+ 7	−14	−46	+13	+29	0	0.20
107572	21 47 12.81	+42 01 04.0	8.72	H	326.803 369 64	+42.017 783 79	2.61	6.08	2.21	0.66	0.73	1.01	0.80	0.92	−31	+ 4	−18	+16	− 3	− 4	− 5	+ 3	+11	−45	1	−0.95
107573	21 47 13.15	+22 01 27.9	7.49	H	326.804 803 66	+22.024 420 81	11.01	29.83	31.02	0.61	0.64	0.82	0.71	0.92	+38	+11	−13	+ 5	− 1	−17	+ 1	−15	− 1	+51	0	−0.06
107574	21 47 13.64	−37 27 24.0	9.19	H	326.806 834 43	−37.456 656 54	1.60	19.39	− 1.18	1.25	1.01	1.57	1.50	1.01	+35	+ 4	− 4	+17	+27	+38	+31	+73	−15	+23	0	0.89
107575	21 47 13.96	+02 41 10.1	5.63	H	326.808 159 96	+02.686 130 92	6.98	6.28	− 2.83	0.69	0.44	0.80	0.97	0.53	+17	− 4	−10	− 6	+ 8	+38	+ 9	−22	+38	+34	0	1.86
107576	21 47 14.22	−51 11 58.9	9.13	H	326.809 266 88	−51.199 697 15	2.74	2.30	− 3.90	1.06	0.76	1.36	1.48	0.80	+26	+ 4	+ 3	+31	+13	+12	+13	+39	− 4	+22	0	0.20
107577	21 47 14.75	−00 31 34.1	9.18	H	326.811 449 48	−00.526 130 51	3.82	4.45	12.06	1.18	0.75	1.43	1.42	0.83	+26	− 4	−24	+ 0	−10	+27	− 4	−19	+42	+38	0	−0.08
107578	21 47 15.82	−32 56 45.2	8.58	H	326.815 904 48	−32.945 890 61	1.33	−11.53	− 7.17	1.09	0.78	1.39	1.38	0.84	+23	+13	−20	+ 3	+ 8	+41	+14	+36	+ 4	+35	0	−0.28
107579	21 47 19.14	+28 05 30.4	8.61	H	326.829 759 57	+28.091 773 01	1.93	− 6.92	− 6.28	0.89	0.94	1.21	0.87	0.94	+ 4	+19	−40	+19	+ 7	− 7	+11	−39	+19	+ 7	2	1.53
107580 H	21 47 20.54	−58 51 54.8	9.22	H	326.835 566 45	−58.865 221 72 *	3.21	37.70	3.59	2.82	3.21	1.95	1.45	1.09	+ 0	− 8	−19	−26	+17	− 9	+11	− 7	− 9	− 4	2	0.26
107581	21 47 21.40	−58 51 22.7	10.37	H	326.839 171 75	−58.856 313 09	−0.88	−8.94	−26.62	2.49	2.21	4.04	3.07	2.21	− 9	− 5	−29	−27	+21	−13	+14	+ 0	−13	+ 1	0	
107582	21 47 21.88	+18 06 11.6	10.41	H	326.841 148 95	+18.103 227 35	3.92	29.27	6.37	1.25	1.41	1.83	1.59	1.91	+42	− 8	−28	+18	+12	−20	+ 7	−11	+23	+42	0	2.68
107583	21 47 21.88	+19 05 50.7	8.17	G	326.841 169 35	+19.097 406 64	3.45	10.66	1.88	0.72	0.63	0.91	0.90	0.78	+22	− 2	− 6	−14	+ 9	−10	+ 7	− 8	+21	+21	0	−0.40
107584	21 47 23.82	−63 44 40.7	9.95	H	326.849 267 49	−63.744 645 26	10.72	289.72	−78.27	0.88	0.96	1.57	0.94	1.01	−28	+ 2	− 6	+ 8	− 9	+ 5	− 9	+ 6	+ 3	−41	3	2.16
107585	21 47 24.79	−04 36 31.0	6.85	H	326.853 293 76	−04.608 618 38	8.92	34.24	−11.67	0.80	0.51	0.89	0.90	0.52	+31	+ 4	+ 9	−28	+ 5	+32	+ 0	+ 3	+21	+41	0	0.11
107586	21 47 25.31	+60 41 33.7	5.53	1 H	326.855 447 59	+60.692 693 63	6.98	− 9.68	− 1.84	0.43	0.39	0.47	0.48	0.40	−16	+ 0	+ 4	+ 2	+ 9	+ 4	+10	− 9	+ 3	− 6	1	2.40
107587	21 47 26.40	+06 36 16.6	10.16	G	326.860 009 85	+06.604 602 85	22.72	210.38	106.25	1.72	1.45	1.98	2.14	1.64	+21	− 2	−11	−18	− 3	+32	+ 3	−49	+16	+35	5	1.43
107588 H	21 47 26.81	−13 07 17.9	8.13	H	326.861 717 97	−13.121 648 48 A	6.47	7.77	− 8.41	7.92	4.70	7.26	9.80	3.80	+47	−11	+10	−13	+38	+13	+11	+42	+ 9	+72	4	4.22
107589	21 47 27.55	−09 45 23.4	8.96	H	326.864 786 79	−09.756 509 62	6.73	65.96	−21.99	1.22	0.67	1.31	1.53	0.65	+28	−17	+15	−34	+12	+26	− 3	+28	+23	+45	0	−0.32
107590	21 47 28.76	−16 45 44.6	7.59	H	326.869 828 14	−16.762 375 32	2.48	9.10	−17.30	0.87	0.69	0.97	1.37	0.79	+30	− 2	−14	+ 0	−27	+25	−25	−31	+13	+12	0	0.35
107591	21 47 28.90	+10 19 54.2	12.17	G	326.870 406 28	+10.331 729 87	4.59	13.14	−62.92	3.43	2.93	4.63	4.78	3.68	+18	− 6	−35	+16	− 7	+ 1	−12	−29	+56	− 2	3	1.05
107592	21 47 33.21	+31 20 35.6	8.75	H	326.888 354 35	+31.343 234 33	5.68	−0.75	12.89	0.74	0.82	1.07	0.83	0.87	+ 1	+ 0	− 7	+26	−25	−12	−25	−66	+22	− 2	0	−1.48
107593	21 47 34.61	−37 57 07.1	6.78	H	326.894 218 27	−37.951 981 70	5.40	−28.48	−21.28	0.78	0.53	0.89	0.90	0.53	+17	−28	−26	+10	+ 6	+18	+21	+67	−30	− 2	0	0.62
107594 H	21 47 36.42	−17 17 41.1	7.65	H	326.901 740 28	−17.294 747 54 A	3.62	12.33	1.21	1.77	1.19	1.66	2.39	1.35	+ 6	− 5	−33	−32	+ 0	+11	+ 6	−15	+23	−17	1	0.50
107595	21 47 37.10	−07 39 58.5	8.05	H	326.904 599 97	−07.666 260 75	2.66	13.51	− 8.63	0.91	0.66	1.07	1.21	0.69	+39	− 5	+10	+ 6	+21	+28	+14	+33	+24	+50	0	1.84
*107596	21 47 38.20	−05 55 00.6	6.17	H	326.909 168 27	−05.916 840 00	12.74	65.31	15.77	0.96	0.50	0.89	1.25	0.54	+16	−12	−14	−44	+12	+ 8	−13	+10	+21	+30	0	2.22
*107597	21 47 38.17	−75 29 20.7	9.89	H	326.909 033 05	−75.489 096 37	3.63	−2.59	1.28	0.95	0.90	1.24	1.00	0.94	− 9	+ 9	−15	−10	− 5	− 5	− 6	− 6	− 5	−13	0	−0.14
107598	21 47 39.79	+59 42 01.4	7.31	H	326.915 799 39	+59.700 380 74	0.30	−2.68	− 2.51	0.56	0.52	0.62	0.61	0.56	− 8	+ 4	+ 3	+ 9	+23	− 3	+26	− 5	−10	+20	0

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
107501	8.414	0.012	7.949	0.012		0.438	0.016	T	0.51	0.02	L	8.0061	0.0011	0.011	78		7.99	8.03		C			1							S
107502	7.863	0.008	6.422	0.005		1.212	0.005	G	1.17	0.06	F	6.4467	0.0012	0.007	85		6.44	6.46					1							S
107503	9.822	0.018	7.875	0.008		1.604	0.063	G	1.64	0.07	O	7.7825	0.0028	0.023	143		7.75	7.82		U 2			1							S
107504	8.509	0.017	6.909	0.009		1.341	0.015	T	1.31	0.02	L	6.9081	0.0010	0.008	83		6.90	6.92		C			1							S
107505	10.026	0.020	8.748	0.012		1.088	0.018	T	1.05	0.02	L	8.8045	0.0022	0.016	124		8.78	8.83					1							
107506	8.319	0.007	8.277	0.008		0.043	0.010	T	0.06	0.01	L	8.3040	0.0013	0.016	176		8.28	8.33					1							
107507	9.921	0.021	8.545	0.012		1.165	0.019	T	1.13	0.02	L	8.6028	0.0016	0.014	114		8.58	8.63		C			1							
107508	9.170	0.018	8.729	0.018		0.416	0.023	T	0.48	0.02	L	8.7833	0.0016	0.013	88		8.75	8.81		C			1							S
107509	9.061	0.018	7.610	0.011		1.223	0.017	T	1.18	0.02	L	7.6316	0.0019	0.012	59		7.62	7.65					1							S
107510	9.478	0.013	8.187	0.008		1.098	0.012	T	1.06	0.01	L	8.2477	0.0012	0.014	213		8.22	8.27					1							
107511	10.278	0.035	8.761	0.018		1.275	0.031	T	1.23	0.03	L	8.7318	0.0017	0.013	81		8.71	8.75		C			1							
107512	7.306	0.008	7.085	0.008	*	0.211	0.010	T	0.23	0.01	L *	7.1237	0.0013	0.011	83	*	7.11	7.15		D	21465+2210	I 1	2 C S B	AD	6	0.177	0.020	2.35	0.42	S
107513	9.919	0.020	8.639	0.012		1.089	0.018	T	1.05	0.02	L	8.6953	0.0015	0.013	120		8.67	8.72		C			1							
107514	8.870	0.011	8.351	0.010	*	0.497	0.011	T	0.57	0.01	L *	8.3905	0.0013	0.014	121	*	8.36	8.42		D	21465−3843	I 1	2 C A	AB	267	0.984	0.027	2.95	0.07	S
107515	11.669	0.134	10.159	0.049		1.270	0.112	T	1.23	0.12	L	10.2267	0.0021	0.019	82		10.19	10.26		C			1							
107516	8.252	0.034	6.898	0.042		1.470	0.020	G	4.00	0.02	A	5.9868	0.0236	0.251	73		5.52	6.27		U 2 C			1 V							S
107517	5.566	0.003	5.570	0.003		−0.002	0.004	T	0.02	0.00	L	5.5804	0.0004	0.005	94		5.57	5.59					1							S
107518	9.126	0.015	8.503	0.014		0.586	0.015	G	0.66	0.01	H	8.5735	0.0018	0.017	80		8.54	8.60		D			1							
107519	8.165	0.007	8.230	0.010		−0.055	0.011	T	−0.03	0.01	L	8.2381	0.0016	0.016	134		8.21	8.27					1							
107520	10.100	0.025	8.550	0.012		1.300	0.015	G	1.36	0.14	K	8.5485	0.0011	0.013	123		8.53	8.57		C			1							
107521	7.897	0.006	7.627	0.008		0.289	0.004	G	0.33	0.01	H	7.6692	0.0013	0.013	135		7.65	7.69					1							S
107522	10.565	0.028	8.963	0.012	*	1.322	0.003	G	1.58	0.02	A *	8.8709	0.0017	0.018	176	*	8.84	8.91		D	21466−5742	I 1	2 C A	AB	301	0.289	0.007	0.11	0.06	
107523	11.089	0.037	9.134	0.012		1.635	0.015	G	1.70	0.14	K	9.0388	0.0035	0.035	183		8.98	9.08		U 2			1							
107524	11.945	0.182	11.070	0.134		0.752	0.003	G	0.80	0.00	H	11.0655	0.0069	0.027	46		10.96	11.10		U			1							G
107525	7.120	0.004	7.193	0.005		−0.074	0.004	G	−0.05	0.01	H	7.1912	0.0015	0.020	190		7.16	7.21	1.79	P 1 A			1							S P
107526	8.836	0.014	8.531	0.015		0.290	0.019	T	0.33	0.02	L	8.5820	0.0020	0.017	85		8.56	8.61					1							S
107527	7.527	0.007	7.049	0.005		0.471	0.007	G	0.54	0.01	H	7.0944	0.0007	0.008	104		7.08	7.11					1							S
107528	8.004	0.007	7.580	0.010		0.401	0.011	T	0.47	0.01	L	7.6290	0.0012	0.009	89		7.61	7.65		C			1							S
107529	9.278	0.018	8.343	0.013		0.826	0.016	T	0.85	0.01	L	8.3917	0.0016	0.011	93		8.36	8.41					1							S
107530	11.096	0.066	9.186	0.023		1.620	0.058	T	2.16	0.13	O	9.0408	0.0075	0.049	72		8.97	9.10		U 2			1							
107531	6.909	0.007	6.698	0.006		0.202	0.009	T	0.22	0.01	L	6.7318	0.0013	0.007	48		6.72	6.75					1							S
107532	9.558	0.012	7.475	0.005		1.762	0.011	T	2.47	0.02	O	7.2800	0.0023	0.033	258		7.21	7.33		U 2 C			1 S							S
107533	4.078	0.002	4.222	0.002	*	−0.120	0.008	G	−0.13	0.03	C *	4.2016	0.0005	0.005	128	*	4.19	4.21		M	21468+4919	H 1	2 C S A	AB	123	0.092	0.015	1.55	0.57	S
107534	10.325	0.025	9.545	0.020		0.693	0.024	T	0.75	0.02	L	9.6236	0.0022	0.025	147		9.58	9.68		C			1							
107535	8.379	0.009	8.371	0.011		0.008	0.012	T	0.03	0.01	L	8.3996	0.0016	0.014	109		8.38	8.43		C			1							S
107536	8.666	0.008	8.185	0.007		0.453	0.010	T	0.52	0.01	L	8.2320	0.0013	0.014	209		8.21	8.26					1							S
107537	9.412	0.018	9.037	0.019		0.355	0.024	T	0.42	0.03	L	9.1027	0.0012	0.016	87		9.08	9.13		D			1							
107538	10.424	0.036	9.825	0.033		0.680	0.015	G	0.74	0.01	H	9.8165	0.0025	0.021	111		9.77	9.86		C			1							G
107539	9.295	0.018	8.041	0.011		1.069	0.016	T	1.03	0.01	L	8.0832	0.0016	0.013	84		8.06	8.10					1							
107540	9.500	0.013	8.314	0.009		1.016	0.012	T	0.99	0.01	L	8.3725	0.0010	0.016	217		8.34	8.40		C			1							
107541	8.985	0.013	7.292	0.006		1.430	0.015	G	1.42	0.02	H	7.2704	0.0012	0.011	96		7.25	7.29					1							S
107542	9.048	0.011	7.684	0.006		1.150	0.015	G	1.11	0.01	H	7.7157	0.0010	0.011	185		7.69	7.74		C			1							S
107543						1.594	0.020	G	1.73	0.15	K	10.9819	0.0044	0.032	102		10.92	11.03		C			1							G
107544	8.216	0.011	7.814	0.009	*	0.411	0.015	G	0.48	0.02	H *	7.8182	0.0012	0.009	78	*	7.79	7.84		D	21469+0051	I 1	2 C A	AB	140	0.598	0.003	0.50	0.01	S
107545	10.025	0.026	9.585	0.026		0.415	0.034	T	0.48	0.04	L	9.6172	0.0026	0.021	104		9.58	9.65					1							G
107546	10.206	0.025	9.097	0.016		0.956	0.023	T	0.94	0.02	L	9.1545	0.0017	0.017	127		9.13	9.19		C			1							
107547	8.709	0.013	8.612	0.016		0.095	0.019	T	0.11	0.02	L	8.6426	0.0015	0.011	79		8.62	8.67					1							S
107548	10.683	0.034	9.178	0.015		1.266	0.029	T	1.22	0.03	L	9.2134	0.0017	0.021	190		9.18	9.25		C			1							
107549	9.655	0.025	7.760	0.011		1.574	0.022	T	1.59	0.02	L	7.7057	0.0012	0.011	72		7.69	7.73					1							S
107550	9.444	0.019	8.243	0.012		1.028	0.018	T	1.00	0.01	L	8.3050	0.0021	0.016	72		8.28	8.33					1							
107551	11.137	0.046	10.189	0.032		0.822	0.043	T	0.84	0.03	L	10.2441	0.0020	0.022	161		10.20	10.28		C			1							
107552	8.692	0.013	8.209	0.012		0.475	0.015	G	0.55	0.02	H	8.2661	0.0017	0.013	81		8.25	8.29		C			1							S
107553	10.394	0.023	10.264	0.032		0.126	0.037	T	0.14	0.04	L	10.3140	0.0025	0.042	242		10.25	10.41					1 S							G
107554	8.617	0.009	8.220	0.009	A	0.600	0.495	G	0.45	0.03	L *	8.2220	0.0020	0.018	130	*	8.19	8.25		D	21470+4759	I 1	2 C A	AB	201	3.298	0.012	2.86	0.07	S
107555	6.443	0.004	6.452	0.004		−0.007	0.005	T	0.01	0.01	L	6.4551	0.0007	0.007	135		6.44	6.47		C			1							S
107556						0.180	0.150	G	0.35	0.02	A	2.9409	0.0038	0.025	57		2.91	3.02	1.02	P 1 A	21470−1607	I 1	1							S
107557	8.562	0.008	8.335	0.009		0.217	0.011	T	0.24	0.01	L	8.3970	0.0022	0.019	144		8.37	8.43					1							
107558	6.588	0.004	6.228	0.005		0.350	0.006	T	0.41	0.01	L	6.2666	0.0007	0.008	100		6.26	6.28					1							S
107559	10.306	0.038	8.740	0.019		1.320	0.015	G	1.28	0.02	K	8.7755	0.0029	0.020	67		8.74	8.81					1							
107560	9.027	0.012	8.831	0.013		0.187	0.017	T	0.21	0.02	L	8.8671	0.0017	0.017	122		8.84	8.89		C			1							
107561	8.391	0.007	7.972	0.007		0.407	0.006	G	0.47	0.01	H	8.0161	0.0011	0.014	221		8.00	8.05					1							S
107562	9.730	0.025	9.471	0.029	*	0.247	0.036	T	0.28	0.04	L *	9.4586	0.0025	0.015	73	*	9.43	9.48		D	21471−2140	H 1	2 C A	AB	272	0.382	0.023	1.92	0.12	
107563	10.156	0.029	9.861	0.034		0.280	0.042	T	0.32	0.05	L	9.9430	0.0031	0.024	115		9.91	9.98					1							G
107564	8.216	0.014	7.703	0.014		0.483	0.015	G	0.55	0.02	H	7.7570	0.0013	0.012	79		7.73	7.78		C			1							S
107565	10.718	0.037	10.269	0.039		0.437	0.043	T	0.51	0.05	L	10.3498	0.0025	0.020	109		10.31	10.40		C			1							
107566	8.762	0.013	7.659	0.009	*	1.000	0.015	G	0.98	0.01	H *	7.6898	0.0014	0.011	83	*	7.67	7.71		C	21472+2409	H 1	2 C B	AB	114	0.560	0.022	3.27	0.11	S
107567	8.156	0.010	7.729	0.010		0.446	0.015	G	0.52	0.02	H	7.7653	0.0013	0.008	64		7.75	7.78		C			1							S
107568	8.858	0.012	7.732	0.008		0.969	0.011	T	0.95	0.01	L	7.7879	0.0014	0.010	101		7.77	7.81					1							S
107569	9.226	0.019	8.843	0.020		0.374	0.024	T	0.44	0.03	L	8.8928	0.0030	0.014	59		8.87	8.92		C			1							S
107570	10.490	0.034	8.954	0.016		1.290	0.030	T	1.25	0.03	L	8.9816	0.0019	0.019	129		8.95	9.01					1							
107571	11.210	0.069	9.415	0.024		1.525	0.060	T	3.08	0.08	O	9.0018	0.0184	0.140	72		8.81	9.27		U 2			1 S							
107572	8.940	0.010	8.745	0.011		0.187	0.014	T	0.21	0.02	L	8.7836	0.0017	0.020	146		8.75	8.82		C			1							
107573	7.863	0.009	7.539	0.010		0.308	0.013	T	0.35	0.02	L	7.5631	0.0010	0.008	80		7.55	7.58		C			1							S
107574	10.651	0.034	9.311	0.017		1.136	0.030	T	1.10	0.03	L	9.3531	0.0023	0.028	110		9.31	9.39					1							
107575	5.644	0.003	5.632	0.003		0.012	0.004	T	0.03	0.00	L	5.6423	0.0006	0.004	90		5.63	5.65		C			1							S
107576	10.568	0.033	9.289	0.019		1.089	0.030	T	1.05	0.03	L	9.3020	0.0020	0.023	136		9.27	9.34					1							
107577	10.436	0.034	9.307	0.022		0.972	0.032	T	0.96	0.03	L	9.3417	0.0024	0.016	82		9.31	9.38		C			1							
107578	10.640	0.049	8.796	0.019		1.160	0.040	G	1.12	0.04	R	8.7443	0.0035	0.019	78		8.70	8.77					1							
107579	10.316	0.042	8.712	0.019		1.344	0.036	T	1.31	0.04	L	8.7663	0.0022	0.015	72		8.74	8.81		C			1							
107580	9.850	0.017	9.267	0.016	*	0.546	0.017	T	0.62	0.02	L *	9.3413	0.0023	0.026	170	*	9.30	9.39		D	21473−5852	I 2	2 C A	AC	194	0.270	0.027	2.27	0.28	
107581	11.691	0.091	10.348	0.041							T	10.5077	0.0040	0.058	167		10.38	10.59		D	21473−5852	I 2	1 X S							
107582	10.823	0.050	10.343	0.052		0.452	0.066	T	0.52	0.07	L	10.5115	0.0035	0.033	99		10.44	10.58		C			1							G
107583	9.616	0.021	8.294	0.013		1.122	0.019	T	1.08	0.02	L	8.3207	0.0012	0.011	90		8.30	8.34		C			1							
107584	10.665	0.027	10.008	0.023		0.634	0.007	G	0.70	0.01	H	10.0802	0.0030	0.039	218		10.01	10.15					1							
107585	6.932	0.005	6.851	0.006		0.070	0.002	G	0.08	0.00	H	6.8762	0.0010	0.008	75		6.86	6.89					1							S
107586	7.556	0.007	5.701	0.003		1.575	0.006	T	1.71	0.02	O	5.6296	0.0009	0.009	115		5.61	5.64		M			1							S
107587	11.449	0.103	10.278	0.062		1.055	0.001	G	1.11	0.00	I	10.2993	0.0035	0.030	69		10.23	10.34		C			1 S							G
107588	8.378	0.017	8.060	0.017	*						T *	8.2081	0.0015	0.016	95	−	8.19	8.25		D	21475−1307	I 1	3 C A							S G
107589	10.282	0.033	9.076	0.020		1.032	0.030	T	1.00	0.03	L	9.1273	0.0018	0.016	94		9.10	9.15					1							
107590	9.243	0.030	7.751	0.017		1.256	0.027	T	1.21	0.03	L	7.7536	0.0013	0.009	54		7.74	7.77		C			1							S
107591						1.116	0.020	G	1.08	0.02	I	12.3556	0.0159	0.076	42		12.20	12.51					1							G
107592	9.731	0.017	8.834	0.013		0.798	0.016	T	0.83	0.01	L	8.8967	0.0015	0.017	180		8.87	8.92		C			1							
107593	8.019	0.008	6.882	0.005		0.978	0.007	T	0.96	0.01	L	6.9410	0.0007	0.008	114		6.93	6.96					1							S
107594	7.568	0.011	7.652	0.014	A	0.000	0.495	G	−0.08	0.03	L *	7.6211	0.0031	0.017	49	*	7.59	7.64			21476−1718	I 1	2 C B	AB	209	4.769	0.064	3.73	0.27	S
107595	9.258	0.018	8.159	0.012		0.949	0.017	T	0.94	0.01	L	8.2168	0.0014	0.011	81		8.20	8.24					1							S
107596	6.445	0.005	6.194	0.005		0.230	0.008	G	0.26	0.01	H	6.2402	0.0012	0.007	66		6.23	6.25		C			1 G							S
107597	11.189	0.054	9.994	0.030		1.023	0.048	T	1.00	0.04	L	10.0507	0.0030	0.034	142		10.01	10.11					1							
107598	7.619	0.008	7.326	0.007		0.278	0.011	T	0.32	0.01	L	7.3840	0.0013	0.011	107		7.36	7.40					1							S
107599	8.265	0.010	7.710	0.008		0.525	0.010	T	0.60	0.01	L	7.7888	0.0008	0.008	86		7.78	7.81					1							S
107600	8.358	0.007	8.421	0.009		−0.048	0.003	G	−0.03	0.00	H	8.4270	0.0015	0.016	180		8.40	8.48		U			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
107601	21 47 40.93	−27 45 03.2	7.33	H	326.920 557 65	−27.750 879 72		6.01	−41.09	−24.99	0.78	0.58	0.93	0.88	0.57	+33	− 7	−18	−19	−25	+37	−20	−16	+ 9	+32	0	1.57
107602	21 47 40.99	+29 27 36.9	8.35	H	326.920 771 23	+29.460 257 30		2.10	3.66	3.97	0.73	0.77	1.11	0.89	0.93	−	3	+ 0	−39	+55	−15	−	3	−12	−49	+47	+ 0	0	−0.32
107603	21 47 41.03	−18 49 29.9	9.27	H	326.920 947 53	−18.824 965 13		0.51	−6.37	−4.96	1.24	0.86	1.34	1.74	1.08	+13	−14	−17	−20	−	3	+20	+	0	+	7	+17	+	4	0	0.37
107604	21 47 41.16	+44 00 39.9	7.83	H	326.921 485 12	+44.011 072 69		6.01	−18.75	−26.40	0.54	0.55	0.74	0.68	0.68	−20	+	5	+	3	+14	−	4	+11	−	2	+26	+	4	−37	0	0.07
107605	21 47 41.62	−41 51 17.2	10.60	H	326.923 436 65	−41.854 788 60		7.55	−70.34	−44.20	1.89	1.03	2.04	2.49	1.06	−	8	+	0	−	5	+27	−21	+29	−16	+40	−	1	−20	0	1.36
107606	21 47 41.94	−66 48 19.7	7.86	H	326.924 740 44	−66.805 467 43		6.31	22.22	−32.80	0.51	0.52	0.79	0.60	0.55	−17	−11	−11	−	2	+	4	+	0	+	4	−	1	−	6	−23	0	−0.48
107607	21 47 43.98	−55 39 15.0	8.69	H	326.933 237 68	−55.654 159 92		10.51	30.37	−178.42	0.94	0.67	1.14	1.14	0.73	+15	+	1	−20	+38	+31	+	1	+29	+44	−18	+29	0	1.91
107608	21 47 44.17	−30 53 53.9	5.02	H	326.934 055 46	−30.898 305 82		9.63	−34.53	0.64	0.78	0.53	0.90	0.88	0.62	+25	−16	−21	−21	−16	+36	−13	+31	+	0	+	26	0	−0.43
107609	21 47 44.73	−33 40 54.5	9.43	H	326.936 359 65	−33.681 811 62		3.42	4.63	−10.81	1.12	0.88	1.48	1.32	0.83	+32	−	8	−24	+	2	+	7	+27	+17	+46	−10	+20	0	−0.13
107610	21 47 44.82	−18 12 46.9	7.40	H	326.936 763 64	−18.213 029 44		8.17	31.38	4.39	0.90	0.62	0.96	1.23	0.73	+	8	−	8	−	5	−	9	−	5	+13	−	5	−	7	+22	−	8	0	−2.42
*107611	H 21 47 45.39	+62 03 24.3	8.48	H	326.939 126 76	+62.056 749 59	A	3.55	12.04	6.00	2.30	2.76	0.96	0.97	0.98	+33	+	3	+10	+23	+	8	+12	+17	+	7	+	8	+30	1	1.47
*107612	21 47 45.35	−50 37 07.8	9.81	G	326.938 943 67	−50.618 839 84		14.77	94.83	−21.72	1.10	0.91	1.63	1.38	0.97	+37	−25	−21	+19	+21	−	5	+24	+41	−22	+36	0	−0.70
107613	21 47 46.34	−27 23 13.1	8.50	H	326.943 082 28	−27.386 961 16		4.36	9.94	−14.61	1.00	0.71	1.18	1.11	0.67	+32	+	6	−15	−17	−30	+36	−25	−23	+	2	+28	0	1.40
107614	21 47 47.12	−63 55 26.7	8.58	H	326.946 345 86	−63.924 075 11		22.36	63.38	26.77	0.56	0.61	1.07	0.67	0.68	−18	−	3	−	5	−	5	+	2	+	8	+	0	+	5	−11	−29	1	−0.19
107615	21 47 48.54	+44 58 40.2	8.42	2 H	326.952 266 16	+44.977 834 05		4.45	28.38	−0.67	0.64	0.66	0.91	0.71	0.76	−10	+23	+	8	+17	−	4	+17	−	6	+16	−	7	−25	0	−1.08
107616	H 21 47 49.62	−72 40 54.6	7.62	G	326.956 754 52	−72.681 827 75	*	3.30	23.20	−13.20	1.07	1.07	0.88	0.82	0.76	+	2	−	3	−	8	+	4	−	2	+	2	−	2	−	3	−	4	−34	3	0.68
107617	21 47 50.21	−39 30 42.7	7.51	H	326.959 208 50	−39.511 873 49		5.20	23.16	−7.07	0.72	0.56	0.89	0.83	0.57	+31	−22	−25	+10	+	8	+20	+17	+56	−17	+24	0	0.33
107618	21 47 50.39	−16 04 46.7	8.06	G	326.959 958 83	−16.079 632 06		21.08	−224.19	−62.57	0.95	0.69	1.03	1.50	0.76	+21	+	1	−	5	+13	−29	+26	−26	−14	+	2	+	3	0	0.09
107619	21 47 53.04	−44 49 28.1	8.52	H	326.970 996 49	−44.824 471 79		2.61	5.96	13.31	1.06	0.81	1.47	0.92	0.85	+36	−28	−	8	−	1	+38	+	4	+39	+67	−22	+39	0	0.92
107620	21 47 55.19	−52 55 49.5	7.59	H	326.979 947 73	−52.930 422 89		29.43	101.64	−87.53	0.66	0.52	0.89	0.86	0.54	+27	−	6	−	9	+26	+27	+15	+26	+36	−20	+25	0	1.28
*107621	21 47 55.71	−49 35 23.6	8.58	H	326.982 128 08	−49.589 880 03		6.73	29.93	−18.13	0.81	0.59	1.16	0.87	0.60	+32	+	6	+	0	−	7	+17	+14	+16	+37	−	7	+32	0	−0.19
*107622	21 47 55.67	−09 51 49.0	8.59	H	326.981 949 24	−09.863 602 41		1.74	−7.45	3.80	1.09	0.58	1.14	1.38	0.55	+33	−21	−	2	−28	−	3	+19	−	7	+23	+	9	+40	0	−0.76
107623	21 47 57.91	+51 37 36.8	7.86	H	326.991 275 74	+51.626 901 48		3.25	−10.84	4.96	0.53	0.53	0.65	0.58	0.61	+	0	+11	+	4	+10	−	5	−	9	−	3	−	1	+	7	+	4	3	0.94
107624	21 47 58.43	+28 48 56.4	8.04	G	326.993 470 93	+28.815 678 76		12.14	62.22	30.65	0.76	0.72	0.97	0.83	0.74	−	5	+23	−13	+17	−	2	−13	+	1	−	8	+20	−	3	0	−0.05
107625	21 47 59.96	−40 15 18.8	8.62	H	326.999 846 72	−40.255 224 34		42.12	107.49	−351.92	0.88	0.57	1.06	1.02	0.61	+14	−20	−12	+12	+	4	+	2	+	9	+44	−23	+11	0	0.08
107626	21 48 00.28	+21 16 49.0	9.26	H	327.001 148 98	+21.280 274 97		6.98	16.29	−1.34	0.86	0.96	1.20	0.99	1.35	+36	−16	−36	+	1	+	4	+	6	+15	−16	+	6	+52	0	−0.45
107627	21 48 00.59	−06 27 46.8	7.55	H	327.002 456 13	−06.462 986 23		7.05	25.60	−43.25	1.08	0.57	0.99	1.54	0.58	+15	−	7	−23	−60	+	8	+12	+	5	−	3	+19	+20	0	0.77
107628	21 48 00.71	+11 45 58.3	8.72	H	327.002 954 62	+11.766 195 61		0.15	3.64	−4.15	1.19	0.95	1.50	1.62	1.15	+	2	+34	−30	−	1	−	2	+20	+17	−27	+43	+16	3	0.64
107629	H 21 48 02.78	+69 19 41.2	8.57	H	327.011 583 54	+69.328 120 57	A	2.38	11.91	−2.65	1.31	1.07	1.15	1.51	1.03	−11	−13	+12	−12	+	3	+	9	+	0	−20	−	7	−22	0	−0.54
107630	21 48 03.64	−32 20 33.6	8.20	G	327.015 169 29	−32.342 673 69		6.10	−15.75	−0.59	0.90	0.70	1.09	1.24	0.72	+26	−	5	−22	−15	+	5	+24	+16	+50	−	7	+16	0	0.02
107631	21 48 03.78	+40 31 33.3	10.13	H	327.015 732 45	+40.525 903 31		7.04	27.02	−36.14	1.01	1.05	1.58	1.08	1.21	−19	+	1	−	1	+	5	+12	−18	+13	+	4	+22	−26	2	0.01
107632	21 48 04.16	−12 08 40.0	8.64	H	327.017 330 13	−12.144 450 02		1.05	−1.87	−6.97	1.12	0.76	1.19	1.67	0.83	+59	−	3	+12	+33	+55	+20	+43	+60	+15	+76	0	−1.22
107633	21 48 04.40	+52 22 07.3	9.50	H	327.018 315 36	+52.368 708 03		2.99	2.43	−4.17	0.79	0.78	0.96	0.91	0.94	−	4	+	2	+	5	+10	+	5	−16	+	9	−	8	−	1	+11	0	−1.35
107634	21 48 04.47	+44 20 39.6	7.53	H	327.018 628 15	+44.344 340 68		3.94	7.86	0.82	0.57	0.56	0.76	0.69	0.69	−29	+	8	+	5	+	4	−	3	+11	+	0	+23	+	4	−43	0	0.10
107635	H 21 48 05.87	−38 38 31.1	9.38	H	327.024 458 27	−38.641 977 50	*	4.62	15.46	−12.88	3.41	2.30	1.71	1.77	1.07	+11	−16	−25	+17	+	5	+13	+14	+73	−27	+	3	0	−0.72
107636	21 48 08.29	+45 48 15.5	7.66	H	327.034 544 01	+45.804 306 25		0.89	2.96	−0.65	0.57	0.54	0.73	0.71	0.64	−26	+	3	+	9	+23	−	4	+11	−	5	+10	+11	−27	0	0.59
107637	21 48 08.41	+36 34 49.5	6.25	1 H	327.035 047 88	+36.580 402 84		4.65	−23.83	−5.96	0.43	0.46	0.71	0.54	0.57	−	7	+	3	−16	−22	−	2	−	8	+	0	−34	+25	+	6	1	0.32
107638	21 48 08.80	−44 56 33.5	10.15	H	327.036 660 90	−44.942 638 76		6.07	28.73	3.79	1.20	1.06	1.86	1.18	1.11	+42	−15	+	3	−	6	+30	+12	+33	+56	−10	+38	5	1.46
107639	21 48 08.85	−60 33 12.4	9.16	H	327.036 867 64	−60.553 438 85		4.55	−15.14	−2.52	1.02	0.88	1.45	1.27	0.93	−	7	−18	−12	−18	+30	+	3	+26	+	3	−19	+	7	0	−0.46
107640	21 48 09.28	−25 52 39.9	7.58	H	327.038 669 99	−25.877 746 42		2.06	−4.91	−17.30	0.82	0.57	1.02	0.93	0.59	+34	−12	−17	−18	−24	+41	−21	−	5	+	3	+36	0	−1.42
107641	21 48 10.87	−24 03 19.4	8.44	H	327.045 296 35	−24.055 402 19		6.33	43.15	14.90	0.97	0.73	1.39	1.24	0.74	+24	−	9	−44	+	0	−39	+60	−21	+	4	+27	+33	2	−0.16
107642	21 48 10.91	+24 27 51.2	7.14	H	327.045 458 90	+24.464 229 03		2.31	−22.37	−21.61	0.71	0.68	0.91	0.85	0.80	+15	+20	−11	−	8	+	5	−31	+	2	+13	+	0	+19	0	1.39
107643	21 48 11.03	+53 05 23.4	7.62	H	327.045 972 43	+53.089 826 59		3.49	15.07	4.59	0.53	0.52	0.65	0.63	0.58	−	3	−	5	+	0	−	8	+14	−24	+13	−	6	+	8	+10	0	−1.03
107644	21 48 11.86	−28 12 38.5	8.12	H	327.049 429 50	−28.210 703 70		2.84	−11.21	−17.57	0.89	0.56	1.03	0.96	0.59	+20	+	9	−14	−27	−10	+34	−	6	−	3	+14	+31	0	1.86
107645	21 48 13.23	−35 50 27.1	8.80	H	327.055 118 20	−35.840 871 42		0.79	22.30	−32.94	0.98	0.63	1.12	1.10	0.59	+	5	−14	−	2	+26	+	4	+10	+	7	+55	−	9	−	4	0	−0.06
107646	21 48 13.80	+07 01 55.2	8.57	G	327.057 518 43	+07.031 989 68		3.98	22.90	6.16	1.09	0.95	1.34	1.31	1.21	+18	−	8	−39	−20	+11	+23	+15	+	9	+25	+39	3	0.29
107647	21 48 14.19	+11 10 39.8	8.15	H	327.059 121 96	+11.177 715 23		11.32	−7.61	26.70	0.91	0.84	1.11	1.13	0.92	+24	−	2	−29	−21	+	0	+	1	−	2	−29	+38	+14	0	−1.41
107648	21 48 14.98	+65 10 14.4	6.74	H	327.062 430 89	+65.170 660 09		3.90	23.99	7.37	0.77	0.71	0.82	0.97	0.74	−	8	−	7	+13	+	3	+	4	+	7	+	3	−17	+	4	−	5	0		
107649	21 48 15.61	−47 18 10.4	5.57	H	327.065 037 24	−47.302 897 90		63.95	165.64	−295.00	0.49	0.41	0.78	0.55	0.40	+44	−20	−	7	+	5	+	2	+15	+	7	+26	−	1	+31	1	0.38
107650	21 48 16.01	+54 23 14.3	7.86	H	327.066 714 76	+54.387 309 43		7.86	36.34	30.28	0.60	0.53	0.70	0.64	0.55	−	8	−11	−	6	−22	+10	+	4	+	8	−20	+13	+10	1	−1.19
107651	21 48 17.06	+62 32 29.1	9.61	H	327.071 087 75	+62.541 429 82		1.06	−2.98	−5.86	0.86	0.78	0.92	1.08	0.97	−	2	+	4	+11	+33	+	3	+	1	+	7	+	4	+10	+13	0	−0.48
107652	H 21 48 17.42	−37 41 31.6	9.14	H	327.072 563 34	−37.692 101 97	A	12.06	−25.38	−50.76	3.74	2.77	3.80	4.34	2.13	+27	−13	−30	+	1	+25	+	5	+26	+67	−23	+27	0	0.47
107653	21 48 18.43	+38 57 22.1	7.22	1 H	327.076 770 90	+38.956 131 91		1.85	2.16	−2.54	0.42	0.50	0.75	0.49	0.62	−24	+	6	−	2	+14	+15	−17	+17	+11	+18	−28	0	−2.75
107654	21 48 22.24	+46 49 33.3	8.31	H	327.092 685 76	+46.825 911 69		6.50	33.32	15.40	0.67	0.69	0.91	0.86	0.85	−21	+14	+	1	+	9	+	2	−	4	+	7	−13	+24	−14	0	−0.53
107655	21 48 22.84	+00 12 03.1	8.32	H	327.095 149 55	+00.200 868 63		7.84	11.87	−33.78	0.91	0.61	1.07	1.19	0.69	+29	+	7	−	5	+	5	+	4	+36	+	7	−	4	+28	+45	0	−1.02
107656	21 48 22.97	−59 32 47.7	8.56	H	327.095 723 54	−59.546 595 53		2.41	10.00	−4.29	0.83	0.72	1.26	1.02	0.64	−26	+12	−37	−17	+25	−12	+17	−10	−	8	+	3	0	0.44
107657	21 48 23.51	+32 47 46.2	6.82	H	327.097 951 24	+32.796 180 54		2.83	4.14	0.80	0.49	0.42	0.69	0.55	0.46	−33	+18	−16	+19	−	6	−	4	−	1	−30	+16	−25	1	−2.29
107658	H 21 48 24.82	−48 50 52.6	9.16	H	327.103 435 51	−48.847 942 81	A	12.83	−96.44	−59.36	1.52	1.21	2.02	1.52	1.07	+25	−22	+17	+	7	+16	+	8	+13	+39	−	3	+27	0	−0.13
107659	21 48 24.89	−60 50 04.8	9.15	H	327.103 709 08	−60.834 673 32		1.85	0.92	0.81	1.01	0.92	1.59	1.35	0.99	−	2	−22	−20	−13	+17	+	5	+17	+	4	−19	+	4	0	1.49
107660	21 48 25.32	+57 51 16.2	8.27	H	327.105 515 52	+57.854 510 26		4.76	32.94	0.92	0.56	0.56	0.67	0.63	0.63	+	9	−	6	−	2	+16	+16	−10	+22	−	6	−	2	+38	0	1.87
107661	21 48 27.41	−21 40 09.1	9.59	H	327.114 197 04	−21.669 186 53		2.20	−15.93	−12.37	1.23	0.96	1.54	1.47	1.06	+34	−21	−33	−	1	−18	+26	−	9	+30	−10	+30	0	2.31
107662	21 48 27.56	+04 23 45.4	9.02	H	327.114 815 75	+04.395 951 58		2.35	−22.66	2.15	1.10	0.96	1.38	1.84	1.30	+37	+	3	−29	+	1	−27	+34	−	9	−57	+44	+61	0	1.62
107663	21 48 27.91	−26 14 06.7	8.60	G	327.116 301 82	−26.235 208 04		8.09	−62.74	−67.94	0.93	0.68	1.17	1.38	1.02	+34	+	6	−	1	−15	−21	+31	−27	−	2	+	1	+53	0	0.48
107664	21 48 29.34	+38 38 54.9	6.10	H	327.122 255 57	+38.648 578 76		6.61	24.01	−1.60	0.33	0.40	0.61	0.38	0.52	−34	+16	−13	+10	+	5	−14	+	9	+15	+23	−41	1	−0.18
107665	21 48 31.39	−78 26 00.7	8.72	H	327.130 773 24	−78.433 528 19		22.16	−137.68	119.98	0.73	0.61	0.88	0.85	0.74	+	7	−24	−	9	+21	+	5	−12	+	9	+10	−25	+	3	1	1.97
107666	21 48 32.51	+28 42 55.1	8.27	H	327.135 469 99	+28.715 312 82		2.70	8.32	−1.43	0.78	0.74	0.96	0.87	0.79	+	1	−	1	−	8	+22	+	0	−24	−	1	−	8	+12	+	2	2	−0.06
107667	21 48 33.14	−14 09 56.5	9.26	H	327.138 090 58	−14.165 702 20		−0.82	16.48	−22.19	1.30	0.78	1.53	1.97	0.68	+27	+	0	+	3	+	3	−13	+37	−	3	+34	+10	+21	5	0.29
107668	21 48 34.67	−06 14 56.7	7.66	H	327.144 455 65	−06.249 088 54		6.30	9.19	−7.18	0.96	0.59	1.01	1.14	0.56	+25	−	3	−25	−40	−	8	+16	−	4	−17	+25	+19	0	1.28
107669	21 48 34.74	−47 46 32.3	6.79	H	327.144 732 44	−47.775 628 59		7.53	−5.03	0.06	0.52	0.43	0.83	0.58	0.41	+43	−14	+	2	+	6	−	1	+20	+	3	+24	+	6	+27	0	−1.32
107670	21 48 36.06	−71 12 27.6	9.53	H	327.150 230 57	−71.207 674 23		2.71	22.81	−5.66	0.87	0.86	1.17	1.00	0.94	−27	+	8	−14	+	0	−19	−	4	−18	+	4	−	5	−38	0	−0.86
107671	21 48 36.52	+39 04 55.4	8.11	H	327.152 179 64	+39.082 049 70		1.46	7.55	−14.41	0.56	0.66	0.99	0.70	0.86	−26	+	6	+	5	+13	+13	−	7	+14	+	8	+14	−38	0	−3.09
107672	21 48 40.20	−07 22 13.1	8.75	H	327.167 497 38	−07.370 296 54		5.54	−41.10	−44.87	1.04	0.63	1.16	1.26	0.67	+19	+	7	−11	−24	+14	+21	+14	+	9	+28	+28	0	1.70
107673	21 48 40.44	−37 47 24.5	9.06	H	327.168 484 31	−37.790 130 86		6.89	−11.58	2.06	1.15	0.80	1.39	1.31	0.78	+30	−34	−29	+11	+15	+14	+29	+66	−32	+15	0	−0.05
107674	21 48 41.26	−19 24 48.8	8.78	H	327.171 917 42	−19.413 545 69		4.78	80.04	−69.95	1.06	0.83	1.23	1.38	0.93	+23	−	5	−	7	−	4	−21	+39	−21	−17	+16	+17	0	0.51
107675	21 48 41.77	−29 16 37.3	9.64	H	327.174 047 75	−29.277 026 63		3.09	32.04	−67.85	1.26	0.88	1.49	1.55	0.95	+28	−	6	−31	+	1	−13	+19	−	7	+	5	−	3	+36	0	1.37
107676	21 48 42.79	−35 12 04.0	9.10	H	327.178 283 97	−35.201 106 58		0.52	−0.17	−0.89	1.10	0.69	1.40	1.38	0.68	+10	+	1	−17	+24	−10	+36	+	0	+53	−27	−11	0	0.36
107677	21 48 43.54	+05 50 38.6	10.86	G	327.181 414 98	+05.844 058 40		2.07	0.85	−2.22	2.27	1.80	2.85	3.98	2.08	+10	+21	−40	+36	−34	+52	−	4	−38	+38	+36	0	0.83
107678	H 21 48 44.12	−65 30 10.3	7.03	G	327.183 828 51	−65.502 870 48	A	9.13	−0.14	8.87	0.80	0.86	1.07	0.70	0.68	−32	+	2	−14	−12	−	1	−	1	−	1	−	8	−40	2	0.60
107679	21 48 44.27	+01 57 33.9	10.76	G	327.184 474 13	+01.959 420 80		3.35	−4.69	−8.00	1.76	1.05	2.03	2.09	1.15	+23	+	0	−17	−	8	+11	+29	+12	−30	+45	+33	0	0.26
107680	21 48 44.78	−33 51 28.7	10.10	G	327.186 586 75	−33.857 979 66		15.01	204.88	−34.50	2.57	1.68	3.08	2.85	1.59	+17	+	0	−10	−18	+	1	+26	+	7	+33	−14	+	6	3		
*107681	21 48 45.33	−80 23 05.1	7.97	H	327.188 887 62	−80.384 754 45		3.08	6.98	0.57	0.62	0.57	0.72	0.76	0.73	+	1	−14	−	6	+10	−	6	+	5	−	6	+10	+	2	−12	0	0.03
*107682	21 48 45.33	−53 01 04.3	9.31	G	327.188 880 82	−53.017 866 99		2.66	−4.21	−3.25	0.99	0.78	1.35	1.30	0.89	+21	−14	−	6	+31	+30	+	2	+29	+38	−24	+30	1	0.51
107683	21 48 46.99	+22 25 40.9	7.16	H	327.195 787 64	+22.428 023 92		9.94	−18.11	−36.32	0.71	0.68	0.91	0.84	0.85	+32	+	5	−24	+19	+15	−26	+10	+13	−11	+45	0	−1.47
107684	21 48 48.48	−39 29 08.9	9.67	H	327.201 989 05	−39.485 812 51		11.95	41.21	−66.47	1.13	0.85	1.52	1.30	0.89	+23	+	1	−17	+13	+	5	+34	+11	+57	−21	+15	0	0.42
107685	21 48 48.58	−39 04 45.9	8.14	H	327.202 418 71	−39.079 421 61		1.77	2.64	1.39	0.94	0.63	1.12	1.05	0.68	+18	−15	−32	+	0	−	9	+23	−	1	+48	−25	+12	0	0.61
107686	21 48 51.91	−29 21 56.6	8.31	H	327.216 298 39	−29.365 711 66		3.16	−11.41	−3.39	0.93	0.62	1.07	1.06	0.65	+21	−	1	−15	+	3	−13	+24	−	9	+	6	−	1	+25	0	0.75
107687	21 48 52.26	+03 09 30.7	8.33	H	327.217 743 37	+03.158 527 06		2.54	−24.79	−14.72	0.91	0.63	1.17	1.38	0.83	+33	+	9	−20	+19	−10	+50	+12	−41	+51	+64	0	1.66
107688	21 48 52.43	+40 37 13.4	8.51	H	327.218 478 71	+40.620 400 54		6.16	50.18	13.88	0.60	0.70	1.00	0.66	0.82	−25	+17	−	7	+	7	+	4	−	7	+	7	+27	+15	−29	1	0.18
107689	21 48 53.81	−82 07 26.1	9.69	H	327.224 224 25	−82.123 918 54		3.47	8.72	4.15	0.93	0.84	1.10	0.98	0.92	+	3	−28	−20	−	4	+12	−	5	+15	+	8	−	9	−	9	0	0.60
107690	21 48 54.41	−56 16 26.4	6.55	H	327.226 715 93	−56.274 005 48		4.76	21.66	−1.28	0.51	0.39	0.71	0.61	0.42	+	7	−	9	−	6	+31	+18	+18	+19	+29	−10	+17	0	0.62
107691	21 48 54.58	−23 38 19.5	9.00	H	327.227 399 01	−23.638 746 04		4.22	−5.84	−11.86	0.99	0.87	1.44	1.25	0.91	+41	−15	−37	−	8	−20	+51	−	3	+25	+20	+39	0	−1.60
107692	21 48 54.74	+46 54 11.1	8.05	G	327.228 089 59	+46.903 089 78		4.63	−6.14	−4.91	0.69	0.61	0.85	0.89	0.75	−25	+13	+	0	+14	−11	+	0	−	7	+	5	+22	−24	0	−0.43
107693	21 48 54.89	−81 14 06.6	9.30	H	327.228 707 89	−81.235 174 38		6.55	30.67	15.61	0.79	0.79	0.97	0.95	0.92	−	8	−12	−11	+16	−11	−	3	−11	+16	+	2	−11	1	−0.54
107694	21 48 55.38	+25 42 35.4	7.96	G	327.230 731 48	+25.709 829 07		8.39	31.09	4.45	0.75	0.81	0.98	0.85	0.94	+25	+14	−	5	+	2	+17	+	2	+14	+11	−15	+27	0	0.40
107695	21 48 56.27	+52 28 44.5	9.02	H	327.234 476 82	+52.479 038 17		3.29	−2.76	−25.19	0.74	0.75	0.90	0.85	0.91	−12	+10	+	0	−	5	+13	−17	+16	−19	+	4	+	4	0	1.26
107696	21 48 56.70	−01 20 08.1	11.14	H	327.236 260 37	−01.335 575 95		11.36	4.14	8.28	12.44	7.62	13.37	15.29	8.02	+22	−14	−	4	−	4	+	4	+	3	−	6	−13	+18	+29	4		
107697	21 48 58.18	−51 21 57.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
107601	8.905	0.015	7.458	0.009		1.220	0.014	T	1.18	0.01	L	7.4957	0.0012	0.010	81		7.48	7.52		C			1								S
107602	9.668	0.021	8.472	0.014		1.024	0.020	T	1.00	0.02	L	8.5144	0.0017	0.017	131		8.48	8.54					1								
107603	10.823	0.060	9.373	0.028		1.223	0.052	T	1.18	0.05	L	9.4318	0.0020	0.014	55		9.40	9.47		C			1								
107604	7.946	0.007	7.832	0.009		0.111	0.011	T	0.12	0.01	L	7.8757	0.0015	0.013	137		7.86	7.90					1								S
107605	11.360	0.067	10.696	0.060		0.640	0.020	G	0.70	0.02	H	10.7376	0.0034	0.032	112		10.65	10.78		C			1								G
107606	8.146	0.006	7.889	0.007		0.245	0.009	T	0.27	0.01	L	7.9346	0.0014	0.015	184		7.91	7.96					1								S
107607	9.366	0.013	8.746	0.012		0.554	0.004	G	0.63	0.00	H	8.8097	0.0020	0.018	134		8.78	8.85		C			1								S
107608	5.085	0.003	5.022	0.003		0.042	0.002	G	0.06	0.00	H	5.0443	0.0005	0.005	79		5.04	5.05		D	21477−3054	I 1	1	S							S
107609	9.849	0.022	9.437	0.023		0.403	0.026	T	0.47	0.03	L	9.5249	0.0027	0.021	103		9.49	9.56		C			1								
107610	7.689	0.010	7.445	0.009		0.233	0.013	T	0.26	0.02	L	7.4704	0.0013	0.008	64		7.46	7.49					1								S
107611	8.791	0.012	8.549	0.013	*	0.231	0.017	T	0.26	0.02	L	* 8.5440	0.0013	0.012	125	*	8.52	8.57		D	21478+6203	I 1	2	C	A	AB	198	0.310	0.004	0.74	0.06	
107612	10.740	0.037	9.876	0.027		0.705	0.004	G	0.75	0.00	H	9.9637	0.0027	0.029	142		9.92	10.01					1								G
107613	9.827	0.027	8.591	0.017		1.055	0.025	T	1.02	0.02	L	8.6644	0.0019	0.013	80		8.64	8.70		C			1								S
107614	9.411	0.011	8.656	0.009		0.674	0.011	T	0.73	0.01	L	8.7178	0.0013	0.020	232		8.69	8.76		C			1								S
107615	9.785	0.018	8.546	0.011		1.057	0.016	T	1.02	0.01	L	8.5831	0.0022	0.021	134		8.55	8.62		U			1								
107616	8.011	0.007	7.661	0.007	*	0.359	0.015	G	0.42	0.02	H	* 7.6974	0.0010	0.015	145	*	7.67	7.72		D	21478−7241	M 1	2	C	A	BA	141	0.230	0.004	0.09	0.08	S
107617	7.683	0.007	7.518	0.007		0.158	0.009	T	0.17	0.01	L	7.5608	0.0011	0.011	119		7.54	7.58					1								S
107618	8.821	0.027	8.121	0.024		0.613	0.002	G	0.68	0.00	H	8.1871	0.0009	0.008	59		8.17	8.20					1								S
107619	10.248	0.025	8.623	0.012		0.220	0.015	G	1.24	0.07	S	8.6826	0.0035	0.037	135		8.61	8.72		R			1	S							
107620	8.399	0.010	7.662	0.008		0.660	0.010	T	0.72	0.01	L	7.7268	0.0012	0.012	124		7.71	7.75					1								S
107621	9.180	0.011	8.642	0.011		0.512	0.012	T	0.58	0.01	L	8.6962	0.0015	0.016	168		8.67	8.73					1								S
107622	9.713	0.022	8.660	0.015		0.914	0.020	T	0.91	0.01	L	8.7520	0.0015	0.014	89		8.72	8.79					1								S
107623	7.989	0.008	7.866	0.010		0.100	0.015	G	0.11	0.02	H	7.8960	0.0012	0.013	127		7.87	7.92					1								S
107624	8.622	0.012	8.107	0.012		0.484	0.015	T	0.56	0.02	L	8.1524	0.0015	0.014	84		8.13	8.18		C			1								S
107625	9.858	0.020	8.730	0.013		0.960	0.000	G	1.01	0.00	I	8.7626	0.0015	0.013	106		8.74	8.79					1								
107626	9.894	0.027	9.305	0.026		0.550	0.033	T	0.62	0.03	L	9.3843	0.0021	0.015	84		9.36	9.41		C			1								
107627	7.703	0.011	7.561	0.013		0.137	0.016	T	0.15	0.02	L	7.5979	0.0014	0.009	68		7.58	7.63					1	G							S
107628	10.681	0.055	8.912	0.022		1.474	0.047	T	1.49	0.07	L	8.8515	0.0028	0.020	50		8.82	8.88		C	21480+1146	I 1	1								
107629	8.827	0.019	8.379	0.020	*	0.423	0.026	T	0.49	0.03	L	* 8.6703	0.0013	0.014	116	*	8.64	8.69		D	21480+6920	I 1	2	C	A	AB	272	1.867	0.003	0.86	0.01	
107630	8.555	0.013	8.229	0.013		0.279	0.003	G	0.32	0.00	H	8.2810	0.0017	0.014	86		8.26	8.31		C			1	G							S
107631	11.537	0.070	10.212	0.034		1.125	0.061	T	1.09	0.06	L	10.2958	0.0027	0.027	162		10.21	10.36					1								G
107632	10.616	0.043	8.787	0.016		1.522	0.036	T	1.56	0.05	L	8.7575	0.0014	0.014	106		8.74	8.79		C			1								
107633	9.612	0.018	9.523	0.024		0.087	0.028	T	0.10	0.03	L	9.5357	0.0025	0.019	123		9.51	9.57					1								G
107634	8.808	0.011	7.632	0.007		1.008	0.010	T	0.98	0.01	L	7.6918	0.0013	0.013	133		7.67	7.72					1								
107635	10.067	0.025	9.476	0.023	*	0.552	0.025	T	0.62	0.02	L	* 9.4993	0.0020	0.019	105	*	9.47	9.53		C	21481−3839	H 1	2	C	B	AB	99	0.201	0.043	1.79	0.87	
107636	9.211	0.015	7.790	0.009		1.200	0.014	T	1.16	0.01	L	7.8281	0.0012	0.014	128		7.80	7.85		C			1								
107637	8.299	0.009	6.440	0.004		1.545	0.008	T	1.61	0.02	L	6.3668	0.0010	0.012	155		6.35	6.39		M			1								S
107638	10.707	0.033	10.180	0.033		0.503	0.035	T	0.58	0.04	L	10.2642	0.0026	0.026	144		10.23	10.31					1								
107639	10.471	0.027	9.306	0.017		1.000	0.025	T	0.98	0.02	L	9.3276	0.0023	0.031	140		9.27	9.38					1								
107640	8.868	0.016	7.688	0.010		1.011	0.015	T	0.99	0.01	L	7.7442	0.0010	0.007	72		7.73	7.76					1								S
107641	8.846	0.015	8.459	0.015		0.378	0.018	T	0.44	0.02	L	8.5228	0.0011	0.011	74		8.50	8.54					1								S
107642	9.072	0.015	7.308	0.008		1.470	0.013	T	1.48	0.02	L	7.2735	0.0025	0.013	81		7.25	7.29					1								S
107643	7.610	0.007	7.613	0.008		0.002	0.010	T	0.02	0.01	L	7.6305	0.0011	0.010	123		7.62	7.65					1								S
107644	9.963	0.025	8.270	0.012		1.414	0.022	T	1.39	0.04	L	8.2603	0.0015	0.012	86		8.24	8.28					1								S
107645	10.321	0.027	8.913	0.014		1.190	0.024	T	1.15	0.02	L	8.9638	0.0020	0.020	119		8.93	9.00					1								
107646	9.704	0.026	8.663	0.019		0.940	0.015	G	0.93	0.01	H	8.7309	0.0024	0.014	52		8.71	8.75		C			1								
107647	8.685	0.017	8.212	0.016		0.446	0.021	T	0.52	0.02	L	8.2549	0.0021	0.013	58		8.22	8.28		C			1								S
107648	8.386	0.009	6.869	0.005		1.275	0.008	T	1.23	0.01	L	6.8938	0.0009	0.009	115		6.88	6.91					1	X							S
107649	6.307	0.003	5.640	0.002		0.601	0.003	G	0.66	0.02	A	5.6986	0.0003	0.005	201		5.69	5.71		C	21483−4718	I 1	1								S
107650	8.162	0.010	7.880	0.009		0.252	0.007	G	0.28	0.01	H	7.9251	0.0013	0.012	124		7.91	7.95		C			1								S
107651	9.910	0.023	9.614	0.027		0.250	0.015	G	0.28	0.02	H	9.6854	0.0021	0.022	119		9.65	9.73		C			1								G
107652	9.527	0.023	8.828	0.023	*	0.632	0.025	T	0.70	0.02	L	* 9.2712	0.0021	0.015	116	*	9.24	9.30		D	21483−3742	I 1	2	C	A	AB	217	1.881	0.004	0.37	0.02	
107653	8.075	0.007	7.324	0.005		0.686	0.007	T	0.74	0.01	L	7.3645	0.0014	0.013	193		7.34	7.39		M			1								S
107654	8.952	0.012	8.357	0.011		0.555	0.014	T	0.63	0.01	L	8.4254	0.0017	0.019	121		8.39	8.46					1								
107655	9.433	0.019	8.405	0.014		0.884	0.018	T	0.89	0.01	L	8.4618	0.0019	0.016	84		8.44	8.50		C			1								
107656	10.531	0.027	8.726	0.011		1.503	0.023	T	1.53	0.03	L	8.6856	0.0021	0.022	156		8.64	8.72					1								
107657	6.811	0.003	6.827	0.004		−0.010	0.005	T	0.01	0.01	L	6.8303	0.0007	0.009	203		6.82	6.85		C			1								S
107658	9.866	0.025	9.170	0.022	*	0.712	0.003	G	0.77	0.00	R	* 9.2982	0.0015	0.017	152	*	9.27	9.33		D	21484−4851	I 1	2	C	A	AB	97	5.399	0.007	1.56	0.03	
107659	10.538	0.030	9.254	0.017		1.093	0.027	T	1.05	0.03	L	9.3221	0.0025	0.028	133		9.28	9.39					1	S							
107660	8.390	0.008	8.272	0.009		0.114	0.011	T	0.13	0.01	L	8.3088	0.0012	0.012	135		8.29	8.34		C			1								
107661	10.899	0.068	9.764	0.040		0.976	0.061	T	0.96	0.05	L	9.7498	0.0027	0.020	78		9.72	9.78		C			1								
107662	10.175	0.032	9.101	0.021		0.930	0.029	T	0.92	0.02	L	9.1801	0.0018	0.016	93		9.15	9.22		C			1								
107663	9.211	0.019	8.610	0.017		0.544	0.015	G	0.62	0.01	H	8.7011	0.0012	0.011	72		8.68	8.72					1	G							S
107664	6.002	0.002	6.086	0.003		−0.072	0.003	T	−0.05	0.00	L	6.0823	0.0006	0.006	222		6.07	6.09		C			1								S
107665	9.768	0.017	8.824	0.013		0.819	0.017	T	0.84	0.01	L	8.8589	0.0016	0.017	143		8.83	8.89					1								
107666	9.464	0.018	8.381	0.012		0.937	0.017	T	0.93	0.01	L	8.4279	0.0019	0.014	86		8.40	8.46		C			1								
107667	10.970	0.059	9.407	0.025		1.311	0.050	T	1.27	0.06	L	9.4147	0.0023	0.021	77		9.37	9.45					1								
107668	7.860	0.011	7.705	0.015		0.149	0.017	T	0.16	0.02	L	7.7080	0.0014	0.013	72		7.69	7.74		C	21486−0615	I 1	1	S							S
107669	7.171	0.004	6.820	0.004		0.341	0.005	T	0.40	0.01	L	6.8696	0.0007	0.009	205		6.86	6.88		C			1								S
107670	9.887	0.020	9.544	0.022		0.332	0.033	T	0.39	0.04	L	9.6127	0.0025	0.029	144		9.57	9.67					1								
107671	10.072	0.019	8.267	0.008		1.503	0.016	T	1.53	0.02	L	8.2306	0.0014	0.018	191		8.20	8.26					1								
107672	9.148	0.017	8.783	0.018		0.346	0.023	T	0.41	0.03	L	8.8314	0.0022	0.020	78		8.80	8.86		C			1								S
107673	9.754	0.019	9.126	0.017		0.579	0.019	T	0.65	0.02	L	9.1904	0.0022	0.019	110		9.17	9.23					1								
107674	9.989	0.033	8.897	0.022		0.944	0.030	T	0.93	0.02	L	8.9467	0.0023	0.015	63		8.93	8.98		C			1								
107675	10.716	0.045	9.772	0.033		0.819	0.043	T	0.84	0.03	L	9.7822	0.0030	0.022	79		9.75	9.81		C			1								
107676	11.070	0.051	9.301	0.020		1.474	0.043	T	1.49	0.06	L	9.2278	0.0024	0.017	119		9.21	9.26		C			1								
107677						1.303	0.020	G	1.36	0.14	K	11.0373	0.0084	0.038	47		10.97	11.10					1								G
107678	7.521	0.007	7.136	0.008	A	0.359	0.003	G	0.42	0.00	H	* 7.1167	0.0011	0.011	214	*	7.10	7.14		D	21487−6530	I 1	2	C	A	AB	307	1.326	0.006	1.49	0.02	S
107679	10.534	0.042	10.854	0.096		−0.159	0.015	G	−0.16	0.02	H	10.7315	0.0040	0.039	94		10.67	10.80					1								G
107680	11.147	0.054	10.180	0.036		0.831	0.003	G	0.87	0.00	H	10.2661	0.0034	0.030	113		10.22	10.30			21487−3351	I 1	1	X							
107681	9.907	0.018	8.134	0.008		1.477	0.016	T	1.49	0.02	L	8.1017	0.0014	0.017	149		8.07	8.15					1								
107682	10.487	0.035	9.408	0.022		0.923	0.004	G	0.92	0.00	H	9.4897	0.0028	0.020	124		9.46	9.53					1								
107683	7.414	0.006	7.197	0.007		0.207	0.009	T	0.23	0.01	L	7.2242	0.0016	0.012	72		7.21	7.25					1								S
107684	10.555	0.031	9.768	0.025		0.698	0.030	T	0.75	0.03	L	9.8043	0.0030	0.028	112		9.75	9.85					1								
107685	9.665	0.020	8.246	0.011		1.184	0.005	G	1.14	0.01	H	8.3092	0.0012	0.012	100		8.29	8.33					1								S
107686	9.810	0.023	8.430	0.013		1.168	0.021	T	1.13	0.02	L	8.4748	0.0019	0.012	83		8.46	8.50		C			1								
107687	9.546	0.017	8.442	0.012		0.952	0.016	T	0.94	0.01	L	8.4903	0.0012	0.013	112		8.47	8.51		C			1								
107688	8.945	0.010	8.550	0.010		0.374	0.013	T	0.44	0.01	L	8.5996	0.0018	0.019	174		8.57	8.63					1								S
107689	10.340	0.026	9.778	0.025		0.530	0.027	T	0.60	0.03	L	9.8071	0.0021	0.029	133		9.77	9.86					1								
107690	6.449	0.003	6.532	0.004		−0.077	0.000	G	−0.06	0.00	H	6.5265	0.0007	0.007	141		6.51	6.54		C			1								S
107691	11.073	0.062	9.176	0.021		1.609	0.054	T	1.72	0.15	O	9.1021	0.0019	0.017	78		9.06	9.14		C			1								
107692	8.615	0.010	8.111	0.009		0.474	0.012	T	0.55	0.01	L	8.1561	0.0020	0.014	119		8.13	8.18					1								
107693	9.987	0.022	9.341	0.020		0.530	0.015	G	0.60	0.02	H	9.4200	0.0018	0.020	123		9.39	9.46					1								
107694	8.364	0.011	7.994	0.011		0.361	0.011	G	0.42	0.01	H	8.0437	0.0015	0.012	77		8.02	8.06		D			1								S
107695	9.395	0.017	9.062	0.019		0.316	0.024	T	0.36	0.03	L	9.1017	0.0017	0.019	120		9.08	9.13					1								
107696	12.716	0.327	11.065	0.124		1.241	0.197	G	1.40	0.21	I	11.2531	0.0068	0.050	65		11.17	11.37					1	X							G G
107697	7.794	0.006	7.534	0.008		0.244	0.010	T	0.27	0.01	L	7.5801	0.0011	0.010	129		7.56	7.60		C			1								S
107698	10.841	0.060	9.105	0.022		1.448	0.051	T	1.45	0.08	L	9.1189	0.0019	0.014	63		9.08	9.15					1								
107699	8.416	0.010	8.260	0.012		0.150	0.015	T	0.17	0.01	L	8.3132	0.0017	0.011	82		8.29	8.34		C			1								S
107700	10.071	0.026	9.085	0.018		0.860	0.015	G	0.90	0.01	H	9.1157	0.0021	0.017	109		9.09	9.15					1								

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
107701	21 49 01.63	−46 53 03.8	8.43 2 H		327.256 805 53	−46.884 376 87		0.62	6.28	1.80	0.71	0.61	1.12	0.81	0.61	+39	−21	−	4	+	2	+	6	+19	+	9	+31	+	5	+28	1	0.52
107702	21 49 01.93	−05 24 13.1	6.66 H		327.258 036 66	−05.403 643 84		7.46	−52.57	−42.48	0.88	0.53	0.90	0.97	0.54	+27	−18	−24	−50	+	1	+26	+	0	−	7	+20	+32			2	1.74
107703	21 49 03.19	+26 30 24.4	9.22 H		327.263 279 77	+26.506 780 06		3.71	15.69	−7.31	1.00	0.93	1.25	1.13	1.10	+10	+18	−14	−	2	+14	−	6	+16	+	3	+21	+13			0	−1.21
107704	21 49 04.33	+49 40 37.6	7.03 G		327.268 029 29	+49.677 108 85		2.47	2.21	−0.16	0.49	0.49	0.62	0.55	0.53	−19	−	6	+	2	−17	+14	+	0	+12	−	2	+11	−11			0	−1.19
107705 H	21 49 05.27	−72 06 06.4	9.53 H		327.271 961 65	−72.101 784 03	A	62.00	300.77	−291.10	2.28	2.27	2.43	2.09	2.18	−13	−12	−	2	−	2	+	3	−22	+	6	−16	+10	−12		1	1.59
107706	21 49 05.44	−49 59 01.4	10.16 H		327.272 668 39	−49.983 734 36		6.78	10.18	−11.15	1.18	0.91	1.68	1.28	0.93	+28	−14	−	8	−11	+12	+	0	+13	+29	−16	+29			0	0.24
107707	21 49 06.69	+42 21 29.5	7.98 H		327.277 876 38	+42.358 182 05		2.65	8.21	0.43	0.55	0.63	0.88	0.68	0.82	−29	+17	−17	+15	−	8	+	5	−	9	+	6	−	5	−37	0	−1.03
107708	21 49 07.01	−22 49 06.7	8.56 G		327.279 191 82	−22.818 536 87		8.97	18.20	15.90	1.10	0.74	1.28	1.39	0.80	+15	−21	−21	+24	−30	+27	−28	+12	+32	+	6				5	1.14
107709	21 49 07.06	+53 28 11.0	9.11 H		327.279 396 29	+53.469 719 60		2.80	15.93	5.89	0.75	0.72	0.91	0.88	0.80	+	1	−	4	−10	−10	+	7	−12	+	6	−14	+	2	+26	0	0.03
107710	21 49 08.12	+66 47 31.9	6.49 H		327.283 849 24	+66.792 193 33	A	10.37	−20.83	−66.26	0.79	0.75	0.76	0.90	0.76	−	7	+	4	+12	+	7	+	8	+	1	+	8	−	9	+	5	−19	1	0.17
107711	21 49 11.13	−41 33 28.3	11.52 G		327.296 375 25	−41.557 870 29		74.42	948.19	−471.79	37.28	21.03	41.23	42.20	21.95	−	5	+	5	−11	−19	−	7	+41	−	1	+18	−17	−17		4		
107712	21 49 11.38	+41 13 24.1	8.06 H		327.297 428 75	+41.223 366 15		14.05	184.02	124.64	0.59	0.66	0.96	0.67	0.81	−41	+12	−13	+16	+	0	−13	+	0	+16	+12	−40			0	0.08
107713	21 49 11.89	+48 26 14.3	8.42 G		327.299 526 91	+48.437 304 89		7.78	−47.68	−52.80	0.64	0.67	0.81	0.77	0.75	−21	+12	−11	−10	+18	−18	+17	−	4	+14	−16			0	−1.04
107714	21 49 12.62	−15 07 14.1	8.06 H		327.302 603 57	−15.120 592 69		5.65	3.37	−0.55	0.88	0.57	1.02	1.43	0.53	+17	+	6	−	5	+	7	−26	+32	−12	+39	−12	+	6		0	0.13
107715	21 49 12.69	−35 38 18.7	8.21 H		327.302 868 61	−35.638 517 61		7.93	58.20	−89.65	0.91	0.57	1.01	1.10	0.54	+	4	−	6	−	8	+30	+	1	+20	+	5	+56	−14	−	9	2	−0.43
107716	21 49 13.09	−50 31 38.1	9.92 H		327.304 532 94	−50.527 261 25		2.88	−6.26	−25.84	1.22	1.09	1.71	1.40	1.13	+43	−16	−	9	+12	+30	+	5	+29	+44	−10	+44			3	0.46
107717	21 49 13.74	+50 30 43.2	8.31 H		327.307 259 41	+50.512 000 16	B	4.73	6.07	−2.17	6.38	5.53	3.12	3.48	3.18	−14	−	5	+	4	−18	+15	+	3	+11	+	0	+	6	+	0	18	2.19
107718	21 49 14.48	+50 30 54.3	7.74 H		327.310 329 41	+50.515 076 62	A	5.07	6.45	−1.00	2.22	2.21	2.09	2.24	2.03	−12	−	2	+10	−20	+16	+	2	+11	−	4	+	6	+	4	18	2.19
107719	21 49 15.00	−33 55 52.6	10.17 G		327.312 486 73	−33.931 265 17		1.14	14.72	11.15	1.43	0.91	1.72	1.68	0.87	+13	+	0	−	4	+11	−	3	+18	+	5	+55	−15	−	3	0	0.75
107720	21 49 16.13	+17 34 21.4	8.40 H		327.317 207 25	+17.572 614 94		4.09	−5.97	−18.14	0.76	0.73	1.01	0.98	0.86	+41	+	5	−	6	+	1	+	2	−30	+	0	−	7	−	4	+41	0	1.67
107721	21 49 16.67	−35 29 06.9	8.42 G		327.319 460 50	−35.485 237 62		7.56	6.43	2.24	0.95	0.57	1.06	1.15	0.54	+	6	−	2	−	8	+25	+	3	+23	+	6	+54	−12	−	6	0	0.61
107722	21 49 17.42	+38 20 51.8	7.65 1 H		327.322 590 47	+38.347 732 20		2.72	−0.99	3.67	0.43	0.50	0.81	0.52	0.64	−31	+11	−10	+13	+13	−20	+14	+	7	+29	−44				0	−0.66
107723	21 49 19.01	+61 16 22.1	6.18 1 H		327.329 213 60	+61.272 815 92		3.74	0.17	−23.07	0.46	0.41	0.50	0.47	0.41	−10	−	3	+18	+	4	+11	+	5	+11	−	5	+	0	−	5	1	1.26
107724	21 49 19.84	−18 23 11.5	7.56 G		327.332 682 39	−18.386 535 26		8.65	38.79	−4.94	0.90	0.57	0.98	1.25	0.60	+15	−16	+	8	−17	+	0	+20	+	0	+29	+16	+12		0	−1.52
107725	21 49 21.00	+56 33 32.9	9.36 2 H		327.337 489 79	+56.559 152 17		4.98	−5.39	−5.52	1.79	1.67	2.04	1.69	1.58	+	4	+19	+	1	−29	+	6	−12	+10	−38	+11	+22		2		
107726	21 49 21.58	+15 45 40.2	6.84 H		327.339 899 22	+15.761 153 07		5.34	27.48	6.16	0.88	0.60	0.91	1.30	0.67	+28	+18	+10	−62	+	9	−15	+	6	−18	+	1	+18			3	1.09
107727	21 49 23.01	+34 03 53.5	10.90 H		327.345 889 61	+34.064 871 23		1.19	1.05	7.44	1.16	1.30	2.25	1.47	1.54	−16	+	5	−	4	+11	+	1	−18	+	5	−23	+39	−12		2	−0.44
107728	21 49 23.84	+30 45 14.1	8.91 H		327.349 350 14	+30.753 905 30	A	11.28	−2.11	−3.52	3.43	3.17	3.66	3.48	3.06	+	1	+13	−17	+19	−14	+	6	−	9	−50	+23	+	3	18	1.63
107729	21 49 24.19	+30 45 30.5	9.56 H		327.350 805 01	+30.758 484 74	B	9.96	7.57	−13.14	11.19	11.64	6.48	9.20	9.67	+	0	+20	−20	+33	−13	+11	−	6	−35	+23	+	4		18	1.63
107730	21 49 24.30	+58 30 04.8	10.16 H		327.351 245 37	+58.501 335 09	A	3.10	18.21	1.48	3.41	3.35	2.82	3.03	2.96	+	6	−	4	+	5	+	1	+15	+	1	+17	−	7	+10	+36	12	2.79
107731	21 49 24.76	−47 58 35.9	8.63 G		327.353 158 09	−47.976 625 86		19.11	−100.95	−355.34	1.45	0.95	1.23	1.50	0.77	−	8	−12	+17	−35	+	9	−	8	+	8	+43	+16	−	1	1	0.82
107732	21 49 25.62	+58 30 09.6	10.54 H		327.356 731 06	+58.502 676 87	B	−4.67	12.61	0.78	6.75	6.50	4.50	4.82	4.64	−	1	−	6	+	7	−	6	+23	+	1	+22	−	4	+10	+36	12	2.79
107733	21 49 25.73	+54 22 55.0	8.14 H		327.357 211 24	+54.381 946 96		1.31	−2.29	−3.87	0.63	0.55	0.72	0.65	0.58	−	8	−14	−	2	−23	+14	+	6	+11	−14	+	9	+11		0	−2.96
107734	21 49 26.87	+20 27 44.8	6.27 H		327.361 940 87	+20.462 443 82		1.77	1.69	0.83	0.52	0.48	0.65	0.58	0.56	+23	+	6	−11	−	4	+11	+	6	+13	−	5	+11	+27		0	−1.44
107735	21 49 27.10	−13 35 39.3	8.65 H		327.362 925 22	−13.594 259 78		0.66	19.51	−16.33	1.14	0.63	1.41	1.81	0.56	+24	−19	+14	−39	+13	+49	−10	+29	+42	+57				0	0.05
107736	21 49 27.36	−49 07 06.4	8.37 G		327.364 004 97	−49.118 452 67		10.50	51.30	−10.44	0.75	0.56	1.11	0.78	0.53	+33	−	4	+	9	−	4	+14	+28	+12	+29	+	2	+30		0	0.51
107737	21 49 28.05	+37 04 52.4	8.29 H		327.366 860 02	+37.081 221 95		1.45	−8.62	−16.80	0.57	0.60	0.95	0.65	0.71	−15	−	3	−	8	+	2	+16	−	5	+17	−18	+19	−	4	0	−0.15
107738	21 49 30.27	+39 00 06.2	8.55 H		327.376 137 66	+39.001 723 33		4.15	11.48	25.42	0.63	0.75	1.14	0.74	0.93	−26	+	9	−	3	+10	+13	−12	+15	+	8	+26	−33			1	0.38
107739	21 49 30.76	−55 13 25.0	10.20 H		327.378 149 89	−55.223 607 40		10.45	14.54	−38.53	2.42	1.86	3.32	3.17	2.04	+18	−18	−31	+21	+28	−17	+25	+36	−33	+26		0					
107740	21 49 32.46	+54 22 29.0	9.23 H		327.385 229 21	+54.374 715 11		4.08	−3.25	−10.84	0.85	0.75	0.97	0.90	0.80	−	7	−12	−	1	−27	+13	+	5	+	8	−14	+	7	+17	0	−1.91
107741	21 49 32.59	−34 54 27.5	10.22 H		327.385 784 65	−34.907 634 32		0.81	20.29	−4.54	1.21	0.79	1.50	1.42	0.74	+13	+	0	−	5	+	7	+	2	+30	+	6	+42	−17	+	1	0	1.19
107742	21 49 33.21	−61 27 48.9	8.60 H		327.388 357 17	−61.463 572 05		12.07	−12.00	4.42	0.49	0.71	1.30	0.60	0.76	−	8	−	9	−18	+32	+12	+	0	+11	−	3	−17	−12		0	0.58
107743 H	21 49 33.38	−08 18 43.4	8.55 H		327.389 099 85	−08.312 050 25	A	3.88	2.34	5.85	4.69	4.27	3.81	4.11	2.37	+27	+10	+	9	−17	+12	+22	+	5	+	8	+28	+31			1	0.11
107744 H	21 49 35.26	+33 18 43.3	7.13 H		327.396 899 67	+33.312 019 16	*	6.36	−29.22	−13.24	0.37	0.41	0.73	0.39	0.47	−20	−	7	+	0	−18	+	1	−	9	+	1	−29	+21	−	8	1	−1.22
107745	21 49 35.70	−36 41 48.6	8.15 2 H		327.398 762 22	−36.696 828 97		1.06	8.96	−16.92	0.87	0.67	0.98	0.96	0.66	+35	−31	−19	+26	+29	+	7	+35	+72	−19	+27			0	1.33
107746 H	21 49 36.02	+36 06 04.5	8.25 H		327.400 091 91	+36.101 250 46	A	6.49	−5.04	4.80	1.08	1.11	1.59	1.22	1.25	−	8	−	5	+	9	−	1	−	8	−16	−	6	−23	+11	−	2	1	1.18
107747	21 49 36.26	−82 26 02.0	7.16 H		327.401 070 72	−82.433 875 61		10.11	83.14	−49.89	0.52	0.48	0.63	0.63	0.55	−	3	−21	−14	+	0	+	5	+	1	+	7	−	2	−15	−25		1	3.13
107748	21 49 39.50	−20 30 28.4	9.12 H		327.414 570 41	−20.507 882 45		2.70	1.04	−8.60	1.09	0.83	1.44	1.24	0.84	+47	−28	−31	−10	−22	+32	−10	+27	−	2	+40			0	2.73
107749	21 49 40.10	+41 08 55.7	6.48 H		327.417 067 59	+41.148 801 03		0.38	−2.93	−5.62	0.42	0.48	0.68	0.50	0.59	−34	+17	−18	+12	+	1	−	7	+	3	+	9	+16	−35		0	−1.05
107750	21 49 41.02	−12 43 22.5	6.31 H		327.420 931 21	−12.722 915 49		6.44	−8.69	20.81	0.72	0.44	0.83	0.97	0.42	+38	+	2	+23	−	1	+27	+30	+16	+46	+25	+52		0	−2.13
107751	21 49 42.74	+24 05 20.9	7.72 2 H		327.428 072 82	+24.089 139 54		1.25	9.25	2.51	0.71	0.77	0.95	0.86	0.94	+22	+10	−17	+	8	+	2	−17	−	3	+14	−14	+28			0	0.12
107752	21 49 43.12	−33 32 29.6	8.49 H		327.429 653 82	−33.541 563 89		0.72	9.44	−25.62	0.94	0.62	1.15	1.18	0.61	+	9	+	0	−10	−	1	−	4	+26	+	5	+50	−19	−10		0	0.74
107753	21 49 44.05	+15 36 30.4	8.20 H		327.433 547 35	+15.608 440 17		2.38	0.91	−1.54	1.06	0.74	1.13	1.53	0.83	+36	+30	+14	−57	+	8	−21	+	7	−	8	+	1	+24		0	1.04
107754	21 49 45.17	+08 15 58.0	9.32 H		327.438 201 45	+08.266 124 66		6.76	2.31	−18.13	1.32	1.10	1.49	1.72	1.38	+29	−	6	+	0	−	1	+	3	−	7	+	2	+15	+10	+30		0	0.87
*107755 H	21 49 45.24	+65 14 00.5	7.64 2 H		327.438 505 81	+65.233 473 33	A	1.11	−3.36	−2.63	1.01	0.85	0.92	1.13	0.87	−	3	−10	+	7	−26	+	6	+	6	+	6	−15	+	9	−	8	3	2.56
*107756	21 49 45.24	−30 07 20.7	9.42 H		327.438 494 18	−30.122 414 66		10.01	45.93	−121.46	1.03	0.66	1.28	1.14	0.65	+23	−	3	−	7	−11	+	0	+35	+	3	+36	−10	+18		0	−0.38
107757	21 49 45.43	−46 36 39.2	6.98 H		327.439 271 55	−46.610 886 26		4.81	27.21	−39.22	0.65	0.50	0.96	0.62	0.47	+33	−19	−	4	−24	+15	+24	+12	+34	+11	+38			1	0.29
107758	21 49 46.12	−11 40 54.4	10.85 G		327.442 152 85	−11.681 769 84		33.87	−304.16	−312.63	2.11	1.30	2.43	2.89	1.34	+35	+	8	+18	+	1	+28	+28	+18	+28	+23	+49			0	1.74
107759	21 49 48.71	+14 02 17.8	9.63 H		327.452 973 02	+14.038 286 33		5.68	159.71	−43.60	1.35	1.10	1.51	1.87	1.42	+20	+14	+	2	+	8	+10	−	1	+12	+28	+16	+20			0	1.20
107760 H	21 49 48.85	+34 55 00.3	7.89 H		327.453 539 26	+34.916 755 77	A	3.05	8.37	−0.92	0.87	1.22	1.10	0.76	0.85	−23	−	7	+12	−	9	−	2	−22	+	0	−18	+	8	+	3	0	0.52
107761	21 49 50.04	−59 51 54.8	8.21 H		327.458 504 47	−59.865 234 81		2.20	−6.88	−2.13	0.73	0.60	1.12	0.90	0.59	−	5	−	6	−27	−	8	+15	+	4	+14	+	0	−18	+13		0	2.05
107762	21 49 50.54	−60 03 21.0	8.41 H		327.460 590 36	−60.055 846 49		4.32	12.94	10.37	0.75	0.61	1.13	0.93	0.60	+	1	−	9	−19	+	0	+20	+11	+19	+	7	−	7	+24	1	2.23
107763	21 49 50.68	+30 10 27.4	5.07 H		327.461 174 77	+30.174 278 52		10.78	18.89	−26.14	0.38	0.46	0.58	0.48	0.53	+10	+	6	−	9	+24	+	3	+	7	+	4	−	8	+	8	+12	0	−0.47
107764	21 49 51.25	+05 12 46.6	7.33 H		327.463 534 44	+05.212 947 94		7.69	19.59	19.27	0.79	0.66	0.91	1.07	0.80	+25	+	6	−	4	+11	−20	+20	−14	−14	+21	+36			0	2.14
107765	21 49 52.80	−25 09 04.2	8.70 H		327.469 980 23	−25.151 175 22		2.76	−9.90	−30.03	1.04	0.74	1.20	1.30	0.70	+15	−	7	−	7	+30	−34	+23	−24	+30	−	4	+	2		0	1.00
*107766	21 49 53.88	−27 24 14.1	7.12 H		327.474 493 13	−27.403 904 36		7.95	29.96	−10.68	0.78	0.49	0.90	0.90	0.47	+17	+	1	−	8	−	7	−11	+26	−	6	+23	−	2	+12		0	−0.71
*107767	21 49 53.85	+60 12 09.6	10.18 H		327.474 376 38	+60.202 668 20		−1.38	−3.57	−6.08	0.96	0.95	1.12	1.09	1.00	−	7	−	5	+19	+	8	+15	−	1	+18	−10	+	6	+18		0	0.47
107768	21 49 54.37	−43 56 48.3	9.60 G		327.476 536 52	−43.946 756 79		5.51	16.90	−5.62	1.22	0.94	1.43	1.44	0.93	+29	−	1	−12	+	3	+32	−22	+31	+69	−18	+28			0	1.60
107769	21 49 58.09	+37 45 14.0	8.55 H		327.492 024 83	+37.753 902 20		4.06	16.24	8.71	0.51	0.57	0.96	0.54	0.67	−31	+18	−11	+14	+24	−18	+28	+	0	+29	−33			0	−0.43
107770	21 49 59.11	+49 59 31.6	8.52 H		327.496 312 11	+49.992 100 38		2.10	9.70	2.01	0.69	0.63	0.85	0.80	0.66	−21	−16	+16	−	7	+16	+16	+13	−11	+	8	−	4			0	−1.38
107771	21 49 59.24	−18 42 04.9	9.03 H		327.496 842 33	−18.701 362 75		11.63	6.16	−87.42	1.26	0.78	1.38	1.94	0.75	+	9	+	7	−	1	+	9	−23	+28	−12	+39	−	7	−	6	0	0.27
107772	21 49 59.98	−41 14 44.2	10.56 H		327.499 897 96	−41.245 604 13		44.45	−243.83	232.53	1.75	1.07	2.15	2.21	1.09	−	3	+11	−10	+	9	−13	+42	−	8	+32	−	7	−	9	3	−0.17
107773	21 50 00.13	−64 42 44.8	5.62 H		327.500 543 28	−64.712 443 60		9.77	−3.60	−38.31	0.36	0.39	0.63	0.40	0.40	−26	+	1	−	9	−11	+	2	+10	+	3	−	7	+18	−29	2	−2.20
107774	21 50 01.60	−62 52 24.2	7.94 H		327.506 661 04	−62.873 378 56		5.59	10.12	−12.01	0.48	0.56	0.91	0.59	0.65	−12	−16	−10	+20	+	2	−	3	+	0	+	1	−	2	−23	1	0.86
107775	21 50 01.93	−47 43 30.4	6.54 H		327.508 059 59	−47.725 111 02		7.44	7.11	−8.89	0.53	0.45	0.83	0.62	0.44	+43	−12	+	7	+11	+	5	+17	+	9	+34	+	6	+32		0	−1.13
107776	21 50 02.29	+29 46 27.9	8.28 H		327.509 528 64	+29.774 428 50		2.93	6.57	−6.68	0.59	0.67	0.88	0.78	0.74	+12	+	2	−18	+47	+	2	+	8	+	0	+	3	+	9	+	6	0	−0.46
107777	21 50 02.48	+52 41 50.3	6.58 H		327.510 353 60	+52.697 319 37		2.00	−2.13	−0.88	0.49	0.49	0.62	0.57	0.52	−	6	+12	+	1	−	9	+	7	−36	+12	−30	+	5	+	9	0	−0.92
107778	21 50 04.86	−11 36 26.2	8.33 H		327.520 234 82	−11.607 280 37		5.38	37.94	−8.61	1.13	0.62	1.24	1.44	0.64	+21	−	9	+12	−	4	+17	+23	+	8	+20	+24	+35			2	−1.28
107779	21 50 04.89	−38 36 51.4	7.45 H		327.520 363 69	−38.614 290 56		20.39	139.01	−176.38	0.83	0.50	0.93	1.02	0.54	+15	−26	−24	+14	+	2	+	0	+	8	+45	−26	+13			2	0.63
107780	21 50 04.96	+10 48 25.3	7.87 H		327.520 647 91	+10.807 015 12		7.99	47.29	18.16	0.92	0.76	1.04	1.18	0.86	+17	−13	−32	−10	+19	−11	+14	+19	+	8	+14			0	−0.28	
107781 H	21 50 05.35	+31 50 52.4	7.30 H		327.522 300 94	+31.847 891 98	A	5.60	38.75	5.13	0.71	0.72	0.90	0.77	0.70	+	1	+	5	+	4	+29	−26	+10	−27	−52	+	6	−	8		1	−0.36	
107782	21 50 06.49	−78 13 17.9	7.83 H		327.527 037 52	−78.221 627 86		3.88	28.31	−51.14	0.62	0.57	0.75	0.71	0.61	−	4	−21	−10	+21	−	1	−	3	−	2	+	0	−	7	−16	5	−1.74	
107783	21 50 06.53	−62 35 12.2	9.33 H		327.527 189 83	−62.586 722 38		3.17	58.57	−10.75	0.77	0.87	1.35	0.93	1.04	−18	−15	−	4	+32	−	2	+	1	−	2	+18	−10	−30		2	−0.01	
107784	21 50 06.60	+52 46 17.4	9.45 H		327.527 493 52	+52.771 494 27		3.39	2.92	−9.41	0.79	0.79	0.99	0.95	0.89	−	8	+15	−	4	−	5	+10	−31	+15	−26	+	3	+17		0	−0.87	
107785	21 50 07.65	−43 25 51.1	8.06 H		327.531 886 93	−43.430 866 14		6.30	22.18	−27.98	0.96	0.59	1.04	1.02	0.59	+13	+14	−	9	−17	+21	+11	+18	+51	−10	+16			0	0.96	
107786	21 50 08.20	+19 25 26.3	7.21 1 H		327.534 156 82	+19.423 974 68		2.96	56.59	7.87	0.66	0.57	0.77	0.89	0.64	+26	−12	−13	−28	+	9	+	8	+	7	−12	+	8	+17		0	−0.51	
107787	21 50 08.48	−04 17 50.4	8.78 H		327.535 335 20	−04.297 328 79		1.36	−2.95	20.99	1.02	0.80	1.26	1.32	0.84	+46	−15	−20	−	1	+	0	+38	+	6	+14	+12	+52			0	−0.99	
107788 H	21 50 08.64	+17 17 09.4	5.34 H		327.536 016 56	+17.285 957 05	*	29.91	91.28	−43.45	0.62	0.60	0.77	0.74	0.62	+42	+	9	+	0	−	5	−	8	−22	−10	−26	+	6	+31		0	2.68	
107789	21 50 09.32	+60 10 48.1	7.98 G		327.538 825 65	+60.180 023 48		0.49	−1.54	−4.62	0.60	0.56	0.67	0.68	0.58	−	8	−	2	+	9	+	7	+15	−	6	+19	−17	−10	+13	1	1.70	
107790	21 50 09.61	+15 45 02.4	7.96 G		327.540 030 83	+15.750 678 09		10.64	−57.64	−55.42	0.89	0.65	1.00	1.28	0.72	+33	+17	+	9	−53	+10	−16	+	6	−18	−	1	+23			1	0.47	
107791	21 50 09.79	+42 51 34.4	7.69 H		327.540 772 75	+42.859 553 06		4.89	−32.72	−50.14	0.54	0.59	0.78	0.67	0.75	−35	+	7	−15	+11	−22	+	6	−17	+29	+	6	−52		0	0.38	
107792	21 50 10.93	+43 53 17.9	7.14 H		327.545 527 46	+43.888 293 56		4.62	−46.62	−46.00	0.50	0.54	0.73	0.62	0.68	−27	+12	+	4	+11	−	8	+17	−	6	+25	+	0	−45		0	−1.47	
107793	21 50 11.46	−11 20 35.1	8.14 H		327.547 763 93	−11.343 094 11		1.46	0.13	−6.74	0.95	0.62	1.14	1.21	0.62	+41	−18	+	6	+	0	+15	+25	+	8	+19	+19	+50			0	0.97	
107794	21 50 11.99	−38 13 48.7	9.20 H		327.549 962 09	−38.230 193 43		2.17	17.90	−9.81	1.16	0.71	1.39	1.38	0.78	+26	−37	−35	−13	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
107701	10.599	0.030	8.644	0.011		1.657	0.026	T	2.19	0.06	O	8.4959	0.0022	0.026	163		8.46	8.54		U 2			1							
107702	7.964	0.011	6.764	0.006		1.027	0.010	T	1.00	0.01	L	6.8286	0.0006	0.006	63		6.82	6.84		C			1							S
107703	9.441	0.022	9.253	0.026		0.180	0.032	T	0.20	0.04	L	9.2839	0.0020	0.022	74		9.25	9.33		D			1							
107704	8.494	0.011	7.157	0.006		1.165	0.004	G	1.13	0.00	H	7.1933	0.0011	0.010	135		7.18	7.21					1							S
107705	11.388	0.065	9.883	0.030	A	1.420	0.510	G	1.84	0.56	K *	9.6201	0.0029	0.029	138	*	9.58	9.67		D	21491−7206	M 1	2 C A	AB	9	1.315	0.015	1.28	0.06	
107706	10.521	0.028	10.155	0.031		0.357	0.037	T	0.42	0.04	L	10.2440	0.0028	0.031	148		10.19	10.30					1							
107707	9.576	0.014	8.114	0.008		1.232	0.013	T	1.19	0.01	L	8.1411	0.0014	0.013	160		8.12	8.16					1							
107708	9.319	0.017	8.649	0.015		0.657	0.015	G	0.72	0.01	H	8.6828	0.0016	0.015	73		8.66	8.72		C			1							S
107709	9.351	0.015	9.130	0.018		0.211	0.022	T	0.23	0.03	L	9.1727	0.0018	0.019	125		9.14	9.21					1							
107710	6.933	0.005	6.519	0.004	A	0.391	0.006	T	0.46	0.01	L	6.5785	0.0045	0.010	112	A	6.56	6.60			21491+6648	I 1	2 C C	AB	153	11.890	0.040	3.84	0.15	S
107711						1.570	0.015	G	2.52	0.06	I	11.5223	0.0059	0.050	107		11.43	11.63		D			1 X S							G
107712	8.649	0.009	8.117	0.008		0.499	0.011	T	0.57	0.01	L	8.1704	0.0011	0.013	145		8.15	8.20		C			1							S
107713	8.960	0.012	8.467	0.011		0.483	0.015	G	0.55	0.02	H	8.5307	0.0012	0.013	129		8.50	8.56		C			1							
107714	8.230	0.011	8.072	0.012		0.152	0.015	T	0.17	0.01	L	8.1099	0.0014	0.009	77		8.09	8.13		C			1							S
107715	8.822	0.011	8.265	0.010		0.527	0.011	T	0.60	0.01	L	8.3291	0.0011	0.013	123		8.31	8.35		C	21492−3538	I 1	1 S							S
107716	10.542	0.030	10.005	0.029		0.511	0.031	T	0.58	0.03	L	10.0340	0.0027	0.028	128		10.00	10.08		C			1							
107717	8.375	0.012	8.323	0.014	B	0.053	0.017	T	0.07	0.01	L	8.3556	0.0154			B				D	21492+5031	I 2	1 C I A							
107718	7.787	0.007	7.725	0.010	A	0.062	0.011	T	0.07	0.01	L	7.7640	0.0109	0.080	117	A	7.72	8.01		D	21492+5031	I 2	1 C P A							S
107719	10.677	0.037	10.284	0.043		0.399	0.007	G	0.46	0.01	H	10.2912	0.0033	0.030	120		10.25	10.34					1							
107720	9.834	0.022	8.521	0.013		1.115	0.020	T	1.08	0.02	L	8.5655	0.0013	0.015	108		8.54	8.59		C			1							
107721	8.798	0.010	8.454	0.010		0.367	0.015	G	0.43	0.02	H	8.5054	0.0011	0.011	119		8.48	8.52		C			1							S
107722	9.740	0.014	7.847	0.006		1.572	0.012	T	1.59	0.01	L	7.7699	0.0012	0.015	247		7.75	7.80		M			1							
107723	8.370	0.010	6.381	0.005		1.685	0.009	T	2.07	0.03	O	6.2558	0.0014	0.013	118		6.24	6.28		U 2			1							S
107724	7.880	0.010	7.579	0.009		0.285	0.015	G	0.32	0.02	H	7.6377	0.0017	0.012	74		7.62	7.66					1							S
107725	10.791	0.048	9.416	0.024		1.960	0.015	G	1.98	0.09	H	9.4415	0.0043	0.039	105		9.32	9.49		U 2 C			1 X S							G
107726	7.988	0.007	6.946	0.004		0.906	0.006	T	0.91	0.00	L	6.9995	0.0009	0.009	139		6.98	7.02		C			1							S
107727	11.495	0.059	10.886	0.057		0.567	0.072	T	0.64	0.07	L	11.0273	0.0034	0.060	264		10.92	11.14					1 S							G
107728	9.109	0.018	8.921	0.022	A	0.180	0.026	T	0.20	0.03	L	8.9728	0.0178	0.094	132	A	8.84	9.16		D	21494+3045	I 2	1 C P A							
107729	9.900	0.028	9.504	0.030	B	0.375	0.038	T	0.44	0.04	L	9.6279	0.0283			B				D	21494+3045	I 2	1 C I A							
107730	10.503	0.045	10.140	0.052	A	0.344	0.064	T	0.40	0.09	L	10.2381	0.0097	0.062	119	A	10.19	10.42		D	21494+5830	I 2	1 C P A							G
107731	9.400	0.013	8.704	0.011		0.620	0.000	G	0.69	0.00	H	8.7581	0.0016	0.018	182		8.73	8.79					1 G							S
107732	10.898	0.049	10.409	0.051	B	0.460	0.065	T	0.53	0.07	L	10.6573	0.0132			B				D	21494+5830	I 2	1 C I A							
107733	8.509	0.010	8.169	0.011		0.323	0.014	T	0.37	0.02	L	8.2154	0.0015	0.014	127		8.19	8.24		C			1							
107734	6.141	0.003	6.254	0.004		−0.097	0.004	T	−0.08	0.01	L	6.2434	0.0005	0.007	102		6.23	6.25		C			1							S
107735	8.914	0.014	8.688	0.017		0.216	0.021	T	0.24	0.02	L	8.7215	0.0016	0.015	108		8.70	8.75					1 G							S
107736	8.798	0.010	8.387	0.010		0.401	0.015	G	0.47	0.02	H	8.4491	0.0012	0.015	148		8.42	8.48		C			1							S
107737	9.907	0.018	8.419	0.010		1.252	0.016	T	1.21	0.02	L	8.4496	0.0016	0.018	179		8.42	8.48		C			1							
107738	9.894	0.017	8.679	0.011		1.039	0.016	T	1.01	0.01	L	8.7144	0.0016	0.018	178		8.69	8.75		C			1							
107739	11.207	0.054	10.304	0.039		0.787	0.051	T	0.82	0.04	L	10.3439	0.0030	0.026	130		10.31	10.38		C			1 X							
107740	9.440	0.016	9.217	0.019		0.213	0.023	T	0.24	0.03	L	9.2909	0.0018	0.019	120		9.26	9.32		C			1							G
107741	10.982	0.042	10.266	0.037		0.658	0.045	T	0.72	0.04	L	10.3539	0.0020	0.030	124		10.31	10.40					1							
107742	9.134	0.009	8.635	0.009		0.480	0.010	T	0.55	0.01	L	8.7108	0.0017	0.022	231		8.68	8.75					1							S
107743	8.906	0.015	8.587	0.016	*	0.303	0.021	T	0.35	0.03	L *	8.6284	0.0023	0.016	82	*	8.59	8.66		D	21496−0819	H 1	2 C B	AB	94	0.493	0.059	2.61	0.09	S
107744	8.301	0.007	7.249	0.004	*	0.913	0.006	T	0.91	0.00	L *	7.2928	0.0006	0.009	280	*	7.28	7.31		C	21496+3319	H 1	2 C S B	AB	271	0.106	0.019	1.96	0.56	S
107745	10.087	0.023	8.400	0.011		1.436	0.021	T	2.84	0.04	O	8.0909	0.0074	0.059	112		8.00	8.16		U 2 C			1 S							S
107746	8.936	0.009	8.353	0.009	A	0.600	0.495	G	0.57	0.03	L *	8.3565	0.0010	0.015	167	*	8.33	8.39		D	21496+3606	I 1	2 C A	AB	139	3.622	0.027	2.91	0.09	S
107747	7.721	0.005	7.216	0.005		0.485	0.005	T	0.54	0.02	A	7.2676	0.0010	0.012	150		7.25	7.29					1							S
107748	10.405	0.037	9.252	0.023		0.990	0.034	T	0.97	0.03	L	9.2904	0.0024	0.018	87		9.27	9.32		C			1							
107749	6.931	0.004	6.528	0.004		0.381	0.005	T	0.45	0.01	L	6.5685	0.0009	0.009	151		6.55	6.59					1							S
107750	6.571	0.004	6.337	0.004		0.223	0.005	T	0.25	0.01	L	6.3734	0.0009	0.007	112		6.36	6.39					1							S
107751	9.879	0.023	7.956	0.010		1.596	0.020	T	1.62	0.02	L	7.8359	0.0023	0.019	76		7.80	7.88		U 2			1							S
107752	10.266	0.026	8.619	0.012		1.378	0.023	T	1.35	0.03	L	8.6307	0.0020	0.014	110		8.61	8.65		C			1							
107753	9.663	0.016	8.332	0.009		1.129	0.014	T	1.09	0.01	L	8.3730	0.0016	0.014	128		8.35	8.40		C			1							
107754	9.568	0.025	9.353	0.031		0.205	0.037	T	0.23	0.04	L	9.3789	0.0034	0.022	54		9.34	9.42		C			1							
107755	9.890	0.023	7.885	0.009	*	1.698	0.020	T	2.63	0.03	O *	7.6381	0.0032	0.021	117	*	7.60	7.67		U 2	21498+6514	I 1	2 C A	AB	267	0.913	0.015	2.68	0.06	
107756	10.138	0.030	9.481	0.025		0.600	0.029	T	0.67	0.03	L	9.5515	0.0018	0.018	107		9.51	9.59					1							
107757	8.556	0.009	7.116	0.005		1.215	0.008	T	1.17	0.01	L	7.1477	0.0008	0.009	137		7.13	7.17		C			1							S
107758	12.779	0.344	11.057	0.119		1.367	0.007	G	1.68	0.02	A	10.9405	0.0033	0.036	77		10.88	11.02		C			1							G
107759	10.487	0.047	9.664	0.036		0.742	0.045	T	0.79	0.03	L	9.7754	0.0036	0.025	53		9.72	9.82		C			1							
107760	8.012	0.006	7.901	0.007	*	0.108	0.008	T	0.12	0.01	L *	7.9282	0.0009	0.011	223	*	7.90	7.95		D	21498+3455	M 1	2 C A	AB	352	0.373	0.004	1.61	0.03	S
107761	10.031	0.020	8.357	0.009		1.399	0.017	T	1.38	0.02	L	8.3589	0.0016	0.020	150		8.32	8.38					1							
107762	8.595	0.009	8.430	0.010		0.151	0.013	T	0.17	0.01	L	8.4652	0.0019	0.022	157		8.43	8.51					1							S
107763	5.082	0.002	5.072	0.002		0.010	0.002	T	0.03	0.00	L	5.0858	0.0005	0.005	134		5.08	5.10		C			1							S
107764	8.690	0.014	7.461	0.009		1.050	0.013	T	1.02	0.01	L	7.4961	0.0014	0.011	62		7.48	7.51		C			1							S
107765	8.835	0.015	8.727	0.018		0.098	0.021	T	0.11	0.02	L	8.7422	0.0018	0.014	74		8.72	8.76		C	21499−2509	I 1	1							S
107766	7.176	0.005	7.117	0.008		0.046	0.007	G	0.06	0.02	A	7.1395	0.0010	0.009	89		7.12	7.16		C			1							S
107767	10.791	0.046	10.165	0.040		0.582	0.053	T	0.65	0.05	L	10.3086	0.0033	0.028	115		10.27	10.36					1							G
107768	10.115	0.027	9.638	0.027		0.430	0.007	G	0.50	0.01	H	9.6951	0.0023	0.020	102		9.66	9.74		C			1							
107769	8.648	0.007	8.554	0.008		0.092	0.010	T	0.10	0.01	L	8.5889	0.0013	0.019	249		8.56	8.62					1							
107770	9.726	0.020	8.633	0.013		0.944	0.018	T	0.93	0.01	L	8.6843	0.0018	0.017	130		8.65	8.72					1							
107771	9.653	0.023	9.067	0.021		0.549	0.023	T	0.62	0.02	L	9.1455	0.0019	0.016	74		9.10	9.18		D			1							S
107772	12.338	0.188	10.618	0.057		1.328	0.041	G	1.54	0.06	I	10.6612	0.0036	0.028	104		10.60	10.72					1							G
107773	6.916	0.003	5.734	0.002		1.018	0.001	G	0.99	0.00	H	5.7900	0.0005	0.006	227		5.78	5.80		C			1							S
107774	8.944	0.010	8.039	0.007		0.818	0.015	G	0.84	0.01	H	8.0946	0.0013	0.016	210		8.07	8.12					1							S
107775	7.820	0.006	6.647	0.003		1.007	0.003	G	0.98	0.00	H	6.7038	0.0005	0.007	194		6.69	6.72					1							S
107776	8.233	0.010	8.266	0.012		−0.026	0.014	T	0.00	0.01	L	8.2760	0.0012	0.016	143		8.25	8.32					1							S
107777	6.967	0.004	6.608	0.004		0.340	0.005	T	0.40	0.01	L	6.6628	0.0009	0.009	119		6.65	6.68					1							S
107778	9.487	0.022	8.409	0.015		0.933	0.020	T	0.93	0.01	L	8.4882	0.0019	0.013	79		8.47	8.51					1							
107779	8.154	0.008	7.516	0.007		0.573	0.003	G	0.65	0.00	H	7.5767	0.0010	0.008	102		7.56	7.59		C			1							S
107780	8.298	0.012	7.897	0.012		0.360	0.007	G	0.42	0.01	H	7.9562	0.0014	0.011	61		7.94	7.97		C			1							S
107781	8.677	0.009	7.453	0.006	A	0.900	0.495	G	1.01	0.01	L *	7.4702	0.0008	0.009	165	*	7.45	7.48		D	21501+3151	I 1	2 C A	AB	10	2.848	0.017	3.52	0.08	S
107782	9.596	0.016	7.990	0.008		1.345	0.014	T	1.31	0.02	L	7.9856	0.0017	0.016	146		7.96	8.01					1							S
107783	10.766	0.032	9.441	0.017		1.125	0.028	T	1.09	0.03	L	9.4950	0.0026	0.032	209		9.44	9.56					1							
107784	9.595	0.019	9.498	0.025		0.095	0.029	T	0.11	0.03	L	9.4920	0.0017	0.021	116		9.46	9.53					1							G
107785	8.333	0.010	8.079	0.011		0.242	0.014	T	0.27	0.02	L	8.1295	0.0012	0.011	97		8.11	8.15					1							S
107786	7.482	0.007	7.234	0.009		0.236	0.011	T	0.26	0.01	L	7.2781	0.0020	0.018	96		7.25	7.30		U 2			1							S
107787	10.115	0.031	8.910	0.019		1.031	0.028	T	1.00	0.02	L	8.9494	0.0025	0.019	71		8.90	8.98		C			1							
107788	5.799	0.003	5.382	0.003	*	0.394	0.004	T	0.46	0.00	L *	5.4265	0.0007	0.006	97	*	5.41	5.44		D	21501+1717	I 1	2 C S A	AB	184	0.103	0.013	1.21	0.31	S
107789	8.456	0.009	8.026	0.009		0.430	0.015	G	0.50	0.02	H	8.0853	0.0013	0.010	118		8.07	8.10					1							S
107790	8.449	0.009	7.998	0.009		0.425	0.012	T	0.49	0.01	L	8.0600	0.0010	0.012	143		8.04	8.08		C			1							S
107791	8.884	0.010	7.798	0.007		0.939	0.009	T	0.93	0.01	L	7.8563	0.0011	0.013	151		7.83	7.88		C			1							
107792	8.710	0.009	7.279	0.005		1.208	0.008	T	1.17	0.01	L	7.3028	0.0009	0.009	131		7.29	7.32		C			1							S
107793	9.829	0.026	8.265	0.013		1.312	0.023	T	1.27	0.03	L	8.2929	0.0013	0.013	79		8.27	8.32		C			1							
107794	10.936	0.048	9.349	0.021		1.330	0.041	T	1.29	0.05	L	9.3544	0.0017	0.018	106		9.33	9.39					1							
107795	10.454	0.036	9.750	0.031		0.636	0.036	T	0.70	0.03	L	9.8075	0.0025	0.021	103		9.78	9.84		C			1							
107796	7.820	0.009	7.314	0.008		0.476	0.011	T	0.55	0.01	L	7.3619	0.0017	0.010	82		7.34	7.39					1							S
107797	8.238	0.010	6.531	0.004		1.420	0.000	G	1.40	0.00	H	6.5165	0.0006	0.007	92		6.50	6.53					1							S
107798	9.574	0.023	8.815	0.019		0.692	0.023	T	0.75	0.02	L	8.8853	0.0022	0.016	80		8.86	8.91		C			1							
107799	8.346	0.010	7.798	0.010		0.513	0.013	T	0.59	0.01	L	7.8438	0.0012	0.012	85		7.83	7.86		C			1							S
107800	9.176	0.014	9.112	0.018		0.064	0.021	T	0.07	0.02	L	9.0979	0.0019	0.018	114		9.06	9.13					1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	π	$\alpha*$	δ	$\alpha*$	δ	π	$\mu_{\alpha*}$			F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr																					%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28									29	30
107801	21 50 19.65	−37 19 42.6	9.57	H	327.581 887 77	−37.328 496 35		3.08	10.15	−54.98	1.25	0.86	1.73	1.44	0.87	+11	− 3	−44	+ 6	−10	+40	+ 6	+47	−25	+ 9									3	2.22
107802 H	21 50 20.29	−45 47 10.5	9.44	H	327.584 528 89	−45.786 259 87	A	4.09	28.51	8.59	1.68	1.50	2.35	1.42	1.23	+36	−23	−13	−40	+ 5	+18	+12	+23	+13	+30									1	0.93
107803	21 50 20.39	−21 16 37.1	9.37	H	327.584 948 17	−21.276 981 97		8.73	21.93	12.09	1.11	0.92	1.54	1.20	0.88	+41	−23	−36	+12	− 3	+29	+11	+62	−17	+32									0	−0.88
107804	21 50 23.03	+49 18 30.3	7.76	H	327.595 966 04	+49.308 413 79		2.95	−6.27	−9.32	0.54	0.54	0.67	0.60	0.57	−13	+ 7	+10	−14	+12	− 1	+12	−10	+ 7	−11									0	−1.13
107805	21 50 23.15	−16 11 46.3	8.28	H	327.596 466 79	−16.196 187 59		25.94	−79.88	−139.94	0.94	0.57	1.01	1.34	0.52	+14	− 2	− 7	− 4	−20	+23	− 7	+41	− 2	+ 1									0	0.46
107806 H	21 50 23.73	−58 18 17.4	7.89	H	327.598 890 76	−58.304 823 69	*	24.46	49.87	−93.85	0.59	0.55	1.02	0.75	0.65	−16	−16	−12	−23	+ 6	+ 7	+ 7	+18	−10	−15									0	−0.58
107807	21 50 26.70	+41 03 46.2	8.07	H	327.611 268 41	+41.062 821 33		3.29	6.71	−5.93	0.58	0.66	0.93	0.68	0.82	−46	+24	−16	+15	− 9	+ 4	− 8	+29	− 5	−48									1	0.32
107808 H	21 50 26.80	+39 26 31.9	7.78	G	327.611 667 63	+39.442 206 40	A	5.39	7.65	−9.71	1.86	1.63	1.21	0.94	0.93	+ 6	− 1	+ 3	+ 7	+ 9	− 1	+ 5	+ 4	+18	−24									1	−0.72
107809	21 50 26.78	+06 28 50.0	10.06	H	327.611 585 59	+06.480 542 52		2.01	−9.49	−13.26	1.43	1.18	1.65	1.82	1.52	+20	−21	− 5	−16	+ 4	+29	− 1	+15	+20	+33									0	−1.46
107810	21 50 28.42	−51 02 15.1	8.95	H	327.618 412 81	−51.037 540 34		3.37	18.59	6.32	0.86	0.68	1.19	1.02	0.67	+25	− 2	− 5	+15	+15	+18	+15	+26	+ 0	+27									0	−1.10
107811	21 50 29.80	+10 56 06.2	8.59	H	327.624 166 21	+10.935 044 69		3.50	7.26	−2.70	1.07	0.84	1.21	1.37	0.93	+ 4	+ 7	−30	−18	+10	+ 4	+11	+ 1	+23	+ 9									0	−1.92
107812	21 50 30.30	+37 35 24.4	7.95	H	327.626 233 33	+37.590 106 00		3.37	−14.32	−28.07	0.47	0.52	0.88	0.52	0.60	−34	+13	−10	+ 6	+19	−19	+21	−13	+30	−35									0	−0.41
107813	21 50 30.82	+32 39 27.8	6.79	H	327.628 425 61	+32.657 714 50		8.78	−65.80	−48.92	0.53	0.52	0.75	0.60	0.56	−16	+10	−11	+23	−16	− 5	−18	−50	+17	−22									0	−0.71
107814	21 50 32.30	+50 59 55.0	7.92	H	327.634 601 90	+50.998 614 49		6.82	−1.56	−41.46	0.55	0.53	0.68	0.62	0.59	− 7	− 8	+ 4	+ 6	+ 0	+ 2	− 1	+10	+ 8	− 2									2	0.99
107815	21 50 32.49	+21 56 35.2	7.24	H	327.635 365 76	+21.943 123 97		4.59	35.30	−15.65	0.63	0.58	0.83	0.67	0.68	+19	+10	−16	+19	+11	−17	+11	+10	+26	+20									0	−0.03
107816	21 50 32.69	+00 45 10.8	7.56	H	327.636 213 72	+00.753 004 89		7.07	35.85	−28.83	1.02	0.63	1.08	1.28	0.67	+39	−10	−21	+ 8	+11	+22	+ 2	−18	+24	+41									0	−0.63
107817	21 50 33.06	−27 20 11.6	8.30	H	327.637 738 13	−27.336 560 12		12.95	−158.03	−93.95	0.94	0.61	1.13	1.00	0.58	+20	+11	+ 9	− 9	+ 9	+29	+ 6	+40	+13	+26									0	0.05
107818	21 50 34.70	−24 11 11.4	9.79	G	327.644 594 45	−24.186 488 78		7.53	16.16	−36.55	1.12	0.85	1.51	1.24	0.80	+41	− 2	−15	−18	−23	+43	−14	+18	− 7	+27									0	−0.18
107819	21 50 34.82	+30 52 18.9	8.67	H	327.645 088 21	+30.871 927 82		2.16	14.09	−3.43	0.76	0.88	1.12	0.98	1.06	− 8	+ 4	−25	+47	−12	+ 2	− 3	− 9	+29	+ 8									3	−0.77
107820	21 50 35.42	−08 58 56.8	6.54	H	327.647 569 99	−08.982 451 35		7.81	64.35	−43.15	0.74	0.55	0.90	0.93	0.58	+37	− 8	+ 4	− 5	+15	+39	+ 9	+29	+19	+49									0	0.83
107821	21 50 36.25	+28 46 02.0	7.97	H	327.651 053 01	+28.767 224 36		20.27	−49.55	−19.43	0.73	0.71	0.97	0.85	0.90	− 2	+ 6	−32	+22	+ 4	−18	+ 0	+ 8	+12	+10									0	−1.07
107822	21 50 37.24	+49 26 16.2	7.81	H	327.655 158 06	+49.437 825 75		29.31	−159.19	−16.14	0.56	0.51	0.66	0.63	0.57	−10	− 5	− 4	− 9	+17	− 6	+16	+ 1	+14	− 7									0	−0.29
107823	21 50 38.60	−83 57 39.5	7.64	1 G	327.660 836 73	−83.960 971 02		3.22	−4.91	−12.02	0.51	0.46	0.64	0.60	0.51	+ 1	−25	+ 1	− 5	+ 5	− 7	+ 7	−12	−13	−16									1	−0.12
107824	21 50 39.19	−18 00 49.5	9.35	H	327.663 294 95	−18.013 737 01		4.56	31.73	−46.68	1.33	0.66	1.26	1.92	0.61	+ 1	− 2	+ 3	− 9	−24	+15	−13	+42	− 1	−12									2	0.60
107825	21 50 39.82	−55 09 54.0	7.64	H	327.665 904 20	−55.165 005 59		1.02	16.09	−4.22	0.83	0.68	1.07	1.11	0.67	+29	−12	−28	+30	+53	−17	+43	+47	−25	+45									0	0.40
107826	21 50 40.48	−68 05 02.3	8.30	H	327.668 655 31	−68.083 968 45		0.96	46.92	−7.58	0.60	0.61	0.93	0.67	0.69	−12	− 3	− 2	− 3	+ 4	+ 4	+ 5	− 2	−20	− 7									1	1.00
107827	21 50 40.64	+61 48 11.2	8.18	H	327.669 323 01	+61.803 124 36		0.71	−4.11	−1.23	0.60	0.53	0.64	0.66	0.57	− 9	− 1	+17	+26	+ 4	+ 0	+ 3	− 2	+ 2	−11									0	3.20
107828 H	21 50 41.38	+77 46 06.6	7.88	G	327.672 411 93	+77.768 509 91	A	2.27	7.97	2.30	1.35	1.66	0.94	1.18	0.96	+ 0	−17	+ 5	+25	+ 1	−16	+ 7	+ 0	− 9	+40									1	0.85
107829	21 50 42.48	−75 17 52.4	8.25	H	327.677 007 19	−75.297 880 33		4.07	20.19	−23.56	0.68	0.61	0.85	0.73	0.67	− 4	−12	+ 0	− 2	−10	− 9	−10	+10	−13	−16									1	0.39
107830	21 50 43.02	−45 46 22.0	8.55	H	327.679 253 43	−45.772 788 36		6.46	5.54	−9.30	0.76	0.68	1.19	0.72	0.66	+42	−31	−22	−25	+13	+25	+20	+39	+ 1	+35									3	−0.43
107831	21 50 43.75	−53 20 28.4	10.21	H	327.682 289 36	−53.341 208 91		2.84	69.74	22.54	1.28	1.00	1.89	1.72	1.11	+25	−22	−26	+29	+27	−13	+27	+38	−34	+41									3	2.41
107832	21 50 44.39	+55 24 42.1	9.05	G	327.684 952 02	+55.411 682 56		6.12	42.45	21.90	0.71	0.73	0.92	0.81	0.75	− 1	+ 5	+ 4	−19	+ 3	−22	+ 3	−20	− 6	+21									0	−0.32
107833	21 50 44.45	−79 32 47.1	8.65	1 H	327.685 218 59	−79.546 412 14		0.90	12.47	−31.21	0.69	0.70	0.86	0.85	0.81	+ 8	−17	− 3	+21	+ 7	− 4	+ 6	+14	+ 2	+ 8									0	−0.83
107834	21 50 46.26	−27 55 56.5	7.55	H	327.692 770 44	−27.932 361 67		4.92	18.12	−0.86	0.77	0.55	0.93	1.00	0.51	+21	− 1	−11	+ 4	− 6	+22	+ 7	+48	−12	+13									0	0.23
107835	21 50 47.23	−69 37 45.9	5.52	H	327.696 773 54	−69.629 404 58		5.84	−24.77	−4.73	0.43	0.40	0.59	0.51	0.49	−20	− 7	−10	+14	+ 3	+ 2	+ 4	+ 0	− 3	−27									1	0.58
107836	21 50 48.09	+45 41 14.5	9.62	H	327.700 375 80	+45.687 357 86		2.20	3.19	1.38	0.74	0.69	0.96	0.86	0.85	−11	+ 5	+ 8	+ 8	+ 0	− 1	+ 0	+ 8	+12	−27									0	2.07
107837	21 50 48.44	−74 46 29.7	8.14	H	327.701 814 68	−74.774 912 61		6.99	58.40	−44.94	0.66	0.59	0.82	0.77	0.69	− 5	−18	− 9	+ 3	− 2	+ 5	− 2	+10	+ 2	−14									0	−1.03
107838	21 50 50.56	+15 07 52.9	9.44	H	327.710 664 20	+15.131 361 88		5.07	7.47	−51.84	1.16	0.86	1.26	1.48	0.92	+30	+ 3	+22	−43	+15	+12	+12	− 4	+ 4	+22									0	−0.14
107839 H	21 50 50.78	−20 32 27.0	7.47	H	327.711 594 68	−20.540 839 57	A	5.97	18.15	−7.49	1.79	1.39	1.89	1.74	1.01	+23	+ 8	+ 8	+12	−11	+15	− 4	+52	+ 2	+17									1	−0.48
107840	21 50 51.77	+32 40 17.2	8.31	H	327.715 689 49	+32.671 456 24		2.68	9.74	−6.96	0.69	0.71	1.02	0.82	0.79	−14	+ 6	− 8	+34	−19	− 7	−25	−50	+17	−26									1	−0.89
107841	21 50 52.94	+39 36 32.8	8.26	H	327.720 582 18	+39.609 115 82		8.85	−2.24	−30.72	0.56	0.60	0.98	0.66	0.70	−29	− 5	+12	+ 6	+18	−19	+19	+ 1	+28	−28									0	−0.02
107842 H	21 50 53.66	−59 38 41.2	7.47	H	327.723 566 57	−59.644 765 98	*	4.55	11.91	−35.04	2.14	1.27	1.26	1.05	0.71	−18	+14	−33	− 6	+18	− 3	+10	− 9	− 5	+17									3	0.01
107843 H	21 50 54.25	−82 43 07.8	5.27	H	327.726 035 61	−82.718 823 92	A	7.49	68.15	−33.03	0.69	0.62	0.65	0.67	0.56	− 6	− 3	− 9	−26	+19	− 2	+19	−23	− 7	−23									2	0.95
107844	21 50 54.61	+32 39 31.0	8.26	H	327.727 545 57	+32.658 598 31		1.94	−7.64	2.28	0.65	0.65	0.93	0.71	0.67	−15	+14	− 9	+26	−20	+ 4	−17	−41	+16	−15									0	−1.93
107845	21 50 56.43	−20 11 19.7	7.75	2 H	327.735 125 97	−20.188 817 58		1.60	28.19	−1.48	0.97	0.72	1.10	1.12	0.68	+35	−21	−32	−25	+12	+13	+22	+67	−30	+25									0	1.25
107846	21 50 56.96	−10 38 38.8	8.62	H	327.737 348 81	−10.644 110 30		10.52	114.46	−2.26	1.05	0.65	1.18	1.33	0.65	+28	−18	+ 9	−20	+18	+21	+ 7	+15	+18	+40									2	2.20
107847 H	21 51 00.47	−76 12 23.4	9.19	H	327.751 974 15	−76.206 489 62	A	16.06	56.88	−32.42	1.38	1.35	1.62	1.43	1.23	−11	−13	−24	+ 2	− 6	− 3	− 6	−10	+10	− 8									1	0.52
107848	21 51 01.97	+12 37 32.1	8.48	2 H	327.758 227 86	+12.625 593 62		−0.30	0.26	−2.72	1.09	0.83	1.17	1.82	0.92	+ 5	+10	−18	+46	−18	+40	−15	+ 7	+10	− 8									0	0.35
107849 H	21 51 01.97	+29 10 31.4	8.82	G	327.758 221 15	+29.175 381 73	*	17.12	215.27	179.27	0.88	0.86	1.16	1.08	1.02	+14	− 8	−19	+45	+ 0	− 8	− 3	− 7	+ 5	+10									2	0.27
107850 H	21 51 02.85	−44 52 20.5	10.06	H	327.761 882 96	−44.872 366 98	A	3.16	14.44	−16.68	3.11	2.31	3.33	3.08	1.90	+23	− 5	− 9	− 1	+ 5	+29	+ 6	+22	− 8	+ 9									1	0.77
107851	21 51 03.40	−07 54 27.1	7.87	G	327.764 153 37	−07.907 535 37		14.02	84.29	18.17	0.92	0.61	1.03	1.09	0.63	+27	− 3	− 4	−18	+13	+21	+10	+20	+23	+33									0	2.73
107852 H	21 51 03.83	+47 10 40.8	8.70	G	327.765 968 57	+47.177 999 97	A	3.06	12.67	−6.49	1.29	1.43	1.34	1.34	1.32	+ 3	+ 1	+17	+31	+ 3	+16	+ 5	+ 4	− 6	+ 2									1	0.15
107853	21 51 03.92	−63 23 19.2	9.57	H	327.766 335 70	−63.388 663 90		4.26	−6.45	14.32	0.86	0.93	1.54	1.18	1.20	−21	− 1	− 3	−17	− 2	+ 1	+ 4	+ 1	+ 1	−50									3	−0.96
107854 H	21 51 04.35	−64 58 42.4	9.49	H	327.768 112 68	−64.978 431 92	A	−2.84	15.33	−20.77	3.57	2.86	3.26	2.12	2.00	−51	−10	+12	− 3	− 4	+ 8	− 2	+ 1	−15	−42									2	−1.23
107855 H	21 51 04.93	+66 50 14.7	8.44	H	327.770 537 01	+66.837 425 55	*	5.88	7.32	−35.85	1.12	1.29	1.01	1.12	0.95	+ 1	−13	+28	+ 6	+ 2	− 2	+ 2	−13	− 5	+14									1	−0.03
107856	21 51 04.97	+39 32 11.9	6.20	H	327.770 724 09	+39.536 649 36		3.04	8.85	3.55	0.39	0.44	0.65	0.43	0.49	−37	+ 3	+ 3	+ 6	+15	−14	+16	+ 6	+23	−31									0	1.00
107857	21 51 05.60	−10 02 17.0	7.49	H	327.773 342 80	−10.038 053 05		12.46	61.90	9.18	0.88	0.57	1.00	1.11	0.58	+28	−23	+12	− 7	+18	+24	+ 8	+32	+14	+43									0	−0.52
107858 H	21 51 07.44	+10 22 04.8	7.88	G	327.781 016 72	+10.367 991 03	*	6.98	−18.58	−65.74	2.31	1.57	1.20	1.39	1.00	+34	− 9	−28	− 9	+16	−19	+ 9	+13	+11	+20									0	−0.17
107859	21 51 07.71	−72 08 22.0	7.26	H	327.782 104 32	−72.139 456 77		2.24	1.58	6.48	0.55	0.54	0.74	0.65	0.60	−17	+ 6	− 6	−10	− 9	− 7	− 9	+ 5	+ 2	−15									1	−0.77
107860	21 51 08.28	−60 43 30.3	9.16	H	327.784 519 67	−60.725 072 52		12.48	95.35	−29.66	0.97	0.79	1.44	1.20	0.81	+ 6	−15	−26	−17	+11	+ 2	+10	+ 4	−21	+17									0	0.93
107861	21 51 08.27	−14 47 56.0	9.41	H	327.784 442 73	−14.798 895 48		1.07	23.85	7.15	1.23	0.72	1.39	1.65	0.68	+41	− 7	− 1	−13	+11	+12	+ 9	+31	+ 0	+43									0	2.22
107862 H	21 51 08.88	+64 01 18.0	8.16	H	327.787 010 94	+64.021 676 07	A	0.09	−3.80	−6.57	0.84	0.79	0.84	0.94	0.77	−10	− 7	+16	+ 7	+25	+20	+20	− 5	+14	+ 8									1	−1.10
107863	21 51 10.68	+03 06 23.9	8.89	H	327.794 494 88	+03.106 632 05		4.27	25.33	1.51	1.13	0.76	1.29	1.67	0.84	+36	+ 1	−15	+34	− 1	+38	+ 4	−35	+36	+45									0	0.68
107864	21 51 11.05	+28 51 50.9	10.53	G	327.796 021 36	+28.864 130 55		9.63	−34.41	−57.85	1.42	1.33	1.71	1.61	1.57	+15	− 7	− 4	+40	+ 5	−27	+ 4	+ 0	+ 4	+14									2	0.38
107865	21 51 12.09	−52 15 38.4	11.47	H	327.800 366 47	−52.260 662 35		29.89	257.92	−220.37	1.78	1.35	2.41	2.32	1.45	+23	+ 5	− 4	+34	+16	+11	+15	+38	−16	+16									0	−0.44
107866	21 51 12.29	+44 26 26.7	7.53	H	327.801 229 07	+44.440 741 76		5.58	38.97	−6.90	0.56	0.54	0.75	0.70	0.68	−19	+21	− 1	− 5	+ 2	+10	+ 4	+13	+ 3	−29									4	−1.10
107867	21 51 15.00	+08 07 43.8	10.21	H	327.812 512 25	+08.128 838 99		11.99	82.98	−89.21	7.46	6.08	8.32	8.90	6.42	+21	−12	−20	−21	−13	+ 3	−14	−28	+20	+17									0	
107868	21 51 18.28	+08 20 49.7	8.51	G	327.826 176 20	+08.347 141 89	A	18.63	100.61	13.43	1.61	1.29	1.67	2.00	1.25	+33	−16	−34	− 2	−18	+28	−11	−29	+19	+32									0	0.76
107869	21 51 18.97	+22 51 35.7	7.85	H	327.829 059 11	+22.859 927 00		3.85	23.18	6.99	0.78	0.65	0.92	0.96	0.75	+13	− 5	+ 3	−14	+ 5	+18	+ 3	− 1	+23	+16									0	1.42
107870	21 51 20.93	+18 29 08.4	9.14	H	327.837 215 56	+18.485 663 80		6.55	67.56	10.99	0.98	0.95	1.33	1.29	1.08	+47	−10	−19	+15	+14	−22	+ 8	− 3	+ 3	+40									0	1.11
107871	21 51 21.55	−06 39 17.5	9.54	H	327.839 805 23	−06.654 870 33		6.70	100.65	−14.33	1.27	0.86	1.42	1.53	0.84	+29	+ 9	− 9	−22	+14	+ 7	+16	+ 9	+31	+22									6	1.33
107872	21 51 21.94	+57 34 42.9	8.62	H	327.841 419 55	+57.578 569 85		3.03	13.16	7.53	0.55	0.60	0.71	0.59	0.58	+ 5	− 6	+17	+11	+ 8	−14	+15	−15	− 3	+28									0	2.51
107873	21 51 22.54	−21 45 02.0	9.31	H	327.843 935 49	−21.750 551 40		10.09	16.32	−33.43	1.09	0.80	1.39	1.28	0.78	+26	−12	− 1	+24	−10	+30	− 6	+52	+12	+28									0	1.79
107874 H	21 51 23.75	+54 17 33.6	9.02	H	327.848 966 80	+54.292 652 99	A	−1.57	1.27	−1.42	1.40	1.40	1.59	1.45	1.34	+ 8	− 6	+13	−17	− 5	− 3	+ 1	−27	−10	+39									1	0.10
107875	21 51 23.57	−33 08 28.9	9.86	H	327.848 225 96	−33.141 366 78		3.39	10.24	−34.59	1.36	0.76	1.46	1.42	0.71	−11	+23	−12	− 5	−11	+33	− 3	+56	−15	−24									0	−0.26
107876	21 51 24.22	−37 24 31.6	8.97	H	327.850 920 41	−37.408 775 37		4.13	−0.63	−11.13	1.08	0.90	1.60	1.29	0.87	+32	−18	−51	− 2	−22	+45	+ 7	+49	−36	+ 9									0	0.52
107877	21 51 24.39	−23 16 13.5	6.85	H	327.851 625 44	−23.270 413 92		25.11	341.35	−84.82	0.81	0.59	0.98	0.96	0.53	+22	−17	−19	+12	−18	+24	− 3	+52	−10	+ 8									0	−0.46
107878	21 51 26.96	−02 14 34.4	7.89	H	327.862 341 14	−02.242 900 90		2.08	−7.56	−28.33	1.05	0.61	1.16	1.26	0.65	+32	− 6	+ 5	+ 3	+ 5	− 6	+ 3	+12	+22	+38									0	1.33
107879	21 51 29.00	−40 02 41.1	9.42	1 H	327.870 828 39	−40.044 753 90		4.22	15.54	−3.91	1.04	0.82	1.36	1.21	0.80	+16	− 3	−12	+17	−12	+38	− 4	+45	− 7	+ 1									0	−2.14
107880	21 51 29.32	+64 43 16.6	7.63	H	327.872 151 76	+64.721 280 82		3.59	16.71	7.93	0.57	0.52	0.61	0.70	0.56	−13	− 5	+11	+18	+11	+11	+ 6	− 9	+ 1	−20									0	1.50
107881	21 51 31.36	−32 32 02.1	8.58	H	327.880 678 20	−32.533 911 95		6.92	32.74	−1.65	0.87	0.61	1.10	0.96	0.57	+12	− 1	− 7	− 9	− 9	+33	+ 6	+60	−22	−15									0	−0.08
107882	21 51 31.49	−57 01 05.0	10.12	H	327.881 195 92	−57.018 068 67		12.66	133.64	−58.39	1.05	0.83	1.61	1.35	0.90	− 6	− 3	− 6	+ 9	− 7	+24	− 5	+14	− 5	− 8									0	1.22
107883	21 51 31.52	−71 07 27.2	8.67	H	327.881 343 61	−71.124 213 75		1.64	21.21	−19.82	0.73	0.67	0.99	0.79	0.75	−21	−10	+14	−12	−10	− 8	− 8	−11	− 9	−25									0	−1.53
107884	21 51 31.59	−27 23 56.8	7.98	H	327.881 625 27	−27.399 101 70		1.66	22.73	−16.22	0.92	0.57	1.06	1.08	0.55	+22	− 7	−13	+ 7	+ 0	+11	+ 3	+37	−16	+23									0	0.77
107885	21 51 33.59	−07 24 14.3	8.92	H	327.889 945 80	−07.403 970 42		1.13	−7.57	−0.05	1.13	0.71	1.19	1.38	0.74	+23	+ 3	− 4	−30	+14	+ 9	+10	+14	+20	+28									0	−0.55
107886	21 51 33.73	+00 46 14.1	6.60	H	327.890 543 32	+00.770 584 66		7.55	−7.73	−16.36	0.79	0.50	0.90	1.13	0.57	+34	+12	+ 5	+ 4	+ 3	+31	+ 5	−34	+28	+49									0	−0.48
107887	21 51 34.24	+19 49 35.9	5.78	H	327.892 648 09	+19.826 649 38		5.58	20.51	13.33	0.54	0.51	0.66	0.59	0.54	+28	+ 6	− 6	− 6	− 1	+ 6	− 1	−23	+ 4	+26									0	−2.44
107888 H	21 51 34.28	−59 25 16.9	8.48	H	327.892 844 52	−59.421 374 65	A	10.72	−28.15	41.88	1.20	1.22	1.86	1.39	1.01	−21	+15	−50	−34	+28	−19	+16	+ 2	− 7	− 7									4	0.63
107889	21 51 34.40	−13 29 44.3	8.51	H	327.893 354 01	−13.495 643 91		6.19	15.76	−13.11	0.93	0.59	1.07	1.16	0.55	+40	+ 0	+11	−13	+ 4	+ 6	+ 1	− 3	+ 1	+39									0	−0.32
107890	21 51 34.69	+26 44 08.0	8.54	G	327.894 553 59	+26.735 561 65		9.10	0.13	−87.00	0.75	0.86	1.00	0.86	1.01	+21	+ 4	− 8	+22	+ 7	−22	+ 4	+29	−10	+25									0	−0.43
107891	21 51 35.34	+71 53 08.5	8.41	G	327.897 262 77	+71.885 681 08		2.82	16.29	23.99	0.62	0.57	0.66	0.79	0.67	+ 0	−11	+ 9	+ 9	+ 1	+ 0	+ 1	+ 5	+ 4	+20									0	−2.89
107892	21 51 36.85	−52 43 40.1	8.24	G	327.903 544 01	−52.727 816 45		4.57	26.64	−23.02	0.79	0.60	0.94	1.11	0.71	+24	−12	− 7	+39	+24	+ 4	+24	+41

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
107801	10.694	0.045	9.675	0.029		0.877	0.042	T	0.89	0.03	L	9.7101	0.0026	0.021	102		9.66	9.75					1							
107802	10.074	0.018	9.512	0.017	A	0.535	0.100	G	0.64	0.03	L *	9.5578	0.0019	0.022	171	*	9.52	9.61		D	21503−4547	M 1	2 C A	AB	276	8.665	0.032	2.86	0.14	
107803	10.035	0.022	9.441	0.020		0.555	0.022	T	0.63	0.02	L	9.4934	0.0019	0.018	113		9.46	9.53					1							S
107804	9.752	0.019	7.912	0.009		1.530	0.017	T	1.57	0.04	L	7.8785	0.0012	0.013	135		7.86	7.90					1							
107805	9.217	0.017	8.382	0.014		0.735	0.017	T	0.78	0.01	L	8.4175	0.0019	0.017	83		8.39	8.44					1							
107806	8.801	0.009	7.978	0.007	*	0.726	0.008	T	0.78	0.01	L *	8.0340	0.0013	0.015	181	*	8.01	8.06		D	21504−5818	H 1	2 C S A	AB	307	0.179	0.005	0.50	0.21	S
107807	8.052	0.006	8.068	0.008		−0.010	0.009	T	0.01	0.01	L	8.0788	0.0013	0.013	157		8.06	8.10					1							
107808	8.031	0.008	7.801	0.007	*	0.218	0.002	G	0.24	0.00	H *	7.8311	0.0009	0.014	195	*	7.81	7.86		D	21504+3927	I 1	2 C A	AB	242	0.316	0.002	0.03	0.03	S
107809	11.908	0.172	10.185	0.061		1.445	0.001	G	1.51	0.14	K	10.1832	0.0035	0.026	59		10.13	10.24					1							
107810	9.369	0.014	8.992	0.015		0.357	0.019	T	0.42	0.02	L	9.0335	0.0020	0.021	131		9.00	9.07					1							S
107811	9.942	0.028	8.719	0.017		1.045	0.026	T	1.02	0.02	L	8.7584	0.0021	0.018	59		8.73	8.79					1							
107812	9.244	0.010	8.073	0.007		1.004	0.010	T	0.98	0.01	L	8.1188	0.0011	0.015	231		8.09	8.15					1							
107813	8.262	0.006	6.921	0.004		1.137	0.006	T	1.10	0.01	L	6.9549	0.0008	0.010	174		6.94	6.97					1							S
107814	8.307	0.008	7.938	0.009		0.350	0.011	T	0.41	0.01	L	8.0021	0.0012	0.012	138		7.98	8.03		C			1							S
107815	8.658	0.011	7.361	0.007		1.103	0.010	T	1.07	0.01	L	7.4084	0.0010	0.012	101		7.39	7.43		C			1							S
107816	9.116	0.014	7.693	0.008		1.201	0.013	T	1.16	0.01	L	7.7286	0.0019	0.015	98		7.71	7.75					1 G							S
107817	8.951	0.014	8.364	0.012		0.549	0.014	T	0.62	0.01	L	8.4238	0.0018	0.014	94		8.40	8.45					1							S
107818	10.704	0.049	9.857	0.037		0.710	0.015	G	0.76	0.01	H	9.9532	0.0022	0.016	86		9.92	9.99		C			1							
107819	10.183	0.029	8.792	0.016		1.176	0.026	T	1.14	0.02	L	8.8360	0.0012	0.019	100		8.80	8.87		D			1							
107820	8.204	0.012	6.680	0.007		1.281	0.011	T	1.24	0.01	L	6.6981	0.0012	0.008	69		6.68	6.71					1							S
107821	8.891	0.014	8.053	0.011		0.737	0.014	T	0.78	0.01	L	8.1092	0.0015	0.013	88		8.09	8.14					1							S
107822	8.775	0.011	7.885	0.009		0.777	0.011	T	0.81	0.01	L	7.9524	0.0012	0.012	138		7.93	7.97		C			1							
107823	7.601	0.006	7.614	0.008		−0.019	0.005	G	0.00	0.01	H	7.6351	0.0022	0.019	142		7.61	7.67	0.98	P 1 A			1							S
107824	9.847	0.026	9.386	0.026		0.448	0.029	T	0.52	0.03	L	9.4544	0.0026	0.015	74		9.43	9.48					1							
107825	9.131	0.012	7.770	0.007		1.153	0.011	T	1.12	0.01	L	7.8069	0.0019	0.014	128		7.79	7.83					1							S
107826	9.579	0.014	8.429	0.009		0.988	0.013	T	0.97	0.01	L	8.4684	0.0015	0.021	185		8.43	8.50					1							
107827	8.334	0.008	8.197	0.010		0.124	0.012	T	0.14	0.01	L	8.2283	0.0012	0.013	133		8.21	8.25		C			1							
107828	9.842	0.020	8.035	0.009	*	1.000	0.040	G	1.51	0.04	M *	7.9761	0.0017	0.012	111	*	7.95	8.00			21507+7746	H 1	2 C A	AB	353	0.405	0.023	3.40	0.17	
107829	9.718	0.017	8.378	0.010		1.136	0.015	T	1.10	0.02	L	8.4162	0.0013	0.017	146		8.39	8.45					1							
107830	9.623	0.013	8.650	0.010		0.854	0.012	T	0.87	0.01	L	8.7088	0.0015	0.017	170		8.68	8.74		C			1							
107831	11.341	0.076	10.221	0.042		0.957	0.069	T	0.94	0.05	L	10.3575	0.0037	0.030	117		10.30	10.40					1							
107832	9.642	0.017	9.096	0.016		0.490	0.015	G	0.56	0.02	H	9.1603	0.0019	0.017	119		9.13	9.19					1							
107833	10.700	0.032	8.826	0.012		1.557	0.027	T	1.57	0.03	L	8.7681	0.0019	0.025	136		8.72	8.81		U			1							
107834	7.432	0.006	7.510	0.008		−0.067	0.009	T	−0.04	0.01	L	7.5289	0.0009	0.010	91		7.51	7.54		C	21508−2756	I 1	1 G							S
107835	7.317	0.004	5.669	0.002		1.378	0.004	T	1.35	0.01	L	5.6606	0.0007	0.008	168		5.65	5.67					1 G							S
107836	9.676	0.020	9.606	0.027		0.069	0.031	T	0.08	0.03	L	9.6528	0.0020	0.022	130		9.62	9.70					1							G
107837	9.286	0.014	8.256	0.010		0.897	0.013	T	0.90	0.01	L	8.3022	0.0017	0.018	141		8.27	8.34					1							
107838	9.904	0.020	9.483	0.021		0.398	0.027	T	0.46	0.03	L	9.5262	0.0018	0.022	112		9.49	9.58					1							
107839	8.087	0.008	7.551	0.008	*	0.510	0.008	T	0.58	0.01	L *	7.5864	0.0014	0.009	94	*	7.57	7.60		D	21508−2032	I 1	2 C A	AB	158	0.504	0.002	0.35	0.01	S
107840	9.657	0.016	8.412	0.010		1.062	0.015	T	1.03	0.01	L	8.4800	0.0014	0.015	156		8.46	8.51		C	21509+3240	I 2	1							
107841	8.734	0.009	8.293	0.009		0.416	0.012	T	0.48	0.01	L	8.3492	0.0014	0.018	191		8.31	8.38					1							
107842	8.919	0.010	7.604	0.006	*	1.117	0.009	T	1.08	0.01	L *	7.6359	0.0016	0.016	151	*	7.61	7.66		D	21509−5939	H 1	2 C A	AB	193	0.212	0.013	1.69	0.21	S
107843	6.182	0.006	5.340	0.005	*	0.756	0.006	T	0.80	0.00	L *	5.4143	0.0005	0.006	130	*	5.40	5.43		D	21509−8243	I 1	2 C A	AB	64	3.233	0.004	1.62	0.02	S
107844	8.436	0.008	8.263	0.009		0.166	0.011	T	0.18	0.01	L	8.3149	0.0011	0.015	157		8.29	8.34		C	21509+3240	I 2	1							
107845	9.829	0.025	7.979	0.011		1.570	0.023	T	2.45	0.05	O	7.7760	0.0070	0.034	78		7.72	7.82		U 2			1 S							S
107846	9.481	0.019	8.723	0.016		0.692	0.020	T	0.75	0.02	L	8.7576	0.0021	0.015	77		8.74	8.78		C			1							S
107847	10.120	0.021	9.297	0.017	*	0.726	0.021	T	0.78	0.01	L *	9.3345	0.0024	0.024	147	*	9.29	9.38		D	21510−7612	H 1	2 C A	AB	353	0.889	0.016	2.34	0.05	
107848	10.143	0.034	8.775	0.020		1.158	0.031	T	1.12	0.03	L	8.6324	0.0359	0.151	50		8.44	8.91		U 2 C			1 S							
107849	9.903	0.026	8.861	0.018	*	0.885	0.015	G	0.93	0.01	H *	8.9283	0.0017	0.020	103	*	8.90	8.97		D	21510+2911	I 1	2 C S B	AB	87	0.158	0.019	1.25	0.42	
107850	10.816	0.052	10.199	0.046	*	0.574	0.060	T	0.65	0.06	L *	10.1869	0.0043	0.040	92	*	10.12	10.27		R	21510−4452	I 1	2 C A	AB	5	0.757	0.014	1.73	0.07	
107851	8.449	0.016	7.888	0.010		0.511	0.015	G	0.58	0.02	H	7.9667	0.0016	0.013	74		7.94	7.99		C			1							S
107852	9.065	0.014	8.770	0.015	*	0.298	0.003	G	0.34	0.00	H *	8.7764	0.0018	0.018	110	*	8.75	8.81		D	21511+4711	I 1	2 C A	AB	20	0.492	0.007	1.84	0.04	
107853	10.619	0.028	9.627	0.019		0.856	0.026	T	0.87	0.02	L	9.7124	0.0024	0.033	192		9.65	9.77					1							
107854	11.081	0.039	9.630	0.018	*	1.223	0.034	T	1.18	0.03	L *	9.6477	0.0023	0.032	220	*	9.59	9.71		D	21511−6459	I 1	2 C A	AB	114	0.363	0.007	0.75	0.07	
107855	8.976	0.014	8.492	0.013	*	0.456	0.017	T	0.53	0.02	L *	8.5428	0.0021	0.014	100	*	8.52	8.57		D	21511+6650	I 1	2 C A	AB	232	0.290	0.003	0.45	0.05	
107856	6.112	0.003	6.192	0.003		−0.068	0.004	T	−0.05	0.00	L	6.1889	0.0006	0.007	196		6.18	6.20					1							S
107857	8.492	0.012	7.591	0.009		0.801	0.011	T	0.83	0.01	L	7.6429	0.0011	0.009	73		7.63	7.66					1							S
107858	8.370	0.013	7.933	0.014	*	0.448	0.015	G	0.52	0.02	H *	7.9684	0.0015	0.014	65	*	7.95	8.00		D	21511+1022	M 1	2 C A	CA	257	0.235	0.008	0.21	0.18	S
107859	9.089	0.012	7.407	0.006		1.405	0.011	T	1.38	0.01	L	7.3978	0.0013	0.014	148		7.38	7.43					1							S
107860	10.049	0.022	9.252	0.017		0.706	0.021	T	0.76	0.02	L	9.2999	0.0023	0.026	133		9.26	9.36					1							
107861	10.869	0.054	9.554	0.029		1.117	0.048	T	1.08	0.05	L	9.5795	0.0024	0.022	96		9.54	9.61					1							
107862	8.264	0.021	8.150	0.029	*	0.111	0.034	T	0.12	0.04	L *	8.2058	0.0017	0.011	110	*	8.18	8.23		D	21511+6401	I 1	2 C A	AB	102	3.507	0.012	2.69	0.05	
107863	9.180	0.017	8.909	0.019		0.258	0.024	T	0.29	0.03	L	8.9574	0.0023	0.016	77		8.93	8.98		C	21512+0306	I 1	1							
107864	10.127	0.029	10.505	0.058		−0.335	0.019	G	−0.37	0.02	H	10.4161	0.0026	0.031	77		10.35	10.48					1							G
107865						1.633	0.082	G	2.68	0.20	I	11.4487	0.0035	0.041	129		11.38	11.52					1							G
107866	8.752	0.010	7.640	0.007		0.958	0.009	T	0.95	0.01	L	7.6948	0.0012	0.013	149		7.67	7.72					1							
107867	11.410	0.089	10.333	0.061		1.622	0.197	G	2.66	0.49	I	10.1976	0.0052	0.032	58		10.11	10.24		D			1 X S							G
107868	9.265	0.021	8.598	0.018	A	0.670	0.015	G	0.73	0.01	H	8.6700	0.0097	0.026	58	A	8.63	8.73			21513+0821	I 1	2 C A	AB	355	14.563	0.031	2.85	0.13	S
107869	9.189	0.018	7.965	0.012		1.050	0.020	G	1.02	0.02	H	8.0211	0.0019	0.011	70		8.00	8.05		C			1							
107870	9.654	0.020	9.188	0.021		0.439	0.027	T	0.51	0.03	L	9.2382	0.0015	0.020	92		9.19	9.30					1							
107871	10.289	0.037	9.578	0.031		0.654	0.039	T	0.72	0.04	L	9.6724	0.0023	0.018	76		9.62	9.72		C			1							
107872	8.798	0.012	8.640	0.014		0.152	0.017	T	0.17	0.02	L	8.6750	0.0015	0.016	123		8.64	8.71					1							
107873	9.866	0.019	9.362	0.019		0.484	0.020	T	0.56	0.02	L	9.4173	0.0015	0.016	119		9.39	9.45		C			1							S
107874	9.534	0.018	9.198	0.020	A	0.400	0.495	G	0.44	0.07	L *	9.1121	0.0018	0.020	119	*	9.07	9.14		D	21514+5418	I 1	2 C A	AB	174	1.687	0.009	1.58	0.04	
107875	10.648	0.041	9.891	0.033		0.691	0.041	T	0.75	0.03	L	10.0029	0.0027	0.024	114		9.96	10.04		C			1							
107876	10.346	0.037	9.097	0.021		1.065	0.033	T	1.03	0.03	L	9.1344	0.0021	0.020	88		9.11	9.17		C			1							
107877	7.438	0.006	6.909	0.006		0.487	0.013	G	0.61	0.07	F	6.9644	0.0007	0.007	87		6.95	6.98					1							S
107878	9.349	0.021	8.018	0.012		1.129	0.019	T	1.09	0.02	L	8.0535	0.0010	0.010	67		8.03	8.09		D			1							S
107879	9.648	0.016	9.441	0.019		0.198	0.023	T	0.22	0.03	L	9.4860	0.0025	0.027	113		9.45	9.56		U			1							S
107880	8.793	0.011	7.722	0.008		0.927	0.010	T	0.92	0.01	L	7.7880	0.0009	0.010	129		7.76	7.81		C			1							
107881	9.082	0.012	8.613	0.012		0.455	0.013	T	0.52	0.01	L	8.6802	0.0019	0.015	112		8.66	8.71		C			1							S
107882	11.057	0.045	10.189	0.034		0.760	0.043	T	0.80	0.03	L	10.2555	0.0026	0.025	143		10.21	10.31		C			1							
107883	10.621	0.033	8.815	0.013		1.503	0.028	T	1.53	0.04	L	8.7964	0.0023	0.023	145		8.76	8.84					1							
107884	9.713	0.020	8.114	0.010		1.340	0.018	T	1.30	0.02	L	8.1336	0.0011	0.010	100		8.12	8.15					1							S
107885	10.116	0.034	8.990	0.023		0.969	0.032	T	0.95	0.03	L	9.0897	0.0025	0.017	71		9.06	9.12		C			1							
107886	7.752	0.006	6.702	0.005		0.912	0.006	T	0.91	0.00	L	6.7603	0.0006	0.007	115		6.75	6.77		C			1							S
107887	5.640	0.003	5.761	0.004		−0.100	0.005	G	−0.08	0.01	H	5.7499	0.0011	0.008	94		5.74	5.77			21516+1950	I 1	1							S
107888	8.866	0.018	8.330	0.016	*	0.510	0.018	T	0.58	0.02	L *	8.5931	0.0014	0.019	152	*	8.57	8.62		D	21516−5925	I 1	2 C A	AB	253	2.134	0.008	2.03	0.03	S
107889	8.933	0.017	8.553	0.018		0.399	0.015	G	0.46	0.02	H	8.5960	0.0019	0.014	95		8.57	8.62		C			1							S
107890	9.140	0.019	8.611	0.018		0.534	0.015	G	0.61	0.02	H	8.6506	0.0020	0.019	78		8.62	8.68		C			1							
107891	8.884	0.010	8.432	0.010		0.398	0.015	G	0.46	0.02	H	8.5055	0.0017	0.018	132		8.48	8.54					1							
107892	8.735	0.011	8.267	0.011		0.415	0.015	G	0.48	0.02	H	8.3353	0.0014	0.014	123		8.31	8.36		C			1							S
107893	6.769	0.029	6.469	0.033	A	0.281	0.002	G	0.32	0.00	R *	6.4509	0.0006	0.006	111	*	6.44	6.46		D	21516+6545	I 1	2 C A	AB	147	1.493	0.002	0.30	0.01	S
107894	8.619	0.008	8.539	0.009		0.072	0.011	T	0.08	0.01	L	8.5711	0.0012	0.014	186		8.55	8.60		C			1							S
107895	9.651	0.018	8.686	0.013		0.848	0.016	T	0.83	0.02	A	8.7674	0.0015	0.015	110		8.74	8.80		C			1							
107896	7.370	0.009	6.847	0.008	*	0.500	0.009	T	0.57	0.01	L *	6.9314	0.0012	0.008	94	*	6.92	6.94		C	21517+1918	I 1	2 C A	AB	297	4.299	0.011	3.37	0.06	S
107897	9.387	0.017	9.120	0.019		0.254	0.024	T	0.29	0.03	L	9.1958	0.0020	0.017	93		9.16	9.23					1							
107898	10.513	0.033	9.805	0.027		0.639	0.032	T	0.70	0.03	L	9.8739	0.0028	0.022	123		9.82	9.91					1							
107899	10.284	0.028	9.198	0.018		0.939	0.025	T	0.93	0.02	L	9.3142	0.0168	0.193	139		8.87	9.44	4.86	P 1 A			1							G
107900	8.339	0.010	8.317	0.012		0.025	0.014	T	0.04	0.01	L	8.3301	0.0018	0.017	119		8.31	8.36					1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
107901	21 51 41.66	−18 37 21.9	6.19	H	327.923 580 06	−18.622 752 48	15.54	144.14	−77.24	0.85	0.46	0.86	1.10	0.44	+14	−17	−10	−28	−18	−	3	− 3	+41	−27	+ 2	2	−1.03
107902	21 51 42.55	+09 02 31.2	8.37	G	327.927 293 65	+09.042 005 76	4.67	18.91	−1.82	0.90	0.78	1.08	1.28	0.89	+22	+ 4	−28	+18	−16	+31	−	6	−13	+16	+27	0	1.02
107903	21 51 42.66	+12 02 08.6	7.61	G	327.927 736 06	+12.035 715 29	5.57	41.59	−2.53	0.92	0.67	0.95	1.52	0.76	−	7	+21	−26	+52	−20	+33	−12	+21	+10	−15	0	−0.31
107904	21 51 44.48	+31 54 43.7	7.57	H	327.935 352 59	+31.912 128 58	5.22	0.53	−12.62	0.60	0.58	0.83	0.67	0.64	−10	+19	−21	+28	−11	+	9	− 3	−28	+23	−	1	0	0.39
*107905	21 51 44.77	+66 50 52.5	9.80	H	327.936 529 18	+66.847 928 10	0.14	1.16	4.59	0.94	0.86	1.00	1.14	0.94	−12	−	1	+11	+14	+13	−11	+14	−	7	+	9	−	8	1	−0.80
*107906	21 51 44.67	−05 19 04.1	11.17	G	327.936 142 95	−05.317 801 97	8.51	205.63	−51.64	2.08	1.43	2.50	2.56	1.48	+31	−10	+10	−18	+13	+40	+	4	+	8	+24	+43	0	−0.65
107907	21 51 45.89	+46 11 56.4	8.31	H	327.941 203 63	+46.198 989 68	1.60	−4.27	−4.25	0.65	0.64	0.84	0.77	0.71	−29	+	4	+15	+21	+	2	+	7	+	1	+10	+	6	−31	0	−0.15
107908	21 51 46.19	+42 31 37.1	9.31	H	327.942 461 35	+42.526 965 48	−1.46	−2.44	8.68	0.79	0.90	1.24	0.85	1.06	−24	+	4	+	1	+12	−	9	+	5	−	8	+26	−	8	−30	1	0.82
107909	21 51 46.44	+64 53 57.9	10.09	H	327.943 484 18	+64.899 410 15 B	4.03	30.79	−3.27	23.98	23.28	8.60	17.53	16.35	−12	−	5	+20	+33	−	2	+	7	−	5	+	8	−	4	−20	1	0.15
*107910 H	21 51 47.39	+55 33 43.5	10.53	H	327.947 478 69	+55.562 091 59 A	0.24	10.86	3.57	4.20	3.31	2.64	2.50	2.13	+26	+10	+	0	−10	+	1	−20	+	3	−18	+	5	+29	2	0.15
*107911	21 51 47.39	−70 21 05.7	7.80	H	327.947 457 00	−70.351 571 30	8.66	24.45	−50.72	0.52	0.51	0.73	0.58	0.52	−15	−14	+	2	+	3	+	1	+13	+	0	−14	−	6	−25	0	0.04
107912	21 51 47.42	−35 57 06.7	8.53	1 H	327.947 601 26	−35.951 868 93	−0.67	11.41	−14.75	1.05	0.68	1.14	1.26	0.67	+31	−25	−31	+39	+16	+13	+25	+54	−23	+27	0	0.14
107913	21 51 47.65	+61 56 34.5	7.44	2 T	327.948 523 38	+61.942 915 13	1.73	−3.61	−1.71	0.50	0.49	0.56	0.52	0.50	−	8	−	2	+	8	+21	+	1	−10	+	4	−18	+	3	−	3	0	0.34
107914	21 51 48.27	+64 53 59.8	6.84	H	327.951 143 14	+64.899 937 28 A	5.92	21.53	−6.31	1.06	0.95	0.85	1.12	0.91	−10	−	5	+19	+21	+	1	+	4	−	1	+	8	−	1	−20	1	0.15
107915	21 51 48.50	+59 55 49.9	7.72	H	327.952 068 76	+59.930 531 28	1.41	−0.48	5.58	0.60	0.56	0.67	0.67	0.59	−	4	−	1	+14	+10	+17	+	1	+22	−18	−	7	+20	0	0.29
107916	21 51 49.98	+24 40 59.8	8.63	H	327.958 248 00	+24.683 266 34	11.62	−109.59	−147.52	0.85	0.81	1.01	1.00	1.00	+26	+	6	−20	−11	+	1	−12	−	3	−	1	−	5	+40	0	0.27
107917	21 51 50.22	+17 08 48.1	8.77	H	327.959 242 93	+17.146 698 56	3.75	5.29	−17.54	0.82	0.81	1.10	1.04	0.90	+41	+13	−	1	−17	−	8	−23	−	8	−26	+11	+30	0	1.93
107918	21 51 51.47	+41 38 57.0	8.37	H	327.964 441 80	+41.649 166 90	9.85	−79.65	−0.09	0.64	0.67	1.01	0.74	0.82	−27	+11	−10	+13	+	0	+	3	+	1	+	7	+	7	−37	0	0.11
107919	21 51 51.86	+11 05 28.3	6.66	G	327.966 102 26	+11.091 197 05	13.96	75.06	26.56	0.77	0.55	0.80	0.98	0.63	−	2	+10	−22	−27	+11	−	1	+13	+	1	+19	−	2	0	0.50
107920	21 51 53.07	+42 20 40.6	7.85	H	327.971 120 44	+42.344 621 30 A	33.93	−175.22	−305.57	1.09	1.17	1.41	1.16	1.23	−18	+15	−	3	+37	−11	−	5	−14	+12	+	4	−31	1	2.03
107921	21 51 53.72	−54 39 07.6	7.07	H	327.973 841 88	−54.652 105 91	5.39	38.36	−46.90	0.66	0.59	0.95	0.87	0.58	+16	−13	−37	+13	+47	−28	+34	+39	−30	+39	0	0.37
107922	21 51 53.78	−65 03 29.1	9.10	H	327.974 096 79	−65.058 087 59	11.74	−30.88	23.80	0.72	0.77	1.27	0.80	0.82	−27	−	6	+	2	−10	−	1	+13	+	0	−	4	−16	−40	0	−0.03
107923	21 51 55.39	+48 26 13.5	6.88	G	327.980 809 44	+48.437 087 96	2.99	−11.92	8.97	0.49	0.54	0.63	0.56	0.58	−20	+	7	−	5	−14	+15	−13	+15	−20	+13	−13	1	0.66
107924	21 51 55.97	+07 53 31.2	10.17	G	327.983 188 16	+07.891 987 78	19.82	−10.35	−65.92	1.68	1.43	1.93	2.32	1.47	+31	−16	−11	+14	−	7	+17	−12	−24	+21	+19	0	0.14
107925 H	21 51 56.56	+09 04 46.2	7.72	H	327.985 684 24	+09.079 507 61 A	10.01	2.20	−22.52	1.24	1.02	1.26	1.49	0.99	+33	−	3	−39	−21	−19	+22	−18	−30	+33	+40	3	0.88
107926 H	21 51 58.35	+38 25 47.6	7.90	H	327.993 118 77	+38.429 901 91 *	2.45	11.77	3.65	0.45	0.57	0.90	0.52	0.68	−45	+13	−	5	+	9	+15	−15	+16	−	3	+24	−53	1	−0.11
107927	21 51 58.50	−30 19 00.0	7.88	H	327.993 739 07	−30.316 657 48	9.89	−25.30	27.12	0.79	0.57	0.95	0.85	0.52	+28	−	2	−	5	+	2	+21	+24	+21	+59	−12	+25	2	−0.10
107928	21 51 58.64	−55 46 44.7	6.98	H	327.994 328 04	−55.779 078 46	5.71	5.15	3.30	0.57	0.42	0.84	0.69	0.43	−	3	+	7	−	4	+21	+11	+23	+11	+11	−	8	+	7	0	0.12
107929	21 52 00.45	+55 47 31.0	6.56	H	328.001 859 77	+55.791 936 72 B	1.67	13.42	13.05	9.58	9.27	4.88	5.86	5.74	+	5	+21	+	1	−11	+	6	−29	+12	−23	+	4	+29	18	1.01
107930	21 52 01.02	+55 47 48.3	5.70	G	328.004 260 49	+55.796 744 52 A	5.07	18.90	−0.53	1.85	1.45	1.52	1.79	1.32	+	2	+20	−	2	−27	+	4	−28	+	7	−33	+	3	+29	18	1.01
107931	21 52 01.50	+05 32 34.6	11.63	G	328.006 236 77	+05.542 951 09	30.95	214.76	−12.01	3.38	2.34	3.63	5.21	2.70	+	9	+	4	−	5	−	1	−	4	+31	−	2	−14	+18	+	7	0	0.59
107932	21 52 01.85	+14 36 05.7	8.28	H	328.007 719 07	+14.601 595 14	2.45	−7.92	−38.84	0.87	0.71	1.10	1.22	0.82	+32	−	6	−11	−13	+23	+	2	+17	−	2	+26	+21	3	0.63
107933	21 52 02.40	+52 42 30.8	9.08	H	328.009 991 93	+52.708 556 22	0.87	6.62	2.42	0.70	0.77	0.93	0.86	0.91	−	3	+17	+	3	−	2	+	5	−29	+11	−19	+	0	+20	0	−1.80
107934 H	21 52 02.43	+38 57 16.3	7.53	H	328.010 128 03	+38.954 528 72 A	6.22	93.24	25.62	0.68	0.80	1.09	0.73	0.85	−29	+	6	+	3	+	8	+	9	−	7	+10	+	1	+19	−40	1	−0.35
107935	21 52 02.79	+22 34 29.4	10.69	3 H	328.011 606 87	+22.574 846 71	1.41	13.37	−7.65	1.51	1.13	1.72	1.94	1.51	+	2	−	6	−20	+	8	+	4	+	3	+	4	−	1	+25	+12	0	0.27
107936	21 52 03.16	−45 00 26.5	9.47	H	328.013 162 92	−45.007 349 56	26.93	−8.12	−63.39	1.35	0.82	1.55	1.24	0.77	+13	−20	−19	−17	−	9	+30	−	1	+23	−	4	+	4	0	−0.29
107937	21 52 03.36	−35 22 02.9	10.18	H	328.014 007 19	−35.367 482 05	−0.22	58.74	−0.87	1.47	1.10	1.82	1.93	1.12	+31	−	1	−27	+37	+21	+28	+28	+63	−16	+32	0	0.40
107938	21 52 04.27	+48 32 55.6	8.09	H	328.017 797 59	+48.548 772 41	1.84	4.89	−4.83	0.59	0.62	0.76	0.68	0.67	−14	+	6	+	6	−	4	+15	−	9	+15	−	8	+10	−12	0	1.56
107939	21 52 04.73	−01 17 06.1	8.66	H	328.019 707 81	−01.285 020 27	9.13	22.87	−5.07	1.12	0.71	1.30	1.27	0.69	+39	+13	+17	+12	+	1	+10	+	3	−	3	+21	+42	0	1.35
107940	21 52 06.05	+79 57 18.1	8.37	H	328.025 198 04	+79.955 033 27	3.06	1.66	−7.90	0.56	0.55	0.62	0.69	0.59	−	2	−	2	+	7	+	5	+	4	+11	−	2	−16	+	8	−26	0	−0.26
107941	21 52 06.58	+01 54 24.8	8.19	H	328.027 408 52	+01.906 884 21	31.97	−74.45	−188.07	0.91	0.64	1.06	1.19	0.75	+29	−	3	−13	+	1	−	6	+28	+	0	−34	+27	+45	0	0.16
107942	21 52 06.66	−42 58 46.4	7.75	H	328.027 741 18	−42.979 566 24	4.28	18.98	7.74	1.07	0.63	1.20	1.45	0.64	+24	+20	−15	+18	+22	+	2	+15	+52	−28	+19	0	0.88
107943	21 52 06.67	−56 24 09.8	9.67	H	328.027 801 36	−56.402 712 74	−1.53	8.54	−48.46	0.94	0.74	1.44	1.14	0.78	−	4	−	6	−	6	+	5	+	3	+13	+	3	+12	−	4	+	1	0	−0.56
107944	21 52 07.07	+30 11 27.9	7.91	H	328.029 473 56	+30.191 089 33	1.40	13.38	4.08	0.55	0.64	0.85	0.73	0.82	−	1	+	7	−18	+45	−	5	+	7	−	1	+12	+17	+	4	0	−0.27
107945	21 52 08.20	+51 25 53.8	8.66	G	328.034 181 17	+51.431 597 49	2.40	5.36	1.44	0.66	0.63	0.82	0.67	0.67	−	5	+10	+	4	−	9	+	4	+	0	+	6	−11	+22	+	7	1	0.78
107946 H	21 52 08.94	+27 48 02.2	8.73	H	328.037 244 87	+27.800 598 57 B	5.05	12.33	2.08	3.28	3.73	3.63	2.68	3.34	+	6	+	4	−17	+18	+19	+	5	+21	+32	+20	+24	3	0.94
107947	21 52 09.67	−62 03 07.7	7.22	1 H	328.040 292 34	−62.052 140 91	22.18	43.57	−91.84	0.37	0.47	0.80	0.47	0.49	−15	−11	−21	+10	+	5	+	5	+	4	−10	+	0	−24	1	0.83
107948	21 52 10.35	+05 37 37.2	12.11	G	328.043 116 63	+05.626 993 81	31.42	117.84	−153.86	4.54	2.97	4.73	6.23	3.53	+	2	+21	−	7	−11	+	5	+28	+	8	−14	+14	+13	0	1.27
107949 H	21 52 11.15	−85 50 11.6	7.70	H	328.046 456 52	−85.836 565 86 A	10.51	−16.72	1.69	1.56	1.30	1.43	1.56	1.19	−10	−12	+	1	+	0	−	1	+	3	+	4	−15	−	9	+	3	2	1.82
107950	21 52 11.66	−69 27 51.5	8.09	H	328.048 592 07	−69.464 315 08	3.49	6.69	−16.50	0.62	0.61	0.88	0.74	0.71	−12	−	8	−	8	+19	+10	−	3	+10	+	2	−11	−13	0	−0.42
107951	21 52 12.04	+01 24 33.1	7.76	H	328.050 183 54	+01.409 185 44	3.59	10.60	3.22	0.92	0.57	1.00	1.29	0.58	+27	−	1	+	5	+	9	+20	+22	+12	−21	+20	+28	0	1.46
107952	21 52 12.97	+79 33 06.3	6.51	H	328.054 062 02	+79.551 739 31	2.68	9.62	13.57	0.43	0.43	0.48	0.51	0.45	−	8	−11	+	8	+	9	+	4	+14	−	2	−16	+	9	−20	0	0.00
107953	21 52 13.44	+43 47 01.3	7.90	H	328.056 003 30	+43.783 690 75	2.41	6.40	6.41	0.59	0.57	0.83	0.76	0.73	−25	+10	−11	+12	−	3	+	6	−	2	+14	+	0	−40	0	−0.32
107954	21 52 14.94	−72 48 22.0	8.47	H	328.062 252 96	−72.806 120 72	2.54	−6.04	12.13	0.62	0.65	0.87	0.76	0.75	−	2	+	5	−16	+	3	−	1	−	9	+	1	+13	+	6	−14	0	−0.20
107955	21 52 17.28	+72 29 23.5	7.14	H	328.071 985 26	+72.489 873 12	3.27	16.73	8.26	0.48	0.45	0.52	0.59	0.47	−11	−	9	+	9	+12	+	0	+	6	−	1	−	8	+10	−	6	0	−1.81
107956	21 52 18.17	+21 16 23.2	6.27	2 H	328.075 722 82	+21.273 102 84	2.56	15.89	24.52	0.55	0.55	0.73	0.57	0.70	+21	+12	−22	+16	+	1	+	0	+	7	−13	+24	+36	0	−0.89
107957 H	21 52 18.53	−70 32 58.0	7.78	H	328.077 206 14	−70.549 453 22 *	1.29	15.40	11.98	0.60	0.56	0.79	0.65	0.58	−17	−18	+	0	−	6	−	6	+	9	−	5	−15	−	4	−22	0	0.92
107958	21 52 19.33	+39 48 06.2	8.24	H	328.080 546 35	+39.801 712 33	24.95	436.77	6.09	0.57	0.65	1.05	0.69	0.80	−32	+	2	−	2	+	3	+19	−	6	+18	−	6	+	8	−43	0	0.73
107959	21 52 20.61	−08 18 05.6	8.78	H	328.085 872 30	−08.301 555 23	2.91	−5.82	−21.91	1.04	0.85	1.21	1.37	0.85	+48	−	3	+	8	+	8	+20	+13	+18	+25	−	5	+47	0	0.75
107960	21 52 20.69	+24 00 44.5	7.60	3 H	328.086 202 01	+24.012 370 78	6.25	4.32	−21.42	0.73	0.71	0.94	0.82	0.84	+24	+22	−	4	+	4	−	3	−15	+	2	−16	+27	+20	0	1.42
107961 H	21 52 20.95	+63 06 04.5	7.38	G	328.087 291 72	+63.101 253 25 A	1.89	−2.01	−1.12	1.45	1.44	1.42	1.38	1.39	−11	−	5	+14	+13	+	6	−	1	+	8	+	2	+18	+	4	6	1.21
107962	21 52 21.24	−03 10 28.7	6.62	H	328.088 486 98	−03.174 633 12	5.79	20.87	−9.33	0.76	0.47	0.80	0.92	0.49	+25	−	3	−	1	−	6	+15	+10	+12	+18	+	6	+32	4	0.52
107963	21 52 21.47	−41 24 45.4	6.84	G	328.089 465 74	−41.412 605 73	4.85	2.61	−20.29	0.71	0.51	0.88	0.89	0.50	+	9	+11	−19	+19	−13	+39	−	4	+36	−16	−	8	2	−0.29
107964	21 52 21.51	+34 22 49.7	7.42	H	328.089 620 11	+34.380 474 86	2.44	3.72	1.42	0.40	0.41	0.77	0.47	0.49	−27	+	3	−	8	−22	+	8	−14	+10	−39	+32	−19	1	1.63
107965	21 52 22.04	−46 51 50.1	10.69	G	328.091 814 68	−46.863 912 01	10.18	58.83	−58.37	1.39	1.33	2.22	1.56	1.38	+42	−22	+	1	−11	+21	+18	+16	+30	+	7	+50	3	−0.22
107966	21 52 24.47	+71 36 33.2	8.29	H	328.101 963 48	+71.609 220 56	2.53	5.33	−0.44	0.61	0.55	0.64	0.70	0.55	+	3	+	4	+20	+15	+	2	+	1	+	6	−15	−	1	+18	0	−0.47
107967	21 52 24.95	+60 19 46.8	7.47	H	328.103 947 97	+60.329 661 90	3.88	−15.29	93.80	0.57	0.52	0.62	0.67	0.56	−	6	−	3	+10	+15	+14	−	7	+19	−11	−	3	+15	0	1.02
107968	21 52 25.37	+02 23 22.2	12.74	G	328.105 708 48	+02.389 501 95	39.84	23.00	−302.98	3.87	2.76	4.47	5.59	3.19	+29	+12	−	4	+21	+	5	+31	+	9	−	3	+22	+39	4	−1.71
107969	21 52 25.48	+58 20 36.9	8.33	G	328.106 154 61	+58.343 597 08	4.42	29.17	16.73	0.58	0.59	0.69	0.63	0.63	+	4	+	1	−	4	+15	+12	−	6	+18	−11	+	6	+26	0	0.23
107970	21 52 26.52	+53 42 43.3	8.95	H	328.110 507 12	+53.712 029 32	2.43	3.77	−0.25	0.72	0.74	0.89	0.86	0.89	+	3	−	4	−	1	−17	+	5	−	3	+	5	−16	+	0	+32	0	−1.93
107971	21 52 27.07	+54 40 58.7	6.83	H	328.112 782 96	+54.682 977 12	5.13	33.06	16.32	0.52	0.46	0.60	0.54	0.44	−16	−21	+	5	−29	+17	+	0	+11	−19	+11	+	6	0	−1.23
107972	21 52 29.04	−27 18 54.7	7.83	H	328.121 008 74	−27.315 197 29	5.44	−12.53	−7.04	0.84	0.56	1.05	0.95	0.54	+24	−	7	−14	+	1	+	5	+20	+	9	+52	−21	+20	0	−0.08
107973	21 52 29.58	−49 35 13.9	7.90	2 H	328.123 253 10	−49.587 184 25	3.73	17.66	−14.45	0.78	0.59	1.14	0.86	0.62	+41	−19	−22	−	1	+18	+11	+20	+36	−18	+45	0	0.79
107974	21 52 29.68	−09 25 04.2	7.20	H	328.123 677 00	−09.417 842 54	19.58	4.67	−34.24	0.79	0.54	0.94	0.90	0.53	+25	−	5	+16	−13	+15	+37	+	7	+17	+	9	+32	0	1.09
107975	21 52 29.96	+28 47 37.3	5.52	H	328.124 817 12	+28.793 692 16	36.15	−58.67	−63.26	0.58	0.56	0.69	0.63	0.74	+16	+	3	−21	+35	+16	−16	+15	+23	+	4	+28	0	0.90
107976	21 52 30.40	+61 11 13.1	9.00	H	328.126 666 56	+61.186 981 96	2.44	6.79	−0.26	0.66	0.61	0.73	0.77	0.67	−	2	−	6	+13	+10	+	6	−	4	+	8	−	9	+	1	+	8	0	1.43
107977	21 52 30.70	+55 02 23.5	7.33	H	328.127 912 30	+55.039 852 39	1.43	1.78	−1.41	0.53	0.47	0.62	0.54	0.46	−10	−	3	−	5	−22	+12	−11	+10	−15	+	8	+	7	0	0.35
107978	21 52 30.87	+59 26 12.0	9.94	H	328.128 632 72	+59.436 680 46	0.03	−3.30	−5.05	0.97	0.90	1.10	1.10	1.04	+	2	+	4	+	7	−	5	+19	+16	+21	−15	+17	+27	4	0.36
107979	21 52 31.36	+42 24 18.7	8.59	H	328.130 653 79	+42.405 190 28	4.24	38.95	11.93	0.65	0.71	0.99	0.78	0.84	−25	+12	−	6	+33	−	9	−	4	+10	+15	+19	−37	0	0.37
107980	21 52 31.54	+35 10 48.3	9.00	H	328.131 406 09	+35.180 082 44	1.89	12.60	0.02	0.54	0.57	1.04	0.61	0.69	−27	+	0	+	1	+	3	+	2	−24	+	8	−24	+26	−12	0	−0.33
107981	21 52 31.59	−40 34 21.0	8.08	G	328.131 635 22	−40.572 500 67	6.82	−4.28	−25.44	0.89	0.62	1.01	1.09	0.65	−	1	−14	−11	+21	−20	+22	−15	+36	+	4	−16	0	−1.59
107982	21 52 32.11	+84 49 25.3	9.12	H	328.133 802 45	+84.823 696 43	7.92	−19.41	9.88	0.76	0.68	0.80	1.00	0.76	−11	−16	+14	+	5	−13	−	3	−10	+14	−	2	−22	0	−1.48
107983	21 52 34.10	+47 13 43.6	10.14	G	328.142 087 72	+47.228 787 23	−0.83	−2.05	−2.52	1.06	1.14	1.47	1.38	1.34	−18	+	8	+10	+	9	+	6	+	6	+	4	+	2	−	8	+	8	0	−0.05
107984	21 52 35.15	+62 42 43.8	6.70	H	328.146 457 03	+62.712 175 05	1.31	−2.31	−1.21	0.49	0.42	0.51	0.54	0.45	−12	+	1	+11	+35	−	5	−	3	+	4	+	3	+10	−11	0	0.15
107985	21 52 36.20	−26 01 34.4	8.78	H	328.150 819 19	−26.026 211 77	18.08	131.38	−142.93	0.96	0.66	1.19	1.24	0.62	+10	+10	−	7	+30	−16	+42	−	9	+53	−	9	−	2	0	0.97
107986	21 52 36.63	−05 21 54.5	9.01	H	328.152 613 03	−05.365 150 17	9.15	6.75	−25.74	1.15	0.68	1.23	1.23	0.67	+24	+10	+	4	−23	+10	+24	+	8	+	4	+14	+31	0	0.29
107987	21 52 38.39	+25 03 18.1	8.36	H	328.159 963 73	+25.055 017 68	9.85	−15.43	−3.70	0.89	0.85	1.00	1.10	0.94	+25	−11	−19	−42	−12	+20	−11	−32	+15	+28	0	−0.56
107988	21 52 38.88	−40 33 46.7	10.71	H	328.162 013 79	−40.562 966 10	3.85	23.57	−19.65	1.59	1.17	1.88	1.94	1.26	+18	−22	−28	−	1	−	8	+15	+	0	+32	−	2	+	0	0	−1.15
107989	21 52 40.36	−19 31 20.4	7.72	H	328.168 171 15	−19.522 346 24	2.16	0.36	15.48	0.87	0.57	0.97	1.24	0.54	+19	−10	−18	+	3	−12	+23	+	3	+55	−18	+	4	2	−1.03
107990	21 52 41.36	−42 50 43.0	8.38	H	328.172 345 61	−42.845 284 33	7.39	27.25	−17.94	1.04	0.72	1.15	1.40	0.73	+37	+16	−15	+41	+28	+12	+25	+56	−23	+29	0	0.18
107991	21 52 41.63	−17 04 00.1	7.92	H	328.173 446 59	−17.066 707 26	4.13	25.82	−17.22	0.89	0.56	0.97	1.32	0.52	+13	+	8	−13	+	5	−25	+22	−12	+25	−13	−	6	0	0.85
107992	21 52 43.41	−36 00 00.2	8.00	G	328.180 893 49	−36.000 068 12	6.35	17.14	−3.78	0.83	0.59	0.98	0.98	0.62	+33	−33	−32	+23	+	9	+12	+17	+41	−14	+33	2	1.72
107993	21 52 44.94	−03 59 31.4	6.66	H	328.187 266 75	−03.992 060 72	6.84	23.31	15.45	0.72	0.49	0.81	0.87	0.48	+29	−	9	−	3	−14	+	7	+28	+	6	+	8	+29	0	−0.37
107994	21 52 45.60	−51 27 12.9	10.59	G	328.189 993 58	−51.453 593 72	14.64	304.46	−219.97	1.39	1.12	1.98	1.62	1.13	+27	−	3	−	4	+22	+19	+10	+19	+31	−	6	+26	1	1.53
107995	21 52 46.86	+73 42 08.0	6.64	H	328.195 246 14	+73.702 216 38	11.51	39.06	22.81	0.46	0.43	0.52	0.47	0.44	−	4	−	8	+	9	−17	+	2	+	7	+	0	−10	+18	+	5	0	0.91
107996	21 52 47.82	+48 01 20.8	9.63	2 H	328.199 241 77	+48.022 455 84	2.40	−2.18	−2.83	0.78	0.84	1.01	0.94	0.94	−11	−	2	−	6	+	3	+	4	−	7	+	4	−	2	−	8	−10	0	−0.41
107997	21 52 48.07	+38 50 08.0	7

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
107901	6.609	0.004	6.226	0.003		0.374	0.004	T	0.44	0.00	L	6.2732	0.0007	0.005	78		6.26	6.28		C			1							S
107902	8.726	0.016	8.384	0.017		0.309	0.015	G	0.35	0.02	H	8.4644	0.0018	0.014	63		8.45	8.50					1							S
107903	7.820	0.011	7.636	0.011		0.167	0.015	G	0.18	0.01	H	7.6703	0.0019	0.017	58		7.64	7.69					1							S
107904	9.306	0.014	7.704	0.008		1.342	0.013	T	1.31	0.01	L	7.7178	0.0013	0.011	118		7.69	7.74		C			1							S
107905	10.030	0.026	9.859	0.033		0.164	0.039	T	0.18	0.04	L	9.8531	0.0033	0.023	106		9.82	9.90					1							G
107906						0.927	0.008	G	0.97	0.01	I	11.3053	0.0062	0.040	74		11.25	11.39		C			1							G
107907	8.305	0.008	8.300	0.010		0.009	0.012	T	0.03	0.01	L	8.3267	0.0014	0.013	129		8.30	8.35					1							
107908	10.437	0.031	9.463	0.022		0.855	0.028	T	0.87	0.02	L	9.4656	0.0029	0.031	137		9.41	9.51					1							
107909	10.727	0.056	9.984	0.046	B	0.680	0.057	T	0.74	0.05	L	10.3410	0.0971			B				D	21518+6454	I 2	1 C I A							
107910	11.295	0.076	10.577	0.064	*	0.660	0.080	T	0.72	0.07	L *	10.6712	0.0035	0.033	122	*	10.63	10.72		C	21518+5534	H 1	2 C C	AB	217	0.421	0.072	2.83	0.24	G
107911	8.412	0.008	7.861	0.008		0.529	0.001	G	0.60	0.00	H	7.9140	0.0011	0.013	168		7.89	7.94		C			1							S
107912	10.529	0.037	8.707	0.015		1.516	0.032	T	1.55	0.05	L	8.6479	0.0025	0.019	103		8.62	8.69		U			1							
107913	7.553	0.015	7.453	0.015		0.090	0.019	T	0.10	0.02	L	7.4323	0.0141	0.131	131		7.33	7.64	1.50	P 1 A			1							S
107914	8.112	0.009	6.950	0.006	A	0.997	0.009	T	0.98	0.01	L	7.0095	0.0050	0.016	126	A	6.99	7.04		D	21518+6454	I 2	1 C P A							S
107915	7.849	0.007	7.739	0.008		0.100	0.015	G	0.11	0.02	H	7.7623	0.0012	0.010	106		7.75	7.78		C			1							S
107916	9.315	0.017	8.702	0.015		0.571	0.020	T	0.64	0.02	L	8.7517	0.0017	0.019	82		8.73	8.80		C			1							
107917	9.372	0.017	8.806	0.016		0.529	0.021	T	0.60	0.02	L	8.8811	0.0014	0.017	99		8.85	8.91		C			1							
107918	9.378	0.013	8.463	0.010		0.811	0.012	T	0.84	0.01	L	8.5195	0.0020	0.019	155		8.49	8.56					1							S
107919	6.981	0.008	6.675	0.006		0.290	0.015	G	0.33	0.02	H	6.7286	0.0014	0.007	62		6.72	6.74					1							S
107920	8.813	0.009	7.916	0.007	A	0.798	0.008	T	0.83	0.01	L	7.9978	0.0061	0.013	158	A	7.98	8.03		C	21519+4221	I 2	2 C A	AB	83	10.727	0.031	3.26	0.13	S
107921	7.218	0.005	7.082	0.005		0.123	0.007	T	0.14	0.01	L	7.1176	0.0012	0.012	119		7.10	7.14					1							S
107922	9.790	0.014	9.140	0.013		0.595	0.014	T	0.67	0.01	L	9.2281	0.0021	0.028	210		9.18	9.28					1							
107923	8.989	0.013	7.054	0.006		1.610	0.012	G	1.62	0.09	H	6.9883	0.0010	0.011	130		6.97	7.00					1							S
107924	11.846	0.151	10.255	0.057		1.100	0.020	G	1.18	0.03	I	10.3340	0.0049	0.031	50		10.26	10.39		C			1							G
107925	8.075	0.015	7.717	0.013	*	0.325	0.015	G	0.38	0.02	H *	7.7938	0.0014	0.013	58	*	7.77	7.84		D	21519+0905	I 1	2 C A	AB	337	9.046	0.014	2.70	0.07	S
107926	9.047	0.008	8.024	0.006	*	0.891	0.007	T	0.90	0.01	L *	8.0604	0.0010	0.014	278	*	8.04	8.08		C	21520+3826	H 1	2 C S A	AB	182	0.127	0.013	0.88	0.48	
107927	8.256	0.008	7.910	0.009		0.364	0.015	G	0.43	0.02	H	7.9629	0.0011	0.011	108		7.94	7.98					1							S
107928	8.231	0.008	7.092	0.005		0.979	0.007	T	0.96	0.01	L	7.1438	0.0009	0.009	152		7.13	7.16		C			1							S
107929	6.593	0.004	6.586	0.005	B	0.007	0.005	T	0.03	0.01	L	6.5965	0.0363			B				D	21520+5548	I 2	1 C I A							S
107930	5.549	0.002	5.665	0.003	A	−0.081	0.004	G	−0.06	0.01	H	5.6923	0.0197	0.101	120	A	5.55	5.83		D	21520+5548	I 2	1 C P A							S
107931						1.420	0.020	G	1.72	0.05	I	11.7750	0.0058	0.039	52		11.68	11.85					1							G
107932	9.636	0.017	8.402	0.011		1.054	0.016	T	1.02	0.01	L	8.4486	0.0026	0.023	116		8.42	8.49					1							
107933	9.110	0.014	9.096	0.019		0.018	0.022	T	0.04	0.02	L	9.0961	0.0018	0.021	109		9.05	9.13					1							
107934	8.845	0.008	7.655	0.006	*	1.019	0.008	T	0.99	0.01	L *	7.7018	0.0009	0.012	214	*	7.67	7.72			21520+3857	M 1	2 C A	AB	12	0.981	0.026	3.56	0.09	
107935	10.667	0.056	10.452	0.074		0.205	0.087	T	0.23	0.10	L	10.7445	0.0812	0.445	64		9.99	11.07	0.39	P 1 A			1							G
107936	10.768	0.042	9.589	0.025		1.003	0.039	T	1.05	0.05	L	9.6097	0.0023	0.020	94		9.58	9.65					1							
107937	11.063	0.050	10.301	0.040		0.695	0.050	T	0.75	0.04	L	10.3172	0.0030	0.030	103		10.26	10.36					1							
107938	8.171	0.008	8.125	0.010		0.047	0.012	T	0.06	0.01	L	8.1107	0.0014	0.018	134		8.09	8.15					1 S							S
107939	9.199	0.017	8.703	0.016		0.466	0.021	T	0.54	0.02	L	8.7619	0.0021	0.014	86		8.73	8.79		C			1							S
107940	8.397	0.008	8.368	0.010		0.031	0.012	T	0.05	0.01	L	8.3888	0.0015	0.016	136		8.36	8.41		C			1							
107941	9.320	0.018	8.289	0.013		0.880	0.002	G	0.92	0.00	H	8.3344	0.0013	0.011	96		8.32	8.36					1							
107942	9.598	0.022	7.910	0.011		1.410	0.019	T	1.39	0.02	L	7.8899	0.0015	0.013	89		7.87	7.91					1							S
107943	10.820	0.035	9.792	0.023		0.895	0.031	T	0.90	0.02	L	9.8314	0.0025	0.025	155		9.79	9.88					1 S							
107944	7.834	0.007	7.897	0.009		−0.053	0.010	T	−0.03	0.01	L	7.9018	0.0013	0.011	117		7.88	7.93		C			1							
107945	8.693	0.010	8.661	0.013		0.020	0.015	G	0.04	0.01	H	8.6702	0.0015	0.016	130		8.64	8.71		C			1							
107946	9.199	0.018	8.865	0.020	*	0.317	0.025	T	0.37	0.03	L *	8.8107	0.0028	0.018	67	*	8.78	8.84		D	21521+2748	I 1	2 C A	BA	344	0.793	0.004	0.08	0.01	
107947	7.816	0.005	7.287	0.005		0.510	0.001	G	0.58	0.00	H	7.3360	0.0009	0.013	247		7.32	7.36		M			1							S
107948						1.530	0.020	G	1.81	0.17	K	12.1485	0.0138	0.091	47		12.05	12.36					1							G
107949	8.216	0.011	7.681	0.010	*	0.509	0.011	T	0.58	0.01	L *	7.8164	0.0013	0.014	138	*	7.79	7.84		D	21522−8550	I 1	2 C A	AB	195	4.932	0.004	0.26	0.01	S
107950	9.851	0.017	8.254	0.009		1.338	0.015	T	1.30	0.02	L	8.2463	0.0014	0.015	169		8.22	8.28					1							
107951	8.920	0.014	7.861	0.010		0.918	0.013	T	0.92	0.01	L	7.9157	0.0015	0.014	98		7.90	7.94					1							S
107952	8.615	0.009	6.711	0.004		1.581	0.008	T	1.60	0.01	L	6.6266	0.0009	0.011	137		6.61	6.64					1							S
107953	9.821	0.019	8.048	0.008		1.477	0.016	T	1.49	0.02	L	8.0318	0.0016	0.015	143		8.01	8.06		C			1							
107954	8.733	0.009	8.484	0.010		0.233	0.014	T	0.26	0.02	L	8.5340	0.0017	0.018	146		8.51	8.57					1							S
107955	7.209	0.005	7.147	0.006		0.062	0.007	T	0.07	0.01	L	7.1625	0.0010	0.011	125		7.15	7.18		C			1							S
107956	8.423	0.013	6.536	0.014		1.601	0.016	T	2.75	0.06	O	6.2409	0.0161	0.110	88		6.07	6.45		U 2			1 S							S
107957	9.012	0.010	7.886	0.007	*	0.969	0.009	T	0.95	0.01	L *	7.9397	0.0011	0.014	167	*	7.92	7.96		D	21523−7033	M 1	2 C S A	AB	294	0.181	0.006	0.76	0.21	S
107958	9.161	0.011	8.325	0.009		0.720	0.015	G	0.77	0.01	H	8.3827	0.0017	0.019	185		8.36	8.42					1 G							
107959	10.959	0.061	8.973	0.020		1.646	0.051	T	1.67	0.05	L	8.8956	0.0019	0.017	71		8.87	8.95		C			1							
107960	8.001	0.014	7.667	0.015		0.322	0.022	T	0.37	0.03	L	7.6725	0.0070	0.046	81		7.63	8.27		P 1 A			1							S
107961	7.421	0.010	7.339	0.010	*	0.120	0.010	G	0.13	0.01	H *	7.4204	0.0012	0.010	112	*	7.40	7.44		D	21523+6306	I 1	2 C A	AB	173	1.986	0.002	0.16	0.01	S
107962	6.553	0.004	6.611	0.006		−0.055	0.002	G	−0.03	0.00	H	6.6064	0.0012	0.008	77		6.59	6.62		C			1							S
107963	8.537	0.010	6.981	0.006		1.300	0.015	G	1.26	0.02	A	6.9952	0.0011	0.008	103		6.98	7.01					1							S
107964	8.694	0.008	7.532	0.005		0.997	0.007	T	0.98	0.01	L	7.5868	0.0007	0.011	281		7.57	7.61					1							S
107965	11.398	0.066	10.640	0.053		0.620	0.020	G	0.69	0.02	H	10.8434	0.0032	0.034	126		10.78	10.91		C			1							G
107966	8.283	0.008	8.295	0.010		−0.006	0.012	T	0.01	0.01	L	8.2957	0.0015	0.014	124		8.27	8.33		C			1							
107967	8.730	0.011	7.586	0.007		0.983	0.010	T	0.96	0.01	L	7.6331	0.0011	0.011	123		7.62	7.65		C			1							
107968						−0.011	0.021	G	−0.20	0.02	A	12.8805	0.0147	0.127	76		12.70	13.11					1							D
107969	8.596	0.010	8.341	0.011		0.231	0.015	G	0.26	0.02	H	8.3932	0.0014	0.015	130		8.37	8.42		C			1 S							
107970	10.380	0.029	9.079	0.016		1.106	0.026	T	1.07	0.03	L	9.1167	0.0019	0.020	116		9.09	9.15					1							
107971	8.144	0.008	6.945	0.006		1.026	0.008	T	1.00	0.01	L	7.0010	0.0008	0.009	130		6.99	7.02		C			1							S
107972	9.202	0.015	7.953	0.010		1.065	0.014	T	1.03	0.01	L	7.9981	0.0015	0.010	96		7.98	8.02		C			1							S
107973	8.362	0.010	7.928	0.011		0.410	0.014	T	0.48	0.01	L	7.9962	0.0019	0.022	142		7.96	8.04		U 2			1							S
107974	7.716	0.008	7.244	0.007		0.445	0.010	T	0.51	0.01	L	7.3004	0.0012	0.008	62		7.29	7.32		C			1							S
107975	6.028	0.004	5.576	0.003		0.426	0.005	T	0.49	0.01	L	5.6173	0.0008	0.006	86		5.61	5.63		C			1							S
107976	9.160	0.015	9.025	0.018		0.130	0.022	T	0.14	0.02	L	9.0452	0.0016	0.014	134		9.02	9.08		C			1							
107977	7.465	0.006	7.344	0.007		0.117	0.009	T	0.13	0.01	L	7.3738	0.0011	0.011	126		7.36	7.40		C			1							S
107978	10.209	0.030	9.916	0.036		0.279	0.044	T	0.32	0.06	L	10.0094	0.0027	0.022	101		9.97	10.04		C			1							G
107979	8.986	0.010	8.627	0.011		0.340	0.014	T	0.40	0.02	L	8.6673	0.0018	0.019	159		8.63	8.70		C	21519+4221	I 2	1							
107980	9.101	0.009	9.007	0.011		0.092	0.013	T	0.10	0.01	L	9.0405	0.0012	0.017	242		9.01	9.07					1							
107981	8.902	0.011	8.172	0.010		0.652	0.004	G	0.72	0.00	H	8.2268	0.0020	0.013	102		8.20	8.25					1							S
107982	9.881	0.021	9.205	0.018		0.625	0.023	T	0.69	0.02	L	9.2549	0.0018	0.016	119		9.22	9.28		C			1							
107983	10.636	0.052	10.198	0.052		0.436	0.058	G	0.50	0.06	H	10.2151	0.0033	0.034	110		10.17	10.28					1 S							D
107984	6.947	0.005	6.730	0.005		0.236	0.005	G	0.29	0.03	C	6.7698	0.0009	0.008	116		6.75	6.78		C			1							S
107985	9.620	0.018	8.863	0.015		0.691	0.002	G	0.75	0.00	H	8.9218	0.0015	0.014	105		8.90	8.95					1							
107986	9.671	0.023	9.092	0.021		0.541	0.028	T	0.61	0.03	L	9.1313	0.0021	0.017	84		9.11	9.16		C			1							
107987	9.019	0.015	8.422	0.013		0.557	0.017	T	0.63	0.02	L	8.4832	0.0019	0.020	82		8.44	8.52					1							
107988	11.300	0.065	10.622	0.057		0.616	0.065	T	0.68	0.06	L	10.8465	0.0040	0.039	101		10.78	10.90		C			1							G
107989	9.720	0.024	7.875	0.011		1.534	0.021	T	1.58	0.05	L	7.8369	0.0010	0.009	84		7.82	7.86		C			1							S
107990	8.851	0.014	8.417	0.014		0.424	0.016	T	0.49	0.02	L	8.4709	0.0024	0.015	82		8.45	8.51		C			1							S
107991	9.409	0.018	8.041	0.011		1.158	0.017	T	1.12	0.01	L	8.0837	0.0015	0.012	83		8.07	8.11		C			1							S
107992	8.418	0.010	8.020	0.010		0.355	0.015	G	0.42	0.02	H	8.0761	0.0014	0.011	95		8.06	8.09		C			1							S
107993	7.802	0.008	6.757	0.006		0.911	0.001	G	0.91	0.03	C	6.8198	0.0008	0.006	77		6.81	6.83					1							S
107994	11.960	0.125	10.645	0.063		0.997	0.009	G	1.04	0.01	I	10.7252	0.0035	0.040	133		10.65	10.79					1							G
107995	6.778	0.004	6.659	0.004		0.108	0.005	T	0.12	0.01	L	6.6835	0.0008	0.008	132		6.67	6.70		C			1							S
107996	9.754	0.021	9.651	0.028		0.090	0.015	G	0.10	0.02	H	9.6647	0.0036	0.034	120		9.61	9.72		U			1							G
107997	8.233	0.007	7.177	0.004		0.916	0.006	T	0.91	0.00	L	7.2359	0.0008	0.010	222		7.22	7.26		C			1							S
107998	9.177	0.012	7.982	0.008		1.023	0.011	T	1.00	0.01	L	8.0432	0.0013	0.014	147		8.02	8.08					1							S
107999	9.781	0.017	9.316	0.017		0.451	0.019	T	0.52	0.02	L	9.3699	0.0021	0.017	128		9.34	9.40		C			1							
108000	10.071	0.021	8.891	0.013		1.011	0.019	T	0.99	0.01	L	8.9171	0.0014	0.013	137		8.89	8.94					1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s	±° ′ ″	mag	5 6 7		deg 8	deg 9	10	mas 11	mas/yr 12	13	mas 14	15	mas 16	mas/yr 17	18	19	20	21	22	23	24	25	26	27	28	29	30
108001	21 52 49.67	+13 42 59.1	8.46	H		328.206 953 21	+13.716 420 43		7.92	56.73	32.32	0.97	0.77	1.14	1.47	0.89	+23	+ 7	−27	+ 7	+14	− 3	+11	− 3	+13	+19	0	−0.10
108002	21 52 50.00	+13 29 20.0	7.34	H		328.208 327 34	+13.488 879 81		4.18	16.25	−18.18	0.82	0.66	0.90	1.06	0.77	+16	−12	−10	+ 8	+ 9	+13	+10	+17	+ 1	+12	0	1.11
108003	21 52 51.30	+23 42 23.9	8.62	H		328.213 758 78	+23.706 638 11		6.08	−10.26	−75.31	0.84	0.79	1.07	0.99	1.06	+17	+14	−14	+11	+ 7	− 3	+11	− 3	+26	+24	0	−1.09
108004	21 52 52.47	−56 37 58.3	8.22	H		328.218 604 69	−56.632 871 27		1.61	10.95	−10.36	0.67	0.56	1.06	0.82	0.56	−	8	−	9	−20	+	3	−	6	+27	+	2	−10	+	1	+	6	0	−1.04
108005	21 52 54.73	−12 58 40.9	8.78	H		328.228 036 27	−12.978 033 51		6.40	−34.91	−79.62	1.03	0.72	1.19	1.37	0.70	+44	−	5	+	4	+	3	+	9	+14	+	7	+	8	+	1	+46	0	−0.65
108006	21 52 55.42	−47 44 06.8	9.12	H		328.230 926 74	−47.735 229 61		9.28	60.99	−17.04	0.78	0.71	1.29	0.90	0.70	+43	+	2	+18	−	2	+	1	+	9	+	4	+20	−	2	+31	0	−2.63
108007	21 52 55.70	+31 22 21.0	10.97	H		328.232 077 62	+31.372 511 83		3.11	−7.03	−1.19	1.37	1.65	2.04	1.72	2.06	+17	−12	−35	+32	+10	−15	+	1	−	8	+25	+	7	0	−0.52
108008	21 52 55.90	+68 05 54.6	8.90	H		328.232 932 07	+68.098 487 52		2.64	−8.84	−8.17	0.72	0.64	0.73	1.05	0.73	−18	−14	+14	−25	+26	+14	+19	−	9	+	7	−12	0	−1.02
108009	21 52 56.04	−28 45 56.7	9.17	H		328.233 509 32	−28.765 753 51		2.65	−2.24	−10.08	1.01	0.74	1.26	1.10	0.69	+25	+	6	−	9	+	4	+10	+20	+12	+60	−16	+21	0	0.83
108010	21 52 56.38	−74 08 35.3	8.55	1 H		328.234 931 09	−74.143 131 57		1.31	−0.57	−11.89	0.72	0.70	0.92	0.89	0.80	−	3	−	9	−	8	−	2	+	6	+	8	+	8	+	0	−18	0	0.53
108011	21 52 58.25	+46 33 05.7	9.39	H		328.242 690 86	+46.551 584 22		3.92	3.53	−1.33	0.88	0.76	1.07	1.07	0.87	−21	+13	+	0	+15	+	4	+	1	+	4	+	8	+	6	−26	0	−1.60
108012	21 52 58.35	+15 55 55.6	6.89	H		328.243 128 24	+15.932 100 90		4.40	65.46	19.88	0.68	0.59	0.83	0.90	0.66	+34	+	3	+	9	−14	+24	+14	+20	+	4	+15	+27	0	1.62
108013	21 52 58.43	−45 07 49.9	9.77	H		328.243 467 94	−45.130 517 61		5.33	−30.35	−34.96	1.44	0.92	1.64	1.21	0.89	+21	−32	−	9	−30	−	2	+25	+	0	+20	+	8	+16	4	4.93
108014	21 52 58.82	+38 20 36.4	8.57	H		328.245 086 90	+38.343 442 96		7.24	8.80	−10.37	0.52	0.62	1.01	0.57	0.73	−46	+16	−16	+	5	+20	−25	+21	−10	+35	−52	1	−0.39
108015	21 52 59.02	−11 19 42.8	9.29	H		328.245 933 91	−11.328 552 46		3.10	−5.31	−6.20	1.24	0.89	1.52	1.53	0.81	+32	−	5	+30	−21	+	5	+26	−	3	+14	+30	+36	0	−0.03
108016	21 53 00.09	−40 39 18.1	10.01	H		328.250 392 72	−40.655 027 97		4.95	−75.88	−162.57	1.38	0.95	1.59	1.68	0.98	+13	−14	−17	−	5	−22	+20	−14	+14	+	1	−12	0	0.07
108017	21 53 00.35	+60 38 32.7	8.14	H		328.251 451 56	+60.642 411 34		−0.82	−2.68	−3.03	0.63	0.56	0.68	0.70	0.59	+	6	+	1	+	7	+11	+17	+	1	+19	−	4	−	4	+24	1	−0.20
108018	21 53 00.95	−10 33 45.0	6.89	H		328.253 943 39	−10.562 505 66		4.81	33.77	−40.71	0.82	0.54	0.97	1.03	0.52	+27	−14	+22	−12	+15	+27	+	4	+22	+24	+38	0	0.76
108019	21 53 01.00	−01 09 28.5	9.34	H		328.254 147 70	−01.157 909 44		1.50	4.06	4.08	1.32	0.76	1.44	1.40	0.77	+31	−	3	+13	−16	+13	+19	+	9	−13	+17	+40	0	0.18
108020	21 53 02.58	−64 13 02.5	9.84	G		328.260 756 56	−64.217 361 83		35.78	102.49	−18.28	0.83	0.98	1.66	0.94	1.10	−25	+	9	−	8	+	6	−14	+	1	−14	+	7	−12	−44	0	1.87
108021	21 53 03.65	−42 11 28.9	8.30	H		328.265 217 47	−42.191 351 31		4.53	2.59	−9.62	1.02	0.62	1.03	1.30	0.64	+	9	+10	−12	+48	−	7	+26	−	5	+39	−16	−	5	0	0.26
108022	21 53 03.76	+25 55 30.5	5.09	1 H		328.265 677 58	+25.925 138 78		6.37	9.12	0.34	0.55	0.50	0.70	0.58	0.60	+	2	+32	−14	−13	+	5	−20	+	4	−	7	+	7	+16	0	0.73
108023	21 53 03.96	+17 54 14.0	7.99	H		328.266 515 85	+17.903 900 21		2.63	60.91	9.62	0.75	0.70	1.04	0.89	0.87	+36	+20	+	7	+	1	−	2	−32	+	2	−	5	+	8	+35	0	−0.01
108024	21 53 04.25	+41 36 12.1	7.50	H		328.267 691 21	+41.603 372 00		7.46	22.68	−21.21	0.48	0.50	0.75	0.58	0.60	−29	+12	−	4	+22	+	3	−	3	+	3	+14	+	5	−31	0	0.70
108025	21 53 04.62	−33 46 30.8	9.98	H		328.269 244 00	−33.775 223 92		6.91	80.36	−74.77	1.23	0.89	1.49	1.51	0.90	−	1	+	6	−21	+11	−14	+34	−	4	+50	−15	−14	0	−0.17
108026	21 53 05.13	+58 21 37.2	9.28	G		328.271 356 03	+58.360 344 33		−0.71	−3.44	−2.37	0.70	0.80	0.91	0.75	0.82	+	2	+	4	+13	+12	+13	−	6	+18	−	6	+12	+24	0	1.13
*108027	21 53 05.38	+68 29 54.8	7.50	H		328.272 415 42	+68.498 564 71		4.59	21.35	13.17	0.61	0.53	0.64	0.81	0.54	−10	−18	+26	+	5	+22	+18	+15	+	0	−	2	−	5	0	−0.18
*108028	21 53 05.36	+20 55 50.8	8.18	H		328.272 319 06	+20.930 764 63		41.71	−6.08	−101.70	0.71	0.77	0.98	0.75	0.93	+35	+12	−16	+	8	−	9	+	7	−	5	−32	+27	+39	0	−0.10
108029	21 53 07.14	+56 12 45.2	6.86	H		328.279 758 97	+56.212 547 63		2.60	27.11	3.90	0.53	0.48	0.64	0.55	0.50	+	9	+14	+	5	−	9	+13	−25	+14	−	9	−	8	+31	0	0.88
108030	21 53 08.20	+68 06 26.9	7.41	H		328.284 157 39	+68.107 482 25		1.92	−8.17	−7.57	0.60	0.57	0.64	0.86	0.62	−20	−15	+20	−20	+28	+14	+20	−	8	+	4	−16	0	0.90
108031	21 53 08.30	+69 41 47.6	7.34	H		328.284 573 28	+69.696 566 90		3.98	4.32	−1.16	0.52	0.53	0.58	0.65	0.52	−12	−11	+16	+	5	+16	+	8	+12	−17	+	2	−14	1	0.21
108032	21 53 09.41	−34 51 56.3	8.82	G		328.289 222 04	−34.865 647 85		9.15	99.21	−14.95	0.97	0.75	1.11	1.15	0.80	+24	−15	−18	+21	+19	+19	+20	+61	−	9	+28	2	1.12
108033	21 53 09.50	+63 15 31.6	8.34	H		328.289 565 61	+63.258 773 32		1.98	6.01	−2.14	0.68	0.59	0.72	0.83	0.67	−	5	−	6	+10	+13	+15	+	6	+15	+	0	+13	+12	0	1.13
108034	21 53 11.93	+71 59 23.0	6.99	2 H		328.299 720 65	+71.989 713 66		3.94	7.85	−10.83	0.50	0.45	0.53	0.63	0.50	−	3	−15	+	9	+	8	+	4	+	3	+	6	−	6	+	1	+14	0	−3.19
108035	21 53 14.71	−36 53 47.4	6.96	H		328.311 281 53	−36.896 510 25		6.37	−7.78	−49.67	0.71	0.52	0.84	0.76	0.55	+25	−28	−29	+	2	+11	+16	+16	+39	−14	+26	2	−0.01
108036	21 53 17.58	−13 33 06.5	5.08	H		328.323 265 91	−13.551 801 34		36.15	313.03	13.67	0.73	0.47	0.81	0.95	0.49	+25	−	4	+10	−11	+	5	+15	+	1	−	1	+	9	+31	4	0.12
108037	21 53 18.05	−59 35 09.1	8.96	H		328.325 216 27	−59.585 867 38		4.89	−11.59	−19.18	0.85	0.89	1.38	1.10	0.90	−	3	+	3	−36	−26	+23	−10	+11	+18	−11	+16	0	0.66
108038	21 53 19.06	+06 24 53.0	9.01	H		328.329 427 69	+06.414 716 28		4.68	35.17	−5.00	1.09	0.83	1.28	1.49	0.97	+19	+	3	−10	+	4	−	3	+37	+	0	+	7	+	6	+27	0	−1.53
108039 H	21 53 19.82	+53 59 50.0	6.61	G		328.332 595 25	+53.997 210 34	A	3.98	−8.80	−12.39	0.61	0.60	0.67	0.64	0.58	−	4	−12	+	8	−23	+	7	+13	+	9	−31	+	2	+30	1	−0.80
108040	21 53 20.38	−24 03 30.3	8.75	H		328.334 906 64	−24.058 411 06		4.38	−42.69	−10.86	0.93	0.64	1.16	1.11	0.57	+15	+	2	+	3	+21	−17	+27	−	9	+53	−	6	+	1	0	0.07
108041	21 53 20.45	−73 43 30.9	8.70	G		328.335 208 05	−73.725 261 56		20.75	141.82	−109.30	0.75	0.70	0.96	1.04	0.82	−12	−	2	−	8	+	5	+	5	+	6	+	4	+	5	−10	−26	0	−0.35
108042	21 53 21.54	+36 07 36.1	7.24	H		328.339 750 40	+36.126 700 76		2.36	5.26	−30.10	0.48	0.47	0.80	0.60	0.57	−15	+	1	+	0	−14	−	2	−	2	+	0	−29	+17	−	3	0	1.01
108043	21 53 21.54	−10 15 20.0	8.44	H		328.339 761 62	−10.255 560 32		3.94	28.31	−11.85	1.07	0.72	1.29	1.30	0.70	+23	−13	+22	−16	+15	+37	+	2	+12	+25	+33	6	2.55
108044 H	21 53 21.64	−14 11 22.7	8.12	G		328.340 174 42	−14.189 637 10	A	2.25	−1.09	0.33	1.83	1.14	1.76	1.99	0.98	+60	−	7	+	3	−21	−	5	+29	+	0	−	3	+20	+29	1	0.01
108045	21 53 21.89	−78 34 46.1	7.54	H		328.341 205 39	−78.579 459 54		5.27	29.82	7.59	0.56	0.56	0.70	0.64	0.63	−	2	−17	−14	+19	+	4	+	1	+	4	+	6	+	8	+	6	1	−0.56
108046	21 53 22.08	+06 47 07.8	9.49	H		328.341 985 46	+06.785 500 17		3.28	23.12	10.98	1.35	1.04	1.54	1.80	1.24	+24	+	2	−	2	+16	−	3	+23	+	0	+	4	−	4	+33	5	1.03
108047	21 53 22.75	+65 38 05.8	9.53	H		328.344 790 70	+65.634 933 37		2.39	16.62	5.19	0.86	0.79	0.95	1.19	0.92	−16	−	6	+	5	+	1	−	2	+22	−	3	−	9	−12	−26	3	−0.24
*108048	21 53 23.41	+49 20 48.8	9.41	2 H		328.347 551 29	+49.346 880 62	A	1.31	−1.41	−2.94	1.13	1.21	1.34	1.20	1.23	−	4	+	2	−	1	−10	+16	−12	+15	−	5	−	1	+	7	1	−0.09
*108049	21 53 23.36	+34 16 53.6	8.18	H		328.347 349 35	+34.281 563 60		3.62	−5.96	−17.10	0.45	0.50	0.89	0.52	0.58	−25	+	0	−12	−20	+	6	−15	+	8	−49	+32	−18	0	−0.43
108050	21 53 24.24	−50 20 26.7	10.16	H		328.350 987 66	−50.340 741 01		8.66	31.44	18.51	1.03	0.91	1.60	1.10	0.89	+30	−	2	+	2	−	2	+17	+24	+16	+27	+	1	+32	0	−0.96
108051	21 53 24.90	+11 38 04.1	7.81	H		328.353 762 13	+11.634 465 38		4.87	−28.18	−13.16	0.97	0.68	1.05	1.51	0.76	−	3	+24	−34	+30	−	5	+24	+	2	+14	+	2	−	5	0	−0.69
108052	21 53 26.55	+62 35 13.2	8.93	1 G		328.360 629 05	+62.586 990 81		−2.48	−2.20	−1.12	0.93	0.80	0.95	1.04	0.84	−11	+	1	+10	+37	−	7	−	2	−	5	+	0	+	5	−	7	1	3.54
108053	21 53 26.57	−39 08 58.7	9.76	H		328.360 708 84	−39.149 632 69		4.64	−6.87	−1.71	1.22	0.79	1.44	1.40	0.80	+	7	−	3	+	1	+10	+	6	+32	+	5	+24	+	7	+10	0	−0.43
108054	21 53 27.12	+51 30 10.7	9.06	H		328.362 992 18	+51.502 976 97		0.87	−1.54	−1.96	0.65	0.65	0.82	0.73	0.73	−15	+	4	−	3	+	5	+	3	−	3	+	3	+	0	+18	−	2	0	0.10
108055	21 53 34.55	+36 25 30.4	10.04	H		328.393 947 24	+36.425 121 69		3.87	95.08	50.70	1.05	1.08	1.76	1.27	1.35	−	8	+	8	−	6	−	7	+	1	+	0	+	5	−21	+11	+14	0	1.91
108056	21 53 34.87	+35 50 53.2	9.15	H		328.395 297 57	+35.848 101 79		9.55	−112.75	139.04	0.66	0.70	1.21	0.76	0.86	−18	−	2	−	5	+	6	−	7	−11	−	3	−31	+28	−	5	0	−1.33
108057	21 53 35.36	−82 46 43.5	12.02	3 H		328.397 332 37	−82.778 741 32		2.61	3.33	−34.73	2.42	2.11	2.79	2.99	2.47	−	4	−15	−10	−24	+	6	+	1	+12	+	3	+	1	−31	2	−0.49
108058 H	21 53 36.03	−10 18 41.8	6.57	G		328.400 110 01	−10.311 616 64	*	2.27	15.81	−1.11	0.81	0.56	0.97	1.02	0.55	+20	−10	+25	−17	+23	+41	+	9	+16	+26	+34	2	3.13
108059	21 53 36.11	−21 43 05.7	9.31	H		328.400 475 79	−21.718 262 37		3.07	8.40	10.68	1.00	0.73	1.30	1.14	0.68	+35	−11	−16	−	3	−	7	+25	+	5	+54	−	9	+25	3	0.30
108060	21 53 37.37	+19 40 06.2	5.69	H		328.405 695 99	+19.668 380 08		14.18	22.10	23.51	0.56	0.53	0.69	0.63	0.59	+32	+13	−	2	−11	+	0	−	3	−	1	−	8	−	9	+29	0	−1.35
108061	21 53 37.69	+19 10 29.8	7.52	2 H		328.407 031 90	+19.174 939 73		0.05	13.30	14.93	0.76	0.70	0.90	1.03	0.77	+37	−	8	−11	−33	−	4	+	0	−	2	−11	−	5	+21	0	−1.08
108062	21 53 37.85	−08 23 54.0	9.11	H		328.407 699 76	−08.398 339 55		3.26	10.41	8.63	1.22	0.78	1.35	1.51	0.75	+27	−	3	−	3	−17	+	6	+14	+	6	+	9	+20	+21	0	−0.22
108063	21 53 38.99	+20 23 54.9	7.13	H		328.412 477 40	+20.398 595 45		4.16	−10.17	−8.91	0.65	0.64	0.83	0.70	0.75	+34	+21	+	7	+	2	+	5	+	0	+	5	−	4	−	4	+38	0	−1.65
108064	21 53 41.13	−16 45 00.7	8.40	G		328.421 369 99	−16.750 206 97	A	5.17	16.23	3.23	3.26	2.20	2.52	3.98	1.98	+16	−22	−17	+	5	−	9	−	3	−	4	+35	−	5	+12	10	1.51
108065	21 53 41.71	−28 40 12.3	7.82	H		328.423 804 35	−28.670 078 66		27.56	152.43	−219.81	0.72	0.53	0.93	0.76	0.49	+29	−	2	−12	−	4	+	8	+27	+13	+51	−23	+20	0	1.41
108066	21 53 41.92	−16 44 55.9	9.54	H		328.424 681 04	−16.748 850 49	B	0.56	9.81	−0.75	12.10	9.02	5.56	10.75	6.64	+24	−23	−15	−	4	−	8	−	5	−	1	+32	−	2	+15	10	1.51
108067	21 53 42.37	−09 46 34.0	8.68	H		328.426 547 94	−09.776 113 02		10.89	65.66	0.70	7.42	5.34	8.76	8.15	5.47	+25	−	3	+11	−18	+12	+32	+	7	−15	+25	+37	5	
108068	21 53 42.71	−15 05 56.3	9.04	G		328.427 953 23	−15.098 967 84		13.59	34.25	−187.17	1.15	0.68	1.32	1.50	0.69	+28	+	0	+	7	−16	+18	+26	+10	+	6	+34	+39	0	−1.39
108069 H	21 53 43.34	+22 11 34.9	8.96	H		328.430 575 96	+22.193 040 71	A	1.01	7.36	3.24	1.79	1.57	2.04	1.92	1.73	+15	+12	−16	−10	+	5	−	9	+	7	−10	+35	+22	1	0.67
108070	21 53 43.71	−49 10 23.4	8.65	H		328.432 132 40	−49.173 168 71		14.60	113.11	−35.89	0.80	0.69	1.24	0.93	0.76	+43	−30	−	6	+13	+22	+	7	+24	+31	−16	+50	0	−0.65
108071	21 53 45.56	+40 25 10.0	9.07	G		328.439 832 44	+40.419 455 50		9.82	−129.66	−116.41	0.72	0.77	1.26	0.86	1.00	−39	+20	−11	+	3	+	7	−17	+12	+	0	+36	−48	0	−1.97
108072 H	21 53 46.46	−20 00 26.8	7.91	G		328.443 567 29	−20.007 449 55	A	12.13	41.40	139.40	1.39	0.98	1.40	1.65	0.84	+21	+	3	−10	−	9	−	4	+26	+	1	+42	−	3	+14	0	−1.12
108073	21 53 48.11	+62 36 51.9	7.01	2 H		328.450 444 81	+62.614 430 01		1.39	−2.71	−1.26	0.54	0.47	0.55	0.59	0.49	−	9	+	4	+	7	+39	−	3	−	2	−	3	−	1	+	7	−11	1	1.98
108074	21 53 49.09	−12 54 16.2	10.23	H		328.454 540 11	−12.904 509 58		4.04	−11.56	−34.54	1.68	1.03	1.77	2.18	1.05	+23	+13	+	3	−30	−	6	−	8	−	2	+	5	+12	+15	0	2.30
108075 H	21 53 49.58	+40 40 38.5	9.19	G		328.456 583 04	+40.677 348 83	A	3.73	0.59	−2.20	1.76	1.93	2.44	1.86	2.21	−31	+	7	+	4	+19	+	0	−16	−	1	+	7	+36	−47	1	0.53
108076	21 53 50.23	+68 47 54.6	8.45	H		328.459 308 92	+68.798 513 33		3.02	20.00	21.25	0.71	0.62	0.74	1.07	0.76	−13	−11	+20	−	1	+20	+15	+16	−	4	−	8	−	3	0	0.81
108077	21 53 50.48	−73 38 45.9	8.92	H		328.460 351 18	−73.646 093 31		3.08	−10.19	−8.74	0.80	0.77	1.02	1.10	0.91	−20	−12	−	3	+	4	−	5	−	6	−	3	+13	+	1	−35	0	−1.29
108078	21 53 51.76	−15 25 35.2	9.43	H		328.465 648 15	−15.426 449 44		2.35	12.22	−16.62	1.18	0.73	1.31	1.53	0.73	+21	−	4	+15	−21	+29	+28	+15	+	4	+29	+40	2	−0.21
108079	21 53 52.68	−54 33 29.5	9.30	H		328.469 498 51	−54.558 182 79		9.83	−48.35	−61.16	0.97	0.75	1.44	1.28	0.81	+	3	−	6	−30	+	7	+29	−16	+21	+30	−33	+17	0	−2.24
108080	21 53 53.30	+62 36 00.8	7.94	H		328.472 093 85	+62.600 212 57		0.45	−3.87	−2.23	0.58	0.52	0.61	0.66	0.55	−15	+	0	+	7	+29	+	0	+	0	+	0	−13	+	8	−14	0	−0.01
108081	21 53 53.55	−72 17 26.3	8.24	G		328.473 108 59	−72.290 637 53		4.05	23.02	−15.36	0.60	0.62	0.83	0.71	0.68	−14	−	1	−	9	+	4	+	0	−	6	+	0	−	2	−	1	−	8	0	−0.58
108082	21 53 53.79	+26 37 49.7	9.04	H		328.474 135 42	+26.630 480 56		0.97	−10.09	−15.17	0.93	0.86	1.20	1.07	1.08	+12	−	2	−18	+18	+	6	−29	+	0	+12	+14	+15	0	1.14
108083	21 53 53.80	+63 44 13.9	7.60	H		328.474 184 90	+63.737 189 41		5.12	25.21	5.23	0.60	0.52	0.65	0.74	0.53	−	4	−	3	+12	+10	+20	+26	+16	+	1	+	8	+	7	0	−1.22
108084	21 53 54.79	+28 20 32.0	6.78	H		328.478 295 14	+28.342 209 59	+	9.16	−160.33	−114.17	0.66	0.56	0.81	0.81	0.83	+	4	+11	−	6	+	4	+	5	−	24	+	2	+11	+30	+12	0	0.43
108085	21 53 55.65	−37 21 53.4	3.00	G		328.481 892 02	−37.364 822 90		16.07	95.88	−12.10	0.65	0.45	0.77	0.76	0.47	+13	−20	−17	−	6	−12	+	8	−	5	+23	−16	+	7	0	0.78
108086	21 53 55.98	−25 46 37.3	8.45	H		328.483 245 44	−25.777 023 22		6.90	12.67	6.21	0.92	0.60	1.05	1.14	0.56	+12	+	3	−	4	+33	−12	+26	−	4	+58	−10	+	0	0	1.13
108087	21 53 56.18	+47 10 45.3	10.79	H		328.484 088 07	+47.179 260 10		0.67	−12.33	−12.62	1.34	1.26	1.69	1.68	1.47	−21	+19	+	4	+15	+	7	+18	+	7	−11	−	3	−12	1	−1.84
108088 H	21 53 57.30	−26 41 50.1	9.51	H		328.488 750 98	−26.697 248 11	A	10.97	157.65	−77.58	1.94	1.40	2.09	2.03	1.16	+20	−	8	−22	+15	−	7	+28	+	4	+53	−24	+12	1	−0.18
108089	21 53 57.40	−06 30 54.2	9.00	H		328.489 183 12	−06.515 048 47		3.24	17.85	−14.25	1.15	0.72	1.28	1.52	0.79	+31	+	6	−17	−22	+22	−13	+11	+22	+	6	+45	2	0.72
108090	21 53 57.72	+06 51 53.2	6.14	H		328.490 500 38	+06.864 770 25		7.89	79.36	14.05	0.68	0.52	0.76	0.84	0.55	+13	−	8	+	3	+	7	−	3	+17	−	4	+	5	+16	+16	0	1.23
108091	21 53 58.03	+10 19 09.9	9.99	H		328.491 800 25	+10.319 411 98		1.68	7.60	−4.04	1.37	1.14	1.56	1.74	1.19	+20	−10	−15	−14	−10	−	4	−10	−16	+15	+10	0	1.09
108092	21 53 58.70	+41 46 47.6	10.30	H		328.494 586 66	+41.779 897 28		43.07	384.40	−357.13	1.03	1.05	1.55	1.19	1.21	−17	+17	−	6	+30	+	5	+	0	+	6	+11	+15	−22	0	0.79
108093	21 53 59.28	−63 06 13.8	7.88	H		328.496 982 51	−63.103 832 43		3.02	16.33	−10.20	0.45	0.53	0.85	0.55	0.58	−16	−	7	−	2	+	7	+	3	−	8	+	3	+	7	−	8	−23	0	1.24
108094	21 54 03.63	+18 04 26.1	8.74	H		328.515 119 26	+18.073 906 36		2.36	−1.92	−9.04	0.83	0.85	1.10	0.97	0.85	+39	+	8	−	4	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
108001	9.072	0.017	8.512	0.016		0.524	0.021	T	0.60	0.02	L	8.5724	0.0023	0.016	71		8.53	8.61		C			1							S
108002	8.715	0.017	7.453	0.011		1.075	0.016	T	1.04	0.01	L	7.5079	0.0013	0.010	54		7.49	7.52		C			1							S
108003	9.744	0.021	8.715	0.015		0.960	0.015	G	0.95	0.01	H	8.7841	0.0020	0.014	83		8.76	8.82		C			1							
108004	10.297	0.023	8.393	0.009		1.615	0.020	T	1.68	0.07	O	8.3242	0.0013	0.018	157		8.30	8.36					1							
108005	9.573	0.023	8.830	0.019		0.665	0.023	T	0.73	0.02	L	8.9202	0.0029	0.018	82		8.90	8.95					1							S
108006	9.597	0.014	9.175	0.014		0.412	0.016	T	0.48	0.02	L	9.2145	0.0016	0.018	176		9.18	9.24		C			1							
108007	11.396	0.079	10.888	0.076		0.477	0.099	T	0.55	0.10	L	11.0770	0.0044	0.031	87		11.02	11.14		C			1							G
108008	9.047	0.015	8.883	0.018		0.150	0.022	T	0.17	0.02	L	8.9561	0.0017	0.014	111		8.94	8.98		C	21531+6806	I 2	1							
108009	10.417	0.032	9.260	0.020		0.993	0.029	T	0.97	0.02	L	9.3318	0.0019	0.015	103		9.30	9.36					1							
108010	10.434	0.029	8.710	0.013		1.438	0.025	T	1.43	0.04	L	8.6846	0.0022	0.019	137		8.65	8.73		U			1							
108011	9.497	0.016	9.401	0.021		0.094	0.025	T	0.11	0.03	L	9.4311	0.0021	0.024	132		9.39	9.47		C			1							G
108012	8.463	0.010	7.019	0.005		1.218	0.009	T	1.18	0.01	L	7.0514	0.0011	0.009	109		7.03	7.07		C			1							S
108013	10.542	0.035	9.874	0.031		0.608	0.035	T	0.68	0.03	L	9.8993	0.0021	0.017	95		9.86	9.93					1	S						
108014	9.204	0.009	8.621	0.008		0.545	0.011	T	0.62	0.01	L	8.6908	0.0013	0.019	277		8.66	8.72					1							
108015	11.151	0.069	9.442	0.026		1.427	0.058	T	1.41	0.09	L	9.4297	0.0025	0.019	74		9.40	9.46		C			1							
108016	10.970	0.046	10.091	0.033		0.769	0.044	T	0.81	0.03	L	10.1501	0.0031	0.024	97		10.09	10.19					1							
108017	8.421	0.008	8.164	0.009		0.260	0.015	G	0.29	0.02	H	8.2068	0.0012	0.014	123		8.18	8.23					1							
108018	8.150	0.010	6.994	0.007		0.993	0.010	T	0.97	0.01	L	7.0520	0.0014	0.010	77		7.04	7.07					1							S
108019	10.965	0.059	9.483	0.027		1.248	0.051	T	1.21	0.05	L	9.5013	0.0018	0.015	76		9.48	9.53		C			1							
108020	11.441	0.050	10.009	0.022		1.180	0.020	G	1.30	0.04	I	9.9749	0.0039	0.049	242		9.91	10.06		R			1							
108021	9.983	0.026	8.450	0.013		1.288	0.023	T	1.25	0.02	L	8.4559	0.0014	0.013	90		8.43	8.48		C			1							
108022	4.882	0.003	5.062	0.003		−0.155	0.004	T	−0.15	0.01	L	5.0381	0.0019	0.013	85		5.02	5.06		U 2			1							S P
108023	9.418	0.017	8.099	0.010		1.120	0.015	T	1.08	0.02	L	8.1536	0.0011	0.013	97		8.13	8.17		D			1							
108024	7.674	0.006	7.511	0.006		0.156	0.008	T	0.17	0.01	L	7.5542	0.0010	0.012	162		7.53	7.57					1							S
108025	10.877	0.046	10.114	0.037		0.696	0.046	T	0.75	0.04	L	10.1181	0.0026	0.021	100		10.08	10.16		C			1							
108026	9.781	0.021	9.362	0.022		0.420	0.015	G	0.49	0.02	H	9.3751	0.0017	0.021	120		9.34	9.41					1							
108027	7.526	0.005	7.495	0.008		0.033	0.009	T	0.05	0.01	L	7.5175	0.0011	0.008	114		7.50	7.53					1							S
108028	9.376	0.017	8.281	0.012		0.937	0.016	T	0.98	0.02	L	8.3232	0.0019	0.013	87		8.30	8.35		C			1							
108029	8.130	0.008	6.982	0.005		0.986	0.007	T	0.97	0.01	L	7.0290	0.0012	0.012	111		7.01	7.05					1							S
108030	8.700	0.013	7.511	0.009		1.018	0.012	T	0.99	0.01	L	7.5794	0.0011	0.010	110		7.56	7.60			21531+6806	I 2	1							S
108031	7.596	0.007	7.378	0.007		0.208	0.009	T	0.23	0.01	L	7.4038	0.0012	0.011	124		7.39	7.42		C			1	S						S
108032	9.424	0.018	8.881	0.017		0.543	0.015	G	0.62	0.01	H	8.9254	0.0016	0.015	93		8.90	8.95					1							
108033	10.821	0.048	8.572	0.013		1.856	0.040	T	1.89	0.04	L	8.4399	0.0018	0.017	115		8.41	8.46					1							
108034	6.969	0.004	6.988	0.006		−0.013	0.007	T	0.01	0.01	L	6.9916	0.0015	0.016	129		6.97	7.04		U 2			1							S
108035	8.320	0.011	7.080	0.005		1.058	0.009	T	1.02	0.01	L	7.1269	0.0013	0.009	94		7.11	7.14		C			1							S
108036	5.528	0.004	5.126	0.003		0.378	0.011	G	0.43	0.02	A	5.1704	0.0007	0.005	81		5.16	5.19					1							S
108037	9.639	0.016	9.027	0.015		0.568	0.016	T	0.64	0.01	L	9.0853	0.0025	0.028	141		9.04	9.13					1							
108038	9.639	0.024	9.051	0.022		0.549	0.029	T	0.62	0.03	L	9.1320	0.0020	0.015	62		9.10	9.16		C			1							S
108039	7.090	0.004	6.661	0.005	A	0.390	0.015	G	0.47	0.01	L	* 6.6861	0.0008	0.007	125	*	6.68	6.70		D	21533+5400	H 1	2 C	A	AB	75	1.353	0.028	3.75	0.10	S
108040	10.093	0.024	8.845	0.015		1.064	0.022	T	1.03	0.02	L	8.9160	0.0017	0.014	108		8.89	8.95					1							
108041	9.639	0.017	8.774	0.013		0.746	0.003	G	0.79	0.00	H	8.8461	0.0021	0.018	137		8.82	8.88		C			1							
108042	9.243	0.011	7.392	0.005		1.539	0.010	T	1.59	0.02	L	7.3523	0.0009	0.011	179		7.34	7.37					1							S
108043	9.704	0.025	8.554	0.017		0.988	0.024	T	0.97	0.02	L	8.6016	0.0025	0.014	63		8.58	8.63					1							
108044	8.577	0.013	8.195	0.013	A	0.355	0.015	G	0.42	0.02	H	* 8.2157	0.0012	0.012	92	*	8.20	8.24		D	21534−1411	I 1	2 C	B	AB	31	1.299	0.051	3.15	0.15	S
108045	9.007	0.011	7.664	0.007		1.139	0.010	T	1.10	0.01	L	7.7086	0.0014	0.014	141		7.69	7.74			21534−7835	I 1	1							S
108046	10.891	0.065	9.614	0.033		1.087	0.057	T	1.05	0.05	L	9.6559	0.0034	0.019	63		9.62	9.70		C			1							
108047	9.731	0.021	9.564	0.025		0.160	0.031	T	0.18	0.03	L	9.5905	0.0022	0.019	115		9.55	9.62		C			1							G
108048	9.473	0.018	9.427	0.024	A	0.047	0.028	T	0.06	0.02	L	9.4283	0.0383	0.036	138	A	9.38	9.48		U	21534+4921	I 1	2 C	D	AB	188	20.702	0.078	2.53	0.35	G D
108049	8.335	0.006	8.199	0.007		0.131	0.009	T	0.15	0.01	L	8.2250	0.0009	0.013	278		8.20	8.25		C			1							S
108050	10.721	0.033	10.278	0.035		0.432	0.038	T	0.50	0.04	L	10.2580	0.0024	0.025	140		10.21	10.30		C			1							
108051	9.203	0.018	7.919	0.011		1.093	0.016	T	1.05	0.02	L	7.9762	0.0015	0.010	58		7.96	8.00					1							S
108052	9.153	0.018	8.999	0.022		0.187	0.004	G	0.21	0.01	H	9.0131	0.0034	0.028	115		8.97	9.06		U	21534+6235	I 1	1	S						D
108053	10.431	0.033	9.846	0.031		0.548	0.033	T	0.62	0.03	L	9.8802	0.0024	0.024	95		9.83	9.94		C			1							
108054	9.191	0.016	9.089	0.020		0.120	0.015	G	0.13	0.01	H	9.1046	0.0018	0.017	128		9.07	9.13					1							
108055	10.997	0.041	10.085	0.028		0.809	0.037	T	0.84	0.03	L	10.1927	0.0034	0.038	173		10.12	10.26					1	S						G
108056	9.839	0.017	9.217	0.015		0.580	0.020	G	0.65	0.02	H	9.2725	0.0016	0.021	192		9.24	9.31					1							
108057											T	12.1072	0.0561	0.426	119		11.44	12.48	0.62	P 1 A			1	S						G
108058	6.427	0.004	6.561	0.005	*	−0.120	0.003	G	−0.11	0.00	H	* 6.5451	0.0010	0.007	65	*	6.53	6.57		D	21536−1019	I 1	2 C S	B	BA	321	0.137	0.043	1.95	0.71	S
108059	9.676	0.020	9.326	0.021		0.340	0.026	T	0.40	0.04	L	9.3895	0.0018	0.016	102		9.36	9.41					1							
108060	5.704	0.003	5.682	0.004		0.011	0.007	G	0.03	0.01	H	5.7013	0.0005	0.005	96		5.69	5.71		C			1							S
108061	9.729	0.022	7.765	0.009		1.664	0.020	T	2.63	0.05	O	7.5132	0.0133	0.095	88		7.40	7.68		U 2			1	S						S
108062	10.307	0.039	9.174	0.025		0.975	0.036	T	0.96	0.03	L	9.2716	0.0018	0.018	72		9.23	9.30					1							
108063	8.781	0.014	7.269	0.008		1.271	0.013	T	1.23	0.01	L	7.2856	0.0012	0.011	86		7.27	7.31					1							S
108064	8.820	0.019	8.413	0.019	A	0.406	0.015	G	0.47	0.02	H	8.4909	0.0104	0.035	58	A	8.46	8.57		D	21537−1645	I 2	1 C P	A						S
108065	8.711	0.012	7.901	0.010		0.733	0.002	G	0.78	0.00	H	7.9634	0.0011	0.012	106		7.94	7.99					1							S
108066	9.962	0.040	9.536	0.041	B	0.402	0.053	T	0.47	0.06	L	9.5936	0.0273			B				D	21537−1645	I 2	1 C I	A						
108067	9.297	0.022	8.727	0.020		0.533	0.026	T	0.61	0.03	L	8.7942	0.0020	0.012	61		8.77	8.81		C			1 X							S G
108068	9.844	0.022	9.107	0.019		0.656	0.006	G	0.72	0.01	H	9.1720	0.0022	0.017	99		9.15	9.20					1							
108069	10.724	0.049	9.182	0.022	A	1.200	0.495	G	1.15	0.08	L	* 9.1257	0.0020	0.017	73	*	9.09	9.17		D	21537+2212	I 1	2 C	A	AB	114	7.449	0.026	2.80	0.18	
108070	9.545	0.016	8.757	0.013		0.699	0.016	T	0.76	0.01	L	8.7884	0.0015	0.019	137		8.75	8.82					1							
108071	9.728	0.018	9.158	0.017		0.520	0.015	G	0.59	0.02	H	9.1929	0.0020	0.022	163		9.15	9.24					1							
108072	8.613	0.012	8.099	0.011	A	0.500	0.042	G	0.56	0.03	L	* 7.9880	0.0015	0.011	81	−	7.97	8.01		D	21538−2000	I 1	3 C	B						S G
108073	7.251	0.008	7.048	0.007		0.259	0.003	G	0.29	0.00	H	7.0762	0.0055	0.047	123		7.04	7.15	0.81	P 1 A	21538+6237	I 2	1	S						S P
108074	10.839	0.063	10.363	0.065		0.448	0.083	T	0.52	0.09	L	10.3223	0.0054	0.039	74		10.25	10.38					1							
108075	9.490	0.014	9.304	0.017	A	0.206	0.140	G	0.13	0.03	L	* 9.3146	0.0018	0.021	172	*	9.27	9.36			21538+4041	M 1	2 C	A	AB	249	1.492	0.025	2.89	0.18	
108076	9.989	0.023	8.571	0.013		1.198	0.021	T	1.16	0.02	L	8.6129	0.0014	0.012	101		8.59	8.63		C			1							
108077	10.378	0.027	9.057	0.015		1.122	0.024	T	1.08	0.03	L	9.0913	0.0019	0.018	135		9.06	9.12		C			1							
108078	11.231	0.067	9.583	0.026		1.160	0.040	G	1.12	0.04	R	9.5941	0.0016	0.019	104		9.56	9.63					1							
108079	9.856	0.020	9.299	0.018		0.527	0.020	T	0.60	0.02	L	9.4152	0.0027	0.025	118		9.37	9.45					1							
108080	7.941	0.008	7.914	0.010		0.025	0.011	T	0.04	0.01	L	7.9594	0.0011	0.012	119		7.94	7.98		C	21538+6237	I 2	1							
108081	8.692	0.009	8.274	0.009		0.380	0.015	G	0.44	0.02	H	8.3332	0.0018	0.019	158		8.30	8.37					1							S
108082	10.413	0.041	9.172	0.024		1.059	0.037	T	1.03	0.03	L	9.2065	0.0021	0.018	78		9.17	9.24					1							
108083	7.619	0.007	7.591	0.009		0.031	0.011	T	0.05	0.01	L	7.6190	0.0012	0.012	112		7.60	7.65					1							S
108084	7.083	0.006	6.799	0.007		0.270	0.009	T	0.30	0.01	L	6.8510	0.0010	0.008	80		6.84	6.87		C			1 O							S
108085	2.896	0.003	2.994	0.002		−0.084	0.003	T	−0.10	0.02	A	2.9763	0.0004	0.004	87		2.97	2.99					1 G							S
108086	8.811	0.012	8.482	0.013		0.299	0.002	G	0.34	0.00	H	8.5217	0.0015	0.011	99		8.51	8.54		C			1							S
108087	11.783	0.129	10.771	0.091		0.883	0.118	T	0.89	0.09	L	10.9492	0.0020	0.034	107		10.89	11.00		D			1							G
108088	10.290	0.031	9.744	0.030	A	0.697	0.096	G	0.81	0.07	B	* 9.6580	0.0021	0.019	102	*	9.63	9.69		D	21540−2642	I 1	2 C	A	AB	106	1.802	0.023	2.63	0.08	
108089	10.474	0.037	9.085	0.020		1.175	0.033	T	1.14	0.03	L	9.1668	0.0015	0.015	79		9.14	9.19		C			1							
108090	7.116	0.007	6.234	0.005		0.786	0.006	T	0.82	0.00	L	6.2880	0.0010	0.007	65		6.28	6.30		C			1							S
108091	12.178	0.281	10.012	0.063		1.612	0.197	G	1.68	0.25	K	10.0987	0.0040	0.027	55		10.05	10.14					1							
108092	12.045	0.129	10.477	0.049		1.333	0.010	G	1.54	0.01	I	10.4087	0.0035	0.036	158		10.36	10.47					1	S						G
108093	7.847	0.006	7.867	0.007		−0.016	0.008	T	0.01	0.01	L	7.8883	0.0014	0.014	186		7.86	7.91					1							S
108094	8.928	0.014	8.751	0.016		0.170	0.020	T	0.19	0.02	L	8.8029	0.0016	0.015	90		8.78	8.83		C			1							
108095	9.172	0.020	8.611	0.019		0.530	0.020	T	0.60	0.02	L	8.6359	0.0027	0.016	68		8.60	8.66					1							S
108096	9.901	0.025	9.764	0.031		0.132	0.037	T	0.15	0.04	L	9.7832	0.0024	0.021	102		9.75	9.82		C			1							G
108097	9.958	0.027	9.346	0.024		0.570	0.032	T	0.64	0.03	L	9.4546	0.0033	0.030	80		9.41	9.52					1							
108098	8.709	0.012	8.155	0.011		0.519	0.015	T	0.59	0.02	L	8.2204	0.0018	0.015	98		8.20	8.25					1							S
108099	9.068	0.015	7.936	0.010		0.974	0.014	T	0.96	0.01	L	7.9906	0.0014	0.013	77		7.96	8.02					1							
108100	11.532	0.098	10.803	0.083		0.580	0.072	G	0.65	0.07	R	10.9874	0.0030	0.028	81		10.93	11.07		D			1 X							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
108101 H	21 54 10.27	+39 52 38.0	9.27 H		328.542 791 57	+39.877 214 94 A		0.08	−2.60	−5.34	1.26	1.42	1.91	1.30	1.43	−37	+12	−14	− 1	+16	−13	+19	−29	+46	−38		2	0.61
108102	21 54 10.34	−04 16 33.4	5.71 G		328.543 091 96	−04.275 957 35		11.22	52.23	−91.47	0.68	0.46	0.76	0.81	0.48	+26	+ 4	+ 0	−16	+12	+27	+10	+ 6	+18	+35		0	−0.41
108103	21 54 11.18	+04 58 44.9	9.25 G		328.546 599 51	+04.979 146 78		15.44	275.40	−11.90	1.38	0.94	1.65	2.59	0.95	+11	+28	−10	+36	+ 4	+57	+ 6	+ 2	+12	− 3		0	0.75
108104	21 54 11.24	+52 19 55.7	8.16 H		328.546 813 76	+52.332 131 63		6.04	52.75	19.02	0.65	0.63	0.78	0.69	0.63	−11	+ 1	+ 7	− 4	+15	−14	+16	−22	+ 5	−10		3	2.35
108105	21 54 11.62	+46 36 03.6	9.06 H		328.548 434 98	+46.601 011 18		4.00	16.54	7.72	0.84	0.82	1.10	1.03	0.92	−25	+ 6	+10	+ 8	+13	− 2	+13	− 5	+ 5	−20		0	−1.38
108106	21 54 11.95	−05 21 11.2	7.44 H		328.549 801 20	−05.353 124 39		8.74	103.35	68.56	0.81	0.55	0.95	0.93	0.59	+31	− 6	+ 3	−11	+17	+35	+13	+16	+26	+44		0	0.51
*108107	21 54 12.42	−43 48 09.5	9.22 H		328.551 737 77	−43.802 635 27		4.57	29.83	−30.91	1.26	0.78	1.26	1.60	0.80	+15	−14	−17	−15	+13	− 1	+14	+26	− 8	+ 8		0	−0.17
*108108	21 54 12.36	−17 34 43.3	8.73 H		328.551 502 70	−17.578 681 48		4.66	12.57	0.34	0.93	0.71	1.09	1.39	0.66	+21	−16	−34	+ 8	−28	+21	− 6	+33	−27	−15		0	−0.49
108109	21 54 12.84	−53 07 29.8	8.27 G		328.553 496 63	−53.124 934 74		5.79	39.04	−15.78	0.80	0.69	1.06	1.11	0.73	+27	−14	−29	+44	+29	− 1	+29	+39	−13	+34		2	1.47
108110	21 54 14.16	+66 43 53.3	9.81 H		328.559 001 74	+66.731 472 24		25.60	233.33	103.32	1.05	1.03	1.16	1.34	1.17	−12	− 4	− 8	+13	+20	−24	+20	−12	+ 0	− 4		0	−0.01
*108111	21 54 14.28	+59 26 32.9	8.76 H		328.559 512 78	+59.442 476 75 A		2.10	0.30	−6.83	2.08	1.97	1.83	2.10	1.88	− 5	− 7	+17	−15	+18	+17	+17	−20	+11	+32		1	0.19
*108112	21 54 14.26	+04 18 41.7	9.03 H		328.559 430 35	+04.311 589 06		1.89	4.03	−4.03	1.04	0.86	1.24	1.44	0.91	+24	+15	−26	+29	+ 7	+25	+17	+27	+18	+29		0	0.93
108113	21 54 14.62	−73 55 15.8	8.79 H		328.560 932 35	−73.921 044 90		3.71	23.36	−32.72	0.81	0.76	1.00	1.10	0.90	−13	−15	− 1	+ 3	+ 4	− 8	+ 4	+10	+ 0	−25		1	−1.67
108114	21 54 15.39	+45 32 35.3	8.46 H		328.564 133 66	+45.543 140 99		3.47	−2.88	−11.84	0.60	0.60	0.84	0.67	0.73	−22	+10	+ 4	+ 5	+ 3	+ 1	+ 5	+ 7	+18	−33		0	0.34
108115	21 54 15.94	+59 26 36.0	11.77 H		328.566 408 78	+59.443 330 74 B		12.56	38.89	−0.89	56.29	53.71	32.11	34.80	32.11	− 5	− 1	+21	− 9	+24	+15	+26	−16	+13	+31		1	0.19
108116	21 54 16.10	−67 58 19.2	8.67 H		328.567 083 71	−67.971 989 91		0.41	15.68	−6.83	0.68	0.77	1.13	0.71	0.77	−13	+12	−23	+ 0	+ 2	+ 4	+ 1	+ 0	−14	−15		0	1.00
108117	21 54 16.19	−11 21 50.9	8.88 H		328.567 477 78	−11.364 146 61		2.61	−14.93	−8.76	1.03	0.72	1.16	1.26	0.71	+34	−19	+ 1	−21	+ 3	+11	− 1	+ 8	+12	+34		0	−0.16
108118	21 54 16.99	−39 56 32.9	9.01 H		328.570 808 41	−39.942 468 67		4.34	6.52	−3.66	1.17	0.89	1.51	1.35	0.88	+12	−16	−19	+10	−14	+33	− 9	+19	+10	+ 9		4	−0.07
108119	21 54 17.44	+19 43 05.3	6.36 G		328.572 661 77	+19.718 151 03 A		8.95	−34.28	−12.44	1.60	1.41	1.50	1.66	1.36	+29	+12	−18	−42	− 3	−19	− 9	−33	−18	+31		3	1.72
108120	21 54 18.07	+33 46 48.7	9.61 H		328.575 302 97	+33.780 200 39		−0.96	1.98	−1.68	0.66	0.89	1.38	0.78	1.03	+15	−17	−15	−20	−12	+ 0	−16	−48	+33	+13		0	−0.56
108121	21 54 18.93	+19 42 57.8	8.75 H		328.578 857 29	+19.716 055 86 B		35.94	−51.96	−24.76	47.43	36.05	12.83	14.94	12.59	+31	+11	−13	−28	− 2	−13	− 7	−30	+ 0	+23		3	1.72
108122	21 54 18.95	+50 03 52.1	9.66 H		328.578 977 43	+50.064 466 81		1.26	2.53	−0.57	0.87	0.77	1.04	1.01	0.91	− 8	−11	−11	+ 1	+ 1	+ 8	+ 1	− 4	+ 6	− 9		0	0.88
108123	21 54 19.06	−36 03 41.5	6.74 H		328.579 402 90	−36.061 530 67		4.05	16.20	−22.45	0.75	0.54	0.91	0.88	0.54	+30	−34	−39	+19	+ 0	+11	+11	+31	−17	+24		2	0.73
108124	21 54 19.12	+23 32 50.4	9.85 H		328.579 651 06	+23.547 335 87		2.77	−2.42	−37.27	1.14	1.05	1.42	1.35	1.25	+14	+14	−19	− 4	+10	− 8	+10	+ 0	+10	+16		0	−0.54
108125	21 54 19.51	−39 56 14.3	9.14 H		328.581 310 17	−39.937 306 48		3.22	12.71	21.97	1.20	0.89	1.60	1.33	0.85	+16	−17	−27	− 6	−14	+44	− 4	+12	+ 5	+15		2	2.01
108126 H	21 54 20.74	−38 28 00.8	8.57 H		328.586 418 00	−38.466 877 16 A		9.91	142.87	29.80	1.43	1.05	1.54	1.52	0.93	+25	+ 6	+ 0	+18	+ 8	+30	+10	+48	− 5	+16		1	−0.74
108127	21 54 22.03	+12 45 03.9	6.61 G		328.591 786 09	+12.751 091 69		7.18	8.33	−12.39	0.80	0.52	0.83	1.25	0.58	− 2	+ 9	−16	+29	− 4	+41	+ 1	+15	+ 2	− 6		0	0.18
108128	21 54 22.20	−41 15 57.7	7.94 2 H		328.592 496 85	−41.266 014 08		2.68	−5.17	−18.92	0.83	0.64	1.01	0.99	0.66	+23	+ 0	−11	+18	+ 0	+21	+ 5	+39	−20	+11		0	−1.69
108129	21 54 22.48	−85 02 00.9	6.59 H		328.593 681 04	−85.033 583 38		7.33	−25.51	10.91	0.46	0.43	0.55	0.58	0.49	+16	− 9	− 7	+13	+11	+ 2	+11	− 1	+11	+18		1	−1.42
108130	21 54 24.90	+06 05 03.4	8.91 H		328.603 770 77	+06.084 282 35		6.78	17.78	−18.41	0.94	0.78	1.11	1.07	0.77	+23	− 6	− 3	− 5	+ 5	+33	+ 5	+ 8	+12	+28		0	0.21
108131	21 54 25.63	+58 40 29.1	8.59 H		328.606 808 03	+58.674 744 45		2.61	9.16	2.67	0.67	0.63	0.77	0.72	0.69	+ 0	+17	+ 1	+11	+19	+ 5	+23	− 8	+12	+16		0	−1.47
108132	21 54 25.92	−30 15 23.5	9.22 G		328.607 993 81	−30.256 531 40		2.25	132.14	−198.67	1.07	0.69	1.31	1.21	0.65	+15	− 9	− 9	+ 6	+ 3	+29	+ 9	+43	−11	+ 4		0	−2.10
108133	21 54 26.54	+80 18 30.9	6.43 2 H		328.610 599 95	+80.308 594 38		3.95	1.99	−14.49	0.45	0.45	0.51	0.56	0.47	−11	− 7	+11	+ 4	+ 0	+17	− 7	−15	+ 6	−34		0	−0.08
108134	21 54 26.99	−43 47 24.4	8.94 H		328.612 477 51	−43.790 109 40		1.93	15.59	−30.59	1.23	0.75	1.26	1.25	0.71	+ 4	+17	−21	−37	+10	+ 7	+11	+17	− 5	+ 7		0	0.90
108135	21 54 28.47	−26 38 07.4	9.18 H		328.618 628 45	−26.635 381 33		6.55	−0.08	−29.98	1.05	0.76	1.43	1.16	0.74	+22	+ 9	−15	+11	− 9	+39	− 3	+52	−21	+10		0	−0.67
108136	21 54 30.13	+30 13 44.7	8.25 H		328.625 548 73	+30.229 085 66		2.34	−4.41	−8.42	0.65	0.82	0.96	0.84	1.02	+ 8	− 1	−26	+49	+ 7	−10	+ 5	+35	+ 5	+15		0	−0.59
108137 H	21 54 31.54	+44 02 52.7	8.27 H		328.631 422 53	+44.047 966 69 A		5.27	8.54	−5.45	2.23	1.72	1.20	1.12	0.99	−23	+ 3	−11	+10	+ 2	− 2	+ 2	+ 2	+ 9	−26		2	−0.95
108138	21 54 31.69	−07 30 37.6	8.70 H		328.632 054 10	−07.510 453 22		0.76	−2.93	−23.02	1.30	0.74	1.28	1.49	0.72	+12	+ 7	− 7	−41	+19	+ 5	+16	−13	+13	+12		4	−1.34
108139	21 54 33.49	+14 32 05.3	9.22 H		328.639 555 48	+14.534 802 90		4.38	15.63	−1.23	1.01	0.76	1.18	1.44	0.95	+30	−15	+ 1	−34	+22	+15	+17	−10	+ 1	+30		0	−0.36
108140	21 54 33.56	+22 39 46.3	11.22 H		328.639 829 61	+22.662 865 09		17.48	179.76	−43.27	2.08	1.74	2.43	2.61	1.92	+13	− 5	− 1	+ 0	+ 5	+10	+ 3	− 7	+15	+ 5		0	2.11
108141	21 54 33.74	+31 36 36.8	8.34 G		328.640 600 46	+31.610 233 76		7.31	6.17	−30.41	0.75	0.80	0.96	0.91	1.03	+ 4	+11	−17	+41	+ 4	+ 5	+ 6	+22	− 3	+13		0	−0.13
108142	21 54 34.72	−38 29 26.5	9.19 H		328.644 679 59	−38.490 695 61		5.52	45.29	18.07	1.04	0.72	1.25	1.38	0.77	+23	− 2	− 8	+ 4	− 1	+34	+ 9	+34	− 9	+10		4	1.04
108143	21 54 35.62	+08 47 30.5	8.78 H		328.648 406 88	+08.791 810 92		2.90	19.35	−6.42	1.06	0.85	1.17	1.38	0.85	+21	+13	+ 9	+27	− 6	+27	− 5	+12	+16	+14		0	0.16
*108144	21 54 35.90	−03 18 04.3	6.24 G		328.649 579 86	−03.301 191 85 A		14.35	26.66	−33.04	1.03	0.59	0.98	1.10	0.57	+42	+ 2	−12	+ 4	+10	+ 7	+11	− 9	+35	+42		2	1.08
*108145 H	21 54 35.81	−02 59 49.5	7.34 G		328.649 227 85	−02.997 088 54 *		1.95	14.09	0.63	2.07	1.16	1.20	1.39	0.69	− 4	− 5	−23	−16	+ 7	− 6	+ 3	−26	+26	+20		0	0.67
108146	21 54 36.64	−58 48 35.4	9.53 H		328.652 653 07	−58.809 828 35		3.32	12.20	0.87	0.88	0.89	1.47	1.09	0.95	− 5	− 7	−30	−27	+15	−13	+ 7	+25	− 6	+ 2		0	−1.45
108147	21 54 36.69	+47 09 18.7	7.47 H		328.652 865 58	+47.155 192 68		14.13	35.12	50.09	0.54	0.53	0.69	0.69	0.62	−23	+14	+ 2	+ 5	+14	+ 3	+15	− 5	+ 7	−14		0	−0.71
108148	21 54 37.54	−66 22 44.8	8.88 H		328.656 424 55	−66.379 102 15		2.05	−15.59	7.25	0.70	0.82	1.22	0.74	0.87	−25	− 7	− 6	− 1	− 1	− 3	+ 0	− 4	− 9	−23		1	0.76
108149	21 54 41.94	−34 08 12.2	8.36 G		328.674 751 83	−34.136 720 41		7.10	−78.19	−8.66	0.90	0.90	1.12	1.17	1.02	+30	− 2	−18	+22	+19	+30	+23	+71	− 1	+33		0	0.56
108150	21 54 42.07	+48 11 55.7	7.45 H		328.675 273 51	+48.198 812 28		7.04	−37.47	−35.61	0.50	0.51	0.65	0.58	0.58	−16	+ 4	+ 3	− 1	+13	−16	+13	+ 0	+ 8	−14		3	0.12
108151	21 54 42.92	+67 45 13.5	6.96 G		328.678 840 42	+67.753 755 21		8.31	34.24	18.94	0.55	0.51	0.58	0.74	0.58	−16	−14	+ 7	−11	+21	+ 6	+17	−13	+ 4	− 6		3	0.87
108152	21 54 43.22	+70 10 18.7	9.52 H		328.680 088 21	+70.171 872 42		4.12	8.61	−5.21	0.81	0.85	0.94	0.96	0.84	− 9	−10	+24	+ 2	+ 6	− 2	+ 5	−18	+ 7	− 8		0	1.51
108153	21 54 43.39	+14 33 28.1	9.10 3 H		328.680 785 62	+14.557 799 18		2.14	−9.57	−20.56	1.03	0.76	1.19	1.38	0.88	+26	−23	− 3	−36	+22	+18	+22	+ 0	− 8	+18		0	0.79
108154	21 54 43.48	+38 14 08.3	9.25 H		328.681 153 48	+38.235 640 53		17.72	187.74	40.30	0.71	0.82	1.22	0.79	0.93	−42	+ 1	− 3	+22	+ 8	−18	+ 8	+ 0	+17	−43		0	−0.85
108155	21 54 44.70	+39 56 07.6	8.46 2 H		328.686 251 03	+39.935 431 26		2.18	−2.15	−3.74	0.56	0.63	0.93	0.63	0.71	−34	+12	−12	+11	+11	− 3	+11	− 3	+11	−35		0	−2.42
108156	21 54 44.89	+32 19 44.9	7.73 H		328.687 061 16	+32.329 136 86		49.21	210.59	−233.39	0.66	0.75	0.93	0.74	0.92	+ 1	+23	−28	+36	+12	+ 4	+18	+15	+ 9	+17		0	−1.67
108157	21 54 45.10	+15 32 31.1	9.35 H		328.687 929 89	+15.541 964 15		2.33	−30.80	−3.53	1.21	0.89	1.32	1.56	1.01	+28	+21	+ 5	−41	+18	− 8	+17	+ 3	+ 7	+24		0	−0.25
*108158	21 54 45.60	−73 26 14.7	7.43 G		328.690 005 86	−73.437 418 43		25.10	−195.48	−438.45	0.58	0.53	0.74	0.78	0.63	−17	+ 0	− 9	− 5	+ 5	−11	+ 5	+ 9	− 7	−31		0	−0.18
*108159	21 54 45.58	−46 59 30.6	11.99 G		328.689 928 50	−46.991 845 96		66.12	−311.69	−365.58	2.26	2.06	3.51	2.38	2.00	+32	−15	+ 7	−14	+10	+10	+10	+20	− 3	+29		0	1.34
108160	21 54 45.68	+32 40 23.8	7.88 H		328.690 341 56	+32.673 289 96		3.17	−8.17	−16.23	0.61	0.72	0.91	0.61	1.00	+16	+ 4	−14	+14	+15	−10	+17	+19	+12	+25		0	0.84
108161 H	21 54 49.88	+45 47 29.8	8.28 H		328.707 826 41	+45.791 610 46 *		−7.63	5.01	6.01	2.00	2.51	2.35	1.86	2.14	− 2	+12	+12	+29	+ 9	− 6	+11	+35	+24	−15		28	2.93
108162 H	21 54 50.70	−77 20 15.2	8.23 G		328.711 251 42	−77.337 542 50 A		37.91	223.70	−186.04	1.00	1.02	1.18	1.08	1.02	− 6	− 8	−25	− 1	+ 0	− 3	− 2	+ 4	− 9	−25		3	1.31
108163	21 54 51.19	+45 46 59.7	11.00 H		328.713 293 54	+45.783 242 79		−10.08	−10.52	4.17	7.08	6.97	9.43	8.21	7.88	−20	− 9	+ 9	+ 6	+ 4	+ 2	+ 5	+ 2	− 3	−14		1	
108164	21 54 52.55	+48 33 16.8	7.89 H		328.718 966 01	+48.554 656 67		4.35	13.67	−0.94	0.54	0.56	0.69	0.60	0.63	−14	+11	− 6	−12	+20	−11	+21	− 9	+14	− 6		1	0.35
108165	21 54 53.16	+56 36 40.4	5.74 2 H		328.721 492 20	+56.611 232 60		1.29	−3.72	−2.20	0.44	0.42	0.54	0.45	0.41	− 2	+19	+14	−13	+ 1	−23	+ 6	−24	+ 2	+ 8		0	2.05
108166	21 54 53.76	+15 13 32.1	7.74 H		328.724 008 57	+15.225 577 18		11.71	37.08	−26.99	0.81	0.59	0.91	1.17	0.72	+26	+16	− 2	−40	+23	− 7	+20	+12	+ 9	+23		0	0.26
108167	21 54 54.38	+32 20 19.5	7.09 H		328.726 573 25	+32.338 743 11		1.78	−8.19	−1.68	0.61	0.64	0.80	0.69	0.82	− 1	+13	−13	+34	+ 8	− 1	+11	+21	+ 6	+ 7		0	−0.05
108168	21 54 54.80	−47 46 18.9	9.68 G		328.728 325 25	−47.771 905 44		4.70	−105.92	−102.29	0.95	0.84	1.49	1.07	0.83	+44	− 5	−13	+ 1	+ 0	+ 7	+ 4	+17	−15	+32		3	−2.63
108169	21 54 55.19	−66 54 06.7	9.39 H		328.729 974 47	−66.901 873 41		−1.27	8.23	−16.29	0.90	0.89	1.38	1.04	0.95	−17	− 8	− 2	+11	+ 1	− 7	+ 1	− 6	−13	−24		2	2.98
108170	21 54 55.36	+61 59 17.8	9.81 G		328.730 685 00	+61.988 266 70		14.88	−74.48	−171.96	0.96	0.83	0.99	1.10	0.91	−15	− 1	+ 7	+33	− 4	− 2	− 5	−14	+ 6	−17		0	−1.18
108171	21 54 56.90	+29 20 54.4	8.35 H		328.737 063 98	+29.348 451 30		3.73	1.41	−23.70	0.66	0.82	1.01	0.87	0.96	+19	+ 9	+ 6	+59	+11	+14	+12	+20	+ 8	+21		2	−0.57
108172	21 54 58.69	+34 46 23.4	7.22 H		328.744 527 31	+34.773 166 36		4.25	24.93	2.28	0.48	0.44	0.73	0.59	0.69	−24	+11	+ 2	−10	−15	−21	−13	−39	+ 6	+11		0	0.37
108173	21 54 58.78	−04 13 12.2	8.16 H		328.744 925 87	−04.220 049 92		1.30	−14.27	−18.04	0.97	0.59	1.07	1.23	0.66	+23	+ 3	+ 0	− 8	+16	+25	+13	+ 8	+23	+37		0	−0.06
108174	21 54 59.59	+53 56 07.4	6.92 H		328.748 301 96	+53.935 391 19		20.80	149.44	87.03	0.48	0.48	0.58	0.55	0.52	− 7	−13	+ 4	−26	+ 8	− 3	+ 8	−31	+ 8	+26		0	−2.35
108175	21 55 00.29	+27 38 54.0	10.21 H		328.751 205 31	+27.648 322 56		2.37	11.22	−14.45	1.15	1.18	1.57	1.29	1.45	+ 7	+ 8	−13	− 1	+ 2	− 9	− 1	+ 4	−18	+11		0	−0.55
108176 H	21 55 00.29	−15 15 28.8	7.07 H		328.751 215 59	−15.258 011 18 A		3.79	−17.25	−32.17	5.83	2.78	1.34	1.55	0.72	+66	− 5	− 3	−13	− 7	+11	+ 0	−12	+23	+29		2	0.48
108177	21 55 00.88	−58 00 56.7	8.75 H		328.753 669 94	−58.015 758 31		1.47	18.49	4.70	0.72	0.75	1.27	0.86	0.71	−12	−12	−36	−27	+20	+ 1	+16	+12	−19	− 4		0	1.20
108178	21 55 01.29	+20 47 34.3	8.35 H		328.755 364 00	+20.792 859 62		3.90	12.31	8.10	0.82	0.82	1.03	0.84	0.82	+35	+ 4	− 5	− 2	− 8	− 6	−10	−24	− 5	+29		0	1.22
108179	21 55 01.72	+62 00 32.8	7.25 H		328.757 185 66	+62.009 107 17		3.52	16.30	−1.82	0.54	0.48	0.57	0.58	0.51	−14	+ 3	+ 8	+33	− 5	−10	− 4	− 6	+13	−16		0	−2.20
108180	21 55 01.81	−11 58 12.9	8.08 H		328.757 553 39	−11.970 248 80		6.49	33.57	−1.38	0.94	0.61	1.04	1.17	0.70	+35	−25	−12	−21	−18	+16	−19	−24	+18	+45		0	−0.17
108181	21 55 03.84	−30 42 35.0	9.76 H		328.766 013 15	−30.709 733 48		2.87	12.75	−23.25	1.24	0.84	1.57	1.35	0.77	+18	+ 0	− 1	+ 0	−11	+40	− 6	+31	−10	+ 2		0	−0.51
108182	21 55 04.46	+00 30 13.5	10.53 H		328.768 599 29	+00.503 751 47		4.51	9.19	13.55	1.98	1.37	2.31	2.88	1.33	+37	+23	+30	+15	+28	+39	+16	− 4	+18	+34		0	0.23
108183	21 55 05.23	+54 29 01.6	8.82 2 H		328.771 801 70	+54.483 786 53 *		2.25	−2.24	−4.59	0.90	0.77	1.08	1.01	0.86	−24	− 9	+17	−35	+20	− 1	+16	−19	+25	+11		3	1.21
108184 H	21 55 05.58	−31 47 47.8	9.26 H		328.773 236 10	−31.796 612 50 *		12.74	1.89	16.12	1.15	0.66	1.34	1.33	0.63	+ 5	+ 3	−14	+ 7	−15	+36	− 9	+19	−14	− 4		0	1.39
108185	21 55 05.71	−31 22 40.3	10.27 H		328.773 803 66	−31.377 870 32		2.90	−26.21	−19.02	1.29	0.76	1.47	1.43	0.73	+ 2	+ 1	− 5	−13	+ 1	+33	+ 3	+25	− 3	+ 0		0	−0.04
108186	21 55 06.94	−36 29 39.2	10.70 H		328.778 901 24	−36.494 231 80		5.30	24.27	−14.85	1.68	1.24	2.05	2.10	1.39	+28	−28	−21	+ 9	+ 4	− 4	+10	+38	−25	+30		0	1.80
108187	21 55 07.04	+09 26 34.0	9.26 H		328.779 352 96	+09.442 766 28		1.70	10.47	−5.66	1.32	0.88	1.38	1.68	0.84	+ 9	+ 4	+15	− 2	−11	−16	− 5	+ 7	+24	− 7		0	−0.73
*108188	21 55 08.09	−34 37 34.4	9.04 H		328.783 703 91	−34.626 233 22		3.85	70.47	−34.11	1.09	0.91	1.32	1.33	1.00	+24	−18	−31	+14	+ 8	+16	+13	+58	− 9	+24		2	0.35
*108189	21 55 08.08	+59 59 54.0	8.03 H		328.783 648 49	+59.998 324 54		1.67	−4.67	−2.10	0.62	0.58	0.68	0.70	0.62	−10	+ 0	+11	+17	+15	− 6	+22	−15	− 1	+14		0	−0.18
108190	21 55 08.47	+02 52 26.9	8.63 H		328.785 281 73	+02.874 138 25		3.99	11.14	3.66	1.25	0.77	1.27	2.03	0.79	+ 7	+29	−17	+44	−19	+26	−13	+ 3	− 2	− 2		0	0.75
108191	21 55 09.88	−67 51 34.7	8.26 H		328.791 165 05	−67.859 635 55		3.61	−2.64	21.88	0.62	0.71	1.02	0.71	0.77	−18	+ 9	−15	− 1	+ 7	− 2	+ 5	− 3	−13	−20		1	−1.13
108192	21 55 10.68	−76 56 26.4	8.07 2 H		328.794 500 35	−76.940 669 74		2.64	33.99	3.47	0.61	0.58	0.77	0.79	0.66	− 2	− 6	−23	− 2	+ 0	− 4	− 1	− 1	+ 1	−29		1	−0.14
108193	21 55 10.71	−69 01 12.0	8.96 G		328.794 642 81	−69.020 009 83		21.48	−157.54	−249.50	0.80	0.75	1.10	0.90	0.81	− 5	+ 3	− 4	+ 9	+14	+ 5	+14	+ 7	− 9	+10		0	1.00
108194	21 55 11.33	−44 41 37.0	9.82 H		328.797 193 66	−44.693 604 43		13.68	71.25	14.03	1.34	0.93	1.56	1.43	0.89	+18	−17	− 6	−28	+ 2	+27	+ 8	+21	− 8	+ 6		2	1.01
108195	21 55 11.34	−61 53 11.0	5.92 H		328.797 246 31	−61.886 388 24		21.49	43.53	−90.56	0.30	0.41	0.67	0.38	0.42	−15	− 9	−15	+12	+ 7	+ 1	+ 4	− 6	+ 5	−23		0	1.05
108196	21 55 11.50	+54 10 43.0	8.11 H		328.797 923 91	+54.178 619 85		3.17	29.39	33.28	0.72	0.59	0.80	0.77	0.65	−13	−21	+ 0	−25	+21	+ 2	+14	−18	+17	+22		0	−0.31
108197	21 55 12.29	+47 27

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
108101	9.461	0.015	9.376	0.019	A	0.261	0.150	G	0.07	0.02	L *	9.2923	0.0020	0.025	176	*	9.26	9.34		D	21542+3953	I 1	2 C A	AB	82	8.915	0.017	2.51	0.07	
108102	7.247	0.006	5.842	0.004		1.185	0.001	G	1.15	0.00	H	5.8819	0.0006	0.006	87		5.87	5.89		C			1							S
108103	9.993	0.036	9.373	0.032		0.630	0.002	G	0.70	0.00	H	9.3961	0.0023	0.014	51		9.37	9.44					1							
108104	8.666	0.011	8.205	0.010		0.435	0.014	T	0.50	0.01	L	8.2612	0.0016	0.016	127		8.24	8.29		C			1							
108105	10.507	0.032	9.192	0.017		1.117	0.028	T	1.08	0.03	L	9.2247	0.0024	0.023	129		9.19	9.27					1							
108106	7.947	0.009	7.471	0.009		0.448	0.012	T	0.52	0.01	L	7.5374	0.0011	0.010	81		7.52	7.56		C			1							S
108107	9.863	0.024	9.271	0.022		0.553	0.024	T	0.63	0.02	L	9.3367	0.0023	0.020	87		9.30	9.36					1							
108108	8.709	0.014	8.713	0.018		−0.002	0.020	T	0.02	0.02	L	8.7342	0.0016	0.012	75		8.71	8.76		C			1							S
108109	8.873	0.012	8.328	0.011		0.544	0.015	G	0.62	0.01	H	8.3692	0.0014	0.016	127		8.35	8.40					1							S
108110	11.188	0.066	9.987	0.036		1.021	0.060	T	1.07	0.07	L	9.9468	0.0030	0.026	102		9.91	9.99					1							G
108111	10.157	0.027	8.879	0.015	A	1.088	0.024	T	1.05	0.03	L	8.9269	0.0131	0.020	99	A	8.90	8.97		D	21542+5927	I 2	1 C P D							D
108112	9.550	0.021	9.078	0.021		0.496	0.015	G	0.57	0.02	H	9.1409	0.0022	0.017	64		9.11	9.16					1							
108113	10.382	0.028	8.877	0.014		1.266	0.025	T	1.22	0.03	L	8.9485	0.0022	0.020	125		8.92	8.98		C			1							
108114	8.475	0.009	8.432	0.011		0.044	0.013	T	0.06	0.01	L	8.4804	0.0014	0.016	127		8.45	8.50		C			1							
108115											T	11.9294	0.2002			B				D	21542+5927	I 2	1 C I D							D
108116	9.880	0.017	8.774	0.011		0.954	0.016	T	0.94	0.01	L	8.8352	0.0017	0.020	167		8.80	8.88					1							
108117	9.418	0.023	8.910	0.022		0.477	0.029	T	0.55	0.03	L	8.9838	0.0030	0.015	71		8.95	9.01					1							
108118	10.422	0.035	9.062	0.018		0.776	0.133	G	0.99	0.05	L	9.1802	0.0025	0.023	98		9.12	9.22		D	21543−3956	I 2	1							
108119	7.523	0.008	6.446	0.005	A	0.938	0.003	G	0.93	0.00	H	6.5354	0.0184	0.017	102	A	6.46	6.55		D	21543+1943	I 2	1 C P A							S D
108120	11.649	0.070	9.740	0.020		1.585	0.058	T	1.60	0.06	L	9.7292	0.0020	0.026	226		9.68	9.78					1							
108121	9.024	0.020	8.413	0.018	B	0.569	0.024	T	0.64	0.02	L	8.5302	0.0908			B				D	21543+1943	I 2	1 C I A							D
108122	9.739	0.022	9.652	0.030		0.085	0.035	T	0.10	0.04	L	9.6955	0.0030	0.025	140		9.64	9.73					1 S							G
108123	8.556	0.011	6.880	0.006		1.401	0.010	T	1.38	0.01	L	6.8856	0.0012	0.010	89		6.87	6.90		C			1							S
108124	11.196	0.063	10.013	0.037		1.014	0.057	T	0.99	0.05	L	10.0150	0.0033	0.027	88		9.97	10.06					1							
108125	10.263	0.030	9.211	0.020		1.176	0.134	G	1.14	0.12	R	9.3042	0.0024	0.023	95		9.27	9.34		D	21543−3956	I 2	1 S							
108126	9.259	0.015	8.674	0.014	A	0.600	0.495	G	0.61	0.03	L *	8.6918	0.0013	0.013	102	*	8.67	8.72		D	21543−3828	I 1	2 C A	AB	146	3.102	0.024	3.20	0.11	S
108127	6.595	0.006	6.615	0.005		0.004	0.002	G	0.02	0.00	H	6.6197	0.0010	0.006	59		6.61	6.63		C			1							S
108128	10.014	0.026	8.201	0.011		1.540	0.023	T	2.77	0.08	O	7.9012	0.0262	0.180	90		7.70	8.17		U 2			1 S							S P
108129	8.088	0.007	6.722	0.004		1.157	0.006	T	1.12	0.01	L	6.7610	0.0007	0.008	136		6.75	6.77					1							S
108130	9.375	0.021	8.958	0.022		0.394	0.028	T	0.46	0.03	L	8.9992	0.0030	0.019	67		8.96	9.03					1							
108131	8.677	0.010	8.606	0.012		0.070	0.015	T	0.08	0.02	L	8.6157	0.0018	0.016	117		8.59	8.64		C			1							
108132	10.086	0.026	9.323	0.022		0.692	0.012	G	0.75	0.01	H	9.3755	0.0017	0.017	93		9.35	9.40					1							
108133	8.382	0.011	6.675	0.007		1.453	0.011	T	2.69	0.03	O	6.4171	0.0052	0.045	119		6.32	6.49		U 2			1 S							S P
108134	10.883	0.051	9.085	0.019		1.497	0.043	T	1.52	0.06	L	9.0690	0.0020	0.019	88		9.04	9.10		C			1							
108135	10.717	0.040	9.267	0.020		1.223	0.035	T	1.18	0.03	L	9.3417	0.0016	0.015	93		9.32	9.37		C			1							
108136	9.430	0.018	8.355	0.013		0.931	0.017	T	0.93	0.01	L	8.4113	0.0015	0.014	109		8.38	8.45					1							S
108137	9.012	0.012	8.360	0.010	*	0.605	0.014	T	0.67	0.01	L *	8.3943	0.0013	0.015	154	*	8.37	8.42		D	21545+4403	I 1	2 C A	AB	280	0.339	0.003	0.06	0.03	S
108138	10.786	0.071	8.860	0.024		1.599	0.060	T	1.62	0.06	L	8.8107	0.0026	0.019	72		8.78	8.84					1							
108139	9.474	0.016	9.229	0.019		0.233	0.023	T	0.26	0.03	L	9.2932	0.0019	0.016	121		9.26	9.32		C			1							
108140											T	11.3573	0.0058	0.056	77		11.27	11.45					1 S							G
108141	9.083	0.014	8.394	0.012		0.629	0.015	G	0.70	0.01	H	8.4757	0.0011	0.013	94		8.44	8.50		D			1							
108142	9.688	0.019	9.202	0.019		0.469	0.021	T	0.54	0.02	L	9.2982	0.0013	0.015	98		9.27	9.33		D			1 G							
108143	10.676	0.058	8.910	0.021		1.472	0.049	T	1.49	0.07	L	8.9091	0.0023	0.020	59		8.87	8.96		C			1							
108144	6.796	0.005	6.292	0.005	A	0.466	0.003	G	0.54	0.00	H	6.3549	0.0064	0.009	78	A	6.34	6.38			21546−0318	I 1	2 C A	AB	183	16.621	0.023	3.20	0.12	S
108145	7.292	0.008	7.328	0.009	*	−0.041	0.004	G	−0.02	0.00	H *	7.3426	0.0021	0.013	72	*	7.32	7.36		D	21546−0300	H 1	2 C A	AB	135	0.259	0.018	2.34	0.14	S
108146	10.730	0.031	9.635	0.020		0.946	0.028	T	0.94	0.02	L	9.6948	0.0027	0.028	161		9.64	9.75					1							
108147	7.876	0.007	7.504	0.009		0.352	0.011	T	0.41	0.01	L	7.5493	0.0011	0.009	119		7.53	7.57		C			1							S
108148	10.264	0.020	8.996	0.012		1.080	0.018	T	1.04	0.01	L	9.0515	0.0021	0.025	178		9.01	9.09					1							
108149	8.927	0.014	8.417	0.013		0.510	0.015	G	0.58	0.02	H	8.4652	0.0017	0.015	87		8.45	8.49		C			1							S
108150	7.788	0.006	7.471	0.008		0.301	0.009	T	0.34	0.01	L	7.5257	0.0012	0.012	147		7.51	7.55		C			1							S
108151	7.359	0.006	6.999	0.006		0.331	0.019	G	0.39	0.03	H	7.0484	0.0008	0.008	104		7.04	7.06		C			1							S
108152	10.133	0.026	9.588	0.025		0.511	0.032	T	0.58	0.03	L	9.6267	0.0030	0.026	123		9.59	9.68					1							
108153	9.749	0.020	9.195	0.018		0.519	0.024	T	0.59	0.03	L	9.2176	0.0028	0.034	118		9.17	9.75		P 1 A			1							
108154	10.125	0.017	9.351	0.014		0.704	0.017	T	0.76	0.01	L	9.3956	0.0022	0.027	237		9.35	9.44		R			1							
108155	8.529	0.008	8.456	0.010		0.072	0.012	T	0.08	0.01	L	8.4860	0.0027	0.029	181		8.44	8.53		U 2 C			1 S							
108156	8.903	0.013	7.822	0.009		0.911	0.005	G	0.96	0.01	I	7.8768	0.0016	0.014	93		7.85	7.89		C			1							
108157	10.671	0.040	9.490	0.024		1.012	0.036	T	0.99	0.03	L	9.5129	0.0026	0.024	107		9.48	9.56					1							
108158	8.299	0.009	7.512	0.007		0.696	0.005	G	0.75	0.00	H	7.5695	0.0011	0.013	148		7.55	7.59					1							S
108159						1.560	0.007	G	2.33	0.01	A	12.0290	0.0064	0.061	117		11.91	12.13					1							G
108160	8.016	0.009	7.908	0.009		0.105	0.012	T	0.12	0.01	L	7.9256	0.0014	0.015	107		7.90	7.95					1							S
108161	8.486	0.010	8.406	0.012	*	0.079	0.015	T	0.09	0.02	L *	8.3154	0.0021	0.021	125	*	8.28	8.35		D	21548+4547	I 2	2 C C	AD	209	0.266	0.027	0.46	0.35	
108162	9.584	0.016	8.403	0.010	A	1.000	0.015	G	1.04	0.02	I *	8.3862	0.0017	0.019	136	*	8.36	8.43			21549−7720	H 1	2 C D	AB	118	2.073	0.060	4.09	0.25	D
108163	11.465	0.115	10.835	0.112							T	11.1423	0.0116	0.089	110		10.91	11.24		D	21548+4547	I 2	1 X S							G G
108164	7.938	0.008	7.892	0.011		0.047	0.013	T	0.06	0.01	L	7.9128	0.0013	0.012	140		7.89	7.94		C			1							S
108165	6.586	0.004	5.874	0.004		0.655	0.005	T	1.00	0.03	C	5.9029	0.0018	0.018	113		5.87	5.93		U 2			1							S
108166	8.112	0.010	7.770	0.009		0.300	0.020	G	0.34	0.03	H	7.8136	0.0017	0.016	118		7.79	7.84					1							S
108167	9.112	0.015	7.249	0.007		1.570	0.015	G	1.58	0.09	H	7.2067	0.0019	0.012	95		7.19	7.23					1							S
108168	10.256	0.023	9.745	0.023		0.487	0.025	G	0.56	0.03	H	9.8099	0.0018	0.019	150		9.78	9.84		C			1							
108169	10.763	0.033	9.503	0.018		1.074	0.029	T	1.04	0.02	L	9.5549	0.0031	0.033	176		9.51	9.62					1							
108170	10.809	0.048	9.843	0.032		0.840	0.020	G	0.88	0.02	H	9.9916	0.0024	0.024	124		9.93	10.02					1							G
108171	9.812	0.023	8.494	0.014		1.160	0.015	G	1.12	0.01	H	8.5197	0.0015	0.013	111		8.49	8.55		C			1							
108172	7.371	0.004	7.236	0.004		0.130	0.005	T	0.14	0.01	L	7.2650	0.0006	0.009	261		7.25	7.28		C			1 G							S
108173	10.263	0.032	8.364	0.013		1.577	0.027	T	1.60	0.03	L	8.2747	0.0018	0.016	84		8.25	8.31					1							
108174	7.487	0.006	6.970	0.006		0.486	0.008	T	0.56	0.01	L	7.0311	0.0008	0.009	124		7.02	7.05					1							S
108175	10.734	0.052	10.428	0.063		0.575	0.072	G	0.65	0.07	R	10.3381	0.0038	0.029	75		10.28	10.41					1							G
108176	8.706	0.012	7.212	0.007	*	1.257	0.011	T	1.22	0.01	L *	7.2326	0.0013	0.013	103	*	7.21	7.25			21550−1515	H 1	2 C B	AB	79	0.301	0.057	2.85	0.53	S
108177	10.618	0.027	8.906	0.012		1.429	0.023	T	1.42	0.04	L	8.8915	0.0024	0.024	179		8.85	8.94					1							
108178	9.547	0.019	8.465	0.013		0.936	0.018	T	0.93	0.01	L	8.5131	0.0017	0.012	84		8.49	8.53		C			1							S
108179	8.474	0.011	7.359	0.007		0.961	0.010	T	0.95	0.01	L	7.4141	0.0011	0.009	128		7.40	7.43		C			1							S
108180	8.546	0.015	8.104	0.015		0.431	0.017	T	0.50	0.02	L	8.1749	0.0013	0.011	63		8.15	8.19		C	21550−1158	I 1	1							S
108181	11.259	0.067	9.918	0.032		1.137	0.058	T	1.10	0.06	L	9.9286	0.0027	0.021	103		9.89	9.97		C			1							
108182	11.253	0.090	10.641	0.082		0.588	0.072	G	0.66	0.07	R	10.6570	0.0043	0.029	69		10.62	10.73		C			1							G
108183	12.971	0.413	9.432	0.022		2.100	0.450	G	2.09	0.46	J	8.8914	0.0098	0.108	108		8.74	9.11		U 2			1 V							P
108184	10.135	0.027	9.349	0.022	*	0.698	0.027	T	0.75	0.02	L *	9.3935	0.0024	0.020	98	*	9.37	9.43		D	21551−3148	I 1	2 C S A	AS	149	0.187	0.005	0.24	0.17	
108185	10.876	0.050	10.356	0.048		0.488	0.063	T	0.56	0.07	L	10.3777	0.0030	0.022	111		10.34	10.43		C			1							
108186	11.170	0.062	10.859	0.074		0.465	0.015	G	0.54	0.02	H	10.8076	0.0041	0.027	86		10.76	10.86		C			1							G
108187	9.654	0.030	9.321	0.033		0.316	0.042	T	0.36	0.06	L	9.3336	0.0024	0.022	57		9.28	9.38					1							
108188	9.524	0.022	9.029	0.021		0.477	0.023	T	0.55	0.02	L	9.1442	0.0023	0.015	85		9.12	9.17		C			1							
108189	8.331	0.009	8.061	0.010		0.257	0.013	T	0.29	0.02	L	8.0987	0.0013	0.012	114		8.08	8.12					1							
108190	10.238	0.039	8.699	0.019		1.293	0.034	T	1.25	0.04	L	8.7835	0.0022	0.013	56		8.76	8.81		C			1							
108191	9.884	0.017	8.400	0.009		1.249	0.015	T	1.21	0.01	L	8.4193	0.0017	0.019	171		8.39	8.45					1							
108192	10.205	0.023	8.375	0.010		1.554	0.021	T	3.15	0.04	O	7.9337	0.0114	0.143	139		7.64	8.18		U 2			1 S							
108193	9.755	0.018	9.044	0.015		0.670	0.003	G	0.73	0.00	H	9.0929	0.0022	0.024	145		9.05	9.13					1							
108194	10.809	0.041	9.844	0.029		0.835	0.039	T	0.85	0.03	L	9.9578	0.0028	0.025	92		9.91	10.00					1							
108195	6.377	0.002	5.961	0.002		0.393	0.003	T	0.46	0.00	L	6.0066	0.0005	0.007	268		5.99	6.02		C	21552−6153	I 1	1 S							S
108196	10.037	0.023	8.250	0.010		1.488	0.020	T	1.51	0.03	L	8.2371	0.0013	0.015	123		8.21	8.26					1							
108197	7.656	0.007	7.662	0.009		−0.001	0.010	T	0.02	0.01	L	7.6707	0.0011	0.011	126		7.65	7.69		C			1							S
108198	8.854	0.010	7.604	0.006		1.066	0.009	T	1.03	0.01	L	7.6063	0.0113	0.080	158		7.53	7.74		U 2			1							S P
108199	7.974	0.007	7.638	0.011		0.319	0.012	T	0.37	0.02	L	7.6787	0.0017	0.013	86		7.66	7.70					1							S
108200						0.686	0.032	G	0.74	0.03	H	11.1321	0.0046	0.037	107		11.07	11.20		C			1							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π δ	π $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	29	30
	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18											
*108201	21 55 16.82	+78 51 07.6	8.16	H	328.820 091 69	+78.852 108 61	3.38	14.91	−8.84	0.63	0.59	0.69	0.75	0.64	+ 5	−20	+ 8	+18	+ 1	+ 3	+ 1	+ 1	+13	+20	3	−0.33
*108202	21 55 17.65	+43 10 19.9	7.94	1 G	328.823 554 52	+43.172 206 45	1.21	−1.52	−8.36	0.60	0.59	0.88	0.77	0.74	−26	+ 7	−11	− 4	− 5	+13	− 4	− 6	+ 1	−39	0	−1.03
*108203	21 55 18.53	−19 38 20.3	8.97	H	328.827 204 18	−19.638 981 56	7.13	−2.62	−24.54	1.13	0.77	1.24	1.77	0.80	+21	− 1	−10	− 3	+ 6	+17	+13	+46	+ 9	+ 9	0	−0.43
*108204	21 55 18.60	+12 56 24.5	10.47	H	328.827 493 61	+12.940 146 52	6.17	−3.71	−43.90	1.76	1.29	1.98	2.56	1.34	+24	+ 2	−11	+ 0	+25	+19	+20	− 3	+20	+13	0	1.58
*108205	21 55 13.77	+50 29 49.8	9.23	2 H	328.807 377 18	+50.497 155 25	−0.20	−0.65	−3.71	1.89	1.57	1.16	1.99	1.75	+ 7	−17	−19	−87	− 7	+19	− 9	−82	+29	+10	0	0.03
108206	21 55 20.25	−34 38 43.6	8.26	H	328.834 390 96	−34.645 451 22	1.83	25.80	−9.96	0.87	0.72	1.05	1.12	0.88	+23	−20	−23	+ 7	+ 8	+18	+ 8	+50	+ 2	+30	0	2.89
108207	21 55 20.27	−46 09 59.4	9.71	G	328.834 467 42	−46.166 492 70	1.99	5.37	−1.13	0.96	0.95	1.57	0.89	0.98	+42	−12	+ 0	−24	+12	+10	+15	+27	− 7	+40	0	0.90
108208	21 55 20.35	+20 10 08.7	8.37	H	328.834 809 08	+20.169 093 47	2.58	22.88	−15.35	0.80	0.75	1.01	0.85	0.75	+33	+18	+ 9	−13	− 7	− 4	− 9	−29	− 3	+22	0	−0.23
108209	21 55 20.60	+61 32 30.5	6.17	1 H	328.835 827 45	+61.541 817 12	0.36	−2.48	−3.04	0.46	0.42	0.50	0.48	0.44	− 3	+ 7	+ 8	+14	+ 3	− 2	+ 6	−10	+ 8	+ 3	0	0.93
108210	21 55 20.82	+53 54 10.4	9.49	H	328.836 730 73	+53.902 891 29	1.78	2.48	−1.50	0.83	0.90	1.08	1.02	1.07	− 1	−12	+10	−20	+ 4	+ 3	+ 5	−27	+10	+33	0	−2.37
108211	21 55 20.90	+36 55 50.4	9.10	H	328.837 069 14	+36.930 662 91	1.14	7.70	2.44	0.74	0.72	1.12	0.93	0.89	− 9	− 1	+ 3	− 1	− 3	− 4	− 1	− 9	+15	+11	0	0.95
108212	21 55 20.98	+20 50 56.6	6.68	H	328.837 399 55	+20.849 054 66	5.10	27.29	−19.25	0.59	0.57	0.76	0.60	0.61	+29	+12	− 8	+14	− 2	−20	− 5	− 5	− 5	+32	0	−0.53
108213	21 55 21.26	+36 08 46.6	6.72	H	328.838 576 14	+36.146 270 20	6.81	−25.02	−20.76	0.44	0.40	0.67	0.52	0.48	−24	+ 0	−10	−11	− 3	− 2	− 3	−19	+16	−16	1	0.01
108214	21 55 22.03	−18 14 23.6	9.35	H	328.841 808 54	−18.239 900 52	1.92	5.43	7.66	1.32	0.79	1.33	1.88	0.79	+ 3	− 9	−22	− 5	− 8	+17	+ 2	+34	− 3	−16	0	−1.20
108215	21 55 22.18	−30 02 05.9	8.53	H	328.842 427 95	−30.034 963 90	1.63	8.18	−8.51	0.89	0.55	1.03	1.08	0.51	+ 7	+ 7	−10	+15	−10	+25	− 3	+45	− 9	− 4	0	−1.96
108216	21 55 24.53	−61 12 34.6	9.82	H	328.852 208 74	−61.209 605 92	27.32	264.12	−180.86	0.79	1.05	1.77	0.94	1.05	−11	−13	−29	+20	+13	− 7	+ 8	− 6	+14	−12	0	−1.69
108217	21 55 24.75	+51 00 13.4	9.10	G	328.853 124 50	+51.003 711 02	3.23	−3.64	0.22	0.69	0.68	0.89	0.80	0.80	− 3	+ 4	−14	− 3	+13	− 9	+10	+ 4	+22	+13	0	−2.10
108218	21 55 24.98	+30 49 43.6	7.69	H	328.854 063 33	+30.828 769 27	3.74	50.03	29.71	0.62	0.75	0.85	0.74	0.91	+18	+ 3	−28	+43	+11	− 6	+11	+31	− 9	+31	0	1.77
108219	21 55 27.25	−23 17 21.9	8.34	2 H	328.863 546 82	−23.289 426 53	0.07	−3.55	−7.07	1.03	0.64	1.12	1.23	0.58	− 5	+ 8	+ 3	+47	−43	+17	−35	+41	− 8	−13	0	−0.90
*108220	21 55 27.44	−70 06 55.0	6.65	H	328.864 352 12	−70.115 280 49	10.34	43.81	−35.52	0.44	0.45	0.63	0.51	0.47	−18	−12	−10	+12	− 9	+ 2	−10	− 3	+ 2	−30	0	1.16
*108221	21 55 27.44	+25 55 57.9	8.53	H	328.864 340 99	+25.932 758 20	8.55	35.27	12.39	0.86	0.80	1.10	0.91	0.93	+15	+34	+16	+ 5	− 7	−21	− 6	+17	− 7	+15	2	0.20
108222	21 55 28.71	+52 31 50.0	10.64	H	328.869 631 79	+52.530 556 98	3.88	80.54	10.83	2.52	2.33	3.17	2.74	2.54	−13	+26	−13	− 6	+13	−22	+17	−18	+19	− 3	0	0.40
108223	21 55 29.59	−25 00 54.3	9.18	H	328.873 277 86	−25.015 096 71	0.51	4.89	2.27	1.04	0.73	1.31	1.23	0.76	+20	+12	−10	+19	+ 2	+37	+ 4	+58	− 5	+24	0	1.05
108224	21 55 29.82	+44 56 54.8	7.72	H	328.874 237 25	+44.948 551 56	3.12	15.02	−1.23	0.54	0.49	0.70	0.64	0.55	−30	+13	+ 4	+ 1	+13	+10	+13	− 8	+15	−34	0	0.07
108225 H	21 55 29.90	+27 23 35.7	9.01	H	328.874 574 90	+27.393 257 00 A	5.46	−2.37	−27.93	1.48	1.35	1.62	1.56	1.43	− 1	+ 0	−25	−27	+18	−17	+13	+ 1	+ 7	+ 5	1	−0.16
108226 H	21 55 30.99	+65 19 14.9	5.84	1 G	328.879 129 29	+65.320 811 94 A	2.71	5.74	−1.37	0.69	0.63	0.67	0.80	0.68	+ 1	−14	+22	+12	+ 5	+22	− 2	− 6	− 2	−28	4	0.88
108227	21 55 31.30	+52 31 15.8	10.96	H	328.880 420 24	+52.521 048 93 C	3.93	1.52	−0.95	26.65	25.80	1.00	0.87	0.89	− 2	+ 1	+ 0	− 2	+ 1	−19	+ 1	− 2	+10	+11	4	0.46
108228 H	21 55 31.42	+10 52 49.5	7.72	G	328.880 923 38	+10.880 419 45 A	22.51	−97.31	−140.76	1.75	1.70	1.76	1.63	1.28	− 7	+29	−58	−10	+ 0	− 3	+ 4	−20	+22	+17	3	0.88
108229	21 55 31.46	−41 41 28.8	8.42	H	328.881 076 31	−41.691 325 03	4.49	15.12	−2.38	0.96	0.85	1.18	1.18	0.90	+37	+16	−11	+36	+21	+28	+22	+60	−24	+25	2	0.38
108230 H	21 55 31.59	+52 31 40.7	7.76	G	328.881 618 15	+52.527 970 12 A	3.93	1.52	−0.95	0.95	0.97	1.00	0.87	0.89	+ 4	+ 6	−11	− 4	+12	−19	+14	− 4	+10	+11	4	0.46
108231	21 55 33.91	+38 48 59.8	9.24	H	328.891 290 78	+38.816 609 97	5.75	52.09	−14.02	0.71	0.79	1.27	0.82	0.91	−43	+10	− 8	+15	+19	−14	+18	−12	+20	−49	0	−0.97
108232	21 55 34.15	−70 04 05.6	6.63	H	328.892 299 55	−70.068 223 66	10.65	47.98	−32.01	0.44	0.45	0.63	0.52	0.53	−21	− 4	− 8	+10	− 5	+ 0	− 4	+ 5	+ 6	−27	1	0.45
108233	21 55 35.10	+53 14 35.6	6.68	H	328.896 268 99	+53.243 213 22	1.92	9.11	4.96	0.48	0.46	0.59	0.53	0.49	+ 6	+ 5	+ 7	+10	+12	−20	+19	− 6	+ 4	+31	1	−2.25
108234	21 55 35.15	+34 58 37.4	7.15	H	328.896 465 47	+34.977 058 66	5.92	28.85	−8.65	0.40	0.40	0.71	0.45	0.44	−32	− 1	+ 1	− 1	− 2	−21	+ 3	−28	+15	−19	0	−1.34
108235	21 55 37.54	+35 04 45.3	8.26	H	328.906 433 28	+35.079 247 61	1.33	16.84	−2.55	0.50	0.50	0.89	0.57	0.55	−29	+ 0	+ 1	+ 3	− 8	−25	− 4	−27	+15	−19	0	−1.59
108236	21 55 38.39	−21 08 23.6	7.09	2 H	328.909 957 43	−21.139 896 96	3.95	−38.20	−30.07	0.94	0.58	1.08	1.05	0.55	+30	−31	−23	−35	−14	+35	+ 1	+31	−12	+13	0	1.18
108237	21 55 38.52	+02 21 39.0	7.06	H	328.910 494 40	+02.360 821 71	4.04	14.52	−9.97	0.89	0.59	1.00	1.22	0.63	+ 5	+35	− 7	+39	−16	+47	−12	+10	− 3	+ 8	0	−0.26
108238	21 55 39.40	+40 49 24.4	7.91	H	328.914 174 23	+40.823 453 65	2.25	18.30	−1.91	0.51	0.55	0.81	0.59	0.67	−37	+11	− 8	+ 9	+ 4	− 3	+ 5	+ 4	+17	−45	0	−1.31
108239 H	21 55 40.02	+07 15 14.2	8.55	H	328.916 768 51	+07.253 930 95 A	5.20	−36.53	−33.50	2.71	2.15	2.36	2.59	1.63	+22	+22	+ 9	+17	+ 0	+ 1	+ 3	+19	+ 7	+11	1	0.61
108240	21 55 41.21	+43 57 41.1	8.96	H	328.921 716 63	+43.961 411 37	0.76	4.70	−0.05	0.78	0.78	1.06	0.93	0.89	−19	+ 8	−23	+19	−13	+12	−12	+ 8	− 7	−23	0	−1.70
108241	21 55 41.96	−29 42 20.5	8.46	G	328.924 817 22	−29.705 701 98	30.22	58.86	−178.57	0.92	0.61	1.06	1.11	0.57	+19	+11	− 6	+21	+ 5	+20	+ 8	+51	− 5	+13	0	−2.01
108242	21 55 42.10	−35 00 38.5	9.47	H	328.925 423 23	−35.010 702 03	−2.66	8.99	−16.90	1.28	0.95	1.51	1.46	1.06	+25	−35	−33	− 5	−14	+19	− 8	+31	− 5	+22	4	−0.25
*108243	21 55 42.84	−23 03 10.8	7.89	H	328.928 507 03	−23.052 989 79	0.89	−11.48	−21.17	0.89	0.56	1.05	1.06	0.53	+13	− 2	−10	+39	−33	+22	−23	+31	− 8	+ 8	0	−0.19
*108244	21 55 42.83	−02 46 34.4	8.78	H	328.928 475 78	−02.776 228 31	2.36	6.65	−6.31	1.28	0.72	1.46	1.81	0.84	+20	+11	− 4	+14	+ 7	+21	+11	− 5	+44	+29	0	−0.88
108245	21 55 43.26	−02 38 06.0	8.01	H	328.930 236 45	−02.635 008 28	3.00	24.89	−11.29	1.09	0.58	1.24	1.31	0.65	+34	+19	− 3	+10	+13	+12	+18	−16	+41	+40	0	0.18
108246	21 55 43.37	+17 06 32.4	9.04	H	328.930 712 72	+17.109 001 27	0.82	29.94	−9.36	0.93	0.87	1.19	1.10	0.94	+37	+12	+15	+ 4	+ 3	−26	+ 6	+ 0	− 9	+37	0	−0.79
108247	21 55 45.16	−66 09 23.1	9.10	H	328.938 150 41	−66.156 411 33	1.25	22.93	−21.42	0.76	0.82	1.25	0.83	0.91	−17	− 2	− 2	+10	+ 5	+ 9	+ 6	+ 6	−10	−11	2	−0.28
108248	21 55 49.28	−45 14 52.6	7.56	H	328.955 312 59	−45.247 935 92	4.13	−1.84	−27.64	0.84	0.60	1.10	0.94	0.58	+26	−24	− 5	+ 3	+ 3	+43	+ 6	+17	− 2	+18	0	0.84
108249	21 55 49.52	+13 50 20.1	7.68	H	328.956 344 30	+13.838 905 00	4.06	−5.30	−30.10	0.88	0.61	0.98	1.14	0.68	+35	−21	−11	− 6	+37	− 5	+31	+ 5	+ 1	+26	0	1.13
108250	21 55 49.88	−48 59 23.5	9.09	H	328.957 815 43	−48.989 854 61	9.22	−12.64	−1.61	0.81	0.74	1.29	0.89	0.79	+51	−40	−22	+ 3	+ 5	+ 8	+10	+18	−10	+44	0	−0.58
108251	21 55 51.05	+31 15 52.8	7.77	H	328.962 722 76	+31.264 675 69	1.29	2.45	−8.42	0.67	0.72	0.85	0.80	0.85	+ 7	+ 4	−25	+32	+15	− 4	+13	+37	−11	+16	0	0.75
108252	21 55 51.95	+26 24 12.2	8.34	H	328.966 453 90	+26.403 375 13	5.54	27.03	−54.01	0.78	0.65	0.91	0.87	0.75	+13	+16	+ 3	+ 6	− 4	−17	− 2	+ 7	+ 9	+ 8	0	0.12
108253	21 55 52.13	+00 18 01.0	7.69	H	328.967 208 31	+00.300 277 96	4.86	0.03	−5.74	0.92	0.67	1.11	1.60	0.74	+28	+10	− 4	+ 8	+11	+42	+11	+ 2	+18	+24	0	0.97
108254	21 55 52.20	−32 29 07.6	9.12	H	328.967 494 33	−32.485 434 08	7.30	−20.34	11.05	1.04	0.65	1.31	1.19	0.61	+11	+ 1	−21	− 8	− 7	+41	+ 2	+27	+ 6	+13	0	0.40
108255 H	21 55 53.40	+15 36 19.8	9.27	H	328.972 491 67	+15.605 507 21 A	6.59	157.43	−150.26	2.85	2.57	2.88	3.17	2.15	+20	+ 1	− 9	−12	+17	−21	+12	+ 3	−13	+37	0	0.27
108256	21 55 53.62	−70 32 12.2	8.86	H	328.973 406 75	−70.536 722 74	17.16	96.35	−22.04	0.68	0.66	0.97	0.76	0.71	− 6	− 9	+ 5	− 1	−14	+ 0	−14	− 7	− 1	−26	0	0.43
108257	21 55 53.71	+63 15 40.1	7.23	H	328.973 811 53	+63.261 126 42	4.64	−28.21	−26.29	0.53	0.49	0.58	0.62	0.53	−14	+ 0	+ 2	+ 2	+13	+13	+13	−19	+ 6	− 8	0	0.61
108258	21 55 55.45	−46 55 40.1	6.55	H	328.981 032 17	−46.927 818 95	18.12	−128.25	−58.47	0.62	0.56	0.86	0.92	0.60	+33	− 8	− 2	−21	+ 7	+19	+19	+31	+ 0	+ 5	3	−0.58
108259	21 55 55.60	−30 36 21.1	6.41	G	328.981 681 77	−30.605 871 53	7.92	53.50	−20.00	0.64	0.42	0.78	0.72	0.40	+16	− 5	− 6	+ 7	− 4	+27	+ 1	+37	−10	+ 9	0	−2.16
108260	21 55 56.14	−80 58 20.6	9.52	H	328.983 913 40	−80.972 387 87	3.40	−15.11	−16.84	0.84	0.76	0.96	1.02	0.90	− 5	− 3	− 7	+25	− 7	− 1	− 8	+ 8	− 6	−12	0	0.63
108261	21 55 56.36	−36 25 46.8	10.85	G	328.984 825 07	−36.429 663 88	3.21	29.02	17.86	1.88	1.31	2.19	2.32	1.48	+20	−20	−12	+22	− 1	+ 1	+ 4	+34	−19	+25	2	0.31
108262	21 55 58.81	−33 11 52.9	9.08	H	328.995 044 46	−33.198 027 45	1.92	12.54	−27.71	1.16	0.83	1.43	1.45	0.93	+30	− 7	−28	− 5	− 5	+39	+ 2	+33	−12	+36	0	−0.23
108263	21 55 59.08	+10 05 49.1	7.05	H	328.996 165 65	+10.096 981 39	4.36	−18.85	−7.03	0.81	0.57	0.80	0.98	0.63	+ 8	− 2	− 3	−23	+ 1	+ 4	+ 0	− 1	+ 9	+12	0	0.12
108264	21 55 59.86	−30 55 24.5	7.99	G	328.999 420 46	−30.923 478 30	6.85	−2.90	29.86	0.78	0.51	0.92	0.90	0.50	+15	−11	−17	+ 2	− 7	+31	+ 0	+41	− 8	+ 9	0	−0.59
108265	21 56 01.33	−11 15 14.6	9.41	H	329.005 540 27	−11.254 049 65	2.02	34.25	−9.57	1.25	0.99	1.41	1.64	1.09	+33	−22	− 1	−14	+ 6	+ 7	+ 3	−24	− 3	+38	6	2.71
108266	21 56 02.90	−54 20 01.1	9.25	H	329.012 089 26	−54.333 629 87	4.52	−0.31	−21.43	0.95	0.91	1.53	1.32	0.93	+14	−10	−27	+14	+38	−23	+28	+32	−27	+32	0	1.02
108267	21 56 03.03	−39 18 32.2	7.75	H	329.012 604 94	−39.308 949 53	12.56	31.55	−59.71	0.75	0.56	0.98	0.84	0.48	+22	−14	−33	+ 5	−17	+37	− 5	+12	+ 0	+ 9	0	1.96
108268	21 56 03.42	−52 27 49.2	6.50	H	329.014 265 56	−52.463 665 89	5.23	22.07	−38.62	0.64	0.48	0.82	0.84	0.53	+25	−18	−23	+36	+17	+ 8	+23	+31	−20	+33	0	0.85
108269	21 56 04.48	−51 36 41.5	9.37	H	329.018 654 83	−51.611 540 61	−1.42	9.82	−43.15	1.00	0.77	1.44	1.26	0.90	+15	− 6	−16	+25	+13	− 3	+14	+31	−26	+25	0	−0.02
108270 H	21 56 04.91	+24 20 23.6	7.85	H	329.020 466 91	+24.339 895 72 A	4.49	10.17	−12.75	1.01	0.90	1.04	0.97	0.87	+ 4	+ 4	− 5	−15	+ 9	+ 4	+11	−17	+14	+14	1	−0.03
108271	21 56 05.34	+55 42 37.2	10.89	G	329.022 260 34	+55.710 321 81	23.33	−26.93	−207.62	1.26	1.30	1.61	1.42	1.39	− 1	+20	− 6	−29	+ 9	−26	+10	−29	+12	+24	1	0.96
108272	21 56 05.39	−05 49 45.2	7.46	H	329.022 465 70	−05.829 212 89	7.10	−9.39	−7.18	0.94	0.63	1.07	1.15	0.80	+15	+ 8	−15	−28	+17	+24	+21	−20	+42	+31	0	0.67
108273	21 56 06.33	−36 07 51.1	9.15	H	329.026 363 95	−36.130 870 40	5.47	30.43	−62.17	1.12	0.78	1.34	1.49	0.88	+13	− 9	−28	+22	−19	+11	−10	+30	−29	+ 9	0	−1.96
108274	21 56 07.61	−14 02 07.9	7.79	2 H	329.031 699 13	−14.035 527 24	0.45	16.07	−2.40	0.89	0.56	0.98	1.18	0.58	+23	+ 2	+ 8	− 1	+21	+19	+15	+12	+18	+28	0	−1.49
108275	21 56 08.16	+63 42 15.0	9.00	H	329.033 994 93	+63.704 172 84	0.76	−1.32	−3.42	0.79	0.70	0.86	1.12	0.78	− 2	− 4	+13	+11	+19	+23	+14	− 5	− 2	+ 2	0	−0.60
108276	21 56 09.77	−60 13 46.0	7.95	G	329.040 704 09	−60.229 444 69	8.62	33.65	−0.71	0.72	0.59	1.05	0.89	0.64	+ 4	−18	−23	− 4	− 6	+20	+ 1	+15	−18	+ 5	0	−0.53
108277	21 56 10.22	−58 09 29.4	10.32	G	329.042 601 68	−58.158 170 56	4.82	24.14	−44.40	1.02	1.01	1.84	1.27	1.06	− 7	− 2	−32	−27	+14	− 2	+ 8	+17	−28	+ 5	2	0.67
108278	21 56 12.02	+33 21 57.0	6.99	H	329.050 084 68	+33.365 838 48	2.71	−39.81	−34.37	0.37	0.58	0.72	0.43	0.78	+26	− 9	−12	−12	+19	− 9	+12	+23	+ 7	+43	0	−0.21
108279	21 56 13.80	−33 00 56.5	9.19	H	329.057 505 53	−33.015 691 28	5.29	33.17	0.44	1.15	0.81	1.42	1.26	0.78	+24	− 9	−33	−25	− 4	+31	+ 3	+35	− 5	+26	0	0.38
108280 H	21 56 13.81	−06 58 48.0	7.54	G	329.057 559 13	−06.979 998 70 A	0.93	15.65	0.61	1.70	1.14	1.81	2.12	1.23	+40	+27	−11	−37	− 5	−13	− 5	−27	+25	+44	0	0.01
108281	21 56 14.04	−57 53 58.6	6.17	H	329.058 490 28	−57.899 606 42	6.00	16.13	6.43	0.40	0.40	0.69	0.49	0.42	+ 0	−21	−24	−14	+ 6	+14	+10	+12	−15	+ 0	0	1.91
108282	21 56 15.88	+20 49 52.2	10.25	H	329.066 184 16	+20.831 155 27	18.46	28.84	−166.12	1.42	1.42	1.78	1.50	1.42	+35	+ 2	+ 7	− 1	−10	−15	−12	−31	+ 6	+23	0	0.93
108283	21 56 16.02	+62 53 40.7	7.64	G	329.066 745 81	+62.894 639 88	1.64	−1.67	−3.81	0.55	0.49	0.58	0.60	0.52	−13	+ 0	+ 6	+20	+ 5	− 1	+ 5	−12	+10	−12	0	0.88
108284	21 56 17.11	+05 30 42.9	8.53	H	329.071 311 20	+05.511 904 88	2.39	−25.50	−36.30	1.08	0.85	1.24	1.24	0.96	+17	+ 1	−23	− 3	+21	+32	+27	+33	+21	+43	0	−1.74
108285	21 56 17.53	−09 30 20.7	9.26	H	329.073 055 61	−09.505 743 50	0.69	18.14	4.15	1.22	0.89	1.55	1.52	1.00	+33	+ 8	−11	−14	+ 3	+28	+ 8	− 8	+44	+41	0	−1.17
108286	21 56 18.61	+07 33 14.5	9.03	2 H	329.077 528 47	+07.554 026 75	0.27	7.63	−24.56	1.27	0.94	1.40	1.57	1.00	+13	− 1	+10	−15	− 6	−13	− 5	− 6	+17	+10	0	−2.70
108287	21 56 19.17	+58 24 44.1	7.89	G	329.079 864 96	+58.412 240 88	6.24	6.94	28.95	0.56	0.55	0.66	0.60	0.63	− 6	+ 3	− 6	+15	+11	−10	+11	− 0	− 4	− 1	0	0.71
108288	21 56 20.23	−59 21 03.9	8.39	H	329.084 279 01	−59.351 075 17	13.75	−20.47	− 7.14	0.82	0.70	1.23	1.16	0.81	+ 5	− 1	−18	− 9	+ 9	− 4	+ 4	+27	−16	+16	0	−0.59
108289	21 56 20.62	−04 45 22.9	7.54	H	329.085 921 98	−04.756 365 81	1.68	3.47	− 5.17	0.87	0.62	1.07	1.17	0.82	+29	+11	−22	− 2	+14	+26	+19	+ 5	+38	+53	0	−1.57
*108290	21 56 21.10	−36 48 49.2	7.99	H	329.087 905 68	−36.813 680 34	13.57	−18.58	−73.01	0.78	0.56	0.92	0.87	0.57	+17	−25	− 7	+ 4	− 7	+12	− 5	+22	+ 1	+15	0	−0.04
*108291	21 56 21.01	−59 20 39.0	10.53	H																						
108293	21 56 22.70	−27 56 12.8	9.32	H	329.094 590 78	−27.936 890 04	3.53	17.01	−18.47	1.08	0.90	1.33	1.16	0.84	+21	+ 1	− 7	+12	+ 7	+17	+11	+64	−11	+15	0	−0.74
108294	21 56 22.79	−37 15 13.1	5.45	H	329.094 951 19	−37.253 631 45	10.35	−25.18	− 9.61	0.59	0.43	0.72	0.61	0.43	+23	−24	−14	− 5	− 9	+25	− 4	+19	− 6	+18	0	0.17
108295	21 56 23.68	+36 52 21.0	8.44	G	329.098 673 76	+36.872 486 33	5.39	2.71	1.36	0.60	0.56	0.94	0.72	0.66	−22	− 3	+ 6	− 4	− 4	−11	− 2	−13	+11	− 4	0	1.37
108296	21 56 23.98	+21 14 23.4	6.39	H	329.099 930 76	+21.239 822 86	2.84	1.73	14.62	0.59	0.56	0.77	0.64	0.61	+27	+12	+12	+10	−10	−29	− 8	−12	− 9	+29	0	0.28
108297	21 56 24.58	−55 41 28.3	7.49	H	329.102 411 95	−55.691 190 99	2.73	−25.16	−37.81	0.62	0.49	1.01	0.81	0.51	− 9	+13	−16	+14	− 5	+23	+ 0	− 7	− 7	+ 1	0	−0.59
108298	21 56 24.88	−09 35 09.1	7.97	2 H	329.103 684 05	−09.585 861 00	2.80	17.29	0.50	0.98	0.66	1.18	1.15	0.78	+30	+ 4	− 5	−20	+ 3	+25	+ 4	−13	+25	+43	2	0.02
108299	21 56 25.71	−00 40 47.5	8.93	H	329.107 117 23	−00.679 871 39	9.81	14.50	4.40	1.14	0.92	1.50	1.65	1.16	+42	− 3	−26	− 9	−17	+44	− 7	−45	+47	+61	0	−0.15
108300	21 56 25.95

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
108201	9.411	0.015	8.256	0.010		0.992	0.014	T	0.97	0.01	L	8.3255	0.0017	0.018	114		8.30	8.36					1							S
108202	10.275	0.022	8.176	0.008		1.672	0.015	G	1.68	0.09	H	8.0587	0.0015	0.019	146		8.02	8.09		U			1							
108203	9.552	0.021	9.043	0.021		0.489	0.023	T	0.56	0.02	L	9.0774	0.0021	0.014	76		9.06	9.11					1							S
108204	11.172	0.074	10.502	0.060		0.610	0.072	T	0.68	0.06	L	10.5932	0.0058	0.041	83		10.46	10.65					1 S							G
108205	13.804	0.732	9.299	0.021		4.100	0.510	G	4.14	0.52	J	8.6209	0.0060	0.081	81		8.45	8.78		U 2	21552+5030	I 1	1							
108206	9.505	0.022	8.376	0.015		0.972	0.021	T	0.96	0.02	L	8.4271	0.0019	0.014	85		8.40	8.46					1							
108207	11.025	0.040	9.814	0.022		1.010	0.020	G	0.99	0.02	H	9.8954	0.0024	0.022	156		9.87	9.94		C			1							
108208	9.878	0.025	8.508	0.014		1.160	0.022	T	1.12	0.02	L	8.5377	0.0015	0.015	92		8.51	8.57		C			1							
108209	8.186	0.010	6.323	0.004		1.599	0.002	G	1.57	0.00	J	6.2912	0.0012	0.010	137		6.28	6.31		M			1							S
108210	9.636	0.020	9.500	0.026		0.131	0.031	T	0.15	0.03	L	9.5371	0.0025	0.019	110		9.50	9.57		C			1							G
108211	10.431	0.025	9.205	0.015		1.047	0.023	T	1.02	0.02	L	9.2649	0.0020	0.022	165		9.23	9.30		C			1							
108212	8.016	0.009	6.797	0.006		1.042	0.008	T	1.01	0.01	L	6.8440	0.0011	0.007	89		6.83	6.86		C			1							S
108213	8.224	0.007	6.857	0.004		1.158	0.006	T	1.12	0.01	L	6.8920	0.0007	0.009	206		6.88	6.91		C			1							S
108214	10.637	0.053	9.446	0.030		1.020	0.047	T	0.99	0.04	L	9.5167	0.0021	0.016	64		9.49	9.55		C			1							
108215	8.339	0.010	8.521	0.014		−0.142	0.006	G	−0.14	0.01	H	8.4848	0.0014	0.014	98		8.46	8.51		C			1							S
108216	11.138	0.041	9.914	0.022		1.048	0.010	G	1.10	0.01	I	9.9595	0.0029	0.032	206		9.90	10.02					1							
108217	9.169	0.014	9.072	0.018		0.050	0.015	G	0.06	0.01	H	9.1169	0.0020	0.019	137		9.08	9.15		C			1							
108218	8.944	0.013	7.807	0.009		0.978	0.012	T	0.96	0.01	L	7.8540	0.0012	0.011	94		7.83	7.87		C			1							
108219	10.394	0.031	8.589	0.013		1.533	0.028	T	2.61	0.04	O	8.3449	0.0021	0.021	105		8.31	8.40		U 2			1							
108220	6.712	0.003	6.655	0.004		0.051	0.004	T	0.06	0.00	L	6.6766	0.0007	0.010	172		6.66	6.69					1							S
108221	9.245	0.022	8.587	0.019		0.601	0.022	T	0.67	0.02	L	8.6641	0.0019	0.014	72		8.64	8.69		C			1							
108222	11.299	0.109	10.549	0.085		0.685	0.109	T	0.74	0.09	L	10.7833	0.0050	0.055	108		10.64	10.90			21555+5232	I 3	1 S							P
108223	11.134	0.062	9.324	0.022		1.507	0.052	T	1.54	0.08	L	9.3088	0.0026	0.017	89		9.28	9.34					1							
108224	7.669	0.007	7.716	0.007		−0.038	0.009	T	−0.02	0.01	L	7.7130	0.0009	0.011	143		7.69	7.74		C			1							S
108225	10.065	0.025	9.194	0.019	A	1.000	0.495	G	0.85	0.04	L *	9.1632	0.0020	0.016	85 *		9.13	9.20		D	21555+2724	I 1	2 C A	AB	52	2.231	0.015	2.31	0.06	
108226	5.815	0.005	5.929	0.007	A	−0.037	0.033	G	−0.08	0.01	L *	5.8832	0.0013	0.010	113 *		5.87	5.90		U 2	21555+6519	I 1	2 C A	AB	246	1.308	0.009	2.21	0.03	S
108227	11.575	0.164	10.958	0.140	C						T	11.0974	0.0448	0.370	108 –		10.08	11.46		D	21555+5232	I 3	1 C F C							G
108228	8.543	0.013	7.772	0.011	*	0.640	0.015	G	0.70	0.01	H *	7.8077	0.0018	0.013	65 *		7.79	7.83		D	21555+1053	I 1	2 C A	AB	8	0.581	0.002	0.62	0.01	S
108229	9.605	0.021	8.520	0.014		0.938	0.019	T	0.93	0.01	L	8.5800	0.0015	0.013	75		8.56	8.61		C	21555−4142	I 1	1 S							
108230	8.394	0.034	7.998	0.035	A	0.422	0.015	G	0.49	0.02	H *	7.8525	0.0017	0.013	115 –		7.83	7.88		D	21555+5232	I 3	2 C P C	AB	36	1.594	0.003	0.72	0.02	S G
108231	9.855	0.014	9.307	0.013		0.513	0.017	T	0.59	0.02	L	9.3535	0.0017	0.025	275		9.31	9.40			21556+3849	I 1	1 S							
108232	6.933	0.004	6.655	0.003		0.262	0.005	T	0.29	0.01	L	6.6988	0.0009	0.010	170		6.69	6.72					1 G							S
108233	8.273	0.010	6.811	0.005		1.240	0.015	G	1.20	0.01	H	6.8369	0.0009	0.009	123		6.82	6.86					1							S
108234	7.439	0.004	7.169	0.004		0.257	0.005	T	0.29	0.01	L	7.2197	0.0007	0.011	274		7.20	7.24					1							S
108235	8.294	0.010	8.253	0.012		0.043	0.014	T	0.06	0.01	L	8.2800	0.0009	0.016	272		8.25	8.31			21556+3505	I 1	1 S							S
108236	9.075	0.017	7.333	0.008		1.481	0.015	T	2.70	0.03	O	7.0671	0.0051	0.045	58		7.02	7.15	23.30	P 1 A	21556−2109	I 1	1 S							S
108237	7.353	0.007	7.104	0.008		0.237	0.010	T	0.26	0.01	L	7.1290	0.0015	0.011	61		7.11	7.14					1							S
108238	9.752	0.015	8.045	0.007		1.425	0.013	T	1.41	0.02	L	8.0438	0.0011	0.016	191		8.02	8.07					1							
108239	9.286	0.022	8.722	0.020	*	0.528	0.027	T	0.60	0.03	L *	8.6649	0.0044	0.020	56 *		8.64	8.71		D	21557+0715	I 1	2 C A	AB	178	0.809	0.004	0.71	0.02	S
108240	10.651	0.031	9.124	0.015		1.283	0.027	T	1.24	0.03	L	9.1220	0.0023	0.023	144		9.09	9.17		C			1							
108241	9.531	0.018	8.569	0.013		0.842	0.004	G	0.88	0.00	H	8.6070	0.0016	0.016	102		8.58	8.63					1							
108242	10.736	0.059	9.511	0.031		1.047	0.052	T	1.02	0.04	L	9.6351	0.0021	0.017	81		9.59	9.66		C			1							
108243	9.957	0.022	8.071	0.009		1.567	0.019	T	1.59	0.02	L	8.0076	0.0017	0.014	120		7.98	8.02					1							S
108244	10.007	0.030	8.887	0.020		0.965	0.028	T	0.95	0.02	L	8.9415	0.0024	0.016	75		8.91	8.97					1							
108245	10.046	0.030	8.179	0.012		1.552	0.026	T	1.57	0.03	L	8.1291	0.0016	0.013	81		8.11	8.16					1							
108246	9.330	0.016	9.085	0.018		0.233	0.023	T	0.26	0.03	L	9.1140	0.0034	0.024	93		9.08	9.16					1							
108247	10.396	0.022	9.179	0.013		1.040	0.020	T	1.01	0.02	L	9.2688	0.0024	0.030	190		9.23	9.32					1							
108248	8.991	0.014	7.682	0.009		1.100	0.020	G	1.05	0.02	A	7.7321	0.0021	0.013	84		7.71	7.76					1							S
108249	9.783	0.019	7.853	0.008		1.602	0.016	T	1.62	0.02	L	7.7883	0.0011	0.011	119		7.76	7.81					1							S
108250	9.688	0.016	9.154	0.016		0.509	0.017	T	0.58	0.02	L	9.1977	0.0017	0.017	152		9.16	9.23		C			1							
108251	9.855	0.023	7.939	0.010		1.591	0.020	T	1.61	0.02	L	7.8875	0.0016	0.017	90		7.86	7.91					1							S
108252	9.112	0.017	8.422	0.014		0.637	0.018	T	0.70	0.02	L	8.4764	0.0017	0.013	83		8.45	8.51		C			1							
108253	7.749	0.009	7.710	0.012		0.056	0.004	G	0.07	0.00	H	7.7135	0.0013	0.013	57		7.69	7.73		D			1							S
108254	9.758	0.019	9.160	0.018		0.558	0.019	T	0.63	0.02	L	9.2450	0.0023	0.018	107		9.21	9.28					1							
108255	10.627	0.047	9.801	0.038	*	0.744	0.046	T	0.79	0.03	L *	9.4183	0.0021	0.022	107 *		9.38	9.45		D	21559+1536	I 1	2 C A	AB	155	1.243	0.007	0.03	0.03	
108256	9.651	0.016	8.908	0.013		0.665	0.016	T	0.73	0.01	L	8.9987	0.0019	0.023	164		8.96	9.04					1							
108257	7.933	0.008	7.307	0.007		0.582	0.009	T	0.65	0.01	L	7.3515	0.0010	0.010	118		7.33	7.37		C			1							S
108258	7.097	0.004	6.597	0.004		0.481	0.004	T	0.55	0.00	L	6.6523	0.0008	0.008	122		6.64	6.66		C			1 G							S
108259	7.591	0.007	6.515	0.004		0.927	0.004	G	0.92	0.00	H	6.5711	0.0007	0.007	109		6.56	6.59					1							S
108260	9.939	0.021	9.580	0.022		0.349	0.027	T	0.41	0.04	L	9.5989	0.0030	0.025	133		9.55	9.65					1							
108261	11.397	0.077	11.071	0.093		0.549	0.015	G	0.62	0.01	H	10.9730	0.0042	0.039	93		10.91	11.04		C			1 S							G
108262	10.481	0.034	9.184	0.019		1.103	0.030	T	1.07	0.03	L	9.2520	0.0025	0.016	87		9.23	9.30		C			1							
108263	8.324	0.017	7.172	0.008		0.990	0.015	T	0.97	0.01	L	7.2187	0.0011	0.008	58		7.21	7.23		C			1							S
108264	8.511	0.010	8.037	0.009		0.471	0.015	G	0.54	0.02	H	8.0934	0.0013	0.013	122		8.07	8.11		C	21560−3056	I 1	1							S
108265	10.518	0.048	9.491	0.032		0.894	0.043	T	0.90	0.03	L	9.5713	0.0032	0.021	65		9.54	9.61		C			1							
108266	10.795	0.041	9.388	0.020		1.189	0.036	T	1.15	0.03	L	9.4127	0.0023	0.023	128		9.37	9.47		C			1							
108267	8.326	0.010	7.800	0.012		0.498	0.015	G	0.57	0.02	H	7.8633	0.0010	0.010	85		7.85	7.88		C			1							S
108268	7.662	0.006	6.604	0.004		0.925	0.007	G	0.90	0.02	A	6.6627	0.0009	0.007	128		6.65	6.68		C			1							S
108269	10.398	0.031	9.451	0.022		0.821	0.029	T	0.84	0.02	L	9.5159	0.0026	0.019	123		9.48	9.55					1							
108270	7.911	0.012	7.812	0.013	*	0.097	0.017	T	0.11	0.02	L *	7.8866	0.0016	0.011	82 *		7.87	7.92		D	21561+2420	I 1	2 C A	AB	278	7.211	0.013	2.45	0.05	S
108271						1.700	0.495	G	1.78	0.17	S	11.0189	0.0043	0.040	120		10.95	11.09		R			1							G
108272	8.694	0.015	7.557	0.010		0.978	0.014	T	0.96	0.01	L	7.6250	0.0013	0.010	70		7.61	7.65		C			1							S
108273	9.695	0.021	9.236	0.021		0.446	0.023	T	0.52	0.02	L	9.2532	0.0020	0.018	94		9.23	9.29		C			1							
108274	9.983	0.031	8.036	0.013		1.650	0.028	T	2.64	0.04	O	7.7820	0.0058	0.089	79		7.70	7.95		U 2			1 S							S
108275	9.189	0.018	9.011	0.021		0.171	0.026	T	0.19	0.03	L	9.0599	0.0018	0.022	107		9.02	9.09					1							
108276	8.426	0.010	7.972	0.008		0.453	0.007	G	0.52	0.01	H	8.0359	0.0016	0.018	138		8.01	8.07		C			1							S
108277	10.936	0.035	10.314	0.032		0.510	0.020	G	0.58	0.02	H	10.4520	0.0030	0.037	179		10.38	10.52		C			1 S							
108278	8.760	0.008	7.143	0.004		1.354	0.007	T	1.32	0.01	L	7.1451	0.0008	0.010	200		7.13	7.16					1							S
108279	9.672	0.019	9.220	0.019		0.440	0.021	T	0.51	0.02	L	9.2865	0.0026	0.021	90		9.26	9.32		C			1							
108280	7.542	0.008	7.565	0.010	A	−0.020	0.002	G	0.00	0.00	H *	7.5477	0.0015	0.011	75 *		7.53	7.57		D	21562−0659	I 1	2 C A	AB	44	1.077	0.018	2.36	0.07	S
108281	6.445	0.002	6.199	0.003		0.215	0.005	G	0.24	0.01	H	6.2387	0.0005	0.006	166		6.22	6.25		C			1							S
108282	11.752	0.128	10.349	0.058		1.186	0.110	T	1.15	0.10	L	10.4218	0.0036	0.038	87		10.31	10.49					1							G
108283	7.676	0.006	7.682	0.008		0.052	0.004	G	0.06	0.00	H	7.6751	0.0010	0.009	118		7.66	7.69					1							S
108284	8.627	0.016	8.533	0.019		0.092	0.023	T	0.10	0.03	L	8.5682	0.0022	0.015	61		8.55	8.59		C			1							
108285	10.438	0.040	9.346	0.027		0.944	0.037	T	0.93	0.03	L	9.4267	0.0027	0.020	73		9.40	9.46					1							
108286	11.163	0.078	9.240	0.026		1.631	0.068	T	2.14	0.15	O	9.1000	0.0033	0.029	54		9.06	9.16		U 2			1							
108287	8.250	0.010	7.926	0.009		0.314	0.006	G	0.36	0.01	H	7.9718	0.0013	0.011	124		7.96	8.00					1 G							S
108288	9.088	0.013	8.467	0.012		0.606	0.096	G	0.65	0.01	L	8.5183	0.0025	0.030	151		8.47	8.56		D	21563−5921	I 2	1							S
108289	9.659	0.022	7.725	0.010		1.605	0.019	T	1.62	0.02	L	7.6510	0.0020	0.015	80		7.62	7.68					1							S
108290	8.648	0.012	8.042	0.011		0.563	0.012	T	0.64	0.01	L	8.1159	0.0012	0.011	88		8.10	8.14		C			1							S
108291											T	10.6662	0.0179	0.163	138		9.98	10.82		D	21563−5921	I 2	S							G
108293	10.475	0.036	9.417	0.024		0.908	0.034	T	0.91	0.03	L	9.4693	0.0025	0.018	84		9.44	9.50		C			1							
108294	5.558	0.003	5.465	0.003		0.084	0.004	T	0.10	0.00	L	5.4854	0.0005	0.005	90		5.48	5.49		C			1							S
108295	8.747	0.009	8.475	0.010		0.259	0.013	T	0.29	0.02	L	8.5053	0.0014	0.018	185		8.47	8.54					1							
108296	8.600	0.012	6.581	0.005		1.698	0.002	G	1.79	0.05	F	6.4842	0.0011	0.009	87		6.46	6.50					1							S
108297	9.280	0.013	7.644	0.007		1.369	0.012	T	1.34	0.01	L	7.6398	0.0011	0.013	137		7.61	7.66					1							S
108298	10.023	0.030	8.246	0.013		1.510	0.027	T	2.82	0.04	O	7.9306	0.0092	0.072	69		7.82	8.02		U 2			1 S							
108299	9.590	0.023	8.986	0.021		0.563	0.027	T	0.64	0.03	L	9.0521	0.0019	0.013	80		9.02	9.07		C			1							
108300	8.500	0.009	7.209	0.005		1.098	0.008	T	1.06	0.01	L	7.2561	0.0010	0.010	129		7.24	7.27		C			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
108301 H	21 56 27.30	+59 47 42.4	6.89	G	329.113 750 56	+59.795 104 24	A	1.88	22.24	−0.12	0.91	0.81	0.88	0.97	0.79	− 7	− 9	+ 3	+12	+20	+ 6	+23	− 8	+10	+29	2	1.01
108302	21 56 27.50	−38 24 41.8	8.98	H	329.114 577 25	−38.411 605 54		8.62	34.02	−44.21	1.02	0.73	1.24	1.15	0.70	+27	−15	−16	−12	−15	+36	− 7	+21	+ 9	+17	0	0.18
108303	21 56 28.27	−07 33 59.0	9.52	H	329.117 774 76	−07.566 375 69		2.84	34.28	5.42	1.38	0.87	1.74	1.57	1.10	+31	+29	+ 1	−20	+ 3	+18	+16	− 7	+52	+41	0	0.67
108304	21 56 28.53	−60 34 08.1	9.42	H	329.118 869 06	−60.568 912 44		−1.50	6.40	−13.86	1.03	0.92	1.53	1.26	0.95	+10	−12	−27	− 5	+ 3	+14	+ 5	+18	−14	+18	0	−0.84
108305	21 56 29.12	−53 02 54.0	7.96	H	329.121 338 43	−53.048 340 41	A	6.66	−12.16	4.63	1.30	0.98	1.38	1.43	0.94	+18	−12	− 9	+44	+26	+ 8	+28	+40	− 7	+21	1	1.33
108306	21 56 29.81	−25 29 58.8	7.68	H	329.124 209 40	−25.499 664 12		6.32	79.28	15.67	0.92	0.60	1.10	1.03	0.57	+11	+ 0	−12	+19	−15	+26	− 9	+50	−18	+ 4	0	1.78
108307	21 56 30.36	+12 39 31.7	7.69	1 H	329.126 506 43	+12.658 818 49		3.43	6.59	−10.67	0.84	0.63	0.95	1.20	0.65	+26	− 6	− 2	+ 5	+18	+27	+10	−18	+13	+12	0	1.36
108308	21 56 30.76	−22 06 09.0	9.30	G	329.128 156 80	−22.102 496 56		5.80	71.93	−34.64	1.22	0.76	1.42	1.36	0.74	+20	+ 4	− 8	−15	−21	+27	−15	+23	+ 4	+12	0	−0.52
108309	21 56 31.70	−15 51 18.1	9.52	H	329.132 082 81	−15.855 041 14		2.92	−13.25	−2.54	1.31	0.79	1.41	1.65	0.75	+29	−18	−18	−19	+25	− 9	+15	+ 3	+ 0	+33	0	−0.29
108310	21 56 32.35	−63 18 17.7	8.69	2 H	329.134 801 16	−63.304 914 32		0.68	26.06	−44.60	0.65	0.77	1.28	0.86	0.89	−26	− 7	− 1	−24	+11	− 4	+14	− 7	− 1	−44	1	1.17
108311	21 56 32.41	+21 47 37.3	8.16	H	329.135 033 00	+21.793 691 87		3.02	18.49	3.59	0.74	0.67	0.94	0.84	0.74	+25	+14	+12	+ 7	− 9	−16	− 7	−10	− 2	+26	0	0.71
108312	21 56 34.15	−61 08 45.6	8.47	H	329.142 305 03	−61.146 011 33		7.31	−5.90	8.60	0.53	0.64	1.11	0.58	0.60	−11	− 4	−21	+34	+ 8	+ 8	+10	− 5	+10	− 5	0	0.55
108313	21 56 34.59	+60 00 48.8	8.75	H	329.144 110 67	+60.013 544 64		6.89	−9.50	−23.95	0.85	0.77	0.94	0.99	0.86	+ 5	− 1	+14	+13	+14	+11	+17	−12	+ 5	+25	0	0.79
108314	21 56 35.06	+52 31 44.4	8.63	H	329.146 101 09	+52.529 005 96		2.34	7.04	−4.63	0.63	0.62	0.79	0.70	0.66	+ 0	+16	+ 6	− 8	+11	−18	+13	−15	+ 1	+10	0	−0.27
108315 H	21 56 35.18	+30 52 38.3	9.44	H	329.146 565 62	+30.877 295 31	A	1.08	5.07	5.76	1.91	2.55	1.99	1.55	2.24	+27	+ 1	− 6	+25	+16	−17	+16	+32	+17	+28	1	−0.44
108316	21 56 35.95	+21 09 40.1	6.87	H	329.149 781 03	+21.161 138 32		5.18	39.73	40.18	0.62	0.60	0.81	0.67	0.62	+29	+ 9	+10	+ 8	−10	−28	− 9	−16	− 7	+26	0	1.68
108317	21 56 39.14	+63 37 32.0	5.11	2 H	329.163 100 55	+63.625 566 51		0.39	−0.33	−3.82	0.49	0.42	0.53	0.63	0.46	−13	− 9	+ 6	− 4	+11	+26	+ 8	−12	+ 9	− 2	1	−0.31
108318	21 56 40.23	−13 48 40.9	10.58	G	329.167 618 06	−13.811 357 93		4.02	229.88	39.13	1.69	1.07	1.88	2.21	1.08	+23	+15	+11	− 1	+ 9	+16	+11	+19	+25	+20	0	1.29
108319	21 56 40.45	+16 07 25.6	8.47	1 H	329.168 540 49	+16.123 775 83	A	10.11	−27.36	−32.37	1.61	1.38	1.73	1.86	1.50	+41	−13	− 3	− 5	+12	− 3	+10	−22	− 3	+29	5	0.44
108320	21 56 41.05	+02 32 04.3	10.54	H	329.171 035 68	+02.534 523 16		3.47	−5.62	−7.29	2.36	1.60	2.62	3.74	1.82	+19	+25	−20	+46	−13	+50	+ 1	−16	+23	+27	0	−1.58
108321	21 56 41.17	+04 00 38.6	7.80	H	329.171 527 96	+04.010 734 95		3.95	6.75	−8.57	0.88	0.74	1.09	1.19	0.90	+15	− 4	−24	+16	−20	+31	−13	−17	+35	+27	3	2.16
108322	21 56 42.45	−83 43 35.5	9.30	H	329.176 860 22	−83.726 524 30		13.80	159.26	−80.83	0.74	0.69	0.95	0.91	0.76	+11	−12	−11	−12	+10	−12	+ 8	−16	− 6	−14	1	0.49
108323	21 56 42.59	−76 37 52.9	8.66	H	329.177 445 21	−76.631 374 71		3.97	14.08	1.57	0.74	0.69	0.93	0.91	0.75	− 7	− 6	−24	+16	− 8	− 3	−10	+ 4	+ 7	−27	2	2.28
108324	21 56 42.88	−33 15 14.7	10.01	H	329.178 668 53	−33.254 080 70		3.23	−35.78	0.63	1.58	1.03	1.89	1.88	1.17	+10	+16	−20	+ 4	+ 9	+39	+ 6	+45	+ 4	+37	0	−0.21
108325	21 56 43.00	−24 00 24.1	8.50	H	329.179 150 70	−24.006 684 94		0.37	13.15	−11.06	0.90	0.69	1.10	1.05	0.70	+27	− 1	− 1	+17	− 6	+22	− 4	+45	+ 4	+28	0	1.17
108326	21 56 45.03	+51 34 33.8	8.13	2 G	329.187 635 67	+51.576 042 48		0.08	−1.20	−0.53	0.58	0.56	0.72	0.66	0.62	−10	−11	+ 7	− 2	+16	− 3	+16	− 6	− 2	+ 8	0	0.77
108327	21 56 46.00	−17 53 49.4	6.76	H	329.191 658 88	−17.897 056 76		6.51	17.21	−0.11	0.77	0.60	0.86	1.16	0.61	+21	− 6	−11	+14	− 2	+22	+ 7	+45	+ 4	+ 1	0	−0.46
108328	21 56 47.43	−28 49 03.3	7.91	H	329.197 607 69	−28.817 584 41		6.40	−25.21	−1.40	0.81	0.58	0.97	0.84	0.56	+22	+ 3	−11	+ 4	+15	+20	+13	+58	−11	+26	0	−0.06
108329	21 56 47.60	−46 28 47.5	7.46	H	329.198 314 89	−46.479 865 35		12.89	56.69	−45.11	0.61	0.55	0.96	0.62	0.52	+34	−15	+ 3	−30	+ 2	+23	+ 4	+11	+ 0	+26	0	0.13
108330	21 56 52.29	+36 08 03.6	8.61	H	329.217 869 30	+36.134 339 61		1.72	1.57	−6.01	0.54	0.51	0.92	0.62	0.58	−29	+ 6	− 1	−12	− 3	− 6	+ 0	−23	+12	−16	0	−0.56
108331	21 56 53.21	+17 26 23.2	7.98	H	329.221 727 30	+17.439 789 21		6.96	−14.48	−2.25	0.75	0.79	1.08	0.97	0.93	+33	+10	−30	+ 8	+35	−37	+24	+38	− 9	+43	2	0.71
108332	21 56 53.69	−48 02 18.6	8.49	H	329.223 722 05	−48.038 508 01		3.19	35.52	−32.10	0.78	0.74	1.23	0.86	0.77	+54	−29	−23	+ 6	+10	+12	+14	+30	− 4	+49	1	0.48
108333	21 56 53.80	+65 35 36.6	7.53	H	329.224 169 98	+65.593 500 71		2.23	5.80	−1.88	0.54	0.49	0.59	0.68	0.55	−21	− 9	+ 8	− 3	+ 5	+22	+ 1	−17	+ 2	−33	3	−0.19
108334	21 56 54.71	−13 20 57.5	8.57	H	329.227 973 54	−13.349 296 06		8.96	16.62	18.41	0.96	0.63	1.06	1.28	0.65	+28	+ 6	+ 5	− 1	+18	+15	+15	+23	+19	+30	0	1.20
108335	21 56 54.99	−33 40 47.1	10.04	H	329.229 129 05	−33.679 744 35		5.57	−18.12	23.29	1.51	1.12	2.08	1.90	1.20	+17	+ 8	−38	+ 0	− 1	+43	+ 8	+39	− 8	+34	0	1.07
108336 H	21 56 55.54	−35 21 35.4	7.42	H	329.231 396 21	−35.359 829 21	A	4.13	14.70	−0.52	1.16	0.93	1.14	1.14	0.79	+ 6	− 8	−33	+15	−22	+11	−13	+39	−30	− 2	1	0.26
108337	21 56 55.84	−44 18 46.4	9.00	H	329.232 665 77	−44.312 886 33		2.06	27.75	1.30	1.15	0.80	1.30	1.16	0.80	+24	+ 6	− 6	−25	+ 8	+18	+ 7	+35	− 3	+27	0	0.96
108338	21 56 55.88	+31 51 38.7	7.67	H	329.232 813 25	+31.860 761 26		2.55	−30.13	−27.02	0.67	0.62	0.82	0.85	0.73	+ 3	+16	−11	+32	+ 7	+10	+ 6	+11	+ 0	− 3	0	0.93
108339	21 56 56.39	+12 04 35.5	5.54	H	329.234 953 25	+12.076 525 64		7.41	−28.38	−13.92	0.80	0.51	0.89	1.28	0.55	− 1	− 4	−23	+17	− 7	+47	+ 0	− 9	+ 9	− 6	0	0.99
108340	21 56 56.66	−61 50 46.0	7.20	G	329.236 084 23	−61.846 100 91		6.83	23.46	−39.24	0.38	0.58	0.90	0.53	0.61	−27	+ 5	−19	+12	− 2	+ 9	+14	−11	+ 8	−20	0	1.15
108341	21 56 58.13	−28 12 41.7	8.18	H	329.242 196 10	−28.211 583 45		6.94	15.62	−30.18	0.83	0.58	0.98	0.89	0.55	+13	+ 0	−14	+ 5	+ 0	+20	+ 5	+58	−14	+ 6	0	−1.35
108342	21 57 00.31	+02 45 34.5	8.78	G	329.251 275 25	+02.759 572 04		17.26	−43.92	−196.59	1.39	0.98	1.51	1.87	1.15	+15	+12	−12	+24	−16	+27	− 7	−15	+20	+27	0	−0.88
108343	21 57 00.58	−27 00 56.4	9.07	H	329.252 422 76	−27.015 679 40		6.24	16.54	−4.61	0.97	0.83	1.24	1.06	0.80	+30	+ 4	−11	+17	+10	+24	+14	+66	−15	+25	0	0.00
108344	21 57 02.07	−59 28 28.5	7.94	G	329.258 615 07	−59.474 593 92		16.58	191.77	−111.26	0.74	0.60	1.08	1.03	0.68	+ 3	+ 5	−22	−24	+ 1	−13	− 6	+ 7	−24	+17	0	1.01
*108345	21 57 02.15	+17 40 55.2	7.15	H	329.258 970 36	+17.681 989 97		1.09	2.06	−4.19	0.66	0.65	0.82	0.81	0.84	+42	− 2	−11	+21	+25	−16	+23	+32	−10	+46	0	1.17
*108346	21 57 02.19	−26 28 45.4	7.64	H	329.259 136 26	−26.479 284 74		7.25	−10.00	−64.55	0.85	0.58	1.04	1.00	0.54	+12	+ 1	−24	+23	−18	+30	− 6	+53	−25	− 5	0	−0.19
*108347	21 57 02.14	−37 44 48.7	6.18	1 H	329.258 927 85	−37.746 856 21		7.41	8.81	5.11	0.61	0.45	0.83	0.72	0.45	+18	−13	−20	+10	−12	+47	− 2	+18	− 1	+19	0	0.74
*108348	21 57 02.22	+48 40 06.8	6.51	1 H	329.259 250 36	+48.668 564 13		3.31	5.77	0.80	0.44	0.43	0.55	0.51	0.48	−10	+11	+ 6	− 7	+16	− 9	+15	+ 0	− 1	− 6	1	0.63
*108349	21 57 02.22	−37 39 31.6	7.13	H	329.259 239 11	−37.658 768 44		3.05	21.66	−7.11	0.71	0.52	0.91	0.78	0.52	+26	−21	−18	−14	−10	+39	− 5	+14	+ 1	+26	2	−0.09
108350	21 57 02.47	+45 49 23.1	8.60	H	329.260 304 09	+45.823 079 76		1.28	8.21	5.73	0.72	0.68	1.00	0.82	0.73	−15	+ 3	+22	+16	− 3	− 6	− 4	+ 1	+13	−31	0	0.83
108351	21 57 04.26	+37 54 37.7	9.54	H	329.267 747 58	+37.910 475 22		1.74	1.78	−9.64	0.90	0.87	1.32	1.07	1.03	−11	+ 7	+ 8	+17	−14	−24	−10	− 7	+12	− 9	0	−0.53
108352	21 57 04.51	−19 11 23.7	7.50	G	329.268 783 33	−19.189 907 20		5.25	−21.80	4.32	1.08	0.62	1.15	1.36	0.66	+18	−33	−16	−21	+ 8	+16	+ 4	+42	+20	+15	0	1.04
108353	21 57 04.90	+46 35 32.8	6.78	G	329.270 428 00	+46.592 439 27		2.01	5.89	0.57	0.50	0.49	0.65	0.56	0.53	−26	+17	+ 5	− 6	+ 6	+ 4	+ 8	− 6	+10	−34	0	0.05
108354	21 57 05.08	−76 12 40.9	6.68	G	329.271 151 12	−76.211 372 58		7.42	−98.99	14.91	0.49	0.47	0.64	0.58	0.51	− 6	−11	−17	− 5	− 5	−20	− 8	+ 1	+11	−21	0	−0.16
108355	21 57 05.36	+58 23 11.1	9.10	H	329.272 324 26	+58.386 424 99		2.51	6.41	0.16	0.71	0.68	0.83	0.75	0.72	− 5	+ 1	− 6	− 6	+22	− 6	+21	− 1	+ 5	+11	0	0.99
108356	21 57 05.94	+42 36 58.5	7.95	H	329.274 751 77	+42.616 258 31		1.29	3.43	−0.90	0.47	0.50	0.72	0.57	0.58	−19	+ 9	+ 3	+13	− 5	+11	− 7	+ 1	− 3	−34	0	1.03
108357	21 57 06.72	+27 59 37.4	8.62	H	329.278 003 53	+27.993 715 57		3.11	−9.47	−9.52	0.88	0.83	1.08	0.98	1.02	+ 6	− 4	− 6	+39	− 6	−35	−10	+18	− 5	+12	2	1.45
108358	21 57 07.11	−15 57 40.8	9.61	H	329.279 628 29	−15.961 341 73		4.34	−39.27	−12.48	1.24	0.89	1.41	1.50	0.82	+43	−27	−15	− 1	+11	+11	+ 8	− 4	− 3	+34	0	0.09
108359	21 57 07.30	−35 39 48.6	10.91	H	329.280 434 14	−35.663 501 19		3.60	−60.17	−144.75	1.84	1.37	2.33	2.43	1.53	+ 9	+ 8	−26	+29	− 9	+26	− 3	+47	−22	+11	0	−0.86
108360	21 57 07.92	+16 36 07.1	9.51	H	329.282 988 96	+16.601 959 09		7.95	45.77	19.11	0.98	0.99	1.26	1.30	1.22	+35	+ 2	−15	− 5	− 4	− 4	− 5	−29	+14	+33	0	1.30
108361	21 57 08.26	−49 41 51.9	7.63	H	329.284 400 71	−49.697 758 88		4.71	36.29	−253.36	0.65	0.52	0.93	0.72	0.54	+25	−10	+11	−11	+17	+16	+14	+17	− 9	+33	1	0.11
108362	21 57 09.15	−00 47 00.4	8.30	H	329.288 119 76	−00.783 455 96		7.23	39.14	−32.15	1.07	0.99	1.31	1.35	0.98	+55	−18	−36	−24	−34	+47	−31	−63	+42	+56	0	0.48
108363	21 57 09.79	+83 29 32.9	7.79	G	329.290 807 55	+83.492 470 58		6.40	4.73	−7.52	0.61	0.53	0.63	0.73	0.53	− 2	−14	+23	−25	−13	+12	−10	− 3	− 2	−13	0	0.29
108364	21 57 11.09	+66 09 22.2	6.41	H	329.296 217 47	+66.156 154 19		2.02	5.84	−0.32	0.45	0.44	0.49	0.54	0.48	−20	− 1	+ 7	+16	+ 5	+ 1	+ 3	−15	+ 6	−25	3	1.47
108365	21 57 11.27	−32 27 39.2	8.41	H	329.296 963 05	−32.460 902 33		4.69	1.40	−2.71	0.96	0.64	1.19	1.19	0.64	+21	−12	−24	+ 1	− 1	+38	+ 6	+51	+ 8	+28	0	−0.49
108366	21 57 13.01	+35 20 58.0	8.80	H	329.304 212 62	+35.349 450 28		2.26	9.61	−4.16	0.53	0.52	0.98	0.61	0.59	−30	+ 9	− 4	− 1	− 1	−20	+ 0	− 7	+ 6	−14	0	−0.96
108367	21 57 13.33	+11 27 59.0	8.88	H	329.305 536 21	+11.466 397 19		1.16	16.35	10.15	1.36	0.91	1.33	2.06	0.93	+ 5	+ 1	−29	+52	−21	+22	−21	−13	+22	− 7	2	−0.39
108368	21 57 13.51	+42 05 53.0	9.30	H	329.306 292 61	+42.098 050 38		−0.76	2.54	1.22	0.70	0.76	1.08	0.91	0.90	−20	+ 3	+ 2	+31	− 5	+ 1	− 7	+13	−10	−25	0	1.25
108369	21 57 15.01	+24 19 54.1	8.71	H	329.312 557 46	+24.331 700 77		2.83	−1.76	−0.33	0.84	0.83	1.05	0.99	0.99	+ 5	+ 0	− 1	− 3	+12	− 4	+11	+ 8	+10	+13	0	0.63
108370	21 57 16.74	+04 14 03.5	8.97	H	329.319 770 01	+04.234 303 63		3.25	0.33	−0.18	1.12	0.96	1.39	1.89	1.19	+19	+ 0	−26	+14	−19	+45	−12	−21	+17	+10	0	0.21
108371 H	21 57 17.19	−34 18 21.1	10.47	H	329.321 631 37	−34.305 868 40	A	14.47	14.69	−44.66	3.00	2.41	3.26	3.38	2.19	+35	− 8	−34	− 2	−17	+32	− 5	+27	−17	+20	1	−0.45
108372 H	21 57 17.67	+61 17 43.1	7.00	H	329.323 616 35	+61.295 317 79	A	1.26	−2.01	−3.67	0.87	0.89	0.72	0.77	0.70	+ 1	− 4	+ 5	+16	+ 3	− 2	+ 2	− 3	+ 3	+14	0	0.55
108373 H	21 57 17.70	+32 40 32.4	8.73	H	329.323 745 18	+32.675 667 19	*	0.42	−4.97	3.51	0.68	0.95	1.12	0.66	1.14	+23	+ 9	− 7	+ 2	+13	−20	+11	+25	− 9	+31	0	0.87
108374 H	21 57 17.90	+50 29 22.1	7.29	G	329.324 601 33	+50.489 480 72	A	1.79	1.99	−0.57	0.86	0.80	0.93	0.87	0.79	− 4	−11	−17	− 4	+ 5	− 1	+ 7	+ 1	+ 6	+ 4	1	0.44
108375	21 57 19.77	−37 45 48.0	7.47	G	329.332 387 10	−37.763 334 71		22.73	101.45	−117.99	0.75	0.58	1.01	0.89	0.55	+25	−15	−23	− 2	−26	+52	−16	+ 4	+ 4	+21	0	0.85
108376	21 57 21.07	+59 35 05.2	10.19	H	329.337 778 59	+59.584 786 47		2.01	−6.93	−3.91	1.38	1.28	1.62	1.67	1.44	+ 3	− 7	+ 9	+ 1	+14	+20	+16	−13	+17	+38	0	1.57
108377	21 57 23.18	−79 43 14.0	7.39	H	329.346 596 65	−79.720 553 58		4.61	29.03	−37.08	0.54	0.53	0.66	0.64	0.57	+ 0	−16	−18	+16	− 2	− 2	− 2	+ 0	− 1	− 3	2	2.00
108378	21 57 24.19	+66 08 20.7	6.55	1 H	329.350 791 97	+66.139 076 33		2.19	5.28	2.32	0.48	0.45	0.51	0.57	0.50	−20	− 5	+ 7	+18	+ 5	− 4	+ 3	−12	+ 7	−24	0	1.41
108379	21 57 25.27	−22 41 17.7	8.94	H	329.355 273 33	−22.688 245 37		4.34	−14.51	−33.94	1.03	0.70	1.24	1.19	0.74	+16	+ 7	+14	+15	−12	+25	−14	+36	+15	+23	0	−0.02
108380	21 57 26.01	+08 08 13.0	11.02	G	329.358 390 99	+08.136 957 72		50.43	380.83	103.22	2.01	1.89	2.48	2.80	2.26	+31	−10	−36	+11	−19	+35	− 6	−21	+16	+41	6	−0.08
108381	21 57 26.59	+23 36 03.3	7.70	H	329.360 811 44	+23.600 923 02		5.44	17.94	4.29	0.69	0.64	0.88	0.75	0.72	+14	+21	+ 4	+ 2	+ 5	−15	+ 9	+ 8	+16	+14	0	2.20
108382	21 57 27.75	+48 02 20.0	8.33	G	329.365 631 94	+48.038 895 24		3.57	9.16	2.15	0.61	0.59	0.78	0.71	0.63	−11	+ 2	+20	− 4	+18	− 5	+18	− 5	− 1	− 5	0	1.22
108383	21 57 28.77	−51 36 54.1	8.97	H	329.369 864 34	−51.615 036 99		6.12	27.52	−38.97	0.91	0.78	1.39	1.18	0.90	+28	−13	−30	+25	+16	− 1	+19	+31	−28	+33	0	−2.37
108384	21 57 29.09	+60 01 54.6	10.02	H	329.371 195 95	+60.031 820 79		−0.38	−3.82	−2.73	1.02	0.92	1.13	1.18	1.00	+ 6	+ 8	+12	+11	+15	+16	+18	−14	+ 4	+25	0	0.14
108385	21 57 29.19	+29 18 36.8	7.19	H	329.371 642 07	+29.310 212 31		5.96	−0.98	−44.06	0.50	0.57	0.77	0.65	0.66	+11	+ 9	−10	+42	+ 5	+ 9	+ 8	+17	+10	+14	0	0.04
108386	21 57 29.54	−45 53 06.4	8.87	H	329.373 064 93	−45.885 105 04		7.73	26.88	−56.79	0.81	0.79	1.26	0.77	0.76	+30	−20	+ 7	−19	+17	+27	+17	+17	− 7	+31	1	1.09
108387	21 57 30.53	+67 35 29.4	8.97	H	329.377 198 08	+67.591 496 15		−0.49	−6.81	−9.56	0.72	0.70	0.77	0.95	0.80	−19	− 9	+17	− 9	+21	− 4	+20	−24	− 2	−15	0	0.45
108388	21 57 30.67	+28 56 13.2	8.81	H	329.377 777 55	+28.936 986 57		15.13	167.92	29.25	0.73	0.82	1.12	0.92	1.03	+ 6	− 6	−22	+12	+ 2	− 1	+ 3	+ 9	−17	+ 9	0	0.22
108389	21 57 30.97	+04 09 28.0	7.06	G	329.379 051 70	+04.157 771 31		11.18	0.64	−24.69	0.76	0.69	0.90	1.08	0.82	+22	−12	−11	+ 2	−11	+29	−15	−27	+24	+ 9	0	1.38
108390	21 57 32.40	+41 26 58.2	8.33	H	329.384 996 57	+41.449 510 47		3.27	7.20	0.06	0.53	0.54	0.81	0.63	0.66	−31	+ 3	− 2	+21	+ 0	+ 0	+ 0	+14	+16	−39	1	0.13
108391	21 57 32.60	+43 29 29.4	10.77	H	329.385 853 66	+43.491 490 77		31.68	194.67	−157.58	1.14	1.18	1.85	1.39	1.38	−19	+ 3	− 4	− 4	− 4	+ 5	− 4	− 5	−13	−25	0	0.89
*108392	21 57 36.93	−71 58 53.9	8.59	H	329.403 864 30	−71.981 642 92		3.76	25.84	−11.90	0.69	0.70	0.96	0.80	0.71	−13	+ 7	−12	−20	+ 8	−10	+ 5	−13	−16	+ 1	0	−0.81
*108393	21 57 36.92	+47 25 22.6	8.17	H	329.403 832 65	+47.422 950 50		2.41	2.75	2.37	0.60	0.57	0.74	0.78	0.61	−19	+ 8	+ 3	+ 3	+14	− 5	+11	+11	+ 0	−17	0	0.47
108394	21 57 37.02	+50 50 43.8	8.85	H	329.404 237 45	+50.845 506 42		12.79	−47.31	−38.36	0.69	0.67	0.86	0.77	0.77	−14	+ 6	− 8	−16	+ 3	− 4	+ 3	−13	+18	+ 8	0	0.77
108395	21 57 37.26	+05 00 58.4	9.03	H	329.405 232 13	+05.016 235 40	A	7.03	−20.60	−22.60	3.10	2.45	2.92	3.49	2.52	+ 8	+ 8	−24	+ 1	+ 8	+17	+14	− 5	+38	+ 6	0	0.41
108396	21 57 37.43	+11 56 50.3	7.50	H	329.405 970 04	+11.947 293 52		2.15	6.02	−2.84	0.84	0.57	0.94	1.25	0.65	+ 7	− 5	−25	+ 5	+ 7	+31	+11	−25	+18	+ 9	0	1.72
108397	21 57 37.89	+05 01 23.0	11.57	H	329.407 895 39	+05.023 065 07	B	7.03	−203.20	−23.80	96.61	67.20	2.92	150.59	57.78	+16	+ 0	− 1	+ 0

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
108301	7.036	0.009	6.977	0.010	*	0.090	0.015	G	0.10	0.02	H *	6.9272	0.0010	0.010	97	*	6.91	6.95		D	21565+5948	I 1	2 C A							S
108302	9.512	0.017	9.024	0.017		0.471	0.018	T	0.54	0.02	L	9.0850	0.0017	0.014	88		9.06	9.11		C			1							
108303	10.040	0.035	9.584	0.035		0.430	0.045	T	0.50	0.05	L	9.6094	0.0021	0.020	77		9.58	9.65		C			1							
108304	11.170	0.049	9.577	0.021		1.335	0.042	T	1.30	0.05	L	9.5709	0.0027	0.027	136		9.53	9.62		C			1							
108305	8.257	0.009	7.985	0.011	A	0.259	0.013	T	0.29	0.02	L	8.0296	0.0066	0.019	120	A	8.00	8.07			21565−5303	I 1	2 C A	AC	354	11.518	0.015	2.85	0.09	S
108306	9.053	0.014	7.811	0.009		1.060	0.013	T	1.03	0.01	L	7.8499	0.0014	0.011	87		7.83	7.87		C			1							S
108307	9.585	0.020	7.853	0.010		1.445	0.018	T	1.44	0.03	L	7.8286	0.0021	0.020	91		7.80	7.86		U 2			1							S
108308	10.295	0.035	9.364	0.026		0.770	0.015	G	0.81	0.01	H	9.4538	0.0017	0.018	81		9.42	9.49		C			1							
108309	9.852	0.027	9.557	0.030		0.280	0.043	T	0.32	0.05	L	9.5891	0.0023	0.025	108		9.53	9.63					1							
108310	10.519	0.025	8.859	0.011		1.388	0.022	T	1.36	0.03	L	8.8384	0.0022	0.029	200		8.78	8.91		U 2			1							S
108311	8.394	0.012	8.198	0.013		0.187	0.017	T	0.21	0.02	L	8.2251	0.0015	0.011	71		8.21	8.24		C			1							S
108312	8.677	0.008	8.483	0.009		0.186	0.011	T	0.20	0.01	L	8.5295	0.0013	0.020	209		8.50	8.57		C			1							S
108313	10.133	0.025	8.874	0.015		1.073	0.023	T	1.04	0.02	L	8.9141	0.0022	0.018	101		8.88	8.94		C			1							
108314	8.647	0.010	8.622	0.013		0.020	0.015	G	0.04	0.01	H	8.6436	0.0013	0.013	120		8.63	8.67					1							
108315	9.754	0.021	9.499	0.024	*	0.243	0.030	T	0.27	0.04	L *	9.5050	0.0022	0.022	96	*	9.47	9.54		D	21566+3053	H 1	2 C A	AB	30	0.532	0.019	2.35	0.11	
108316	8.214	0.011	6.979	0.005		1.054	0.009	T	1.02	0.01	L	7.0365	0.0013	0.008	83		7.02	7.05		C			1							S
108317	7.165	0.013	5.344	0.011		1.547	0.014	T	2.57	0.06	O	5.1110	0.0117	0.098	100		4.91	5.41		P 1 C	21567+6338	I 1	1 S							S P
108318	11.443	0.096	10.726	0.083		0.585	0.005	G	0.66	0.01	H	10.7273	0.0042	0.031	77		10.67	10.79												G
108319	9.057	0.013	8.503	0.013	A	0.519	0.016	T	0.59	0.02	L	8.5871	0.0066	0.018	100	A	8.57	8.65		U	21567+1607	I 1	2 C A	AB	271	10.019	0.008	1.58	0.03	S
108320	11.832	0.210	10.521	0.099		1.126	0.191	T	1.71	0.15	K	10.6492	0.0081	0.031	38		10.59	10.70					1							G
108321	9.977	0.033	8.024	0.013		1.620	0.028	T	1.64	0.03	L	7.9129	0.0013	0.017	67		7.88	7.94		C			1							S
108322	10.137	0.021	9.319	0.017		0.722	0.021	T	0.77	0.01	L	9.4408	0.0027	0.024	133		9.39	9.48					1							
108323	10.117	0.022	8.804	0.013		1.115	0.020	T	1.08	0.02	L	8.8328	0.0017	0.018	142		8.79	8.86					1							
108324	10.633	0.042	10.038	0.038		0.555	0.042	T	0.63	0.04	L	10.1281	0.0037	0.030	87		10.07	10.18					1							
108325	9.886	0.024	8.631	0.014		1.070	0.022	T	1.03	0.02	L	8.6700	0.0013	0.011	102		8.65	8.69					1							
108326	8.425	0.010	8.193	0.011		0.221	0.014	T	0.24	0.02	L	8.2207	0.0038	0.039	137		8.17	8.30		U 2			1							
108327	6.840	0.005	6.767	0.007		0.070	0.000	G	0.08	0.00	H	6.7846	0.0008	0.006	78		6.77	6.80		C			1							S
108328	9.205	0.016	8.035	0.011		1.004	0.015	T	0.98	0.01	L	8.0763	0.0017	0.012	97		8.06	8.10		C			1							S
108329	7.894	0.006	7.492	0.007		0.386	0.011	G	0.45	0.01	H	7.5491	0.0010	0.011	148		7.53	7.57		C			1							S
108330	8.646	0.008	8.615	0.011		0.033	0.013	T	0.05	0.01	L	8.6313	0.0014	0.017	240		8.60	8.67					1							
108331	9.178	0.014	8.085	0.010		0.944	0.013	T	0.93	0.01	L	8.1397	0.0013	0.010	89		8.12	8.16		C			1							
108332	9.923	0.020	8.650	0.012		1.084	0.018	T	1.05	0.01	L	8.6537	0.0015	0.017	160		8.62	8.68			21569−4802	I 1	1							
108333	7.489	0.008	7.514	0.010		−0.010	0.015	G	0.01	0.01	H	7.5304	0.0008	0.012	115		7.51	7.55					1							S
108334	9.038	0.014	8.640	0.014		0.389	0.017	T	0.45	0.02	L	8.6621	0.0012	0.014	82		8.64	8.69					1							S
108335	10.840	0.053	10.121	0.044		0.647	0.052	T	0.71	0.05	L	10.1709	0.0034	0.028	85		10.12	10.20		C			1							
108336	7.416	0.006	7.428	0.008	*	−0.010	0.002	G	0.01	0.00	H *	7.4286	0.0011	0.011	91	*	7.41	7.45		D	21569−3522	I 1	2 C A	AB	317	0.551	0.006	2.26	0.03	S
108337	10.310	0.030	9.104	0.018		1.032	0.027	T	1.00	0.02	L	9.1648	0.0020	0.016	88		9.13	9.19		C			1							
108338	9.523	0.020	7.820	0.010		1.422	0.018	T	1.41	0.03	L	7.8076	0.0014	0.012	87		7.79	7.83		C			1							S
108339	5.601	0.004	5.549	0.004		0.054	0.007	G	0.07	0.01	H	5.5645	0.0007	0.006	65		5.56	5.57		C			1							S
108340	7.471	0.004	7.228	0.004		0.232	0.005	T	0.26	0.01	L	7.2672	0.0009	0.012	269		7.25	7.29					1 G							S
108341	8.662	0.012	8.222	0.012		0.415	0.016	T	0.48	0.02	L	8.2751	0.0015	0.010	91		8.26	8.29		C			1							S
108342	9.501	0.029	8.830	0.026		0.623	0.003	G	0.69	0.00	H	8.9186	0.0025	0.015	34		8.88	8.94					1							
108343	9.531	0.018	9.110	0.019		0.411	0.021	T	0.48	0.02	L	9.1604	0.0020	0.018	96		9.13	9.19		C			1							
108344	8.578	0.009	8.015	0.008		0.517	0.002	G	0.59	0.00	H	8.0530	0.0014	0.017	147		8.03	8.08		C	21570−5928	I 1	1							S
108345	9.112	0.014	7.294	0.007		1.520	0.015	G	1.56	0.02	H	7.2733	0.0014	0.010	89		7.26	7.29					1							S
108346	8.183	0.010	7.690	0.008		0.480	0.015	G	0.55	0.02	H	7.7454	0.0013	0.010	91		7.73	7.77		C			1							S
108347	6.573	0.004	6.218	0.004		0.321	0.002	G	0.37	0.00	H	6.2630	0.0018	0.014	90		6.23	6.29		U 2			1							S P
108348	6.405	0.004	6.492	0.004		−0.074	0.005	T	−0.05	0.01	L	6.4906	0.0026	0.021	142		6.46	6.52	0.32	P 1 A			1							S P
108349	8.878	0.014	7.281	0.008		1.338	0.013	T	1.30	0.01	L	7.2850	0.0011	0.010	83		7.27	7.30		C			1							S
108350	10.730	0.036	8.819	0.013		1.587	0.030	T	1.61	0.03	L	8.7167	0.0024	0.022	129		8.68	8.76					1							
108351	10.068	0.023	9.538	0.022		0.497	0.029	T	0.57	0.03	L	9.6447	0.0028	0.027	146		9.60	9.71					1							
108352	8.702	0.047	7.631	0.033		0.931	0.020	G	0.93	0.01	H	7.6801	0.0016	0.008	46		7.66	7.69		C			1							S
108353	8.278	0.009	6.922	0.005		1.149	0.008	T	1.11	0.01	L	6.9410	0.0011	0.010	135		6.92	6.96					1							S
108354	7.936	0.006	6.788	0.004		0.984	0.002	G	0.96	0.00	H	6.8481	0.0007	0.009	150		6.83	6.86		C			1							S
108355	9.220	0.013	9.079	0.015		0.136	0.019	T	0.15	0.02	L	9.1470	0.0015	0.017	123		9.12	9.18					1							
108356	7.973	0.007	7.952	0.009		0.024	0.011	T	0.04	0.01	L	7.9679	0.0011	0.013	174		7.95	7.99		C			1							S
108357	9.508	0.021	8.720	0.017		0.715	0.021	T	0.77	0.02	L	8.7635	0.0027	0.022	79		8.72	8.80					1							
108358	10.162	0.031	9.655	0.031		0.487	0.033	T	0.56	0.04	L	9.7177	0.0024	0.026	103		9.65	9.77					1							
108359	11.727	0.107	10.996	0.087		0.494	0.107	G	0.57	0.11	R	11.0224	0.0047	0.033	88		10.97	11.08		C			1							G
108360	10.110	0.028	9.534	0.025		0.538	0.033	T	0.61	0.04	L	9.6264	0.0025	0.023	99		9.59	9.68		C			1							
108361	8.414	0.011	7.720	0.008		0.640	0.011	T	0.70	0.01	L	7.7618	0.0013	0.011	142		7.74	7.79					1							S
108362	8.857	0.021	8.336	0.020		0.489	0.026	T	0.56	0.03	L	8.4053	0.0018	0.012	63		8.39	8.43		C			1							S
108363	8.107	0.010	7.813	0.008		0.294	0.015	G	0.34	0.02	H	7.8619	0.0011	0.013	131		7.84	7.89		C			1							S
108364	6.328	0.004	6.394	0.005		−0.056	0.006	T	−0.03	0.01	L	6.3990	0.0008	0.006	116		6.39	6.41					1							S
108365	8.869	0.013	8.456	0.013		0.390	0.017	T	0.46	0.02	L	8.4975	0.0019	0.014	100		8.47	8.53		C			1							S
108366	8.887	0.008	8.802	0.010		0.083	0.012	T	0.10	0.01	L	8.8306	0.0013	0.016	233		8.80	8.86		C			1							
108367	10.654	0.057	9.021	0.025		1.367	0.049	T	1.34	0.06	L	9.0240	0.0022	0.017	53		8.98	9.05		C			1							
108368	9.310	0.012	9.341	0.016		−0.024	0.018	T	0.00	0.02	L	9.2968	0.0027	0.030	174		9.26	9.34					1 S							
108369	10.057	0.027	8.811	0.017		1.063	0.025	T	1.03	0.02	L	8.8841	0.0022	0.023	89		8.83	8.92					1 S							
108370	10.808	0.061	9.140	0.025		1.160	0.040	G	1.12	0.04	R	9.1335	0.0025	0.016	54		9.11	9.17		C			1							
108371	12.203	0.167	10.561	0.058	*	1.205	0.015	G	1.16	0.01	K *	10.6014	0.0032	0.025	89	*	10.54	10.64		D	21573−3418	H 1	2 C A	AB	109	0.973	0.016	1.25	0.06	G
108372	7.057	0.005	7.009	0.006	*	0.043	0.007	T	0.06	0.01	L *	7.0189	0.0011	0.009	125	*	7.00	7.04		D	21573+6118	I 1	2 C A	AB	171	0.419	0.001	0.63	0.01	S
108373	9.023	0.012	8.788	0.014	*	0.224	0.017	T	0.25	0.02	L *	8.7993	0.0020	0.019	123	*	8.77	8.85		C	21573+3241	I 1	2 C S B	AS	246	0.182	0.042	0.61	0.76	S
108374	9.238	0.015	7.463	0.007	*	1.433	0.170	G	1.48	0.03	L *	7.4303	0.0013	0.013	135	*	7.41	7.46			21573+5029	H 1	2 C A	AB	190	0.902	0.022	3.40	0.11	S
108375	8.144	0.009	7.531	0.009		0.568	0.009	G	0.64	0.01	H	7.5932	0.0012	0.011	90		7.58	7.61		C			1							S
108376	10.796	0.051	10.174	0.046		0.300	0.015	G	0.34	0.02	H	10.2657	0.0038	0.031	92		10.21	10.33					1							G
108377	8.689	0.009	7.509	0.006		1.011	0.008	T	0.99	0.01	L	7.5613	0.0013	0.012	150		7.54	7.58		C			1							S
108378	8.695	0.011	6.749	0.005		1.614	0.010	T	1.64	0.01	L	6.6614	0.0023	0.016	120		6.64	6.68		U 2			1							S
108379	9.869	0.021	9.009	0.017		0.754	0.021	T	0.80	0.01	L	9.0833	0.0014	0.014	96		9.06	9.11					1							
108380						1.439	0.010	G	1.77	0.03	I	11.0996	0.0050	0.039	56		11.02	11.17		C			1							G
108381	9.202	0.016	7.809	0.009		1.178	0.014	T	1.14	0.01	L	7.8663	0.0010	0.012	83		7.85	7.89		C			1							
108382	8.260	0.007	8.305	0.010		−0.048	0.003	G	−0.03	0.00	H	8.3220	0.0014	0.017	156		8.29	8.36					1							
108383	9.437	0.015	9.001	0.016		0.425	0.018	T	0.49	0.02	L	9.0684	0.0023	0.019	116		9.03	9.11					1							
108384	10.396	0.036	10.117	0.042		0.265	0.052	T	0.30	0.07	L	10.0977	0.0025	0.022	98		10.07	10.14		C			1							G
108385	8.760	0.011	7.317	0.006		1.217	0.010	T	1.18	0.01	L	7.3540	0.0012	0.010	121		7.33	7.37					1							S
108386	9.269	0.013	8.907	0.013		0.352	0.016	T	0.41	0.02	L	8.9580	0.0020	0.019	131		8.92	8.99		C			1							S
108387	9.140	0.016	8.965	0.019		0.168	0.023	T	0.18	0.02	L	9.0251	0.0019	0.015	100		8.99	9.05					1							
108388	9.622	0.023	8.852	0.019		0.685	0.023	T	0.74	0.02	L	8.9469	0.0018	0.016	90		8.92	8.97		C			1							
108389	7.622	0.010	7.112	0.007		0.519	0.006	G	0.59	0.01	H	7.1731	0.0014	0.009	59		7.16	7.18		C	21575+0409	I 1	1							S
108390	8.469	0.007	8.334	0.009		0.130	0.011	T	0.14	0.01	L	8.3816	0.0011	0.015	183		8.35	8.41		C			1							S
108391	12.410	0.201	10.751	0.068		1.806	0.170	G	3.16	0.57	I	10.6271	0.0041	0.040	139		10.56	10.69					1 G							G
108392	9.980	0.019	8.713	0.012		1.079	0.018	T	1.04	0.01	L	8.7602	0.0018	0.020	159		8.73	8.80		C			1							
108393	8.290	0.008	8.190	0.010		0.097	0.012	T	0.11	0.01	L	8.2106	0.0011	0.014	126		8.19	8.24		C			1							S
108394	9.566	0.024	8.921	0.022		0.599	0.028	T	0.67	0.03	L	8.9731	0.0024	0.022	126		8.94	9.00					1							
108395	9.470	0.023	9.069	0.024	A	0.379	0.031	T	0.44	0.03	L	9.1141	0.0229	0.025	59	A	9.08	9.16		R	21576+0501	I 2	1 C P C							S
108396	7.513	0.012	7.493	0.010		0.023	0.014	T	0.04	0.01	L	7.5102	0.0010	0.008	72		7.49	7.53		D	21576+1157	I 1	1							
108397											T	12.2652	0.2990			B				D	21576+0501	I 2	1 C L C							
108398	9.382	0.016	8.016	0.009		1.157	0.014	T	1.12	0.01	L	8.0571	0.0012	0.013	117		8.04	8.08		C			1 G							
108399	8.361	0.011	8.283	0.013		0.077	0.016	T	0.09	0.02	L	8.3121	0.0017	0.013	86		8.29	8.33		C			1							S
108400	8.545	0.008	7.946	0.007		0.530	0.006	G	0.60	0.01	H	8.0108	0.0013	0.016	151		7.98	8.04		C			1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
108401	21 57 39.33	+20 18 08.7	7.28	H	329.413 886 85	+20.302 403 82	7.18	−8.22	−12.23	0.69	0.65	0.90	0.71	0.73	+30	+23	+17	+ 3	−11	−26	− 6	− 9	− 4	+33	0	0.24
108402	21 57 39.35	−08 33 51.6	6.80	H	329.413 958 90	−08.564 330 30	4.71	10.61	5.82	0.81	0.53	0.89	0.94	0.57	+26	+ 7	+12	−14	+28	+24	+22	+26	+26	+39	0	0.63
108403	21 57 39.70	+33 03 16.9	8.94	H	329.415 431 61	+33.054 690 67	0.84	−9.17	−11.07	0.61	0.90	1.09	0.65	1.13	+24	−12	−19	−10	+21	−14	+14	+36	− 4	+36	0	0.60
108404	21 57 39.74	+37 02 14.7	9.16	H	329.415 597 46	+37.037 418 59	3.36	−6.80	−20.84	0.80	0.72	1.22	0.97	0.82	−26	+ 4	+ 9	+ 2	− 6	−14	− 1	−14	+ 4	− 9	0	−0.09
108405	21 57 41.24	−51 00 18.9	10.36	G	329.421 816 11	−51.005 255 42	61.63	−30.94	−373.28	2.46	3.16	2.67	3.09	3.55	+51	−41	−11	−63	−50	+13	−36	−76	−12	+71	0	−0.76
108406 H	21 57 41.26	−00 37 43.6	8.73	H	329.421 907 95	−00.628 781 15 B	4.90	−61.79	−59.55	3.55	2.94	3.05	3.73	2.12	+44	−12	−19	−11	−18	+29	−16	−27	+29	+41	1	−0.42
108407	21 57 41.62	−08 34 54.4	8.55	H	329.423 421 41	−08.581 768 27	5.10	6.88	6.30	1.04	0.61	1.09	1.18	0.67	+15	+ 7	+ 8	−32	+24	+24	+20	+ 6	+27	+28	2	1.69
108408	21 57 41.78	+10 26 26.0	7.30	H	329.424 074 63	+10.440 560 43	13.72	−5.22	−46.62	0.87	0.72	1.08	1.04	0.83	+ 6	+26	−39	−19	− 4	+ 8	+ 9	−35	+37	+22	0	−0.03
108409 H	21 57 43.18	+20 14 29.9	8.47	H	329.429 897 43	+20.241 650 75 A	7.23	47.22	3.07	1.64	1.56	1.87	1.59	1.76	+38	− 3	+12	+ 7	− 9	−23	− 2	−15	+11	+39	1	−0.16
108410	21 57 43.29	−48 50 42.4	8.60	H	329.430 386 48	−48.845 111 84	5.48	19.86	−17.46	0.68	0.61	1.04	0.79	0.68	+42	−27	− 8	+17	+12	+ 1	+16	+28	−11	+39	0	−1.89
108411	21 57 43.35	−36 38 20.4	8.07	H	329.430 623 84	−36.638 991 08	5.37	5.12	−33.16	0.83	0.61	0.96	0.99	0.63	+15	−15	− 1	+20	−15	+23	−14	+19	+ 7	+11	0	−0.63
108412	21 57 43.85	+33 23 05.1	8.02	H	329.432 707 76	+33.384 757 12	8.87	10.71	−33.69	0.45	0.73	0.89	0.52	0.89	+26	− 9	−11	−10	+23	− 9	+15	+29	+ 5	+42	0	−0.23
108413	21 57 45.85	+10 07 58.8	8.12	H	329.441 045 48	+10.133 012 68	3.84	8.43	−4.14	0.99	1.06	1.14	1.18	1.20	+35	+ 3	−14	−27	−14	+ 7	−14	−49	+25	+31	5	0.38
108414	21 57 47.44	−15 07 23.8	7.38	H	329.447 652 74	−15.123 270 51	7.59	12.17	−25.76	0.85	0.51	0.91	1.06	0.51	+20	−25	−11	+ 2	− 1	+ 9	+ 3	+ 8	−10	+14	0	−0.30
108415	21 57 47.52	+19 52 41.5	7.47	H	329.447 997 28	+19.878 199 32	6.47	29.16	−22.98	0.66	0.67	0.87	0.72	0.78	+34	+20	+ 6	− 8	+ 0	− 6	− 1	− 4	−10	+35	0	0.81
108416	21 57 49.22	−29 06 57.7	9.05	H	329.455 086 09	−29.116 026 53	32.13	53.63	−132.86	3.58	2.35	4.31	3.86	2.29	+21	− 8	−17	−18	− 4	+27	+ 2	+24	−14	+16	5	
108417	21 57 49.31	+28 41 30.6	8.93	H	329.455 452 07	+28.691 819 65	2.27	−7.61	−1.26	0.92	1.00	1.14	0.98	1.05	+23	+ 7	+20	+13	+ 1	+ 5	+ 0	−13	−11	+26	0	0.05
108418	21 57 49.40	−67 07 23.3	8.12	H	329.455 846 34	−67.123 132 07	8.21	7.34	4.05	0.56	0.58	0.89	0.68	0.60	−12	−11	− 7	− 8	+ 1	− 1	+ 3	−12	−16	−15	0	1.03
108419	21 57 50.33	−17 47 05.6	11.70	G	329.459 705 93	−17.784 900 80	24.09	−101.48	−329.34	2.57	1.86	3.09	3.45	1.86	+38	− 2	− 1	+ 0	+10	+21	+ 5	− 4	+28	+36	0	−0.32
108420	21 57 51.07	+74 59 48.3	6.32	1 H	329.462 775 35	+74.996 739 98	2.93	−3.40	−10.65	0.52	0.44	0.52	0.61	0.46	−	8	+10	+10	−12	+ 8	− 9	+ 9	−25	+10	−16	0	0.08
108421	21 57 51.16	−47 32 48.7	8.89	H	329.463 146 03	−47.546 854 48	3.10	18.19	−0.44	0.83	0.74	1.22	0.88	0.76	+33	−19	−15	−12	+15	+15	+13	+23	+ 1	+41	1	−0.08
*108422	21 57 51.40	−68 12 49.4	8.90	2 H	329.464 172 53	−68.213 717 14	18.20	41.72	−86.48	0.75	0.89	1.17	0.83	0.96	−	5	+ 4	−18	+10	+13	− 5	+12	+12	− 5	+ 1	0	1.34
*108423	21 57 51.31	+27 12 55.8	8.55	G	329.463 799 33	+27.215 513 07	6.97	56.04	−23.63	0.85	0.80	1.06	0.97	0.93	+11	+ 9	+ 9	+ 6	+ 2	−17	+ 4	+10	+ 7	+10	0	0.85
*108424	21 57 51.36	+46 51 52.0	7.56	H	329.463 983 75	+46.864 440 76	1.89	3.21	−0.38	0.54	0.48	0.68	0.60	0.51	−20	+18	+ 4	+ 0	+ 5	+11	+ 5	− 4	+ 5	−27	0	−0.07
*108425	21 57 51.93	+51 02 16.2	8.89	H	329.466 382 91	+51.037 825 51	3.45	6.29	0.08	0.68	0.63	0.83	0.77	0.73	−11	+ 5	−10	− 3	+ 4	+ 4	+ 6	− 8	+21	+ 9	0	1.62
*108426	21 57 51.93	+61 01 07.9	7.85	2 T	329.466 382 77	+61.018 871 30	1.38	−5.78	−3.73	0.55	0.51	0.61	0.69	0.59	+	2	− 2	+14	+17	+ 9	−12	+13	+ 1	− 7	+19	1	−0.61
108427	21 57 52.70	+56 09 50.1	10.69	3 H	329.469 564 46	+56.163 908 76 *	1.54	−2.50	−0.86	1.30	1.22	1.52	1.28	1.32	−	5	+12	+14	−17	+10	−19	+ 9	−30	− 5	+22	0	1.38
108428	21 57 53.07	+00 36 00.8	7.96	H	329.471 120 12	+00.600 223 61	5.38	1.54	11.21	1.06	1.01	1.34	1.45	0.99	+27	+ 6	−38	+ 6	−38	+43	−24	−44	+23	+32	0	1.43
108429	21 57 53.37	−64 35 57.5	8.75	H	329.472 378 86	−64.599 304 58	10.70	93.57	−56.33	0.62	0.74	1.12	0.70	0.74	−30	− 8	−12	+ 2	− 7	+11	− 7	−10	+ 3	−44	0	0.43
108430	21 57 54.25	+24 44 53.2	8.23	H	329.476 049 72	+24.748 120 16	3.38	−11.33	4.17	0.94	0.68	0.95	1.18	0.73	−	8	+ 1	+ 2	−38	+24	+24	+20	+12	+17	− 1	2	1.70
108431 H	21 57 55.03	−54 59 33.2	4.40	G	329.479 295 77	−54.992 566 60 *	17.65	43.00	−3.67	0.53	0.39	0.78	0.63	0.39	−16	+ 9	−22	− 8	+15	+ 0	+13	− 2	− 6	− 3	2	0.49
108432	21 57 55.22	+12 57 52.3	9.64	H	329.480 066 53	+12.964 534 51	8.72	52.69	−26.72	1.19	1.09	1.48	1.61	1.38	+41	−18	−28	− 1	+11	+ 7	+ 4	−37	+29	+34	0	−0.06
108433	21 57 55.35	+49 04 04.4	9.48	H	329.480 643 78	+49.067 875 39	−0.84	−5.37	−2.97	0.69	0.69	0.86	0.79	0.81	−	2	+10	+ 2	− 9	+12	− 4	+12	+ 6	− 6	− 5	0	0.90
108434	21 57 56.12	+50 50 43.8	8.88	H	329.483 844 29	+50.845 490 56	19.63	271.96	77.84	0.68	0.68	0.86	0.76	0.78	−11	+ 6	− 7	−17	+ 2	− 3	+ 3	−18	+16	+12	0	−1.19
108435	21 57 58.38	+76 05 23.5	7.84	H	329.493 247 50	+76.089 852 82	4.32	24.76	41.09	0.58	0.55	0.63	0.64	0.55	−	4	− 2	+ 1	+ 3	− 3	− 1	− 2	−22	+16	− 1	0	−1.20
108436	21 57 58.98	−42 50 33.6	8.73	H	329.495 749 07	−42.842 662 54	10.18	−31.98	−15.12	1.02	0.71	1.16	1.38	0.69	−	8	+ 8	−24	+24	−33	+30	−21	+35	− 4	−28	0	0.89
108437	21 58 00.70	−53 32 57.5	8.73	H	329.502 919 84	−53.549 309 59	3.06	13.92	−4.18	0.81	0.61	1.19	1.12	0.67	−	3	+ 3	−23	+36	+ 6	− 6	+ 4	+16	−26	+ 3	0	0.92
108438	21 58 01.03	−05 12 14.0	8.30	H	329.504 276 28	−05.203 900 94	18.12	123.93	−116.59	0.97	0.59	1.10	1.22	0.63	+21	+14	− 8	− 7	+ 9	+30	+13	− 2	+29	+30	0	−0.90
108439	21 58 01.44	+05 56 25.4	7.20	G	329.506 020 49	+05.940 387 55 A	11.00	11.73	−12.27	2.48	1.84	2.42	2.57	2.00	+	7	+30	−27	+ 1	− 5	+40	+19	−17	+42	+36	21	2.89
108440	21 58 01.95	+43 08 58.8	7.79	G	329.508 106 81	+43.149 670 48	5.07	32.42	−7.23	0.55	0.53	0.82	0.62	0.60	−25	+25	− 4	+ 3	+ 2	+24	+ 1	+ 5	− 9	−37	1	0.07
108441	21 58 02.05	+05 56 31.5	7.76	H	329.508 529 03	+05.942 069 81 B	15.98	22.32	−14.17	6.40	4.48	4.59	5.78	3.84	+	8	+29	−22	+ 9	− 2	+39	+18	− 7	+41	+36	21	2.89
108442	21 58 02.27	−35 03 27.7	8.60	H	329.509 472 84	−35.057 703 19	8.37	18.07	−12.04	0.99	0.70	1.18	1.13	0.82	+14	− 7	−20	+ 8	−14	+ 7	−10	+31	−30	+12	4	1.60
108443	21 58 03.09	+19 04 57.3	9.48	H	329.512 858 14	+19.082 571 02	11.21	93.14	20.30	1.17	1.13	1.40	1.47	1.33	+41	−12	−13	−29	+ 4	+ 3	+ 7	+ 3	+ 0	+31	0	0.72
108444	21 58 03.47	+26 32 20.7	8.36	H	329.514 468 45	+26.539 072 40	4.48	0.02	−26.07	0.77	0.77	0.95	0.83	0.83	+21	+11	+14	+11	− 1	− 6	+ 1	+ 2	+ 8	+25	0	−0.25
108445	21 58 04.86	−65 17 09.6	9.86	2 H	329.520 229 61	−65.286 013 52	8.27	42.61	12.84	0.93	1.00	1.52	1.03	1.09	−28	−28	+12	− 4	+ 5	+ 2	+ 3	−10	+ 3	−42	1	1.99
108446	21 58 06.28	−56 42 20.6	7.40	H	329.526 185 56	−56.705 716 42	1.61	28.74	−13.36	0.59	0.46	0.84	0.66	0.47	−	7	−18	−20	+ 8	+12	+17	+20	+ 2	−15	+13	0	0.31
108447	21 58 06.37	+38 55 36.9	7.67	H	329.526 553 51	+38.926 910 18	2.22	−1.82	−6.11	0.40	0.48	0.72	0.46	0.55	−51	+ 4	+ 0	+ 7	+17	− 1	+16	−13	+ 0	−55	0	−0.71
108448 H	21 58 07.78	−03 29 23.6	7.42	H	329.532 399 56	−03.489 882 72 A	8.47	9.48	5.65	2.04	1.20	2.02	2.28	1.35	+35	+11	−15	+11	+27	+ 8	+24	− 2	+45	+43	1	0.90
108449 H	21 58 09.69	−79 00 35.4	9.63	H	329.540 374 73	−79.009 846 75 *	9.03	33.68	21.45	0.83	0.87	1.09	1.04	1.00	+	3	−12	−30	+12	+ 9	− 6	+ 7	+ 1	+11	+11	0	2.16
108450	21 58 11.15	+43 14 19.7	7.43	G	329.546 448 52	+43.238 804 04	1.01	4.28	−7.03	0.53	0.50	0.75	0.60	0.55	−30	+17	+ 2	−10	+ 3	+ 8	+ 5	+ 1	+ 5	−41	0	−0.21
108451	21 58 11.75	−23 13 49.7	8.09	H	329.548 957 32	−23.230 477 37	2.39	15.41	−9.52	0.94	0.65	1.07	1.13	0.67	+12	+ 1	+ 3	+43	−15	+12	−11	+50	− 2	+16	0	0.07
108452	21 58 11.88	−15 05 27.5	8.74	H	329.549 494 03	−15.090 964 92	1.64	15.71	1.59	1.29	0.69	1.24	1.58	0.69	+10	−14	−22	−26	+28	−10	+19	+28	−15	+20	0	0.20
108453	21 58 13.28	−05 25 28.8	6.33	H	329.555 349 53	−05.424 666 89	17.98	41.40	−104.86	0.69	0.47	0.81	0.82	0.47	+27	− 1	− 6	− 7	+11	+40	+12	+ 4	+15	+32	0	−2.53
*108454	21 58 13.67	−40 59 15.9	9.81	H	329.556 938 61	−40.987 736 66	7.24	−39.20	−19.23	1.52	1.17	1.64	1.88	1.17	+46	−22	−27	+41	+30	+ 4	+36	+60	−25	+38	0	−0.38
*108455	21 58 13.73	−40 09 36.7	7.95	H	329.557 220 26	−40.160 186 67	4.56	42.10	−8.72	0.76	0.62	0.98	0.83	0.59	+28	−12	−15	+17	+ 6	+23	+12	+38	−19	+19	0	−0.31
*108456	21 58 13.53	+82 52 10.8	6.92	H	329.556 381 01	+82.869 666 45 A	25.38	−129.14	−74.41	2.42	2.16	1.92	2.53	2.16	+	2	− 9	+ 3	+13	− 4	+ 1	− 5	− 4	+ 4	− 3	0	−1.27
108457	21 58 16.16	+09 10 51.9	12.33	G	329.567 337 93	+09.181 093 59	19.41	77.62	3.19	3.50	2.83	4.08	4.96	3.72	+16	− 1	−11	+ 6	−12	−11	−12	−22	+29	+16	0	0.94
108458	21 58 17.67	−12 06 07.8	8.25	H	329.573 610 47	−12.102 164 22	0.31	21.41	−15.44	1.05	0.61	1.03	1.25	0.59	+	4	−16	+ 9	−39	+29	+ 8	+20	+ 4	+20	+ 6	0	0.03
108459	21 58 18.67	−02 45 12.7	8.21	H	329.577 799 91	−02.753 523 55	13.01	−31.10	−24.78	1.11	0.64	1.19	1.52	0.75	+36	− 5	−21	+24	+34	−14	+30	− 1	+18	+49	0	−0.03
108460 H	21 58 19.95	−01 49 46.4	9.13	H	329.583 141 60	−01.829 563 61 A	9.37	63.72	−33.97	3.83	2.33	3.28	3.71	2.39	+36	− 6	− 9	− 7	+23	+24	+29	−12	+20	+33	1	−0.64
108461	21 58 20.37	+82 52 16.2	7.45	H	329.584 895 65	+82.871 158 16 B	26.03	−132.18	−40.27	8.51	8.36	4.56	5.85	5.30	+	0	−11	+ 5	+ 7	− 3	+ 0	− 5	−10	+10	− 5	0	−1.27
108462	21 58 20.75	−07 34 02.5	9.37	H	329.586 470 08	−07.567 347 73	2.86	17.23	1.17	1.23	0.78	1.33	1.54	0.77	+28	+ 6	+ 1	−22	+24	− 3	+20	+19	+22	+25	0	1.17
108463	21 58 21.20	−62 42 38.8	8.84	H	329.588 339 67	−62.710 766 00	3.71	14.21	−4.95	0.65	0.74	1.20	0.76	0.79	−12	−10	− 2	+11	+ 5	− 7	+ 4	+ 6	− 4	−17	0	0.16
108464	21 58 21.65	−65 33 43.2	10.30	G	329.590 228 99	−65.562 013 40	13.25	−287.42	−50.50	1.54	1.70	2.64	1.76	1.80	−24	+ 4	+ 0	−17	+ 4	+ 8	+ 5	− 9	−14	−35	2	
108465	21 58 23.22	+44 08 44.7	7.74	H	329.596 741 45	+44.145 744 94	2.56	−6.53	−9.28	0.56	0.56	0.78	0.64	0.61	−15	− 3	+ 6	− 2	− 5	+ 3	− 5	− 2	+ 7	−20	0	−0.83
108466	21 58 23.45	+73 32 05.3	11.11	H	329.597 708 01	+73.534 816 36	16.04	144.09	172.99	1.26	1.21	1.41	1.31	1.36	+	3	− 8	+ 8	−36	+ 6	+ 1	+ 3	−18	+ 2	+20	0	0.22
108467	21 58 23.97	+75 35 20.4	10.56	H	329.599 890 19	+75.589 002 73	47.95	231.83	22.60	1.05	0.92	1.08	1.23	1.08	−	1	+ 0	+ 2	+ 0	+ 2	− 4	+ 5	−25	− 3	+ 9	0	1.99
108468	21 58 24.31	−12 39 53.3	7.16	H	329.601 274 28	−12.664 808 02	29.06	33.59	61.61	0.89	0.49	0.89	1.05	0.49	+	7	−13	+ 7	−19	+17	+13	+12	+ 0	+11	+ 9	0	1.41
108469	21 58 24.79	−84 26 07.6	8.98	H	329.603 304 13	−84.435 432 40	2.70	14.43	−15.96	0.74	0.61	0.84	0.96	0.75	+	8	−22	− 4	+ 3	+ 8	− 7	+ 7	− 5	− 4	− 5	0	1.09
108470	21 58 24.97	−38 08 21.6	8.20	H	329.604 038 37	−38.139 339 67	2.51	14.52	−18.32	0.86	0.64	1.14	1.05	0.57	+12	− 2	−29	+ 3	−21	+44	− 9	+ 3	− 4	+ 1	0	−0.02
108471	21 58 27.31	+14 01 20.4	6.53	H	329.613 807 96	+14.022 331 41	4.41	33.89	−58.19	0.67	0.57	0.90	0.94	0.71	+22	−21	−28	−34	+16	+20	+ 9	−34	+37	+11	0	0.21
108472	21 58 27.57	−57 31 36.6	9.64	H	329.614 867 81	−57.526 845 18	1.96	15.98	−7.49	0.94	0.99	1.54	1.19	1.00	+	0	− 9	−32	− 3	+22	− 1	+19	+ 9	−11	+16	0	0.24
108473	21 58 28.56	+03 46 38.1	6.95	H	329.619 005 54	+03.777 240 24	23.68	−248.23	−133.05	0.87	0.89	1.05	1.28	1.08	+37	+15	− 7	+20	−24	+41	−19	−29	+19	+40	6	2.49
108474	21 58 28.61	−29 44 19.3	8.98	H	329.619 205 73	−29.738 688 94	7.31	4.06	−5.68	1.03	0.65	1.19	1.23	0.62	+11	+ 3	−14	+ 4	−16	+25	−10	+34	+ 3	+12	0	−1.12
108475	21 58 29.01	−44 45 21.0	8.28	G	329.620 883 28	−44.755 838 29	10.54	16.30	−3.12	0.93	0.70	1.06	1.01	0.70	+33	− 2	− 7	−12	+ 6	+ 2	+ 7	+33	−14	+30	0	−3.19
*108476	21 58 29.76	+54 29 05.6	8.89	2 H	329.624 011 37	+54.484 890 64	0.27	−1.35	−3.83	0.71	0.67	0.87	0.86	0.75	−	8	+ 2	− 3	−10	+22	− 9	+19	− 6	+ 9	+33	0	−1.94
*108477	21 58 29.76	−13 15 07.8	7.47	H	329.623 998 88	−13.252 156 06	3.17	15.67	−7.65	0.86	0.59	0.93	1.18	0.62	+23	+ 3	+ 8	+ 3	+21	+16	+18	+26	+ 7	+19	2	0.48
108478	21 58 30.07	−59 00 44.0	6.13	2 H	329.625 302 72	−59.012 210 07 +	15.04	6.81	28.65	2.96	2.31	1.10	0.87	0.55	−45	+15	−71	−18	+39	−35	+11	− 6	−15	+21	0	0.01
108479	21 58 30.13	−41 43 15.5	6.77	1 H	329.625 552 48	−41.720 972 90	3.16	−22.30	−6.40	0.68	0.52	0.82	0.82	0.51	+21	− 1	−19	+13	− 2	+26	+ 5	+36	− 7	+13	0	−2.03
108480	21 58 30.37	−59 53 50.4	9.27	1 H	329.626 561 51	−59.897 327 00	5.72	3.63	−21.20	0.93	0.92	1.51	1.17	0.94	+	7	−12	−31	−10	+ 0	+10	+ 5	+ 7	−21	+ 9	0	0.63
108481	21 58 31.60	+34 39 32.0	9.09	H	329.631 647 54	+34.658 877 70	31.70	−113.81	−34.80	0.74	0.98	1.23	0.93	1.24	+27	−19	−20	+14	+22	−35	+17	+25	−21	+48	0	−2.31
108482	21 58 32.96	−53 59 15.7	8.51	H	329.637 345 95	−53.987 691 91	7.33	1.69	24.93	0.78	0.61	1.21	1.10	0.64	+	2	+ 4	−25	+28	+17	− 8	+12	+13	−21	+ 9	0	0.48
108483	21 58 33.46	+15 18 25.9	7.79	H	329.639 434 51	+15.307 187 11	5.20	2.21	11.67	0.80	0.63	1.02	1.05	0.77	+18	− 1	−20	−31	+18	+ 2	+15	−24	+44	+ 3	0	0.23
108484	21 58 34.95	−44 03 45.0	6.54	G	329.645 625 88	−44.062 489 04	14.40	13.74	−50.15	0.82	0.54	0.84	0.93	0.53	+20	+ 5	− 9	−29	− 8	+ 5	− 1	+28	+ 1	+ 9	0	−0.33
108485	21 58 36.57	+06 00 50.0	7.98	H	329.652 375 80	+06.013 897 77	8.13	19.39	−8.49	0.83	0.79	1.10	1.07	0.84	+26	− 9	−26	+16	−13	+37	− 9	−25	+40	+27	0	−1.50
108486	21 58 37.75	−45 44 36.4	7.71	2 H	329.657 278 28	−45.743 430 76	4.71	13.98	11.78	0.70	0.55	0.96	0.65	0.50	+23	−22	−11	−13	− 3	+35	+ 0	+10	+ 4	+19	0	0.37
108487	21 58 38.41	−32 21 19.7	7.95	G	329.660 041 64	−32.355 462 92	4.18	16.60	0.89	1.07	0.76	1.19	1.46	0.78	+37	− 9	−18	+35	+20	+33	+25	+55	+11	+48	4	−0.50
108488	21 58 39.58	+00 32 22.0	7.63	H	329.664 901 69	+00.539 457 83	3.40	32.14	−6.77	0.93	0.90	1.33	1.29	0.91	+33	− 5	−47	+ 2	−32	+49	−13	−31	+37	+41	0	0.57
108489	21 58 40.32	+52 51 11.6	8.88	H	329.667 982 70	+52.853 208 63	0.06	−4.38	−7.62	0.68	0.68	0.84	0.72	0.74	+	5	+ 2	− 4	+ 0	+16	−20	+15	+ 7	− 6	+19	0	−0.37
108490	21 58 41.08	+29 48 48.8	6.95	H	329.671 150 15	+29.813 568 73	34.12	−361.74	−386.30	0.47	0.58	0.70	0.59	0.69	+14	+10	−17	+47	+ 3	+ 0	+ 4	+16	+ 5	+18	0	−0.68
108491	21 58 41.35	+22 34 20.0	8.28	H	329.672 297 92	+22.572 230 68	11.13	71.86	−7.79	0.96	0.80	1.06	1.20	0.89	+21	− 8	+ 0	−18	−11	+ 9	−11	−20	+14	+ 9	0	1.27
120229	21 58 41.72	+23 04 16.3	9.37	G																						
108492	21 58 42.67	+54 14 52.8	8.48	H	329.677 773 29	+54.248 009 72	1.77	2.05	−2.76	0.67	0.62	0.80	0.78	0.67	−	8	−12	+ 7	−22	+31	− 5	+19	+ 5	+ 8	+30	0	−0.85
108493	21 58 43.65	−64 07 49.1	8.28	H	329.681 873 50	−64.130 313 08	1.25	5.16	3.41	0.56	0.65	1.05	0.65	0.68	−27	+ 0	− 8	−10	− 1	+ 2	− 1	−20	+ 2	−43	0	0.41
108494	21 58 43.78	−21 10 58.5	6.06	2 H	329.682 402 04	−21.182 929 43	1.15	27.77	−6.28	0.75	0.51	0.81	0.90	0.51	+18	− 8	− 3	−21	−11	+21	− 5	+15	− 2	+ 4	2	0.46
108495	21 58 44.33	−25 34 18.5	9.28	H	329.684 694 65	−25.571 804 35	10.23	132.99	−45.13	0.94	0.69	1.18	1.01	0.69	+21	− 7	− 6	+ 4	− 7	+25	− 2	+35	−18	+11	0	−0.22
108496	21 58 45.16	+00 48 37.1	10.26	G	329.688 168 61	+00.810 318 84	13.31	−68.64	−240.45	1.68	1.53	2.15	2.04	1.60	+31	− 6	−35	− 8	−25	+29	−18	−42	+40	+33	0	0.04
108497	21 58 46.23	−82 45 11.4	8.55	H	329.692 641 87	−82.753 170 36	5.46	30.31	−0.15	0.76	0.67	0.87	0.90	0.77	+	0	−10	− 7	−24	+ 1	−12	+ 3	−16	+ 1	−23	0	−1.52
108498	21 58 48.99	+15 03 14.1	7.94	H	329.704 126 76	+15.053 908 19	3.24	−0.66	−44.89	0.95	0.73	1.19	1.28	0.98	+	3	+19	−33	−47	+26	− 3	+32	−28	+49	+ 1	2	−0.49
108499	21 58 49.26

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
108401	7.285	0.007	7.278	0.007		0.011	0.009	T	0.03	0.01	L	7.2892	0.0013	0.011	87		7.27	7.31		C			1 G							S
108402	6.733	0.006	6.791	0.006		−0.041	0.010	G	−0.02	0.01	H	6.7978	0.0010	0.008	75		6.79	6.81					1						S
108403	9.168	0.011	8.973	0.012		0.187	0.015	T	0.21	0.02	L	9.0024	0.0015	0.019	171		8.97	9.04		C			1						
108404	9.852	0.017	9.205	0.015		0.600	0.020	T	0.67	0.02	L	9.2848	0.0023	0.026	179		9.24	9.33					1						
108405	12.618	0.230	10.687	0.061		1.510	0.015	G	2.15	0.12	I	10.4678	0.0056	0.036	60		10.40	10.52			21577−5100	I 1	1 S							
108406	9.554	0.029	8.834	0.025	*	0.661	0.031	T	0.72	0.03	L *	8.8683	0.0029	0.019	55	*	8.83	8.90		D	21577−0038	I 1	2 C A	BA	254	0.602	0.005	0.05	0.02	S
108407	8.507	0.012	8.528	0.016		−0.015	0.018	T	0.01	0.02	L	8.5557	0.0016	0.011	73		8.53	8.57					1							
108408	7.892	0.013	7.356	0.010		0.513	0.015	G	0.59	0.02	H	7.4136	0.0019	0.009	66		7.40	7.43					1							S
108409	9.089	0.015	8.618	0.015	A	0.900	0.495	G	0.53	0.05	L *	8.5722	0.0027	0.016	89	*	8.55	8.60			21577+2015	I 1	2 C A	AB	247	1.775	0.016	1.72	0.05	S
108410	9.837	0.015	8.718	0.010		0.964	0.014	T	0.95	0.01	L	8.7635	0.0014	0.015	186		8.74	8.79		C			1							
108411	9.407	0.018	8.183	0.012		1.046	0.017	T	1.02	0.01	L	8.2415	0.0014	0.014	92		8.22	8.27		C			1							S
108412	8.682	0.008	8.084	0.007		0.569	0.015	G	0.64	0.01	H	8.1386	0.0011	0.015	195		8.11	8.16		C			1							S
108413	8.221	0.012	8.131	0.014		0.088	0.017	T	0.10	0.02	L	8.1587	0.0019	0.012	61		8.13	8.18		C			1							S
108414	7.503	0.008	7.399	0.010		0.101	0.012	T	0.11	0.01	L	7.4195	0.0017	0.012	74		7.40	7.45			21578−1507	I 1	1 S							S
108415	7.818	0.007	7.502	0.009		0.300	0.011	T	0.34	0.01	L	7.5417	0.0012	0.011	87		7.52	7.56					1							S
108416	10.331	0.033	9.112	0.020		1.035	0.031	T	1.08	0.04	L	9.1872	0.0024	0.022	95		9.15	9.22					1 X							
108417	10.414	0.037	9.056	0.020		1.150	0.033	T	1.11	0.03	L	9.0959	0.0023	0.017	82		9.07	9.14		C			1							
108418	8.538	0.008	8.162	0.008		0.356	0.011	T	0.42	0.01	L	8.2014	0.0016	0.017	182		8.17	8.23					1							S
108419						1.393	0.019	G	1.65	0.05	I	11.8132	0.0080	0.055	86		11.70	11.94					1							G
108420	8.394	0.008	6.522	0.005		1.560	0.015	G	1.57	0.09	H	6.4394	0.0012	0.012	122		6.42	6.46		U 2			1							S
108421	8.872	0.011	8.873	0.014		−0.020	0.003	G	0.00	0.00	H	8.8879	0.0015	0.018	119		8.86	8.92					1							
108422	9.896	0.017	9.020	0.014		0.767	0.017	T	0.81	0.01	L	9.0393	0.0049	0.051	148		8.96	9.14		U 2			1							
108423	9.410	0.020	8.559	0.016		0.700	0.015	G	0.76	0.01	H	8.6671	0.0019	0.011	73		8.65	8.69		C			1							
108424	7.492	0.006	7.549	0.009		−0.040	0.015	G	−0.02	0.01	H	7.5520	0.0013	0.014	126		7.53	7.58					1							S
108425	8.961	0.013	8.890	0.017		0.060	0.015	G	0.07	0.01	H	8.9175	0.0019	0.015	126		8.89	8.95		C			1							
108426	8.909	0.011	7.945	0.008		0.847	0.010	T	0.86	0.01	L	8.0287	0.0178	0.163	128		7.76	8.12	2.11	P 1 A	21579+6101	I 1	1 S							S
108427	12.508	0.304	10.628	0.081		1.760	0.510	G	1.74	0.52	J	10.7975	0.0362	0.328	111		10.29	11.06	17.86	P 1 A			1 V							G
108428	9.221	0.023	8.058	0.015		0.998	0.021	T	0.98	0.02	L	8.1253	0.0023	0.012	51		8.11	8.15		C			1							S
108429	9.265	0.010	8.787	0.010		0.463	0.011	T	0.53	0.01	L	8.8523	0.0017	0.025	219		8.82	8.89					1							
108430	8.329	0.009	8.248	0.011		0.080	0.013	T	0.09	0.01	L	8.2624	0.0016	0.015	79		8.24	8.30		C			1							
108431	4.763	0.001	4.445	0.001	*	0.297	0.013	G	0.35	0.02	A *	4.4784	0.0004	0.004	138	*	4.47	4.49		D	21579−5500	I 1	2 C S D	AB	69	0.104	0.016	1.16	0.29	S D
108432	10.447	0.032	9.673	0.026		0.704	0.032	T	0.76	0.03	L	9.7813	0.0028	0.027	114		9.72	9.84					1							
108433	9.572	0.021	9.514	0.028		0.058	0.033	T	0.07	0.03	L	9.5050	0.0029	0.025	136		9.46	9.55					1							G
108434	9.816	0.026	8.967	0.019		0.730	0.020	G	0.78	0.02	H	9.0194	0.0016	0.016	124		8.99	9.05		C			1							
108435	9.290	0.013	7.940	0.008		1.144	0.012	T	1.11	0.01	L	8.0035	0.0014	0.012	126		7.98	8.03		C			1							
108436	9.241	0.015	8.796	0.015		0.434	0.017	T	0.50	0.02	L	8.8299	0.0015	0.015	82		8.80	8.86		C			1							S
108437	8.728	0.011	8.724	0.014		0.005	0.016	T	0.03	0.01	L	8.7351	0.0017	0.017	124		8.70	8.77					1							
108438	9.080	0.016	8.385	0.014		0.641	0.017	T	0.71	0.01	L	8.4338	0.0019	0.014	77		8.41	8.46		C			1							S
108439	7.403	0.009	7.220	0.010	A	0.000	0.006	G	0.02	0.01	H	7.2378	0.0134	0.075	56	A	7.21	7.49		D	21580+0556	I 2	1 C P A							S
108440	7.941	0.006	7.795	0.009		0.119	0.015	G	0.13	0.01	H	7.8415	0.0012	0.014	160		7.81	7.87					1							S
108441	8.213	0.015	7.771	0.013	B	0.413	0.005	G	0.51	0.05	L	7.9130	0.0182			B				D	21580+0556	I 2	1 C I A							S
108442	9.164	0.016	8.650	0.016		0.493	0.017	T	0.57	0.02	L	8.7048	0.0019	0.015	85		8.67	8.73		C			1							S
108443	10.271	0.036	9.562	0.030		0.653	0.038	T	0.72	0.03	L	9.6122	0.0024	0.023	84		9.58	9.66		D			1							
108444	10.173	0.033	8.497	0.015		1.401	0.029	T	1.38	0.04	L	8.5015	0.0026	0.015	80		8.48	8.54		C			1							
108445	10.409	0.022	9.872	0.022		0.511	0.023	T	0.58	0.02	L	9.9702	0.0026	0.038	197		9.89	10.04		U			1							
108446	9.512	0.015	7.602	0.006		1.620	0.013	T	2.06	0.04	O	7.4758	0.0015	0.014	139		7.45	7.50					1							S
108447	7.537	0.004	7.648	0.005		−0.097	0.005	G	−0.08	0.01	H	7.6413	0.0008	0.012	280		7.62	7.66					1							S
108448	7.892	0.011	7.543	0.012	*	0.331	0.015	T	0.39	0.02	L *	7.5051	0.0011	0.010	98	*	7.49	7.53		D	21581−0329	I 1	2 C A	AB	305	0.854	0.003	0.25	0.01	S
108449	10.449	0.026	9.654	0.021	*	0.705	0.025	T	0.76	0.02	L *	9.7695	0.0026	0.026	148	*	9.72	9.81			21582−7901	H 1	2 C S C	AB	202	0.154	0.040	0.92	0.88	
108450	7.358	0.005	7.414	0.007		−0.050	0.015	G	−0.03	0.01	H	7.4265	0.0010	0.012	157		7.41	7.44					1							S
108451	9.505	0.016	8.194	0.010		1.114	0.015	T	1.08	0.02	L	8.2601	0.0012	0.013	103		8.24	8.28		C			1							S
108452	10.656	0.058	8.882	0.022		1.160	0.040	G	1.12	0.04	R	8.9063	0.0020	0.018	68		8.87	8.93					1							
108453	6.777	0.005	6.377	0.005		0.378	0.009	G	0.44	0.01	H	6.4220	0.0006	0.006	84		6.41	6.43		C			1							S
108454	10.704	0.039	9.877	0.031		0.729	0.038	T	0.78	0.03	L	9.9499	0.0027	0.024	85		9.90	9.99		C			1							
108455	9.240	0.016	8.069	0.010		1.004	0.015	T	0.98	0.01	L	8.1110	0.0011	0.011	88		8.08	8.13		D			1							S
108456	7.563	0.008	7.024	0.008	A	0.517	0.005	G	0.59	0.01	H	7.0345	0.0182	0.108	124	A	6.97	7.33		D	21582+8252	I 2	1 C P B							S
108457						1.363	0.020	G	1.42	0.14	K	12.5049	0.0096	0.083	50		12.28	12.65					1							D
108458	9.756	0.024	8.377	0.014		1.167	0.022	T	1.13	0.02	L	8.4194	0.0013	0.014	80		8.40	8.44					1							
108459	8.796	0.011	8.249	0.011		0.512	0.014	T	0.58	0.01	L	8.3222	0.0019	0.015	95		8.29	8.34					1							S
108460	9.336	0.025	8.800	0.022	*	0.503	0.030	T	0.58	0.03	L *	9.2444	0.0034	0.026	80	*	9.19	9.29		R	21583−0150	I 1	2 C A	AB	296	2.185	0.007	0.14	0.02	S
108461	8.243	0.012	7.499	0.010	B	0.698	0.002	G	0.72	0.01	L	7.5979	0.0285			B				D	21582+8252	I 2	1 C I B							S
108462	10.861	0.052	9.493	0.027		1.158	0.046	T	1.12	0.04	L	9.5344	0.0018	0.017	81		9.51	9.59					1							
108463	10.648	0.029	8.970	0.012		1.402	0.025	T	1.38	0.03	L	8.9847	0.0015	0.025	189		8.94	9.03					1							
108464	11.300	0.050	10.409	0.036		0.752	0.005	G	0.80	0.01	H	10.4486	0.0031	0.042	189		10.38	10.51					1 X							
108465	9.686	0.016	7.897	0.008		1.490	0.014	T	1.51	0.02	L	7.8701	0.0011	0.013	150		7.84	7.89		C			1							
108466	13.040	0.409	11.216	0.132		1.534	0.366	T	1.58	0.80	L	11.2287	0.0045	0.041	126		11.12	11.29					1							G
108467	12.227	0.149	10.707	0.061		0.742	0.015	G	1.61	0.12	S	10.6620	0.0040	0.030	120		10.60	10.71		R			1 S							G
108468	7.945	0.010	7.235	0.007		0.640	0.009	T	0.70	0.01	L	7.2927	0.0013	0.008	72		7.28	7.31					1							S
108469	10.643	0.034	9.095	0.016		1.300	0.030	T	1.26	0.03	L	9.1331	0.0018	0.020	134		9.10	9.17					1							
108470	9.756	0.023	8.339	0.013		1.197	0.021	T	1.16	0.02	L	8.3691	0.0015	0.013	84		8.34	8.39		C			1							
108471	8.339	0.009	6.691	0.004		1.378	0.008	T	1.35	0.01	L	6.6728	0.0008	0.008	119		6.66	6.69					1							S
108472	10.899	0.041	9.782	0.025		0.962	0.037	T	0.95	0.03	L	9.8048	0.0028	0.032	154		9.75	9.86					1							
108473	7.651	0.009	7.027	0.009		0.577	0.009	T	0.65	0.01	L	7.0743	0.0020	0.011	48		7.06	7.09					1							S
108474	9.617	0.019	9.035	0.017		0.546	0.019	T	0.62	0.02	L	9.0992	0.0018	0.016	107		9.06	9.12					1 S							
108475	8.726	0.012	8.315	0.012		0.388	0.005	G	0.45	0.01	H	8.3783	0.0018	0.011	81		8.36	8.40		C			1							S
108476	9.268	0.019	8.964	0.021		0.350	0.015	G	0.41	0.02	H	8.9759	0.0053	0.045	123		8.92	9.07		U 2			1							
108477	8.883	0.015	7.598	0.010		1.093	0.014	T	1.05	0.01	L	7.6332	0.0013	0.011	75		7.61	7.65					1							S
108478	6.693	0.006	6.188	0.005		0.469	0.011	G	0.54	0.01	H	6.2383	0.0030	0.054	149		6.21	6.42	1.46	P 1 A			1 O							S
108479	8.876	0.012	6.962	0.005		1.580	0.015	G	1.59	0.09	H	6.8868	0.0023	0.014	90		6.87	6.92		U			1							S
108480	9.999	0.021	9.358	0.019		0.589	0.021	T	0.66	0.02	L	9.3938	0.0027	0.026	135		9.33	9.44		U			1 S							
108481	10.396	0.028	9.198	0.017		1.040	0.015	G	1.09	0.02	I	9.2313	0.0020	0.022	128		9.19	9.27		C			1							
108482	8.861	0.011	8.546	0.012		0.301	0.017	T	0.34	0.02	L	8.5850	0.0020	0.019	132		8.56	8.62					1							S
108483	9.054	0.013	7.898	0.009		1.000	0.015	G	0.98	0.01	H	7.9549	0.0016	0.012	103		7.94	7.98		C			1							S
108484	7.668	0.007	6.643	0.005		0.897	0.005	G	0.90	0.00	H	6.7016	0.0013	0.010	80		6.69	6.72					1							S
108485	8.041	0.012	7.982	0.016		0.059	0.019	T	0.07	0.01	L	8.0064	0.0018	0.016	65		7.98	8.03		C	21586+0600	I 1	1							S
108486	7.903	0.010	7.743	0.009		0.146	0.013	T	0.16	0.01	L	7.7666	0.0046	0.059	102		7.72	8.03	2.09	P 1 A			1							S
108487	7.914	0.008	7.915	0.011		−0.040	0.002	G	−0.02	0.00	H	7.9569	0.0014	0.012	82		7.94	7.98		C			1							S
108488	9.403	0.025	7.771	0.013		1.366	0.022	T	1.33	0.03	L	7.7778	0.0018	0.012	53		7.76	7.80					1							S
108489	10.730	0.041	9.022	0.017		1.426	0.035	T	1.41	0.06	L	9.0156	0.0023	0.021	127		8.99	9.06					1							
108490	7.547	0.006	7.015	0.005		0.501	0.008	G	0.61	0.03	C	7.0625	0.0007	0.006	139		7.05	7.07		C	21587+2949	I 1	1							S
108491	9.083	0.016	8.367	0.014		0.658	0.017	T	0.72	0.01	L	8.4142	0.0017	0.016	77		8.40	8.44		C			1 S							S
120229						1.600	0.510	G	1.57	0.52	J												S							G
108492	8.516	0.009	8.480	0.012		0.038	0.014	T	0.05	0.01	L	8.5037	0.0013	0.015	120		8.48	8.53		C			1							
108493	10.089	0.016	8.453	0.008		1.369	0.014	T	1.34	0.02	L	8.4338	0.0016	0.022	222		8.39	8.47					1							
108494	8.188	0.016	6.277	0.007		1.621	0.014	T	2.26	0.04	O	6.1140	0.0054	0.034	60		6.07	6.19		U 2 C			1 S							S
108495	10.028	0.029	9.354	0.026		0.613	0.029	T	0.68	0.03	L	9.4064	0.0015	0.013	84		9.39	9.43		C			1							
108496	11.376	0.110	10.199	0.062		0.794	0.002	G	0.84	0.00	H	10.4274	0.0034	0.021	51		10.39	10.46		C			1							
108497	9.886	0.019	8.684	0.012		1.029	0.018	T	1.00	0.01	L	8.7214	0.0018	0.017	120		8.70	8.75					1							
108498	9.293	0.015	8.046	0.009		1.064	0.014	T	1.03	0.01	L	8.1097	0.0020	0.015	106		8.07	8.13					1							S
108499	10.664	0.047	10.014	0.042		0.595	0.047	T	0.67	0.04	L	10.0559	0.0028	0.021	78		10.02	10.10					1							
108500	9.668	0.017	9.197	0.017		0.444	0.022	T	0.51	0.02	L	9.2656	0.0019	0.019	115		9.23	9.30		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
108501	21 58 50.77	−56 07 47.3	9.12	H	329.711 547 06	−56.129 803 71	0.38	21.54	−4.60	0.80	0.74	1.35	1.04	0.75	− 4 − 2	−26	+18	+ 3	+17	+ 8	− 3	+ 0	+ 6		0	−1.74
108502	21 58 50.80	−19 36 35.1	8.71	H	329.711 666 62	−19.609 761 94	12.66	56.81	−74.27	1.05	0.72	1.15	1.40	0.75	+26	−15	− 3	−22	−10	+ 8	− 5	+ 0	+ 1	+12	0	−0.93
108503	21 58 51.02	+40 11 48.6	9.07	H	329.712 586 41	+40.196 838 67	2.75	−9.47	−34.06	0.67	0.71	1.06	0.87	0.88	−34	+13	− 6	+24	+ 5	+ 1	+ 3	− 3	+12	−42	1	3.37
108504	21 58 53.03	−31 04 54.8	10.65	H	329.720 971 66	−31.081 880 72	22.67	−218.27	−208.21	1.56	1.09	1.86	1.86	1.13	+22	−21	−24	−10	− 6	+29	− 3	+25	+ 0	+29	0	0.91
108505	21 58 53.51	+62 41 52.6	5.96	2 H	329.722 949 77	+62.697 951 51	2.54	12.03	14.14	0.46	0.42	0.49	0.49	0.43	−13	+ 3	+11	+28	+ 1	−11	+ 2	− 9	+ 6	−15	0	−1.06
108506	21 58 54.99	−04 22 21.0	6.24	H	329.729 108 38	−04.372 494 43	27.77	−0.99	−252.83	0.76	0.46	0.81	0.89	0.48	+23	+18	+10	−14	+13	+15	+12	−14	+17	+28	0	−0.48
108507	21 58 55.80	+41 41 46.3	7.59	1 H	329.732 512 76	+41.696 206 83	0.39	2.33	−4.32	0.46	0.46	0.69	0.54	0.53	−32	+ 9	− 3	+19	+ 2	+11	+ 2	+ 9	+ 1	−37	0	0.58
108508	21 58 56.59	+47 59 00.0	8.82	3 H	329.735 799 01	+47.983 343 42	1.32	−2.07	−3.38	0.70	0.66	0.87	0.76	0.69	−14	+10	+14	− 8	+19	+ 1	+17	+11	+ 1	− 7	0	0.93
108509	21 58 56.76	−39 31 21.1	8.37	1 H	329.736 507 74	−39.522 540 93	2.21	18.40	−17.37	0.86	0.62	1.05	0.96	0.57	+21	−10	−15	+16	− 8	+30	+ 0	+29	−12	+ 6	0	−1.08
108510	21 58 57.39	−21 37 32.8	9.96	G	329.739 130 40	−21.625 774 73	7.88	219.04	−45.69	1.38	0.94	1.53	1.69	1.01	+14	− 5	+ 5	−12	− 3	+27	− 2	+23	− 2	+ 9	5	−0.18
108511	21 58 57.64	+00 05 44.5	8.14	G	329.740 153 43	+00.095 686 44	2.39	21.88	2.14	0.98	0.77	1.16	1.46	0.79	+15	+13	−27	+24	−27	+42	−16	−19	+10	+13	0	1.65
108512	21 58 59.54	+32 28 59.7	8.05	H	329.748 098 66	+32.483 254 12	2.03	1.97	−0.59	0.53	0.61	0.79	0.51	0.71	+11	+ 9	− 3	+ 6	+ 5	−20	+ 5	+ 6	+ 2	+19	1	−1.31
108513	21 58 59.64	+19 01 13.4	6.50	H	329.748 516 99	+19.020 383 79	15.68	76.56	−33.65	0.69	0.61	0.80	0.84	0.75	+24	+ 4	− 3	−31	+19	+16	+20	+14	+20	+28	0	−2.28
108514	21 58 59.64	+37 17 03.3	8.47	G	329.748 519 91	+37.284 241 93	5.05	2.37	−6.96	0.64	0.58	0.99	0.84	0.71	−23	+18	−13	− 5	− 4	−21	+ 0	−21	+23	−16	0	0.37
108515	21 58 59.92	−10 10 46.7	8.40	H	329.749 650 76	−10.179 631 10	1.78	−16.92	−29.63	0.96	0.65	1.08	1.09	0.66	+35	− 2	− 1	−13	+ 3	+ 3	+ 2	+ 3	− 1	+37	0	2.49
108516	21 59 01.31	−11 17 03.4	7.79	H	329.755 438 79	−11.284 265 02	6.43	−35.56	−105.46	0.93	0.58	1.01	1.11	0.55	+16	− 8	+18	−21	+19	+15	+11	+ 6	+18	+18	0	−0.20
108517	21 59 02.78	+38 05 10.1	10.01	H	329.761 596 12	+38.086 135 64	4.39	1.34	−0.85	1.07	0.98	1.56	1.18	1.07	−21	+11	+ 5	+ 0	+ 6	−11	+11	−11	+21	− 8	0	0.84
108518	21 59 03.57	+63 15 46.2	8.64	G	329.764 871 58	+63.262 830 67	0.93	0.46	−5.56	0.70	0.62	0.76	0.86	0.68	−10	+ 2	+ 6	+ 4	+ 8	+14	+ 7	−11	− 2	−12	0	0.04
108519 H	21 59 03.72	+63 59 55.3	8.68	H	329.765 511 31	+63.998 696 31 *	0.87	−2.46	−5.13	2.37	3.08	1.27	1.54	1.15	+61	− 8	+ 3	+ 0	+ 1	+10	− 1	− 2	+18	+ 2	1	−0.62
108520	21 59 06.61	−25 21 15.4	8.21	H	329.777 543 15	−25.354 289 08	0.75	−8.30	−34.69	0.86	0.71	1.11	0.98	0.68	+28	+ 3	−16	+22	−10	+23	+ 0	+47	−24	+ 9	0	−0.71
108521	21 59 06.66	+45 32 31.7	9.53	H	329.777 747 90	+45.542 145 39	−0.71	−0.28	−4.55	0.82	0.74	1.08	1.00	0.85	−26	+ 1	+ 6	+ 6	− 3	+ 3	− 4	+ 3	+15	−32	3	−0.47
108522	21 59 07.40	−15 08 37.0	9.08	H	329.780 829 57	−15.143 607 85	1.17	1.89	−1.86	1.19	0.82	1.44	1.39	0.78	+44	−28	−31	− 7	−10	+21	− 9	−13	+19	+34	0	0.25
108523	21 59 08.30	−46 45 46.0	11.87	H	329.784 562 62	−46.762 767 30	37.83	2.31	−146.57	2.34	2.32	3.99	2.67	2.27	+42	−36	−29	−18	+ 2	+ 8	+12	+16	−16	+18	0	−0.19
108524	21 59 08.33	−71 44 55.4	9.04	2 H	329.784 725 34	−71.748 727 20	0.37	−3.82	6.04	0.76	0.77	1.08	0.93	0.82	−14	− 1	− 8	−12	+ 2	−16	+ 0	− 6	− 3	−10	0	−0.68
108525	21 59 08.79	+03 11 51.4	8.45	H	329.786 641 86	+03.197 600 20	28.15	220.49	68.03	1.14	0.95	1.42	1.50	1.17	+22	+24	−20	+19	−14	+17	− 1	− 7	+30	+33	0	1.39
108526	21 59 09.12	+02 24 01.8	10.23	H	329.788 001 70	+02.400 502 17	9.25	−16.18	−76.86	1.77	1.22	2.04	2.55	1.46	+ 6	+16	−17	+33	−22	+32	−10	−21	+39	+14	0	0.52
108527	21 59 09.54	−60 36 28.1	7.75	G	329.789 741 06	−60.607 815 57	8.83	−22.26	−26.14	0.66	0.61	0.97	0.80	0.62	+ 4	−19	−26	− 8	+ 3	+13	+ 5	+ 7	− 1	+ 8	0	0.89
*108528	21 59 10.48	−66 04 59.0	8.14	H	329.793 653 13	−66.083 063 95	0.35	−5.40	−1.51	0.59	0.66	1.02	0.65	0.70	−26	+ 2	− 1	− 4	+ 5	+ 2	+ 5	−19	−23	−23	1	0.60
*108529	21 59 10.47	−14 30 34.7	8.64	H	329.793 604 39	−14.509 629 83	1.58	−8.13	−2.74	1.10	0.73	1.29	1.42	0.67	+22	−14	−47	−17	+12	−13	+ 4	−13	+14	+ 9	0	−0.69
108530	21 59 10.54	−31 32 52.8	8.59	H	329.793 896 40	−31.547 999 60	2.16	3.60	−3.36	1.03	0.76	1.33	1.14	0.77	+31	−36	−37	−21	− 8	+38	− 2	+39	+ 4	+32	0	0.74
108531	21 59 11.52	+33 37 50.7	8.22	G	329.797 980 63	+33.630 762 77	1.82	−3.52	−5.14	0.49	0.67	0.90	0.60	0.74	+18	−11	− 6	− 7	+11	− 6	+ 9	+ 0	− 1	+31	0	−1.24
108532	21 59 12.00	−23 53 24.7	8.32	H	329.800 012 73	−23.890 203 05	−0.98	−1.32	−8.65	1.10	0.71	1.25	1.28	0.69	+ 5	+ 0	− 5	+54	−29	+10	−21	+47	−13	+ 1	0	0.36
108533	21 59 13.89	+41 57 32.7	8.55	H	329.807 866 94	+41.959 094 72	−0.89	−4.52	−5.14	0.59	0.64	0.90	0.79	0.78	−19	+ 5	+ 1	+26	− 3	+ 5	− 5	+ 2	+ 3	−25	1	0.69
108534	21 59 14.20	−61 12 50.5	9.02	H	329.809 180 62	−61.214 029 91	4.31	−16.77	−3.76	0.64	0.79	1.32	0.75	0.88	−11	−10	− 9	+20	+ 9	+ 1	+ 9	− 2	− 3	−13	0	0.25
108535	21 59 15.10	+73 10 49.0	5.04	H	329.812 932 27	+73.180 284 13	26.67	−68.28	−159.81	0.41	0.37	0.45	0.45	0.39	− 9	−16	+ 0	− 2	+ 7	+ 1	+ 5	− 2	+ 6	+ 7	0	−1.19
108536	21 59 15.17	+46 05 30.0	9.41	H	329.813 222 45	+46.091 665 70	15.32	223.13	94.84	0.90	0.83	1.14	1.00	0.91	−24	+16	+ 2	+ 4	+11	−11	+13	− 4	+17	−28	1	0.42
108537	21 59 15.51	+50 50 04.1	8.78	H	329.814 644 89	+50.834 468 37	1.21	−8.93	−6.69	0.70	0.66	0.85	0.77	0.73	− 4	+ 6	− 3	− 9	+ 2	− 5	+ 1	− 4	− 1	+18	0	−0.50
108538	21 59 16.58	−62 28 37.0	8.15	H	329.819 070 01	−62.476 931 65	5.42	−4.61	17.35	0.50	0.58	0.97	0.59	0.60	− 5	− 9	− 6	+19	+14	− 9	+13	+ 3	− 8	− 4	0	2.46
108539 H	21 59 16.67	+05 36 43.9	9.30	H	329.819 451 79	+05.612 186 77 A	5.09	−2.21	−6.76	6.80	3.45	1.92	2.04	1.84	+77	+ 2	−10	+ 0	− 1	+18	+ 0	− 1	+17	+42	1	−0.34
108540	21 59 17.52	−22 52 18.8	7.41	H	329.823 008 01	−22.871 877 52	13.51	68.01	19.28	0.88	0.67	1.02	0.97	0.69	+25	−16	−19	− 2	+11	− 1	+13	+60	−23	+25	0	−0.26
108541	21 59 17.68	+57 32 06.3	9.39	H	329.823 656 85	+57.535 094 36	3.27	7.91	10.92	0.79	0.75	0.93	0.84	0.81	+ 6	+ 5	+ 5	+ 8	+ 3	−11	+ 7	− 8	− 3	+26	2	0.23
108542	21 59 17.72	−23 50 00.0	7.03	H	329.823 823 22	−23.833 334 82	3.24	33.74	−32.42	0.76	0.56	0.96	0.84	0.56	+21	+ 2	−12	+34	−15	+19	−10	+50	−17	+17	0	−0.05
108543	21 59 17.88	−38 23 42.3	5.50	H	329.824 500 83	−38.395 093 30	8.29	42.47	−0.98	0.60	0.46	0.78	0.67	0.44	+27	− 9	−24	+ 7	− 8	+35	+ 3	+33	−11	+16	2	0.54
108544	21 59 18.11	−05 28 34.9	8.71	H	329.825 442 78	−05.476 352 98	4.31	15.59	7.17	0.94	0.65	1.13	1.16	0.62	+38	+14	+19	+ 7	+16	+39	+10	+ 2	+18	+36	0	−0.86
108545	21 59 18.61	−20 00 15.6	8.81	H	329.827 546 80	−20.004 334 54	6.22	−18.25	2.27	1.06	0.77	1.20	1.49	0.80	+25	+ 2	− 3	− 3	−18	+ 8	−10	+13	+ 2	+ 3	0	−0.46
108546	21 59 19.67	+60 17 51.6	7.65	2 H	329.831 973 01	+60.297 667 53	0.41	−3.22	−0.70	0.56	0.52	0.62	0.69	0.59	− 1	+ 2	+ 7	+23	+ 9	+11	+11	− 2	− 8	+10	1	0.74
108547	21 59 20.96	−46 20 35.9	7.60	H	329.837 352 66	−46.343 319 41	7.24	58.33	−15.11	0.62	0.59	0.96	0.59	0.56	+37	−27	−15	−30	+ 3	+23	+ 8	+14	− 2	+30	0	0.92
108548	21 59 21.57	+22 09 11.8	8.76	H	329.839 876 23	+22.153 288 20	3.25	5.47	−8.16	1.16	0.94	1.25	1.39	1.05	+33	− 7	− 4	+ 3	−11	−14	−18	−33	+17	+13	2	−0.23
108549	21 59 21.67	+17 07 35.1	7.91	H	329.840 287 39	+17.126 422 12	2.75	48.94	−2.96	0.72	0.78	1.13	0.84	1.04	+30	+ 9	−30	− 6	− 5	−17	− 5	−36	+46	+21	2	1.15
108550	21 59 22.25	−01 22 49.3	8.71	H	329.842 706 83	−01.380 362 35	4.69	11.19	1.34	1.09	0.90	1.29	1.38	0.99	+26	+11	−26	+10	+15	+29	+22	+36	+ 0	+35	0	0.23
108551	21 59 22.31	−71 46 46.0	9.94	H	329.842 970 37	−71.779 432 47	3.14	20.03	18.08	0.89	0.95	1.27	1.08	0.97	−17	− 1	−15	−14	+ 5	−19	+ 3	−20	+ 5	−15	0	−0.22
108552	21 59 22.45	+34 10 50.5	7.89	H	329.843 539 56	+34.180 691 98	10.48	72.51	−8.19	0.50	0.62	0.85	0.63	0.70	+11	− 4	+ 1	+ 0	+14	− 9	+12	+ 4	+ 4	+29	0	1.00
*108553	21 59 22.86	+57 39 30.8	6.58	H	329.845 262 64	+57.658 547 96	5.10	−5.50	−9.92	0.42	0.40	0.50	0.42	0.40	− 6	+ 6	+10	+ 0	− 3	−13	+ 0	−15	+ 0	+ 2	1	0.68
*108554	21 59 22.83	+81 50 46.8	9.26	H	329.845 140 22	+81.846 343 12	0.55	8.91	−0.53	0.77	0.79	0.88	0.87	0.89	− 5	+ 1	+16	+24	+ 1	− 9	+ 2	+ 0	− 1	− 5	4	0.60
108555	21 59 23.67	+38 47 47.1	9.08	H	329.848 612 23	+38.796 413 15	1.35	3.71	−5.32	0.62	0.76	1.16	0.70	0.84	−46	+ 1	− 2	+15	+11	− 5	+11	− 8	+ 4	−48	2	0.40
108556	21 59 24.20	−42 48 35.7	7.71	1 H	329.850 814 75	−42.809 928 91	1.49	7.03	−5.29	0.83	0.59	1.01	1.14	0.56	+ 8	+ 5	−17	+18	−20	+36	−10	+25	+ 2	−11	0	−0.59
108557 H	21 59 24.53	+17 19 11.4	8.98	H	329.852 213 84	+17.319 824 18 A	6.75	39.76	−15.03	2.01	1.78	2.85	2.16	2.37	+27	+16	−27	+ 9	+ 7	−21	+ 8	−30	+62	+ 8	1	0.76
108558	21 59 24.61	−50 58 10.3	9.47	H	329.852 528 12	−50.969 524 12	4.47	−64.19	1.68	0.97	0.89	1.51	1.15	1.05	+42	−36	−16	+16	+32	+ 2	+35	+45	−25	+47	0	0.11
108559	21 59 24.65	+29 53 04.7	7.89	H	329.852 718 87	+29.884 626 64	1.08	2.15	2.84	0.59	0.70	0.84	0.74	0.86	+11	+ 6	− 8	+56	− 1	−10	+ 1	+24	+13	+13	0	0.03
108560	21 59 25.82	−17 18 38.0	8.56	H	329.857 566 34	−17.310 563 28	4.18	56.25	−46.26	1.60	0.75	1.38	2.83	0.85	+27	−29	−15	−63	+18	+32	+28	−13	+ 3	−14	0	2.29
108561	21 59 26.24	+04 46 34.9	8.73	H	329.859 352 78	+04.776 350 70	6.41	38.84	7.23	1.23	1.07	1.41	1.66	1.49	+15	+ 6	+11	+ 8	− 6	+18	− 5	−25	−11	+23	0	0.31
108562	21 59 27.70	−17 59 44.3	8.06	2 H	329.865 416 49	−17.995 628 12	0.74	7.70	−8.89	0.96	0.70	1.09	1.27	0.70	+49	−19	−14	+11	+25	− 1	+18	+ 9	+ 3	+51	0	0.58
108563	21 59 29.98	+15 39 41.7	8.23	H	329.874 925 36	+15.661 590 78	2.62	6.73	1.05	0.84	0.72	1.22	1.26	0.88	+25	−13	−32	− 3	+11	+20	+ 4	−29	+46	+ 9	0	−0.53
108564	21 59 30.34	+37 58 31.1	8.17	H	329.876 401 52	+37.975 318 45	3.04	72.96	−10.97	0.62	0.56	0.93	0.76	0.70	−26	+ 7	+ 1	+ 0	+ 0	−22	+ 4	−21	+ 7	−13	0	1.05
108565	21 59 30.70	−29 03 23.5	7.07	H	329.877 906 69	−29.056 525 20	5.54	−38.66	−18.94	0.72	0.48	0.81	0.86	0.49	+ 3	+ 5	−12	− 2	−15	+30	−10	+31	− 3	+ 1	0	−2.03
108566	21 59 31.73	+10 34 35.3	6.99	1 H	329.882 191 81	+10.576 470 09	2.46	11.40	5.77	0.95	0.75	1.11	1.25	1.04	+11	+32	−24	−19	− 7	+ 3	+ 3	−30	+30	+25	0	0.14
108567	21 59 32.11	−60 55 57.9	9.53	H	329.883 772 94	−60.932 743 82	43.04	−9.88	−94.62	0.88	0.93	1.53	0.91	0.94	−10	− 8	−15	+23	+ 1	+ 6	+ 2	− 1	− 5	−14	0	0.33
108568	21 59 33.31	−37 16 09.9	8.09	H	329.888 780 53	−37.269 411 44	1.43	30.73	1.27	0.77	0.64	0.94	0.92	0.67	+19	−21	−20	+ 6	−14	+22	+ 9	+22	+ 5	+12	0	1.28
108569	21 59 33.68	−59 45 09.0	9.74	G	329.890 320 84	−59.752 509 20	84.26	886.92	−126.37	1.01	1.01	1.74	1.28	1.06	− 9	+ 0	−27	−36	− 3	− 3	− 5	− 8	−11	− 1	0	−0.41
108570	21 59 34.40	+56 53 16.6	7.41	H	329.893 341 97	+56.887 942 76	9.18	63.55	−2.74	0.77	0.75	0.93	0.79	0.74	+ 4	+ 6	+14	−13	− 3	−16	+ 2	−27	− 5	+23	0		
108571	21 59 34.73	−27 37 49.7	7.23	G	329.894 716 80	−27.630 461 64 A	13.85	31.07	−13.87	0.99	0.75	1.07	1.00	0.64	+21	+ 2	− 6	+ 9	−10	+35	− 7	+30	+ 8	+24	1	0.34
108572	21 59 35.98	+14 21 37.3	8.93	G	329.899 921 85	+14.360 371 75	1.76	−14.98	−8.98	0.91	0.81	1.24	1.30	1.07	+18	− 6	−25	−38	+15	+18	+13	−37	+44	+14	0	−1.11
108573	21 59 37.84	−33 46 37.4	10.36	H	329.907 646 87	−33.777 057 57	1.85	16.85	7.49	1.70	1.11	2.04	1.88	1.17	+16	+ 8	−29	−10	− 3	+24	− 3	+27	−26	+25	0	0.94
108574	21 59 38.96	−06 16 25.3	7.94	H	329.912 352 49	−06.273 686 08	2.52	−8.62	−0.48	0.87	0.55	0.97	1.03	0.57	+22	+ 2	+13	−12	+24	+32	+18	+14	+28	+35	0	0.99
108575	21 59 40.14	−64 36 24.3	8.80	1 H	329.917 236 64	−64.606 743 19	6.02	11.32	1.26	0.61	0.72	1.08	0.73	0.75	−25	− 7	−14	+ 6	− 2	+11	− 2	−12	+ 2	−37	0	0.87
108576	21 59 40.16	+16 02 18.6	9.80	2 H	329.917 335 92	+16.038 487 07	14.53	−75.56	−66.81	1.20	1.15	1.63	1.50	1.34	+22	− 2	−26	+ 4	+ 0	+ 5	− 5	−45	+45	+ 9	0	−1.08
108577 H	21 59 41.89	+49 07 23.4	7.62	H	329.924 562 23	+49.123 169 42 *	3.95	12.80	−7.99	0.51	0.53	0.67	0.59	0.57	−14	+ 8	+ 8	+ 4	+ 8	− 1	+ 6	+ 7	− 5	−17	1	−0.58
108578	21 59 42.00	+26 25 57.8	9.72	H	329.924 997 74	+26.432 714 21	8.99	−37.64	−43.84	0.87	0.94	1.20	0.95	1.19	+16	+ 7	− 4	+ 6	+ 9	− 2	+11	+ 8	+27	+20	0	0.27
*108579 H	21 59 43.84	−29 58 54.8	8.92	H	329.932 657 01	−29.981 886 57 A	5.44	−32.16	−13.57	2.08	1.45	1.97	2.21	1.17	+ 5	− 9	−29	+12	−36	+19	−30	+30	+ 0	−19	1	0.73
*108580	21 59 43.81	+61 06 03.5	8.90	G	329.932 558 11	+61.100 965 11	3.34	−17.36	−10.57	0.69	0.65	0.75	0.83	0.72	+ 5	+ 1	+14	+29	+ 6	−13	+11	+12	+ 0	+23	1	1.37
108581	21 59 45.45	−33 10 37.2	10.10	H	329.939 358 06	−33.176 996 09	3.49	13.18	−23.43	1.49	1.17	1.87	1.57	1.10	+41	−27	−42	−16	− 1	+18	+13	+41	−26	+31	0	0.05
108582	21 59 45.49	−10 18 47.1	7.91	G	329.939 544 81	−10.313 072 32	6.60	49.46	−61.01	0.86	0.52	0.92	0.89	0.52	+21	+ 5	+ 8	−29	+10	+20	+ 7	+ 2	+18	+29	0	3.14
108583 H	21 59 47.02	+67 58 26.4	7.90	H	329.945 916 02	+67.974 002 37 A	8.85	57.68	21.61	0.90	0.83	0.87	1.14	0.89	− 8	− 3	+15	−16	+21	+ 9	+17	+ 7	+14	− 6	0	−0.40
108584	21 59 47.73	−59 34 12.1	8.21	G	329.948 894 01	−59.570 021 51	4.29	−9.17	2.81	0.73	0.66	1.11	1.01	0.71	+ 5	+ 2	−28	−15	+10	+ 2	+ 7	+ 8	−10	+11	0	0.41
108585	21 59 47.84	−28 37 07.9	7.40	H	329.949 348 31	−28.618 852 49	8.68	−52.44	−9.25	0.80	0.52	0.92	0.89	0.49	+ 6	−11	−19	+ 1	−23	+27	−15	+30	+ 5	− 1	0	−2.42
108586 H	21 59 49.43	−50 14 41.9	8.89	H	329.955 964 18	−50.244 961 32 A	6.14	26.29	−20.99	1.46	1.28	1.96	1.51	1.22	+42	−24	−17	+17	+25	−20	+28	+35	−43	+46	1	0.33
108587	21 59 49.54	+70 51 57.8	9.68	H	329.956 396 77	+70.866 068 95	3.82	−9.12	−11.75	0.84	0.79	0.91	0.94	0.86	− 6	+ 6	+10	+ 5	+13	+ 1	+13	− 8	+ 1	− 3	2	−0.96
108588	21 59 49.60	+23 56 27.4	7.97	2 H	329.956 654 55	+23.940 932 24 *	1.79	−12.27	−25.04	0.72	0.87	0.92	0.80	0.96	+24	+ 0	−21	− 9	−11	− 1	−11	−47	+32	+23	4	3.44
108589	21 59 50.96	−43 28 45.8	8.14	G	329.962 325 17	−43.479 397 41	15.26	65.90	−64.49	1.04	0.77	1.22	1.61	0.77	+18	+23	−25	+ 0	+11	+ 8	+10	+49	−11	+23	5	1.62
108590	21 59 51.79	−60 45 53.5	7.54	H	329.965 810 22	−60.764 865 88	4.72	19.11	−16.93	0.58	0.59	0.94	0.66	0.57	−12	− 4	−25	+21	+ 0	+11	+ 3	− 2	−10		1	0.62
108591	21 59 52.31	−73 53 31.2	9.01	H	329.967 947 03	−73.891 990 36	3.42	25.59	−20.15	0.87	0.79	1.11	1.18	0.95	−12	−15	+ 3	+ 7	− 3	+ 5	− 1	+ 2	−14	−30	1	0.22
108592	21 59 52.87	−35 05 59.2	8.66	H	329.970 285 66	−35.099 765 91	5.50	20.28	15.27	0.98	0.78	1.14	1.11	0.83	+28	−20	−10	+19	+ 7	+11	+10	+46	− 8	+30	0	−1.09
108593	21 59 53.19	−34 33 02.1	8.14	H	329.971 637 59	−34.550 579 03	0.84	10.75	−6.16	0.82	0.71	1.05	1.00	0.80	+21	+ 1	−24	+10	−16	+22	−10	+40	−26	+16	5	−0.93
108594	21 59 53.70	−62 06 15.8	11.97	G	329.973 731 32	−62.104 378 18	23.51	86.83	−9.31	1.50	1.83	3.25	1.97	1.96	−12	− 5	− 6	− 1	+12	− 1	+10	− 3	−13	−14	2	−1.49
108595	21 59 54.30	−53 12 27.1	8.81	H	329.976 267 11	−53.207 536 20	1.10	7.41	−24.80	0.89	0.76	1.30	1.18	0.88	+12	− 6	−15	+36	+25	− 1	+24	+34	−14	+23	0	1.20
108596	21 59 54.82	+25 18 15.8	8.72	H	329.978 402 76	+25.304 395 40	4.61	−7.21	−7.40	0.88	0.81	1.23	1.03	1.04	− 1	+17	−25	− 4	+15	−21	+17	− 3	+44	−12	0	0.52
108597	21 59 55.54	−31 31 32.5	7.06	2 T	329.981 424 31	−31.525 689 19	3.54	−0.16	−19.25	0.72	0.58	0.94	0.84	0.61	+36	−22	−28	− 4	+ 8	+41	+12	+49	+ 2	+45	0	−1.34
108598	21 59 56.60	−54 39 16.7	9.57	H	329.985 818 84	−54.654 648 00	22.95	−54.83	−92.17	0.97	0.71	1.38	1.28	0.81	+ 6	− 7	+ 2	− 9	− 1	+ 5	+ 0	+ 7	−10	+ 7	0	3.10
108599 H	21 59 58.38	−40 32 20.1	8.09	H	329.993 237 94	−40.538 904 30 *	6.36	50.39	18.99	0.86	0.75

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
108501	10.952	0.044	9.275	0.018		1.401	0.038	T	1.38	0.05	L	9.2624	0.0033	0.025	137		9.22	9.31				1							
108502	9.354	0.021	8.780	0.020		0.540	0.021	T	0.61	0.02	L	8.8314	0.0028	0.015	60		8.81	8.86				1							
108503	10.545	0.028	9.230	0.015		1.117	0.025	T	1.08	0.03	L	9.2416	0.0018	0.024	189		9.21	9.28				1 S							
108504	12.030	0.147	10.936	0.090		0.945	0.132	T	0.94	0.10	L	10.8098	0.0036	0.030	101		10.76	10.86				1							G
108505	8.123	0.009	6.188	0.005		1.640	0.008	T	2.41	0.03	O	5.9927	0.0029	0.028	127		5.95	6.04		U 2		1 S							S
108506	7.508	0.008	6.351	0.005		0.971	0.038	G	1.02	0.02	A	6.3845	0.0009	0.007	88		6.37	6.40				1							S
108507	7.521	0.005	7.573	0.006		−0.060	0.015	G	−0.04	0.01	H	7.5786	0.0013	0.014	181		7.56	7.61		U 2		1							S
108508	8.881	0.011	8.904	0.014		−0.019	0.015	T	0.00	0.01	L	8.8277	0.0062	0.104	155		8.76	9.30	1.68	P 1 A		1							
108509	10.469	0.037	8.568	0.014		1.612	0.033	T	1.96	0.09	O	8.4584	0.0032	0.021	89		8.44	8.49		U		1							
108510	10.754	0.055	10.064	0.050		0.734	0.003	G	0.78	0.00	H	10.1129	0.0035	0.022	67		10.07	10.16		C		1							
108511	8.462	0.019	8.144	0.020		0.276	0.015	G	0.31	0.02	H	8.2055	0.0028	0.016	49		8.19	8.23				1							S
108512	7.994	0.008	8.029	0.010		−0.027	0.012	T	−0.01	0.01	L	8.0506	0.0015	0.012	108		8.03	8.07		C		1							S
108513	7.793	0.008	6.611	0.006		1.013	0.008	T	0.99	0.01	L	6.6661	0.0010	0.007	83		6.65	6.68		C		1							S
108514	9.083	0.010	8.517	0.009		0.548	0.015	G	0.62	0.01	H	8.5814	0.0012	0.017	182		8.55	8.61				1							
108515	9.947	0.032	8.506	0.017		1.216	0.028	T	1.18	0.03	L	8.5586	0.0019	0.014	73		8.54	8.59				1							
108516	9.274	0.018	7.916	0.011		1.150	0.017	T	1.11	0.01	L	7.9545	0.0008	0.011	72		7.93	7.97		C	21590−1117	I 1	1						
108517	11.254	0.057	10.076	0.032		1.010	0.051	T	0.99	0.04	L	10.1792	0.0034	0.034	157		10.11	10.25		C			1						G
108518	8.774	0.011	8.630	0.013		0.140	0.007	G	0.15	0.01	H	8.6805	0.0017	0.016	124		8.66	8.71					1						
108519	9.019	0.013	8.818	0.015	–	0.240	0.400	G	0.23	0.07	L *	8.7425	0.0013	0.015	113	–	8.72	8.78		D	21591+6400	I 1	4 C	C					G
108520	10.262	0.030	8.388	0.012		1.590	0.027	T	1.74	0.08	O	8.3110	0.0015	0.018	91		8.28	8.34					1						
108521	9.531	0.016	9.539	0.023		−0.003	0.026	T	0.02	0.02	L	9.5396	0.0027	0.030	135		9.51	9.59					1						G
108522	10.987	0.066	9.227	0.025		1.467	0.056	T	1.48	0.08	L	9.2178	0.0027	0.018	67		9.19	9.25					1						
108523						1.653	0.082	G	2.65	0.51	K	11.8602	0.0066	0.068	138		11.69	12.01					1						D
108524	11.026	0.044	9.224	0.016		1.500	0.037	T	1.53	0.06	L	9.1682	0.0046	0.036	156		9.11	9.22	86.40	P 1 A			1						
108525	9.410	0.021	8.520	0.016		0.755	0.009	G	0.80	0.01	H	8.5872	0.0021	0.012	49		8.56	8.61		C			1						S
108526	10.818	0.065	10.470	0.085		1.570	0.015	G	0.72	0.14	S	10.3655	0.0088	0.031	45		10.32	10.44		R			1						G
108527	8.260	0.008	7.790	0.008		0.440	0.001	G	0.51	0.00	H	7.8484	0.0020	0.017	139		7.82	7.88					1						S
108528	10.057	0.017	8.299	0.008		1.465	0.015	T	1.47	0.02	L	8.2672	0.0012	0.016	184		8.24	8.30		D			1						
108529	9.960	0.033	8.807	0.020		0.990	0.030	T	0.97	0.02	L	8.8089	0.0021	0.014	71		8.78	8.84		C			1						S
108530	10.475	0.035	8.751	0.015		1.438	0.030	T	1.43	0.05	L	8.7213	0.0027	0.023	97		8.69	8.76					1						
108531	8.100	0.007	8.194	0.009		−0.097	0.005	G	−0.08	0.01	H	8.2004	0.0013	0.014	165		8.17	8.23					1						
108532	9.919	0.021	8.463	0.011		1.227	0.019	T	1.19	0.02	L	8.4875	0.0015	0.011	102		8.47	8.51		C			1						
108533	8.575	0.008	8.548	0.010		0.030	0.012	T	0.05	0.01	L	8.5690	0.0021	0.021	182		8.53	8.60		R	21592+4158	I 1	1						S
108534	11.008	0.034	9.178	0.013		1.522	0.029	T	1.56	0.04	L	9.1462	0.0021	0.024	217		9.10	9.20					1						
108535	5.572	0.003	5.090	0.003		0.439	0.001	G	0.51	0.00	H	5.1402	0.0005	0.005	129		5.13	5.15		C	21593+7310	I 1	1						S
108536	10.395	0.030	9.507	0.022		0.776	0.029	T	0.82	0.03	L	9.5494	0.0027	0.024	135		9.49	9.60					1 S						G
108537	9.036	0.014	8.803	0.016		0.222	0.020	T	0.24	0.02	L	8.8438	0.0020	0.016	121		8.81	8.87					1						
108538	8.421	0.007	8.170	0.008		0.239	0.010	T	0.27	0.01	L	8.2195	0.0016	0.018	193		8.19	8.26					1						S
108539	9.848	0.029	9.344	0.029	*	0.474	0.037	T	0.55	0.04	L *	9.4089	0.0038	0.023	63	*	9.37	9.47		D	21593+0537	H 1	2 C	A	AB	246	0.328	0.011	0.67	0.17	
108540	7.918	0.009	7.446	0.010		0.437	0.017	G	0.51	0.02	H	7.5059	0.0016	0.010	78		7.49	7.52		C			1						S
108541	9.759	0.020	9.420	0.022		0.322	0.028	T	0.37	0.04	L	9.4650	0.0020	0.021	136		9.42	9.50		C			1 S						G
108542	7.056	0.004	7.028	0.005		0.026	0.006	T	0.04	0.01	L	7.0496	0.0011	0.009	100		7.04	7.06					1						S
108543	6.778	0.005	5.609	0.003		0.996	0.003	G	0.97	0.00	H	5.6691	0.0006	0.005	86		5.66	5.68		C			1						S
108544	9.036	0.016	8.764	0.017		0.259	0.022	T	0.29	0.03	L	8.7767	0.0016	0.015	89		8.75	8.80		C			1						
108545	9.171	0.017	8.836	0.018		0.323	0.027	T	0.37	0.04	L	8.8863	0.0025	0.014	68		8.86	8.91		C			1						
108546	7.988	0.010	7.700	0.010		0.321	0.004	G	0.37	0.01	H	7.7321	0.0054	0.037	116		7.69	7.80		U 2			1						S
108547	9.187	0.011	7.731	0.006		1.240	0.015	G	1.20	0.01	H	7.7661	0.0011	0.012	161		7.75	7.79					1						S
108548	10.058	0.029	8.875	0.018		1.014	0.027	T	0.99	0.02	L	8.9291	0.0032	0.017	73		8.88	8.96					1						
108549	9.258	0.017	8.024	0.011		1.054	0.016	T	1.02	0.01	L	8.0751	0.0014	0.012	95		8.05	8.10		C			1						S
108550	9.000	0.018	8.717	0.020		0.269	0.025	T	0.30	0.03	L	8.7788	0.0015	0.014	58		8.76	8.83		D			1						
108551	10.498	0.029	10.009	0.029		0.472	0.032	T	0.54	0.03	L	10.0402	0.0023	0.027	154		9.99	10.08		C			1						
108552	8.287	0.008	7.934	0.009		0.335	0.011	T	0.39	0.01	L	7.9755	0.0013	0.014	138		7.95	8.00		C			1						S
108553	6.598	0.004	6.579	0.004		0.022	0.005	T	0.04	0.00	L	6.5978	0.0005	0.006	142		6.59	6.61					1						S
108554	10.966	0.046	9.354	0.020		1.350	0.040	T	1.32	0.05	L	9.4081	0.0023	0.020	107		9.37	9.45					1						
108555	9.437	0.011	9.103	0.011		0.317	0.015	T	0.37	0.02	L	9.1560	0.0017	0.025	247		9.11	9.20					1						
108556	9.719	0.021	7.910	0.009		1.506	0.018	T	1.54	0.03	L	7.8331	0.0025	0.017	89		7.81	7.86		U			1						S
108557	9.561	0.022	9.040	0.020	*	0.489	0.027	T	0.56	0.03	L *	9.0925	0.0027	0.019	97	*	9.06	9.12		D	21594+1719	I 1	2 C	A	AB	120	0.621	0.013	2.21	0.04	
108558	10.049	0.021	9.526	0.021		0.519	0.008	G	0.59	0.01	H	9.5834	0.0020	0.021	135		9.54	9.63		C			1						
108559	9.833	0.022	8.054	0.010		1.482	0.019	T	1.50	0.03	L	8.0220	0.0011	0.011	125		8.00	8.05		C			1						
108560	9.269	0.017	8.622	0.015		0.583	0.015	G	0.65	0.01	H	8.6850	0.0015	0.014	98		8.67	8.71		C			1 G						S
108561	10.282	0.053	8.816	0.027		1.235	0.047	T	1.19	0.05	L	8.8848	0.0029	0.019	53		8.85	8.93		C			1						
108562	10.283	0.033	8.279	0.013		1.697	0.029	T	2.35	0.12	O	8.1010	0.0216	0.126	98		7.90	8.23		U 2			1 S						S
108563	8.150	0.009	8.216	0.011		−0.057	0.009	G	−0.04	0.01	H	8.2180	0.0016	0.011	91		8.20	8.24		C			1						S
108564	9.657	0.015	8.290	0.009		1.158	0.014	T	1.12	0.01	L	8.3342	0.0012	0.016	168		8.30	8.36					1						
108565	8.392	0.008	7.173	0.007		1.042	0.008	T	1.01	0.01	L	7.2361	0.0007	0.007	89		7.22	7.25			21595−2903	I 1	1						S
108566	9.077	0.018	7.153	0.008		1.597	0.016	T	1.62	0.02	L	7.1016	0.0021	0.016	62		7.08	7.13		U			1						S
108567	11.146	0.044	9.722	0.021		1.202	0.038	T	1.16	0.04	L	9.6907	0.0026	0.028	163		9.64	9.75					1						
108568	10.140	0.031	8.279	0.013		1.579	0.028	T	1.85	0.09	O	8.1865	0.0020	0.020	84		8.16	8.23					1						S
108569	11.657	0.081	9.958	0.029		1.479	0.016	G	1.99	0.00	A	9.7934	0.0025	0.030	132		9.75	9.85		C			1						
108570	7.705	0.006	7.433	0.007		0.259	0.009	T	0.29	0.01	L	7.4831	0.0009	0.009	128		7.47	7.50		C			1 X						S
108571	7.622	0.006	7.275	0.007	A	0.380	0.015	G	0.44	0.02	H	7.3169	0.0041	0.011	98	A	7.30	7.34		C	21596−2738	I 1	2 C	B	AB	36	11.424	0.033	3.44	0.10	S
108572	10.396	0.030	9.044	0.016		1.180	0.020	G	1.14	0.02	I	9.1037	0.0016	0.017	111		9.07	9.13		C			1						
108573	10.851	0.062	10.354	0.061		0.479	0.066	T	0.55	0.07	L	10.4681	0.0043	0.034	82		10.41	10.52					1						
108574	9.477	0.018	8.056	0.010		1.200	0.016	T	1.16	0.02	L	8.1035	0.0018	0.011	85		8.08	8.12		C			1						S
108575	9.116	0.009	8.827	0.010		0.274	0.014	T	0.31	0.02	L	8.8736	0.0018	0.025	217		8.83	8.91		U			1						
108576	10.765	0.050	9.859	0.033		0.790	0.046	T	0.83	0.05	L	9.9350	0.0033	0.036	89		9.89	10.05		U 2			1						
108577	7.687	0.006	7.621	0.008	*	0.066	0.009	T	0.08	0.01	L *	7.6500	0.0011	0.012	148	*	7.63	7.68		D	21597+4907	I 1	2 C	S A	BA	151	0.187	0.003	0.09	0.12	S
108578	9.311	0.020	9.654	0.035		−0.272	0.009	G	−0.29	0.01	H	9.6129	0.0029	0.021	81		9.57	9.65		C			1						
108579	9.232	0.029	8.706	0.019	*	0.502	0.026	T	0.57	0.03	L *	9.0309	0.0019	0.017	90	*	9.01	9.06		D	21597−2959	I 1	2 C	A	AB	262	2.608	0.007	0.86	0.03	
108580	9.113	0.013	8.920	0.015		0.150	0.015	G	0.17	0.01	H	8.9558	0.0016	0.015	112		8.93	8.98		C			1						
108581	10.637	0.049	10.164	0.049		0.458	0.054	T	0.53	0.06	L	10.2049	0.0039	0.026	79		10.17	10.25		C			1						
108582	8.445	0.012	7.958	0.012		0.466	0.015	G	0.54	0.02	H	8.0152	0.0020	0.015	84		7.99	8.04					1						S
108583	8.481	0.031	7.904	0.032	*	0.539	0.040	T	0.61	0.04	L *	8.0143	0.0015	0.012	113	*	7.99	8.03		D	21598+6758	I 1	2 C	A	AB	188	3.190	0.007	2.28	0.03	S
108584	8.511	0.009	8.226	0.010		0.251	0.016	G	0.28	0.02	H	8.2799	0.0013	0.018	145		8.25	8.31		D			1						S P
108585	7.959	0.008	7.451	0.009		0.477	0.011	T	0.55	0.01	L	7.5100	0.0011	0.008	96		7.49	7.53					1						S
108586	9.382	0.014	8.956	0.014	A	0.400	0.495	G	0.45	0.03	L *	8.9781	0.0016	0.017	134	*	8.94	9.01		D	21598−5015	I 1	2 C	A	AB	243	1.116	0.021	2.81	0.09	
108587	10.771	0.042	9.786	0.027		0.863	0.037	T	0.88	0.03	L	9.8372	0.0022	0.021	127		9.79	9.88					1						G
108588	8.778	0.014	7.199	0.008		0.400	0.600	G	5.51	0.19	O	6.5853	0.0232	0.125	77		6.36	6.75		U 2	21598+2356	I 1	1 V						S
108589	8.735	0.012	8.180	0.011		0.500	0.012	G	0.57	0.01	H	8.2479	0.0018	0.016	78		8.23	8.28					1						S
108590	9.550	0.015	7.707	0.007		1.533	0.013	T	1.58	0.03	L	7.6605	0.0014	0.016	157		7.63	7.69					1						S
108591	10.505	0.030	9.123	0.016		1.169	0.027	T	1.13	0.02	L	9.1772	0.0022	0.021	126		9.15	9.22		C			1						
108592	9.118	0.016	8.708	0.016		0.401	0.019	T	0.47	0.02	L	8.7561	0.0013	0.015	84		8.73	8.79		C			1						S
108593	10.207	0.028	8.335	0.012		1.589	0.025	T	1.95	0.08	O	8.2273	0.0024	0.025	92		8.20	8.27					1						
108594						1.420	0.015	G	1.84	0.02	A	12.0837	0.0055	0.066	188		11.95	12.19					1						D
108595	10.163	0.024	8.915	0.014		1.064	0.022	T	1.03	0.02	L	8.9733	0.0017	0.019	128		8.94	9.01		C			1						
108596	8.914	0.013	8.732	0.015		0.174	0.019	T	0.19	0.02	L	8.7819	0.0024	0.019	81		8.75	8.82		C			1						
108597	6.958	0.008	7.042	0.008		−0.108	0.003	G	−0.09	0.00	H	7.0517	0.0074	0.046	97		6.99	7.11		U 2 C			1						S
108598	10.533	0.037	9.730	0.030		0.711	0.036	T	0.77	0.03	L	9.7106	0.0022	0.026	149		9.66	9.76		C			1						
108599	9.320	0.015	8.197	0.010	*	0.967	0.014	T	0.95	0.01	L *	8.2551	0.0017	0.013	86	*	8.23	8.28		C	22000−4032	H 1	2 C	S A	AB	123	0.110	0.016	0.28	1.39	S
108600	10.347	0.027	8.599	0.012		1.457	0.023	T	1.46	0.04	L	8.5633	0.0019	0.019	146		8.52	8.60					1						

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Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr											%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
108601	22 00 01.33	+39 13 58.4	8.95	H	330.005 542 68	+39.232 876 12		2.65	10.86	7.18	0.69	0.80	1.19	0.77	0.89	−49	+11	+ 0	+20	+10	− 5	+ 9	−12	+10	−53	0	−0.72
108602	22 00 02.28	+54 06 27.4	7.54	G	330.009 494 87	+54.107 611 69		21.27	−21.43	−20.97	0.60	0.50	0.69	0.72	0.58	+ 3	−16	+11	− 9	+24	− 7	+19	+ 4	− 8	+46	0	−0.30
108603	22 00 03.38	+65 25 58.0	6.93	1 H	330.014 085 33	+65.432 776 97		1.55	−2.50	−2.19	0.48	0.47	0.56	0.61	0.50	−20	−12	+26	− 1	+10	+23	+ 2	− 6	+ 4	−28	0	1.46
108604	22 00 03.92	−52 03 23.7	8.06	H	330.016 344 67	−52.056 591 48		6.13	53.03	−8.93	0.74	0.64	1.08	0.99	0.72	+32	−18	−21	+29	+22	− 1	+23	+37	−13	+39	0	0.08
108605	22 00 04.24	+55 07 44.4	9.59	H	330.017 680 93	+55.128 993 08		1.10	−2.46	−3.59	0.78	0.79	0.99	0.90	0.79	+ 4	+ 2	+ 3	−11	+19	−13	+17	−12	+ 2	+40	0	−0.01
108606	22 00 04.44	+44 33 07.7	8.20	2 H	330.018 483 93	+44.552 142 23		4.40	16.61	3.55	0.61	0.60	0.84	0.76	0.66	−22	+ 4	+ 2	+ 0	− 1	+ 3	− 1	+ 2	+ 2	−28	1	−0.47
108607	22 00 04.67	+55 01 11.2	7.86	H	330.019 453 64	+55.019 774 93		−0.57	−3.55	−6.43	0.62	0.53	0.71	0.66	0.57	+ 5	− 7	+ 2	− 1	+26	− 2	+24	+ 3	+ 9	+37	1	0.25
108608	22 00 06.67	+26 47 01.7	7.74	H	330.027 775 64	+26.783 813 54		4.50	6.65	5.07	0.63	0.67	0.84	0.71	0.83	+15	− 2	+ 1	+14	+ 6	−18	+ 6	+ 9	+19	+16	0	−2.35
108609	22 00 07.24	+51 31 05.6	7.59	1 H	330.030 157 11	+51.518 229 59		4.37	5.47	−5.95	0.54	0.51	0.68	0.63	0.57	− 9	−13	+ 2	−11	+10	+10	+ 7	− 3	+10	+ 9	0	−1.36
108610	22 00 07.44	−62 06 41.0	8.51	H	330.031 003 51	−62.111 400 31		4.99	18.94	−25.35	0.53	0.62	1.06	0.70	0.70	+ 1	− 9	− 5	− 1	+10	+ 2	+10	+ 5	−15	− 3	0	0.99
108611	22 00 07.47	−52 18 10.0	8.21	G	330.031 118 76	−52.302 764 65		16.17	55.75	−71.76	0.86	0.67	1.11	1.09	0.79	+33	−21	− 9	+41	+28	+ 3	+31	+44	−19	+41	0	−0.49
108612	22 00 07.92	+06 43 02.8	6.00	H	330.032 996 05	+06.717 435 70		3.05	14.53	0.70	0.71	0.58	0.84	0.91	0.70	+ 8	−12	−18	− 3	+ 5	+16	+ 2	−14	+30	+ 7	0	−0.01
108613	22 00 08.05	+18 54 05.1	9.11	H	330.033 549 82	+18.901 429 63		1.06	−30.40	−67.81	1.12	0.99	1.38	1.36	1.47	+18	+ 4	−22	−29	+18	+ 4	+22	− 1	+42	+20	0	−0.26
108614	22 00 11.05	+42 35 01.0	7.56	H	330.046 027 62	+42.583 615 02		5.63	34.41	−7.10	0.46	0.49	0.70	0.57	0.59	−25	+ 7	− 3	+11	− 1	+11	− 1	+10	+ 0	−38	1	0.46
108615	22 00 11.37	−79 17 31.0	9.65	H	330.047 371 02	−79.291 936 84		6.86	18.07	−17.85	0.87	0.79	1.05	1.02	0.86	+ 3	− 8	−17	+13	+ 2	+ 1	+ 3	+ 9	− 9	+ 6	0	2.20
108616	22 00 11.85	+19 54 41.2	8.37	H	330.049 373 18	+19.911 431 67		4.98	5.77	−5.96	0.76	0.76	1.13	0.85	1.13	+26	+ 9	−19	+24	+12	−10	+14	+ 2	+41	+28	0	1.13
108617	22 00 12.31	−27 17 56.9	9.60	H	330.051 285 19	−27.299 135 65		14.23	47.14	18.89	0.98	0.73	1.22	1.10	0.76	+15	+ 6	− 6	+19	− 9	+34	− 7	+37	− 6	+10	0	−0.49
108618	22 00 12.57	+22 02 07.4	8.42	G	330.052 359 19	+22.035 387 99		5.56	−21.61	− 8.83	0.99	0.86	1.17	1.30	1.08	+28	− 2	− 2	− 8	−10	− 1	−11	−18	+15	+20	2	−1.08
108619	22 00 12.90	−12 13 28.8	9.22	H	330.053 750 42	−12.224 677 03		5.01	169.23	−92.22	1.40	0.80	1.48	1.80	0.90	+16	−19	−20	−19	+20	− 4	+10	−11	+22	+24	4	0.03
108620	22 00 16.23	−48 50 29.5	9.68	G	330.067 623 79	−48.841 531 62		2.25	−10.31	0.35	0.82	0.77	1.28	0.94	0.81	+39	−16	+ 5	+13	+ 2	+ 7	+ 5	+26	− 4	+26	1	0.40
108621	22 00 17.09	+34 37 46.6	6.87	H	330.071 216 04	+34.629 600 52		1.88	4.77	−2.21	0.43	0.51	0.67	0.53	0.60	+10	+ 4	− 8	+ 4	+11	−12	+11	+ 0	+ 5	+24	0	−1.14
108622	22 00 18.91	−17 23 10.6	7.87	G	330.078 809 40	−17.386 277 00		6.99	−16.19	−10.33	0.93	0.61	1.11	1.12	0.60	+48	−21	− 4	+ 7	+26	+23	+15	+ 4	+27	+55	0	0.54
108623	22 00 19.19	+17 02 20.8	10.25	H	330.079 940 42	+17.039 120 91		4.71	17.83	−2.25	1.33	1.45	2.12	1.60	1.73	+33	+ 8	−31	−13	− 8	−12	−12	−53	+52	+11	0	−0.07
108624	22 00 21.45	−46 57 31.0	9.42	G	330.089 371 41	−46.958 618 52		8.10	−83.53	−152.65	0.96	0.99	1.57	1.18	1.00	+44	−31	−34	−10	+17	+ 6	+21	+37	− 9	+34	1	1.49
108625	22 00 21.84	+60 27 23.9	9.03	H	330.091 001 63	+60.456 648 98		3.76	10.54	8.01	0.73	0.72	0.80	0.88	0.81	+12	− 2	+ 8	+22	+25	+ 1	+25	+15	− 6	+26	0	−1.08
*108626	22 00 24.22	−55 53 00.4	6.02	H	330.100 930 18	−55.883 451 50		5.20	23.69	−14.44	0.47	0.39	0.71	0.57	0.39	− 6	− 1	−22	+11	+ 1	+24	+10	− 6	− 9	+12	0	−0.27
*108627	22 00 24.22	+49 03 06.3	7.73	H	330.100 916 35	+49.051 745 22		1.14	2.91	−1.05	0.52	0.54	0.69	0.59	0.58	−16	− 1	+18	− 3	+10	− 4	+11	+ 3	− 2	−14	1	1.17
108628	22 00 24.63	−12 51 11.8	8.80	H	330.102 644 42	−12.853 279 04		0.63	7.53	3.49	1.33	0.83	1.51	1.47	0.97	+37	−44	−31	− 4	+17	− 1	+12	−10	+ 7	+44	0	1.72
108629	22 00 24.84	+21 20 24.4	8.65	H	330.103 497 19	+21.340 123 16		3.88	10.38	− 8.28	0.84	0.80	1.18	0.93	1.12	+27	+22	−10	+ 0	−11	−26	− 9	−28	+18	+31	0	−0.70
108630	22 00 25.15	+43 26 43.4	8.89	3 T	330.104 788 67	+43.445 378 59	*	−0.35	− 3.22	− 4.09	0.98	0.87	1.31	0.99	0.88	−35	+26	−14	−24	+22	− 4	+22	−21	+20	−32	4	2.24
108631	22 00 25.80	−63 25 52.7	7.80	H	330.107 509 68	−63.431 315 19		2.14	10.31	−10.22	0.48	0.55	0.89	0.59	0.61	−24	− 1	− 4	−22	+ 1	− 5	+ 3	−13	+ 5	−41	1	−0.03
108632	22 00 26.71	+33 00 20.8	6.46	H	330.111 292 56	+33.005 788 27		15.05	−14.63	57.44	0.34	0.51	0.66	0.35	0.58	+17	+ 3	−18	− 9	+14	−20	+11	+ 4	+ 4	+28	2	−0.70
108633	22 00 27.49	+09 16 43.2	9.36	H	330.114 530 72	+09.278 675 48		3.52	− 9.64	−22.18	1.37	1.18	1.58	1.81	1.59	+13	− 3	−10	−14	+ 9	+ 4	+ 9	−15	+24	+14	0	0.30
108634	22 00 28.12	+33 40 48.0	9.44	H	330.117 173 10	+33.680 006 95		20.40	−245.88	−247.94	0.86	1.07	1.50	0.98	1.28	+10	− 9	−18	−10	+23	−11	+17	+ 6	+ 3	+37	0	0.26
108635	22 00 28.38	+01 13 01.1	8.05	H	330.118 236 07	+01.216 978 80		4.99	35.98	−35.40	0.92	0.79	1.13	1.14	0.81	+28	+ 6	−21	− 4	− 8	+27	− 3	+ 0	−12	+19	0	−0.85
108636	22 00 29.19	−70 30 25.6	8.53	H	330.121 634 82	−70.507 099 80		2.20	23.38	− 3.45	0.72	0.68	0.98	0.83	0.75	−15	− 7	+ 1	+ 1	−13	− 7	−14	− 9	− 5	−27	0	0.19
108637	22 00 30.94	−20 49 08.2	8.96	H	330.128 929 00	−20.818 946 28		3.02	12.24	− 0.02	1.08	0.81	1.24	1.47	0.79	+21	+10	− 4	+ 3	− 8	+24	+ 1	+33	− 5	− 3	2	1.43
108638	22 00 31.85	−00 34 44.3	9.78	H	330.132 697 37	−00.578 966 23		0.32	− 4.98	− 6.63	1.68	1.13	1.86	2.70	1.30	+ 0	+26	−25	+ 0	+ 7	+30	+15	+24	+ 3	− 1	0	1.12
108639	22 00 32.05	−42 27 06.5	7.25	H	330.133 532 70	−42.451 792 77		4.54	34.11	−11.04	0.74	0.54	0.90	0.90	0.50	+10	+12	−23	+22	−21	+41	−12	+16	− 5	− 3	2	0.88
108640	22 00 33.47	−51 29 32.0	8.27	G	330.139 471 68	−51.492 222 89		10.36	37.17	14.20	0.73	0.67	1.09	0.96	0.77	+38	−16	−14	+23	+25	+12	+26	+33	−10	+49	0	−0.74
108641	22 00 33.56	+05 58 18.7	8.47	H	330.139 817 78	+05.971 874 40		11.71	−38.56	−107.31	0.98	1.00	1.19	1.37	1.20	+31	− 4	−18	+11	− 4	+27	− 1	−17	+ 9	+27	0	1.01
108642	22 00 34.86	−08 31 33.7	8.29	H	330.145 246 66	−08.526 036 88		2.63	4.28	−23.63	1.17	0.58	1.17	1.26	0.58	+24	+37	+13	−38	− 2	−13	+ 2	− 9	+ 9	+20	0	1.33
108643	22 00 35.40	−54 06 41.3	8.21	1 H	330.147 481 80	−54.111 485 89		4.77	9.79	−23.29	0.77	0.57	1.19	1.09	0.65	− 5	− 7	+ 2	+13	− 7	− 1	− 5	+ 3	−15	− 9	0	2.91
108644	22 00 36.40	−02 44 26.8	9.35	2 H	330.151 663 55	−02.740 764 96		7.91	32.23	−12.40	1.42	0.75	1.50	1.75	0.78	+27	+16	− 1	+12	+13	+ 1	+14	− 6	+22	+30	0	−0.99
108645	22 00 36.54	+44 06 18.6	7.38	H	330.152 233 47	+44.105 166 07		3.74	−10.03	− 7.33	0.51	0.51	0.72	0.60	0.56	−25	+ 0	+ 1	+ 1	− 3	+ 7	− 3	− 3	+ 7	−30	0	−0.20
108646	22 00 36.65	+75 04 22.5	8.73	2 H	330.152 714 50	+75.072 917 03		3.57	− 5.02	1.78	0.65	0.56	0.67	0.77	0.62	− 3	+ 6	+12	− 7	+ 3	−11	+ 3	−18	− 1	− 8	0	−0.26
108647 H	22 00 38.19	−13 44 45.1	7.53	H	330.159 144 49	−13.745 866 15	A	6.18	9.16	3.48	2.39	1.54	1.51	1.70	1.06	+55	+ 6	+ 0	−18	+ 3	+ 0	− 1	−20	+ 4	+28	1	−0.27
108648	22 00 38.36	+69 06 06.5	9.06	H	330.159 821 08	+69.101 794 17		3.08	− 2.99	−12.60	0.76	0.67	0.82	1.02	0.68	− 8	−12	+23	+13	+17	+18	+12	− 2	+ 1	+ 4	0	1.93
108649	22 00 38.82	−14 09 51.5	7.72	H	330.161 740 57	−14.164 299 92		15.48	133.57	−11.03	0.82	0.63	0.97	1.04	0.63	+40	−24	−15	+ 3	− 2	+22	− 6	−16	+17	+29	0	1.19
108650 H	22 00 39.27	+62 29 16.1	6.67	H	330.163 610 47	+62.487 801 93	A	0.14	− 1.71	− 2.88	0.61	0.53	0.57	0.61	0.51	− 8	− 1	− 6	+14	+ 5	− 2	+ 0	−24	+10	−20	2	−0.38
108651 H	22 00 39.37	−50 02 06.9	9.31	H	330.164 037 58	−50.035 245 91	A	12.31	26.80	−56.83	3.47	3.43	3.60	2.62	2.31	+43	−14	−11	− 1	+10	−15	+12	+15	−37	+52	0	−0.40
108652 H	22 00 39.37	+47 21 53.4	9.37	H	330.164 058 92	+47.364 836 02	*	−0.31	− 1.77	− 0.97	1.87	1.62	1.34	1.77	1.15	−34	+ 6	+ 2	+ 1	+10	+13	+14	−21	+25	−25	1	0.23
108653	22 00 39.89	+72 54 51.4	8.96	H	330.166 191 41	+72.914 286 49		1.08	−13.02	6.28	0.65	0.67	0.77	0.76	0.75	− 2	− 7	+ 8	− 1	− 3	−14	+ 1	−11	−12	+23	0	−1.02
108654	22 00 40.29	+56 42 38.3	8.29	H	330.167 882 62	+56.710 627 96		1.43	0.36	0.55	0.59	0.54	0.70	0.61	0.54	+10	+14	+19	− 6	− 1	−21	+ 4	−11	− 3	+21	0	0.55
108655	22 00 40.97	+02 47 32.4	8.86	H	330.170 688 26	+02.792 330 14		10.07	29.18	−0.56	1.27	0.86	1.39	1.59	0.82	+14	+35	− 9	+25	− 8	+16	− 2	+ 9	+ 9	+ 8	3	1.10
108656	22 00 42.22	−23 17 49.3	7.77	H	330.175 903 30	−23.297 027 57		12.41	33.60	−75.46	0.90	0.63	1.13	1.00	0.65	+19	+ 6	− 5	− 3	− 5	− 2	− 2	+46	−22	+13	0	0.66
108657	22 00 42.37	+01 50 28.1	8.56	H	330.176 553 88	+01.841 131 33		3.90	− 4.90	−24.96	1.12	0.81	1.23	1.75	0.79	+17	+21	−14	+43	−14	+39	−12	+ 5	− 5	− 4	0	0.88
108658	22 00 43.15	−33 30 29.9	8.70	H	330.179 777 02	−33.508 310 46		1.19	−30.75	−40.48	1.04	0.76	1.36	1.14	0.75	+22	− 7	−42	−20	−13	+24	− 5	+32	−35	+20	0	1.26
108659	22 00 45.30	+52 32 51.0	8.58	H	330.188 738 08	+52.547 512 86		0.38	3.70	− 2.06	0.61	0.58	0.75	0.65	0.62	− 5	+11	− 9	+ 3	+13	−16	+15	− 8	+12	+14	0	−1.92
108660	22 00 45.48	+31 27 00.3	7.26	H	330.189 512 13	+31.450 070 70		15.14	−41.33	−32.14	0.60	0.60	0.79	0.73	0.74	+ 7	+ 9	−24	+13	+15	+ 8	+18	+11	+ 1	+16	0	0.69
108661 H	22 00 50.22	−28 27 13.5	5.43	G	330.209 229 38	−28.453 737 26	A	3.22	14.81	0.30	0.91	0.64	0.90	0.96	0.59	+16	−16	+ 1	+14	−23	+ 7	−21	+21	+18	+ 6	1	−0.28
108662	22 00 50.62	+51 14 09.8	8.74	G	330.210 899 14	+51.236 057 11		1.67	2.33	−1.42	0.67	0.64	0.84	0.76	0.69	− 6	− 9	+ 5	− 3	+ 4	+ 1	+ 3	− 2	+ 0	+ 9	0	−0.68
108663	22 00 50.92	+07 51 08.8	8.00	H	330.212 167 39	+07.852 449 93		5.04	19.05	−12.30	0.89	0.79	1.08	1.35	1.01	+15	− 3	−22	+29	− 2	+38	+ 5	+ 6	+24	+17	0	−0.97
108664	22 00 51.77	+28 02 50.8	8.29	H	330.215 715 77	+28.047 457 85		2.04	17.75	−21.87	0.95	0.85	1.10	1.01	1.03	+ 5	+16	+ 1	+40	−18	− 9	−11	−19	+30	+ 7	0	−2.63
108665	22 00 52.26	−44 27 45.8	9.54	H	330.217 753 95	−44.462 724 22		4.07	49.09	−10.18	1.35	0.99	1.38	1.42	0.95	+27	+11	− 9	−37	−13	− 6	− 3	+25	+ 4	+11	0	1.16
108666	22 00 52.63	−26 31 31.7	8.53	H	330.219 289 14	−26.525 482 35		5.23	−13.91	−71.98	0.98	0.79	1.15	1.19	0.82	+22	− 6	−10	+26	+ 5	+21	+10	+55	− 8	+16	2	1.24
108667	22 00 52.72	+39 31 33.0	7.65	H	330.219 652 35	+39.525 846 91		3.59	−21.47	− 6.49	0.49	0.56	0.87	0.59	0.72	−51	+14	−11	+22	+13	+ 2	+ 9	−11	− 4	−61	0	−0.36
108668	22 00 53.03	+45 33 35.6	9.59	H	330.220 952 55	+45.559 885 20		3.45	1.23	1.29	0.84	0.84	1.17	1.03	0.93	−20	− 2	+10	+12	+ 2	− 4	+ 0	− 9	+11	−26	0	0.16
108669	22 00 53.83	+09 56 26.4	10.49	G	330.224 312 00	+09.940 674 39		17.43	27.27	−481.95	2.04	1.86	2.36	2.36	2.15	+13	+29	−28	−43	− 6	−15	+ 1	−52	+37	+14	0	0.38
108670 H	22 00 53.84	−56 28 16.3	8.19	H	330.224 339 42	−56.471 189 05	A	3.00	14.73	0.96	1.12	0.91	1.31	1.31	0.91	− 4	−23	−22	+14	+ 6	+ 2	+11	+ 1	−11	+ 0	1	−0.56
108671	22 00 54.33	+15 15 37.9	8.18	G	330.226 392 99	+15.260 540 78		8.23	29.23	−39.51	0.80	0.72	1.14	1.07	1.01	+14	−16	−39	−18	+14	− 5	+ 4	−35	+45	− 1	0	0.79
108672	22 00 54.91	+31 32 03.4	7.77	H	330.228 808 53	+31.534 287 12		4.37	15.22	− 4.17	0.67	0.67	0.85	0.82	0.81	+11	+12	−24	+39	+10	+10	+13	+15	− 3	+16	2	0.49
108673	22 00 55.12	−47 12 47.5	8.52	H	330.229 652 83	−47.213 195 51		4.84	40.85	−31.55	0.84	0.77	1.26	1.04	0.79	+33	−19	−22	− 2	+13	+21	+15	+31	+ 2	+36	1	0.51
108674	22 00 55.29	+10 41 39.0	9.55	H	330.230 363 08	+10.694 160 20		1.02	− 4.51	− 3.08	1.75	1.45	1.92	2.20	1.99	+28	+31	−11	−37	−22	−10	−11	−64	+28	+33	5	−2.31
108675 H	22 00 55.66	+43 38 06.6	7.65	G	330.231 926 99	+43.635 166 61	A	5.92	8.52	−14.67	0.82	0.86	1.13	0.84	0.83	−25	−12	+22	− 4	+14	+ 6	+ 9	− 6	− 5	−22	1	−0.90
108676	22 00 55.81	+77 18 58.4	8.32	H	330.232 534 05	+77.316 229 48		3.76	5.15	4.71	0.62	0.55	0.65	0.64	0.53	+ 0	−11	+14	+29	− 6	− 3	− 7	−16	+16	+ 1	0	−0.22
108677	22 00 55.88	+47 38 24.3	8.63	H	330.232 837 85	+47.640 094 56		4.31	23.88	10.36	0.67	0.67	0.89	0.78	0.74	+ 0	+ 1	+ 7	− 8	+ 7	− 5	+ 7	+ 3	+ 2	+ 3	0	0.98
108678	22 00 56.15	+07 26 52.9	8.80	H	330.233 942 18	+07.448 036 42		0.33	− 1.50	− 1.85	1.34	0.94	1.63	1.85	1.31	−17	+29	−31	+43	−20	+38	+ 9	−14	+46	+18	0	−0.32
108679	22 00 57.96	+21 51 54.5	7.68	H	330.241 496 97	+21.865 132 04		5.11	6.06	−65.90	0.85	0.77	1.02	1.05	1.11	+21	+ 2	− 2	+16	−14	−14	−15	−13	+ 2	+26	0	−0.60
108680	22 00 58.81	+35 18 04.6	8.48	H	330.245 053 73	+35.301 288 88		2.60	14.58	6.25	0.62	0.68	0.88	0.76	0.91	+19	+ 1	−14	+27	+16	−18	+17	+10	− 8	+36	0	−1.07
108681	22 00 59.08	−36 33 22.4	6.71	G	330.246 171 11	−36.556 223 18		7.11	19.87	−38.08	0.77	0.57	0.87	0.87	0.58	− 3	−21	− 9	+31	−30	+19	−29	+27	+18	−11	0	−0.82
108682	22 00 59.84	−35 27 27.3	8.22	H	330.249 343 66	−35.457 569 94		5.72	19.42	− 3.05	0.83	0.63	0.97	0.96	0.65	+23	−21	−18	+ 2	−19	+29	−15	+11	+10	+29	0	0.41
108683	22 01 00.96	+35 57 45.8	9.50	H	330.254 014 70	+35.962 732 63		6.71	−77.67	20.51	0.73	0.76	1.32	0.85	0.90	−32	+ 3	− 6	+ 7	+ 3	+ 1	+ 9	−18	− 2	− 9	0	1.58
108684	22 01 01.30	+48 11 02.5	8.72	2 H	330.255 428 93	+48.184 023 31		−0.20	− 1.38	− 2.71	0.67	0.66	0.87	0.84	0.71	−20	− 2	+17	−13	+16	+ 4	+13	− 8	+ 6	−21	1	0.32
108685	22 01 01.34	−38 53 35.4	8.82	H	330.255 597 98	−38.893 157 78		4.05	7.38	11.72	0.93	0.66	1.12	1.08	0.65	+22	− 5	− 4	+14	− 2	+26	+ 2	+30	−15	+ 9	0	−0.80
108686	22 01 01.67	+15 10 50.6	9.02	H	330.256 941 22	+15.180 711 29		10.20	106.71	16.96	0.99	0.95	1.51	1.51	1.23	+11	+ 3	−45	−27	+19	− 9	+12	−48	+53	−14	0	0.70
108687	22 01 01.87	+64 22 41.9	9.38	H	330.257 802 15	+64.378 312 53		3.49	−10.00	−10.41	0.80	0.72	0.86	1.11	0.81	−13	−13	+17	+32	+ 5	+15	− 2	+10	+ 3	−19	0	−0.95
108688	22 01 02.24	+66 04 56.9	8.27	H	330.259 336 19	+66.082 485 97		0.28	− 3.17	− 2.43	0.59	0.54	0.62	0.70	0.58	−21	+ 1	+ 6	+ 8	+ 7	+ 0	+ 5	−10	+10	−26	1	0.84
108689	22 01 03.54	+55 59 55.2	8.51	H	330.264 759 38	+55.998 672 37		10.68	−39.88	6.11	0.67	0.61	0.80	0.72	0.61	− 7	+ 8	+11	−16	+16	−17	+16	− 7	+ 1	+14	0	0.33
108690	22 01 04.35	+19 32 19.4	8.91	H	330.268 115 09	+19.538 732 20		3.69	− 1.48	− 5.25	0.87	0.97	1.18	1.01	1.32	+32	+ 9	+ 3	+10	− 1	+ 6	+ 2	−12	+28	+35	0	−1.68
108691	22 01 05.01	+00 36 17.1	5.60	H	330.270 879 29	+00.604 743 48		4.93	7.14	−11.60	0.76	0.60	0.83	0.93	0.67	+24	+ 3	−17	+13	+16	+10	+16	+41	−12	+26	0	1.65
108692	22 01 05.07	−13 01 37.9	7.35	H	330.271 137 80	−13.027 203 52		13.62	− 7.03	−119.23	0.91	0.60	1.00	1.00	0.62	+22	−28	− 2	−10	+10	− 1	+ 9	−22	− 5	+23	0	0.20
108693	22 01 05.32	+13 07 11.9	5.61	H	330.272 146 00	+13.119 961 36		14.30	57.60	−56.74	0.60	0.58	0.81	0.84	0.75	+37	−16	−16	−17	− 6	+12	−16	−52	+36	+25	2	−0.37
108694	22 01 06.15	−20 56 52.8	9.97	G	330.275 625 14	−20.948 005 38		11.44	96.89	−110.47	1.53	1.00	1.75	2.00	1.09	+14	+29	−13	− 4	+ 6	+24	+16	+38	+12	+10	2	1.09
108695	22 01 06.69	+39 14 45.4	7.11	H	330.277 877 72	+39.245 954 74		5.07	11.87	− 3.45	0.39	0.49	0.74	0.46	0.62	−55	+19	−14	+13	+12	− 2	+10	−12	+ 4	−63	0	−0.65
108696	22 01 07.06	+08 38 36.7	8.94	H	330.279 436 48	+08.643 539 67		2.66	− 3.28	− 0.06	1.23	1.00	1.55	1.63	1.15	+12	+ 2	−23	+ 5	+10	− 8	+ 4	−22	+48	− 9	0	1.25
108697	22 01 08.81	+41 04 43.1	8.67	H	330.286 704 62	+41.078 637 98		3.72	7.40	− 5.53	0.59	0.61	0.91	0.68	0.74	−35	+12

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
108601	10.193	0.017	9.080	0.012		0.959	0.016	T	0.95	0.01	L	9.1151	0.0013	0.023	254		9.07	9.15					1 S							
108602	8.157	0.009	7.596	0.009		0.553	0.015	G	0.63	0.01	H	7.6660	0.0009	0.009	117		7.65	7.69		C			1							S
108603	9.478	0.019	7.192	0.007		1.886	0.016	T	1.92	0.02	L	7.0143	0.0022	0.016	109		6.99	7.05		U 2			1							S
108604	8.476	0.009	8.099	0.009		0.363	0.015	G	0.42	0.02	H	8.1502	0.0017	0.017	126		8.12	8.18		C			1							S
108605	9.699	0.019	9.605	0.026		0.092	0.030	T	0.10	0.03	L	9.6312	0.0025	0.029	121		9.58	9.68					1							G
108606	8.443	0.008	8.237	0.009		0.190	0.012	T	0.21	0.01	L	8.2625	0.0029	0.047	124		8.23	8.54		P 1 A			1							
108607	8.466	0.010	7.915	0.010		0.516	0.013	T	0.59	0.01	L	7.9689	0.0013	0.015	129		7.94	8.00		C			1							S
108608	7.683	0.009	7.737	0.013		−0.046	0.014	T	−0.02	0.01	L	7.7334	0.0018	0.012	80		7.71	7.75					1							S
108609	7.940	0.007	7.619	0.007		0.325	0.007	G	0.38	0.01	H	7.6652	0.0017	0.016	132		7.64	7.69		M			1							S
108610	8.940	0.010	8.536	0.010		0.382	0.013	T	0.45	0.01	L	8.5965	0.0015	0.021	204		8.57	8.64					1							S
108611	8.826	0.011	8.288	0.010		0.502	0.013	G	0.57	0.01	H	8.3275	0.0012	0.015	122		8.30	8.35					1							S
108612	5.847	0.004	5.976	0.005		−0.112	0.006	T	−0.10	0.01	L	5.9625	0.0010	0.009	59		5.95	5.98					1							S
108613	10.459	0.038	9.212	0.021		1.064	0.034	T	1.03	0.03	L	9.2815	0.0025	0.023	84		9.23	9.32		C			1							
108614	7.698	0.006	7.577	0.007		0.117	0.009	T	0.13	0.01	L	7.6075	0.0011	0.012	179		7.59	7.63		C			1							S
108615	10.427	0.026	9.758	0.023		0.609	0.026	T	0.68	0.02	L	9.7782	0.0023	0.025	157		9.73	9.83					1							
108616	8.327	0.012	8.348	0.015		−0.015	0.018	T	0.01	0.02	L	8.3728	0.0022	0.016	77		8.35	8.40					1							S
108617	10.391	0.034	9.683	0.029		0.639	0.034	T	0.70	0.03	L	9.7380	0.0025	0.019	93		9.71	9.78					1							
108618	8.893	0.015	8.446	0.014		0.440	0.015	G	0.51	0.02	H	8.5144	0.0022	0.015	65		8.49	8.54		C			1							
108619	10.149	0.034	9.298	0.026		0.723	0.002	G	0.77	0.00	H	9.3539	0.0022	0.018	70		9.32	9.39					1							
108620	10.150	0.020	9.758	0.021		0.388	0.004	G	0.45	0.00	H	9.7845	0.0019	0.023	181		9.75	9.82		C			1							
108621	8.610	0.009	6.988	0.005		1.358	0.008	T	1.33	0.01	L	7.0162	0.0010	0.010	141		7.00	7.03					1							S
108622	8.202	0.010	7.904	0.010		0.283	0.015	T	0.32	0.02	L	7.9340	0.0014	0.012	95		7.91	7.96					1							S
108623	10.846	0.057	10.395	0.062		0.425	0.077	T	0.49	0.08	L	10.3440	0.0038	0.029	86		10.30	10.40		C			1							G
108624	10.188	0.022	9.502	0.019		0.615	0.004	G	0.68	0.00	H	9.5577	0.0022	0.022	139		9.52	9.60					1							
108625	9.398	0.017	9.069	0.019		0.312	0.024	T	0.36	0.03	L	9.1109	0.0018	0.015	109		9.08	9.15		C			1							
108626	5.933	0.003	6.005	0.003		−0.061	0.004	T	−0.04	0.00	L	6.0044	0.0007	0.008	136		5.99	6.02		C			1							S
108627	9.580	0.016	7.864	0.008		1.432	0.014	T	1.42	0.02	L	7.8645	0.0010	0.013	148		7.84	7.89					1							
108628	10.596	0.055	8.985	0.024		1.160	0.040	G	1.12	0.04	R	8.9663	0.0022	0.013	60		8.94	8.99					1							
108629	8.808	0.013	8.665	0.016		0.138	0.019	T	0.15	0.02	L	8.7023	0.0018	0.012	71		8.68	8.72		C			1							
108630	10.033	0.021	8.990	0.015		0.906	0.019	T	0.91	0.01	L	8.9348	0.0439	0.271	160		8.70	9.34	5.33	P 1 A			1 V							
108631	9.827	0.014	7.974	0.006		1.541	0.012	T	1.60	0.03	L	7.9142	0.0012	0.017	237		7.89	7.94					1							S
108632	6.972	0.003	6.509	0.004		0.463	0.010	G	0.53	0.01	H	6.5652	0.0006	0.007	181		6.55	6.58		C			1							S
108633	10.662	0.059	9.423	0.034		1.057	0.053	T	1.02	0.04	L	9.5255	0.0050	0.023	49		9.47	9.57		C			1							
108634	10.646	0.033	9.539	0.020		0.946	0.030	T	0.99	0.03	L	9.5792	0.0024	0.030	151		9.53	9.63					1							
108635	8.936	0.019	8.137	0.015		0.724	0.019	T	0.78	0.01	L	8.1964	0.0016	0.011	52		8.17	8.21					1							S
108636	10.408	0.028	8.680	0.012		1.442	0.024	T	1.44	0.04	L	8.6648	0.0019	0.021	149		8.63	8.70					1							
108637	10.063	0.027	9.064	0.019		0.873	0.025	T	0.88	0.02	L	9.1158	0.0026	0.020	71		9.08	9.15					1							
108638	11.135	0.070	9.918	0.040		1.040	0.063	T	1.01	0.05	L	9.9477	0.0051	0.026	53		9.91	10.00		C			1							
108639	8.092	0.011	7.339	0.008		0.688	0.011	T	0.75	0.01	L	7.3878	0.0015	0.011	93		7.37	7.41					1							S
108640	8.745	0.009	8.311	0.009		0.428	0.016	G	0.50	0.02	H	8.3667	0.0012	0.015	131		8.35	8.39		C			1							S
108641	9.156	0.020	8.519	0.018		0.592	0.023	T	0.66	0.02	L	8.5924	0.0034	0.017	51		8.54	8.63					1							S
108642	9.576	0.022	8.405	0.014		1.004	0.020	T	0.98	0.02	L	8.4551	0.0018	0.013	80		8.43	8.48		C			1							S
108643	9.549	0.015	8.335	0.010		1.038	0.014	T	1.01	0.01	L	8.3815	0.0015	0.017	142		8.35	8.42		U			1							
108644	10.478	0.050	9.442	0.033		0.901	0.045	T	0.90	0.03	L	9.5057	0.0095	0.061	77		9.40	9.68		P 1 A			1							
108645	9.150	0.012	7.518	0.006		1.366	0.011	T	1.33	0.01	L	7.5289	0.0012	0.013	157		7.51	7.56					1							S
108646	8.911	0.011	8.748	0.013		0.156	0.016	T	0.17	0.02	L	8.7860	0.0016	0.019	119		8.76	9.07	1.65	P 1 A			1							P
108647	7.905	0.007	7.580	0.008	*	0.312	0.012	T	0.36	0.02	L *	7.6062	0.0026	0.016	71	*	7.57	7.63		D	22006−1345	I 1	2 C	A	AB	51	0.375	0.012	1.70	0.06	S
108648	9.157	0.018	9.062	0.022		0.093	0.027	T	0.11	0.03	L	9.0968	0.0017	0.012	97		9.07	9.12					1							
108649	8.316	0.010	7.786	0.012		0.523	0.015	G	0.60	0.02	H	7.8371	0.0015	0.011	75		7.82	7.86		C			1							S
108650	6.703	0.004	6.693	0.005	*	0.014	0.006	T	0.03	0.01	L *	6.6865	0.0006	0.007	121	*	6.68	6.70		D	22007+6229	I 1	2 C	A	AB	223	0.987	0.011	3.28	0.06	S
108651	10.426	0.027	9.424	0.019	*	0.876	0.025	T	0.92	0.03	L *	9.4559	0.0019	0.020	139	*	9.42	9.49		D	22007−5002	I 1	2 C	A	AB	339	0.489	0.004	0.14	0.02	
108652	9.364	0.017	9.393	0.024	*	−0.022	0.027	T	0.00	0.03	L *	9.3727	0.0020	0.021	124	*	9.34	9.41		D	22007+4722	M 1	2 C	A	AB	123	0.282	0.010	0.89	0.13	
108653	11.446	0.084	9.180	0.022		1.870	0.070	T	1.90	0.07	L	9.0541	0.0018	0.022	121		9.02	9.09					1							
108654	8.566	0.010	8.317	0.010		0.233	0.014	T	0.26	0.02	L	8.3618	0.0012	0.013	122		8.34	8.38		C			1							
108655	9.327	0.020	8.918	0.020		0.387	0.026	T	0.45	0.03	L	8.9546	0.0025	0.019	50		8.89	9.00					1							
108656	8.917	0.018	7.870	0.013		0.909	0.017	T	0.91	0.01	L	7.9346	0.0018	0.009	67		7.92	7.95					1							S
108657	10.553	0.053	8.765	0.022		1.519	0.047	T	2.16	0.12	O	8.6261	0.0022	0.020	47		8.59	8.66					1							
108658	10.259	0.033	8.798	0.018		1.231	0.030	T	1.19	0.03	L	8.8601	0.0018	0.013	79		8.84	8.88		C			1							
108659	8.786	0.011	8.582	0.013		0.195	0.016	T	0.21	0.02	L	8.6408	0.0013	0.015	130		8.62	8.66		C			1							
108660	7.671	0.007	7.305	0.007		0.347	0.009	T	0.41	0.01	L	7.3462	0.0013	0.010	89		7.33	7.37					1							S
108661	5.508	0.020	5.612	0.020	A	−0.095	0.007	G	−0.08	0.01	H *	5.4012	0.0008	0.006	89	*	5.39	5.41		D	22008−2827	I 1	2 C	A	AB	113	1.818	0.002	1.08	0.01	S
108662	8.759	0.011	8.717	0.014		0.030	0.015	G	0.05	0.01	H	8.7565	0.0016	0.016	124		8.73	8.79					1							
108663	8.085	0.012	8.010	0.014		0.074	0.017	T	0.09	0.02	L	8.0308	0.0023	0.015	57		8.00	8.05		C			1							S
108664	9.956	0.027	8.432	0.014		1.281	0.024	T	1.24	0.03	L	8.4486	0.0025	0.019	79		8.42	8.48		C			1							
108665	10.338	0.033	9.593	0.027		0.667	0.032	T	0.73	0.03	L	9.6768	0.0032	0.025	75		9.63	9.73					1							
108666	9.891	0.022	8.644	0.013		1.064	0.020	T	1.03	0.02	L	8.7031	0.0013	0.017	82		8.68	8.73		C			1							
108667	8.979	0.009	7.770	0.006		1.034	0.008	T	1.01	0.01	L	7.8177	0.0010	0.015	251		7.79	7.84					1							
108668	9.941	0.022	9.626	0.025		0.299	0.031	T	0.34	0.04	L	9.6615	0.0021	0.021	137		9.62	9.70		C			1							G
108669						0.976	0.013	G	1.02	0.01	I	10.6289	0.0073	0.045	54		10.53	10.67					1							G
108670	8.511	0.009	8.298	0.011	*	0.203	0.013	T	0.22	0.01	L *	8.2508	0.0015	0.015	139	*	8.21	8.28		D	22009−5628	I 1	2 C	A	AB	288	0.916	0.006	1.59	0.02	S
108671	8.662	0.011	8.237	0.011		0.432	0.015	G	0.50	0.02	H	8.2716	0.0012	0.013	88		8.25	8.30		C			1							S
108672	7.818	0.009	7.760	0.011		0.058	0.013	T	0.07	0.01	L	7.7974	0.0014	0.011	96		7.78	7.83		C			1							S
108673	9.985	0.020	8.658	0.012		1.126	0.018	T	1.09	0.02	L	8.6900	0.0017	0.018	132		8.66	8.74					1							
108674	11.519	0.109	9.742	0.036		1.510	0.095	T	2.06	0.23	K	9.6246	0.0042	0.029	66		9.58	9.68					1							
108675	8.016	0.008	7.724	0.008	*	0.312	0.021	G	0.36	0.03	H *	7.7205	0.0015	0.012	159	*	7.70	7.74		D	22009+4338	I 1	2 C	A	AB	316	0.953	0.006	1.77	0.02	S
108676	8.404	0.010	8.340	0.011		0.064	0.014	T	0.07	0.01	L	8.3466	0.0016	0.015	119		8.32	8.38					1							S
108677	9.179	0.013	8.670	0.013		0.478	0.017	T	0.55	0.02	L	8.7337	0.0018	0.021	142		8.70	8.77					1							S
108678	8.948	0.018	8.814	0.021		0.129	0.026	T	0.14	0.03	L	8.8448	0.0033	0.014	46		8.82	8.87		C			1							
108679	9.023	0.016	7.807	0.010		1.039	0.015	T	1.01	0.01	L	7.8459	0.0015	0.011	69		7.82	7.87		C			1							S
108680	8.475	0.008	8.486	0.010		−0.005	0.012	T	0.02	0.01	L	8.4873	0.0014	0.015	127		8.46	8.52		C			1							
108681	8.132	0.008	6.845	0.006		1.096	0.002	G	1.06	0.00	H	6.8858	0.0014	0.009	77		6.87	6.91		C			1							S
108682	8.412	0.012	8.233	0.014		0.164	0.018	T	0.18	0.02	L	8.2762	0.0017	0.013	82		8.26	8.30		C			1							S
108683	10.166	0.024	9.584	0.022		0.544	0.029	T	0.62	0.03	L	9.6186	0.0022	0.027	183		9.57	9.66		C			1							
108684	9.249	0.013	8.813	0.013		0.450	0.015	G	0.52	0.02	H	8.8150	0.0029	0.030	156		8.76	8.86	28.49	P 1 A			1							
108685	9.335	0.015	8.865	0.015		0.443	0.019	T	0.51	0.02	L	8.9213	0.0021	0.014	86		8.90	8.95		C			1							
108686	9.619	0.019	9.082	0.019		0.504	0.024	T	0.58	0.03	L	9.1316	0.0019	0.019	90		9.10	9.16		C			1							
108687	9.644	0.024	9.462	0.031		0.174	0.037	T	0.19	0.04	L	9.4412	0.0022	0.022	119		9.40	9.47					1							
108688	8.406	0.010	8.288	0.012		0.114	0.015	T	0.13	0.01	L	8.3116	0.0015	0.013	127		8.29	8.33		C			1							
108689	9.248	0.013	8.571	0.011		0.626	0.014	T	0.69	0.01	L	8.6432	0.0018	0.018	122		8.62	8.67					1							
108690	9.286	0.017	8.941	0.018		0.327	0.023	T	0.38	0.03	L	8.9859	0.0023	0.024	85		8.95	9.04					1							
108691	7.273	0.010	5.744	0.005		1.279	0.001	G	1.24	0.00	H	5.7620	0.0008	0.006	58		5.75	5.78		C			1							S
108692	7.842	0.011	7.414	0.010		0.443	0.015	G	0.51	0.02	H	7.4534	0.0012	0.006	59		7.44	7.47		C			1							S
108693	6.028	0.004	5.647	0.004		0.336	0.005	G	0.39	0.01	H	5.6918	0.0007	0.006	93		5.68	5.70		C	22011+1307	I 1	1							S
108694	10.981	0.055	10.048	0.038		0.796	0.005	G	0.84	0.01	H	10.1140	0.0029	0.023	72		10.07	10.15		C			1							
108695	7.082	0.003	7.106	0.005		−0.017	0.005	T	0.01	0.01	L	7.1148	0.0010	0.012	267		7.10	7.13					1							S
108696	9.320	0.023	8.938	0.024		0.333	0.015	G	0.39	0.02	H	9.0253	0.0025	0.019	51		8.99	9.05		C			1							
108697	8.686	0.008	8.650	0.010		0.038	0.012	T	0.05	0.01	L	8.6850	0.0016	0.019	182		8.66	8.72					1							
108698	10.085	0.025	9.506	0.023		0.569	0.003	G	0.64	0.00	H	9.5646	0.0029	0.026	88		9.53	9.61					1							
108699	7.531	0.009	5.807	0.005		1.440	0.001	G	1.41	0.01	L	5.7854	0.0012	0.008	59		5.77	5.80					1							S
108700	7.280	0.007	7.306	0.008		−0.037	0.001	G	−0.01	0.00	H	7.3219	0.0019	0.014	80		7.29	7.34		R	22012+2650	I 1	1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
*108701	22 01 11.80	−51 45 43.8	10.78	G	330.299 156 84	−51.762 160 64	16.53	6.99	−55.80	1.59	1.45	2.49	2.07	1.62	+35	−35	−40	+30	+29	−14	+33	+36	−35	+42	0	1.84
*108702	22 01 11.80	−24 36 14.4	10.06	H	330.299 147 04	−24.603 987 80	3.29	18.14	−23.86	1.25	1.06	1.53	1.40	1.04	+22	−13	+ 1	+40	−15	+ 2	− 7	+53	− 7	+18	0	−2.86
108703	22 01 12.06	−11 20 36.8	9.13	H	330.300 245 42	−11.343 563 94	4.38	9.86	−24.79	1.25	0.75	1.31	1.56	0.84	+10	−13	− 3	− 8	+12	+11	+ 6	+10	+24	+16	0	1.33
108704	22 01 12.36	+52 05 20.2	8.37	H	330.301 506 68	+52.088 931 23	2.93	10.54	−0.13	0.59	0.54	0.70	0.68	0.59	− 5	+ 2	+ 0	+ 4	+22	−13	+20	+ 8	+10	+23	0	−1.43
108705	22 01 12.64	−25 00 38.2	8.08	H	330.302 682 32	−25.010 597 25	1.92	17.65	−48.86	0.82	0.68	1.06	0.91	0.66	+28	+ 5	−16	+22	−11	+27	− 4	+48	−18	+18	0	−0.16
108706	22 01 12.88	+28 18 24.5	11.99	G	330.303 657 18	+28.306 817 43	111.57	372.11	36.48	2.44	2.70	3.19	2.76	3.38	+16	+15	+ 8	+13	− 7	− 6	− 2	−27	+ 8	+22	2	−2.00
108707	22 01 14.63	−28 19 27.8	8.90	H	330.310 948 85	−28.324 375 97	5.71	−0.69	10.15	0.90	0.65	1.11	1.02	0.68	+ 9	+ 0	−27	− 2	−26	+34	−19	+11	− 1	+11	0	1.05
108708	22 01 14.65	−19 18 45.7	8.94	H	330.311 048 37	−19.312 690 05	15.77	109.31	−15.99	1.14	0.71	1.27	1.39	0.65	+28	− 2	+ 1	−24	+10	+ 0	+ 3	−23	+19	+20	0	2.64
108709	22 01 16.02	+38 34 00.7	9.18	H	330.316 770 15	+38.566 854 53	18.06	39.83	−109.59	0.80	0.89	1.36	0.97	1.03	−36	− 7	+ 4	−17	+ 3	−10	+ 3	−19	+ 3	−21	1	1.98
108710	22 01 17.39	+46 21 05.7	9.66	H	330.322 476 96	+46.351 572 66	B 11.91	7.99	0.05	10.48	9.62	5.13	5.14	4.86	−13	+16	+ 4	− 5	+11	+ 5	+14	−16	+20	−15	16	1.13
108711 H	22 01 18.65	−17 30 59.6	7.74	H	330.327 692 99	−17.516 561 71	A 6.04	−30.33	−23.29	1.66	1.00	1.71	1.74	0.89	+36	−23	−11	−22	+ 4	+14	+ 5	−13	+19	+44	2	1.04
108712	22 01 18.95	+46 21 11.1	9.63	H	330.328 969 04	+46.353 096 19	A 11.99	9.43	0.30	3.97	4.07	3.90	3.91	3.67	−16	+12	+ 7	− 1	+10	+ 3	+12	−16	+18	−17	16	1.13
108713	22 01 19.46	+36 25 58.4	8.12	H	330.331 064 84	+36.432 887 70	1.82	8.17	1.47	0.51	0.48	0.85	0.61	0.56	−34	+ 5	−16	− 5	− 2	−11	+ 1	−29	+16	−24	0	0.25
108714	22 01 19.95	+59 30 07.0	9.36	2 G	330.333 127 67	+59.501 946 38	−0.49	−0.02	−0.46	0.94	0.79	1.04	1.05	0.86	− 4	− 9	+ 8	+ 3	+18	+16	+17	+ 0	+ 4	+16	0	−0.71
108715	22 01 20.24	+33 10 10.7	8.30	H	330.334 328 65	+33.169 637 26	4.19	4.53	−5.00	0.47	0.70	0.92	0.49	0.78	+25	− 9	−21	−24	+ 7	− 7	+ 3	− 8	+16	+34	0	−0.02
108716	22 01 21.11	−48 12 39.5	9.03	H	330.337 944 24	−48.210 959 80	3.84	1.46	−3.40	0.96	0.77	1.31	0.99	0.75	+23	+ 7	+ 0	−18	+14	+ 5	+13	+25	+ 0	+25	7	2.35
108717	22 01 22.34	−47 51 56.2	8.74	H	330.343 094 20	−47.865 613 64	5.66	−21.13	5.76	0.83	0.76	1.26	0.88	0.74	+34	−13	−16	− 5	+27	+ 4	+24	+36	−11	+41	0	−0.09
108718	22 01 23.09	+61 58 25.8	7.07	H	330.346 214 80	+61.973 835 48	6.32	77.60	41.89	0.58	0.46	0.55	0.62	0.47	−13	+ 8	+16	+46	− 8	+ 0	− 6	+10	− 3	− 8	0	0.12
108719	22 01 24.87	+24 50 47.4	9.59	H	330.353 644 84	+24.846 499 80	4.20	15.42	6.59	1.44	1.08	1.65	1.96	1.47	− 6	+24	−25	−47	+17	−17	+26	−10	+41	−18	0	2.20
108720 H	22 01 25.72	+61 33 22.0	7.78	2 G	330.357 152 41	+61.556 109 52	* 1.11	−1.05	−3.08	0.60	0.49	0.59	0.67	0.53	− 7	− 4	+ 3	+41	− 2	−17	+ 2	+12	− 3	+ 5	0	0.67
108721	22 01 26.85	+29 22 34.4	8.93	H	330.361 862 26	+29.376 212 35	−0.59	−4.25	−2.41	0.75	0.87	1.14	0.95	1.05	+15	+10	−17	+58	− 4	+ 3	− 1	− 6	+19	+18	0	−1.09
108722	22 01 27.12	−14 19 36.7	7.60	H	330.362 983 54	−14.326 848 19	5.24	19.10	−51.76	0.78	0.60	0.92	1.01	0.59	+34	−11	− 1	+ 3	+15	+21	+ 9	− 4	+17	+24	2	0.98
108723	22 01 27.38	−33 50 08.1	7.25	H	330.364 070 02	−33.835 588 20	5.53	14.01	−80.43	0.83	0.58	1.00	0.93	0.61	+25	+ 4	−22	−19	− 1	+15	− 5	+29	−23	+36	0	2.17
108724	22 01 28.00	+57 28 48.6	10.39	H	330.366 685 60	+57.480 170 58	1.92	5.58	1.60	0.95	0.88	1.11	1.04	0.96	+ 8	+ 4	+13	−10	− 2	−17	+ 1	−17	+13	+30	1	1.18
108725	22 01 28.40	+48 17 54.2	8.26	G	330.368 343 13	+48.298 388 53	4.84	43.57	9.55	0.60	0.58	0.74	0.71	0.62	−16	+10	+ 1	−13	+18	− 7	+17	+ 2	+14	−17	0	−0.56
108726	22 01 28.74	−33 41 42.7	9.69	H	330.369 761 56	−33.695 195 52	4.66	−36.24	−3.06	1.29	0.89	1.55	1.51	0.97	+18	− 2	−25	−14	−12	+26	−12	+25	−19	+30	0	1.55
108727	22 01 29.31	+23 14 29.4	8.59	H	330.372 111 17	+23.241 486 62	5.64	−13.67	−13.95	0.97	0.89	1.12	1.01	1.07	+28	+25	+ 1	−14	− 6	−17	− 6	−22	− 3	+33	0	0.12
*108728	22 01 30.69	+43 53 25.5	8.93	3 H	330.377 893 44	+43.890 404 36	5.19	57.31	21.15	0.68	0.77	1.05	0.84	0.90	−21	+ 4	+14	−19	+ 4	− 2	+ 6	− 1	+ 6	−34	2	0.84
*108729	22 01 30.68	−52 56 31.2	9.18	H	330.377 852 53	−52.941 991 50	16.12	−165.27	−88.66	0.94	0.82	1.40	1.31	0.94	+15	− 7	−22	+24	+21	+ 3	+20	+34	−15	+18	3	1.32
108730	22 01 30.98	−36 03 30.2	8.86	G	330.379 102 70	−36.058 399 32	6.78	42.81	8.98	0.98	0.80	1.30	1.24	0.75	+20	− 1	−20	+ 9	−28	+44	−18	+ 6	+10	+15	0	−0.34
108731	22 01 32.21	+53 59 39.9	8.52	H	330.384 212 27	+53.994 430 01	2.95	−7.99	−7.22	0.71	0.57	0.80	0.81	0.64	+ 6	−21	+ 8	− 8	+27	−14	+23	+ 8	−11	+45	0	−1.44
108732 H	22 01 32.84	−15 36 43.2	7.02	H	330.386 819 84	−15.612 007 86	A 6.43	39.48	−5.88	1.16	0.81	1.21	1.42	0.76	+32	+18	+ 6	− 6	+26	+ 8	+28	+26	+26	+21	1	0.71
108733	22 01 33.36	−02 28 01.3	9.38	G	330.388 987 79	−02.467 023 03	4.07	4.54	−8.98	1.22	0.96	1.41	1.41	1.00	+26	+ 8	+13	+ 9	+ 9	+16	+ 6	+18	−10	+25	0	0.63
108734	22 01 33.94	−42 04 15.7	9.16	H	330.391 401 00	−42.071 037 72	11.88	20.97	−5.56	1.08	0.80	1.39	1.37	0.76	+ 6	+22	−17	+24	−21	+47	−11	+22	+ 0	− 9	0	−0.81
108735	22 01 35.46	−06 12 46.9	8.07	H	330.397 738 40	−06.213 021 88	4.17	4.73	13.61	0.94	0.61	1.11	1.10	0.69	+35	+ 6	+ 0	+ 0	+23	+40	+23	+19	+30	+52	0	−0.16
108736	22 01 36.47	−53 05 32.5	7.12	H	330.401 968 27	−53.092 354 78	27.96	51.86	−504.00	0.60	0.46	0.86	0.75	0.52	+ 6	− 4	−15	+30	+ 9	+ 7	+10	+27	−19	+ 9	0	2.19
108737	22 01 37.61	+53 47 49.7	8.44	H	330.406 719 84	+53.797 137 56	2.96	7.14	2.44	0.62	0.54	0.76	0.65	0.55	− 4	−12	+12	−18	+16	−19	+15	− 6	− 8	+23	0	−0.44
108738	22 01 38.20	+50 10 04.6	9.27	2 H	330.409 166 60	+50.167 954 70	−0.24	2.32	−0.30	0.69	0.68	0.84	0.75	0.72	+ 6	− 2	+ 5	− 8	+ 4	− 6	+ 3	− 2	+ 0	+19	0	−0.08
108739	22 01 39.31	−19 01 39.9	10.59	H	330.413 773 18	−19.027 757 28	0.58	−16.25	−26.97	1.67	1.08	1.90	2.05	0.99	+28	+ 5	+13	− 9	+10	+ 7	+ 4	−21	− 1	+19	2	−0.75
108740	22 01 39.55	−63 21 39.7	9.39	H	330.414 780 75	−63.361 014 00	−0.22	4.56	−6.73	0.74	0.86	1.37	0.85	0.86	−23	+ 1	−13	−23	+ 4	− 7	+ 5	−24	+20	−42	0	0.08
108741	22 01 39.80	−54 09 25.8	7.89	2 G	330.415 832 14	−54.157 168 45	6.99	33.78	−22.40	0.72	0.54	1.12	0.94	0.56	−20	+23	−26	+17	− 2	+ 9	− 1	+ 4	− 2	−12	0	0.25
108742	22 01 40.75	−24 51 56.3	8.34	G	330.419 791 99	−24.865 632 87	5.99	29.35	− 9.77	0.79	0.72	1.04	0.81	0.72	+33	+ 0	−11	+ 8	+ 3	+22	+ 5	+58	−12	+30	0	0.73
108743	22 01 42.46	+25 03 31.2	8.91	H	330.426 898 33	+25.058 662 56	4.20	−5.89	−18.17	1.12	0.95	1.46	1.68	1.27	− 1	+29	−23	−28	+12	−13	+24	−18	+50	−12	0	−1.07
*108744	22 01 43.41	−83 57 11.0	9.12	H	330.430 879 27	−83.953 045 86	5.66	27.94	−59.38	0.78	0.72	0.95	0.90	0.80	+ 2	−31	− 4	− 2	+10	− 5	+ 7	−20	− 3	−17	1	0.16
*108745	22 01 43.00	+41 32 21.0	6.99	H	330.429 181 68	+41.539 177 13	2.44	−10.63	−12.53	0.43	0.48	0.69	0.51	0.57	−33	+12	− 4	+22	− 5	+11	− 7	+ 1	+ 2	−42	1	2.52
*108746	22 01 43.39	+26 22 40.3	7.48	G	330.430 797 21	+26.377 871 13	7.77	10.93	15.16	0.60	0.63	0.83	0.63	0.75	+11	+13	−20	+20	+ 7	− 1	+12	− 1	+29	+18	0	−1.29
108747	22 01 45.14	−36 18 34.6	8.78	H	330.438 103 38	−36.309 614 54	2.72	36.76	18.95	1.05	0.79	1.30	1.39	0.76	+ 5	+ 7	−29	+28	−31	+42	−18	+19	+ 6	+ 4	0	1.57
108748	22 01 46.20	−01 07 42.2	7.95	H	330.442 488 47	−01.128 388 87	14.59	165.35	−14.82	1.00	0.72	1.10	1.74	0.75	+13	+12	− 1	+34	+ 0	+43	− 2	+18	+ 2	−11	0	0.22
108749	22 01 46.24	+57 39 49.7	8.94	H	330.442 682 65	+57.663 813 03	5.12	−11.27	−17.93	0.67	0.62	0.78	0.70	0.67	+ 4	+ 5	+ 9	− 4	+ 1	−11	+ 4	−14	− 7	+23	0	−0.08
108750	22 01 46.68	+39 12 15.3	8.38	H	330.444 506 80	+39.204 242 40	3.58	7.70	−5.51	0.51	0.64	0.95	0.63	0.87	−52	+13	−15	+ 6	+17	− 3	+15	−18	+ 6	−64	0	0.01
108751	22 01 48.20	−41 23 28.1	9.10	G	330.450 824 22	−41.391 134 20	3.40	23.19	− 9.52	1.03	0.78	1.20	1.22	0.76	+16	−15	−14	+10	−13	+20	− 8	+24	+10	+ 0	0	−0.40
108752	22 01 48.81	+16 28 01.5	10.65	G	330.453 362 72	+16.467 077 80	60.94	392.28	154.00	1.44	1.60	2.14	1.95	2.05	+24	− 5	−41	−23	+ 5	−12	− 4	−47	+45	+ 6	0	0.06
108753 H	22 01 48.94	+23 34 02.9	8.64	H	330.453 920 71	+23.567 475 65	A 2.72	−1.19	−8.55	1.77	1.78	1.89	1.74	1.92	+53	+11	+ 0	− 3	− 5	− 2	− 4	−28	+11	+31	1	0.79
108754	22 01 49.14	−03 35 51.9	8.67	H	330.454 744 42	−03.597 748 59	10.52	66.78	30.16	1.20	0.67	1.26	1.57	0.62	+30	+ 8	− 3	− 5	+24	−13	+15	−14	+17	+18	0	1.59
108755	22 01 49.16	−32 03 38.4	9.27	H	330.454 817 76	−32.060 659 45	7.20	−8.73	28.32	1.08	0.79	1.26	1.32	0.85	+35	−26	−29	+ 1	+ 1	+15	+ 7	+35	−11	+37	0	0.73
108756	22 01 49.33	+45 31 13.6	9.35	H	330.455 532 89	+45.520 431 61	15.64	203.22	−56.23	0.87	0.90	1.26	1.04	0.95	−20	− 3	+16	+ 3	− 2	− 3	− 2	−11	+14	−23	0	−1.63
108757 H	22 01 50.41	−09 52 29.1	8.19	G	330.460 045 78	−09.874 757 21	* 2.61	13.70	7.63	0.93	0.65	1.07	1.17	0.71	+32	− 6	−10	− 1	− 4	+16	− 3	−16	+21	+40	0	1.52
108758	22 01 50.58	+52 52 56.1	5.79	H	330.460 741 94	+52.882 246 28	3.08	9.99	2.67	0.38	0.39	0.48	0.39	0.39	−11	− 2	+ 8	− 5	+ 9	−16	+11	−10	+ 2	+10	3	−1.28
108759	22 01 52.65	−77 39 45.1	6.39	H	330.469 366 72	−77.662 528 54	10.48	−11.96	− 6.41	0.45	0.43	0.56	0.57	0.48	− 3	− 9	−20	+12	− 1	+ 5	+ 0	+10	−16	−18	0	−1.05
108760	22 01 53.39	−46 23 10.9	9.27	H	330.472 464 20	−46.386 351 54	2.67	27.91	−64.56	0.94	0.83	1.31	0.87	0.88	+25	−23	−27	−31	+14	+11	+14	+21	− 9	+35	1	−0.59
108761	22 01 54.09	+04 46 14.5	8.00	H	330.475 373 21	+04.770 703 73	21.86	69.08	−101.27	0.95	0.76	1.11	1.08	0.81	+26	+10	+ 8	+13	+10	+30	+ 7	+ 9	− 9	+29	0	−0.28
108762	22 01 55.11	−00 19 25.4	9.10	H	330.479 626 86	−00.323 725 71	3.59	−25.74	− 7.01	1.33	0.84	1.43	1.89	0.93	+ 7	+21	− 1	+40	− 1	+45	+ 4	+20	+13	+15	0	−0.13
108763	22 01 55.66	+36 56 44.7	8.20	2 H	330.481 910 64	+36.945 752 79	2.50	−1.85	−14.11	0.63	0.56	0.99	0.79	0.67	−38	+12	−15	−16	+ 5	−24	+ 6	−32	+24	−32	0	0.01
108764	22 01 56.68	−37 56 41.3	9.32	H	330.486 187 25	−37.944 819 04	8.29	−29.96	−20.63	0.96	0.84	1.22	1.03	0.84	+23	−21	−18	+ 5	− 9	+26	+ 3	+49	−13	+ 7	0	0.41
108765	22 01 58.22	−40 18 57.6	9.82	2 H	330.492 592 80	−40.316 004 35	A 15.06	−61.67	−21.21	2.74	2.09	2.73	2.07	1.45	+26	+13	−10	+31	+16	+27	+22	+42	+ 3	+36	9	2.32
*108766 H	22 02 01.37	+10 58 25.7	6.36	G	330.505 700 44	+10.973 802 35	A 2.43	10.84	1.53	1.18	0.79	1.10	1.30	0.90	+32	− 3	−19	−22	+ 6	+ 6	− 3	−40	+35	+35	0	0.36
*108767	22 02 01.42	+23 29 43.9	8.33	G	330.505 923 24	+23.495 535 71	12.31	19.62	15.45	0.84	0.87	1.07	0.96	1.33	+30	+ 3	− 9	− 8	+ 0	−22	+ 3	−15	−10	+47	0	1.71
*108768	22 02 01.27	−80 18 54.3	11.77	2 H	330.505 311 35	−80.315 093 62	13.82	223.60	−105.54	2.19	1.99	2.59	2.67	2.33	− 4	−13	+ 4	+ 1	− 7	+15	− 7	− 4	− 6	− 7	1	1.25
108769	22 02 02.57	+04 28 09.0	8.35	H	330.510 697 87	+04.469 167 65	3.24	7.26	0.19	1.17	0.75	1.25	1.35	0.79	+ 9	+26	+ 2	+ 8	+ 4	+30	+ 6	+ 3	+13	+14	0	−0.73
108770	22 02 02.64	+78 09 55.4	9.62	H	330.511 019 34	+78.165 386 15	1.55	−7.71	−2.42	0.82	0.75	0.88	0.99	0.80	+12	−14	+10	+25	− 7	− 9	− 5	−14	+15	+19	0	−2.08
108771	22 02 04.44	−34 22 58.4	7.62	H	330.518 507 79	−34.382 886 31	1.53	9.65	−25.55	0.79	0.60	1.03	0.95	0.58	+26	+ 9	−24	− 5	−11	+42	− 3	+18	+ 1	+35	0	2.13
108772	22 02 04.58	+58 00 01.3	5.55	2 T	330.519 066 36	+58.000 370 41	0.70	−3.47	− 1.59	0.39	0.38	0.46	0.40	0.38	− 2	+ 5	+13	− 7	+ 0	−12	+ 4	−19	− 1	+11	0	0.34
108773	22 02 04.74	−35 32 46.2	7.37	H	330.519 762 53	−35.546 160 40	2.44	3.61	− 5.90	0.77	0.59	0.93	0.91	0.61	+23	−17	−20	+ 7	−17	+31	−11	+22	+12	+25	2	0.33
108774	22 02 05.36	+44 20 35.1	7.96	H	330.522 324 91	+44.343 095 17	29.79	38.49	29.00	0.64	0.61	0.90	0.74	0.67	−25	+11	+ 2	− 7	+ 6	+ 5	+ 5	−17	+ 7	−37	0	0.54
108775	22 02 05.73	+12 42 16.5	8.60	H	330.523 888 06	+12.704 585 28	1.16	0.88	−17.52	1.09	0.89	1.40	1.38	1.22	+18	+10	− 4	−16	+ 7	+ 1	+ 9	−38	+42	+16	0	−1.10
108776 H	22 02 05.83	+42 22 46.8	10.92	2 G	330.524 302 18	+42.379 670 00	* 1.04	7.19	−4.98	1.81	1.96	2.35	1.86	2.04	−13	+14	− 9	+40	− 3	+ 8	− 1	+29	+10	−29	0	1.78
108777	22 02 06.32	−74 29 55.2	8.46	H	330.526 334 78	−74.498 673 35	4.21	51.05	−27.62	0.66	0.58	0.81	0.84	0.72	−13	−24	− 6	− 5	+ 2	+18	+ 4	− 6	− 6	−22	1	0.25
108778	22 02 06.89	−65 14 21.7	7.36	G	330.528 715 79	−65.239 364 93	4.76	48.08	−74.34	0.47	0.50	0.77	0.57	0.53	−19	− 9	−13	+ 6	− 4	− 5	− 4	− 2	− 7	−27	0	−0.15
108779	22 02 07.33	−75 40 44.4	6.67	H	330.530 546 40	−75.678 992 32	5.67	9.11	−37.00	0.49	0.47	0.62	0.55	0.54	− 7	−13	−13	− 3	−14	− 6	−13	+16	+10	−23	0	−0.38
108780	22 02 07.51	−09 16 56.1	8.23	H	330.531 283 01	−09.282 249 04	1.81	−0.05	−12.98	0.96	0.62	1.09	1.13	0.70	+32	+ 0	+ 4	−28	+ 7	+21	+ 3	− 9	+31	+43	0	0.97
108781	22 02 08.47	−59 12 29.0	8.50	H	330.535 271 53	−59.208 044 98	8.52	87.79	−74.41	0.76	0.75	1.20	0.98	0.83	+ 1	−10	−23	−20	+11	− 2	+ 8	+ 0	−14	+15	0	−1.08
108782	22 02 10.54	+01 24 03.3	9.17	G	330.543 912 82	+01.400 908 69	96.98	−455.08	−280.37	1.27	0.94	1.48	1.97	1.00	+21	+12	−21	+25	+ 1	+28	+ 4	+25	−25	+ 5	0	1.76
108783	22 02 10.86	+75 21 18.5	7.51	H	330.545 233 93	+75.355 126 25	2.85	−6.59	−40.93	0.56	0.52	0.60	0.62	0.51	− 1	+ 2	+13	+ 2	+ 1	− 2	+ 0	− 8	− 2	− 8	0	−1.83
108784	22 02 11.78	−17 54 12.0	6.28	G	330.549 094 07	−17.903 328 74	11.79	117.62	−59.86	0.70	0.45	0.80	0.83	0.42	+35	−17	+ 2	+ 2	+ 8	+11	+ 5	− 4	+ 2	+32	0	−0.55
108785	22 02 13.12	−23 36 59.8	7.48	H	330.554 650 61	−23.616 616 67	5.00	28.89	− 8.67	0.83	0.63	1.00	0.99	0.63	+23	− 5	−18	+ 5	+ 0	+ 4	+ 7	+42	−15	+ 8	0	−0.25
108786	22 02 15.21	−54 45 43.5	8.98	H	330.563 368 39	−54.762 093 73	7.03	23.56	−1.06	0.82	0.64	1.17	1.04	0.68	+11	−20	−26	−19	− 4	+ 8	− 2	− 8	+ 0	+ 8	0	0.22
108787	22 02 15.63	−54 29 32.3	9.01	H	330.565 108 41	−54.492 293 49	21.09	145.28	−67.87	0.92	0.67	1.40	1.24	0.75	−18	+13	−23	− 3	−14	+16	− 8	−14	+ 8	−15	0	0.97
108788	22 02 15.81	+32 07 57.4	10.10	H	330.565 854 52	+32.132 613 07	2.63	5.47	1.62	1.15	1.20	1.48	1.37	1.54	+ 4	− 4	−17	+46	− 4	−10	− 6	+ 7	+18	+ 7	2	2.42
108789	22 02 16.00	+36 58 58.2	6.95	2 H	330.566 662 33	+36.982 846 33	2.83	−1.38	−13.36	0.47	0.46	0.80	0.60	0.53	−33	+17	−25	−12	− 3	−17	− 1	−27	+24	−27	0	−0.26
108790	22 02 17.15	−36 26 56.1	9.44	H	330.571 472 21	−36.448 903 79	6.86	−26.79	0.24	1.07	0.86	1.35	1.30	0.81	+13	− 8	−21	+16	−24	+28	−14	+24	− 3	− 4	0	−0.86
108791	22 02 18.23	+20 27 50.3	8.85	H	330.575 950 40	+20.463 959 22	2.85	−10.84	−15.34	0.83	0.93	1.09	0.87	1.21	+39	+ 2	+ 1	+15	−11	−12	−10	−16	+30	+38	0	0.68
108792	22 02 19.83	−47 08 45.1	8.22	H	330.582 637 08	−47.145 865 28	1.80	8.22	−20.41	0.77	0.72	1.21	0.89	0.72	+38	−30	−21	−19	+ 6	+27	+10	+22	+ 1	+32	3	0.36
108793	22 02 21.31	+18 49 59.2	8.32	H	330.588 796 48	+18.833 117 93	6.02	37.68	− 4.08	0.86	0.79	1.10	1.10	1.06	+17	+ 6	−13	−35	+ 2	+ 8	+ 5	−28	+34	+17	0	0.46
108794	22 02 22.94	+55 56 46.1	7.30	H	330.595 569 78	+55.946 143 79	4.59	12.01	1.94	0.51	0.47	0.61	0.56	0.48	− 8	+ 3	+ 8	−10	+19	−17	+18	− 3	− 5	+17	1	2.21
108795	22 02 25.41	+42 25 31.5	8.41	H	330.605 880 66	+42.425 421 17	1.91	13.13	4.21	0.63	0.67	0.98	0.77	0.83	−30	+ 3	+ 3	+26	+ 1	+17	− 2	+ 3	−12	−38	0	−1.99
108796	22 02 26.15	+34 22 43.4	7.42	2 H	330.608 938 10	+34.378 730 91	1.67	−4.74	−11.51	0.48	0.60	0.79	0.59	0.69	+13	− 1	−14	− 5	+ 4	− 7	+ 4	−25	+19	+26	0	−1.14
108797 H	22 02 26.25	−16 57 53.4	6.39	2 H	330.609 355 10	−16.964 833 42	B 6.92	5.94	−1.09	2.97	2.05	2.17	2.52	1.26	+45	− 6	− 3	− 9	− 4	+19	− 6	− 7	+13	+41	20	2.30
108798	22 02 26.42	−35 50 05.3	8.05	G	330.610 064 85	−35.834 810 01	4.45	39.58	−43.17	0.84	0.63	1.06	0.94	0.61	+13	−16	−10	+ 0	−16	−13	+28	+10	+12	+ 2	2	0.08
108799	22 02 27.31	−77 18 50.1	10.00	H	330.613 792 82	−77.313 906 70	B 6.55	57.49	−50.71	8.49	8.03	4.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
108701						1.270	0.015	G	1.51	0.02	A	10.8671	0.0045	0.039	117		10.80	10.93		C	22012−5146	I 1	1 S						G
108702	10.446	0.029	10.083	0.034		0.393	0.003	G	0.46	0.00	H	10.1451	0.0029	0.024	117		10.11	10.18		C			1						
108703	9.523	0.023	9.165	0.025		0.339	0.032	T	0.40	0.04	L	9.2081	0.0025	0.020	67		9.18	9.25		C			1						S
108704	8.381	0.009	8.363	0.012		0.021	0.014	T	0.04	0.01	L	8.3862	0.0015	0.015	146		8.36	8.40		C			1						
108705	9.496	0.015	8.207	0.010		1.096	0.014	T	1.06	0.01	L	8.2475	0.0016	0.015	112		8.22	8.27					1						S
108706						1.718	0.020	G	2.92	0.05	I	11.9745	0.0081	0.068	81		11.84	12.08					1						D
108707	9.377	0.019	8.942	0.019		0.424	0.022	T	0.49	0.02	L	8.9948	0.0014	0.016	92		8.97	9.02		C			1						
108708	9.730	0.027	8.992	0.022		0.661	0.026	T	0.72	0.02	L	9.0714	0.0031	0.022	81		9.04	9.10					1						S
108709	10.207	0.023	9.247	0.017		0.831	0.022	T	0.85	0.02	L	9.3238	0.0021	0.031	194		9.26	9.37					1 S						
108710	10.960	0.052	9.745	0.029	B	1.039	0.047	T	1.01	0.04	L	9.8791	0.0315			B				D	22013+4621	I 2	1 C I A						
108711	9.129	0.038	7.838	0.022	*	1.098	0.034	T	1.06	0.04	L *	7.9098	0.0009	0.008	89	*	7.89	7.93		D	22013−1731	I 1	2 C A	AB	346	3.798	0.017	2.54	0.06	S
108712	9.602	0.019	9.468	0.024	A	0.129	0.029	T	0.14	0.03	L	9.6790	0.0299	0.170	132	A	9.42	9.89		D	22013+4621	I 2	1 C P A							G
108713	8.061	0.005	8.103	0.007		−0.034	0.008	T	−0.01	0.01	L	8.1185	0.0011	0.013	214		8.10	8.14		C			1						S
108714	10.398	0.034	9.516	0.025		0.913	0.004	G	0.91	0.00	H	9.4772	0.0053	0.040	115		9.43	9.55		U 2			1 S						G
108715	8.341	0.006	8.309	0.008		0.034	0.009	T	0.05	0.01	L	8.3223	0.0012	0.015	194		8.30	8.35					1						S
108716	10.356	0.029	9.119	0.017		1.056	0.026	T	1.02	0.02	L	9.2017	0.0015	0.018	121		9.17	9.23					1 S						
108717	9.262	0.014	8.766	0.013		0.478	0.015	T	0.55	0.02	L	8.8438	0.0016	0.017	129		8.81	8.87					1						S
108718	8.526	0.011	7.184	0.006		1.138	0.010	T	1.10	0.01	L	7.2375	0.0007	0.008	113		7.23	7.25					1						S
108719	11.044	0.064	9.741	0.034		1.107	0.057	T	1.07	0.06	L	9.7569	0.0030	0.025	68		9.72	9.81		C			1						
108720	7.940	0.009	7.787	0.009	*	0.158	0.007	G	0.17	0.01	H *	7.8413	0.0020	0.018	119	*	7.80	7.88		U 2	22014+6133	H 1	2 C S A	AB	3	0.167	0.013	1.81	0.28	S
108721	10.839	0.044	9.099	0.017		1.451	0.037	T	1.45	0.06	L	9.0601	0.0021	0.016	122		9.04	9.09		C			1						
108722	8.965	0.015	7.707	0.009		1.072	0.014	T	1.04	0.01	L	7.7672	0.0015	0.011	86		7.75	7.79		C			1						S
108723	8.696	0.013	7.364	0.008		1.130	0.012	T	1.09	0.01	L	7.4216	0.0017	0.012	79		7.40	7.44					1						S
108724	10.673	0.042	10.472	0.059		0.192	0.068	T	0.21	0.08	L	10.4512	0.0027	0.029	134		10.41	10.50		C			1						G
108725	8.712	0.010	8.303	0.010		0.392	0.015	G	0.46	0.02	H	8.3513	0.0015	0.017	157		8.32	8.38					1						
108726	10.360	0.038	9.765	0.034		0.555	0.038	T	0.63	0.04	L	9.8103	0.0039	0.024	74		9.75	9.84					1						
108727	10.216	0.036	8.744	0.018		1.240	0.032	T	1.20	0.03	L	8.7552	0.0020	0.016	75		8.70	8.78		C			1						
108728	10.456	0.032	9.198	0.017		1.072	0.028	T	1.04	0.02	L	9.0992	0.0140	0.278	145		8.98	9.79	5.07	P 1 A			1 S						
108729	10.009	0.021	9.255	0.017		0.673	0.020	T	0.73	0.02	L	9.3111	0.0022	0.023	127		9.28	9.36					1						
108730	9.303	0.020	8.894	0.021		0.383	0.013	G	0.45	0.01	H	8.9615	0.0022	0.018	79		8.93	8.99		C			1						
108731	8.603	0.011	8.518	0.013		0.083	0.016	T	0.10	0.02	L	8.5533	0.0015	0.015	116		8.53	8.58		C			1						
108732	8.127	0.012	7.101	0.008	*	0.894	0.010	T	0.90	0.01	L *	7.1805	0.0017	0.014	73	*	7.16	7.21		D	22015−1536	I 1	2 C B	AB	270	9.151	0.044	3.67	0.12	S
108733	11.078	0.075	9.537	0.035		1.284	0.020	G	1.24	0.02	H	9.5191	0.0046	0.024	58		9.48	9.57					1						
108734	9.754	0.020	9.207	0.019		0.519	0.021	T	0.59	0.02	L	9.2792	0.0022	0.018	91		9.24	9.31		C			1						
108735	9.431	0.019	8.173	0.012		1.072	0.018	T	1.04	0.01	L	8.2386	0.0015	0.013	94		8.22	8.26		C			1						S
108736	7.817	0.008	7.188	0.009		0.572	0.011	G	0.64	0.01	H	7.2492	0.0010	0.010	139		7.23	7.26					1						S
108737	8.493	0.010	8.436	0.013		0.057	0.015	T	0.07	0.01	L	8.4639	0.0017	0.017	124		8.44	8.50		C			1						
108738	9.510	0.017	9.336	0.020		0.167	0.025	T	0.18	0.03	L	9.3290	0.0036	0.038	131		9.26	9.38		U 2 C			1						
108739	11.980	0.150	10.525	0.067		1.227	0.120	G	1.19	0.12	R	10.7486	0.0034	0.033	97		10.70	10.80		C			1						G
108740	10.852	0.028	9.491	0.015		1.153	0.025	T	1.12	0.02	L	9.5569	0.0019	0.029	236		9.49	9.61					1 S						
108741	8.338	0.009	7.940	0.010		0.402	0.004	G	0.47	0.00	H	7.9821	0.0049	0.044	144		7.93	8.04	0.18	P 1 A			1						S
108742	8.753	0.010	8.375	0.010		0.360	0.015	G	0.42	0.02	H	8.4318	0.0015	0.013	111		8.41	8.45		C			1						S
108743	10.461	0.040	9.022	0.022		1.214	0.036	T	1.17	0.04	L	9.0779	0.0020	0.018	75		9.03	9.11		C			1						
108744	9.957	0.020	9.185	0.016		0.687	0.019	T	0.74	0.02	L	9.2531	0.0024	0.021	141		9.22	9.28					1						
108745	8.558	0.008	7.120	0.005		1.213	0.007	T	1.17	0.01	L	7.1585	0.0007	0.009	180		7.14	7.18		C			1						S
108746	7.728	0.007	7.519	0.008		0.200	0.010	T	0.22	0.01	L	7.5473	0.0018	0.012	84		7.53	7.58					1						S
108747	9.952	0.029	8.889	0.020		0.921	0.027	T	0.92	0.02	L	8.9379	0.0020	0.015	80		8.91	8.96		C			1						
108748	8.580	0.012	8.009	0.011		0.531	0.015	G	0.60	0.02	H	8.0619	0.0014	0.012	63		8.04	8.08		C			1						S
108749	9.418	0.015	8.982	0.015		0.412	0.020	T	0.48	0.02	L	9.0292	0.0017	0.016	139		9.00	9.06					1						
108750	8.392	0.006	8.376	0.008		0.019	0.009	T	0.04	0.01	L	8.3940	0.0012	0.018	251		8.36	8.42					1						
108751	9.538	0.018	9.108	0.018		0.397	0.007	G	0.46	0.01	H	9.2032	0.0021	0.018	82		9.17	9.24					1						
108752						1.498	0.048	G	2.05	0.37	I	10.7087	0.0043	0.027	82		10.62	10.75		C			1 S						G
108753	8.735	0.014	8.699	0.018	A	0.700	0.495	G	0.04	0.05	L *	8.6607	0.0023	0.015	73	*	8.62	8.68		D	22018+2334	I 1	2 C B	AB	182	1.184	0.050	3.02	0.19	S
108754	9.276	0.021	8.715	0.020		0.525	0.026	T	0.60	0.03	L	8.7854	0.0017	0.013	75		8.76	8.81		C			1						
108755	9.788	0.023	9.307	0.023		0.465	0.025	T	0.54	0.03	L	9.3752	0.0024	0.018	84		9.35	9.41					1						
108756	10.210	0.028	9.420	0.023		0.717	0.028	T	0.77	0.02	L	9.4907	0.0033	0.027	129		9.45	9.54		R			1						
108757	9.100	0.016	8.263	0.013	*	0.754	0.015	G	0.80	0.01	H *	8.3162	0.0018	0.013	90	*	8.29	8.34		C	22018−0952	I 1	2 C S C	BA	18	0.108	0.021	1.23	1.05	S
108758	5.640	0.003	5.762	0.003		−0.106	0.004	T	−0.09	0.01	L	5.7546	0.0007	0.007	136		5.74	5.77					1						S
108759	6.661	0.004	6.419	0.004		0.231	0.005	T	0.26	0.01	L	6.4588	0.0010	0.008	134		6.45	6.47					1						S
108760	10.721	0.031	9.374	0.017		1.142	0.028	T	1.23	0.04	L	9.4008	0.0015	0.018	147		9.36	9.43		C			1 S						
108761	8.828	0.017	8.076	0.014		0.687	0.017	T	0.74	0.01	L	8.1415	0.0018	0.014	56		8.11	8.17		C	22019+0447	I 1	1 S						S
108762	10.442	0.038	9.226	0.024		1.039	0.035	T	1.01	0.03	L	9.2717	0.0023	0.014	63		9.24	9.30		C			1						
108763	10.411	0.022	8.545	0.009		1.551	0.019	T	1.57	0.02	L	8.3135	0.0024	0.029	234		8.27	8.36		U 2			1 S						
108764	9.972	0.023	9.381	0.021		0.552	0.023	T	0.62	0.02	L	9.4378	0.0026	0.021	86		9.41	9.47		C			1						
108765	10.617	0.038	9.905	0.032	A	0.642	0.038	T	0.71	0.03	L	9.9591	0.0272	0.040	89	A	9.88	10.01		U	22020−4019	I 1	2 C B	AB	187	17.457	0.036	1.82	0.15	
108766	6.210	0.003	6.346	0.004	*	−0.104	0.004	G	−0.09	0.01	H *	6.3321	0.0009	0.007	83	*	6.32	6.34			22020+1058	H 1	2 C A	AB	263	0.525	0.023	3.49	0.11	S
108767	8.988	0.017	8.375	0.015		0.563	0.015	G	0.64	0.01	H	8.4450	0.0016	0.011	72		8.42	8.47					1						S
108768						1.100	0.020	G	1.18	0.03	I	11.9026	0.0093	0.091	129		11.69	12.03		U 2			1 S						D P
108769	10.318	0.042	8.490	0.018		1.521	0.036	T	1.56	0.05	L	8.4682	0.0023	0.011	57		8.44	8.50		C			1						
108770	11.197	0.054	9.763	0.026		1.210	0.047	T	1.17	0.05	L	9.7884	0.0024	0.022	116		9.75	9.83		C			1 S						
108771	9.536	0.018	7.785	0.009		1.460	0.016	T	1.47	0.03	L	7.7577	0.0012	0.010	83		7.74	7.78					1						S
108772	5.568	0.004	5.550	0.004		0.017	0.005	T	0.04	0.01	L	5.5460	0.0038	0.036	137		5.52	5.61	3.07	P 1 A			1						S P
108773	9.202	0.017	7.502	0.009		1.419	0.015	T	1.40	0.02	L	7.5067	0.0013	0.010	83		7.49	7.53					1						S
108774	8.802	0.009	8.022	0.008		0.693	0.009	T	0.75	0.01	L	8.0950	0.0017	0.017	145		8.07	8.12					1						S
108775	8.914	0.014	8.636	0.016		0.264	0.020	T	0.30	0.03	L	8.6708	0.0037	0.025	68		8.62	8.70					1						
108776											T *	10.7130	0.0116	0.131	162	*	10.51	10.98		U 2 C	22021+4223	H 1	2 C D	AB	30	0.257	0.016	0.42	0.15	G D
108777	8.837	0.010	8.487	0.011		0.332	0.014	T	0.39	0.02	L	8.5413	0.0018	0.016	129		8.51	8.57					1						S
108778	8.767	0.009	7.497	0.005		1.088	0.002	G	1.05	0.00	H	7.5312	0.0010	0.012	195		7.51	7.56		C			1						S
108779	8.547	0.009	6.822	0.005		1.439	0.008	T	1.43	0.01	L	6.8057	0.0010	0.011	145		6.78	6.82					1						S
108780	9.850	0.026	8.369	0.014		1.247	0.023	T	1.21	0.02	L	8.3881	0.0022	0.011	79		8.37	8.41		C			1						
108781	9.515	0.015	8.576	0.011		0.815	0.014	T	0.84	0.01	L	8.6421	0.0019	0.022	146		8.61	8.69					1						
108782	11.009	0.068	9.420	0.031		1.453	0.010	G	1.90	0.01	A	9.2298	0.0027	0.017	51		9.20	9.26		C			1						
108783	8.754	0.023	7.634	0.016		0.965	0.022	T	0.95	0.02	L	7.6734	0.0016	0.013	125		7.65	7.70					1						S
108784	7.569	0.008	6.398	0.004		1.002	0.003	G	0.98	0.00	H	6.4497	0.0007	0.006	95		6.44	6.46					1						S
108785	8.853	0.015	7.612	0.010		1.059	0.014	T	1.03	0.01	L	7.6477	0.0013	0.010	68		7.63	7.66		C			1						S
108786	9.222	0.014	8.968	0.015		0.238	0.021	T	0.27	0.03	L	9.0455	0.0021	0.022	133		9.00	9.08					1						
108787	10.057	0.022	9.077	0.016		0.847	0.021	T	0.86	0.01	L	9.1518	0.0018	0.017	130		9.12	9.18		C			1						
108788	10.344	0.032	10.184	0.042		0.154	0.050	T	0.17	0.05	L	10.1537	0.0033	0.028	92		10.11	10.21					1						G
108789	9.072	0.009	7.160	0.004		1.621	0.008	T	2.25	0.02	O	6.9991	0.0017	0.023	214		6.96	7.03		U 2	22023+3659	I 1	1						S
108790	9.964	0.028	9.492	0.028		0.457	0.031	T	0.53	0.03	L	9.5399	0.0031	0.020	81		9.50	9.57					1						
108791	9.234	0.018	8.858	0.019		0.356	0.024	T	0.42	0.03	L	8.9303	0.0022	0.016	79		8.90	8.96		C			1						
108792	9.956	0.020	8.353	0.010		1.343	0.018	T	1.31	0.02	L	8.3733	0.0015	0.016	123		8.35	8.40					1						
108793	8.645	0.012	8.355	0.012		0.260	0.015	G	0.29	0.02	H	8.3929	0.0019	0.016	94		8.36	8.41		C			1						S
108794	7.559	0.006	7.316	0.007		0.232	0.009	T	0.26	0.01	L	7.3646	0.0012	0.009	120		7.35	7.38					1						S
108795	9.727	0.014	8.525	0.009		1.029	0.013	T	1.00	0.01	L	8.5762	0.0015	0.017	180		8.54	8.61		C			1						
108796	9.502	0.015	7.619	0.007		1.564	0.013	T	1.58	0.01	L	7.5339	0.0013	0.018	149		7.50	7.56		U 2			1						S
108797	6.861	0.024	6.401	0.014	*	0.447	0.022	T	0.52	0.02	L *	6.4855	0.0090	0.058	77	*	6.44	6.84		P 1 A	22024−1658	I 1	2 C B	BA	66	3.846	0.007	0.23	0.02	S
108798	8.430	0.010	8.077	0.011		0.314	0.006	G	0.36	0.01	H	8.1437	0.0019	0.015	84		8.12	8.17					1						S
108799	10.434	0.033	9.926	0.032	B	0.477	0.042	T	0.55	0.04	L	10.1424	0.0232			B				D	22025−7719	I 2	1 C I A						
108800	9.631	0.019	8.456	0.013		1.008	0.018	T	0.98	0.01	L	8.5061	0.0015	0.013	87		8.49	8.53		D			1						

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
108801	22 02 28.51	−77 18 40.4	8.20	G	330.618 776 31	−77.311 215 05	A	6.07	50.32	−42.02	1.36	1.34	1.31	1.52	1.23	− 1 − 2 −14 +18 + 1 − 2 − 1 +10 −11 −14										2	1.54
108802	22 02 28.55	+68 15 33.2	12.37	H																							
108803	22 02 28.99	−26 11 51.6	9.77	H	330.620 780 35	−26.197 671 44		1.73	−2.05	−7.19	1.07	0.73	1.27	1.19	0.76	+10 − 7 −11 +13 −26 +31 −24 +24 + 3 + 8										0	0.23
108804	22 02 29.35	−58 17 40.2	8.81	G	330.622 307 28	−58.294 509 72		10.06	70.13	−94.03	0.72	0.76	1.32	0.90	0.82	− 5 + 3 −28 −37 +11 − 6 + 4 + 5 −29 + 8										0	1.42
108805	22 02 30.60	+23 34 42.4	7.47	H	330.627 504 39	+23.578 453 77		5.79	23.07	−16.07	0.65	0.76	0.88	0.78	1.07	+24 +18 −18 − 4 −15 −10 −13 −31 − 4 +43										0	−1.74
108806	22 02 30.65	+11 22 16.1	8.06	H	330.627 722 60	+11.371 144 65		21.36	154.47	67.13	0.88	0.68	1.15	1.33	0.95	+23 + 5 − 3 + 2 + 9 +39 +10 −43 +42 +35										0	0.84
108807	22 02 32.08	+27 43 29.0	9.20	2 H	330.633 666 76	+27.724 712 61		1.61	−5.78	1.59	0.92	1.02	1.25	0.90	1.14	+16 +21 −18 +18 − 4 − 4 + 5 −39 +34 +22										0	0.23
108808	22 02 32.96	−37 05 53.4	8.59	H	330.637 350 35	−37.098 162 75		10.95	−17.34	28.26	0.86	0.70	1.05	1.00	0.69	+13 −18 −19 +16 −17 +11 − 9 +36 − 6 − 4										0	0.49
108809	22 02 32.98	−32 08 01.7	6.63	H	330.637 406 80	−32.133 803 56		33.25	−19.49	22.64	0.72	0.54	0.91	0.75	0.52	+39 −38 −46 −15 −15 +28 + 3 +29 −20 +26										0	1.04
108810	22 02 33.11	−00 55 06.1	7.80	G	330.637 978 87	−00.918 365 70		6.26	27.30	11.91	1.00	0.69	1.16	1.68	0.71	+10 +13 + 0 +25 − 2 +47 − 4 + 5 +10 − 7										0	0.95
108811	22 02 34.20	+68 15 32.4	8.74	G	330.642 499 21	+68.258 989 52		9.94	132.55	176.41	0.80	0.77	0.91	1.08	0.76	−19 −23 +22 − 8 +18 + 5 + 7 + 2 +18 − 6										0	−1.12
108812	22 02 37.25	+33 22 45.8	6.99	1 H	330.655 222 74	+33.379 387 74		11.37	30.10	1.47	0.39	0.58	0.74	0.45	0.66	+27 −21 −21 − 8 +14 −13 +11 − 5 + 0 +35										2	2.18
108813	22 02 37.28	−52 19 59.7	9.15	H	330.655 331 23	−52.333 248 47		3.18	29.96	−5.02	1.00	0.78	1.51	1.31	0.96	+24 −17 −12 +32 +27 + 5 +30 +36 −32 +36										0	0.28
108814	22 02 38.49	+15 59 11.5	6.71	H	330.660 390 78	+15.986 536 50		5.97	12.49	−19.04	0.62	0.59	0.86	0.74	0.77	+15 − 3 −32 +16 − 5 − 9 − 9 −40 +49 + 8										0	−0.15
108815	22 02 40.26	+18 18 13.6	8.87	H	330.667 734 37	+18.303 790 60		8.87	−2.07	−19.54	0.90	1.02	1.13	1.12	1.09	+34 + 1 − 9 −27 − 9 +24 −10 −41 +22 +27										0	1.73
108816	22 02 41.16	+18 15 56.6	9.68	H	330.671 510 64	+18.265 716 04		13.32	46.74	45.61	1.30	1.25	1.57	1.84	1.51	+21 − 3 +18 −22 + 2 +27 − 7 −47 − 4 + 9										0	−0.83
108817	22 02 41.33	−27 22 02.3	6.91	H	330.672 209 26	−27.367 299 79		3.13	−26.54	−33.66	0.72	0.52	0.86	0.85	0.54	+11 − 5 −21 + 0 −27 +39 −21 +17 + 7 +14										0	−0.93
108818	22 02 42.16	−30 42 44.6	9.04	H	330.675 686 26	−30.712 383 62		2.42	−1.23	−43.90	1.14	0.89	1.28	1.51	1.04	+18 − 6 −24 +32 − 4 +23 + 3 +33 + 5 +31										2	−0.79
108819	22 02 44.34	+42 48 52.2	7.22	H	330.684 751 25	+42.814 509 88		3.45	15.77	−0.18	0.44	0.47	0.67	0.53	0.54	−28 + 9 − 2 +10 + 5 + 8 + 5 + 2 + 0 −24										0	−0.35
108820	22 02 44.97	+08 19 43.0	12.10	G	330.687 370 72	+08.328 605 98		21.75	20.52	−149.60	3.72	2.58	4.00	5.78	3.56	+ 9 + 4 − 8 +12 + 6 +14 + 7 +11 +19 + 8										0	0.66
108821	22 02 46.07	−12 13 00.8	9.84	G	330.691 966 66	−12.216 880 64		20.03	46.06	−207.23	4.68	3.09	4.98	5.84	3.00	+20 −15 −15 −18 +12 + 9 + 8 −10 + 7 +13										0	
108822	22 02 46.43	+12 07 30.3	11.98	H	330.693 464 01	+12.125 089 93		22.95	−28.25	−354.45	3.10	2.94	4.25	4.52	4.14	+44 + 5 −14 − 2 −10 +29 − 8 −49 +49 +46										0	−0.83
108823	22 02 46.75	+28 30 41.7	8.32	H	330.694 811 54	+28.511 569 51		1.63	−8.19	−10.93	0.81	0.91	1.05	0.92	1.14	+13 +10 −11 + 2 − 7 − 5 − 4 −33 +19 +20										0	−0.12
108824	22 02 47.45	−39 39 22.2	7.84	H	330.697 700 80	−39.656 163 23		2.37	−11.51	−2.15	0.88	0.63	0.97	1.13	0.66	+27 − 1 − 9 +29 +14 +17 +16 +48 + 0 +26										0	−0.51
108825	22 02 48.08	+62 32 22.6	9.62	H	330.700 315 98	+62.539 601 47		0.46	−4.11	−3.59	0.90	0.76	0.94	1.05	0.85	− 8 + 6 + 4 +16 + 8 − 3 + 8 + 2 + 2 − 6										0	−0.78
108826	22 02 48.30	+73 49 29.4	7.36	H	330.701 233 20	+73.824 835 73		3.78	6.66	24.84	0.54	0.48	0.58	0.57	0.51	−10 −17 + 6 −23 + 6 + 4 + 5 − 7 − 2 + 2										0	0.25
108827	22 02 48.43	−02 28 43.3	8.51	H	330.701 786 30	−02.478 702 84		11.55	−67.31	−115.46	1.02	0.70	1.17	1.21	0.68	+13 − 3 −28 − 1 − 8 +28 + 0 + 0 +20 +11										0	1.26
108828	22 02 49.44	+67 15 51.2	10.38	H	330.705 981 12	+67.264 229 56	B	1.67	66.79	9.14	18.50	16.23	7.76	16.78	13.24	−18 −19 +10 − 5 +15 −13 +13 − 9 + 7 − 9										3	1.28
108829	22 02 49.53	+66 03 51.3	6.76	H	330.706 388 58	+66.064 241 22		2.94	24.88	18.87	0.48	0.44	0.51	0.56	0.46	−20 + 8 +15 +11 + 6 + 5 + 3 − 4 + 5 +29										0	1.17
*108830	22 02 49.67	+37 40 03.8	8.61	H	330.706 959 57	+37.667 716 88		6.83	−0.63	−6.01	0.67	0.58	0.98	0.81	0.70	−41 + 6 − 7 −21 + 8 −14 + 9 −38 +18 −35										0	1.75
*108831	22 02 49.67	+30 46 16.4	8.26	G	330.706 950 45	+30.771 218 67		3.69	−11.83	−16.31	0.65	0.74	0.97	0.81	0.85	+ 8 + 4 −34 +18 − 1 − 2 + 0 −14 +17 +12										0	−0.33
108832	22 02 50.66	−57 15 49.7	9.90	H	330.711 070 22	−57.263 803 82		3.65	10.91	−6.98	1.13	0.90	1.54	1.38	0.99	+ 6 −10 −17 +17 +16 + 6 +19 +13 −15 +35										0	−0.94
108833	22 02 50.73	+39 25 38.7	8.43	H	330.711 364 52	+39.427 404 31		3.97	9.43	−3.52	0.56	0.66	1.06	0.69	0.87	−47 +22 −20 +24 + 8 − 3 + 4 − 9 + 7 −60										0	−1.09
108834	22 02 51.82	+67 15 39.3	8.72	H	330.715 920 47	+67.260 919 69	A	5.67	26.20	5.46	1.91	1.62	1.50	2.20	1.77	−16 −16 + 8 − 5 +15 −14 +15 −11 + 3 −12										3	1.28
108835	22 02 52.44	−03 28 18.9	9.00	H	330.718 505 37	−03.471 924 81		7.64	−11.38	−9.32	1.51	0.81	1.47	1.85	0.84	− 3 +27 −12 +22 −13 + 4 − 5 +10 +18 − 2										0	−0.25
108836	22 02 53.09	−03 47 38.1	10.99	G	330.721 191 67	−03.793 907 63		23.98	−121.12	−188.21	2.79	1.65	2.85	4.80	1.93	+10 +15 − 6 +20 + 7 + 5 + 8 + 8 +28 − 2										3	−0.34
108837	22 02 53.19	+47 32 27.7	8.04	H	330.721 617 97	+47.541 015 73		3.12	9.66	5.66	0.58	0.55	0.75	0.72	0.64	−10 + 0 + 6 −12 + 8 + 5 + 8 − 3 + 8 −16										1	0.91
108838	22 02 53.87	+35 15 13.2	9.19	H	330.724 469 54	+35.253 660 18		1.82	−9.32	−4.76	0.74	0.91	1.16	0.85	1.05	+ 8 + 8 − 9 +16 + 6 −12 +12 −28 +15 +22										0	−0.28
108839	22 02 54.00	−21 31 32.0	10.99	2 H	330.724 991 74	−21.525 547 71		3.74	−0.25	−21.13	1.87	1.35	2.13	2.10	1.38	+23 + 2 − 1 −11 + 8 +19 +10 +35 −11 +16										0	0.45
108840	22 02 54.49	+50 53 34.6	9.12	H	330.727 052 35	+50.892 937 45		0.57	−2.14	−3.28	0.71	0.62	0.83	0.79	0.65	+ 2 − 3 +10 + 1 + 2 + 1 + 2 − 3 − 4 +14										0	−1.24
108841	22 02 54.63	+39 33 45.8	8.21	H	330.727 627 86	+39.562 716 69	A	1.71	−1.07	−2.91	0.96	1.07	1.50	1.01	1.24	−46 + 9 −15 +19 +17 − 2 +13 −23 + 7 −55										2	1.17
108842 H	22 02 55.05	+15 46 56.9	7.26	G	330.729 387 19	+15.782 477 47	*	10.14	−11.43	−7.86	0.65	0.67	0.97	0.79	0.96	+25 −14 −37 + 7 − 5 + 4 − 9 −42 +50 +23										0	1.55
108843	22 02 55.97	+14 02 21.5	7.51	H	330.733 195 94	+14.039 310 54		1.90	−1.82	−10.85	0.77	0.72	1.00	1.18	1.11	+29 − 1 −12 −28 + 0 +25 + 3 −33 +25 +36										0	0.57
108844	22 02 56.33	+00 04 11.6	9.25	3 H	330.734 725 15	+00.069 889 51		−0.56	44.50	−1.43	1.24	0.95	1.42	1.71	1.00	+25 +19 −13 +31 + 6 +25 +11 +16 +15 +22										0	0.60
108845 H	22 02 56.68	+44 38 59.8	5.57	H	330.736 157 75	+44.649 941 58	A	6.16	−21.46	−32.32	0.52	0.53	0.67	0.55	0.54	−20 + 8 − 5 + 7 − 2 − 6 − 1 + 0 +10 −34										2	0.43
108846	22 02 56.83	+22 04 58.7	8.78	H	330.736 798 05	+22.082 963 91		1.97	35.71	18.12	1.26	1.04	1.39	1.72	1.35	+19 +15 − 1 −50 −10 + 2 − 6 −39 +19 +10										0	0.18
108847	22 02 57.65	−68 22 28.4	8.99	H	330.740 209 03	−68.374 551 69		7.55	−31.56	21.65	0.77	0.76	1.12	0.84	0.88	−10 + 2 + 4 +11 +10 + 5 + 9 + 0 −23 − 9										0	−0.53
108848	22 03 00.92	−08 30 00.1	7.35	H	330.753 852 14	−08.500 014 36		1.25	18.37	−4.14	1.04	0.65	1.02	1.14	0.69	+ 3 + 5 −22 −53 +21 + 2 +20 −44 +38 + 3										0	2.59
108849	22 03 03.74	−76 07 05.8	5.94	H	330.765 592 41	−76.118 266 34		16.20	27.81	−66.28	0.45	0.42	0.57	0.54	0.49	− 4 − 8 − 9 + 1 − 9 −16 − 7 +14 + 2 −27										2	2.38
108850	22 03 04.05	+07 38 13.6	8.69	G	330.766 861 62	+07.637 108 41		5.34	−17.54	−40.76	1.07	0.85	1.20	1.62	1.00	+13 + 1 − 2 +28 − 3 +34 − 4 + 6 − 4 − 2										0	−1.13
108851	22 03 04.63	−07 08 06.3	11.03	G	330.769 303 61	−07.135 096 92		9.98	173.27	−80.24	2.10	1.40	2.27	2.35	1.40	+31 + 8 + 6 −33 − 7 +20 − 8 −30 +15 +32										0	0.14
108852	22 03 06.09	−53 04 51.4	10.11	H	330.775 374 89	−53.080 955 80		7.82	−14.76	−19.88	1.05	0.86	1.66	1.38	1.01	+ 9 − 5 − 5 +21 + 5 +12 + 7 +12 −21 +11										1	0.10
108853	22 03 06.28	−50 18 59.8	8.00	H	330.776 166 45	−50.316 611 82		2.04	−43.28	−8.28	0.72	0.63	1.14	0.87	0.66	+34 −26 −29 + 2 +13 + 4 +14 +25 −14 +40										0	−0.24
108854	22 03 07.46	−43 13 56.6	8.40	H	330.781 100 31	−43.232 390 66		4.84	35.59	−31.65	1.04	0.73	1.19	1.47	0.79	+31 +21 − 1 +11 − 2 +21 − 2 +16 −15 +29										4	1.44
108855	22 03 07.77	+03 10 56.9	7.91	H	330.782 382 25	+03.182 470 63		3.42	−16.21	−25.15	0.90	0.76	1.03	1.43	0.84	+21 − 1 −17 +21 − 3 +23 + 2 +23 −15 − 3										0	0.56
108856	22 03 08.63	−27 03 04.4	7.76	H	330.785 940 79	−27.051 213 71		6.48	−13.46	−5.88	0.87	0.64	1.07	1.07	0.61	+ 8 −13 −37 +16 −45 +45 −32 +15 + 9 + 6										0	−0.54
108857	22 03 09.27	+31 51 57.1	9.39	H	330.788 612 59	+31.865 849 23		1.63	52.01	31.55	0.98	1.02	1.39	1.25	1.29	− 5 + 9 −35 +50 − 9 − 4 − 5 −14 +40 − 1										0	−1.46
108858	22 03 09.58	+45 37 36.2	9.11	H	330.789 896 59	+45.626 719 54		0.20	6.18	−0.53	0.74	0.76	1.00	0.89	0.82	−20 + 2 − 1 − 3 + 4 − 6 + 4 −19 +16 −22										0	0.38
108859	22 03 10.75	+18 53 03.7	7.65	G	330.794 810 49	+18.884 363 26		21.24	28.90	−18.37	0.86	0.80	1.00	1.01	0.97	+14 +12 −10 −47 − 1 + 8 + 3 −47 +29 +17										0	1.19
108860	22 03 10.82	+59 36 10.7	10.93	G	330.795 080 07	+59.602 978 27		12.95	155.16	139.19	4.07	3.68	4.45	4.28	3.73	− 9 + 1 + 8 −15 +15 +12 +17 −31 + 6 +13										1	
108861	22 03 11.13	+41 24 21.8	7.41	H	330.796 358 19	+41.406 046 82		6.36	−6.51	−16.16	0.46	0.52	0.74	0.52	0.63	−39 +13 − 4 +20 − 5 + 8 − 7 + 2 − 1 −48										0	1.62
108862	22 03 13.16	+88 04 22.9	7.45	H	330.804 850 50	+88.073 029 11		6.40	27.46	13.75	0.55	0.49	0.60	0.75	0.58	− 2 −14 +20 − 3 + 6 − 7 + 7 + 4 −13 + 8										0	0.70
108863	22 03 13.51	+09 43 38.9	10.31	H	330.806 291 56	+09.727 465 84		−2.23	4.75	1.90	1.75	1.36	2.06	2.09	1.78	+20 +27 −20 −25 +27 −16 +30 +11 +31 +23										0	0.00
108864	22 03 14.46	+30 12 11.5	7.02	H	330.810 238 65	+30.203 197 03		3.45	6.25	6.70	0.48	0.63	0.73	0.57	0.72	+16 +11 −28 +23 −10 + 0 − 3 −31 +16 +30										0	1.11
108865	22 03 14.55	+42 33 59.1	9.67	2 G	330.810 642 05	+42.566 403 63		−2.77	17.81	−2.79	0.97	1.05	1.53	1.12	1.20	−16 +17 + 0 +26 +12 + 1 +14 − 1 +25 −19										1	1.14
108866	22 03 15.29	−48 16 12.3	8.99	H	330.813 710 56	−48.270 080 12		6.47	28.72	−44.62	0.88	0.82	1.30	1.32	0.83	+30 − 1 − 3 −12 + 8 + 5 +20 +44 − 7 + 7										2	1.01
108867	22 03 15.43	+48 50 56.6	8.57	H	330.814 285 87	+48.849 060 07		3.14	2.33	8.16	0.62	0.62	0.81	0.69	0.62	−15 + 5 +16 − 6 +17 − 4 +17 − 7 + 5 −11										1	−0.09
108868	22 03 16.43	−06 31 20.7	5.55	H	330.818 463 58	−06.522 426 98		12.02	47.80	8.65	0.68	0.47	0.80	0.78	0.49	+35 − 6 − 4 −17 − 6 +33 − 6 −21 +21 +45										2	0.55
108869	22 03 16.76	−31 26 42.5	7.09	2 H	330.819 842 22	−31.445 147 41		1.68	0.68	−14.23	0.77	0.64	0.95	0.83	0.68	+26 −28 −39 − 3 − 8 +20 + 1 +40 −17 +22										2	0.51
*108870	22 03 17.44	−56 46 47.3	4.69	G	330.822 664 98	−56.779 806 02		275.76	3959.97	−2538.84	0.48	0.39	0.69	0.55	0.42	+ 6 −23 −19 +10 + 4 +21 +15 − 1 −15 +22										0	−0.68
*108871	22 03 17.02	−29 54 16.2	7.14	H	330.820 934 73	−29.904 488 53		14.78	106.46	−25.31	0.72	0.61	0.90	0.88	0.75	+27 −18 −26 − 6 − 3 +34 − 2 +31 + 9 +41										0	−1.10
*108872	22 03 17.39	−34 46 45.1	9.25	H	330.822 443 75	−34.779 181 83		1.14	0.25	−8.54	1.09	0.86	1.42	1.36	0.83	+25 + 4 −26 − 5 −16 +41 − 5 + 7 +13 +33										0	0.72
108873	22 03 18.73	+41 02 14.5	8.50	H	330.828 040 38	+41.037 355 53		2.48	8.17	3.01	0.60	0.60	0.89	0.71	0.77	−38 +13 −10 +39 −11 − 5 −13 +15 + 9 −47										0	2.28
108874	22 03 18.83	−02 09 19.2	4.74	2 T	330.828 456 86	−02.155 335 88		8.56	24.81	−11.14	0.77	0.54	0.81	0.99	0.57	+14 −11 −18 + 2 +13 +31 +19 +34 + 3 + 6										2	−0.43
108875	22 03 19.02	+11 23 11.6	5.83	H	330.829 258 88	+11.386 556 05		6.03	16.71	−1.63	0.70	0.48	0.82	1.06	0.58	+23 + 1 +11 + 7 +27 +33 +18 − 8 +30 +22										0	0.59
108876	22 03 19.70	−16 37 35.3	10.92	3 H	330.832 072 42	−16.626 462 81		3.58	3.03	−2.53	2.26	1.50	2.55	3.19	1.40	+27 − 6 −14 − 4 − 5 +14 − 2 − 3 + 2 + 5										0	0.59
108877	22 03 20.19	−25 39 05.6	9.43	H	330.834 136 09	−25.651 554 04		1.57	9.35	−4.09	1.04	0.81	1.30	1.24	0.87	+25 + 9 −15 +15 −28 +38 −23 +17 − 1 +26										0	1.28
108878	22 03 20.55	+30 59 41.5	8.52	H	330.835 618 62	+30.994 874 34		3.92	8.02	−7.49	0.69	0.82	1.02	0.86	0.93	+10 + 5 −30 +29 + 0 + 8 + 2 −29 +24 + 9										2	0.49
108879	22 03 20.87	+54 52 48.2	7.08	H	330.836 977 23	+54.880 055 61		5.65	15.02	2.70	0.48	0.46	0.61	0.56	0.51	− 1 −11 +12 −10 +19 −13 +18 − 7 − 5 +38										0	−1.64
108880	22 03 21.01	+22 27 45.9	9.76	H	330.837 527 38	+22.462 754 05		5.94	48.10	−13.75	1.25	1.26	1.46	1.52	1.83	+35 + 6 − 6 −29 −21 − 2 −19 −43 + 6 +38										0	0.16
108881	22 03 22.20	+37 42 22.2	8.72	H	330.842 502 09	+37.706 174 88		2.79	−17.13	−22.50	0.76	0.66	1.06	0.89	0.76	−50 + 0 − 3 −28 +19 − 9 +21 −42 +11 −39										3	1.67
108882	22 03 23.03	−14 57 06.3	7.91	H	330.845 949 21	−14.951 738 14		0.80	−2.46	−7.51	1.00	0.62	1.06	1.41	0.67	+15 + 6 − 8 − 3 +35 +10 +30 +15 +30 +13										0	0.31
108883	22 03 23.15	−38 45 11.7	8.83	H	330.846 455 68	−38.753 259 96		3.04	−12.76	−21.41	0.98	0.92	1.21	1.14	0.99	+18 − 3 − 5 + 2 +14 +21 +13 +60 − 4 +20										6	0.92
108884	22 03 23.47	+44 39 24.6	8.71	H	330.847 801 07	+44.656 820 75		4.04	15.45	4.85	0.66	0.69	0.95	0.76	0.75	−22 + 9 − 3 − 6 + 2 + 2 + 2 −11 + 4 −32										0	0.72
108885	22 03 24.41	+30 02 14.8	7.48	H	330.851 693 74	+30.037 436 13		3.11	9.40	−7.15	0.56	0.67	0.81	0.65	0.79	+12 +14 −20 +33 − 9 − 5 − 4 −23 +15 +22										0	−0.23
108886	22 03 24.78	+05 26 26.5	7.31	H	330.853 249 45	+05.440 699 90		2.68	8.87	−12.94	0.91	0.71	1.00	1.13	0.76	+16 +13 +15 + 1 +11 +21 + 9 +28 + 4 +11										0	−1.53
108887	22 03 24.84	+55 47 51.2	9.52	G	330.853 488 02	+55.797 564 27		4.32	8.08	1.32	0.94	0.89	1.14	1.04	0.94	− 2 + 4 +13 −11 +13 −11 +15 −16 + 1 +25										0	1.26
108888 H	22 03 25.12	+48 41 03.0	8.04	2 H	330.854 680 76	+48.684 167 17	A	3.29	−4.45	−9.71	1.00	0.96	1.15	1.02	0.94	−24 +22 −10 −16 +22 −10 +27 −18 +29 −24										1	1.76
108889	22 03 25.99	+55 47 14.7	9.56	H	330.858 280 60	+55.787 420 97		4.26	5.44	4.60	1.09	1.00	1.29	1.19	1.04	− 7 − 2 +14 −18 +14 −10 +16 −20 + 0 +24										4	1.64
108890	22 03 26.81	−50 38 34.0	12.09	2 G	330.861 720 81	−50.642 777 35		45.87	351.30	−485.99	5.12	5.01	8.09	5.15	5.16	+44 −34 −39 − 1 +21 − 6 +26 +36 −34 +46										3	
108891	22 03 27.64	+49 39 53.6	7.57	G	330.865 161 69	+49.664 875 26		2.33	7.73	1.56	0.48	0.48	0.64	0.51	0.47	− 8 + 4 +18 + 9 + 4 − 3 + 7 − 9 + 5 + 2										1	−1.21
108892 H	22 03 27.82	+45 34 07.0	10.05	2 H	330.865 933 42	+45.568 617 99	A	−2.13	−9.14	1.61	2.67	2.93	3.57	3.16	3.30	−15 + 0 − 3 − 9 − 4 − 1 − 4 −12 +15 −18										6	2.77
108893 H	22 03 27.89	−21 42 05.8	9.56	H	330.866 208 73	−21.701 609 83	A	2.07	9.89	−8.43	16.06	12.05	16.74	17.22	10.59	+24 + 9 − 3 −14 + 3 +20 + 5 +23 −17 +11										0	−0.57
108894	22 03 29.15	+67 06 25.2	8.97	G	330.871 440 61	+67.106 996 79		−0.04	−1.77	−1.12	0.72	0.65	0.77	0.88	0.70	−18 − 9 +12 +17 + 7 −20 + 9 − 6 + 6 −14										0	0.66
108895	22 03 30.04	−05 41 33.6	7.62	H	330.875 170 66	−05.692 658 59		6.96	57.18	23.38	0.80	0.55	0.95	0.99	0.62	+33 + 5 + 3 −14 + 7 +32 + 6 −22 +33 +46										0	0.27
108896	22 03 30.48	−60 10 02.8	8.27	H	330.877 017 04	−60.167 432 23		4.31	19.53	−11.15	0.72	0.70	1.13	0.89	0.66	−13 + 2 −37 − 4 − 6 +19 + 1 − 9 − 4 −18										0	−0.13
108897	22 03 30.98	+63 32 04.5	8.92	H	330.879 067 53	+63.534 591 49		2.18	9.36	2.12	0.74	0.63	0.80	0.98	0.74	−18 + 0 + 9 +15 − 3 +24 − 6 + 2 −11 −31										0	−0.96
108898	22 03 31.32	−05 53 24.8	7.85	G	330.880 484 16	−05.890 217 80		13.18	79.55	14.73	0.84	0.60	0.98	1.14	0.67	+40 − 4 + 0 −19 +10 +27 + 2 +16 +27 +51					

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
108801	8.571	0.009	8.236	0.009	A	0.348	0.015	G	0.41	0.02	H	8.2775	0.0048	0.031	132	A	8.25	8.36		D	22025−7719	I 2	1 C P A							S
108802											T	12.5104	0.0443	0.356	76		11.33	12.93		D	22025+6816	I 2	S							G
108803	11.390	0.079	9.989	0.037		1.182	0.071	T	1.14	0.06	L	9.9077	0.0025	0.018	79		9.86	9.93		C			1							
108804	9.512	0.015	8.846	0.014		0.604	0.015	G	0.67	0.01	H	8.9317	0.0021	0.018	149		8.89	8.96		C			1							
108805	7.554	0.008	7.480	0.009		0.073	0.011	T	0.08	0.01	L	7.5005	0.0009	0.009	79		7.48	7.52					1							S
108806	8.736	0.010	8.117	0.009		0.576	0.012	T	0.65	0.01	L	8.1872	0.0010	0.012	106		8.16	8.21		C			1							S
108807	11.297	0.076	9.401	0.025		1.608	0.066	T	2.00	0.16	O	9.2841	0.0065	0.047	72		9.19	9.35		U 2			1							
108808	9.187	0.015	8.670	0.015		0.495	0.016	T	0.57	0.02	L	8.7000	0.0020	0.011	89		8.68	8.73		C			1							S
108809	7.230	0.005	6.690	0.005		0.504	0.009	G	0.59	0.02	A	6.7417	0.0016	0.010	85		6.73	6.76					1							S
108810	9.446	0.021	7.935	0.012		1.249	0.020	G	1.21	0.02	H	7.9849	0.0015	0.011	59		7.97	8.00		D			1							S
108811	9.771	0.021	8.764	0.015		0.920	0.015	G	0.96	0.02	I	8.8065	0.0017	0.018	114		8.78	8.84		D	22025+6816	I 2	1							
108812	7.295	0.005	7.018	0.004		0.264	0.006	T	0.30	0.01	L	7.0665	0.0014	0.012	182		7.04	7.08		M			1							S
108813	10.542	0.031	9.288	0.018		1.069	0.028	T	1.03	0.02	L	9.3172	0.0019	0.025	133		9.28	9.37					1							
108814	6.643	0.006	6.686	0.006		−0.047	0.005	G	−0.03	0.01	H	6.6976	0.0009	0.007	79		6.69	6.71		C			1							S
108815	9.484	0.019	8.909	0.017		0.537	0.023	T	0.61	0.02	L	8.9832	0.0023	0.016	83		8.96	9.01		C			1							
108816	10.556	0.043	9.788	0.033		0.684	0.041	T	0.74	0.03	L	9.8118	0.0036	0.027	79		9.77	9.85		C			1							
108817	8.678	0.012	7.056	0.007		1.358	0.011	T	1.33	0.01	L	7.0651	0.0010	0.008	86		7.05	7.08					1							S
108818	10.439	0.042	9.165	0.024		1.085	0.038	T	1.05	0.03	L	9.2070	0.0030	0.017	67		9.18	9.24					1							
108819	7.147	0.005	7.202	0.005		−0.046	0.006	T	−0.02	0.01	L	7.2119	0.0008	0.009	174		7.20	7.23		C			1							S
108820						1.437	0.004	G	1.56	0.15	K	12.2388	0.0087	0.071	54		12.15	12.36					1							G
108821	10.832	0.062	9.965	0.044		0.737	0.005	G	0.78	0.01	H	9.9810	0.0032	0.022	63		9.95	10.03		C			1 X							
108822											T	12.1146	0.0077	0.063	82		12.01	12.23					1							G
108823	10.214	0.033	8.439	0.015		1.479	0.029	T	1.50	0.04	L	8.4551	0.0019	0.014	80		8.43	8.49					1							
108824	9.549	0.019	7.973	0.010		1.322	0.017	T	1.28	0.02	L	7.9947	0.0016	0.011	84		7.98	8.02		C			1							S
108825	9.847	0.029	9.697	0.037		0.144	0.044	T	0.16	0.04	L	9.6740	0.0023	0.020	121		9.64	9.70		C			1							G
108826	8.864	0.012	7.486	0.007		1.166	0.011	T	1.13	0.01	L	7.5213	0.0013	0.010	114		7.51	7.54					1							S
108827	9.170	0.023	8.586	0.021		0.545	0.028	T	0.62	0.03	L	8.6318	0.0024	0.013	52		8.61	8.66					1							S
108828	10.701	0.054	10.265	0.055	B	0.412	0.071	T	0.48	0.08	L	10.4232	0.0570			B				D	22029+6716	I 2	1 C I A							
108829	6.871	0.004	6.767	0.005		0.101	0.006	T	0.11	0.01	L	6.7963	0.0007	0.008	127		6.78	6.81		C			1							S
108830	8.861	0.009	8.635	0.010		0.216	0.013	T	0.24	0.01	L	8.6762	0.0014	0.017	224		8.65	8.70					1							S
108831	8.476	0.010	8.293	0.011		0.198	0.015	G	0.22	0.02	H	8.3278	0.0017	0.013	92		8.30	8.35					1							S
108832	11.383	0.066	10.014	0.032		1.159	0.057	T	1.12	0.05	L	10.0637	0.0035	0.033	125		10.00	10.11					1							
108833	8.576	0.007	8.446	0.008		0.126	0.010	T	0.14	0.01	L	8.4743	0.0012	0.018	256		8.44	8.51		C			1							S
108834	8.916	0.013	8.694	0.015	A	0.212	0.019	T	0.23	0.02	L	8.7844	0.0156	0.058	117	A	8.68	8.86		D	22029+6716	I 2	1 C P A							S
108835	9.615	0.027	9.013	0.025		0.561	0.032	T	0.63	0.03	L	9.1198	0.0029	0.020	56		9.06	9.15					1							
108836	11.934	0.217	11.248	0.175		1.140	0.005	G	1.23	0.01	I	11.1082	0.0046	0.032	50		10.93	11.17					1							G
108837	9.372	0.015	8.153	0.010		1.042	0.014	T	1.01	0.01	L	8.2091	0.0015	0.013	140		8.19	8.24					1							
108838	9.411	0.014	9.199	0.016		0.202	0.020	T	0.22	0.02	L	9.2593	0.0020	0.024	133		9.22	9.31					1							
108839	11.320	0.083	11.040	0.104		0.266	0.125	T	0.30	0.16	L	11.0590	0.0477	0.217	63		10.78	11.31	0.36	P 1 A			1							G P
108840	9.475	0.019	9.138	0.021		0.320	0.026	T	0.37	0.04	L	9.1983	0.0021	0.019	117		9.16	9.23		C			1							
108841	8.214	0.006	8.195	0.008	A	0.022	0.009	T	0.04	0.01	L	8.2276	0.0053	0.018	261	A	8.20	8.26			22029+3934	I 1	2 C A	AB	196	10.718	0.018	2.86	0.08	S
108842	7.676	0.009	7.295	0.008	*	0.396	0.015	G	0.46	0.02	H	*	7.3454	0.0017	0.010	77	*	7.33	7.36			22029+1547	H 1	2 C S A	AB	139	0.113	0.015	1.21	0.65	S
108843	9.506	0.018	7.682	0.008		1.518	0.016	T	1.55	0.02	L	7.6287	0.0015	0.014	94		7.61	7.65					1							S
108844	10.838	0.060	9.415	0.029		1.219	0.055	T	3.82	0.12	O	8.7940	0.0319	0.218	66		8.33	9.08		U 2			1 S							G
108845	5.556	0.003	5.593	0.003	*	−0.029	0.004	T	−0.01	0.00	L	*	5.5742	0.0011	0.010	142	*	5.56	5.59		D	22029+4439	I 1	2 C A	AB	5	0.981	0.004	2.09	0.02	S
108846	10.321	0.042	8.910	0.022		1.192	0.037	T	1.15	0.03	L	8.9476	0.0021	0.015	65		8.91	8.98					1							
108847	9.770	0.017	9.054	0.015		0.645	0.017	T	0.71	0.01	L	9.1264	0.0024	0.025	147		9.09	9.19		C			1							
108848	8.994	0.015	7.484	0.008		1.270	0.013	T	1.23	0.01	L	7.5133	0.0010	0.009	75		7.50	7.53					1							S
108849	6.417	0.004	5.984	0.003		0.399	0.003	G	0.46	0.00	H	6.0295	0.0006	0.006	141		6.02	6.04			22031−7607	I 1	1							S
108850	9.224	0.018	8.760	0.018		0.523	0.015	G	0.60	0.02	H	8.7946	0.0018	0.015	64		8.77	8.82		C			1							
108851						1.019	0.006	G	1.07	0.01	I	11.1818	0.0054	0.036	69		11.10	11.23		C			1							G
108852	11.084	0.049	10.218	0.036		0.759	0.047	T	0.80	0.03	L	10.2473	0.0031	0.029	133		10.19	10.30		C			1							
108853	9.262	0.013	8.100	0.008		0.997	0.012	T	0.98	0.01	L	8.1651	0.0013	0.015	151		8.14	8.19					1							S
108854	9.876	0.027	8.537	0.015		1.136	0.024	T	1.10	0.03	L	8.5722	0.0021	0.012	71		8.55	8.60					1							
108855	9.699	0.030	8.062	0.015		1.370	0.026	T	1.34	0.03	L	8.0627	0.0014	0.013	48		8.04	8.09					1							S
108856	7.976	0.011	7.783	0.010		0.177	0.014	T	0.19	0.02	L	7.8227	0.0016	0.010	83		7.81	7.84			22031−2703	I 1	1							S
108857	9.853	0.023	9.399	0.022		0.428	0.029	T	0.50	0.03	L	9.4912	0.0019	0.022	101		9.45	9.53					1							
108858	9.213	0.014	9.108	0.017		0.102	0.021	T	0.12	0.02	L	9.1471	0.0017	0.018	122		9.12	9.17					1							
108859	8.334	0.013	7.703	0.012		0.594	0.015	G	0.66	0.01	H	7.7719	0.0020	0.014	89		7.75	7.80		C			1							S
108860	11.965	0.172	11.131	0.126		0.937	0.005	G	0.98	0.01	I	11.0984	0.0043	0.045	115		11.03	11.17		C	22031+5937	I 1	1 X							G
108861	8.943	0.011	7.540	0.007		1.186	0.010	T	1.15	0.01	L	7.5712	0.0011	0.014	183		7.55	7.59					1							S
108862	7.584	0.007	7.473	0.008		0.108	0.010	T	0.12	0.01	L	7.4956	0.0013	0.011	108		7.47	7.51					1							S
108863	11.686	0.115	10.357	0.059		1.128	0.101	T	1.09	0.10	L	10.4774	0.0046	0.033	69		10.42	10.53		C			1							G
108864	6.960	0.005	7.014	0.005		−0.042	0.002	G	−0.02	0.00	H	7.0180	0.0008	0.008	112		7.00	7.03		C			1							S
108865	12.135	0.126	10.002	0.029		0.671	0.400	G	1.99	0.16	S	9.8261	0.0052	0.052	166		9.75	9.93		R 2			1 S							G
108866	9.568	0.015	9.016	0.015		0.523	0.016	T	0.60	0.02	L	9.1025	0.0018	0.022	125		9.06	9.14			22033−4816	I 1	1 G							
108867	8.541	0.009	8.565	0.012		−0.017	0.014	T	0.01	0.01	L	8.5725	0.0017	0.018	141		8.54	8.60					1							
108868	6.778	0.005	5.659	0.004		0.959	0.002	G	0.95	0.00	H	5.7134	0.0007	0.005	95		5.70	5.72		C			1							S
108869	8.989	0.015	7.351	0.008		1.396	0.014	T	3.06	0.03	O	6.9707	0.0066	0.078	74		6.88	7.09		U 2			1 S							S
108870	6.069	0.003	4.833	0.002		1.056	0.016	G	1.15	0.02	A	4.8310	0.0005	0.005	135		4.82	4.84		C			1							S
108871	7.516	0.008	7.189	0.007		0.330	0.019	G	0.38	0.03	H	7.2176	0.0010	0.008	75		7.20	7.23					1							S
108872	10.513	0.033	9.303	0.020		1.035	0.030	T	1.01	0.03	L	9.4158	0.0024	0.020	82		9.38	9.45					1							
108873	8.612	0.008	8.503	0.009		0.106	0.011	T	0.12	0.01	L	8.5391	0.0016	0.018	183		8.51	8.57					1							
108874	4.622	0.021	4.727	0.018		−0.100	0.110	G	−0.03	0.02	A	4.6852	0.0248	0.104	57		4.66	4.91		U 2 C			1							S
108875	5.760	0.003	5.819	0.004		−0.050	0.004	T	−0.03	0.00	L	5.8197	0.0006	0.005	95		5.81	5.83		C			1							S
108876	11.686	0.147	10.821	0.108		0.774	0.137	T	0.81	0.10	L	11.0661	0.0139	0.108	65		10.88	11.53		U 2			1							G
108877	9.632	0.019	9.423	0.023		0.200	0.028	T	0.22	0.03	L	9.4931	0.0018	0.019	107		9.47	9.54					1							
108878	8.582	0.011	8.508	0.014		0.073	0.017	T	0.08	0.02	L	8.5447	0.0017	0.015	101		8.51	8.57		C			1							S
108879	7.013	0.004	7.068	0.006		−0.046	0.007	T	−0.02	0.01	L	7.0771	0.0008	0.008	126		7.06	7.09		C			1							S
108880	10.504	0.041	9.790	0.034		0.657	0.043	T	0.72	0.04	L	9.8993	0.0032	0.021	77		9.84	9.93		C			1							
108881	9.910	0.016	8.799	0.010		0.958	0.015	T	0.95	0.01	L	8.8830	0.0011	0.016	233		8.85	8.92		C			1							
108882	9.454	0.021	8.061	0.012		1.178	0.019	T	1.14	0.02	L	8.0811	0.0013	0.011	72		8.06	8.10		C			1							S
108883	10.088	0.029	8.932	0.018		0.993	0.027	T	0.97	0.02	L	8.9977	0.0024	0.018	78		8.97	9.03		C			1							
108884	8.796	0.010	8.719	0.012		0.076	0.015	T	0.09	0.02	L	8.7433	0.0020	0.017	141		8.71	8.78		C			1							
108885	7.400	0.006	7.460	0.007		−0.056	0.003	G	−0.03	0.00	H	7.4646	0.0009	0.008	106		7.45	7.49					1							S
108886	9.506	0.021	7.539	0.009		1.631	0.018	T	1.65	0.02	L	7.4229	0.0031	0.015	59		7.39	7.45					1							S
108887	9.736	0.020	9.433	0.022		0.231	0.024	G	0.26	0.03	H	9.5718	0.0029	0.025	118		9.53	9.62					1							G
108888	8.163	0.010	8.027	0.012	*	0.131	0.015	T	0.15	0.01	L	*	8.0858	0.0053	0.046	142	*	8.03	8.15	1.65	P 1 A	22034+4841	I 1	2 C B	AB	190	8.531	0.026	3.30	0.14	S
108889	11.107	0.057	9.617	0.024		1.254	0.049	T	1.21	0.05	L	9.7170	0.0039	0.037	115		9.64	9.76		R			1 S							G
108890						1.570	0.015	G	2.52	0.06	I	12.1535	0.0066	0.087	126		11.87	12.26		U			1 X							D G
108891	7.458	0.006	7.568	0.007		−0.060	0.015	G	−0.04	0.01	H	7.5486	0.0011	0.010	153		7.53	7.57					1							S
108892						2.400	0.600	G	2.40	0.61	J	*	10.0792	0.0099	0.090	123	*	9.97	10.23		U 2	22035+4534	M 1	2 C B	AB	131	8.485	0.053	2.47	0.21	G
108893	10.163	0.034	9.843	0.040	A	1.300	0.495	G	0.53	0.12	L	*	9.6665	0.0031	0.019	65	*	9.64	9.72		D	22035−2142	I 1	2 C D	AB	186	1.250	0.102	1.18	0.07	S D
108894	9.139	0.015	8.976	0.017		0.200	0.015	G	0.22	0.02	H	9.0246	0.0019	0.016	121		9.00	9.05		C			1							
108895	8.923	0.013	7.737	0.009		1.016	0.012	T	0.99	0.01	L	7.7826	0.0011	0.010	111		7.77	7.80					1							S
108896	8.694	0.010	8.324	0.010		0.361	0.012	T	0.42	0.01	L	8.3607	0.0015	0.017	137		8.33	8.40		C			1							S
108897	8.913	0.012	8.901	0.016		0.040	0.015	G	0.06	0.01	H	8.9438	0.0020	0.017	126		8.92	8.97		C			1							
108898	8.375	0.010	7.881	0.009		0.483	0.015	G	0.55	0.02	H	7.9442	0.0010	0.010	114		7.93	7.96					1 G							S
108899	9.287	0.015	7.646	0.008		1.373	0.013	T	1.34	0.02	L	7.6519	0.0013	0.012	115		7.63	7.67					1							S
108900											T	12.1890	0.0089	0.093	131		11.94	12.33					1 S							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
108901	22 03 35.46	+04 23 28.4	8.35	G	330.897 752 73	+04.391 209 39		10.71	25.17	−39.12	1.07	0.72	1.14	1.27	0.75	+ 9	+ 5	− 8	+ 3	+ 3	+19	+ 4	+16	− 6	+ 7		3	−0.79
*108902 H	22 03 35.51	+63 30 31.6	9.55	H	330.897 954 02	+63.508 785 38	A	1.38	−3.79	−1.50	2.05	1.87	1.41	1.75	1.30	+11	− 2	+10	+ 3	− 4	+25	− 7	− 4	− 5	−23		1	0.15
*108903	22 03 35.50	−55 58 36.2	6.88	H	330.897 901 05	−55.976 731 11		20.76	−241.03	−94.62	0.56	0.45	0.82	0.72	0.48	+ 1	− 1	−22	+22	+ 5	+14	+10	+ 9	−15	+12		0	0.82
108904	22 03 37.03	+26 57 01.6	8.05	H	330.904 274 23	+26.950 440 35		3.54	27.80	35.45	0.76	0.73	1.02	0.85	0.86	+ 4	+ 5	−31	+32	− 4	−14	− 8	−25	+40	− 5		0	−1.47
108905	22 03 37.41	+06 41 36.0	11.58	G	330.905 864 06	+06.693 345 85		11.93	2.38	−36.20	2.70	2.14	2.87	3.49	2.14	+15	+ 2	+ 3	+23	−13	+ 3	−12	+ 6	+10	− 2		0	1.58
108906	22 03 38.12	+52 43 01.7	7.83	H	330.908 841 14	+52.717 142 34		3.65	−30.39	−25.68	0.50	0.48	0.60	0.52	0.50	−10	+ 5	+ 7	+ 2	+12	− 5	+17	−19	+ 9	+ 8		1	0.30
108907	22 03 38.95	−85 54 09.4	8.43	H	330.912 310 76	−85.902 618 25		9.20	24.97	31.94	0.64	0.58	0.75	0.77	0.64	− 4	+ 0	+ 4	+ 4	+ 1	+17	+ 0	− 5	−16	− 3		0	0.40
108908	22 03 39.08	−29 20 47.6	7.39	H	330.912 852 13	−29.346 559 49		4.01	15.09	0.21	0.76	0.62	0.90	0.88	0.70	+22	−22	−25	− 9	− 5	+27	− 4	+34	+ 4	+30		0	−2.79
108909	22 03 39.15	−07 47 04.6	8.14	2 H	330.913 112 16	−07.784 606 49		−0.52	8.48	−14.49	1.02	0.74	1.24	1.25	0.76	+36	+ 9	−14	−29	− 7	− 8	− 6	−33	+40	+23		0	1.52
108910	22 03 39.32	−58 15 07.8	8.75	H	330.913 837 99	−58.252 168 07		3.82	8.82	−8.35	0.70	0.85	1.40	0.89	0.79	+ 2	− 1	−37	−28	+15	− 6	+ 5	+ 1	−11	+21		0	0.23
108911 H	22 03 41.33	+53 12 45.1	8.42	2 G	330.922 228 49	+53.212 539 03	*	0.66	−2.84	−3.19	0.59	0.58	0.73	0.63	0.61	−12	− 6	+20	−10	+14	− 6	+17	−20	− 7	+ 5		1	−0.87
108912	22 03 42.30	−60 26 14.9	7.87	1 H	330.926 239 20	−60.437 463 73		23.29	105.70	2.45	0.63	0.62	0.98	0.76	0.59	−14	− 3	−26	− 2	− 1	+18	+ 4	− 8	− 6	−15		0	−1.88
108913	22 03 43.02	−44 03 00.9	9.02	G	330.929 243 60	−44.050 242 57		6.19	−14.07	−2.05	1.11	0.69	1.10	1.45	0.72	+15	− 6	−11	−26	+ 3	+12	+ 5	+17	− 6	+ 8		2	0.36
108914	22 03 43.22	+49 46 17.8	7.32	H	330.930 072 38	+49.771 606 36		5.88	41.62	23.85	0.50	0.49	0.64	0.55	0.52	− 8	+ 0	+14	+15	+ 5	− 7	+ 9	−13	+ 4	+ 4		1	−0.73
108915	22 03 43.89	−51 12 14.8	9.99	G	330.932 866 53	−51.204 120 90		11.28	240.19	40.75	1.09	1.14	1.76	1.39	1.29	+45	−33	−33	+21	+33	+ 1	+37	+44	−27	+50		0	1.71
108916	22 03 45.57	+46 34 59.6	8.48	H	330.939 874 91	+46.583 218 48		7.64	−9.53	−19.61	0.67	0.68	0.92	0.74	0.77	−33	+10	− 1	− 1	+10	+ 0	+12	−11	+28	−34		0	0.99
*108917 H	22 03 47.16	+64 37 39.9	4.26	H	330.946 507 82	+64.627 754 25	A	32.07	214.46	89.29	0.77	0.63	0.68	0.78	0.56	−12	−21	+24	+14	+16	+17	+ 7	+11	+ 9	− 4		16	3.51
*108918	22 03 45.80	−15 54 48.6	8.80	H	330.940 825 99	−15.913 508 07		−0.17	0.06	−27.31	1.05	0.71	1.21	1.35	0.73	+33	−23	−12	− 4	+14	+18	+11	+ 5	+11	+25		0	−0.60
*108919	22 03 46.07	+13 07 30.3	8.40	H	330.941 977 92	+13.125 075 87		3.42	3.45	4.42	0.96	0.75	1.34	1.30	0.96	+27	+ 2	− 5	−42	+14	+ 0	+13	−20	+44	+ 8		0	−0.48
108920	22 03 47.58	+04 47 31.8	7.96	H	330.948 232 54	+04.792 160 29		5.11	−31.74	−64.67	0.99	0.72	1.07	1.14	0.76	+17	+18	− 2	− 2	+11	+11	+10	+32	+ 1	+18		0	−0.11
108921	22 03 48.07	+55 50 56.7	7.80	H	330.950 280 01	+55.849 075 28		14.52	46.07	60.73	0.58	0.54	0.69	0.64	0.56	−10	+ 0	+11	−17	+17	− 9	+17	−15	− 3	+10		1	1.13
108922	22 03 51.87	+44 35 25.3	7.78	H	330.966 139 42	+44.590 356 77		1.99	−0.96	−7.87	0.59	0.57	0.80	0.66	0.61	−30	+14	− 1	+ 2	+ 4	+ 1	+ 5	− 8	+12	−37		0	−0.51
108923 H	22 03 52.83	−24 50 46.8	8.33	H	330.970 122 13	−24.846 338 56	A	19.61	211.94	6.94	1.53	1.14	1.57	1.55	1.07	+29	−12	−12	+35	−15	+ 8	− 9	+28	− 1	+26		0	0.79
108924	22 03 52.93	+63 07 11.2	5.26	2 H	330.970 541 72	+63.119 778 85		7.27	36.70	58.29	0.45	0.39	0.47	0.50	0.41	−19	+ 6	+10	+18	+ 7	− 2	+ 5	− 7	−11	−25		0	−0.58
108925 H	22 03 53.86	+59 48 52.5	6.69	H	330.974 424 46	+59.814 579 19	A	2.38	−3.54	−1.52	1.10	1.07	0.75	0.79	0.63	+31	+ 7	+ 9	+20	+13	+25	+11	+ 2	− 6	+20		2	1.46
108926	22 03 57.79	−60 50 51.1	8.78	H	330.990 795 76	−60.847 540 64		2.15	8.10	−11.27	0.73	0.78	1.26	0.77	0.81	−11	−15	− 6	+35	+ 8	+10	+10	− 1	− 8	−12		1	0.69
108927	22 03 58.26	−32 32 40.9	10.22	H	330.992 749 99	−32.544 684 52		4.15	50.41	−31.75	1.40	1.09	1.75	1.74	1.23	+29	− 9	−25	+ 6	−11	+ 8	− 4	+24	−35	+ 9		0	−0.42
108928	22 03 59.50	+28 20 54.3	7.31	2 H	330.997 932 76	+28.348 414 54		2.71	14.42	−5.36	0.70	0.80	0.94	0.77	0.96	+12	+22	−13	+18	+ 3	+ 6	+ 9	−22	+13	+21		0	0.67
108929	22 03 59.71	+10 43 47.5	9.42	H	330.998 794 96	+10.729 863 19		1.86	7.35	6.64	1.50	0.85	1.70	2.15	1.14	+10	+ 1	+ 9	−26	+47	+32	+39	− 8	+45	+19		0	0.83
108930	22 04 04.76	−69 55 29.2	10.98	G	331.019 839 96	−69.924 769 85		33.56	625.30	−76.85	1.55	1.85	2.40	1.79	1.88	−12	+ 3	− 7	− 6	− 5	+10	− 3	−36	− 7	−13		4	−1.09
108931	22 04 05.99	−13 01 10.6	7.49	H	331.024 945 56	−13.019 605 40		6.33	−4.90	−8.53	0.81	0.53	0.87	0.91	0.51	+20	−25	− 6	−16	+ 8	+ 7	+ 4	− 4	+14	+15		0	−0.95
108932 H	22 04 06.40	+34 33 05.9	9.72	H	331.026 665 13	+34.551 639 73	A	7.37	−5.57	−67.62	1.54	1.74	2.17	1.60	1.81	+31	−22	−42	+27	+27	−32	+13	+ 2	+19	+24		0	1.31
108933	22 04 06.72	+44 20 42.4	6.56	H	331.027 995 08	+44.345 124 51		5.72	−0.53	−2.90	0.46	0.47	0.67	0.55	0.54	−37	+ 7	+ 0	−17	+ 7	+ 0	+ 9	+ 1	+ 8	−46		0	0.71
108934 H	22 04 08.23	+35 45 34.5	9.38	H	331.034 282 86	+35.759 573 37	A	4.15	−1.94	−6.45	4.47	3.58	1.81	1.27	1.74	+48	+ 3	− 1	− 2	+10	+ 0	+ 6	+ 8	+27	+42		1	0.75
108935	22 04 09.94	−21 46 48.0	7.85	H	331.041 423 16	−21.779 995 28		4.18	−9.63	12.89	0.87	0.62	0.97	0.99	0.64	+22	− 7	− 7	−12	+ 4	+14	+ 9	+29	−15	+12		0	0.45
108936	22 04 11.09	−17 48 44.8	8.14	H	331.046 192 83	−17.812 437 52		3.74	40.18	24.50	1.02	0.61	1.15	1.33	0.61	+26	+ 6	+ 3	+ 0	+12	+10	+11	+15	+19	+21		0	1.28
108937	22 04 11.54	−47 33 24.8	9.69	H	331.048 063 14	−47.556 875 88		6.70	81.42	−11.59	0.90	0.88	1.42	1.08	0.89	+30	− 7	+ 2	+ 2	+16	+ 9	+17	+30	− 9	+22		0	0.73
108938	22 04 12.85	+59 52 01.8	6.96	2 H	331.053 562 15	+59.867 156 03		2.57	7.58	3.54	0.51	0.49	0.60	0.62	0.52	− 6	− 3	+13	+ 8	+12	+22	+ 9	+ 6	− 9	+ 1		1	−1.66
108939	22 04 16.73	+16 16 14.1	7.66	H	331.069 715 45	+16.270 569 97		4.94	−4.96	−8.20	0.68	0.80	1.03	0.81	0.94	+31	− 6	−46	+ 5	−11	− 3	−17	−50	+50	+19		0	0.24
108940	22 04 17.52	+02 36 21.0	9.44	H	331.073 014 13	+02.605 832 82		27.44	153.22	32.04	1.60	1.28	1.65	2.62	1.47	+26	−10	−23	−20	+ 9	+21	+26	+42	−22	− 2		0	1.85
108941	22 04 17.93	+65 44 32.4	8.69	H	331.074 707 93	+65.742 329 50		7.69	156.65	83.00	0.70	0.60	0.73	0.83	0.63	−11	+ 3	+12	+ 4	+ 8	+12	+ 6	− 8	+10	−18		0	−0.56
108942	22 04 17.99	+24 01 09.8	9.01	H	331.074 943 57	+24.019 378 37		7.79	−1.85	−23.26	1.04	1.11	1.29	1.34	1.37	+30	+ 9	+ 2	− 8	−12	−13	−16	−48	− 7	+21		0	0.51
108943	22 04 18.13	+21 47 42.4	9.14	2 H	331.075 524 55	+21.795 104 48		−1.70	−21.81	−34.27	11.99	11.91	14.91	15.09	14.26	+30	+18	+17	−15	−17	−14	−15	−43	+ 0	+27		0	
108944	22 04 18.20	−61 52 21.5	7.95	H	331.075 845 48	−61.872 641 36		11.89	60.89	−27.46	0.43	0.58	0.96	0.58	0.61	−12	− 1	−12	−11	+11	− 2	+ 9	− 4	−16	−10		1	0.82
108945	22 04 18.76	+19 29 01.9	9.93	H	331.078 170 35	+19.483 853 48		−0.13	−2.99	0.94	1.29	1.47	1.77	1.40	1.57	+33	+14	+ 4	+ 4	−14	+ 3	−13	−37	+30	+22		0	0.95
108946	22 04 19.14	−42 43 28.3	8.81	G	331.079 766 86	−42.724 529 62	A	6.57	52.20	−26.14	1.92	1.36	1.97	1.99	1.16	+22	+26	−20	+26	−13	+25	− 8	+21	−16	+20		0	1.56
108947	22 04 19.75	+20 15 57.2	8.37	H	331.082 295 00	+20.265 879 89		31.38	176.11	−85.94	0.75	0.79	1.09	0.77	1.00	+20	+ 7	− 1	+17	−12	−17	− 8	−21	+40	+17		0	0.80
108948	22 04 20.04	+58 46 55.2	7.62	H	331.083 508 12	+58.782 012 68		2.52	8.67	0.52	0.51	0.48	0.59	0.53	0.46	−12	− 1	+12	+ 7	+ 9	+ 4	+ 9	− 9	+ 5	− 5		0	−0.15
108949 H	22 04 22.46	+13 38 53.7	7.04	G	331.093 590 14	+13.648 238 95	A	14.99	0.56	−34.11	1.43	1.28	1.53	1.83	1.46	+41	+ 4	− 4	−20	+ 7	+ 9	+ 8	− 3	+25	+36		0	−0.70
108950	22 04 22.55	−38 52 34.3	7.23	H	331.093 941 19	−38.876 204 42		19.50	129.94	−45.45	0.76	0.63	0.89	0.88	0.68	+21	−11	−11	+ 2	+10	+23	+10	+54	− 1	+25		4	0.14
108951	22 04 23.75	−42 28 11.1	10.16	H	331.098 966 11	−42.469 761 13		4.20	16.50	−27.53	1.44	1.16	1.76	1.78	1.12	+21	+14	−14	+22	−23	+38	−15	+23	−11	+ 5		0	−1.12
108952	22 04 23.83	−29 54 59.5	6.45	1 H	331.099 309 44	−29.916 537 81		2.51	2.82	3.35	0.65	0.56	0.79	0.72	0.61	+22	−12	−27	− 5	+ 0	+19	+ 1	+40	−11	+28		4	−1.12
108953	22 04 25.11	+21 03 09.1	8.86	G	331.104 642 21	+21.052 526 28		1.47	46.39	−11.83	0.88	0.98	1.30	1.02	1.45	+31	+11	−12	+ 1	−15	+ 2	− 8	−39	+36	+36		0	−0.20
108954	22 04 25.62	−55 53 26.9	8.95	H	331.106 752 75	−55.890 812 80		2.15	10.88	−28.04	0.82	0.77	1.23	1.06	0.82	+10	−10	−26	+ 7	+24	+ 7	+23	+16	− 9	+30		0	0.77
108955	22 04 25.64	−20 24 43.5	8.19	H	331.106 848 39	−20.412 088 04		6.22	−10.47	−7.35	1.01	0.64	1.07	1.35	0.59	+21	− 5	− 1	− 9	+47	−18	+35	+14	− 7	+29		0	−1.58
108956	22 04 25.89	−52 12 45.9	8.36	G	331.107 856 34	−52.212 742 45		8.62	13.23	−42.23	0.69	0.59	1.14	0.88	0.65	+17	− 6	−17	+14	+16	+ 2	+16	+22	−23	+31		1	0.20
108957	22 04 27.83	+62 24 27.5	8.44	2 G	331.115 963 81	+62.407 647 31		−0.65	−2.85	−4.95	0.62	0.57	0.67	0.70	0.62	− 9	+11	+ 8	+23	+ 1	− 6	+ 1	− 4	− 8	− 9		0	0.37
108958	22 04 27.89	−14 26 49.0	7.36	1 H	331.116 222 45	−14.446 953 01		3.41	−14.41	10.88	0.86	0.60	0.94	1.17	0.63	+29	− 7	−10	+ 2	+37	+ 8	+30	+26	+17	+27		0	1.41
108959	22 04 29.71	+26 39 54.8	8.91	H	331.123 807 29	+26.665 230 27		3.31	6.40	−2.06	0.94	0.89	1.20	1.13	1.08	+ 8	+ 3	−17	+33	+ 6	−16	+ 3	−12	+21	+ 1		0	−0.43
108960	22 04 29.92	−25 52 59.9	6.73	H	331.124 647 27	−25.883 306 37		4.41	87.41	26.61	0.70	0.62	0.95	0.79	0.58	+45	− 9	−29	−13	−44	+47	−35	−13	+15	+40		3	0.53
108961 H	22 04 30.12	+15 51 28.6	7.88	H	331.125 486 54	+15.857 954 22	*	10.86	−24.68	−66.38	0.70	0.72	0.95	0.84	0.90	+33	− 8	−33	+ 5	− 7	− 2	−13	−38	+40	+22		2	−0.20
108962	22 04 30.90	+05 46 33.5	10.93	H	331.128 747 28	+05.775 980 56		20.32	212.11	−2.32	2.09	1.66	2.39	2.71	1.73	+17	+ 9	+15	− 2	+ 3	+24	+ 1	+ 1	+12	+10		0	0.20
108963	22 04 31.11	+10 14 25.2	6.93	H	331.129 624 40	+10.240 346 92		7.67	−44.72	−13.87	0.90	0.58	0.92	1.06	0.69	+26	+21	+ 2	−16	+40	− 1	+43	+22	+28	+21		0	−0.12
108964	22 04 31.48	−08 43 01.9	7.26	H	331.131 183 11	−08.717 185 75		8.10	15.32	−66.39	1.49	0.66	0.99	2.31	0.74	−32	+20	−16	−77	+55	−16	+53	−26	+26	−37		0	2.77
108965 H	22 04 31.63	−52 32 16.9	8.53	H	331.131 796 40	−52.538 036 96	A	2.68	45.11	16.87	1.44	1.08	2.11	1.65	1.08	+14	− 3	+ 8	+18	−13	+13	−11	− 3	+31	− 8		1	0.22
108966	22 04 32.79	+25 39 30.8	7.22	H	331.136 637 01	+25.658 548 70		4.69	−10.66	−11.45	0.57	0.78	0.92	1.01	1.64	+20	+ 6	−25	+ 8	− 9	−36	+ 1	−33	−20	+72		0	0.77
108967	22 04 32.98	−35 04 22.5	10.05	H	331.137 414 44	−35.072 907 38		6.23	−28.87	−28.07	1.33	1.09	1.75	1.54	1.00	+31	− 3	−25	− 4	− 5	+28	+ 4	+25	− 6	+24		0	1.79
108968	22 04 33.23	−58 10 13.9	9.38	H	331.138 439 74	−58.170 516 41		9.65	−40.86	−5.80	0.82	1.05	1.62	1.02	0.93	− 4	+ 0	−43	−32	+19	−12	+ 7	+ 6	− 9	+15		0	−0.27
108969	22 04 34.51	+32 56 30.3	6.36	H	331.143 807 05	+32.941 763 33		3.39	6.11	−7.82	0.36	0.56	0.73	0.39	0.74	+22	+ 1	−20	− 9	+13	−11	+15	−10	+19	+41		0	−1.87
108970	22 04 34.79	−78 10 44.2	9.53	H	331.144 970 45	−78.178 940 61		4.61	−3.92	−11.58	0.89	0.80	1.10	1.18	0.92	− 6	−12	−17	+15	+ 1	+18	+ 5	+ 9	−13	−13		0	1.35
108971	22 04 34.88	−56 17 58.7	7.86	H	331.145 320 47	−56.299 639 67		15.65	−111.44	−29.24	0.68	0.51	0.94	0.91	0.58	+ 0	−10	− 7	+31	+ 0	+16	+ 7	+10	−20	+ 9		0	−0.33
108972	22 04 35.00	−04 50 24.2	7.75	G	331.145 844 81	−04.840 051 34		4.15	8.63	−0.23	0.88	0.59	1.08	1.11	0.70	+22	+13	−13	+ 2	− 1	+34	+ 9	−23	+43	+39		0	−0.16
108973	22 04 35.13	+08 54 46.2	8.61	H	331.146 388 24	+08.912 836 03		7.10	15.85	26.40	1.04	0.74	1.05	1.25	0.92	+16	+ 1	+ 3	−23	+24	+ 3	+25	+29	+21	+14		0	−1.47
108974	22 04 35.82	+29 57 34.4	8.05	H	331.149 265 84	+29.959 557 47		1.72	−8.54	0.65	0.66	0.82	0.91	0.80	1.01	+21	+12	− 7	+26	−19	+ 3	−12	−40	+10	+31		0	−0.06
108975	22 04 36.76	−26 49 20.4	5.97	1 H	331.153 161 81	−26.822 335 60		2.89	12.59	−9.54	0.68	0.45	0.75	0.80	0.50	+ 4	− 6	−13	+17	−31	+32	−28	+14	+17	+14		0	0.27
108976	22 04 38.39	−64 43 41.5	7.33	2 H	331.159 976 37	−64.728 194 60		8.19	26.84	−58.82	0.43	0.48	0.72	0.50	0.52	−22	− 4	− 8	+ 6	− 1	+ 0	− 3	− 5	+ 0	−34		0	−1.08
108977 H	22 04 38.68	+56 49 00.3	9.20	G	331.161 146 24	+56.816 745 37	A	3.52	−4.47	−7.93	1.65	1.49	1.74	1.47	1.38	+18	+ 6	+19	−10	− 6	− 9	− 1	−27	−13	+21		1	0.43
108978	22 04 39.16	−28 26 06.2	6.99	H	331.163 169 20	−28.435 053 39		7.13	−18.80	20.91	0.76	0.61	0.91	0.95	0.65	+21	−16	−18	+ 2	−19	+26	−15	+23	+18	+20		0	−1.91
108979	22 04 39.83	−10 53 03.8	9.11	H	331.165 947 69	−10.884 380 47		5.38	−61.55	−35.25	1.08	0.81	1.25	1.09	0.77	+50	−10	−14	−12	+ 5	+ 7	+ 5	+ 1	− 4	+48		2	−0.32
108980	22 04 41.34	+32 03 08.0	8.85	G	331.172 252 60	+32.052 217 55		6.84	8.14	0.21	0.73	0.96	1.13	0.72	1.22	+18	− 1	−27	+14	+ 0	−14	− 1	−16	+15	+30		0	−2.18
108981	22 04 41.55	+46 25 38.1	10.10	H	331.173 122 85	+46.427 252 14		1.13	1.03	2.27	1.05	1.02	1.39	1.28	1.16	−12	+10	+ 4	+16	+ 6	+ 0	+ 5	−16	+14	−20		1	−0.72
108982	22 04 42.36	−35 41 47.0	7.79	2 H	331.176 486 29	−35.696 384 45		2.60	56.55	10.92	0.78	0.61	1.00	0.87	0.56	+27	−10	− 8	+13	− 7	+32	− 2	+22	− 3	+17		0	1.75
108983 H	22 04 43.79	−38 38 34.8	9.83	H	331.182 446 00	−38.643 000 19	A	3.53	20.25	−40.19	4.30	2.65	2.99	2.98	2.04	+33	+ 7	+ 2	+14	+ 6	+37	+ 6	+49	+13	+28		1	−1.24
108984	22 04 43.93	−37 02 20.4	10.08	H	331.183 033 63	−37.039 008 34		1.76	−7.14	−7.60	1.32	0.99	1.62	1.54	0.95	+14	− 9	− 7	+14	−17	+12	−11	+23	− 5	+ 1		0	1.06
108985	22 04 44.31	−25 07 12.6	8.67	H	331.184 627 26	−25.120 171 25		11.72	−46.77	−77.86	0.90	0.74	1.09	1.05	0.75	+36	− 7	−11	+ 5	−38	+27	−34	− 5	+10	+34		0	−0.05
108986	22 04 44.50	−60 27 53.0	9.08	H	331.185 400 88	−60.464 721 18		1.53	1.24	0.55	0.86	0.91	1.39	1.02	0.87	−10	− 3	−23	−19	− 6	+17	− 2	−13	− 1	−10		1	1.02
108987	22 04 45.55	−45 29 25.4	8.87	H	331.189 785 14	−45.490 400 49		9.48	10.29	−84.44	1.01	0.80	1.16	1.18	0.86	+26	−21	−20	+15	+ 3	+17	+ 7	+36	+ 1	+21		0	−0.28
108988	22 04 45.88	+21 48 33.5	9.21	H	331.191 159 08	+21.809 305 55		2.59	9.27	−12.63	1.16	1.24	1.31	1.47	1.37	+38	− 3	+ 5	− 5	−23	+17	−29	−59	+10	+31		0	0.51
108989	22 04 46.13	+47 21 51.5	9.70	H	331.192 222 54	+47.364 317 38		0.67	−2.94	−2.19	0.86	0.81	1.09	0.95	0.80	−16	+ 9	+17	−12	+16	+19	+13	−29	+ 6	−20		0	−0.45
108990	22 04 46.79	+01 46 27.1	8.39	H	331.194 943 98	+01.774 201 87		7.24	−7.99	−17.46	1.16	0.76	1.14	1.54	0.77	− 7	+19	−18	+42	−22	+15	−16	+20	+ 9	−11		0	1.24
108991	22 04 47.43	−00 54 22.5	5.29	H	331.197 641 06	−00.906 239 94		14.10	−20.05	−42.57	0.76	0.51	0.82	1.13	0.55	+ 6	+22	− 8	+27	−14	+35	− 9	+ 3	+ 7	+ 2		0	−1.06
108992	22 04 47.48	−32 33 11.9	8.97	H	331.197 837 24	−32.553 319 41		2.19	3.63	−6.86	1.08	0.84	1.26	1.43	1.03	+34	−16	−24	+ 5	+ 0	+16	+ 3	+25	−11	+46		0	1.07
108993	22 04 48.36	−37 21 45.5	9.68	H	331.201 516 18	−37.362 648 31		3.23	15.40	−10.94	1.20	1.02	1.51	1.44	1.03	+20	− 1	+ 6	+ 4	+ 1	+ 2	+ 4	+43	− 3	+15		2	0.76
108994	22 04 48.79	−45 45 22.7	7.70	H	331.203 309 29	−45.756 317 88		3.25	6.98	−2.90	0.95	0.73	1.11	0.95	0.82	+30	−44	−22	+ 4	+10	+23	+14	+44	− 5	+27		0	1.20
108995	22 04 49.56	−30 52 42.2	9.68	H	331.206 515 42	−30.878 391 43		7.78	43.91	−28.51	1.39	1.07	1.55	1.82	1.17	+14	−14	−18	+27	−17	− 4	−14	+27	− 1	+ 7		0	0.94
108996	22 04 49.75	−23 43 46.5	8.88	H	331.207 311 79	−23.729 576 65		16.80	−41.57	7.04	1.41	0.71	1.24	1.72	0.78	− 8	+22	− 1	−35	+14	+ 0	+19	+25	+21	−13		0	0.57
108997	22 04 51.06	+59 42 59.8

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
108901	8.847	0.016	8.395	0.016		0.456	0.015	G	0.53	0.02	H	8.4549	0.0024	0.015	59		8.43	8.49					1							S
108902	9.566	0.020	9.555	0.029	*	0.015	0.032	T	0.03	0.03	L *	9.5604	0.0021	0.020	119	*	9.53	9.60		C			2 C C	AB	54	0.447	0.056	3.30	0.21	G
108903	7.557	0.006	6.950	0.004		0.564	0.005	T	0.64	0.01	L	7.0040	0.0010	0.010	143		6.99	7.02		C	22036−5559	I 1	1							S
108904	9.350	0.018	8.165	0.012		1.015	0.017	T	0.99	0.01	L	8.2172	0.0010	0.014	79		8.19	8.25		D			1							
108905						1.175	0.006	G	1.14	0.01	I	11.7503	0.0091	0.053	51		11.65	11.87					1							G
108906	9.698	0.020	7.975	0.009		1.438	0.017	T	1.43	0.03	L	7.9626	0.0025	0.023	138		7.92	8.00		R			1 S							
108907	9.139	0.012	8.493	0.010		0.600	0.013	T	0.67	0.01	L	8.5553	0.0015	0.014	145		8.53	8.58		C			1							S
108908	7.280	0.008	7.370	0.009		−0.081	0.002	G	−0.06	0.00	H	7.3667	0.0009	0.007	73		7.35	7.39					1							S
108909	10.221	0.034	8.347	0.014		1.590	0.030	T	2.21	0.07	O	8.1934	0.0028	0.030	83		8.13	8.25		U 2			1							
108910	10.324	0.025	8.907	0.013		1.197	0.022	T	1.16	0.02	L	8.9108	0.0020	0.020	152		8.88	8.96					1							
108911	8.802	0.011	8.468	0.011	*	0.366	0.006	G	0.43	0.01	H *	8.4939	0.0021	0.020	127	*	8.45	8.52		U 2	22037+5313	H 1	2 C S B	AB	298	0.197	0.048	2.54	0.72	
108912	8.605	0.009	7.944	0.008		0.617	0.015	G	0.69	0.01	H	8.0000	0.0019	0.020	146		7.97	8.03		U			1							S
108913	9.459	0.019	9.036	0.020		0.404	0.006	G	0.47	0.01	H	9.1155	0.0019	0.015	76		9.09	9.15		C			1							
108914	8.770	0.010	7.439	0.006		1.129	0.009	T	1.09	0.01	L	7.4918	0.0012	0.011	152		7.48	7.52					1							S
108915	10.777	0.036	9.973	0.029		0.634	0.004	G	0.70	0.00	H	10.1345	0.0021	0.025	131		10.09	10.18					1							
108916	8.808	0.011	8.502	0.012		0.291	0.015	T	0.33	0.02	L	8.5510	0.0019	0.022	144		8.52	8.58					1							
108917	4.678	0.003	4.277	0.003	*	0.379	0.004	T	0.44	0.00	L *	4.3520	0.0008	0.009	120	*	4.34	4.38		D	22038+6437	I 1	2 C A	AB	276	7.871	0.006	2.08	0.03	S
108918	10.065	0.033	8.894	0.021		1.004	0.030	T	0.98	0.02	L	8.9669	0.0021	0.013	71		8.94	9.00		C			1							
108919	10.278	0.028	8.545	0.012		1.446	0.024	T	1.44	0.04	L	8.5325	0.0015	0.016	105		8.51	8.56		C			1							
108920	8.138	0.011	7.971	0.011		0.160	0.015	T	0.18	0.01	L	8.0186	0.0014	0.008	58		8.00	8.04		C			1							S
108921	8.468	0.010	7.858	0.008		0.568	0.011	T	0.64	0.01	L	7.9233	0.0011	0.012	124		7.90	7.94		C			1							S
108922	7.860	0.007	7.791	0.008		0.069	0.010	T	0.08	0.01	L	7.8088	0.0011	0.012	143		7.79	7.83		C			1							S
108923	9.202	0.013	8.447	0.011	A	0.300	0.495	G	0.70	0.02	L *	8.4675	0.0019	0.014	109	*	8.45	8.49		D	22039−2451	I 1	2 C A	AB	175	3.050	0.016	3.15	0.14	
108924	7.241	0.006	5.467	0.005		1.557	0.011	G	2.68	0.05	F	5.2411	0.0037	0.037	127		5.19	5.31		U 2			1 S							S
108925	6.910	0.004	6.725	0.006	*	0.170	0.007	T	0.19	0.01	L *	6.7517	0.0012	0.012	119	*	6.73	6.77		D	22041+5951	I 2	2 C A	AG	230	0.363	0.020	3.06	0.09	S
108926	10.757	0.032	8.925	0.012		1.524	0.027	T	1.56	0.04	L	8.8983	0.0024	0.021	167		8.85	8.93					1							
108927	10.942	0.050	10.345	0.050		0.557	0.052	T	0.63	0.05	L	10.3420	0.0034	0.028	83		10.30	10.39		C			1							
108928	9.067	0.016	7.499	0.009		1.338	0.015	T	4.08	0.07	O	6.7138	0.0312	0.163	73		6.51	6.94		U 2			1 S							S
108929	10.786	0.042	9.494	0.024		1.099	0.038	T	1.06	0.04	L	9.5900	0.0020	0.016	85		9.57	9.62		C			1							
108930						1.340	0.007	G	1.64	0.03	A	11.0382	0.0047	0.052	152		10.95	11.13					1							G
108931	7.643	0.007	7.499	0.009		0.139	0.011	T	0.15	0.01	L	7.5377	0.0013	0.010	69		7.52	7.55		C			1							S
108932	10.355	0.031	9.909	0.031	A	0.495	0.072	G	0.62	0.07	B *	9.8406	0.0034	0.031	124	*	9.78	9.89		D	22041+3433	I 1	2 C A	AB	34	6.106	0.019	2.12	0.07	G
108933	6.655	0.004	6.576	0.004		0.078	0.005	T	0.09	0.01	L	6.5961	0.0007	0.007	145		6.58	6.61		C			1							S
108934	9.394	0.017	9.408	0.023	*	−0.008	0.027	T	0.01	0.03	L *	9.3891	0.0027	0.022	115	*	9.34	9.43		D	22041+3546	H 1	2 C A	AB	235	0.336	0.019	1.97	0.21	
108935	8.135	0.010	7.884	0.012		0.235	0.016	T	0.26	0.02	L	7.9209	0.0016	0.012	61		7.90	7.94		C			1							S
108936	9.531	0.022	8.279	0.014		1.068	0.020	T	1.03	0.02	L	8.3112	0.0020	0.013	78		8.29	8.34					1							
108937	10.180	0.024	9.713	0.025		0.453	0.027	T	0.52	0.03	L	9.7875	0.0026	0.018	118		9.76	9.83					1							
108938	6.971	0.007	6.957	0.007		0.034	0.009	G	0.05	0.01	H	6.9765	0.0062	0.050	120		6.92	7.06	2.13	P 1 A	22041+5951	I 2	1							S
108939	8.786	0.012	7.757	0.009		0.896	0.011	T	0.90	0.01	L	7.8220	0.0013	0.010	86		7.81	7.84					1							S
108940	10.995	0.082	9.658	0.039		1.134	0.071	T	1.10	0.07	L	9.5953	0.0044	0.032	49		9.56	9.65		R			1 G							
108941	9.340	0.016	8.762	0.015		0.540	0.019	T	0.61	0.02	L	8.8035	0.0016	0.015	119		8.78	8.83		C			1							
108942	9.508	0.021	9.045	0.021		0.436	0.027	T	0.50	0.03	L	9.1075	0.0021	0.020	71		9.07	9.14		C			1							
108943	11.361	0.098	9.389	0.031		1.671	0.085	T	2.63	0.09	O	9.1391	0.0093	0.051	61		9.08	9.23		U 2			1 X S							G
108944	9.162	0.010	8.062	0.007		0.950	0.009	T	0.94	0.01	L	8.1133	0.0011	0.015	245		8.09	8.14		C			1							S
108945	11.213	0.074	9.984	0.042		1.050	0.066	T	1.02	0.05	L	10.0982	0.0031	0.032	88		10.04	10.15					1							
108946	9.222	0.018	8.815	0.019	A	0.343	0.005	G	0.40	0.01	H	8.9045	0.0128	0.025	77	A	8.87	8.98			22043−4243	I 1	2 C A	AB	55	12.769	0.026	2.52	0.13	S
108947	9.391	0.019	8.451	0.014		0.816	0.018	T	0.84	0.01	L	8.5083	0.0017	0.013	80		8.49	8.54		C			1							
108948	7.681	0.007	7.630	0.009		0.052	0.011	T	0.06	0.01	L	7.6425	0.0011	0.011	125		7.62	7.66		C			1							S
108949	7.447	0.015	7.003	0.013	*	0.470	0.010	G	0.54	0.01	H *	7.1391	0.0009	0.008	101	*	7.12	7.16		D	22044+1339	I 1	2 C A	AB	83	1.882	0.003	0.17	0.01	S
108950	8.105	0.010	7.313	0.008		0.718	0.010	T	0.77	0.01	L	7.3730	0.0013	0.009	82		7.36	7.39		C			1							S
108951	10.504	0.039	10.185	0.045		0.384	0.004	G	0.45	0.00	H	10.2452	0.0040	0.026	75		10.20	10.30		C			1							
108952	8.570	0.020	6.638	0.009		1.603	0.017	T	1.62	0.02	L	6.5612	0.0023	0.013	74		6.54	6.58		U 2			1							S
108953	10.848	0.064	9.025	0.023		1.464	0.010	G	1.44	0.01	J	9.0764	0.0022	0.018	74		9.04	9.11					1							
108954	10.534	0.030	9.088	0.015		1.219	0.026	T	1.18	0.03	L	9.1149	0.0026	0.021	136		9.07	9.15					1							
108955	8.574	0.013	8.232	0.014		0.331	0.021	T	0.39	0.03	L	8.2716	0.0015	0.010	81		8.25	8.30		C			1							S
108956	8.806	0.009	8.417	0.009		0.360	0.002	G	0.42	0.00	H	8.4505	0.0015	0.017	157		8.43	8.48					1							S
108957	8.643	0.013	8.495	0.016		0.150	0.015	G	0.17	0.01	H	8.5007	0.0026	0.044	125		8.47	8.66	2.10	P 1 A			1							
108958	9.364	0.017	7.537	0.008		1.520	0.015	T	1.56	0.02	L	7.4856	0.0021	0.016	76		7.46	7.51		U			1							S
108959	10.251	0.035	9.044	0.021		1.032	0.032	T	1.00	0.03	L	9.0808	0.0027	0.022	77		9.05	9.12		C			1							
108960	7.969	0.009	6.851	0.006		0.963	0.008	T	0.95	0.01	L	6.8971	0.0010	0.007	99		6.88	6.91			22045−2553	I 1	1							S
108961	8.589	0.012	7.953	0.011	*	0.591	0.014	T	0.66	0.01	L *	8.0075	0.0014	0.011	94	*	7.99	8.02		C	22045+1552	I 1	2 C S B	AB	26	0.123	0.027	1.68	0.75	S
108962						1.243	0.197	G	1.40	0.21	I	11.0494	0.0074	0.031	53		10.96	11.11		C			1							G
108963	8.107	0.009	7.025	0.005		0.936	0.008	T	0.93	0.01	L	7.0878	0.0012	0.009	103		7.07	7.10		C			1							S
108964	7.645	0.006	7.292	0.006		0.335	0.008	T	0.39	0.01	L	7.3369	0.0018	0.011	77		7.31	7.35					1 G							S
108965	10.225	0.021	8.701	0.011	*	1.281	0.019	T	1.24	0.02	L *	8.6853	0.0014	0.015	154	*	8.66	8.72		D	22045−5232	I 1	2 C A	AB	122	0.701	0.008	1.97	0.04	
108966	7.287	0.008	7.226	0.008		0.061	0.011	T	0.07	0.01	L	7.2440	0.0012	0.009	76		7.23	7.26		C			1 G							S
108967	10.683	0.040	10.109	0.038		0.540	0.041	T	0.61	0.04	L	10.1633	0.0034	0.026	88		10.13	10.20					1 S							
108968	10.093	0.020	9.439	0.018		0.598	0.020	T	0.67	0.02	L	9.5132	0.0023	0.027	154		9.47	9.56					1							
108969	7.742	0.004	6.491	0.003		1.121	0.019	G	1.05	0.03	C	6.5309	0.0007	0.008	200		6.52	6.54		C	22046+3256	I 1	1							S
108970	10.187	0.025	9.559	0.022		0.579	0.025	T	0.65	0.02	L	9.6575	0.0021	0.022	131		9.62	9.69		C			1							
108971	8.410	0.009	7.904	0.008		0.486	0.009	T	0.56	0.01	L	7.9634	0.0016	0.014	143		7.94	7.99					1							S
108972	8.116	0.011	7.776	0.009		0.327	0.015	G	0.38	0.02	H	7.8260	0.0024	0.015	74		7.80	7.85					1							S
108973	9.079	0.018	8.658	0.018		0.427	0.015	G	0.49	0.02	H	8.7062	0.0017	0.014	65		8.67	8.73		C			1							
108974	10.123	0.024	8.220	0.010		1.610	0.015	G	1.62	0.09	H	8.1614	0.0018	0.013	107		8.14	8.18					1							
108975	5.758	0.004	5.936	0.004		−0.167	0.008	G	−0.16	0.03	C	5.9100	0.0015	0.010	80		5.90	5.93		U 2			1							S
108976	7.614	0.006	7.354	0.006		0.261	0.003	G	0.29	0.02	A	7.4000	0.0036	0.041	205		7.33	7.46	0.89	P 1 A			1							S
108977	9.901	0.023	9.535	0.026	A	0.271	0.141	G	0.25	0.09	L *	9.5013	0.0020	0.021	126	*	9.47	9.54		D	22046+5649	I 1	2 C A	AB	305	5.860	0.019	2.45	0.12	
108978	8.201	0.011	7.093	0.006		0.955	0.010	T	0.94	0.01	L	7.1494	0.0011	0.007	81		7.13	7.17					1							S
108979	9.557	0.023	9.119	0.022		0.413	0.029	T	0.48	0.03	L	9.2048	0.0027	0.016	73		9.18	9.24					1							
108980	9.406	0.016	8.867	0.015		0.500	0.015	G	0.57	0.02	H	8.9558	0.0018	0.017	104		8.93	8.98		C			1							
108981	10.302	0.035	10.138	0.047		0.157	0.055	T	0.17	0.06	L	10.1646	0.0038	0.034	127		10.11	10.21					1 S							G P
108982	9.648	0.020	8.045	0.010		1.367	0.018	T	3.25	0.04	O	7.6018	0.0097	0.077	93		7.50	7.75		U 2			1 S							S
108983	10.680	0.044	9.955	0.038	–						T *	9.9612	0.0033	0.026	76	–	9.92	10.02		D	22047−3839	I 1	3 C C							G
108984	10.615	0.045	10.113	0.045		0.483	0.048	T	0.55	0.05	L	10.1907	0.0027	0.023	84		10.15	10.24		C			1							
108985	9.377	0.016	8.769	0.015		0.565	0.016	T	0.64	0.01	L	8.7956	0.0013	0.013	107		8.77	8.82					1							
108986	10.603	0.032	9.211	0.017		1.177	0.028	T	1.14	0.03	L	9.2439	0.0031	0.024	140		9.20	9.29		C			1							
108987	9.461	0.018	8.936	0.017		0.502	0.019	T	0.57	0.02	L	8.9820	0.0022	0.016	81		8.94	9.02		C			1							
108988	9.493	0.023	9.199	0.026		0.280	0.033	T	0.32	0.04	L	9.2786	0.0031	0.026	68		9.24	9.32		C			1							
108989	9.734	0.020	9.714	0.029		0.023	0.033	T	0.04	0.03	L	9.7126	0.0023	0.025	139		9.67	9.76		C			1							G
108990	8.893	0.017	8.432	0.017		0.435	0.022	T	0.50	0.02	L	8.4843	0.0025	0.015	51		8.46	8.51					1							S
108991	5.586	0.004	5.310	0.003		0.231	0.004	G	0.23	0.03	C	5.3574	0.0010	0.006	57		5.35	5.37					1							S
108992	10.740	0.053	9.102	0.023		1.160	0.040	G	1.12	0.04	R	9.1348	0.0021	0.018	80		9.10	9.17		C			1 S							
108993	10.249	0.032	9.723	0.031		0.502	0.033	T	0.57	0.04	L	9.7933	0.0027	0.022	81		9.76	9.83		C			1							
108994	9.575	0.020	7.837	0.009		1.450	0.017	T	1.45	0.03	L	7.8379	0.0022	0.016	79		7.81	7.86					1							S
108995	10.324	0.039	9.746	0.036		0.540	0.047	T	0.61	0.05	L	9.7881	0.0030	0.030	65		9.74	9.83					1							
108996	9.662	0.023	8.966	0.020		0.630	0.023	T	0.70	0.02	L	9.0152	0.0033	0.018	61		8.99	9.07					1							
108997	8.895	0.013	8.773	0.016		0.118	0.019	T	0.13	0.02	L	8.8074	0.0018	0.014	117		8.79	8.83		C			1							
108998	9.530	0.028	9.038	0.027		0.463	0.035	T	0.53	0.04	L	9.0941	0.0017	0.012	46		9.07	9.12					1							
108999	9.981	0.027	8.922	0.018		0.918	0.025	T	0.92	0.02	L	8.9748	0.0019	0.016	99		8.95	9.01		U			1							
109000	9.990	0.030	8.692	0.018		1.104	0.027	T	1.07	0.03	L	8.7526	0.0017	0.015	69		8.73	8.78		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr																			%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28										29	30
109001	22 04 56.31	−12 59 39.3	9.22	H	331.234 626 77	−12.994 246 42		8.76	128.97	−56.64	1.33	0.75	1.40	1.66	0.74	+16	−20	−25	−11	+20	+ 6	+13	− 4	+21	+ 8										0	0.59
109002	22 04 56.56	+47 14 04.2	6.92	2 H	331.235 655 88	+47.234 503 20		6.62	59.37	31.33	0.51	0.44	0.61	0.57	0.49	−18	+ 6	− 1	−19	+ 9	+13	+10	−21	+13	−27										0	0.72
109003	22 04 56.75	+21 03 36.9	8.30	H	331.236 442 80	+21.060 253 45		3.40	−11.26	−22.85	0.76	0.76	1.09	0.85	0.97	+20	+ 6	−27	+13	− 1	− 4	+ 2	−30	+35	+25										0	1.27
109004	22 04 58.76	+22 38 12.9	7.50	H	331.244 837 91	+22.636 917 92		4.52	2.85	−26.32	0.87	0.93	0.94	0.88	0.92	+37	+26	+19	−27	−26	−	6	−24	−62	−	2	+36									0	−0.43
109005	22 05 00.48	+62 47 07.9	5.27	H	331.251 998 83	+62.785 529 41		10.25	14.19	58.43	0.45	0.40	0.47	0.51	0.42	−17	+ 6	+12	+24	+ 8	− 4	+ 6	− 4	− 6	−23										0	−0.83
109006	22 05 02.59	−40 53 00.9	9.48	H	331.260 794 46	−40.883 587 16		6.82	33.43	−9.27	1.05	1.10	1.45	1.14	1.01	+30	− 3	−23	+ 5	−10	+35	− 3	+ 1	+ 1	+21										4	−0.21
109007	22 05 03.01	−32 57 48.7	9.59	H	331.262 534 44	−32.963 538 32		16.22	−0.17	−113.37	1.29	0.95	1.50	1.79	1.12	+26	−11	−27	+ 7	−14	+ 9	− 7	+12	−18	+36										0	−1.03
109008	22 05 03.35	−06 18 09.2	7.77	H	331.263 971 33	−06.302 550 17		3.07	13.19	0.91	0.80	0.58	0.95	0.96	0.61	+40	+ 0	+ 4	−11	+ 5	+36	+ 2	−28	+23	+46										0	0.87
109009	22 05 03.47	+14 48 57.4	6.38	1 H	331.264 465 76	+14.815 954 56		6.40	−13.53	−14.89	0.67	0.51	0.78	0.92	0.65	+14	− 2	+ 4	−26	+ 3	− 2	+ 3	−13	+ 9	+ 7										0	2.89
109010	22 05 04.99	+33 26 33.6	11.78	H	331.270 782 96	+33.442 667 83		−2.75	179.61	76.85	2.14	2.86	4.23	2.47	3.69	+29	−23	−42	−10	+ 4	+13	+ 1	−18	+39	+41										0	−1.26
109011	22 05 05.24	−03 12 37.1	8.82	H	331.271 834 20	−03.210 297 96		6.23	16.82	−9.77	1.23	0.84	1.51	1.68	1.18	+13	+ 3	−13	+17	+ 1	+36	+ 7	+17	+44	+40										3	1.12
109012	22 05 05.51	−35 10 52.6	8.58	G	331.272 970 28	−35.181 276 67		19.44	324.50	−185.47	0.86	0.70	1.13	0.98	0.64	+25	− 1	−18	− 6	−14	+37	− 5	+12	+ 2	+16										0	−0.40
109013	22 05 05.79	+39 23 27.5	9.10	H	331.274 110 16	+39.390 965 74		9.06	−6.15	−29.79	0.66	0.84	1.32	0.75	1.17	−41	+31	−26	+ 6	+11	−14	+13	−12	+24	−52										0	0.79
109014	22 05 06.80	+39 28 57.6	7.67	H	331.278 352 03	+39.482 675 14		12.41	−0.06	16.13	0.45	0.59	0.90	0.50	0.70	−55	+27	−30	+ 7	+21	− 9	+21	−34	+21	−59										0	−0.25
109015 H	22 05 07.41	+51 42 01.4	7.28	H	331.280 888 00	+51.700 376 91	A	5.18	−9.98	−35.60	0.67	0.63	0.74	0.65	0.56	−	6	−16	+17	−22	+12	+ 6	+10	−23	+14	+24										0	0.15
109016	22 05 08.20	+48 04 34.8	9.75	H	331.284 185 60	+48.076 336 11	A	−1.38	−6.02	−4.96	1.31	1.23	1.52	1.45	1.30	−	5	+12	+ 1	− 7	+14	− 8	+16	+ 1	+21	−	7									1	0.68
109017	22 05 08.79	+62 16 47.4	5.07	1 H	331.286 630 39	+62.279 821 01		0.60	−1.76	−3.01	0.46	0.42	0.49	0.52	0.45	−10	+ 5	+ 2	+36	+ 7	−17	+10	+ 5	− 8	+ 1										0	−0.40
109018 H	22 05 09.05	+29 52 03.2	8.72	G	331.287 710 61	+29.867 568 52	*	8.19	38.11	−17.48	0.73	0.95	1.06	0.94	1.21	+18	+16	− 4	+31	−20	+ 3	−13	−33	+ 8	+28										0	−0.49
109019	22 05 09.93	+46 31 25.3	10.11	H	331.291 381 45	+46.523 686 78		−0.21	2.35	0.67	1.15	1.12	1.51	1.45	1.29	−	7	+11	− 2	+18	+ 7	+ 6	+ 6	−24	+16	−11									2	1.26
109020	22 05 10.57	+44 03 52.6	9.95	2 H	331.294 050 69	+44.064 607 38		2.53	9.33	−0.67	2.43	2.54	3.48	2.82	2.91	−31	+ 7	+ 6	− 8	+ 8	+ 6	+ 8	−16	+12	−31										0	
109021	22 05 11.16	−28 10 54.7	8.72	H	331.296 516 22	−28.181 856 12		−0.46	4.80	−5.50	0.99	0.82	1.25	1.10	0.86	+20	− 5	−16	+ 4	−22	+37	−19	+17	+11	+27										0	−0.16
109022	22 05 11.23	−41 33 46.6	8.00	H	331.296 777 14	−41.562 938 43		2.17	14.20	−1.70	0.81	0.70	0.95	0.97	0.70	+34	−12	− 6	− 4	− 8	+14	− 4	+16	− 5	+28										0	0.23
109023	22 05 11.32	+26 40 25.0	5.75	H	331.297 147 74	+26.673 618 26		8.22	28.42	29.23	0.56	0.59	0.73	0.63	0.78	+14	− 6	−15	+40	+ 1	−24	+ 1	−11	+ 6	+22										0	−1.67
109024	22 05 12.02	+12 36 18.2	7.54	H	331.300 098 06	+12.605 064 51		7.32	12.74	−12.15	0.77	0.57	0.94	1.08	0.67	+25	− 4	+12	−12	+12	+ 3	+10	+ 3	+21	+ 9										0	−0.49
109025	22 05 12.94	+09 11 03.6	8.39	H	331.303 925 46	+09.184 325 78		1.91	4.21	−14.38	1.02	0.69	1.07	1.22	0.84	+26	+12	+ 0	− 9	+33	− 2	+35	+18	+20	+23										2	2.42
109026	22 05 13.07	+49 18 45.6	8.23	H	331.304 449 07	+49.312 665 91		3.93	−1.91	−15.78	0.52	0.55	0.70	0.60	0.62	−18	+ 1	+ 5	+ 4	+ 9	− 5	+11	−14	+ 1	− 7										0	−1.54
109027	22 05 13.36	+19 24 50.2	8.56	H	331.305 685 19	+19.413 936 27		4.52	1.29	−3.54	0.76	0.78	1.02	0.83	0.96	+29	+ 8	−10	+ 9	−10	+ 9	− 6	−32	+36	+31										0	0.66
109028	22 05 13.77	+66 46 30.9	8.72	H	331.307 378 40	+66.775 247 55		4.53	16.01	7.15	0.67	0.60	0.69	0.81	0.67	−18	− 1	+ 8	+15	+13	− 7	+12	−10	+ 1	−21										3	−0.29
109029 H	22 05 13.86	+63 34 42.3	6.93	H	331.307 734 65	+63.578 414 44	*	5.59	23.01	0.93	1.15	0.87	0.70	0.85	0.67	−28	+ 0	+ 4	− 3	− 7	+28	− 7	−12	−10	−43										3	0.72
109030	22 05 13.97	+14 29 09.6	7.45	H	331.308 212 66	+14.485 986 73		4.06	−34.74	−33.00	0.84	0.60	1.01	1.26	0.77	+14	+28	−10	−42	+14	−23	+23	−10	+36	− 9										0	−0.57
109031	22 05 14.72	+39 40 48.2	7.73	2 H	331.311 353 06	+39.680 056 68		1.34	−5.45	0.61	0.49	0.59	0.93	0.59	0.75	−49	+17	−25	+16	+17	− 7	+14	−27	+15	−58										2	−0.88
109032	22 05 15.24	−37 18 53.5	8.76	H	331.313 519 54	−37.314 873 64		4.65	18.18	−2.56	1.00	0.77	1.22	1.25	0.79	+22	− 3	− 9	+23	+ 3	+20	+ 7	+39	−10	+15										0	2.06
109033	22 05 16.52	+46 44 41.6	6.16	2 H	331.318 851 69	+46.744 884 77		3.39	−28.13	−20.22	0.46	0.45	0.63	0.49	0.51	−22	+12	+ 0	− 7	+ 7	+ 8	+ 8	−16	+20	−33										1	1.29
109034	22 05 17.62	+46 29 00.6	9.48	H	331.323 420 33	+46.483 508 07		0.57	1.92	1.16	0.95	0.90	1.24	1.14	1.03	−	6	+12	− 6	+17	+ 8	+ 2	+ 6	−17	+17	−14									1	0.16
109035	22 05 18.17	−01 25 14.0	10.60	H	331.325 699 97	−01.420 543 10	B	8.61	10.39	−15.84	63.87	50.21	2.80	3.98	2.29	+41	+ 2	+ 3	− 2	− 1	− 9	− 1	− 1	+ 1	+22									2	1.80
109036	22 05 19.30	+66 16 59.3	9.15	H	331.330 411 90	+66.283 149 75		2.67	7.90	0.77	0.69	0.66	0.76	0.83	0.72	−17	+ 5	+19	− 1	+ 5	− 2	+ 5	− 6	+ 6	−29										0	−0.39
109037	22 05 19.47	−23 26 17.9	8.86	H	331.331 116 10	−23.438 301 56		20.21	11.09	−93.25	1.25	0.78	1.24	1.56	0.93	+	7	+ 9	− 2	−29	+13	+16	+11	+26	+19	+16										0	−0.13
109038	22 05 19.62	−01 25 27.1	8.29	H	331.331 736 39	−01.424 194 80	A	8.61	10.39	−15.84	3.25	2.37	2.80	3.98	2.29	+29	+21	−16	+ 1	+ 4	− 9	+ 3	+ 9	+ 1	+22										2	1.80
109039	22 05 20.82	+76 35 08.3	8.81	H	331.336 741 21	+76.585 646 97		6.33	84.46	83.51	0.67	0.57	0.70	0.77	0.65	−	6	−18	+13	+ 3	+ 8	− 9	+ 9	−12	+ 3	− 2										0	−0.07
109040	22 05 21.37	+29 32 56.0	10.81	H	331.339 052 09	+29.548 876 64		21.82	178.84	−79.90	1.24	1.81	1.95	1.61	1.93	+31	+ 6	− 2	+32	−17	+11	−18	−43	+20	+25										2	−0.03
109041	22 05 21.66	−35 09 49.9	8.69	H	331.340 251 81	−35.163 866 21		2.72	1.12	−1.88	0.94	0.72	1.20	1.08	0.67	+21	− 5	−24	+ 0	−18	+33	−10	+ 2	+ 0	+13										0	−0.13
109042	22 05 22.54	+24 10 40.9	8.92	H	331.343 922 91	+24.178 028 61		11.32	182.61	−17.21	1.01	0.97	1.15	1.49	1.33	+26	+10	+10	−29	−14	−13	−16	−52	−17	+21										0	−2.73
109043 H	22 05 22.82	+38 57 40.6	9.25	H	331.345 095 29	+38.961 291 24	A	8.95	−5.64	−15.36	2.39	2.80	3.49	2.64	3.32	−40	+ 4	−17	− 7	+ 2	−22	− 3	−14	+35	−61										2	0.58
109044	22 05 23.72	+00 15 40.2	7.57	H	331.348 848 90	+00.261 159 88		3.29	−0.82	−4.72	0.86	0.66	0.98	1.06	0.67	+15	+ 7	−19	+ 0	− 4	+30	+ 3	+ 1	+15	+10										0	−0.12
109045	22 05 24.18	+18 11 01.2	9.97	H	331.350 741 25	+18.183 677 16		3.01	0.09	−8.23	1.17	1.05	1.50	1.48	1.38	+	9	− 1	−35	−32	+ 9	+18	+15	−22	+40	+16										0	−0.23
109046	22 05 25.32	+46 24 49.8	10.26	G	331.355 498 15	+46.413 838 82		−0.26	1.43	0.12	1.19	1.12	1.56	1.49	1.34	−	4	+14	+ 3	+20	+ 8	− 4	+ 8	−18	+16	−10										2	1.02
109047	22 05 26.37	−48 43 06.8	8.08	H	331.359 884 62	−48.718 543 59		5.94	34.26	−32.77	0.74	0.62	1.05	0.73	0.64	+25	−24	−25	− 8	+21	− 1	+21	+29	−22	+34										0	0.78
109048	22 05 27.06	−52 07 24.9	9.13	H	331.362 759 78	−52.123 593 27		2.37	−17.49	−15.51	0.81	0.71	1.53	1.06	0.81	+	9	−12	+ 8	+ 3	+ 1	+14	+ 2	− 3	− 6	+21										6	2.01
109049	22 05 28.18	+05 45 16.7	10.57	G	331.367 397 27	+05.754 649 34		9.92	−141.54	−124.42	2.03	1.69	2.32	2.98	2.03	+17	− 6	+ 1	−11	+ 9	+22	+10	+14	+17	+ 6										0	−0.17
109050	22 05 28.45	+40 17 40.5	10.83	H	331.368 526 78	+40.294 572 25		2.24	4.36	−12.26	1.04	1.15	1.84	1.35	1.67	−37	− 3	− 1	+27	+ 6	−10	+ 2	− 1	+10	−55										1	2.32
109051	22 05 31.16	−13 46 12.8	9.84	G	331.379 813 70	−13.770 229 63		2.27	−1.61	0.25	1.50	0.92	1.49	1.74	1.01	+26	−20	+ 2	+ 2	+46	+11	+35	+42	+12	+43										0	1.09
109052	22 05 32.15	+00 37 39.4	6.99	H	331.383 957 08	+00.627 608 14		4.57	−10.10	−12.41	0.81	0.63	0.93	1.01	0.67	+14	+ 7	− 9	+ 1	+ 1	+29	+ 6	+10	+21	+12										0	−0.74
109053	22 05 32.36	−07 41 42.9	8.01	H	331.384 831 54	−07.695 255 70		11.44	62.79	9.81	0.97	0.56	1.05	1.16	0.61	+23	+17	− 7	−16	+21	+10	+20	− 2	+26	+33										0	2.02
109054	22 05 32.40	+62 15 42.2	8.74	H	331.385 012 03	+62.261 716 81		−0.38	−1.06	−2.65	0.82	0.68	0.84	0.97	0.79	−	2	+ 3	+12	+30	+ 6	− 7	+ 8	+ 0	− 8	+ 4										0	−0.42
109055	22 05 32.52	+17 30 38.3	7.56	G	331.385 502 85	+17.510 642 28		10.17	−53.04	−46.76	0.69	0.63	0.94	0.91	0.80	+24	−17	−28	− 2	+ 1	+14	− 2	−16	+32	+16										0	−0.76
109056	22 05 34.65	+28 57 50.4	5.69	1 H	331.394 394 37	+28.964 003 85		10.71	30.03	−9.48	0.46	0.55	0.68	0.56	0.67	+20	+12	−13	+49	+ 0	− 1	+ 0	−14	+24	+17										0	−0.71
109057	22 05 34.92	+36 23 05.7	7.99	H	331.395 517 17	+36.384 923 73		4.22	8.37	1.64	0.58	0.62	0.87	0.72	0.82	+18	+ 8	−21	− 6	− 6	− 9	− 4	−27	+35	+20										0	0.36
109058	22 05 35.13	−09 53 50.1	9.07	H	331.396 364 49	−09.897 254 74		20.01	85.85	−22.31	1.11	0.88	1.28	1.28	0.82	+44	− 9	+ 3	− 5	+12	+ 3	+10	+ 3	− 2	+37										2	0.35
109059	22 05 35.44	−30 42 28.3	8.19	G	331.397 665 43	−30.707 851 57		10.42	43.05	12.60	0.94	0.84	1.23	1.30	0.79	+12	−10	−56	+15	−31	+21	−13	+44	−34	− 2										0	−1.28
109060	22 05 36.53	−58 57 37.9	8.15	H	331.402 203 94	−58.960 535 01		9.75	83.09	−57.21	0.64	0.64	1.04	0.80	0.67	+	5	−21	−24	−22	+ 6	+15	+ 8	+ 5	− 7	+ 8										0	0.12
109061	22 05 36.55	−38 24 43.5	9.19	H	331.402 286 58	−38.412 084 36		2.71	−2.70	−16.45	1.22	1.19	1.52	1.52	1.32	+30	+ 5	− 1	+16	+20	+37	+20	+65	+ 6	+34										2	−0.38
109062	22 05 37.83	−16 33 17.7	11.36	G	331.407 628 72	−16.554 930 24		11.96	−233.13	−241.20	2.35	1.60	2.57	2.99	1.58	+23	+ 1	+ 2	−27	+ 2	+ 9	− 1	−26	+ 7	+ 6										0	0.71
109063	22 05 38.89	+57 56 38.9	9.46	G	331.412 049 72	+57.944 128 75		2.89	−9.33	−3.67	0.77	0.75	0.92	0.86	0.76	−	4	+ 6	+19	−17	+ 5	−12	+ 7	−23	−10	+16										2	−0.32
109064	22 05 39.18	+01 46 56.7	8.31	H	331.413 253 89	+01.782 421 56		4.63	35.00	−40.01	1.24	0.81	1.37	1.69	0.97	−11	+ 9	−21	+35	−30	+25	−18	− 6	+46	− 5										0	2.40
109065	22 05 39.57	+57 07 35.0	7.58	H	331.414 870 15	+57.126 385 76		8.94	20.53	38.33	0.53	0.47	0.63	0.55	0.54	+	1	+11	+12	+ 1	− 3	−23	− 1	− 5	−12	+19										0	1.17
109066	22 05 40.53	+32 23 06.1	10.14	H	331.418 856 90	+32.385 015 49		1.95	−63.00	−14.40	0.77	1.19	1.61	0.75	1.45	+19	+ 5	−22	− 8	+ 8	−12	+12	−21	+30	+34										0	0.40
109067	22 05 40.58	+12 22 39.8	9.55	H	331.419 096 20	+12.377 708 47		21.52	200.55	−420.89	1.24	0.92	1.59	1.98	1.20	+25	+10	+11	−34	+25	− 5	+25	+12	+12	+14										6	3.12
109068	22 05 40.69	+05 03 29.8	4.86	H	331.419 549 90	+05.058 284 53		12.38	101.60	101.19	0.79	0.60	0.90	0.82	0.66	+19	−30	−27	−24	+ 3	+21	+15	+27	−30	+11										0	−0.77
109069	22 05 41.63	+05 57 59.4	7.54	H	331.423 460 67	+05.966 492 81		6.02	43.81	11.11	0.97	0.86	1.18	1.18	1.01	+17	+ 1	+11	−14	− 1	−10	+ 1	+ 6	+25	+10										0	−0.02
109070	22 05 42.08	+35 20 54.6	8.79	2 H	331.425 312 82	+35.348 504 08	*	5.10	13.94	−8.76	0.73	1.00	1.10	0.93	1.09	+18	−10	−21	−20	− 8	+15	− 7	−48	+25	+33										3	2.12
109071 H	22 05 43.16	+41 21 08.4	7.69	1 H	331.429 813 56	+41.352 341 80	A	1.33	−2.23	−5.77	0.72	0.76	0.99	0.76	0.93	−37	+ 5	− 8	+32	− 8	− 1	−10	+ 3	+12	−43										1	−0.32
*109072	22 05 44.54	+29 54 23.4	8.16	2 H	331.435 567 33	+29.906 500 44	A	−0.86	−13.29	−19.14	1.85	1.97	2.00	1.64	1.94	+24	+ 7	+16	+42	−15	+ 1	− 5	−35	+ 1	+34										1	2.41
*109073	22 05 44.49	+00 48 20.7	8.71	H	331.435 355 84	+00.805 744 64		18.61	75.22	−28.88	1.25	0.83	1.49	1.74	0.84	−	8	+36	−37	+42	−26	+44	+ 0	− 3	+28	+ 6										0	−1.33
109074	22 05 47.03	−00 19 11.4	2.95	H	331.445 938 69	−00.319 826 56		4.30	17.90	−9.93	0.75	0.53	0.83	0.91	0.57	+10	+19	− 1	+11	− 6	+27	− 3	+14	+12	+13										0	−0.28
109075	22 05 47.21	−33 38 14.3	8.39	H	331.446 719 92	−33.637 293 14		1.08	1.45	−22.75	1.01	0.90	1.33	1.15	0.91	+41	−21	−39	−14	− 7	+35	+ 3	+27	+ 5	+43										0	0.80
109076	22 05 47.37	+06 59 18.0	8.93	H	331.447 384 55	+06.988 325 05		4.73	28.87	10.13	1.08	0.94	1.27	1.59	1.20	+22	+12	− 1	+18	− 1	+31	+ 0	+ 9	+ 4	+12										0	0.90
109077	22 05 48.14	−18 40 05.6	7.64	G	331.450 585 47	−18.668 235 07		6.01	15.30	14.32	0.87	0.62	0.92	1.16	0.61	+46	− 2	+ 5	+27	+44	− 4	+38	+47	− 4	+50										0	1.84
109078 H	22 05 50.43	+04 51 54.1	7.85	H	331.460 142 34	+04.865 036 03	A	6.83	13.44	3.43	2.25	2.35	2.08	2.04	1.82	+70	−14	−14	−16	+ 0	+14	+ 6	+ 0	−12	+17										0	−0.38
109079	22 05 50.44	+45 06 45.0	6.50	H	331.460 157 23	+45.112 512 00		4.67	13.08	−3.32	0.44	0.45	0.65	0.51	0.52	−36	− 5	+ 1	−12	+ 6	+10	+ 5	− 7	+ 6	−39										0	−0.03
109080	22 05 50.77	+41 57 47.8	8.29	G	331.461 524 72	+41.963 290 38		6.65	38.05	18.63	0.51	0.59	0.83	0.60	0.77	−32	+ 8	+ 0	+14	+ 1	+ 5	+ 2	+ 0	+11	−37										1	1.16
109081	22 05 50.95	−59 38 09.4	5.62	G	331.462 297 54	−59.635 941 71		6.34	56.46	−53.57	0.47	0.41	0.70	0.58	0.41	−	5	− 3	−23	−28	+ 4	+ 5	+ 3	−11	− 5	+ 4										0	−1.08
109082	22 05 51.22	+48 13 53.4	6.26	2 H	331.463 416 22	+48.231 504 57		1.66	−1.62	−4.33	0.40	0.41	0.53	0.45	0.44	−15	+ 2	+ 4	−16	+10	+ 1	+10	−15	+12	−16										0	−2.42
109083	22 05 51.26	+11 20 25.1	9.81	H	331.463 575 74	+11.340 315 76		−0.69	2.52	9.25	1.52	1.10	1.75	2.39	1.36	+35	+21	+ 4	+24	+40	+29	+38	+21	+34	+30										0	0.46
109084	22 05 51.46	−11 54 49.5	10.12	G	331.464 403 93	−11.913 747 90		46.70	−265.50	−174.71	7.02	4.72	7.86	8.54	4.76	+31	− 3	− 8	−19	+ 1	+ 1	− 1	−11	+16	+28										0	
109085 H	22 05 51.85	+45 22 17.2	9.11	H	331.466 037 68	+45.371 443 28	A	−1.32	0.89	−3.48	2.29	1.94	2.55	2.51	2.16	−12	+ 0	− 9	−17	+12	+ 1	+11	−23	+ 9	− 6										2	0.98
109086	22 05 52.07	+12 32 47.2	8.65	H	331.466 963 13	+12.546 445 78		13.50	206.70	32.67	1.02	0.82	1.33	1.51	0.96	+36	+ 0	+ 9	−10	+18	− 3	+16	+ 4	+14	+19										0	−0.51
109087	22 05 52.27	−19 46 25.8	8.74	H	331.467 808 93	−19.773 838 11		6.17	44.46	−5.76	1.02	0.67	1.16	1.25	0.63	+37	+ 3	+12	+ 2	+20	+ 2	+15	+ 2	+ 2	+38										0	1.69
109088	22 05 52.77	+14 46 31.2	9.28	H	331.469 878 60	+14.775 334 97		4.32	−12.83	−4.24	1.11	0.90	1.34	1.44	0.93	+21	+ 6	+25	−16	+ 4	− 5	+ 6	− 1	+14	+ 2										0	1.07
109089	22 05 52.97	+33 30 24.9	8.47	3 H	331.470 725 23	+33.506 904 27	*	3.54	−1.06	−7.44	0.75	1.14	1.36	1.37	1.62	+37	−37	−17	+12	+ 4	−29	+ 3	−12	−15	+27										14	2.52
109090	22 05 54.03	+27 58 03.0	7.78	H	331.475 109 53	+27.967 506 29		18.02	37.52	−193.43	0.72	0.75	0.93	0.81	0.91	+	4	+ 3	−16	+18	+ 6	− 6	+ 8	−21	+ 1	+12										0	0.57
109091	22 05 54.05	+02 15 57.2	8.67	H	331.475 213 29	+02.265 900 83		0.35	−11.28	−5.52	1.44	0.88	1.44	1.99	1.15	−13	+32	−20	−12	+11	+ 7	+22	+ 7	+31	−13										0	−0.72
109092	22 05 54.45	+44 17 15.3

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
109001	9.990	0.030	9.245	0.024		0.667	0.029	T	0.73	0.02	L	9.3569	0.0032	0.019	66		9.33	9.39		C			1							
109002	8.301	0.014	7.069	0.011		1.052	0.014	T	1.02	0.01	L	7.0867	0.0081	0.079	143		6.95	7.23	24.41	P 1 A			1							S
109003	9.884	0.026	8.444	0.014		1.215	0.023	T	1.17	0.02	L	8.4588	0.0017	0.011	75		8.44	8.49		C			1							
109004	7.810	0.007	7.530	0.010		0.266	0.011	T	0.30	0.01	L	7.5760	0.0016	0.009	73		7.56	7.60		C			1							S
109005	7.152	0.005	5.432	0.003		1.413	0.002	G	1.39	0.00	H	5.4101	0.0006	0.006	117		5.40	5.42		C			1							S
109006	10.766	0.042	9.614	0.026		0.990	0.038	T	0.97	0.03	L	9.6421	0.0026	0.026	88		9.59	9.71		C			1							
109007	10.732	0.055	9.707	0.036		0.882	0.051	T	0.89	0.04	L	9.7317	0.0037	0.027	71		9.69	9.77					1							
109008	7.706	0.006	7.760	0.009		−0.042	0.002	G	−0.02	0.00	H	7.7664	0.0009	0.009	107		7.75	7.78					1							S
109009	8.390	0.012	6.597	0.005		1.523	0.011	T	2.41	0.03	O	6.4055	0.0028	0.017	80		6.38	6.44		U 2			1	S						S
109010											T	11.9115	0.0075	0.074	152		11.74	12.04					1	S						D
109011	9.271	0.019	8.877	0.020		0.373	0.026	T	0.44	0.03	L	8.9036	0.0026	0.018	57		8.86	8.94		C			1	G						
109012	9.515	0.017	8.655	0.013		0.758	0.002	G	0.80	0.00	H	8.7259	0.0018	0.014	96		8.70	8.76		C			1							
109013	9.704	0.013	9.159	0.012		0.511	0.016	T	0.58	0.02	L	9.2105	0.0022	0.027	251		9.16	9.26					1	S						
109014	8.125	0.005	7.718	0.006		0.385	0.007	T	0.45	0.01	L	7.7622	0.0010	0.013	269		7.74	7.78					1							S
109015	7.461	0.005	7.316	0.007	*	0.140	0.008	T	0.15	0.01	L	* 7.3305	0.0011	0.011	136	*	7.32	7.35		C	22051+5142	H 1	2 C	A	AB	351	0.915	0.026	3.88	0.11	S
109016	9.764	0.020	9.743	0.028	A	0.024	0.031	T	0.04	0.02	L	9.7689	0.0098	0.027	150	A	9.73	9.82		C	22051+4805	H 1	2 C	A	AB	180	12.670	0.021	2.55	0.11	G
109017	5.152	0.003	5.119	0.002		0.240	0.003	G	0.15	0.03	C	5.1230	0.0012	0.009	109		5.11	5.14		M	22051+6217	I 1	1							S
109018	9.311	0.014	8.763	0.013	*	0.510	0.010	G	0.58	0.01	H	* 8.8035	0.0019	0.015	108	*	8.78	8.83		C	22052+2952	I 1	2 C	S C	AS	5	0.139	0.044	1.27	1.03	
109019	11.223	0.073	10.152	0.043		1.143	0.005	G	1.11	0.01	J	10.2795	0.0036	0.030	127		10.23	10.33		C			1							G
109020	10.404	0.030	10.045	0.035		0.340	0.043	T	0.40	0.06	L	10.0356	0.0076	0.094	148		9.83	10.13		U 2			1 X	S						D
109021	10.388	0.036	8.846	0.017		1.295	0.031	T	1.25	0.03	L	8.8789	0.0021	0.019	84		8.85	8.91		C			1							
109022	10.035	0.027	8.179	0.011		1.543	0.023	T	1.60	0.05	L	8.1114	0.0016	0.012	72		8.09	8.14		C			1							S
109023	7.386	0.007	5.888	0.004		1.249	0.015	G	1.26	0.03	C	5.9083	0.0008	0.006	73		5.90	5.92		C			1							S
109024	7.506	0.006	7.527	0.007		−0.015	0.008	T	0.01	0.01	L	7.5399	0.0015	0.013	100		7.52	7.57					1							S
109025	10.135	0.027	8.527	0.013		1.347	0.024	T	1.31	0.03	L	8.5466	0.0017	0.017	92		8.51	8.57		C	22052+0911	I 1	1							
109026	8.422	0.008	8.252	0.010		0.163	0.012	T	0.18	0.01	L	8.2846	0.0014	0.016	147		8.26	8.31					1							S
109027	9.021	0.015	8.611	0.015		0.388	0.020	T	0.45	0.02	L	8.6533	0.0025	0.015	84		8.63	8.68					1							
109028	8.875	0.012	8.713	0.014		0.156	0.017	T	0.17	0.02	L	8.7705	0.0015	0.015	125		8.75	8.80					1							
109029	7.960	0.008	7.025	0.006	*	0.826	0.007	T	0.85	0.01	L	* 7.0790	0.0011	0.010	118	*	7.07	7.10		D	22052+6335	H 1	2 C	A	AB	322	0.294	0.007	1.67	0.07	S
109030	9.102	0.014	7.582	0.008		1.260	0.015	G	1.22	0.02	H	7.6113	0.0017	0.013	89		7.59	7.64					1							S
109031	9.935	0.016	7.948	0.006		1.647	0.014	T	1.67	0.01	L	7.8362	0.0014	0.020	266		7.80	7.86		U 2			1							
109032	9.889	0.024	8.870	0.017		0.888	0.022	T	0.89	0.02	L	8.9181	0.0021	0.017	88		8.89	8.94		C			1							
109033	8.215	0.009	6.390	0.006		1.611	0.015	G	2.56	0.03	C	6.1659	0.0042	0.033	144		6.12	6.23		U 2			1	S						S
109034	11.181	0.067	9.589	0.027		1.569	0.018	G	1.54	0.02	J	9.5985	0.0030	0.027	132		9.56	9.64					1							G
109035	10.902	0.075	10.400	0.079	B	0.472	0.099	T	0.54	0.10	L	11.1834	0.2583			B				D	22054−0126	I 2	1 C F	D						D
109036	9.280	0.013	9.164	0.017		0.112	0.020	T	0.13	0.02	L	9.1980	0.0018	0.019	132		9.17	9.23					1							
109037	9.709	0.025	8.959	0.021		0.670	0.025	T	0.73	0.02	L	9.0000	0.0019	0.014	67		8.96	9.03		C			1							S
109038	8.870	0.018	8.326	0.017	A	0.510	0.022	T	0.58	0.02	L	8.4019	0.0271	0.018	61	A	8.34	8.42		D	22054−0126	I 2	1 C P	D						S D
109039	10.074	0.026	8.917	0.016		0.993	0.024	T	0.97	0.02	L	8.9710	0.0014	0.015	122		8.95	9.00		R			1							
109040	12.359	0.189	10.954	0.084							T	10.9261	0.0046	0.037	115		10.86	11.00		C			1							G
109041	10.042	0.025	8.808	0.015		1.054	0.023	T	1.02	0.02	L	8.8527	0.0016	0.016	94		8.82	8.88		C			1							
109042	9.621	0.023	8.948	0.020		0.623	0.025	T	0.69	0.02	L	9.0527	0.0026	0.017	80		9.02	9.09					1							
109043	9.819	0.014	9.324	0.014	*	0.466	0.018	T	0.54	0.02	L	* 9.3571	0.0020	0.025	212	*	9.32	9.41		D	22054+3858	I 1	2 C	A	AB	326	0.529	0.004	0.38	0.03	
109044	7.892	0.009	7.599	0.010		0.291	0.015	G	0.33	0.02	H	7.6421	0.0017	0.009	61		7.63	7.66		C			1							S
109045	11.251	0.068	10.067	0.038		1.015	0.061	T	0.99	0.05	L	10.1363	0.0027	0.022	76		10.10	10.17		C			1							
109046	10.431	0.038	10.227	0.050		0.180	0.015	G	0.20	0.02	H	10.3310	0.0028	0.030	131		10.28	10.38					1	S						G
109047	8.335	0.008	8.097	0.009		0.227	0.011	T	0.25	0.01	L	8.1443	0.0016	0.015	122		8.12	8.17					1							S
109048	10.507	0.026	9.240	0.015		1.079	0.023	T	1.04	0.02	L	9.2953	0.0021	0.020	152		9.26	9.34		C			1							
109049						0.889	0.014	G	0.93	0.01	H	10.7140	0.0068	0.031	47		10.66	10.78					1	S						G
109050	11.290	0.050	10.996	0.064		0.280	0.076	T	0.32	0.10	L	10.8974	0.0031	0.039	205		10.81	10.97					1							G
109051	9.629	0.036	9.911	0.066		−0.181	0.014	G	−0.19	0.02	H	9.7726	0.0026	0.018	61		9.75	9.80		C			1							
109052	8.273	0.012	7.109	0.007		0.999	0.011	T	0.98	0.01	L	7.1574	0.0011	0.008	57		7.14	7.17					1							S
109053	8.542	0.011	8.061	0.011		0.460	0.015	G	0.53	0.02	H	8.1080	0.0015	0.011	97		8.09	8.13		C			1							S
109054	8.806	0.016	8.784	0.021		0.060	0.015	G	0.07	0.01	H	8.7644	0.0021	0.018	111		8.74	8.79		C			1							S
109055	7.947	0.010	7.623	0.009		0.330	0.015	G	0.38	0.02	H	7.6519	0.0016	0.012	86		7.64	7.68		C			1							S
109056	5.621	0.002	5.677	0.003		−0.048	0.003	T	−0.03	0.00	L	5.6827	0.0010	0.007	123		5.67	5.69		M			1							S
109057	7.980	0.008	7.981	0.010		0.004	0.012	T	0.02	0.01	L	7.9968	0.0011	0.012	117		7.97	8.01		C			1							S
109058	10.059	0.032	9.199	0.024		0.754	0.031	T	0.80	0.02	L	9.2086	0.0022	0.019	72		9.19	9.26					1							
109059	8.924	0.016	8.236	0.014		0.609	0.015	G	0.68	0.01	H	8.3105	0.0017	0.012	73		8.30	8.33		C			1							S
109060	8.876	0.011	8.230	0.009		0.592	0.011	T	0.66	0.01	L	8.2802	0.0020	0.017	142		8.25	8.31		C	22056−5858	I 1	1							S
109061	11.160	0.064	9.350	0.022		1.507	0.054	T	1.54	0.08	L	9.3068	0.0034	0.024	70		9.26	9.35					1							
109062						1.109	0.006	G	1.19	0.01	I	11.4989	0.0043	0.033	73		11.39	11.57					1							G
109063	9.755	0.024	9.540	0.031		0.210	0.015	G	0.23	0.02	H	9.5709	0.0019	0.019	117		9.54	9.61		C			1							G
109064	8.808	0.016	8.403	0.016		0.391	0.015	G	0.46	0.02	H	8.3991	0.0024	0.014	57		8.38	8.42		C	22057+0147	I 1	1	S						S
109065	8.151	0.010	7.635	0.009		0.485	0.012	T	0.56	0.01	L	7.6907	0.0009	0.011	129		7.67	7.71		C	22057+5708	I 1	1 G							S
109066	10.832	0.046	10.165	0.039		0.618	0.051	T	0.69	0.04	L	10.2708	0.0026	0.030	150		10.22	10.32					1							G
109067	10.342	0.034	9.609	0.028		0.672	0.035	T	0.73	0.03	L	9.6852	0.0028	0.017	88		9.64	9.71		C			1							
109068	6.759	0.008	5.022	0.005		1.443	0.037	G	1.45	0.02	A	4.9990	0.0008	0.006	37		4.98	5.01					1							S
109069	8.831	0.017	7.650	0.011		1.012	0.016	T	0.99	0.01	L	7.7103	0.0025	0.016	47		7.69	7.75					1							S
109070	10.474	0.032	8.954	0.015		1.298	0.029	T	4.81	0.05	O	7.8039	0.0239	0.226	120		7.61	8.17		U 2			1 V							P
109071	7.668	0.005	7.701	0.007	*	−0.026	0.008	T	0.00	0.01	L	* 7.6880	0.0014	0.017	193	*	7.66	7.71		U 2	22057+4121	H 1	2 C	A	AB	281	0.662	0.005	2.23	0.02	S
109072	9.815	0.025	7.937	0.011	A	2.000	0.495	G	3.71	0.13	O	7.7734	0.0109	0.041	107	A	7.72	7.84		U 2	22057+2954	I 1	2 C	A	AB	267	11.816	0.010	1.83	0.06	S
109073	9.437	0.024	8.794	0.021		0.597	0.028	T	0.67	0.03	L	8.8354	0.0019	0.014	55		8.82	8.86		C			1							
109074	4.175	0.004	3.051	0.004		0.969	0.011	G	0.92	0.02	A	3.1080	0.0006	0.006	52		3.10	3.13			22058−0019	I 1	1							S
109075	9.819	0.022	8.503	0.013		1.118	0.020	T	1.08	0.02	L	8.5536	0.0023	0.018	80		8.53	8.58		C			1							
109076	9.423	0.023	8.972	0.023		0.415	0.015	G	0.48	0.02	H	9.0272	0.0029	0.020	53		8.99	9.05					1							
109077	7.911	0.009	7.680	0.011		0.240	0.015	G	0.27	0.02	H	7.7010	0.0011	0.009	89		7.69	7.72		C			1							S
109078	9.151	0.023	8.131	0.016	A	1.200	0.495	G	0.83	0.08	L	* 8.0038	0.0020	0.008	42	*	7.99	8.02		D	22058+0452	I 1	2 C	A	AB	195	1.232	0.015	0.72	0.03	S
109079	6.462	0.004	6.492	0.005		−0.025	0.006	T	0.00	0.01	L	6.5026	0.0006	0.006	136		6.49	6.51		C			1							S
109080	8.721	0.008	8.301	0.008		0.410	0.015	G	0.48	0.02	H	8.3698	0.0014	0.018	182		8.34	8.40					1							
109081	7.553	0.005	5.790	0.002		1.468	0.000	G	1.41	0.06	F	5.7644	0.0007	0.007	148		5.75	5.78					1							S
109082	6.145	0.004	6.248	0.005		−0.088	0.006	T	−0.07	0.01	L	6.2342	0.0024	0.028	153		6.20	6.28	1.09	P 1 A			1							S P
109083	11.731	0.116	9.988	0.038		1.482	0.101	T	1.72	0.17	K	9.9156	0.0024	0.025	78		9.86	9.96		C			1							
109084	11.792	0.130	10.257	0.052		1.408	0.007	G	1.69	0.02	I	10.1998	0.0040	0.026	75		10.16	10.25		C			1 X							
109085	9.567	0.018	9.259	0.020	*	0.293	0.025	T	0.33	0.03	L	* 9.1853	0.0017	0.022	130	*	9.15	9.22		D	22059+4522	I 1	2 C	A	AB	246	0.738	0.005	0.75	0.03	
109086	9.334	0.016	8.721	0.014		0.571	0.019	T	0.64	0.02	L	8.7720	0.0021	0.018	93		8.74	8.79		C			1							S
109087	9.254	0.018	8.790	0.018		0.450	0.020	T	0.52	0.02	L	8.8400	0.0017	0.015	83		8.82	8.87		C	22059−1946	I 1	1							S
109088	10.390	0.035	9.344	0.023		0.909	0.032	T	0.91	0.02	L	9.4394	0.0024	0.023	86		9.39	9.49					1							
109089	12.153	0.146	8.755	0.014		3.150	0.510	G	3.16	0.52	J	8.3268	0.2057	1.484	135		7.82	10.93	435.60	P 1 A			1 V							G
109090	8.409	0.011	7.840	0.009		0.536	0.011	T	0.61	0.01	L	7.8959	0.0009	0.009	74		7.88	7.91		D			1							S
109091	10.723	0.055	8.839	0.021		1.565	0.047	T	1.58	0.05	L	8.7842	0.0024	0.019	57		8.74	8.83					1							
109092	9.640	0.016	7.914	0.008		1.440	0.014	T	1.44	0.02	L	7.9017	0.0017	0.014	147		7.88	7.93		C			1							
109093	10.917	0.035	10.178	0.029		0.677	0.036	T	0.74	0.03	L	10.2766	0.0031	0.033	169		10.21	10.34		U			1							
109094	10.079	0.015	8.840	0.009		1.057	0.014	T	1.02	0.01	L	8.8860	0.0016	0.025	250		8.85	8.93					1							
109095						1.390	0.020	G	1.52	0.15	K	11.2572	0.0116	0.069	49		10.99	11.35					1 X	S						G
109096	8.223	0.012	7.080	0.006		0.983	0.010	T	0.96	0.01	L	7.1412	0.0007	0.008	125		7.13	7.16					1							S
109097	9.196	0.014	8.579	0.013	A	0.600	0.015	G	0.67	0.01	H	* 8.5443	0.0018	0.018	143	*	8.51	8.58		D	22060−5628	I 1	2 C	A	AB	93	1.677	0.011	2.05	0.04	S
109098	9.907	0.019	9.229	0.017		0.616	0.019	T	0.68	0.02	L	9.2864	0.0026	0.030	142		9.25	9.35					1							
109099	7.742	0.010	7.478	0.012	*	0.248	0.016	T	0.28	0.02	L	* 7.6417	0.0013	0.011	88	*	7.63	7.68		D	22060+2048	I 1	2 C	A	AB	221	7.119	0.004	0.53	0.01	S
109100	10.429	0.041	8.638	0.017		1.491	0.035	T	1.51	0.05	L	8.5748	0.0023	0.019	63		8.54	8.62					1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	$\mu_{\alpha*}$	μ_δ	π	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
109101	22 06 01.73	−37 17 06.5	10.08 H		331.507 195 52	−37.285 137 60		7.63	34.12	−16.07	1.44	1.11	1.68	1.69	1.11	+19	−12	− 5	+18	+10	+ 9	+13	+38	− 2	+22		2	2.07
109102	22 06 01.96	+45 00 51.8	5.09 1 H		331.508 166 31	+45.014 385 66		5.27	−9.35	−15.36	0.42	0.42	0.63	0.47	0.48	−32	+ 0	+ 1	− 8	− 1	+17	− 1	− 5	+ 3	−38		0	−0.30
109103	22 06 02.38	−03 06 22.1	7.97 H		331.509 897 31	−03.106 133 16		3.73	−11.96	−25.55	1.01	0.74	1.23	1.28	0.81	+12	+10	− 3	+ 8	+ 3	+46	+ 8	− 8	+33	+25		3	2.45
109104	22 06 02.80	−53 52 56.0	9.70 H		331.511 667 33	−53.882 224 67		7.99	40.33	−5.62	0.94	0.86	1.48	1.32	0.92	− 2	+10	−31	+19	− 6	+21	+ 4	−14	+16	+10		0	1.06
109105 H	22 06 03.02	+43 23 38.6	10.03 H		331.512 602 06	+43.394 064 50	A	1.07	2.45	1.25	4.56	3.81	1.76	1.49	1.67	−48	+ 6	− 8	+16	+ 0	− 1	+ 1	− 7	+13	−25		0	−0.35
109106	22 06 03.27	−44 32 13.5	7.83 G		331.513 623 92	−44.537 094 36		9.18	14.22	15.32	0.94	0.62	0.99	1.05	0.60	+17	−13	−15	−24	− 5	+12	− 2	+29	+10	+11		0	−0.86
109107	22 06 03.90	−65 40 05.7	7.51 H		331.516 249 97	−65.668 236 56		2.40	−23.85	−20.13	0.46	0.53	0.80	0.56	0.55	−20	− 5	−22	+ 3	+ 0	−13	− 4	−10	+ 1	−31		0	−0.54
109108	22 06 04.14	−43 57 58.1	6.94 H		331.517 250 94	−43.966 142 12		6.82	67.64	−33.81	0.88	0.57	0.95	1.16	0.54	− 1	+20	−19	− 3	−26	+19	− 9	+20	+11	−21		2	1.11
109109	22 06 04.85	−47 56 07.0	8.76 H		331.520 200 79	−47.935 264 43		8.93	96.48	27.40	0.83	0.74	1.23	0.96	0.75	+27	−21	−24	+ 3	+15	− 8	+18	+37	−21	+18		0	−2.13
109110	22 06 05.24	−05 21 28.5	7.57 G		331.521 815 08	−05.357 917 36		28.16	171.96	−46.70	0.91	0.63	1.01	1.03	0.62	+27	+24	− 5	− 6	−18	+15	−14	−23	+ 9	+24		0	1.92
109111	22 06 06.90	−39 32 35.0	4.47 H		331.528 765 18	−39.543 049 03		13.20	−24.16	−125.17	0.66	0.50	0.78	0.75	0.49	+16	−14	−16	− 6	−22	+29	−13	+33	+ 9	+ 3		0	−0.71
109112	22 06 07.34	−49 41 10.3	8.14 H		331.530 596 29	−49.686 185 84		6.31	33.68	−26.23	0.73	0.72	1.27	0.85	0.71	+59	−48	−54	+23	+ 7	+ 3	+25	+38	−31	+40		0	−1.09
109113	22 06 08.36	+49 54 08.8	9.72 2 G		331.534 816 24	+49.902 455 29		−1.35	−3.80	−5.32	0.78	0.77	1.01	0.85	0.83	− 8	+12	− 1	− 1	+12	− 9	+14	−10	+16	+ 5		0	−0.16
109114	22 06 09.56	+50 17 08.8	7.36 H		331.539 833 01	+50.285 788 72		0.91	−7.69	−12.18	0.51	0.49	0.65	0.53	0.50	+ 0	+12	+ 9	+ 2	+ 5	− 3	+ 7	− 7	+11	+ 9		0	−0.35
109115	22 06 10.22	−55 59 24.6	12.75 H		331.542 574 99	−55.990 169 28	B	11.07	−128.19	71.33	103.57	85.75	3.54	74.10	52.14	−10	+ 7	+ 9	+11	− 1	+ 8	+ 0	+10	+ 6	− 8		1	0.40
109116	22 06 10.46	−28 01 28.6	8.53 H		331.543 592 49	−28.024 601 28		11.86	94.42	−9.91	0.88	0.74	1.10	1.04	0.87	+27	− 6	−24	− 3	−10	+33	− 8	+23	+ 0	+39		0	0.25
109117	22 06 10.58	+10 05 36.5	7.12 H		331.544 067 37	+10.093 468 40	A	8.77	0.45	−4.73	2.05	1.33	1.79	2.38	1.44	+32	+20	− 2	−16	+31	−24	+35	− 3	+26	+25		1	0.51
109118	22 06 11.08	−55 59 36.0	9.95 H		331.546 146 51	−55.993 320 98	A	11.07	36.86	−0.55	3.12	2.55	3.54	3.68	2.70	− 9	+ 3	+ 4	+ 5	− 1	+ 6	− 1	+ 7	−24	− 5		1	0.40
109119	22 06 11.82	+10 05 28.8	10.20 H		331.549 257 76	+10.091 325 75	B	93.81	−6.56	−5.69	110.03	74.33	66.11	76.60	55.87	+39	+20	+ 7	− 7	+29	−26	+38	+ 6	+29	+21		1	0.51
109120	22 06 12.02	+47 19 35.8	9.55 H		331.550 086 61	+47.326 621 19		−1.52	1.04	−5.28	0.83	0.73	1.03	0.98	0.83	−12	+ 9	+ 2	− 8	+10	+17	+ 9	−19	+13	−18		0	1.47
109121	22 06 12.25	+45 14 55.3	6.19 H		331.551 024 89	+45.248 702 96		10.09	23.25	−5.46	0.41	0.43	0.61	0.45	0.49	−31	− 2	+ 2	−11	+10	+ 0	+10	−17	+13	−31		0	−1.08
109122	22 06 13.05	−14 53 45.6	7.12 H		331.554 355 03	−14.895 992 02		21.53	226.28	−7.39	0.89	0.58	0.97	1.71	0.60	+37	−27	−17	−31	+ 3	− 1	+ 8	− 3	+ 3	−21		0	1.59
109123	22 06 13.34	+31 07 11.4	8.47 H		331.555 578 24	+31.119 831 39		0.27	−10.04	−2.48	0.71	0.82	0.98	0.87	0.92	+13	+ 6	−18	+28	− 5	− 9	− 7	−25	+24	+ 5		0	1.69
*109124	22 06 13.55	+56 20 36.2	6.38 2 H		331.556 454 90	+56.343 389 87		5.66	16.36	2.56	0.43	0.41	0.53	0.44	0.42	− 1	+ 6	+16	+ 1	+ 0	−13	+ 6	−16	− 1	+16		0	1.63
*109125	22 06 13.54	−29 04 15.3	7.59 H		331.556 397 42	−29.070 921 64		4.69	16.23	0.47	0.73	0.63	0.90	0.88	0.68	+19	−10	−31	+14	− 4	+25	+ 2	+46	−12	+23		0	−0.80
109126	22 06 13.83	+50 14 07.9	8.27 H		331.557 605 73	+50.235 541 40		6.04	−10.87	−1.29	0.62	0.56	0.79	0.65	0.66	− 3	+11	+10	+ 9	+ 2	− 4	+ 2	− 4	+ 6	+ 2		0	0.92
109127 H	22 06 14.02	+82 39 38.7	7.90 H		331.558 427 39	+82.660 738 93	*	2.99	26.89	8.63	0.61	0.58	0.67	0.69	0.60	+ 1	+ 5	+12	+27	− 7	− 1	− 4	+ 1	+13	+ 4		1	1.61
109128	22 06 14.52	−28 42 16.1	7.44 G		331.560 484 45	−28.704 481 18		3.85	14.80	17.98	0.89	0.78	0.95	1.08	1.01	+32	−12	−12	+16	+14	+19	+20	+61	+ 9	+36		2	−1.62
109129 H	22 06 15.50	+39 37 42.2	8.58 H		331.564 598 63	+39.628 390 21	A	2.43	3.61	−2.90	1.05	1.12	1.59	0.95	1.33	−47	+20	−23	+11	+13	− 4	+15	−14	+15	−56		2	0.14
109130	22 06 17.68	+55 14 48.5	7.64 H		331.573 653 16	+55.246 807 03		1.18	−2.53	−3.54	0.54	0.51	0.66	0.69	0.59	− 8	− 4	+ 4	− 5	+23	− 9	+22	− 5	+ 2	+36		0	0.08
109131	22 06 21.48	+51 52 08.4	9.05 H		331.589 488 19	+51.869 000 88		2.62	7.27	−11.96	0.77	0.73	0.98	0.84	0.74	+ 0	+14	+14	−16	+ 4	−15	+ 9	−21	+12	+10		0	0.87
109132 H	22 06 21.71	+74 29 43.6	9.26 H		331.590 446 31	+74.495 454 47	A	1.98	11.86	0.56	1.26	1.19	1.24	1.38	1.21	+ 0	− 7	+11	−11	− 2	+ 2	− 2	− 1	− 9	+ 2		1	0.83
109133	22 06 22.33	−23 06 02.2	8.95 H		331.593 033 77	−23.100 610 38		12.27	171.31	21.54	1.22	0.82	1.38	1.61	0.94	+10	−12	−11	−22	− 4	+46	+ 0	+ 5	+14	+13		0	1.55
109134	22 06 22.76	−48 29 01.4	8.52 H		331.594 822 47	−48.483 722 03		3.24	21.01	8.40	0.86	0.89	1.42	0.87	0.83	+40	−30	−53	− 1	+42	−24	+35	+50	−38	+52		0	−0.18
109135	22 06 22.81	−68 44 28.9	7.56 H		331.595 049 01	−68.741 361 82		5.67	29.34	−25.11	0.50	0.52	0.73	0.53	0.55	−21	+ 1	+ 1	+ 1	+ 5	+ 9	+ 3	−17	−12	−31		0	0.42
109136	22 06 24.05	−46 09 10.9	10.44 G		331.600 187 95	−46.153 032 57		5.39	21.12	−2.50	1.53	1.16	1.95	1.35	1.18	+21	−12	− 4	−14	+ 3	+27	+ 5	+32	−13	+17		0	−1.47
109137	22 06 24.59	+25 09 05.1	7.29 H		331.602 460 62	+25.151 406 91		4.24	10.93	−9.32	0.63	0.76	0.81	0.76	1.08	+29	+18	− 4	− 4	−27	−18	−24	−58	− 7	+40		0	−0.92
109138	22 06 25.00	−42 58 25.7	8.30 H		331.604 149 87	−42.973 806 36		14.02	54.27	46.45	0.92	0.64	1.08	1.20	0.63	+ 4	+18	−19	+27	−17	+39	− 7	+21	+ 6	− 3		2	1.49
109139	22 06 26.21	−13 52 10.3	4.29 H		331.609 188 94	−13.869 540 13		18.90	40.45	−57.16	0.81	0.49	0.95	0.90	0.50	+23	−19	+ 2	− 8	+14	+31	+ 6	+ 2	+32	+30		0	0.85
109140	22 06 28.40	−14 05 15.3	8.80 H		331.618 325 41	−14.087 585 77		4.52	19.78	−9.35	1.15	0.75	1.33	1.23	0.71	+33	−41	−10	−13	+ 7	+26	+ 4	−10	+ 5	+24		0	1.13
*109141	22 06 29.96	−01 17 35.0	8.51 H		331.624 824 62	−01.293 064 08		9.88	63.76	−1.54	1.13	0.80	1.32	1.62	0.91	+ 4	+22	−34	+35	−15	+34	+ 2	+ 7	+23	+15		0	−0.34
*109142	22 06 29.93	−08 43 50.3	10.55 G		331.624 713 11	−08.730 637 82		9.88	123.62	−117.54	1.82	1.17	1.92	2.16	1.24	+33	+ 5	−13	−17	+33	−12	+25	+18	+ 1	+44		0	0.17
109143	22 06 30.70	+59 20 50.6	9.48 H		331.627 929 86	+59.347 376 06		2.19	−4.08	−6.27	0.79	0.71	0.89	0.88	0.78	− 9	− 2	+10	+ 2	+ 1	+17	− 1	−16	−10	−13		0	−2.49
109144	22 06 32.97	+01 51 24.0	7.24 H		331.637 386 34	+01.856 671 86		19.77	341.88	190.32	1.03	0.71	1.02	1.40	0.78	− 3	+19	−11	+50	−19	+30	−11	+23	+14	− 1		0	0.11
109145	22 06 33.53	+05 11 40.9	7.33 H		331.639 721 23	+05.194 684 35		8.32	34.02	7.34	0.80	0.83	1.00	1.04	1.02	+34	−11	−29	+ 6	+10	+15	+17	+32	−18	+27		0	1.72
109146	22 06 33.81	+57 11 59.9	8.90 G		331.640 888 59	+57.199 967 03		2.74	−3.55	−7.24	0.64	0.63	0.78	0.63	0.62	+11	+11	+20	−11	− 3	−20	+ 2	−20	− 3	+20		0	0.15
109147	22 06 33.92	+12 26 42.9	7.22 H		331.641 328 98	+12.445 243 65		11.08	−0.79	19.97	0.75	0.61	0.95	1.07	0.70	+32	−10	+ 2	− 6	+32	+ 5	+28	+19	+16	+17		0	0.63
109148	22 06 33.99	+30 55 45.3	8.29 H		331.641 616 82	+30.929 239 49		2.36	13.21	−0.13	0.76	0.92	1.03	0.97	1.05	+15	+ 6	− 7	+32	− 3	− 7	− 9	−45	+11	+ 4		0	0.75
109149	22 06 34.88	−34 24 30.4	10.26 G		331.645 323 57	−34.408 451 82		21.10	63.89	−31.08	1.55	1.11	1.89	1.77	1.11	+14	+10	−14	− 3	−16	+37	−10	+16	− 3	+ 9		2	0.89
109150	22 06 34.94	+03 27 31.8	8.98 H		331.645 577 58	+03.458 826 10		4.42	17.27	−28.64	1.13	0.84	1.25	1.59	1.00	+20	+17	+ 4	+38	+ 5	+40	+ 5	+17	+ 5	+17		0	0.46
109151	22 06 35.01	−31 34 10.2	8.19 2 H		331.645 859 63	−31.569 489 73		2.22	1.03	2.04	0.89	0.77	1.11	0.98	0.82	+26	−28	−37	+ 1	−19	+15	− 9	+40	−24	+21		0	0.73
109152	22 06 35.12	−71 05 37.5	8.66 H		331.646 327 20	−71.093 753 73		8.74	51.60	−34.83	0.67	0.71	0.95	0.76	0.82	−19	+ 0	−14	+11	− 2	−19	− 5	− 4	+11	−22		0	−1.24
109153	22 06 35.59	+54 31 06.2	9.16 H		331.648 282 78	+54.518 383 13		4.09	−19.09	−11.91	0.80	0.71	0.93	0.88	0.74	+ 4	− 8	+ 7	−18	+ 8	− 8	+ 8	−23	+11	+30		0	−0.51
109154	22 06 37.92	+12 11 48.3	8.96 H		331.657 981 15	+12.196 740 04		0.96	−7.07	−11.66	1.10	0.82	1.42	1.67	1.07	+25	+ 9	+ 8	−24	+33	+ 3	+32	+13	+25	+16		0	0.14
109155	22 06 38.87	+02 26 22.2	6.51 G		331.661 974 10	+02.439 493 94		6.91	19.51	−13.91	0.76	0.58	0.86	1.15	0.65	+ 7	+ 3	− 3	+21	− 3	+39	− 3	+ 7	+13	− 5		0	−0.28
109156	22 06 39.63	−49 13 03.2	9.80 H		331.665 142 92	−49.217 554 22		13.25	17.16	2.83	1.63	1.63	2.59	1.82	1.81	+47	−38	−42	+10	+18	− 9	+24	+33	−31	+45		0	
109157	22 06 39.87	+51 48 21.1	7.08 H		331.666 116 26	+51.805 856 73		2.71	10.19	−0.23	0.47	0.42	0.57	0.51	0.43	−11	+11	− 4	−13	+15	−12	+16	−18	+16	+ 3		0	−0.97
109158	22 06 39.93	+48 27 06.9	10.12 3 H		331.666 362 00	+48.451 914 68		0.53	−1.16	−4.26	1.35	1.30	1.77	1.81	1.84	−21	+28	−15	−16	+ 7	− 4	+12	−26	+17	−23		2	1.69
109159	22 06 41.32	−41 31 59.8	9.60 G		331.672 187 31	−41.533 285 47		3.69	57.68	−31.83	1.32	0.99	1.52	1.58	0.95	+23	+ 9	+ 3	+16	−20	+24	−17	+13	+ 5	+13		0	−2.26
109160	22 06 41.90	+16 44 58.6	7.79 H		331.674 582 21	+16.749 607 91		3.06	−3.62	−2.85	0.66	0.58	0.78	0.77	0.60	+26	− 4	− 8	+19	− 2	−16	− 5	− 3	+ 6	+14		2	2.06
109161 H	22 06 42.07	+65 34 03.5	9.87 H		331.675 305 41	+65.567 629 66	*	2.84	−8.35	−11.72	0.91	0.80	0.96	1.14	0.88	−17	+ 4	+13	+ 9	+11	+ 6	+ 8	− 6	+10	−22		0	0.28
109162	22 06 42.32	+53 07 53.3	7.80 G		331.676 324 33	+53.131 477 65		31.99	−531.46	−341.14	0.55	0.51	0.67	0.54	0.51	−14	−12	+ 4	−10	+16	− 3	+18	−29	+15	+ 5		0	−0.98
109163	22 06 43.32	+72 13 41.4	7.37 H		331.680 511 44	+72.228 155 72		4.87	−17.96	34.00	0.51	0.48	0.56	0.58	0.48	+ 0	+ 9	+16	+ 3	+ 0	−11	+ 1	− 3	− 2	+ 0		0	−0.14
109164	22 06 43.99	+28 19 05.1	8.48 H		331.683 311 17	+28.318 080 02		2.65	−12.75	−8.69	0.86	0.87	1.22	1.03	1.12	− 3	+20	−34	+ 9	+17	−23	+15	−12	+21	− 4		2	1.08
109165	22 06 44.98	−15 38 40.0	9.87 2 H		331.687 411 99	−15.644 444 26		−0.63	12.72	−14.12	1.48	1.00	1.67	1.88	0.97	+27	+18	+12	−13	+ 0	+ 4	− 3	−26	+ 7	− 1		0	0.35
109166	22 06 45.97	−45 23 30.5	8.44 H		331.691 558 39	−45.391 796 67		33.11	385.67	−263.55	0.99	0.83	1.22	1.11	0.86	+28	− 5	−23	− 4	+15	+25	+16	+44	+ 1	+39		0	0.42
109167	22 06 46.43	−06 43 45.7	8.00 H		331.693 454 73	−06.729 352 65		7.86	20.33	−8.95	0.93	0.59	1.04	1.07	0.65	+33	+18	+ 9	+ 4	+30	+33	+31	+ 9	+30	+47		0	0.53
109168	22 06 48.06	−33 35 05.0	9.91 H		331.700 250 81	−33.584 719 98		0.57	33.74	−22.54	1.28	1.03	1.67	1.50	1.05	+24	+ 3	−25	−10	−13	+36	− 4	+10	+12	+29		0	−1.99
109169	22 06 48.43	+85 24 33.1	8.10 H		331.701 774 61	+85.409 184 79		14.11	87.85	76.08	0.56	0.56	0.64	0.64	0.60	+ 0	− 8	+ 4	+15	− 2	− 1	− 2	+ 1	− 6	− 3		0	0.23
109170	22 06 48.87	−12 30 43.7	8.96 H		331.703 622 37	−12.512 142 56		2.41	3.31	−11.02	1.17	0.81	1.34	1.51	0.85	+25	−16	− 3	+ 1	+17	+22	+10	+ 2	+24	+24		0	−0.19
109171	22 06 53.01	+49 16 02.5	8.31 H		331.720 867 20	+49.267 347 76		2.14	−11.29	−17.77	0.53	0.57	0.73	0.56	0.61	− 7	+ 2	+ 2	+16	+ 5	− 5	+ 8	−10	+24	+ 2		1	−1.56
109172	22 06 53.39	−29 36 51.3	7.86 H		331.722 450 72	−29.614 261 05		16.03	97.00	101.55	0.82	0.66	1.00	0.96	0.70	+18	−10	−35	+ 0	−13	+21	− 7	+33	−15	+21		0	−0.45
109173	22 06 55.78	+40 39 51.6	9.77 H		331.732 396 37	+40.664 347 03		5.31	−2.46	−17.37	0.94	0.99	1.58	1.20	1.41	−41	+ 6	−10	+44	−10	−10	−17	+ 8	+11	−57		1	0.87
109174	22 06 58.36	+81 08 27.4	10.44 H		331.743 166 80	+81.140 950 39		18.75	16.50	−63.46	1.03	1.04	1.20	1.26	1.13	−12	−14	+32	+12	+ 8	+16	+ 1	− 6	− 3	−18		0	1.59
109175	22 06 58.73	+26 37 22.0	7.24 H		331.744 695 98	+26.622 780 25		6.91	−12.41	2.47	0.63	0.68	0.82	0.71	0.83	+15	− 5	−13	+30	− 7	−23	− 9	−19	+ 6	+18		0	−0.48
109176	22 07 00.47	+25 20 42.2	3.77 G		331.751 977 29	+25.345 046 10		85.06	296.73	26.93	0.52	0.63	0.71	0.56	0.69	+24	+14	−20	−12	−10	−19	−11	−40	+12	+27		2	2.60
109177	22 07 00.97	−41 07 59.3	7.97 H		331.754 032 86	−41.133 141 38		4.55	39.22	−6.88	0.79	0.70	1.02	0.89	0.64	+33	− 5	−16	+ 5	−15	+30	− 8	+14	+ 7	+27		0	0.67
109178 H	22 07 01.03	−53 46 50.1	9.67 H		331.754 304 25	−53.780 595 50	A	4.06	20.90	−0.14	1.90	1.51	2.38	1.92	1.17	+ 8	− 9	−24	+10	−24	+31	−18	−14	+17	−10		1	−0.36
109179	22 07 01.24	+18 19 01.2	8.44 H		331.755 147 20	+18.316 992 32		4.05	−33.33	−34.63	0.93	0.73	1.01	1.12	0.77	+ 7	+ 9	−20	−40	+17	+ 8	+19	+ 6	+12	+ 7		0	0.29
109180 H	22 07 02.19	+36 05 37.4	7.80 H		331.759 133 53	+36.093 730 60	A	6.92	2.25	−5.74	1.29	1.40	1.66	1.36	1.66	+13	+ 4	−22	+ 3	−10	− 8	−12	−30	+30	+32		5	2.40
109181	22 07 02.57	+11 46 03.9	6.83 2 H		331.760 697 30	+11.767 752 35		2.97	−27.44	−34.83	0.97	0.71	0.98	1.50	0.88	+41	+14	+15	+35	+52	+26	+48	+45	+22	+41		0	0.75
109182	22 07 03.26	+34 31 16.7	7.22 H		331.763 604 04	+34.521 304 26		16.48	118.85	62.36	0.45	0.58	0.72	0.54	0.68	+12	− 2	−17	+10	+ 3	− 6	+ 8	−30	+19	+28		0	0.31
109183 H	22 07 03.49	−59 07 37.1	8.66 G		331.764 526 55	−59.126 979 24	A	14.55	224.42	72.68	1.46	1.48	1.91	1.77	1.42	+ 1	+ 3	−28	−25	+ 2	+ 2	+ 0	− 6	− 9	− 4		1	1.13
109184	22 07 06.15	+37 54 02.8	7.58 H		331.775 604 73	+37.900 773 36		5.73	20.22	−7.29	0.59	0.58	0.90	0.77	0.72	−42	+ 8	−16	−15	+11	−19	+11	−42	+26	−47		4	0.12
109185	22 07 06.56	−73 22 45.0	9.71 H		331.777 346 92	−73.379 158 23		6.44	31.97	−50.31	0.92	0.95	1.25	1.09	1.04	− 8	−11	− 6	+ 9	+ 6	− 9	+ 7	+ 0	−18	− 9		0	−0.08
109186 H	22 07 06.61	+00 34 12.6	7.44 G		331.777 534 49	+00.570 167 87	A	12.96	87.68	46.56	2.41	2.07	2.29	2.88	2.08	+16	+31	−20	+31	− 3	+47	+ 5	+27	− 9	+23		8	1.10
109187	22 07 07.26	+30 19 04.1	7.34 H		331.780 247 08	+30.317 803 89		6.04	3.25	−3.84	0.60	0.84	0.90	0.81	1.10	+25	+12	+17	+ 8	−16	− 3	−11	−46	−12	+34		0	−1.39
109188	22 07 07.98	−42 30 05.3	8.64 H		331.783 246 71	−42.501 485 63		6.00	−4.74	9.03	0.99	0.77	1.14	1.33	0.81	+23	+ 4	−10	+27	+ 3	+29	+ 7	+38	− 7	+20		0	0.21
109189	22 07 09.40	−28 02 51.8	9.00 H		331.789 148 71	−28.047 715 82		3.61	−5.73	−2.96	1.06	0.85	1.26	1.34	1.06	+21	−11	−21	+16	− 4	+24	+ 0	+30	− 4	+32		0	0.48
109190	22 07 09.65	+58 50 26.8	6.34 H		331.790 218 02	+58.840 772 39		5.82	−16.06	−22.30	0.43	0.43	0.51	0.48	0.42	−12	+ 2	+15	+ 1	+ 5	+ 3	+ 6	−17	− 3	− 5		1	1.95
109191	22 07 10.73	+72 22 21.9	6.84 1 H		331.794 721 73	+72.372 741 94		8.95	83.91	43.90	0.46	0.43	0.50	0.51	0.42	− 5	− 5	+15	− 4	+ 0	− 3	+ 0	− 5	− 1	+ 1		0	0.89
109192	22 07 12.33	+35 37 24.0	8.62 H		331.801 366 79	+35.623 326 04		1.28	8.99	3.11	0.64	0.72	0.93	0.79	0.90	+17	+ 2	−11	+26	− 2	−16	+ 1	−27	+ 9	+25		0	1.10
109193	22 07 12.42	+52 38 08.5	8.73 2 G		331.801 735 58	+52.635 698 47		1.19	−6.94	−5.78	0.65	0.66	0.79	0.68	0.67	−20	+15	−10	− 3	+15	− 4	+24	−32	+11	+12		0	0.77
109194	22 07 12.56	−47 51 09.8	9.15 H		331.802 313 36	−47.852 715 95		9.93	−67.16	−46.05	0.82	0.79	1.29	0.99	0.80	+28	−11	−27	− 2	+ 5	+ 3	+12	+37	−23	+11		0	2.28
109195	22 07 12.94	−38 56 01.4	8.62 H		331.803 908 32	−38.933 711 58		4.11	−31.38	−0.34	0.91	0.76	1.25	1.03	0.68	+20	−13	−38	− 8	−25	+42	− 7	+26	− 5	+ 5		0	−0.62
109196	22 07 13.64	+68 18 07.7	7.52 G		331.806 839 28	+68.302 142 30		10.28	111.12	38.00	0.61	0.53	0.64	0.84	0.56	−12	−18	+13	+ 7	+13	+11	+ 8	+ 7	+ 2	+ 5

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
109101	10.683	0.043	10.141	0.043		0.515	0.045	T	0.59	0.05	L	10.1937	0.0041	0.027	87		10.14	10.24					1 G							
109102	7.157	0.006	5.270	0.003		1.568	0.005	T	1.59	0.01	L	5.2044	0.0010	0.008	127		5.19	5.22		M			1							S
109103	9.756	0.031	8.156	0.016		1.341	0.027	T	1.31	0.03	L	8.1263	0.0026	0.016	52		8.10	8.15		C			1							S
109104	10.354	0.025	9.752	0.023		0.560	0.025	T	0.63	0.02	L	9.8171	0.0030	0.029	141		9.77	9.88					1							
109105	10.254	0.027	10.039	0.034	*	0.205	0.040	T	0.23	0.05	L	*	10.0945	0.0027	0.031	155	*	10.04	10.15		D	22061+4324	H 1	2 C A	AB	301	0.343	0.021	1.78	0.19	G
109106	8.227	0.011	7.867	0.011		0.352	0.020	G	0.41	0.02	H	7.9158	0.0012	0.012	79		7.89	7.94					1							S
109107	8.743	0.008	7.602	0.006		0.981	0.008	T	0.96	0.01	L	7.6741	0.0014	0.015	191		7.65	7.70					1							S
109108	8.240	0.009	7.051	0.006		1.018	0.008	T	0.99	0.01	L	7.1079	0.0018	0.010	78		7.09	7.13					1							S
109109	9.323	0.014	8.791	0.013		0.507	0.014	T	0.58	0.01	L	8.8683	0.0022	0.018	117		8.84	8.90					1							
109110	8.403	0.012	7.644	0.010		0.674	0.015	G	0.73	0.01	H	7.7156	0.0029	0.016	64		7.69	7.73					1							S
109111	6.269	0.004	4.624	0.002		1.349	0.060	G	1.31	0.02	A	4.6247	0.0007	0.005	74		4.61	4.63					1							S
109112	8.669	0.008	8.183	0.007		0.457	0.010	T	0.53	0.01	L	8.2376	0.0010	0.014	189		8.21	8.26					1							S
109113	9.752	0.019	9.699	0.027		0.050	0.015	G	0.06	0.01	H	9.7358	0.0038	0.037	147		9.67	9.79		U 2			1							G
109114	9.508	0.016	7.555	0.007		1.620	0.014	T	1.64	0.01	L	7.4758	0.0013	0.012	138		7.45	7.50					1							
109115											T	13.0108	0.3290			B				D	22062−5600	I 2	1 C L D							D
109116	9.158	0.015	8.591	0.014		0.534	0.015	T	0.61	0.02	L	8.6448	0.0017	0.017	80		8.62	8.69					1							
109117	7.341	0.006	7.134	0.007	A	0.198	0.008	T	0.22	0.01	L	7.1878	0.0149	0.018	102	A	7.15	7.21		D	22062+1006	I 2	1 C P B							S
109118	10.993	0.046	10.007	0.030	A	0.852	0.043	T	0.87	0.03	L	10.0914	0.0233	0.041	123	A	10.03	10.16		D	22062−5600	I 2	1 C P D							D
109119	10.531	0.046	9.803	0.037	B	0.668	0.047	T	0.73	0.04	L	10.5918	0.2846			B				D	22062+1006	I 2	1 C I B							
109120	9.564	0.017	9.568	0.023		0.001	0.026	T	0.02	0.02	L	9.5590	0.0024	0.024	140		9.52	9.59					1 S							G
109121	6.282	0.003	6.196	0.003		0.078	0.004	T	0.09	0.00	L	6.2183	0.0007	0.007	136		6.21	6.23		C			1							S
109122	7.630	0.007	7.172	0.007		0.445	0.008	T	0.51	0.01	L	7.2176	0.0009	0.008	81		7.21	7.23		C			1 G							S
109123	9.710	0.021	8.600	0.014		0.957	0.020	T	0.94	0.01	L	8.6371	0.0019	0.017	88		8.61	8.66		C			1							
109124	6.268	0.003	6.374	0.004		−0.091	0.007	G	−0.07	0.01	H	6.3584	0.0014	0.019	126		6.34	6.39	1.43	P 1 A			1							S P
109125	7.549	0.007	7.588	0.010		−0.035	0.002	G	−0.01	0.00	H	7.5889	0.0009	0.010	78		7.57	7.61		C			1							S
109126	9.626	0.017	8.386	0.011		1.058	0.016	T	1.02	0.01	L	8.4431	0.0017	0.015	144		8.42	8.47					1 G							
109127	8.030	0.009	7.922	0.012	*	0.105	0.014	T	0.12	0.01	L	*	7.9435	0.0012	0.013	125	*	7.92	7.97		D	22062+8240	I 1	2 C S A	AB	252	0.184	0.012	1.59	0.26	S
109128	9.116	0.015	7.573	0.008		1.290	0.015	G	1.25	0.02	H	7.5936	0.0015	0.009	73		7.58	7.61		C			1 G							S
109129	8.738	0.007	8.606	0.008	*	0.127	0.010	T	0.14	0.01	L	*	8.6293	0.0012	0.019	269	*	8.60	8.67		D	22063+3938	M 1	2 C A	AB	72	0.538	0.007	2.42	0.04	
109130	7.948	0.007	7.666	0.009		0.287	0.013	G	0.33	0.02	H	7.7194	0.0009	0.011	119		7.70	7.74		C			1							S
109131	10.512	0.033	9.169	0.017		1.139	0.029	T	1.10	0.03	L	9.2067	0.0023	0.023	131		9.17	9.25					1							
109132	11.374	0.065	9.621	0.024	A	1.046	0.197	G	1.02	0.16	K	*	9.4259	0.0022	0.020	119	*	9.39	9.47		D	22064+7430	I 1	2 C A	AB	149	9.755	0.009	1.78	0.04	
109133	9.691	0.023	8.962	0.019		0.654	0.023	T	0.72	0.02	L	9.0827	0.0023	0.017	63		9.05	9.14					1							S
109134	9.884	0.020	8.641	0.013		1.061	0.019	T	1.03	0.02	L	8.6895	0.0020	0.019	122		8.66	8.73		C			1							
109135	7.594	0.005	7.548	0.006		0.020	0.003	G	0.04	0.00	H	7.5703	0.0009	0.012	171		7.55	7.59					1							S
109136	10.753	0.044	10.548	0.059		0.310	0.020	G	0.36	0.03	H	10.5317	0.0048	0.033	77		10.46	10.58					1							
109137	7.196	0.008	7.271	0.011		−0.073	0.004	G	−0.05	0.01	H	7.2716	0.0013	0.009	84		7.26	7.29					1 G							S
109138	8.850	0.013	8.362	0.012		0.471	0.014	T	0.54	0.01	L	8.3994	0.0019	0.013	79		8.38	8.42		C			1							S
109139	4.201	0.003	4.274	0.003		−0.075	0.003	G	−0.06	0.02	A	4.2648	0.0007	0.004	61		4.26	4.27					1							S
109140	10.256	0.055	8.910	0.029		1.141	0.049	T	1.10	0.05	L	8.9651	0.0016	0.014	65		8.94	8.99		C			1							
109141	9.038	0.016	8.525	0.016		0.482	0.020	T	0.55	0.02	L	8.6176	0.0022	0.019	64		8.59	8.65					1							S
109142	11.405	0.098	10.741	0.089		0.593	0.003	G	0.66	0.00	H	10.6858	0.0039	0.027	75		10.64	10.74		C			1							G
109143	9.776	0.022	9.526	0.027		0.238	0.033	T	0.27	0.04	L	9.5504	0.0022	0.018	120		9.52	9.59		C			1							G
109144	7.871	0.011	7.297	0.011		0.537	0.014	T	0.61	0.01	L	7.3617	0.0023	0.012	51		7.34	7.40		C			1							S
109145	7.491	0.011	7.331	0.014		0.154	0.017	T	0.17	0.02	L	7.3826	0.0016	0.007	45		7.38	7.40		C			1							S
109146	9.102	0.014	8.931	0.016		0.200	0.015	G	0.22	0.02	H	8.9565	0.0018	0.016	123		8.93	8.98		C			1							
109147	7.544	0.006	7.244	0.007		0.285	0.009	T	0.32	0.01	L	7.2959	0.0013	0.013	89		7.28	7.32		C			1							S
109148	10.065	0.026	8.408	0.012		1.386	0.023	T	1.36	0.03	L	8.4339	0.0017	0.015	86		8.41	8.47		C			1							
109149	11.745	0.136	10.328	0.059		1.020	0.015	G	1.07	0.02	I	10.3824	0.0030	0.021	68		10.35	10.43		C			1							
109150	9.560	0.023	9.006	0.022		0.519	0.028	T	0.59	0.03	L	9.0960	0.0033	0.020	55		9.06	9.14					1							
109151	10.243	0.032	8.418	0.014		1.550	0.029	T	2.35	0.07	O	8.2372	0.0041	0.028	70		8.19	8.27		U 2			1							
109152	9.216	0.012	8.714	0.012		0.483	0.013	T	0.55	0.01	L	8.7665	0.0023	0.024	156		8.73	8.81					1							S
109153	9.602	0.021	9.151	0.021		0.439	0.024	T	0.51	0.03	L	9.2544	0.0013	0.018	123		9.22	9.29		D			1							
109154	10.894	0.056	9.115	0.021		1.482	0.047	T	1.50	0.07	L	9.0884	0.0019	0.014	81		9.06	9.11		C			1							
109155	6.420	0.005	6.496	0.006		−0.062	0.000	G	−0.04	0.00	H	6.4916	0.0010	0.007	56		6.48	6.50					1							S
109156	10.597	0.029	9.918	0.027		0.628	0.033	T	0.70	0.03	L	9.9309	0.0028	0.029	154		9.89	9.99			22067−4913	I 1	1 X S							
109157	6.957	0.004	7.063	0.006		−0.090	0.010	G	−0.07	0.01	H	7.0590	0.0006	0.009	134		7.05	7.08					1							S
109158	12.696	0.300	10.722	0.080		1.637	0.247	T	1.66	0.25	L	10.2543	0.0446	0.455	140		9.90	10.95		U 2 C			1 G							G
109159	10.187	0.031	9.695	0.030		0.533	0.008	G	0.61	0.01	H	9.7226	0.0033	0.024	68		9.69	9.83		C			1							
109160	8.180	0.010	7.807	0.008		0.353	0.012	T	0.41	0.01	L	7.8762	0.0016	0.011	98		7.86	7.90					1							S
109161	10.224	0.030	9.922	0.034	*	0.287	0.042	T	0.33	0.05	L	*	9.9445	0.0020	0.023	113	*	9.90	9.98			22067+6534	H 1	2 C S C	AB	4	0.130	0.024	0.82	1.09	G
109162	8.770	0.010	7.850	0.008		0.788	0.005	G	0.83	0.01	H	7.9266	0.0010	0.011	137		7.91	7.95		C			1							
109163	8.835	0.014	7.498	0.009		1.134	0.013	T	1.10	0.01	L	7.5365	0.0011	0.009	122		7.52	7.55		C			1							S
109164	9.823	0.021	8.609	0.014		1.038	0.020	T	1.01	0.02	L	8.6461	0.0019	0.014	77		8.62	8.68		C	22067+2819	I 1	1							
109165	12.169	0.196	10.355	0.064		1.541	0.170	T	2.15	0.54	K	9.9354	0.0314	0.220	69		9.68	10.21		U 2			1 S							
109166	9.508	0.018	8.541	0.013		0.860	0.018	G	0.90	0.02	A	8.5834	0.0014	0.013	72		8.56	8.61					1							
109167	8.177	0.009	8.014	0.010		0.156	0.013	T	0.17	0.01	L	8.0528	0.0017	0.013	103		8.02	8.08					1							S
109168	10.498	0.043	9.994	0.043		0.484	0.046	T	0.56	0.05	L	10.0171	0.0029	0.022	83		9.97	10.05		C			1							
109169	8.993	0.013	8.174	0.010		0.735	0.015	G	0.78	0.01	H	8.2450	0.0013	0.015	123		8.22	8.27		C			1							S
109170	10.482	0.037	9.065	0.020		1.197	0.033	T	1.16	0.03	L	9.1244	0.0029	0.018	67		9.10	9.15		C			1							
109171	8.427	0.009	8.325	0.010		0.099	0.013	T	0.11	0.01	L	8.3531	0.0014	0.013	142		8.33	8.38					1							
109172	8.463	0.011	7.917	0.011		0.539	0.015	G	0.61	0.02	H	7.9731	0.0015	0.011	75		7.95	7.99					1							S
109173	10.324	0.024	9.830	0.024		0.465	0.031	T	0.54	0.03	L	9.8747	0.0026	0.030	191		9.83	9.93					1							G
109174	12.165	0.166	10.645	0.071		1.278	0.142	T	1.24	0.15	L	10.6005	0.0048	0.041	111		10.53	10.67		R			1							G
109175	8.643	0.013	7.369	0.008		1.085	0.012	T	1.05	0.01	L	7.4037	0.0013	0.010	72		7.39	7.42		C			1							S
109176	4.294	0.004	3.822	0.004		0.435	0.007	G	0.51	0.03	C		3.8678	0.0007	0.004	79		3.86	3.87			22070+2520	I 1	1							S
109177	9.170	0.016	8.072	0.011		0.948	0.015	T	0.94	0.01	L		8.1322	0.0021	0.012	81		8.11	8.16					1							S
109178	11.251	0.058	9.909	0.028	A						T	*	9.8354	0.0026	0.030	138	*	9.78	9.90			22070−5347	I 1	2 C A	AB	117	5.765	0.016	2.20	0.06	
109179	9.788	0.022	8.575	0.014		1.037	0.020	T	1.01	0.02	L		8.6039	0.0018	0.018	92		8.57	8.63		C			1							
109180	8.160	0.012	7.918	0.011	A	0.230	0.400	G	0.17	0.03	L	*	7.8551	0.0011	0.012	124	–	7.84	7.88		D	22070+3606	I 1	3 C A							S G
109181	8.944	0.014	7.031	0.007		1.640	0.015	G	1.95	0.05	F		6.9148	0.0028	0.020	67		6.87	6.96		U 2			1							S
109182	7.736	0.007	7.275	0.007		0.455	0.010	G	0.52	0.01	H		7.3230	0.0011	0.011	135		7.31	7.34		C	22071+3431	I 1	1							S
109183	9.477	0.023	8.641	0.017	*	0.709	0.003	G	0.76	0.00	H	*	8.7860	0.0022	0.022	136	*	8.75	8.83		D	22071−5908	I 1	2 C A	AB	136	3.611	0.007	1.26	0.03	
109184	8.871	0.009	7.685	0.006		1.016	0.008	T	0.99	0.01	L		7.7471	0.0011	0.011	182		7.73	7.77					1							
109185	10.399	0.028	9.720	0.024		0.617	0.028	T	0.69	0.03	L		9.8374	0.0027	0.030	142		9.78	9.89					1							
109186	8.034	0.017	7.423	0.016	*	0.564	0.011	G	0.64	0.01	H	*	7.5684	0.0040	0.016	48	*	7.54	7.59		R	22071+0034	I 1	2 C A	AB	97	2.516	0.006	0.51	0.02	S
109187	8.787	0.013	7.444	0.008		1.139	0.012	T	1.10	0.01	L		7.5056	0.0010	0.009	84		7.49	7.52		D			1							S
109188	10.118	0.026	8.756	0.015		1.154	0.024	T	1.12	0.02	L		8.8036	0.0026	0.015	86		8.78	8.83		C			1							
109189	10.406	0.033	9.088	0.019		1.119	0.030	T	1.08	0.03	L		9.1649	0.0024	0.021	77		9.13	9.20		C			1							
109190	7.449	0.006	6.445	0.005		0.877	0.006	T	0.89	0.00	L		6.4991	0.0006	0.006	119		6.49	6.52					1							S
109191	7.011	0.005	6.860	0.006		0.145	0.007	T	0.16	0.01	L		6.8897	0.0024	0.017	126		6.86	6.91	0.22	P 1 A			1							S
109192	8.749	0.010	8.626	0.012		0.119	0.015	T	0.13	0.01	L		8.6707	0.0019	0.016	121		8.64	8.70					1							
109193	8.886	0.012	8.800	0.015		0.140	0.015	G	0.15	0.01	H		8.7799	0.0021	0.044	130		8.75	8.98	5.41	P 1 A			1							P
109194	9.878	0.020	9.237	0.018		0.589	0.020	T	0.66	0.02	L		9.2743	0.0019	0.018	112		9.24	9.30		C			1							
109195	9.219	0.017	8.651	0.016		0.535	0.017	T	0.61	0.02	L		8.7374	0.0017	0.012	78		8.71	8.76		C			1							S
109196	8.006	0.008	7.582	0.008		0.428	0.015	G	0.50	0.02	H		7.6217	0.0011	0.011	125		7.60	7.64		C			1							S
109197	7.272	0.005	7.122	0.006		0.144	0.007	T	0.16	0.01	L		7.1562	0.0009	0.011	128		7.14	7.17					1							S
109198	9.612	0.016	9.062	0.015		0.521	0.016	T	0.59	0.02	L		9.1258	0.0020	0.023	121		9.10	9.17					1							
109199	7.950	0.010	6.938	0.005		0.883	0.008	T	0.89	0.01	L		6.9916	0.0011	0.006	87		6.98	7.00					1							S
109200	9.794	0.022	8.689	0.015		1.011	0.019	G	0.99	0.01	H		8.6986	0.0019	0.018	122		8.67	8.73		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	mas/yr 13	mas 14	15	mas 16	mas/yr 17	18	19	20	21	22	23	24	25	26	27	28	% 29	30
109201	22 07 18.10	−10 26 48.7	6.87	2 H	331.825 433 83	−10.446 869 51	2.03	8.59	−1.22	0.76	0.51	0.81	0.93	0.51	+17	−	9	−16	−19	+21	−	5	+16	−12	+	8	+	5	0	1.60
109202	22 07 19.08	+27 42 14.1	8.87	H	331.829 483 74	+27.703 919 03	2.37	2.54	−22.24	0.84	0.88	1.09	0.95	1.06	+	8	+14	−17	+22	−	4	+	3	+	0	−23	+12	+18	0	−1.64
109203	22 07 20.00	−61 32 36.7	9.49	H	331.833 343 08	−61.543 535 05	16.74	92.15	−29.59	0.66	0.82	1.43	0.77	0.87	−15	−	7	−11	+12	+	8	+12	+10	+	0	−11	−12	3	0.62
109204	22 07 25.30	−19 34 12.6	7.47	H	331.855 397 88	−19.570 176 27	4.25	−13.72	−44.75	0.80	0.57	0.93	1.01	0.55	+41	+	1	+	5	+	5	+19	−	3	+14	+	4	−	6	+35	4	1.55
109205	22 07 25.59	+53 18 26.8	6.17	1 H	331.856 620 16	+53.307 446 84	−0.55	−3.05	−3.80	0.42	0.41	0.52	0.43	0.42	−11	−	2	+	2	−10	+10	−	6	+13	−31	+19	+	3	0	−0.74
109206	22 07 26.77	+17 36 40.2	8.37	H	331.861 525 93	+17.611 153 14	2.30	−2.47	−10.83	0.83	0.63	0.90	1.04	0.68	+	9	−	7	−	4	−29	+	4	+22	+	5	−	9	+	0	+	4	2	1.10
109207	22 07 27.16	−30 25 45.5	8.79	G	331.863 154 99	−30.429 292 76	14.36	373.27	60.75	0.94	0.76	1.15	1.09	0.90	+26	−20	−22	−10	−	4	+12	−	6	+33	−14	+38					0	−0.39
109208	22 07 27.50	−66 59 13.0	9.84	H	331.864 586 73	−66.986 931 38	4.09	8.46	14.37	1.01	0.98	1.44	1.14	1.03	−16	+	5	−	5	+	8	+14	+	3	+16	−	8	−12	+	7	0	−1.15
109209	22 07 28.52	+19 28 31.6	5.74	H	331.868 822 40	+19.475 436 31	16.39	121.91	36.78	0.51	0.44	0.62	0.54	0.47	+17	+	5	−	7	+14	−	2	−17	−	3	−	9	+21	+11	0	−0.21
109210	22 07 28.61	−44 14 08.9	10.01	H	331.869 194 14	−44.235 819 18	6.30	−67.01	−11.28	1.59	1.06	1.65	2.29	1.12	+11	+	2	−27	−24	+	5	−	8	+	4	+26	−	3	+	8	4	−0.04
109211 H	22 07 29.16	+25 38 11.4	8.26	G	331.871 486 74	+25.636 490 16 *	3.75	19.28	−0.50	0.78	0.83	1.04	0.88	0.99	+20	+	2	−25	+11	−10	−11	−14	−30	+	7	+20					0	−0.67
109212	22 07 29.95	+18 00 02.8	6.31	2 H	331.874 801 37	+18.000 789 82	3.45	23.23	−33.21	0.68	0.48	0.70	0.84	0.51	+	2	−	5	−15	−32	+13	+16	+14	−	3	−	1					0	0.91
109213 H	22 07 30.06	+56 30 30.4	8.56	H	331.875 238 03	+56.508 449 51 A	2.77	4.19	−2.81	1.25	1.31	1.21	1.04	1.05	−14	+10	+	9	−	8	+	8	−11	+14	−15	−	1	+16			3	0.11
109214	22 07 30.33	−68 01 24.1	6.99	H	331.876 372 90	−68.023 351 88	22.49	−238.93	−54.43	0.48	0.49	0.72	0.57	0.54	−14	+	4	−13	−	4	+11	−	6	+	9	−	9	−19	−	7	0	0.13
109215	22 07 30.57	+14 08 07.1	10.54	H	331.877 379 88	+14.135 300 90	2.17	8.19	−10.11	2.03	1.39	2.27	3.40	1.73	+27	+27	+	3	−58	+13	−37	+14	+10	−	4	+17			0	−0.78
109216	22 07 30.61	+45 08 09.7	9.77	H	331.877 555 70	+45.136 025 69	0.89	−4.32	−2.38	0.83	0.81	1.19	0.94	1.06	−33	−12	+11	−	8	+13	+	8	+15	−	5	−	4	−38			0	−0.25
109217	22 07 31.11	+51 43 07.0	8.79	H	331.879 635 77	+51.718 616 96	0.32	−2.14	−2.08	0.69	0.65	0.87	0.78	0.65	−10	+	7	−	6	−18	+11	−24	+10	−16	+23	−	2			0	−1.21
109218	22 07 31.35	+09 40 15.7	7.06	1 H	331.880 611 17	+09.671 021 37	3.28	15.09	−5.66	0.85	0.53	0.92	1.00	0.66	+	6	+21	−11	−37	+24	−	9	+30	−23	+40	−	5			0	0.25
109219	22 07 31.85	−71 37 22.2	8.90	H	331.882 717 01	−71.622 834 09	4.90	−7.19	22.51	0.73	0.78	1.05	0.89	0.88	−26	+15	−13	−18	+	9	−23	+	7	−14	+	4	−26			1	1.21
109220	22 07 35.26	−14 29 26.5	6.70	G	331.896 913 04	−14.490 690 19	6.70	63.96	−24.71	0.73	0.51	0.83	0.85	0.47	+30	−13	+	0	−17	+	0	+14	−	3	−17	+	7	+20			0	0.12
109221	22 07 37.44	−51 52 39.4	8.79	H	331.906 016 09	−51.877 610 08	10.25	−47.21	−56.47	0.72	0.56	1.23	1.22	0.72	+	5	−13	−	0	−	4	−12	+	6	−	2	+	0	−	4	−28	1	0.76
109222	22 07 37.49	−24 23 36.6	7.81	H	331.906 221 72	−24.393 507 33	2.74	7.12	−54.52	1.02	0.63	1.00	1.42	0.69	+	2	−	6	−31	−37	−	7	+11	+	0	−15	+30	−11			2	−0.55
109223	22 07 38.31	−20 45 33.3	7.41	H	331.909 610 84	−20.759 254 27	6.06	12.74	−34.54	0.91	0.57	1.01	1.08	0.56	+38	−24	−19	−	8	+14	−	4	+	4	−16	+16	+43			0	−0.12
109224	22 07 38.98	+25 00 58.3	8.32	H	331.912 423 84	+25.016 184 88	5.83	16.46	−10.88	0.81	0.80	0.97	0.87	0.86	+17	+22	−21	−	3	−19	+	1	−14	−47	+16	+25			0	0.25
109225	22 07 39.19	+55 44 43.0	8.59	G	331.913 274 64	+55.745 276 35	1.00	−1.56	−4.13	0.74	0.68	0.89	0.89	0.77	−	4	+	2	+15	−10	+18	+	5	+16	−	5	+17	+24			0	−0.72
109226	22 07 39.41	+10 45 13.1	7.10	H	331.914 214 56	+10.753 643 38	5.82	51.29	−14.39	1.14	0.57	1.00	1.19	0.64	−13	−30	+21	+13	+17	+23	−	4	+	1	+19	+	2			0	0.57
109227	22 07 39.50	−56 51 03.7	8.37	H	331.914 568 24	−56.851 036 64	3.04	−17.82	−23.54	0.75	0.62	1.09	1.04	0.69	+	2	−	9	−	4	+23	+	4	+19	+	9	−	1	−17	+10			0	0.73
109228	22 07 39.86	−59 19 11.7	7.15	G	331.916 064 22	−59.319 915 05	15.48	−169.89	−96.63	0.56	0.50	0.84	0.68	0.50	−	8	−	8	−22	−17	−	2	+18	+	1	−	1	+	2	−	2	0	−1.74
109229	22 07 41.61	−05 49 43.5	7.68	H	331.923 391 39	−05.828 741 66	2.48	27.74	1.31	0.88	0.62	0.96	1.08	0.68	+14	+13	−	7	+	2	+	6	+12	+	9	+28	+16	+17			1	0.09
109230	22 07 44.30	−28 08 51.4	7.16	H	331.934 593 73	−28.147 605 44	12.35	−6.50	0.50	0.70	0.59	0.86	0.83	0.67	+22	−	8	−29	+11	−	8	+23	−	1	+31	−13	+23			0	−0.35
109231	22 07 44.50	+37 08 59.5	9.75	H	331.935 415 67	+37.149 864 84	4.70	−12.97	−7.07	1.15	1.11	1.61	1.49	1.45	+	7	+19	−16	+	1	+15	−	6	+19	−12	+24	+26			0	0.64
109232	22 07 45.22	+39 20 35.7	8.05	H	331.938 408 89	+39.343 239 53	2.65	−2.36	2.98	0.54	0.67	1.03	0.63	0.81	−52	+21	−22	−	7	+17	−	6	+18	−38	+22	−56			0	−0.27
*109233	22 07 45.63	−65 06 11.4	7.53	H	331.940 140 03	−65.103 156 84	1.71	1.36	−51.51	0.49	0.54	0.82	0.58	0.55	−18	−	8	−13	−	3	+	2	+	4	+	3	−16	−14	−23			0	0.38
*109234	22 07 45.63	+33 24 56.7	8.47	G	331.940 113 46	+33.415 745 68	7.94	−5.42	−12.81	0.57	0.82	0.98	0.84	1.12	+21	−	0	−10	−15	+	5	−12	−	2	−50	+14	+	6			1	0.75
109235	22 07 45.95	+69 33 11.8	8.91	H	331.941 462 14	+69.553 281 34	8.81	26.65	−1.82	0.69	0.59	0.73	0.90	0.63	+	5	−14	+14	−	8	+10	+	7	−	2	+	0	+	7			0	0.55
109236	22 07 46.42	−10 04 42.7	7.47	H	331.943 420 76	−10.078 516 08	6.07	9.39	−27.46	0.92	0.56	0.95	1.07	0.56	+	9	−	5	−	7	−30	+26	+17	+23	−10	+20	+	5			0	0.16
109237	22 07 48.13	+37 37 01.3	9.54	H	331.950 550 47	+37.617 014 79 A	24.99	86.37	−158.20	1.69	1.84	2.26	2.04	2.11	−11	+20	−	1	+15	+10	+	8	+19	−	6	+18	+	4			2	0.24
109238	22 07 48.96	+42 57 11.7	7.89	2 H	331.954 016 90	+42.953 250 54	1.17	11.99	1.27	0.49	0.54	0.78	0.62	0.69	−34	+	6	−	1	+19	+	1	+	2	+	0	+	0	+	8	−39	0	1.14
109239	22 07 49.09	−38 45 18.0	8.90	H	331.954 535 76	−38.755 004 35	3.59	12.23	−8.90	1.10	0.94	1.48	1.21	0.87	+23	−11	−35	−	6	−21	+41	−	4	+21	−10	+	8			0	−0.01
109240	22 07 50.33	+21 42 11.1	5.79	H	331.959 719 53	+21.703 091 55	4.67	−45.18	−68.26	0.61	0.47	0.67	0.75	0.51	+	8	+	5	−	3	−11	+	2	+	9	+	0	+	9	+	3	2	−1.01
109241	22 07 51.04	−21 35 34.7	7.92	H	331.962 672 76	−21.592 985 94	11.74	66.66	−27.93	0.87	0.60	0.98	1.11	0.65	+33	+	4	−	1	−13	+14	+27	+11	−14	+32	+52			0	−0.23
109242	22 07 51.45	+41 36 45.4	9.08	H	331.964 378 81	+41.612 623 62	4.17	−2.59	−8.64	0.59	0.68	1.00	0.66	0.87	−32	+	9	−11	+22	+	0	+12	−	1	−	1	−	9	−39			0	0.96
109243	22 07 52.40	−16 00 05.2	8.62	H	331.968 335 23	−16.001 453 57	−2.43	5.67	8.74	1.10	0.69	1.16	1.33	0.65	+	6	−	8	+21	+	2	+	1	+	7	−	4	−19	−	3	−12	0	0.78
109244	22 07 52.44	−17 55 52.0	8.71	H	331.968 501 16	−17.931 104 26	1.61	26.62	−9.32	1.35	0.84	1.32	2.02	0.92	+17	+	2	+	3	+12	+36	+	2	+28	+28	−	6	+16			0	1.00
109245	22 07 53.19	−70 17 08.6	6.67	H	331.971 613 84	−70.285 733 57	33.48	73.69	11.00	0.49	0.47	0.67	0.57	0.51	−11	−	7	−12	+12	+	1	+15	+	6	−17	−	7	−	3			0	0.02
109246	22 07 53.35	−33 46 02.8	9.50	H	331.972 283 61	−33.767 432 10	6.15	4.93	−19.95	1.15	0.96	1.47	1.32	0.93	+31	−	3	−	9	+	3	−	9	+33	−	2	+26	+	2	+19	0	−0.84
109247	22 07 53.40	+44 12 22.3	7.39	H	331.972 496 96	+44.206 183 93	1.27	21.95	4.91	0.54	0.54	0.79	0.65	0.65	−24	+	0	+	6	−	1	+	9	+	8	+	8	−11	+	3	−30	0	−1.12
109248	22 07 53.59	−05 29 49.5	8.34	H	331.973 306 62	−05.497 085 87	4.55	9.38	−2.53	0.99	0.63	1.08	1.17	0.68	+15	+20	−	7	+	2	+	4	+18	+	7	+10	+13	+21			0	2.19
109249	22 07 57.31	+55 54 26.1	9.50	H	331.988 812 21	+55.907 239 12	−0.87	4.85	−2.26	0.87	0.80	1.06	1.05	0.92	+	0	+	9	+	6	+	2	+13	+	2	+16	−	7	+17	+28	0	1.10
109250 H	22 07 57.41	+60 59 58.8	9.43	H	331.989 207 74	+60.999 657 82 *	0.88	−1.91	−4.07	0.87	0.73	0.90	1.03	0.80	−	2	−12	+16	+38	+	6	−18	+15	+	3	−	4	+17			0	−0.28
109251	22 07 58.07	+13 04 09.5	7.80	H	331.991 968 31	+13.069 305 08	6.52	33.86	−3.98	0.79	0.64	0.92	1.08	0.82	+34	−10	−	8	−13	+29	+14	+30	+22	+	7	+27					2	0.38
109252 H	22 07 58.69	+56 34 43.7	7.96	G	331.994 552 78	+56.578 811 79 *	6.47	37.41	24.44	0.54	0.52	0.66	0.56	0.55	+	1	+	8	+11	+	2	+10	−10	+14	−	6	+	5	+22			0	0.79
109253	22 08 00.28	+63 44 08.0	8.01	G	332.001 182 75	+63.735 558 25	1.41	−2.99	−1.48	0.62	0.56	0.68	0.80	0.64	−20	−	3	+11	+15	+	1	+20	−	3	−	4	−	8	−32			0	1.44
109254 H	22 08 00.45	+61 07 22.1	8.43	H	332.001 892 57	+61.122 800 81 A	1.22	−3.95	−4.51	1.37	1.13	1.24	1.32	1.09	−	1	−	3	+14	+31	−	2	−	8	+	5	−	7	+	8	+17	1	0.98
109255	22 08 00.53	+34 15 49.4	9.88	H	332.002 218 34	+34.263 732 41	6.09	−25.61	−38.11	0.85	1.06	1.42	1.07	1.29	+19	−	2	−12	+15	+	9	−	2	+13	−24	+26	+35			1	0.88
109256	22 08 00.72	−32 22 48.8	8.79	H	332.002 992 42	−32.380 232 65	2.15	27.64	−0.25	1.06	0.98	1.48	1.20	0.98	+35	−32	−36	−19	−18	+44	−	7	+29	+12	+32			2	−0.57
109257	22 08 04.68	+29 41 01.8	8.05	H	332.019 487 27	+29.683 830 31	7.35	15.97	−21.14	0.60	0.76	0.85	0.74	0.95	+29	+	1	−20	+35	−	4	−	6	−	2	−23	+10	+36			0	0.78
109258	22 08 07.43	+68 31 08.5	8.10	G	332.030 978 95	+68.519 038 22	7.40	4.92	4.95	0.64	0.63	0.73	0.83	0.61	−15	−21	+26	+	0	+17	+12	+10	+	1	+	6	+	5			0	−1.25
109259	22 08 08.00	−30 48 05.4	10.12	H	332.033 348 39	−30.801 504 18	4.07	−1.03	−5.00	1.35	1.19	1.82	1.63	1.23	+19	−	3	−50	−19	−	6	+11	−	8	+34	−20	+35			0	2.80
109260	22 08 08.71	−66 29 50.0	8.10	H	332.036 310 33	−66.497 229 89	5.86	21.50	−27.75	0.54	0.59	0.87	0.63	0.59	−14	+	2	−26	+	3	+	9	−	2	+	8	−	9	−	4	−	8	0	2.01
109261	22 08 09.02	+17 33 31.0	7.13	H	332.037 597 49	+17.558 623 76	5.36	28.05	−2.60	0.68	0.51	0.72	0.82	0.53	+10	−	9	−	6	−38	+10	+17	+11	−	8	−	3	+	5			2	−0.97
109262	22 08 09.84	−51 13 04.5	10.52	G	332.041 012 96	−51.217 926 63	20.32	339.60	−142.73	1.08	0.96	1.94	1.32	1.14	+13	−17	−	1	−	6	+	4	+17	+	8	−	9	−19	+29			1	1.53
109263	22 08 10.73	+64 04 13.1	9.78	H	332.044 711 69	+64.070 311 81	3.83	−0.94	−5.79	0.87	0.83	1.00	1.15	0.93	−14	−16	+21	−18	+	3	+	24	+	0	−	15	−	9	−19			0	−0.70
109264	22 08 11.48	−36 36 30.2	8.90	H	332.047 814 11	−36.608 392 45	2.96	−9.56	3.39	1.02	0.81	1.32	1.18	0.80	+23	+13	−	6	+25	+11	+36	+13	+30	−	3	+23			0	1.24
109265	22 08 11.89	−03 31 52.8	7.68	H	332.049 553 67	−03.531 327 82	4.76	19.52	2.00	1.04	0.60	1.02	1.18	0.62	+	9	+22	−	4	−23	−	7	+10	−	2	−12	+	6	−	7	2	−0.99
109266	22 08 13.23	−61 38 24.0	8.27	H	332.055 111 83	−61.640 007 31	14.03	175.54	−112.23	0.44	0.61	0.97	0.57	0.61	−11	−	3	−23	+	2	+	5	+	8	+	6	−	2	−	9	−13	1	1.04
109267	22 08 13.58	−57 29 32.5	8.85	H	332.056 563 31	−57.492 348 42	5.36	16.18	−20.10	0.77	0.89	1.32	0.99	0.87	+	9	−	4	−24	+	3	+	8	+	8	+11	−	7	−	5	+34	4	2.71
109268	22 08 13.88	−46 57 38.2	1.73	1 G	332.057 818 38	−46.960 615 93	32.16	127.60	−147.91	0.49	0.50	0.82	0.44	0.50	+37	−40	−23	−10	+	9	+17	+	22	+34	−24	+25			1	−0.23
109269	22 08 14.80	−23 43 55.9	7.84	G	332.061 669 39	−23.732 182 75	3.39	−25.54	7.55	0.93	0.72	1.03	1.23	0.79	+22	−18	−17	−24	−18	+38	−16	−29	+15	+	8					2	0.51
109270	22 08 15.18	−50 41 37.0	10.31	G	332.063 238 89	−50.693 604 81	13.26	195.43	−82.14	1.05	0.91	1.97	1.33	1.13	+29	−18	−10	+	2	−	2	+12	+	3	+	7	−18	+35			1	1.25
109271	22 08 15.23	−17 50 08.8	7.84	H	332.063 475 98	−17.835 785 73	17.13	163.71	−107.23	0.93	0.62	1.07	1.36	0.67	+27	−	2	+	1	+15	+25	+19	+19	+	4	−27	+12			0	1.67
109272	22 08 16.28	+49 47 49.2	6.41	H	332.067 850 15	+49.797 000 84	2.93	1.57	−4.37	0.42	0.45	0.58	0.46	0.51	−	4	+	9	−13	+	7	+	3	−	6	+	6	−19	+17	+	8	0	−3.01
109273	22 08 16.47	+72 46 06.7	7.09	2 H	332.068 610 66	+72.768 536 62	1.68	−9.85	−8.63	0.52	0.49	0.58	0.59	0.50	−	7	−	9	+15	−	5	+	1	−	5	+	1	−	3	+	3	+11	0	0.55
109274	22 08 16.68	−63 30 18.4	7.70	G	332.069 479 36	−63.505 119 34	10.40	8.40	−13.86	0.46	0.50	0.79	0.53	0.50	−27	+	0	−10	−14	+	9	−	4	+	8	−15	+	3	−32	1	−1.31
109275	22 08 17.20	+69 58 56.3	7.87	G	332.071 651 59	+69.982 318 86	4.33	12.11	1.30	0.58	0.51	0.63	0.73	0.52	+	0	−14	+19	+	1	+17	+21	+11	+	6	−	3	+	8	0	−1.81
109276	22 08 17.26	+25 32 37.0	6.08	H	332.071 902 11	+25.543 611 78	11.60	−26.97	−36.91	0.56	0.52	0.71	0.61	0.58	+13	+18	−	2	−	2	−	6	−21	−	8	−17	−10	+19			0	−1.48
109277	22 08 17.53	−50 06 19.7	7.89	H	332.073 043 49	−50.105 474 54	7.02	−10.68	19.28	0.61	0.57	1.13	0.79	0.65	+46	−30	−28	+21	+	5	−	1	+13	+22	−21	+43			1	−0.39
109278	22 08 17.94	+60 53 47.0	9.53	2 H	332.074 733 70	+60.896 379 18 A	9.90	−6.96	−5.00	3.55	2.75	3.13	3.68	2.83	+	1	−	6	+14	+29	+	4	−	2	+	9	−	7	+16	+16	18	3.36
109279	22 08 17.98	+04 31 04.6	8.58	H	332.074 912 82	+04.517 950 28	0.25	−23.76	−16.51	0.94	0.79	1.06	1.08	0.98	+10	−19	−	4	−13	+	4	+22	+	4	0	+10	+16	+22			0	1.54
109280	22 08 18.28	−82 38 02.2	8.19	H	332.076 149 95	−82.633 947 59	1.90	−6.40	−25.57	0.67	0.61	0.80	0.80	0.66	+	2	−22	−25	−	5	+	4	+	0	+	4	−11	−	9	−22	0	−1.81
109281 H	22 08 18.81	+24 09 25.1	6.57	H	332.078 389 71	+24.156 975 09 *	12.65	−55.38	−81.77	0.74	0.57	0.79	0.93	0.61	+18	+27	−	3	−34	−	6	−17	−	5	−20	+	1	+	9	0	−0.20
109282	22 08 19.36	−34 33 21.1	6.98	2 H	332.080 669 88	−34.555 847 89	3.08	20.83	−62.47	0.79	0.56	0.95	0.93	0.56	+10	+	9	−18	+12	−13	+31	−	7	+22	−	7	+	3			0	1.59
109283 H	22 08 21.25	+49 13 15.6	7.97	2 H	332.088 528 52	+49.221 010 90 A	3.88	4.85	0.64	0.76	0.79	0.93	0.73	0.76	−18	+	2	−	4	+	3	+14	−	1	+18	−24	+21	−	1	1	0.83
109284	22 08 22.49	−69 17 11.4	9.51	G	332.093 689 44	−69.286 496 16	11.00	13.61	−192.32	0.89	0.90	1.26	0.92	0.95	−19	−12	+	9	−	6	−	2	+10	−	3	−21	−	8	−23	1	0.37
109285	22 08 22.95	−32 59 18.2	4.50	H	332.095 638 30	−32.988 398 27	25.01	80.05	−28.88	1.05	0.77	1.29	1.25	0.75	+15	+	6	−13	−	9	−16	+35	−	8	+13	+	4	+	4	0			
109286	22 08 23.42	−48 19 48.8	10.07	H	332.097 586 91	−48.330 218 07	1.73	−9.91	−3.47	1.27	1.28	2.14	1.57	1.28	+35	−26	−45	+	2	+25	−21	+25	+48	−35	+31					2	−1.48
109287	22 08 24.64	−53 21 22.5	9.36	H	332.102 650 37	−53.356 244 77	4.56	19.28	−27.52	0.80	0.68	1.28	1.02	0.75	+19	−16	−13	−	5	−	7	+35	−	2	−15	+	5	+30			1	2.36
109288 H	22 08 25.32	−44 03 26.2	9.22	G	332.105 498 90	−44.057 281 79 *	9.20	37.91	22.88	1.32	0.95	1.47	2.09	1.05	+14	−11	−26	−	3	−15	+10	−	4	+39	−17	+	1			0	−0.34
109289	22 08 25.93	−34 02 37.4	4.99	1 H	332.108 033 68	−34.043 721 11	6.18	5.98	−49.37	0.66	0.49	0.83	0.72	0.46	+19	+12	−23	−10	−13	+27	−	4	+24	−	2	+15			0	−0.75
109290	22 08 26.15	−16 32 34.8	7.30	H	332.108 950 44	−16.543 006 53	7.00	22.50	11.27	0.94	0.59	0.97	1.21	0.56	+	8	+	0	+17	−14	+33	+14	+25	−	3	−	2	+	4	0	−1.44		
109291	22 08 26.55	−59 29 16.5	8.55	H	332.110 628 81	−59.487 915 50	7.92	15.33	8.22	0.73	0.68	1.13	0.91	0.71	−10	+	5	−18	−17	+	1	−	5	+	0	+	1	−	1	−	5	0	0.14
109292	22 08 26.66	−44 43 30.8	8.25	G	332.111 075 52	−44.725 224 93	8.66	69.66	−6.20	1.08	0.83	1.22	1.28	0.88	+20	+10	−20	−12	+12	+	7	+	8	+45	+	0	+31			0	−0.58
109293	22 08 26.74	+19 29 42.0	9.28	H	332.111 398 54	+19.494 986 31	−0.48	−3.34	−44.78	1.14	0.88	1.34	1.22	1.02	+16	−12	−18	+32	+	5	−27	+	1	−13	+12	+17					7	−1.06
109294	22 08 27.62	−34 59 34.0	9.64	H	332.115 095 54	−34.992 780 22	3.51	15.00	−39.00	1.06	0.91	1.42	1.17	0.90	+16	+14	−	7	−	1	−	2	+27	+	2	+22	−	2	+10			0	0.76
109

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
109201	9.001	0.015	7.091	0.007		1.620	0.014	T	2.27	0.06	O	6.9254	0.0084	0.048	82		6.85	7.02		U 2			1 S							S
109202	10.048	0.028	8.961	0.019		0.940	0.026	T	0.93	0.02	L	9.0278	0.0021	0.016	83		9.00	9.07					1						
109203	10.527	0.022	9.576	0.016		0.838	0.020	T	0.88	0.02	L	9.6363	0.0022	0.032	248		9.58	9.70					1 S						
109204	8.790	0.015	7.582	0.010		1.033	0.014	T	1.01	0.01	L	7.6424	0.0012	0.010	91		7.62	7.66					1						S
109205	6.632	0.005	6.221	0.005		0.389	0.007	T	0.45	0.01	L	6.2629	0.0012	0.012	134		6.24	6.29		U 2 C			1							S
109206	10.325	0.034	8.532	0.014		1.493	0.029	T	1.52	0.04	L	8.4949	0.0020	0.017	96		8.47	8.52					1 S						
109207	9.748	0.024	8.858	0.018		0.763	0.003	G	0.81	0.00	H	8.9442	0.0013	0.012	75		8.93	8.99		C			1 S						
109208	10.346	0.025	9.883	0.025		0.450	0.028	T	0.52	0.03	L	9.9454	0.0023	0.033	157		9.88	10.01		C			1 S						
109209	6.115	0.003	5.773	0.004		0.331	0.006	T	0.39	0.01	L	5.8215	0.0007	0.007	90		5.81	5.84		C			1						S
109210	10.658	0.041	10.064	0.038		0.555	0.041	T	0.63	0.04	L	10.1309	0.0033	0.028	72		10.09	10.20					1						
109211	8.437	0.014	8.293	0.017	*	0.174	0.015	G	0.19	0.02	H	*	8.3155	0.0024	0.016	88	*	8.28	8.34		D	22075+2538	I 1	2 C S A	AB	120	0.172	0.005	0.55	0.20	S
109212	8.410	0.012	6.518	0.008		1.605	0.012	T	2.12	0.08	O		6.3814	0.0111	0.063	92		6.26	6.47		U 2 C			1 S						S
109213	10.153	0.025	8.747	0.013	*	1.180	0.015	G	1.14	0.01	H	*	8.7265	0.0017	0.017	133	*	8.70	8.75		D	22075+5631	H 1	2 C A	AB	330	0.482	0.006	1.74	0.03	
109214	7.701	0.006	7.065	0.005		0.585	0.006	T	0.66	0.01	L		7.1134	0.0009	0.011	169		7.10	7.13		C			1						S
109215	11.147	0.057	10.530	0.056		0.574	0.070	T	0.65	0.07	L		10.6616	0.0043	0.033	84		10.57	10.72		C			1						G
109216	9.961	0.024	9.874	0.032		0.085	0.037	T	0.10	0.04	L		9.8087	0.0026	0.023	144		9.78	9.85		C			1						G
109217	8.804	0.011	8.785	0.014		0.050	0.015	G	0.06	0.01	H		8.8089	0.0016	0.016	131		8.78	8.84					1						
109218	6.944	0.005	7.043	0.007		−0.083	0.002	G	−0.06	0.00	H		7.0339	0.0012	0.011	92		7.02	7.06		M			1						S
109219	10.342	0.024	9.000	0.013		1.138	0.021	T	1.10	0.02	L		9.0723	0.0018	0.021	161		9.05	9.12		C			1						
109220	6.893	0.005	6.732	0.004		0.140	0.003	G	0.15	0.00	H		6.7566	0.0010	0.006	71		6.75	6.77		C			1						S
109221	9.494	0.013	8.866	0.011		0.579	0.013	T	0.65	0.01	L		8.9199	0.0017	0.018	163		8.89	8.95					1 G						
109222	9.143	0.020	7.933	0.013		1.035	0.019	T	1.01	0.02	L		9.7767	0.0015	0.009	60		7.96	7.99		C			1						S
109223	8.911	0.016	7.529	0.010		1.169	0.015	T	1.13	0.01	L		7.5745	0.0011	0.008	87		7.56	7.59					1						S
109224	8.693	0.017	8.341	0.018		0.334	0.023	T	0.39	0.03	L		8.3994	0.0020	0.016	80		8.38	8.43		C			1						
109225	10.044	0.030	8.734	0.016		1.113	0.027	T	1.08	0.03	L		8.7402	0.0021	0.020	125		8.71	8.77					1						
109226	8.219	0.011	7.200	0.008		0.888	0.010	T	0.89	0.01	L		7.2597	0.0010	0.007	79		7.24	7.27		C			1 G						S
109227	9.557	0.018	8.475	0.012		0.936	0.017	T	0.93	0.01	L		8.5329	0.0017	0.018	125		8.49	8.57		C			1						
109228	8.359	0.009	7.250	0.006		0.953	0.003	G	1.00	0.00	I		7.2972	0.0010	0.010	150		7.28	7.32					1						S
109229	9.402	0.020	7.817	0.010		1.329	0.018	T	1.29	0.02	L		7.8306	0.0012	0.010	63		7.81	7.84		C			1						S
109230	7.558	0.008	7.188	0.007		0.351	0.010	T	0.41	0.01	L		7.2386	0.0009	0.009	82		7.23	7.25					1						S
109231	10.128	0.028	9.744	0.030		0.364	0.038	T	0.43	0.04	L		9.8351	0.0035	0.028	97		9.79	9.88					1						G
109232	10.263	0.019	8.255	0.007		1.664	0.016	T	1.69	0.02	L		8.1532	0.0013	0.017	250		8.12	8.19					1						
109233	9.271	0.011	7.672	0.006		1.340	0.010	T	1.30	0.01	L		7.6772	0.0012	0.015	188		7.65	7.71					1						S
109234	8.856	0.010	8.509	0.010		0.338	0.015	G	0.39	0.02	H		8.5497	0.0016	0.019	167		8.52	8.59					1 G						
109235	9.593	0.016	8.970	0.015		0.580	0.019	T	0.65	0.02	L		9.0346	0.0012	0.015	122		9.01	9.07					1						
109236	8.875	0.014	7.586	0.009		1.090	0.020	G	1.05	0.02	H		7.6402	0.0011	0.012	84		7.62	7.66		C			1						S
109237	10.625	0.037	9.608	0.025	A	0.876	0.035	T	0.92	0.04	L		9.6790	0.0133	0.031	137	A	9.63	9.74			22078+3737	H 1	2 C D	AB	212	10.839	0.042	2.81	0.19	D
109238	7.896	0.007	7.895	0.008		0.006	0.010	T	0.03	0.01	L		7.9045	0.0036	0.031	169		7.87	7.95		U 2			1						S P
109239	10.670	0.045	9.029	0.021		1.423	0.004	G	1.41	0.01	H		9.0431	0.0061	0.032	74		9.00	9.08		R			1 S						S
109240	5.685	0.003	5.775	0.004		−0.077	0.004	T	−0.06	0.01	L		5.7714	0.0008	0.007	84		5.76	5.79					1						S
109241	8.423	0.009	7.960	0.009		0.453	0.015	G	0.52	0.02	H		8.0208	0.0010	0.011	108		8.00	8.04					1						S
109242	9.236	0.011	9.091	0.014		0.140	0.017	T	0.15	0.02	L		9.1266	0.0017	0.019	194		9.09	9.16		C			1						
109243	10.608	0.053	8.833	0.021		1.479	0.045	T	1.50	0.07	L		8.7516	0.0024	0.016	66		8.72	8.78					1						
109244	10.022	0.035	8.834	0.022		1.018	0.032	T	0.99	0.03	L		8.8791	0.0023	0.019	57		8.85	8.91					1						
109245	7.285	0.005	6.730	0.004		0.544	0.004	G	0.62	0.00	H		6.7844	0.0011	0.009	146		6.77	6.81					1						S
109246	10.093	0.033	9.628	0.033		0.451	0.037	T	0.52	0.04	L		9.5981	0.0021	0.021	90		9.57	9.63		C			1						
109247	9.401	0.013	7.567	0.006		1.526	0.011	T	1.57	0.02	L		7.5067	0.0014	0.013	144		7.48	7.53					1						S
109248	8.523	0.014	8.339	0.015		0.176	0.019	T	0.19	0.02	L		8.3997	0.0025	0.015	64		8.38	8.43					1						S
109249	9.834	0.026	9.532	0.030		0.310	0.015	G	0.36	0.02	H		9.5743	0.0028	0.026	120		9.53	9.61					1						G
109250	9.603	0.020	9.422	0.024	*	0.173	0.029	T	0.19	0.03	L	*	9.4917	0.0016	0.020	126	*	9.46	9.52		C	22080+6100	H 1	2 C S C	AB	307	0.167	0.046	1.46	1.13	G
109251	8.142	0.010	7.832	0.010		0.299	0.011	G	0.34	0.01	H		7.8766	0.0016	0.013	96		7.86	7.91					1						S
109252	8.308	0.008	7.973	0.010	*	0.303	0.009	G	0.35	0.01	H	*	8.0198	0.0014	0.013	135	*	8.00	8.04		C	22080+5635	H 1	2 C S A	AB	57	0.117	0.023	1.56	0.95	
109253	8.338	0.009	8.048	0.010		0.276	0.013	T	0.31	0.02	L		8.0742	0.0017	0.012	106		8.05	8.09		C			1						S
109254	8.482	0.013	8.396	0.017	*	0.084	0.020	T	0.10	0.02	L	*	8.4693	0.0016	0.016	117	*	8.44	8.50		D	22080+6107	I 1	2 C A	AB	270	5.536	0.004	0.89	0.02	
109255	10.474	0.032	9.954	0.032		0.488	0.041	T	0.56	0.04	L		9.9873	0.0025	0.026	126		9.93	10.04		C			1						G
109256	9.275	0.019	8.859	0.019		0.407	0.022	T	0.47	0.02	L		8.8804	0.0022	0.019	74		8.84	8.91		C			1						S
109257	8.215	0.009	8.065	0.010		0.140	0.015	G	0.15	0.01	H		8.0970	0.0012	0.013	103		8.07	8.13		C			1						S
109258	8.626	0.010	8.144	0.010		0.454	0.013	T	0.52	0.01	L		8.2073	0.0013	0.014	124		8.18	8.24					1						
109259	10.702	0.046	10.208	0.048		0.476	0.051	T	0.55	0.05	L		10.2285	0.0036	0.025	75		10.20	10.28		C			1						
109260	8.236	0.007	8.114	0.008		0.118	0.010	T	0.13	0.01	L		8.1471	0.0017	0.016	163		8.12	8.17					1						S
109261	7.215	0.006	7.131	0.008		0.061	0.010	G	0.07	0.01	H		7.1536	0.0012	0.009	94		7.14	7.17		C			1						S
109262	12.059	0.113	10.643	0.049		1.186	0.009	G	1.30	0.00	A		10.6407	0.0022	0.027	165		10.58	10.70		D			1						G
109263	10.138	0.032	9.834	0.037		0.289	0.046	T	0.33	0.06	L		9.8586	0.0025	0.029	102		9.82	9.91					1						G
109264	10.220	0.029	9.024	0.018		1.024	0.027	T	1.00	0.02	L		9.0665	0.0023	0.018	80		9.03	9.10		C			1						
109265	7.873	0.010	7.702	0.013		0.164	0.015	T	0.18	0.01	L		7.7364	0.0013	0.014	51		7.71	7.76		D			1						S
109266	8.867	0.008	8.319	0.007		0.544	0.015	G	0.62	0.01	H		8.3835	0.0013	0.019	248		8.35	8.41					1						S
109267	10.487	0.035	8.955	0.017		1.287	0.031	T	1.25	0.03	L		9.0042	0.0026	0.027	133		8.96	9.05					1						
109268	1.675	0.004	1.757	0.004		−0.070	0.005	T	−0.05	0.01	L		1.6983	0.0004	0.005	133		1.69	1.71		M	22082−4658	I 1	1 S							S
109269	9.125	0.018	7.943	0.012		1.010	0.015	G	0.99	0.01	H		8.0065	0.0011	0.010	68		7.99	8.02					1						S
109270	11.514	0.063	10.401	0.036		0.914	0.005	G	0.96	0.01	I		10.4620	0.0022	0.030	168		10.40	10.51					1						
109271	8.514	0.016	7.902	0.014		0.564	0.015	G	0.64	0.01	H		7.9610	0.0013	0.008	57		7.95	7.97		C			1						S
109272	8.482	0.011	6.581	0.004		1.579	0.009	T	1.60	0.01	L		6.5313	0.0010	0.010	148		6.51	6.55			22083+4948	I 1	1						S
109273	9.584	0.018	7.338	0.007		1.897	0.016	T	3.03	0.03	O		6.9909	0.0056	0.052	127		6.91	7.06		U 2			1 S						S
109274	8.181	0.006	7.746	0.006		0.420	0.003	G	0.49	0.00	H		7.7993	0.0012	0.014	232		7.78	7.82					1						S
109275	7.888	0.008	7.866	0.009		0.030	0.010	G	0.05	0.01	H		7.8858	0.0012	0.010	123		7.87	7.91					1						S
109276	6.438	0.004	6.110	0.005		0.311	0.006	T	0.36	0.01	L		6.1574	0.0006	0.006	88		6.15	6.17					1						S
109277	8.221	0.006	7.917	0.007		0.289	0.009	T	0.33	0.01	L		7.9642	0.0011	0.015	200		7.94	7.99					1						S
109278	9.716	0.019	9.494	0.024	A	0.240	0.015	G	0.27	0.02	H		9.6027	0.0275	0.044	122	A	9.54	9.69		U	22083+6054	I 1	2 C A	AB	45	15.850	0.025	1.32	0.11	G
109279	9.780	0.025	8.690	0.018		0.942	0.024	T	0.93	0.02	L		8.7446	0.0019	0.014	49		8.72	8.76		C			1						
109280	9.979	0.020	8.379	0.010		1.341	0.018	T	1.31	0.02	L		8.3392	0.0015	0.018	145		8.30	8.37					1						
109281	7.630	0.007	6.656	0.004	*	0.842	0.006	T	0.86	0.00	L	*	6.7097	0.0009	0.006	74	*	6.70	6.72		D	22083+2409	H 1	2 C S A	AB	311	0.119	0.005	0.39	0.28	S
109282	8.936	0.014	7.188	0.007		1.486	0.013	T	2.36	0.04	O		7.0126	0.0035	0.023	77		6.97	7.06		U 2			1 S						S
109283	7.945	0.009	7.953	0.012	*	−0.003	0.014	T	0.02	0.01	L	*	7.9725	0.0017	0.020	136	*	7.95	8.07	1.95	P 1 A	22084+4913	I 1	2 C A	AB	56	6.704	0.021	3.54	0.11	S
109284	10.547	0.028	9.571	0.019		0.791	0.002	G	0.83	0.00	H		9.6533	0.0027	0.029	167		9.60	9.71		C			1						
109285	4.575	0.003	4.503	0.003		0.054	0.005	G	0.06	0.02	A		4.5232	0.0007	0.004	74		4.52	4.53		C			1 X						S
109286	10.516	0.032	10.082	0.035		0.410	0.044	T	0.48	0.05	L		10.1671	0.0039	0.030	105		10.12	10.22		C			1						
109287	9.907	0.019	9.404	0.019		0.484	0.020	T	0.56	0.02	L		9.4722	0.0017	0.020	128		9.44	9.51					1						
109288	10.060	0.027	9.320	0.023	*	0.975	0.015	G	0.96	0.01	H	*	9.3732	0.0024	0.015	71	*	9.35	9.41		D	22084−4403	H 1	2 C S A	AB	332	0.179	0.007	0.33	0.22	
109289	6.947	0.006	5.151	0.003		1.499	0.002	G	1.50	0.06	F		5.1195	0.0010	0.008	83		5.11	5.13		M			1						S
109290	8.410	0.013	7.410	0.008		0.874	0.011	T	0.88	0.01	L		7.4620	0.0013	0.012	69		7.45	7.48		C			1						S
109291	9.124	0.012	8.597	0.011		0.503	0.012	T	0.58	0.01	L		8.6653	0.0019	0.024	153		8.63	8.71					1						S
109292	8.755	0.015	8.274	0.015		0.478	0.015	G	0.55	0.02	H		8.3511	0.0018	0.016	74		8.33	8.38					1						S
109293	11.293	0.075	9.452	0.025		1.563	0.065	T	1.70	0.18	O		9.3826	0.0027	0.020	86		9.35	9.42					1						
109294	10.537	0.044	9.672	0.032		0.758	0.042	T	0.80	0.03	L		9.7739	0.0025	0.024	88		9.72	9.82		C			1						
109295	9.069	0.012	7.673	0.007		1.180	0.011	T	1.14	0.01	L		7.7079	0.0014	0.011	120		7.69	7.73		C			1						
109296	8.026	0.006	7.985	0.007		0.043	0.009	T	0.06	0.01	L		7.9858	0.0009	0.015	258		7.96	8.01		C	22085+3922	I 1	1						S
109297	10.890	0.063	9.215	0.025		1.400	0.054	T	1.38	0.07	L		9.2176	0.0028	0.023	67		9.19	9.25		C			1						
109298	8.779	0.014	7.454	0.009		1.125	0.013	T	1.09	0.01	L		7.4952	0.0008	0.008	72		7.48	7.51		C			1						S
109299	9.398	0.019	8.894	0.018		0.484	0.020	T	0.56	0.02	L		8.9512	0.0024	0.017	71		8.93	8.99					1						S
109300	8.566	0.012	7.152	0.007		1.194	0.011	T	1.15	0.01	L		7.1996	0.0015	0.010	89		7.18	7.22					1						S
																												64589	55485	

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
109301	22 08 40.44	+00 03 40.2	8.55	H	332.168 513 95	+00.061 177 36		4.14	16.65	−19.29	1.03	0.82	1.20	1.28	1.11	+ 8	+15	−18	+ 2	+ 9	+20	+13	+26	+24	+27	0	0.36
109302	22 08 40.48	+00 20 17.1	7.71	H	332.168 667 04	+00.338 076 31		1.84	9.14	−17.07	0.90	0.77	1.06	1.12	0.97	+ 9	+14	− 8	+30	−10	+34	− 5	+23	+22	+31	3	−0.11
109303	22 08 40.86	+45 44 31.7	6.11	3 H	332.170 257 91	+45.742 138 01		23.79	−52.48	47.88	0.40	0.42	0.59	0.46	0.53	−27	+10	− 4	− 7	+ 9	− 6	+10	−15	+15	−35	1	1.06
109304	22 08 41.81	+47 56 00.9	6.86	H	332.174 189 83	+47.933 587 74		5.41	30.51	−21.91	0.45	0.46	0.60	0.49	0.51	−30	+14	−12	−22	+16	+ 0	+19	−27	+25	−31	1	0.19
109305	22 08 42.38	+10 29 14.3	9.32	H	332.176 599 44	+10.487 299 64		−0.99	−5.69	7.11	1.27	0.89	1.49	2.01	1.13	+10	+ 7	−19	− 1	+16	+ 3	+ 8	−35	+40	−15	0	0.14
109306	22 08 42.63	−33 07 32.7	6.37	H	332.177 644 44	−33.125 751 26		12.70	13.66	24.90	0.74	0.51	0.89	0.86	0.48	+ 6	+11	−10	+16	−21	+33	−14	+30	+ 5	− 3	0	−0.38
109307	22 08 43.00	+56 01 50.6	8.33	H	332.179 156 25	+56.030 727 67		8.53	−61.49	−49.45	0.64	0.58	0.76	0.75	0.64	+ 0	+14	+ 6	+ 2	+12	− 5	+18	−14	+12	+24	1	0.55
109308	22 08 44.12	−59 17 06.8	7.84	1 H	332.183 825 27	−59.285 228 24		1.72	4.10	12.37	0.65	0.57	0.96	0.81	0.61	− 4	−14	−13	−17	− 1	+14	+ 2	− 5	−11	+ 0	0	−0.40
109309	22 08 45.59	+07 19 54.4	8.68	H	332.189 977 77	+07.331 791 28		2.10	19.21	−51.41	1.05	0.90	1.22	1.42	1.15	+36	− 8	− 2	+20	+ 9	+12	+ 7	− 2	+ 9	+30	0	1.22
*109310	22 08 45.68	+39 25 28.5	8.43	H	332.190 350 56	+39.424 572 95		19.22	118.74	59.51	0.60	0.72	1.14	0.69	0.88	−59	+22	−21	− 3	+11	− 3	+14	−29	+18	−58	0	0.01
*109311	22 08 45.60	+61 01 20.7	7.32	2 G	332.189 985 92	+61.022 430 50		1.65	−1.93	−5.05	0.59	0.51	0.61	0.69	0.57	+ 0	− 7	+13	+42	+ 7	−16	+17	+ 2	− 4	+21	0	−1.25
*109312 H	22 08 45.81	−25 46 12.8	7.11	H	332.190 865 96	−25.770 235 79	*	5.26	39.02	−37.82	1.91	1.54	1.16	1.14	0.83	−16	− 9	− 3	+22	−14	+ 7	−16	+24	+ 8	+28	2	0.71
*109313	22 08 45.79	+34 30 15.9	8.69	H	332.190 811 49	+34.504 409 83		3.64	−6.74	−9.22	0.73	0.86	1.20	0.90	1.04	+13	+ 4	−11	+ 1	+ 8	+ 8	+14	−24	+32	+33	0	−1.00
109314	22 08 46.13	+08 53 49.1	9.35	H	332.192 195 83	+08.896 971 17		4.03	9.57	2.47	1.17	0.94	1.31	1.33	1.20	+38	+14	+11	−19	+ 9	− 3	+14	−20	+10	+38	0	−0.22
109315	22 08 46.18	+38 07 56.2	10.44	H	332.192 416 39	+38.132 288 72		0.59	4.53	4.80	2.06	1.94	3.02	2.94	2.49	−24	+15	−11	+13	− 1	− 3	− 3	−26	+17	−35	0	
109316	22 08 47.37	−13 18 01.6	6.91	H	332.197 385 66	−13.300 437 23		20.40	95.63	−10.56	0.84	0.53	0.90	1.01	0.49	+17	−17	− 2	−22	+17	+ 8	+12	−12	+ 5	+ 5	0	0.81
109317	22 08 49.26	−12 26 07.9	9.63	H	332.205 268 69	−12.435 519 06		3.59	−21.85	−27.94	1.38	0.95	1.63	1.63	0.92	+38	−11	−12	− 9	+12	+13	+ 8	− 3	+21	+36	0	0.88
109318	22 08 49.68	−37 46 45.7	7.94	H	332.207 010 22	−37.779 363 95		3.61	−27.17	−15.95	0.88	0.73	1.10	1.06	0.73	+29	− 8	−14	+29	+10	+31	+15	+33	+ 5	+33	0	2.89
109319	22 08 50.40	+22 08 19.6	7.20	1 H	332.209 985 59	+22.138 784 76		4.93	6.95	−5.26	0.74	0.54	0.78	0.79	0.58	+ 6	+22	− 8	−17	+ 9	− 1	+11	− 3	+12	+10	0	0.58
109320	22 08 51.58	+61 41 37.7	9.23	H	332.214 905 00	+61.693 810 83		−0.51	−0.77	−3.67	0.92	0.74	0.93	1.13	0.87	+ 0	+ 8	+10	+33	− 4	− 5	+ 0	+ 0	+ 2	+10	0	−0.20
109321	22 08 52.06	−31 45 28.3	10.31	H	332.216 905 66	−31.757 866 93		2.53	21.54	−38.68	1.48	1.21	1.97	1.71	1.19	+23	− 5	−29	− 1	−20	+38	−10	+17	+15	+25	2	0.05
109322	22 08 52.35	+04 14 09.6	7.39	G	332.218 142 34	+04.235 993 44		8.28	−3.58	−35.85	0.92	0.66	1.08	1.08	0.79	+ 3	+16	−21	−14	+ 0	+24	+12	−13	+42	+ 8	0	1.31
109323	22 08 55.31	−77 09 36.6	8.99	H	332.230 468 28	−77.160 177 35		7.00	−13.54	−41.10	0.72	0.68	0.91	1.01	0.90	−11	− 9	− 5	+ 8	− 8	− 2	− 6	+10	−15	−35	0	−0.06
*109324	22 08 55.61	+70 14 25.0	7.76	G	332.231 697 48	+70.240 264 04		12.21	77.77	−27.24	0.57	0.50	0.59	0.69	0.54	+ 1	− 5	+10	+19	+ 7	+ 8	+ 7	+11	− 8	+ 8	0	−0.65
*109325	22 08 55.59	−70 31 18.6	8.90	2 H	332.231 627 53	−70.521 839 57		1.22	20.63	−8.09	0.77	0.84	1.08	0.91	1.03	−15	− 4	−13	+ 2	+ 6	+ 1	+11	−25	− 1	+ 0	0	0.06
109326	22 08 55.70	−32 36 02.2	10.66	H	332.232 080 12	−32.600 611 95		−2.38	−25.70	20.45	1.76	1.57	2.18	2.05	1.77	+30	− 7	−20	− 8	+12	+21	+13	+49	− 6	+35	4	−0.18
109327	22 08 56.21	+03 04 57.0	8.29	H	332.234 202 93	+03.082 498 83		1.38	6.67	−11.12	0.99	0.89	1.24	1.32	1.00	+24	−10	−11	+16	− 9	+36	−11	− 8	+29	+18	0	0.30
109328	22 08 56.87	−63 53 20.7	7.60	H	332.236 959 61	−63.889 074 28		4.90	−11.10	−1.62	0.48	0.52	0.85	0.57	0.53	−21	+ 4	−11	−10	+ 7	− 8	+ 5	−17	+ 1	−23	0	−1.08
109329	22 08 57.55	−35 56 41.3	10.74	H	332.239 793 93	−35.944 809 60		2.63	3.73	2.36	1.71	1.40	2.02	2.12	1.48	+22	+ 4	+ 1	+27	+ 6	+21	+ 7	+35	+ 2	+13	0	0.65
109330	22 08 58.59	−17 53 41.7	9.61	G	332.244 129 68	−17.894 908 07		16.93	225.01	161.22	1.40	0.97	1.60	1.97	1.02	+24	+ 1	+ 4	+17	+ 6	+26	+ 0	− 9	−20	+ 0	0	−0.88
109331	22 08 58.97	−50 37 08.8	10.27	H	332.245 688 51	−50.619 113 67		0.42	3.31	3.46	1.08	0.93	2.05	1.30	1.11	+28	−21	− 8	+ 3	− 2	+ 9	+ 3	+ 4	−16	+36	0	0.85
109332	22 08 58.99	−18 31 10.5	5.80	G	332.245 794 32	−18.519 573 49		0.48	0.17	− 7.47	0.80	0.57	0.93	1.09	0.56	+30	− 3	+17	+11	+14	+ 0	+ 7	−21	−22	+18	0	1.01
109333	22 08 59.40	−52 46 07.8	9.89	H	332.247 484 65	−52.768 840 69		5.75	49.63	−27.95	0.93	0.82	1.60	1.17	0.84	+ 2	− 1	− 6	+11	+ 0	+31	+ 3	−11	+15	+17	3	1.02
109334	22 08 59.75	−36 03 21.8	7.44	H	332.248 978 76	−36.056 066 33		5.12	−37.12	−24.28	0.79	0.66	0.92	0.92	0.72	+29	− 4	− 6	+36	+15	+18	+17	+36	− 9	+28	0	0.19
*109335	22 09 00.01	+67 43 23.4	10.11	H	332.250 054 82	+67.723 155 25	B	12.29	−4.24	−13.40	21.13	20.02	11.32	15.06	11.66	−13	−18	+14	− 8	+12	− 6	+11	−15	+ 1	− 4	2	0.59
*109336	22 09 00.01	+15 38 35.4	9.60	H	332.250 032 73	+15.643 160 83		1.83	10.21	−39.80	1.17	0.97	1.38	1.49	1.16	+32	+19	+ 1	+ 4	− 1	−11	− 1	−13	+ 8	+24	4	1.61
109337	22 09 00.24	+58 51 07.3	7.52	H	332.251 014 60	+58.852 023 03		5.02	32.34	− 6.44	0.58	0.51	0.65	0.66	0.57	− 8	+10	+12	+10	+ 9	+13	+ 8	− 5	+ 0	+ 0	4	1.61
109338	22 09 01.36	+48 31 07.4	7.15	1 H	332.255 654 99	+48.518 726 14		10.07	77.85	33.40	0.46	0.49	0.65	0.52	0.54	−19	− 2	− 5	−11	+19	− 4	+17	−13	+20	− 9	0	0.76
109339	22 09 01.81	+67 43 02.8	8.53	H	332.257 538 73	+67.717 449 47	A	5.75	−3.09	−14.43	1.97	1.89	1.68	2.20	1.77	−13	−18	+13	−10	+12	−10	+12	−13	+ 1	+ 0	2	0.59
109340	22 09 02.90	+51 02 45.1	9.12	3 T	332.262 096 12	+51.045 863 98	*	−1.53	−3.81	− 3.78	1.00	0.84	1.21	1.17	0.88	− 2	+13	+ 3	−36	+18	−17	+17	−28	+22	+ 3	8	4.44
109341	22 09 04.18	+09 27 04.3	7.92	H	332.267 409 60	+09.451 203 32		4.47	16.97	−10.70	1.01	0.71	1.14	1.16	0.94	+24	+34	+ 5	−32	+14	−13	+23	−20	+26	+22	0	−1.57
109342 H	22 09 05.23	+44 51 17.1	6.74	G	332.271 782 30	+44.854 755 45	*	5.00	18.79	−0.18	0.50	0.49	0.70	0.56	0.61	−38	+ 1	+ 0	− 4	+12	+ 0	+12	−13	+12	−40	0	−0.19
109343	22 09 05.61	+02 54 07.7	11.39	G	332.273 379 53	+02.902 136 51		27.63	297.98	−182.66	2.54	2.04	3.13	3.70	2.44	+16	+ 5	−12	+23	−10	+39	− 3	+ 8	+32	+13	0	−1.43
*109344 H	22 09 06.21	−18 29 05.8	8.24	H	332.275 879 03	−18.484 940 30	A	13.30	38.55	−18.03	2.87	2.20	2.20	2.63	1.63	+26	− 7	− 9	−41	− 8	+18	−13	−65	− 2	+17	1	0.88
*109345 H	22 09 05.99	+50 46 32.8	8.71	G	332.274 958 04	+50.775 768 27	A	0.30	−0.27	− 3.27	1.18	1.09	1.35	1.20	1.12	− 9	− 5	− 2	−15	+11	− 3	+ 8	−13	+11	+10	1	−0.03
109346	22 09 07.13	+46 23 27.6	9.93	H	332.279 699 39	+46.391 006 46		1.68	−9.79	− 7.42	0.90	0.79	1.17	1.08	0.98	−11	+28	−18	+18	+14	− 5	+14	− 5	+ 6	− 9	4	−0.22
109347	22 09 07.78	+07 29 33.7	8.32	H	332.282 405 76	+07.492 685 84		10.24	54.40	−19.33	1.04	0.75	1.25	1.44	1.11	+28	+13	−14	+10	+22	+ 3	+26	− 1	+35	+31	0	1.83
109348 H	22 09 08.53	+22 58 55.1	9.26	H	332.285 556 73	+22.981 967 52	A	0.97	4.53	− 1.13	1.53	1.35	1.58	1.51	1.37	+24	+12	−18	−12	+ 2	− 3	+ 3	−10	+ 9	+23	1	−0.27
109349	22 09 09.20	+02 44 02.6	6.64	H	332.288 319 36	+02.734 067 08		11.25	22.09	−21.08	0.76	0.68	0.96	1.03	0.85	+20	−13	−14	+11	− 7	+31	− 8	− 2	+36	+17	0	1.36
109350	22 09 12.37	+83 34 54.9	8.43	H	332.301 540 22	+83.581 907 45		0.47	21.98	13.49	0.72	0.70	0.78	0.89	0.72	+12	− 9	+20	−23	−12	+12	−14	−25	+ 6	− 1	0	−0.11
109351	22 09 13.05	+15 57 41.8	8.48	G	332.304 360 84	+15.961 610 75		0.89	−18.09	−15.99	0.85	0.72	1.09	1.07	0.87	+27	+18	− 7	− 9	+ 7	−28	+ 8	+ 3	+16	+19	0	0.20
109352	22 09 13.68	+33 10 21.0	5.58	H	332.306 981 73	+33.172 497 60		11.51	−60.00	−65.86	0.36	0.51	0.64	0.50	0.72	+24	− 2	−16	−10	+ 6	−16	− 0	−30	+23	+ 9	0	0.62
109353	22 09 14.66	−51 48 28.3	9.26	H	332.311 066 80	−51.807 873 12		0.59	−5.61	− 6.08	0.81	0.72	1.38	0.97	0.80	+14	−13	− 4	− 9	− 1	+21	+ 1	−17	− 5	+23	1	2.29
109354	22 09 15.19	+44 50 47.3	6.73	2 H	332.313 283 15	+44.846 478 44		4.18	13.46	0.59	0.50	0.49	0.70	0.57	0.61	−37	− 2	+ 0	− 6	+13	+ 0	+13	−13	+12	−40	0	−1.96
109355	22 09 15.60	+13 40 15.9	8.63	G	332.315 016 31	+13.671 074 17		17.89	31.26	−76.45	1.16	0.93	1.38	1.54	1.24	+11	+17	−24	−40	+25	+ 6	+31	−16	+33	+12	0	2.79
109356	22 09 15.93	−07 14 27.8	8.64	H	332.316 365 58	−07.241 053 86		1.99	3.34	10.55	0.97	0.63	1.05	0.99	0.61	+26	+ 5	−10	−22	+ 9	+22	+12	− 7	+11	+24	2	−0.60
109357	22 09 18.14	−11 21 58.0	7.87	H	332.325 566 90	−11.366 103 23		5.63	4.63	−42.51	0.84	0.62	0.98	0.99	0.68	+37	+ 7	+ 6	− 4	+25	+25	+23	+12	+23	+44	0	1.11
109358 H	22 09 21.28	+58 03 43.2	9.19	G	332.338 664 16	+58.062 012 24	A	1.87	3.49	0.56	1.14	1.07	1.22	1.21	1.08	− 7	+11	+18	−21	+ 7	+15	+ 3	−21	+13	+15	1	0.31
109359	22 09 21.53	−64 20 24.7	8.92	H	332.339 695 27	−64.340 187 08		6.90	−34.34	40.73	0.65	0.76	1.22	0.72	0.72	−16	+ 5	−22	+ 4	+ 3	− 3	+ 2	−16	+ 7	−18	0	−0.39
109360 H	22 09 22.00	+22 32 46.4	8.32	H	332.341 668 18	+22.546 231 12	A	2.85	21.22	−15.31	2.34	1.57	2.00	2.37	1.32	+27	+24	− 9	−19	− 4	+20	− 4	−26	+ 1	+11	3	0.39
109361	22 09 22.45	+35 07 45.8	7.45	H	332.343 552 45	+35.129 388 37		23.47	49.12	−34.61	0.52	0.60	0.78	0.67	0.87	+13	+14	−11	+14	− 3	− 8	− 5	−36	+13	+13	0	0.08
109362	22 09 22.59	+01 37 16.7	8.53	H	332.344 105 28	+01.621 302 03		0.48	3.17	−12.36	1.14	0.91	1.41	2.16	1.26	+ 0	+13	−37	+18	− 3	− 4	+ 3	+11	+35	−31	0	−0.62
109363	22 09 23.00	+54 10 39.9	9.04	G	332.345 828 53	+54.177 743 49		9.70	97.51	53.99	0.72	0.69	0.88	0.75	0.73	− 6	− 3	− 6	−30	+10	−13	+ 9	−32	+17	+20	0	0.40
109364	22 09 23.74	−41 58 26.5	10.34	G	332.348 928 26	−41.974 030 30		6.53	−53.91	−101.01	1.48	1.12	1.77	1.88	1.14	+11	+13	−17	+17	− 7	+22	+ 2	+30	+11	− 1	0	0.29
109365	22 09 24.58	−70 54 14.6	6.83	H	332.352 407 99	−70.904 061 04		6.05	14.83	− 9.33	0.48	0.49	0.67	0.54	0.56	− 9	−12	− 4	− 6	+ 8	− 4	+10	−18	−17	− 4	0	−0.53
109366	22 09 24.63	+32 11 18.0	8.68	H	332.352 626 13	+32.188 337 66		3.57	35.53	− 1.90	0.54	0.91	1.15	0.55	1.06	+29	+11	− 4	−11	+ 2	−11	+ 7	−17	+20	+41	0	1.06
109367	22 09 26.26	−51 53 23.8	8.31	H	332.359 430 58	−51.889 937 20		10.67	−27.83	5.36	0.65	0.56	1.07	0.79	0.61	+14	+ 2	− 2	+ 6	+ 4	+25	+ 5	− 1	− 5	+22	0	−0.27
*109368	22 09 26.92	−78 55 34.5	10.87	G	332.362 153 32	−78.926 238 20		19.32	309.08	−481.86	1.25	1.17	1.53	1.51	1.26	− 3	−17	−19	− 2	+ 0	+ 6	+ 1	− 9	+ 0	− 1	1	1.30
*109369	22 09 26.84	−08 11 09.1	6.99	H	332.361 846 13	−08.185 848 55		6.22	63.09	48.79	0.88	0.49	0.85	0.93	0.49	+ 8	+ 3	+ 2	−34	+27	+13	+25	−14	+17	+14	0	1.57
*109370	22 09 26.91	+30 32 16.8	9.04	H	332.362 139 45	+30.538 007 95		2.65	−10.75	− 6.43	0.86	1.03	1.31	1.18	1.52	+19	+ 0	−23	+29	+ 7	−13	+ 5	+ 1	+19	+19	0	1.82
109371	22 09 27.95	−42 37 17.6	9.70	H	332.366 463 52	−42.621 551 80		6.70	56.62	− 3.45	1.12	0.84	1.36	1.38	0.80	+ 2	+ 9	−23	+12	−15	+36	− 5	+18	+ 1	− 4	0	0.24
109372	22 09 28.24	+46 55 14.9	7.93	G	332.367 674 00	+46.920 814 83		12.61	30.02	− 3.91	0.65	0.61	0.87	0.74	0.76	−22	+27	−22	+ 9	+ 7	+15	+13	−18	+11	−19	0	−0.58
109373	22 09 28.28	+54 10 03.7	8.04	H	332.367 843 67	+54.167 690 09		3.19	20.17	10.13	0.60	0.56	0.73	0.61	0.58	− 6	− 1	− 2	−23	+ 3	+ 1	+ 7	−41	+25	+16	0	−0.03
109374	22 09 28.42	+05 32 24.2	9.73	G	332.368 411 58	+05.540 054 85		6.32	46.24	6.34	1.23	1.12	1.52	1.55	1.35	+31	−21	−25	+ 6	− 4	+ 1	−10	− 3	+31	+13	0	−2.06
109375	22 09 28.94	−23 39 32.8	6.36	H	332.370 575 15	−23.659 116 59		6.34	34.06	3.25	0.76	0.57	0.83	0.92	0.60	+20	−25	−22	−39	− 2	+35	− 5	−50	+34	+26	2	0.01
109376	22 09 29.01	+26 46 06.3	8.94	2 H	332.370 884 84	+26.768 425 88		1.50	2.70	0.40	0.86	0.80	1.04	0.87	0.84	+12	+14	−10	+19	− 3	−11	− 2	− 6	+ 5	+20	0	0.56
109377 H	22 09 29.68	+78 51 45.0	8.99	H	332.373 684 39	+78.862 503 10	A	1.97	28.65	13.72	1.72	1.40	1.28	1.73	1.33	+14	− 3	+ 2	+31	+ 5	+ 9	+ 3	−10	+ 8	+ 8	0	−0.75
*109378	22 09 29.82	−07 32 51.2	6.54	H	332.374 231 00	−07.547 560 77		46.97	85.48	−449.82	0.70	0.53	0.79	0.78	0.52	+35	+ 0	− 1	−18	− 1	+25	− 3	−27	+ 3	+28	2	0.05
*109379	22 09 29.76	+62 09 34.8	8.62	H	332.373 994 12	+62.159 667 51		1.62	8.77	3.92	0.73	0.63	0.78	0.87	0.72	+ 1	+13	+15	+21	− 2	+ 8	+ 1	− 2	− 7	+ 7	0	−0.70
109380	22 09 30.49	−08 48 02.0	8.67	H	332.377 045 52	−08.800 545 27		8.07	6.68	− 3.87	1.03	0.59	1.08	1.24	0.58	+16	+ 8	−17	−33	+23	−25	+17	−16	+14	+10	0	−0.17
109381	22 09 34.49	−41 13 29.0	7.83	G	332.393 703 33	−41.224 717 29		22.85	158.69	−71.49	0.75	0.64	0.96	0.86	0.63	+15	− 1	− 7	+16	−16	+35	−10	+35	+11	+ 7	0	0.09
109382	22 09 35.48	−02 01 15.9	8.61	2 H	332.397 837 58	−02.021 079 62		0.94	−12.30	−16.08	1.15	0.75	1.23	1.54	0.78	+10	+31	+ 7	+33	−12	+31	−12	+10	+ 5	− 5	2	−0.55
109383 H	22 09 35.88	−40 59 07.7	9.56	H	332.399 495 17	−40.985 475 06	A	3.93	20.41	−22.73	3.28	3.35	3.16	2.72	2.78	+26	+ 7	− 3	+ 6	+ 5	+29	+13	+45	− 6	+25	1	−0.76
109384	22 09 36.97	+71 18 52.4	9.61	G	332.404 058 09	+71.314 544 47		18.12	232.70	−87.43	0.77	0.76	0.87	0.96	0.80	−10	+ 2	+17	+ 2	+ 5	− 9	+ 6	− 1	−12	+ 0	0	−0.69
109385	22 09 38.72	−06 23 35.8	8.52	H	332.411 320 33	−06.393 263 94		4.24	17.10	−0.79	1.07	0.69	1.16	1.18	0.73	+ 8	+26	−12	−13	+ 0	+21	+ 8	+10	+21	+16	0	1.37
109386	22 09 39.12	−45 39 14.9	9.38	G	332.413 019 28	−45.654 152 16		8.14	13.97	−16.80	1.03	0.85	1.37	1.04	0.83	+21	−12	−22	− 5	− 4	+24	+ 4	+35	−17	+12	0	−3.12
109387	22 09 39.44	+22 14 32.1	7.47	H	332.414 334 65	+22.242 242 90		8.07	88.57	−18.85	0.71	0.57	0.80	0.81	0.67	+13	+13	− 1	−11	+ 4	− 3	+ 1	+ 1	−13	+21	0	−0.65
109388	22 09 39.68	−04 38 26.5	10.41	G	332.415 340 76	−04.640 681 04		113.97	1134.90	−19.71	2.06	1.18	2.10	2.75	1.31	+ 3	+26	− 5	+10	−10	− 7	− 3	+10	+17	− 8	0	−2.67
109389	22 09 40.12	+73 23 27.2	8.34	H	332.417 152 01	+73.390 891 74		3.28	4.16	2.58	0.57	0.55	0.65	0.67	0.63	+ 5	− 8	+11	− 5	+10	− 5	+ 9	+ 4	+ 0	+23	1	0.79
109390	22 09 41.47	−13 36 18.7	9.55	G	332.422 792 36	−13.605 203 04		2.54	−39.79	−84.60	1.33	0.87	1.40	1.58	0.78	+17	− 9	+12	−24	− 3	+ 6	− 5	−28	+ 1	− 1	0	0.26
109391	22 09 41.83	−19 53 21.2	9.46	H	332.424 288 60	−19.889 223 28		12.60	58.38	−23.11	1.16	0.90	1.35	1.64	0.99	+36	− 5	−18	+10	+17	+16	+13	− 9	+28	+39	0	0.93
109392	22 09 43.25	−14 33 39.7	9.18	H	332.430 228 86	−14.561 027 63		3.79	25.02	2.74	1.09	0.72	1.23	1.20	0.66	+12	−18	+28	−20	+14	+13	+ 8	−15	− 1	+13	0	−0.13
109393	22 09 44.49	+64 07 20.6	6.93	H	332.435 394 20	+64.122 382 23		1.53	−5.26	− 4.08	0.51	0.45	0.56	0.68	0.49	−20	−12	+12	− 7	+ 3	+27	+ 2	− 3	− 9	−31	0	0.17
109394	22 09 44.59	−28 47 12.2	11.84	G	332.435 800 27	−28.786 720 07		−2.75	35.22	−12.67	2.43	2.38	3.49	2.79	2.76	+37	−19	−40	+ 4	−13	+13	− 2	+20	−34	+27	4	−0.58
109395	22 09 44.94	−13 53 29.7	8.02	2 H	332.437 233 00	−13.891 581 39		1.92	11.41	−23.24	1.14	0.64	1.15	1.32	0.59	+ 8	+ 5	+18	−30	+ 6	−14	+ 7	−23	− 2	− 3	0	2.69
109396	22 09 45.02	+61 54 36.5	8.93	H	332.437 577 84	+61.910 131 52		2.17	8.97	3.01	0.83	0.74	0.90	0.98	0.80	− 2	+15	+15	+29	+ 3	− 3	+ 7	− 4	− 4	+ 9	0	−1.55
109397	22 09 45.68	+43 11 11.6	7.14	H	332.440 320 83	+43.186 547 67		1.49	1.59	− 4.36	0.47	0.52

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
109301	9.037	0.020	8.592	0.019		0.420	0.025	T	0.49	0.03	L	8.6421	0.0024	0.013	52		8.62	8.67					1							S
109302	9.232	0.023	7.890	0.013		1.138	0.021	T	1.10	0.02	L	7.8772	0.0012	0.012	52		7.86	7.90					1							S
109303	7.054	0.010	6.203	0.011		0.763	0.011	T	0.80	0.01	L	6.2527	0.0043	0.131	164		6.21	6.85	1.98	P 1 A			1 S							S
109304	6.810	0.004	6.851	0.005		−0.033	0.006	T	−0.01	0.01	L	6.8580	0.0009	0.009	148		6.85	6.87		C			1							S
109305	10.800	0.051	9.425	0.027		1.164	0.045	T	1.13	0.04	L	9.4853	0.0034	0.019	72		9.45	9.54					1							
109306	6.617	0.005	6.402	0.005		0.205	0.007	T	0.23	0.01	L	6.4374	0.0010	0.008	74		6.42	6.45					1							S
109307	8.935	0.013	8.371	0.012		0.480	0.015	G	0.55	0.02	H	8.4324	0.0013	0.014	119		8.41	8.46		C			1							
109308	9.854	0.018	8.003	0.008		1.539	0.016	T	1.59	0.04	L	7.9619	0.0017	0.018	147		7.92	8.00		U			1							S
109309	10.129	0.032	8.818	0.018		1.114	0.029	T	1.08	0.03	L	8.8386	0.0033	0.026	76		8.80	8.88					1							
109310	9.185	0.009	8.499	0.008		0.634	0.010	T	0.70	0.01	L	8.5647	0.0013	0.020	255		8.53	8.60					1							
109311	7.372	0.006	7.323	0.007		0.079	0.004	G	0.09	0.00	H	7.3492	0.0010	0.016	119		7.33	7.42	3.81	P 1 A			1							S
109312	7.335	0.006	7.138	0.006	*	0.175	0.002	G	0.19	0.00	H	*	7.1715	0.0011	0.007	103	*	7.16	7.18		D	22088−2546	H 1	2 C A	AB	303	0.226	0.011	1.82	0.10	S
109313	10.127	0.025	8.820	0.014		1.111	0.022	T	1.07	0.02	L	8.8604	0.0023	0.018	124		8.83	8.90		C			1							
109314	9.710	0.021	9.392	0.023		0.302	0.029	T	0.35	0.04	L	9.4282	0.0030	0.021	97		9.39	9.48					1							
109315	11.995	0.132	10.422	0.046		1.342	0.115	T	1.92	0.25	K	10.5236	0.0041	0.049	156		10.45	10.61					1 X							G
109316	7.461	0.009	6.975	0.007		0.469	0.009	T	0.54	0.01	L	7.0148	0.0011	0.007	63		7.01	7.03		C			1							S
109317	10.515	0.043	9.676	0.034		0.738	0.042	T	0.79	0.03	L	9.7711	0.0020	0.017	62		9.75	9.81		D			1							
109318	9.557	0.020	8.090	0.011		1.236	0.018	T	1.19	0.02	L	8.1014	0.0023	0.017	78		8.07	8.13					1							S
109319	8.285	0.013	7.303	0.008		0.861	0.011	T	0.87	0.01	L	7.3610	0.0022	0.019	99		7.33	7.39		U			1							S
109320	9.357	0.016	9.269	0.020		0.140	0.015	G	0.15	0.01	H	9.2849	0.0028	0.022	106		9.26	9.32					1							
109321	11.393	0.079	10.444	0.055		0.836	0.071	T	0.85	0.05	L	10.4676	0.0033	0.031	72		10.42	10.51		C			1							
109322	8.035	0.012	7.462	0.009		0.546	0.015	G	0.62	0.01	H	7.5104	0.0012	0.011	57		7.49	7.53		C			1							S
109323	9.561	0.017	9.039	0.017		0.499	0.018	T	0.57	0.02	L	9.1028	0.0020	0.018	126		9.07	9.13					1							
109324	8.304	0.010	7.809	0.010		0.483	0.023	G	0.55	0.02	H	7.8654	0.0012	0.011	119		7.84	7.88		C			1							S
109325	10.989	0.042	9.119	0.015		1.587	0.037	T	2.22	0.09	O	8.9635	0.0065	0.059	150		8.86	9.04		U 2			1							
109326	11.573	0.222	10.659	0.168		0.687	0.155	G	0.74	0.13	R	10.7966	0.0056	0.038	77		10.73	10.87		C			1							G
109327	9.931	0.029	8.424	0.016		1.267	0.026	T	1.23	0.03	L	8.4489	0.0018	0.013	55		8.42	8.48		D			1							
109328	9.165	0.010	7.728	0.006		1.212	0.009	T	1.17	0.01	L	7.7668	0.0012	0.014	215		7.74	7.79					1							S
109329	11.428	0.088	10.819	0.080		0.567	0.104	T	0.64	0.10	L	10.8589	0.0037	0.040	76		10.80	10.93		C			1							G
109330	10.621	0.061	9.699	0.045		0.791	0.004	G	0.83	0.00	H	9.7591	0.0031	0.024	51		9.73	9.80		C			1							
109331	10.861	0.033	10.310	0.032		0.522	0.034	T	0.59	0.04	L	10.3800	0.0026	0.030	183		10.33	10.45					1							
109332	5.584	0.003	5.774	0.005		−0.154	0.006	G	−0.15	0.01	H	5.7504	0.0008	0.006	57		5.74	5.76					1							S
109333	10.535	0.028	9.957	0.026		0.543	0.028	T	0.62	0.03	L	10.0047	0.0025	0.026	139		9.96	10.06		C			1							
109334	8.897	0.016	7.577	0.010		1.121	0.015	T	1.08	0.02	L	7.6043	0.0014	0.009	76		7.58	7.62		C	22090−3604	I 1	1							S
109335	10.260	0.037	9.836	0.039	B	0.401	0.050	T	0.47	0.06	L	10.0928	0.0837			B				R	22090+6743	I 2	1 C I D							D
109336	10.930	0.054	9.689	0.030		1.059	0.048	T	1.03	0.04	L	9.7661	0.0033	0.023	90		9.72	9.81		C			1							
109337	8.783	0.011	7.640	0.008		0.983	0.011	T	0.96	0.01	L	7.6866	0.0013	0.012	121		7.66	7.70					1							
109338	8.149	0.008	7.243	0.006		0.804	0.007	T	0.83	0.01	L	7.3025	0.0016	0.014	140		7.28	7.33		U 2			1							S
109339	8.567	0.011	8.516	0.013	A	0.052	0.016	T	0.06	0.01	L	8.5500	0.0261	0.047	116	A	8.45	8.60		R	22090+6743	I 2	1 C P D							D
109340	9.982	0.026	9.201	0.022		0.710	0.026	T	0.76	0.02	L	9.1919	0.0381	0.314	125		8.91	9.62	4.32	P 1 A			1 V							G
109341	8.023	0.010	7.930	0.011		0.091	0.014	T	0.10	0.01	L	7.9605	0.0013	0.010	83		7.95	7.98		C			1							S
109342	6.726	0.004	6.763	0.005	*	−0.030	0.000	G	−0.01	0.00	H	*	6.7784	0.0008	0.009	149	*	6.76	6.79			22092+4451	I 2	2 C S B	AE	282	0.131	0.031	2.51	0.88	S
109343						1.413	0.010	G	1.70	0.03	I	11.4849	0.0075	0.042	47		11.42	11.55		C			1							G
109344	9.140	0.024	8.505	0.022	*	0.585	0.024	T	0.66	0.02	L	*	8.3669	0.0021	0.011	53	*	8.35	8.38		D	22091−1829	I 1	2 C A	AB	38	1.017	0.006	0.23	0.02	S
109345	8.936	0.014	8.799	0.016	*	0.120	0.015	G	0.13	0.01	H	*	8.7692	0.0016	0.014	126	*	8.74	8.80		D	22091+5047	I 1	2 C A	AB	303	1.010	0.006	1.58	0.03	
109346	10.364	0.029	9.948	0.031		0.393	0.039	T	0.46	0.04	L	10.0185	0.0021	0.020	138		9.97	10.06					1 S							G
109347	8.918	0.014	8.371	0.013		0.523	0.015	G	0.60	0.02	H	8.4320	0.0017	0.016	81		8.40	8.46		C			1							S
109348	10.569	0.039	9.343	0.022	*	1.047	0.035	T	1.02	0.03	L	*	9.4253	0.0026	0.021	88	*	9.38	9.47		D	22091+2259	H 1	2 C A	AB	130	0.610	0.015	2.71	0.07	
109349	6.727	0.005	6.650	0.006		0.076	0.007	T	0.09	0.01	L	6.6681	0.0011	0.007	53		6.66	6.68		C			1							S
109350	9.735	0.021	8.526	0.013		1.034	0.019	T	1.01	0.02	L	8.5946	0.0017	0.015	112		8.56	8.62					1							
109351	10.289	0.029	8.588	0.013		1.420	0.020	G	1.40	0.03	I	8.5834	0.0018	0.017	96		8.55	8.61		C			1							
109352	6.844	0.003	5.698	0.002		0.985	0.003	T	0.97	0.00	L	5.7472	0.0005	0.006	177		5.74	5.76		C	22092+3310	I 1	1 G							S
109353	11.136	0.045	9.443	0.017		1.414	0.038	T	1.39	0.06	L	9.4030	0.0015	0.019	161		9.37	9.44					1							
109354	6.681	0.004	6.725	0.005		−0.036	0.006	T	−0.01	0.01	L	6.7291	0.0010	0.014	150		6.71	6.78	3.78	P 1 A	22092+4451	I 2	1							S P
109355	9.483	0.018	8.707	0.015		0.670	0.015	G	0.73	0.01	H	8.7686	0.0020	0.015	76		8.74	8.80		C			1							
109356	8.673	0.016	8.624	0.020		0.050	0.024	T	0.06	0.02	L	8.6666	0.0017	0.014	81		8.64	8.69					1							S
109357	9.458	0.021	7.996	0.012		1.232	0.019	T	1.19	0.02	L	8.0301	0.0010	0.008	80		8.01	8.05					1							
109358	9.611	0.036	9.240	0.038	*	0.340	0.015	G	0.40	0.02	H	*	9.2821	0.0020	0.018	114	*	9.25	9.31		D	22094+5804	M 1	2 C A	AB	303	0.960	0.017	2.84	0.09	
109359	9.723	0.014	8.986	0.012		0.660	0.014	T	0.72	0.01	L	9.0582	0.0024	0.026	192		9.01	9.10					1							
109360	9.065	0.017	8.573	0.016	*	0.463	0.021	T	0.53	0.02	L	*	8.4192	0.0020	0.016	89	*	8.39	8.45		D	22094+2233	I 1	2 C A	AB	354	1.110	0.005	0.54	0.02	S
109361	8.085	0.007	7.513	0.006		0.561	0.015	G	0.63	0.01	H	7.5700	0.0013	0.011	129		7.55	7.59		C			1 G							S
109362	10.035	0.040	8.638	0.022		1.181	0.036	T	1.14	0.03	L	8.6971	0.0018	0.011	42		8.68	8.74		C			1							
109363	9.746	0.025	9.087	0.022		0.640	0.015	G	0.70	0.01	H	9.1675	0.0020	0.017	121		9.14	9.19		C			1							
109364	11.086	0.054	10.371	0.046		0.670	0.020	G	0.73	0.02	H	10.5013	0.0036	0.031	88		10.45	10.56		C			1							
109365	8.054	0.006	6.930	0.005		0.968	0.006	T	0.95	0.01	L	6.9923	0.0009	0.011	156		6.97	7.01		C			1							S
109366	10.044	0.021	8.818	0.013		1.047	0.019	T	1.02	0.02	L	8.8527	0.0014	0.016	155		8.83	8.89		C			1							
109367	8.811	0.009	8.366	0.009		0.420	0.012	T	0.49	0.01	L	8.4092	0.0017	0.019	164		8.38	8.44					1							S
109368	11.887	0.108	10.780	0.068		0.956	0.008	G	1.00	0.01	I	11.0058	0.0028	0.033	127		10.93	11.06					1							G
109369	8.214	0.010	7.093	0.006		0.970	0.015	G	0.95	0.01	H	7.1512	0.0008	0.010	103		7.13	7.17					1							S
109370	11.002	0.059	9.199	0.021		1.501	0.050	T	1.53	0.07	L	9.1651	0.0021	0.019	73		9.14	9.20		C			1							
109371	10.206	0.027	9.745	0.027		0.448	0.030	T	0.52	0.03	L	9.8003	0.0023	0.023	95		9.76	9.83					1							
109372	8.505	0.009	7.965	0.008		0.524	0.015	G	0.60	0.02	H	8.0406	0.0013	0.015	127		8.02	8.07					1							S
109373	9.331	0.016	8.138	0.011		1.022	0.015	T	1.00	0.01	L	8.2093	0.0012	0.012	124		8.18	8.23					1							
109374	10.373	0.040	9.743	0.036		0.589	0.002	G	0.66	0.00	H	9.8420	0.0026	0.019	65		9.81	9.87		C			1 S							
109375	7.511	0.006	6.465	0.006		0.921	0.003	G	0.92	0.00	H	6.5210	0.0012	0.010	96		6.51	6.54					1							S
109376	11.108	0.063	9.183	0.020		1.632	0.054	T	2.49	0.08	O	8.9683	0.0075	0.061	79		8.83	9.07		U 2			1 S							P
109377	9.389	0.016	9.065	0.017	*	0.308	0.022	T	0.35	0.03	L	*	9.0696	0.0024	0.015	112	*	9.05	9.10		D	22095+7852	I 1	2 C A	AB	244	0.480	0.004	0.93	0.02	
109378	7.489	0.006	6.625	0.005		0.773	0.006	T	0.77	0.02	A	6.6823	0.0006	0.006	83		6.67	6.69		C			1							S
109379	8.752	0.013	8.646	0.016		0.103	0.019	T	0.12	0.02	L	8.6642	0.0012	0.014	106		8.64	8.69		C			1							
109380	9.108	0.013	8.704	0.014		0.382	0.018	T	0.45	0.02	L	8.7599	0.0018	0.016	115		8.73	8.78		C			1							S
109381	8.646	0.011	7.891	0.009		0.660	0.002	G	0.72	0.00	H	7.9637	0.0016	0.011	90		7.94	7.99		C			1							S
109382	10.883	0.069	8.834	0.021		1.734	0.059	T	2.43	0.12	O	8.6426	0.0184	0.127	60		8.51	8.86		U 2			1 S							P
109383	10.498	0.037	9.898	0.035	*	0.564	0.008	G	0.64	0.01	R	*	9.6851	0.0024	0.023	83	*	9.65	9.72		D	22096−4059	I 1	2 C A	AB	125	1.109	0.010	0.30	0.04	
109384	10.627	0.037	9.717	0.027		0.780	0.020	G	0.82	0.02	H	9.7549	0.0019	0.018	127		9.72	9.79		C			1							G
109385	8.743	0.016	8.559	0.018		0.176	0.023	T	0.19	0.03	L	8.5836	0.0019	0.016	57		8.55	8.61					1							
109386	9.889	0.024	9.479	0.025		0.513	0.003	G	0.59	0.00	H	9.4844	0.0024	0.020	89		9.45	9.52					1							
109387	8.748	0.012	7.587	0.008		0.997	0.011	T	0.98	0.01	L	7.6364	0.0016	0.011	91		7.62	7.66					1							S
109388						1.531	0.035	G	2.50	0.00	A	10.3672	0.0047	0.029	46		10.32	10.40		C			1							G
109389	8.437	0.009	8.360	0.011		0.090	0.015	G	0.10	0.02	H	8.3775	0.0013	0.013	124		8.35	8.40		C			1							
109390	10.750	0.059	9.685	0.038		0.892	0.010	G	0.90	0.01	H	9.7215	0.0038	0.016	58		9.70	9.75		C			1							
109391	10.131	0.034	9.515	0.032		0.571	0.034	T	0.64	0.03	L	9.5833	0.0025	0.025	82		9.53	9.62		C			1							
109392	10.529	0.043	9.269	0.025		1.074	0.039	T	1.04	0.03	L	9.3485	0.0023	0.016	67		9.32	9.38		C			1							
109393	7.332	0.007	6.967	0.005		0.346	0.008	T	0.41	0.01	L	7.0163	0.0009	0.009	109		7.00	7.03					1							S
109394						0.820	0.020	G	0.84	0.01	H	12.0235	0.0082	0.054	74		11.95	12.17					1							G
109395	10.029	0.033	8.229	0.014		1.529	0.030	T	2.17	0.08	O	8.0871	0.0056	0.033	58		8.03	8.15		U 2			1 S							S
109396	9.077	0.014	8.976	0.017		0.098	0.021	T	0.11	0.02	L	8.9733	0.0017	0.017	107		8.95	9.00		C			1 S							
109397	9.020	0.010	7.265	0.005		1.463	0.009	T	1.47	0.01	L	7.2766	0.0007	0.010	164		7.26	7.30					1							S
109398	10.769	0.059	10.354	0.065		0.392	0.081	T	0.46	0.09	L	10.3944	0.0029	0.024	69		10.31	10.44					1							
109399	10.601	0.042	9.092	0.020		1.269	0.037	T	1.23	0.04	L	9.1290	0.0022	0.015	66		9.10	9.15		C			1							
109400	5.953	0.003	4.896	0.003		0.919	0.003	G	0.91	0.03	C	4.9537	0.0005	0.005	130		4.94	4.96		C			1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA		Dec	V		α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	μ_δ	μ_δ	μ_δ	μ_δ	μ_δ	μ_δ	F1	F2
	h m s		±° ′ ″	mag		deg		deg	mas	mas/yr		mas		mas	mas/yr		α*	α*	δ	α*	δ	π	α*	δ	π	$\mu_{\alpha*}$				%	
1 2	3		4	5	6 7	8		9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28				29	30
109401	22 09 51.16	−30 08 11.0	8.93	H	332.463 160 50	−30.136 379 09		11.32	−16.52	6.08	1.03	0.92	1.37	1.11	1.09	+34	−27	−41	−17	−13	+22	− 3	+23	−23	+34				0	0.17
109402	22 09 51.33	+29 21 06.1	11.86	G	332.463 864 67	+29.351 702 09		27.87	273.03	−153.72	1.77	2.19	2.78	2.16	2.51	+20	+ 4	−18	+34	+ 2	+ 8	+ 6	− 1	+10	+26				2	0.76
109403	22 09 52.49	+52 35 20.8	9.55	G	332.468 697 53	+52.589 101 80		23.88	−197.37	−243.68	0.88	0.88	1.09	0.91	0.90	−18	+ 1	− 1	−27	+23	−12	+23	−28	+15	+ 3				0	0.40
109404	22 09 55.71	−34 00 54.1	5.37	H	332.482 130 69	−34.015 035 53		15.35	−13.79	28.29	0.62	0.48	0.77	0.68	0.47	+21	+ 0	−16	+ 3	− 7	+33	− 1	+33	− 3	+18				0	0.74
109405	22 09 55.80	−57 13 31.8	9.74	H	332.482 494 08	−57.225 501 14		13.88	103.93	−142.15	1.08	0.97	1.65	1.37	1.11	+10	−11	−12	+15	+ 8	+29	+17	− 1	− 8	+30				0	1.44
109406	22 09 56.55	+21 08 38.2	8.43	H	332.485 619 46	+21.143 956 62		4.09	21.73	9.81	0.95	0.68	1.01	1.15	0.77	+ 4	− 9	− 4	+31	− 9	+ 0	− 6	− 8	−10	+ 7				0	0.26
109407	22 09 57.67	−32 35 32.8	8.32	H	332.490 288 10	−32.592 440 81		0.42	−14.85	−7.60	0.94	0.73	1.19	1.05	0.72	+22	−19	−19	− 1	−20	+35	−13	+24	+ 7	+13				0	−0.44
109408	22 09 57.82	−48 06 27.0	6.43	H	332.490 918 75	−48.107 508 48		4.75	68.64	−62.74	0.60	0.57	0.91	0.71	0.62	+27	−26	−41	+ 5	+22	−12	+23	+48	−35	+27				1	0.05
109409 H	22 09 58.03	−41 46 36.0	10.00	H	332.491 791 33	−41.776 659 84	A	3.47	−28.49	−34.53	2.93	2.14	2.78	2.96	1.78	+ 7	+ 1	+ 6	+ 5	−26	+ 5	− 8	+37	+32	−33				1	1.59
109410	22 09 59.25	+33 10 41.8	4.28	H	332.496 886 03	+33.178 267 47		12.96	−12.34	−17.94	0.36	0.48	0.62	0.42	0.58	+18	− 3	−13	− 2	+ 5	−13	+ 5	−22	+22	+24				1	−0.07
109411	22 09 59.77	−45 52 54.6	9.21	G	332.499 052 50	−45.881 844 94		5.58	35.31	−28.59	1.11	0.83	1.40	1.18	0.82	+22	−31	−12	− 1	− 6	+28	+ 2	+36	− 5	+ 8				0	0.87
109412	22 10 00.13	−28 17 33.0	6.44	G	332.500 555 11	−28.292 493 14		9.24	29.36	24.02	0.69	0.59	0.97	0.81	0.57	+24	−17	−55	+10	−27	+33	− 7	+30	−24	+14				2	0.49
109413	22 10 00.85	+04 05 55.4	7.63	G	332.503 534 48	+04.098 720 86		14.10	104.74	−43.83	0.97	0.75	1.20	1.16	0.95	+ 2	+20	−31	−12	+ 0	+25	+16	−11	+39	+16				3	2.18
109414 H	22 10 02.24	+23 07 33.2	7.31	H	332.509 320 67	+23.125 891 91	A	9.54	−16.13	−8.90	1.88	1.62	1.50	1.54	1.27	+25	− 3	− 2	− 8	+ 3	−15	+ 2	−18	+ 8	+ 6				1	−0.01
109415	22 10 03.46	−83 21 29.6	7.36	H	332.514 420 12	−83.358 208 38		3.77	24.80	−8.61	0.58	0.50	0.67	0.72	0.56	+ 1	− 7	−23	+ 7	+ 0	+ 4	− 2	− 9	+ 1	−17				1	−2.13
109416	22 10 03.58	+62 36 40.9	9.82	G	332.514 916 36	+62.611 368 19		2.30	−1.93	−2.32	1.08	0.94	1.15	1.29	1.14	− 5	+ 0	+ 7	+27	+13	+ 0	+11	+ 2	−21	−10				0	−1.70
109417	22 10 04.02	+44 10 52.6	9.52	H	332.516 765 75	+44.181 286 02		3.35	−11.29	−6.81	0.88	0.90	1.30	1.08	1.11	−28	+ 7	− 1	+ 7	+15	− 2	+13	−15	+16	−35				0	1.64
109418	22 10 06.56	+35 12 50.2	6.98	H	332.527 335 05	+35.213 947 65		7.94	−15.81	−28.51	0.46	0.52	0.71	0.55	0.63	+13	+ 2	−21	+21	+ 2	−13	+ 3	−28	+32	+17				0	−0.61
109419	22 10 07.37	−48 22 01.1	9.23	H	332.530 715 62	−48.366 960 91		1.89	36.66	−28.31	1.10	1.15	1.84	1.53	1.14	+29	−26	−57	+ 0	+27	−27	+17	+42	−26	+29				0	−0.40
109420	22 10 07.77	+40 55 10.6	10.34	2 H	332.532 361 40	+40.919 618 39		−0.20	−1.78	−5.13	1.06	1.15	1.84	1.24	1.39	−38	+ 9	+ 8	+39	− 2	+ 1	− 4	− 5	+10	−44				3	−0.03
109421	22 10 08.03	−42 54 07.3	10.25	H	332.533 472 27	−42.902 028 78		29.74	46.76	−115.39	1.72	1.47	2.37	2.11	1.31	+15	+16	−31	+16	− 8	+41	+ 6	+13	+ 5	+17				0	2.76
109422	22 10 08.48	−32 32 54.4	4.94	H	332.535 348 03	−32.548 440 42		53.36	428.62	13.83	0.65	0.50	0.82	0.68	0.49	+14	−13	− 5	− 2	−11	+34	−10	+32	+ 7	+11				0	−0.50
109423	22 10 08.49	−27 40 25.7	8.64	H	332.535 384 03	−27.673 800 97		17.41	−70.58	−115.90	0.90	0.79	1.19	0.98	0.81	+31	−23	−46	+15	−15	+18	− 4	+41	−24	+26				0	−0.57
109424	22 10 10.27	+56 05 02.0	6.94	1 H	332.542 810 92	+56.083 882 62		2.38	8.93	1.95	0.46	0.45	0.57	0.55	0.50	+ 3	+10	+ 9	+11	+ 8	− 3	+15	−11	+10	+32				0	1.65
109425	22 10 10.49	+57 49 20.0	8.83	H	332.543 708 62	+57.822 213 97		8.05	45.38	50.50	0.75	0.68	0.86	0.82	0.73	−10	+ 5	+ 6	−27	+ 7	− 1	+ 8	−26	+ 7	+ 1				0	0.32
109426	22 10 11.35	+54 33 28.9	7.70	H	332.547 290 71	+54.558 030 45		3.84	16.67	4.19	0.55	0.52	0.67	0.61	0.57	− 6	− 4	− 1	−23	+ 1	− 4	+ 3	−35	+16	+17				0	−2.03
109427	22 10 11.82	+06 11 52.0	3.52	G	332.549 249 02	+06.197 789 00		33.77	281.96	31.23	0.72	0.54	0.85	0.89	0.74	+18	−30	−10	−10	+ 7	+22	− 3	−16	+35	+31				2	1.11
109428	22 10 11.97	−04 55 43.7	8.73	H	332.549 864 86	−04.928 802 57		11.05	25.00	11.25	1.45	0.91	1.37	2.24	1.04	+ 7	+10	−25	+43	+ 7	− 4	+ 6	+44	+ 4	+ 4				0	−1.44
109429	22 10 12.26	+67 45 33.0	9.61	H	332.551 097 58	+67.759 167 41		3.51	17.10	3.36	0.79	0.77	0.88	0.96	0.80	−16	−16	+18	− 6	+ 8	− 4	+10	−21	− 9	−13				0	0.69
109430	22 10 12.81	−15 00 04.2	9.15	H	332.553 364 75	−15.001 153 17		3.07	12.93	−19.22	1.21	0.78	1.28	1.48	0.75	+17	− 4	+15	+17	+ 9	+ 4	+ 7	+ 3	−10	+11				0	−0.87
109431	22 10 13.76	+60 00 07.7	8.25	H	332.557 335 39	+60.002 133 80		3.12	13.39	2.76	0.55	0.53	0.63	0.64	0.57	−14	− 8	+12	− 1	+ 2	+15	+ 0	−22	+ 5	− 9				0	−1.54
109432	22 10 13.96	+50 59 44.7	8.59	G	332.558 173 02	+50.995 740 03		2.41	4.53	−5.77	0.71	0.65	0.84	0.80	0.69	− 5	− 7	+ 6	−36	+ 8	+12	+ 6	−36	+18	+15				0	−1.52
109433	22 10 14.99	−35 58 42.2	8.77	H	332.562 452 55	−35.978 400 25		7.29	−35.29	−65.45	0.99	0.93	1.20	1.18	1.02	+37	−14	−27	+31	+19	+14	+24	+49	−11	+37				0	−0.80
109434	22 10 15.32	+72 06 40.7	6.36	H	332.563 815 46	+72.111 317 92		6.38	−8.49	−21.74	0.43	0.42	0.48	0.49	0.40	− 7	+ 6	+19	+ 7	+ 0	−10	+ 2	− 6	+ 3	− 3				0	−1.31
109435	22 10 15.44	+64 57 23.9	8.93	H	332.564 317 11	+64.956 625 70		5.14	9.30	2.39	0.77	0.72	0.85	0.97	0.77	− 6	−14	+22	+19	+17	+11	+12	− 4	− 4	− 6				0	0.27
109436	22 10 16.15	+38 44 38.1	10.00	H	332.567 292 30	+38.743 918 80		4.86	3.46	0.27	1.02	1.06	1.51	1.30	1.28	−31	+12	− 4	−17	+ 8	−16	+ 9	−28	+18	−36				0	1.40
109437	22 10 16.97	+32 17 17.5	7.21	2 H	332.570 716 65	+32.288 182 51		1.78	9.21	3.67	0.42	0.63	0.81	0.43	0.76	+28	+ 6	− 9	−13	+ 1	−13	+ 7	−24	+15	+44				0	−0.94
109438	22 10 18.19	−20 59 38.5	8.77	H	332.575 805 20	−20.994 041 17		5.58	−20.94	−70.26	1.19	0.71	1.18	1.60	0.78	+14	− 5	−12	−28	+ 9	+ 0	+ 3	−26	+17	+30				0	−0.77
109439	22 10 18.96	+19 36 59.6	6.18	H	332.579 018 66	+19.616 566 99		18.01	92.06	−93.77	0.57	0.47	0.66	0.60	0.49	+10	+ 6	−16	+22	− 3	−14	− 4	− 4	+13	+10				0	−0.91
109440 H	22 10 19.73	+13 44 57.8	8.08	H	332.582 189 52	+13.749 389 65	A	18.38	−114.64	−99.44	1.63	1.33	1.96	2.39	1.56	+23	+10	−45	−35	+39	−27	+36	−13	+39	−11				1	1.26
109441	22 10 20.21	+66 18 15.2	7.98	H	332.584 215 59	+66.304 216 19		5.93	19.04	−10.85	0.59	0.56	0.64	0.69	0.58	−17	+ 5	+14	+10	+ 6	+ 4	+ 4	− 6	+ 6	−27				0	−0.25
109442	22 10 21.10	−03 53 38.3	6.28	H	332.587 910 64	−03.893 978 11		9.00	16.27	−44.24	0.82	0.54	0.82	1.01	0.59	+ 1	+ 4	− 4	+12	− 2	+16	− 1	+ 9	+ 8	− 7				0	0.07
109443	22 10 21.23	−51 57 35.4	7.62	G	332.588 470 42	−51.959 839 36		15.80	220.63	−106.00	0.93	0.57	0.94	1.14	0.70	−17	+ 5	−16	−40	+ 9	+ 4	+ 8	−10	+ 7	+ 3				1	1.49
109444	22 10 21.53	−15 56 26.7	8.98	H	332.589 719 46	−15.940 747 90		8.37	−24.50	−79.76	1.18	0.83	1.32	1.58	0.85	+39	+14	− 3	+ 7	+37	−10	+30	+25	+ 0	+41				0	0.90
*109445	22 10 22.02	+14 37 47.7	6.36	H	332.591 770 13	+14.629 918 69		7.69	18.95	−25.12	0.67	0.53	0.81	0.82	0.64	+22	+ 0	− 7	+19	+10	−11	+ 9	+ 1	+19	+19				0	2.04
*109446	22 10 21.93	−09 23 16.0	8.06	H	332.591 355 15	−09.387 766 96		4.74	31.14	8.28	0.94	0.53	0.95	1.00	0.52	+12	+ 7	−17	−31	+21	− 5	+19	−14	+17	+14				0	1.09
109447	22 10 22.22	+25 20 39.3	8.12	H	332.592 564 24	+25.344 236 98		3.69	14.39	−4.68	0.69	0.65	0.87	0.77	0.72	+17	+17	+ 7	+ 1	− 7	− 9	− 8	− 8	−11	+16				0	−1.66
109448	22 10 22.63	+28 08 57.7	8.95	H	332.594 300 51	+28.149 347 98		3.10	−17.50	−6.12	0.96	0.78	1.15	1.17	0.90	− 4	+15	−16	+ 5	+ 5	−19	+ 5	+ 3	+22	−14				0	0.60
109449	22 10 25.28	−54 00 25.4	9.62	H	332.605 343 53	−54.007 045 61		3.21	−12.25	1.06	0.97	0.97	1.62	1.24	1.00	+18	−10	−27	+24	+21	− 1	+22	+14	−19	+28				3	0.76
109450	22 10 25.94	+18 47 49.8	7.57	H	332.608 102 53	+18.797 175 11		20.58	353.19	−29.57	0.67	0.55	0.78	0.74	0.58	+19	+ 7	−11	+33	− 2	−15	− 6	−11	+ 3	+13				0	−0.24
109451	22 10 26.52	+64 20 27.7	8.05	H	332.610 518 42	+64.341 040 81		1.94	−3.31	−3.06	0.63	0.56	0.70	0.78	0.58	−18	−14	+20	+ 0	+ 4	+20	− 1	−10	+ 0	−25				0	−0.79
109452	22 10 27.71	+16 42 29.4	7.73	H	332.615 456 68	+16.708 155 58		5.33	17.30	−11.71	0.74	0.65	0.93	0.90	0.78	+19	+13	−13	− 5	+ 0	+ 5	+ 3	−29	+14	+25				0	−1.04
109453	22 10 27.92	+65 31 25.6	7.70	H	332.616 326 85	+65.523 771 58		4.63	−4.24	−9.81	0.55	0.51	0.59	0.68	0.56	−14	+ 0	+ 8	+11	+14	+ 5	+12	− 2	− 3	−17				0	−0.38
109454	22 10 28.92	+30 48 38.6	7.95	G	332.620 486 15	+30.810 735 65		10.18	−70.65	−90.41	0.63	0.68	0.83	0.76	0.85	+19	− 1	−11	+28	+ 8	−13	+ 7	+13	− 1	+22				0	0.96
109455	22 10 29.62	−38 10 36.3	9.07	H	332.623 421 66	−38.176 750 11		7.83	11.33	−43.48	1.03	0.97	1.31	1.19	0.92	+33	−19	−23	− 3	− 9	+21	− 3	− 4	− 8	+22				0	−0.09
109456	22 10 29.89	+19 36 24.1	8.05	H	332.624 555 63	+19.606 682 58		4.38	9.51	−2.18	0.67	0.57	0.80	0.72	0.62	+14	+ 3	−19	+17	− 1	−12	− 2	− 8	+14	+15				2	2.04
109457	22 10 30.02	+29 01 46.1	9.42	H	332.625 068 91	+29.029 471 04		3.44	−8.32	−2.59	0.98	0.95	1.33	1.25	1.08	+12	+15	+ 8	+61	−13	+13	−11	−12	+14	+10				2	−0.48
109458	22 10 30.18	+20 58 40.8	6.45	H	332.625 769 81	+20.978 006 91		4.92	−2.83	−9.26	0.67	0.45	0.70	0.75	0.52	+ 2	+10	− 9	+34	− 5	+ 6	− 4	− 7	+10	+ 4				0	2.09
109459	22 10 31.57	+50 48 10.8	8.28	H	332.631 526 30	+50.803 005 99		−0.13	2.07	−6.27	0.63	0.59	0.84	0.67	0.59	−18	− 6	+16	− 8	+19	+ 2	+19	−20	+20	+ 2				0	0.12
109460	22 10 31.74	−10 49 13.7	6.64	H	332.632 256 49	−10.820 461 79		7.34	48.59	28.28	0.77	0.55	0.86	0.99	0.57	+29	+ 3	+ 1	− 8	+35	+ 6	+28	+ 7	+20	+28				0	0.93
109461	22 10 31.79	+22 47 49.8	9.19	H	332.632 440 70	+22.797 154 01		26.93	−579.60	−59.69	1.00	0.88	1.21	1.18	1.09	+13	+ 8	+ 5	− 6	− 4	−12	− 5	− 3	−10	+16				0	−0.34
109462 H	22 10 32.35	−33 49 38.1	7.53	G	332.634 807 94	−33.827 245 50	A	14.35	6.48	−53.51	1.53	1.23	1.60	1.51	1.07	+32	−20	−11	+13	− 9	− 3	−11	+36	+ 4	+ 3				1	0.68
109463	22 10 32.52	+47 08 26.0	7.90	H	332.635 509 54	+47.140 565 33		0.89	−1.29	−0.89	0.63	0.66	0.86	0.77	0.79	−19	+ 8	−12	+ 6	+14	+10	+16	−13	+ 9	−14				0	0.35
*109464 T	22 10 32.73	+47 55 02.3	10.95	H	332.636 383 09	+47.917 307 82	B	4.20	−6.18	−4.37	160.60	168.99	1.96	1.93	2.03	−17	+ 0	+ 0	+ 0	+ 0	−18	+ 0	+ 0	+35	−33				3	1.00
*109465	22 10 32.68	+36 14 38.5	9.31	H	332.636 168 42	+36.244 024 59		5.04	9.74	1.98	0.87	0.88	1.29	1.04	1.03	+ 9	+ 0	−22	− 3	+11	−14	+ 9	−22	+32	+17				0	0.76
109466	22 10 33.70	−04 16 00.7	5.98	H	332.640 433 35	−04.266 863 95		11.57	72.36	3.50	0.88	0.54	0.86	1.38	0.62	+ 1	+ 3	− 7	+26	− 4	+24	− 7	+ 7	+ 1	−25				0	−0.90
109467	22 10 34.45	+47 54 49.6	7.47	G	332.643 554 80	+47.913 789 57	A	4.20	−6.18	−4.37	1.83	1.86	1.96	1.93	2.03	−28	+28	−20	− 7	+20	−18	+24	−20	+35	−33				3	1.00
109468	22 10 35.30	−40 24 41.9	9.57	G	332.647 093 59	−40.411 636 80		20.63	148.99	−60.75	1.27	1.05	1.48	1.43	1.11	+22	− 3	− 3	+ 8	− 7	+21	− 4	+37	+ 6	+17				0	0.04
109469 H	22 10 36.09	+37 06 23.3	8.18	2 H	332.650 382 47	+37.106 467 73	*	1.04	−4.16	−10.84	0.76	0.74	0.99	1.05	0.89	− 9	+ 4	− 8	−16	+10	+ 3	+11	−29	+17	+ 4				0	−0.39
109470	22 10 36.96	−37 44 58.5	7.08	H	332.653 989 96	−37.749 583 02		15.90	227.94	−82.66	0.80	0.72	0.92	1.11	0.77	+23	−37	−14	−28	+ 0	+36	+ 8	− 6	−10	− 0				0	2.68
109471	22 10 37.46	+11 37 28.8	5.78	1 H	332.656 084 71	+11.624 671 70		5.22	−46.82	−54.38	0.65	0.52	0.85	0.97	0.64	+19	−12	− 7	−19	+21	+16	+13	−22	+26	+ 1				0	−0.20
109472	22 10 37.46	−11 33 53.9	5.43	G	332.656 102 32	−11.564 959 01		5.81	29.74	8.02	0.70	0.46	0.75	0.76	0.44	+18	− 5	+ 6	−29	+20	+26	+18	−10	+ 5	+10				0	2.20
109473	22 10 38.35	+40 15 49.1	8.55	G	332.659 797 57	+40.263 650 36		3.35	− 6.29	26.64	0.55	0.66	1.07	0.66	0.90	−52	− 3	− 4	+35	+ 3	−19	− 4	−17	+26	−64				1	0.15
109474	22 10 38.90	+70 07 57.1	5.52	H	332.662 092 70	+70.132 513 90	A	30.61	−64.78	24.17	0.52	0.47	0.50	0.55	0.46	+ 0	− 9	+19	+10	+ 5	+22	+ 0	−10	+ 1	+ 5				1	0.65
109475	22 10 39.32	−68 19 44.1	7.04	H	332.663 851 49	−68.328 920 55		4.28	106.10	−45.83	0.47	0.47	0.69	0.51	0.49	−11	+ 3	− 8	− 1	+ 5	+ 9	+ 5	− 8	−13	−14				0	−2.01
109476	22 10 40.04	−24 01 33.5	9.51	2 H	332.666 827 61	−24.025 971 67		1.83	−27.16	−2.51	1.16	0.89	1.19	1.47	0.97	+20	−24	−17	−44	− 5	+30	− 8	−59	+26	+32				0	−1.49
109477	22 10 42.33	−75 52 52.9	6.54	H	332.676 385 66	−75.881 350 84		8.47	40.55	−34.66	0.46	0.47	0.61	0.53	0.48	− 1	−12	−14	− 6	+ 2	−17	− 1	−11	+ 3	−16				0	0.44
109478	22 10 43.51	+16 13 15.4	8.99	H	332.681 295 41	+16.220 957 42		3.79	−5.80	−8.30	0.91	0.93	1.18	1.20	1.36	+35	− 3	− 5	−13	−18	−10	−15	−43	+12	+42				2	−0.18
109479	22 10 43.77	+71 07 42.3	7.49	H	332.682 390 90	+71.128 428 83		23.70	54.09	−73.84	0.50	0.48	0.55	0.60	0.50	− 9	+ 0	+18	+11	+ 4	− 9	+ 5	+ 4	− 3	+ 6				0	−1.71
109480 H	22 10 44.56	+07 54 32.6	10.92	G	332.685 646 80	+07.909 061 09	A	26.63	251.33	26.51	11.72	6.20	8.18	8.34	6.06	+68	+ 2	−13	−10	+ 8	− 9	+14	−17	+40	+30				1	−0.16
109481	22 10 44.66	+42 44 11.8	7.82	1 H	332.686 101 40	+42.736 609 74		4.57	22.07	−1.20	0.52	0.57	0.79	0.64	0.68	−43	− 1	+ 2	+20	+ 0	+ 3	+ 0	−15	+ 9	−43				0	1.26
109482	22 10 45.46	−40 15 09.1	8.89	H	332.689 396 82	−40.252 532 49		1.40	30.18	−9.84	1.11	0.84	1.25	1.39	0.87	+15	−19	−10	+18	−18	+17	−13	+26	+ 7	+ 2				0	−1.53
109483 H	22 10 46.80	−69 32 35.8	9.09	H	332.695 017 15	−69.543 287 76	A	2.65	18.71	−11.76	2.50	2.17	2.15	1.85	1.55	+17	− 2	− 8	+16	− 3	+19	+ 5	−18	− 7	+ 1				0	−0.62
109484	22 10 48.73	−48 53 26.2	8.77	G	332.703 055 84	−48.890 621 31		6.80	13.87	−10.57	0.85	0.75	1.30	0.93	0.87	+21	− 8	−20	−21	+14	− 1	+ 6	+23	−10	+42				0	−0.41
109485	22 10 48.77	−63 34 09.7	8.95	H	332.703 212 87	−63.569 362 10		3.33	16.87	−7.09	0.68	0.81	1.24	0.81	0.83	−27	− 4	− 7	−15	+ 2	+ 0	+ 3	−17	+ 3	−41				0	−1.20
109486	22 10 49.24	+13 57 07.7	8.85	H	332.705 165 23	+13.952 146 38		2.92	2.00	−6.36	1.01	0.77	1.22	1.51	0.93	+ 3	+11	−24	−30	+29	− 8	+27	−17	+32	−10				0	0.00
109487	22 10 49.27	−39 02 12.7	8.95	H	332.705 305 99	−39.036 864 18		2.71	0.74	−5.72	1.08	0.87	1.39	1.18	0.82	+20	+ 7	− 1	− 4	−14	+41	−15	− 7	− 1	+ 9				0	0.94
109488	22 10 49.47	−55 27 24.5	7.22	G	332.706 117 05	−55.456 800 68		19.51	194.05	−136.95	0.59	0.50	0.89	0.85	0.55	+ 1	− 2	−24	+18	+ 1	− 8	+ 1	+15	−16	+10				0	0.67
109489	22 10 49.82	−37 58 11.5	9.51	G	332.707 571 13	−37.969 851 75		10.53	274.03	−52.14	1.20	1.05	1.46	1.38	0.97	+34	− 8	−10	+ 0	−18	+28	−17	−16	− 3	+16				0	0.08
109490	22 10 50.58	+15 42 29.8	8.02	H	332.710 764 37	+15.708 275 10		22.24	25.37	−21.13	0.78	0.76	1.00	1.00	1.06	+39	+ 4	− 9	− 8	− 6	−18	− 6	−23	+ 6	+45				0	−2.17
109491	22 10 51.17	−63 05 57.9	7.76	H	332.713 204 95	−63.099 411 71		11.59	118.17	−8.85	0.43	0.53	0.81	0.49	0.56	−30	− 6	− 4	+ 1	− 4	− 4	− 5	− 7	+ 1	−41				0	−0.07
109492	22 10 51.26	+58 12 04.5	3.39	1 H	332.713 591 31	+58.201 249 92		4.49	13.35	4.49	0.42	0.41	0.50	0.44	0.39	−11	+ 8	+18	− 2	+ 8	−13	+12	−21	− 3	− 3				0	1.77
109493	22 10 51.70	+30 33 11.0	6.30	H	332.715 400 24	+30.553 042 43		7.80	17.28	−16.95	0.53	0.49	0.64	0.68	0.57	+ 3	+10	+ 1	+38	− 3	+ 3	− 3	+ 5	+ 5	+ 2				0	0.06
109494	22 10 52.44	−71 58 32.8	8.45	H	332.718 494 80	−71.975 777 86		4.57	6.99	−1.29	0.59	0.63	0.88	0.74	0.73	−12	+ 3	− 4	− 1	+ 4	−22	+ 2	− 8	−13	−21				0	0.76
109495	22 10 54.45	+16 36 54.8	9.61	H	332.726 894 23	+16.615 214 53		4.33	−12.76	−0.65	1.16	1.09	1.47	1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
109401	9.517	0.019	8.968	0.018		0.520	0.019	T	0.59	0.02	L	9.0405	0.0023	0.014	74		9.01	9.07					1							
109402						1.436	0.020	G	1.76	0.05	I	11.9691	0.0057	0.048	99		11.88	12.04					1							G
109403	10.707	0.052	9.735	0.034		0.900	0.020	G	0.94	0.02	I	9.7401	0.0026	0.024	125		9.70	9.79		C			1 S							G
109404	5.653	0.003	5.400	0.003		0.241	0.004	T	0.27	0.01	L	5.4373	0.0007	0.006	91		5.43	5.45		C			1							S
109405	10.761	0.043	9.793	0.028		0.838	0.040	T	0.86	0.03	L	9.8793	0.0037	0.033	115		9.81	9.95		C			1							
109406	9.861	0.028	8.552	0.017		1.112	0.026	T	1.07	0.03	L	8.5992	0.0019	0.014	69		8.57	8.62		C			1							
109407	9.939	0.037	8.447	0.019		1.256	0.033	T	1.21	0.03	L	8.4873	0.0022	0.015	80		8.46	8.51					1							
109408	8.246	0.009	6.589	0.005		1.380	0.001	G	1.35	0.00	H	6.5796	0.0011	0.011	117		6.57	6.60					1							S
109409	10.593	0.036	10.116	0.037	*	0.462	0.040	T	0.53	0.04	L *	10.1043	0.0060	0.039	86	*	10.04	10.18		R	22100−4147	I 1	2 C A	AB	284	0.664	0.014	1.59	0.06	
109410	4.845	0.002	4.338	0.002		0.471	0.012	G	0.52	0.03	C	4.3853	0.0004	0.004	168		4.38	4.39					1							S
109411	9.855	0.023	9.270	0.022		0.578	0.003	G	0.65	0.00	H	9.3325	0.0021	0.018	80		9.30	9.35					1							
109412	6.626	0.004	6.458	0.004		0.147	0.002	G	0.16	0.00	H	6.4929	0.0005	0.005	82		6.49	6.50					1							S
109413	8.285	0.014	7.669	0.012		0.524	0.015	G	0.60	0.02	H	7.7433	0.0016	0.009	48		7.73	7.76					1							S
109414	7.787	0.008	7.373	0.007	*	0.391	0.010	T	0.46	0.01	L *	7.4009	0.0011	0.010	88	*	7.38	7.42		D	22100+2308	I 1	2 C A	AB	37	0.460	0.003	0.03	0.01	S
109415	8.941	0.011	7.496	0.006		1.219	0.010	T	1.18	0.01	L	7.5201	0.0011	0.010	140		7.50	7.54		C			1							S
109416	9.978	0.026	9.777	0.034		0.140	0.015	G	0.15	0.01	H	9.8877	0.0030	0.026	96		9.83	9.93		C			1							G
109417	9.861	0.019	9.537	0.022		0.308	0.027	T	0.35	0.04	L	9.5918	0.0021	0.026	149		9.55	9.64					1 S							G
109418	7.169	0.006	6.994	0.005		0.168	0.007	T	0.18	0.01	L	7.0358	0.0009	0.008	127		7.02	7.05		C			1							S
109419	9.813	0.020	9.281	0.019		0.538	0.007	G	0.61	0.01	H	9.3451	0.0025	0.026	107		9.30	9.39		C			1							
109420	10.831	0.036	10.467	0.043		0.345	0.052	T	0.40	0.07	L	10.4161	0.0124	0.139	207		10.21	10.58	0.25	P 1 A			1 S							G P
109421	11.841	0.114	10.471	0.055		1.157	0.103	T	1.12	0.09	L	10.3791	0.0078	0.052	83		10.29	10.47		R			1							
109422	5.511	0.004	4.988	0.004		0.489	0.007	G	0.54	0.02	A	5.0428	0.0005	0.004	81		5.04	5.05		C			1							S
109423	9.557	0.020	8.720	0.016		0.737	0.020	T	0.78	0.01	L	8.7788	0.0016	0.011	80		8.76	8.80					1							
109424	6.999	0.005	6.934	0.006		0.059	0.007	T	0.07	0.01	L	6.9614	0.0014	0.013	126		6.94	6.99		U 2			1							S
109425	9.409	0.018	8.883	0.018		0.430	0.015	G	0.50	0.02	H	8.9296	0.0020	0.014	109		8.91	8.96		C			1							
109426	7.754	0.007	7.693	0.010		0.061	0.011	T	0.07	0.01	L	7.7222	0.0013	0.011	122		7.71	7.74					1							S
109427	3.644	0.003	3.540	0.002		0.086	0.002	G	0.09	0.02	A	3.5534	0.0008	0.005	67		3.55	3.56					1 G							S
109428	9.576	0.026	8.805	0.022		0.702	0.027	T	0.76	0.02	L	8.8700	0.0029	0.015	50		8.85	8.90		C			1							
109429	10.963	0.049	9.783	0.029		1.011	0.044	T	0.99	0.04	L	9.7817	0.0026	0.022	126		9.74	9.82		C			1							G
109430	10.583	0.044	9.311	0.025		1.083	0.040	T	1.05	0.03	L	9.3217	0.0037	0.022	74		9.28	9.36					1							
109431	10.111	0.024	8.413	0.011		1.418	0.021	T	1.40	0.03	L	8.3898	0.0012	0.011	128		8.37	8.41		C			1							
109432	10.030	0.038	8.733	0.020		1.041	0.015	G	1.01	0.01	H	8.7544	0.0015	0.014	130		8.73	8.78		C			1							
109433	9.559	0.022	8.826	0.019		0.657	0.022	T	0.72	0.02	L	8.9045	0.0013	0.015	72		8.88	8.93		D	22102−3559	I 1	1							S
109434	6.291	0.003	6.346	0.004		−0.053	0.004	G	−0.03	0.00	H	6.3512	0.0008	0.006	125		6.34	6.36		C			1							S
109435	9.140	0.015	8.976	0.017		0.157	0.021	T	0.17	0.02	L	8.9846	0.0025	0.021	113		8.95	9.03					1 S							
109436	11.644	0.074	10.055	0.027		1.332	0.062	T	1.30	0.07	L	10.1552	0.0029	0.037	190		10.09	10.23					1 S							G
109437	9.268	0.011	7.446	0.005		1.547	0.010	T	2.53	0.02	O	7.2239	0.0035	0.033	183		7.15	7.26		U 2 C			1 S							S
109438	10.035	0.032	8.884	0.020		0.989	0.029	T	0.97	0.02	L	8.9329	0.0027	0.018	75		8.90	8.96					1							
109439	7.037	0.005	6.264	0.004		0.688	0.005	T	0.75	0.00	L	6.3162	0.0013	0.010	93		6.30	6.33					1							S
109440	8.768	0.014	8.207	0.013	A	0.300	0.495	G	0.57	0.04	L *	8.1862	0.0018	0.013	78	*	8.16	8.21		D	22103+1345	I 1	2 C B	AB	1	3.874	0.034	3.22	0.17	S
109441	8.142	0.010	7.989	0.011		0.147	0.014	T	0.16	0.01	L	8.0297	0.0012	0.012	118		8.01	8.04					1							S
109442	6.272	0.004	6.284	0.005		−0.006	0.004	G	0.01	0.00	H	6.2897	0.0008	0.005	52		6.28	6.30		C			1							S
109443	8.246	0.008	7.693	0.007		0.527	0.009	G	0.60	0.01	H	7.7400	0.0016	0.013	147		7.72	7.76					1 G							S
109444	9.781	0.026	9.049	0.022		0.657	0.026	T	0.72	0.02	L	9.1188	0.0022	0.015	70		9.09	9.15		C			1							S
109445	7.720	0.007	6.474	0.006		1.080	0.015	G	1.04	0.01	H	6.5265	0.0010	0.008	71		6.51	6.54		C	22104+1438	I 1	1							S
109446	9.318	0.015	8.168	0.010		0.988	0.014	T	0.97	0.01	L	8.2264	0.0013	0.010	99		8.20	8.24		C			1							
109447	8.100	0.010	8.110	0.012		−0.024	0.002	G	0.00	0.00	H	8.1252	0.0014	0.011	92		8.11	8.16		C			1							S
109448	10.285	0.033	9.080	0.020		1.031	0.030	T	1.00	0.03	L	9.1156	0.0027	0.022	80		9.08	9.15		C			1							
109449	10.976	0.042	9.750	0.023		1.047	0.037	T	1.02	0.03	L	9.7902	0.0026	0.029	130		9.74	9.84		C			1							
109450	8.311	0.011	7.630	0.009		0.618	0.011	T	0.69	0.01	L	7.6970	0.0013	0.009	101		7.68	7.72					1							S
109451	8.467	0.010	8.111	0.010		0.337	0.013	T	0.39	0.02	L	8.1288	0.0014	0.013	119		8.11	8.15		C			1							S
109452	7.736	0.008	7.717	0.009		0.018	0.011	T	0.04	0.01	L	7.7461	0.0017	0.012	91		7.73	7.77					1							S
109453	7.709	0.008	7.708	0.009		0.006	0.011	T	0.03	0.01	L	7.7098	0.0012	0.009	106		7.70	7.72					1							S
109454	8.437	0.010	8.002	0.010		0.411	0.013	T	0.48	0.01	L	8.0524	0.0015	0.010	87		8.03	8.07		C			1							S
109455	9.593	0.021	9.113	0.020		0.464	0.022	T	0.53	0.02	L	9.1728	0.0027	0.019	79		9.14	9.21		C			1							
109456	8.040	0.009	8.032	0.011		0.012	0.013	T	0.03	0.01	L	8.0590	0.0013	0.012	94		8.04	8.08		C			1							S
109457	11.082	0.048	9.571	0.021		1.271	0.041	T	1.23	0.04	L	9.5742	0.0028	0.025	136		9.52	9.62					1							
109458	6.559	0.005	6.451	0.005		0.099	0.001	G	0.11	0.00	H	6.4853	0.0008	0.006	68		6.47	6.51		C			1							S
109459	8.287	0.016	8.277	0.020		−0.002	0.010	G	0.02	0.01	H	8.2847	0.0014	0.015	134		8.26	8.31					1							
109460	8.076	0.009	6.766	0.006		1.113	0.008	T	1.08	0.01	L	6.8132	0.0012	0.008	85		6.80	6.84					1							S
109461	10.393	0.042	9.349	0.028		0.924	0.010	G	0.97	0.01	I	9.3360	0.0024	0.021	85		9.30	9.37					1							
109462	8.311	0.008	7.644	0.008	A	0.636	0.015	G	0.66	0.01	L *	7.6518	0.0014	0.010	97	*	7.62	7.67		D	22105−3350	I 1	2 C B	AB	332	1.616	0.036	3.40	0.22	S
109463	9.954	0.024	8.042	0.010		1.587	0.021	T	1.61	0.02	L	8.0154	0.0017	0.019	122		7.99	8.05					1							
109464											T	10.6196	0.7101			B				D	22106+4755	I 2	1 C F D							D
109465	9.891	0.022	9.405	0.022		0.457	0.028	T	0.53	0.03	L	9.4124	0.0023	0.020	114		9.37	9.45					1							
109466	7.227	0.007	6.082	0.005		0.981	0.003	G	0.96	0.00	H	6.1485	0.0012	0.008	48		6.14	6.16					1							S
109467	8.043	0.009	7.508	0.007	A	0.529	0.015	G	0.60	0.02	H	7.5830	0.0543	0.019	137	A	7.55	7.61		D	22106+4755	I 2	1 C P D							S D
109468	10.689	0.048	9.584	0.031		0.960	0.015	G	1.01	0.01	I	9.6813	0.0027	0.021	72		9.63	9.72		C			1							
109469	10.586	0.037	8.491	0.012	*	1.581	0.218	G	1.59	0.24	R *	8.2999	0.0027	0.024	106	*	8.26	8.35		U 2	22106+3706	H 1	2 C S B	AB	348	0.125	0.018	0.72	0.90	
109470	7.612	0.008	7.119	0.006		0.451	0.010	G	0.52	0.01	H	7.1783	0.0011	0.007	74		7.16	7.19		C			1 G							S
109471	7.871	0.008	5.965	0.004		1.617	0.007	T	1.83	0.03	O	5.8757	0.0018	0.012	93		5.85	5.89		U 2			1							S
109472	5.283	0.003	5.413	0.003		−0.117	0.001	G	−0.10	0.00	H	5.3954	0.0006	0.005	75		5.39	5.41					1							S
109473	8.981	0.008	8.603	0.008		0.358	0.011	T	0.42	0.01	L	8.6391	0.0013	0.018	282		8.60	8.67		C			1							
109474	5.960	0.004	5.560	0.003	A	0.391	0.004	T	0.46	0.00	L	5.6119	0.0042	0.015	120	A	5.60	5.64		D	22106+7008	I 1	2 C A	AB	252	14.632	0.015	3.10	0.07	S
109475	8.511	0.008	7.164	0.005		1.142	0.007	T	1.11	0.01	L	7.2043	0.0009	0.012	181		7.18	7.22		C			1							S
109476	9.724	0.022	9.508	0.026		0.200	0.034	T	0.22	0.04	L	9.5706	0.0051	0.036	88		9.51	9.63	2.43	P 1 A			1							
109477	8.088	0.007	6.672	0.005		1.182	0.003	G	1.14	0.00	H	6.7052	0.0008	0.008	140		6.69	6.72					1							S
109478	10.179	0.028	9.111	0.019		0.925	0.026	T	0.92	0.02	L	9.1473	0.0025	0.021	94		9.12	9.18					1							S
109479	8.240	0.008	7.557	0.007		0.631	0.009	T	0.70	0.01	L	7.6275	0.0010	0.010	125		7.61	7.64					1							S
109480						1.480	0.020	G	1.95	0.12	I *	11.0150	0.0045	0.038	98	*	10.90	11.07		R	22107+0755	M 1	2 C A	AS	71	0.455	0.020	0.28	0.22	G
109481	8.120	0.008	7.857	0.008		0.250	0.011	T	0.28	0.01	L	7.8888	0.0015	0.015	167		7.86	7.91		M			1							S
109482	10.344	0.039	9.013	0.022		1.129	0.035	T	1.09	0.04	L	9.0560	0.0022	0.016	66		9.03	9.08		C			1							
109483	9.566	0.015	9.174	0.015	*	0.383	0.018	T	0.45	0.02	L *	9.1772	0.0024	0.027	156	*	9.13	9.24		D	22108−6933	M 1	2 C A	AB	245	0.361	0.005	0.92	0.04	
109484	9.379	0.015	8.812	0.014		0.531	0.002	G	0.60	0.00	H	8.8899	0.0018	0.018	122		8.86	8.91					1							
109485	10.262	0.019	9.054	0.012		1.033	0.018	T	1.01	0.01	L	9.1221	0.0021	0.025	207		9.08	9.16					1							
109486	9.136	0.016	8.876	0.018		0.291	0.016	G	0.33	0.02	H	8.9200	0.0033	0.021	80		8.89	8.95					1							
109487	10.154	0.034	9.079	0.023		0.931	0.031	T	0.93	0.02	L	9.1072	0.0032	0.018	71		9.08	9.14		C			1							
109488	8.040	0.007	7.294	0.006		0.663	0.005	G	0.72	0.00	H	7.3550	0.0009	0.011	137		7.34	7.37					1							S
109489	10.497	0.038	9.593	0.028		0.763	0.002	G	0.81	0.00	H	9.6654	0.0032	0.023	77		9.63	9.70					1							
109490	8.730	0.011	8.087	0.010		0.598	0.015	G	0.67	0.01	H	8.1494	0.0012	0.012	92		8.13	8.18		C			1							S
109491	8.552	0.007	7.830	0.006		0.663	0.007	T	0.72	0.01	L	7.9025	0.0012	0.014	235		7.87	7.92					1							S
109492	5.403	0.004	3.528	0.002		1.558	0.004	T	1.58	0.00	L	3.5120	0.0013	0.011	110		3.50	3.54		U 2			1							S P
109493	6.558	0.004	6.320	0.005		0.227	0.006	T	0.25	0.01	L	6.3682	0.0009	0.007	92		6.36	6.39		C			1							S
109494	8.507	0.008	8.439	0.010		0.061	0.011	T	0.07	0.01	L	8.4795	0.0013	0.015	158		8.46	8.51					1							S
109495	10.036	0.030	9.626	0.030		0.401	0.035	T	0.47	0.04	L	9.7072	0.0027	0.022	85		9.65	9.75		C			1							
109496	11.313	0.068	9.564	0.027		1.458	0.058	T	1.46	0.09	L	9.5594	0.0028	0.024	86		9.52	9.60		C			1							
109497	7.704	0.007	7.482	0.008		0.212	0.010	T	0.23	0.01	L	7.5090	0.0011	0.010	119		7.49	7.52		C	22109+5756	I 1	1							S
109498	9.514	0.022	8.200	0.013		1.116	0.020	T	1.08	0.02	L	8.2512	0.0022	0.014	69		8.22	8.27					1							S
109499	9.855	0.024	8.344	0.013		1.271	0.021	T	1.23	0.02	L	8.3731	0.0017	0.012	83		8.35	8.39		C			1							
109500	10.259	0.038	9.690	0.036		0.596	0.002	G	0.67	0.00	H	9.6890	0.0021	0.018	66		9.65	9.72					1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
109501 H	22 10 57.47	+24 29 18.8	8.63	H	332.739 478 74	+24.488 546 46	A	6.39	57.25	26.45	2.02	1.85	2.08	2.20	1.85	+14	+33	− 4	−16	− 2	− 9	− 1	− 5	+ 3	+28	1	0.04
109502	22 10 58.18	+63 17 48.4	8.75	1 H	332.742 416 84	+63.296 777 33		5.00	−4.54	−9.66	0.75	0.67	0.81	0.95	0.77	−16	− 6	+ 7	+21	+ 8	+ 3	+ 5	−13	−13	−22	0	−0.97
109503	22 10 59.46	+49 02 51.7	7.31	1 H	332.747 759 00	+49.047 689 82		1.10	−3.70	−3.83	0.47	0.50	0.66	0.50	0.53	−16	+ 5	−12	+ 6	+12	− 1	+16	−16	+21	+ 3	0	−1.29
109504	22 10 59.52	−56 44 59.6	10.12	H	332.748 018 85	−56.749 902 41		13.32	15.90	−43.87	1.25	1.15	1.82	1.64	1.25	+12	+ 3	−25	+24	+ 8	+17	+13	+ 8	− 8	+22	0	−0.49
109505 H	22 10 59.56	+63 23 58.5	7.32	1 G	332.748 157 93	+63.399 585 32	A	1.04	−0.83	−2.05	1.62	1.29	1.43	1.63	1.40	− 7	− 5	+ 3	+15	+10	+ 5	+ 7	− 3	− 8	− 5	2	1.82
109506	22 11 00.63	+52 24 36.3	9.11	H	332.752 637 78	+52.410 089 54		3.24	19.90	9.37	0.79	0.72	0.99	0.75	0.68	− 9	+23	− 4	− 5	+17	− 8	+24	−28	+18	+10	0	0.60
109507	22 11 01.67	−25 50 26.3	9.52	H	332.756 969 88	−25.840 641 93		3.55	9.21	3.12	1.16	0.88	1.38	1.41	1.08	+24	−12	−17	+13	− 3	+11	− 1	+21	− 8	+32	0	0.76
109508	22 11 01.80	−39 32 50.5	7.98	G	332.757 489 42	−39.547 369 95		8.94	−10.37	−90.72	0.92	0.75	1.13	1.01	0.75	+25	− 5	+ 0	−13	−16	+32	−16	−13	+ 2	+20	0	0.60
109509	22 11 02.30	−21 13 57.7	6.10	H	332.759 600 52	−21.232 686 36		17.64	123.93	−42.66	0.78	0.54	0.84	0.95	0.55	+27	−13	− 5	−20	− 5	+ 6	−10	−33	+25	+30	4	0.21
109510	22 11 03.12	−40 16 51.8	7.83	H	332.763 017 27	−40.281 044 02		4.73	−55.76	−42.08	0.90	0.69	1.00	1.14	0.74	+ 8	−11	+ 4	+33	−15	+24	−14	+38	+12	+ 3	0	0.22
109511	22 11 03.73	+43 01 50.6	6.76	H	332.765 555 44	+43.030 731 40		3.74	−24.66	−20.54	0.44	0.47	0.69	0.53	0.57	−31	+ 9	− 6	+20	+ 1	+10	+ 1	−15	+ 7	−33	0	−0.95
109512	22 11 04.30	−66 20 28.4	8.46	1 H	332.767 919 81	−66.341 209 73		7.35	8.26	−26.77	0.63	0.63	0.95	0.75	0.62	−15	+ 4	−24	+ 9	+10	− 5	+ 8	− 4	− 1	− 7	0	0.52
109513	22 11 04.70	−60 40 18.6	9.32	H	332.769 563 85	−60.671 823 50		3.84	11.66	9.47	0.76	0.74	1.26	0.78	0.74	+ 0	−13	−13	+24	+10	+10	+14	+ 9	−25	− 2	0	0.95
109514	22 11 04.80	+48 40 38.6	6.64	H	332.769 991 51	+48.677 391 97		4.64	22.23	−3.87	0.40	0.44	0.57	0.43	0.48	−26	+ 8	−13	−10	+17	− 2	+19	−23	+20	−19	0	−0.84
109515	22 11 05.53	+19 47 19.3	8.69	H	332.773 038 42	+19.788 693 66		2.17	−4.69	−18.90	0.82	0.67	0.99	0.87	0.75	+ 7	+15	−17	+18	− 7	− 3	− 6	−26	+15	+ 9	2	−0.89
109516	22 11 06.21	+12 23 42.8	9.55	H	332.775 857 02	+12.395 221 72		3.04	−7.04	−5.03	1.09	0.87	1.40	1.39	1.13	+26	− 1	−18	−31	+15	+10	+17	−19	+33	+19	2	1.12
109517	22 11 06.62	+70 58 32.0	7.91	H	332.777 576 24	+70.975 549 30		4.88	20.93	12.28	0.56	0.51	0.59	0.67	0.55	− 5	− 6	+13	+24	+ 1	− 7	+ 3	+ 9	− 5	+ 3	0	−0.66
109518	22 11 07.93	+66 27 41.0	9.09	H	332.783 028 91	+66.461 387 48		0.45	−1.07	−3.54	0.69	0.70	0.78	0.83	0.71	−19	+ 1	+15	+ 2	+16	+ 2	+14	− 9	+ 9	−20	0	−0.45
109519	22 11 08.21	−70 52 02.6	8.54	H	332.784 216 74	−70.867 398 88		3.57	−4.39	3.50	0.70	0.73	0.97	0.76	0.87	−14	−13	−10	−11	+ 3	− 6	+ 4	−17	− 9	−14	0	0.83
109520	22 11 09.13	+50 38 29.6	8.56	H	332.788 024 07	+50.641 541 82		1.27	2.02	−2.34	0.67	0.66	0.86	0.73	0.72	− 6	+ 7	− 5	− 9	+ 6	+ 0	+10	−31	+14	+ 8	0	−0.65
*109521	22 11 09.78	+50 49 23.8	5.38	H	332.790 733 22	+50.823 289 38		18.24	126.81	42.56	0.44	0.42	0.56	0.53	0.57	−14	+ 4	+ 6	−15	+18	− 2	+17	−30	− 3	−22	0	−0.78
*109522	22 11 09.64	+43 31 39.4	7.38	H	332.790 168 41	+43.527 622 42		4.70	2.12	−38.84	0.49	0.53	0.76	0.60	0.63	−28	− 4	+12	+ 7	+ 5	+11	+ 3	−18	+ 3	−30	0	−1.19
109523	22 11 10.94	−25 22 11.5	8.19	G	332.795 570 08	−25.369 860 94		8.35	−17.04	−1.78	1.12	0.74	1.04	1.25	0.85	−11	+ 5	−25	−36	+29	+13	+33	+ 8	+ 3	− 4	0	1.01
109524	22 11 11.11	+37 17 40.9	8.50	H	332.796 273 54	+37.294 701 06		3.48	−3.36	28.40	0.88	0.81	1.13	1.32	1.07	− 5	+12	−10	− 6	+ 2	+ 4	+ 4	−17	+14	− 6	0	0.32
109525	22 11 11.21	−22 27 52.3	8.78	H	332.796 697 66	−22.464 513 93		2.49	11.56	−1.49	1.18	0.74	1.16	1.22	0.75	+29	− 3	−13	−49	−16	+20	−15	−46	+29	+39	4	0.69
109526	22 11 11.72	−05 53 37.3	9.06	H	332.798 848 57	−05.893 685 36		0.61	13.07	−5.22	1.16	0.96	1.33	1.37	0.93	+29	+ 6	−15	− 3	+ 6	+19	+12	+19	+ 8	+17	0	0.88
109527	22 11 11.89	+36 15 25.0	7.23	H	332.799 562 27	+36.256 937 89		44.57	25.38	−250.23	0.53	0.56	0.79	0.69	0.68	+ 2	+ 4	−19	− 7	+ 3	−11	+ 4	−30	+36	+ 9	0	−1.23
109528	22 11 12.16	−12 51 41.3	11.07	G	332.800 685 01	−12.861 465 12		24.11	79.72	−99.06	1.83	1.36	2.10	2.15	1.24	+32	− 3	+18	−17	+ 1	+ 2	− 2	−21	−10	+18	2	0.09
109529	22 11 12.53	−48 58 14.1	10.64	H	332.802 197 29	−48.970 582 61		2.98	1.32	−11.43	1.37	1.28	2.19	1.41	1.36	+22	−19	−36	−18	+20	+ 0	+12	+24	− 2	+40	0	0.91
109530	22 11 14.53	+06 50 19.9	8.55	H	332.810 550 06	+06.838 874 87		2.94	0.99	−8.94	1.01	0.90	1.21	1.31	1.00	+40	−11	−19	+ 2	+ 2	+10	−15	−52	+31	+14	4	−0.12
109531	22 11 14.70	+27 44 12.0	7.26	H	332.811 257 77	+27.736 657 84		3.25	−11.00	−8.62	0.64	0.55	0.73	0.72	0.60	+14	+13	+ 2	+23	− 2	−12	− 7	−11	− 3	+ 2	0	−1.44
109532	22 11 14.75	+17 44 21.9	7.94	H	332.811 467 06	+17.739 404 07		5.99	37.35	11.24	0.85	0.71	0.93	1.01	0.78	+23	+ 2	− 3	−36	+ 6	+10	+ 5	−21	− 2	+19	0	0.96
109533	22 11 15.04	+52 18 44.4	8.23	H	332.812 679 08	+52.312 325 16		−0.13	−0.66	−4.46	0.64	0.66	0.84	0.66	0.63	− 4	+10	− 3	−17	+16	−14	+18	−26	+14	+16	0	−1.36
*109534	22 11 16.06	+68 51 22.8	8.18	H	332.816 912 22	+68.856 337 54		2.04	8.09	4.40	0.61	0.52	0.64	0.82	0.59	−10	−13	+ 9	−16	+18	+17	+14	− 2	− 8	+ 1	0	0.76
*109535 H	22 11 15.98	+40 10 07.6	8.14	H	332.816 566 52	+40.168 774 50	*	4.53	40.52	10.00	1.01	1.16	1.21	1.15	1.14	−39	+ 3	− 4	+33	−10	−14	−14	− 6	+19	−68	1	−1.35
109536	22 11 16.34	−60 32 52.9	7.79	G	332.818 101 87	−60.548 027 97		5.92	15.94	−4.43	0.57	0.55	0.88	0.61	0.55	+ 4	+ 9	−17	+41	+16	+15	+17	+24	−16	+ 4	1	−0.28
109537	22 11 17.11	+41 00 52.8	11.11	G	332.821 309 35	+41.014 666 74		44.84	−207.31	231.37	1.85	2.18	3.24	2.10	2.45	−31	+17	− 6	+12	+ 1	+ 9	+ 3	−23	+ 3	−28	2	
109538	22 11 18.59	−56 25 02.1	9.06	H	332.827 473 73	−56.417 240 60		6.58	0.67	1.08	0.96	0.88	1.52	1.30	0.93	+ 5	+10	−32	+24	+10	+21	+17	+11	− 8	+24	0	−1.30
109539	22 11 20.55	+79 38 26.6	8.72	H	332.835 639 17	+79.640 727 83		4.92	−18.43	−10.37	0.65	0.67	0.75	0.81	0.78	+ 0	−12	+23	+19	+13	+11	+ 8	− 2	+ 3	− 5	0	1.59
109540	22 11 20.89	−34 01 42.2	10.70	H	332.837 060 40	−34.028 402 40		1.88	0.77	5.68	1.65	1.30	2.04	2.05	1.34	+20	+ 3	−21	+ 9	−21	+34	−11	+24	− 5	+ 7	0	0.80
*109541	22 11 21.67	−61 17 30.2	8.98	H	332.840 289 26	−61.291 712 65		0.25	−6.06	−1.94	0.59	0.72	1.22	0.69	0.78	−10	−15	− 9	+17	+10	+ 6	+11	+ 2	−17	−15	0	0.60
*109542	22 11 21.70	−39 20 47.7	10.23	H	332.840 399 05	−39.346 593 41		4.04	−4.93	−9.35	1.43	1.17	1.75	1.55	1.19	+22	+ 2	+ 4	− 4	−13	+26	−15	− 4	+ 3	+21	0	−2.16
*109543	22 11 21.66	+39 42 41.9	7.26	1 H	332.840 257 07	+39.711 645 70		3.30	−14.10	−35.40	0.42	0.53	0.80	0.51	0.66	−56	+16	−17	− 1	+13	− 4	+11	−37	+17	−62	1	0.84
109544	22 11 22.41	−22 12 31.2	8.09	H	332.843 369 69	−22.208 666 74		6.60	−7.57	−3.18	0.87	0.62	0.96	1.01	0.62	+32	−15	−24	−34	− 7	+19	−11	−40	+36	+37	0	0.21
109545	22 11 22.64	+24 46 58.1	8.50	H	332.844 327 79	+24.782 812 32		1.46	0.25	−1.03	0.82	0.75	0.93	0.84	0.73	+32	+18	+14	− 4	− 9	− 5	−10	−23	− 2	+23	0	−2.13
109546	22 11 23.14	+29 15 16.8	7.53	H	332.846 404 36	+29.254 654 96		6.63	25.60	−10.82	0.58	0.56	0.73	0.71	0.63	+22	+ 1	− 5	+52	+ 4	− 8	+ 4	+ 4	+ 4	+20	0	−0.55
109547	22 11 23.75	−64 00 51.6	7.61	2 H	332.848 951 44	−64.014 343 57		−0.30	−8.65	8.64	0.49	0.54	0.89	0.59	0.55	−18	+10	−15	− 9	+ 3	−10	+ 1	−13	− 2	−21	0	−1.53
109548	22 11 23.98	+20 30 07.0	9.51	H	332.849 909 66	+20.501 948 02		3.11	−0.99	−5.95	0.96	0.85	1.28	1.05	0.96	+10	+ 1	−25	+ 6	+ 2	−11	− 1	−24	+23	+ 3	0	−0.07
109549	22 11 25.78	−34 56 23.3	9.17	H	332.857 422 76	−34.939 807 89		17.21	−3.84	−6.98	1.14	0.95	1.50	1.23	0.96	+27	+14	−32	+14	+ 9	+32	+15	+48	−12	+35	0	2.01
109550	22 11 27.14	−43 50 33.2	6.62	H	332.863 074 75	−43.842 568 60		8.34	44.96	14.90	0.78	0.59	0.92	1.19	0.61	+24	+17	−31	+23	+ 6	+15	+11	+35	− 3	+43	2	1.14
109551	22 11 27.14	−27 09 08.2	6.87	H	332.863 103 68	−27.152 286 82		7.11	10.15	−35.00	0.70	0.62	0.96	0.77	0.64	+33	−23	−46	+25	−14	+22	− 1	+44	−22	+30	0	0.75
109552 H	22 11 28.33	+32 05 09.8	7.36	H	332.868 023 16	+32.086 058 53	A	8.50	44.90	7.11	0.66	0.81	1.02	0.67	1.01	+41	−15	− 1	− 9	+16	− 4	+17	+14	+ 1	+59	2	−0.76
109553	22 11 28.98	−26 30 07.7	10.10	H	332.870 752 61	−26.502 147 01		1.82	1.97	−10.35	1.27	1.14	1.73	1.47	1.38	+34	+ 6	−23	+18	− 1	+27	− 2	+40	−17	+43	2	0.76
109554	22 11 29.56	+17 31 10.5	8.27	H	332.873 180 32	+17.519 584 00	+	9.79	31.08	−19.53	1.49	1.36	1.16	2.67	2.05	+ 4	+16	−36	+49	−27	+22	−18	+ 4	+ 4	+11	0	0.08
109555	22 11 29.89	+18 25 32.7	10.25	G	332.874 549 24	+18.425 757 16		87.42	329.21	178.44	1.31	1.32	1.63	1.50	1.40	+26	+ 4	−21	−31	− 2	− 3	− 3	−35	+14	+19	0	1.81
109556	22 11 30.58	+59 24 52.3	5.05	1 G	332.877 434 67	+59.414 514 51		1.98	−7.22	−11.06	0.41	0.38	0.46	0.44	0.39	−12	+ 0	+11	+11	− 1	+14	− 3	−15	− 2	−11	0	−1.49
109557	22 11 30.91	+15 06 16.0	9.28	H	332.878 778 66	+15.104 445 51		10.53	25.83	38.60	0.97	0.92	1.24	1.29	1.07	+39	+ 8	−14	+ 9	+ 9	− 3	+ 8	− 1	+19	+27	0	0.92
109558	22 11 31.06	+18 05 33.6	9.46	G	332.879 415 54	+18.092 680 44		8.43	511.53	59.92	1.26	1.02	1.42	1.61	1.29	+10	+20	−14	−50	+10	− 7	+ 9	−20	+ 9	+15	0	1.05
109559	22 11 31.67	−76 02 45.9	9.01	H	332.881 963 37	−76.046 074 92		3.42	23.77	15.33	0.74	0.77	1.05	0.88	0.81	+ 1	−14	− 3	+ 5	− 8	−22	− 8	− 6	−11	−14	0	0.21
109560	22 11 36.27	−01 00 18.2	9.20	H	332.901 137 71	−01.005 061 43		2.26	−10.57	−18.75	1.20	0.91	1.34	1.54	0.94	+13	+ 8	− 1	+10	−15	+20	−13	− 2	+13	− 2	0	−0.99
109561 H	22 11 38.00	−34 27 54.2	6.68	G	332.908 345 42	−34.465 065 18	A	3.23	14.95	−18.70	1.44	1.20	1.60	1.46	1.01	+19	+16	−22	+10	− 4	+31	+ 2	+51	− 8	+12	2	1.98
109562	22 11 38.60	+52 25 48.0	7.56	1 H	332.910 853 98	+52.429 990 88		−0.19	−4.84	−1.92	0.52	0.48	0.66	0.52	0.48	−11	+18	+ 1	− 5	+15	− 3	+22	−30	+21	+ 5	0	0.49
109563	22 11 39.23	+06 11 35.8	8.45	H	332.913 440 73	+06.193 280 54		13.78	234.28	67.75	0.99	0.81	1.18	1.34	0.93	+37	− 7	−16	+11	+ 9	+23	− 5	−49	+31	+20	0	1.46
109564	22 11 39.83	−50 51 01.7	9.93	H	332.915 942 43	−50.850 475 59		8.95	−122.48	−133.86	0.87	0.76	1.50	1.03	0.81	+29	−11	− 9	+ 8	+ 3	+14	+ 4	+16	− 1	+32	0	2.33
109565	22 11 40.75	−44 44 54.5	7.90	G	332.919 779 43	−44.748 461 98		15.67	112.91	−95.11	0.86	0.60	0.98	0.97	0.60	+19	+10	−17	−13	+ 8	− 2	+ 6	+36	−16	+21	0	0.68
109566	22 11 42.56	−58 49 53.4	9.09	H	332.927 336 81	−58.831 490 42	A	10.11	−2.60	−22.13	2.43	2.46	2.92	2.61	2.24	− 6	− 4	−20	−25	− 3	+20	+ 2	−13	− 5	+ 0	6	2.32
109567	22 11 44.11	+49 56 11.9	7.72	H	332.933 809 08	+49.936 631 11		12.63	127.99	−33.87	0.51	0.52	0.70	0.56	0.57	+ 1	+ 2	−11	+11	+14	−10	+15	− 6	+17	+12	0	−2.53
109568	22 11 44.38	−58 49 55.8	10.06	H	332.934 912 09	−58.832 155 82	B	12.14	−3.95	−23.39	9.06	9.21	6.17	5.56	4.44	− 3	− 6	−22	−17	− 4	+19	+ 1	− 1	− 5	+ 2	6	2.32
*109569	22 11 44.94	+38 24 57.1	7.22	H	332.937 230 57	+38.415 871 91		2.00	5.24	−14.84	0.59	0.57	0.84	0.82	0.77	−11	+ 8	−12	+32	+14	−16	+15	− 5	+17	− 6	0	0.81
*109570	22 11 44.89	+04 02 44.7	9.95	H	332.937 054 74	+04.045 739 31		8.48	−7.16	−32.42	1.50	1.16	1.73	1.72	1.37	+13	+ 6	+ 7	−11	+14	+32	+12	+ 1	− 7	+21	0	0.79
109571	22 11 47.67	−01 14 43.5	8.47	H	332.948 607 90	−01.245 427 00		4.84	−63.86	−31.86	1.01	0.84	1.22	1.29	0.80	+21	+14	− 8	+ 9	−15	+41	−11	− 1	+ 4	+ 4	0	−1.16
109572	22 11 48.52	+56 50 20.6	5.24	H	332.952 146 31	+56.839 042 11		27.03	236.75	129.67	0.40	0.39	0.49	0.41	0.41	+ 0	+16	+ 3	− 6	+ 1	−10	+ 7	−28	+19	+ 8	0	0.82
109573	22 11 49.79	−29 58 05.7	10.70	G	332.957 451 60	−29.968 257 59		11.30	99.08	−60.88	1.52	1.40	2.08	1.83	1.66	+30	+ 0	−15	+ 6	− 5	+34	− 2	+24	+15	+39	0	0.28
109574	22 11 50.07	−09 44 43.2	8.70	H	332.958 641 23	−09.745 321 42		2.59	15.87	2.69	1.10	0.63	1.22	1.15	0.68	+24	+22	+ 2	−24	+26	+ 3	+30	+ 2	+39	+24	0	−0.25
109575	22 11 50.24	+80 03 26.9	8.21	H	332.959 332 06	+80.057 483 00		3.17	4.67	−1.71	0.57	0.61	0.68	0.70	0.67	−11	− 8	+29	+ 8	+ 5	+15	− 1	− 5	+ 1	−19	1	2.04
109576	22 11 50.98	+06 17 27.4	7.84	H	332.962 430 60	+06.290 936 71		4.51	23.27	−32.49	0.85	0.67	1.02	1.15	0.77	+30	−11	−13	− 3	+11	+24	− 2	−49	+31	+14	0	0.01
109577	22 11 51.33	+16 02 26.1	5.93	H	332.963 886 78	+16.040 596 53		17.88	−2.94	−18.79	0.60	0.56	0.74	0.71	0.65	+34	+10	+ 5	+ 8	−13	−15	−13	−26	+14	+26	2	−0.77
109578	22 11 51.94	−00 21 45.3	8.51	H	332.966 412 99	−00.362 595 41		6.86	−5.75	−25.57	1.10	0.74	1.22	1.31	0.78	− 2	+24	+16	+25	−15	+21	− 7	+19	+35	− 7	0	−1.25
109579	22 11 52.58	−31 54 26.5	9.41	H	332.969 067 69	−31.907 351 37		4.34	−45.73	3.93	1.13	0.86	1.39	1.31	0.88	+13	+ 1	−16	+10	−21	+30	−15	+16	− 6	+ 3	0	2.01
109580	22 11 53.12	−67 56 25.2	8.77	2 H	332.971 339 92	−67.940 340 04		0.75	22.72	−14.27	0.77	0.68	1.01	0.83	0.67	− 9	− 7	+ 2	− 9	+ 2	+ 2	+ 3	− 5	−10	− 8	0	0.47
109581	22 11 54.15	+39 02 19.4	8.64	G	332.975 639 15	+39.038 736 08		6.99	1.27	−1.70	0.76	0.75	1.15	0.85	0.88	−41	+11	−10	−23	+14	− 3	+16	−33	+19	−34	0	−0.92
109582	22 11 54.70	+06 53 46.7	7.17	G	332.977 928 27	+06.896 311 28		9.52	−23.56	−7.93	0.83	0.59	0.92	1.09	0.71	+30	−15	− 5	+23	+11	+15	+ 2	−39	+18	+22	6	1.93
109583	22 11 54.88	−28 47 37.6	10.41	G	332.978 670 41	−28.793 790 50		0.31	6.18	−43.84	1.54	1.30	1.99	1.87	1.55	+32	−18	−32	+ 2	−18	+23	−12	+22	−12	+41	0	−2.19
109584	22 11 55.13	−76 06 57.3	6.13	H	332.979 703 09	−76.115 924 45		10.80	−59.14	−40.71	0.47	0.45	0.62	0.55	0.47	− 2	− 6	−19	+ 1	+ 1	−18	− 3	− 8	− 5	−14	0	0.35
109585	22 11 56.74	+59 05 03.8	6.29	H	332.986 427 44	+59.084 385 64		9.44	130.07	79.62	0.43	0.43	0.51	0.50	0.47	− 6	+ 0	+13	+ 6	− 2	+ 8	− 1	−21	−10	+ 1	0	−0.50
109586	22 11 57.54	+50 11 46.3	7.22	H	332.989 742 87	+50.196 193 19		1.58	−3.71	−3.00	0.71	0.76	0.96	0.78	0.79	− 2	− 6	− 5	+ 4	+ 9	− 4	+11	−24	+12	+13	0	
109587	22 11 58.66	+37 39 04.2	8.00	G	332.994 430 85	+37.651 166 62	A	17.23	−51.92	−5.42	1.86	1.65	1.75	2.51	1.89	− 2	+ 0	− 8	−11	− 6	+ 6	− 6	−24	+13	−11	15	2.00
109588	22 11 59.58	+37 39 08.9	9.78	H	332.998 269 73	+37.652 460 06	B	8.41	−62.82	−2.17	10.84	10.32	8.48	11.27	8.69	− 2	+ 3	−10	− 9	− 3	+ 6	− 3	−26	+13	−12	15	2.00
109589	22 11 59.65	+26 02 01.1	8.05	H	332.998 522 31	+26.033 651 76		4.14	10.11	−9.46	0.76	0.65	0.95	0.81	0.72	+16	+33	+ 8	− 2	− 4	−26	− 7	+ 5	−17	+23	0	−0.28
*109590	22 12 01.81	+02 26 16.3	9.43	H	333.007 521 71	+02.437 873 13		2.38	11.63	−22.79	1.27	1.08	1.39	1.68	1.31	+20	− 3	+ 5	+26	+11	+18	+11	+35	− 5	+18	3	−0.94
*109591	22 12 01.79	+47 05 44.2	6.70	H	333.007 460 93	+47.095 618 59		4.48	13.81	4.68	0.48	0.49	0.66	0.51	0.55	−30	+18	− 9	−11	+20	+ 0	+23	−16	+21	−25	1	−0.12
109592	22 12 02.01	+60 45 32.7	5.37	H	333.008 392 87	+60.759 071 89		8.74	1.15	9.53	0.43	0.41	0.48	0.48	0.42	−11	− 6	+ 9	+30	− 6	− 4	− 4	− 8	+ 7	− 5	0	−1.88
*109593	22 12 02.34	−48 10 02.2	8.83	H	333.009 742 02	−48.167 287 18		2.93	8.62	−6.51	0.88	0.83	1.38	1.19	0.98	+29	−22	−29	+ 5	+14	+ 1	+15	+43	−18	+34	0	−0.87
*109594	22 12 02.30	−43 08 04.6	8.44	2 H	333.009 580 39	−43.134 608 02		3.69	18.42	−8.38	0.99	0.90	1.38	1.29	0.87	+24	+ 0	−46	+15	− 1	+22	+10	+41	−27	+26	0	0.55
*109595 H	22 12 02.25	−38 18 10.3	6.90	G	333.009 391 46	−38.302 861 68	A	10.63	−12.31	15.28	1.74	1.45	1.81	2.01	1.53	+13	+ 2	+ 5	− 8	− 9	+21	− 6	− 4	− 6	+15	2	1.49
109596	22 12 04.11	+77 21 00.9	9.39	H	333.017 122 04	+77.350 252 10		11.33	58.03	25.58	0.70	0.60	0.73	0.78	0.68	− 3	−13	+14	+11	− 2	− 5	− 2	+ 0	+ 8	+ 3	0	−1.14
109597	22 12 04.56	+12 07 47.4	8.92	H	333.018 998 88	+12.129 841 50		7.55	13.87	−20.29	0.97	0.82	1.26	1.28	0.91	+39	−19	−29	−10	+ 7	+10	+ 1	−25	+21	+14	0	0.33
109598	22 12 05.24	+09 00 05.4	8.63	H	333.021 825 63	+09.001 500 65		1.05	−0.35	−7.46	1.18	1.01	1.57	1.44	1.22	+13	+17	−41	+34	+13	−11	+15	−52	+49	+ 5	0	0.49
109599	22 12 05.71

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
109501	9.173	0.017	8.722	0.017	*	0.454	0.020	G	0.52	0.02	H *	8.7340	0.0014	0.014	83	*	8.70	8.76		D	22110+2429	I 1	2 C A	AS	153	0.509	0.003	0.50	0.02	
109502	9.190	0.016	8.806	0.016		0.364	0.021	T	0.43	0.02	L	8.8407	0.0027	0.023	113		8.80	8.87		U			1							
109503	9.533	0.016	7.494	0.007		1.688	0.014	T	1.71	0.01	L	7.4128	0.0017	0.015	145		7.39	7.44		M			1							S
109504	10.930	0.046	10.156	0.038		0.689	0.045	T	0.75	0.04	L	10.2578	0.0043	0.031	119		10.19	10.31		C			1							
109505	7.601	0.009	7.473	0.011	*	0.190	0.015	G	0.21	0.02	H *	7.4097	0.0033	0.021	110	*	7.38	7.45	0.31	P 1 A	22110+6324	I 1	2 C A	AB	232	0.781	0.002	0.19	0.01	S W
109506	9.406	0.018	9.114	0.020		0.278	0.025	T	0.32	0.03	L	9.1858	0.0021	0.022	127		9.15	9.22					1							
109507	11.364	0.093	9.634	0.031		1.443	0.078	T	1.44	0.12	L	9.6617	0.0038	0.020	76		9.64	9.70					1							
109508	8.760	0.014	8.066	0.012		0.646	0.015	G	0.71	0.01	H	8.1201	0.0025	0.015	66		8.10	8.15					1							S
109509	6.690	0.005	6.161	0.005		0.503	0.007	G	0.58	0.01	H	6.2085	0.0007	0.006	84		6.20	6.22					1							S
109510	9.210	0.018	7.958	0.011		1.068	0.016	T	1.03	0.01	L	7.9954	0.0020	0.010	67		7.98	8.02		C			1							S
109511	8.198	0.007	6.893	0.005		1.109	0.007	T	1.07	0.01	L	6.9329	0.0008	0.010	168		6.92	6.95					1							S
109512	9.152	0.011	8.522	0.010		0.592	0.003	G	0.66	0.00	H	8.5881	0.0017	0.019	159		8.55	8.62		M			1							S
109513	9.676	0.015	9.356	0.016		0.307	0.024	T	0.35	0.03	L	9.4003	0.0022	0.024	158		9.35	9.44					1							
109514	6.565	0.004	6.620	0.004		−0.046	0.005	T	−0.02	0.01	L	6.6307	0.0007	0.008	140		6.62	6.64		C			1							S
109515	10.242	0.029	8.836	0.016		1.188	0.026	T	1.15	0.02	L	8.8500	0.0019	0.012	94		8.82	8.88		R			1							
109516	11.589	0.093	9.728	0.028		1.547	0.077	T	1.61	0.17	L	9.6620	0.0026	0.019	106		9.62	9.71		C			1							
109517	8.145	0.008	7.930	0.010		0.205	0.012	T	0.23	0.01	L	7.9736	0.0011	0.011	123		7.95	7.99		C			1							S
109518	9.494	0.018	9.100	0.019		0.373	0.024	T	0.44	0.03	L	9.1727	0.0019	0.019	112		9.14	9.19					1							
109519	10.244	0.025	8.692	0.012		1.303	0.022	T	1.26	0.02	L	8.6965	0.0017	0.019	154		8.66	8.73					1							
109520	10.374	0.047	8.722	0.021		1.150	0.015	G	1.11	0.01	H	8.7292	0.0018	0.018	125		8.70	8.76					1							
109521	5.568	0.003	5.401	0.003		0.152	0.004	T	0.17	0.00	L	5.4316	0.0005	0.006	137		5.42	5.44		C	22111+5049	I 1	1 G							S
109522	8.909	0.009	7.515	0.006		1.179	0.008	T	1.14	0.01	L	7.5498	0.0009	0.012	167		7.53	7.57					1							S
109523	8.497	0.013	8.191	0.014		0.271	0.015	G	0.31	0.02	H	8.2635	0.0020	0.010	60		8.24	8.28		C			1							S
109524	9.942	0.024	8.624	0.014		1.119	0.022	T	1.08	0.02	L	8.6666	0.0024	0.022	101		8.63	8.70					1							
109525	10.112	0.028	8.894	0.017		1.041	0.026	T	1.01	0.02	L	8.9520	0.0020	0.015	93		8.93	8.98		C			1							
109526	11.101	0.073	9.160	0.024		1.610	0.061	T	1.63	0.06	L	9.1734	0.0030	0.020	48		9.14	9.22					1							
109527	8.243	0.009	7.312	0.006		0.812	0.000	G	0.85	0.00	H	7.3697	0.0012	0.012	111		7.35	7.39					1							S
109528						1.320	0.015	G	1.38	0.14	K	11.1494	0.0041	0.032	76		11.10	11.20		C			1							G
109529	11.156	0.053	10.698	0.057		0.490	0.020	G	0.56	0.02	H	10.7482	0.0042	0.038	128		10.69	10.83					1							G
109530	10.421	0.029	8.714	0.013		1.425	0.025	T	1.41	0.04	L	8.6825	0.0024	0.018	97		8.65	8.71					1							
109531	7.415	0.007	7.268	0.008		0.141	0.010	T	0.16	0.01	L	7.3121	0.0010	0.008	88		7.30	7.33		C			1							S
109532	8.371	0.010	7.973	0.011		0.377	0.014	T	0.44	0.01	L	8.0269	0.0014	0.012	91		8.00	8.05		C			1							S
109533	9.462	0.016	8.341	0.011		0.965	0.015	T	0.95	0.01	L	8.3892	0.0019	0.017	127		8.36	8.41					1							S
109534	8.166	0.008	8.170	0.010		0.001	0.012	T	0.02	0.01	L	8.1912	0.0013	0.011	120		8.17	8.21		C			1							S
109535	8.507	0.006	8.186	0.006	*	0.305	0.007	T	0.35	0.01	L *	8.2167	0.0011	0.016	299	*	8.19	8.25		D	22113+4010	I 1	2 C A	AB	158	0.281	0.004	0.17	0.06	S
109536	8.332	0.008	7.828	0.008		0.468	0.015	G	0.54	0.02	H	7.8907	0.0016	0.014	153		7.87	7.92					1							S
109537						1.460	0.020	G	1.85	0.09	I	11.1918	0.0037	0.046	204		11.10	11.26					1 X							G
109538	10.362	0.028	9.185	0.017		1.009	0.026	T	0.98	0.02	L	9.2272	0.0024	0.025	120		9.20	9.28		C			1							
109539	9.243	0.013	8.756	0.013		0.458	0.017	T	0.53	0.02	L	8.8234	0.0014	0.016	117		8.80	8.86		D			1							
109540	11.234	0.080	10.792	0.088		0.494	0.107	G	0.57	0.11	R	10.8045	0.0039	0.034	90		10.74	10.88					1							G
109541	10.739	0.025	9.114	0.011		1.360	0.022	T	1.33	0.03	L	9.1303	0.0018	0.023	241		9.09	9.17					1 S							
109542	10.767	0.052	10.357	0.058		0.401	0.064	T	0.47	0.07	L	10.3227	0.0052	0.029	65		10.27	10.38		C			1							
109543	9.367	0.025	7.443	0.012		1.597	0.022	T	1.62	0.02	L	7.3754	0.0009	0.014	299		7.35	7.40		M			1							S
109544	9.203	0.018	8.178	0.013		0.893	0.017	T	0.90	0.01	L	8.2489	0.0014	0.011	101		8.23	8.27		C			1							
109545	9.711	0.024	8.607	0.016		0.952	0.022	T	0.94	0.02	L	8.6619	0.0019	0.015	82		8.63	8.69					1							
109546	7.691	0.006	7.544	0.006		0.141	0.008	T	0.16	0.01	L	7.5826	0.0013	0.011	131		7.56	7.60					1							S
109547	9.716	0.014	7.809	0.006		1.617	0.013	T	2.02	0.04	O	7.6898	0.0035	0.040	206		7.62	7.75		U 2			1							S
109548	11.597	0.137	9.698	0.038		1.577	0.113	T	1.60	0.12	L	9.6280	0.0024	0.019	74		9.60	9.66		C			1							
109549	10.141	0.029	9.235	0.021		0.790	0.028	T	0.82	0.02	L	9.3151	0.0024	0.019	80		9.27	9.34		C			1							
109550	7.874	0.009	6.720	0.005		0.993	0.003	G	0.97	0.00	H	6.7833	0.0010	0.008	78		6.76	6.80					1							S
109551	8.299	0.009	6.986	0.006		1.115	0.008	T	1.08	0.01	L	7.0379	0.0007	0.008	109		7.02	7.05					1							S
109552	7.675	0.005	7.397	0.005	A	0.342	0.072	G	0.25	0.03	L *	7.4244	0.0009	0.010	171	*	7.41	7.44		D	22115+3205	I 1	2 C B	AB	223	3.393	0.033	3.70	0.09	S
109553	11.481	0.085	10.184	0.042		1.070	0.020	G	1.03	0.02	K	10.2436	0.0029	0.026	98		10.21	10.30		C			1							
109554	9.474	0.017	8.361	0.012		0.870	0.015	G	0.88	0.01	H	8.4310	0.0020	0.015	89		8.40	8.46		C			1 O							
109555	12.485	0.255	10.446	0.061		1.465	0.003	G	1.87	0.01	I	10.2639	0.0040	0.024	79		10.21	10.29					1							G
109556	5.309	0.002	5.108	0.002		0.192	0.003	T	0.21	0.00	L	5.1290	0.0012	0.011	121		5.11	5.15		U 2			1							S
109557	9.966	0.024	9.317	0.021		0.595	0.024	T	0.67	0.02	L	9.4092	0.0020	0.020	86		9.38	9.44		C			1							
109558	9.989	0.028	9.538	0.030		0.459	0.033	G	0.53	0.04	H	9.5691	0.0023	0.018	80		9.52	9.61		C			1							
109559	10.357	0.029	9.104	0.017		1.068	0.026	T	1.03	0.02	L	9.1777	0.0018	0.019	117		9.15	9.21		C			1							
109560	11.386	0.098	9.356	0.029		1.681	0.081	T	1.71	0.08	L	9.3029	0.0026	0.015	55		9.26	9.33		C			1							
109561	7.427	0.008	6.785	0.007	*	0.568	0.015	G	0.64	0.01	H *	6.7967	0.0010	0.009	86	*	6.78	6.81		D	22116−3428	I 1	2 C A	AB	356	0.799	0.002	0.98	0.02	S
109562	7.578	0.006	7.572	0.008		0.010	0.009	T	0.03	0.01	L	7.5716	0.0019	0.017	123		7.55	7.60		U			1							S
109563	9.182	0.017	8.505	0.015		0.594	0.002	G	0.66	0.00	H	8.5730	0.0017	0.015	92		8.55	8.60		C			1							S
109564	10.755	0.029	10.001	0.024		0.650	0.003	G	0.71	0.00	H	10.0655	0.0022	0.030	196		10.01	10.12		C			1							
109565	8.483	0.012	7.963	0.010		0.493	0.010	G	0.57	0.01	H	8.0143	0.0011	0.012	89		7.99	8.05					1							S
109566	9.652	0.018	9.134	0.017	A	0.486	0.023	T	0.56	0.02	L	9.1958	0.0118	0.063	160	A	9.13	9.35		D	22117−5850	I 2	1 C P A							S
109567	8.751	0.011	7.827	0.008		0.818	0.010	T	0.84	0.01	L	7.8734	0.0012	0.012	140		7.86	7.89					1							S
109568	10.688	0.034	10.127	0.033	B	0.525	0.042	T	0.60	0.04	L	10.1702	0.0251			B				D	22117−5850	I 2	1 C I A							
109569	9.389	0.014	7.414	0.006		1.673	0.013	T	2.09	0.04	O	7.2851	0.0027	0.024	134		7.25	7.33		R 2			1							S
109570	11.373	0.112	10.017	0.055		1.149	0.098	T	1.11	0.09	L	10.1149	0.0042	0.022	44		10.08	10.14		C			1							
109571	10.102	0.036	8.571	0.018		1.286	0.032	T	1.25	0.03	L	8.6229	0.0021	0.014	58		8.60	8.65		C			1							
109572	5.880	0.003	5.313	0.002		0.534	0.003	T	0.61	0.00	L	5.3618	0.0005	0.005	141		5.35	5.37		C	22119+5650	I 1	1							S
109573	11.819	0.143	10.785	0.086		0.874	0.005	G	0.92	0.01	H	10.8550	0.0046	0.030	78		10.81	10.93		C			1							G
109574	10.196	0.035	8.860	0.019		1.133	0.031	T	1.10	0.03	L	8.8642	0.0016	0.014	98		8.83	8.89		C			1							
109575	10.154	0.024	8.373	0.011		1.484	0.021	T	1.50	0.03	L	8.3453	0.0021	0.015	129		8.31	8.37					1							
109576	8.160	0.011	7.876	0.011		0.291	0.015	G	0.33	0.02	H	7.9126	0.0009	0.009	89		7.90	7.92		C			1							S
109577	7.152	0.006	6.039	0.003		0.951	0.001	G	0.94	0.03	C	6.0932	0.0007	0.007	91		6.08	6.10		C			1							S
109578	9.004	0.020	8.563	0.020		0.416	0.026	T	0.48	0.03	L	8.6072	0.0025	0.013	55		8.57	8.63		C			1							S
109579	10.097	0.030	9.479	0.028		0.572	0.030	T	0.64	0.03	L	9.5389	0.0028	0.021	78		9.51	9.58		C			1							
109580	10.807	0.036	8.990	0.014		1.543	0.032	T	2.33	0.07	O	8.8143	0.0038	0.056	159		8.72	8.89		U 2			1							
109581	9.115	0.010	8.714	0.010		0.400	0.015	G	0.47	0.02	H	8.7412	0.0016	0.020	201		8.71	8.78		C			1							
109582	7.396	0.006	7.189	0.006		0.177	0.015	G	0.19	0.02	H	7.2131	0.0011	0.010	106		7.19	7.23		C	22119+0654	I 1	1 S							S
109583	11.404	0.072	10.488	0.052		0.768	0.003	G	0.81	0.00	H	10.5941	0.0040	0.032	87		10.54	10.64		C			1							
109584	7.421	0.006	6.245	0.003		1.001	0.002	G	0.98	0.00	H	6.2974	0.0007	0.007	122		6.29	6.31					1							S
109585	7.740	0.008	6.415	0.005		1.123	0.003	G	1.09	0.00	H	6.4575	0.0007	0.006	113		6.45	6.47		C			1							S
109586	7.753	0.006	7.288	0.007		0.430	0.015	G	0.50	0.02	H	7.3212	0.0010	0.010	139		7.30	7.34		C	22120+5012	I 1	1 X S							S
109587	8.622	0.013	8.047	0.012	A	0.548	0.015	G	0.62	0.01	H	8.1177	0.0060	0.028	110	A	8.09	8.19		D	22120+3739	I 2	1 C P A							S
109588	10.755	0.060	9.813	0.040	B	0.831	0.053	T	0.85	0.04	L	9.9514	0.0284			B				D	22120+3739	I 2	1 C I A							
109589	8.037	0.010	8.043	0.012		−0.001	0.014	T	0.02	0.01	L	8.0548	0.0016	0.014	90		8.03	8.08		C			1							S
109590	11.197	0.076	9.617	0.033		1.325	0.065	T	1.29	0.08	L	9.5827	0.0024	0.019	61		9.53	9.62		C			1							
109591	6.666	0.005	6.697	0.006		−0.024	0.007	T	0.00	0.01	L	6.7016	0.0007	0.008	127		6.69	6.72					1							S
109592	6.895	0.004	5.494	0.003		1.184	0.004	T	1.14	0.00	L	5.5311	0.0006	0.006	131		5.52	5.54		C	22120+6046	I 1	1							S
109593	10.454	0.030	8.944	0.015		1.270	0.026	T	1.23	0.03	L	8.9863	0.0023	0.019	120		8.95	9.02					1							
109594	10.444	0.036	8.659	0.015		1.517	0.032	T	2.30	0.08	O	8.4937	0.0045	0.032	82		8.45	8.55		U 2			1							
109595	7.262	0.009	6.881	0.007	*	0.387	0.015	G	0.45	0.02	H *	6.9793	0.0012	0.009	88	*	6.97	7.00		D	22120−3818	I 1	2 C A	AB	132	2.102	0.003	0.04	0.01	S
109596	10.134	0.025	9.451	0.021		0.631	0.027	T	0.70	0.02	L	9.5176	0.0016	0.015	120		9.49	9.54		C			1							
109597	9.494	0.017	8.985	0.016		0.478	0.021	T	0.55	0.02	L	9.0253	0.0018	0.019	106		8.99	9.05		C			1							
109598	10.670	0.045	8.851	0.018		1.514	0.038	T	1.55	0.06	L	8.7502	0.0037	0.021	73		8.72	8.79					1							
109599	9.796	0.024	9.596	0.030		0.180	0.015	G	0.20	0.02	H	9.6223	0.0022	0.019	120		9.59	9.66		C			1							G
109600	10.075	0.024	9.253	0.018		0.725	0.023	T	0.78	0.02	L	9.3209	0.0022	0.023	127		9.27	9.36					1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
109601	22 12 06.65	+31 33 44.7	10.16	G	333.027 717 21	+31.562 422 47		24.11	−345.06	−418.84	1.00	1.19	1.50	1.05	1.45	+20	− 3	− 1	+ 9	+12	−27	+13	+11	− 5	+40	0	0.20
109602	22 12 08.09	+24 57 02.3	5.97	H	333.033 698 09	+24.950 637 00		1.07	10.24	1.73	0.56	0.53	0.70	0.59	0.60	+18	+24	+ 7	− 3	+ 0	−16	+ 2	− 4	+ 2	+21	0	−0.26
109603	22 12 08.78	+57 16 20.0	10.56	G	333.036 565 56	+57.272 225 21		4.15	−4.03	−2.11	1.26	1.12	1.42	1.27	1.19	−	9	+ 7	+ 5	−20	+14	−14	+18	−28	+ 8	+10	0	1.25
109604	22 12 09.04	+10 09 19.5	8.02	H	333.037 670 40	+10.155 415 01		2.27	25.46	−10.00	1.01	0.81	1.25	1.66	1.13	+33	+ 0	−16	+27	+17	+14	+15	−19	+23	+33	0	0.06
*109605	22 12 09.81	−32 32 10.0	8.10	2 H	333.040 884 27	−32.536 118 63		1.85	11.47	−5.50	0.87	0.70	1.09	0.96	0.75	+20	−19	− 9	− 7	− 7	+30	− 3	+30	− 1	+14	0	−0.82
*109606	22 12 09.76	+53 41 55.7	9.58	2 H	333.040 680 18	+53.698 793 71		0.46	−3.27	−2.62	0.79	0.80	1.03	0.82	0.84	−14	− 9	− 7	−11	+16	− 5	+18	−38	+29	+ 8	0	−1.33
109607	22 12 11.89	−14 13 30.9	8.23	H	333.049 540 83	−14.225 253 56		6.05	0.75	10.92	1.03	0.66	1.12	1.24	0.67	+25	−14	+ 7	+17	+15	− 8	+15	+13	− 5	+30	0	−0.42
109608 H	22 12 13.37	+08 27 38.0	8.32	G	333.055 700 41	+08.460 548 04	*	7.79	21.30	26.92	1.13	0.85	1.27	1.33	1.04	+17	+ 2	−17	−29	+ 7	+18	+11	−38	+27	+21	0	0.17
109609	22 12 14.87	−49 42 36.5	8.64	H	333.061 966 42	−49.710 151 04		2.89	32.07	−10.56	0.68	0.59	1.15	0.79	0.71	+24	−16	− 7	− 3	+ 6	+12	+ 2	+23	+ 5	+38	1	0.79
109610	22 12 16.17	+14 33 12.2	11.61	3 H	333.067 377 91	+14.553 399 63		1.76	19.14	−3.34	2.07	1.31	3.19	3.42	2.05	+	4	+34	−29	− 5	+ 2	+36	+31	−32	+70	+10	0	−1.94
109611	22 12 16.43	+47 12 53.5	9.58	H	333.068 459 35	+47.214 858 70		−0.16	−5.65	−5.68	0.86	0.80	1.08	0.93	0.90	−16	+13	− 3	− 9	+18	+ 1	+22	−21	+14	+ 5	1	−1.51
109612	22 12 16.83	−54 58 40.1	9.66	H	333.070 108 60	−54.977 810 52		20.39	111.45	−65.02	0.98	0.88	1.56	1.37	1.02	+	0	−16	− 9	− 4	+ 0	−11	+ 6	−18	−29	+18	0	0.75
109613	22 12 16.89	−11 03 56.0	7.25	2 H	333.070 382 51	−11.065 552 26		2.59	7.20	−4.34	0.79	0.57	0.91	0.90	0.53	+35	− 4	+ 7	−12	+11	+ 5	+ 6	−15	+ 3	+22	0	1.12
109614	22 12 17.61	+02 44 01.7	7.15	H	333.073 379 02	+02.733 799 31		12.52	15.05	−34.97	0.77	0.63	0.86	0.99	0.73	+18	+ 5	+ 0	+27	+ 7	+27	+ 7	+29	− 4	+16	0	0.33
109615	22 12 18.85	−32 03 43.8	8.20	H	333.078 546 35	−32.062 173 65		7.66	48.38	10.06	0.85	0.64	1.04	0.93	0.63	+16	− 5	−17	− 3	−18	+34	−12	+10	+ 0	+ 7	0	0.35
109616	22 12 19.54	−07 03 53.0	8.72	H	333.081 404 47	−07.064 726 20		1.53	−15.60	− 7.18	1.00	0.77	1.10	1.13	0.75	+15	+ 5	− 2	+ 6	−10	+18	− 7	+14	−10	+ 1	0	1.03
109617	22 12 21.19	+55 05 51.8	7.18	H	333.088 292 47	+55.097 713 54		2.74	13.37	−13.70	0.50	0.54	0.65	0.60	0.61	+	4	− 5	−10	−15	−13	+ 0	− 6	−46	+29	+30	1	0.69
109618 H	22 12 21.57	+27 12 08.3	8.64	H	333.089 876 74	+27.202 293 98	*	2.43	0.20	−4.86	0.89	0.80	1.07	0.97	0.82	+15	+14	+14	+12	− 7	− 2	−12	−17	−22	+ 5	0	0.71
109619	22 12 21.61	+39 25 55.9	11.81	3 H	333.090 062 09	+39.432 182 26		1.35	−8.18	− 7.46	2.00	2.23	3.40	3.82	3.52	−12	+ 0	+ 2	−21	+17	+20	+16	−20	+ 2	−30	7	1.42
109620	22 12 22.45	+63 17 27.9	5.76	2 H	333.093 522 50	+63.291 071 90		3.77	3.72	−15.08	0.47	0.43	0.51	0.57	0.50	−14	+ 5	+ 5	+31	+ 8	− 5	+ 3	− 7	−11	−24	0	−0.34
109621	22 12 22.99	+25 29 00.5	8.07	H	333.095 784 53	+25.483 481 56		9.76	60.25	2.31	0.76	0.70	0.94	0.85	0.86	+17	+ 3	+ 7	+ 2	− 1	−21	+ 1	−10	− 7	+22	0	−0.20
109622	22 12 24.56	−55 31 26.8	9.03	H	333.102 329 29	−55.524 104 10		2.37	22.03	−21.60	0.86	0.83	1.42	1.21	0.83	−	9	+10	−44	+13	+ 9	− 7	+ 5	+ 7	−12	+ 6	0	−0.28
109623	22 12 25.64	+07 31 02.5	8.92	H	333.106 836 83	+07.517 355 61		7.77	61.69	−56.18	1.25	0.88	1.44	1.61	1.04	+13	+10	−24	−29	+19	−19	+11	−54	+40	−10	0	0.85
109624 H	22 12 25.74	−14 11 37.8	6.04	H	333.107 257 18	−14.193 841 49	A	23.00	26.09	−47.47	0.94	0.63	0.90	0.98	0.60	+42	−12	−23	+ 7	+24	−24	+12	+ 1	− 7	+47	1	−0.33
109625	22 12 26.00	−48 17 44.3	9.27	H	333.108 343 20	−48.295 626 34		6.13	1.51	− 2.46	0.98	0.79	1.38	1.25	0.93	+20	−15	−20	− 8	− 2	− 1	− 3	+16	−14	+29	0	−0.36
109626	22 12 26.35	+60 27 58.3	9.23	1 H	333.109 799 74	+60.466 191 40		3.91	1.12	−0.85	0.64	0.63	0.73	0.77	0.71	−10	− 3	+ 3	+15	+ 1	+ 2	+ 3	−13	+ 4	− 2	0	−0.95
109627	22 12 26.61	+23 45 32.3	7.46	H	333.110 878 56	+23.758 959 18		1.93	−13.62	−22.62	0.81	0.58	0.89	1.05	0.67	−	2	+23	− 3	−16	+ 6	−13	+10	− 9	+24	−12	2	0.58
109628	22 12 28.30	−64 35 42.9	8.14	H	333.117 936 49	−64.595 242 50		1.77	29.18	0.57	0.58	0.63	1.03	0.65	0.61	−	8	−13	−21	+ 1	+ 0	+ 7	+ 1	−15	+ 0	−10	2	0.52
109629	22 12 28.95	+76 27 42.5	6.93	H	333.120 617 06	+76.461 815 07		3.04	19.57	27.96	0.53	0.44	0.55	0.60	0.45	−	6	−14	+17	+17	+ 1	−11	+ 2	− 4	+11	+ 1	1	1.16
109630	22 12 29.02	+45 34 18.8	9.26	H	333.120 913 03	+45.571 882 72		2.36	1.23	− 4.71	0.70	0.81	1.09	0.79	0.96	−28	+ 2	+ 5	− 8	+11	− 1	+12	−10	+ 5	−34	0	1.71
109631	22 12 29.87	−40 12 10.9	6.59	H	333.124 459 62	−40.203 015 96		10.26	11.98	−61.54	0.71	0.54	0.83	0.85	0.54	+	9	− 5	− 1	+ 6	− 8	+22	− 7	+13	+12	+ 1	0	1.81
109632	22 12 30.38	+40 33 53.5	8.78	H	333.126 596 67	+40.564 863 00		0.77	−0.06	−11.65	0.64	0.79	1.21	0.68	0.91	−52	+17	−19	+33	+ 4	− 2	+ 7	−19	+22	−52	0	0.12
109633	22 12 32.03	+47 00 39.9	9.38	H	333.133 444 77	+47.011 071 92		1.71	1.96	− 3.74	0.87	0.82	1.17	0.96	0.90	−16	+14	+14	+ 8	+15	− 1	+18	−17	+ 6	−10	0	−0.65
*109634 H	22 12 33.12	−18 01 37.8	8.80	H	333.138 009 15	−18.027 172 47	*	10.99	−28.52	3.87	1.15	0.90	1.30	1.59	0.93	+17	+ 1	−32	−28	+16	+ 6	+12	−31	+29	+12	0	1.02
*109635	22 12 33.10	+66 56 30.9	8.98	H	333.137 932 66	+66.941 927 55		1.99	−3.77	− 3.17	0.69	0.68	0.76	0.78	0.67	−26	− 5	+18	− 4	+16	− 1	+14	−15	+ 7	−27	0	−1.10
109636	22 12 34.13	−38 17 49.2	9.17	H	333.142 211 02	−38.297 009 23		2.48	26.55	−35.96	0.98	0.93	1.30	1.12	0.87	+29	− 9	+14	+ 0	−12	+30	−16	−13	+ 1	+20	0	−0.44
109637 H	22 12 35.75	−08 00 50.0	7.12	G	333.148 959 72	−08.013 881 95	A	13.29	59.46	−40.23	1.14	0.83	1.17	1.16	0.72	+38	+54	+12	+26	− 2	+34	− 1	− 4	+11	+ 8	1	−0.61
109638	22 12 35.88	+08 33 17.5	11.99	G	333.149 509 18	+08.554 857 37		71.97	116.05	−661.45	3.64	2.74	4.34	4.79	3.46	+15	+ 9	−25	−30	+13	+ 5	+14	−44	+37	+14	0	−2.19
109639	22 12 35.96	−48 45 46.7	7.92	H	333.149 841 89	−48.762 973 97		12.48	45.31	−51.09	0.72	0.57	1.11	0.81	0.66	+17	−23	−15	−26	+ 3	+ 4	− 3	+17	+ 0	+29	0	0.29
109640	22 12 36.93	−27 05 05.9	7.41	H	333.153 892 53	−27.084 981 77		4.40	−2.67	−14.87	0.80	0.72	1.10	0.90	0.79	+44	−30	−37	+ 8	−27	+13	−13	+17	−21	+41	0	−0.23
109641	22 12 38.23	+07 24 11.6	8.18	H	333.159 272 38	+07.403 228 49		1.92	−2.47	− 5.91	0.97	0.68	1.12	1.31	0.80	+18	− 4	−27	−14	+20	−10	+ 7	−48	+37	− 5	0	2.12
109642	22 12 38.37	−54 17 26.2	7.73	2 G	333.159 873 14	−54.290 613 19		16.66	146.97	−94.42	1.27	1.07	2.03	1.58	1.22	+	4	− 4	− 5	− 1	+ 7	− 9	+ 7	− 1	−29	+27	1	
109643	22 12 38.52	−10 25 33.6	8.77	H	333.160 497 05	−10.425 996 24		2.78	14.88	0.50	1.02	0.66	1.17	1.08	0.65	+37	+12	+ 4	−20	+11	+16	+11	−14	+20	+34	0	0.95
109644	22 12 41.03	+59 08 27.5	9.91	H	333.170 957 11	+59.140 971 22		4.22	−7.47	−11.50	0.86	0.78	0.96	0.99	0.88	−	3	+ 5	+14	+14	+ 1	+12	+ 6	−27	−10	+13	0	−1.21
109645	22 12 41.71	+35 01 13.4	8.87	G	333.173 776 81	+35.020 398 59		6.02	10.34	10.57	0.74	0.76	1.05	0.90	0.84	+13	+ 1	− 8	+33	+ 2	−17	+ 3	− 2	+16	+17	3	0.24
109646	22 12 43.41	−06 28 08.3	7.44	H	333.180 864 57	−06.468 969 18		26.57	221.95	19.82	0.82	0.57	0.85	0.97	0.60	+	6	− 1	−18	+16	−14	+ 2	−12	+22	−11	− 1	0	−0.09
109647	22 12 43.89	−04 43 14.1	6.39	G	333.182 894 91	−04.720 593 82		10.68	−43.36	−35.13	1.02	0.61	0.92	1.72	0.74	−	9	+ 8	+ 5	+25	− 9	+ 5	− 9	+26	+13	−44	0	−0.54
109648	22 12 44.83	−42 32 02.5	8.24	G	333.186 787 58	−42.534 034 32		3.93	7.09	−42.45	0.82	0.71	0.96	1.10	0.80	+24	− 9	−16	+ 9	− 3	+13	+ 1	+37	− 2	+22	0	−0.44
109649	22 12 45.86	−46 31 01.4	9.00	H	333.191 097 07	−46.517 069 18		4.89	13.27	−19.24	1.12	1.02	1.47	1.00	1.00	+34	−38	−40	+ 5	+11	+12	+24	+55	−24	+22	0	−0.82
109650 H	22 12 46.00	+01 11 04.5	8.58	H	333.191 672 46	+01.184 580 73	A	14.35	92.69	−43.65	3.32	1.68	2.03	3.16	1.31	+57	+18	− 9	+29	+ 0	+22	− 4	+ 4	+22	−37	1	−0.87
109651 H	22 12 46.25	+40 47 38.0	8.11	H	333.192 709 36	+40.793 879 71	A	4.28	38.09	11.74	1.06	1.06	1.42	0.93	1.12	−45	+11	−16	+19	+ 2	+ 6	+ 6	−20	+11	−43	2	1.25
109652	22 12 46.69	−20 53 25.2	7.55	G	333.194 552 19	−20.890 336 28		12.80	−26.60	−66.93	0.89	0.64	0.98	1.14	0.67	+23	+ 9	−15	−13	+ 2	+ 5	+ 2	−41	+26	+27	0	−0.25
109653	22 12 47.66	+15 00 31.7	8.19	H	333.198 592 01	+15.008 800 63		4.06	39.64	10.15	0.76	0.68	1.00	0.91	0.84	+28	+ 5	−21	+20	+ 3	+ 5	+ 4	−13	+39	+23	0	−0.07
109654	22 12 47.81	+34 36 17.0	5.34	H	333.199 212 76	+34.604 712 73		12.74	19.32	−49.66	0.40	0.43	0.58	0.49	0.48	+13	− 1	− 5	+18	+ 6	−10	+ 6	− 2	+ 7	+17	0	−0.08
109655	22 12 48.17	−56 25 08.9	9.74	G	333.200 695 87	−56.419 129 88		22.22	−42.28	−274.20	1.24	0.99	1.64	1.68	1.08	+	3	+ 6	−21	+33	− 1	+14	+ 4	+ 3	− 5	+14	0	1.03
109656	22 12 50.71	−10 55 29.7	10.71	G	333.211 308 04	−10.924 929 78		12.81	177.85	−184.68	1.86	1.34	2.14	2.14	1.22	+39	+ 3	+11	−17	+ 5	+ 6	+ 0	−22	+ 6	+26	0	−1.98
109657	22 12 51.23	+73 18 53.8	8.48	H	333.213 457 83	+73.314 953 02	B	5.78	17.49	19.92	8.40	8.24	4.71	5.04	4.98	+	0	− 3	+17	−29	+15	+ 5	+11	+12	+ 2	+ 8	3	−0.40
109658	22 12 52.25	+11 23 28.9	9.28	H	333.217 718 99	+11.391 358 05		4.52	6.89	− 1.66	1.04	0.90	1.40	1.68	1.23	+35	+ 4	− 6	− 5	+24	− 1	+20	− 4	+ 8	+30	2	1.33
109659	22 12 52.72	+73 18 25.7	6.11	H	333.219 679 53	+73.307 143 14	A	3.70	21.48	20.59	0.94	0.87	0.82	0.97	0.86	−	2	−18	+14	−16	+11	+ 6	+ 8	+13	+ 0	+ 7	3	−0.40
109660	22 12 53.41	+44 46 16.2	7.99	H	333.222 530 55	+44.771 158 25		11.87	3.45	−64.10	0.54	0.56	0.82	0.62	0.66	−31	+ 5	+ 3	− 6	+14	− 5	+15	−20	+19	−35	1	0.51
*109661	22 12 53.88	+68 58 59.8	7.41	H	333.224 498 26	+68.983 272 49		5.36	22.60	11.08	0.55	0.47	0.59	0.68	0.50	−11	−20	+22	− 1	+14	+18	+11	− 2	−11	+ 0	0	−0.38
*109662	22 12 53.84	−35 25 50.9	9.23	G	333.224 317 09	−35.430 816 57		−0.10	−32.15	− 8.12	1.07	1.01	1.37	1.29	1.03	+45	− 7	−35	+10	+ 8	+29	+17	+36	+ 0	+50	0	1.75
109663	22 12 55.15	−73 02 50.1	9.44	H	333.229 802 61	−73.047 252 08		0.84	18.17	−14.95	0.78	0.85	1.06	0.96	0.96	−16	−10	− 7	− 4	+12	− 7	+11	−18	−13	−23	0	2.04
109664	22 12 55.17	+30 21 59.6	9.41	H	333.229 864 05	+30.366 563 28		1.46	4.83	2.28	0.83	0.90	1.14	1.08	1.00	+	5	− 1	+ 1	+20	− 2	+ 6	− 3	+ 5	+ 3	− 1	0	−2.63
109665	22 12 55.78	+44 19 16.9	9.16	H	333.232 418 87	+44.321 356 28		1.84	2.98	0.53	0.73	0.73	1.05	0.92	0.91	−37	− 3	+19	− 8	+19	+ 0	+19	−10	+10	−48	0	−0.97
109666	22 12 56.15	−55 56 41.9	7.20	2 H	333.233 950 99	−55.944 962 35		2.56	45.29	−16.02	0.64	0.52	0.87	0.91	0.61	+	2	+ 8	−14	+23	+13	+ 6	+14	+10	− 5	+21	0	0.96
109667	22 12 57.50	−26 19 39.8	6.19	H	333.239 586 51	−26.327 724 21		17.22	−25.51	−28.47	0.64	0.51	0.81	0.71	0.56	+29	−16	−36	− 3	− 4	+17	+ 4	+19	−18	+29	0	0.98
109668	22 12 57.88	+51 11 25.0	8.11	H	333.241 161 89	+51.190 280 82		3.61	22.80	2.59	0.64	0.62	0.80	0.72	0.70	−	1	+ 0	+ 1	−19	+10	− 1	+11	−23	+14	+27	0	0.68
109669 H	22 12 58.80	+53 59 04.3	8.54	G	333.244 985 66	+53.984 539 31	*	1.61	4.44	− 1.59	1.12	1.03	0.95	0.78	0.88	−	7	−21	− 6	−20	+ 1	− 1	+ 3	−32	+12	+29	1	0.19
109670	22 12 59.62	−47 23 10.3	11.48	2 G	333.248 397 67	−47.386 187 88		44.20	117.12	−87.90	11.05	10.74	16.43	8.85	11.25	+34	−29	−32	−40	+17	− 1	+16	+32	−20	+43	1	
109671 H	22 13 00.01	−61 58 52.9	8.96	H	333.250 033 36	−61.981 359 33	A	7.16	−14.57	− 0.44	1.11	1.30	1.98	1.28	1.25	−20	− 5	+ 1	− 4	− 9	+ 3	− 7	+ 7	− 1	−45	1	−0.01
109672	22 13 00.56	−13 01 40.7	8.89	H	333.252 316 24	−13.027 975 24		15.42	−58.41	−139.37	1.17	0.79	1.28	1.41	0.78	+27	+ 2	− 4	−18	+18	− 5	+14	+ 0	+ 5	+21	2	1.67
109673 H	22 13 00.73	−49 03 13.3	7.59	H	333.253 060 00	−49.053 701 77	A	6.13	25.49	2.21	0.95	0.72	1.25	0.94	0.76	+	8	− 7	− 2	−25	+ 4	− 1	− 2	+12	+ 0	+28	1	−0.37
109674	22 13 00.75	−69 41 07.8	9.06	H	333.253 121 98	−69.685 498 58		8.01	38.70	−24.84	0.79	0.81	1.15	0.90	0.84	−13	− 5	−27	+13	− 2	− 2	+ 0	−10	+ 3	− 4	0	1.45
109675	22 13 01.69	−15 45 03.7	10.09	G	333.257 051 08	−15.751 040 99		10.66	181.78	−100.02	1.54	1.54	1.71	1.94	1.64	+54	+ 3	+11	−22	−25	+ 7	−27	−53	− 1	+54	0	1.01
109676	22 13 03.01	+34 25 21.9	10.99	2 H	333.262 534 81	+34.422 740 74		3.32	−9.35	−10.67	1.58	1.67	2.33	2.27	1.95	+29	− 7	−28	+ 7	+17	−15	+15	+ 3	+ 3	+11	4	2.92
109677	22 13 03.24	+33 36 11.5	7.39	H	333.263 485 41	+33.603 190 15		14.72	8.52	66.33	0.46	0.53	0.74	0.60	0.65	+23	− 1	−10	− 2	+12	−24	+ 9	+ 4	−11	+40	0	1.36
109678	22 13 03.32	+03 20 57.6	8.74	H	333.263 827 90	+03.349 330 70		1.74	7.53	− 4.03	1.16	0.84	1.24	1.43	0.93	+11	+10	+ 9	+ 6	+11	+11	+ 9	+20	− 6	+ 8	0	0.03
109679	22 13 03.64	+52 55 16.5	8.22	H	333.265 168 58	+52.921 239 20		2.62	−32.29	27.51	0.57	0.58	0.74	0.61	0.61	−14	− 3	+ 0	−11	+20	−18	+23	−30	+13	+ 4	0	0.11
109680	22 13 05.08	−71 08 43.1	9.67	G	333.271 163 36	−71.145 293 37		14.79	323.47	−312.20	0.84	0.86	1.18	0.97	1.08	−10	+ 2	− 4	−12	+ 3	−13	+ 2	− 9	− 8	− 8	0	2.71
109681	22 13 05.27	+38 26 29.6	8.19	H	333.271 962 60	+38.441 542 65		1.86	−2.20	−15.69	0.74	0.68	1.05	1.04	0.96	−12	+11	−18	+31	+15	−21	+15	− 1	+27	−12	0	−0.35
109682	22 13 05.83	−59 41 30.1	7.72	G	333.274 283 94	−59.691 707 49		6.41	− 7.16	5.39	0.61	0.53	0.89	0.73	0.53	−10	+15	−15	−18	+ 7	− 7	+ 3	− 1	− 9	− 1	0	1.94
109683	22 13 06.22	−13 52 15.8	7.62	H	333.275 926 40	−13.871 057 71		5.35	15.23	−26.80	0.94	0.65	1.04	1.23	0.72	+36	− 3	− 6	+ 8	+29	− 6	+24	+20	+ 0	+46	0	−2.00
109684	22 13 06.72	−29 32 17.1	8.95	H	333.277 996 31	−29.538 077 83		1.56	10.90	−22.18	1.07	0.84	1.36	1.33	0.97	+19	+ 2	−21	+29	−10	+34	− 4	+33	+11	+31	0	−0.51
109685	22 13 06.76	−16 37 18.5	9.09	H	333.278 166 30	−16.621 811 47		6.74	− 0.15	−11.14	1.11	0.88	1.28	1.32	0.86	+40	− 7	−18	−15	−12	+ 5	−16	−37	+23	+28	0	0.14
109686	22 13 07.75	−86 28 45.4	8.23	H	333.282 311 15	−86.479 281 88		4.64	3.88	6.80	0.66	0.54	0.72	0.79	0.60	−	6	−16	+ 7	− 7	+ 3	+17	+ 5	+ 0	−23	− 2	0	0.40
109687	22 13 08.36	+62 42 32.0	9.39	G	333.284 846 03	+62.708 897 17		1.22	− 3.11	− 1.32	0.99	0.84	1.02	1.25	1.07	−	8	+ 6	− 5	+28	+11	+ 0	+ 9	+ 4	−14	−12	0	−1.37
109688	22 13 08.90	+41 47 24.3	8.18	H	333.287 085 77	+41.790 074 69		2.95	32.09	28.11	0.55	0.63	0.93	0.63	0.73	−38	+17	−10	+19	+ 4	+12	+ 8	−25	+ 0	−31	2	0.05
109689	22 13 09.42	−21 24 21.6	8.34	H	333.289 231 87	−21.405 992 72		5.40	12.78	− 4.56	1.07	0.69	1.06	1.29	0.73	+11	−10	−25	−44	+ 8	+ 1	+ 2	−42	+29	+16	0	0.62
109690	22 13 09.61	−45 18 09.7	9.35	H	333.290 027 70	−45.302 688 56		6.04	32.15	− 8.90	1.10	0.90	1.31	1.15	0.88	+18	+ 6	−14	−19	+ 0	+14	+ 7	+43	−10	+ 8	0	−0.44
*109691	22 13 10.01	+18 16 47.6	6.50	H	333.291 723 89	+18.279 900 63		4.34	3.91	−36.30	0.68	0.56	0.80	0.82	0.66	+14	+ 8	−20	+ 0	+ 2	−10	+ 1	−21	+ 7	+15	0	−1.34
*109692	22 13 09.87	+59 17 57.6	7.21	H	333.291 119 04	+59.299 341 44		7.88	53.78	25.95	0.54	0.49	0.60	0.59	0.55	−	3	+ 0	+ 5	+16	+ 2	+ 8	+ 3	−21	+ 0	+ 2	0	−0.92
109693	22 13 10.17	+86 06 28.3	5.27	H	333.292 393 84	+86.107 856 72		12.75	51.31	40.32	0.43	0.40	0.49	0.52	0.46	+	3	+ 4	+16	+13	+ 0	− 5	− 1	− 2	− 7	+ 4	0	−1.16
*109694	22 13 10.69	+86 13 16.9	6.59	H	333.294 551 84	+86.221 349 32		4.28	32.91	5.30	0.46	0.43	0.51	0.55	0.47	+	6	− 1	+ 9	+15	+ 0	− 8	+ 1	+ 4	+ 5	+ 5	1	1.85
*109695 H	22 13 10.59	−11 10 37.8	9.46	G	333.294 104 87	−11.177 157 21	A	8.89	273.29	−83.39	4.87	3.54	3.65	4.86	2.77	+47	+ 5	+18	−28	−10	+13	−20	−42	−16	+29	2	1.47
109696	22 13 11.51	+25 56 27.3	6.59	G	333.297 966 47	+25.940 924 72		7.13	−39.47	−144.72	0.60	0.54	0.73	0.66	0.61	+15	+16	− 4	+ 7	− 3	−18	− 3	+ 0	− 3	+22	0	0.15
109697	22 13 11.91	+05 33 18.5	8.96	H	333.299 637 76	+05.555 143 77		0.77	1.96	1.19	1.17	0.85	1.35	1.46	0.93	+41	−10	−15	+17	+21	− 1	+ 9	−26	+21	+23	0	−1.04
109698	22 13 12.18	−03 52 20.5	9.19	H	333.300 735 35	−03.872 368 89		4.08	4.23	− 9.96	1.32	1.07	1.43

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
109601	11.594	0.107	10.244	0.049		1.167	0.013	G	1.28	0.02	I	10.2797	0.0031	0.029	99		10.24	10.33		C			1							G
109602	7.897	0.009	6.117	0.004		1.500	0.012	G	1.53	0.02	H	6.0961	0.0010	0.009	83		6.08	6.11					1							S
109603	11.340	0.101	10.793	0.097		0.670	0.015	G	0.73	0.01	H	10.7328	0.0039	0.038	115		10.66	10.78					1							D
109604	9.430	0.019	8.132	0.012		1.104	0.018	T	1.07	0.02	L	8.1863	0.0023	0.014	72		8.16	8.21		C			1							S
109605	10.200	0.030	8.280	0.012		1.628	0.027	T	1.82	0.09	O	8.1919	0.0043	0.022	87		8.15	8.24		U 2			1							S
109606	9.899	0.023	9.639	0.028		0.330	0.015	G	0.38	0.02	H	9.6628	0.0064	0.046	130		9.59	9.73		U 2			1							G P
109607	8.723	0.015	8.251	0.015		0.445	0.019	T	0.51	0.02	L	8.3260	0.0024	0.013	58		8.31	8.35					1							S
109608	8.922	0.014	8.365	0.013	*	0.551	0.015	G	0.62	0.01	H	* 8.4263	0.0012	0.014	80	*	8.40	8.45		D	22122+0828	H 1	2 C S A	AB	321	0.169	0.005	0.28	0.22	S
109609	10.441	0.024	8.802	0.011		1.371	0.021	T	1.34	0.03	L	8.7916	0.0014	0.017	158		8.76	8.82		C			1							
109610	12.343	0.227	10.929	0.120		1.211	0.212	T	4.99	0.96	Q	10.5160	0.1062	1.063	62		8.80	11.25	421.90	P 1 B			1 S							G P
109611	10.984	0.065	9.671	0.032		1.115	0.057	T	1.08	0.06	L	9.7587	0.0028	0.024	107		9.70	9.79					1 S							G
109612	10.852	0.042	9.734	0.025		0.955	0.039	T	1.00	0.04	L	9.8006	0.0026	0.023	121		9.76	9.85		C			1							
109613	9.350	0.018	7.459	0.008		1.604	0.016	T	2.13	0.05	O	7.3208	0.0040	0.028	86		7.25	7.36		U 2			1 S							S
109614	7.565	0.009	7.188	0.007		0.357	0.011	T	0.42	0.01	L	7.2337	0.0015	0.013	66		7.22	7.27		C			1							S
109615	8.763	0.012	8.246	0.012		0.501	0.015	G	0.57	0.02	H	8.3086	0.0019	0.012	81		8.29	8.33		C			1							S
109616	10.140	0.033	8.840	0.019		1.105	0.030	T	1.07	0.03	L	8.8910	0.0032	0.020	59		8.85	8.92		C			1							
109617	8.947	0.012	7.337	0.006		1.368	0.015	G	1.34	0.02	H	7.3331	0.0009	0.009	131		7.32	7.35		C			1							S
109618	10.230	0.039	8.767	0.019	*	1.233	0.034	T	1.19	0.03	L	* 8.8046	0.0019	0.017	86	*	8.78	8.83		C	22124+2712	H 1	2 C S C	AB	17	0.153	0.051	2.20	0.91	
109619						1.500	0.510	G	3.20	0.98	K	11.6540	0.0861	1.158	103		10.10	13.10	293.00	P 1 A			1							G
109620	7.921	0.010	5.980	0.005		1.645	0.009	T	2.27	0.03	O	5.8161	0.0025	0.026	109		5.76	5.85		U 2			1 S							S
109621	9.380	0.020	8.184	0.013		1.024	0.019	T	1.00	0.02	L	8.2398	0.0014	0.012	75		8.22	8.27		C	22124+2529	I 1	1							
109622	10.520	0.032	9.148	0.017		1.161	0.028	T	1.12	0.03	L	9.1949	0.0017	0.020	126		9.15	9.22					1							
109623	9.572	0.020	8.975	0.018		0.557	0.024	T	0.63	0.02	L	9.0399	0.0020	0.017	91		9.01	9.07		C			1							S
109624	6.480	0.006	6.085	0.004	*	0.386	0.006	T	0.45	0.01	L	* 6.1269	0.0006	0.006	63	*	6.12	6.14		D	22124−1412	H 1	2 C A	AB	257	0.602	0.016	3.15	0.06	S
109625	9.864	0.021	9.322	0.020		0.515	0.022	T	0.59	0.02	L	9.3858	0.0027	0.026	127		9.34	9.43					1							
109626	9.544	0.017	9.258	0.019		0.272	0.024	T	0.31	0.03	L	9.3028	0.0023	0.021	123		9.27	9.36		U			1							
109627	9.220	0.018	7.609	0.009		1.349	0.016	T	1.31	0.02	L	7.6092	0.0015	0.012	83		7.59	7.63		C			1							S
109628	9.880	0.015	8.290	0.008		1.333	0.013	T	1.30	0.01	L	8.2980	0.0014	0.017	197		8.27	8.33					1							
109629	8.880	0.012	7.079	0.006		1.499	0.011	T	1.53	0.02	L	7.0573	0.0011	0.010	117		7.04	7.08					1							S
109630	9.425	0.018	9.288	0.022		0.132	0.027	T	0.15	0.03	L	9.3135	0.0020	0.023	155		9.26	9.35					1							
109631	7.812	0.008	6.698	0.006		0.955	0.002	G	0.94	0.00	H	6.7555	0.0011	0.007	73		6.74	6.77		C			1							S
109632	10.948	0.031	8.956	0.010		1.651	0.026	T	1.67	0.03	L	8.8891	0.0016	0.022	276		8.85	8.93					1 S							
109633	9.384	0.017	9.374	0.024		0.014	0.027	T	0.03	0.03	L	9.3902	0.0026	0.021	113		9.35	9.42					1							G
109634	9.492	0.022	8.855	0.020	*	0.586	0.022	T	0.66	0.02	L	* 8.9244	0.0021	0.012	66	*	8.90	8.95			22126−1802	H 1	2 C S B	AB	229	0.181	0.038	0.83	0.80	S
109635	9.018	0.015	8.965	0.018		0.054	0.022	T	0.07	0.02	L	9.0019	0.0018	0.017	112		8.98	9.03					1							
109636	9.730	0.021	9.221	0.021		0.489	0.023	T	0.56	0.02	L	9.2742	0.0019	0.016	87		9.25	9.31		C			1							
109637	7.596	0.009	7.196	0.008	*	0.403	0.015	G	0.47	0.02	H	* 7.2082	0.0012	0.007	61	*	7.19	7.22		D	22126−0801	I 1	2 C A	AB	178	0.981	0.019	2.93	0.06	S
109638						1.553	0.005	G	2.39	0.02	A	12.0434	0.0093	0.065	70		11.91	12.15					1							G
109639	8.480	0.009	7.968	0.008		0.472	0.010	G	0.54	0.01	H	8.0255	0.0011	0.013	124		8.00	8.05		C			1							S
109640	8.684	0.010	7.526	0.007		0.994	0.010	T	0.97	0.01	L	7.5705	0.0011	0.009	110		7.56	7.59					1 G							S
109641	8.246	0.009	8.176	0.011		0.069	0.013	T	0.08	0.01	L	8.2104	0.0013	0.010	87		8.19	8.23		C			1							S
109642	8.363	0.009	7.779	0.008		0.546	0.007	G	0.62	0.01	H	7.8450	0.0015	0.016	135		7.82	7.89		U 2			1 X							S
109643	8.865	0.014	8.792	0.018		0.072	0.021	T	0.08	0.02	L	8.8005	0.0020	0.014	84		8.78	8.82		C			1							
109644	10.370	0.041	9.939	0.046		0.407	0.057	T	0.47	0.06	L	10.0061	0.0020	0.022	110		9.98	10.04					1							G
109645	9.378	0.015	8.898	0.015		0.452	0.019	T	0.52	0.02	L	8.9589	0.0021	0.020	129		8.92	8.99		C			1							
109646	8.078	0.011	7.489	0.010		0.535	0.020	G	0.61	0.02	H	7.5572	0.0014	0.011	68		7.54	7.59					1							S
109647	6.978	0.008	6.455	0.008		0.498	0.006	G	0.57	0.01	H	6.4996	0.0015	0.006	43		6.49	6.51		C			1							S
109648	8.552	0.011	8.296	0.012		0.246	0.002	G	0.28	0.00	H	8.3197	0.0019	0.015	91		8.29	8.35					1							S
109649	9.580	0.021	9.054	0.020		0.502	0.022	T	0.57	0.02	L	9.1078	0.0024	0.019	84		9.08	9.14		C			1							S
109650	9.378	0.023	8.659	0.019	*	0.661	0.024	T	0.72	0.02	L	* 8.7173	0.0030	0.016	53	*	8.69	8.75			22128+0111	I 1	2 C A	AB	250	0.434	0.018	1.87	0.11	S
109651	9.380	0.010	8.250	0.007	*	0.972	0.009	T	0.96	0.01	L	* 8.2725	0.0012	0.018	263	*	8.24	8.30		D	22128+4048	I 1	2 C A	AB	254	0.556	0.005	2.17	0.03	
109652	8.105	0.010	7.609	0.011		0.503	0.015	G	0.58	0.02	H	7.6483	0.0017	0.013	80		7.63	7.67		C			1							S
109653	8.386	0.011	8.207	0.013		0.170	0.015	G	0.19	0.01	H	8.2460	0.0015	0.012	87		8.22	8.27		C			1							S
109654	6.810	0.004	5.473	0.003		1.134	0.004	T	1.10	0.00	L	5.5100	0.0006	0.006	129		5.50	5.52		C			1							S
109655	11.064	0.048	9.856	0.027		1.010	0.021	G	1.05	0.03	I	9.8565	0.0030	0.027	121		9.81	9.92		C			1							
109656	11.744	0.129	10.852	0.101		0.961	0.004	G	1.01	0.00	I	10.8647	0.0050	0.035	86		10.81	10.94		C			1							G
109657	8.608	0.010	8.381	0.011	B	0.217	0.014	T	0.24	0.02	L	8.5217	0.0289			B				D	22129+7318	I 2	1 C I D							D
109658	9.517	0.017	9.296	0.020		0.211	0.025	T	0.23	0.03	L	9.3476	0.0016	0.017	88		9.31	9.38					1							
109659	7.371	0.006	6.189	0.003	A	1.006	0.006	T	0.98	0.01	L	6.2579	0.0050	0.008	129	A	6.25	6.27		D	22129+7318	I 2	1 C P D							S D
109660	8.722	0.009	8.055	0.008		0.624	0.015	G	0.69	0.01	H	8.1203	0.0009	0.011	162		8.10	8.14					1							S
109661	7.408	0.006	7.411	0.006		0.002	0.008	T	0.02	0.01	L	7.4192	0.0011	0.010	124		7.40	7.44		C			1							S
109662	10.593	0.041	9.347	0.024		1.103	0.005	G	1.07	0.01	I	9.4003	0.0025	0.015	80		9.36	9.43		C			1							
109663	10.987	0.045	9.572	0.021		1.195	0.039	T	1.15	0.04	L	9.6055	0.0017	0.025	137		9.56	9.64					1							
109664	11.717	0.115	9.658	0.029		1.743	0.098	T	1.75	0.21	K	9.5076	0.0034	0.023	92		9.47	9.54					1							
109665	9.227	0.011	9.167	0.014		0.060	0.017	T	0.07	0.01	L	9.1879	0.0017	0.020	163		9.15	9.23					1							
109666	9.180	0.013	7.402	0.006		1.511	0.012	T	2.21	0.04	O	7.2545	0.0033	0.033	125		7.20	7.32		U 2			1							S
109667	6.399	0.005	6.209	0.005		0.169	0.003	G	0.18	0.00	H	6.2470	0.0007	0.007	80		6.24	6.26		C			1							S
109668	9.315	0.015	8.209	0.010		0.960	0.015	G	0.95	0.01	H	8.2719	0.0015	0.017	121		8.24	8.30					1							
109669	8.641	0.011	8.567	0.013	*	0.100	0.015	G	0.11	0.02	H	* 8.5784	0.0016	0.015	131	*	8.56	8.61		D	22130+5359	M 1	2 C A	AB	4	0.231	0.003	0.24	0.08	
109670						0.660	0.020	G	0.72	0.02	H	11.6511	0.0057	0.057	149		11.43	11.74		U			1 X							G G
109671	9.240	0.019	8.708	0.015	*	0.507	0.018	T	0.58	0.02	L	* 9.0704	0.0024	0.027	245	*	9.02	9.13		D	22130−6159	I 1	2 C A	AB	289	2.430	0.007	1.36	0.03	
109672	9.897	0.028	8.934	0.020		0.834	0.027	T	0.85	0.02	L	9.0264	0.0027	0.020	83		8.99	9.07					1 S							
109673	8.610	0.010	7.660	0.008	*	0.837	0.010	T	0.86	0.01	L	* 7.7439	0.0012	0.013	140	*	7.72	7.77		D	22130−4903	I 1	2 C A	AB	353	5.519	0.011	3.03	0.07	S
109674	9.765	0.016	9.113	0.014		0.597	0.016	T	0.67	0.01	L	9.1882	0.0022	0.026	151		9.15	9.24					1							
109675	10.771	0.062	10.211	0.060		0.576	0.003	G	0.65	0.00	H	10.2039	0.0049	0.026	62		10.15	10.26		C			1							
109676						0.732	0.126	G	0.78	0.09	R	11.1305	0.0069	0.068	114		11.02	11.22		U			1 G							G
109677	8.030	0.007	7.455	0.007		0.559	0.015	G	0.63	0.01	H	7.5140	0.0008	0.008	140		7.50	7.53		C			1							S
109678	10.684	0.050	8.873	0.020		1.507	0.043	T	1.54	0.06	L	8.8666	0.0024	0.015	55		8.84	8.89		C			1							
109679	9.746	0.021	8.360	0.011		1.172	0.019	T	1.13	0.02	L	8.3880	0.0013	0.012	125		8.37	8.41		C			1							
109680	10.672	0.033	9.755	0.024		0.802	0.003	G	0.84	0.00	H	9.8162	0.0025	0.029	157		9.77	9.88		C			1							
109681	9.971	0.022	8.336	0.011		1.368	0.019	T	1.34	0.02	L	8.3309	0.0017	0.019	132		8.30	8.36					1							
109682	7.953	0.007	7.730	0.008		0.188	0.002	G	0.21	0.00	H	7.7780	0.0013	0.017	153		7.75	7.81					1							S
109683	9.012	0.016	7.736	0.010		1.086	0.015	T	1.05	0.01	L	7.7869	0.0012	0.010	66		7.77	7.81					1							S
109684	10.423	0.032	9.041	0.017		1.169	0.028	T	1.13	0.03	L	9.1135	0.0016	0.014	90		9.09	9.15					1							
109685	9.547	0.022	9.123	0.023		0.414	0.026	T	0.48	0.03	L	9.1870	0.0017	0.014	64		9.15	9.22		C			1							
109686	8.502	0.009	8.245	0.010		0.245	0.013	T	0.27	0.02	L	8.2978	0.0019	0.018	124		8.27	8.33					1							S
109687	9.678	0.021	9.459	0.025		0.280	0.015	G	0.32	0.02	H	9.4714	0.0020	0.019	96		9.44	9.50					1							G
109688	9.865	0.017	8.318	0.009		1.299	0.015	T	1.26	0.02	L	8.3376	0.0012	0.017	195		8.31	8.37					1							
109689	8.382	0.011	8.324	0.014		0.052	0.016	T	0.06	0.01	L	8.3652	0.0017	0.013	82		8.34	8.39					1							S
109690	9.636	0.018	9.424	0.021		0.196	0.027	T	0.21	0.03	L	9.4158	0.0029	0.020	92		9.38	9.45					1							
109691	8.305	0.012	6.663	0.006		1.374	0.011	T	1.34	0.01	L	6.6456	0.0012	0.009	84		6.63	6.66					1							S
109692	7.442	0.007	7.232	0.007		0.201	0.009	T	0.22	0.01	L	7.2729	0.0013	0.013	114		7.25	7.29		C			1							S
109693	5.233	0.002	5.261	0.002		−0.030	0.005	G	−0.01	0.05	F	5.2659	0.0005	0.006	123		5.26	5.28					1 G							S
109694	8.129	0.010	6.726	0.005		1.186	0.009	T	1.15	0.01	L	6.7504	0.0009	0.008	131		6.74	6.77		C			1							S
109695	10.831	0.062	9.726	0.037	*	0.914	0.003	G	0.96	0.00	I	* 9.5999	0.0037	0.027	88	*	9.57	9.66		D	22132−1111	I 1	2 C D	AB	273	0.931	0.010	0.04	0.02	D
109696	7.913	0.009	6.707	0.006		1.025	0.005	G	1.00	0.00	H	6.7503	0.0008	0.007	83		6.74	6.76		C			1							S
109697	10.380	0.030	9.060	0.017		1.121	0.027	T	1.08	0.03	L	9.1225	0.0022	0.019	87		9.10	9.15		C			1							
109698	10.584	0.054	9.293	0.030		1.098	0.048	T	1.06	0.05	L	9.3620	0.0032	0.020	47		9.33	9.39		C			1							
109699	9.290	0.012	8.682	0.011		0.567	0.014	T	0.64	0.01	L	8.7428	0.0012	0.019	183		8.70	8.77					1							S
109700	7.796	0.009	7.298	0.009		0.480	0.010	T	0.55	0.01	L	7.3477	0.0016	0.012	83		7.33	7.37					1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
109701	22 13 14.92	+55 18 49.6	7.64	H	333.312 177 99	+55.313 785 29	2.04	−5.02	−4.27	0.52	0.57	0.65	0.62	0.61	+ 6	− 6	− 2	−21	−12	+ 9	− 6	−43	+19	+32	1	−0.28
109702 H	22 13 15.37	−73 55 50.6	9.34	H	333.314 043 05	−73.930 720 13	A 2.23	5.31	11.57	1.49	1.45	1.75	1.79	1.45	−21	−29	− 6	−19	+12	+34	+11	−29	− 2	−32	0	0.09
109703	22 13 17.11	+10 50 54.6	8.24	G	333.321 291 87	+10.848 503 63	5.95	25.87	−18.33	0.92	0.90	1.28	1.53	1.11	+39	+ 3	−17	+ 4	+ 5	+24	− 2	−39	+18	+25	0	−0.10
109704	22 13 17.49	−42 54 14.6	8.11	H	333.322 864 46	−42.904 061 03	4.66	21.68	−74.41	0.91	0.80	1.08	1.32	0.91	+28	+ 8	−19	+33	+ 5	+28	+13	+47	− 4	+31	0	0.72
*109705	22 13 18.54	+23 26 36.9	10.98	H	333.327 254 04	+23.443 587 34	5.05	175.37	−90.98	1.74	1.49	2.11	2.23	1.98	+ 6	− 9	− 4	−24	+ 3	−10	+ 3	−21	−10	+ 7	4	0.71
*109706	22 13 18.51	+49 22 28.8	7.35	H	333.327 137 51	+49.374 667 97	6.06	13.77	−50.84	0.50	0.51	0.69	0.52	0.57	− 7	+ 4	−12	+12	+15	−10	+20	− 7	+16	+14	0	−0.83
109707	22 13 18.77	−02 44 01.3	8.95	H	333.328 217 48	−02.733 684 03	3.27	5.27	−26.40	1.24	0.94	1.29	1.77	1.11	+16	+12	−14	+34	+ 6	+ 7	+ 9	+46	+ 6	+13	0	2.23
109708	22 13 19.83	−68 42 14.1	8.77	H	333.332 624 91	−68.703 919 00	8.32	−8.00	34.25	0.67	0.67	1.01	0.69	0.71	−14	− 4	−18	−13	+ 0	+17	+ 3	− 6	−13	−13	0	−1.93
109709	22 13 20.28	+00 14 32.3	7.58	H	333.334 491 05	+00.242 306 68	3.03	40.23	5.27	0.95	0.67	1.02	1.35	0.69	+ 6	+16	−15	+41	−18	+35	−13	+ 8	+10	− 4	0	−0.82
109710	22 13 22.13	+31 22 56.2	7.88	H	333.342 209 76	+31.382 278 54	2.01	3.73	−3.52	0.67	0.64	0.87	0.74	0.71	+13	− 1	+ 8	+20	+ 0	−14	+ 1	− 1	+ 8	+15	0	−1.57
109711	22 13 22.85	+43 22 27.6	9.18	H	333.345 197 94	+43.374 339 69	0.29	−0.38	−6.46	0.72	0.79	1.13	0.91	1.05	−25	+ 8	+11	+20	+ 3	+ 7	− 1	−13	− 5	−35	0	−1.00
109712	22 13 23.01	+61 10 13.5	8.60	H	333.345 865 72	+61.170 430 17	2.09	4.95	−1.85	0.76	0.68	0.80	0.98	0.84	−17	+ 5	+ 0	+34	− 5	− 7	+ 0	− 9	+ 5	− 8	0	0.01
109713	22 13 23.87	+53 09 14.6	7.26	H	333.349 454 90	+53.154 059 10	8.62	−0.77	17.31	0.47	0.47	0.59	0.46	0.46	−18	+ 0	− 3	+ 0	+19	−12	+23	−30	+16	− 3	0	−1.92
109714 H	22 13 23.88	+39 13 40.9	8.08	G	333.349 484 72	+39.228 034 66	A 2.84	18.67	0.52	1.65	1.65	1.94	1.48	1.52	−49	+24	−17	−12	+16	+ 1	+21	−19	+19	−49	1	−0.30
109715	22 13 24.78	−26 31 46.0	12.14	G	333.353 255 76	−26.529 455 89	3.21	2.51	−6.30	3.17	2.76	4.24	3.50	2.99	+53	−24	−33	−18	−27	+18	−19	−12	−13	+51	0	−1.21
109716	22 13 25.19	+12 43 17.0	8.31	H	333.354 976 62	+12.721 395 32	5.34	−13.70	−9.05	0.88	0.75	1.11	1.28	0.97	+27	− 8	−14	−21	+ 4	+18	+ 2	−35	+18	+18	0	1.29
109717	22 13 25.28	−01 39 13.1	7.07	G	333.355 323 62	−01.653 652 07	2.80	122.96	−90.82	0.87	0.61	0.93	1.17	0.64	+ 6	+13	−10	+21	−11	+30	− 8	+ 8	− 3	− 8	0	−0.26
109718	22 13 25.89	+21 07 39.8	9.64	H	333.357 870 19	+21.127 721 88	4.34	−12.24	−7.75	1.11	1.00	1.41	1.41	1.19	+13	−11	−22	− 1	− 5	+13	− 5	−26	+21	+ 9	0	1.05
109719	22 13 26.15	+24 01 35.3	7.89	H	333.358 968 47	+24.026 459 05	6.77	31.35	48.58	0.80	0.63	0.94	0.96	0.77	+ 6	+27	−20	−24	+ 8	−20	+ 6	−11	+ 8	+15	2	1.21
109720	22 13 26.37	−11 55 33.9	6.93	H	333.359 865 31	−11.926 072 86	2.96	20.99	−20.86	0.77	0.56	0.87	0.79	0.52	+22	+ 1	+19	−24	+21	+24	+16	−13	− 2	+14	0	−0.97
109721	22 13 27.78	−19 22 50.4	10.53	G	333.365 761 01	−19.380 656 90	12.26	40.19	−193.53	1.77	1.50	2.07	2.73	1.59	+30	−17	−30	+ 1	− 2	+18	−11	−50	+28	+15	0	−0.38
109722	22 13 33.19	−07 22 19.8	8.69	H	333.388 310 15	−07.372 165 59	7.67	84.67	−32.83	1.01	0.81	1.11	1.21	0.82	+14	+ 7	− 5	+20	− 6	+26	− 2	+30	+ 9	+11	6	0.51
109723	22 13 34.36	−35 44 36.3	8.64	H	333.393 183 13	−35.743 406 55	1.38	−27.07	−13.98	0.94	0.83	1.23	1.10	0.78	+42	− 6	−26	+ 3	−11	+38	− 1	+11	+15	+46	0	0.59
109724	22 13 35.09	+70 08 27.5	8.16	H	333.396 188 53	+70.140 973 61	3.19	4.47	0.30	0.61	0.58	0.69	0.77	0.64	− 3	−10	+14	+ 2	+ 6	+23	+ 2	+13	− 1	+ 4	0	−0.49
109725	22 13 37.27	−41 08 11.9	8.86	H	333.405 272 26	−41.136 649 04	4.81	−8.95	−48.14	0.83	0.84	1.08	0.95	0.87	+15	−13	−20	+13	− 9	+22	− 1	+35	− 4	− 1	0	0.07
109726	22 13 37.54	−66 46 55.8	7.61	H	333.406 396 59	−66.782 173 55	1.29	−8.35	8.59	0.52	0.55	0.78	0.66	0.58	−10	− 4	−19	− 8	+16	−13	+12	− 2	− 5	− 2	0	−0.58
109727	22 13 37.81	+49 28 16.5	7.09	H	333.407 552 42	+49.471 249 15	11.68	85.12	8.54	0.47	0.47	0.66	0.50	0.59	− 9	+ 8	− 7	+20	+ 8	− 7	+ 8	−11	+ 8	+ 2	0	0.49
109728 H	22 13 38.15	+42 02 09.2	9.62	H	333.408 951 90	+42.035 895 73	A 1.32	9.61	0.65	2.15	1.77	2.15	1.65	1.76	−38	+ 8	−10	+39	− 8	+16	− 9	−12	− 2	−47	1	1.96
109729	22 13 38.61	+18 54 10.1	8.01	H	333.410 881 81	+18.902 805 53	5.36	−24.25	−17.34	0.82	0.69	0.95	0.88	0.84	+15	+22	−14	+44	− 8	− 3	− 2	− 9	+20	+24	2	−0.33
109730	22 13 38.65	+28 36 28.9	5.87	H	333.411 042 40	+28.608 026 81	13.08	74.04	−3.99	0.46	0.50	0.62	0.52	0.52	+26	+16	+ 6	+36	− 6	− 7	− 7	−11	−10	+24	1	0.54
109731	22 13 39.63	−27 27 32.6	8.88	H	333.415 121 17	−27.459 047 06	6.66	48.38	−56.37	0.98	0.86	1.35	1.17	1.05	+38	− 9	−33	+14	−25	+25	−20	+13	−14	+46	0	−0.76
109732	22 13 40.20	+21 02 58.9	8.07	H	333.417 492 35	+21.049 685 50	2.80	−1.15	−7.55	0.70	0.57	0.82	0.82	0.72	+ 9	− 2	−14	− 8	+ 2	+10	+ 3	−20	+11	+12	0	0.48
109733	22 13 42.21	−03 46 32.4	8.49	H	333.425 889 00	−03.775 676 67	6.13	16.13	−46.71	1.03	0.77	1.16	1.16	0.77	+19	+ 9	− 8	− 4	+ 4	+28	+10	+13	+13	+ 9	0	−2.02
109734	22 13 43.12	−68 07 35.0	6.84	H	333.429 684 62	−68.126 383 53	3.90	26.87	0.51	0.47	0.48	0.68	0.50	0.46	−17	+ 7	−18	− 7	+ 7	− 1	+ 7	−14	− 3	−12	0	−1.44
109735	22 13 43.47	−52 15 11.2	8.28	G	333.431 105 80	−52.253 100 15	7.28	38.36	−28.47	0.60	0.58	1.05	0.77	0.62	+21	−11	−16	− 5	− 1	+29	+ 2	− 3	+11	+38	0	0.07
109736	22 13 44.35	+07 42 53.9	8.07	H	333.434 806 26	+07.714 960 30	4.05	2.58	−1.46	1.00	0.70	1.07	1.32	0.81	+11	+ 8	+ 4	−19	+16	+ 6	+12	−31	+13	+ 9	4	2.42
109737	22 13 44.39	−25 10 51.3	5.58	G	333.434 947 38	−25.180 925 37	14.78	71.18	8.36	0.76	0.46	0.79	0.99	0.45	+18	−17	−27	−11	+29	−16	+17	− 9	+ 3	+29	0	0.68
109738	22 13 44.75	+42 27 43.6	8.97	H	333.436 456 16	+42.462 104 00	0.31	2.98	−7.35	0.66	0.74	1.09	0.76	0.92	−41	− 4	+23	+26	− 5	+ 4	− 6	+ 6	+ 1	−46	1	0.54
109739	22 13 45.18	−30 51 22.6	8.61	H	333.438 256 81	−30.856 287 36	1.45	6.97	10.09	0.91	0.73	1.13	0.98	0.75	+20	− 5	− 2	+ 2	− 8	+25	− 7	+20	+ 0	+14	0	1.40
109740	22 13 45.34	+20 12 00.7	9.08	G	333.438 916 91	+20.200 207 89	5.66	2.47	−14.14	0.85	0.80	1.11	0.91	0.94	+12	+ 8	−14	+ 9	− 7	−18	−11	−21	+ 4	+14	0	0.51
109741	22 13 45.86	+37 02 41.7	10.06	H	333.441 076 15	+37.044 908 53	0.99	2.60	−2.30	1.17	1.05	1.44	1.75	1.25	− 1	+13	−23	− 5	− 3	+ 8	+ 2	+ 4	+10	−13	0	0.55
109742	22 13 46.29	−46 44 37.1	8.34	H	333.442 859 74	−46.743 627 37	6.62	−27.44	−21.64	0.90	0.71	1.10	0.77	0.76	+16	−26	−30	−13	+17	+ 2	+16	+40	−21	+26	2	0.11
109743 H	22 13 48.11	+67 10 26.1	9.10	2 H	333.450 473 78	+67.173 924 57	A 0.66	−1.71	−2.23	1.20	1.17	1.20	1.31	1.14	−10	− 9	+24	+ 5	+16	+11	+12	−11	+ 2	−10	0	0.18
109744	22 13 48.77	−28 40 04.8	9.54	H	333.453 202 84	−28.667 989 31	2.36	−6.25	−24.34	1.22	0.98	1.72	1.44	1.06	+18	+ 0	−31	+ 3	−25	+49	−15	+13	+15	+31	0	1.70
109745	22 13 49.18	+45 26 26.2	5.53	H	333.454 912 77	+45.440 603 28	13.00	73.41	4.01	0.38	0.39	0.54	0.41	0.44	−30	+ 0	− 2	−17	+14	+10	+14	−19	+10	−28	0	1.68
109746	22 13 49.71	+63 09 44.5	6.13	H	333.457 143 50	+63.162 356 74	3.37	−8.37	−7.93	0.49	0.46	0.53	0.60	0.54	−15	+ 3	+ 9	+36	+ 8	− 2	+ 7	+ 2	−15	−15	0	0.10
109747	22 13 50.16	+01 36 32.2	8.08	H	333.458 984 35	+01.608 948 90	3.42	−2.71	−3.71	1.01	0.69	1.14	1.54	0.74	+ 6	+17	−11	+ 1	+ 4	+26	+10	− 6	+29	−14	0	0.31
109748	22 13 50.38	+00 52 35.5	7.86	H	333.459 897 16	+00.876 515 58	15.41	60.01	−39.20	1.06	0.66	1.14	1.71	0.76	+ 1	+25	− 2	+24	− 6	+30	− 2	+ 6	+24	−21	0	0.05
109749	22 13 50.96	−62 16 50.7	9.46	H	333.462 314 47	−62.280 752 98	4.84	26.70	−14.57	0.68	0.84	1.33	0.79	0.84	−24	+ 0	− 5	− 9	−14	+ 0	−11	− 5	+ 2	−43	2	−0.78
109750	22 13 51.49	−04 27 04.7	7.09	H	333.464 547 88	−04.451 311 01	4.88	3.86	−8.64	0.96	0.59	0.92	1.21	0.65	− 4	+10	− 9	− 7	+ 4	− 1	+ 6	+10	+ 8	−21	0	0.96
109751	22 13 51.60	−14 52 10.8	10.19	G	333.464 995 69	−14.869 670 11	0.41	1.44	8.93	1.66	1.26	1.89	2.09	1.43	+28	− 9	+17	+ 0	− 8	+ 8	− 5	−31	− 3	+41	0	−0.14
109752	22 13 52.50	−45 48 22.9	7.68	H	333.468 747 11	−45.806 363 76	6.82	7.56	−9.38	0.74	0.58	0.93	0.78	0.56	+13	−11	−29	+ 8	− 4	+25	+ 4	+33	−17	+ 8	0	0.00
109753	22 13 52.55	−22 15 51.4	8.54	H	333.468 949 92	−22.264 274 02	11.07	−55.58	−77.22	1.08	0.72	1.19	1.22	0.76	+24	−15	−24	−33	− 9	+24	−10	−42	+37	+32	0	1.29
109754 H	22 13 52.70	+39 42 53.6	4.50	G	333.469 589 44	+39.714 889 28	A 5.79	37.65	15.55	0.46	0.52	0.64	0.49	0.58	−28	+13	− 5	−12	− 4	−22	− 8	−10	+29	−48	2	0.51
109755	22 13 52.98	−34 45 35.3	7.68	G	333.470 766 23	−34.759 817 43	8.99	63.17	0.17	0.85	0.73	0.99	1.03	0.83	+35	+ 5	−11	+ 1	+16	+29	+13	+45	+ 5	+48	0	1.44
109756	22 13 53.22	+05 16 35.9	11.82	H	333.471 768 54	+05.276 628 19	38.99	179.29	−41.43	3.36	1.96	3.59	4.16	2.35	+33	+15	+ 1	− 1	+30	−11	+30	− 8	+13	+27	2	1.32
109757	22 13 53.31	−45 20 48.2	9.22	H	333.472 127 24	−45.346 711 42	9.77	142.61	−41.25	1.06	0.82	1.29	1.10	0.79	+13	+ 2	−26	−13	+ 8	+ 8	+ 9	+41	−19	+11	0	0.37
109758	22 13 53.33	−45 54 41.4	8.56	H	333.472 218 55	−45.911 501 96	3.15	12.92	−30.75	0.96	0.90	1.19	1.02	0.91	+35	−29	−30	+12	+23	+ 9	+29	+57	−18	+30	0	0.67
109759	22 13 53.47	+53 16 05.0	7.92	G	333.472 803 09	+53.268 065 95	0.95	−0.90	−13.73	0.52	0.54	0.68	0.55	0.58	−15	− 3	+ 3	+ 1	+16	−16	+22	−27	+10	+ 4	0	−1.77
109760	22 13 53.65	−31 30 07.6	9.03	H	333.473 537 54	−31.502 098 47	1.66	12.45	−5.58	1.11	0.81	1.29	1.42	0.86	− 3	+ 4	−18	+10	−12	+20	− 6	+17	+ 0	−21	0	0.68
109761	22 13 54.28	−04 38 39.3	8.68	H	333.476 180 60	−04.644 246 88	7.46	39.64	4.97	1.26	0.75	1.14	2.01	0.88	−11	− 2	− 5	+17	−15	− 3	−14	+14	+ 2	−44	0	0.54
109762	22 13 55.44	−11 35 22.5	9.07	H	333.480 990 73	−11.589 592 88	1.84	22.36	−23.32	1.05	0.79	1.19	1.19	0.77	+33	+ 0	+10	−19	+ 8	+ 4	+ 4	−19	+ 5	+23	0	−0.68
109763	22 13 57.48	−61 26 55.5	8.01	2 H	333.489 496 73	−61.448 738 75	0.19	18.46	−1.91	0.42	0.53	0.88	0.53	0.55	−17	− 5	−16	+ 0	+ 2	+ 8	+ 3	+ 8	− 9	−19	0	0.09
109764	22 13 58.41	+69 53 51.2	7.88	H	333.493 392 23	+69.897 563 65	3.47	−3.52	−7.98	0.60	0.58	0.68	0.74	0.63	− 2	−18	+ 8	+ 5	+ 7	+14	+ 7	− 3	− 2	+13	0	−0.38
109765	22 13 58.87	+09 28 48.6	7.97	H	333.495 281 47	+09.480 157 83	4.32	35.33	22.96	0.99	0.81	1.19	1.31	0.95	+ 9	+20	−30	−27	+ 6	− 4	+ 7	−52	+35	− 3	0	−0.53
109766	22 13 58.88	+40 29 48.5	9.25	H	333.495 332 64	+40.496 815 69	0.49	5.29	5.31	0.59	0.78	1.22	0.60	0.89	−52	+27	−23	+24	+ 5	+ 2	+13	−20	+23	−47	1	−0.73
109767	22 14 00.98	+57 07 11.9	9.84	G	333.504 073 05	+57.119 979 45	11.18	99.00	39.82	0.97	0.89	1.10	0.99	0.94	− 5	+14	+ 5	−19	+12	− 5	+17	−36	+17	+10	4	1.94
109768	22 14 01.78	−24 37 30.4	8.09	H	333.507 418 65	−24.625 119 97	3.27	31.41	−17.51	1.02	0.58	0.99	1.20	0.60	+10	− 5	− 3	−24	+35	+10	+25	− 3	+16	+34	0	0.81
109769	22 14 02.23	−55 17 56.7	8.09	H	333.509 292 39	−55.299 096 61	4.13	17.75	−4.74	0.70	0.59	1.06	0.92	0.67	+ 4	+ 2	−11	+ 8	+11	+ 1	+ 9	+13	−10	+25	1	1.16
109770	22 14 02.59	−57 13 06.2	8.07	2 H	333.510 806 77	−57.218 395 46	0.40	15.07	−9.75	0.78	0.71	1.14	1.05	0.81	+13	− 7	−10	+21	+ 3	+23	+ 7	+ 4	− 1	+21	0	−1.36
109771	22 14 02.72	+05 46 29.8	8.08	G	333.511 342 78	+05.774 946 77	13.99	−27.77	−74.44	0.95	0.59	1.00	1.30	0.66	+21	− 1	− 9	−14	+31	− 2	+24	−20	+16	+ 8	0	2.19
109772	22 14 03.15	+12 10 19.2	8.16	H	333.513 129 01	+12.172 010 58	5.38	−14.09	11.23	0.86	0.78	1.07	1.15	1.05	+34	− 4	−14	−29	− 2	+13	+ 0	−34	+13	+36	0	0.09
109773	22 14 03.39	−78 19 52.1	8.24	H	333.514 126 16	−78.331 148 75	9.58	43.25	11.50	0.64	0.61	0.77	0.87	0.78	− 8	−11	−12	+14	− 3	+10	− 2	+11	− 3	−20	0	0.44
109774	22 14 04.90	−59 29 41.5	8.47	H	333.520 428 17	−59.494 864 10	10.22	−24.49	25.67	0.71	0.66	1.09	0.80	0.63	−19	+11	−24	−16	+11	+ 2	+ 8	− 5	− 5	+ 1	0	−0.78
109775	22 14 06.64	−21 24 40.8	7.41	H	333.527 687 40	−21.411 333 68	6.89	20.75	−1.08	0.82	0.54	0.87	0.98	0.58	+20	−20	−18	−24	+ 0	+19	− 4	−39	+26	+27	2	0.34
109776	22 14 07.21	+66 55 56.2	8.62	H	333.530 042 24	+66.932 269 52	4.42	12.16	1.74	0.63	0.65	0.71	0.72	0.65	−21	− 8	+19	+ 1	+19	+ 4	+15	−23	+ 4	−27	0	0.40
109777	22 14 08.84	−00 39 31.0	9.49	H	333.536 821 36	−00.658 614 26	1.77	9.53	−16.03	1.34	0.99	1.43	1.75	1.09	+ 5	+12	−22	+29	−24	+13	−20	+ 9	− 3	+ 3	0	−0.36
109778	22 14 08.99	+46 42 12.3	7.98	H	333.537 457 20	+46.703 416 11	1.65	−7.81	−16.28	0.66	0.65	0.91	0.69	0.68	−28	+26	− 1	− 7	+22	−12	+28	−21	+22	−20	0	1.27
109779	22 14 10.62	+29 14 10.9	8.13	H	333.544 234 81	+29.236 364 98	5.95	29.68	1.20	0.62	0.65	0.83	0.79	0.73	+14	+10	−15	+45	− 7	+ 3	− 7	− 4	+ 4	+12	0	1.67
109780	22 14 11.55	−73 24 36.8	8.54	H	333.548 123 41	−73.410 234 77	9.30	73.14	−23.97	0.68	0.75	0.89	0.83	0.78	−22	−13	−12	−12	+16	+11	+18	−29	− 6	−15	0	−0.36
109781	22 14 11.65	+04 28 16.8	8.76	H	333.548 527 41	+04.471 323 50	2.99	16.44	−22.82	1.04	0.74	1.14	1.35	0.84	+32	−12	+ 1	+12	+16	+10	+12	−15	− 1	+25	0	−0.62
109782	22 14 12.35	−44 42 48.8	8.71	H	333.551 444 87	−44.713 551 13	15.97	1.54	−99.20	1.00	0.70	1.17	1.25	0.66	+13	+13	−17	+ 2	+ 4	+10	+ 6	+29	− 7	+ 9	2	1.77
109783	22 14 14.20	−05 44 46.6	7.90	G	333.559 153 53	−05.746 279 55	8.54	77.30	−4.76	1.06	0.64	1.00	1.37	0.69	− 7	+10	−14	+21	−17	+ 7	−14	+21	+ 2	−21	0	0.67
109784 H	22 14 15.52	+37 44 45.3	8.83	H	333.564 664 25	+37.745 910 78	B 4.62	3.82	−4.45	3.11	2.66	2.61	2.93	2.49	+13	+ 1	− 9	− 4	− 1	− 7	− 1	+ 1	+42	−23	3	−0.05
109785 H	22 14 16.11	+61 55 13.7	8.62	H	333.567 144 40	+61.920 470 48	A 2.77	22.50	7.56	1.23	1.05	1.14	1.36	1.18	− 8	+15	− 8	+20	− 3	+18	+ 0	− 4	− 1	− 2	1	0.03
109786 H	22 14 18.02	−21 04 28.9	5.33	G	333.575 073 83	−21.074 700 81	A 11.59	22.98	55.36	1.05	0.83	0.98	1.15	0.74	+12	+ 1	−30	−27	− 4	+10	−10	−57	+35	− 1	1	0.51
109787	22 14 18.36	−53 17 59.6	10.08	G	333.576 512 56	−53.299 876 55	17.53	259.17	−118.35	1.03	0.96	1.80	1.31	1.08	+29	−25	−21	+14	+ 7	+21	+17	+ 7	−14	+39	0	1.89
109788	22 14 18.45	+17 11 22.4	6.50	H	333.576 881 02	+17.189 566 16	A 8.19	−82.75	−91.39	1.93	1.29	1.61	2.12	1.66	+28	− 1	− 8	−32	+13	+14	+16	+ 7	+11	+27	1	0.22
109789	22 14 18.74	−27 46 00.9	5.45	H	333.578 067 96	−27.766 912 18	6.42	22.88	1.90	0.64	0.53	0.85	0.75	0.62	+35	−19	−40	+14	−27	+24	−17	+11	−12	+40	0	0.50
109790	22 14 18.99	+17 11 42.0	9.71	H	333.579 104 72	+17.194 996 29	B 8.19	−82.75	−91.39	67.82	57.14	1.61	2.12	1.66	+33	+15	+ 6	+ 6	− 5	+14	− 1	− 8	+11	+27	1	0.22
109791	22 14 19.35	−05 33 31.3	8.87	H	333.580 608 95	−05.558 691 79	5.46	5.80	−9.55	1.33	0.77	1.24	2.18	0.89	− 6	− 1	−20	+19	−17	+ 5	−16	+13	− 2	−42	0	0.59
109792	22 14 19.83	−58 01 07.4	9.46	H	333.582 621 13	−58.018 712 35	10.41	130.23	−23.01	0.89	0.90	1.47	1.07	0.94	− 7	− 6	−11	−33	+ 3	+ 4	+ 2	−13	+13	− 6	3	2.03
109793	22 14 20.04	+18 01 13.4	8.19	G	333.583 488 58	+18.020 393 76	2.71	2.25	−4.54	0.95	0.74	1.10	1.24	0.97	+12	+13	−14	−29	+ 5	− 1	+ 9	−18	+28	+ 9	0	−0.46
109794	22 14 20.48	−19 14 55.8	7.10	H	333.585 321 16	−19.248 819 97	13.86	19.58	−50.29	0.83	0.64	0.92	1.16	0.67	+22	− 3	−10	+ 3	− 2	+30	− 7	−49	+18	+14	2	−0.05
109795	22 14 20.91	−39 44 52.6	8.70	H	333.587 108 68	−39.747 932 74	5.58	141.45	−43.28	0.96	0.79	1.21	1.07	0.78	+15	−10	−11	− 3	+ 5	+33	+ 9	+16	+ 2	+14	0	−1.72
109796	22 14 21.06	−42 19 04.1	8.11	G	333.587 769 94	−42.317 800 48	15.53	47.21	−113.74	0.96	1.14	1.30	1.21	1.14	+42	−28	−54	+32	+ 7	+ 5	+21	+57	−22	+21	5	0.76
109797	22 14 21.56	+36 49 54.5	7.65	H	333.589 848 62	+36.831 792 14	2.45	14.16	−1.04	0.63	0.57	0.78	0.96	0.68	− 5	+ 1	−10	−11	+ 4	+12	+ 5	− 3	+ 2	−15	0	−0.35
109798	22 14 21.68	+65 46 58.2	9.96	H	333.590 343 03	+65.782 843 64	3.42	−5.22	−4.10	0.88	0.88	1.00	1.09	0.98	−11	− 1	+ 3	+ 7	+13	−13	+10	−23	+13	− 9	0	−1.28
109799	22 14 22.08	+00 02 56.1	7.78	H	333.591 984 04	+00.048 909 52	0.86	5.03	−10.44	0.94	0.73	1.04	1.40	0.83	+18	+ 9	−18	+36	−23	+36	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
109701	7.710	0.007	7.654	0.009		0.083	0.010	G	0.10	0.01	H	7.6763	0.0012	0.013	130		7.65	7.69					1							S
109702	9.861	0.019	9.530	0.021	A	0.400	0.495	G	0.42	0.06	L *	9.4267	0.0030	0.030	125	*	9.38	9.49		D	22133−7356	I 1	2 C A	AB	87	2.059	0.009	1.77	0.04	
109703	8.623	0.012	8.269	0.012		0.368	0.003	G	0.43	0.00	H	8.3240	0.0020	0.015	79		8.30	8.35					1							S
109704	9.627	0.022	8.252	0.013		1.164	0.020	T	1.13	0.02	L	8.2775	0.0014	0.011	84		8.26	8.30					1							
109705	11.559	0.104	10.762	0.077		0.722	0.100	T	0.77	0.07	L	11.1193	0.0054	0.037	78		11.05	11.18		C			1							G
109706	9.001	0.011	7.486	0.006		1.274	0.010	T	1.23	0.01	L	7.5128	0.0011	0.013	152		7.49	7.54					1							S
109707	10.896	0.063	9.076	0.024		1.514	0.053	T	1.55	0.08	L	9.0748	0.0028	0.020	52		9.04	9.10		C			1							
109708	9.357	0.013	8.809	0.012		0.520	0.013	T	0.59	0.01	L	8.8831	0.0020	0.024	176		8.84	8.92					1							
109709	9.378	0.023	7.738	0.012		1.372	0.020	T	1.34	0.02	L	7.7307	0.0023	0.013	55		7.71	7.75					1							S
109710	9.540	0.020	8.001	0.010		1.293	0.018	T	1.25	0.02	L	8.0331	0.0017	0.014	97		8.01	8.07					1							
109711	9.154	0.011	9.195	0.015		−0.033	0.017	T	−0.01	0.02	L	9.1773	0.0023	0.026	166		9.13	9.21					1							
109712	10.005	0.024	8.707	0.014		1.104	0.022	T	1.07	0.02	L	8.7685	0.0018	0.015	106		8.74	8.79		C			1							
109713	7.535	0.006	7.296	0.006		0.218	0.011	G	0.24	0.01	H	7.3313	0.0010	0.010	132		7.32	7.35					1							S
109714	9.014	0.009	8.177	0.008	*	0.750	0.015	G	0.79	0.01	H *	8.2256	0.0014	0.018	188	*	8.20	8.25		D	22134+3914	H 1	2 C A	AB	320	0.548	0.026	2.79	0.10	S
109715						0.910	0.020	G	0.95	0.02	I	12.3173	0.0108	0.090	79		12.18	12.50					1							D
109716	9.626	0.020	8.421	0.013		1.010	0.015	G	0.99	0.01	H	8.4717	0.0013	0.013	90		8.44	8.51		C			1							
109717	8.889	0.016	7.214	0.009		1.407	0.015	G	1.39	0.02	H	7.2095	0.0017	0.012	51		7.18	7.23					1							S
109718	10.890	0.061	9.800	0.039		0.942	0.055	T	0.93	0.04	L	9.8081	0.0026	0.022	84		9.77	9.85		C			1							
109719	8.240	0.012	7.924	0.011		0.327	0.015	G	0.38	0.02	H	7.9704	0.0017	0.011	90		7.95	7.99		C			1							S
109720	7.871	0.008	7.021	0.006		0.762	0.008	T	0.80	0.01	L	7.0806	0.0012	0.010	88		7.07	7.10					1							S
109721	12.126	0.185	10.625	0.074		0.869	0.003	G	0.91	0.00	H	10.6842	0.0039	0.037	60		10.44	10.74					1							G
109722	9.376	0.023	8.761	0.021		0.573	0.027	T	0.65	0.03	L	8.8097	0.0026	0.015	60		8.78	8.84		C			1							S
109723	9.872	0.023	8.760	0.015		0.958	0.021	T	0.95	0.01	L	8.8062	0.0015	0.013	81		8.78	8.84		C			1							
109724	8.261	0.009	8.179	0.011		0.081	0.013	T	0.09	0.01	L	8.1972	0.0014	0.012	112		8.18	8.23		C			1							S
109725	9.470	0.022	8.907	0.021		0.531	0.023	T	0.60	0.02	L	8.9753	0.0023	0.018	80		8.95	9.00		C			1							
109726	9.356	0.013	7.744	0.007		1.350	0.012	T	1.32	0.01	L	7.7598	0.0013	0.013	168		7.74	7.79					1							S
109727	7.695	0.007	7.139	0.005		0.521	0.008	T	0.59	0.01	L	7.2016	0.0008	0.010	161		7.19	7.22		C			1 G							S
109728	9.733	0.017	9.666	0.023	*	0.067	0.027	T	0.08	0.03	L *	9.6440	0.0024	0.028	178	*	9.59	9.70		C	22136+4202	H 1	2 C B	AB	263	0.559	0.024	2.73	0.13	G
109729	8.282	0.010	8.040	0.011		0.226	0.001	G	0.25	0.00	H	8.0820	0.0016	0.013	85		8.05	8.11		C			1							S
109730	7.384	0.005	6.002	0.002		1.169	0.004	T	1.13	0.00	L	6.0362	0.0009	0.007	132		6.03	6.05					1							S
109731	9.445	0.019	8.933	0.019		0.491	0.020	T	0.56	0.02	L	8.9866	0.0016	0.017	107		8.96	9.02					1							S
109732	8.053	0.009	8.066	0.011		−0.007	0.013	T	0.01	0.01	L	8.0809	0.0012	0.009	89		8.06	8.10		C			1							S
109733	9.908	0.033	8.615	0.019		1.100	0.030	T	1.06	0.03	L	8.6553	0.0023	0.014	52		8.63	8.69		C			1							S
109734	8.646	0.009	6.991	0.005		1.384	0.008	T	1.36	0.01	L	6.9820	0.0010	0.010	173		6.97	7.00					1							S
109735	8.725	0.010	8.340	0.010		0.385	0.012	G	0.45	0.01	H	8.3751	0.0012	0.015	150		8.35	8.40		C			1							S
109736	9.573	0.021	8.234	0.013		1.136	0.019	T	1.10	0.02	L	8.2352	0.0015	0.015	86		8.21	8.27			22137+0743	I 1	1 G							S
109737	6.180	0.003	5.638	0.003		0.497	0.004	G	0.57	0.00	H	5.6927	0.0007	0.005	95		5.68	5.70		C			1							S
109738	8.966	0.010	8.933	0.012		0.035	0.014	T	0.05	0.01	L	8.9907	0.0020	0.020	176		8.95	9.02					1							
109739	9.834	0.021	8.723	0.014		0.958	0.020	T	0.95	0.01	L	8.7743	0.0019	0.016	87		8.75	8.80		C			1							
109740	9.410	0.018	9.122	0.020		0.310	0.020	G	0.36	0.03	H	9.1340	0.0020	0.018	81		9.10	9.17					1							
109741	11.458	0.079	10.142	0.042		1.118	0.070	T	1.08	0.07	L	10.2323	0.0032	0.025	100		10.19	10.29					1							G
109742	8.987	0.015	8.423	0.013		0.532	0.015	T	0.60	0.02	L	8.4527	0.0013	0.014	94		8.43	8.48		C			1							S
109743	9.331	0.017	9.117	0.019	*	0.204	0.023	T	0.22	0.03	L *	9.1677	0.0018	0.020	123	*	9.14	9.23		U 2	22138+6710	H 1	2 C B	AB	9	0.724	0.034	3.47	0.13	
109744	11.226	0.062	9.684	0.027		1.295	0.053	T	1.25	0.06	L	9.7053	0.0028	0.024	86		9.66	9.74					1							
109745	5.546	0.003	5.528	0.003		0.021	0.004	T	0.04	0.00	L	5.5437	0.0004	0.005	157		5.53	5.55		C			1							S
109746	6.012	0.003	6.116	0.004		−0.089	0.004	T	−0.07	0.01	L	6.1080	0.0006	0.007	108		6.10	6.12					1							S
109747	9.428	0.023	8.192	0.015		1.077	0.018	G	1.04	0.01	H	8.2513	0.0014	0.011	55		8.23	8.28		C			1							
109748	8.448	0.016	7.927	0.018		0.528	0.015	G	0.60	0.02	H	7.9789	0.0018	0.014	57		7.96	8.01		C			1							S
109749	10.727	0.024	9.538	0.015		1.018	0.022	T	0.99	0.02	L	9.6245	0.0018	0.029	254		9.57	9.69					1 S							
109750	9.065	0.019	7.256	0.009		1.506	0.017	T	1.54	0.03	L	7.2160	0.0016	0.008	52		7.20	7.23		C			1							S
109751	10.539	0.053	10.174	0.062		0.335	0.020	G	0.39	0.03	H	10.2798	0.0029	0.026	53		10.24	10.33					1							
109752	8.937	0.013	7.788	0.009		0.987	0.012	T	0.97	0.01	L	7.8409	0.0014	0.011	93		7.82	7.87					1							S
109753	9.406	0.018	8.614	0.014		0.702	0.017	T	0.76	0.01	L	8.6732	0.0023	0.015	88		8.64	8.71		C			1							S
109754	6.301	0.002	4.658	0.002	*	1.385	0.007	G	1.36	0.03	C *	4.6490	0.0005	0.006	242	*	4.64	4.66		D	22139+3942	I 1	2 C A	AD	12	0.424	0.009	3.46	0.04	S
109755	8.058	0.010	7.703	0.010		0.341	0.015	G	0.40	0.02	H	7.7552	0.0013	0.011	75		7.73	7.77		C			1							S
109756						1.456	0.133	G	1.83	0.59	I	11.9009	0.0079	0.054	87		11.81	12.00					1							D
109757	9.871	0.021	9.284	0.019		0.549	0.021	T	0.62	0.02	L	9.3367	0.0013	0.018	96		9.30	9.37		D	22139−4521	I 1	1							
109758	9.602	0.020	8.627	0.014		0.856	0.018	T	0.87	0.01	L	8.7139	0.0022	0.017	86		8.69	8.75		C			1							S
109759	10.021	0.024	8.105	0.010		1.600	0.015	G	1.61	0.09	H	8.0376	0.0012	0.011	134		8.02	8.06					1							
109760	9.647	0.020	9.088	0.019		0.528	0.020	T	0.60	0.02	L	9.1506	0.0018	0.018	79		9.11	9.17					1							
109761	9.159	0.021	8.709	0.021		0.424	0.027	T	0.49	0.03	L	8.7738	0.0028	0.016	50		8.75	8.80					1							
109762	10.586	0.045	9.169	0.021		1.197	0.039	T	1.16	0.04	L	9.2380	0.0019	0.018	90		9.21	9.26		C			1							
109763	10.246	0.017	8.221	0.007		1.715	0.015	T	2.27	0.04	O	8.0619	0.0038	0.083	263		7.96	8.19		U 2 C			1							S
109764	9.323	0.015	8.042	0.010		1.100	0.015	G	1.06	0.02	H	8.0519	0.0012	0.012	116		8.03	8.07		C			1							
109765	9.171	0.018	8.061	0.012		0.957	0.017	T	0.94	0.01	L	8.1286	0.0016	0.013	71		8.10	8.15		C			1							S
109766	9.179	0.009	9.219	0.013		−0.032	0.014	T	−0.01	0.01	L	9.2513	0.0016	0.026	290		9.21	9.29					1							
109767	10.863	0.101	10.154	0.082		0.727	0.009	G	0.77	0.01	H	9.9769	0.0027	0.025	123		9.95	10.02		C			1							G
109768	9.898	0.024	8.246	0.011		1.382	0.021	T	1.35	0.03	L	8.2330	0.0015	0.017	120		8.21	8.26					1							S
109769	8.215	0.008	8.114	0.009		0.098	0.011	T	0.11	0.01	L	8.1320	0.0017	0.015	121		8.11	8.16		C			1							S
109770	10.056	0.022	8.345	0.010		1.456	0.020	T	3.01	0.04	O	7.9706	0.0128	0.145	133		7.70	8.25		U 2 C			1 S							S
109771	8.653	0.009	8.110	0.009		0.534	0.015	G	0.61	0.02	H	8.1815	0.0013	0.011	106		8.16	8.20		C			1							S
109772	8.563	0.011	8.205	0.012		0.367	0.015	G	0.43	0.02	H	8.2510	0.0012	0.013	94		8.23	8.27		C			1							S
109773	8.760	0.011	8.288	0.010		0.457	0.012	T	0.53	0.01	L	8.3462	0.0017	0.015	126		8.32	8.37					1							S
109774	9.029	0.011	8.523	0.011		0.486	0.012	T	0.56	0.01	L	8.5803	0.0018	0.020	167		8.55	8.62					1							S
109775	7.465	0.007	7.406	0.009		0.029	0.015	G	0.05	0.01	H	7.4300	0.0009	0.009	88		7.41	7.44		C			1							S
109776	8.725	0.012	8.615	0.014		0.107	0.017	T	0.12	0.02	L	8.6628	0.0013	0.014	113		8.64	8.68					1							
109777	10.992	0.068	9.571	0.032		1.200	0.059	T	1.16	0.06	L	9.6534	0.0029	0.020	55		9.62	9.68		C			1							
109778	9.916	0.021	8.143	0.009		1.477	0.018	T	1.49	0.03	L	8.1141	0.0015	0.014	131		8.09	8.14		C			1							
109779	8.373	0.009	8.167	0.010		0.197	0.013	T	0.22	0.01	L	8.1913	0.0014	0.014	114		8.17	8.21					1							
109780	9.650	0.016	8.629	0.011		0.890	0.015	T	0.90	0.01	L	8.6993	0.0017	0.019	141		8.67	8.74					1							
109781	10.305	0.033	8.890	0.017		1.195	0.029	T	1.15	0.03	L	8.9214	0.0024	0.016	93		8.90	8.95					1							
109782	9.466	0.018	8.787	0.016		0.617	0.018	T	0.69	0.02	L	8.8386	0.0016	0.014	88		8.82	8.88					1							S
109783	8.437	0.018	7.923	0.016		0.475	0.015	G	0.55	0.02	H	7.9967	0.0018	0.011	56		7.97	8.02					1							S
109784	9.423	0.027	8.883	0.027	*	0.506	0.034	T	0.58	0.04	L *	8.9404	0.0023	0.021	107	*	8.89	8.98		D	22143+3745	I 1	2 C A	BA	148	3.451	0.005	0.11	0.02	
109785	9.020	0.019	8.585	0.020	*	0.411	0.026	T	0.48	0.03	L *	8.7174	0.0019	0.015	107	*	8.69	8.74		D	22143+6155	I 1	2 C A	AB	176	5.459	0.006	1.72	0.03	
109786	7.451	0.010	7.038	0.013	B	0.812	0.012	G	0.84	0.01	H *	5.4748	0.0013	0.008	82	*	5.46	5.49		D	22143−2104	I 1	2 C A	AB	113	5.148	0.006	1.43	0.02	S
109787	11.108	0.051	10.184	0.036		0.754	0.003	G	0.80	0.00	H	10.2190	0.0029	0.026	132		10.18	10.27					1							
109788	8.171	0.011	6.638	0.006	A	1.288	0.010	T	1.25	0.01	L	6.6540	0.0207	0.018	86	A	6.62	6.67		D	22143+1712	I 2	1 C P D							S D
109789	5.296	0.002	5.416	0.003		−0.121	0.003	G	−0.11	0.00	H	5.4081	0.0004	0.004	103		5.40	5.42					1							S
109790	9.875	0.034	9.228	0.030	B	0.600	0.039	T	0.67	0.04	L	9.5079	0.2314			B				D	22143+1712	I 2	1 C F D							D
109791	8.952	0.020	8.862	0.024		0.088	0.029	T	0.10	0.03	L	8.9045	0.0023	0.014	48		8.89	8.93		C			1							S
109792	10.211	0.021	9.531	0.019		0.617	0.021	T	0.69	0.02	L	9.5939	0.0024	0.035	150		9.54	9.66					1							
109793	9.770	0.025	8.336	0.014		1.220	0.015	G	1.18	0.01	H	8.3444	0.0018	0.015	80		8.32	8.38		C			1							
109794	7.641	0.009	7.152	0.008		0.473	0.015	G	0.54	0.02	H	7.2033	0.0013	0.009	67		7.19	7.22		C			1							S
109795	9.433	0.018	8.760	0.016		0.631	0.015	G	0.70	0.01	H	8.8294	0.0023	0.013	73		8.81	8.85		C			1							S
109796	8.826	0.015	8.163	0.013		0.611	0.015	G	0.68	0.01	H	8.2363	0.0016	0.014	69		8.21	8.27					1							S
109797	7.756	0.007	7.668	0.007		0.086	0.009	T	0.10	0.01	L	7.6881	0.0012	0.011	104		7.67	7.71		C			1							S
109798	10.161	0.028	9.994	0.036		0.160	0.043	T	0.18	0.04	L	10.0123	0.0030	0.021	103		9.97	10.05		C			1							G
109799	9.953	0.039	7.980	0.016		1.636	0.034	T	1.66	0.04	L	7.8925	0.0020	0.013	53		7.87	7.92		C			1							S
109800	9.199	0.012	9.146	0.016		0.054	0.019	T	0.07	0.01	L	9.1740	0.0021	0.023	186		9.13	9.21					1 G							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
109801	22 14 24.06	−08 44 37.0	11.95	G	333.600 236 40	−08.743 598 29	9.96	−94.48	−568.27	3.08	2.30	3.43	4.12	2.30	+19	+24	+16	+ 0	+ 8	+24	+14	+30	+15	− 7	0	0.37
109802	22 14 24.08	+52 30 48.7	7.65	2 H	333.600 333 85	+52.513 534 29	1.78	−2.61	−7.54	0.57	0.58	0.76	0.59	0.55	− 7	+11	+ 9	−19	+18	−16	+22	−26	+13	+15	0	0.28
109803	22 14 24.66	+63 07 19.6	8.62	G	333.602 767 05	+63.122 118 57	1.73	−2.80	−3.04	0.73	0.66	0.79	0.91	0.78	−15	− 5	+ 4	+18	+ 6	+ 3	+ 7	−12	−14	−14	0	1.00
109804	22 14 24.83	−29 06 10.4	8.93	H	333.603 450 48	−29.102 884 70	1.50	−6.73	−2.10	0.99	0.82	1.28	1.14	0.95	+26	− 4	−15	+ 4	−12	+32	−12	+27	+18	+37	0	−0.16
109805	22 14 25.36	−60 05 07.3	9.41	1 H	333.605 671 63	−60.085 371 17	2.61	25.00	−1.46	1.18	1.06	1.74	1.42	1.08	− 8	+15	−26	−10	+10	−10	+ 5	+18	−15	− 5	1	−0.96
109806	22 14 26.46	+43 39 43.1	8.11	H	333.610 234 18	+43.661 976 35	5.04	11.88	2.78	0.55	0.60	0.86	0.69	0.75	−33	+ 3	− 5	− 5	+12	+ 5	+12	−21	+ 9	−37	0	−0.67
109807	22 14 26.62	+02 42 23.9	10.40	G	333.610 925 18	+02.706 651 90	32.33	212.82	19.78	1.81	1.12	1.92	2.19	1.25	+ 2	+30	−11	+21	+ 4	+36	+11	+ 8	+11	+14	0	−0.29
109808	22 14 27.14	−37 47 33.0	8.83	H	333.613 098 86	−37.792 489 24	1.20	−8.75	−23.84	1.15	0.91	1.35	1.27	0.88	+19	−24	− 1	+24	−27	+ 9	−28	+11	+19	+ 6	0	0.19
109809	22 14 27.23	+49 52 17.7	8.48	H	333.613 443 34	+49.871 594 39	0.66	1.36	−2.97	0.63	0.63	0.87	0.69	0.72	− 5	−12	− 2	+ 7	+16	−10	+18	− 8	+ 5	+12	0	0.69
109810 H	22 14 29.18	+07 58 34.2	6.65	G	333.621 567 89	+07.976 176 15 A	3.74	3.72	−10.91	1.17	0.82	1.09	1.21	0.83	+ 8	− 1	−12	−32	+13	+23	+18	−33	+24	+ 6	4	0.62
109811	22 14 30.67	−12 15 13.7	8.10	H	333.627 809 28	−12.253 814 56	5.73	16.76	28.12	1.11	0.75	1.09	1.11	0.83	+17	+13	+ 6	−30	+33	+ 0	+34	+ 1	+ 2	+24	0	0.13
109812	22 14 31.55	+27 51 14.0	10.33	G	333.631 475 89	+27.853 898 24	50.56	−216.18	533.30	1.34	1.18	1.68	1.60	1.27	+ 8	+26	+ 4	− 4	− 4	−29	− 5	− 9	− 8	+ 5	0	−0.09
109813 H	22 14 32.36	−53 34 31.1	8.24	G	333.634 844 88	−53.575 300 39 A	5.65	42.97	−28.02	1.35	0.99	1.58	1.27	0.96	+16	−16	− 9	+15	− 5	+ 3	+ 3	+ 2	−38	+10	1	−0.66
109814	22 14 32.43	−76 56 32.7	8.57	G	333.635 143 59	−76.942 430 37	6.40	61.81	−10.43	0.68	0.67	0.87	0.84	0.78	−11	− 7	− 9	+ 9	+ 7	− 5	+ 6	+ 8	− 8	− 9	0	0.61
109815 H	22 14 34.61	+29 34 20.8	7.10	G	333.644 216 29	+29.572 441 60 A	6.12	32.84	−33.16	1.28	1.17	1.35	1.22	1.25	+17	−11	+ 0	+17	− 1	−34	− 1	−11	+ 9	+29	1	1.44
109816	22 14 34.81	−32 18 28.8	9.52	H	333.645 021 03	−32.307 986 72	33.74	−3.83	−114.61	1.23	0.95	1.48	1.25	1.01	+13	− 6	−11	−14	−10	+28	− 8	+ 5	− 5	+11	0	−1.52
109817	22 14 35.08	+27 02 44.1	9.32	H	333.646 186 77	+27.045 586 40	3.14	32.26	14.57	0.98	0.90	1.18	1.13	1.08	+15	− 2	+ 8	+17	− 5	−19	− 4	+ 0	− 3	+14	0	−0.74
109818	22 14 35.48	+48 49 14.4	7.93	H	333.647 849 61	+48.820 675 83	5.13	−3.45	−11.42	0.48	0.52	0.70	0.50	0.56	− 5	+ 4	−15	+ 7	+ 8	− 5	+12	−21	+14	+ 9	0	−0.77
109819	22 14 36.21	+31 33 26.7	8.24	H	333.650 866 68	+31.557 424 74	8.88	23.14	3.61	0.53	0.70	0.96	0.52	0.76	+30	+ 2	− 1	− 1	+18	−27	+19	+ 8	−12	+42	0	0.84
109820	22 14 37.20	−15 06 05.4	7.23	H	333.655 014 70	−15.101 506 00	11.14	−14.99	−85.39	0.92	0.70	1.06	1.05	0.77	+41	−30	− 7	−17	−14	+23	−18	−31	+21	+49	0	0.52
109821	22 14 38.21	−41 22 47.1	6.23	G	333.659 205 56	−41.379 743 31	45.19	570.33	−791.08	0.57	0.52	0.71	0.63	0.58	+13	−11	− 7	+13	−12	+25	−10	+26	+ 7	+ 3	0	0.56
109822	22 14 38.22	−15 49 03.6	6.55	H	333.659 261 91	−15.817 664 87	26.19	−5.11	−356.91	0.74	0.60	0.82	0.92	0.69	+24	−10	− 2	−20	+ 5	+ 7	+ 2	−25	+13	+26	0	1.75
*109823 H	22 14 38.28	−32 12 22.7	9.77	H	333.659 512 88	−32.206 303 17 A	10.74	−22.01	−64.54	3.79	2.95	4.44	4.07	2.85	+15	+ 3	−22	+10	−19	+40	−13	− 2	− 8	+ 7	0	−0.35
*109824	22 14 38.25	−59 17 31.7	8.73	H	333.659 376 13	−59.292 139 77	−0.60	14.94	−19.67	0.77	0.76	1.18	0.92	0.76	−15	− 1	−15	−24	+ 8	+ 2	+ 7	−17	− 6	− 3	0	−0.56
109825	22 14 39.17	+08 49 27.9	8.01	H	333.663 199 81	+08.824 430 42	4.72	17.40	6.57	1.04	0.62	0.99	1.24	0.70	− 8	+22	−14	−46	+28	−24	+28	−17	+15	−14	0	−0.46
109826	22 14 39.70	−30 41 03.1	9.20	H	333.665 434 64	−30.684 183 27	8.19	127.44	−53.73	0.97	0.77	1.22	1.05	0.77	+17	− 2	−22	+ 3	−15	+27	− 9	+20	+ 2	+13	0	1.05
109827	22 14 39.90	+35 37 58.2	9.52	H	333.666 253 11	+35.632 845 24	8.70	79.35	12.13	0.88	0.88	1.31	1.01	1.04	+ 6	+ 2	+ 0	+19	+10	−32	+14	+ 5	+17	+16	0	0.11
109828	22 14 42.02	−06 24 01.5	7.54	H	333.675 072 18	−06.400 424 14	4.57	24.00	−17.45	0.82	0.59	0.88	1.00	0.61	+10	+ 7	−21	− 6	+ 3	+12	+ 1	+ 6	− 4	− 2	0	−0.43
*109829	22 14 43.17	+49 21 15.4	7.56	H	333.679 866 39	+49.354 280 43 A	4.61	−12.12	−2.59	1.12	1.20	1.21	1.08	1.16	− 4	+ 1	− 2	+16	+ 7	− 7	+17	−14	+16	+24	4	0.36
*109830	22 14 43.03	+49 51 39.1	8.73	G	333.679 298 57	+49.860 850 72	1.01	1.73	−2.73	0.61	0.68	0.88	0.69	0.78	− 6	+ 3	+ 3	+ 6	+12	− 8	+16	−17	− 5	+10	0	−0.41
109831	22 14 44.33	+42 57 14.3	5.72	H	333.684 711 13	+42.953 963 72	11.67	50.49	−21.96	0.37	0.42	0.60	0.42	0.51	−35	+12	− 3	+ 4	+ 2	+ 6	+ 1	−16	+ 7	−41	0	0.66
109832	22 14 44.37	−15 42 05.4	7.94	H	333.684 856 01	−15.701 508 25	2.94	−6.67	−24.71	0.95	0.79	1.06	1.16	0.85	+34	−22	−22	−23	− 8	+13	−13	−41	+23	+26	0	0.60
109833	22 14 45.18	+49 21 09.2	10.42	H	333.688 230 32	+49.352 543 06 B	0.57	−18.11	−4.60	34.58	37.37	18.85	28.09	26.05	− 7	+ 3	− 2	+ 7	+ 5	− 8	+11	−13	+13	+13	4	0.36
109834	22 14 46.46	+36 09 19.6	7.78	H	333.693 576 22	+36.155 446 52	3.39	−20.12	2.95	0.64	0.57	0.80	0.81	0.66	+ 0	+ 6	+ 0	+ 1	+10	− 9	+10	− 3	+10	+ 3	0	0.28
109835	22 14 46.71	−00 47 23.0	8.71	H	333.694 610 55	−00.789 723 62	0.14	2.90	1.87	1.07	0.83	1.19	1.23	0.86	+20	+17	+ 6	+15	− 3	+11	− 4	+ 4	− 3	+19	0	−1.64
109836	22 14 46.78	−05 53 10.6	7.82	H	333.694 905 79	−05.886 282 32	12.29	17.72	−110.19	0.91	0.62	0.95	1.11	0.64	+ 7	− 1	−16	− 2	− 3	+ 2	− 1	+ 7	−10	− 6	0	0.64
109837	22 14 46.92	+04 16 56.7	6.97	H	333.695 511 78	+04.282 430 44	5.41	−2.77	21.21	0.75	0.52	0.84	0.98	0.58	+29	+ 2	+ 3	+13	+19	+27	+15	− 9	+ 7	+21	0	0.11
109838	22 14 47.11	−24 00 16.8	6.89	H	333.696 273 63	−24.004 673 01	16.17	99.01	−12.18	0.77	0.50	0.82	0.92	0.52	+25	−16	−12	−16	+28	+12	+20	+ 9	+12	+40	2	2.31
109839	22 14 47.47	−36 33 16.6	8.16	H	333.697 792 01	−36.554 602 50	12.99	−90.76	−103.41	0.88	0.79	1.09	1.06	0.71	+32	−12	−33	+14	−14	+18	− 5	+16	− 1	+27	0	−0.10
109840 H	22 14 47.61	−74 59 43.6	8.46	H	333.698 378 41	−74.995 441 42 A	4.13	4.13	7.17	1.11	1.08	1.27	1.10	1.02	−15	−24	− 1	−15	+ 6	− 6	+ 3	−33	+ 6	−23	3	0.09
109841	22 14 47.74	+57 42 38.5	8.60	G	333.698 903 79	+57.710 681 89	14.05	113.81	30.31	0.70	0.62	0.79	0.77	0.65	− 5	+ 8	+11	−14	+ 0	− 3	+ 1	−30	+ 4	− 6	3	1.41
109842	22 14 47.98	+24 18 53.7	7.00	H	333.699 909 20	+24.314 910 56	20.72	63.77	18.51	0.68	0.53	0.76	0.78	0.63	+ 6	+18	−13	−10	− 3	+ 1	+ 1	−18	+15	+14	0	0.02
109843	22 14 48.57	+22 31 24.4	6.62	H	333.702 377 15	+22.523 441 28	3.60	2.32	−8.68	0.67	0.52	0.77	0.77	0.58	+ 5	+ 1	−22	− 7	+ 9	+ 6	+10	−11	+17	+ 1	0	2.16
109844	22 14 48.72	−33 08 36.1	9.23	H	333.703 016 55	−33.143 349 55	2.60	19.55	−10.05	1.03	0.95	1.29	1.09	1.01	+21	− 5	− 2	+10	+ 2	+17	+ 3	+42	− 5	+19	0	0.85
109845	22 14 49.22	−82 10 57.2	9.62	H	333.705 091 97	−82.182 567 94	8.57	−1.19	−31.47	0.85	0.74	0.95	1.03	0.85	+ 0	−22	−12	+11	+ 4	− 6	− 2	−11	+ 3	−23	0	0.00
109846 H	22 14 49.51	+21 56 59.1	8.99	H	333.706 286 84	+21.949 746 30 A	3.85	11.94	−17.84	1.91	1.63	1.97	1.95	1.68	+21	+ 7	−25	−15	+ 4	+ 4	+ 3	+ 1	+ 5	+13	0	0.54
109847	22 14 50.83	+16 39 15.8	9.45	H	333.711 783 85	+16.654 402 45	3.37	−20.97	−24.49	1.05	1.07	1.38	1.25	1.29	+38	− 6	−20	+ 3	+ 1	+15	+ 2	−15	+23	+37	2	0.29
109848	22 14 52.51	−77 30 09.7	9.54	H	333.718 777 35	−77.502 693 68	10.76	−10.75	−100.79	0.90	0.88	1.14	1.22	1.11	− 7	−14	−20	+11	+ 6	− 1	+ 5	+ 1	− 4	−14	0	0.02
109849	22 14 54.05	−06 44 07.7	7.63	G	333.725 205 28	−06.735 463 67	2.20	13.50	0.14	0.84	0.58	0.88	1.03	0.59	+ 6	+21	−16	− 6	+ 6	+ 2	+ 8	+19	− 3	− 2	0	0.85
109850	22 14 54.44	−38 09 38.5	10.30	H	333.726 818 21	−38.160 696 53	6.94	23.10	−58.24	1.42	1.26	1.82	1.69	1.29	+31	− 2	− 2	+18	− 5	+19	− 3	+20	− 3	+27	4	1.30
109851	22 14 55.08	+46 34 24.1	9.80	H	333.729 519 15	+46.573 354 39	2.33	−4.55	−0.86	0.90	0.84	1.20	0.94	0.93	−40	+17	− 4	− 7	+20	−18	+27	−24	+24	−27	0	−1.83
109852	22 14 55.55	+49 47 36.8	9.10	H	333.731 470 43	+49.793 559 91	−0.18	1.14	−1.52	0.70	0.75	1.00	0.79	0.89	− 8	− 1	+ 0	+ 7	+10	−12	+14	−11	− 3	+11	0	−0.24
109853 H	22 14 56.43	+61 42 34.4	8.68	H	333.735 119 93	+61.709 546 65 A	4.46	11.75	−1.83	1.54	1.22	1.24	1.42	1.33	− 5	+ 9	+ 3	+32	+ 6	+ 2	+ 9	+13	+ 5	+ 7	0	0.22
109854	22 14 58.44	+09 50 20.3	10.54	H	333.743 518 08	+09.838 979 03	−0.99	0.59	−3.22	1.72	1.28	1.94	2.37	1.33	+23	− 4	+ 8	+ 3	+13	+12	− 3	−39	+ 7	− 6	0	−2.29
109855	22 14 59.42	−52 11 47.6	7.86	H	333.747 597 55	−52.196 556 70	5.72	0.53	12.75	0.56	0.51	1.01	0.69	0.55	+18	− 9	−15	− 3	− 4	+29	+ 1	+ 0	− 3	+34	0	0.54
109856	22 15 00.80	+61 41 32.4	8.18	G	333.753 314 36	+61.692 343 83	1.17	−0.55	−5.24	0.65	0.59	0.71	0.79	0.76	−10	+ 6	+ 4	+29	− 7	− 4	− 3	−12	− 9	+ 2	1	0.68
109857	22 15 01.68	+57 02 36.5	4.18	1 H	333.756 995 82	+57.043 465 22	38.86	476.45	50.00	0.45	0.48	0.54	0.56	0.66	+ 9	+20	+12	+ 2	−12	−10	− 4	−35	+ 6	+37	1	1.08
109858	22 15 01.70	+21 16 42.4	8.24	G	333.757 069 38	+21.278 443 93	8.17	9.04	−35.10	0.85	0.74	0.99	0.96	0.85	+ 6	+ 9	−35	−17	+ 1	+12	+ 8	−23	+14	+23	2	−0.09
109859	22 15 02.20	+29 22 50.9	9.05	H	333.759 159 52	+29.380 809 70	1.56	−18.90	−12.64	0.91	0.87	1.17	1.13	0.98	+ 0	+ 3	+ 5	+38	−14	−13	−15	+ 9	−11	− 5	3	−0.26
109860	22 15 03.21	−02 03 32.6	7.89	H	333.763 369 88	−02.059 054 47	4.87	6.16	4.39	1.07	0.68	1.07	1.64	0.71	+ 2	+22	−12	+34	−10	+28	− 8	+22	+ 2	−24	0	0.40
109861 H	22 15 03.31	+51 29 05.4	8.04	H	333.763 795 32	+51.484 833 57 A	4.94	8.57	3.68	0.97	0.95	1.19	1.00	0.90	−13	+12	+11	−12	+19	−13	+22	−22	+12	+18	2	0.28
109862	22 15 03.53	+43 46 24.4	6.82	1 H	333.764 698 55	+43.773 447 95	5.83	−24.55	−46.46	0.45	0.49	0.71	0.55	0.59	−37	+ 5	− 3	− 2	+13	+ 4	+14	−15	+11	−35	0	0.87
109863	22 15 03.65	+11 01 44.0	9.08	H	333.765 211 66	+11.028 894 53	3.21	−2.67	−5.20	0.90	0.88	1.38	1.47	1.03	+44	+ 5	+ 9	− 7	+16	+29	+ 0	−30	+24	+17	0	−0.58
109864	22 15 04.05	−70 29 25.4	8.62	H	333.766 860 81	−70.490 402 13	4.66	20.42	−0.21	0.69	0.64	0.92	0.78	0.71	− 2	− 7	−17	+10	+ 1	+ 1	+ 3	− 1	−21	+ 1	1	−0.53
109865	22 15 04.65	−55 30 51.8	8.52	H	333.769 373 03	−55.514 401 76	3.81	−2.71	−16.44	0.73	0.72	1.13	1.02	0.76	+ 1	− 5	−28	+13	+13	− 8	+10	+ 3	+ 0	+15	0	−0.10
109866	22 15 05.01	−19 53 44.1	8.65	H	333.770 873 77	−19.895 570 32	3.21	31.36	−11.81	1.12	0.96	1.28	1.65	0.99	+17	+ 8	−37	−11	− 7	+18	−10	−66	+34	+ 0	0	0.30
109867	22 15 05.02	+59 06 52.1	7.16	H	333.770 932 69	+59.114 476 70	6.77	−14.14	−33.39	0.47	0.47	0.55	0.54	0.49	−13	+ 1	+16	+12	− 2	+13	− 1	−26	− 4	− 5	0	−0.48
109868	22 15 07.67	−25 38 52.8	7.74	H	333.781 944 83	−25.647 986 68	3.82	1.83	−2.85	1.10	0.76	1.16	1.30	0.72	+35	−15	−41	−49	−11	+ 1	−20	−52	+24	+46	0	−0.01
109869	22 15 09.42	−08 03 13.8	9.57	H	333.789 264 95	−08.053 825 41	13.82	−49.95	−60.70	1.27	1.03	1.53	1.40	0.96	+31	+26	+16	+14	+ 6	+38	+ 5	+26	+ 7	+17	0	−0.48
109870	22 15 10.85	−25 58 01.2	7.91	G	333.795 201 05	−25.967 004 70	5.91	−2.84	11.34	1.10	0.69	1.17	1.23	0.67	+28	−23	−48	−45	− 2	+ 3	−11	−43	+27	+39	0	−1.30
109871	22 15 11.05	−44 12 06.7	8.53	H	333.796 045 22	−44.201 862 44	10.38	9.98	−66.47	1.10	0.81	1.24	1.41	0.79	− 5	+28	−30	− 5	− 3	+ 3	− 8	+46	−17	+ 0	2	−0.20
109872	22 15 11.11	+55 55 06.6	9.93	H	333.796 289 29	+55.918 492 92	0.17	−3.73	−7.25	1.05	1.13	1.23	1.30	1.27	+21	− 2	− 2	−27	−22	− 1	−15	−51	+11	+47	1	−0.19
109873	22 15 11.41	−46 31 50.1	8.58	H	333.797 540 22	−46.530 593 96	11.27	37.27	−88.94	0.99	0.84	1.39	1.02	0.80	+32	−27	−49	+ 0	− 9	+35	+14	+41	−23	+19	0	−0.87
109874 H	22 15 12.35	−05 35 05.7	7.63	H	333.801 462 20	−05.584 910 02 A	2.44	19.18	−1.92	2.52	1.51	2.03	4.35	1.66	+34	−21	−15	+32	− 5	−24	−24	−10	+12	−39	1	−0.41
109875	22 15 14.56	−48 41 38.3	8.35	H	333.810 655 32	−48.693 975 60	4.01	14.00	1.46	0.73	0.59	1.14	0.88	0.62	+ 4	+ 2	−26	−11	+ 3	+ 0	+ 2	+ 4	− 4	+11	0	0.89
109876	22 15 15.48	+58 16 31.6	8.48	H	333.814 508 05	+58.275 454 03	13.22	101.72	16.40	0.67	0.64	0.82	0.72	0.64	+ 5	+15	+ 4	− 5	+ 5	+22	+ 7	−26	+18	+10	3	−0.82
*109877	22 15 16.60	+34 00 29.9	8.38	H	333.819 162 84	+34.008 311 64	5.83	−15.53	−23.03	0.66	0.69	0.96	0.85	0.76	+23	+ 2	+15	+10	+15	−19	+17	+ 4	− 9	+35	0	−2.18
*109878	22 15 16.59	−79 21 10.4	8.98	H	333.819 139 48	−79.352 880 97	3.89	16.31	−11.36	0.70	0.73	0.89	0.90	0.85	+ 3	−10	−19	+ 5	− 6	+ 7	− 3	− 7	+ 8	+12	1	−0.98
109879	22 15 16.76	−39 08 27.3	9.26	H	333.819 847 28	−39.140 910 12	1.91	−3.83	6.81	1.17	0.98	1.56	1.36	0.95	+29	− 4	−14	+ 3	+ 0	+43	+ 7	+20	− 4	+23	0	0.08
109880	22 15 17.01	−70 39 10.4	6.88	H	333.820 863 17	−70.652 885 64	4.56	32.06	−52.23	0.51	0.47	0.69	0.56	0.55	−12	−16	− 6	− 2	+ 7	+ 1	+12	− 8	−27	− 2	0	1.08
109881	22 15 17.58	+39 46 34.7	7.59	H	333.823 239 13	+39.776 296 52	13.49	230.18	48.34	0.47	0.51	0.81	0.56	0.58	−49	+18	−16	− 9	+ 0	− 9	+ 3	−15	+15	−38	2	1.15
109882	22 15 17.97	+45 32 00.1	8.97	H	333.824 863 81	+45.533 360 15	3.74	5.70	−5.79	0.68	0.76	1.03	0.76	0.87	−22	+ 5	+ 8	+ 1	+12	+ 5	+12	− 6	+ 5	−25	0	1.68
109883	22 15 18.03	−52 42 04.4	7.90	H	333.825 125 04	−52.701 230 18	4.13	15.08	−3.39	0.58	0.51	0.96	0.70	0.55	+18	−20	−16	+ 8	+ 2	+11	+ 9	+10	−22	+24	0	−0.90
109884	22 15 18.96	−24 59 26.6	8.77	2 H	333.829 004 34	−24.990 718 84	7.27	36.29	−47.89	1.03	0.69	1.15	1.34	0.75	+35	−26	−22	−20	+ 2	+ 4	− 4	−28	+14	+51	0	−0.06
109885	22 15 19.25	−46 46 41.9	9.11	H	333.830 189 30	−46.778 309 49	2.49	1.04	−2.74	1.09	0.83	1.43	1.05	0.89	+22	−26	−28	−22	+ 0	+18	− 3	+28	+ 2	+32	0	0.23
109886	22 15 20.00	+62 18 43.4	8.91	H	333.833 342 15	+62.312 057 20	1.80	2.48	−4.87	0.82	0.71	0.89	1.10	0.91	− 7	+14	+ 3	+ 4	+ 5	+ 9	+ 4	− 5	− 2	− 2	0	−0.01
109887	22 15 20.23	−53 58 53.7	8.54	H	333.834 286 13	−53.981 576 94	6.05	−4.19	15.57	0.71	0.63	1.08	0.93	0.70	+10	−10	− 6	+11	+ 3	+ 3	+ 6	+ 2	−18	+26	0	0.69
109888	22 15 21.14	+30 58 23.2	8.97	H	333.838 086 37	+30.973 106 07	0.72	5.61	12.34	0.85	0.79	1.02	1.05	0.83	+ 2	+ 5	+21	+44	− 9	+ 0	−11	+ 0	+ 9	− 6	0	1.10
109889	22 15 24.06	+61 00 50.4	8.58	H	333.850 269 44	+61.013 998 96	4.55	27.17	8.81	0.78	0.64	0.75	0.90	0.81	−22	+ 0	− 5	+51	−16	− 2	−19	+ 8	+ 3	−27	0	0.64
109890	22 15 25.63	+06 49 21.4	9.56	2 T	333.856 775 55	+06.822 623 69	0.15	19.22	−1.63	1.27	0.85	1.42	2.03	0.98	+19	+22	−12	−10	+30	− 4	+25	−15	+ 9	− 3	0	2.24
109891	22 15 26.64	+18 36 11.7	7.74	H	333.860 992 79	+18.603 236 99	5.69	11.50	−13.58	0.75	0.69	0.97	0.82	0.87	+25	+14	−11	+24	−10	−13	− 6	−29	+24	+29	0	−1.00
109892	22 15 27.56	−36 33 49.0	10.57	H	333.864 840 08	−36.563 601 34	4.18	−9.15	6.04	1.56	1.30	1.90	1.70	1.17	+33	− 6	− 7	− 3	−18	+18	−14	+ 0	+ 1	+24	0	1.51
109893	22 15 29.18	+43 44 53.3	7.62	H	333.871 570 46	+43.748 149 07	6.34	20.05	2.61	0.50	0.55	0.79	0.61	0.67	−32	+ 2	− 5	− 1	+11	+ 4	+11	−15	+14	+33	0	0.96
109894 H	22 15 29.39	+55 49 06.8	7.46	H	333.872 464 36	+55.818 567 53 A	2.20	5.43	−1.65	1.63	1.61	0.85	0.92	0.83	−41	− 1	− 2	−11	+ 4	− 7	+ 6	−25	+16	+18	1	0.25
109895	22 15 30.17	−10 06 51.9	9.56	H	333.875 707 20	−10.114 421 24	7.13	−52.04	−111.16	1.52	1.00	1.75	1.99	0.87	+29	+36	+ 5	−47	+ 7	−41	− 4	− 9	−19	+19	3	−0.59
109896	22 15 30.42	−43 38 04.8	7.01	H	333.876 739 50	−43.634 671 55	7.56	120.47	−0.96	0.72	0.62	0.94	0.92	0.62	+ 5	+13	−25	+21	− 9	+27	− 2	+42	−19	−12	0	0.26
109897	22 15 30.66	+14 46 37.3	8.76	H	333.877 748 19	+14.777 024 06	2.51	40.98	18.65	0.92	0.77	1.16	1.25	1.03	+20	+13	−18	+18	+ 9	+ 4	+12	− 5	+35	+15	0	0.68
109898	22 15 33.95	+06 38 32.7	8.45	G	333.891 449 56	+06.642 428 37	2.33	−14.90	−4.62	0.97	0.62	1.06	1.36	0.74	+18	+ 7	− 8

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
109801						0.932	0.020	G	0.98	0.02	I	12.0362	0.0122	0.064	49		11.93	12.12					1							G
109802	9.618	0.020	7.814	0.009		1.560	0.015	G	1.53	0.01	J	7.7704	0.0030	0.027	124		7.73	7.81		U 2			1							P
109803	8.985	0.012	8.671	0.013		0.330	0.015	G	0.38	0.02	H	8.7054	0.0016	0.016	109		8.68	8.74		C			1							
109804	10.670	0.038	9.038	0.017		1.366	0.033	T	1.33	0.04	L	9.0842	0.0030	0.019	93		9.06	9.12					1							
109805	10.679	0.037	9.527	0.022		0.990	0.034	T	0.97	0.03	L	9.5758	0.0029	0.034	137		9.53	9.66		U			1							
109806	8.183	0.006	8.116	0.008		0.067	0.009	T	0.08	0.01	L	8.1386	0.0016	0.017	176		8.11	8.17					1 S							S
109807	12.270	0.208	10.562	0.069		1.252	0.005	G	1.41	0.01	I	10.5068	0.0031	0.022	62		10.46	10.56		C			1							G
109808	10.404	0.034	8.948	0.018		1.227	0.030	T	1.19	0.03	L	8.9908	0.0026	0.018	71		8.96	9.02		C			1							
109809	8.581	0.011	8.480	0.013		0.098	0.016	T	0.11	0.02	L	8.5209	0.0016	0.018	135		8.49	8.55		C			1							
109810	6.765	0.017	6.795	0.017	A	−0.039	0.003	G	−0.02	0.00	H *	6.6441	0.0009	0.006	87	*	6.63	6.66		D	22145+0759	I 1	2 C A	AB	118	1.509	0.004	1.17	0.02	S
109811	9.164	0.016	8.191	0.012		0.842	0.016	T	0.86	0.01	L	8.2428	0.0017	0.013	79		8.22	8.27		C			1							
109812						1.426	0.045	G	1.74	0.12	I	10.4205	0.0032	0.026	85		10.38	10.47		C			1							G
109813	8.714	0.010	8.303	0.010	*	0.411	0.015	G	0.48	0.02	H *	8.3278	0.0014	0.014	133	*	8.31	8.36		D	22145−5335	I 1	2 C A	AB	99	0.564	0.005	1.64	0.03	S
109814	9.201	0.015	8.616	0.013		0.549	0.015	G	0.62	0.01	H	8.6839	0.0021	0.017	129		8.65	8.72					1							
109815	8.083	0.029	7.442	0.023	A	0.571	0.006	G	0.64	0.01	H *	7.2189	0.0011	0.009	102	*	7.21	7.24		D	22146+2934	I 1	2 C A	AB	80	1.315	0.005	0.59	0.01	S
109816	10.898	0.060	9.662	0.033		1.070	0.015	G	1.13	0.02	I	9.6503	0.0025	0.023	71		9.62	9.69					1							
109817	9.957	0.027	9.369	0.024		0.549	0.032	T	0.62	0.03	L	9.4420	0.0031	0.021	76		9.40	9.48		C			1							
109818	7.995	0.008	7.932	0.009		0.063	0.011	T	0.07	0.01	L	7.9574	0.0010	0.013	148		7.93	7.99		C			1							S
109819	8.653	0.011	8.291	0.011		0.368	0.015	G	0.43	0.02	H	8.3294	0.0011	0.014	154		8.30	8.36		C	22146+3133	I 1	1							S
109820	7.718	0.008	7.272	0.010		0.436	0.015	G	0.50	0.02	H	7.3265	0.0009	0.007	59		7.32	7.34		C			1							S
109821						0.648	0.006	G	0.70	0.02	A	6.3521	0.0006	0.007	79		6.34	6.37					1							S
109822	7.691	0.009	6.652	0.005		0.890	0.010	G	0.95	0.02	A	6.6962	0.0010	0.007	69		6.68	6.71		C			1							S
109823	11.056	0.070	10.214	0.053	A						T *	9.9162	0.0035	0.022	68	*	9.88	9.97		D	22146−3212	I 1	2 C A	AB	216	1.781	0.006	0.55	0.03	
109824	10.225	0.023	8.862	0.013		1.154	0.021	T	1.12	0.02	L	8.9022	0.0020	0.022	154		8.87	8.93					1							
109825	8.304	0.010	8.035	0.011		0.256	0.014	T	0.29	0.02	L	8.0831	0.0016	0.014	82		8.06	8.10		C			1							S
109826	9.809	0.021	9.252	0.020		0.527	0.022	T	0.60	0.02	L	9.3158	0.0015	0.016	95		9.28	9.35		C			1							
109827	10.275	0.028	9.588	0.024		0.635	0.030	T	0.70	0.03	L	9.6482	0.0028	0.024	127		9.60	9.69					1							
109828	7.668	0.011	7.552	0.012		0.112	0.015	T	0.13	0.01	L	7.5834	0.0011	0.009	58		7.56	7.60		C			1							S
109829	8.233	0.009	7.610	0.007	A	0.580	0.010	T	0.65	0.01	L	7.6830	0.0122	0.025	162	A	7.64	7.71		D	22147+4921	I 2	1 C P A							S
109830	8.803	0.011	8.714	0.014		0.109	0.007	G	0.12	0.01	H	8.7663	0.0016	0.016	132		8.74	8.80					1							G
109831	5.732	0.002	5.717	0.002		0.014	0.002	T	0.03	0.00	L	5.7326	0.0005	0.006	175		5.72	5.74					1							S
109832	10.006	0.032	8.113	0.013		1.572	0.027	T	1.59	0.03	L	8.0590	0.0020	0.010	66		8.04	8.08		C			1							S
109833	10.771	0.050	10.118	0.044	B	0.606	0.057	T	0.68	0.05	L	10.4735	0.1292			B				D	22147+4921	I 2	1 C I A							
109834	9.555	0.016	7.929	0.008		1.361	0.014	T	1.33	0.02	L	7.9286	0.0012	0.013	113		7.91	7.95		C			1							
109835	10.646	0.058	8.923	0.023		1.160	0.040	G	1.12	0.04	R	8.8724	0.0027	0.016	58		8.84	8.90		C			1							
109836	8.728	0.018	7.886	0.015		0.756	0.018	T	0.80	0.01	L	7.9707	0.0013	0.009	55		7.95	7.99		C			1							S
109837	8.230	0.010	7.081	0.007		0.987	0.010	T	0.97	0.01	L	7.1389	0.0009	0.009	100		7.13	7.15					1							S
109838	7.330	0.008	6.933	0.005		0.376	0.009	T	0.44	0.01	L	6.9822	0.0008	0.008	97		6.97	7.00					1							S
109839	8.819	0.014	8.225	0.013		0.555	0.014	T	0.63	0.01	L	8.2784	0.0019	0.016	87		8.26	8.31					1 G							S
109840	8.609	0.017	8.281	0.019	*	0.311	0.023	T	0.36	0.03	L *	8.5361	0.0018	0.019	127	*	8.50	8.56		D	22148−7500	I 1	2 C A	AB	177	2.308	0.009	2.04	0.04	S
109841	9.368	0.014	8.686	0.012		0.630	0.015	T	0.70	0.01	L	8.7295	0.0016	0.017	120		8.70	8.76					1							
109842	7.542	0.006	7.046	0.006		0.480	0.007	G	0.55	0.01	H	7.1042	0.0008	0.008	96		7.09	7.12		C			1							S
109843	7.788	0.009	6.728	0.006		0.919	0.008	T	0.92	0.01	L	6.7801	0.0013	0.011	84		6.76	6.80			22148+2231	I 1	1							S
109844	10.427	0.037	9.324	0.025		0.951	0.035	T	0.94	0.03	L	9.3988	0.0024	0.026	70		9.35	9.44					1							
109845	10.428	0.027	9.713	0.022		0.644	0.026	T	0.71	0.02	L	9.7560	0.0024	0.023	134		9.71	9.79					1							
109846	9.183	0.025	8.712	0.026	*	0.444	0.033	T	0.51	0.04	L *	9.0911	0.0021	0.019	89	*	9.06	9.12		D	22148+2157	I 1	2 C A	AB	19	2.604	0.008	0.94	0.03	
109847	10.757	0.054	9.542	0.029		1.032	0.049	T	1.00	0.04	L	9.5984	0.0026	0.023	87		9.54	9.64					1							
109848	10.269	0.024	9.618	0.022		0.596	0.024	T	0.67	0.02	L	9.6699	0.0027	0.028	133		9.61	9.73					1							
109849	7.501	0.009	7.635	0.013		−0.100	0.006	G	−0.08	0.01	H	7.6041	0.0013	0.011	61		7.58	7.62		C			1							S
109850	11.073	0.059	10.444	0.052		0.585	0.068	T	0.66	0.06	L	10.4274	0.0045	0.033	74		10.38	10.50					1							
109851	9.802	0.020	9.844	0.030		−0.034	0.033	T	−0.01	0.03	L	9.7953	0.0026	0.025	139		9.75	9.85					1							G
109852	9.248	0.016	9.127	0.020		0.137	0.023	G	0.15	0.02	H	9.1552	0.0024	0.022	142		9.12	9.18					1							G
109853	8.775	0.012	8.670	0.015	*	0.102	0.018	T	0.12	0.02	L *	8.7199	0.0016	0.014	107	*	8.70	8.75		C	22149+6143	M 1	2 C B	AP	269	0.587	0.039	3.57	0.17	
109854	11.614	0.118	10.741	0.088		0.412	0.072	G	0.48	0.08	R	10.6379	0.0039	0.034	67		10.55	10.67					1							G
109855	9.079	0.011	7.964	0.007		0.961	0.010	T	0.95	0.01	L	8.0189	0.0012	0.013	156		8.00	8.04					1							S
109856	8.526	0.011	8.208	0.011		0.330	0.015	G	0.38	0.02	H	8.2704	0.0015	0.014	111		8.24	8.29		C			1							
109857	4.527	0.002	4.215	0.002		0.278	0.005	G	0.33	0.03	C	4.2584	0.0009	0.008	119		4.24	4.27		M	22150+5703	I 1	1 G							S P
109858	8.845	0.013	8.307	0.012		0.521	0.015	G	0.59	0.02	H	8.3542	0.0014	0.014	92		8.33	8.39		C			1							S
109859	10.140	0.029	9.114	0.020		0.894	0.026	T	0.90	0.02	L	9.2042	0.0031	0.027	95		9.15	9.25					1							
109860	9.215	0.022	8.005	0.015		1.035	0.021	T	1.01	0.02	L	8.0585	0.0023	0.013	55		8.03	8.08		C			1							S
109861	8.061	0.011	7.962	0.015	*	0.097	0.018	T	0.11	0.02	L *	8.0814	0.0017	0.017	135	*	8.05	8.11		D	22151+5129	I 1	2 C A	AB	176	4.795	0.017	2.93	0.09	S
109862	8.224	0.008	6.951	0.005		1.084	0.007	T	1.05	0.01	L	6.9887	0.0011	0.012	171		6.96	7.01		M			1							S
109863	9.287	0.015	9.077	0.017		0.201	0.021	T	0.22	0.02	L	9.1446	0.0017	0.014	96		9.12	9.18		C			1							
109864	8.701	0.010	8.629	0.012		0.065	0.014	T	0.07	0.01	L	8.6486	0.0019	0.020	153		8.62	8.68		C			1							S
109865	10.030	0.022	8.625	0.012		1.187	0.020	T	1.15	0.02	L	8.6822	0.0019	0.017	131		8.65	8.72		C			1							
109866	10.175	0.039	8.802	0.021		1.162	0.035	T	1.12	0.03	L	8.8180	0.0016	0.015	73		8.79	8.84		C			1							
109867	7.234	0.005	7.157	0.006		0.076	0.007	T	0.09	0.01	L	7.1899	0.0009	0.008	111		7.18	7.21		C			1							S
109868	9.840	0.024	7.922	0.010		1.626	0.021	T	1.87	0.07	O	7.8265	0.0014	0.014	98		7.81	7.85		C			1							S
109869	10.280	0.061	9.722	0.052		0.522	0.072	T	0.59	0.08	L	9.6881	0.0020	0.016	57		9.67	9.72		C			1							
109870	8.481	0.014	7.959	0.011		0.506	0.015	G	0.58	0.02	H	8.0194	0.0011	0.012	105		8.00	8.04					1							S
109871	9.086	0.017	8.565	0.017		0.498	0.018	T	0.57	0.02	L	8.6361	0.0023	0.015	70		8.61	8.67			22152−4412	I 1	1 G							S
109872	10.184	0.031	9.996	0.040		0.190	0.015	G	0.21	0.02	H	9.9953	0.0039	0.029	115		9.95	10.04					1							G
109873	9.128	0.016	8.627	0.015		0.482	0.017	T	0.55	0.02	L	8.6901	0.0018	0.018	77		8.66	8.73		C			1							S
109874	9.108	0.021	7.792	0.013	*	1.118	0.020	T	1.08	0.02	L *	7.8004	0.0013	0.011	44	*	7.78	7.82		D	22152−0535	I 1	2 C A	AB	280	0.700	0.011	1.94	0.05	S
109875	9.662	0.015	8.463	0.010		1.026	0.014	T	1.00	0.01	L	8.5159	0.0016	0.018	152		8.49	8.55					1							
109876	9.122	0.012	8.553	0.011		0.532	0.014	T	0.60	0.01	L	8.5981	0.0014	0.017	134		8.57	8.62					1							
109877	8.753	0.011	8.414	0.012		0.322	0.015	T	0.37	0.02	L	8.4557	0.0018	0.015	128		8.42	8.48		C			1							S
109878	10.487	0.026	9.106	0.014		1.169	0.023	T	1.13	0.02	L	9.1507	0.0023	0.021	141		9.12	9.18					1							
109879	10.885	0.050	9.392	0.023		1.256	0.043	T	1.21	0.04	L	9.4228	0.0026	0.017	77		9.38	9.44		C			1							
109880	8.222	0.007	6.990	0.005		1.052	0.007	T	1.02	0.01	L	7.0476	0.0009	0.009	155		7.03	7.06					1							S
109881	8.303	0.006	7.670	0.005		0.588	0.007	T	0.66	0.01	L	7.7218	0.0007	0.010	235		7.70	7.74		C			1							S
109882	9.083	0.012	9.005	0.016		0.077	0.019	T	0.09	0.02	L	9.0048	0.0022	0.023	157		8.96	9.06					1							
109883	8.774	0.009	7.997	0.007		0.719	0.003	G	0.77	0.00	H	8.0416	0.0011	0.013	157		8.02	8.07		C			1							S
109884	9.252	0.020	8.815	0.020		0.426	0.023	T	0.49	0.02	L	8.8661	0.0092	0.055	98		8.79	9.01	0.63	P 1 A			1							S
109885	10.530	0.041	9.213	0.022		1.118	0.036	T	1.08	0.04	L	9.2745	0.0028	0.021	100		9.24	9.31					1							
109886	9.208	0.016	8.937	0.018		0.258	0.023	T	0.29	0.03	L	8.9820	0.0020	0.015	100		8.96	9.00		C			1							
109887	8.970	0.012	8.593	0.012		0.357	0.016	T	0.42	0.02	L	8.6278	0.0016	0.018	137		8.60	8.66					1							S
109888	10.632	0.041	9.191	0.020		1.216	0.036	T	1.18	0.04	L	9.1338	0.0023	0.022	105		9.10	9.17					1							
109889	8.902	0.012	8.609	0.013		0.279	0.017	T	0.32	0.02	L	8.6531	0.0017	0.017	107		8.63	8.68					1							
109890	9.898	0.024	9.594	0.028		0.289	0.035	T	0.33	0.04	L	9.6404	0.0531	0.239	81		9.37	9.89	0.26	P 1 A			1							P
109891	8.149	0.010	7.778	0.011		0.351	0.014	T	0.41	0.01	L	7.8201	0.0016	0.012	86		7.80	7.84		C			1							S
109892	11.074	0.062	10.603	0.066		0.457	0.071	T	0.53	0.07	L	10.6736	0.0036	0.035	76		10.61	10.73		C			1							G
109893	7.657	0.006	7.612	0.007		0.046	0.009	T	0.06	0.01	L	7.6452	0.0010	0.012	162		7.62	7.66					1							S
109894	7.391	0.006	7.454	0.008	*	−0.053	0.009	T	−0.03	0.01	L *	7.4520	0.0016	0.013	117	*	7.43	7.48		D	22155+5549	M 1	2 C A	AB	132	0.335	0.003	0.52	0.03	S
109895	10.379	0.044	9.652	0.035		0.667	0.045	T	0.73	0.04	L	9.6981	0.0018	0.018	71		9.66	9.74		D			1 G							
109896	8.333	0.011	7.121	0.007		1.036	0.010	T	1.01	0.01	L	7.1726	0.0010	0.008	74		7.16	7.19		C			1							S
109897	9.908	0.028	8.843	0.019		0.913	0.027	T	0.91	0.02	L	8.8996	0.0018	0.015	88		8.87	8.93		C			1							
109898	8.487	0.011	8.433	0.013		0.036	0.015	G	0.05	0.01	H	8.4645	0.0016	0.011	92		8.45	8.49		C			1							S
109899	9.256	0.020	8.729	0.019		0.495	0.025	T	0.57	0.03	L	8.7950	0.0021	0.013	56		8.77	8.81		C			1							
109900	8.602	0.015	8.199	0.015		0.381	0.020	T	0.45	0.02	L	8.2211	0.0022	0.011	60		8.20	8.24		C			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$											%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28										29	30
*109901	22 15 35.16	−39 00 50.3	9.35	2 H	333.896 492 93	−39.013 986 08		19.37	93.49	−41.83	2.51	2.14	3.26	2.77	2.02	+22	+ 6	−23	+ 1	− 5	+31	+ 3	+13	− 6	+16										0	
*109902	22 15 35.03	−44 27 05.4	6.10	G	333.895 968 52	−44.451 494 21		5.59	6.85	−2.14	0.74	0.50	0.84	0.95	0.48	+ 3	+12	−26	+ 8	− 6	+ 9	− 3	+31	−15	− 3										0	2.06
109903	22 15 35.79	+16 56 58.5	8.95	H	333.899 122 09	+16.949 570 03		4.46	9.45	−1.28	0.97	0.88	1.20	1.28	1.08	+27	− 3	−15	−29	+ 0	+26	+ 3	−26	+27	+27										0	−1.01
109904	22 15 35.88	−42 58 36.2	9.13	H	333.899 512 25	−42.976 731 04		1.46	−16.88	−7.50	1.01	0.96	1.42	1.32	1.05	+ 0	+24	−31	+28	−16	+39	− 4	+45	−17	−12										0	0.26
109905	22 15 36.10	+23 05 23.4	8.57	H	333.900 409 52	+23.089 834 80		1.43	−14.61	5.52	0.91	0.80	1.25	1.12	1.02	+ 8	+ 4	−40	− 7	+20	−18	+14	−31	+45	− 7										0	0.33
109906	22 15 36.13	−33 37 18.2	9.69	H	333.900 526 77	−33.621 727 72		2.67	64.82	−45.65	1.26	1.15	1.65	1.68	1.35	+31	+15	−16	+20	+ 6	+41	+14	+36	+ 7	+37										0	−0.90
109907	22 15 36.37	+25 44 56.4	8.28	H	333.901 549 80	+25.749 007 92		1.42	1.65	−11.86	0.75	0.71	0.97	0.79	0.85	+15	+22	−11	+ 2	+ 8	−25	+ 8	− 2	+ 7	+28										0	0.21
109908 H	22 15 36.88	−41 20 48.3	4.79	G	333.903 686 69	−41.346 750 29	*	12.44	46.04	20.45	0.56	0.56	0.76	0.62	0.53	+28	−18	−21	+ 1	−16	+38	−10	− 3	+ 4	+16										0	1.72
109909	22 15 37.36	+10 27 24.7	8.06	H	333.905 664 12	+10.456 852 36		4.33	34.06	5.59	0.81	0.63	1.01	1.33	0.70	+28	+ 6	+ 4	−14	+12	+19	+ 3	−28	+ 1	− 3										0	0.18
109910	22 15 38.66	+04 16 17.1	7.36	G	333.911 067 16	+04.271 412 52		8.19	−41.61	−18.45	0.77	0.51	0.85	0.96	0.59	+21	− 3	− 6	− 6	+17	+ 3	+14	−17	+21	+13										0	−0.75
109911	22 15 38.88	+49 57 16.2	9.97	G	333.912 014 09	+49.954 510 62		−0.25	2.62	−1.96	0.86	0.88	1.21	0.95	1.02	− 9	− 9	+ 3	− 2	+ 8	− 6	+10	−12	+ 7	+ 6										0	−0.37
109912	22 15 39.23	−24 35 00.5	9.38	G	333.913 469 90	−24.583 481 54		1.29	−1.38	−12.96	1.11	0.81	1.26	1.36	0.85	+44	−28	−19	− 8	+ 5	+15	+ 3	−10	+ 9	+51										0	1.29
109913	22 15 39.28	+00 58 25.7	8.99	H	333.913 672 15	+00.973 799 60		6.10	122.16	−0.21	1.31	0.88	1.44	1.94	0.94	+ 8	+33	−19	− 2	− 4	+ 5	− 2	−18	+ 9	−15										0	−1.39
109914	22 15 39.93	−37 12 41.0	10.47	G	333.916 363 06	−37.211 390 42		8.96	17.81	−19.88	1.64	1.33	2.16	1.93	1.19	+25	+ 0	−26	+12	−29	+39	−18	+ 3	+ 7	+16										0	1.44
109915	22 15 40.63	−21 16 35.6	8.50	H	333.919 311 60	−21.276 554 85		2.32	18.22	3.74	1.03	0.69	1.16	1.27	0.74	+ 9	+ 2	−18	−18	+21	− 4	+16	−21	+34	+ 4										0	−0.81
109916	22 15 42.42	+35 33 52.1	8.30	H	333.926 744 42	+35.564 482 31		5.10	14.50	−2.59	0.66	0.71	0.97	0.76	0.83	+11	+12	+ 4	+16	+12	−33	+15	+18	+ 0	+22										0	−0.15
109917	22 15 43.28	+14 09 03.2	9.62	H	333.930 335 50	+14.150 881 23		5.78	20.75	13.12	1.11	0.93	1.53	1.42	1.30	+17	+ 1	−28	+ 4	+15	−23	+ 9	− 7	+36	+ 8										0	−0.37
109918	22 15 44.42	−18 08 39.6	9.66	G	333.935 101 78	−18.144 332 55		20.60	161.45	−159.68	1.28	1.01	1.49	1.77	1.17	+31	− 2	−22	−17	− 9	+21	− 6	−24	+31	+34										0	−1.03
109919 H	22 15 48.60	+43 54 02.7	7.48	G	333.952 490 99	+43.900 760 00	A	2.98	2.78	−1.10	0.95	0.98	1.27	1.07	1.08	−26	− 6	+ 0	+ 9	+ 9	− 4	+ 9	−23	+11	−21										0	−0.15
109920	22 15 49.37	+15 26 25.6	8.46	H	333.955 690 59	+15.440 448 55		8.47	14.06	−6.67	0.78	0.74	1.10	1.01	0.94	+22	+ 3	−19	− 4	+ 9	− 7	+ 6	−19	+39	+ 9										2	0.04
109921	22 15 49.57	+31 18 52.7	8.08	H	333.956 548 30	+31.314 634 46		2.14	10.24	−0.92	0.59	0.63	0.85	0.54	0.70	+18	− 2	+12	− 9	+17	− 9	+19	+11	+ 2	+36										1	0.39
109922	22 15 49.87	−45 48 56.4	8.64	H	333.957 773 96	−45.815 662 51		2.11	17.11	−6.75	0.93	0.83	1.14	0.99	0.84	+24	−17	−29	− 8	+18	+ 3	+16	+47	−16	+29										0	−0.31
109923	22 15 50.25	−52 09 30.6	8.24	H	333.959 357 23	−52.158 491 85		1.96	6.10	−5.81	0.62	0.57	1.05	0.73	0.60	+13	+ 1	−11	+ 3	+ 0	+18	+ 2	− 2	− 8	+27										0	0.53
109924	22 15 51.36	−42 16 56.5	8.91	H	333.964 003 86	−42.282 357 54		4.40	35.52	−1.10	0.96	1.12	1.30	1.25	1.41	+32	−22	−30	+14	+18	−13	+19	+65	−26	+31										5	1.97
109925	22 15 52.34	−64 48 44.4	8.71	H	333.968 066 45	−64.812 328 08		7.13	43.90	−55.23	0.63	0.77	1.10	0.74	0.71	−15	− 2	−30	− 1	+ 1	− 2	+ 0	−17	+ 8	−20										0	0.85
109926	22 15 53.92	+54 40 21.8	7.50	1 H	333.974 683 27	+54.672 720 55		46.62	213.47	69.91	0.53	0.54	0.67	0.56	0.55	−16	−11	+ 3	−19	+ 8	+ 3	+ 8	−35	+23	+ 5										0	0.43
109927	22 15 54.07	+00 02 13.4	8.97	H	333.975 277 01	+00.037 058 52		1.06	−0.26	−7.44	1.25	0.83	1.28	1.88	0.94	+ 8	+ 4	−14	+ 7	+ 3	+14	+ 3	+13	−27	−16										0	−1.56
109928	22 15 54.24	+38 51 25.2	7.68	H	333.975 981 57	+38.857 013 40		1.55	1.54	0.86	0.64	0.57	0.78	0.87	0.67	− 6	+12	−13	+ 3	+ 9	− 2	+ 7	+ 1	− 4	−11										0	0.73
109929	22 15 54.43	−36 54 13.2	9.08	H	333.976 806 97	−36.903 676 23		5.65	−21.50	−36.93	1.13	0.91	1.42	1.28	0.84	+27	+ 2	−12	+15	−17	+30	−11	+12	+ 6	+18										0	0.67
109930	22 15 54.67	−57 19 05.1	13.52	H	333.977 773 62	−57.318 092 97		−9.99	43.72	5.74	17.82	15.02	25.09	22.92	16.30	+ 6	+ 0	− 9	+ 5	− 9	+19	− 5	−16	+ 0	+12										4	
109931	22 15 54.77	+24 55 41.5	8.94	G	333.978 216 20	+24.928 181 35		13.29	−182.14	−75.86	0.92	0.73	1.11	1.04	0.93	− 2	+ 7	− 4	− 7	+ 2	−23	+ 3	−13	+22	− 2										0	−0.81
109932	22 15 56.58	−42 41 49.4	7.51	H	333.985 759 38	−42.697 043 65		4.17	−5.09	−40.65	0.78	0.78	1.02	1.08	0.93	+16	+ 5	− 6	+28	−10	+30	− 3	+52	− 1	+ 3										0	−0.54
109933	22 15 56.98	−31 51 38.7	8.49	H	333.987 434 47	−31.860 744 33		4.92	38.04	19.23	1.01	0.74	1.17	1.25	0.76	+ 5	+11	−16	+12	−13	+15	− 9	+23	−14	− 7										0	−2.05
109934	22 15 57.39	−02 44 41.9	8.51	H	333.989 129 39	−02.744 977 58		3.05	3.28	−10.36	1.25	0.71	1.25	1.87	0.77	− 1	+36	−11	+21	− 4	+19	− 4	+ 5	+ 0	−25										0	1.77
109935	22 15 57.62	+71 40 11.8	8.44	H	333.990 098 78	+71.669 953 47		3.72	8.33	−5.12	0.61	0.56	0.67	0.73	0.60	− 3	+ 4	+20	+15	+ 1	−18	+ 5	− 9	−11	+ 6										0	−0.29
109936	22 15 58.03	+19 30 10.0	9.44	H	333.991 790 28	+19.502 764 24		2.24	−3.48	−9.33	0.98	1.00	1.33	1.11	1.32	+28	+13	−14	− 7	− 9	− 6	− 7	−25	+18	+33										2	0.79
109937	22 15 58.17	+37 44 55.4	4.14	G	333.992 375 70	+37.748 734 83		5.20	8.74	0.76	0.50	0.44	0.61	0.79	0.53	− 3	+ 2	− 8	− 3	+ 9	+ 7	+ 8	+ 9	− 4	−12										2	0.51
109938	22 15 59.23	+13 48 12.9	8.98	H	333.996 788 16	+13.803 574 14		1.76	7.20	4.95	0.98	0.87	1.30	1.42	1.20	+19	− 8	−14	−17	+ 5	− 4	+ 1	−36	+ 8	+ 7										0	0.94
109939	22 15 59.81	+08 32 58.6	6.21	G	333.999 220 11	+08.549 599 01		8.25	26.08	−10.32	0.83	0.48	0.77	1.02	0.54	− 5	+16	−10	−44	+25	−19	+26	−19	+17	−17										0	0.14
109940	22 16 00.40	−51 18 14.1	8.73	G	334.001 665 96	−51.303 917 55		3.77	27.60	−9.65	0.66	0.63	1.17	0.83	0.68	+36	−12	−13	+ 6	+ 0	+36	+ 3	+15	+12	+43										3	0.59
109941	22 16 00.61	−14 11 02.6	10.40	G	334.002 523 35	−14.184 068 56		17.59	48.63	37.82	1.87	1.57	2.14	2.20	1.56	+44	−16	− 2	−20	− 9	+14	−16	−42	+15	+35										0	1.05
109942	22 16 00.64	+11 45 35.9	7.30	G	334.002 655 73	+11.759 961 60		3.27	12.05	−6.85	0.74	0.59	0.92	0.98	0.65	+32	+ 4	− 8	−22	+12	+ 4	+10	−16	+ 9	+12										0	0.11
109943	22 16 00.69	−14 26 09.5	7.87	H	334.002 875 84	−14.435 959 51		2.91	5.72	−0.13	1.11	0.82	1.26	1.33	0.86	+38	− 7	−10	−19	− 9	+ 4	−11	−32	+20	+39										0	1.13
109944	22 16 00.93	+45 05 20.9	7.13	H	334.003 868 18	+45.089 125 15		3.19	15.08	0.39	0.45	0.49	0.68	0.48	0.57	−33	+11	− 9	−14	+12	+ 0	+14	−14	+14	−37										1	1.40
109945	22 16 00.95	+18 34 17.0	9.18	H	334.003 961 79	+18.571 391 39		9.39	11.91	−12.15	1.04	1.00	1.30	1.15	1.21	+32	+14	−11	+19	−12	−10	−11	−31	+13	+34										0	−0.76
109946	22 16 01.51	+11 47 46.3	8.28	H	334.006 295 89	+11.796 193 58		3.49	18.37	27.10	0.86	0.73	1.11	1.12	0.82	+36	− 3	− 5	−22	+ 5	+12	+ 0	−31	+ 7	+15										0	0.23
109947	22 16 05.41	+03 14 44.7	8.81	H	334.022 536 70	+03.245 738 28		3.12	−32.13	−1.24	1.17	0.80	1.46	1.76	1.24	+ 5	+18	−11	−16	+10	+43	+25	−33	+53	+39										0	−0.99
109948	22 16 05.91	−37 56 43.9	9.73	H	334.024 613 15	−37.945 535 56		10.19	96.65	−78.67	1.35	1.11	1.60	1.55	1.12	+28	−17	−20	+30	+ 8	− 1	+ 9	+39	+ 3	+25										0	0.61
109949	22 16 05.96	+24 32 18.3	8.99	H	334.024 813 13	+24.538 423 02		0.37	−7.14	−6.81	0.91	0.78	1.04	1.13	0.96	+10	+ 0	+ 0	−22	− 7	+ 4	− 6	−26	+ 4	+12										0	0.49
109950	22 16 05.97	+16 01 15.3	8.59	G	334.024 863 24	+16.020 928 40		7.91	−18.44	−3.31	0.83	0.75	1.16	0.98	0.99	+23	+ 4	−22	+ 4	+11	+ 1	+13	−15	+37	+21										0	−0.15
109951 H	22 16 06.52	−07 05 23.6	8.72	G	334.027 172 18	−07.089 884 02	*	15.04	73.71	−347.35	3.52	3.07	1.52	1.61	1.09	+46	+15	+15	− 1	+17	+ 6	+13	+32	+ 5	+20										2	0.60
109952	22 16 07.22	−23 00 33.9	7.43	G	334.030 087 85	−23.009 412 96		9.60	20.85	15.11	0.83	0.55	0.87	0.99	0.59	+20	− 8	−19	−14	+31	+ 4	+25	+14	+ 9	+33										2	−1.23
109953	22 16 07.72	+06 00 54.0	9.34	G	334.032 146 11	+06.014 992 28		8.42	−18.29	−145.34	1.15	0.89	1.34	1.69	1.02	+37	− 3	+ 1	+12	+12	+24	+ 2	−27	+10	+23										0	1.63
109954	22 16 07.88	+38 15 38.8	10.59	H	334.032 823 84	+38.260 772 85		8.38	165.80	38.12	2.54	2.36	3.20	3.36	2.82	+ 6	+11	−16	− 1	+ 8	− 6	+ 6	−14	− 1	+ 3										3	
109955	22 16 08.18	−57 34 05.0	7.18	2 H	334.034 063 40	−57.568 042 26		3.71	18.17	−12.37	0.51	0.54	0.86	0.60	0.56	+ 3	−17	− 7	−24	− 3	+18	− 2	−10	+ 0	+ 9										1	1.14
109956	22 16 09.37	−53 33 10.6	8.72	H	334.039 021 61	−53.552 933 46		14.90	38.13	−28.55	0.79	0.63	1.20	0.98	0.73	+21	− 3	+ 9	+27	+15	+21	+16	+18	−14	+35										0	0.34
109957	22 16 13.56	−59 14 02.9	9.16	H	334.056 491 84	−59.234 139 39		5.54	−32.17	44.63	0.88	0.83	1.41	0.97	0.80	−13	+11	−30	−18	+13	+ 1	+10	− 3	− 5	+ 2										0	1.04
109958	22 16 14.64	−39 47 40.8	9.75	H	334.061 014 63	−39.794 672 52		6.92	−24.46	−99.49	1.30	1.02	1.67	1.40	0.94	+ 8	− 5	−23	−10	− 4	+35	+ 4	+ 5	+ 1	+ 8										0	−1.12
109959	22 16 16.15	+30 02 52.7	7.81	H	334.067 282 90	+30.047 962 34		8.38	−0.93	−25.56	0.62	0.63	0.82	0.76	0.71	+ 8	+ 4	+ 2	+25	− 8	− 7	− 8	− 6	+ 9	+ 2										0	−0.46
109960	22 16 16.55	−17 12 18.9	8.71	H	334.068 953 36	−17.205 246 52		5.01	12.28	0.87	0.96	0.71	1.11	1.27	0.85	+21	− 4	− 4	+ 5	+ 7	+19	+ 4	− 9	+33	+21										0	−0.91
109961	22 16 17.34	+33 43 56.0	7.38	H	334.072 258 83	+33.732 209 54		14.37	89.98	−0.60	0.56	0.56	0.78	0.73	0.64	+26	+10	+14	+ 5	+ 9	−13	+11	+ 0	+ 5	+37										3	1.88
109962 H	22 16 17.91	+73 36 16.3	8.17	G	334.074 622 97	+73.604 514 82	*	7.19	42.32	38.69	1.07	1.01	0.79	0.82	0.76	−10	−17	+ 8	−36	+12	+ 6	+12	+ 2	− 5	+ 0										1	−0.24
109963	22 16 18.42	+51 05 08.8	8.13	H	334.076 743 60	+51.085 789 38		1.14	3.21	−1.09	0.67	0.65	0.86	0.72	0.68	−11	+ 3	− 5	−17	+20	− 7	+20	−18	+ 4	+22										0	−1.94
109964	22 16 18.72	+62 18 57.8	7.08	H	334.078 008 74	+62.316 060 80		8.76	−6.24	−9.27	0.59	0.51	0.64	0.76	0.67	− 3	+19	+13	+20	+ 7	+10	+ 6	−10	− 3	− 3										0	−1.02
109965 H	22 16 19.73	+26 16 16.0	8.17	H	334.082 191 12	+26.271 111 64	A	3.72	−23.45	−28.10	1.30	1.14	1.41	1.29	1.28	+14	+14	−15	+ 3	+ 7	−14	+ 6	+ 9	− 8	+25										1	0.02
109966	22 16 19.76	+20 34 44.1	9.84	H	334.082 319 06	+20.578 922 33		5.57	−4.73	−22.07	1.20	1.00	1.41	1.41	1.22	+22	−12	−11	+15	− 9	+17	− 5	−30	− 7	+22										2	0.84
109967	22 16 19.87	+68 13 49.1	9.82	H	334.082 789 03	+68.230 295 74		2.21	8.84	−0.54	0.96	0.95	1.10	1.20	1.11	− 4	−12	+11	+18	+ 3	− 2	+ 2	+ 2	− 9	−12										1	0.78
109968	22 16 22.86	+51 00 26.2	7.93	H	334.095 244 89	+51.007 288 77		4.50	25.62	16.21	0.62	0.60	0.80	0.66	0.64	− 7	+ 2	− 3	− 3	+21	−13	+ 9	−25	+14	+ 5	+23									0	−0.17
109969	22 16 24.94	+24 11 39.5	8.38	H	334.103 906 61	+24.194 311 48		6.99	33.01	2.01	0.78	0.72	1.01	0.87	0.78	+ 3	+19	−40	−19	+ 1	+ 1	+ 1	−27	+39	+ 9										2	0.42
109970	22 16 25.22	−14 02 42.0	8.14	H	334.105 098 12	−14.044 988 96		4.40	21.84	−13.42	1.03	1.04	1.19	1.32	1.07	+45	−14	− 1	−19	− 4	+22	−16	−47	+15	+31										0	−1.08
109971	22 16 26.39	+47 58 40.5	9.79	H	334.109 942 96	+47.977 921 79	B	5.56	−0.62	6.08	7.91	7.80	3.86	4.09	3.84	− 6	+ 4	+ 2	− 3	+18	+ 1	+19	− 6	− 4	+ 1										8	1.60
109972	22 16 26.51	+57 13 12.8	5.88	H	334.110 469 21	+57.220 225 42		4.48	47.37	5.36	0.47	0.45	0.56	0.55	0.48	+ 2	+13	+19	+ 9	+12	+ 4	+16	−23	+ 9	+15										0	0.75
109973	22 16 26.57	−41 37 37.9	5.11	H	334.110 702 33	−41.627 201 98		13.61	−13.56	−9.50	0.61	0.65	0.86	0.74	0.78	+40	−26	−32	+14	+ 3	+19	+16	+42	−22	+32										0	0.26
109974	22 16 27.38	+47 58 32.6	8.83	H	334.114 100 97	+47.975 711 21	A	4.08	−1.85	3.98	2.01	1.97	2.06	2.10	2.03	− 7	+ 3	+ 3	− 9	+17	− 1	+18	−12	− 6	+ 3										8	1.60
109975	22 16 28.56	−29 34 53.9	9.23	H	334.119 006 30	−29.581 627 92		3.56	44.30	−8.68	1.08	0.95	1.40	1.24	1.01	+31	−14	−22	+29	− 5	+16	+ 1	+38	− 8	+23										0	−0.20
109976	22 16 28.94	−63 20 17.3	7.33	G	334.120 566 42	−63.338 134 26		11.61	46.06	−49.80	0.43	0.45	0.74	0.52	0.47	−20	− 6	−18	−13	+ 0	+ 6	+ 3	+ 1	−14	−25										0	−1.83
109977	22 16 29.66	+27 48 14.5	6.38	H	334.123 569 19	+27.804 040 24		8.17	−14.99	−4.28	0.59	0.57	0.73	0.61	0.64	+24	+29	+ 2	+ 5	− 9	−11	− 6	−24	+ 9	+23										0	−0.62
109978	22 16 30.31	−35 11 12.5	9.01	H	334.126 300 78	−35.186 810 56		6.99	23.39	−23.22	1.22	0.93	1.45	1.29	0.90	+13	+18	−26	− 4	−25	+32	−16	+14	− 1	+ 7										0	2.12
109979	22 16 30.40	+32 37 17.6	7.52	H	334.126 664 58	+32.621 561 35		3.60	18.13	−2.16	0.43	0.55	0.71	0.47	0.58	+28	+11	+11	+ 5	+ 9	−16	+10	+ 4	− 3	+33										2	−1.26
109980	22 16 31.19	+68 20 23.3	9.23	H	334.129 960 55	+68.339 818 57		41.69	377.97	−9.38	0.76	0.77	0.88	0.95	0.88	−12	−10	+11	+ 2	+ 3	+ 6	+ 3	− 6	−10	−14										0	−1.27
109981	22 16 32.28	+63 42 44.6	7.24	H	334.134 499 51	+63.712 398 88		5.49	21.63	12.23	0.55	0.50	0.59	0.65	0.58	−15	+ 2	+ 7	+26	+ 9	− 1	+ 5	− 8	−12	−24										3	1.25
109982	22 16 33.47	−43 44 15.7	7.91	H	334.139 473 77	−43.737 680 56		2.24	17.91	−16.31	0.80	0.70	0.97	1.10	0.76	+ 3	− 3	−12	+23	−15	+21	− 7	+44	− 3	−21										0	0.59
109983	22 16 33.64	+34 31 17.6	7.86	G	334.140 174 17	+34.521 543 95		4.75	−7.82	−24.33	0.55	0.57	0.80	0.72	0.63	+18	+15	+15	+13	− 3	−17	+ 1	+ 2	+ 6	+16										0	−0.40
109984	22 16 33.67	−01 35 46.9	6.16	H	334.140 297 53	−01.596 367 96		12.44	−28.26	−8.86	0.76	0.52	0.81	0.86	0.54	+ 8	+16	+ 1	+10	+ 3	+20	+ 4	+13	+ 6	+10										3	−0.54
109985	22 16 33.90	+84 30 16.0	7.57	H	334.141 250 15	+84.504 451 31		4.49	−2.56	−14.70	0.52	0.47	0.55	0.63	0.50	−12	−15	+23	− 3	−10	− 4	− 9	+ 5	+10	−22										0	0.09
109986 H	22 16 34.13	+46 43 42.1	9.23	H	334.142 214 31	+46.728 364 36	A	3.35	13.67	1.74	1.22	1.09	1.47	1.09	1.10	−31	+23	− 7	− 6	+16	−17	+24	−10	+34	−19										1	0.11
109987	22 16 35.45	−40 15 39.8	8.94	H	334.147 701 74	−40.261 059 11		2.63	23.76	7.45	1.10	0.82	1.36	1.15	0.74	+15	−26	−29	−13	−14	+27	− 8	− 4	+ 9	+ 2										0	0.63
109988	22 16 35.99	−68 20 46.6	8.42	H	334.149 978 24	−68.346 283 95		2.29	52.57	−22.46	0.62	0.68	0.96	0.65	0.68	−16	+ 8	−29	+ 3	+ 2	+ 2	+ 5	−14	+13	− 6										0	−0.57
109989	22 16 36.32	+42 50 23.6	8.71	H	334.151 345 35	+42.839 876 61		3.02	−15.65	−10.51	0.63	0.64	0.98	0.70	0.73	−29	+12	+ 3	+22	− 4	− 1	− 5	+ 3	+ 5	−37										0	1.34
109990	22 16 37.44	−25 53 53.3	6.14	G	334.155 996 77	−25.898 132 49		5.74	37.73	−12.34	0.86	0.51	0.87	1.01	0.52	+12	− 3	−36	−43	+11	+ 0	+ 3	−34	+25	+35										0	−0.75
109991	22 16 40.15	+12 55 12.9	7.47	H	334.167 278 03	+12.920 257 64		4.10	14.14	5.40	0.90	0.68	1.04	1.44

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
109901	10.352	0.031	9.397	0.022		0.828	0.029	T	0.85	0.02	L	9.4955	0.0061	0.041	78		9.45	9.56		U 2			1 X							
109902	7.372	0.006	6.200	0.005		0.988	0.052	G	0.97	0.00	A	6.2634	0.0013	0.009	78		6.25	6.28					1						S
109903	9.566	0.019	8.962	0.018		0.563	0.023	T	0.64	0.02	L	9.0770	0.0022	0.017	85		9.05	9.11		C			1						S
109904	10.552	0.041	9.223	0.023		1.128	0.037	T	1.09	0.04	L	9.2993	0.0029	0.021	77		9.26	9.34					1						
109905	10.013	0.028	8.674	0.016		1.136	0.025	T	1.10	0.03	L	8.7376	0.0012	0.015	78		8.70	8.76					1						
109906	10.792	0.060	9.730	0.037		0.921	0.053	T	0.92	0.04	L	9.8568	0.0038	0.021	58		9.82	9.89		C			1						
109907	10.057	0.027	8.436	0.013		1.357	0.024	T	1.32	0.03	L	8.4281	0.0014	0.015	87		8.41	8.46		C			1						
109908	5.800	0.003	4.892	0.003	*	0.790	0.021	G	0.83	0.02	A	* 4.9496	0.0008	0.005	81	*	4.94	4.96		D	22156−4121	M 1	2 C S D	BA	256	0.146	0.027	1.48	0.38	S D
109909	8.333	0.010	8.082	0.011		0.220	0.015	G	0.24	0.02	H	8.1318	0.0014	0.013	93		8.12	8.16					1						S
109910	7.769	0.007	7.412	0.007		0.338	0.009	T	0.39	0.01	L	7.4454	0.0011	0.011	105		7.43	7.46					1						S
109911	10.042	0.028	10.089	0.045		0.040	0.025	G	0.06	0.02	H	9.9876	0.0030	0.024	139		9.94	10.03					1						G
109912	9.211	0.016	9.349	0.023		−0.105	0.004	G	−0.09	0.01	H	9.3510	0.0033	0.020	91		9.31	9.38					1						
109913	9.451	0.028	9.055	0.029		0.375	0.037	T	0.44	0.04	L	9.0818	0.0039	0.018	43		9.06	9.11					1						
109914	10.835	0.056	10.511	0.060		0.430	0.015	G	0.50	0.02	H	10.5583	0.0046	0.030	75		10.51	10.61		C			1						
109915	9.933	0.028	8.646	0.017		1.095	0.026	T	1.06	0.03	L	8.6673	0.0024	0.019	80		8.64	8.70					1						
109916	8.429	0.008	8.306	0.010		0.119	0.012	T	0.13	0.01	L	8.3429	0.0015	0.014	120		8.31	8.37		C			1						S
109917	10.041	0.033	9.631	0.035		0.401	0.040	T	0.47	0.04	L	9.7126	0.0036	0.024	81		9.64	9.76		C			1						
109918	10.729	0.056	9.708	0.037		0.903	0.010	G	0.95	0.01	I	9.7944	0.0018	0.015	64		9.74	9.82		D			1						
109919	7.590	0.007	7.595	0.009	*	0.060	0.015	G	0.07	0.01	H	* 7.5525	0.0012	0.011	163	*	7.53	7.57		D	22158+4354	I 1	2 C A	AB	238	0.760	0.002	0.87	0.01	S
109920	8.975	0.013	8.511	0.013		0.450	0.014	T	0.52	0.01	L	8.5613	0.0022	0.013	88		8.53	8.58		C			1						
109921	8.202	0.009	8.081	0.011		0.117	0.013	T	0.13	0.01	L	8.1294	0.0012	0.013	131		8.11	8.16		C			1						S
109922	10.470	0.035	8.804	0.016		1.393	0.030	T	1.37	0.04	L	8.7854	0.0023	0.018	87		8.75	8.82		C			1						
109923	9.920	0.017	8.371	0.009		1.305	0.020	G	1.28	0.02	A	8.3928	0.0011	0.015	166		8.36	8.42		C			1						S
109924	9.312	0.021	8.942	0.022		0.361	0.026	T	0.42	0.03	L	8.9956	0.0019	0.017	68		8.97	9.02					1						
109925	9.383	0.011	8.770	0.010		0.569	0.011	T	0.64	0.01	L	8.8361	0.0016	0.026	193		8.80	8.89					1						
109926	8.515	0.009	7.579	0.007		0.810	0.015	G	0.85	0.01	H	7.6459	0.0014	0.015	122		7.62	7.67		M	22159+5440	I 1	1							
109927	8.932	0.017	8.953	0.022		−0.017	0.015	G	0.01	0.01	H	8.9776	0.0027	0.016	51		8.95	9.02		C			1						
109928	9.101	0.013	7.800	0.008		1.120	0.015	G	1.08	0.02	H	7.8522	0.0011	0.015	117		7.84	7.88					1						
109929	10.202	0.031	9.188	0.022		0.885	0.028	T	0.89	0.02	L	9.2374	0.0025	0.017	80		9.20	9.27		C			1						
109930						1.410	0.015	G	1.76	0.02	A	13.6154	0.1373	0.594	15		12.39	14.34					1 X S						G
109931	9.764	0.026	9.017	0.021		0.660	0.010	G	0.72	0.01	H	9.0731	0.0024	0.018	83		9.04	9.12		C			1						
109932	9.362	0.019	7.662	0.009		1.420	0.017	T	1.40	0.03	L	7.6454	0.0014	0.011	73		7.62	7.67					1						S
109933	9.692	0.022	8.585	0.015		0.983	0.002	G	0.96	0.00	H	8.6507	0.0014	0.015	75		8.63	8.68		C			1						
109934	8.875	0.019	8.548	0.020		0.310	0.026	T	0.36	0.04	L	8.5836	0.0030	0.017	51		8.56	8.62					1						S
109935	9.942	0.021	8.583	0.012		1.151	0.019	T	1.11	0.02	L	8.6058	0.0017	0.017	138		8.58	8.64					1						
109936	10.752	0.047	9.556	0.028		1.024	0.043	T	1.00	0.04	L	9.6042	0.0026	0.022	86		9.58	9.65		C			1						
109937	6.009	0.004	4.286	0.003		1.447	0.001	G	1.33	0.03	C	4.2900	0.0007	0.005	100		4.28	4.30					1						S
109938	10.552	0.042	9.138	0.022		1.194	0.037	T	1.15	0.03	L	9.1447	0.0020	0.018	77		9.10	9.17		C			1						
109939	6.226	0.004	6.198	0.004		0.019	0.004	G	0.04	0.00	H	6.2181	0.0007	0.006	89		6.21	6.23		C			1						S
109940	9.005	0.010	8.768	0.012		0.212	0.002	G	0.23	0.00	H	8.8007	0.0016	0.021	173		8.76	8.84					1						S
109941						1.070	0.015	G	1.13	0.02	I	10.5091	0.0044	0.037	64		10.45	10.57		C			1						
109942	7.236	0.006	7.278	0.007		−0.049	0.002	G	−0.03	0.00	H	7.2919	0.0010	0.007	95		7.28	7.31		C			1						S
109943	9.526	0.025	8.035	0.013		1.250	0.006	G	1.21	0.01	H	8.0336	0.0010	0.009	64		8.02	8.05		C			1						S
109944	7.400	0.005	7.157	0.005		0.232	0.007	T	0.26	0.01	L	7.2020	0.0007	0.009	158		7.18	7.22					1						S
109945	9.655	0.020	9.225	0.020		0.406	0.026	T	0.47	0.03	L	9.2667	0.0026	0.019	82		9.24	9.31		C			1						
109946	9.783	0.022	8.395	0.013		1.174	0.020	T	1.14	0.02	L	8.4509	0.0010	0.011	92		8.43	8.47		C			1						S
109947	10.153	0.030	8.892	0.018		1.670	0.015	G	1.65	0.01	J	8.9228	0.0031	0.020	78		8.89	8.96					1 G						
109948	10.532	0.037	9.774	0.031		0.676	0.037	T	0.74	0.03	L	9.8653	0.0038	0.024	78		9.83	9.92		C			1						
109949	9.428	0.020	9.016	0.021		0.389	0.027	T	0.45	0.03	L	9.0756	0.0026	0.015	79		9.05	9.11		C			1						
109950	9.105	0.015	8.642	0.014		0.475	0.015	G	0.55	0.02	H	8.6909	0.0017	0.013	88		8.67	8.72		C			1						
109951	9.577	0.025	8.806	0.021	*	0.707	0.002	G	0.76	0.00	H	* 8.8550	0.0015	0.013	52	*	8.82	8.88		D	22161−0705	H 1	2 C B	AB	333	0.180	0.048	1.83	0.87	
109952	7.708	0.008	7.433	0.008		0.244	0.005	G	0.27	0.01	H	7.4974	0.0013	0.010	92		7.48	7.52		C			1						S
109953	10.135	0.027	9.371	0.023		0.654	0.005	G	0.72	0.00	H	9.4824	0.0025	0.022	81		9.45	9.53		C			1						
109954	11.511	0.097	10.610	0.069		0.801	0.089	T	0.83	0.06	L	10.7395	0.0042	0.040	112		10.68	10.81		C			1 X						G
109955	9.152	0.011	7.420	0.006		1.473	0.010	T	2.72	0.02	O	7.1460	0.0058	0.045	156		7.08	7.21		U 2	22161−5734	I 1	1 S						S
109956	9.377	0.014	8.765	0.013		0.568	0.014	T	0.64	0.01	L	8.8410	0.0015	0.016	136		8.81	8.87		C			1						
109957	10.064	0.022	9.225	0.017		0.738	0.021	T	0.79	0.01	L	9.2998	0.0023	0.027	155		9.26	9.35					1						
109958	10.595	0.038	9.817	0.030		0.692	0.037	T	0.75	0.03	L	9.8840	0.0033	0.024	76		9.83	9.91					1						
109959	8.371	0.009	7.866	0.009		0.501	0.015	G	0.57	0.02	H	7.9222	0.0013	0.011	95		7.90	7.94		C			1						S
109960	8.762	0.013	8.683	0.016		0.071	0.019	T	0.08	0.02	L	8.7405	0.0026	0.016	65		8.71	8.77		C			1						S
109961	8.033	0.008	7.456	0.006		0.539	0.009	T	0.61	0.01	L	7.4949	0.0013	0.011	122		7.48	7.51		C	22163+3344	I 1	1 S						S
109962	8.744	0.010	8.284	0.010	*	0.433	0.003	G	0.50	0.00	H	* 8.3232	0.0012	0.016	133	*	8.30	8.36		D	22163+7336	H 1	2 C A	AB	275	0.203	0.006	0.97	0.16	
109963	9.703	0.019	8.269	0.011		1.240	0.015	G	1.20	0.01	H	8.2927	0.0017	0.017	131		8.26	8.32					1						
109964	7.278	0.005	7.100	0.006		0.171	0.007	T	0.19	0.01	L	7.1376	0.0009	0.011	104		7.12	7.15					1						S
109965	9.065	0.022	8.161	0.015	*	0.803	0.020	T	0.83	0.01	L	* 8.3186	0.0014	0.014	86	*	8.29	8.35		D	22163+2616	I 1	2 C A	AB	198	2.296	0.007	1.62	0.04	
109966	10.352	0.038	9.883	0.039		0.442	0.050	T	0.51	0.05	L	9.9346	0.0028	0.026	72		9.89	9.98					1						
109967	10.211	0.029	9.883	0.033		0.311	0.041	T	0.36	0.06	L	9.9063	0.0046	0.037	117		9.82	9.98		R			1						G
109968	9.274	0.016	8.050	0.010		1.046	0.015	T	1.02	0.01	L	8.0992	0.0013	0.015	130		8.07	8.13					1						
109969	8.598	0.012	8.398	0.013		0.191	0.017	T	0.21	0.02	L	8.4387	0.0019	0.016	79		8.42	8.46		C			1						
109970	9.429	0.020	8.237	0.013		1.021	0.019	T	0.99	0.02	L	8.3036	0.0023	0.015	71		8.27	8.34					1						S
109971	10.018	0.028	9.795	0.034	B	0.213	0.041	T	0.24	0.05	L	9.9351	0.0184			B				D	22165+4759	I 2	1 C I A						
109972	7.087	0.005	5.986	0.003		0.950	0.005	T	0.94	0.00	L	6.0473	0.0006	0.006	124		6.04	6.06		C			1						S
109973	6.285	0.004	5.215	0.003		0.930	0.002	G	0.92	0.00	H	5.2712	0.0008	0.005	78		5.26	5.29					1 G						S
109974	8.895	0.010	8.808	0.013	A	0.085	0.015	T	0.10	0.02	L	8.8616	0.0080	0.057	142	A	8.81	9.01		D	22165+4759	I 2	1 C P A						
109975	10.571	0.041	9.382	0.024		1.011	0.038	T	0.99	0.03	L	9.3757	0.0023	0.019	95		9.33	9.43					1						
109976	7.876	0.006	7.384	0.005		0.495	0.001	G	0.57	0.00	H	7.4322	0.0008	0.011	229		7.42	7.46					1						S
109977	7.623	0.007	6.481	0.004		0.982	0.006	T	0.96	0.01	L	6.5417	0.0007	0.006	83		6.53	6.55		C			1						S
109978	9.402	0.022	9.019	0.023		0.374	0.027	T	0.44	0.03	L	9.0959	0.0031	0.020	65		9.06	9.12					1						
109979	9.250	0.013	7.664	0.007		1.330	0.012	T	1.29	0.01	L	7.6727	0.0011	0.012	162		7.65	7.69		C			1						S
109980	10.786	0.046	9.368	0.023		1.170	0.015	G	1.28	0.03	I	9.3549	0.0017	0.019	120		9.32	9.39					1						
109981	8.641	0.011	7.359	0.007		1.091	0.010	T	1.05	0.01	L	7.4031	0.0014	0.012	121		7.38	7.43					1						S
109982	9.768	0.023	8.068	0.011		1.419	0.020	T	1.40	0.03	L	8.0524	0.0015	0.014	80		8.03	8.07					1						S
109983	8.170	0.008	7.891	0.009		0.306	0.007	G	0.35	0.01	H	7.9224	0.0016	0.012	121		7.91	7.94		C			1						S
109984	6.384	0.005	6.182	0.005		0.194	0.006	G	0.21	0.01	H	6.2177	0.0012	0.007	61		6.21	6.23		C			1						S
109985	7.639	0.007	7.578	0.007		0.061	0.009	T	0.07	0.01	L	7.5963	0.0012	0.011	120		7.58	7.62		C			1						S
109986	9.436	0.015	9.271	0.018	A	0.210	0.140	G	0.14	0.04	L	* 9.2772	0.0023	0.021	143	*	9.24	9.33			22166+4644	I 1	2 C D	AB	358	2.301	0.061	3.88	0.27	D
109987	10.397	0.037	9.035	0.020		1.154	0.033	T	1.12	0.03	L	9.1079	0.0018	0.016	71		9.08	9.13					1						
109988	9.837	0.018	8.539	0.011		1.104	0.016	T	1.07	0.02	L	8.5887	0.0017	0.022	177		8.55	8.62					1						
109989	9.068	0.010	8.734	0.011		0.317	0.014	T	0.37	0.02	L	8.7849	0.0015	0.019	184		8.76	8.83					1						
109990	7.582	0.007	6.270	0.004		1.110	0.004	G	1.07	0.00	H	6.3050	0.0008	0.007	116		6.29	6.32					1						S
109991	8.747	0.014	7.577	0.010		0.990	0.015	G	0.97	0.01	H	7.6318	0.0014	0.010	75		7.61	7.65		C			1						S
109992	7.094	0.007	6.928	0.007		0.159	0.009	T	0.18	0.01	L	6.9795	0.0011	0.009	80		6.97	7.00					1						S
109993	7.873	0.008	6.777	0.005		0.947	0.007	T	0.94	0.01	L	6.8305	0.0009	0.008	102		6.82	6.85		C			1						S
109994	9.811	0.028	9.266	0.026		0.511	0.034	T	0.58	0.04	L	9.3058	0.0033	0.023	79		9.27	9.36		C	22167−1112	I 1	1						
109995	10.103	0.039	8.871	0.023		1.052	0.035	T	1.02	0.03	L	8.9556	0.0025	0.017	63		8.93	8.98		C			1						
109996	9.756	0.020	9.444	0.023		0.327	0.005	G	0.38	0.01	H	9.4634	0.0029	0.023	127		9.43	9.50					1						G
109997	9.406	0.024	8.195	0.016		1.036	0.023	T	1.01	0.02	L	8.2692	0.0018	0.010	55		8.26	8.29		C			1						
109998	8.539	0.012	7.362	0.008		1.009	0.011	T	0.98	0.01	L	7.4180	0.0012	0.011	86		7.40	7.44		C			1						S
109999	9.151	0.016	8.030	0.011		0.965	0.015	T	0.95	0.01	L	8.0973	0.0016	0.011	95		8.08	8.12		C			1						S
110000	6.796	0.005	5.468	0.003		1.132	0.001	G	1.10	0.00	H	5.5095	0.0005	0.004	75		5.50	5.52		C			1						S

Number HIP 1 2	Descriptor: epoch J1991.25 RA h m s 3	Dec ±° ′ ″ 4	V mag 5	6	7	Position: epoch J1991.25 α (ICRS) deg 8	δ deg 9	10	Par. π mas 11	Proper Motion $\mu_{\alpha*}$ mas/yr 12	μ_δ 13	Standard Errors α* mas 14	δ 15	π mas 16	$\mu_{\alpha*}$ mas/yr 17	μ_δ 18	Astrometric Correlations (%) 19	20	21	22	23	24	25	26	27	28	Soln F1 % 29	F2 30
110001	22 16 48.18	+30 05 29.0	7.63		H	334.200 749 51	+30.091 379 85		1.94	−0.11	−8.95	0.57	0.58	0.75	0.70	0.70	+10	+ 4	+ 2	+25	− 4	− 7	− 4	+ 6	+ 4	+ 7	0	−1.20
110002	22 16 48.35	−07 08 55.1	8.43		H	334.201 463 19	−07.148 629 73		9.57	49.08	−3.13	1.03	0.76	1.13	1.29	0.77	+26	+17	+ 5	+ 3	+14	+ 9	+15	+22	+ 6	+12	0	0.95
110003	22 16 49.97	−07 46 59.7	4.17		G	334.208 193 29	−07.783 237 06		17.04	118.95	−21.91	0.64	0.51	0.74	0.69	0.47	+23	+ 9	− 7	− 3	− 6	+24	− 3	+ 6	+ 0	+16	0	0.94
110004	22 16 50.64	−16 23 03.7	8.16		G	334.210 998 19	−16.384 370 96		6.64	52.53	−0.34	0.98	0.72	1.10	1.22	0.82	+20	+ 8	−12	−11	+11	+ 3	+11	−13	+30	+19	0	0.04
110005	22 16 51.35	+69 55 15.2	8.58		H	334.213 958 58	+69.920 884 10		2.03	3.99	−0.19	0.67	0.62	0.75	0.84	0.65	−10	−11	+14	+19	+ 5	+20	+ 5	− 2	+ 7	+ 8	0	−0.12
110006	22 16 51.57	−50 06 06.4	10.53		H	334.214 880 46	−50.101 786 49		2.08	14.45	−4.39	1.29	1.18	2.20	1.40	1.28	+26	−31	−21	−14	− 2	+17	− 1	+ 5	+ 6	+26	1	−0.47
110007	22 16 51.97	+65 28 11.7	10.15		H	334.216 553 68	+65.469 911 42		7.11	197.12	14.12	1.07	1.10	1.30	1.28	1.23	−13	+ 1	+12	+10	+ 9	−11	+ 9	−14	+32	−17	0	0.35
110008	22 16 52.14	+01 57 47.2	9.06		H	334.217 230 11	+01.963 116 11		3.17	3.69	−2.93	1.08	0.90	1.27	1.42	0.95	+22	+11	−13	+21	− 8	+27	− 8	+ 4	−15	+ 2	0	−0.86
110009	22 16 52.60	−09 02 24.1	5.80		H	334.219 167 36	−09.040 037 34		9.28	−58.02	−12.11	0.77	0.59	0.90	0.79	0.56	+31	+30	+18	− 7	− 9	+26	−20	−22	−24	+12	0	−1.35
110010	22 16 54.59	−53 49 11.9	8.83		H	334.227 457 02	−53.819 982 00		7.76	59.81	−30.50	0.73	0.66	1.20	0.95	0.76	+ 7	−12	+ 3	+12	+ 7	+21	+10	+ 0	− 1	+34	0	−0.43
110011	22 16 54.80	+33 34 18.9	7.72		H	334.228 330 07	+33.571 929 79		4.52	−4.04	−14.92	0.57	0.60	0.82	0.71	0.70	+29	+11	+21	− 4	+ 5	−16	+ 8	+ 3	+ 0	+37	0	0.24
110012	22 16 54.98	−20 01 31.3	7.35		H	334.229 070 28	−20.025 348 59		8.12	114.07	−55.78	0.80	0.52	0.84	1.09	0.54	+ 9	+ 5	−13	+11	− 5	+15	− 3	− 6	+18	+ 0	0	0.66
110013	22 16 55.55	−55 24 00.0	8.66		H	334.231 470 82	−55.400 003 35		1.12	15.70	−0.33	0.79	0.76	1.29	1.06	0.87	+10	−23	− 8	+ 6	+ 8	+ 1	+ 7	+14	− 3	+21	0	−1.25
110014	22 16 56.27	−14 39 24.9	7.16		H	334.234 450 23	−14.656 927 83		21.96	2.78	−20.37	0.91	0.70	1.05	1.06	0.77	+41	−29	−18	− 7	−10	+20	−14	−26	+27	+43	0	−1.12
110015	22 16 56.76	−50 07 36.6	9.81		H	334.236 486 61	−50.126 838 61		6.03	23.66	−13.18	0.96	0.87	1.69	1.10	0.95	+26	−29	−18	−11	− 9	+18	− 8	− 1	+ 8	+22	0	0.32
110016	22 16 57.16	+74 06 23.0	8.83		H	334.238 167 79	+74.106 390 62		8.30	15.94	61.13	0.74	0.66	0.79	0.95	0.77	− 1	−13	+ 5	+ 3	+12	+ 4	+11	+14	− 5	+ 3	0	−1.50
110017	22 16 59.06	+35 22 14.5	8.13		H	334.246 072 03	+35.370 689 12		8.48	74.61	1.11	0.68	0.68	0.95	0.77	0.72	+10	+13	+ 7	+28	+ 2	−32	+ 7	+13	+12	+ 7	0	−0.81
110018	22 16 59.79	−23 08 24.4	6.17		G	334.249 115 09	−23.140 098 53		6.28	77.63	−61.10	0.72	0.49	0.76	0.83	0.51	+20	−13	−14	−21	+21	+ 7	+16	+ 1	+ 6	+31	0	−0.80
110019	22 16 59.97	+30 19 25.7	8.29		H	334.249 860 99	+30.323 807 02		4.82	38.49	25.52	0.71	0.69	0.89	0.86	0.80	+10	+ 2	− 5	+39	−13	− 2	−13	−12	+ 6	+ 7	2	2.46
110020	22 16 59.97	+53 39 01.0	8.59	1	G	334.249 874 38	+53.650 279 04		0.44	−3.36	−3.62	0.59	0.61	0.78	0.61	0.66	−12	−12	+ 1	− 4	+18	−18	+21	−22	+ 5	+ 5	0	−2.27
110021	22 17 01.02	+56 10 36.0	7.15		H	334.254 244 51	+56.176 660 32		9.95	36.33	−28.01	0.53	0.53	0.63	0.64	0.60	+10	+ 7	− 2	− 4	−15	− 3	− 1	−41	+16	+43	0	−0.89
110022	22 17 04.11	−34 12 52.2	7.93		H	334.267 124 19	−34.214 509 95		3.17	20.09	−14.79	0.88	0.82	1.12	1.05	0.85	+28	− 1	−18	+ 8	−12	+31	− 5	+24	+11	+22	0	1.92
110023	22 17 06.50	−05 23 14.0	5.75		G	334.277 092 35	−05.387 211 52		9.56	−4.20	19.51	1.00	0.52	0.86	1.85	0.63	−20	+ 3	−19	− 8	+14	−19	+11	+ 6	−11	−50	0	1.04
*110024	H 22 17 06.54	+08 22 27.4	7.66		H	334.277 252 93	+08.374 281 11	A	6.89	22.35	−18.03	1.24	0.80	1.19	1.41	0.88	+20	+31	− 6	−22	+20	−23	+28	− 4	+28	+ 5	1	0.02
*110025	22 17 06.54	+54 12 33.4	9.97		G	334.277 243 10	+54.209 286 60		4.06	−4.63	−2.90	0.87	0.85	1.10	0.96	0.90	−19	+ 0	− 3	−18	+18	−22	+22	−36	+ 8	+ 4	0	−0.88
110026	22 17 07.02	+54 30 27.5	8.68		G	334.279 245 58	+54.507 627 23		1.48	−4.13	−2.86	0.63	0.63	0.80	0.64	0.61	−17	− 3	+ 3	−13	+14	− 8	+17	−35	+17	+ 0	1	−0.42
110027	22 17 07.09	+32 59 28.5	8.02		H	334.279 547 94	+32.991 252 23		2.68	3.45	−9.57	0.49	0.63	0.81	0.57	0.66	+29	+10	+14	+12	+ 5	−19	+ 9	+ 0	+ 1	+32	2	0.08
110028	22 17 08.40	−30 09 12.0	8.58		G	334.285 001 16	−30.153 346 02		13.54	167.14	−129.07	0.91	0.76	1.16	1.03	0.74	+20	− 3	−20	+23	−21	+21	−15	+24	− 6	+ 8	0	0.75
110029	H 22 17 08.66	−51 58 38.0	8.25		G	334.286 082 02	−51.977 224 39	A	5.20	18.04	10.95	1.36	1.31	1.88	1.39	1.24	+42	− 7	− 5	+ 7	+ 0	+12	+ 3	+12	+ 3	+32	1	1.27
110030	22 17 09.04	−14 11 32.6	8.18		H	334.287 687 16	−14.192 387 32		2.52	−13.48	−2.15	1.11	0.96	1.27	1.47	1.10	+25	−14	−26	−23	+ 7	+ 6	− 2	−48	+32	+15	0	−0.22
110031	22 17 10.01	−34 45 38.7	6.83		H	334.291 693 92	−34.760 750 49		3.49	23.52	−36.81	0.76	0.65	0.92	0.90	0.68	+26	+ 7	−18	− 8	−12	+26	− 4	+12	+ 3	+15	0	1.43
110032	22 17 10.48	+22 23 15.0	7.58		H	334.293 660 12	+22.387 495 39		1.80	−11.25	−16.58	0.73	0.58	0.87	0.86	0.78	+ 2	− 8	−20	−10	+12	−11	+ 9	−16	+23	− 7	2	−0.09
110033	22 17 12.05	+40 58 04.8	9.48		H	334.300 189 65	+40.967 995 03		1.80	0.96	−3.41	0.68	0.82	1.25	0.70	0.88	−57	+25	−24	+34	− 6	+16	+ 0	− 7	+ 2	−50	0	1.62
110034	22 17 12.17	+66 07 44.0	7.07		H	334.300 688 68	+66.128 897 14		2.79	14.29	11.65	0.49	0.48	0.54	0.63	0.55	− 8	− 9	+ 2	+16	+23	− 4	+21	− 3	+11	− 2	0	0.01
110035	22 17 14.63	+12 53 53.7	7.04		G	334.310 966 02	+12.898 251 78		32.55	857.66	98.18	1.39	0.67	0.95	1.70	0.76	−27	−14	+ 7	−77	+41	+10	+32	−21	+ 4	−20	0	0.99
110036	22 17 14.71	−54 19 16.6	7.36		H	334.311 302 42	−54.321 270 02		7.63	58.73	−21.40	0.59	0.50	0.95	0.73	0.53	+ 9	−10	−25	+ 6	+ 3	+13	+ 7	+ 7	−12	+28	0	0.90
110037	22 17 15.90	−04 29 22.0	9.44	2	H	334.316 235 94	−04.489 438 90		2.79	6.42	−4.66	1.32	0.84	1.38	1.52	0.85	+ 5	+11	−21	− 8	+ 0	+ 6	+ 0	− 4	− 8	− 4	0	−1.73
110038	22 17 16.51	+15 02 48.7	7.07		H	334.318 798 98	+15.046 867 97		7.32	−25.59	−55.20	0.65	0.57	0.80	0.81	0.73	+24	+ 3	−12	+ 8	+10	−13	+ 9	− 2	+ 9	+23	0	1.02
110039	22 17 17.47	−27 23 23.1	7.05		H	334.322 801 82	−27.389 761 94		7.26	53.46	−69.36	0.71	0.51	0.95	0.88	0.60	+46	−14	−21	− 7	−20	+44	−13	−29	+37	+65	0	−0.04
110040	22 17 20.12	+22 00 40.2	7.93		H	334.333 835 65	+22.011 171 90		0.21	0.65	−11.15	0.77	0.66	0.95	0.88	0.82	+ 3	+ 8	−34	− 3	+ 4	− 8	+ 4	−21	+19	+ 9	0	0.02
110041	22 17 20.13	+24 48 40.7	8.65		H	334.333 889 14	+24.811 317 38		1.59	−18.75	11.10	1.02	0.85	1.14	1.17	0.97	+ 9	− 9	−19	+29	− 3	− 6	−14	−45	+30	− 7	0	−0.34
110042	H 22 17 20.24	+50 48 33.3	8.45		G	334.334 339 65	+50.809 262 81	A	3.71	9.85	−2.82	1.15	1.16	1.25	1.07	1.07	+ 8	− 8	+14	+12	+25	− 4	+34	− 3	− 6	+39	1	0.24
110043	22 17 20.83	−50 04 47.6	8.73		H	334.336 805 29	−50.079 902 30		4.01	2.07	−13.82	0.86	0.67	1.32	0.89	0.71	+ 9	−25	−14	−28	+ 3	+21	+ 1	+ 5	+ 9	+19	0	−0.47
110044	22 17 20.98	+28 06 27.0	8.69		H	334.337 414 87	+28.107 507 90		3.44	−3.14	−9.81	0.69	0.76	0.96	0.82	0.88	+28	+14	− 7	+42	−10	+10	− 6	−18	+18	+30	2	−0.49
110045	22 17 21.34	+40 38 33.4	9.68		H	334.338 911 01	+40.642 612 48		2.14	2.46	−1.71	0.65	0.84	1.28	0.73	1.00	−51	+17	−19	+28	− 1	+16	+ 0	−15	− 8	−51	1	1.27
110046	22 17 22.17	−16 02 18.6	8.54		H	334.342 379 17	−16.038 505 64		4.20	6.78	−9.66	1.03	0.80	1.23	1.31	1.02	+36	−18	−13	−16	+ 5	+21	− 2	− 7	+37	+49	0	0.77
110047	22 17 24.34	+64 42 53.1	8.08		H	334.351 412 32	+64.714 745 67		7.96	5.15	38.31	0.67	0.61	0.72	0.93	0.75	−24	−12	+12	−23	+12	+12	+12	−13	+ 0	−36	1	0.31
110048	22 17 24.64	−74 57 00.5	8.83		H	334.352 662 23	−74.950 134 33		3.66	0.12	17.77	0.80	0.83	1.02	1.03	1.14	− 5	−19	−22	−31	+ 1	+10	+ 2	−34	+ 7	− 9	0	−0.41
110049	22 17 24.93	+26 23 12.5	7.13		H	334.353 858 45	+26.386 813 33		4.20	39.21	22.52	0.69	0.56	0.79	0.74	0.66	+ 7	+12	−11	+16	− 1	−11	+ 1	− 8	+15	+14	2	1.07
110050	22 17 25.25	+45 16 47.1	8.10		H	334.355 203 73	+45.279 750 75		1.48	−11.51	−8.27	0.59	0.58	0.80	0.64	0.66	−33	+ 9	− 1	−20	+16	− 1	+17	−13	+ 7	−34	0	0.13
110051	22 17 25.45	−57 47 02.6	8.33		H	334.356 049 39	−57.784 051 31		3.57	26.58	−13.26	0.61	0.66	1.07	0.72	0.67	+ 5	− 4	− 5	−29	−11	+11	−10	−11	−10	+ 8	0	−0.81
110052	22 17 26.43	−32 48 14.3	9.01		H	334.360 113 88	−32.803 983 43		7.34	33.19	−0.06	1.00	0.87	1.22	1.24	1.06	+29	− 2	− 7	+ 5	+11	+31	+10	+32	+ 6	+42	0	2.45
110053	22 17 26.98	+49 11 44.1	8.29		H	334.362 435 34	+49.195 583 41		11.22	−116.45	77.35	0.53	0.56	0.75	0.58	0.63	− 7	+ 0	− 9	− 2	+ 7	− 3	+ 9	−20	+25	+ 7	0	−0.74
110054	22 17 27.17	−15 58 47.2	7.07		H	334.363 219 23	−15.979 766 38		6.84	28.78	1.49	0.85	0.63	0.97	1.05	0.76	+30	−17	− 2	− 1	+ 9	+16	+ 3	+ 4	+25	+42	0	1.55
*110055	22 17 28.31	+49 07 37.0	6.46		H	334.367 952 72	+49.126 935 40		3.63	16.70	9.00	0.38	0.44	0.57	0.40	0.49	−10	+ 3	− 8	+ 3	+ 1	− 7	+ 3	−22	+19	− 1	0	−0.20
*110056	22 17 28.25	+58 05 07.8	9.21		G	334.367 704 07	+58.085 487 63		10.84	0.47	−24.76	0.81	0.78	0.94	0.92	0.80	+ 0	+11	+13	−15	− 2	+ 9	− 2	−38	− 1	+ 3	0	−1.72
110057	22 17 28.74	−26 13 53.7	9.15		H	334.369 753 42	−26.231 592 34		4.56	31.41	−38.04	1.34	0.75	1.39	1.75	0.82	+14	−17	−27	−31	+24	− 3	+ 6	−18	+25	+41	2	−0.76
110058	22 17 29.76	+05 08 39.1	7.34	2	H	334.374 010 52	+05.144 199 06		1.30	5.14	−6.62	0.81	0.64	0.97	1.01	0.76	+33	−24	−13	+13	+ 0	+23	−16	−39	+35	+17	0	0.71
110059	22 17 30.08	−37 03 59.4	10.04		H	334.375 333 98	−37.066 495 46		4.26	16.79	−7.46	1.38	1.20	1.85	1.74	1.24	+30	− 1	−17	+18	+ 2	+37	+ 9	+31	+ 1	+32	0	0.25
110060	22 17 31.40	−23 06 52.3	7.63		H	334.380 824 90	−23.114 532 70		2.02	18.06	−8.50	0.87	0.64	0.99	1.03	0.66	+31	−22	−35	−20	+11	+ 6	+ 8	− 5	+ 6	+39	0	−0.78
110061	22 17 31.72	−36 18 33.2	9.96		H	334.382 161 26	−36.309 218 02		6.24	55.15	3.66	1.35	1.17	1.74	1.53	1.17	+27	+ 3	−14	+ 3	−14	+34	− 9	+ 8	+ 0	+19	0	0.52
110062	22 17 32.21	+70 03 32.4	7.37		H	334.384 216 55	+70.058 991 62		5.27	−6.97	−26.22	0.57	0.49	0.61	0.69	0.54	− 7	− 4	+10	+13	+ 6	+11	+ 5	− 1	+10	+ 7	0	0.46
110063	22 17 32.68	−18 09 42.8	8.37		H	334.386 169 58	−18.161 898 91		3.38	12.75	11.88	0.98	0.65	1.08	1.29	0.78	+ 7	−10	−16	−18	+ 2	+23	+ 1	−13	+37	+ 8	0	0.12
110064	22 17 32.81	+16 48 38.6	8.79		H	334.386 689 58	+16.810 720 55		7.00	−45.65	−57.53	1.07	0.85	1.29	1.36	1.18	+ 9	−10	−13	−34	+16	+16	+15	−23	+32	+14	0	−1.72
110065	22 17 38.38	−12 14 19.0	8.71		H	334.409 927 07	−12.238 615 43		5.96	3.32	5.66	1.03	0.88	1.19	1.20	1.06	+54	+ 5	+10	− 6	+ 2	+13	+ 5	−17	+14	+66	0	−2.56
110066	22 17 39.25	−48 39 00.9	8.40		H	334.413 524 04	−48.650 237 22		39.38	204.23	−105.11	0.77	0.58	1.13	0.92	0.61	+ 6	− 1	−24	− 4	+ 7	− 3	+ 4	+18	+ 8	+14	0	0.19
110067	22 17 39.57	−35 24 41.0	10.21		H	334.414 890 55	−35.411 386 60		7.84	11.59	−57.60	1.52	1.21	1.89	1.62	1.13	+28	+18	−14	+ 0	−31	+42	−27	− 2	− 8	+ 8	0	1.47
110068	22 17 40.48	+42 31 52.9	9.56		H	334.418 670 07	+42.531 364 15		0.70	−17.64	−15.01	0.82	0.87	1.27	0.93	0.98	−40	+14	+ 0	+24	− 7	+ 3	− 6	+ 6	+ 6	−39	2	2.51
110069	22 17 40.92	+17 24 54.3	8.67		G	334.420 483 87	+17.415 093 81		5.84	−25.00	−31.33	1.00	0.77	1.24	1.28	1.09	+ 1	+22	−27	−32	+24	− 6	+32	−14	+46	− 2	0	−0.17
110070	22 17 42.35	−78 25 50.6	8.55		H	334.426 467 02	−78.430 715 48		3.42	15.34	−11.80	0.71	0.70	0.88	0.97	0.91	− 9	−17	−14	+13	−11	+13	−10	+10	+ 1	−23	0	−0.61
110071	22 17 44.67	+42 46 57.2	8.04		H	334.436 124 07	+42.782 548 59		14.26	171.51	70.05	0.53	0.58	0.87	0.63	0.67	−35	+ 4	+13	+11	− 1	+ 0	− 2	− 3	− 2	−42	0	0.61
110072	22 17 45.17	−65 01 07.0	8.01		H	334.438 223 74	−65.018 603 74		4.60	20.05	−0.81	0.52	0.56	0.86	0.61	0.54	− 8	−10	−24	+ 1	+ 3	+ 4	+ 4	− 9	+ 4	− 7	0	0.27
110073	22 17 47.31	+26 56 11.5	6.63	1	H	334.447 118 48	+26.936 537 81		2.74	−25.44	−5.86	0.61	0.53	0.73	0.69	0.66	+ 4	+ 7	− 4	+10	+ 3	−10	+ 4	− 8	+14	+ 5	0	0.89
110074	22 17 47.68	−50 19 29.8	7.90		H	334.448 675 54	−50.324 948 25		8.99	−27.90	−3.18	0.60	0.53	1.07	0.70	0.56	+24	−22	−23	−15	−13	+24	−10	− 6	+11	+21	0	−0.14
110075	22 17 49.71	−04 15 02.3	8.87		H	334.457 119 02	−04.250 641 36		3.65	1.25	−1.05	1.02	0.72	1.11	1.15	0.74	+13	+ 1	−19	+ 0	+ 3	+10	+ 6	+14	−15	+ 6	0	−0.27
110076	22 17 49.89	+39 01 33.4	7.40		H	334.457 871 81	+39.025 953 39		4.70	68.80	14.84	0.62	0.58	0.78	0.82	0.66	− 6	+14	−17	+22	+ 6	−11	+ 2	+ 7	− 3	−13	2	2.56
110077	22 17 50.20	−09 44 30.8	8.78		H	334.459 175 07	−09.741 877 99		8.22	96.85	−32.29	1.36	0.94	1.47	1.88	1.09	+14	+28	− 4	− 8	− 6	−16	− 6	− 3	− 3	+12	0	−2.02
*110078	22 17 50.70	−77 30 41.7	5.49		G	334.461 232 41	−77.511 588 03		26.00	−37.28	14.28	0.43	0.41	0.52	0.55	0.46	−10	−11	−10	+12	+10	+ 9	+10	− 7	−12	−18	1	1.75
*110079	22 17 50.69	−07 35 15.4	9.31		G	334.461 192 05	−07.587 624 60		18.96	197.88	−86.54	1.22	1.03	1.36	1.43	0.92	+36	+14	+11	− 8	−18	+21	−25	−39	− 4	+ 9	0	1.16
110080	22 17 51.16	+31 29 23.6	9.25		H	334.463 163 37	+31.489 891 47		7.68	20.58	−15.26	0.63	0.84	1.21	0.61	0.93	+33	− 3	+ 9	− 7	+19	+ 0	+18	+ 8	+22	+49	0	−1.07
110081	22 17 51.30	+49 49 48.0	7.59		H	334.463 756 90	+49.829 999 06		4.17	1.38	−12.91	0.51	0.55	0.73	0.56	0.62	−15	−10	+ 0	+ 6	+ 8	− 4	+12	−21	+ 5	+ 3	0	0.15
110082	22 17 51.50	+20 06 31.6	8.72		H	334.464 569 85	+20.108 776 03		1.13	26.97	8.63	0.91	0.82	1.18	1.01	1.12	+24	+ 3	− 6	+20	−13	+ 6	−12	−38	+31	+25	2	−0.08
110083	22 17 54.20	−67 11 31.7	8.60		H	334.475 820 86	−67.192 147 39		1.83	40.03	−3.47	0.69	0.66	0.95	0.80	0.71	−17	+ 3	− 8	−10	+ 9	−10	+ 8	− 4	− 3	−20	0	0.44
110084	22 17 54.56	−32 28 42.0	8.61		G	334.477 316 70	−32.478 343 60		22.54	162.57	−203.08	0.95	0.88	1.18	1.12	0.97	+27	− 6	−16	+ 4	+ 5	+28	+ 7	+37	+ 2	+34	0	−0.38
110085	22 18 00.05	−20 29 58.5	8.76		G	334.500 206 80	−20.499 589 71		9.96	153.55	−172.07	0.99	0.69	1.10	1.48	0.75	+16	− 4	−24	+ 2	+ 1	+ 8	+ 2	− 2	+13	+ 8	0	0.79
110086	22 18 00.25	+19 02 25.6	7.63		H	334.501 055 71	+19.040 431 45		4.65	59.71	−11.05	0.74	0.72	0.98	0.78	0.87	+31	+11	−21	+11	−12	+ 0	− 8	−34	+44	+27	0	−0.50
110087	22 18 01.69	−36 12 55.9	9.10		H	334.507 023 42	−36.215 519 29		8.75	50.67	−13.34	1.10	1.04	1.52	1.34	1.03	+27	+ 4	−24	+ 8	−19	+36	− 8	+16	+ 4	+16	0	0.12
110088	H 22 18 02.09	−62 48 40.8	6.98		G	334.508 723 53	−62.811 325 29	A	7.58	−2.00	−3.49	0.79	0.99	1.13	0.71	0.75	−21	−14	− 1	+ 0	− 2	− 9	− 3	−11	+ 2	−35	1	0.74
110089	22 18 04.04	+13 57 01.3	6.83		H	334.516 826 09	+13.950 360 38		9.38	74.88	−14.53	0.68	0.57	0.81	0.80	0.66	+32	+ 6	− 1	+12	+ 0	−19	− 2	−15	+ 2	+25	0	−0.04
110090	22 18 04.15	+55 16 53.3	8.89		G	334.517 301 41	+55.281 477 06		2.52	−0.66	−2.38	0.61	0.69	0.80	0.70	0.70	− 1	− 6	+ 4	−11	− 9	+ 3	− 4	−40	+16	+20	0	−1.38
110091	22 18 04.30	−00 14 15.1	6.39		H	334.517 902 89	−00.237 522 68		24.11	−41.39	−54.73	0.84	0.56	0.92	1.37	0.58	+ 9	+17	+ 0	+30	+ 5	+47	− 5	− 6	−11	−19	0	−1.16
110092	22 18 05.60	+16 23 20.5	7.83		H	334.523 345 07	+16.389 041 04		5.78	35.56	−34.76	0.73	0.66	0.89	0.86	0.86	+25	− 2	− 9	− 2	+18	− 1	+20	+ 7	+ 7	+29	0	−1.54
110093	22 18 05.84	+64 48 49.7	9.64		H	334.524 342 23	+64.813 814 06		1.99	5.37	3.34	0.91	0.92	1.06	1.18	1.06	−21	− 4	+ 3	− 2	+ 0	+ 6	− 1	−12	+16	−26	0	−0.14
110094	22 18 06.35	+61 08 02.8	8.59		H	334.526 441 77	+61.134 124 13		16.31	160.74	128.66	0.74	0.64	0.76	0.82	0.74	−16	+ 7	− 3	+42	−10	+ 6	−10	− 7	+ 6	−16	1	−1.70
110095	22 18 06.52	−55 46 40.4	8.54		H	334.527 153 52	−55.777 893 80		2.34	−31.41	−15.55	0.75	0.72	1.11	1.05	0.77	+ 4	−10	−16	+ 4	+ 2	− 4	+ 3	− 3	− 5	+21	0	−0.75
110096	22 18 07.06	+39 47 34.6	8.93	2	H	334.529 412 41	+39.792 956 48		3.32	−4.66	−16.87	0.63	0.69	1.03	0.75	0.79	−34	+17	−19	+ 9	+13	−14	+14	+ 1	+ 8	− 7	0	−0.67
110097	22 18 09.13	−01 07 19.4	9.07		H	334.538 049 56	−01.122 064 46		14.24	207.76	−97.66	1.31	0.82	1.40	1.57	0.84	+ 6	+25	−21	+13	+ 1	+ 3	+ 3	− 1	+12	+ 1	0	1.11
110098	22 18 10.60	+18 25 19.5	8.35		H	334.544 179 41	+18.422 087 32		4.13	−14.29	−2.42	0

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
110001	7.523	0.006	7.597	0.007		−0.093	0.002	G	−0.07	0.00	H	7.6003	0.0013	0.011	97		7.58	7.62					1							S
110002	9.047	0.018	8.462	0.017		0.546	0.022	T	0.62	0.02	L	8.5472	0.0026	0.012	59		8.52	8.57		C			1							S
110003	5.418	0.004	4.278	0.003		0.979	0.019	G	0.95	0.02	A	4.3335	0.0008	0.005	58		4.32	4.35					1							S
110004	8.793	0.014	8.230	0.013		0.528	0.015	G	0.60	0.02	H	8.2840	0.0020	0.013	74		8.26	8.31		C			1							S
110005	8.553	0.011	8.571	0.014		−0.012	0.016	T	0.01	0.01	L	8.5818	0.0018	0.017	121		8.56	8.61					1							S
110006	11.175	0.057	10.568	0.053		0.500	0.020	G	0.57	0.02	H	10.6417	0.0037	0.037	132		10.57	10.70					1							G
110007	10.877	0.053	10.290	0.050		0.548	0.064	T	0.62	0.06	L	10.2677	0.0037	0.029	103		10.22	10.31					1							G
110008	10.318	0.042	9.183	0.026		0.976	0.038	T	0.96	0.03	L	9.2180	0.0019	0.015	59		9.20	9.25					1							
110009	7.298	0.007	5.923	0.006		1.158	0.003	G	1.12	0.00	H	5.9623	0.0009	0.006	56		5.95	5.97		C			1							S
110010	10.084	0.022	8.942	0.015		0.982	0.021	T	0.96	0.02	L	8.9949	0.0016	0.015	138		8.97	9.02					1							
110011	8.952	0.012	7.819	0.008		0.975	0.011	T	0.96	0.01	L	7.8850	0.0010	0.011	131		7.86	7.91		C			1							
110012	7.556	0.006	7.380	0.008		0.161	0.010	T	0.18	0.01	L	7.4105	0.0010	0.008	83		7.40	7.43		C			1							S
110013	10.551	0.034	8.806	0.014		1.455	0.029	T	1.46	0.05	L	8.8009	0.0018	0.020	118		8.76	8.84					1							
110014	7.709	0.009	7.219	0.008		0.476	0.007	G	0.55	0.01	H	7.2678	0.0008	0.007	60		7.25	7.28		D			1							S
110015	10.222	0.026	9.848	0.028		0.410	0.020	G	0.48	0.02	H	9.9024	0.0025	0.025	135		9.87	9.94					1							
110016	9.432	0.015	8.883	0.014		0.514	0.018	T	0.59	0.02	L	8.9405	0.0018	0.016	119		8.91	8.97		C			1							
110017	8.803	0.010	8.190	0.009		0.571	0.015	G	0.64	0.01	H	8.2555	0.0016	0.014	114		8.24	8.28		C			1							S
110018	7.525	0.007	6.299	0.004		1.051	0.001	G	1.02	0.00	H	6.3436	0.0007	0.007	88		6.33	6.36		C			1							S
110019	8.681	0.010	8.332	0.011		0.351	0.015	G	0.41	0.02	H	8.3739	0.0016	0.016	101		8.35	8.41					1							S
110020	9.043	0.013	8.654	0.013		0.410	0.005	G	0.48	0.01	H	8.6862	0.0022	0.022	130		8.65	8.72		U			1							
110021	7.282	0.006	7.148	0.006		0.113	0.002	G	0.13	0.00	H	7.1935	0.0009	0.011	124		7.18	7.21		C			1							S
110022	9.292	0.018	8.067	0.012		1.047	0.017	T	1.02	0.01	L	8.0973	0.0016	0.013	74		8.08	8.12		C			1							S
110023	6.850	0.006	5.849	0.004		0.878	0.003	G	0.89	0.00	H	5.9069	0.0008	0.005	50		5.90	5.92					1							S
110024	8.135	0.011	7.718	0.012	A	0.100	0.495	G	0.41	0.04	L	* 7.7452	0.0010	0.008	84	*	7.73	7.77		D	22171+0822	I 1	2 C	A	AB	79	1.422	0.033	3.45	0.09	S
110025	10.340	0.037	9.995	0.041		0.260	0.015	G	0.29	0.02	H	10.0627	0.0036	0.033	117		10.01	10.11					1							G
110026	8.847	0.012	8.748	0.015		0.170	0.015	G	0.19	0.01	H	8.7377	0.0016	0.016	125		8.71	8.77					1							
110027	8.347	0.009	8.045	0.009		0.287	0.012	T	0.33	0.01	L	8.0966	0.0012	0.014	147		8.08	8.12		C			1							S
110028	9.413	0.019	8.657	0.016		0.659	0.002	G	0.72	0.00	H	8.7152	0.0015	0.014	90		8.69	8.76					1							S
110029	8.562	0.011	8.135	0.010	*	0.405	0.002	G	0.47	0.00	H	* 8.3516	0.0015	0.016	168	*	8.33	8.38		D	22171−5159	I 1	2 C	A	AB	93	2.445	0.009	1.36	0.03	S
110030	9.585	0.021	8.292	0.013		1.100	0.019	T	1.06	0.02	L	8.3526	0.0021	0.015	73		8.32	8.38					1							
110031	8.429	0.011	6.956	0.006		1.241	0.010	T	1.20	0.01	L	6.9891	0.0012	0.007	68		6.97	7.00		C			1							S
110032	7.726	0.008	7.611	0.009		0.111	0.011	T	0.12	0.01	L	7.6266	0.0013	0.009	87		7.61	7.65		C			1							S
110033	9.546	0.012	9.474	0.016		0.071	0.019	T	0.08	0.02	L	9.5142	0.0017	0.029	303		9.47	9.56					1 S							
110034	7.209	0.006	7.084	0.006		0.120	0.015	G	0.13	0.01	H	7.1207	0.0007	0.007	112		7.11	7.13		C			1							S
110035	7.781	0.008	7.114	0.007		0.606	0.011	G	0.70	0.07	F	7.1695	0.0013	0.009	78		7.15	7.19		C			1 G							S
110036	7.724	0.006	7.392	0.006		0.312	0.007	G	0.36	0.02	A	7.4398	0.0012	0.011	140		7.42	7.46		C			1							S
110037	11.702	0.121	9.754	0.036		1.651	0.104	T	1.87	0.17	K	9.5277	0.0119	0.055	56		9.42	9.63		U 2			1							
110038	8.338	0.010	7.190	0.006		0.986	0.009	T	0.97	0.01	L	7.2400	0.0008	0.007	89		7.23	7.25		C			1							S
110039	8.535	0.009	7.160	0.006		1.164	0.008	T	1.13	0.01	L	7.2166	0.0010	0.009	142		7.20	7.23		C			1							S
110040	9.813	0.023	8.070	0.011		1.453	0.020	T	1.46	0.03	L	8.0669	0.0024	0.014	89		8.04	8.10					1							
110041	10.009	0.032	8.765	0.019		1.061	0.029	T	1.03	0.02	L	8.8154	0.0023	0.017	82		8.79	8.85		C			1							
110042	8.626	0.012	8.502	0.014	*	0.123	0.015	G	0.14	0.01	H	* 8.5046	0.0013	0.014	129	*	8.48	8.53		D	22173+5049	I 1	2 C	A	AB	217	0.570	0.007	1.92	0.03	
110043	10.148	0.023	8.851	0.014		1.103	0.021	T	1.07	0.02	L	8.9009	0.0020	0.021	129		8.86	8.93					1							
110044	10.265	0.028	8.825	0.014		1.215	0.025	T	1.17	0.03	L	8.8587	0.0018	0.014	120		8.84	8.88					1							
110045	9.707	0.011	9.663	0.015		0.045	0.017	T	0.06	0.01	L	9.6968	0.0017	0.026	300		9.66	9.75		C			1							G
110046	10.006	0.028	8.626	0.016		1.168	0.025	T	1.13	0.02	L	8.7029	0.0014	0.013	67		8.69	8.72		C			1							
110047	8.676	0.011	8.139	0.010		0.534	0.015	G	0.61	0.02	H	8.1939	0.0013	0.015	109		8.16	8.22					1							
110048	10.381	0.030	8.950	0.016		1.208	0.027	T	1.17	0.03	L	8.9913	0.0018	0.021	114		8.95	9.03					1 G							
110049	8.532	0.011	7.236	0.007		1.102	0.010	T	1.06	0.01	L	7.3028	0.0011	0.012	83		7.28	7.32		C			1							S
110050	9.844	0.017	8.241	0.008		1.343	0.015	T	1.31	0.02	L	8.2473	0.0015	0.015	167		8.22	8.28					1							
110051	9.500	0.013	8.425	0.009		0.931	0.012	T	0.93	0.01	L	8.4920	0.0020	0.020	171		8.46	8.54					1							
110052	9.567	0.024	9.064	0.023		0.484	0.025	T	0.56	0.03	L	9.1127	0.0021	0.014	67		9.09	9.14		D			1 S							
110053	8.895	0.011	8.338	0.010		0.521	0.013	T	0.59	0.01	L	8.4022	0.0013	0.014	149		8.38	8.43		C			1							S
110054	8.361	0.010	7.193	0.007		1.002	0.010	T	0.98	0.01	L	7.2407	0.0016	0.010	70		7.22	7.26					1							S
110055	7.789	0.007	6.565	0.004		1.046	0.006	T	1.02	0.01	L	6.6294	0.0010	0.009	152		6.61	6.65			22175+4908	I 1	1							S
110056	9.901	0.022	9.329	0.020		0.520	0.015	G	0.59	0.02	H	9.3443	0.0023	0.021	116		9.31	9.38					1							
110057	9.788	0.022	9.208	0.019		0.544	0.021	T	0.62	0.02	L	9.2720	0.0022	0.018	108		9.23	9.30		C	22175−2614	I 1	1							
110058	9.611	0.021	7.567	0.009		1.730	0.019	T	2.55	0.04	O	7.3439	0.0059	0.047	83		7.24	7.42		U 2			1 S							S
110059	10.483	0.040	10.117	0.046		0.357	0.053	T	0.42	0.06	L	10.1223	0.0037	0.030	82		10.08	10.16		C	22175−3704	I 1	1							
110060	8.865	0.015	7.737	0.010		0.971	0.014	T	0.96	0.01	L	7.7978	0.0015	0.010	83		7.77	7.82		C			1							S
110061	10.938	0.051	10.071	0.039		0.775	0.048	T	0.81	0.03	L	10.1050	0.0036	0.028	85		10.04	10.15					1							
110062	8.740	0.011	7.498	0.007		1.060	0.010	T	1.03	0.01	L	7.5349	0.0011	0.011	113		7.52	7.56		C			1							S
110063	9.671	0.024	8.506	0.016		1.000	0.022	T	0.98	0.02	L	8.5321	0.0010	0.013	73		8.50	8.55					1							
110064	9.467	0.018	8.884	0.017		0.546	0.018	T	0.62	0.02	L	8.9074	0.0019	0.015	86		8.88	8.95		C			1 S							S
110065	9.249	0.018	8.782	0.018		0.453	0.020	T	0.52	0.02	L	8.8120	0.0020	0.014	94		8.79	8.84					1							S
110066	9.649	0.015	8.520	0.010		0.961	0.003	G	1.01	0.00	I	8.5483	0.0015	0.018	154		8.52	8.58					1							
110067	10.726	0.055	10.183	0.053		0.516	0.057	T	0.59	0.06	L	10.3204	0.0025	0.020	63		10.28	10.36		C			1							
110068	9.822	0.016	9.625	0.019		0.188	0.023	T	0.21	0.03	L	9.6182	0.0024	0.031	206		9.55	9.67			22177+4232	I 1	1 S							G
110069	8.961	0.016	8.689	0.018		0.271	0.015	G	0.31	0.02	H	8.7442	0.0022	0.015	69		8.73	8.77		C			1							
110070	10.100	0.023	8.670	0.013		1.207	0.021	T	1.17	0.02	L	8.7113	0.0018	0.016	127		8.68	8.76					1							
110071	8.742	0.009	8.116	0.008		0.582	0.010	T	0.65	0.01	L	8.1669	0.0014	0.017	200		8.14	8.20					1							
110072	8.273	0.006	8.033	0.007		0.229	0.009	T	0.25	0.01	L	8.0777	0.0011	0.017	189		8.05	8.11					1							S
110073	8.731	0.013	6.797	0.006		1.604	0.016	G	1.74	0.03	C	6.7283	0.0013	0.009	79		6.71	6.75		M			1							S
110074	8.331	0.007	7.944	0.008		0.377	0.016	G	0.44	0.02	H	7.9865	0.0012	0.013	155		7.96	8.01					1							S
110075	9.200	0.018	8.887	0.019		0.297	0.025	T	0.34	0.03	L	8.9523	0.0022	0.015	58		8.92	8.98					1							
110076	8.986	0.014	7.536	0.008		1.220	0.015	G	1.18	0.01	H	7.5627	0.0010	0.009	97		7.55	7.58		C			1							S
110077	9.345	0.025	8.825	0.024		0.488	0.031	T	0.56	0.03	L	8.8914	0.0030	0.023	44		8.85	8.94					1							S
110078	5.853	0.002	5.512	0.002		0.312	0.001	G	0.36	0.00	H	5.5621	0.0006	0.006	132		5.55	5.57		C			1							S
110079	10.247	0.049	9.428	0.040		0.754	0.002	G	0.80	0.00	H	9.4578	0.0022	0.021	61		9.42	9.49		C			1							
110080	9.873	0.018	9.299	0.016		0.537	0.021	T	0.61	0.02	L	9.3663	0.0019	0.021	189		9.33	9.41					1							
110081	9.144	0.013	7.724	0.007		1.190	0.015	G	1.15	0.01	H	7.7591	0.0011	0.012	149		7.73	7.78					1							
110082	10.515	0.045	8.844	0.018		1.397	0.038	T	1.37	0.05	L	8.8681	0.0019	0.011	69		8.85	8.89		C			1							
110083	9.823	0.017	8.706	0.011		0.962	0.016	T	0.95	0.01	L	8.7664	0.0016	0.021	163		8.74	8.81					1							
110084	9.482	0.021	8.683	0.017		0.717	0.002	G	0.77	0.00	H	8.7496	0.0020	0.011	64		8.74	8.78		C			1							
110085	9.483	0.022	8.819	0.019		0.607	0.003	G	0.68	0.00	H	8.8901	0.0017	0.013	76		8.87	8.92					1							S
110086	9.019	0.015	7.754	0.009		1.078	0.014	T	1.04	0.01	L	7.8013	0.0017	0.010	79		7.79	7.82		C			1							S
110087	9.850	0.023	9.174	0.020		0.614	0.023	T	0.68	0.02	L	9.2302	0.0028	0.023	78		9.20	9.27					1							
110088	7.519	0.004	7.046	0.004	*	0.463	0.004	G	0.53	0.00	H	* 7.0685	0.0007	0.010	259	*	7.05	7.09		D	22180−6249	I 1	2 C	A	AB	202	0.540	0.002	0.81	0.01	S
110089	8.096	0.010	6.949	0.007		0.986	0.010	T	0.97	0.01	L	6.9964	0.0009	0.007	87		6.99	7.01					1							S
110090	9.134	0.013	8.910	0.015		0.201	0.010	G	0.22	0.01	H	8.9598	0.0013	0.013	126		8.93	8.98					1							
110091	6.924	0.005	6.441	0.005		0.441	0.003	G	0.51	0.00	H	6.4932	0.0014	0.007	57		6.48	6.52		C			1							S
110092	8.417	0.010	7.881	0.012		0.506	0.015	G	0.58	0.02	H	7.9380	0.0012	0.011	95		7.91	7.95					1							S
110093	10.233	0.033	9.678	0.032		0.520	0.041	T	0.59	0.04	L	9.7537	0.0025	0.023	114		9.71	9.79					1							G
110094	9.494	0.017	8.684	0.014		0.732	0.017	T	0.78	0.01	L	8.7345	0.0018	0.015	128		8.72	8.76		C			1							
110095	9.892	0.021	8.630	0.013		1.070	0.020	T	1.03	0.02	L	8.6789	0.0020	0.019	119		8.64	8.71		C			1							S
110096	9.022	0.012	8.917	0.014		0.102	0.017	T	0.12	0.02	L	8.9706	0.0027	0.038	161		8.93	9.06		U 2			1							
110097	9.867	0.035	9.136	0.030		0.634	0.004	G	0.70	0.00	H	9.2019	0.0029	0.017	54		9.17	9.23		C			1							
110098	8.953	0.014	8.411	0.013		0.519	0.015	G	0.59	0.02	H	8.4610	0.0017	0.010	77		8.44	8.48		C	22182+1825	I 1	1 G							S
110099	11.388	0.075	9.791	0.030		1.362	0.067	T	3.67	0.11	O	9.1809	0.0263	0.211	91		8.77	9.58	210.00	P 1 A			1 S							
110100	10.298	0.026	8.961	0.015		1.134	0.023	T	1.10	0.02	L	8.9595	0.0018	0.018	134		8.93	9.01		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
110101	22 18 11.42	−22 17 55.0	7.65	H	334.547 572 97	−22.298 621 97	8.32	35.03	−5.05	0.93	0.64	1.02	1.20	0.74	+18	−4	−29	−22	+23	+3	+17	−10	+25	+38	0	−1.09
110102	22 18 12.10	−63 00 22.3	8.48	G	334.550 418 91	−63.006 201 72	+ 14.59	−223.60	−99.49	0.91	0.91	0.99	2.38	1.80	+38	+0	−7	−77	−59	−2	+67	+43	+7	−86	0	0.52
110103	22 18 12.59	+62 48 15.7	5.75	G	334.552 478 53	+62.804 363 92	4.73	42.73	9.80	0.48	0.47	0.54	0.59	0.59	−14	+16	+11	+20	+6	−4	+7	−14	−9	−11	0	−1.37
*110104	22 18 12.95	−36 15 39.6	8.98	H	334.553 938 48	−36.260 998 44	6.41	6.54	−4.81	1.15	1.01	1.48	1.36	1.05	+23	−2	−16	+8	−20	+33	−15	+10	+4	+14	0	0.74
*110105	22 18 12.84	−72 20 13.8	9.87	G	334.553 491 48	−72.337 170 29	11.15	225.75	−110.27	0.92	0.93	1.31	1.20	1.04	−6	−12	−9	+10	+2	−19	−2	−11	−13	−27	1	0.71
110106	22 18 13.07	−03 10 19.9	11.20	2 G	334.554 451 39	−03.172 203 79	22.72	216.95	10.46	2.23	1.58	2.34	3.17	1.66	+5	+18	−13	+17	−12	+16	−12	+4	−10	−18	0	−1.58
110107	22 18 14.06	−21 25 35.7	9.20	H	334.558 579 21	−21.426 584 15	4.74	−22.90	29.37	1.30	0.90	1.37	1.95	0.95	+26	−10	−16	+11	+45	−5	+33	+15	+9	+31	0	0.40
110108	22 18 14.94	−05 50 30.0	8.08	G	334.562 248 50	−05.841 670 04	4.59	6.02	21.09	1.24	0.70	1.18	2.01	0.74	−1	+21	+9	−7	+17	+2	+14	−10	+13	−45	0	1.12
110109	22 18 15.18	−53 37 31.9	5.36	G	334.563 260 60	−53.625 535 94	73.47	439.86	−632.60	0.46	0.39	0.70	0.53	0.43	+14	−16	−14	+3	+3	+22	+9	+3	−8	+36	0	0.85
110110 H	22 18 17.75	−34 34 00.2	8.80	H	334.573 942 49	−34.566 727 02	A 3.87	12.66	12.64	2.09	1.95	2.05	2.07	1.40	+42	−9	−16	−10	−31	+26	−5	+20	−3	−10	2	−0.53
110111	22 18 17.83	+25 29 44.1	8.82	H	334.574 301 86	+25.495 570 34	2.44	19.36	8.34	0.95	0.93	1.31	1.02	1.18	+6	+27	−29	−1	−10	−11	+0	−39	+34	+21	0	−0.36
110112	22 18 18.23	+13 36 29.0	8.41	3 H	334.575 977 23	+13.608 054 83	3.90	0.82	−28.23	0.95	0.65	1.10	1.30	0.75	+25	+6	−3	−5	+11	−15	+10	+0	+12	+2	0	0.88
110113 H	22 18 19.50	−00 22 16.5	11.43	G	334.581 247 26	−00.371 250 18	A 2.52	−53.73	−18.28	6.53	7.01	5.53	8.53	4.76	+29	+0	−15	+34	−3	+36	−4	+1	−2	−3	0	1.14
110114 H	22 18 19.82	−35 29 51.4	9.30	H	334.582 586 62	−35.497 620 16	A 11.61	31.35	−27.86	1.89	1.47	2.20	1.88	1.32	+25	+13	−17	+3	−22	+49	−15	+0	−1	+15	4	−0.45
110115	22 18 20.05	−38 45 34.9	9.98	G	334.583 540 58	−38.759 699 81	14.72	62.55	−86.08	1.30	1.02	1.51	1.52	0.99	+10	−6	−17	+18	−15	+16	−10	+23	+1	−2	0	0.32
110116	22 18 20.40	+76 29 16.8	6.62	H	334.584 996 94	+76.488 007 54	3.46	12.48	8.03	0.47	0.43	0.52	0.53	0.47	−4	−7	+23	+9	−10	−19	−5	+5	−2	+3	3	2.93
110117	22 18 20.78	−64 33 27.4	8.55	1 H	334.586 577 25	−64.557 613 14	3.04	−18.29	8.49	0.56	0.67	0.99	0.71	0.74	−11	−7	−26	+0	−2	−7	−5	−8	+7	−30	0	−0.47
110118	22 18 24.24	−27 17 41.1	8.87	H	334.601 011 44	−27.294 739 35	1.43	−7.44	−25.07	1.12	0.65	1.21	1.14	0.62	+15	+14	+2	−29	+18	+15	+17	−19	+28	+26	3	−0.08
110119	22 18 25.05	+63 13 12.2	8.57	G	334.604 366 62	+63.220 045 73	B 8.32	−2.40	−10.58	14.13	13.14	4.49	5.98	5.61	−4	−20	+10	+18	+9	+0	+13	−10	+0	+17	5	2.39
*110120	22 18 25.23	+09 53 41.0	9.76	G	334.605 134 49	+09.894 725 99	9.35	201.08	28.26	1.10	0.88	1.46	1.83	1.00	+25	+9	+28	+4	+29	+38	+14	−7	+8	+5	0	−0.94
*110121	22 18 25.23	+28 44 32.4	8.12	H	334.605 133 30	+28.742 345 42	7.25	−6.34	−14.39	0.70	0.69	0.96	0.86	0.84	+15	+17	−9	+38	−15	+3	−15	−26	−8	+17	0	0.42
110122	22 18 25.32	+64 51 31.9	9.20	H	334.605 481 28	+64.858 857 92	1.03	4.35	−2.57	0.93	0.88	1.04	1.19	1.02	−24	−1	+1	−2	+2	+5	+2	−18	+18	−28	0	0.38
110123	22 18 26.63	−39 44 42.0	11.04	G	334.610 973 54	−39.744 998 42	1.83	21.96	−97.05	1.72	1.48	2.28	1.91	1.37	+27	−15	−23	−8	−11	+35	−1	+17	−6	+18	0	−0.43
110124	22 18 26.87	−06 38 10.1	9.23	H	334.611 976 45	−06.636 133 05	8.47	−7.06	7.14	1.27	0.86	1.36	1.91	0.84	+12	+20	+10	+13	+4	+26	−5	−13	+2	−28	0	−0.58
110125	22 18 27.81	+63 13 22.5	7.74	G	334.615 858 03	+63.222 908 12	A 2.81	−1.99	−3.74	1.88	1.77	1.63	2.19	2.08	−8	−17	+8	+17	+7	+7	+2	+10	−10	+3	+12	5	2.39
110126	22 18 28.85	−23 19 51.7	7.30	H	334.620 203 53	−23.331 029 09	5.31	47.33	−47.55	0.79	0.60	0.86	0.96	0.69	+37	−27	−30	−38	−10	+7	−12	−31	+7	+47	0	0.73
110127	22 18 29.34	−39 08 10.2	10.21	H	334.622 248 74	−39.136 153 10	18.70	107.38	−13.75	1.39	1.24	1.85	1.65	1.12	+23	−6	−36	+4	−22	+33	−5	+31	−12	+6	0	−0.18
110128	22 18 29.58	−01 07 22.9	7.41	G	334.623 237 57	−01.123 027 05	4.37	56.21	31.30	0.91	0.61	1.02	0.99	0.63	+11	+26	−13	+3	−5	+25	+2	−19	+18	+15	0	1.11
110129	22 18 29.85	+64 41 13.4	8.94	H	334.624 376 75	+64.687 050 08	3.02	7.95	2.23	0.93	0.88	1.02	1.32	1.06	−30	−16	+3	−22	+18	+13	+14	−29	+10	−42	0	−1.21
110130	22 18 30.18	−60 15 34.2	2.87	1 H	334.625 742 57	−60.259 494 86	+ 16.42	−71.48	−38.15	3.97	1.27	0.59	1.82	1.00	+84	+15	+4	−42	−74	+6	+79	+44	+14	+11	0	0.16
110131	22 18 30.73	−15 00 46.9	8.37	H	334.628 061 18	−15.013 037 19	3.99	36.91	9.15	1.10	0.76	1.28	1.29	0.87	+29	−22	−24	−11	+1	+13	−4	−33	+34	+32	0	3.45
110132	22 18 31.13	+00 52 17.3	8.65	H	334.629 712 39	+00.871 463 62	7.08	−5.32	−3.32	1.16	0.73	1.18	1.47	0.78	+9	+10	−5	+1	+6	+6	+4	−5	−7	−3	0	−1.20
110133	22 18 32.86	+35 09 59.9	9.19	H	334.636 895 96	+35.166 626 92	1.82	−7.45	4.94	0.78	0.91	1.29	1.04	1.07	+2	+8	+2	+15	−5	−38	+2	−22	+19	+4	0	−0.06
110134	22 18 33.11	−05 12 05.4	9.03	H	334.637 972 68	−05.201 494 87	2.33	7.36	2.35	1.36	0.84	1.39	1.83	0.90	+9	+27	+5	−18	+14	−17	+21	+9	+16	−27	0	−0.29
110135	22 18 34.18	−20 44 23.8	7.16	H	334.642 404 51	−20.739 952 46	4.02	−27.32	−25.19	0.81	0.63	0.93	1.15	0.67	+23	+4	−16	−2	+21	+4	+20	+22	+20	+18	0	−0.41
110136	22 18 34.61	−28 07 02.8	8.23	H	334.644 225 13	−28.117 451 89	1.33	12.00	−8.59	0.85	0.60	1.10	0.91	0.58	+46	−9	+0	+23	−12	+20	−10	−21	+15	+50	0	0.60
110137	22 18 34.97	+25 00 00.6	8.41	H	334.645 717 99	+25.000 154 14	4.61	−1.90	−14.43	0.71	0.82	1.07	0.76	0.92	+8	+12	−37	−8	+0	−5	+4	−33	+41	+15	0	−0.55
110138	22 18 35.60	−14 37 59.0	9.01	G	334.648 341 67	−14.633 044 69	17.98	43.23	185.65	1.20	0.95	1.38	1.63	1.18	+26	−15	−19	−10	+15	+14	+12	−26	+27	+34	0	0.24
110139	22 18 35.77	+47 53 49.2	8.19	H	334.649 028 55	+47.896 993 27	2.88	−10.77	−5.35	0.58	0.54	0.75	0.65	0.57	−13	+2	+15	−16	+21	+5	+19	−16	+12	−1	0	−1.84
110140	22 18 36.34	+08 26 45.9	10.38	G	334.651 411 26	+08.446 070 70	3.97	283.70	−103.48	1.78	1.18	2.01	2.24	1.49	+2	+30	−24	−30	+29	−22	+31	−10	+30	+2	0	0.32
110141	22 18 37.61	+10 21 18.7	7.73	H	334.656 720 82	+10.355 202 23	2.83	−20.00	8.38	0.76	0.55	0.92	1.45	0.65	+20	−5	+0	−19	+25	+22	+20	−9	+3	−16	0	−0.07
110142	22 18 37.67	+52 39 21.8	7.29	H	334.656 947 19	+52.656 046 80	1.68	−1.29	−2.74	0.55	0.54	0.72	0.63	0.60	−2	+9	−5	+0	+17	−21	+25	−20	+7	+37	0	1.53
110143	22 18 38.62	−30 40 13.3	8.73	H	334.660 915 32	−30.670 368 91	5.01	31.75	14.75	0.86	0.77	1.13	1.01	0.88	+32	−6	−13	+7	−11	+30	−8	+12	+3	+32	0	−0.85
110144	22 18 39.13	+41 08 29.3	9.44	H	334.663 034 17	+41.141 481 96	2.08	−3.13	−6.53	0.64	0.78	1.16	0.73	0.90	−39	+13	+3	+20	+2	+16	−1	−25	−1	−44	1	0.60
110145 H	22 18 39.16	−49 53 56.7	10.54	H	334.663 160 84	−49.899 096 41	B −1.13	−22.76	−27.12	7.72	6.81	10.35	7.90	5.53	+12	−16	−9	−15	+0	+31	+3	−1	+9	+11	2	0.72
110146	22 18 39.32	−20 54 04.0	10.82	3 H	334.663 841 25	−20.901 115 51	* −4.01	−4.53	−6.33	3.41	2.61	5.73	7.76	4.52	+67	+78	+56	+73	+59	+89	+69	+64	+74	+73	0	1.20
110147	22 18 39.48	−49 54 27.6	8.39	G	334.664 513 27	−49.907 679 45	15.80	169.39	−131.79	0.87	0.68	1.24	0.87	0.70	+6	+2	−11	−7	+8	+16	+6	+20	+11	+25	0	0.99
110148	22 18 40.52	−46 08 13.6	7.53	G	334.668 825 02	−46.137 109 08	4.27	29.48	−12.98	0.70	0.54	0.95	0.79	0.61	+10	−18	−19	−2	−11	+24	−5	−9	+5	+26	0	−0.20
110149	22 18 41.41	+07 51 55.7	7.64	H	334.672 536 38	+07.865 475 06	4.87	−12.02	−15.49	0.98	0.68	1.11	1.15	0.92	+5	+0	−24	−35	+12	+18	+19	−32	+37	+15	0	1.13
110150	22 18 44.06	+12 56 19.3	8.42	H	334.683 591 51	+12.938 698 59	4.42	5.14	20.55	1.14	0.68	1.13	1.82	0.81	+2	+17	−16	−60	+24	−12	+30	−32	+24	−31	0	−0.36
110151	22 18 44.65	−29 18 04.3	9.79	H	334.686 024 51	−29.301 201 61	0.12	13.97	2.86	1.16	0.96	1.49	1.25	0.92	+45	−4	−5	+5	−18	+20	−17	−27	+3	+42	0	−1.07
110152	22 18 45.04	+25 46 26.6	7.72	H	334.687 687 50	+25.774 069 36	6.88	35.58	0.36	0.65	0.67	0.82	0.70	0.79	+17	+6	−23	+5	−13	−8	−10	−38	+16	+29	0	−0.40
110153	22 18 45.27	+76 20 45.3	9.15	H	334.688 612 75	+76.345 929 85	3.91	20.47	7.88	0.74	0.63	0.78	0.83	0.68	−5	−13	+22	+15	−5	−21	−1	+8	+2	+2	0	−1.33
110154	22 18 45.61	+56 07 33.9	8.99	2 H	334.690 039 74	+56.126 089 63	1.81	−4.27	−1.74	0.81	0.83	0.95	0.98	0.95	+16	+4	+0	−19	−19	−6	+10	−44	+4	+46	0	−0.81
110155	22 18 45.85	+42 08 33.4	7.88	H	334.691 037 63	+42.142 624 88	2.26	−20.37	−12.41	0.51	0.56	0.81	0.58	0.60	−42	−9	+10	+30	−8	−5	−6	−11	+2	−38	0	0.45
110156	22 18 46.08	−29 45 08.5	9.95	G	334.692 001 74	−29.752 352 43	25.36	220.57	−77.04	1.24	1.03	1.54	1.50	1.03	+43	−9	−5	+3	−24	+30	−24	−38	+16	+42	3	1.07
110157	22 18 46.34	+19 17 09.3	7.99	H	334.693 092 80	+19.285 923 37	4.23	1.59	−11.72	0.76	0.75	1.06	0.82	1.10	+35	+11	−16	+1	−16	−4	−10	−43	+38	+37	0	0.41
*110158	22 18 47.01	−80 58 46.7	9.60	H	334.695 877 40	−80.979 627 32	6.02	9.80	−4.61	0.87	0.82	1.04	1.03	0.81	−7	+7	−29	+19	+8	−7	+5	−9	+2	−8	1	0.32
*110159	22 18 47.00	+19 57 44.2	6.86	H	334.695 815 65	+19.962 273 73	6.91	80.36	−54.81	0.66	0.61	0.93	0.73	0.90	+22	+4	−12	+15	−14	+0	−8	−38	+38	+30	4	−2.63
110160	22 18 48.08	−70 18 20.5	11.82	2 H	334.700 345 58	−70.305 695 53	6.09	154.81	−131.08	2.37	2.19	3.15	2.71	2.37	−8	−12	−3	−10	−6	−3	−6	−7	−1	−6	0	−1.37
110161	22 18 49.60	−68 18 45.5	7.26	H	334.706 668 50	−68.312 641 39	19.17	37.61	−187.27	0.48	0.49	0.72	0.51	0.46	−17	+7	−28	−2	+4	+10	+9	−17	+5	−5	1	0.91
110162	22 18 49.98	+50 47 00.7	8.70	H	334.708 236 57	+50.783 519 22	2.95	−5.52	−12.53	0.66	0.63	0.88	0.71	0.67	−2	−6	−8	−2	+22	−21	+24	−13	−4	+29	0	0.89
*110163	22 18 51.26	+04 08 35.4	9.13	2 G	334.713 586 52	+04.143 156 52	4.07	16.62	−11.76	0.98	0.68	1.11	1.17	0.75	+24	+13	+12	−6	+14	+10	+13	−15	+24	+12	0	−0.01
*110164	22 18 51.24	−38 26 01.3	8.46	H	334.713 511 23	−38.433 698 10	3.81	−1.44	−9.52	0.85	0.70	1.08	0.91	0.63	+22	−12	−24	+8	−13	+21	−8	+8	+10	+9	0	0.85
110165	22 18 51.89	+07 21 03.3	8.31	H	334.716 226 75	+07.350 919 00	2.49	4.14	−6.80	1.05	0.89	1.27	1.29	1.25	+28	+11	−10	−13	−7	+17	+1	−43	+19	+39	0	−1.25
110166	22 18 52.46	+16 15 28.7	6.89	H	334.718 574 63	+16.257 973 01	10.01	39.69	−6.76	0.64	0.54	0.78	0.78	0.67	+21	+2	−13	+3	+17	+7	+19	+8	+1	+22	0	−0.75
110167	22 18 52.62	−44 53 10.5	10.79	H	334.719 255 44	−44.886 256 97	7.48	79.99	−116.49	1.76	1.24	2.05	2.50	1.38	−2	+4	−17	−18	+10	−11	+10	+18	−8	−12	0	0.79
110168	22 18 53.09	+05 08 33.9	10.22	H	334.721 221 19	+05.142 746 16	3.78	16.15	−2.94	1.71	0.96	1.81	2.23	1.14	+10	+10	−1	−7	+22	+1	+18	−22	+39	−12	0	1.97
110169	22 18 55.37	−11 33 26.0	7.93	H	334.730 700 91	−11.557 229 73	5.36	−1.27	−1.96	1.01	0.87	1.19	1.26	0.95	+47	+9	+4	−7	−9	+21	−10	−47	+14	+49	0	0.40
110170	22 18 55.85	+37 45 53.6	8.77	H	334.732 721 75	+37.764 896 73	B 8.50	41.30	30.10	20.27	20.87	10.76	14.55	17.19	+11	−3	−11	−22	+8	+2	+9	−11	+0	+10	1	1.19
110171	22 18 56.17	+37 46 09.0	6.19	G	334.734 027 74	+37.769 180 03	A 15.19	55.40	43.73	1.07	0.95	1.02	1.42	1.08	+7	−4	−11	−22	+12	+3	+14	+0	−2	+5	1	1.19
*110172	22 18 57.67	−30 51 54.9	9.78	H	334.740 307 99	−30.865 254 37	3.32	88.59	−24.36	7.89	6.27	9.70	8.81	6.60	+24	+2	−15	+1	−10	+22	−7	+12	−12	+15	0		
*110173	22 18 57.27	+37 42 24.3	11.28	H	334.738 610 83	+37.706 759 69	1.07	−9.58	−1.03	6.93	6.22	8.63	8.51	8.12	+8	+8	−25	−25	+3	+2	+5	+6	−9	+4	0		
110174	22 18 57.71	+50 14 18.0	8.59	H	334.740 458 01	+50.238 346 30	3.75	7.47	−8.33	0.70	0.66	0.91	0.71	0.72	−12	−1	+0	+4	+18	−6	+23	−13	+9	+11	0	0.38
110175	22 18 58.56	−22 47 42.5	8.40	H	334.743 997 42	−22.795 129 88	1.67	−32.55	−19.46	1.05	0.78	1.22	1.28	0.84	+26	−12	−43	−30	+12	−4	+3	−17	+20	+38	0	−0.45
110176	22 18 59.54	−16 21 52.1	9.82	G	334.748 101 61	−16.364 461 53	11.64	217.86	−72.16	1.19	0.91	1.36	1.46	1.05	+36	−25	−13	−16	−18	+21	−20	−31	+26	+42	0	0.44
110177	22 19 00.24	+45 48 08.6	8.37	2 H	334.751 012 46	+45.802 380 16	0.92	−4.76	−4.77	0.59	0.60	0.81	0.67	0.64	−34	+4	+2	−13	+21	+0	+21	−21	+12	−25	0	2.10
110178	22 19 00.47	−52 13 24.4	9.65	H	334.751 975 63	−52.223 442 49	7.75	50.38	−14.21	0.85	0.87	1.44	1.09	1.01	+28	−12	−6	+14	+5	+12	+8	+17	−16	+33	0	1.65
110179	22 19 00.70	−13 18 17.9	5.96	G	334.752 901 98	−13.304 970 87	9.21	72.65	−9.91	0.71	0.55	0.81	0.80	0.62	+37	−10	−7	−18	−3	+20	−1	−30	+18	+48	0	1.01
110180	22 19 01.30	+56 57 47.4	10.20	H	334.755 409 12	+56.963 154 65	−0.91	−2.01	−1.75	0.96	1.02	1.20	1.13	1.08	+0	−3	+19	−6	+3	−7	+10	−35	−3	+22	2	−1.54
110181	22 19 02.25	+68 25 56.9	7.45	H	334.759 368 18	+68.432 478 90	4.38	−13.38	−33.50	0.56	0.52	0.64	0.67	0.60	−11	−22	+12	−2	+5	+16	+6	+1	−13	−7	0	−2.76
110182	22 19 02.25	+46 00 18.4	7.39	H	334.759 369 30	+46.005 103 43	1.79	−6.39	−6.64	0.49	0.50	0.68	0.54	0.54	−23	+3	+4	−7	+12	−4	+13	−16	+9	−17	1	1.66
110183 H	22 19 05.61	+76 00 47.4	7.51	H	334.773 383 72	+76.013 164 88	A 2.83	24.94	10.05	1.04	0.98	0.78	0.81	0.74	+10	−14	+10	+6	+18	+2	+21	+3	+7	+5	2	−0.35
110184	22 19 07.16	+28 50 51.2	7.17	H	334.779 837 00	+28.847 555 21	13.73	50.35	27.27	0.56	0.64	0.80	0.69	0.90	+29	+0	−11	+32	−11	−9	−16	−29	+23	+22	0	−0.50
110185	22 19 07.37	+27 40 54.8	7.49	H	334.780 710 15	+27.681 899 00	2.72	−10.78	−20.06	0.59	0.57	0.80	0.61	0.71	+6	+29	−25	+21	−7	+7	+9	−26	+34	+26	0	−0.97
110186	22 19 07.60	+52 07 13.2	9.10	1 H	334.781 654 70	+52.120 325 37	1.21	−2.08	−2.16	0.71	0.65	0.88	0.82	0.73	−4	+5	−9	−22	+20	−16	+17	−15	+6	+29	0	−0.04
110187	22 19 07.63	−07 18 47.7	8.90	G	334.781 791 18	−07.313 251 29	11.78	231.73	−139.85	1.40	1.73	1.40	1.78	1.84	+68	−9	−27	−41	−56	+31	−57	−75	+28	+60	0	0.07
110188	22 19 08.85	−48 02 05.8	8.54	2 H	334.786 891 46	−48.034 931 56	2.37	−11.18	−24.33	0.62	0.60	1.08	0.68	0.66	+21	−16	−19	−16	+10	+15	+7	+23	+12	+31	0	−0.34
110189	22 19 12.16	+18 04 48.8	7.69	1 H	334.800 667 65	+18.080 235 20	2.47	16.20	8.80	0.71	0.61	0.93	0.77	0.83	+20	+9	−5	+31	+8	−14	+11	+9	+34	+22	0	−0.68
110190	22 19 12.48	+36 54 32.3	10.55	H	334.801 995 38	+36.908 986 06	21.92	−192.51	−1.24	1.36	1.21	1.73	2.14	1.52	+7	+5	−13	+2	−3	−1	−2	+8	−1	+11	0	1.92
110191	22 19 13.34	+33 30 24.1	7.11	H	334.805 603 96	+33.506 698 10	3.62	29.75	7.01	0.50	0.52	0.71	0.59	0.58	+23	+2	+8	−4	+2	+1	+2	−11	+15	+28	0	−1.45
110192	22 19 15.17	−10 47 32.2	9.94	2 G	334.813 210 39	−10.792 268 11	10.02	−13.15	−12.63	2.24	1.58	2.64	2.34	1.99	+25	+40	−15	−21	−8	+7	+0	−20	+14	+47	0	2.08
110193	22 19 17.70	−10 47 25.1	8.77	G	334.823 742 17	−10.790 292 53	A 8.40	5.03	16.44	2.82	2.12	3.09	2.76	1.94	+34	+60	+7	+5	−21	+14	+0	−22	+28	+32	3	0.82
110194	22 19 18.38	+34 32 16.5	7.05	H	334.826 567 10	+34.537 930 39	5.93	−67.14	−66.08	0.51	0.53	0.74	0.62	0.57	+22	+18	+16	+16	−1	−16	+6	−10	+17	+22	0	0.08
110195	22 19 18.71	−28 17 57.1	12.26	2 H	334.827 938 01	−28.299 200 08	10.70	50.61	−12.94	2.95	2.16	3.77	3.43	2.15	+48	−13	−11	+21	−16	+21	−12	−25	+17	+51	0	1.73
110196	22 19 19.33	+44 18 10.1	10.03	1 H	334.830 549 39	+44.302 793 08	2.38	−6.70	−2.91	1.02	1.06	1.54	1.36	1.30	−31	−14	+10	+4	−5	−9	−6	+12	+15	−34	0	1.76
110197	22 19 19.38	−31 42 22.9	9.20	H	334.830 755 47	−31.706 360 85	3.81	26.90	16.72	1.11	1.04	1.40	1.34	1.12	+36	+8	−2	+20	+7	+31	+10	+35	+10	+36	0	0.25
110198	22 19 19.85	−28 12 30.9	6.85	1 H	334.832 726 29	−28.208 577 43	3.98	−7.63	−1.68	0.70	0.47	0.88	0.75	0.46	+42	−14	−5	+22	−4	+18	−2	−15	+18	+48	0	0.86
110199	22 19 20.83	−41 45 05.4	9.76	G	334.836 789 02	−41.751 494 95	6.14	81.08	−68.90	1.14	1.03	1.52	1.34	1.09	+19	+4	−18	+8	+9	+24	+12	+32	−9	+23	0	−0.94
110200 H	22 19 20.94	+58 57 11.4	8.85	2 H	334.837 247 39	+58.953 155 46	A 2.60	−2.95	−3.19	2.01	1.99	1.50	1.57	1.29	−29	−7	+17	+27	−6	+19	−12	+2	−4	−21	0	1.13

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
110101	7.936	0.009	7.670	0.011		0.250	0.015	T	0.28	0.02	L	7.7225	0.0015	0.012	70		7.71	7.74		C			1								S
110102	9.207	0.009	8.565	0.008		0.592	0.002	G	0.66	0.00	H	8.6029	0.0014	0.017	251		8.57	8.64					1 O								S
110103	7.397	0.006	5.888	0.003		1.256	0.004	G	1.21	0.00	H	5.9234	0.0006	0.006	105		5.91	5.93		C			1								S
110104	10.126	0.026	9.093	0.018		0.899	0.024	T	0.90	0.02	L	9.1379	0.0027	0.020	75		9.10	9.17		C			1								
110105	10.866	0.049	9.917	0.032		0.711	0.003	G	0.76	0.00	H	10.0062	0.0028	0.027	137		9.94	10.06		C			1 S								
110106						1.399	0.020	G	1.67	0.05	I	11.3001	0.0056	0.055	53		11.18	11.38		U			1								G
110107	9.859	0.028	9.289	0.026		0.537	0.028	T	0.61	0.03	L	9.3170	0.0019	0.020	65		9.28	9.36					1								
110108	9.562	0.024	8.178	0.014		1.147	0.001	G	1.11	0.00	H	8.2766	0.0017	0.010	49		8.26	8.31		C			1								S
110109	6.125	0.003	5.464	0.002		0.614	0.015	G	0.70	0.02	A	5.5015	0.0005	0.006	126		5.49	5.51			22183−5338	I 1	1								S
110110	9.269	0.017	8.856	0.017	*	0.404	0.020	T	0.47	0.02	L *	8.8957	0.0021	0.016	74	*	8.87	8.92		D	22183−3434	I 1	2 C A	AB	111	0.507	0.010		2.00	0.03	S
110111	10.031	0.024	8.897	0.016		0.976	0.022	T	0.96	0.02	L	8.9847	0.0027	0.017	87		8.95	9.01					1								
110112	10.289	0.035	8.680	0.017		1.372	0.032	T	3.49	0.11	O	8.1393	0.0400	0.378	86		7.73	8.70		U 2			1 S								
110113						0.920	0.003	G	0.96	0.00	I *	11.5714	0.0102	0.062	53	*	11.20	11.64			22183−0022	H 1	2 C D	AB	191	0.406	0.146		2.25	0.81	G X
110114	10.123	0.029	9.401	0.025	A	0.700	0.495	G	0.72	0.04	L *	9.4326	0.0020	0.018	69	*	9.40	9.47		D	22183−3530	I 1	2 C B	AB	170	3.527	0.040		3.33	0.13	
110115	11.251	0.068	10.035	0.037		0.965	0.015	G	1.01	0.02	I	10.1176	0.0034	0.024	86		10.08	10.17		C			1								
110116	6.628	0.004	6.616	0.004		0.012	0.005	T	0.03	0.01	L	6.6311	0.0006	0.006	115		6.62	6.64		C			1								S
110117	9.141	0.009	8.602	0.009		0.505	0.011	T	0.58	0.01	L	8.6639	0.0016	0.021	208		8.62	8.70		U			1								S
110118	10.869	0.050	9.047	0.018		1.516	0.042	T	1.55	0.06	L	8.9958	0.0018	0.018	117		8.96	9.02					1								
110119	8.899	0.019	8.603	0.020	B	0.310	0.015	G	0.36	0.02	H	8.6905	0.0530			B				D	22185+6313	I 2	1 C I A								
110120	10.560	0.041	9.819	0.033		0.706	0.015	G	0.76	0.01	H	9.9009	0.0020	0.016	91		9.87	9.93					1								
110121	8.424	0.009	8.144	0.010		0.266	0.013	T	0.30	0.02	L	8.1926	0.0020	0.017	122		8.17	8.22					1								S
110122	9.574	0.020	9.253	0.022		0.305	0.028	T	0.35	0.04	L	9.2757	0.0021	0.019	112		9.24	9.31		C			1								
110123						0.640	0.020	G	0.70	0.02	H	11.2103	0.0047	0.042	81		11.14	11.27		C			1								G
110124	9.784	0.032	9.258	0.031		0.494	0.040	T	0.57	0.04	L	9.3333	0.0027	0.020	49		9.28	9.36					1								
110125	8.056	0.011	7.771	0.010	A	0.313	0.005	G	0.36	0.01	H	7.8773	0.0297	0.072	108	A	7.67	7.93		D	22185+6313	I 2	1 C P A								S
110126	7.846	0.009	7.362	0.009		0.478	0.015	G	0.55	0.02	H	7.4100	0.0010	0.009	80		7.40	7.42		C			1								S
110127	11.300	0.091	10.256	0.053		0.897	0.082	T	0.94	0.08	L	10.3558	0.0028	0.028	81		10.30	10.41					1								
110128	8.683	0.019	7.522	0.013		1.027	0.015	G	1.00	0.01	H	7.5641	0.0010	0.012	58		7.55	7.58		C			1								S
110129	9.372	0.016	8.988	0.017		0.364	0.022	T	0.43	0.02	L	9.0259	0.0022	0.018	102		9.00	9.06		C			1								
110130	4.684	0.003	3.017	0.002		1.390	0.003	G	1.37	0.02	A	3.0103	0.0006	0.005	146		3.00	3.02		M	22185−6016	I 1	1 O								S
110131	9.563	0.026	8.485	0.018		0.933	0.024	T	0.93	0.02	L	8.5269	0.0018	0.014	64		8.50	8.55		C			1								
110132	9.080	0.021	8.679	0.021		0.379	0.028	T	0.44	0.03	L	8.7383	0.0017	0.014	51		8.72	8.77					1								
110133	11.026	0.052	9.316	0.021		1.427	0.044	T	1.41	0.07	L	9.3386	0.0022	0.019	105		9.30	9.37		C			1 S								
110134	10.616	0.056	9.185	0.029		1.208	0.049	T	1.17	0.05	L	9.1939	0.0036	0.020	45		9.12	9.22					1								
110135	9.116	0.016	7.326	0.008		1.491	0.014	T	1.51	0.02	L	7.2828	0.0010	0.011	74		7.26	7.30					1								S
110136	9.472	0.013	8.335	0.009		0.978	0.012	T	0.96	0.01	L	8.3932	0.0015	0.016	149		8.37	8.42					1								
110137	8.693	0.013	8.428	0.014		0.252	0.018	T	0.28	0.02	L	8.4861	0.0017	0.013	82		8.46	8.51		C			1								
110138	9.803	0.028	9.077	0.023		0.663	0.003	G	0.72	0.00	H	9.1650	0.0017	0.020	74		9.14	9.20		C			1								
110139	8.182	0.007	8.172	0.009		0.014	0.011	T	0.03	0.01	L	8.2062	0.0015	0.017	155		8.18	8.24		C			1								S
110140	10.976	0.061	10.432	0.061		0.489	0.038	G	0.56	0.04	H	10.4933	0.0037	0.020	67		10.44	10.53					1								G
110141	9.469	0.016	7.870	0.008		1.340	0.014	T	1.30	0.02	L	7.8808	0.0016	0.012	113		7.86	7.91					1								S
110142	8.750	0.011	7.411	0.007		1.136	0.010	T	1.10	0.01	L	7.4552	0.0011	0.011	117		7.43	7.47		C			1								S
110143	9.047	0.015	8.759	0.016		0.273	0.023	T	0.31	0.03	L	8.8035	0.0020	0.014	87		8.77	8.83		C			1								S
110144	9.757	0.014	9.444	0.015		0.297	0.019	T	0.34	0.03	L	9.5141	0.0020	0.026	278		9.47	9.57					1 S								
110145	11.669	0.096	10.773	0.070	B						T *	10.6759	0.0065	0.072	126	*	10.54	10.78		D	22187−4954	I 2	2 C A	BC	56	2.857	0.029		0.34	0.07	G
110146						1.500	0.510	G	4.18	0.96	Q	10.1887	0.1796	1.348	35		8.35	12.01	307.00	P 1 A			1 V								G
110147	9.196	0.012	8.444	0.010		0.679	0.001	G	0.74	0.00	H	8.5300	0.0018	0.022	134		8.49	8.57		D	22187−4954	I 2	1								
110148	8.707	0.010	7.631	0.007		0.941	0.020	G	0.97	0.02	A	7.6914	0.0011	0.011	106		7.67	7.71		C			1								S
110149	9.107	0.018	7.774	0.011		1.131	0.017	T	1.09	0.02	L	7.8112	0.0016	0.013	66		7.79	7.83		C			1								S
110150	9.889	0.025	8.557	0.014		1.130	0.022	T	1.09	0.02	L	8.5909	0.0017	0.016	92		8.56	8.61		C			1								
110151	10.802	0.047	9.803	0.031		0.862	0.044	T	0.87	0.03	L	9.9344	0.0037	0.029	103		9.89	10.00					1								
110152	7.974	0.008	7.743	0.010		0.220	0.015	G	0.24	0.02	H	7.7843	0.0013	0.012	92		7.76	7.80					1								S
110153	9.521	0.017	9.179	0.018		0.324	0.023	T	0.38	0.03	L	9.2287	0.0015	0.013	111		9.20	9.25					1								
110154	9.451	0.017	9.067	0.018		0.391	0.002	G	0.46	0.00	H	9.0823	0.0046	0.033	117		9.04	9.17		U 2			1								P
110155	9.801	0.016	8.031	0.007		1.475	0.014	T	1.49	0.02	L	8.0053	0.0015	0.017	227		7.98	8.03					1								
110156	11.373	0.076	10.080	0.038		1.130	0.012	G	1.22	0.02	I	10.0680	0.0035	0.026	100		10.03	10.12					1								
110157	9.426	0.019	8.113	0.012		1.115	0.018	T	1.08	0.02	L	8.1535	0.0011	0.008	78		8.13	8.17					1								S
110158	10.194	0.021	9.670	0.020		0.480	0.015	G	0.55	0.02	H	9.7012	0.0026	0.028	153		9.64	9.74					1								
110159	8.494	0.015	6.991	0.007		1.264	0.013	T	1.22	0.01	L	7.0209	0.0011	0.008	71		7.01	7.03		C			1								S
110160											T	11.9627	0.0083	0.077	116		11.76	12.07		U			1								D
110161	8.039	0.007	7.325	0.006		0.650	0.010	G	0.71	0.01	H	7.3906	0.0009	0.012	168		7.37	7.41			22189−6819	I 1	1								S
110162	8.814	0.011	8.750	0.014		0.064	0.017	T	0.07	0.02	L	8.7326	0.0017	0.019	138		8.70	8.76					1								
110163	9.511	0.020	9.149	0.022		0.382	0.015	G	0.45	0.02	H	9.2279	0.0047	0.039	90		9.15	9.28	1.07	P 1 A			1								
110164	9.760	0.022	8.554	0.014		1.032	0.020	T	1.00	0.02	L	8.6300	0.0022	0.017	86		8.60	8.65		C			1								
110165	10.529	0.045	8.532	0.016		1.655	0.038	T	1.68	0.04	L	8.4225	0.0020	0.017	70		8.39	8.46					1								S
110166	7.048	0.004	6.911	0.006		0.132	0.007	T	0.15	0.01	L	6.9385	0.0009	0.009	102		6.92	6.96		C			1								S
110167	11.903	0.170	10.983	0.130		0.755	0.126	G	0.80	0.11	R	10.9261	0.0050	0.037	71		10.87	10.99		C			1								G
110168	11.690	0.110	10.285	0.051		1.187	0.095	T	1.15	0.09	L	10.3905	0.0050	0.029	87		10.33	10.45					1								
110169	9.222	0.017	8.042	0.011		1.011	0.016	T	0.99	0.01	L	8.0926	0.0012	0.009	77		8.07	8.12		D	22189−1133	I 1	1 S								S
110170	9.508	0.021	8.847	0.018	B	0.613	0.024	T	0.68	0.02	L	9.1485	0.0666			B				D	22189+3745	I 3	1 C I A								
110171	6.506	0.004	6.200	0.004	A	0.270	0.000	G	0.30	0.00	H	6.2474	0.0054	0.023	104	A	6.22	6.29		D	22189+3745	I 3	1 C P A								S
110172	10.753	0.044	9.822	0.032		0.809	0.042	T	0.84	0.03	L	9.9267	0.0023	0.024	80		9.88	9.98		D			1 X								G
110173											T	11.4099	0.0100	0.078	96		11.22	11.52			22189+3745	I 3	1 X S								G G
110174	9.852	0.023	8.689	0.014		0.998	0.021	T	0.98	0.02	L	8.7566	0.0018	0.020	136		8.73	8.79		C			1								G
110175	9.678	0.024	8.528	0.016		0.988	0.022	T	0.97	0.02	L	8.5609	0.0018	0.014	68		8.54	8.59		C			1								
110176	10.785	0.056	9.940	0.041		0.766	0.002	G	0.81	0.00	H	9.9642	0.0023	0.018	78		9.92	10.01					1								
110177	8.379	0.007	8.399	0.009		−0.016	0.010	T	0.01	0.01	L	8.3776	0.0044	0.063	176		8.28	8.47		U 2 C			1 S								
110178	10.287	0.023	9.721	0.022		0.534	0.024	T	0.61	0.03	L	9.7610	0.0028	0.027	154		9.71	9.80					1								
110179	7.347	0.006	6.084	0.004		1.075	0.004	G	1.04	0.00	H	6.1292	0.0007	0.007	86		6.12	6.15					1								S
110180	10.506	0.043	10.269	0.053		0.280	0.040	G	0.32	0.05	R	10.2731	0.0030	0.025	115		10.23	10.32		C			1								G
110181	8.833	0.012	7.564	0.008		1.081	0.011	T	1.04	0.01	L	7.6159	0.0010	0.009	115		7.60	7.64		C			1								S
110182	8.833	0.009	7.514	0.006		1.120	0.008	T	1.08	0.01	L	7.5542	0.0010	0.010	160		7.54	7.57		C			1								S
110183	7.605	0.006	7.546	0.008	*	0.059	0.009	T	0.07	0.01	L *	7.5392	0.0010	0.011	125	*	7.52	7.56		D	22191+7601	H 1	2 C A	AB	191	0.417	0.005		1.87	0.03	S
110184	7.833	0.006	7.237	0.006		0.556	0.006	T	0.63	0.01	L	7.2901	0.0009	0.009	105		7.28	7.31		C			1								S
110185	7.781	0.006	7.518	0.008		0.278	0.015	G	0.32	0.02	H	7.5597	0.0012	0.011	102		7.54	7.57					1								S
110186	9.035	0.014	9.125	0.020		0.070	0.015	G	0.08	0.02	H	9.1308	0.0031	0.027	129		9.08	9.18		U			1								
110187	9.583	0.028	8.929	0.026		0.599	0.002	G	0.67	0.00	H	9.0248	0.0035	0.020	51		9.01	9.08		C			1								
110188	10.546	0.026	8.753	0.011		1.523	0.023	T	2.35	0.09	O	8.5748	0.0163	0.138	179		8.25	8.72		U 2			1								P
110189	9.830	0.024	7.901	0.010		1.560	0.015	G	1.57	0.09	H	7.8102	0.0022	0.017	80		7.79	7.84		U 2			1								S
110190	11.697	0.106	10.595	0.062		0.951	0.096	T	0.94	0.07	L	10.7178	0.0031	0.033	117		10.66	10.79		C			1 S								G
110191	8.366	0.009	7.223	0.005		0.983	0.008	T	0.96	0.01	L	7.2738	0.0008	0.009	139		7.26	7.29		C			1								S
110192	10.479	0.050	9.836	0.045		0.563	0.015	G	0.64	0.01	H	10.0578	0.0071	0.036	41		9.95	10.10		U	22193−1047	I 2	1								
110193	10.262	0.044	8.822	0.022	A	1.147	0.015	G	1.11	0.01	H	8.9528	0.0129	0.022	43	A	8.91	8.98			22193−1047	I 2	2 C B	AB	56	11.664	0.058		2.78	0.17	
110194	8.520	0.009	7.176	0.006		1.140	0.008	T	1.10	0.01	L	7.2179	0.0008	0.009	118		7.20	7.23		C			1								S
110195											T	12.3678	0.0103	0.111	128		11.97	12.56		U			1 S								G
110196	11.980	0.110	10.216	0.034		1.470	0.091	T	1.48	0.14	L	10.1652	0.0040	0.037	155		10.11	10.22		U			1 S								G
110197	10.580	0.039	9.283	0.023		1.103	0.035	T	1.07	0.04	L	9.3638	0.0021	0.019	73		9.34	9.40		R	22193−3142	I 1	1								
110198	8.868	0.010	7.010	0.005		1.545	0.009	T	1.61	0.02	L	6.9622	0.0015	0.013	157		6.94	6.98		M			1								S
110199	10.499	0.035	9.810	0.031		0.664	0.007	G	0.73	0.01	H	9.8984	0.0031	0.021	80		9.85	9.93		C			1								
110200	9.767	0.021	8.987	0.017	*	0.816	0.009	G	0.84	0.01	H *	9.0040	0.0038	0.039	113	*	8.95	9.06		U 2	22193+5857	H 1	2 C A	AB	139	0.511	0.029		3.00	0.18	

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	13	mas 14	15	mas 16	mas/yr 17	18	19	20	21	22	23	24	25	26	27	28	% 29	30
110201	22 19 21.40	−46 41 08.7	7.93	H	334.839 177 25	−46.685 747 32	3.50	26.22	−2.12	0.79	0.51	1.05	0.90	0.57	− 2	−14	−23	+11	−17	+39	− 8	− 3	+15	+19	0	−1.12
110202	22 19 22.00	−40 17 02.5	7.83	1 H	334.841 667 41	−40.284 021 90	1.82	9.18	−1.19	0.85	0.68	1.11	0.94	0.71	+24	−23	−18	− 5	− 1	+22	+ 3	+24	− 6	+28	0	−0.98
110203	22 19 23.49	+14 04 12.3	7.97	H	334.847 865 82	+14.070 075 96	7.60	−1.17	−2.26	0.79	0.64	0.93	0.92	0.71	+27	+17	− 3	+14	+ 7	−15	+ 8	+ 8	+14	+18	0	−0.78
110204	22 19 23.70	+15 32 44.8	6.91	2 G	334.848 762 20	+15.545 790 13	2.60	10.07	−9.04	0.68	0.54	0.82	0.81	0.66	+16	+ 6	− 7	− 5	+12	− 1	+12	− 2	+ 1	+15	0	0.38
110205	22 19 25.06	+12 27 36.1	7.98	H	334.854 432 56	+12.460 030 53	23.88	66.56	−98.29	0.93	0.61	0.98	1.45	0.73	+ 6	+12	− 2	−42	+20	− 3	+25	−15	+19	−23	0	−1.02
110206	22 19 25.30	−59 17 54.2	8.16	1 H	334.855 411 33	−59.298 375 06	1.74	35.98	−9.66	0.67	0.63	1.06	0.75	0.64	− 1	−13	−17	−19	+ 8	+11	+10	+ 4	−25	+ 3	1	0.70
110207	22 19 25.74	+60 08 52.0	6.87	1 H	334.857 264 80	+60.147 780 61	1.51	−0.22	0.63	0.49	0.48	0.56	0.56	0.53	−13	+ 5	+14	+35	−14	+ 7	−17	− 2	+10	−19	0	−0.42
110208	22 19 26.03	−08 30 21.7	8.19	H	334.858 453 36	−08.506 029 92	3.75	−35.79	−27.62	0.95	0.91	1.14	1.08	0.92	+47	− 7	−22	−10	−27	+31	−22	−26	+ 3	+47	5	1.45
110209	22 19 27.02	−71 24 31.1	9.19	H	334.862 580 75	−71.408 635 76	8.80	34.88	−67.12	0.72	0.77	1.06	0.81	0.79	−12	+ 9	− 4	− 1	+ 8	−10	+ 6	− 6	−15	− 1	2	0.93
110210	22 19 27.24	−23 48 08.3	8.20	H	334.863 504 79	−23.802 312 54	2.60	−5.91	4.18	0.99	0.69	1.06	1.10	0.75	+34	−33	−42	−41	− 8	+16	−10	−31	+19	+40	0	−0.40
110211	22 19 28.79	−60 47 57.8	8.74	G	334.869 948 57	−60.799 377 07	B 7.04	17.52	−2.07	1.80	2.32	2.72	1.93	2.19	−33	− 2	+ 0	+28	− 4	+13	− 7	− 9	−13	−44	3	0.40
110212	22 19 30.26	−60 47 33.5	8.28	H	334.876 081 14	−60.792 648 64	A 3.98	15.34	1.09	2.42	3.20	2.30	1.61	1.85	−33	− 3	+ 3	+24	− 4	+15	− 7	− 5	−11	−41	3	0.40
110213	22 19 30.73	+51 28 14.8	11.28	3 H	334.878 056 08	+51.470 787 54	−4.64	26.83	−5.09	12.24	12.03	15.72	13.53	12.86	+ 3	− 6	− 3	−24	+10	+ 0	+ 7	−20	+13	+24	0	
110214	22 19 31.60	+64 47 19.0	7.38	H	334.881 654 11	+64.788 599 34	10.60	−21.04	−40.51	0.57	0.57	0.67	0.69	0.64	−23	− 7	+ 2	−10	+10	− 2	+ 7	−22	+26	−20	0	0.76
110215	22 19 32.82	+43 37 24.2	9.46	H	334.886 758 04	+43.623 376 17	0.38	19.42	0.10	0.87	0.84	1.27	1.04	0.96	−18	− 1	+18	+35	+ 0	+ 0	+ 0	+12	− 2	−18	1	1.50
110216	22 19 33.40	+60 56 51.1	9.40	H	334.889 150 90	+60.947 526 50	2.28	3.62	2.29	0.78	0.74	0.87	0.96	1.00	−15	+ 0	− 1	+27	−10	+10	−14	− 7	+ 6	−25	0	−0.98
110217	22 19 33.60	−11 54 59.5	8.57	H	334.890 010 35	−11.916 514 23	10.67	−14.84	1.49	1.05	0.92	1.22	1.42	1.09	+50	− 5	−11	−10	−23	+14	−19	−51	+21	+61	0	−0.51
110218	22 19 34.13	+21 22 00.0	10.30	H	334.892 195 77	+21.366 668 66	20.12	370.21	204.07	1.45	1.42	1.71	1.59	1.83	+26	+16	−16	−30	−14	+ 8	− 6	−45	+19	+37	0	−0.04
110219	22 19 34.39	−16 42 15.0	7.28	H	334.893 272 02	−16.704 156 95	22.36	39.85	−82.26	0.78	0.55	0.91	0.90	0.60	+27	−22	−23	−11	− 4	+15	− 9	−20	+37	+26	2	1.25
110220	22 19 34.57	+14 36 35.6	8.82	H	334.894 041 85	+14.609 896 60	4.92	12.16	−7.94	0.93	0.86	1.15	1.21	1.03	+33	+ 4	+ 5	− 7	+ 5	−10	+ 6	+ 6	+ 0	+23	0	0.96
110221	22 19 35.01	+21 01 26.8	7.59	H	334.895 872 47	+21.024 121 77	4.55	−17.77	−28.65	0.79	0.73	1.02	0.88	0.96	+19	+20	−11	−20	−11	+ 8	− 2	−35	+30	+33	0	0.80
110222	22 19 36.15	+38 53 26.2	10.38	H	334.900 608 65	+38.890 602 23	2.49	8.14	−4.99	1.35	1.22	1.72	1.93	1.48	+ 2	+15	−21	+ 9	+13	−16	+ 9	+ 3	+ 2	+ 6	2	1.73
110223	22 19 36.72	−09 48 03.0	8.61	H	334.902 997 04	−09.800 845 06	5.03	−4.04	−24.04	1.24	0.94	1.41	1.79	1.04	+34	+ 9	− 7	− 1	+ 4	− 9	+ 2	− 3	− 1	+41	0	1.90
110224	22 19 38.53	−00 35 52.3	9.00	G	334.910 541 21	−00.597 856 13	1.80	−11.68	−3.77	1.49	1.05	1.51	2.52	1.14	+13	+27	+14	+58	− 7	+46	−30	+ 2	− 9	−30	0	−0.53
110225	22 19 40.39	+16 09 46.5	7.89	H	334.918 300 42	+16.162 927 03	4.90	2.73	3.77	0.72	0.62	0.87	0.83	0.80	+23	− 1	− 1	− 5	+13	+ 7	+14	+ 6	+ 7	+30	0	−0.32
110226	22 19 40.49	+01 24 45.5	10.08	H	334.918 704 03	+01.412 630 97	5.08	9.62	−33.80	1.48	1.03	1.61	2.03	1.20	+44	− 6	− 9	+29	+18	+ 6	+12	−17	− 1	+35	2	−0.09
110227	22 19 41.25	−63 16 00.6	8.17	G	334.921 875 23	−63.266 820 47	4.28	−22.14	22.26	0.52	0.56	0.88	0.63	0.56	−18	− 6	−22	−16	− 5	+ 7	− 1	− 4	− 5	−23	1	−0.68
110228	22 19 41.39	−01 48 24.8	8.76	H	334.922 438 95	−01.806 899 61	4.82	−53.53	−47.78	1.07	0.87	1.19	1.24	0.85	+25	+ 6	+ 2	+20	+ 3	+ 9	+ 2	+16	− 4	+12	0	1.56
110229	22 19 42.72	+83 32 00.9	8.63	G	334.928 006 72	+83.533 571 08	14.17	298.50	40.47	0.77	0.66	0.81	0.95	0.69	+ 0	−15	+24	−26	− 2	+20	− 6	− 4	+ 3	+ 1	0	−0.28
110230	22 19 44.60	+52 52 52.7	7.73	G	334.935 839 28	+52.881 303 19	2.99	14.20	4.06	0.57	0.54	0.75	0.62	0.60	− 8	+ 8	− 5	− 8	+14	−14	+19	−22	+18	+19	0	−1.65
110231 H	22 19 44.85	−82 37 54.7	9.01	H	334.936 862 00	−82.631 858 75	A 6.81	−10.02	−18.76	1.12	0.96	1.10	1.30	1.04	+ 0	−21	−16	−12	+ 0	− 5	− 2	−23	+ 7	−14	1	−0.98
110232	22 19 45.34	+73 02 26.1	8.42	H	334.938 907 58	+73.040 580 49	2.69	11.02	−4.03	0.60	0.60	0.69	0.68	0.64	+ 1	− 9	+13	−31	− 3	− 4	− 2	−12	+ 4	− 3	0	0.03
110233	22 19 46.22	−33 33 26.8	8.54	H	334.942 594 49	−33.557 441 37	0.20	6.48	−6.19	0.95	0.96	1.28	1.00	0.90	+36	−19	−32	−10	−10	+24	+ 0	+25	− 7	+26	0	−0.27
110234 H	22 19 47.10	−55 35 07.9	8.05	H	334.946 230 00	−55.585 539 98	A 5.85	−28.26	11.77	1.04	0.98	1.39	1.30	0.95	+11	− 4	−23	+ 6	− 2	+ 2	+ 1	+ 0	− 7	+16	2	0.60
110235	22 19 47.16	−41 39 08.4	9.04	H	334.946 490 99	−41.652 345 73	3.25	109.18	6.80	0.97	0.96	1.24	1.07	0.99	+26	−13	−12	+ 1	+15	+13	+15	+39	− 2	+29	0	−0.77
110236	22 19 47.42	+76 07 26.0	7.70	H	334.947 573 11	+76.123 900 29	4.54	−2.17	−11.97	0.54	0.51	0.59	0.61	0.54	− 3	−11	+19	+ 9	− 3	−12	− 2	− 1	+ 2	− 4	0	−0.80
*110237 H	22 19 48.12	−76 07 19.6	8.40	H	334.950 496 82	−76.122 102 99	A 5.30	38.10	−19.28	1.07	1.07	1.13	1.04	0.94	+ 5	− 3	−15	+17	− 6	−11	+ 0	−18	+ 2	− 8	4	0.29
*110238	22 19 48.03	−27 23 19.5	7.77	H	334.950 116 56	−27.388 763 09	5.39	−31.86	−1.62	1.00	0.57	1.04	1.01	0.55	+13	+18	−13	−29	+11	+ 4	+13	−23	+20	+24	2	0.71
110239	22 19 48.64	+16 47 43.5	8.13	H	334.952 676 99	+16.795 415 42	3.29	−0.60	−6.70	0.98	0.69	1.08	1.33	0.96	+ 5	+ 0	−13	−32	+18	+ 0	+20	+ 1	+24	− 2	0	0.99
110240	22 19 49.04	−04 03 58.3	7.75	1 H	334.954 350 26	−04.066 202 61	4.82	−26.44	−20.96	0.95	0.64	0.98	1.29	0.59	+ 6	+12	−12	+10	+ 7	+11	+ 2	+11	−16	−15	0	−0.11
110241	22 19 49.80	+66 25 19.4	8.48	H	334.957 513 93	+66.422 048 86	4.51	10.36	2.26	0.67	0.72	0.76	0.79	0.79	−11	+ 6	− 1	+27	+22	− 7	+24	−19	+26	− 3	1	−0.68
110242	22 19 49.84	+46 54 01.4	8.18	H	334.957 678 20	+46.900 390 35	3.78	−7.03	−6.90	0.62	0.55	0.80	0.68	0.62	−19	+19	+ 1	− 4	+19	− 8	+22	−10	+12	−13	1	−0.65
110243	22 19 50.53	−47 59 34.7	8.62	H	334.960 544 08	−47.992 961 79	2.72	62.32	−6.24	0.63	0.62	1.12	0.69	0.68	+18	−23	−15	−21	+11	+18	+ 9	+22	+ 4	+25	0	0.47
110244	22 19 52.40	−36 34 34.0	10.38	G	334.968 353 59	−36.576 114 97	−0.85	47.07	33.13	2.82	2.55	3.57	3.14	2.50	+25	− 2	−27	− 6	−10	+18	− 2	+17	−13	+14	0	
110245	22 19 52.52	−37 16 30.3	10.17	G	334.968 843 59	−37.275 074 62	27.62	90.47	−141.32	1.54	1.42	2.04	1.79	1.40	+24	+ 6	−28	+17	+ 5	+33	+15	+31	− 1	+24	0	−0.26
110246	22 19 53.12	+28 51 30.9	8.68	H	334.971 349 29	+28.858 593 53	2.67	5.33	1.12	0.80	0.93	1.18	1.04	1.26	+27	+ 0	− 2	+33	−15	−12	−18	−35	+10	+21	0	0.14
110247	22 19 53.98	+25 43 26.6	7.29	G	334.974 923 49	+25.724 042 29	3.53	−19.01	−27.02	0.63	0.64	0.85	0.69	0.75	+18	+ 2	−34	+ 8	− 3	−10	− 5	−37	+31	+18	0	0.73
110248	22 19 54.12	−76 29 41.4	8.42	H	334.975 491 84	−76.494 821 29	14.82	114.45	−35.15	0.62	0.59	0.76	0.76	0.71	− 2	−12	− 4	+ 4	+10	− 5	+10	−12	− 3	− 4	0	−0.92
110249	22 19 55.03	+52 00 25.7	7.94	H	334.979 302 43	+52.007 125 08	13.64	90.49	−4.91	0.61	0.57	0.78	0.65	0.60	− 9	+ 3	−11	− 6	+24	− 5	+26	−18	+18	+25	0	0.16
110250	22 19 55.35	+12 27 06.9	7.62	1 G	334.980 628 87	+12.451 927 38	3.36	18.58	−5.01	0.92	0.58	0.95	1.54	0.73	− 1	+18	−16	−47	+25	− 8	+28	−23	+17	−29	0	−1.01
110251	22 19 56.00	+16 52 21.5	8.95	2 H	334.983 319 55	+16.872 640 15	1.68	−4.50	−5.07	1.14	0.88	1.32	1.64	1.08	+ 7	+11	−23	−17	+23	+14	+26	+ 6	+10	+ 5	0	0.62
110252 H	22 19 56.57	−36 41 41.9	9.73	H	334.985 702 33	−36.694 968 31	A 3.49	32.56	1.94	4.91	3.21	4.42	5.00	3.10	+14	−14	−15	+24	+ 4	− 4	+ 9	+22	−26	+ 5	2	0.86
110253	22 19 58.83	+47 28 21.7	7.84	H	334.995 124 35	+47.472 691 22	4.43	22.25	−5.82	0.53	0.51	0.71	0.60	0.55	−17	+15	+14	− 6	+24	+ 0	+25	−15	+12	− 9	0	−0.34
110254	22 20 00.54	+51 15 02.2	8.73	H	335.002 259 90	+51.250 598 27	1.18	−0.83	−4.41	0.79	0.73	1.03	0.89	0.78	− 8	+11	−15	−16	+24	−19	+22	−16	+12	+24	2	2.60
110255	22 20 00.87	−22 01 07.6	7.72	H	335.003 630 69	−22.018 784 83	2.89	38.04	−37.09	0.87	0.67	1.00	1.21	0.81	+34	−26	−28	+13	+ 9	+ 5	+ 7	+ 9	+10	+32	0	1.22
*110256	22 20 01.48	−80 26 22.7	5.09	2 H	335.006 167 56	−80.439 643 01	12.15	56.36	−42.78	0.44	0.45	0.54	0.52	0.49	+ 3	−16	−16	+20	+ 2	− 7	+ 2	− 5	− 8	+ 0	2	1.09
*110257	22 20 01.29	−66 11 50.5	9.03	H	335.005 376 68	−66.197 366 58	2.56	14.73	−1.73	0.75	0.82	1.21	0.93	0.83	− 6	+ 6	−19	+ 7	+20	−26	+14	−10	−14	+ 5	0	1.04
*110258	22 20 01.38	−49 03 38.1	10.93	G	335.005 764 94	−49.060 584 14	28.72	255.38	−167.51	1.44	1.27	2.23	1.69	1.38	+14	− 1	−24	−21	+ 2	− 8	+ 0	+ 7	+18	+15	3	−0.21
110259	22 20 01.67	−63 37 41.6	8.73	1 H	335.006 973 91	−63.628 225 63	0.96	15.37	−0.08	0.61	0.65	1.03	0.76	0.71	−13	− 1	−22	− 9	+ 9	+ 1	− 7	+ 2	− 1	−24	0	−0.69
110260	22 20 02.57	−66 53 09.4	7.59	H	335.010 690 96	−66.885 934 92	6.43	72.83	−43.86	0.52	0.53	0.74	0.62	0.52	−18	+ 7	−14	−13	+14	− 9	+12	−16	− 3	−17	0	0.27
110261	22 20 03.37	+31 08 54.3	9.35	H	335.014 055 82	+31.148 428 34	2.37	6.62	−11.46	0.68	0.88	1.19	0.72	1.12	+32	−13	− 7	−12	+ 0	− 9	+ 5	−19	+ 2	+54	1	1.96
110262	22 20 04.17	−33 41 15.9	7.98	G	335.017 389 41	−33.687 751 88	14.61	4.59	−7.07	0.93	0.77	1.09	1.09	0.76	+13	−12	−16	+24	−29	+24	−23	+15	− 5	+ 0	0	0.77
110263	22 20 04.52	−52 58 45.9	8.62	H	335.018 833 26	−52.979 413 52	1.37	1.37	5.82	0.72	0.64	1.05	0.88	0.71	+11	+ 1	−16	+ 9	+ 6	+11	+10	− 3	+ 8	+32	1	0.81
110264	22 20 05.69	−38 45 54.2	7.84	H	335.023 690 68	−38.765 059 88	5.21	−32.34	−28.56	0.79	0.69	1.00	0.91	0.65	+26	−14	−25	+18	− 9	+14	− 3	+22	− 3	+19	0	−0.89
110265	22 20 06.22	+02 46 59.4	8.31	H	335.025 925 23	+02.783 163 42	4.89	22.31	1.97	1.16	0.78	1.21	1.31	0.84	+30	+ 8	+ 7	−27	+ 5	+ 7	+ 0	− 49	+ 3	+13	0	−0.94
110266	22 20 06.24	+56 55 04.8	6.55	G	335.025 990 45	+56.918 002 04	3.90	19.08	5.11	0.45	0.50	0.56	0.56	0.56	− 4	+ 4	+21	− 2	− 3	− 9	+ 7	−44	− 1	+16	0	1.23
110267	22 20 07.26	+32 50 48.7	10.96	H	335.030 231 98	+32.846 847 68	−0.84	−4.58	−3.58	1.11	1.33	1.80	1.24	1.58	+23	+ 4	−12	− 3	+ 6	− 5	+ 8	−16	+17	+35	0	−0.01
110268	22 20 07.67	+41 28 04.2	9.59	H	335.031 961 80	+41.467 845 89	3.96	15.39	20.86	0.77	0.87	1.28	0.85	0.93	−49	+11	− 4	+33	−15	− 2	−12	− 2	+ 9	−45	1	3.07
110269	22 20 07.95	−26 14 30.2	9.75	H	335.033 138 42	−26.241 720 52	1.68	−12.09	8.18	1.41	0.84	1.46	1.77	0.81	+ 2	+13	−13	−21	+26	−11	+21	−22	+22	− 6	0	0.16
110270	22 20 09.12	+77 34 36.7	8.27	H	335.037 996 47	+77.576 872 74	3.70	19.53	12.28	0.60	0.57	0.65	0.71	0.63	−12	− 6	+19	+30	−14	− 9	−11	+15	+10	− 8	0	0.17
110271	22 20 09.93	−44 21 52.6	9.12	G	335.041 388 85	−44.364 597 56	2.54	49.63	−35.09	1.15	0.81	1.38	1.87	0.99	−11	+13	−20	+10	−13	− 3	−10	+28	−13	−34	0	0.17
110272	22 20 11.58	−31 55 38.8	9.78	H	335.048 260 79	−31.927 443 53	7.34	17.85	−33.02	1.24	1.20	1.59	1.53	1.40	+38	− 3	−24	+ 3	−11	+24	− 6	+19	− 7	+41	0	1.16
110273	22 20 11.91	−07 49 16.0	5.35	H	335.049 614 99	−07.821 105 92	4.39	15.21	1.61	0.70	0.61	0.80	0.81	0.60	+30	+ 9	−16	−14	−18	+22	−16	−37	+ 2	+25	5	3.03
*110274	22 20 12.54	+21 49 01.3	8.52	H	335.052 262 28	+21.817 022 79	3.49	2.62	−4.66	1.04	0.84	1.17	1.30	1.08	− 8	+ 0	+12	−34	+ 8	+ 9	+ 7	−36	+22	− 4	2	0.30
*110275	22 20 12.52	+56 25 12.8	9.35	H	335.052 148 57	+56.420 209 41	3.95	14.71	5.78	0.83	0.82	0.99	1.05	0.95	+ 5	+ 8	− 2	−14	− 7	−18	+ 0	−38	+ 3	+33	0	−1.42
110276 H	22 20 12.72	+29 31 07.6	8.12	H	335.052 996 73	+29.518 765 91	A 9.13	84.38	19.45	1.59	1.70	1.69	1.41	1.53	+14	− 3	−11	+27	−10	−18	−15	−20	−10	+20	1	0.08
110277	22 20 15.11	+48 38 22.8	9.69	H	335.062 950 07	+48.639 680 03	2.47	1.87	−4.00	0.78	0.73	1.08	0.78	0.76	− 7	+22	+ 3	+11	+ 6	− 6	+12	− 6	+18	+ 2	0	0.52
110278	22 20 16.28	−12 13 17.5	7.81	H	335.067 821 40	−12.221 536 76	4.35	47.62	−10.47	0.88	0.75	1.03	1.07	0.81	+49	−18	−20	−15	−18	+27	−20	−49	+27	+50	0	−0.42
110279	22 20 16.76	−33 53 33.9	10.65	H	335.069 825 11	−33.892 741 59	3.85	−6.89	−43.39	1.65	1.30	2.01	1.83	1.28	+18	+ 9	−17	− 4	−23	+30	−16	+ 8	+ 3	+ 8	0	−0.24
110280	22 20 17.47	+57 59 31.2	10.49	H	335.072 772 80	+57.992 008 47	1.72	2.91	3.79	1.32	1.24	1.59	1.43	1.20	+ 6	+22	+33	+ 1	+10	+17	+ 9	−32	+ 1	+15	0	−1.11
110281	22 20 17.68	+30 14 20.6	9.05	H	335.073 649 10	+30.239 044 12	2.60	−9.00	1.20	0.82	0.84	1.05	1.07	1.07	+20	+ 3	−22	+34	−12	+ 6	−11	−25	+ 6	+22	0	−0.20
110282	22 20 18.71	−79 17 41.3	8.40	H	335.077 965 36	−79.294 797 81	3.18	−0.96	−1.85	0.59	0.61	0.74	0.70	0.81	− 2	−21	− 9	+16	− 4	− 4	−10	+ 5	+24	− 8	0	1.79
110283	22 20 19.66	−53 12 23.1	11.16	H	335.081 926 34	−53.206 411 66	7.73	160.86	−104.64	2.64	2.49	3.99	3.37	2.74	+22	−17	−13	+14	+ 7	+ 8	+10	+ 7	−10	+28	1	
110284	22 20 20.37	−29 43 12.1	9.04	H	335.084 887 77	−29.720 021 74	2.95	−0.04	0.99	1.05	0.80	1.36	1.16	0.77	+45	+12	+11	+19	− 2	+32	− 3	−26	+19	+48	0	−0.76
110285	22 20 20.65	+82 58 14.5	9.08	H	335.086 044 44	+82.970 682 87	16.31	182.43	46.63	0.70	0.71	0.82	0.86	0.76	+ 3	−13	+24	+ 7	+11	+15	+ 6	+17	− 2	+16	0	−0.37
110286	22 20 21.20	+11 02 20.6	7.49	H	335.088 341 75	+11.039 068 58	3.42	26.41	2.54	0.83	0.63	1.03	1.09	0.77	+21	− 9	− 6	− 5	+ 8	+29	+ 6	−22	+22	+16	0	−0.14
110287	22 20 22.71	+51 51 39.6	7.24	2 H	335.094 612 07	+51.861 001 45	1.10	3.01	0.18	0.51	0.50	0.67	0.56	0.52	−13	− 1	− 9	−15	+28	−12	+25	−14	+14	+19	0	0.77
110288	22 20 22.84	−51 06 31.4	9.16	H	335.095 165 76	−51.108 720 28	4.67	47.88	−19.44	0.78	0.68	1.27	1.08	0.82	+22	−22	− 7	+23	−17	− 1	−11	+ 6	− 8	+20	1	−0.35
110289	22 20 23.01	−43 30 09.6	7.57	H	335.095 885 31	−43.502 654 40	5.56	−4.86	−55.32	0.82	0.70	0.99	1.04	0.72	+ 1	+ 7	−18	+34	−15	+27	−10	+36	− 6	−21	2	−0.31
110290	22 20 23.39	+36 18 24.0	8.88	G	335.097 448 32	+36.306 657 51	5.54	−23.35	−17.27	0.82	0.76	1.03	1.32	0.92	+11	+ 7	+ 0	+14	−10	+ 6	− 8	+14	−10	−13	2	1.51
110291	22 20 24.01	+46 25 06.3	8.50	G	335.100 040 65	+46.418 409 89	17.39	−190.34	−64.41	0.99	0.95	1.30	1.07	1.01	−20	+ 9	+ 4	− 6	+12	− 2	+12	−14	+ 5	−19	0	
110292	22 20 24.33	+02 51 06.1	12.11	G	335.101 371 77	+02.851 684 73	14.65	101.86	−28.16	3.63	2.35	3.79	4.34	2.84	+19	+ 9	+10	−21	+16	+ 3	+15	−30	−12	+18	0	0.88
110293	22 20 25.09	+22 13 40.8	9.81	H	335.104 533 71	+22.227 992 91	5.28	14.00	−13.29	1.26	1.09	1.56	1.53	1.40	+14	+ 9	−18	+ 8	− 4	− 9	− 9	−44	+28	+ 2	2	1.70
110294	22 20 25.74	+58 05 05.3	9.61	G	335.107 258 23	+58.084 798 34	17.41	−9.47	5.87	1.02	1.03	1.29	1.19	0.99	+ 4	+19	+34	− 2	+ 7	+22	+ 1	−36	− 8	+ 8	0	−0.30
110295	22 20 25.96	+40 22 29.3	9.28	H	335.108 171 96	+40.374 802 03	4.14	18.41	3.31	0.64	0.86	1.24	0.70	0.99	−42	+12	−14	+17	+11	− 1	+17	−15	+ 6	−29	0	0.15
110296	22 20 26.22	−10 13 38.8	9.88	G	335.109 234 82	−10.227 442 04	2.03	15.58	−10.32	1.73	1.09	1.68	2.55	1.26	+ 3	+13	+16	−23	+ 4	− 3	+ 4	−22	+ 1	− 1	0	−1.07
110297	22 20 26.96	+33 32 34.9	9.13	H	335.112 340 01	+33.543 027 63	1.47	3.00	−2.27	0.68	0.69	0.99	0.87	0.87	+21	− 2	− 6	+ 8	+ 1	− 1	+ 2	− 7	+16	+27	0	−1.14
110298	22 20 27.56	+05 47 22.2	5.37	H	335.114 853 93	+05.789 492 88	3.55	20.33	2.10	0.69	0.49	0.77	0.96	0.53	+18	+10	+19	+21	+14	+26	+ 6

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
110201	8.098	0.008	7.945	0.008		0.133	0.002	G	0.15	0.00	H	7.9807	0.0020	0.015	115		7.95	8.01					1							S
110202	9.921	0.027	8.027	0.012		1.573	0.023	T	1.59	0.02	L	7.9451	0.0027	0.021	72		7.92	7.98		U			1							S
110203	8.237	0.010	7.994	0.010		0.232	0.013	T	0.26	0.02	L	8.0441	0.0016	0.012	89		8.02	8.07		C			1							S
110204						1.660	0.020	G	1.64	0.02	J	7.0175	0.0019	0.021	96		6.97	7.05		U 2			1							S
110205	8.792	0.015	8.066	0.013		0.666	0.016	T	0.73	0.01	L	8.1157	0.0015	0.010	83		8.10	8.14		C			1							S
110206	10.172	0.023	8.334	0.010		1.529	0.020	T	1.57	0.04	L	8.2778	0.0023	0.023	148		8.24	8.31		U			1							S
110207	8.015	0.009	7.026	0.006		0.866	0.008	T	0.88	0.01	L	7.0241	0.0017	0.017	121		7.00	7.06		U 2			1							S
110208	9.400	0.026	8.277	0.018		0.967	0.025	T	0.95	0.02	L	8.3513	0.0034	0.013	48		8.33	8.37					1							
110209	9.784	0.017	9.273	0.017		0.490	0.018	T	0.56	0.02	L	9.3020	0.0022	0.026	168		9.25	9.34					1							
110210	9.419	0.017	8.302	0.012		0.953	0.015	G	0.94	0.01	J	8.3623	0.0015	0.011	85		8.35	8.38		C			1							
110211	9.268	0.015	8.707	0.014	B	0.511	0.015	G	0.58	0.02	H	8.8318	0.0091			B				D	22195−6048	I 2	1 C I B							S
110212	9.327	0.013	8.356	0.009	A	0.820	0.042	G	0.86	0.04	H	8.4393	0.0074	0.030	220	A	8.38	8.49		D	22195−6048	I 2	1 C P B							
110213											T	11.3618	0.0201	0.254	124		10.80	11.62	0.43	P 1 A			1 X S							D P
110214	7.743	0.008	7.416	0.008		0.330	0.001	G	0.38	0.00	H	7.4618	0.0011	0.013	115		7.45	7.49					1							S
110215	11.133	0.046	9.608	0.020		1.282	0.039	T	1.24	0.04	L	9.6143	0.0022	0.031	168		9.58	9.67					1							
110216	9.729	0.021	9.417	0.024		0.340	0.015	G	0.40	0.02	H	9.4791	0.0021	0.016	118		9.45	9.51		C			1							G
110217	9.160	0.016	8.617	0.015		0.516	0.016	T	0.59	0.02	L	8.6836	0.0018	0.016	88		8.66	8.72					1							S
110218	11.386	0.086	10.263	0.050		1.586	0.218	G	2.57	0.50	I	10.3027	0.0063	0.037	73		10.23	10.36					1							G
110219	7.909	0.010	7.353	0.008		0.526	0.010	T	0.60	0.01	L	7.3991	0.0013	0.010	82		7.38	7.42					1							S
110220	10.859	0.047	8.988	0.018		1.555	0.040	T	1.57	0.04	L	8.9391	0.0028	0.021	85		8.91	8.97		C			1							
110221	9.066	0.014	7.687	0.008		1.167	0.013	T	1.13	0.01	L	7.7560	0.0018	0.013	80		7.74	7.78		C			1							S
110222	12.225	0.185	10.471	0.060		1.462	0.154	T	1.47	0.24	L	10.5156	0.0038	0.040	95		10.45	10.57					1							G
110223	10.007	0.032	8.718	0.020		1.096	0.030	T	1.06	0.03	L	8.7797	0.0032	0.016	46		8.75	8.80		C			1							
110224	10.557	0.054	9.215	0.030		1.370	0.015	G	1.34	0.02	H	9.1602	0.0024	0.015	50		9.12	9.18					1							
110225	8.185	0.010	7.910	0.013		0.273	0.015	G	0.31	0.02	H	7.9610	0.0016	0.015	98		7.94	7.99		C			1							S
110226	11.071	0.050	10.197	0.038		0.780	0.047	T	0.82	0.03	L	10.2316	0.0031	0.024	94		10.20	10.28		C			1							
110227	8.680	0.007	8.216	0.007		0.453	0.006	G	0.52	0.01	H	8.2733	0.0013	0.016	230		8.24	8.30					1							S
110228	9.450	0.025	8.853	0.024		0.557	0.031	T	0.63	0.03	L	8.8846	0.0026	0.018	51		8.83	8.92					1							
110229	9.315	0.016	8.674	0.014		0.580	0.020	G	0.65	0.02	H	8.7649	0.0020	0.016	113		8.74	8.80					1							
110230	9.784	0.022	7.884	0.009		1.570	0.015	G	1.58	0.09	H	7.8535	0.0015	0.015	118		7.84	7.88					1							
110231	9.903	0.020	9.108	0.016	*	0.705	0.020	T	0.76	0.02	L	*	9.1448	0.0017	0.020	122	*	9.11	9.17		D	22197−8238	H 1	2 C A	AB	102	0.885	0.013	2.69	0.06	
110232	10.351	0.027	8.583	0.011		1.473	0.023	T	1.49	0.03	L		8.5451	0.0016	0.016	130		8.52	8.58		C			1							
110233	10.415	0.034	8.666	0.016		1.458	0.030	T	1.46	0.05	L		8.6772	0.0018	0.014	72		8.65	8.70		C			1							
110234	9.253	0.014	8.194	0.010	*	0.918	0.013	T	0.92	0.01	L	*	8.2125	0.0013	0.015	118	*	8.19	8.24		D	22198−5535	I 1	2 C A	AB	218	0.920	0.013	2.65	0.06	S
110235	9.909	0.023	9.119	0.018		0.701	0.022	T	0.76	0.02	L		9.1761	0.0019	0.014	81		9.14	9.20					1							
110236	7.860	0.007	7.707	0.008		0.147	0.010	T	0.16	0.01	L		7.7494	0.0011	0.010	118		7.73	7.77		C			1							S
110237	8.979	0.011	8.446	0.010	*	0.500	0.013	T	0.57	0.01	L	*	8.5065	0.0016	0.016	137	*	8.48	8.54		C	22198−7607	H 1	2 C D	AB	52	0.420	0.068	4.00	0.33	S D
110238	9.044	0.015	7.884	0.010		0.996	0.014	T	0.97	0.01	L		7.9343	0.0012	0.012	101		7.91	7.95					1							S
110239	9.415	0.017	8.229	0.011		1.016	0.016	T	0.99	0.01	L		8.2972	0.0019	0.014	82		8.27	8.32		C			1							
110240	8.017	0.013	7.772	0.012		0.233	0.017	T	0.26	0.02	L		7.8188	0.0036	0.020	51		7.80	7.85		U			1 G							S
110241	8.595	0.011	8.483	0.013		0.109	0.016	T	0.12	0.02	L		8.5265	0.0018	0.015	110		8.50	8.55		C			1							S
110242	9.980	0.024	8.330	0.011		1.380	0.021	T	1.35	0.03	L		8.3275	0.0015	0.018	155		8.30	8.35					1							
110243	10.065	0.017	8.722	0.010		1.139	0.015	T	1.10	0.02	L		8.7868	0.0016	0.019	179		8.75	8.82					1							
110244	10.928	0.057	10.477	0.064		0.523	0.015	G	0.60	0.02	H		10.4795	0.0043	0.034	76		10.41	10.53		C	22199−3635	I 1	1 X							
110245	11.595	0.100	10.216	0.047		1.240	0.015	G	1.20	0.01	H		10.2617	0.0039	0.033	82		10.19	10.32					1 S							
110246	9.987	0.024	8.770	0.015		1.040	0.022	T	1.01	0.02	L		8.8421	0.0015	0.017	103		8.80	8.87		C			1							
110247	9.410	0.018	7.500	0.008		1.590	0.015	G	1.60	0.09	H		7.4139	0.0015	0.012	91		7.39	7.43					1							S
110248	9.123	0.012	8.481	0.010		0.590	0.012	T	0.66	0.01	L		8.5510	0.0017	0.016	132		8.53	8.58		C			1							S
110249	8.454	0.012	7.984	0.010		0.485	0.015	G	0.56	0.02	H		8.0449	0.0014	0.016	128		8.02	8.07		C			1							S
110250	8.077	0.010	7.663	0.013		0.383	0.015	G	0.45	0.02	H		7.7173	0.0016	0.013	86		7.70	7.74		M			1							S
110251	11.000	0.053	9.209	0.021		1.522	0.047	T	2.66	0.07	O		8.9520	0.0085	0.072	88		8.86	9.11		U 2			1							P
110252	10.232	0.042	9.698	0.041	*	0.509	0.044	T	0.58	0.05	L	*	9.8478	0.0033	0.029	75	*	9.80	9.91		D	22199−3642	I 1	2 C A	AB	302	6.625	0.007	0.27	0.03	
110253	7.976	0.007	7.853	0.008		0.119	0.010	T	0.13	0.01	L		7.8896	0.0012	0.013	157		7.86	7.91		C			1							S
110254	10.560	0.038	8.909	0.016		1.381	0.033	T	1.35	0.04	L		8.8772	0.0016	0.018	141		8.85	8.92			22200+5115	I 1	1 S							
110255	8.996	0.018	7.816	0.012		1.011	0.017	T	0.99	0.01	L		7.8838	0.0017	0.012	59		7.86	7.90		C			1							S
110256	6.810	0.006	5.317	0.006		1.276	0.007	T	3.21	0.02	O		4.9203	0.0052	0.045	137		4.85	4.98		U 2			1 S							S
110257	10.659	0.030	9.163	0.014		1.259	0.026	T	1.22	0.03	L		9.1958	0.0025	0.025	157		9.16	9.25					1							
110258						1.287	0.005	G	1.47	0.01	I		11.0398	0.0039	0.048	130		10.94	11.10					1							G
110259	10.092	0.018	8.839	0.011		1.068	0.016	T	1.03	0.01	L		8.8987	0.0020	0.026	219		8.85	8.94		U			1 S							
110260	8.012	0.006	7.631	0.007		0.382	0.004	G	0.45	0.00	H		7.6757	0.0012	0.014	172		7.65	7.70					1							S
110261	9.774	0.018	9.377	0.019		0.376	0.024	T	0.44	0.03	L		9.4446	0.0027	0.030	160		9.40	9.50		R			1							
110262	8.572	0.012	8.055	0.011		0.506	0.015	G	0.58	0.02	H		8.0909	0.0018	0.017	73		8.06	8.13		C			1							S
110263	10.058	0.020	8.769	0.012		1.096	0.018	T	1.06	0.02	L		8.7930	0.0017	0.017	139		8.76	8.83		C			1							
110264	9.225	0.016	7.950	0.010		1.086	0.015	T	1.05	0.01	L		8.0037	0.0019	0.013	90		7.99	8.03					1							S
110265	9.676	0.022	8.446	0.014		1.050	0.020	T	1.02	0.02	L		8.4761	0.0021	0.013	96		8.46	8.50		C			1							
110266	6.463	0.003	6.533	0.004		−0.057	0.005	G	−0.04	0.01	H		6.5374	0.0006	0.006	118		6.53	6.55					1							S
110267	12.079	0.129	10.970	0.074		0.956	0.116	T	0.94	0.09	L		11.1257	0.0029	0.041	166		11.06	11.20		C			1							G
110268	9.851	0.014	9.635	0.018		0.206	0.021	T	0.23	0.02	L		9.6584	0.0023	0.030	259		9.61	9.72					1							G
110269	11.130	0.073	9.863	0.038		1.079	0.064	T	1.04	0.05	L		9.9171	0.0025	0.021	87		9.88	9.96		C			1							
110270	8.478	0.008	8.290	0.009		0.154	0.015	G	0.17	0.01	H		8.3288	0.0018	0.015	130		8.31	8.36		C			1							
110271	10.014	0.029	9.222	0.023		0.753	0.007	G	0.80	0.01	H		9.2678	0.0030	0.020	87		9.24	9.30		C			1							
110272	10.321	0.035	9.778	0.035		0.516	0.037	T	0.59	0.04	L		9.8932	0.0021	0.017	71		9.86	9.93		D			1							
110273	5.274	0.004	5.340	0.005		−0.048	0.016	G	−0.03	0.02	A		5.3365	0.0015	0.006	54		5.33	5.35					1							S
110274	8.528	0.014	8.513	0.017		0.019	0.020	T	0.04	0.02	L		8.5337	0.0023	0.020	64		8.50	8.57					1							S
110275	9.602	0.021	9.396	0.025		0.197	0.031	T	0.22	0.04	L		9.4142	0.0021	0.018	116		9.38	9.45		C			1							G
110276	8.764	0.011	8.253	0.010	*	0.480	0.014	T	0.55	0.01	L	*	8.2260	0.0016	0.013	103	*	8.19	8.25		D	22202+2931	I 1	2 C A	AB	283	0.854	0.003	0.59	0.02	
110277	9.781	0.020	9.701	0.027		0.079	0.031	T	0.09	0.03	L		9.7169	0.0027	0.028	147		9.67	9.77		C			1							G
110278	9.132	0.016	7.941	0.010		1.020	0.015	T	0.99	0.01	L		7.9772	0.0011	0.012	89		7.96	8.01					1							
110279	11.245	0.069	10.785	0.080		0.434	0.097	T	0.50	0.10	L		10.7430	0.0032	0.027	66		10.70	10.79		C			1							G
110280	11.146	0.066	10.524	0.059		0.550	0.015	G	0.62	0.01	H		10.6087	0.0046	0.034	110		10.55	10.66		C			1							D
110281	9.246	0.018	9.065	0.020		0.173	0.025	T	0.19	0.03	L		9.1093	0.0022	0.016	96		9.08	9.14		C			1							
110282	8.659	0.009	8.419	0.010		0.224	0.014	T	0.25	0.02	L		8.4658	0.0015	0.016	137		8.43	8.50					1							S
110283	12.100	0.146	11.255	0.112		0.759	0.139	T	0.80	0.10	L		11.3056	0.0073	0.060	137		11.17	11.40					1 X							G
110284	10.846	0.041	9.138	0.017		1.426	0.035	T	1.41	0.06	L		9.1783	0.0017	0.017	122		9.14	9.21					1							
110285	9.924	0.025	9.119	0.020		0.712	0.024	T	0.77	0.02	L		9.2222	0.0021	0.018	119		9.19	9.25		C			1							
110286	9.192	0.014	7.638	0.008		1.304	0.013	T	1.26	0.01	L		7.6503	0.0012	0.011	94		7.63	7.68		C	22204+1102	I 1	1							S
110287	7.219	0.006	7.287	0.008		0.046	0.005	G	0.06	0.00	H		7.2643	0.0043	0.044	132		7.19	7.32		U 2			1							S
110288	9.695	0.014	9.224	0.014		0.457	0.015	T	0.53	0.02	L		9.2623	0.0018	0.020	189		9.23	9.29		C			1							
110289	9.054	0.014	7.693	0.008		1.153	0.013	T	1.12	0.01	L		7.7337	0.0023	0.013	82		7.71	7.76		C			1							S
110290	9.251	0.014	8.895	0.015		0.358	0.015	G	0.42	0.02	H		8.9621	0.0018	0.019	111		8.92	9.01		C			1							
110291	9.133	0.015	8.574	0.014		0.586	0.015	G	0.66	0.01	H		8.6040	0.0018	0.017	148		8.57	8.64					1 X							
110292						1.457	0.001	G	1.84	0.00	I		12.2306	0.0092	0.077	75		12.12	12.34					1							D
110293	10.374	0.041	9.883	0.041		0.462	0.053	T	0.53	0.06	L		9.9086	0.0038	0.022	66		9.86	9.96		C			1							
110294	10.694	0.043	9.731	0.030		0.840	0.015	G	0.88	0.01	H		9.7606	0.0029	0.028	113		9.71	9.80					1							G
110295	9.815	0.014	9.331	0.014		0.456	0.018	T	0.53	0.02	L		9.3792	0.0021	0.028	240		9.33	9.43					1							
110296	12.002	0.194	10.174	0.059		1.578	0.020	G	1.58	0.09	H		9.9258	0.0059	0.033	45		9.89	9.98					1							
110297	9.095	0.012	9.127	0.016		−0.025	0.018	T	0.00	0.02	L		9.1333	0.0018	0.017	135		9.10	9.17		C			1							
110298	5.325	0.003	5.371	0.003		−0.037	0.004	T	−0.01	0.00	L		5.3648	0.0006	0.006	80		5.36	5.38		C	22205+0547	I 1	1							S
110299	10.085	0.033	9.094	0.023		0.867	0.030	T	0.88	0.02	L		9.1304	0.0020	0.021	70		9.10	9.16		C			1							
110300	8.538	0.009	7.025	0.005		1.272	0.008	T	1.23	0.01	L		7.0601	0.0011	0.010	113		7.04	7.07					1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%		
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
110301	22 20 29.12	+35 07 03.2	9.80	H	335.121 320 03	+35.117 556 98	B	9.32	5.06	−14.15	12.20	13.64	9.82	8.19	9.25	+18	+ 9	+ 7	+ 7	− 9	−23	− 3	−22	+32	+14		3	1.04
110302	22 20 29.23	−00 03 55.1	7.63	G	335.121 810 10	−00.065 294 99		9.86	88.42	59.43	0.99	0.65	1.08	1.49	0.68	+31	+28	+22	+22	+28	+28	+ 9	− 8	− 8	− 3		2	0.91
110303	22 20 29.91	−50 47 49.2	9.27	H	335.124 636 29	−50.796 989 93		9.12	−5.01	−5.33	0.77	0.71	1.26	1.00	0.80	+32	−13	− 8	− 8	−16	+18	−14	− 2	+ 6	+34		0	0.78
110304	22 20 30.23	+61 34 39.7	8.12	H	335.125 960 33	+61.577 705 89		8.58	−46.77	−69.31	0.58	0.59	0.66	0.65	0.64	−17	− 6	+ 5	+15	+ 8	− 4	+ 8	−23	+ 5	−17		0	0.74
110305	22 20 31.21	+35 06 53.4	7.48	G	335.130 034 32	+35.114 819 91	A	8.37	−29.07	−35.32	1.48	1.59	1.59	1.50	1.49	+ 8	+12	− 8	+11	+ 1	−17	+ 5	−19	+26	+13		3	1.04
110306	22 20 31.33	−65 13 56.5	8.66	H	335.130 552 29	−65.232 373 86		8.02	−8.73	15.18	0.65	0.74	1.06	0.76	0.76	−20	− 2	−19	+ 6	+12	− 5	+11	− 9	− 1	−16		0	0.31
110307	22 20 32.02	+69 21 47.6	7.69	H	335.133 431 20	+69.363 235 73		14.55	−85.95	−45.11	0.59	0.56	0.67	0.78	0.63	− 3	−22	+21	+ 8	+22	+18	+17	+10	− 2	+19		0	−1.25
110308	22 20 33.71	+39 19 15.5	9.48	H	335.140 453 31	+39.320 961 49		1.86	1.83	−5.00	1.05	0.92	1.25	1.29	1.12	+14	− 4	− 7	+36	+15	−15	+17	+ 5	+ 6	+22		0	0.08
110309	22 20 34.64	+54 50 31.3	7.41	H	335.144 342 60	+54.842 028 46		21.02	201.48	−84.00	0.48	0.47	0.61	0.53	0.49	− 9	− 7	+ 1	− 1	+ 9	+ 2	+10	−18	+14	+11		0	−0.42
110310 H	22 20 35.29	+53 48 53.1	8.28	G	335.147 032 93	+53.814 740 14	A	0.67	−5.27	−3.68	1.57	1.48	1.69	1.47	1.44	− 7	− 7	−13	−10	+15	−13	+13	−13	+ 7	+27		0	1.84
110311	22 20 36.25	−57 30 35.1	6.41	H	335.151 024 17	−57.509 761 73		4.18	25.71	−8.89	0.41	0.44	0.70	0.48	0.44	− 1	− 3	−17	−13	+ 1	+ 9	+ 3	− 4	−12	+ 2		0	−1.12
110312	22 20 37.59	−30 46 27.1	10.19	H	335.156 628 62	−30.774 198 40		2.26	11.87	−12.72	1.33	1.07	1.71	1.58	1.14	+48	+ 0	− 2	+21	+ 1	+30	+ 4	− 6	+22	+56		0	1.25
110313	22 20 38.14	+62 20 17.6	9.54	H	335.158 931 58	+62.338 220 68		0.85	−3.21	−4.23	0.88	0.87	1.02	1.11	1.04	−12	+18	+22	+ 5	+ 8	+ 5	+ 9	−24	+ 0	− 9		0	0.16
110314	22 20 38.77	+58 24 35.5	6.46	H	335.161 555 98	+58.409 853 02		5.46	−3.35	21.17	0.45	0.47	0.55	0.52	0.48	−14	+ 2	+19	+ 6	+ 0	+16	− 2	−32	− 9	−14		0	−0.09
110315	22 20 39.47	−36 32 23.1	8.78	H	335.164 454 24	−36.539 742 28		2.18	−19.88	−72.91	1.06	1.27	1.46	1.18	1.33	+36	− 2	−37	+19	+16	+17	+25	+59	−16	+32		0	−0.03
110316	22 20 39.52	+50 58 50.9	6.40	1 H	335.164 659 20	+50.980 815 44		1.98	2.54	−0.41	0.47	0.43	0.61	0.46	0.43	−12	+20	−10	−16	+17	−23	+20	−21	+14	+12		0	0.10
110317	22 20 39.63	+74 12 10.4	9.36	1 H	335.165 138 40	+74.202 881 49		3.48	5.90	1.27	0.76	0.69	0.83	0.93	0.70	− 8	−14	+ 8	+ 1	+ 6	+ 3	+ 4	− 4	+10	+ 2		1	−0.71
110318	22 20 39.77	+71 41 31.5	8.21	H	335.165 713 92	+71.692 095 04		4.08	33.66	7.35	0.62	0.58	0.67	0.71	0.61	+ 6	+ 1	+11	+32	+12	−13	+17	+ 5	− 1	+20		0	−0.51
110319	22 20 40.74	+00 32 47.6	8.37	H	335.169 745 72	+00.546 563 58		2.70	29.04	8.83	1.07	0.64	1.13	1.33	0.67	+18	+27	− 5	−14	+16	− 5	+12	−35	+20	− 7		0	−1.09
110320 H	22 20 40.79	+60 05 37.6	8.48	H	335.169 952 55	+60.093 781 10	*	4.52	0.46	−3.98	1.55	1.44	0.99	1.01	0.95	+ 1	+18	+15	+28	− 2	+ 1	+ 2	+14	+13	+ 7		1	0.49
110321	22 20 41.82	+49 58 53.5	8.81	2 H	335.174 261 00	+49.981 541 36		3.92	−10.80	−5.80	0.74	0.74	0.99	0.79	0.76	−11	−15	+ 5	+10	+11	− 3	+18	−23	+ 0	+14		1	3.25
110322	22 20 42.25	+49 58 16.8	8.84	2 H	335.176 027 46	+49.971 327 42		6.17	−36.00	−11.29	0.75	0.74	1.02	0.77	0.76	−15	−24	+10	− 1	+17	− 6	+22	−18	− 5	+12		5	1.56
110323	22 20 42.33	+14 01 56.5	6.55	H	335.176 355 85	+14.032 351 30		7.59	24.66	−23.29	0.64	0.54	0.76	0.75	0.59	+31	+11	− 6	+ 8	+ 1	−15	− 2	−12	+ 8	+18		0	0.77
110324	22 20 42.86	+23 03 39.4	8.03	H	335.178 594 51	+23.060 932 68		2.46	−11.40	−7.97	0.81	0.76	1.09	0.88	0.93	+ 9	+13	−43	+ 0	+ 2	−20	− 1	−38	+30	+16		0	1.69
110325	22 20 44.56	−34 30 59.4	6.92	H	335.185 655 04	−34.516 496 95		3.41	−61.13	−31.19	0.79	0.64	1.00	0.92	0.65	+16	+ 4	−12	+14	−15	+38	− 9	+26	+10	+11		0	1.82
110326	22 20 44.75	+24 57 24.7	8.34	H	335.186 443 29	+24.956 865 03	A	1.41	−5.30	−1.75	1.69	1.45	1.70	1.46	1.48	+ 8	+ 1	−37	− 6	+ 7	− 9	+ 8	−27	+20	+24		3	0.38
110327	22 20 45.71	+56 06 50.0	8.75	G	335.190 474 37	+56.113 896 71		15.44	7.24	−21.70	0.72	0.72	0.88	0.79	0.77	+10	+ 1	+ 5	−11	− 8	− 5	− 4	−27	+ 9	+32		0	−1.66
110328	22 20 46.83	−58 54 22.0	8.66	1 H	335.195 140 62	−58.906 120 27		1.56	14.51	−9.16	0.74	0.73	1.20	0.85	0.72	−12	− 6	−22	− 9	+ 3	+13	+ 5	+ 7	−12	− 9		0	1.08
*110329 H	22 20 49.07	−80 27 14.3	8.43	H	335.204 478 01	−80.453 980 95	B	11.97	−9.07	−23.75	1.95	1.93	2.10	2.25	1.97	− 3	− 5	− 6	− 2	− 3	+ 8	− 2	−13	−10	− 9		4	1.90
*110330	22 20 47.55	+06 56 58.5	8.25	H	335.198 108 62	+06.949 578 71		14.60	71.27	−134.07	0.96	0.67	1.07	1.10	0.72	+13	+ 8	+15	−10	+ 7	+13	+ 5	−21	+ 9	+ 2		4	0.68
*110331	22 20 48.53	−35 54 16.6	9.40	H	335.202 192 62	−35.904 618 97		4.34	0.12	−13.44	1.15	1.09	1.53	1.32	1.10	+27	+ 4	−35	+ 7	− 8	+28	+ 3	+33	− 9	+22		0	1.04
*110332	22 20 48.94	−37 18 09.9	9.62	H	335.203 899 84	−37.302 753 32		6.50	24.47	−29.60	1.23	1.12	1.62	1.44	1.14	+22	− 5	−17	+13	− 1	+29	+ 6	+28	−15	+11		2	−1.71
110333	22 20 49.11	−13 58 42.4	9.03	H	335.204 609 58	−13.978 443 65		5.67	25.29	−1.25	1.11	0.82	1.38	1.30	0.93	+37	−18	−26	−16	+ 5	+27	+ 4	−27	+39	+44		0	−0.22
110334	22 20 49.88	−61 40 14.6	9.29	H	335.207 846 24	−61.670 723 13		5.65	22.60	11.28	0.57	0.71	1.18	0.67	0.73	−32	−16	+ 0	− 6	+ 1	+ 5	+ 3	−14	− 8	−34		0	−0.65
110335	22 20 50.71	+08 16 29.4	9.34	G	335.211 303 15	+08.274 833 54		4.31	−2.30	−23.60	1.24	0.87	1.43	1.61	0.99	+11	+23	−15	−28	+15	−18	+17	−14	+25	− 6		0	0.32
110336	22 20 51.15	+26 41 18.5	9.76	H	335.213 135 53	+26.688 474 70		1.40	−11.98	−8.97	1.09	1.02	1.36	1.28	1.33	+ 8	+ 7	−13	+18	− 6	−13	−11	−40	+13	+ 1		0	0.22
110337	22 20 51.29	−42 18 23.4	12.44	G	335.213 712 10	−42.306 487 50		19.70	502.24	−280.51	3.39	2.67	4.09	3.71	2.77	+ 5	+ 0	− 4	+ 0	+ 0	+15	+ 0	+29	− 1	+ 6		0	−1.85
110338	22 20 51.34	−08 45 55.7	7.20	H	335.213 935 15	−08.765 474 49		6.90	15.55	−24.55	0.85	0.69	1.01	0.95	0.78	+29	+ 2	−12	− 8	+ 1	+30	+ 6	−10	+ 0	+39		6	0.35
110339	22 20 51.46	+46 03 44.5	7.43	H	335.214 402 62	+46.062 367 36		20.31	4.79	−50.76	0.47	0.48	0.68	0.53	0.51	−24	+ 9	+10	− 2	+11	+ 1	+10	− 7	+ 1	−29		2	−0.66
110340	22 20 55.70	−41 25 48.5	8.65	H	335.232 067 64	−41.430 135 41		21.12	55.47	13.84	0.93	0.77	1.20	1.06	0.74	+12	+13	−17	+23	+ 0	+28	+ 5	+25	+ 3	+18		0	−0.36
110341	22 20 55.77	+08 11 12.1	6.18	H	335.232 386 65	+08.186 689 42		31.45	43.67	21.60	0.82	0.50	0.83	1.01	0.58	− 6	+20	−14	−38	+25	−18	+28	−13	+27	−19		0	0.08
110342	22 20 55.80	−60 25 49.9	7.89	H	335.232 486 80	−60.430 531 51		5.27	3.67	3.98	0.53	0.55	0.87	0.55	0.56	+ 1	− 1	− 9	+37	+14	+13	+14	+11	−17	− 3		0	1.07
110343	22 20 56.54	−42 44 56.7	9.25	H	335.235 568 32	−42.749 084 38		4.40	8.75	−5.87	1.30	0.91	1.39	1.62	0.93	− 7	+ 7	−10	+35	−11	+ 7	− 9	+40	+ 0	−21		0	0.32
110344 H	22 20 57.62	+66 57 54.3	7.28	G	335.240 064 57	+66.965 088 01	A	9.31	43.50	28.60	0.71	0.73	0.75	0.76	0.73	− 6	− 1	+24	+19	+17	+ 3	+17	− 8	+14	− 1		2	0.73
110345	22 20 59.42	+51 04 33.4	8.89	H	335.247 601 89	+51.075 935 76		2.76	8.72	2.12	0.75	0.66	0.96	0.76	0.70	− 7	+11	−14	− 2	+19	−23	+22	−11	+10	+23		0	−0.13
110346	22 21 00.05	+26 56 06.6	6.46	2 H	335.250 199 94	+26.935 180 51		4.11	14.05	−7.42	0.62	0.56	0.77	0.69	0.71	+ 2	+20	−20	+ 7	− 4	+ 3	+ 3	−34	+26	+ 8		0	0.33
110347	22 21 00.23	+35 37 18.9	10.14	H	335.250 978 19	+35.621 919 80		−1.23	−7.76	−19.69	1.23	1.15	1.60	1.45	1.39	+ 7	+16	+ 4	+28	− 7	− 8	−10	−19	+15	− 8		2	0.01
110348	22 21 00.43	+06 21 52.4	9.50	H	335.251 784 59	+06.364 549 01		3.95	11.53	−4.10	1.23	0.78	1.30	1.51	0.85	+10	+19	− 5	− 7	+14	+ 9	+14	−19	+15	− 3		0	−0.52
110349	22 21 00.58	+06 35 27.3	7.88	H	335.252 415 62	+06.590 930 38		18.41	108.93	2.98	0.96	0.59	1.01	1.20	0.70	+ 6	+20	− 2	−23	+15	−21	+18	−14	+17	− 7		0	0.09
110350	22 21 01.04	−14 55 07.2	8.27	H	335.254 326 15	−14.918 658 12		3.23	17.95	−0.55	1.01	0.77	1.19	1.26	0.83	+18	−11	−10	−29	+11	+24	+ 3	−43	+38	+15		0	0.28
110351	22 21 01.53	+46 32 11.6	4.55	1 H	335.256 367 92	+46.536 564 84		6.40	21.72	1.92	0.40	0.39	0.52	0.37	0.38	−28	+16	+ 6	−25	+16	− 4	+18	−19	+ 9	−28		1	−0.01
110352	22 21 01.76	+41 35 53.3	7.97	H	335.257 341 54	+41.598 127 97		4.35	−24.71	−16.28	0.48	0.57	0.87	0.53	0.65	−49	+ 4	− 5	+32	−13	+ 4	−12	− 7	+ 0	−48		1	0.55
110353 H	22 21 01.80	+31 18 35.5	7.51	H	335.257 520 38	+31.309 868 41	A	2.61	−1.75	−25.90	1.83	2.24	1.09	0.84	1.05	+70	−18	−31	−23	− 3	− 6	− 7	−20	+ 9	+49		1	0.15
110354	22 21 01.90	+15 19 02.1	11.77	H	335.257 896 62	+15.317 244 42		18.51	258.67	61.63	2.49	1.88	2.98	3.08	2.18	+23	+ 0	− 1	−19	+ 5	− 7	+ 5	−14	+19	+ 7		0	0.54
110355	22 21 03.74	−62 32 53.5	6.61	H	335.265 580 75	−62.548 187 75		14.70	161.75	−44.91	0.39	0.47	0.67	0.46	0.54	−30	− 1	−11	−13	+ 9	− 6	+ 9	−18	+ 1	−35		1	2.11
110356	22 21 03.88	+55 59 09.0	8.01	G	335.266 153 25	+55.985 822 74		3.35	11.77	3.26	0.53	0.55	0.67	0.63	0.63	+ 5	− 4	+ 3	− 7	− 7	− 3	− 2	−26	+10	+30		0	−1.87
110357	22 21 04.44	−69 59 49.1	11.25	2 H	335.268 507 44	−69.996 967 38		11.59	149.29	−208.54	1.94	1.81	2.60	2.25	1.99	− 3	+ 5	+ 0	+12	−13	−11	−13	+ 6	+ 5	−11		0	1.87
110358	22 21 06.44	+01 02 06.5	7.68	H	335.276 843 52	+01.035 126 46		15.89	155.75	−83.23	0.94	0.55	0.97	1.12	0.56	+24	− 2	+ 8	+14	+24	− 3	+10	−16	+13	+10		0	−0.32
110359	22 21 06.83	−05 07 00.4	9.78	H	335.278 442 44	−05.116 772 72		5.98	33.27	−44.79	1.57	1.31	1.90	1.93	1.38	+27	+ 6	−33	+ 5	−33	+18	−28	−57	+46	+18		0	−2.01
110360 H	22 21 07.75	−31 26 26.3	10.98	H	335.282 299 38	−31.440 631 78	*	5.90	−17.87	−19.16	5.36	4.20	2.93	2.85	2.35	+37	−10	− 7	+ 3	− 3	+23	− 2	− 3	+10	+54		1	−0.20
110361	22 21 08.10	+48 14 24.0	7.62	H	335.283 749 27	+48.240 003 28		2.91	5.97	−5.26	0.47	0.45	0.65	0.49	0.47	−12	+ 9	+ 3	+ 6	+12	− 4	+13	+ 4	+ 6	+ 0		0	−0.20
110362	22 21 09.74	+55 33 03.9	9.58	G	335.290 577 26	+55.551 075 62		1.50	−3.86	−2.13	0.84	0.85	1.05	0.93	0.88	− 3	+ 2	+ 0	−12	+ 2	+ 4	+ 5	−29	+10	+19		0	−1.54
110363	22 21 11.14	+17 58 10.7	7.36	H	335.296 417 66	+17.969 646 13		9.08	−11.61	−35.65	0.71	0.55	0.83	0.79	0.69	+22	+ 2	−17	+42	+16	−26	+13	+17	+13	+23		0	0.47
110364	22 21 12.17	−74 58 03.2	7.30	2 H	335.300 710 90	−74.967 562 69		3.38	10.17	−6.04	0.57	0.53	0.71	0.62	0.52	− 6	− 6	−18	−26	+ 2	+ 0	+ 3	−18	−13	−11		0	−0.26
110365	22 21 12.32	+08 40 53.9	9.22	H	335.301 342 94	+08.681 643 32		11.62	264.40	−107.00	1.35	0.90	1.46	1.86	1.02	+ 9	+17	+26	−28	+22	+ 9	+19	−18	+13	− 6		0	0.13
110366	22 21 12.85	−47 34 47.0	9.42	H	335.303 542 88	−47.579 722 28		9.24	96.45	−67.27	0.85	0.80	1.34	0.83	0.92	+13	−17	−11	−28	+17	+16	+13	+20	+ 6	+28		0	0.72
110367	22 21 14.82	+25 26 47.0	8.58	H	335.311 754 95	+25.446 393 56		11.15	−76.53	−20.12	0.74	0.73	1.02	0.80	0.96	+11	+ 6	−31	+16	+ 3	−18	+ 3	−19	+24	+22		0	0.35
110368	22 21 16.84	+18 48 46.4	9.85	H	335.320 178 58	+18.812 893 57		3.10	22.76	11.42	1.18	1.08	1.46	1.34	1.31	+26	+ 9	−21	+13	+20	−17	+18	+20	+ 5	+30		0	0.03
110369	22 21 18.02	+36 58 53.9	8.65	H	335.325 098 02	+36.981 646 37		5.33	26.16	6.73	1.00	0.78	1.10	1.71	1.01	− 0	+ 6	−14	−36	+ 6	+ 9	+10	− 6	+ 6	−10		0	−0.65
110370	22 21 18.43	+05 43 42.6	8.49	2 H	335.326 797 10	+05.728 498 43		7.27	37.22	−39.45	0.95	0.74	1.09	1.25	0.74	+25	− 1	+23	+14	+17	+25	+ 6	− 1	+ 9	+ 5		0	−1.26
110371 H	22 21 19.33	+28 19 49.9	4.78	H	335.330 531 66	+28.330 515 92	A	5.37	17.42	5.60	0.65	0.73	0.71	0.59	0.65	+21	+15	−15	+50	− 2	+16	−11	−16	− 2	+16		1	−0.64
110372	22 21 20.26	+08 37 16.8	7.78	H	335.334 419 60	+08.621 322 28		6.35	16.26	−35.75	0.97	0.62	1.01	1.36	0.72	+ 7	+ 8	+ 9	−18	+18	− 3	+16	−18	+10	−15		0	−0.26
110373 H	22 21 21.13	+41 47 48.1	8.34	1 H	335.338 024 01	+41.796 700 13	*	3.25	−2.23	−5.81	0.93	1.10	1.11	0.75	0.86	−33	−13	+16	+26	− 7	+ 7	− 9	− 2	+13	−30		1	0.07
110374	22 21 22.18	−52 14 53.8	8.44	G	335.342 427 86	−52.248 268 49		8.61	76.75	−27.57	0.64	0.65	1.08	0.82	0.73	+27	− 5	−10	+18	+11	+22	+13	+28	− 4	+34		3	−0.38
110375	22 21 22.65	−12 11 08.9	9.18	H	335.344 362 44	−12.185 809 69		2.88	−2.57	−13.45	1.17	0.91	1.42	1.56	1.00	+26	+ 3	−33	−12	− 1	+ 5	− 1	−35	+31	+27		0	0.89
110376	22 21 22.71	−55 45 52.8	7.77	H	335.344 607 60	−55.764 680 42		14.01	61.31	25.14	0.65	0.60	0.98	0.86	0.59	+ 5	+ 2	−21	+13	− 2	+11	+ 3	− 6	+ 0	+17		0	0.30
110377	22 21 23.60	+07 11 07.5	7.08	H	335.348 328 03	+07.185 417 56		4.40	−3.35	−29.45	0.84	0.56	0.83	1.01	0.59	+ 0	+ 2	+10	−38	+20	+10	+20	−19	+ 6	−12		0	0.22
110378	22 21 23.88	−06 14 35.2	7.49	H	335.349 515 45	−06.243 105 19		6.64	26.79	−9.12	1.23	0.93	1.23	2.05	0.98	+23	+15	− 4	−24	− 7	−27	−19	−57	+ 5	−24		0	0.01
110379	22 21 24.07	−18 30 20.8	8.24	H	335.350 306 98	−18.505 784 24		1.51	38.84	15.40	0.96	0.64	1.05	1.26	0.70	+18	−20	−14	− 5	+17	+20	+14	− 1	+13	+15		0	0.46
110380	22 21 24.57	−51 06 05.1	7.95	G	335.352 363 48	−51.101 408 06		9.29	−16.63	24.29	0.59	0.56	0.98	0.83	0.65	+29	−14	− 3	+27	− 4	+ 3	+ 2	+22	− 9	+29		2	0.98
110381	22 21 26.75	+21 02 53.0	7.68	2 H	335.361 478 56	+21.048 049 49		6.21	21.51	5.69	0.82	0.67	0.92	0.87	0.78	+25	+30	+10	−22	− 5	+ 2	− 3	−16	+10	+30		0	−1.24
110382	22 21 27.96	+14 53 49.4	7.64	H	335.366 519 23	+14.897 056 22		3.97	−30.34	26.42	0.73	0.69	0.94	0.84	0.75	+35	+13	− 4	−10	− 6	−15	− 5	−25	+25	+18		0	0.88
110383	22 21 28.77	+14 22 12.7	6.94	H	335.369 877 04	+14.370 206 45		7.40	−13.84	−16.34	0.65	0.54	0.77	0.76	0.59	+29	+15	− 3	+ 6	− 2	−12	− 4	−20	+11	+17		0	−0.01
110384	22 21 29.76	−32 40 57.1	9.12	H	335.373 998 70	−32.682 541 01		1.62	35.64	−16.79	0.99	0.97	1.35	1.11	0.94	+33	− 7	−29	+ 6	−21	+27	−12	+15	−15	+17		0	0.39
110385	22 21 30.23	+03 16 54.9	9.15	H	335.375 961 64	+03.281 910 33		15.00	−30.10	−42.43	1.11	0.83	1.25	1.40	1.03	+27	−13	−13	− 1	+ 4	+ 3	+ 4	−24	− 5	+20		0	−1.13
110386	22 21 31.07	+12 12 18.6	4.82	2 T	335.379 463 77	+12.205 172 62		3.36	6.21	5.54	0.68	0.52	0.79	1.03	0.63	+ 6	− 1	−23	−33	+18	+ 7	+16	−32	+16	−12		0	−2.83
110387	22 21 33.10	+24 04 18.8	8.17	H	335.387 933 22	+24.071 894 06		5.08	30.15	10.57	0.83	0.69	1.00	0.99	0.86	− 9	+ 6	−37	−23	+ 8	− 4	+ 8	−29	+31	− 4		2	1.33
110388	22 21 33.44	−14 27 24.8	7.79	2 H	335.389 323 74	−14.456 893 59		3.44	−1.18	−3.42	1.01	0.70	1.17	1.37	0.95	+32	−28	−26	−39	− 4	+32	− 5	−42	+34	+44		0	−0.11
110389	22 21 33.61	+33 54 25.4	9.71	H	335.390 028 35	+33.907 061 88		2.34	−8.10	−15.79	0.96	1.00	1.36	1.21	1.18	+19	+ 0	− 8	+33	− 5	+ 8	+ 3	−24	+22	+31		0	−0.03
110390	22 21 33.93	+11 35 17.6	8.49	H	335.391 371 16	+11.588 232 51		6.55	1.59	−19.73	0.99	0.69	1.08	1.35	0.84	+ 3	− 2	−21	−44	+16	+ 7	+16	−40	+24	−12		0	1.92
110391	22 21 35.58	−21 35 52.9	5.12	H	335.398 231 08	−21.598 024 35		17.81	−11.34	−84.57	0.76	0.61	0.87	1.12	0.70	+41	−25	−30	− 6	−26	+ 2	−19	−34	− 4	+45		0	0.30
110392	22 21 35.67	−35 56 12.2	8.40	G	335.398 628 74	−35.936 722 64		5.23	−14.90	−1.50	0.91	0.94	1.19	1.04	0.96	+27	− 3	−35	+13	+ 1	+23	+11	+53	−16	+22		3	0.61
110393	22 21 37.92	−28 46 21.6	8.21	G	335.408 006 28	−28.772 653 01		2.93	14.25	−7.69	0.75	0.55	0.96	0.84	0.55	+50	+ 6	+11	+27	− 4	+24	− 2	−13	+17	+56		0	0.14
110394	22 21 38.54	+29 11 36.1	9.28	H	335.410 591 32	+29.193 355 05		3.05	6.01	3.99	0.82	0.94	1.24	1.03	1.41	+19	+ 1	+ 1	+17	− 6	−27	− 2	−23	+ 6	+26		0	−1.21
110395	22 21 39.30	−01 23 14.5	3.86	H	335.413 749 83	−01.387 353 15		20.67	129.24	8.90	1.58	1.19	1.71	2.03	1.25	+21	+ 0	+ 7	+ 3	− 7	− 1	−11	−25	− 2	+ 4		0		
110396	22 21 41.81	−07 36 30.0	8.85	3 H	335.424 209 64	−07.608 325 82		3.51	−16.65	−11.43	1.17	0.90	1.26	1.53	1.06	+14	+15	−12	−16	+ 6	− 1	+ 3	− 4	−12	+13		0	0.86

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
110301	10.220	0.032	9.725	0.032	B	0.466	0.041	T	0.54	0.04	L	9.8137	0.0489			B				D	22205+3507	I 2	1 C I B							
110302	8.200	0.009	7.705	0.013		0.466	0.014	T	0.54	0.01	L	7.7361	0.0014	0.013	66		7.71	7.76		C			1						S
110303	10.109	0.019	9.319	0.015		0.701	0.018	T	0.76	0.01	L	9.4066	0.0020	0.025	173		9.37	9.45					1						
110304	8.856	0.011	8.194	0.010		0.609	0.015	G	0.68	0.01	H	8.2514	0.0010	0.012	118		8.23	8.28					1						
110305	7.840	0.007	7.516	0.008	A	0.358	0.015	G	0.42	0.02	H	7.5618	0.0086	0.014	103	A	7.53	7.58		D	22205+3507	I 2	1 C P B						S
110306	9.082	0.010	8.699	0.010		0.337	0.000	G	0.39	0.00	H	8.7445	0.0018	0.022	178		8.71	8.78					1						S
110307	8.296	0.010	7.746	0.008		0.515	0.011	T	0.59	0.01	L	7.8006	0.0010	0.012	111		7.78	7.82		C			1						S
110308	9.453	0.020	9.509	0.028		−0.046	0.031	T	−0.02	0.03	L	9.4750	0.0032	0.022	91		9.44	9.51		C			1						
110309	8.006	0.008	7.465	0.007		0.497	0.013	G	0.57	0.01	H	7.5229	0.0010	0.009	132		7.51	7.54		C			1						S
110310			8.857	0.024	*	0.718	0.068	G	0.77	0.05	H *	8.3735	0.0012	0.011	118	*	8.35	8.40		D	22206+5349	I 1	2 C A	AB	334	1.137	0.004	0.36	0.02	
110311	8.247	0.008	6.567	0.004		1.404	0.007	T	1.38	0.01	L	6.5510	0.0009	0.010	164		6.53	6.57					1						S
110312	10.887	0.046	10.313	0.045		0.537	0.057	T	0.61	0.06	L	10.3031	0.0035	0.029	105		10.26	10.34		C			1						
110313	9.795	0.022	9.562	0.027		0.230	0.015	G	0.26	0.02	H	9.6109	0.0023	0.021	100		9.58	9.64					1						G
110314	7.709	0.007	6.557	0.004		0.990	0.006	T	0.97	0.01	L	6.6209	0.0005	0.006	120		6.61	6.64					1						S
110315	10.173	0.031	8.891	0.019		1.086	0.029	T	1.05	0.02	L	8.9196	0.0025	0.021	79		8.88	8.96					1						S
110316	7.937	0.008	6.522	0.004		1.195	0.007	T	1.15	0.01	L	6.5649	0.0012	0.012	153		6.55	6.58		M			1						S
110317	9.677	0.019	9.381	0.021		1.230	0.015	G	0.31	0.09	S	9.4351	0.0034	0.033	128		9.40	9.49		R 2			1						G
110318	8.565	0.010	8.232	0.010		0.316	0.013	T	0.36	0.02	L	8.2859	0.0015	0.016	136		8.25	8.32					1						S
110319	8.329	0.012	8.354	0.014		−0.018	0.017	T	0.00	0.02	L	8.3754	0.0015	0.014	85		8.35	8.40		C			1						S
110320	8.788	0.010	8.522	0.011	*	0.253	0.014	T	0.28	0.02	L *	8.5520	0.0016	0.019	121	*	8.53	8.59		D	22207+6006	H 1	2 C A	AB	192	0.277	0.010	1.84	0.12	
110321	9.089	0.017	8.876	0.019		0.203	0.024	T	0.22	0.03	L	8.8773	0.0035	0.034	147		8.83	8.94		U 2			1 S						
110322	9.197	0.016	8.856	0.017		0.323	0.022	T	0.37	0.03	L	8.9196	0.0031	0.031	144		8.86	8.96		U			1 S						
110323	7.743	0.008	6.664	0.005		0.934	0.007	T	0.93	0.01	L	6.7093	0.0009	0.007	86		6.70	6.72		C			1						S
110324	9.220	0.015	8.110	0.011		0.957	0.014	T	0.94	0.01	L	8.1888	0.0019	0.013	92		8.16	8.21					1						S
110325	8.424	0.011	7.059	0.006		1.160	0.015	G	1.14	0.02	A	7.0895	0.0009	0.008	78		7.08	7.11		C			1						S
110326	9.703	0.033	8.447	0.021	A	1.071	0.030	T	1.04	0.03	L	8.5038	0.0102	0.035	89	A	8.48	8.61		D	22208+2457	I 1	2 C A	AB	46	12.589	0.014	1.73	0.06	
110327	9.481	0.019	8.755	0.016		0.560	0.015	G	0.63	0.01	H	8.8667	0.0016	0.016	118		8.83	8.90		C			1						
110328	10.875	0.038	8.855	0.012		1.710	0.033	T	2.02	0.08	O	8.7401	0.0030	0.028	151		8.69	8.78		U			1						
110329	9.097	0.018	8.486	0.017	*	0.569	0.022	T	0.64	0.02	L *	8.5524	0.0024	0.027	152	*	8.52	8.63		D	22208−8027	I 1	2 C A	BA	297	9.310	0.005	0.12	0.02	S
110330	8.873	0.014	8.316	0.013		0.521	0.017	T	0.59	0.02	L	8.3604	0.0018	0.011	82		8.34	8.38		C			1						S
110331	9.871	0.026	9.481	0.027		0.369	0.035	T	0.43	0.04	L	9.4884	0.0030	0.022	70		9.45	9.53		C			1						
110332	10.337	0.037	9.684	0.033		0.597	0.037	T	0.67	0.03	L	9.7489	0.0028	0.022	79		9.70	9.79					1						
110333	9.679	0.023	9.081	0.021		0.558	0.023	T	0.63	0.02	L	9.1556	0.0024	0.016	88		9.13	9.18		C			1						
110334	10.450	0.019	9.400	0.013		0.912	0.017	T	0.91	0.01	L	9.4504	0.0017	0.026	279		9.41	9.50					1						
110335	9.849	0.025	9.393	0.026		0.453	0.007	G	0.52	0.01	H	9.4162	0.0019	0.019	73		9.39	9.45		D			1						
110336	11.333	0.076	9.802	0.033		1.286	0.065	T	1.25	0.07	L	9.9210	0.0027	0.022	81		9.87	9.95		C			1						
110337						1.300	0.025	G	1.49	0.04	I	12.6157	0.0105	0.084	73		12.47	12.79					1						G
110338	8.813	0.016	7.336	0.009		1.244	0.014	T	1.20	0.01	L	7.3633	0.0016	0.011	56		7.35	7.38		C			1						S
110339	7.986	0.007	7.482	0.006		0.474	0.008	T	0.55	0.01	L	7.5372	0.0009	0.010	170		7.52	7.56		C			1						S
110340	9.437	0.017	8.697	0.014		0.663	0.017	T	0.72	0.01	L	8.7800	0.0016	0.015	84		8.75	8.82		D			1						S
110341	6.718	0.005	6.223	0.004		0.451	0.010	G	0.52	0.01	H	6.2808	0.0007	0.006	79		6.27	6.29		C			1						S
110342	8.087	0.006	7.908	0.008		0.164	0.010	T	0.18	0.01	L	7.9520	0.0010	0.017	164		7.92	7.98		C			1						S
110343	10.424	0.036	9.353	0.024		0.927	0.033	T	0.92	0.02	L	9.4138	0.0019	0.021	85		9.37	9.47					1						
110344	7.554	0.009	7.248	0.011	*	0.290	0.015	G	0.33	0.02	H *	7.3481	0.0009	0.010	129	*	7.33	7.37		D	22210+6658	I 1	2 C A	AB	352	4.270	0.012	2.94	0.05	S
110345	9.002	0.012	8.871	0.014		0.126	0.017	T	0.14	0.02	L	8.9338	0.0018	0.018	147		8.90	8.97					1						
110346	8.490	0.013	6.694	0.008		1.526	0.013	T	2.51	0.04	O	6.4773	0.0046	0.046	91		6.41	6.56		U 2			1 S						S P
110347	11.975	0.136	10.262	0.046		1.430	0.113	T	1.42	0.18	L	10.2793	0.0033	0.028	108		10.23	10.32		C			1						G
110348	9.790	0.027	9.538	0.030		0.240	0.038	T	0.27	0.05	L	9.5745	0.0030	0.021	87		9.55	9.61		C			1						
110349	8.558	0.012	7.932	0.011		0.582	0.014	T	0.65	0.01	L	8.0061	0.0010	0.010	84		7.99	8.02		C			1						S
110350	9.503	0.019	8.375	0.013		0.971	0.018	T	0.96	0.01	L	8.4335	0.0018	0.013	84		8.41	8.45		C			1						S
110351	4.423	0.002	4.540	0.002		−0.100	0.002	T	−0.10	0.03	C	4.5201	0.0007	0.007	138		4.51	4.53		M	22210+4632	I 1	1						S
110352	9.273	0.010	8.087	0.006		1.016	0.009	T	0.99	0.01	L	8.1392	0.0012	0.014	283		8.11	8.16					1						
110353	8.775	0.009	7.618	0.006	*	0.993	0.009	T	0.97	0.01	L *	7.6776	0.0012	0.013	201	*	7.66	7.70		D	22210+3119	I 1	2 C A	AB	219	0.334	0.008	1.57	0.07	S
110354						0.663	0.400	G	1.75	0.29	S	11.8736	0.0071	0.052	90		11.71	11.96		R			1 S						G
110355	7.219	0.004	6.666	0.003		0.533	0.004	G	0.61	0.00	H	6.7219	0.0007	0.009	257		6.71	6.74		C			1 G						S
110356	7.924	0.009	7.970	0.011		−0.044	0.009	G	−0.02	0.01	H	8.0031	0.0013	0.012	126		7.99	8.02		C			1						
110357											T	11.3919	0.0084	0.066	133		11.24	11.49		U			1 S						G
110358	8.323	0.009	7.738	0.007		0.546	0.010	T	0.62	0.01	L	7.7946	0.0007	0.009	106		7.78	7.81					1 G						S
110359	10.349	0.043	9.847	0.043		0.472	0.055	T	0.54	0.06	L	9.8870	0.0034	0.027	47		9.83	9.93		C			1						
110360	11.592	0.104	11.126	0.102	*	0.580	0.040	G	0.65	0.04	R *	11.1096	0.0047	0.043	93	*	11.02	11.19			22211−3126	H 1	2 C A	AB	343	0.218	0.013	0.05	0.23	G
110361	7.615	0.005	7.631	0.007		−0.010	0.008	T	0.01	0.01	L	7.6292	0.0010	0.013	158		7.61	7.65		C			1						S
110362	9.799	0.019	9.565	0.024		0.210	0.012	G	0.23	0.01	H	9.6397	0.0031	0.027	135		9.60	9.69					1						G
110363	7.792	0.007	7.399	0.008		0.372	0.010	T	0.43	0.01	L	7.4417	0.0010	0.008	85		7.43	7.46		C			1						S
110364	9.482	0.017	7.541	0.007		1.645	0.015	T	2.59	0.03	O	7.2982	0.0035	0.038	128		7.26	7.37	23.43	P 1 A			1 S						S
110365	9.872	0.029	9.288	0.027		0.564	0.015	G	0.64	0.01	H	9.3396	0.0022	0.015	60		9.30	9.36					1						
110366	10.015	0.018	9.440	0.017		0.540	0.018	T	0.61	0.02	L	9.5378	0.0020	0.021	151		9.50	9.58		C			1						
110367	9.324	0.016	8.654	0.014		0.620	0.018	T	0.69	0.02	L	8.7069	0.0017	0.014	94		8.68	8.73		C			1						
110368	10.306	0.032	9.798	0.032		0.477	0.041	T	0.55	0.04	L	9.9584	0.0022	0.022	85		9.91	10.00		C			1						
110369	9.972	0.021	8.753	0.013		1.042	0.019	T	1.01	0.02	L	8.8176	0.0020	0.018	117		8.79	8.86		C			1 G						
110370	9.163	0.019	8.577	0.018		0.547	0.023	T	0.62	0.02	L	8.6134	0.0027	0.022	78		8.58	8.70		U 2			1						S
110371	4.777	0.002	4.804	0.002	*	−0.010	0.014	G	0.06	0.03	C *	4.7984	0.0005	0.005	127	*	4.79	4.81		D	22213+2820	I 1	2 C B	AF	294	0.423	0.017	4.03	0.08	S
110372	8.186	0.008	7.822	0.013		0.376	0.006	G	0.44	0.01	H	7.8683	0.0019	0.013	69		7.85	7.89		C			1						S
110373	8.311	0.006	8.341	0.008	*	−0.023	0.009	T	0.00	0.01	L *	8.3375	0.0018	0.023	254	*	8.30	8.38	0.93	P 1 A	22214+4148	I 1	2 C A	AB	225	0.275	0.003	0.76	0.04	S
110374	8.836	0.010	8.472	0.010		0.364	0.019	G	0.43	0.02	H	8.5297	0.0019	0.020	157		8.50	8.56					1						S
110375	11.273	0.079	9.344	0.024		1.601	0.066	T	1.62	0.07	L	9.2958	0.0036	0.022	70		9.26	9.35					1						
110376	8.354	0.009	7.836	0.009		0.518	0.003	G	0.59	0.00	H	7.8851	0.0011	0.014	133		7.86	7.92		C			1						S
110377	8.485	0.012	7.195	0.007		1.097	0.011	T	1.06	0.01	L	7.2496	0.0011	0.009	77		7.24	7.27		C			1						S
110378	7.733	0.008	7.518	0.011		0.205	0.013	T	0.23	0.01	L	7.5602	0.0018	0.011	43		7.54	7.62		C			1						S
110379	10.016	0.027	8.397	0.014		1.356	0.024	T	1.32	0.03	L	8.3884	0.0024	0.016	85		8.36	8.42					1						S
110380	8.549	0.007	8.022	0.007		0.503	0.012	G	0.58	0.01	H	8.0672	0.0012	0.015	184		8.04	8.09		C			1						S
110381	7.785	0.009	7.690	0.009		0.093	0.012	T	0.11	0.01	L	7.7161	0.0016	0.012	76		7.69	7.81		U 2			1						S
110382	9.078	0.015	7.760	0.009		1.119	0.014	T	1.08	0.01	L	7.8044	0.0013	0.010	95		7.79	7.83		C			1						S
110383	7.223	0.006	6.965	0.005		0.242	0.008	T	0.27	0.01	L	7.0095	0.0012	0.008	85		6.99	7.02					1						S
110384	11.111	0.068	9.271	0.023		1.530	0.057	T	1.57	0.12	L	9.2424	0.0030	0.021	67		9.22	9.28					1						
110385	10.007	0.028	9.207	0.023		0.724	0.028	T	0.78	0.02	L	9.2941	0.0030	0.020	73		9.26	9.32					1						
110386	4.698	0.007	4.804	0.010		−0.132	0.009	G	−0.16	0.03	C	4.7989	0.0094	0.106	79		4.60	4.89		U 2 C			1						S
110387	8.527	0.013	8.200	0.014		0.310	0.018	T	0.36	0.02	L	8.2474	0.0021	0.013	76		8.22	8.27		C			1						S
110388	9.951	0.024	7.976	0.010		1.673	0.021	T	1.90	0.07	O	7.8772	0.0033	0.028	94		7.83	7.94		U 2			1 G						S
110389	11.038	0.054	9.791	0.029		1.064	0.048	T	1.03	0.04	L	9.8754	0.0022	0.024	124		9.83	9.92		C			1						
110390	8.797	0.012	8.504	0.013		0.279	0.017	T	0.32	0.02	L	8.5619	0.0020	0.015	90		8.53	8.59		C			1						
110391	6.486	0.005	5.247	0.004		1.057	0.005	T	1.02	0.00	L	5.2868	0.0009	0.005	63		5.28	5.30					1						S
110392	8.855	0.013	8.443	0.013		0.406	0.015	G	0.47	0.02	H	8.5031	0.0018	0.015	75		8.48	8.52		C			1						S
110393	8.119	0.007	8.185	0.009		−0.077	0.002	G	−0.06	0.00	H	8.1987	0.0011	0.014	151		8.18	8.22					1						S
110394	10.548	0.040	9.394	0.025		0.991	0.037	T	0.97	0.03	L	9.4530	0.0017	0.020	96		9.42	9.48					1						
110395	3.806	0.003	3.844	0.003		−0.057	0.009	G	−0.06	0.02	A	3.8423	0.0010	0.005	46		3.83	3.86			22217−0123	I 1	1 X S						S
110396	10.390	0.049	8.975	0.026		1.212	0.046	T	4.46	0.09	O	8.0541	0.0279	0.159	50		7.65	8.43		U 2			1 S						
110397	10.126	0.023	9.369	0.019		0.684	0.004	G	0.74	0.00	H	9.3897	0.0020	0.019	139		9.36	9.42		C			1						
110398	10.710	0.042	9.645	0.026		0.923	0.037	T	0.92	0.03	L	9.7208	0.0024	0.019	81		9.69	9.76		C			1						
110399	8.147	0.008	8.042	0.009		0.102	0.011	T	0.12	0.01	L	8.0575	0.0015	0.015	114		8.04	8.08		C			1						S
110400						1.653	0.082	G	2.73	0.24	I	12.0858	0.0060	0.070	147		11.95	12.21					1 S						G

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
*110401 H	22 21 43.12	−17 09 38.9	10.68	G	335.429 655 43	−17.160 794 05	A	19.54	374.49	−238.15	3.64	2.35	3.54	3.83	2.08	+26	+ 6	−14	−12	+ 0	+ 4	+ 2	−19	+22	+13	1	−0.12
*110402	22 21 43.17	−59 56 53.1	8.08	2 H	335.429 893 35	−59.948 077 99		1.13	3.70	−16.59	0.62	0.58	0.89	0.69	0.57	−	7	−	4	−	6	−10	+14	+	9	+13	+	0	−16	−	2	1	−0.21
110403	22 21 44.04	−70 40 32.7	9.35	H	335.433 491 91	−70.675 754 95		4.36	30.27	−32.75	0.83	0.84	1.14	0.95	0.89	+	0	−	9	−21	−18	+	0	−	5	−	1	−	5	−	1	−	3	0	−0.63
110404	22 21 44.37	+20 59 30.6	8.61	H	335.434 862 54	+20.991 837 93		3.64	0.18	−5.91	1.05	0.80	1.15	1.10	0.98	+20	+34	−	6	−23	−	8	+	4	+	0	−33	+17	+33			0	−0.37
110405 H	22 21 45.17	+66 42 22.5	6.62	G	335.438 227 81	+66.706 248 07	A	4.39	28.78	7.86	0.94	0.92	0.95	0.98	0.96	+16	−11	−	2	+	3	+14	+	1	+13	−	5	+21	+10			3	1.86
110406	22 21 46.40	−06 10 52.8	7.66	H	335.443 337 83	−06.181 320 76		5.87	5.19	−11.78	1.17	0.85	1.26	2.00	0.94	+10	+12	−27	−20	+13	−16	+	0	−48	+23	−37			0	0.51
110407	22 21 47.64	+35 43 30.5	9.25	H	335.448 485 94	+35.725 135 21		0.18	−1.56	−9.08	0.86	0.85	1.16	1.06	1.19	+13	+10	+	6	+20	−	3	−10	−	1	+14	+23	+	3	0	−0.37
110408	22 21 50.86	+42 04 41.4	6.38	1 H	335.461 913 27	+42.078 168 70		4.56	15.65	−5.23	0.35	0.42	0.61	0.41	0.47	−41	+	3	+	4	+21	−	4	+	2	−	5	−	2	−	2	−43	0	−1.15
110409	22 21 51.07	+62 15 42.1	7.60	H	335.462 787 49	+62.261 688 86		2.11	−30.42	−16.73	0.58	0.57	0.67	0.76	0.71	−13	+	4	+19	+12	+	8	+13	+	8	−18	+	1	−	6	0	−1.38
110410	22 21 51.75	+63 08 23.8	6.95	H	335.465 610 56	+63.139 942 29		5.12	31.40	17.28	0.51	0.50	0.56	0.61	0.63	−16	+11	+13	+30	+	8	−	3	+11	−	9	+	5	−13			0	0.24
110411	22 21 52.08	+42 49 33.4	9.42	H	335.466 989 79	+42.825 934 08		1.55	−8.06	−7.63	0.80	0.84	1.27	0.89	0.96	−38	+14	+	1	+21	+	3	+	7	+	3	−	3	+	0	−41	0	1.06
110412	22 21 52.83	+40 39 59.1	6.54	H	335.470 124 25	+40.666 424 36		5.46	4.20	−0.75	0.34	0.45	0.70	0.40	0.56	−46	+12	−	8	+12	+	7	+20	+10	−	11	−	9	−44			0	0.05
110413	22 21 55.09	−25 21 55.1	7.54	H	335.479 530 82	−25.365 294 04		2.57	5.30	−2.38	0.79	0.52	0.84	0.93	0.55	+20	−10	−	8	−22	+14	+10	+11	−	1	+	8	+25			0	0.17
110414	22 21 56.68	+57 53 11.1	9.77	H	335.486 182 90	+57.886 429 96		−0.96	−3.71	−2.98	1.09	1.09	1.35	1.27	1.06	+10	+19	+41	+20	+16	+21	+15	−21	+	1	+21			0	−0.02
*110415	22 21 57.17	−40 32 43.0	10.09	H	335.488 219 17	−40.545 289 46		4.41	20.16	−37.73	1.28	0.99	1.57	1.47	1.03	+16	−	8	−	6	−	9	+	6	+17	+	4	+27	+10	+21		2	1.45
*110416	22 21 57.12	−55 01 17.9	8.88	H	335.488 015 08	−55.021 642 77		4.80	21.07	−22.02	0.75	0.69	1.12	1.02	0.75	+15	−	9	−18	−	4	−	4	+	5	−	2	+	1	−	8	+33	0	−1.08
110417	22 21 57.30	+54 08 22.6	8.71	H	335.488 765 12	+54.139 604 76		5.17	21.99	0.95	0.62	0.66	0.84	0.69	0.72	−	8	−12	−	6	−	5	+19	−18	+19	−17	+	3	+13			0	−0.39
110418	22 21 57.50	−20 49 42.2	8.25	1 H	335.489 600 29	−20.828 377 74	A	2.64	26.63	−2.56	1.53	1.12	1.63	2.08	1.15	+20	+	3	−35	−	8	+	5	+	2	+	3	−	6	+13	+39	1	1.35
110419 H	22 21 57.60	−34 31 13.0	7.43	H	335.489 992 79	−34.520 265 32	*	10.85	9.87	25.83	1.77	1.51	1.33	1.21	0.85	+36	+	5	−22	+	5	−	2	+25	+	3	+35	+15	+26			2	0.31
110420	22 21 57.94	−37 39 13.0	10.12	H	335.491 427 96	−37.653 607 49		5.56	1.24	−46.67	1.47	1.25	1.92	1.74	1.17	+22	−	6	−11	+17	−11	+33	−	7	+	6	−11	+	2			0	1.56
110421	22 21 58.28	+43 44 41.9	7.95	H	335.492 840 90	+43.744 984 70		3.48	−24.06	−25.44	0.58	0.60	0.89	0.71	0.70	−31	+	5	+	7	+18	−	3	−	2	−	4	−	1	+	3	−36	0	−1.14
110422	22 21 59.03	+48 50 58.3	7.91	H	335.495 958 06	+48.849 537 01		9.95	44.74	3.59	0.52	0.54	0.75	0.52	0.54	−11	+22	+	9	−	5	+	5	−	5	+	8	−	5	+10	−	5	0	−0.71
110423	22 21 59.33	+09 41 54.5	8.26	H	335.497 223 26	+09.698 476 29		9.54	138.89	−16.38	0.84	0.78	1.17	1.35	0.85	+46	+	4	+20	+13	+26	+31	+	9	−	8	+	2	+10			0	−0.16
110424	22 21 59.99	−19 26 07.0	7.86	H	335.499 944 60	−19.435 268 75		16.02	−21.11	−55.97	1.06	0.64	1.14	1.66	0.76	+	8	−13	−33	−	5	+20	+30	+23	−	7	+25	+24			0	−0.88
110425 H	22 21 01.23	−67 05 04.4	7.80	G	335.505 122 98	−67.084 555 43	A	5.61	27.39	−22.56	1.38	1.72	1.86	1.50	1.64	−	2	+	4	−16	−	1	+13	+	1	+11	−13	+	1	+	0	1	1.56
110426	22 22 01.44	−02 16 39.9	9.05	H	335.505 985 86	−02.277 750 93		−0.15	16.76	−0.53	1.12	0.85	1.24	1.29	0.82	+16	+12	−15	−	2	+	5	+10	+	7	+12	−	8	+	1	0	−0.06
110427	22 22 02.21	−08 44 49.6	9.69	G	335.509 222 28	−08.747 108 02		14.04	176.85	66.70	1.26	1.18	1.52	1.50	1.30	+43	−	8	−	9	+	2	−	8	+31	−	6	−12	+	7	+44	0	−0.60
110428	22 22 02.53	−84 39 58.3	8.73	2 H	335.510 531 41	−84.666 195 45		4.29	−1.72	−15.56	0.73	0.65	0.89	0.95	0.79	+18	−17	−16	−12	+	5	−	4	+	6	+	1	+	0	+	3	1	1.66
110429	22 22 02.68	−44 01 58.0	9.28	H	335.511 149 19	−44.032 779 28		5.97	7.08	9.69	1.17	0.81	1.46	1.64	0.95	−12	+12	−24	+18	−17	+18	−13	+	7	−	4	−21			0	−0.47
110430	22 22 02.83	−69 39 11.8	8.83	H	335.511 776 90	−69.653 272 68		2.57	17.93	−2.65	0.76	0.82	1.10	0.86	0.83	−	2	−	4	−26	−	7	−	3	+	6	−	2	−13	+12	+	4	0	−0.10
110431	22 22 03.38	+55 35 14.3	8.44	G	335.514 094 92	+55.587 292 32		1.47	−3.51	−1.70	0.58	0.60	0.74	0.65	0.64	−	8	+	2	−	6	−11	+	3	+	2	+	6	−22	+12	+10	0	−2.03
110432	22 22 04.02	−53 51 50.5	7.23	H	335.516 760 74	−53.864 019 13		4.18	14.60	−21.34	0.54	0.53	0.87	0.66	0.55	+22	−18	−27	+12	+	9	+20	+17	+	8	−	6	+39			2	0.02
110433	22 22 04.58	−34 29 20.3	7.45	H	335.519 062 56	−34.488 973 17		11.51	9.65	26.62	0.91	0.77	1.19	1.13	0.68	+13	+	4	−36	+	6	−36	+42	−19	+	1	+17	+	8	0	1.26
*110434	22 22 05.20	+15 39 05.4	6.68	H	335.521 683 18	+15.651 490 52		6.93	19.34	−8.81	0.69	0.57	0.81	0.77	0.60	+23	+	7	−	1	−	2	−	1	+	5	−	2	−21	+10	+15	0	−1.25
*110435	22 22 05.16	−06 34 10.0	8.36	H	335.521 517 25	−06.569 430 74		8.55	−34.53	−21.53	1.36	0.91	1.32	2.50	1.00	+	6	−	2	−27	+25	−	3	−	5	−24	−31	+10	−47	0	−0.60		
110436	22 22 07.32	−58 28 42.5	8.84	H	335.530 505 80	−58.478 465 03		6.82	49.52	−46.47	0.77	0.72	1.23	0.85	0.67	−10	−	5	−24	−17	+14	+	5	+12	+	3	−13	+	2	0	0.46		
110437	22 22 08.91	+43 49 42.6	9.80	H	335.537 139 43	+43.828 507 75		−0.82	−1.29	−4.17	0.90	0.87	1.32	1.17	0.99	−27	+	6	+13	+28	−	3	−	3	−	6	−	6	+	9	−38	1	0.60
110438 H	22 22 11.05	+59 59 04.8	9.23	H	335.546 030 61	+59.984 674 37	A	4.40	17.22	14.53	1.90	1.75	1.82	2.03	2.03	−	8	+17	+16	+23	−	4	−	5	−	3	−	8	−	6	−	2	1	−0.60
110439	22 22 11.63	−10 50 52.9	7.76	H	335.548 449 33	−10.848 031 24		−0.48	−40.53	−20.77	1.30	0.89	1.40	1.73	1.17	+34	−	8	−47	−44	−21	+11	−30	−43	+21	+49			0	1.19		
110440	22 22 13.61	−39 49 10.6	8.51	G	335.556 727 38	−39.819 608 70		17.84	26.33	−227.24	0.94	1.12	1.28	1.24	1.35	+37	−	4	+	3	+21	+31	+34	+25	+68	+	5	+48			0	−0.80		
110441	22 22 14.63	+54 48 01.3	8.84	G	335.560 961 58	+54.800 361 09		2.17	−4.28	−3.08	0.64	0.60	0.80	0.77	0.71	+	3	−13	−11	+10	+11	−	7	+13	−	4	+	1	+31			0	0.09		
110442	22 22 15.82	−60 30 26.7	9.01	H	335.565 912 95	−60.507 405 85		15.03	−88.74	−169.05	0.71	0.81	1.28	0.76	0.82	−14	+	9	−	1	+28	+	7	+21	+	2	−	5	−	8	−28	0	0.70		
110443	22 22 16.39	−54 33 40.3	8.98	H	335.568 297 64	−54.561 183 26		74.75	−185.33	232.67	0.83	0.80	1.32	1.11	0.90	+35	−	8	−14	+	3	+10	+15	+10	+12	−10	+51			0	0.90		
*110444	22 22 16.97	+11 04 51.6	10.16	H	335.570 696 19	+11.080 992 01	B	5.11	17.14	−25.19	13.92	11.21	6.79	7.97	7.02	+35	+21	+	8	−32	+	1	−15	+	2	−29	−	4	+31			2	1.81		
*110445	22 22 16.88	+38 22 48.7	8.89	H	335.570 314 78	+38.380 206 08		1.91	−7.58	−5.72	0.89	0.86	1.24	1.30	1.04	−	5	+	6	−32	+16	+15	−16	+	9	−11	+29	−11			0	1.46		
*110446	22 22 16.87	+30 25 14.6	9.36	H	335.570 312 49	+30.420 713 19		1.47	4.40	−7.76	0.96	0.95	1.22	1.20	1.18	+19	−	6	−13	+27	−15	−14	−16	−27	+	6	+22			0	−0.61		
110447	22 22 17.81	+11 04 48.8	9.03	H	335.574 188 53	+11.080 234 14	A	9.14	17.22	−28.40	2.98	2.44	2.90	3.37	2.72	+30	+11	−	4	−35	+	4	−11	+	3	−36	+	3	+25			2	1.81		
110448	22 22 17.94	+48 50 24.8	8.39	H	335.574 770 63	+48.840 224 23		1.89	−2.02	−2.48	0.61	0.56	0.79	0.62	0.59	−	3	+11	+14	−10	+	6	−	4	+	7	−	5	+	3	+	0	0	−0.92		
110449	22 22 18.16	+44 39 08.5	10.50	H	335.575 680 34	+44.652 373 01		−0.37	−5.09	−8.56	1.02	1.03	1.49	1.20	1.12	−30	+	2	+	5	−	2	+14	−13	+17	−22	+	8	−14			0	−0.82		
110450	22 22 18.72	−57 59 55.9	8.88	H	335.577 988 11	−57.998 853 13		8.14	−6.90	4.95	0.69	0.74	1.24	0.78	0.69	−	9	+	1	−29	−30	+14	−	2	+	7	+	5	−19	+	9	1	−1.55		
110451	22 22 19.03	−60 52 14.5	11.44	3 H	335.579 282 86	−60.870 685 51		−0.36	12.70	−4.56	1.95	1.53	3.66	2.04	1.74	−	8	−60	+	3	−59	−12	+60	+23	+	0	−44	−53			4	1.57		
110452	22 22 19.28	+64 19 46.3	9.79	H	335.580 329 06	+64.329 517 70		1.55	−0.60	1.93	0.97	0.96	1.08	1.40	1.25	−21	−	7	+	3	+	6	+24	−14	+23	−27	+19	−20			2	0.49		
110453	22 22 22.39	−20 10 16.7	8.01	H	335.593 311 45	−20.171 297 29		2.67	68.24	−1.13	1.00	0.65	1.08	1.41	0.75	+26	−29	−36	+17	+	5	+	2	+	4	−13	+15	+31			0	−0.64		
110454	22 22 22.47	−15 27 03.9	8.53	H	335.593 618 82	−15.451 072 46		6.84	32.53	59.34	1.12	0.68	1.11	1.33	0.71	−	4	−	7	−12	−33	+26	+	2	+21	−37	+25	−11			0	1.80		
110455	22 22 23.56	−37 26 04.3	9.10	H	335.598 160 22	−37.434 540 66		0.85	2.81	−15.47	1.12	1.02	1.54	1.33	1.00	+27	−	2	−11	+	6	−15	+39	−12	+	1	−12	+	2			2	−0.36		
110456	22 22 25.79	−49 35 15.8	9.63	G	335.607 471 57	−49.587 727 58		3.43	12.65	−16.31	1.02	0.92	1.50	1.07	0.92	+24	−21	−21	−18	−	9	+	5	−	9	+	2	+	8	+20			0	0.05		
110457	22 22 26.46	−46 40 03.8	9.09	H	335.610 230 34	−46.667 727 80		8.22	57.81	−42.89	1.14	0.77	1.40	1.23	0.87	+	0	−19	−20	+10	−	3	+24	+	2	+	9	+	4	+12			2	0.68		
110458 H	22 22 26.72	+45 26 03.2	8.13	G	335.611 352 37	+45.434 209 46	*	8.23	22.02	−21.70	2.30	3.34	1.15	0.94	0.91	−20	−11	+25	−	6	+	7	−	1	+	7	−20	+	2	−26			0	0.77		
110459	22 22 26.91	+58 36 02.6	8.42	H	335.612 118 43	+58.600 715 12		4.14	16.29	5.28	0.74	0.73	0.91	0.91	0.74	−18	+	0	+25	+	7	−	3	+22	−	8	−23	−	4	−21			0	−2.12		
110460	22 22 28.27	−39 43 47.6	10.45	H	335.617 790 14	−39.729 875 96		4.19	5.51	4.22	1.52	1.44	2.01	1.84	1.59	+39	+	5	−11	+24	+14	+37	+18	+46	−	2	+41			0	0.64		
110461	22 22 29.18	−00 43 11.6	10.11	H	335.621 580 83	−00.719 875 41		−0.43	−9.90	−8.52	1.52	0.99	1.61	2.27	1.11	+28	−11	−	4	+15	+22	+10	+	6	−30	−	5	−	2			2	−0.36		
110462	22 22 32.57	+30 21 27.0	7.51	2 G	335.635 716 66	+30.357 496 89		6.89	−34.51	−10.45	0.66	0.72	0.91	0.83	0.90	+22	−	3	−20	+19	−17	−13	−21	−45	+26	+15			0	−2.27		
110463	22 22 33.69	+07 36 22.3	8.01	H	335.640 374 18	+07.606 194 32		5.74	22.96	−10.19	0.99	0.59	1.05	1.18	0.73	+	3	+34	+	1	−37	+20	−21	+29	−	5	+27	−	8	0	1.00		
110464	22 22 33.91	+09 56 24.9	7.98	2 H	335.641 274 57	+09.940 251 81		4.76	2.48	−41.23	0.84	0.66	1.05	1.51	0.73	+33	+	6	+	8	−14	+24	+11	+19	−	4	+	4	−13	0	−0.17		
110465	22 22 34.30	+06 28 24.0	7.28	H	335.642 903 29	+06.473 331 49		9.78	1.68	−17.41	0.87	0.58	0.95	1.04	0.65	+12	+17	−	1	−21	+16	−	9	+17	−24	+22	+	2			0	0.13		
110466	22 22 34.34	−27 25 15.1	9.13	H	335.643 070 90	−27.420 866 06		9.92	66.96	−37.09	1.27	0.86	1.25	1.34	0.84	+16	+	4	−15	−48	+	1	+	7	+	1	−40	+15	+14			2	1.14		
110467	22 22 34.36	−48 49 53.8	9.57	G	335.643 162 43	−48.831 622 25		4.89	26.16	−17.24	0.92	0.83	1.53	1.15	0.96	+	9	−14	+	7	−13	−	2	+10	−	5	+	5	+27	+	7	0	1.59		
110468	22 22 35.71	−50 48 17.7	8.75	G	335.648 802 94	−50.804 904 12		35.14	165.19	−1058.33	0.69	0.67	1.30	1.29	0.76	+31	−22	+	1	+	6	−16	−22	+	2	+15	−	7	+	7	1	2.49		
110469	22 22 36.17	−43 24 27.1	9.97	H	335.650 723 44	−43.407 527 29		5.78	13.90	−8.66	1.27	0.86	1.54	1.60	0.97	−	8	+15	−14	+33	−16	+23	−14	+10	−12	−	8	0	1.18				
110470 H	22 22 36.42	−56 09 08.7	7.50	H	335.651 749 91	−56.152 418 35	A	3.53	14.09	−11.23	1.27	0.97	1.37	1.29	0.79	+	4	−	5	−	6	+	5	−	9	+40	−	6	−14	+	9	−	3	1	0.10
110471	22 22 37.45	−03 44 13.2	8.22	H	335.656 049 32	−03.737 006 63		3.36	−19.64	−19.01	1.01	0.84	1.22	1.52	0.90	+12	+13	−32	+28	−25	+38	−15	−25	+30	+	4	0	1.19				
110472	22 22 37.64	+81 56 20.3	7.09	H	335.656 843 58	+81.938 963 24		8.12	60.66	74.62	0.47	0.46	0.54	0.49	0.46	−	5	+	6	+18	+13	−10	+10	−12	+	5	+16	−17			1	−0.23		
110473 H	22 22 38.46	+47 37 56.4	9.98	H	335.660 263 37	+47.632 335 11	A	2.33	0.12	−4.51	1.55	1.47	1.92	1.57	1.41	−20	−	1	+13	−	5	+16	+10	+13	−10	−	1	−	1	0	−0.25		
110474	22 22 38.51	−37 42 41.5	10.45	H	335.660 452 37	−37.711 536 88		6.74	104.56	−35.07	3.09	2.52	3.70	3.49	2.55	+16	+15	−	1	−	1	−	2	+23	−	2	+	3	−	9	+	1	0			
110475	22 22 39.08	−19 20 59.3	8.76	H	335.662 837 84	−19.349 794 66		1.24	12.85	2.67	1.26	0.83	1.38	1.75	1.02	+11	−10	−28	−15	+16	+23	+17	−13	+25	+30			2	−1.23				
110476	22 22 41.38	+42 57 04.3	9.29	H	335.672 422 47	+42.951 199 29		1.91	−0.27	−6.32	0.71	0.77	1.15	0.80	0.88	−36	+10	+	8	+29	−	6	+12	−	9	+	3	−10	−42			0	0.79		
110477	22 22 41.85	+78 51 57.9	8.52	H	335.674 389 51	+78.866 089 27		2.00	15.21	8.30	0.66	0.65	0.78	0.87	0.66	−12	−17	+35	+	0	+11	+14	+	4	+	4	+10	−14			0	2.84		
110478	22 22 44.18	−45 56 52.5	6.42	3 H	335.684 091 36	−45.947 917 27	*	6.54	27.89	−10.92	0.80	0.62	1.01	1.02	0.82	+10	−10	−25	−22	−20	+23	−13	−34	+16	+30			0	1.13				
110479	22 22 44.89	−38 45 15.0	8.23	H	335.687 051 52	−38.754 178 42		7.69	−15.30	0.52	0.89	0.76	1.20	1.04	0.77	+32	+	0	−11	+17	−	1	+27	+	3	+10	+	1	+33			0	−0.16		
*110480	22 22 45.72	−31 58 54.0	10.20	H	335.690 519 79	−31.981 665 87		2.17	27.67	−29.09	1.31	1.09	1.72	1.48	1.00	+44	−	6	−12	+14	−	4	+10	−	7	−28	+	9	+36			2	0.61		
*110481	22 22 45.70	−44 19 29.3	8.54	H	335.690 429 29	−44.324 808 59		11.69	59.56	1.82	1.13	0.68	1.28	1.76	0.84	−	9	+23	−15	+27	−35	+24	−29	−	9	−11	−	7			0	0.95			
110482	22 22 45.97	+39 38 07.2	8.91	H	335.691 525 82	+39.635 343 75		4.64	−3.43	−2.93	0.80	0.80	1.05	0.85	0.94	+	8	+	4	−	2	+	2	+	2	−	3	−11	+	6	+	9	0	−0.09		
110483 H	22 22 46.99	−29 37 09.1	8.19	G	335.695 788 15	−29.619 199 48	*	26.07	440.61	−116.32	2.20	1.08	1.25	1.13	0.80	+57	+	3	+	0	+19	−	4	+33	−	1	−14	+32	+63			3	0.22			
110484	22 22 47.67	−46 09 55.3	8.37	H	335.698 620 96	−46.165 357 94		3.89	26.95	5.53	0.78	0.58	1.02	0.91	0.69	−	2	−	5	−14	+	6	+	0	+31	+	5	+	9	−	3	+	5	0	0.13		
110485 H	22 22 48.00	+85 03 42.1	7.15	H	335.700 003 60	+85.061 686 19	*	3.91	33.61	12.94	0.51	0.46	0.55	0.58	0.48	−	4	−14	+12	−15	−	7	+12	−	7	−	2	+	8	−18	0	−1.46			
110486	22 22 49.91	+33 35 45.2	7.60	G	335.707 953 36	+33.595 877 60		9.27	27.47	−21.07	0.57	0.60	0.84	0.73	0.81	+25	−13	−17	+13	+	0	−12	−	9	−28	+27	+16			1	0.76			
110487	22 22 50.28	+36 39 32.1	6.45	H	335.709 493 58	+36.658 916 83		7.47	4.71	53.41	0.51	0.50	0.69	0.76	0.64	+11	+13	−	7	−17	−	7	+	7	−	4	−22	+15	+	2	0	−0.58		
110488	22 22 50.74	+75 00 17.4	7.67	H	335.711 402 92	+75.004 841 98		8.41	63.48	28.67	0.57	0.52	0.61	0.71	0.59	−	1	+	2	+	8	+15	+11	−	9	+13	+	4	+	8	+15	2	−0.87		
110489	22 22 50.93	−27 35 05.2	9.37	H	335.712 210 32	−27.584 779 22		−0.30	4.51	−30.89	1.38	0.91	1.33	1.54	0.97	+11	+	3	−	8	−46	+12	+	7	+	9	−32	+11	+23			0	0.10			
110490 H	22 22 51.90	−71 28 27.8	9.13	H	335.716 258 08	−71.474 392 14	A	1.77	19.78	−14.85	1.21	1.37	1.56	1.21	1.21	−	8	+	4	−26	−	9	+22	−13	+	8	+	2			1	−0.23			
110491	22 22 54.51	−27 33 10.9	8.65	H	335.727 119 74	−27.553 022 60		10.61	55.22	−18.43	1.20	0.73	1.12	1.16	0.71	+	6	+12	−	3	−52	+11	+11	+12	−31	+20	+13			0	1.53			
110492	22 22 54.76	+19 02 31.5	8.20	H	335.728 165 51	+19.042 082 69		4.96	20.00	−6.02	0.73	0.58	0.92	0.77	0.71	+16	+	8	−18	+20	+15	−26	+14	+	6	+15	+18			0	0.23			
110493	22 22 56.88	+16 19 28.1	11.20	3 H	335.736 986 58	+16.324 460 57		3.02	19.28	−24.66	2.10	1.60	2.26	2.65	1.86	+23	+	6	+	0	−42	+	3	+12	+	4	−35	+19	+	9	0	0.19		
110494	22 22 57.47	−45 07 30.4	8.20	G	335

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
110401	12.173	0.200	10.834	0.093	*	1.208	0.013	G	1.35	0.02	I *	10.7852	0.0037	0.035	75	*	10.72	10.87					2 C C	AB	194	1.064	0.073	2.82	0.28	G
110402	10.166	0.024	8.259	0.010		1.617	0.021	T	1.81	0.07	O	8.1724	0.0035	0.032	152		8.13	8.22		U 2			1							S
110403	10.725	0.039	9.506	0.022		1.042	0.035	T	1.01	0.03	L	9.5213	0.0025	0.029	144		9.48	9.57					1							
110404	9.798	0.022	8.696	0.015		0.951	0.021	T	0.94	0.01	L	8.7724	0.0019	0.017	78		8.74	8.81		C			1							
110405	7.327	0.008	6.648	0.008	*	0.667	0.015	G	0.73	0.01	H *	6.7381	0.0009	0.008	102	*	6.72	6.75		D	22218+6642	I 1	2 C A	AB	96	4.166	0.003	0.63	0.01	S
110406	9.790	0.035	7.900	0.015		1.603	0.031	T	2.48	0.06	O	7.6866	0.0026	0.022	45		7.65	7.82		R			1							S
110407	9.352	0.017	9.254	0.021		0.080	0.020	G	0.09	0.02	H	9.2789	0.0026	0.021	111		9.25	9.31					1							
110408	6.258	0.002	6.358	0.003		−0.086	0.003	T	−0.07	0.00	L	6.3577	0.0010	0.011	228		6.34	6.38	1.02	P 1 A			1							S
110409	9.512	0.017	7.762	0.008		1.459	0.015	T	1.47	0.02	L	7.7347	0.0012	0.012	103		7.72	7.75					1							
110410	7.051	0.006	6.968	0.006		0.082	0.008	T	0.09	0.01	L	6.9894	0.0010	0.008	109		6.97	7.01		C			1							S
110411	11.290	0.047	9.596	0.018		1.415	0.040	T	1.40	0.06	L	9.5660	0.0023	0.026	204		9.51	9.62					1 S							
110412	8.242	0.006	6.694	0.003		1.300	0.005	T	1.26	0.01	L	6.6947	0.0006	0.009	266		6.68	6.71			22219+4040	I 1	1							S
110413	9.115	0.017	7.673	0.010		1.209	0.020	G	1.17	0.02	H	7.7054	0.0015	0.011	84		7.69	7.72		C			1							S
110414	10.247	0.029	9.830	0.030		0.430	0.015	G	0.50	0.02	H	9.8621	0.0035	0.026	109		9.82	9.90					1							G
110415	10.636	0.040	10.092	0.040		0.517	0.042	T	0.59	0.04	L	10.2038	0.0031	0.021	74		10.16	10.24		C			1							
110416	9.262	0.013	8.890	0.013		0.363	0.016	T	0.42	0.02	L	8.9657	0.0021	0.020	117		8.94	9.00		C			1							
110417	9.219	0.016	8.735	0.016		0.468	0.017	T	0.54	0.02	L	8.8125	0.0013	0.015	119		8.79	8.84		C			1							
110418	9.651	0.022	8.333	0.013	A	1.119	0.020	T	1.08	0.02	L	8.4225	0.0108	0.020	69	A	8.40	8.47		U	22220−2050	I 1	2 C B	AB	204	15.553	0.033	2.89	0.15	
110419	7.929	0.008	7.480	0.010	*	0.437	0.010	T	0.51	0.01	L *	7.5314	0.0010	0.010	68	*	7.51	7.55		D	22220−3431	I 1	2 C A	AS	118	0.228	0.004	0.05	0.09	S
110420	10.723	0.050	10.031	0.045		0.626	0.051	T	0.69	0.04	L	10.2409	0.0033	0.032	80		10.18	10.29					1 S							
110421	9.458	0.012	8.108	0.007		1.144	0.011	T	1.11	0.01	L	8.1180	0.0014	0.017	184		8.09	8.14					1							
110422	8.271	0.009	7.933	0.010		0.323	0.015	G	0.37	0.02	H	7.9900	0.0016	0.015	151		7.97	8.02					1							S
110423	9.068	0.013	8.334	0.011		0.673	0.014	T	0.73	0.01	L	8.4045	0.0018	0.016	99		8.38	8.43		C			1							S
110424	8.610	0.014	7.926	0.012		0.642	0.015	G	0.71	0.01	H	7.9931	0.0015	0.009	61		7.96	8.01					1							S
110425	8.327	0.009	7.910	0.009	*	0.417	0.004	G	0.48	0.00	H *	7.9035	0.0012	0.016	163	*	7.88	7.93		D	22220−6705	I 1	2 C A	AB	20	0.740	0.003	0.62	0.01	S
110426	11.052	0.067	9.229	0.024		1.500	0.015	G	1.50	0.09	H	9.1751	0.0024	0.017	62		9.14	9.20		C			1							
110427	10.536	0.050	9.767	0.039		0.746	0.003	G	0.79	0.00	H	9.8396	0.0023	0.018	55		9.80	9.88		C			1							
110428	10.340	0.027	8.847	0.014		1.276	0.025	T	4.64	0.04	O	7.8030	0.0115	0.113	109		7.65	7.99		U 2			1 S							S
110429	9.864	0.020	9.314	0.019		0.521	0.021	T	0.59	0.02	L	9.3990	0.0031	0.021	105		9.35	9.43		C			1							
110430	10.419	0.027	8.971	0.014		1.221	0.024	T	1.18	0.02	L	8.9971	0.0025	0.023	141		8.96	9.04					1							
110431	9.319	0.015	8.523	0.012		0.792	0.012	G	0.82	0.01	H	8.5595	0.0009	0.012	138		8.54	8.58		D			1							
110432	8.402	0.010	7.323	0.006		0.934	0.009	T	0.93	0.01	L	7.3901	0.0008	0.009	139		7.38	7.41		C			1							S
110433	7.845	0.008	7.491	0.010		0.336	0.012	T	0.39	0.02	L	7.5347	0.0019	0.013	66		7.52	7.56		C			1							S
110434	6.660	0.004	6.686	0.005		−0.019	0.006	T	0.00	0.01	L	6.6877	0.0008	0.007	93		6.68	6.70		C			1							S
110435	8.748	0.021	8.383	0.021		0.346	0.028	T	0.41	0.04	L	8.4394	0.0032	0.015	43		8.42	8.49					1							S
110436	9.944	0.019	8.921	0.013		0.891	0.017	T	0.90	0.01	L	8.9941	0.0021	0.022	159		8.96	9.04		C			1							
110437	9.905	0.018	9.823	0.025		0.081	0.029	T	0.09	0.03	L	9.8271	0.0025	0.029	177		9.79	9.88					1							G
110438	9.994	0.025	9.512	0.025	*	0.454	0.032	T	0.52	0.03	L *	9.3302	0.0017	0.021	122	*	9.30	9.37		R	22222+5959	I 1	2 C A	AB	339	1.129	0.005	0.22	0.02	
110439	9.652	0.029	7.911	0.014		1.452	0.025	T	1.45	0.04	L	7.8953	0.0020	0.011	52		7.87	7.92		C			1 G							S
110440	9.344	0.018	8.567	0.015		0.676	0.002	G	0.74	0.00	H	8.6469	0.0012	0.013	75		8.62	8.67					1							S
110441	9.038	0.014	8.883	0.017		0.220	0.015	G	0.24	0.02	H	8.8973	0.0018	0.017	127		8.87	8.93		C			1							
110442	9.913	0.018	9.089	0.014		0.727	0.017	T	0.78	0.01	L	9.1462	0.0019	0.021	169		9.11	9.19					1							
110443	10.812	0.040	9.161	0.018		1.329	0.017	G	1.54	0.03	I	9.0894	0.0021	0.022	124		9.06	9.13		C			1							
110444	11.078	0.096	10.238	0.069	B	0.755	0.089	T	0.80	0.06	L	10.3252	0.0283			B				D	22223+1105	I 2	1 C I A							
110445	10.434	0.029	8.998	0.015		1.212	0.026	T	1.17	0.03	L	9.0577	0.0024	0.024	107		9.02	9.10					1							
110446	9.409	0.018	9.369	0.024		0.042	0.028	T	0.06	0.02	L	9.3855	0.0027	0.018	88		9.36	9.42		C			1							
110447	9.573	0.023	9.090	0.022	A	0.455	0.029	T	0.52	0.03	L	9.1317	0.0102	0.040	81	A	9.09	9.24		R	22223+1105	I 2	1 C P A							
110448	9.910	0.019	8.525	0.011		1.172	0.017	T	1.13	0.01	L	8.5624	0.0015	0.016	149		8.53	8.59					1							
110449	10.531	0.031	10.489	0.046		0.043	0.051	T	0.06	0.04	L	10.5197	0.0035	0.035	174		10.44	10.58					1							G
110450	9.355	0.011	8.931	0.012		0.414	0.013	T	0.48	0.01	L	8.9745	0.0016	0.022	175		8.93	9.02					1							
110451						1.500	0.510	G	2.50	0.72	K	11.4605	0.0702	1.444	197		9.08	12.98	306.00	P 1 A			1 S							G
110452	10.262	0.031	9.818	0.033		0.419	0.042	T	0.49	0.04	L	9.8877	0.0027	0.021	101		9.84	9.93		C			1							G
110453	9.427	0.020	8.150	0.013		1.087	0.019	T	1.05	0.02	L	8.1802	0.0015	0.013	71		8.15	8.21		C			1							
110454	9.309	0.020	8.616	0.017		0.627	0.020	T	0.69	0.02	L	8.6592	0.0013	0.012	84		8.63	8.67		C			1							S
110455	10.414	0.042	9.156	0.024		1.072	0.038	T	1.04	0.03	L	9.2672	0.0032	0.021	84		9.23	9.30					1 S							
110456	10.198	0.023	9.683	0.023		0.563	0.005	G	0.64	0.01	H	9.7473	0.0028	0.024	118		9.70	9.79					1							
110457	9.744	0.019	9.167	0.018		0.542	0.019	T	0.62	0.02	L	9.2054	0.0027	0.020	98		9.17	9.24					1							S
110458	8.561	0.008	8.164	0.008	*	0.406	0.004	G	0.47	0.00	H *	8.2118	0.0010	0.013	175	*	8.19	8.24		C	22224+4526	H 1	2 C C	AB	103	0.248	0.041	2.89	0.48	
110459	9.884	0.021	8.541	0.012		1.139	0.019	T	1.10	0.02	L	8.5805	0.0019	0.020	116		8.55	8.62					1							
110460	11.073	0.060	10.486	0.060		0.435	0.020	G	0.50	0.02	H	10.5522	0.0044	0.029	76		10.50	10.61		C			1							
110461	11.723	0.104	10.222	0.043		1.263	0.088	T	1.22	0.09	L	10.2754	0.0022	0.020	75		10.24	10.31					1							
110462	8.397	0.011	7.621	0.011		0.700	0.015	G	0.76	0.01	H	7.6684	0.0075	0.045	97		7.61	7.73		U 2	22225+3021	I 1	1							S P
110463	8.380	0.011	8.030	0.011		0.332	0.015	T	0.39	0.02	L	8.0896	0.0023	0.014	78		8.07	8.11		C			1							S
110464	8.390	0.009	8.000	0.010		0.363	0.006	G	0.42	0.01	H	8.0699	0.0036	0.039	111		8.01	8.12	0.86	P 1 A	22226+0956	I 1	1							S
110465	7.547	0.006	7.304	0.009		0.232	0.010	T	0.26	0.01	L	7.3439	0.0008	0.010	79		7.33	7.36		C	22226+0628	I 1	1							S
110466	9.798	0.024	9.169	0.022		0.580	0.024	T	0.65	0.02	L	9.2563	0.0022	0.019	87		9.23	9.29		C			1							
110467	10.053	0.022	9.581	0.022		0.485	0.005	G	0.56	0.01	H	9.6832	0.0023	0.026	121		9.63	9.74		C			1							
110468						0.833	0.008	G	0.88	0.01	H	8.8849	0.0017	0.017	159		8.85	8.92		C			1 G							
110469	10.508	0.033	9.990	0.032		0.496	0.035	T	0.57	0.04	L	10.0766	0.0030	0.025	115		10.03	10.12		C			1							
110470	7.888	0.008	7.553	0.008	*	0.318	0.010	T	0.37	0.01	L *	7.5776	0.0012	0.014	146	*	7.55	7.60		D	22226−5609	I 1	2 C A	AB	281	0.509	0.003	0.99	0.02	S
110471	9.641	0.030	8.308	0.017		1.131	0.027	T	1.09	0.03	L	8.3837	0.0029	0.017	47		8.36	8.41					1							
110472	7.584	0.006	7.131	0.005		0.427	0.007	T	0.49	0.01	L	7.1817	0.0008	0.010	134		7.17	7.20					1							S
110473	10.322	0.031	10.106	0.038	*	0.206	0.046	T	0.23	0.05	L *	10.0444	0.0019	0.026	147	*	10.01	10.09		D	22226+4738	M 1	2 C A	AB	330	0.958	0.011	1.79	0.04	G
110474	11.154	0.073	10.464	0.067		0.625	0.075	T	0.69	0.07	L	10.5777	0.0049	0.042	78		10.51	10.63					1 X							
110475	10.104	0.037	8.889	0.023		1.039	0.034	T	1.01	0.03	L	8.9297	0.0016	0.014	64		8.90	8.95		C			1							
110476	9.387	0.012	9.301	0.016		0.084	0.019	T	0.10	0.02	L	9.3251	0.0020	0.025	206		9.28	9.37					1 S							
110477	8.532	0.012	8.512	0.015		0.023	0.018	T	0.04	0.01	L	8.5343	0.0018	0.015	107		8.51	8.57		C			1							
110478	9.031	0.013	6.379	0.004		2.231	0.011	T	4.65	0.03	O	5.4957	0.0119	0.256	96		5.13	5.93		U 2	22227−4557	I 1	1 V							S
110479	8.593	0.012	8.258	0.012		0.323	0.019	T	0.37	0.03	L	8.3069	0.0018	0.016	75		8.28	8.33					1							S
110480	11.296	0.066	10.257	0.041		0.893	0.061	T	0.90	0.04	L	10.3437	0.0031	0.023	100		10.30	10.39		C			1							
110481	9.036	0.012	8.585	0.012		0.422	0.002	G	0.49	0.00	H	8.6394	0.0019	0.017	106		8.60	8.67		C			1							S
110482	9.273	0.015	8.941	0.016		0.315	0.021	T	0.36	0.03	L	8.9904	0.0025	0.022	99		8.95	9.02					1							
110483	9.135	0.012	8.271	0.010	*	0.752	0.004	G	0.80	0.00	H *	8.3329	0.0014	0.012	140	*	8.31	8.36			22228−2937	H 1	2 C B	AB	345	0.153	0.029	2.23	0.60	S
110484	8.784	0.011	8.405	0.012		0.370	0.014	T	0.43	0.01	L	8.4595	0.0014	0.020	113		8.42	8.49					1							S
110485	8.392	0.010	7.261	0.005	*	0.973	0.009	T	0.96	0.01	L *	7.3151	0.0010	0.009	124	*	7.30	7.34		D	22228+8504	H 1	2 C S A	AB	102	0.112	0.005	0.60	0.44	S
110486	8.166	0.009	7.639	0.007		0.498	0.015	G	0.57	0.02	H	7.7009	0.0012	0.011	130		7.68	7.72		C			1 G							S
110487	7.806	0.007	6.574	0.004		1.052	0.006	T	1.02	0.01	L	6.6156	0.0007	0.008	114		6.61	6.63		C			1							S
110488	8.939	0.011	7.771	0.007		1.002	0.010	T	0.98	0.01	L	7.8370	0.0011	0.013	122		7.82	7.86		C			1							
110489	10.316	0.035	9.420	0.027		0.782	0.034	T	0.82	0.02	L	9.5145	0.0025	0.022	90		9.48	9.54		C			1							
110490	9.671	0.016	9.214	0.016	A	0.400	0.495	G	0.52	0.04	L *	9.2262	0.0019	0.026	164	*	9.18	9.28		D	22229−7128	I 1	2 C B	AB	108	3.294	0.028	3.02	0.13	
110491	9.106	0.016	8.672	0.016		0.424	0.018	T	0.49	0.02	L	8.7434	0.0015	0.017	90		8.72	8.78					1							
110492	8.425	0.010	8.218	0.011		0.198	0.014	T	0.22	0.02	L	8.2689	0.0016	0.009	88		8.25	8.28		C			1							S
110493	11.847	0.147	11.579	0.196							T	11.2656	0.0473	0.287	82		11.01	11.69	0.36	P 1 A			1							G
110494	8.548	0.009	8.229	0.010		0.302	0.010	G	0.35	0.01	H	8.2882	0.0012	0.013	116		8.27	8.31		C			1							S
110495	8.633	0.009	8.248	0.009		0.374	0.020	G	0.44	0.02	H	8.3028	0.0016	0.013	109		8.28	8.33		C			1							S
110496	9.734	0.017	8.096	0.009		1.371	0.015	T	1.34	0.02	L	8.1064	0.0017	0.020	117		8.08	8.14					1							
110497	6.028	0.003	6.157	0.004		−0.112	0.004	T	−0.10	0.01	L	6.1413	0.0006	0.006	118		6.13	6.15		C			1							S
110498	6.078	0.004	6.039	0.004		0.035	0.005	T	0.05	0.00	L	6.0620	0.0006	0.006	105		6.05	6.07		C			1							S
110499	9.879	0.018	9.265	0.016		0.569	0.018	T	0.64	0.02	L	9.3379	0.0024	0.028	152		9.30	9.41		C			1							
110500	8.272	0.010	7.922	0.010		0.367	0.013	G	0.43	0.01	H	7.9832	0.0018	0.021	138		7.95	8.02		U 2			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas			mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
110501	22 23 05.39	+12 46 52.8	8.39	H	335.772 446 28	+12.781 327 46		1.91	−4.71	−9.66	0.88	0.65	1.04	1.23	0.82	+11	+ 0	− 9	−20	+13	− 9	+12	−13	+21	−10	0	0.18
110502	22 23 06.52	−43 24 20.5	8.19	H	335.777 161 67	−43.405 703 56		5.63	70.56	−12.50	0.84	0.56	1.06	1.06	0.62	−	4 +	9	−13	+32	−20	+29	−15	+	7	−	9	−	2	0	−0.04
110503	22 23 06.81	−55 53 38.7	9.55	H	335.778 388 39	−55.894 096 43		8.42	−44.15	−149.87	0.88	0.88	1.34	1.12	0.90	+	3	−18	−	3	−	9	−	3	+	7	−	2	−18	+	2	+11	0	0.93
110504	22 23 07.02	+55 57 47.6	6.44	2 T	335.779 247 34	+55.963 235 84		1.19	−2.91	−2.42	0.43	0.43	0.54	0.48	0.47	−	6	−	1	+	1	−10	+	4	+	2	+	4	−18	+18	+10	0	−0.38
110505	22 23 07.34	+27 07 09.1	8.87	H	335.780 590 93	+27.119 207 84		0.90	−22.15	−18.77	0.85	0.89	1.24	0.88	1.05	−	3	+31	−45	+23	−	7	−	1	+	5	−33	+31	+20	0	1.52
110506	22 23 07.79	−45 55 42.0	5.62	H	335.782 463 22	−45.928 347 17		24.62	233.33	−57.92	0.55	0.43	0.70	0.62	0.50	−	2	−11	−14	+	7	−	3	+22	−	1	+21	+	3	+	2	0	−0.60
110507	22 23 08.31	−14 12 41.3	8.31	H	335.784 607 80	−14.211 462 66		7.25	22.53	−2.74	0.87	0.62	1.00	0.95	0.61	+32	−	7	+	0	−22	+	0	+18	−	4	−36	+19	+30	0	0.43
110508	22 23 08.99	+09 27 39.6	7.91	H	335.787 473 01	+09.460 995 98		30.84	305.93	35.08	0.76	0.57	1.00	1.27	0.64	+23	+	0	+18	−12	+27	+27	+17	−11	−	2	−11			0	−0.60
110509	22 23 12.85	−22 03 23.7	9.90	3 H	335.803 536 18	−22.056 596 37		−1.76	31.53	−5.43	1.35	1.11	1.59	2.07	1.48	+43	−15	−24	−17	−14	−	4	−15	−23	+	4	+57			0	1.61
*110510	22 23 13.65	+45 17 10.0	9.36	H	335.806 885 44	+45.286 116 20		1.63	0.56	−0.87	0.72	0.76	1.05	0.82	0.84	−24	+	4	+15	−11	+	4	+	4	+	3	−13	−	6	−28	0	−1.38
*110511	22 23 13.64	+47 26 27.5	10.23	2 H	335.806 814 95	+47.440 971 47		3.18	−2.55	−1.82	1.85	1.80	2.49	1.96	1.90	−16	+12	−	4	−14	+	9	+11	+12	−21	+15	−	3			0	
110512	22 23 14.23	−25 50 31.4	7.87	H	335.809 287 73	−25.842 056 53		18.77	376.34	−94.31	0.81	0.59	0.89	0.98	0.59	+20	−	9	+	4	−20	+	5	+12	+	3	−14	+	2	+	9	0	−0.70
110513 H	22 23 15.10	+05 38 48.2	7.61	H	335.812 930 50	+05.646 731 70	A	5.88	9.23	−47.27	1.16	0.96	1.20	1.57	1.10	+43	+18	+17	+19	+	8	+22	−	4	−29	−10	+24			1	0.34
110514	22 23 15.94	−15 19 56.1	10.35	3 H	335.816 414 37	−15.332 242 50		3.90	−15.16	−16.24	2.42	1.33	2.09	2.96	1.57	−	5	−25	−18	−61	+34	+	5	+39	−40	−	6	−15			2	0.69
110515	22 23 16.44	−73 40 01.5	9.96	H	335.818 493 43	−73.667 084 58		5.07	16.89	7.39	0.92	0.90	1.21	1.32	1.03	−	6	−	7	−21	−12	−	4	+10	+	0	−	9	−13	−24		0	1.78
110516	22 23 19.44	−45 18 56.5	7.97	H	335.830 985 25	−45.315 681 07		8.84	−23.76	14.94	0.89	0.53	1.05	1.22	0.67	−12	−14	−	7	−	8	−15	+	9	−16	−	1	+18	−	5	0	0.06
110517	22 23 19.99	+31 30 03.9	8.51	H	335.833 300 61	+31.501 089 05		6.76	−17.52	−16.83	0.53	0.73	0.95	0.61	0.90	+46	−	6	−	7	−17	−16	−	5	−14	−36	+13	+56			0	1.09
110518	22 23 20.46	−14 57 03.1	7.02	G	335.835 247 00	−14.950 855 20		15.45	−45.63	−181.53	0.73	0.50	0.81	0.87	0.53	+25	−12	−13	−	7	+21	+	4	+16	−	6	+17	+25			0	1.50
110519 H	22 23 24.44	−43 24 23.3	8.59	H	335.851 843 72	−43.406 471 90	*	9.44	32.22	−32.58	0.96	0.67	1.25	1.25	0.74	−13	+17	−22	+28	−19	+33	−10	+	2	+	3	−	4			0	0.57
110520	22 23 24.65	−46 40 07.0	6.93	H	335.852 727 35	−46.668 623 52		4.71	−13.02	14.06	0.64	0.44	0.81	0.71	0.50	−	4	−12	−10	+20	−	3	+36	+	3	+	8	−	6	+	3	2	−0.31
110521	22 23 25.89	+42 03 32.3	8.16	H	335.857 871 21	+42.058 979 45		3.28	−1.90	−12.10	0.50	0.60	0.92	0.58	0.71	−45	+	0	−	3	+23	−	9	−	1	−10	−	3	+	4	−46	0	−1.23
110522	22 23 27.62	+00 36 31.1	6.94	H	335.865 082 54	+00.608 638 30		8.96	−13.50	−9.26	0.74	0.46	0.78	0.94	0.50	+20	+	0	+	8	+	8	+16	+	0	+	8	−24	−	7	+	0	2	0.81
110523	22 23 27.96	+17 39 21.7	7.33	H	335.866 495 90	+17.656 021 05		2.50	−11.34	−19.05	0.72	0.58	0.86	0.78	0.72	+18	+	6	−	6	+34	−	8	−22	−	7	−17	+12	+20			2	0.40
110524	22 23 28.02	−04 29 04.3	9.57	H	335.866 745 76	−04.484 540 63		1.25	−0.18	3.77	1.61	1.32	1.57	2.22	1.26	+25	−11	−12	+21	−29	+20	−40	−54	+	2	−	4			0	1.04
110525	22 23 28.73	+55 15 06.5	9.29	G	335.869 701 97	+55.251 799 73		0.66	−3.63	−1.45	0.70	0.71	0.90	0.78	0.78	+	1	−	5	+	3	+	9	+14	+	4	+15	+	3	+10	+21	0	−1.13
110526 H	22 23 28.92	+32 27 35.8	10.70	H	335.870 515 91	+32.459 936 21	A	62.18	251.26	−207.57	8.44	11.42	10.01	9.72	18.48	+49	−	1	−	3	+	2	−	4	−10	−	7	−24	+	4	+42	4	4.46
110527	22 23 29.88	+03 51 17.6	9.15	H	335.874 508 71	+03.854 893 54		6.29	68.29	3.80	1.19	0.89	1.42	1.48	1.02	+35	+26	+	9	−10	+	5	−22	+	3	−23	−	3	+23			0	−0.21
110528	22 23 30.37	−20 18 49.6	8.20	2 H	335.876 537 78	−20.313 767 40		1.21	12.75	−26.35	1.03	0.76	1.13	1.41	0.85	+32	−29	−26	+12	−17	−	3	−12	−41	−	7	+31			0	0.97
110529	22 23 30.79	−24 45 45.6	5.53	H	335.878 274 30	−24.762 655 07		12.00	97.60	−2.50	0.70	0.50	0.77	0.74	0.49	+20	−23	+	6	−23	+13	+	8	+10	−	6	+	3	+21			0	1.82
110530	22 23 30.83	−52 37 01.6	9.65	2 H	335.878 451 10	−52.617 114 99		4.82	18.88	−9.82	0.84	0.86	1.48	1.13	1.03	+19	−	4	−20	+21	+	8	+19	+12	+22	+	1	+32			1	1.33
110531	22 23 30.91	+06 32 31.5	7.56	H	335.878 774 94	+06.542 074 96		6.75	3.11	23.81	0.93	0.69	1.05	1.01	0.82	+18	−10	+21	−16	+17	+	5	+17	−	6	+	7	+22			0	−1.01
110532	22 23 32.15	−07 11 40.0	5.92	G	335.883 979 01	−07.194 442 93		7.10	−6.21	8.95	0.85	0.68	0.93	1.18	0.88	+14	+	4	−14	−13	+	7	+10	+	7	−21	−	5	+12			1	1.08
110533	22 23 32.50	+40 34 46.0	8.60	H	335.885 413 90	+40.579 440 71		5.27	−8.41	−6.60	0.58	0.69	1.01	0.71	0.95	−30	+	4	−	2	+34	+11	+	4	+14	+	6	−	2	−27			3	0.44
*110534	22 23 32.67	−57 13 11.0	10.82	G	335.886 113 28	−57.219 714 74		51.57	586.49	−376.12	1.36	1.11	1.98	1.79	1.19	+	0	−	7	−12	+26	−	8	+28	−	4	+	0	−	8	−	6	3	1.44
*110535	22 23 32.61	−29 41 39.2	9.11	H	335.885 873 90	−29.694 223 65		5.64	−5.95	−20.32	0.99	0.77	1.29	1.13	0.83	+54	−	4	−10	+26	−	1	+24	+	4	+	0	+16	+62			0	−0.61
110536	22 23 32.98	−02 18 05.4	7.36	G	335.887 430 20	−02.301 508 00		5.37	−16.37	−31.93	0.87	0.68	1.05	1.02	0.76	+27	−	2	−25	+	5	−15	+31	−10	−43	+33	+30			0	2.16
110537	22 23 33.05	−15 57 58.2	8.91	H	335.887 718 84	−15.966 172 22		6.75	−54.35	−19.01	1.11	0.66	1.08	1.24	0.67	−	2	−16	−	8	−36	+24	+14	+21	−34	+13	−	6			0	1.01
110538	22 23 33.64	+52 13 46.2	4.42	H	335.890 151 72	+52.229 499 51		19.21	−13.56	−186.37	0.40	0.38	0.51	0.45	0.39	−	9	+	0	+	4	−18	+20	−	4	+17	−	8	+12	+17	0	−0.08
110539 H	22 23 34.02	+45 20 59.9	7.07	H	335.891 731 99	+45.349 981 25	A	4.50	36.49	6.24	0.95	1.02	1.26	0.93	0.95	−31	+14	−11	+	4	+	2	+	4	+	5	−25	+	5	−28	7	1.74
110540 H	22 23 34.29	+64 52 50.3	9.85	H	335.892 865 26	+64.880 640 92	A	3.61	−2.82	−2.96	1.61	1.56	1.64	1.82	1.67	−25	−11	−10	−15	+15	−	1	+13	−27	+20	−13			5	0.24
110541 H	22 23 34.54	+20 51 48.5	8.51	H	335.893 921 69	+20.863 467 34	C	6.55	16.17	−11.53	2.68	1.49	1.55	1.71	1.34	+54	+	1	−	6	−15	+11	−	1	+	4	−	8	−21	+20	3	0.04
110542	22 23 34.79	+44 17 09.4	9.03	H	335.894 950 29	+44.285 933 67		5.28	3.01	−26.18	0.73	0.80	1.09	0.89	0.90	−33	+	8	+	3	−13	+17	−	3	+17	−13	+	3	−28			0	0.32
110543	22 23 37.19	+51 11 44.5	7.40	H	335.904 960 63	+51.195 693 60		0.44	−2.86	−2.62	0.49	0.45	0.63	0.51	0.45	−13	+	7	−	2	−11	+18	−11	+18	−11	+15	+11			0	−0.84
110544	22 23 38.66	+05 57 29.5	8.11	H	335.911 084 75	+05.958 194 16		4.31	−30.93	2.35	0.96	0.72	1.10	1.27	0.90	+28	+10	+	9	+	7	+	7	−	2	+	4	−20	−	2	+20	0	0.46
110545	22 23 39.16	−73 26 30.2	9.18	H	335.913 162 42	−73.441 709 51		6.06	−32.47	6.43	0.78	0.81	1.04	1.05	0.90	−17	−	2	−21	−	4	−	3	+	6	−	2	−14	+	6	−32	1	0.58
*110546	22 23 39.25	+00 58 56.2	9.37	H	335.913 536 47	+00.982 288 17		3.28	35.07	8.07	1.11	0.81	1.29	1.28	0.89	+29	−10	+10	+	1	+14	+18	+11	−18	−14	+19			0	−0.88
*110547	22 23 39.22	−72 48 14.6	8.44	H	335.913 405 37	−72.804 062 86	B	5.34	19.46	−17.41	8.85	9.24	4.19	7.46	6.67	−	7	−12	−18	+14	−	3	−	4	−	6	−	5	+	8	−16	17	1.65
110548 H	22 23 39.36	+20 50 53.8	6.20	H	335.913 981 36	+20.848 265 37	A	29.50	335.18	−14.71	1.03	0.77	0.83	0.90	0.73	+15	+18	−	6	−19	+	9	−	3	+14	−	6	−	1	+26			3	0.70
110549	22 23 40.63	+19 11 17.4	8.11	H	335.919 284 99	+19.188 163 44		1.73	−19.38	−37.12	0.79	0.64	1.02	0.84	0.78	+12	+	8	−24	+22	+	9	−14	+	8	−	7	+12	+16			0	−0.05
110550	22 23 41.68	+78 14 35.9	6.77	H	335.923 673 69	+78.243 295 22		2.54	3.70	8.82	0.53	0.45	0.55	0.65	0.50	−15	−13	+27	+17	−	9	+	3	−12	+	7	+	9	−23			0	−0.26
110551	22 23 43.48	−72 48 13.6	8.02	H	335.931 182 08	−72.803 775 58	A	4.00	19.79	−20.21	2.32	2.72	2.54	2.52	2.54	−	5	−16	−24	+10	−	3	−	4	−	6	−	9	+	7	−15	17	1.65
110552	22 23 43.54	+00 33 27.0	8.38	H	335.931 430 95	+00.557 488 58		4.28	21.51	−11.50	0.95	0.61	1.03	1.23	0.67	+22	+	9	+17	+	6	+11	−	3	+	2	−32	−16	+	5			0	1.63
110553	22 23 43.86	−38 42 24.5	10.12	H	335.932 758 52	−38.706 814 31		4.23	7.02	−16.17	1.41	1.20	1.72	1.68	1.38	+25	−19	−	4	+30	+12	−	1	+13	+31	−10	+33			0	0.87
110554	22 23 44.12	+30 05 06.5	10.16	H	335.933 830 82	+30.085 135 48		7.45	166.72	19.53	1.16	1.19	1.49	1.53	1.42	+16	+18	−11	+39	−20	+18	−13	−38	+13	+22			0	−1.66
110555	22 23 45.31	−34 54 12.9	10.22	H	335.938 808 26	−34.903 585 47		4.50	−24.08	−25.56	1.50	1.36	1.82	1.85	1.47	+17	+10	−15	+12	+	6	+20	+10	+43	+	5	+19			0	−0.20
110556	22 23 45.90	+10 33 32.0	10.43	H	335.941 237 66	+10.558 879 36		4.30	23.06	−16.02	1.49	1.12	1.79	1.82	1.26	+32	+13	−	1	−17	+	6	+	8	+	4	−23	+	4	+17	2	0.78
110557	22 23 46.79	+26 00 12.1	9.03	H	335.944 940 85	+26.003 361 67		2.27	−6.83	−13.50	0.95	0.81	1.24	1.20	1.02	−	5	+	0	−36	−	2	+18	−24	+10	−22	+25	−16			0	2.63
110558	22 23 47.96	−50 26 34.5	8.02	G	335.949 848 75	−50.442 910 39		4.11	−14.48	−30.32	0.74	0.64	1.08	0.76	0.68	+10	−	2	−16	−33	+17	−	5	+	7	+18	−	4	+32			0	0.67
110559	22 23 48.16	+22 06 23.4	8.08	H	335.950 687 20	+22.106 492 67		1.30	3.07	−1.47	0.82	0.67	0.94	0.90	0.79	+26	+16	+	9	−	2	−	8	−	8	−	7	−23	+10	+20	0	−1.40
110560	22 23 49.14	+24 23 34.6	10.64	G	335.954 742 92	+24.392 940 44		5.62	−77.39	−166.04	1.53	1.20	1.70	1.78	1.32	+10	+	3	−18	+	9	−	3	−	6	−	5	−19	+10	+	3	0	0.13
110561	22 23 50.17	+58 32 04.3	7.08	H	335.959 054 07	+58.534 522 58		5.66	27.43	−19.04	0.52	0.51	0.64	0.65	0.57	−14	+14	+23	+17	+	1	+21	−	5	−18	+	1	−21			0	0.91
110562	22 23 51.34	+27 21 15.7	8.91	H	335.963 910 79	+27.354 356 38		11.93	−10.33	−37.14	0.80	0.81	1.12	0.92	1.12	+14	+16	−31	+41	−	4	−	2	+	2	−19	+24	+27			0	−1.11
110563	22 23 52.73	−02 45 27.7	8.19	H	335.969 727 13	−02.757 702 68		2.85	62.39	−9.15	1.00	0.76	1.13	1.29	0.78	+31	+	9	−17	+24	−11	+29	−15	−41	+21	+16			0	−0.82
110564 H	22 23 53.74	−66 55 38.7	8.96	H	335.973 920 65	−66.927 423 37	A	13.05	−53.28	−66.17	1.40	1.42	1.84	1.34	1.12	−	7	+20	−27	−	8	+	8	+	6	+12	−34	+22	−	4	1	0.66
110565	22 23 54.03	+13 43 26.1	10.99	H	335.975 117 38	+13.723 927 76		3.16	−44.57	−10.37	1.72	1.43	2.06	2.22	1.71	+23	+	1	+	2	−	4	+	6	−	3	+	4	−17	+	3	+13	0	−0.82
110566	22 23 54.06	+38 34 23.9	6.18	H	335.975 254 89	+38.573 311 76		19.16	255.69	123.47	0.50	0.46	0.65	0.64	0.53	−	7	+19	−10	+14	+	8	−10	+	9	−13	+13	−	6			0	1.01
110567	22 23 55.60	−65 21 14.1	7.67	G	335.981 659 85	−65.353 925 61		12.85	−25.14	4.23	0.53	0.54	0.79	0.67	0.62	−	9	−	1	−	4	+27	−	1	−	6	−	1	+12	−	1	−	8	0	−0.16
110568	22 23 55.68	−76 51 11.3	8.24	H	335.981 999 31	−76.853 140 82		4.72	35.02	−8.96	0.64	0.62	0.80	0.79	0.69	−	7	−11	−13	+	4	+10	−	9	+	9	−14	−	1	−	2	0	−0.05
110569	22 23 56.39	+31 15 42.3	6.96	3 H	335.984 948 62	+31.261 751 85		1.65	6.83	0.29	0.46	0.61	0.83	0.49	0.74	+48	−17	−20	−22	−12	+	1	−12	−31	+21	+61			0	−1.72
110570	22 23 57.88	+25 03 13.4	9.40	H	335.991 171 19	+25.053 708 82		4.30	17.86	−0.82	0.88	0.73	1.07	0.90	0.85	+11	+27	−	8	+20	−	3	−15	−	4	−	9	−	1	+19	0	−1.05
110571	22 23 58.09	+35 06 32.7	8.11	G	335.992 045 36	+35.109 076 46		3.67	16.22	0.01	0.65	0.66	0.92	0.81	0.93	+	6	+	1	−15	+21	+	1	−20	−	3	−13	+27	−	1	0	−1.52
110572	22 23 59.38	+43 32 58.8	8.34	H	335.997 429 84	+43.549 677 40		3.75	16.63	−5.34	0.58	0.61	0.93	0.67	0.73	−36	+11	−	2	+10	+	2	−	5	+	3	−	4	+14	−39	1	−1.98
110573	22 24 00.48	+15 16 53.4	6.79	G	336.002 012 89	+15.281 504 93		5.22	16.19	−12.64	0.67	0.62	0.84	0.75	0.73	+22	+	3	−13	−18	−10	+10	−	7	−45	+22	+24			0	−0.34
110574	22 24 01.29	+06 12 10.6	8.11	H	336.005 391 11	+06.202 950 07		17.57	23.97	−50.81	1.23	0.89	1.62	1.99	1.79	+	9	+13	−30	−36	+37	−38	+	4	+39	−51	+44			0	−0.78
110575	22 24 01.99	−31 28 42.5	8.54	H	336.008 274 94	−31.478 485 10		2.81	22.90	2.34	0.87	0.71	1.18	0.90	0.65	+53	−21	−15	+	2	−14	+21	−15	−29	+15	+50			0	−0.29
110576	22 24 04.07	−26 11 49.5	9.84	H	336.016 963 60	−26.197 081 19		7.26	70.98	−7.90	1.17	0.92	1.30	1.43	0.94	+35	−15	−13	−12	−	3	+	6	−	6	−26	+	9	+29	0	0.33
110577	22 24 06.53	−26 22 23.7	8.00	G	336.027 196 48	−26.373 255 99		11.09	61.66	−19.16	0.88	0.64	0.98	1.03	0.64	+27	−	4	−19	−25	−	6	+15	−	4	−24	+	9	+25	0	1.30
110578 H	22 24 06.87	−04 50 13.2	5.79	H	336.028 619 39	−04.837 001 02	*	7.69	26.35	−7.77	0.85	0.66	0.89	1.14	0.66	+11	+	4	−	8	+15	−15	+35	−21	−42	−	4	−10			3	1.13
110579	22 24 07.31	−33 43 23.5	8.38	H	336.030 438 96	−33.723 201 46		6.38	−11.48	−14.98	0.91	0.75	1.21	1.04	0.74	+32	−18	−17	−12	−12	−37	−12	−31	+30	+35	0				1	1.08
110580	22 24 07.59	−10 11 51.6	7.15	H	336.031 633 96	−10.197 672 55		3.85	−55.94	−24.68	1.23	0.64	1.14	1.66	0.81	+	1	+24	−33	+33	−14	+22	−13	−15	+27	+15	0				0	0.19
110581	22 24 07.80	+53 22 05.6	10.31	H	336.032 517 27	+53.368 229 55		−1.55	−0.24	−6.35	0.94	0.89	1.21	1.05	0.99	−	9	+	1	+	1	−	9	+17	−17	+20	−16	+16	+19	1	−2.36
110582	22 24 10.41	−02 03 42.9	7.35	2 H	336.043 386 19	−02.061 911 79		2.92	5.24	−9.19	0.84	0.63	0.97	0.97	0.74	+29	+	1	−24	−	9	−	9	+19	−	9	−56	+31	+24	0	−0.15
110583	22 24 12.35	+38 14 46.9	9.18	2 H	336.051 451 51	+38.246 367 50	A	8.06	8.93	−7.34	1.53	1.56	1.82	1.71	1.56	−	4	+	3	+	2	−	4	+	4	−21	+	4	−21	+24	−10	3	−0.29
*110584	22 24 12.74	+48 49 18.8	7.60	H	336.053 100 92	+48.821 883 58		6.73	22.13	−2.28	0.46	0.45	0.65	0.44	0.44	−11	+20	+11	−	2	+	8	+	2	+11	−	3	+16	−	7	0	−2.19
*110585	22 24 12.65	−60 41 07.2	8.94	H	336.052 713 62	−60.685 322 97		2.56	30.56	5.84	0.54	0.75	1.18	0.62	0.74	−28	+	1	−11	+18	−	6	+10	−	6	+	0	−	8	−36	1	−1.02
110586	22 24 12.99	−28 40 27.8	8.62	H	336.054 118 13	−28.674 391 05		9.75	38.66	−18.12	0.88	0.66	1.09	1.03	0.72	+40	+	3	+	3	+10	+	9	+26	+	9	+	3	+22	+52	0	−0.02
110587	22 24 13.24	−49 52 46.6	9.64	H	336.055 153 67	−49.879 604 38		8.95	61.16	14.20	0.98	0.91	1.54	1.02	1.06	+17	−22	+	0	−24	+	9	+13	−	2	+20	+11	+39			3	1.28
110588	22 24 14.62	+71 18 03.2	7.59	H	336.060 905 44	+71.300 876 79		6.30	40.61	16.35	0.52	0.48	0.56	0.58	0.55	−	4	−	7	+	8	+22	+	8	−	4	+	9	+10	+	4	+	1	0	−1.12
110589	22 24 15.98	−35 32 48.2	10.12	H	336.066 567 19	−35.546 730 15		6.34	27.45	−84.60	1.43	1.13	1.77	1.51	1.14	+16	+	8	−10	−	6	−	2	+36	+	2	+30	−	8	+11	0	1.75
110590	22 24 16.29	−21 35 49.8	7.00	1 H	336.067 869 79	−21.597 156 83		3.20	26.91	11.50	0.85	0.62	1.00	1.23	0.66	+22	−10	−41	−10	+	1	−	9	−	4	−29	+12	+28			0	0.66
110591	22 24 16.43	+44 27 08.1	8.75	H	336.068 457 21	+44.452 260 54		2.13	16.98	−1.46	0.72	0.74	1.03	0.81	0.83	−37	+	0	+	5	+	0	+11	−	5	+13	−14	+	3	−23	0	0.03
110592	22 24 16.62	−66 15 45.8	8.47	H	336.069 264 78	−66.262 709 53		3.28	16.28	−6.98	0.70	0.66	1.04	0.81	0.66	−10	−	2	+	9	+	2	+	7	−13	+	8	−19	−14	−	6	0	−0.38
110593	22 24 17.56	−63 09 22.6	8.06	H	336.073 165 30	−63.156 268 89		0.78	15.69	−2.23	0.47	0.53	0.82	0.56	0.56	−22	−11	−	4	+	1	−	2	+	6	−	1	−12	−	7	−26	1	0.43
110594	22 24 17.97	−01 26 49.0	8.70	H	336.074 864 86	−01.446 957 06		5.18	3.70	68.46	1.11	0.83	1.28	1.75	0.97	+36	−	2	−16	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
110501	8.605	0.012	8.399	0.014		0.197	0.017	T	0.22	0.02	L	8.4477	0.0026	0.015	84		8.42	8.47				1							S
110502	9.415	0.015	8.290	0.010		0.969	0.014	T	0.95	0.01	L	8.3504	0.0016	0.013	119		8.33	8.37		C		1							S
110503	10.614	0.033	9.629	0.022		0.851	0.031	T	0.87	0.02	L	9.6967	0.0029	0.026	126		9.65	9.75				1							
110504	9.452	0.016	6.758	0.005		2.215	0.014	T	2.26	0.01	L	6.5496	0.0092	0.062	139		6.46	6.62		U 2 C		1 S							
110505	10.352	0.030	8.963	0.016		1.175	0.027	T	1.14	0.02	L	9.0401	0.0014	0.017	90		9.01	9.07		C		1							
110506	6.057	0.003	5.669	0.003		0.372	0.012	G	0.45	0.02	A	5.7120	0.0006	0.006	110		5.70	5.72		C	22231−4556	I 1	1 S						S
110507	8.580	0.011	8.332	0.012		0.232	0.016	T	0.26	0.02	L	8.3772	0.0015	0.014	112		8.34	8.41		C			1						S
110508	8.769	0.010	7.986	0.009		0.682	0.005	G	0.74	0.00	H	8.0464	0.0012	0.012	116		8.02	8.07		C			1						S
110509						1.500	0.510	G	2.91	1.20	Q	9.8347	0.0914	0.581	67		8.93	10.23	248.50	P 1 B			1 S						G P
110510	9.380	0.014	9.322	0.019		0.058	0.022	T	0.07	0.02	L	9.3841	0.0025	0.027	160		9.34	9.43					1						
110511	10.311	0.028	10.303	0.043		0.012	0.047	T	0.03	0.04	L	10.2427	0.0047	0.038	143		10.18	10.31		U			1 X						G
110512	8.633	0.012	7.939	0.011		0.610	0.020	G	0.68	0.02	H	7.9999	0.0014	0.009	73		7.98	8.02		C			1						S
110513	7.850	0.010	7.647	0.011	A	0.700	0.495	G	0.16	0.05	L *	7.6622	0.0022	0.016	74	*	7.64	7.69			22233+0539	I 1	2 C B	AB	64	4.435	0.037	3.54	0.12	S
110514	10.927	0.078	10.382	0.077		0.511	0.098	T	0.58	0.10	L	10.4572	0.0050	0.038	87		10.40	10.86		P 1 A			1 G						G
110515	10.545	0.031	9.977	0.029		0.535	0.031	T	0.61	0.03	L	10.0766	0.0024	0.029	128		10.02	10.13		C			1						
110516	8.532	0.010	8.022	0.009		0.467	0.015	G	0.54	0.02	H	8.0786	0.0013	0.013	115		8.06	8.10		C			1						S
110517	8.790	0.008	8.543	0.009		0.235	0.011	T	0.26	0.01	L	8.5829	0.0013	0.018	212		8.56	8.62		C			1						
110518	7.556	0.007	7.078	0.007		0.462	0.012	G	0.53	0.01	H	7.1211	0.0010	0.009	100		7.11	7.14		C			1						S
110519	9.132	0.013	8.648	0.012	*	0.468	0.014	T	0.54	0.01	L *	8.6940	0.0018	0.017	117	*	8.67	8.72		C	22234−4324	H 1	2 C S A	AB	154	0.184	0.011	0.94	0.30	S
110520	7.004	0.005	6.930	0.005		0.057	0.010	G	0.06	0.02	A	6.9491	0.0009	0.008	103		6.94	6.96		C			1						S
110521	8.343	0.006	8.191	0.007		0.146	0.009	T	0.16	0.01	L	8.2182	0.0013	0.017	247		8.19	8.25		C			1						S
110522	7.162	0.005	6.969	0.005		0.184	0.005	G	0.20	0.01	H	7.0016	0.0012	0.010	93		6.98	7.02					1						S
110523	9.014	0.014	7.474	0.008		1.293	0.013	T	1.25	0.01	L	7.4888	0.0013	0.012	97		7.47	7.51					1						S
110524	11.368	0.124	9.774	0.050		1.160	0.040	G	1.12	0.04	R	9.7375	0.0028	0.018	39		9.70	9.77					1						
110525	9.508	0.017	9.285	0.020		0.230	0.005	G	0.26	0.01	H	9.3422	0.0024	0.024	136		9.31	9.38					1						G
110526						1.570	0.015	G	2.12	0.08	B *	10.7666	0.0038	0.043	154	*	10.70	10.82		R	22235+3228	I 1	2 C B	AS	199	1.772	0.011	0.10	0.05	G
110527	9.638	0.022	9.200	0.023		0.413	0.029	T	0.48	0.03	L	9.2378	0.0022	0.017	65		9.22	9.27		C	22234+0351	I 1	1						S
110528	10.423	0.042	8.422	0.015		1.695	0.037	T	2.50	0.08	O	8.2093	0.0128	0.128	71		7.93	8.36		U 2			1 S						
110529	6.757	0.006	5.636	0.004		0.979	0.003	G	0.96	0.00	H	5.6922	0.0011	0.009	83		5.68	5.71					1						S
110530	10.061	0.020	9.662	0.021		0.377	0.027	T	0.44	0.03	L	9.7326	0.0028	0.029	160		9.68	9.78		U			1						
110531	9.163	0.018	7.713	0.010		1.223	0.016	T	1.18	0.02	L	7.7238	0.0021	0.012	75		7.71	7.75		C			1						S
110532	7.191	0.007	6.027	0.005		0.998	0.003	G	0.98	0.00	H	6.0886	0.0008	0.006	49		6.08	6.10		C			1						S
110533	9.925	0.015	8.719	0.010		1.032	0.014	T	1.00	0.01	L	8.7710	0.0014	0.016	201		8.74	8.80					1 S						
110534	12.494	0.208	10.882	0.070		1.470	0.020	G	2.02	0.01	A	10.7855	0.0042	0.045	141		10.70	10.86					1						G
110535	10.377	0.027	9.191	0.017		1.016	0.025	T	0.99	0.02	L	9.2742	0.0014	0.018	128		9.24	9.30		C			1						
110536	7.856	0.009	7.393	0.008		0.460	0.015	G	0.53	0.02	H	7.4572	0.0013	0.010	72		7.44	7.48		C			1 S						S
110537	9.495	0.022	8.968	0.022		0.503	0.023	T	0.58	0.02	L	9.0225	0.0021	0.012	72		9.01	9.05		C			1						
110538	5.725	0.003	4.543	0.002		1.015	0.005	G	1.03	0.03	C	4.5867	0.0005	0.004	119		4.58	4.59					1 S						S
110539	8.124	0.008	7.119	0.006	*	0.878	0.007	T	0.89	0.01	L *	7.2305	0.0010	0.011	163	*	7.21	7.26		D	22236+4521	I 1	2 C A	AB	89	6.468	0.003	0.67	0.01	S
110540	10.298	0.030	9.973	0.034	A	0.317	0.155	G	0.37	0.21	R *	9.9300	0.0027	0.023	110	*	9.89	9.96		C	22236+6453	I 1	2 C C	AB	215	7.975	0.036	3.15	0.21	G
110541	8.951	0.014	8.538	0.014	*	0.390	0.018	T	0.46	0.02	L *	8.5984	0.0025	0.014	75	*	8.57	8.62		D	22236+2051	I 2	2 C A	CD	73	0.381	0.017	2.17	0.12	
110542	9.447	0.014	9.055	0.015		0.371	0.019	T	0.43	0.02	L	9.1219	0.0023	0.027	185		9.08	9.17					1 S						
110543	7.600	0.006	7.417	0.007		0.175	0.009	T	0.19	0.01	L	7.4560	0.0009	0.010	143		7.44	7.47					1						S
110544	9.325	0.019	8.232	0.013		0.944	0.018	T	0.93	0.01	L	8.2684	0.0017	0.011	79		8.25	8.29		C			1						
110545	9.901	0.019	9.198	0.016		0.635	0.019	T	0.70	0.02	L	9.3104	0.0020	0.021	139		9.26	9.35					1						
110546	9.808	0.023	9.394	0.025		0.391	0.031	T	0.46	0.03	L	9.4595	0.0025	0.016	82		9.42	9.48		C			1						
110547	8.507	0.010	8.401	0.012	B	0.096	0.015	T	0.11	0.02	L	8.5164	0.0320			B				D	22237−7248	I 2	1 C I A						S
110548	6.822	0.005	6.276	0.004	*	0.518	0.004	T	0.59	0.00	L *	6.3176	0.0013	0.008	78	*	6.31	6.33		D	22236+2051	I 2	2 C A	AB	0	0.417	0.010	2.90	0.05	S
110549	10.169	0.027	8.292	0.011		1.593	0.024	T	1.77	0.08	O	8.2108	0.0016	0.014	82		8.19	8.23		C			1						S
110550	6.717	0.004	6.763	0.005		−0.037	0.006	T	−0.01	0.01	L	6.7672	0.0007	0.007	103		6.76	6.78					1						S
110551	7.999	0.007	7.952	0.009	A	0.043	0.010	T	0.06	0.01	L	8.0425	0.0241	0.132	143	A	7.77	8.18		D	22237−7248	I 2	1 C P A						S
110552	8.723	0.012	8.416	0.013		0.292	0.017	T	0.33	0.02	L	8.4544	0.0014	0.014	91		8.42	8.47		C			1						S
110553	10.613	0.044	10.095	0.042		0.496	0.046	T	0.57	0.05	L	10.2318	0.0037	0.024	76		10.19	10.30					1						
110554	10.882	0.064	10.238	0.058		0.598	0.075	T	0.67	0.07	L	10.2920	0.0031	0.021	93		10.25	10.32		C			1						G
110555	10.748	0.049	10.282	0.052		0.452	0.056	T	0.52	0.06	L	10.3197	0.0028	0.027	64		10.28	10.37		D			1						
110556	11.090	0.068	10.444	0.061		0.578	0.072	G	0.65	0.07	R	10.5528	0.0027	0.021	79		10.49	10.60					1						G
110557	10.426	0.043	9.130	0.024		1.102	0.039	T	1.06	0.04	L	9.1987	0.0017	0.013	75		9.17	9.22					1						
110558	9.771	0.018	8.167	0.009		1.328	0.003	G	1.29	0.00	H	8.1731	0.0016	0.016	129		8.14	8.21					1						S
110559	9.578	0.020	8.195	0.012		1.170	0.018	T	1.13	0.02	L	8.2491	0.0014	0.011	74		8.23	8.27		C			1						
110560	11.287	0.077	10.514	0.059		0.573	0.016	G	0.65	0.01	H	10.7573	0.0046	0.033	90		10.70	10.81		C			1						G
110561	7.452	0.006	7.118	0.006		0.326	0.011	G	0.38	0.01	H	7.1629	0.0009	0.008	119		7.15	7.18		C			1						S
110562	9.580	0.022	8.961	0.020		0.576	0.026	T	0.65	0.02	L	9.0370	0.0028	0.021	105		9.00	9.07					1						
110563	9.439	0.022	8.295	0.015		0.983	0.021	T	0.96	0.02	L	8.3493	0.0019	0.012	75		8.33	8.38		C			1						S
110564	9.965	0.018	9.093	0.014	*	0.763	0.018	T	0.80	0.01	L *	9.1020	0.0025	0.028	158	*	9.06	9.15		D	22239−6656	H 1	2 C A	AB	231	0.816	0.011	2.12	0.05	
110565						0.736	0.126	G	0.78	0.09	R	11.1347	0.0052	0.040	91		11.06	11.19		C			1						G
110566	6.750	0.004	6.234	0.004		0.485	0.005	T	0.56	0.01	L	6.2841	0.0006	0.006	112		6.28	6.30					1						S
110567	8.110	0.007	7.713	0.006		0.397	0.003	G	0.46	0.00	H	7.7697	0.0013	0.013	177		7.74	7.79		C			1						S
110568	9.628	0.016	8.357	0.010		1.082	0.015	T	1.04	0.01	L	8.4031	0.0014	0.016	138		8.38	8.43		C			1						
110569	9.016	0.009	7.224	0.004		1.523	0.008	T	2.90	0.07	O	6.8783	0.0234	0.194	212		6.55	7.42		U 2 C			1 S						S P
110570	9.711	0.019	9.384	0.021		0.310	0.026	T	0.36	0.04	L	9.4809	0.0024	0.019	101		9.45	9.52		C			1						
110571	8.195	0.008	8.120	0.009		0.070	0.020	G	0.08	0.02	H	8.1415	0.0012	0.014	117		8.12	8.17		C			1						S
110572	8.357	0.006	8.334	0.008		0.026	0.009	T	0.04	0.01	L	8.3534	0.0015	0.018	197		8.33	8.38		C			1						S
110573	6.696	0.005	6.772	0.004		−0.075	0.004	G	−0.05	0.01	H	6.7755	0.0007	0.006	91		6.76	6.79					1						S
110574	8.856	0.015	8.204	0.014		0.605	0.017	T	0.67	0.01	L	8.2449	0.0017	0.012	75		8.23	8.27		C			1 G						S
110575	10.074	0.023	8.659	0.012		1.195	0.020	T	1.15	0.02	L	8.7061	0.0018	0.016	128		8.68	8.74					1						
110576	10.643	0.046	9.931	0.037		0.642	0.045	T	0.71	0.04	L	9.9690	0.0028	0.019	77		9.94	10.01		C			1						
110577	8.406	0.010	7.994	0.014		0.408	0.015	G	0.47	0.02	H	8.0746	0.0022	0.012	78		8.05	8.10					1						S
110578	5.747	0.005	5.778	0.005	*	−0.033	0.004	G	−0.01	0.00	R *	5.7843	0.0011	0.006	45	*	5.77	5.79		D	22241−0451	I 1	2 C S A	AS	123	0.147	0.045	0.17	0.22	S
110579	8.921	0.013	8.446	0.012		0.460	0.014	T	0.53	0.01	L	8.4833	0.0021	0.018	94		8.45	8.53					1						S
110580	8.956	0.017	7.307	0.009		1.379	0.015	T	1.35	0.02	L	7.2989	0.0010	0.008	55		7.29	7.31					1 G						S
110581	12.126	0.183	10.417	0.061		1.427	0.152	T	1.41	0.24	L	10.4535	0.0034	0.032	124		10.41	10.51		C			1 S						G
110582	7.614	0.008	7.394	0.009		0.210	0.011	T	0.23	0.01	L	7.4148	0.0026	0.022	80		7.38	7.45		U 2			1						S
110583	9.446	0.018	9.224	0.021	A	0.212	0.026	T	0.23	0.03	L	9.2419	0.0108	0.032	110	A	9.20	9.31		U	22242+3815	I 1	2 C D	AC	72	13.806	0.024	2.40	0.10	D
110584	7.718	0.005	7.613	0.008		0.102	0.009	T	0.12	0.01	L	7.6439	0.0009	0.011	161		7.63	7.66		C			1						S
110585	10.424	0.020	9.050	0.011		1.163	0.018	T	1.12	0.02	L	9.1026	0.0013	0.026	264		9.06	9.15					1						
110586	9.083	0.014	8.666	0.014		0.408	0.016	T	0.47	0.02	L	8.7119	0.0013	0.012	102		8.69	8.74		C			1						S
110587	10.200	0.024	9.692	0.024		0.488	0.026	T	0.56	0.03	L	9.7435	0.0025	0.026	116		9.70	9.78		C			1						
110588	7.795	0.006	7.618	0.007		0.170	0.009	T	0.19	0.01	L	7.6458	0.0011	0.011	138		7.62	7.67		C			1						S
110589	10.983	0.059	10.149	0.045		0.734	0.057	T	0.78	0.04	L	10.2626	0.0035	0.025	66		10.22	10.30		C			1						
110590	9.145	0.018	7.192	0.008		1.620	0.016	T	1.64	0.02	L	7.1122	0.0026	0.016	68		7.09	7.14		U			1						S
110591	10.193	0.021	8.843	0.012		1.144	0.019	T	1.11	0.02	L	8.9156	0.0020	0.023	177		8.87	8.96					1						
110592	10.244	0.021	8.629	0.010		1.352	0.018	T	1.32	0.02	L	8.6218	0.0018	0.019	164		8.59	8.66		C			1						
110593	8.257	0.006	8.080	0.007		0.162	0.009	T	0.18	0.01	L	8.1157	0.0012	0.017	219		8.09	8.15					1						S
110594	9.369	0.016	8.777	0.014		0.552	0.019	T	0.62	0.02	L	8.8151	0.0015	0.015	88		8.79	8.84					1						
110595	11.324	0.080	11.126	0.115	*	0.189	0.132	T	0.21	0.15	L *	11.4074	0.0076	0.076	152	*	11.24	11.53		U	22243+4850	H 1	2 C C	AB	113	0.327	0.055	0.31	0.43	G
110596	10.805	0.054	8.813	0.018		1.500	0.040	G	1.50	0.10	R	8.6841	0.0081	0.043	71		8.61	8.76		U 2			1						
110597	9.614	0.028	9.092	0.027		0.490	0.035	T	0.56	0.04	L	9.1747	0.0024	0.015	43		9.14	9.19		C			1						
110598	9.257	0.019	8.758	0.018		0.480	0.020	T	0.55	0.02	L	8.8095	0.0022	0.015	73		8.78	8.83					1						S
110599	8.699	0.010	7.450	0.006		1.065	0.009	T	1.03	0.01	L	7.5038	0.0010	0.012	130		7.49	7.52					1						S
110600	7.430	0.008	6.990	0.007		0.402	0.015	G	0.47	0.02	H	7.0255	0.0012	0.008	82		7.01	7.04					1						S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
110601	22 24 26.40	−06 01 56.9	8.48	H	336.109 993 15	−06.032 482 97	0.76	8.68	−0.39	1.22	0.91	1.51	1.61	1.08	+19	+ 4	−22	+ 2	+ 3	−34	− 4	− 7	+ 4	+20	0	0.10
110602	22 24 27.03	−13 31 45.9	5.76	H	336.112 624 94	−13.529 403 59	6.01	50.69	14.24	0.66	0.46	0.76	0.67	0.48	+29	− 5	−14	−20	+ 2	+17	+ 3	−19	+26	+35	0	2.13
110603	22 24 27.41	+35 25 59.5	7.30	H	336.114 197 14	+35.433 184 74	3.45	−14.75	−21.14	0.58	0.57	0.82	0.71	0.84	+10	+ 3	−10	+22	+ 0	− 9	− 4	− 8	+25	− 4	0	0.80
*110604	22 24 27.48	−48 48 56.3	7.67	H	336.114 518 96	−48.815 634 63	1.21	13.46	−6.87	0.67	0.56	0.99	0.77	0.60	+ 3	+ 5	− 4	−21	+ 7	+ 6	+ 6	− 3	+13	+ 9	0	−0.50
*110605 H	22 24 27.47	+03 49 06.4	8.72	H	336.114 446 67	+03.818 431 54 A	1.55	−8.92	−71.61	2.11	1.55	2.16	2.27	1.43	+34	+20	+11	−11	+ 7	− 7	+ 3	−25	− 4	+ 9	0	0.27
110606	22 24 28.41	+14 53 43.4	8.06	T	336.118 369 79	+14.895 379 28	1.93	6.87	12.73	0.86	0.73	1.02	1.03	0.86	+19	+ 6	− 3	−23	− 1	− 6	− 2	−35	+ 1	+14	0	1.07
110607	22 24 28.60	−09 48 00.8	8.48	H	336.119 159 88	−09.800 223 20	2.56	1.94	−2.84	1.14	0.79	1.46	1.62	0.87	+ 5	+32	−41	+25	−18	+37	+ 7	−28	+37	+24	0	0.19
110608	22 24 30.61	−30 19 39.6	9.81	H	336.127 526 13	−30.327 661 96	10.83	−105.48	−99.75	1.27	0.98	1.57	1.48	1.02	+50	−19	−19	+21	− 5	+ 1	+ 0	− 6	+ 4	+58	0	0.85
110609	22 24 31.00	+49 28 35.0	4.55	1 H	336.129 148 80	+49.476 400 74	1.54	−5.12	−3.37	0.37	0.38	0.52	0.34	0.37	−14	+ 8	+18	−16	+15	+11	+15	− 6	+12	−14	0	−2.06
110610	22 24 32.88	+71 02 48.7	7.43	H	336.136 984 52	+71.046 864 10	4.35	−7.40	−21.22	0.50	0.49	0.55	0.57	0.52	+ 2	+ 1	+11	+22	+18	+ 1	+18	+ 6	+ 8	+ 9	0	−1.36
110611	22 24 33.05	−13 11 05.4	7.70	2 H	336.137 693 60	−13.184 838 87	0.72	−6.80	−18.49	0.83	0.61	0.95	0.92	0.63	+24	+ 9	− 4	−11	− 2	+19	+ 0	−29	+24	+23	0	0.26
110612	22 24 33.12	−08 06 23.6	9.69	H	336.137 988 35	−08.106 549 89	7.39	11.07	−5.39	1.35	1.20	1.58	1.75	1.46	+34	+ 2	− 1	−12	−11	+30	−13	−35	+12	+28	0	0.39
110613	22 24 33.34	+08 10 29.8	8.30	H	336.138 911 83	+08.174 947 31	4.92	38.94	−23.91	1.17	0.67	1.18	1.56	0.82	− 1	+34	− 1	−46	+28	−16	+36	−16	+32	−23	0	−0.37
110614	22 24 33.35	+20 16 34.5	8.83	H	336.138 956 15	+20.276 241 76	5.53	−20.41	−45.86	0.94	0.75	1.12	0.99	0.93	+13	+20	−20	+ 8	+14	+ 7	+21	+ 2	+16	+32	0	−0.37
110615	22 24 33.66	−17 35 35.1	7.79	H	336.140 249 94	−17.593 092 51	2.88	−9.21	−10.82	0.95	0.66	1.13	1.23	0.83	+31	−17	−33	+ 8	+24	+ 3	+16	+10	+29	+48	0	0.87
110616	22 24 33.90	−23 22 02.8	7.51	H	336.141 246 93	−23.367 440 94	1.09	−1.44	−3.77	0.79	0.55	0.85	0.91	0.56	+14	+12	− 4	−25	+16	+ 2	+14	− 9	+13	+14	0	−0.27
*110617	22 24 34.43	+16 09 00.5	8.72	2 H	336.143 468 59	+16.150 146 02	1.19	4.62	−6.54	1.09	0.89	1.23	1.49	0.98	+18	+ 2	−29	−41	− 7	+19	− 3	−52	+22	+ 4	0	−0.12
*110618	22 24 34.39	−72 15 13.6	5.28	G	336.143 294 93	−72.253 773 88	34.60	1302.45	−674.12	0.44	0.43	0.60	0.51	0.42	− 2	− 1	−23	− 6	+12	−18	+ 8	+ 1	− 7	+ 0	0	0.58
110619	22 24 35.80	−01 11 12.4	6.74	H	336.149 175 43	−01.186 766 69	4.59	113.24	37.69	0.82	0.61	0.91	1.12	0.68	+23	−11	−21	− 9	+11	+24	− 6	−60	+27	− 7	0	−0.98
110620	22 24 36.28	−11 34 42.0	10.80	G	336.151 174 44	−11.578 337 86	17.81	172.94	−145.34	2.29	1.42	2.38	2.42	1.73	− 1	+24	−16	−36	+10	+14	+20	−23	+37	+14	0	0.96
110621	22 24 36.65	+26 42 55.4	9.01	H	336.152 697 26	+26.715 399 68	9.68	−12.84	−9.84	0.94	0.86	1.26	1.04	1.10	+ 9	+16	−34	+17	+18	−26	+18	−10	+32	+11	0	−0.15
110622	22 24 36.95	+41 18 24.0	8.33	2 H	336.153 953 14	+41.306 668 23	1.49	−5.67	−12.18	0.47	0.59	0.93	0.51	0.71	−44	+ 1	− 1	+43	− 6	+ 1	− 2	+ 0	+13	−40	0	0.96
110623	22 24 37.33	+16 53 48.8	8.28	H	336.155 528 03	+16.896 878 63	17.43	124.26	39.70	0.88	0.75	1.15	1.16	0.90	+19	+ 8	−34	−24	− 6	+ 8	− 4	−52	+43	+ 8	0	0.61
110624	22 24 37.52	−39 07 37.3	6.85	G	336.156 338 18	−39.127 041 49	8.89	110.71	−9.10	0.70	0.62	0.92	0.84	0.75	+30	−23	−18	+ 5	− 0	+17	− 1	+13	+ 1	+31	0	0.23
110625	22 24 37.65	+23 37 42.1	9.69	H	336.156 894 85	+23.628 360 81	2.00	−4.28	−0.85	1.17	0.96	1.35	1.51	1.18	+15	+ 7	+ 0	−18	+ 0	+ 1	+ 0	+ 0	+ 3	+10	0	−0.92
110626	22 24 37.72	+39 25 49.9	8.03	H	336.157 150 48	+39.430 525 27	21.88	192.38	92.42	0.77	0.68	0.95	0.93	0.89	+ 6	+ 7	− 9	+32	+ 9	− 4	+ 8	−15	+14	− 0	0	1.58
110627	22 24 38.40	+32 26 57.8	8.47	H	336.159 986 25	+32.449 399 46	1.52	13.34	30.49	0.55	0.70	0.93	0.63	0.87	+31	+ 9	− 6	− 3	− 9	− 8	− 4	−30	+24	+39	0	−0.46
110628	22 24 38.83	−33 16 10.3	7.88	H	336.161 786 27	−33.269 531 05	12.79	−23.44	−49.20	0.84	0.67	1.06	0.92	0.65	+35	−20	−11	−13	−16	+38	−18	−39	+22	+36	0	−1.26
110629	22 24 39.11	−41 26 24.9	6.64	H	336.162 959 92	−41.440 255 44 A	13.97	144.58	−35.21	3.75	2.04	3.00	3.08	1.86	−23	+49	−30	−38	+13	− 4	+11	−16	+ 9	+ 7	22	3.11
110630	22 24 39.78	−65 37 17.2	7.35	G	336.165 744 81	−65.621 435 75	4.92	22.53	0.38	0.51	0.48	0.73	0.62	0.49	−12	+ 2	−11	+19	+ 1	−11	− 1	− 2	− 4	−13	1	−2.17
110631	22 24 40.13	−51 45 03.0	8.60	H	336.167 222 03	−51.750 821 36	3.27	19.14	−5.17	0.64	0.68	1.15	0.84	0.77	+31	−20	−11	+18	+ 3	+17	+ 6	+27	+ 3	+36	0	0.01
110632 T	22 24 40.46	−41 26 25.8	8.77	H	336.168 568 89	−41.440 498 16 B	13.97	97.08	−51.51	36.51	27.16	3.00	35.43	22.50	+ 1	+ 5	− 2	+ 0	+ 0	+ 0	+ 0	+ 0	+ 1	− 2	22	3.11
110633	22 24 40.47	−38 12 36.7	8.29	H	336.168 627 47	−38.210 195 76	4.26	12.61	5.93	0.99	0.78	1.19	1.18	0.85	+21	+ 2	− 9	+38	+ 0	+22	+ 4	+23	+ 0	+26	0	−0.44
110634	22 24 41.32	+63 34 13.4	7.72	H	336.172 150 01	+63.570 377 24	4.48	21.69	9.86	0.64	0.61	0.71	0.84	0.79	−25	− 4	+ 8	+23	+11	−16	+13	−18	+16	−22	0	0.55
110635	22 24 42.45	+74 51 00.8	8.41	H	336.176 889 48	+74.850 211 43	4.55	−17.36	19.83	0.63	0.61	0.71	0.73	0.63	+ 0	− 4	+ 7	+19	+ 6	−12	+ 8	− 1	+12	+ 9	0	1.43
110636	22 24 43.42	+09 48 36.4	7.03	1 H	336.180 917 78	+09.810 124 67	4.87	1.74	16.61	0.76	0.55	0.91	1.05	0.60	+23	+20	+ 5	−16	+15	+18	+11	−24	+ 5	− 3	0	0.52
110637	22 24 44.14	−12 57 27.8	7.76	H	336.183 896 06	−12.957 711 94	0.69	11.62	−25.89	0.89	0.62	0.96	1.04	0.65	+13	+ 7	− 5	+ 4	−11	+24	− 9	−18	+18	+10	0	1.02
110638	22 24 45.01	+18 51 47.3	7.90	H	336.187 538 51	+18.863 126 28	5.16	22.70	−2.95	0.69	0.59	0.85	0.73	0.72	+19	+ 3	− 2	+24	− 9	− 3	−11	−35	+16	+14	2	1.69
110639	22 24 45.26	−34 48 07.0	9.07	H	336.188 573 71	−34.801 950 29	1.97	21.43	9.18	1.24	0.91	1.48	1.48	0.87	+30	+10	− 7	+22	+15	+17	+14	−17	+12	+32	2	2.02
110640 H	22 24 45.65	+22 33 04.7	8.83	G	336.190 193 95	+22.551 294 24 A	46.74	−173.46	−67.63	1.68	1.46	1.66	1.35	1.28	+29	+24	+22	−28	−15	−15	− 6	−32	+10	+30	1	−0.30
110641	22 24 46.50	−26 51 35.4	7.04	H	336.193 746 74	−26.859 843 53	2.66	−13.28	−30.93	0.85	0.57	0.88	0.88	0.54	+19	+12	+ 6	−33	+ 5	+ 5	+ 4	−24	+ 4	+16	2	0.40
110642	22 24 47.63	+34 43 25.6	10.27	H	336.198 463 18	+34.723 777 18	22.90	−190.01	−25.88	1.41	1.13	1.77	2.06	1.52	− 1	− 7	−12	+45	− 2	−26	−12	−19	+30	−18	0	−0.49
110643 H	22 24 48.84	+28 41 08.4	8.32	H	336.203 494 23	+28.685 655 20 A	3.96	−3.17	−30.16	2.10	3.17	1.37	1.16	1.33	−47	−10	−15	+35	− 1	− 9	− 7	− 9	+20	− 4	1	−0.80
110644	22 24 50.55	+41 07 56.3	8.70	H	336.210 638 06	+41.132 313 67	6.13	1.49	−18.16	0.60	0.72	1.12	0.64	0.85	−41	+ 2	− 1	+47	− 3	+ 3	+ 2	+ 0	+12	−34	0	−0.37
110645	22 24 51.31	+08 44 11.9	7.28	H	336.213 803 50	+08.736 647 05	7.03	4.69	−11.07	0.75	0.50	0.93	1.34	0.59	+12	− 1	+22	−21	+28	+18	+18	−20	+ 6	−22	0	−1.08
110646	22 24 51.86	−41 23 14.2	7.84	H	336.216 077 97	−41.387 291 20	5.87	89.15	−69.54	0.79	0.59	0.97	0.89	0.59	+ 7	+ 2	−14	+15	− 9	+17	− 7	+ 0	− 8	+ 3	0	−0.54
110647	22 24 54.91	+55 07 28.6	8.66	H	336.228 787 97	+55.124 604 79	2.20	6.37	0.19	0.59	0.56	0.72	0.74	0.65	+ 4	− 4	− 2	+ 9	+19	− 3	+17	+10	+ 9	+30	0	−0.96
110648	22 24 55.08	+56 42 36.7	9.28	H	336.229 490 20	+56.710 200 05	3.93	16.25	6.30	0.80	0.76	0.96	1.02	0.89	− 6	+ 1	+14	−21	+ 4	−11	+ 8	−27	+10	+23	0	−1.90
110649	22 24 56.19	−57 47 47.8	5.31	G	336.234 136 15	−57.796 610 17	48.81	180.71	−331.27	0.35	0.40	0.61	0.41	0.38	− 2	− 9	−20	−16	+ 3	+10	+ 4	+ 9	+12	+ 2	0	1.77
110650	22 24 56.78	+17 17 17.1	10.36	G	336.236 598 65	+17.288 071 19	18.39	−95.12	−272.20	1.40	1.39	1.86	1.61	1.69	+34	+ 9	−16	+10	−13	− 6	−17	−49	+40	+17	4	1.36
110651	22 24 58.51	+72 02 28.9	8.88	H	336.243 800 59	+72.041 371 00	1.46	−4.82	−3.60	0.66	0.62	0.74	0.78	0.75	+ 3	−12	− 6	+25	+ 2	−19	+ 1	+ 4	+ 8	+ 9	0	−0.95
110652	22 25 00.49	−30 43 14.6	9.62	H	336.252 032 29	−30.720 724 29	4.61	58.39	−39.13	1.10	0.89	1.50	1.21	0.84	+49	−15	−21	+15	− 7	+14	− 4	−14	+ 7	+50	0	0.39
110653	22 25 00.98	−42 01 48.3	10.85	G	336.254 063 58	−42.030 078 31 B	−0.16	2.60	−19.88	13.17	10.41	10.34	10.36	7.70	+ 5	+ 6	−27	− 1	− 8	+16	− 5	+ 5	− 4	+17	18	2.66
110654	22 25 02.00	−42 01 42.8	9.29	G	336.258 317 15	−42.028 560 73 A	3.66	13.34	−16.93	2.55	2.05	2.58	2.57	1.96	+ 8	+ 6	−23	− 9	− 7	+14	− 5	− 6	− 6	+19	18	2.66
*110655	22 25 02.76	−33 12 17.4	10.59	H	336.261 502 14	−33.204 845 72	30.73	131.65	102.84	4.19	3.69	5.33	4.78	3.55	+42	+ 0	−11	−19	−21	+32	−20	−50	+26	+43	2	
*110656 H	22 25 02.67	−38 05 43.4	10.50	H	336.261 121 94	−38.095 392 96 A	7.73	19.22	−0.50	7.35	5.30	4.25	4.45	3.53	+72	− 6	−12	+ 7	− 1	+20	+ 3	+18	− 5	+27	1	1.06
*110657	22 25 02.68	+32 47 28.4	7.06	H	336.261 151 67	+32.791 235 77	10.05	53.54	−12.29	0.43	0.53	0.69	0.51	0.63	+25	− 1	− 9	+ 7	− 6	− 5	− 6	−23	+24	+26	1	−1.51
*110658	22 25 02.75	+26 36 40.0	7.39	H	336.261 469 95	+26.611 116 66	10.02	−26.98	−23.41	0.63	0.54	0.77	0.63	0.60	− 1	+24	−31	+ 4	+10	−11	+ 9	− 3	+ 7	+13	0	−0.05
110659	22 25 03.07	−53 48 35.6	8.86	1 H	336.262 798 65	−53.809 899 66	13.09	75.42	−154.35	0.73	0.69	1.22	0.94	0.74	+20	−16	−16	+24	+ 6	+27	+11	+21	+ 7	+36	3	−0.19
110660	22 25 03.28	+15 18 06.6	11.85	G	336.263 680 79	+15.301 829 18	17.24	−81.19	−225.94	2.30	2.06	2.97	2.60	2.48	+24	+ 6	− 9	− 7	− 1	+ 1	− 0	−34	− 2	+25	2	−1.41
110661	22 25 03.33	+51 15 20.9	6.52	1 H	336.263 863 96	+51.255 817 22	2.85	50.29	25.23	0.45	0.42	0.57	0.49	0.44	−14	+ 5	+ 2	−12	+16	−12	+16	− 4	+10	+ 3	0	−0.52
110662	22 25 03.66	+57 50 29.7	10.35	2 G	336.265 270 01	+57.841 595 17	0.17	−2.46	−2.15	1.23	1.13	1.46	1.55	1.32	− 1	+19	+22	+19	+ 8	+22	+ 7	−13	+ 2	+ 9	0	1.63
110663	22 25 04.16	−13 59 53.6	8.63	H	336.267 348 17	−13.998 209 84	23.97	169.22	−41.18	0.98	0.65	1.07	1.00	0.64	+16	+ 1	−18	−30	+ 8	+16	+11	−27	+24	+15	0	1.18
110664	22 25 05.98	+44 32 18.9	8.10	2 H	336.274 926 11	+44.538 583 95	1.87	−1.85	−5.22	0.52	0.56	0.82	0.59	0.65	−25	+ 6	+ 8	− 2	+ 5	− 3	+ 5	−11	− 2	−28	1	0.77
110665	22 25 07.76	−44 24 49.3	8.42	H	336.282 321 67	−44.413 684 36	5.79	66.37	−22.82	0.93	0.63	1.24	1.51	0.76	− 9	+17	−21	+ 9	−26	+29	−15	+ 6	+13	+ 9	0	2.37
110666	22 25 08.72	+77 25 56.7	7.30	H	336.286 346 04	+77.432 415 27	5.69	−7.42	−27.03	0.50	0.46	0.53	0.62	0.59	− 2	−13	+ 7	+30	− 3	−11	+ 0	+19	− 5	+12	0	1.10
110667	22 25 09.01	+46 22 00.6	10.49	H	336.287 548 85	+46.366 824 06	3.04	−6.24	−6.93	1.04	1.02	1.45	1.04	0.98	−24	+21	− 4	− 3	+18	− 4	+21	−20	+13	−15	1	0.82
110668	22 25 10.39	−70 25 53.3	5.78	H	336.293 298 97	−70.431 470 60	19.75	121.79	−62.31	0.44	0.42	0.60	0.51	0.44	−10	+ 0	−25	+15	+ 3	−14	− 1	+11	−14	+10	0	0.64
110669	22 25 12.01	−46 29 45.7	8.27	H	336.300 038 70	−46.496 039 53	5.91	−65.78	−1.96	0.82	0.63	1.03	0.88	0.72	+ 3	−17	−14	+ 1	+ 1	+24	+ 4	+15	+ 1	+ 4	0	−1.02
110670	22 25 12.17	+42 01 54.5	7.85	H	336.300 715 14	+42.031 798 61	4.22	−36.26	4.34	0.47	0.59	0.93	0.55	0.75	−50	− 2	+ 0	+15	− 5	− 7	− 5	−11	+13	−51	0	−1.43
110671	22 25 13.98	+60 50 10.8	8.12	H	336.308 239 94	+60.836 324 68	3.08	4.89	−2.53	0.59	0.55	0.66	0.66	0.59	−17	− 5	+11	+32	− 6	− 1	− 4	− 9	+15	−10	0	−0.15
110672	22 25 16.61	+01 22 38.6	4.80	1 H	336.319 218 57	+01.377 392 45	2.96	18.38	3.35	0.71	0.43	0.71	0.80	0.48	− 4	−16	+ 2	−13	+14	+23	+17	−18	−26	−14	0	−0.31
110673	22 25 16.78	−51 23 53.7	7.59	G	336.319 907 54	−51.398 258 21	4.48	−22.51	−75.07	0.53	0.55	0.94	0.66	0.63	+33	−21	−17	+18	+ 8	+10	+10	+23	+ 0	+39	1	0.99
110674	22 25 16.87	−47 34 10.9	8.57	H	336.320 271 40	−47.569 702 33	2.60	50.16	−7.60	0.82	0.68	1.21	0.81	0.74	+ 3	− 5	−12	−24	+ 4	+22	+ 5	− 3	+ 8	+18	3	−0.27
110675	22 25 18.31	+45 59 03.5	8.59	H	336.326 277 71	+45.984 311 49	1.42	8.43	−0.95	0.65	0.68	0.97	0.72	0.71	−26	+ 5	+15	−17	+14	− 5	+14	−13	+14	−19	1	−1.13
110676	22 25 19.32	+11 31 37.3	8.36	H	336.330 482 20	+11.527 020 67	4.33	−17.57	−22.59	0.90	0.68	1.05	1.29	0.80	+18	+12	− 8	−26	+15	+ 5	+15	−19	+ 9	− 4	0	0.00
110677	22 25 19.90	−00 00 36.8	8.98	H	336.332 900 68	−00.010 215 21	4.90	2.00	−6.85	1.20	0.83	1.50	1.50	0.96	+13	+20	−36	− 6	+17	− 5	+14	−51	+46	− 2	0	1.17
110678	22 25 20.70	+40 09 36.8	8.95	H	336.336 258 67	+40.160 223 24	4.11	−6.77	−7.71	0.78	0.93	1.17	0.93	1.18	− 3	+15	+ 6	+ 4	− 2	− 8	− 1	−14	+11	−11	0	0.77
110679	22 25 21.10	+73 36 10.8	8.13	H	336.337 932 38	+73.602 996 20	8.20	−34.45	−19.66	0.60	0.57	0.66	0.63	0.60	−14	− 4	+11	−36	+16	+ 9	+14	−16	+11	− 9	0	0.28
110680 H	22 25 23.30	−39 13 22.1	8.69	H	336.347 080 40	−39.222 811 95 A	4.14	14.20	−7.09	2.35	2.06	1.84	1.83	1.29	−24	+ 7	− 7	+15	− 4	+17	− 1	+16	− 3	−12	1	−0.05
110681	22 25 23.63	+74 49 41.5	7.98	H	336.348 439 53	+74.828 191 52	1.65	−3.20	1.83	0.58	0.56	0.65	0.72	0.63	+ 7	− 7	+11	+21	+ 9	−11	+12	+ 2	+ 4	+17	0	−0.85
110682	22 25 24.13	+50 24 05.5	7.34	H	336.350 548 37	+50.401 517 00	1.62	1.53	0.16	0.45	0.41	0.58	0.47	0.42	−16	+ 8	− 6	− 1	+23	−19	+26	−11	+16	+14	1	0.00
110683	22 25 24.53	+02 46 13.0	10.34	H	336.352 215 44	+02.770 281 28	5.78	−14.13	−10.60	1.58	1.23	1.74	1.95	1.21	+30	+10	+14	+21	+ 0	+18	−13	−25	−10	+ 2	0	0.18
110684	22 25 25.60	+47 06 12.5	8.41	H	336.356 675 36	+47.103 483 31	2.82	2.42	−6.87	0.61	0.60	0.83	0.62	0.60	−21	+16	+11	− 3	+18	+ 2	+20	−13	+ 4	− 9	0	−0.53
110685	22 25 27.98	−25 21 17.2	8.93	H	336.366 599 99	−25.354 778 65	10.07	−14.59	−93.43	1.11	0.82	1.24	1.23	0.78	+32	−18	−17	−27	+ 0	+10	− 3	−24	+12	+25	4	−0.08
110686	22 25 29.21	+04 44 52.5	8.67	H	336.371 715 68	+04.747 914 02	9.73	87.36	15.15	1.08	0.71	1.11	1.38	0.72	+16	+ 9	+26	+26	+ 6	+14	− 9	−28	−10	−11	0	0.85
110687	22 25 29.78	+22 34 27.0	7.65	H	336.374 083 36	+22.574 173 02	4.79	53.76	−5.19	0.76	0.68	0.96	0.82	0.79	+19	+29	− 8	− 4	+12	−29	+ 6	+10	−12	+38	0	1.07
110688	22 25 31.08	−11 54 28.9	8.55	H	336.379 482 61	−11.908 021 57	1.19	−1.98	2.10	1.19	0.71	1.23	1.26	0.74	− 2	+38	−21	−21	+ 3	+ 3	+11	−25	+21	− 2	0	−0.41
110689 H	22 25 31.22	−15 35 55.9	8.27	G	336.380 063 66	−15.598 872 25 *	10.94	−14.36	20.18	3.39	1.62	3.19	3.31	1.90	+ 1	+ 0	−21	−25	+16	−14	+13	−29	+24	+19	1	0.95
110690	22 25 33.54	−37 07 50.6	10.32	G	336.389 765 30	−37.130 713 36	18.46	−230.83	−343.38	1.60	1.42	2.01	1.89	1.42	+27	−10	−14	−23	+19	−17	+16	+ 5	+19	0	−0.48
110691	22 25 35.48	−11 10 32.6	9.69	G	336.397 813 44	−11.175 725 08	11.88	−161.47	−73.24	1.54	1.01	1.73	1.86	1.24	+ 8	+25	−16	−11	+10	+ 9	+19	− 3	+36	+17	0	−1.07
110692	22 25 36.53	−34 54 34.2	10.55	G	336.402 196 87	−34.909 508 83	24.49	25.02	−30.58	1.64	1.16	1.97	1.90	1.07	+24	+13	+ 5	+21	+13	+26	+ 7	−29	+11	+17	2	0.66
110693	22 25 37.63	−21 35 54.8	8.50	H	336.406 783 25	−21.598 545 92	3.64	3.93	5.79	1.01	0.79	1.14	1.54	0.93	+19	− 2	−29	− 2	+29	−15	+21	− 3	+ 5	+24	0	0.34
110694	22 25 37.97	+09 59 19.8	10.13	H	336.408 202 80	+09.988 824 59	10.63	30.03	−0.06	1.36	1.08	1.70	2.01	1.18	+36	+18	+11	+ 3	+12	+16	+ 1	−21	+ 8	+ 1	4	−0.93
110695	22 25 40.43	−24 43 43.4	9.51	H	336.418 440 19	−24.728 733 17	23.63	22.06	−33.69	1.31	0.90	1.40	1.45	0.85	+22	+ 0	− 8	−37	+ 9	−10	+ 6	−20	+ 9	+13	0	−0.16
110696	22 25 40.68	+18 26 39.3	6.26	H	336.419 507 24	+18.444 245 58	5.74	28.67	28.90	0.61	0.55	0.79	0.64	0.71	+21	+17	−12	+18	−14	− 6	− 9	−37	+30	+24	2	0.10
110697	22 25 40.94	−37 34 08.9	9.71	3 H	336.420 567 36	−37.569 149 41	−3.18	−14.81	−32.57	1.33	1.44	1.78	1.62	1.71	+37	+16	− 5	+20	+ 3	+34	+ 5	+35	+ 9	+41	0	2.32
*110698	22 25 41.78	+24 06 01.4	8.94	H	336.424 075 29	+24.100 396 11	6.08	3.30	−2.80	0.96	0.78	1.07	1.09	0.95	+19	+ 5	+ 8	−17	+ 3	− 9	+ 4	+ 2	+ 8	+26	0	−0.44
*110699	22 25 41.75	+52 26 18.5	8.02	2 T	336.423 958 75	+52.438 459 18	0.32	1.75	−2.35	0.57	0.48	0.69	0.60	0.49	−14

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
110601	9.988	0.033	8.615	0.019		1.162	0.030	T	1.12	0.03	L	8.6426	0.0027	0.017	48		8.62	8.68		C			1 S							S
110602	6.996	0.005	5.872	0.004		0.970	0.004	G	0.95	0.00	H	5.9276	0.0006	0.007	92		5.92	5.94					1						S
110603	9.300	0.013	7.468	0.006		1.570	0.015	G	1.69	0.03	C	7.4083	0.0013	0.010	123		7.39	7.42					1						S
110604	9.346	0.014	7.804	0.008		1.295	0.013	T	1.25	0.01	L	7.8290	0.0014	0.012	127		7.81	7.86		C			1						S
110605	9.245	0.023	8.728	0.023	*	0.486	0.030	T	0.56	0.03	L *	8.8306	0.0022	0.018	70	*	8.80	8.86		R	22245+0349	I 1	2 C A	AB	148	3.217	0.004	0.82	0.02	S
110606	10.106	0.030	8.239	0.012		1.571	0.028	T	2.53	0.12	L	8.1816	0.0030	0.023	92		8.15	8.21		U			1 S						
110607	10.279	0.039	8.605	0.018		1.399	0.034	T	1.38	0.04	L	8.6284	0.0019	0.011	59		8.61	8.66		C			1						
110608	10.458	0.033	9.854	0.030		0.562	0.033	T	0.64	0.03	L	9.9360	0.0036	0.024	106		9.90	9.98					1						
110609	4.673	0.002	4.605	0.002		0.092	0.034	G	0.18	0.03	C	4.6112	0.0008	0.007	154		4.60	4.62		M			1						S
110610	7.603	0.006	7.456	0.007		0.141	0.009	T	0.16	0.01	L	7.4864	0.0011	0.010	130		7.47	7.51					1						S
110611	9.668	0.024	7.893	0.011		1.509	0.022	T	2.05	0.07	O	7.7744	0.0033	0.028	82		7.74	7.83		U 2			1						S
110612	10.296	0.042	9.712	0.040		0.545	0.051	T	0.62	0.05	L	9.8087	0.0041	0.026	53		9.77	9.85		C			1						
110613	9.817	0.025	8.430	0.015		1.173	0.023	T	1.13	0.02	L	8.4654	0.0020	0.012	78		8.44	8.48		C			1						
110614	9.954	0.026	8.953	0.018		0.875	0.024	T	0.88	0.02	L	8.9901	0.0017	0.016	76		8.96	9.03		C			1						
110615	9.802	0.023	7.949	0.010		1.541	0.020	T	1.60	0.04	L	7.9071	0.0015	0.013	84		7.89	7.94					1						S
110616	7.374	0.007	7.484	0.008		−0.114	0.007	G	−0.10	0.01	H	7.4719	0.0015	0.012	74		7.46	7.49					1						S
110617	10.850	0.049	8.893	0.018		1.623	0.042	T	1.64	0.04	L	8.8287	0.0051	0.035	79		8.78	8.88		U 2			1						
110618	6.071	0.003	5.361	0.002		0.660	0.042	G	0.81	0.02	A	5.3997	0.0009	0.007	140		5.39	5.43			22246−7215	I 1	1						S
110619	8.020	0.007	6.848	0.005		1.005	0.007	T	0.98	0.01	L	6.9031	0.0010	0.008	103		6.89	6.92					1						S
110620						1.236	0.015	G	1.40	0.02	I	10.9278	0.0056	0.035	54		10.86	11.00		C			1						G
110621	9.494	0.019	9.061	0.019		0.409	0.025	T	0.48	0.03	L	9.0974	0.0025	0.018	88		9.06	9.14		C			1						
110622	8.340	0.005	8.322	0.007		0.021	0.008	T	0.04	0.01	L	8.3449	0.0026	0.035	302		8.30	8.40	0.41	P 1 A			1						
110623	9.144	0.015	8.373	0.012		0.702	0.015	T	0.76	0.01	L	8.4197	0.0017	0.015	85		8.40	8.45					1						S
110624	7.054	0.005	6.867	0.006		0.143	0.006	G	0.16	0.01	H	6.9059	0.0014	0.009	80		6.89	6.92					1 G						S P
110625	11.678	0.108	9.847	0.034		1.555	0.093	T	1.75	0.21	K	9.7926	0.0029	0.020	78		9.73	9.83					1						
110626	8.840	0.011	8.099	0.009		0.678	0.011	T	0.74	0.01	L	8.1700	0.0023	0.020	102		8.15	8.21					1 G						
110627	9.727	0.018	8.567	0.012		0.996	0.017	T	0.97	0.01	L	8.6346	0.0014	0.015	156		8.61	8.66					1						
110628	8.539	0.009	7.938	0.008		0.544	0.015	G	0.62	0.01	H	8.0007	0.0015	0.011	105		7.98	8.02					1						S
110629	7.153	0.006	6.665	0.006	A	0.471	0.006	T	0.54	0.01	L	6.7435	0.0136	0.058	110	A	6.67	6.82		D	22247−4126	I 2	1 C P D						S D
110630	7.307	0.004	7.347	0.005		−0.036	0.002	G	−0.01	0.00	H	7.3441	0.0014	0.013	165		7.33	7.37		C			1						S
110631	9.687	0.014	8.714	0.011		0.854	0.013	T	0.87	0.01	L	8.7572	0.0015	0.020	200		8.73	8.80					1						
110632						0.472	0.100	G	0.54	0.11	R	8.8918	0.0773			B				D	22247−4126	I 2	1 C L D						D
110633	9.785	0.024	8.434	0.015		1.145	0.022	T	1.11	0.02	L	8.4558	0.0013	0.014	78		8.43	8.48					1						
110634	8.927	0.013	7.822	0.009		0.953	0.012	T	0.94	0.01	L	7.8789	0.0014	0.011	101		7.86	7.90		C			1						
110635	9.599	0.016	8.516	0.011		0.937	0.015	T	0.93	0.01	L	8.5684	0.0013	0.015	130		8.55	8.60					1						S
110636	9.196	0.023	7.241	0.010		1.622	0.020	T	1.64	0.02	L	7.1432	0.0019	0.013	106		7.12	7.17		U 2			1						S
110637	9.544	0.023	7.920	0.011		1.360	0.020	T	1.33	0.02	L	7.9067	0.0014	0.016	68		7.89	7.93					1						S
110638	8.016	0.009	7.910	0.010		0.103	0.013	T	0.12	0.01	L	7.9458	0.0013	0.009	83		7.93	7.96		C			1						S
110639	10.499	0.040	9.191	0.024		1.107	0.038	T	1.07	0.04	L	9.2129	0.0021	0.017	73		9.18	9.25		D			1						
110640	10.473	0.034	9.008	0.018	A	1.180	0.008	G	1.30	0.01	I *	8.9184	0.0023	0.016	75	*	8.90	8.95		D	22248+2233	I 1	2 C A	AB	228	1.613	0.021	2.35	0.05	
110641	9.026	0.015	7.200	0.007		1.519	0.013	T	1.55	0.02	L	7.1611	0.0018	0.014	85		7.14	7.19					1						S
110642	11.690	0.095	10.288	0.043		1.185	0.082	T	1.15	0.07	L	10.4429	0.0030	0.032	104		10.40	10.49		C			1						G
110643	9.613	0.021	8.458	0.014	*	0.992	0.019	T	0.97	0.01	L *	8.4893	0.0020	0.017	110	*	8.46	8.52		D	22248+2841	H 1	2 C A	AB	330	0.340	0.008	1.71	0.11	
110644	9.195	0.009	8.738	0.009		0.431	0.012	T	0.50	0.01	L	8.8007	0.0013	0.021	259		8.76	8.84					1						
110645	8.485	0.013	7.388	0.008		0.947	0.012	T	0.94	0.01	L	7.4458	0.0009	0.008	99		7.43	7.46					1						S
110646	9.440	0.016	7.972	0.009		1.237	0.014	T	1.20	0.01	L	7.9991	0.0018	0.014	108		7.98	8.02		C			1						S
110647	8.775	0.013	8.662	0.015		0.110	0.019	T	0.12	0.02	L	8.7017	0.0014	0.014	135		8.68	8.72					1						
110648	9.468	0.020	9.310	0.025		0.152	0.030	T	0.17	0.03	L	9.3309	0.0024	0.017	115		9.30	9.36		C			1						G
110649	6.151	0.002	5.395	0.002		0.665	0.012	G	0.73	0.02	A	5.4504	0.0004	0.005	183		5.44	5.46			22249−5748	I 1	1						S
110650						0.960	0.020	G	1.01	0.02	I	10.5078	0.0037	0.025	84		10.46	10.54					1						G
110651	8.871	0.012	8.870	0.015		0.006	0.018	T	0.03	0.02	L	8.8851	0.0018	0.016	111		8.85	8.91		C			1						
110652	10.132	0.028	9.654	0.028		0.463	0.031	T	0.53	0.03	L	9.7241	0.0031	0.024	117		9.67	9.77					1						
110653	11.308	0.077	10.949	0.092	B	0.544	0.007	G	0.62	0.01	H	10.9500	0.0308			B				D	22250−4202	I 2	1 C I A						
110654	9.631	0.026	9.291	0.028	A	0.276	0.004	G	0.31	0.01	H	9.3780	0.0084	0.042	121	A	9.33	9.46		D	22250−4202	I 2	1 C P A						
110655	12.458	0.235	10.719	0.073		1.312	0.020	G	1.37	0.14	K	10.7038	0.0027	0.033	99		10.66	10.75					1 X						G
110656	11.048	0.062	10.588	0.066	*	0.573	0.071	G	0.65	0.07	R *	10.6250	0.0053	0.040	77	*	10.52	10.68		D	22250−3806	H 1	2 C A	AB	234	0.337	0.027	1.11	0.28	G
110657	7.280	0.005	7.075	0.006		0.196	0.007	T	0.21	0.01	L	7.1211	0.0010	0.009	141		7.11	7.14		C			1						S
110658	7.680	0.007	7.423	0.006		0.226	0.006	G	0.25	0.01	H	7.4627	0.0011	0.010	93		7.44	7.49		C			1						S
110659	9.642	0.016	8.935	0.014		0.638	0.016	T	0.70	0.01	L	8.9911	0.0021	0.026	132		8.95	9.06		U			1						
110660						1.180	0.020	G	1.30	0.04	I	11.9588	0.0054	0.049	76		11.88	12.05					1 G						G
110661	8.705	0.010	6.721	0.005		1.681	0.009	T	2.02	0.03	O	6.6033	0.0019	0.016	138		6.58	6.63		U 2			1						S
110662	10.536	0.042	10.255	0.051		0.250	0.015	G	0.28	0.02	H	10.3908	0.0069	0.044	107		10.29	10.45		U 2	22251+5750	I 1	1						G
110663	9.563	0.020	8.718	0.016		0.770	0.005	G	0.81	0.01	H	8.7687	0.0026	0.018	95		8.74	8.80					1						
110664	8.010	0.006	8.088	0.007		−0.049	0.015	G	−0.03	0.01	H	8.0887	0.0022	0.023	193		8.06	8.13		U 2			1						S
110665	9.847	0.020	8.544	0.012		1.107	0.018	T	1.07	0.02	L	8.5910	0.0021	0.015	116		8.57	8.62		C			1						
110666	7.566	0.005	7.324	0.006		0.231	0.007	T	0.26	0.01	L	7.3669	0.0009	0.010	123		7.35	7.38		C			1						S
110667	10.666	0.037	10.445	0.047		0.211	0.056	T	0.23	0.06	L	10.5574	0.0043	0.036	157		10.50	10.63					1 S						G
110668	6.238	0.003	5.819	0.003		0.396	0.004	T	0.46	0.00	L	5.8679	0.0007	0.007	136		5.86	5.88					1						S
110669	9.449	0.017	8.377	0.012		0.928	0.016	T	0.92	0.01	L	8.4301	0.0020	0.014	97		8.41	8.46		C	22252−4629	I 1	1						
110670	9.316	0.010	7.983	0.006		1.131	0.009	T	1.09	0.01	L	8.0207	0.0010	0.015	271		8.00	8.04					1						
110671	8.206	0.008	8.130	0.010		0.075	0.012	T	0.09	0.01	L	8.1549	0.0014	0.014	120		8.13	8.18		C			1						
110672	4.578	0.003	4.776	0.003		−0.171	0.004	T	−0.18	0.01	L	4.7397	0.0014	0.011	70		4.73	4.77		U 2			1						S
110673	8.737	0.008	7.694	0.006		0.910	0.015	G	0.92	0.02	A	7.7503	0.0012	0.015	196		7.73	7.77		C			1						S
110674	10.066	0.024	8.694	0.014		1.161	0.022	T	1.12	0.02	L	8.7422	0.0022	0.020	123		8.70	8.77					1						
110675	8.666	0.009	8.597	0.011		0.069	0.013	T	0.08	0.01	L	8.6166	0.0022	0.019	172		8.58	8.64					1						S
110676	9.012	0.015	8.429	0.013		0.545	0.018	T	0.62	0.02	L	8.4750	0.0016	0.014	83		8.45	8.50		C			1						S
110677	9.334	0.018	8.994	0.020		0.323	0.025	T	0.37	0.03	L	9.0598	0.0021	0.017	79		9.03	9.09		C			1						
110678	9.083	0.014	8.958	0.017		0.121	0.021	T	0.14	0.02	L	8.9979	0.0024	0.020	116		8.96	9.03		C			1						
110679	8.542	0.010	8.168	0.010		0.397	0.006	G	0.46	0.01	H	8.2252	0.0013	0.010	112		8.21	8.25		C	22254+7336	I 1	1						
110680	9.805	0.022	8.823	0.016	*	0.861	0.020	T	0.87	0.01	L *	8.8445	0.0025	0.017	83	*	8.82	8.88		D	22254−3913	H 1	2 C A	AB	136	0.379	0.012	1.82	0.07	
110681	9.563	0.016	8.155	0.009		1.190	0.014	T	1.15	0.01	L	8.1471	0.0014	0.012	126		8.12	8.17					1						
110682	7.357	0.006	7.340	0.007		0.020	0.009	T	0.04	0.01	L	7.3578	0.0009	0.009	147		7.35	7.37		C			1						S
110683	11.790	0.108	10.472	0.057		1.119	0.096	T	1.08	0.10	L	10.5163	0.0034	0.027	78		10.48	10.56		C			1						G
110684	8.375	0.008	8.404	0.010		−0.020	0.015	G	0.00	0.01	H	8.4155	0.0014	0.016	140		8.39	8.45					1						
110685	9.618	0.020	8.979	0.018		0.587	0.020	T	0.66	0.02	L	9.0549	0.0020	0.020	93		9.02	9.09		C			1						S
110686	9.291	0.019	8.726	0.018		0.529	0.023	T	0.60	0.02	L	8.7840	0.0024	0.013	72		8.76	8.80		C			1						S
110687	7.878	0.008	7.660	0.010		0.208	0.012	T	0.23	0.01	L	7.7160	0.0014	0.008	70		7.70	7.74			22255+2234	I 1	1						S
110688	8.861	0.015	8.603	0.017		0.242	0.023	T	0.27	0.03	L	8.6170	0.0029	0.019	59		8.59	8.65					1						S
110689	8.873	0.014	8.310	0.013	*	0.508	0.015	G	0.58	0.02	H *	8.3738	0.0016	0.015	92	*	8.35	8.40		C	22255−1536	H 1	2 C B	AB	61	0.290	0.051	2.52	0.39	S
110690	11.688	0.116	10.436	0.061		1.072	0.023	G	1.14	0.03	I	10.4595	0.0038	0.029	80		10.41	10.50					1						
110691	10.558	0.053	9.783	0.044		0.672	0.007	G	0.73	0.01	H	9.8387	0.0029	0.021	53		9.81	9.87					1						
110692	11.876	0.127	10.565	0.063		1.210	0.015	G	1.17	0.01	H	10.6569	0.0044	0.027	89		10.59	10.70					1						G
110693	10.079	0.033	8.625	0.017		1.226	0.029	T	1.18	0.03	L	8.6641	0.0017	0.013	70		8.64	8.69		C			1						
110694	10.662	0.044	10.135	0.042		0.495	0.055	T	0.57	0.06	L	10.2364	0.0034	0.032	91		10.17	10.29					1						
110695	10.606	0.043	9.611	0.031		0.925	0.015	G	0.97	0.01	I	9.6558	0.0034	0.024	77		9.61	9.71					1						
110696	7.827	0.007	6.404	0.004		1.201	0.006	T	1.16	0.01	L	6.4221	0.0010	0.007	84		6.41	6.44		C			1						S
110697	10.946	0.065	9.374	0.028		1.500	0.510	G	1.63	0.54	K	9.8231	0.2104	1.094	87		8.44	11.50	136.10	P 1 B			1						G P
110698	9.385	0.020	9.018	0.021		0.348	0.027	T	0.41	0.04	L	9.0248	0.0017	0.017	83		8.99	9.05		C	22257+2406	I 1	1						
110699	7.970	0.010	8.014	0.013		−0.036	0.015	T	−0.01	0.01	L	8.0331	0.0135	0.079	126		7.86	8.10		U 2 C			1						
110700	9.454	0.016	9.483	0.023		−0.022	0.026	T	0.00	0.03	L	9.4822	0.0037	0.030	107		9.41	9.52					1						

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\mu_{\alpha*}$	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$										F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr																						%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28													29	30
110701	22 25 44.18	−15 21 25.9	7.89	H	336.434 092 79	−15.357 193 00		4.46	−9.11	−5.53	0.90	0.67	1.08	1.08	0.72	+33	−14	−31	−13	+25	−13	+15	−	4	+20	+36											0	−0.54
110702	22 25 44.61	+43 53 41.2	9.45	H	336.435 876 37	+43.894 784 98		0.48	1.48	−1.85	0.81	0.89	1.28	0.91	1.03	−39	+10	−19	−13	+19	−13	+17	+	0	+14	−32											0	1.88
110703	22 25 46.15	−49 49 33.2	8.08	2 H	336.442 282 83	−49.825 896 56		2.21	24.06	−2.52	0.74	0.65	1.06	0.78	0.76	+	1	−	3	−	8	−20	+10	−	6	+	8	+	7	−	8	+14					0	0.02
110704	22 25 46.28	+53 48 59.7	7.14	H	336.442 827 75	+53.816 587 48		5.36	−3.18	14.54	0.48	0.47	0.68	0.53	0.54	−10	−	4	+13	+	4	+	4	−14	+	4	−	3	+	5	+	5					0	−0.32
110705	22 25 46.33	+13 09 26.5	8.85	G	336.443 046 12	+13.157 352 06		5.07	−16.11	−13.29	0.86	0.74	1.09	1.05	0.86	+24	+11	−	9	+	4	+	10	−18	+	9	+	7	+	3	+15					0	1.67
110706	22 25 46.88	+63 19 42.0	6.86	2 H	336.445 341 29	+63.328 325 67		3.64	24.35	−0.43	0.55	0.62	0.68	0.65	0.68	−13	+19	+29	+24	+	3	−10	+	7	−25	+	1	−17									0	0.57
110707 H	22 25 48.04	−20 14 13.2	6.73	2 H	336.450 185 47	−20.236 994 94	A	2.58	1.23	−4.29	1.55	1.24	1.67	1.94	1.21	+24	−	8	−33	−18	−	3	+	2	−	3	−38	+16	+41							9	1.54
110708	22 25 48.55	−33 22 19.0	8.37	H	336.452 307 91	−33.371 949 22		2.36	27.17	−8.70	0.88	0.63	1.08	0.95	0.60	+27	−13	+	6	+	2	+	5	+24	+	2	−27	+13	+33							0	−0.28
110709	22 25 49.00	−68 33 52.1	8.74	H	336.454 155 26	−68.564 480 90		8.42	−41.27	−25.56	0.65	0.81	1.08	0.68	0.76	−21	+12	−31	−	4	+11	+	2	+14	−20	−	1	−	5							0	1.59
110710	22 25 49.67	+34 38 51.1	8.73	H	336.456 953 43	+34.647 528 54		2.34	3.60	−3.70	0.71	0.74	1.13	0.89	0.97	−	6	+14	−35	+22	−	4	−13	−	3	−18	+41	−10							0	0.68
110711	22 25 49.86	+69 53 42.6	7.95	H	336.457 766 87	+69.895 172 34		3.92	0.59	20.06	0.62	0.56	0.68	0.81	0.64	+	3	−11	+	9	+29	+10	+	1	+10	+	4	+19	+20							0	−1.64
110712	22 25 51.03	−75 00 56.6	6.12	G	336.462 607 06	−75.015 719 25	A	43.39	58.55	12.48	1.00	0.95	0.96	0.97	0.83	−17	−21	−	9	−17	−	1	+	2	+	2	−23	−	4	−20					1	0.66
*110713	22 25 52.73	+53 56 40.6	7.29	H	336.469 687 97	+53.944 610 38		15.89	−63.71	5.58	0.49	0.46	0.62	0.52	0.50	−	5	−	3	+10	+	6	+	9	−14	+12	−	3	+16	+	9					0	−2.14
*110714	22 25 52.71	−37 11 51.3	10.46	H	336.469 622 01	−37.197 588 17		29.93	−29.50	−124.12	1.58	1.46	2.01	1.95	1.51	+30	−	5	−10	+16	−16	+23	−11	+18	+	7	+22									0	−0.85
110715	22 25 53.75	−08 57 33.8	9.03	H	336.473 955 16	−08.959 383 11		13.78	37.49	17.58	1.13	0.90	1.39	1.45	1.06	+24	−14	−27	−	1	−	7	+23	−	6	−11	+37	+22									2	0.48
110716	22 25 54.89	+35 21 55.2	8.32	H	336.478 712 05	+35.365 323 14		34.28	184.88	−193.82	0.65	0.69	0.92	0.79	1.04	+15	+	7	+	2	+20	−	4	−	1	−12	−21	+	9	−	4					0	−0.68
110717	22 25 55.05	−35 39 38.1	8.48	H	336.479 391 52	−35.660 592 97		9.66	−30.17	−93.58	1.00	0.70	1.22	1.08	0.64	+24	−	3	+	3	−20	−	2	+34	−	6	−34	+17	+23							0	2.76
110718	22 25 55.14	+02 29 12.6	9.08	H	336.479 765 37	+02.486 843 95		0.77	16.39	5.52	1.03	0.81	1.19	1.23	0.95	+27	−	2	+	7	−	6	+10	−	2	+	9	−13	+	6	+21					0	0.97
110719	22 25 56.25	−75 00 52.9	9.35	H	336.484 379 45	−75.014 699 38	B	60.24	15.18	61.32	59.31	44.30	20.25	38.25	26.40	−16	−30	−	7	−11	−	2	+	3	+	3	−15	−12	−22							1	0.66
110720 H	22 25 56.59	−45 06 47.7	7.38	H	336.485 781 54	−45.113 242 15	A	7.83	86.29	−19.88	1.79	1.12	1.58	2.05	1.05	+	3	+15	−13	+	1	−	8	−	9	−	4	+12	+16	+	1					3	0.69
110721	22 25 58.40	+53 46 53.7	8.31	H	336.493 323 37	+53.781 590 75		−1.04	−2.60	−3.11	0.59	0.58	0.76	0.65	0.62	−11	−10	+16	−	2	+	9	−	7	+10	−	8	+12	+	3					0	−1.00
110722	22 25 59.25	+41 56 38.3	9.57	H	336.496 871 02	+41.943 973 51		2.54	1.97	−0.33	0.73	0.83	1.33	0.82	1.03	−53	+	3	−	4	+36	−13	−	9	−	9	+	9	+26	−44					2	−0.79
110723	22 25 59.85	−14 57 06.1	8.03	H	336.499 389 24	−14.951 697 94		3.01	6.69	−6.91	0.89	0.61	1.04	1.03	0.61	+29	−17	−26	−19	+14	+	9	+	8	−24	+25	+23									0	−0.84
110724	22 26 00.16	+80 42 05.6	6.68	H	336.500 684 95	+80.701 561 36		7.11	24.46	13.84	0.49	0.49	0.57	0.58	0.51	−19	−15	+27	+	8	+	1	+	7	−	5	−	3	+13	−30					0	0.44
110725	22 26 00.78	+70 46 15.2	5.47	H	336.503 262 20	+70.770 885 42		6.27	19.69	5.34	0.64	0.68	0.76	0.79	0.78	−	6	+	0	+	4	+	9	+	9	+	7	+11	−14	+18	+	7	0					
110726	22 26 01.68	+42 23 26.9	9.04	H	336.506 989 22	+42.390 801 67		0.57	3.59	−2.34	0.58	0.75	1.12	0.68	0.92	−45	+	8	−11	+22	−13	+11	−14	−	7	+	0	−50							0	0.14
110727	22 26 02.11	+65 31 46.8	8.09	H	336.508 779 99	+65.529 666 87		6.45	13.68	14.60	0.59	0.60	0.69	0.73	0.71	−21	−	1	−	4	−	3	+10	−	6	+	9	−21	+18	−27					0	−1.07
110728	22 26 02.39	+65 30 12.0	9.05	H	336.509 965 76	+65.503 343 63		3.26	15.40	9.59	0.81	0.80	0.96	0.95	0.95	−19	−	8	+	1	+	4	+	7	−10	+	4	−19	+23	−27					0	−0.73
*110729	22 26 02.79	−83 30 57.2	8.18	H	336.511 605 99	−83.515 876 79		6.66	27.74	19.59	0.61	0.58	0.71	0.74	0.68	−	0	−10	−14	−	1	+11	−	8	+11	−	6	+	2	−	9					0	0.38
*110730	22 26 02.72	+59 14 49.4	8.53	G	336.511 328 55	+59.247 065 20		8.13	−6.46	−13.78	0.71	0.64	0.77	0.79	0.75	−19	+	4	+15	+32	−18	+	7	−22	+	7	+	7	−28							1	2.66
110731	22 26 03.70	−22 55 32.9	9.27	H	336.515 408 25	−22.925 803 68		1.72	31.77	−22.12	1.20	0.82	1.30	1.56	0.86	+16	+	8	−	2	−	7	+	5	+	4	+	4	−	6	+	4	+	8			4	0.27
110732	22 26 04.27	−40 07 10.9	9.11	H	336.517 794 36	−40.119 696 85		10.32	26.18	8.31	1.07	0.81	1.38	1.14	0.84	+	4	+13	−12	−	8	−	2	+33	+	1	−	6	−	9	+	3			0	0.23
110733	22 26 04.29	+25 55 39.6	7.05	H	336.517 858 47	+25.927 658 40		4.01	−12.73	−7.73	0.64	0.50	0.74	0.75	0.58	−	6	+	7	−	7	+	4	+	5	−18	+	4	−	4	+12	−11			0	1.75
110734	22 26 04.47	+21 05 48.9	8.92	H	336.518 614 68	+21.096 917 26		7.39	56.67	−22.65	1.17	0.86	1.33	1.57	1.21	+10	+11	+	7	−13	+23	+15	+26	+	3	+11	+	2									0	0.77
110735	22 26 04.61	−18 21 22.2	8.74	H	336.519 193 18	−18.356 179 98		7.53	−45.64	−35.64	1.07	0.85	1.29	1.39	1.04	+52	−32	−32	−	5	−	9	−	4	−12	−25	+13	+61									0	0.05
110736	22 26 05.45	−48 26 18.7	11.06	3 H	336.522 723 77	−48.438 526 72		1.31	24.12	−6.76	0.94	1.05	1.49	0.97	1.13	+28	+34	+18	−48	−25	−	9	−24	−68	−15	+38											1	2.19
110737	22 26 06.20	+10 56 43.0	9.50	1 H	336.525 844 56	+10.945 274 15		1.88	10.46	−0.91	1.21	0.89	1.39	1.59	1.04	+13	−	6	+	1	−34	+	9	+23	+	4	−44	+13	−	5							4	1.64
110738	22 26 06.76	−44 59 53.1	7.98	H	336.528 177 81	−44.998 085 09		4.12	1.58	13.65	1.01	0.66	1.14	1.64	0.72	−	9	−10	−30	+28	−24	−	4	−21	+21	+14	−15									0	1.39
110739	22 26 06.80	−05 10 40.4	7.29	H	336.528 337 00	−05.177 880 10		11.74	23.57	−6.36	0.94	0.72	1.13	1.27	0.90	+20	+	5	−27	+11	−	4	+30	+	6	−17	+20	+31									0	−1.03
110740	22 26 06.95	+28 31 04.8	7.12	H	336.528 968 21	+28.517 989 18		6.30	−22.90	6.29	0.59	0.53	0.80	0.78	0.75	+	9	−10	−17	+44	+	2	−15	−	4	+	4	+14	−	1							0	−1.30
110741	22 26 08.51	−12 48 01.7	8.97	H	336.535 474 05	−12.800 466 69		4.98	−11.51	−16.06	1.26	0.76	1.22	1.70	0.82	−	3	+22	−18	+26	−	7	+12	−	7	+	9	−	5	−11							2	1.13
110742	22 26 09.42	−27 20 25.4	8.78	H	336.539 235 60	−27.340 402 14		2.71	13.54	7.43	1.23	0.79	1.33	1.37	0.79	+	7	+12	−15	−33	+23	−	9	+20	−15	+24	+10									0	−0.24
110743	22 26 09.70	−29 04 55.8	7.92	H	336.540 428 27	−29.082 164 75		10.54	22.70	−29.10	0.86	0.67	1.09	0.97	0.65	+52	−23	−29	+16	−	8	+	8	−	3	−13	+	3	+53							2	−0.20
110744	22 26 09.79	−25 34 07.7	9.40	H	336.540 785 65	−25.568 815 39		5.16	1.67	4.88	1.31	0.90	1.40	1.45	0.87	+21	+	5	−15	−32	+	4	+	2	+	3	−25	+12	+22							0	−0.84
110745	22 26 10.61	−28 00 45.0	7.35	H	336.544 206 68	−28.012 512 90		4.26	−0.41	−14.30	0.95	0.61	0.99	0.97	0.63	+	8	+28	−	7	−36	+17	+	9	+21	−13	+24	+18									2	1.51
110746	22 26 10.70	−23 40 56.8	6.29	H	336.544 566 34	−23.682 442 61		6.59	12.26	−1.91	0.66	0.49	0.74	0.75	0.48	+24	−10	−10	−13	+	0	+19	+	0	−13	+	7	+20									0	−1.27
110747	22 26 11.16	−24 26 26.4	9.09	H	336.546 495 62	−24.440 680 03		0.88	5.66	4.23	1.02	0.74	1.10	1.16	0.73	+19	−11	+	2	−31	+	1	+17	+	1	−25	−	6	+	7							0	−0.07
110748	22 26 11.65	−47 15 48.0	9.45	H	336.548 547 16	−47.263 338 00		4.45	57.74	−17.42	1.10	0.84	1.45	1.02	0.95	+14	−12	−15	−21	+	0	+22	−	1	+	6	+22	+23									0	0.30
110749	22 26 13.12	+69 02 37.1	7.11	H	336.554 682 27	+69.043 635 34		5.01	−5.62	−16.52	0.50	0.48	0.58	0.60	0.50	−11	−21	+18	−15	+	8	+20	+	2	−15	+10	−	3									0	−0.34
110750	22 26 13.38	−19 11 18.1	9.25	H	336.555 763 23	−19.188 366 10		37.37	236.36	−26.55	7.94	5.62	9.04	10.01	6.54	+24	−19	−36	−27	+14	−	8	+	4	−24	+20	+32									0	
110751	22 26 13.47	+51 18 12.5	9.20	H	336.556 142 30	+51.303 461 59		1.10	0.17	5.15	0.81	0.74	1.02	0.90	0.77	−19	−	4	−	1	−20	+13	+	2	+12	−22	+17	+	7							1	−0.92
110752	22 26 14.33	+21 32 08.3	9.88	H	336.559 708 12	+21.535 645 42		9.11	193.50	152.49	2.99	2.56	3.55	3.24	3.19	+19	+13	−	4	−	7	+11	−	9	+12	−	7	−	6	+28							0	
110753	22 26 14.46	−02 47 19.6	6.94	G	336.560 249 70	−02.788 780 19		19.57	−31.12	−82.02	0.90	0.79	0.94	0.93	0.83	+56	−	4	−	7	−22	−32	+	9	−40	−71	+	6	+43							0	−0.22
110754	22 26 16.60	+35 41 27.5	9.37	H	336.569 151 18	+35.690 960 22		4.34	−10.90	−11.30	0.97	0.94	1.28	1.17	1.25	+	0	+14	−	1	+34	−	9	−	3	−	9	+11	+23	−13							0	0.60
110755	22 26 17.55	−18 33 48.1	8.13	G	336.573 108 67	−18.563 362 06		5.70	29.22	10.21	0.88	0.67	1.02	1.17	0.87	+45	−27	−22	−13	−	8	+	6	−	8	−25	+14	+60									2	0.20
110756 H	22 26 17.59	+43 08 04.5	9.85	H	336.573 294 39	+43.134 581 30	A	5.43	5.14	3.23	1.96	2.71	2.74	1.61	2.19	−19	+16	−17	+14	−	1	−	6	−	1	−	2	+	4	−35							1	−0.57
110757	22 26 18.04	+33 23 29.8	9.47	H	336.575 175 21	+33.391 621 30		4.12	−5.87	−31.47	0.84	1.02	1.29	1.02	1.13	+30	−	2	−12	−12	−22	+	8	−19	−48	+28	+34									0	−0.64
110758	22 26 18.14	−18 00 39.2	8.24	H	336.575 601 62	−18.010 893 72		12.80	73.04	−114.19	0.99	0.71	1.14	1.24	0.83	+37	−34	−29	−	7	−	4	−	6	−	5	−26	+	5	+46							0	0.56
110759	22 26 18.84	+21 05 26.8	9.18	H	336.578 491 29	+21.090 768 21		4.23	−9.17	−17.15	1.23	0.98	1.36	1.64	1.26	+	6	+	7	+16	−	5	+22	+	7	+23	+14	+13	−	1							0	−0.34
110760	22 26 19.58	+07 54 12.8	7.48	G	336.581 594 78	+07.903 558 36		12.38	20.35	−37.35	1.06	0.64	1.05	1.50	0.73	+	1	+14	−	6	−42	+34	−27	+34	+	5	−	7	−12							0	−1.14
110761	22 26 21.57	+10 45 27.8	8.23	H	336.589 863 03	+10.757 708 80		19.50	−36.21	−54.84	0.88	0.68	1.04	1.11	0.75	+16	−	7	+12	−28	+14	+17	+10	−29	−	4	−	2									0	0.66
110762	22 26 22.50	−46 08 17.7	10.31	H	336.593 742 06	−46.138 261 74		2.09	19.08	−13.16	1.30	1.02	1.57	1.65	1.21	+10	−	8	−10	+	6	+	3	+	2	+	3	+25	+11	+	6					0	−0.47
110763	22 26 24.44	+41 07 50.3	9.98	H	336.601 833 34	+41.130 639 73		1.03	13.86	−1.07	0.63	0.90	1.30	0.75	1.15	−29	+	2	+	2	+30	+	5	+	3	+	6	−	7	+17	−30					0	0.00
110764	22 26 24.70	+01 58 10.5	8.54	H	336.602 911 79	+01.969 596 08		1.86	3.48	4.99	1.06	0.68	1.08	1.28	0.77	+	5	−	1	−	3	−26	+15	+	2	+13	−35	−	8	−	8					0	0.44
110765	22 26 24.79	−44 16 28.6	9.92	H	336.603 281 78	−44.274 615 33		7.28	97.45	−61.19	1.24	0.93	1.69	1.76	1.05	+	8	+	4	−31	+15	−19	+36	−	7	+	7	+	5	+19							0	−0.14
110766 H	22 26 25.32	+43 32 10.3	9.48	H	336.605 494 03	+43.536 196 08	*	3.94	0.05	−1.83	0.80	0.94	1.42	0.86	1.07	−37	+17	−	9	+15	+	9	−	9	+14	−11	+19	−27							0	0.05
110767	22 26 25.56	−14 06 54.4	8.64	H	336.606 479 91	−14.115 110 70		1.79	−1.18	−15.04	1.01	0.71	1.10	1.05	0.69	+13	−	2	−29	−36	+15	+13	+19	−20	+19	+12									0	1.49
110768 H	22 26 28.16	+43 31 38.9	9.84	H	336.617 347 82	+43.527 472 60	A	0.59	−0.15	−7.69	1.69	1.87	2.60	1.70	1.94	−28	+13	−17	+10	+	7	−11	+	3	−	9	+10	−16		2	−0.18						
110769	22 26 29.27	−41 05 50.5	9.97	G	336.621 954 17	−41.097 361 51		7.45	−1.42	−46.82	1.49	0.84	1.60	1.72	0.96	−10	+	3	−	1	+31	−23	+	4	−27	−11	−	5	−20							0	0.28
110770	22 26 29.91	−00 34 02.0	8.15	H	336.624 613 59	−00.567 228 87		2.74	2.49	−10.84	1.02	0.74	1.16	1.23	0.82	+38	+13	−	6	+18	−	1	+21	−13	−52	+24	+16		2	0.63								
110771	22 26 29.97	+20 17 43.0	8.43	H	336.624 868 60	+20.295 271 64		8.06	46.60	−5.89	0.90	0.74	1.09	0.91	0.92	+	7	+18	−17	+13	−	3	+	7	+	6	−23	+19	+25		2	−0.48						
110772	22 26 32.02	+54 38 29.5	8.90	H	336.633 416 89	+54.641 533 34		4.98	5.51	6.17	0.68	0.65	0.84	0.77	0.76	+10	−	4	−	2	+	5	+	9	+	5	+	9	+	5	+30		0	−1.23				
110773	22 26 32.19	+79 48 55.1	9.32	H	336.634 131 00	+79.815 314 96		22.83	42.06	−176.04	0.72	0.69	0.81	0.98	0.84	−10	−	6	+16	+20	+	9	+23	+	5	+	2	−	2	−11		0	2.64				
110774	22 26 32.42	+63 52 43.2	9.52	H	336.635 072 40	+63.878 670 78		39.97	195.22	208.45	1.03	1.33	1.28	1.41	1.43	−18	−	1	+21	+12	+22	−15	+26	−47	+	1	−11		2	0.21						
110775	22 26 32.47	+26 16 25.1	11.45	H	336.635 289 77	+26.273 648 31		15.77	104.51	−178.35	2.26	1.66	2.55	2.76	2.11	+	0	+16	−	1	−17	+	5	−	6	+	7	−	3	+	8	−	6	4	1.73			
110776	22 26 33.39	+04 36 34.5	9.70	G	336.639 115 31	+04.609 570 63		21.67	223.91	82.67	1.31	0.91	1.44	1.71	0.95	+27	+17	+20	+23	+11	+22	−	5	−24	+	1	−	2		2	4.35						
110777	22 26 33.53	−58 52 40.5	8.42	H	336.639 691 33	−58.877 916 13		2.85	−27.19	−20.21	0.69	0.64	1.01	0.79	0.65	−10	−13	−	6	−18	+11	+13	+11	−	4	−10	−	7		0	−0.61						
110778 H	22 26 34.15	−16 44 31.7	5.55	G	336.642 281 54	−16.742 147 59	A	49.80	209.77	3.96	3.04	1.99	2.54	2.87	1.79	−69	−	8	+13	−85	+74	+12	+64	−61	+	1	−39		21	1.73						
110779	22 26 34.22	−73 06 28.7	9.50	H	336.642 580 99	−73.107 959 56		7.65	28.06	−40.27	0.77	0.76	1.03	1.03	0.85	+	1	−15	−17	+	4	−	8	−	7	−	9	−13	−	5	−17		0	1.77				
110780	22 26 34.65	−07 22 38.9	6.85	G	336.644 385 00	−07.377 460 71		12.56	74.66	−35.12	0.92	0.64	1.00	1.40	0.74	+	2	+12	−21	−13	+	3	+31	+	8	−26	+11	−11		3	0.19						
110781	22 26 35.21	−62 32 22.4	7.77	H	336.646 715 23	−62.539 554 65		3.15	3.06	−25.43	0.46	0.58	0.86	0.55	0.58	−25	+	1	−15	−	4	+	8	+	2	+	9	−23	−	7	−23		0	0.70				
110782	22 26 36.17	+06 33 01.4	8.76	H	336.650 712 95	+06.550 397 50		10.13	42.43	−21.54	1.31	0.79	1.32	1.64	0.87	+	5	+29	+18	−15	+26	+	6	+18	−23	−	9	−11		0	−1.73						
110783	22 26 36.48	+27 45 45.6	9.23	H	336.651 980 02	+27.762 664 95		6.48	64.72	8.96	0.91	0.83	1.18	1.17	1.04	+14	−	3	−	8	+64	−	8	−	6	−15	+	0	+	8	+	2	0	0.26				
110784	22 26 37.05	−39 22 38.3	10.39	G	336.654 383 04	−39.377 315 54		5.79	28.84	−4.52	1.42	1.07	1.77	1.66	1.10	+	4	+	9	−	9	+18	−	4	+24	−	4	+	3	−	9	−	7	0	1.27			
110785	22 26 37.22	+04 23 37.1	5.76	G	336.655 074 84	+04.393 637 58		25.34	286.36	52.92	1.46	1.15	1.66	1.69	1.21	+26	+	3	+10	−17	+	2	−12	+	0	−31	+	2	+10		0						
110786	22 26 41.65	−11 13 41.4	6.98	H	336.673 522 65	−11.228 170 87		12.23	36.98	−11.55	0.91	0.58	0.94	0.98	0.58	+	7	+24	−18	−21	−	5	+	7	+	1	−20	+16	+	1	0	−0.15					
110787	22 26 42.45	+78 47 09.4	5.83	H	336.676 859 52	+78.785 943 17		15.98	−14.09	−37.12	0.45	0.41	0.50	0.61	0.47	−	7	−16	+15	+	3	+	0	+23	−	4	+	4	+	1	−20		1	1.47				
110788	22 26 43.18	+36 46 10.7	8.10	G	336.679 924 01	+36.769 643 87		18.12	226.56	108.80	0.70	0.68	0.96	0.96	0.97	+16	+18	−	5	−21	−12	−	2	−	7	−27	+24	+18		2	0.66						
110789	22 26 44.61	+22 48 43.7	7.97	H	336.685 895 10	+22.812 151 13		6.13	−3.66	−31.48	0.80	0.71	1.02	0.94	0.96	+21	+19	−	9	+16	+11	−19	+12	+12	+10	+32			0	0.47						
110790 H	22 26 45.56	+37 26 37.4	6.46	H	336.689 827 04	+37.443 718 76	A	1.69	−0.82	−5.20	0.74	0.66	0.95	1.00	0.84	+18	+	9	+	7	−	2	+	6	−	5	+	9	+	5	+10		2	0.49				
110791	22 26 46.50	+21 52 10.8	7.85	H	336.693 756 19	+21.869 679 52		2.98	−13.59	−8.43	0.86	0.65	1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
110701	9.044	0.014	7.986	0.010		0.918	0.013	T	0.92	0.01	L	8.0502	0.0015	0.011	105		8.03	8.07					1							S
110702	9.436	0.012	9.437	0.016		0.004	0.018	T	0.02	0.02	L	9.4585	0.0023	0.029	184		9.41	9.51					1							
110703	9.905	0.019	8.334	0.010		1.341	0.018	T	3.17	0.05	O	7.9277	0.0172	0.141	122		7.77	8.16		U 2			1 S							
110704	8.555	0.009	7.263	0.006		1.099	0.008	T	1.06	0.01	L	7.3093	0.0008	0.009	134		7.29	7.33					1 G							S
110705	9.275	0.016	8.881	0.016		0.378	0.015	G	0.44	0.02	H	8.9438	0.0018	0.014	83		8.92	8.97		C			1							
110706	8.862	0.013	7.076	0.006		1.518	0.012	T	2.42	0.03	O	6.8843	0.0038	0.028	86		6.84	6.93		U 2			1 S							S
110707	7.499	0.011	6.757	0.009	*	0.664	0.011	T	0.73	0.01	L *	6.8714	0.0031	0.017	60	*	6.84	6.91		U 2 C	22258−2014	I 1	2 C A	AB	152	6.880	0.003	0.99	0.02	S
110708	9.629	0.018	8.484	0.012		0.984	0.017	T	0.96	0.01	L	8.5347	0.0013	0.015	116		8.51	8.55					1							
110709	9.396	0.013	8.834	0.012		0.530	0.013	T	0.60	0.01	L	8.8555	0.0019	0.021	148		8.82	8.89			22258−6834	I 1	1 S							
110710	8.753	0.011	8.714	0.013		0.041	0.016	T	0.06	0.01	L	8.7503	0.0021	0.024	114		8.72	8.80					1							S
110711	9.251	0.014	8.059	0.009		1.021	0.013	T	0.99	0.01	L	8.1217	0.0014	0.013	124		8.10	8.14		C			1							
110712	6.845	0.004	6.181	0.004	A	0.599	0.002	G	0.68	0.07	F	6.2454	0.0103	0.018	137	A	6.21	6.27		D	22259−7501	I 2	1 C P A							S
110713	7.771	0.007	7.328	0.006		0.432	0.007	T	0.50	0.01	L	7.3868	0.0008	0.009	132		7.37	7.40		C			1							S
110714	11.993	0.166	10.613	0.074		1.335	0.015	G	1.40	0.14	K	10.5726	0.0038	0.030	85		10.52	10.62					1							G
110715	9.718	0.028	9.112	0.026		0.565	0.034	T	0.64	0.03	L	9.1505	0.0026	0.019	61		9.11	9.20					1							S
110716	9.446	0.017	8.396	0.012		0.902	0.016	T	0.95	0.02	L	8.4636	0.0016	0.016	110		8.44	8.49		C			1							
110717	9.122	0.017	8.552	0.016		0.537	0.017	T	0.61	0.02	L	8.5974	0.0016	0.013	95		8.58	8.62					1							S
110718	10.793	0.053	9.240	0.025		1.304	0.046	T	1.26	0.05	L	9.2359	0.0027	0.018	82		9.20	9.26		C			1							
110719	10.134	0.027	8.845	0.015	B	1.120	0.009	G	1.08	0.01	K	9.5412	0.1731			B				D	22259−7501	I 2	1 C I A							
110720	8.334	0.018	7.401	0.013	*	0.824	0.016	T	0.85	0.01	L *	7.5345	0.0011	0.012	87	*	7.52	7.56		D	22259−4507	I 1	2 C A	AB	277	2.098	0.005	1.07	0.02	S
110721	8.601	0.009	8.341	0.010		0.260	0.015	G	0.29	0.02	H	8.3825	0.0016	0.015	132		8.36	8.41		C			1							
110722	9.735	0.013	9.573	0.016		0.156	0.019	T	0.17	0.02	L	9.6271	0.0018	0.027	277		9.58	9.69					1							G
110723	9.257	0.015	8.132	0.010		0.969	0.014	T	0.95	0.01	L	8.1972	0.0018	0.018	115		8.17	8.22		C			1							S
110724	8.100	0.009	6.800	0.005		1.105	0.008	T	1.07	0.01	L	6.8512	0.0007	0.008	115		6.83	6.87					1							S
110725	7.051	0.004	5.609	0.003		1.216	0.004	T	1.18	0.00	L	5.6373	0.0005	0.006	122		5.63	5.65					1 X							S
110726	9.039	0.009	9.023	0.012		0.019	0.014	T	0.04	0.01	L	9.0554	0.0016	0.023	248		9.01	9.10					1							
110727	8.332	0.010	8.098	0.010		0.223	0.013	T	0.25	0.01	L	8.1571	0.0016	0.012	121		8.14	8.18		C			1							
110728	10.549	0.038	9.188	0.019		1.153	0.033	T	1.12	0.03	L	9.2192	0.0016	0.018	119		9.18	9.24					1							
110729	8.542	0.009	8.211	0.010		0.314	0.013	T	0.36	0.02	L	8.2623	0.0012	0.013	132		8.24	8.29					1 G							S
110730	8.918	0.011	8.559	0.012		0.363	0.015	G	0.42	0.02	H	8.6151	0.0017	0.018	125		8.59	8.65					1							
110731	9.896	0.029	9.321	0.027		0.540	0.029	T	0.61	0.03	L	9.3867	0.0025	0.019	77		9.36	9.42		C			1							
110732	9.926	0.023	9.171	0.020		0.674	0.023	T	0.73	0.02	L	9.2469	0.0029	0.025	116		9.20	9.29					1							S
110733	7.102	0.006	7.052	0.006		0.060	0.015	G	0.07	0.01	H	7.0760	0.0010	0.008	93		7.06	7.09		C			1							S
110734	9.808	0.025	8.998	0.020		0.732	0.025	T	0.78	0.02	L	9.0645	0.0024	0.019	72		9.03	9.10		C			1							S
110735	9.238	0.019	8.799	0.019		0.428	0.022	T	0.50	0.02	L	8.8384	0.0016	0.016	67		8.81	8.86		C			1							S
110736						1.500	0.510	G	5.34	0.96	K	9.7674	0.2059	1.357	141		7.26	11.02	396.00	P 1 B			1 S							D P
110737	9.469	0.018	9.433	0.025		0.038	0.029	T	0.05	0.02	L	9.5162	0.0047	0.027	84		9.47	9.56		U			1							
110738	9.281	0.015	8.102	0.010		1.011	0.014	T	0.99	0.01	L	8.1503	0.0023	0.015	94		8.12	8.19					1							S
110739	7.628	0.008	7.310	0.011		0.292	0.017	G	0.33	0.02	H	7.3668	0.0012	0.009	55		7.36	7.39		C			1							S
110740	8.448	0.013	7.235	0.008		1.037	0.012	T	1.01	0.01	L	7.2890	0.0010	0.011	105		7.27	7.31		C			1							S
110741	9.505	0.021	9.041	0.022		0.450	0.024	T	0.52	0.03	L	9.0697	0.0024	0.019	63		9.04	9.10		C			1 S							
110742	10.213	0.029	8.912	0.017		1.106	0.026	T	1.07	0.03	L	8.9446	0.0021	0.019	80		8.92	8.97		C			1							
110743	8.360	0.010	7.967	0.010		0.408	0.004	G	0.47	0.00	H	8.0124	0.0010	0.010	107		8.00	8.03					1							S
110744	9.808	0.023	9.409	0.024		0.390	0.028	T	0.46	0.03	L	9.4940	0.0031	0.022	85		9.45	9.54		C			1							
110745	9.117	0.017	7.478	0.009		1.371	0.015	T	1.34	0.02	L	7.4989	0.0014	0.008	76		7.48	7.51		C			1							S
110746	6.262	0.003	6.287	0.005		−0.021	0.005	T	0.00	0.01	L	6.2883	0.0007	0.005	80		6.28	6.30		C			1							S
110747	9.361	0.018	9.127	0.021		0.218	0.028	T	0.24	0.03	L	9.1519	0.0022	0.017	70		9.12	9.18		C			1							S
110748	10.226	0.031	9.535	0.028		0.626	0.031	T	0.69	0.03	L	9.5822	0.0027	0.024	91		9.53	9.62					1							
110749	7.441	0.005	7.139	0.005		0.278	0.007	G	0.32	0.01	H	7.1851	0.0009	0.010	128		7.17	7.20		C			1							S
110750	10.931	0.055	9.382	0.024		1.135	0.015	G	1.10	0.02	K	9.3838	0.0021	0.020	87		9.35	9.42		C			1 X S							G
110751	10.458	0.035	9.307	0.022		0.989	0.032	T	0.97	0.03	L	9.3622	0.0029	0.023	138		9.33	9.40					1							
110752	10.769	0.056	9.966	0.042		0.727	0.054	T	0.78	0.04	L	10.0154	0.0040	0.029	61		9.97	10.08		C			1 X							
110753	7.471	0.006	6.994	0.005		0.461	0.015	G	0.53	0.02	H	7.0445	0.0010	0.009	94		7.03	7.06					1							S
110754	9.890	0.023	9.413	0.023		0.449	0.030	T	0.52	0.03	L	9.4662	0.0018	0.021	104		9.42	9.51		D			1							
110755	8.609	0.012	8.185	0.012		0.432	0.015	G	0.50	0.02	H	8.2233	0.0019	0.010	76		8.21	8.24		C			1							S
110756	10.297	0.022	9.909	0.024	*	0.367	0.031	T	0.43	0.03	L *	9.9387	0.0025	0.033	191	*	9.89	10.00		D	22263+4308	M 1	2 C A	AB	11	0.453	0.009	1.22	0.05	G
110757	10.124	0.026	9.560	0.025		0.528	0.032	T	0.60	0.03	L	9.5859	0.0026	0.022	120		9.55	9.62		C			1							
110758	8.889	0.015	8.305	0.014		0.547	0.015	T	0.62	0.01	L	8.3642	0.0021	0.014	67		8.34	8.40		C			1							S
110759	10.392	0.040	9.296	0.025		0.947	0.036	T	0.94	0.03	L	9.3379	0.0035	0.022	70		9.29	9.37					1							
110760	7.959	0.011	7.532	0.009		0.418	0.015	G	0.48	0.02	H	7.5648	0.0017	0.010	72		7.55	7.58		C			1							S
110761	9.168	0.016	8.319	0.013		0.762	0.016	T	0.80	0.01	L	8.3827	0.0013	0.012	83		8.36	8.40		C			1							S
110762	10.769	0.040	10.267	0.040		0.483	0.043	T	0.55	0.04	L	10.4198	0.0042	0.027	96		10.37	10.46					1							
110763	10.210	0.019	10.028	0.025		0.174	0.029	T	0.19	0.03	L	10.0330	0.0020	0.028	224		9.98	10.08					1							G
110764	9.011	0.017	8.587	0.018		0.415	0.015	G	0.48	0.02	H	8.6349	0.0018	0.015	75		8.61	8.66		C			1							S
110765	10.448	0.029	9.975	0.030		0.503	0.005	G	0.58	0.01	H	10.0287	0.0026	0.027	107		9.98	10.08					1							
110766	9.590	0.015	9.487	0.019	*	0.100	0.022	T	0.11	0.02	L *	9.5221	0.0020	0.027	190	*	9.47	9.57			22265+4332	I 2	2 C S A	CD	194	0.187	0.027	1.46	0.42	
110767	10.719	0.056	8.828	0.018		1.571	0.047	T	1.59	0.05	L	8.7560	0.0017	0.015	87		8.73	8.78					1							
110768	10.257	0.024	10.031	0.030	A	0.100	0.495	G	0.33	0.16	L *	9.9188	0.0026	0.029	188	*	9.87	9.97		D	22265+4332	I 2	2 C A	AB	292	2.618	0.013	1.56	0.05	G
110769	10.827	0.042	10.032	0.033		0.710	0.020	G	0.76	0.02	H	10.1271	0.0024	0.026	107		10.09	10.17					1							
110770	10.033	0.028	8.292	0.013		1.452	0.024	T	1.45	0.04	L	8.2872	0.0017	0.014	85		8.26	8.31		C			1							
110771	8.940	0.015	8.475	0.014		0.438	0.019	T	0.51	0.02	L	8.5266	0.0019	0.020	82		8.49	8.56					1							S
110772	9.468	0.018	8.936	0.017		0.495	0.021	G	0.57	0.02	H	9.0044	0.0013	0.017	132		8.97	9.04		C			1							
110773	10.452	0.033	9.386	0.022		0.914	0.031	T	0.91	0.02	L	9.4708	0.0020	0.014	111		9.44	9.50					1							
110774	11.163	0.064	9.673	0.029		1.102	0.020	G	1.18	0.03	I	9.6501	0.0026	0.022	85		9.61	9.70		C			1							G
110775											T	11.5883	0.0066	0.050	98		11.47	11.69					1 S							G
110776	10.700	0.052	9.797	0.041		0.821	0.001	G	0.86	0.00	H	9.8285	0.0033	0.019	66		9.80	9.86		C			1							
110777	10.302	0.024	8.563	0.011		1.450	0.021	T	1.45	0.03	L	8.5601	0.0017	0.020	155		8.53	8.60					1							
110778	6.270	0.007	5.587	0.006	*	0.618	0.002	G	0.68	0.02	A *	5.6854	0.0008	0.007	75	*	5.68	5.70		D	22266−1644	I 1	2 C A	AB	350	2.202	0.006	0.15	0.01	S
110779	10.268	0.023	9.550	0.019		0.646	0.023	T	0.71	0.02	L	9.6322	0.0019	0.023	147		9.59	9.69		C			1							
110780	7.209	0.005	6.893	0.007		0.320	0.015	G	0.37	0.02	H	6.9284	0.0010	0.006	52		6.92	6.94					1							S
110781	9.430	0.011	7.909	0.006		1.278	0.010	T	1.24	0.01	L	7.9262	0.0011	0.015	224		7.89	7.96		C			1							S
110782	9.377	0.021	8.820	0.019		0.521	0.025	T	0.59	0.03	L	8.8775	0.0027	0.023	66		8.84	8.92					1							S
110783	9.844	0.021	9.297	0.020		0.512	0.026	T	0.58	0.03	L	9.3395	0.0023	0.025	124		9.30	9.39					1							
110784	10.933	0.054	10.478	0.058		0.518	0.015	G	0.59	0.02	H	10.4992	0.0030	0.027	98		10.45	10.56					1							
110785	6.380	0.005	5.821	0.004		0.519	0.005	G	0.59	0.01	H	5.8680	0.0010	0.006	78		5.86	5.88		C	22266+0424	I 1	1 X S							S
110786	7.289	0.008	7.006	0.009		0.269	0.011	T	0.30	0.01	L	7.0487	0.0014	0.010	56		7.03	7.07					1							S
110787	6.043	0.004	5.857	0.004		0.171	0.005	T	0.19	0.01	L	5.8918	0.0007	0.006	111		5.88	5.90		C			1							S
110788	8.754	0.012	8.139	0.010		0.584	0.015	G	0.66	0.01	H	8.2148	0.0017	0.014	109		8.19	8.26					1							S
110789	8.219	0.010	7.998	0.011		0.211	0.014	T	0.23	0.02	L	8.0359	0.0021	0.015	82		8.01	8.06			22267+2249	I 1	1							S
110790	6.255	0.005	6.409	0.006	*	−0.132	0.007	T	−0.12	0.01	L *	6.4133	0.0010	0.008	96	*	6.40	6.43		D	22268+3727	I 1	2 C A	AB	1	4.325	0.013	3.51	0.07	S
110791	9.335	0.017	7.954	0.010		1.169	0.015	T	1.13	0.01	L	8.0202	0.0011	0.011	69		8.00	8.04					1							S
110792	8.338	0.011	8.131	0.012		0.198	0.015	T	0.22	0.02	L	8.1624	0.0018	0.011	60		8.14	8.18		C			1							S
110793	11.587	0.101	10.388	0.053		1.026	0.089	T	1.00	0.07	L	10.4631	0.0032	0.025	88		10.41	10.51		C			1							G
110794	9.723	0.016	9.227	0.016		0.466	0.021	T	0.54	0.02	L	9.2779	0.0019	0.020	141		9.24	9.32		C			1							
110795	8.931	0.013	8.459	0.012	*	0.445	0.016	T	0.51	0.02	L *	8.5084	0.0019	0.017	94	*	8.48	8.55		D	22268−4537	I 1	2 C A	AS	288	0.231	0.005	0.16	0.11	S
110796	10.414	0.045	9.300	0.029		0.960	0.042	T	0.95	0.03	L	9.3521	0.0021	0.016	54		9.32	9.37		D			1							
110797	12.278	0.179	11.219	0.114	A	1.210	0.042	G	1.35	0.08	I *	10.3791	0.0032	0.032	137	*	10.32	10.45		D	22268−5445	I 1	2 C A	AB	72	2.454	0.010	0.15	0.03	
110798	11.141	0.051	9.444	0.020		1.417	0.043	T	1.40	0.07	L	9.3979	0.0027	0.026	145		9.35	9.44					1 S							
110799	8.996	0.028	8.346	0.026	*	0.749	0.002	G	0.79	0.00	H *	8.6112	0.0025	0.017	88	*	8.58	8.64		D	22269+6343	I 1	2 C A	BA	345	1.780	0.004	0.50	0.02	
110800	8.990	0.011	8.649	0.012		0.330	0.018	T	0.38	0.02	L	8.6929	0.0022	0.021	130		8.67	8.73					1							S

Number HIP 1 2	Descriptor: epoch J1991.25 RA h m s 3	Dec ±° ′ ″ 4	V mag 5	6 7	Position: epoch J1991.25 α (ICRS) deg 8	δ deg 9	10	Par. π mas 11	Proper Motion $\mu_{\alpha*}$ mas/yr 12	μ_δ 13	Standard Errors α* mas 14	δ 15	π mas 16	$\mu_{\alpha*}$ mas/yr 17	μ_δ 18	Astrometric Correlations (%) 19	20	21	22	23	24	25	26	27	28	Soln F1 % 29	F2 30
110801	22 26 53.89	+73 34 29.2	7.89	H	336.724 552 04	+73.574 778 38		4.35	9.87	−7.49	0.58	0.54	0.64	0.61	0.55	−15	−11	+14	−36	+11	+10	+10	−14	+ 6	−16	0	0.56
110802	22 26 55.74	−16 37 33.5	9.48	H	336.732 247 08	−16.625 964 17		4.20	35.01	6.28	1.57	0.95	1.62	2.08	1.24	+ 7	−21	−16	−25	+35	+17	+29	−11	+21	+31	2	−0.69
110803	22 26 56.14	−40 22 37.3	11.21	G	336.733 921 38	−40.377 039 80		−2.66	80.44	12.80	1.82	1.26	2.30	2.14	1.40	+ 6	+ 0	− 4	− 5	− 9	+21	− 8	−20	− 6	+ 4	0	2.34
110804	22 26 58.26	+46 01 48.8	10.29	H	336.742 742 36	+46.030 229 07		2.79	−2.01	−3.57	0.91	0.93	1.32	0.98	0.98	−23	+ 5	+ 2	−19	+16	+ 0	+18	−25	+17	− 7	3	1.19
110805	22 26 58.27	−35 40 32.2	8.24	H	336.742 784 97	−35.675 613 90		4.49	−15.96	−39.65	0.93	0.73	1.20	1.02	0.65	+21	+ 4	+21	−16	+ 7	+36	− 4	−41	− 2	+10	0	1.34
110806	22 26 58.53	−17 25 28.7	10.66	H	336.743 873 46	−17.424 648 63		15.84	290.79	81.75	1.88	1.41	2.16	2.47	1.67	+28	−34	−28	−11	+ 3	+12	+ 5	−34	+ 7	+34	9	3.33
*110807	22 26 59.16	+56 26 00.8	6.59	1 H	336.746 499 39	+56.433 549 61		4.02	16.16	5.44	0.47	0.44	0.57	0.54	0.46	−19	−20	+16	−20	+14	+ 8	+ 9	− 8	+ 8	− 3	0	−0.08
*110808	H 22 26 59.10	−41 17 53.5	8.44	H	336.746 254 82	−41.298 190 61	A	8.39	55.17	−10.07	1.69	1.09	1.80	1.82	1.15	− 4	− 8	+ 5	+24	−21	− 7	−20	−23	− 5	− 6	1	0.80
110809	22 27 00.91	+30 57 25.0	7.39	H	336.753 800 49	+30.956 940 26		1.84	−12.70	−25.91	0.45	0.62	0.84	0.54	0.90	+50	− 8	− 8	−15	−10	+10	− 5	−25	+26	+72	0	−0.64
110810	22 27 01.30	+45 47 22.2	7.43	H	336.755 431 88	+45.789 498 79		4.10	−19.28	−15.26	0.50	0.50	0.72	0.54	0.53	−24	+ 4	− 1	−25	+13	− 5	+13	−23	+18	−12	0	−0.44
110811	22 27 01.79	−52 57 46.1	8.77	H	336.757 451 83	−52.962 808 42		1.37	−1.64	8.16	0.69	0.70	1.19	0.87	0.81	+23	− 7	−10	+14	+12	+20	+12	+22	+ 0	+39	0	0.95
110812	22 27 02.49	−62 31 29.3	8.79	H	336.760 366 98	−62.524 800 59		29.13	−75.12	82.91	0.63	0.79	1.16	0.72	0.76	−33	+ 4	−20	+ 5	+ 7	− 4	+ 6	−15	+ 5	−31	0	0.03
110813	22 27 03.12	−17 15 48.3	7.60	H	336.763 018 86	−17.263 403 95		8.21	−86.69	−104.35	0.92	0.68	1.06	1.23	0.83	+28	−36	−25	−14	+ 6	+21	+10	−26	+ 5	+32	0	−1.02
110814	22 27 04.99	+65 27 58.3	7.98	H	336.770 775 79	+65.466 191 08		3.94	21.45	−15.26	0.64	0.65	0.76	0.79	0.79	−20	+ 4	− 6	− 1	+11	− 9	+12	−19	+25	−16	0	1.23
110815	H 22 27 05.13	+45 07 07.4	9.14	H	336.771 395 46	+45.118 731 74	A	−0.98	−0.73	−3.43	1.43	1.47	1.88	1.25	1.27	−35	+11	− 8	+11	− 2	− 3	+ 0	−12	+ 4	−25	1	−0.19
110816	22 27 05.15	+39 40 18.6	7.83	H	336.771 442 51	+39.671 846 65		3.86	−8.70	25.95	0.71	0.66	0.92	0.89	0.85	− 3	+ 6	+ 1	+20	+ 5	+ 8	+ 8	−23	+12	+ 3	0	0.45
110817	22 27 05.31	+65 07 56.2	5.52	1 H	336.772 130 47	+65.132 274 52		1.29	−0.74	−1.93	0.46	0.47	0.55	0.57	0.53	−24	− 1	+ 0	+ 3	+ 9	+ 1	+ 8	−18	+27	−23	0	−0.10
110818	22 27 05.72	−32 33 12.2	9.87	H	336.773 834 54	−32.553 376 24		2.04	54.61	−24.54	1.15	0.85	1.48	1.36	0.86	+35	+ 1	−11	+23	− 5	+21	+ 0	−18	+27	+41	0	1.19
110819	22 27 06.44	+57 29 31.2	9.26	H	336.776 818 85	+57.491 996 73		1.53	5.22	−0.67	0.84	0.78	0.97	1.06	0.95	− 2	+ 2	+11	+ 0	+12	− 9	+13	+ 0	−10	+19	0	−0.03
110820	22 27 06.63	−02 04 50.5	8.48	H	336.777 628 34	−02.080 691 02		7.69	71.18	25.29	1.19	0.93	1.30	1.70	1.01	+43	+10	+ 0	− 7	+10	+14	−21	−70	+14	+ 2	0	0.82
110821	22 27 06.71	−01 18 32.9	6.77	H	336.777 947 58	−01.309 139 32		8.76	53.64	−4.67	0.82	0.70	0.97	1.13	0.74	+41	− 3	− 2	+ 4	+ 2	+39	−21	−60	+10	+ 9	0	0.27
110822	22 27 06.81	+30 44 03.5	8.40	H	336.778 387 57	+30.734 312 31		4.75	43.87	−16.25	0.55	0.72	1.03	0.62	0.99	+47	−18	− 6	−23	−14	+14	−11	−30	+26	+70	0	0.37
110823	22 27 07.48	+21 25 46.2	8.37	H	336.781 181 86	+21.429 490 61		1.50	16.83	−2.43	1.00	0.81	1.27	1.21	1.10	+ 6	+ 8	−23	+ 5	+ 7	+12	+13	−11	+34	+12	0	−0.29
110824	22 27 07.50	+54 10 53.7	10.46	G	336.781 232 07	+54.181 577 66		0.16	−2.77	−3.00	1.05	1.02	1.35	1.13	1.13	+ 3	− 5	+14	− 2	+ 8	− 6	+ 9	+ 0	− 2	+21	2	0.37
110825	22 27 07.76	+11 16 58.4	8.75	H	336.782 341 86	+11.282 887 73		1.91	7.98	0.49	1.07	0.77	1.20	1.51	0.96	+13	+24	− 2	−35	+14	− 5	+15	−36	+21	−12	2	2.41
110826	22 27 09.72	+08 55 27.1	7.86	H	336.790 480 26	+08.924 192 74		7.88	−57.45	−28.79	0.79	0.65	1.03	1.40	0.74	+43	+ 7	+25	+12	+37	+17	+26	+11	−13	+ 6	0	−0.45
110827	22 27 10.17	−46 54 13.8	9.70	H	336.792 363 20	−46.903 830 99		6.88	76.24	−49.16	1.27	1.00	1.63	1.45	1.16	+11	−16	−16	+ 9	−16	+14	+11	+13	+ 5	0	−1.50
110828	22 27 10.91	+61 54 44.6	6.61	H	336.795 440 77	+61.912 396 49		5.96	−19.33	−77.19	0.48	0.50	0.56	0.57	0.57	−23	+ 9	+13	+11	+ 3	+10	− 1	−19	+ 7	−34	0	−2.36
110829	22 27 12.04	−19 26 35.6	8.65	H	336.800 174 94	−19.443 214 61		6.52	−20.32	−11.63	0.99	0.74	1.18	1.31	0.85	+36	−22	−38	−14	+ 5	− 3	− 2	−14	+13	+48	0	0.53
110830	22 27 14.10	−69 42 17.4	8.53	H	336.808 753 74	−69.704 831 66		8.38	−91.61	−17.93	0.66	0.72	0.98	0.73	0.67	− 2	− 5	−39	− 4	+ 2	− 1	+ 2	+ 1	−11	+ 7	0	0.92
110831	22 27 14.34	+29 28 12.3	9.71	H	336.809 767 08	+29.470 089 94		2.14	19.81	1.24	0.88	0.99	1.22	1.11	1.34	+ 5	+ 4	−15	+32	−14	− 2	−14	− 2	+ 7	+12	0	−1.86
110832	H 22 27 16.23	−40 26 55.7	8.50	H	336.817 622 10	−40.448 803 63	A	10.15	18.89	−17.16	2.25	1.66	2.37	2.29	1.59	+ 5	− 1	+ 2	− 3	− 2	+22	− 6	−14	−10	−23	1	1.58
110833	22 27 16.62	+17 04 38.9	8.60	H	336.819 236 71	+17.077 483 72		0.32	7.88	−18.55	0.91	0.75	1.17	1.06	0.88	+21	+26	− 8	− 2	+ 1	−23	+ 0	− 9	+ 8	+ 9	0	0.29
110834	22 27 17.17	+58 56 30.8	9.18	H	336.821 524 84	+58.941 891 32		0.96	4.81	0.83	0.83	0.76	0.97	1.02	1.00	− 6	+ 7	+19	+28	− 7	+12	− 9	− 1	+10	− 5	0	0.43
110835	22 27 17.30	+44 22 45.6	9.92	H	336.822 103 44	+44.379 320 56		2.68	−0.38	−4.18	0.95	1.07	1.45	1.06	1.35	−29	+ 4	+ 6	+11	+13	+ 3	+16	+15	+ 7	−25	1	0.96
110836	22 27 17.82	+56 15 11.8	10.90	G	336.824 259 86	+56.253 275 74		1.03	−4.71	−1.81	1.33	1.16	1.53	1.50	1.23	−20	−16	+17	−30	+15	+ 6	+12	−17	+ 1	− 8	0	1.61
110837	22 27 18.61	−34 18 14.3	8.93	H	336.827 532 35	−34.303 979 72		5.02	4.09	−2.92	0.91	0.65	1.13	0.99	0.62	+15	− 8	+ 9	− 6	+10	+21	+ 7	−29	+ 2	+18	0	3.59
110838	H 22 27 19.87	−64 57 59.0	4.51	G	336.832 804 53	−64.966 379 27	A	12.21	68.68	10.21	0.53	0.52	0.63	0.54	0.47	−14	− 2	−12	+13	+ 7	+ 5	+ 6	+ 0	−12	−17	3	1.63
110839	22 27 20.46	−63 41 16.5	9.08	H	336.835 269 22	−63.687 910 50		2.04	20.16	−18.41	0.76	0.79	1.22	0.92	0.84	−18	−11	+ 3	− 4	+ 2	+ 0	+ 3	− 7	−11	− 8	0	−0.12
110840	22 27 20.52	+33 30 51.9	7.56	G	336.835 506 05	+33.514 421 84		10.58	7.14	−26.51	0.59	0.60	0.90	0.79	0.77	+16	+ 7	−14	+14	−11	+ 8	−18	+ 8	−36	+45	+13	1	−0.59
110841	22 27 20.54	+63 57 22.6	7.31	H	336.835 603 39	+63.956 273 61		4.68	36.00	13.97	0.61	0.69	0.66	0.79	0.95	−24	− 2	+17	+13	+36	−12	+34	−55	− 3	−33	0	1.59
110842	H 22 27 21.21	−58 00 02.3	6.87	2 H	336.838 378 21	−58.000 640 67	A	7.81	−15.60	6.76	0.64	0.59	0.87	0.66	0.52	−12	+ 1	+ 5	−17	+ 2	+ 8	+ 1	−13	−12	−11	3	0.52
110843	22 27 24.38	−49 21 54.5	7.48	G	336.851 600 06	−49.365 147 52		27.90	337.19	−330.34	0.65	0.55	0.96	0.79	0.63	+ 8	−10	−19	−10	− 1	− 2	+ 0	+ 2	−19	+14	0	−0.13
110844	22 27 24.97	−63 37 28.3	8.95	1 H	336.854 028 58	−63.624 538 10		7.58	−3.72	19.07	0.74	0.78	1.24	0.95	0.81	−10	− 5	−15	− 5	− 5	+ 5	− 3	−12	− 6	−13	0	0.06
110845	22 27 25.59	−22 32 03.5	8.71	H	336.856 611 56	−22.534 308 44		7.22	0.39	−36.16	0.95	0.69	1.06	1.32	0.72	+24	− 3	− 4	+10	+ 1	+11	− 4	−23	− 5	+ 9	0	1.50
110846	22 27 26.12	+47 49 02.1	9.22	H	336.858 831 47	+47.817 255 09	A	0.83	−6.05	−3.17	2.09	2.05	2.24	1.97	1.78	− 2	− 5	+ 5	+ 4	+ 2	+ 6	+ 3	−27	+20	+12	4	1.89
*110847	22 27 26.47	+47 49 26.4	9.59	H	336.860 281 20	+47.823 991 51	B	6.48	−0.91	−10.66	4.16	4.03	3.42	3.03	2.80	− 1	− 5	+ 7	+ 9	+ 3	+ 1	+ 4	−17	+20	+11	4	1.89
*110848	22 27 26.25	−01 38 27.2	9.50	G	336.859 395 36	−01.640 879 35		4.55	−3.85	−11.90	1.21	0.98	1.41	1.78	1.15	+41	− 6	− 5	− 4	+ 2	+28	−13	−54	+ 7	+17	0	0.74
110849	22 27 26.50	+39 48 36.1	6.16	G	336.860 413 47	+39.810 040 53		2.39	−0.53	−6.09	0.53	0.55	0.71	0.57	0.62	−10	+20	− 8	+ 5	+ 9	+ 7	+15	−28	+25	− 4	4	−0.86
110850	22 27 27.06	+07 12 58.3	9.96	H	336.862 735 08	+07.216 202 48		5.88	23.27	−8.86	1.65	1.19	1.94	2.16	1.38	+31	+38	+13	−49	− 6	−45	− 8	−38	−19	+19	0	−0.18
110851	22 27 30.25	+42 00 48.9	8.10	H	336.876 059 81	+42.013 587 70		11.19	−28.57	−12.11	0.44	0.55	0.88	0.50	0.67	−44	+ 3	− 2	+24	− 2	− 4	+ 0	−11	+20	−41	0	−0.15
110852	22 27 30.71	−77 43 03.7	7.76	H	336.877 961 68	−77.717 699 63		18.97	76.11	−91.64	0.63	0.56	0.73	0.85	0.64	−11	+ 0	−13	+19	+ 4	+11	+ 5	−13	− 9	+ 0	0	0.58
110853	22 27 31.13	−31 33 14.9	7.68	H	336.879 700 22	−31.554 128 98		12.64	16.41	−31.32	0.76	0.62	1.04	0.84	0.61	+45	−14	−13	+ 1	−19	+30	−18	−24	+31	+50	0	−0.53
110854	22 27 33.13	+51 58 35.9	7.83	1 H	336.888 040 98	+51.976 630 33		2.00	1.06	−1.12	0.62	0.50	0.72	0.69	0.56	−13	− 2	+ 1	−22	+ 8	+ 0	+ 7	−22	+23	+13	2	2.61
110855	22 27 35.30	+62 20 15.3	9.53	H	336.897 087 01	+62.337 588 41		2.95	−14.27	−15.74	0.78	0.79	0.92	1.01	0.91	−18	+ 0	+17	+ 4	− 8	+ 6	− 9	−22	+ 1	−23	0	−1.22
110856	H 22 27 35.34	+00 40 22.3	9.84	G	336.897 235 95	+00.672 850 23	A	3.60	−9.01	−1.88	1.94	1.58	2.19	2.43	1.59	+27	+10	+15	+ 4	+10	+48	+ 0	−36	+ 5	+14	3	0.07
110857	22 27 36.37	+23 50 15.4	8.23	G	336.901 560 47	+23.837 603 86		3.20	−32.75	−16.41	0.82	0.74	1.00	1.00	1.13	+32	+21	+ 9	−20	− 2	−10	− 4	− 2	− 1	+53	0	0.98
110858	22 27 37.01	+34 00 00.3	8.24	H	336.904 192 54	+34.000 079 18		0.15	−7.78	−4.73	0.71	0.72	1.10	1.00	1.05	+13	−11	−32	+31	− 3	−29	−17	−30	+41	− 2	0	0.15
110859	22 27 37.24	−33 11 13.1	9.33	H	336.905 187 39	−33.186 978 27		2.23	18.85	−14.09	1.19	0.82	1.49	1.33	0.80	+27	+13	−10	+23	+ 5	+23	+ 8	− 6	+ 9	+31	0	0.50
110860	22 27 37.83	−51 08 51.7	9.08	1 H	336.907 625 57	−51.147 686 60		0.60	3.00	−14.29	0.76	0.83	1.49	0.97	0.99	+30	−17	−24	+ 6	− 1	+23	+ 3	+ 7	+13	+44	1	−0.86
110861	22 27 39.28	−26 25 07.6	7.20	H	336.913 660 35	−26.418 789 53		6.08	6.11	−7.92	0.76	0.57	0.87	0.96	0.59	+28	− 5	+ 3	− 7	+ 9	+14	+ 5	−10	+17	+31	0	0.26
110862	22 27 39.62	−33 29 39.6	8.94	G	336.915 094 84	−33.494 328 02		12.13	172.93	31.20	0.95	0.74	1.24	1.04	0.72	+40	− 4	− 8	+ 4	+ 3	+26	+ 4	−11	+12	+42	0	−0.02
110863	22 27 39.87	+78 34 11.5	8.14	H	336.916 106 43	+78.569 857 80		10.54	101.44	46.99	0.66	0.61	0.74	0.84	0.65	−11	−17	+31	−14	+ 9	+10	+ 4	+ 0	+ 9	−14	1	1.23
110864	22 27 41.19	+65 25 49.2	9.72	1 H	336.921 635 50	+65.430 330 68		0.16	−4.44	−0.33	0.95	0.97	1.12	1.26	1.24	−15	− 3	− 1	− 4	+ 7	− 4	+ 6	−28	+21	−13	1	0.71
110865	22 27 41.83	+40 29 05.6	10.86	2 H	336.924 274 79	+40.484 902 24		13.12	173.95	41.26	1.57	1.75	2.44	1.92	1.97	− 3	+ 5	+ 5	− 2	− 8	+ 3	− 5	−23	+20	+ 4	3	3.84
110866	22 27 41.83	−58 00 45.2	8.01	H	336.924 293 68	−58.012 546 04		4.40	16.28	21.01	0.58	0.59	0.96	0.67	0.58	− 1	− 7	−17	−22	+ 3	+10	+ 4	+ 6	−12	− 1	0	−0.76
*110867	22 27 42.26	−86 09 20.4	8.10	H	336.926 083 49	−86.155 653 41		16.19	167.84	−159.78	0.60	0.58	0.72	0.73	0.61	+ 1	− 2	− 7	− 1	+ 9	+11	+ 9	−10	−20	+ 4	0	0.82
*110868	22 27 42.13	+20 37 35.6	9.52	H	336.925 534 39	+20.626 567 85		1.43	−6.18	−5.29	1.22	0.93	1.54	1.44	1.32	+ 6	+21	−12	−20	+ 1	+ 3	+10	−32	+39	+ 2	0	−0.73
110869	22 27 42.85	+47 46 59.0	9.59	H	336.928 532 71	+47.783 069 06		1.47	1.50	−3.15	0.77	0.76	1.13	0.84	0.80	− 9	+ 5	+ 0	− 4	− 3	+ 5	+ 1	−22	+27	+ 6	2	−0.37
110870	22 27 43.30	+06 57 31.2	11.98	G	336.930 435 16	+06.958 659 55		16.83	268.47	−182.65	3.64	2.43	3.91	4.45	2.60	+ 8	+28	+ 6	−38	+ 9	−32	+ 9	−11	−11	− 2	10	−0.58
110871	22 27 43.59	+51 29 34.3	7.36	G	336.931 634 57	+51.492 848 99		−0.63	−4.74	−2.61	0.52	0.46	0.65	0.57	0.48	−20	− 9	+ 7	−22	+23	+ 3	+20	−18	+14	+ 5	0	0.57
110872	22 27 44.68	+39 02 33.0	9.37	H	336.936 146 54	+39.042 500 27		4.22	13.42	7.45	1.14	0.94	1.43	1.24	1.08	+ 1	+21	− 4	+20	+ 1	+ 2	+11	−27	+35	+ 9	0	−0.14
110873	22 27 46.22	+31 50 23.9	6.00	H	336.942 584 54	+31.839 974 97		3.48	50.84	28.63	0.42	0.52	0.69	0.48	0.67	+30	+ 6	−10	+ 0	−12	+ 0	− 4	−38	+28	+44	1	−0.48
110874	22 27 47.19	+37 49 20.7	7.83	H	336.946 635 40	+37.822 412 56		3.56	−4.48	−3.40	0.80	0.68	1.06	1.17	0.92	+ 5	+ 5	− 5	−15	+14	+ 9	+14	−14	+36	+ 7	0	−0.73
*110875	H 22 27 49.63	−17 16 13.9	8.05	G	336.956 785 22	−17.270 523 78	A	4.67	2.54	7.27	2.50	1.80	2.20	2.29	1.55	+12	−25	−29	−43	+20	+ 0	+15	−32	+12	+25	4	0.06
*110876	22 27 49.58	+01 39 26.3	8.24	H	336.956 571 00	+01.657 314 03		9.28	26.76	4.32	1.01	0.68	1.06	1.07	0.76	+ 7	−19	− 4	−30	+10	+28	+11	−42	+ 5	+ 5	0	−0.69
110877	22 27 49.75	−30 36 54.0	10.17	H	336.957 283 49	−30.614 987 18		6.27	−4.40	0.52	1.53	1.25	2.00	1.63	1.08	+49	+ 1	+ 1	+20	−21	+21	−23	−36	+10	+41	0	0.80
110878	22 27 50.18	+10 28 22.7	8.65	H	336.959 091 03	+10.472 984 47		2.84	−1.87	−6.85	1.27	0.77	1.26	1.53	0.98	− 8	+ 8	+11	−50	+25	+11	+27	−42	+ 8	−14	0	0.13
110879	22 27 50.42	−30 36 08.6	10.02	H	336.960 082 67	−30.602 395 87		10.15	0.40	−70.25	6.76	5.61	8.52	7.27	5.19	+48	− 5	+ 0	− 1	−17	+17	−17	−23	+12	+45	0	
110880	22 27 50.48	+15 38 17.7	9.32	H	336.960 347 99	+15.638 246 08		−2.05	6.88	−17.72	1.11	0.88	1.29	1.42	1.13	+22	+16	+ 0	−15	+12	− 2	+12	+ 4	− 4	+13	0	−1.49
110881	22 27 50.76	−21 52 10.7	8.14	2 H	336.961 481 28	−21.869 632 61		1.63	15.50	−6.05	0.96	0.69	1.03	1.31	0.71	+10	+ 6	− 3	−17	+18	− 5	+12	−24	+ 6	− 6	0	1.17
110882	22 27 51.48	+04 41 47.1	4.78	H	336.964 487 69	+04.696 410 70		20.39	77.29	−307.36	0.72	0.53	0.78	1.01	0.57	+24	+13	+12	+28	+12	+16	+ 2	− 3	− 5	− 2	0	1.87
110883	22 27 51.70	−05 54 21.1	7.88	H	336.965 436 50	−05.905 864 54		5.95	24.92	−10.37	0.95	0.76	1.08	1.17	0.93	+28	+ 4	+ 4	− 6	−10	+29	−12	−50	+ 6	+28	0	0.80
110884	22 27 52.14	−37 04 39.1	8.79	H	336.967 251 64	−37.077 537 92		1.27	−11.65	−18.14	1.00	0.77	1.34	1.16	0.81	+26	+ 6	+ 7	+ 8	+ 8	+29	+ 8	−16	+24	+37	0	1.68
110885	22 27 53.20	+70 48 05.9	7.70	H	336.971 660 16	+70.801 635 21		2.87	19.83	10.58	0.52	0.54	0.60	0.62	0.62	− 1	+ 4	+ 7	+19	+15	+10	+16	+ 3	+13	+ 6	0	−0.64
110886	22 27 53.33	−56 39 37.2	8.61	H	336.972 210 45	−56.660 339 25		7.81	17.14	39.83	0.80	0.66	1.14	0.98	0.65	+15	−14	−30	+24	+ 7	+22	+17	+ 7	− 4	+23	0	1.75
110887	22 27 53.70	−58 06 38.7	11.51	G	336.973 751 16	−58.110 750 58		19.67	237.36	54.10	1.64	1.58	2.57	1.95	1.63	+ 6	− 1	− 9	−34	− 7	+ 4	− 6	− 5	− 9	+ 5	1	0.90
110888	22 27 54.15	+51 34 32.5	7.58	H	336.975 609 68	+51.575 692 54		1.60	−3.90	−5.24	0.53	0.48	0.65	0.59	0.50	−24	− 9	+10	−24	+27	+ 0	+24	−19	+ 8	+ 3	1	1.14
110889	22 27 56.95	+59 44 57.6	10.67	G	336.987 299 48	+59.749 344 73		19.24	403.94	206.55	1.26	1.15	1.45	1.40	1.41	−10	+23	+ 9	+ 8	−11	− 4	−10	−13	+13	−18	0	0.61
110890	22 27 59.19	−63 41 56.7	9.39	H	336.996 642 45	−63.699 073 16		4.73	3.07	−46.55	0.83	0.94	1.39	1.08	0.97	−10	+ 2	− 8	+13	− 5	− 1	− 3	− 5	−13	+ 5	0	−0.03
110891	22 27 59.62	−05 56 19.2	8.23	H	336.998 402 17	−05.938 659 07		3.66	−9.14	−16.82	1.01	0.82	1.15	1.19	1.04	+29	+ 0	+ 5	−14	− 9	+25	−10	−44	+15	+32	0	−0.82
110892	22 28 00.27	−35 24 34.4	10.81	G	337.001 138 61	−35.409 555 03		17.22	139.67	−64.14	1.70	1.47	2.24	1.93	1.33	+31	+ 4	− 2	− 4	− 8	+29	−14	−48	+ 9	+19	3	−0.48
110893	H 22 28 00.42	+57 41 49.3	9.59	G	337.001 740 03	+57.697 020 05	A	249.52	−870.23	−471.10	3.09	2.86	3.03	3.00	2.97	+ 3	+19	+17	+12	+ 1	+ 8	− 3	−13	−18	+ 5	4	1.29
110894	22 28 01.88	+24 56 15.9	10.00	H	337.007 837 09	+24.937 749 62		14.72	284.45	19.49	1.09	1.09	1.47	1.19	1.39	+21	+17	+14	+ 7	− 6	− 3	− 2	−10	+12	+26	0	0.10
110895	22 28 03.21	−79 39 33.6	8.96	H	337.013 380 86	−79.659 335 99		4.61	2.27	−1.88	0.74	0.72	0.89	0.94	0.83	− 6	−16	− 8	+19	− 4	+ 5	− 6	− 5	+ 5	−16	0	−1.33
110896	22 28 03.51	+44 07 14.0	6.56	1 H	337.014 618 17	+44.120 549 10		3.12	4.20	11.33	0.40	0.46	0.67	0.47	0.58	−33	+ 8	− 6	− 7	+ 8	− 5	+ 8	− 4	+ 4	−36	0	0.06
110897	H 22 28 05.69	+29 42 07.5	9.02	H	337.023 718 68	+29.702 080 48	A	4.06	6.21	−2.36	1.64	1.55	1.93	1.92	1.87	+13	+ 0	−23	+34	−10	− 3	−18	− 2	+ 6	+ 0	0	0.43
110898	22 28 06.82	+46 38 27.9	9.76	H	337.028 431 82	+46.641 070 74		0.71	−4.60	−7.26	0.87	0.84	1.21	0.90	0.93	−16	+18	+ 5	− 9	+17	−12	+22	−10	+18	− 8	0

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
110801	7.864	0.008	7.892	0.009		−0.021	0.011	T	0.00	0.01	L	7.8974	0.0014	0.012	113		7.87	7.92		C			1							S
110802	10.071	0.033	9.540	0.032		0.506	0.034	T	0.58	0.04	L	9.5869	0.0029	0.018	70		9.56	9.62		C			1							
110803						0.580	0.020	G	0.65	0.02	H	11.3591	0.0050	0.041	117		11.30	11.43					1							G
110804	10.335	0.028	10.336	0.042		0.004	0.046	T	0.02	0.04	L	10.2933	0.0031	0.033	180		10.24	10.35					1							G
110805	9.611	0.019	8.359	0.012		1.068	0.018	T	1.03	0.01	L	8.4058	0.0016	0.014	108		8.38	8.42					1							
110806											T	10.7997	0.0036	0.038	68		10.75	10.87					1							G
110807	6.453	0.004	6.568	0.004		−0.092	0.004	G	−0.07	0.01	H	6.5589	0.0016	0.011	118		6.54	6.57		M			1							S
110808	9.082	0.013	8.523	0.012	A	0.800	0.495	G	0.61	0.03	L *	8.5610	0.0019	0.013	115	*	8.54	8.59		C	22270−4118	I 1	2 C	B	AB	18	4.171	0.034	3.46	0.18	S
110809	9.168	0.009	7.539	0.005		1.363	0.008	T	1.33	0.01	L	7.5446	0.0007	0.010	224		7.53	7.56		C			1							S
110810	7.620	0.005	7.449	0.006		0.164	0.007	T	0.18	0.01	L	7.4866	0.0010	0.013	178		7.47	7.51					1							S
110811	10.082	0.019	8.868	0.012		1.038	0.018	T	1.01	0.01	L	8.9404	0.0019	0.020	159		8.90	8.98					1							
110812	9.886	0.015	8.880	0.011		0.867	0.015	T	0.88	0.01	L	8.9301	0.0018	0.022	208		8.89	8.98		C			1	S						
110813	8.711	0.014	7.701	0.010		0.882	0.013	T	0.89	0.01	L	7.7545	0.0016	0.012	75		7.74	7.78		C			1							S
110814	9.560	0.018	8.105	0.010		1.227	0.016	T	1.19	0.02	L	8.1431	0.0014	0.010	110		8.13	8.16		C			1							S
110815	9.139	0.011	9.195	0.014	*	−0.046	0.016	T	−0.02	0.02	L *	9.1323	0.0017	0.023	176	*	9.10	9.17		D	22271+4507	M 1	2 C	A	AB	147	0.825	0.008	1.45	0.03	
110816	9.263	0.015	7.953	0.009		1.113	0.014	T	1.08	0.01	L	8.0006	0.0018	0.013	100		7.98	8.03		C			1							
110817	5.875	0.004	5.557	0.003		0.302	0.005	T	0.35	0.01	L	5.5969	0.0020	0.016	109		5.57	5.62		U 2			1							S
110818	10.309	0.033	9.955	0.038		0.344	0.045	T	0.40	0.06	L	9.9482	0.0026	0.019	110		9.91	9.99		C			1							
110819	9.540	0.020	9.307	0.023		0.222	0.029	T	0.24	0.03	L	9.3296	0.0019	0.019	108		9.30	9.36		C			1							G
110820	9.658	0.022	8.563	0.015		0.946	0.020	T	0.94	0.01	L	8.6490	0.0017	0.013	81		8.63	8.67		C			1							S
110821	7.538	0.007	6.841	0.005		0.652	0.004	G	0.72	0.00	H	6.9027	0.0009	0.008	87		6.89	6.92		C			1							S
110822	10.000	0.015	8.512	0.008		1.252	0.013	T	1.21	0.01	L	8.5518	0.0013	0.016	206		8.53	8.58					1							
110823	10.134	0.031	8.503	0.015		1.365	0.027	T	1.33	0.03	L	8.5179	0.0028	0.017	75		8.49	8.54					1							
110824	10.505	0.039	10.481	0.058		0.040	0.015	G	0.06	0.01	H	10.4785	0.0035	0.033	129		10.41	10.52					1							G
110825	8.806	0.014	8.773	0.017		0.035	0.020	T	0.05	0.02	L	8.7697	0.0020	0.022	84		8.73	8.80			22271+1117	I 1	1							S
110826	8.236	0.008	7.900	0.008		0.342	0.015	G	0.40	0.02	H	7.9391	0.0011	0.012	105		7.91	7.97					1							S
110827	10.669	0.045	9.783	0.033		0.774	0.043	T	0.81	0.03	L	9.8425	0.0025	0.029	82		9.79	9.90		C			1							
110828	7.927	0.008	6.720	0.004		1.032	0.007	T	1.00	0.01	L	6.7758	0.0009	0.008	120		6.77	6.79		C			1							S
110829	9.053	0.016	8.693	0.016		0.350	0.020	T	0.41	0.03	L	8.7319	0.0017	0.016	87		8.70	8.76		C			1							S
110830	9.013	0.012	8.599	0.012		0.405	0.014	T	0.47	0.01	L	8.6238	0.0020	0.019	138		8.60	8.67		C			1							S
110831	11.881	0.109	9.847	0.030		1.722	0.093	T	1.75	0.21	K	9.8082	0.0023	0.017	100		9.76	9.84					1							
110832	9.108	0.015	8.465	0.013	*	0.546	0.001	G	0.62	0.00	H *	8.6178	0.0035	0.025	116	*	8.57	8.65		R	22273−4027	I 1	2 C	B	AB	183	6.425	0.005	0.33	0.03	S
110833	9.979	0.029	8.695	0.017		1.093	0.026	T	1.05	0.03	L	8.7652	0.0022	0.014	89		8.75	8.79					1							
110834	9.711	0.021	9.270	0.021		0.563	0.015	G	0.64	0.01	H	9.3031	0.0020	0.018	112		9.27	9.33		C			1							G
110835	9.900	0.018	9.901	0.026		0.004	0.029	T	0.02	0.03	L	9.9282	0.0022	0.033	183		9.87	10.01					1	S						G
110836	11.633	0.116	11.001	0.110		0.519	0.012	G	0.59	0.01	H	10.9920	0.0031	0.039	115		10.94	11.05					1	S						G
110837	10.319	0.028	9.039	0.017		1.089	0.026	T	1.05	0.03	L	9.0970	0.0016	0.014	110		9.07	9.13					1							
110838	4.478	0.002	4.494	0.002	A	−0.029	0.001	G	−0.01	0.02	A *	4.4819	0.0005	0.006	176	*	4.47	4.49			22273−6458	I 1	2 C	B	AB	281	6.976	0.030	4.23	0.15	S
110839	10.180	0.021	9.154	0.014		0.894	0.019	T	0.90	0.01	L	9.2361	0.0020	0.024	196		9.19	9.28		C			1							
110840	7.978	0.008	7.593	0.008		0.385	0.004	G	0.45	0.00	H	7.6514	0.0011	0.010	114		7.63	7.67		C			1							S
110841	7.498	0.007	7.332	0.006		0.159	0.009	T	0.18	0.01	L	7.3681	0.0012	0.010	99		7.36	7.39		C			1	G						S
110842	7.106	0.004	6.923	0.005	A	0.200	0.495	G	0.16	0.01	L *	6.9216	0.0010	0.013	191	*	6.90	6.97		U 2 C	22274−5800	I 1	2 C	A	AB	339	2.132	0.014	3.32	0.07	S P
110843	8.382	0.009	7.555	0.007		0.730	0.001	G	0.78	0.00	H	7.6201	0.0011	0.010	126		7.60	7.64		C			1							S
110844	9.638	0.014	9.025	0.013		0.571	0.017	T	0.64	0.02	L	9.0766	0.0023	0.029	192		9.04	9.13		U			1	S						
110845	9.243	0.018	8.740	0.017		0.484	0.019	T	0.56	0.02	L	8.8193	0.0013	0.013	73		8.80	8.86		C			1							S
110846	9.266	0.018	9.171	0.022	A	0.093	0.026	T	0.11	0.03	L	9.2556	0.0085	0.061	156	A	9.05	9.32		D	22274+4749	I 2	1 C	P B						
110847	9.666	0.023	9.475	0.028	B	0.183	0.034	T	0.20	0.04	L	9.5988	0.0100			B				D	22274+4749	I 2	1 C	I B						
110848	9.875	0.023	9.548	0.026		0.385	0.004	G	0.45	0.00	H	9.5631	0.0038	0.023	76		9.52	9.60					1							
110849	5.964	0.003	6.124	0.004		−0.136	0.003	G	−0.13	0.00	H	6.1093	0.0008	0.007	95		6.10	6.12		C			1							S
110850	10.542	0.040	9.964	0.039		0.540	0.050	T	0.61	0.05	L	10.0810	0.0032	0.025	66		10.03	10.10					1							
110851	8.627	0.006	8.151	0.006		0.448	0.008	T	0.52	0.01	L	8.2008	0.0009	0.014	279		8.18	8.23					1							S
110852	8.422	0.010	7.821	0.009		0.560	0.010	T	0.63	0.01	L	7.8860	0.0017	0.014	123		7.86	7.92					1							S
110853	8.692	0.010	7.760	0.008		0.810	0.010	T	0.84	0.01	L	7.8169	0.0013	0.011	114		7.79	7.83					1							S
110854	8.985	0.012	7.950	0.009		0.900	0.011	T	0.90	0.01	L	7.9905	0.0016	0.021	141		7.96	8.04		U			1							S
110855	9.753	0.021	9.626	0.028		0.123	0.033	T	0.14	0.03	L	9.5780	0.0021	0.020	101		9.54	9.62		C			1							G
110856	11.083	0.058	9.900	0.034	A	1.060	0.197	G	1.03	0.16	R *	9.9634	0.0030	0.019	75	*	9.92	10.00		D	22276+0040	H 1	2 C	D	AB	238	1.314	0.072	3.27	0.23	D
110857	8.693	0.014	8.268	0.014		0.398	0.015	G	0.46	0.02	H	8.3238	0.0012	0.013	76		8.30	8.35		D			1							S
110858	9.553	0.019	8.367	0.012		1.016	0.018	T	0.99	0.01	L	8.4125	0.0013	0.017	107		8.39	8.44		C			1							
110859	10.890	0.049	9.427	0.022		1.233	0.042	T	1.19	0.04	L	9.4942	0.0026	0.022	107		9.46	9.56					1							
110860	10.591	0.031	9.229	0.017		1.154	0.028	T	1.12	0.03	L	9.2462	0.0021	0.023	160		9.20	9.29		U			1							
110861	7.471	0.006	7.233	0.007		0.222	0.009	T	0.24	0.01	L	7.2666	0.0014	0.011	89		7.25	7.28		C			1							S
110862	9.574	0.019	9.023	0.018		0.550	0.015	G	0.62	0.01	H	9.0649	0.0018	0.019	117		9.03	9.09			22277−3329	I 1	1							
110863	8.670	0.013	8.189	0.012		0.478	0.015	G	0.55	0.02	H	8.2412	0.0016	0.014	106		8.22	8.26		C			1							S
110864	10.196	0.028	9.758	0.028		0.413	0.036	T	0.48	0.04	L	9.8147	0.0033	0.025	110		9.78	9.87		U			1							G
110865											T	11.0022	0.0060	0.060	122		10.90	11.12		U			1	S						G
110866	9.403	0.012	8.155	0.008		1.064	0.011	T	1.03	0.01	L	8.1748	0.0011	0.016	187		8.15	8.21		D			1							S
110867	9.281	0.013	8.212	0.009		0.913	0.002	G	0.96	0.00	I	8.2610	0.0015	0.014	142		8.24	8.28		C			1							
110868	9.485	0.019	9.483	0.026		0.007	0.030	T	0.03	0.03	L	9.5170	0.0033	0.029	78		9.45	9.55					1							S
110869	9.781	0.023	9.636	0.030		0.140	0.035	T	0.15	0.04	L	9.6387	0.0022	0.024	148		9.60	9.69					1							G
110870						1.190	0.015	G	1.32	0.03	I	12.1252	0.0093	0.050	60		12.02	12.21					1							G
110871	7.511	0.006	7.379	0.007		0.130	0.004	G	0.14	0.00	H	7.4093	0.0009	0.010	138		7.39	7.43					1							S
110872	10.826	0.059	9.556	0.031		1.082	0.052	T	1.04	0.04	L	9.5337	0.0024	0.024	99		9.49	9.58		C			1							
110873	7.887	0.007	6.158	0.004		1.442	0.006	T	1.44	0.01	L	6.1370	0.0008	0.008	149		6.12	6.15					1							S
110874	8.957	0.013	7.944	0.009		0.884	0.012	T	0.89	0.01	L	7.9863	0.0014	0.014	97		7.96	8.02		C			1							
110875	8.350	0.016	7.983	0.018	*	0.347	0.015	G	0.41	0.02	H *	8.1201	0.0018	0.016	70	*	8.10	8.17		D	22278−1716	I 1	2 C	A	AB	95	7.972	0.018	1.74	0.05	S
110876	8.708	0.012	8.283	0.012		0.407	0.015	G	0.47	0.02	H	8.3294	0.0019	0.011	81		8.31	8.36		C			1							S
110877	11.444	0.067	10.249	0.038		1.016	0.061	T	1.06	0.07	L	10.3128	0.0032	0.030	122		10.27	10.38		C			1							
110878	10.014	0.031	8.776	0.019		1.057	0.028	T	1.02	0.02	L	8.8227	0.0020	0.017	80		8.79	8.85		C			1							
110879	10.870	0.044	10.152	0.037		0.646	0.043	T	0.71	0.04	L	10.1520	0.0037	0.030	126		10.09	10.21					1	X S						G
110880	11.152	0.060	9.509	0.025		1.375	0.051	T	1.35	0.06	L	9.4678	0.0026	0.020	89		9.43	9.51					1							
110881	10.201	0.035	8.409	0.015		1.523	0.031	T	2.87	0.05	O	8.0767	0.0120	0.112	77		7.92	8.30		U 2			1	S						S
110882	6.138	0.004	4.915	0.003		1.039	0.015	G	1.07	0.02	A	4.9476	0.0010	0.006	78		4.94	4.96			22278+0441	I 1	1							S
110883	9.190	0.017	7.997	0.011		1.022	0.016	T	1.00	0.01	L	8.0473	0.0021	0.012	68		8.03	8.07					1							S
110884	10.475	0.034	8.914	0.016		1.310	0.030	T	1.27	0.03	L	8.9470	0.0022	0.022	113		8.91	8.99					1							
110885	7.834	0.006	7.712	0.009		0.118	0.010	T	0.13	0.01	L	7.7451	0.0014	0.012	124		7.73	7.77		C			1							S
110886	9.012	0.012	8.639	0.012		0.353	0.016	T	0.41	0.02	L	8.6955	0.0023	0.023	152		8.65	8.75					1							S
110887						1.300	0.015	G	1.49	0.02	I	11.6449	0.0056	0.058	169		11.54	11.73					1							G
110888	7.626	0.006	7.575	0.008		0.052	0.009	T	0.06	0.01	L	7.5991	0.0010	0.010	139		7.58	7.61		C			1							S
110889						1.110	0.020	G	1.19	0.03	I	10.8295	0.0042	0.031	118		10.77	10.89		C			1							G
110890	9.995	0.019	9.434	0.017		0.530	0.019	T	0.60	0.02	L	9.5060	0.0026	0.029	179		9.46	9.56					1							
110891	9.602	0.024	8.356	0.015		1.063	0.022	T	1.03	0.02	L	8.3961	0.0015	0.012	73		8.38	8.42					1							S
110892	12.111	0.136	10.746	0.069		1.088	0.013	G	1.16	0.02	I	10.9170	0.0044	0.038	104		10.84	10.96					1							G
110893	11.669	0.113	9.971	0.039	A	1.613	0.003	G	2.63	0.01	I *	9.5728	0.0027	0.024	105	*	9.53	9.61		D	22281+5741	I 2	2 C	A	AB	128	3.400	0.022	1.61	0.06	G
110894	11.174	0.063	10.057	0.038		0.954	0.058	T	1.00	0.05	L	10.1396	0.0038	0.030	78		10.09	10.19					1							G
110895	10.514	0.032	9.100	0.016		1.194	0.028	T	1.15	0.03	L	9.1251	0.0015	0.018	126		9.10	9.16		C			1							
110896	8.762	0.008	6.767	0.004		1.653	0.007	T	1.68	0.01	L	6.6660	0.0014	0.018	201		6.63	6.69		U 2	22281+4407	I 1	1							S
110897	9.629	0.022	9.320	0.023	A	0.600	0.495	G	0.27	0.07	L *	9.0874	0.0013	0.015	94	*	9.06	9.11		D	22281+2942	I 1	2 C	A	AB	53	1.535	0.006	0.64	0.02	
110898	9.799	0.015	9.774	0.022		0.028	0.025	T	0.04	0.02	L	9.7706	0.0024	0.027	165		9.72	9.83					1							G
110899	10.300	0.035	9.118	0.022		1.013	0.032	T	0.99	0.03	L	9.1420	0.0025	0.014	72		9.12	9.18					1							
110900	8.285	0.012	7.235	0.007	*	0.894	0.003	G	0.90	0.00	H *	7.2625	0.0010	0.009	82	*	7.25	7.28		D	22282+1214	I 1	2 C	A	AB	199	0.925	0.011	2.36	0.07	S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr											%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
110901	22 28 08.14	+14 21 14.5	9.87		H	337.033 921 46	+14.354 038 85		8.85	165.05	108.62	1.16	1.08	1.47	1.41	1.38	+29	+ 5	+ 3	– 9	– 5	–10	– 4	–28	+ 6	+26	0	–1.68
110902	H 22 28 08.36	−11 53 25.1	8.30		H	337.034 850 34	−11.890 297 25	A	5.85	19.30	12.76	3.59	3.84	1.49	1.55	0.88	+11	+18	–17	– 6	– 3	– 1	+ 1	+ 1	+ 9	–19	4	–0.65
110903	22 28 09.23	−31 04 36.1	8.66		H	337.038 450 18	−31.076 694 70		4.34	28.21	2.55	0.92	0.77	1.19	1.06	0.75	+46	–10	–14	+ 7	–22	+31	–18	–26	+21	+50	0	1.41
110904	22 28 10.15	−32 15 57.1	9.23		H	337.042 294 18	−32.265 851 04		1.10	30.71	−19.21	0.95	0.68	1.20	1.06	0.68	+32	– 8	–11	+10	+ 6	+ 4	+ 5	– 1	+14	+38	0	–0.70
110905	22 28 10.23	+19 26 50.1	8.99		H	337.042 635 50	+19.447 247 36		2.55	3.86	0.65	0.93	0.84	1.13	0.91	0.96	+31	+20	– 1	+22	– 9	+12	– 8	–28	+12	+31	4	–1.66
110906	22 28 10.97	+82 09 19.0	8.66		H	337.045 722 71	+82.155 289 79		0.99	15.26	4.31	0.59	0.57	0.67	0.64	0.57	–	5	+ 6	+21	+10	– 9	+ 9	–10	+ 6	+11	–15	0	0.90
110907	22 28 11.15	+27 01 08.0	6.48		H	337.046 451 71	+27.018 886 96		6.76	−35.57	−33.43	0.54	0.48	0.68	0.58	0.57	+	8	+19	– 6	+31	– 3	– 7	– 1	+ 6	+13	+10	2	–1.24
110908	22 28 11.23	−27 12 27.4	7.98		H	337.046 805 49	−27.207 614 19		1.01	15.07	−15.77	1.00	0.76	1.13	1.13	0.76	+26	– 4	–27	–32	+ 7	+ 8	+ 4	–12	+15	+38	0	0.84
110909	H 22 28 11.53	+17 15 48.0	7.45		H	337.048 047 65	+17.263 341 87	A	2.27	23.86	−17.28	1.27	1.11	1.46	1.37	1.16	+35	+15	+ 7	+15	+ 0	–25	+ 0	– 7	+12	+21	4	0.06
110910	22 28 12.63	+24 52 11.9	7.55		H	337.052 609 76	+24.869 973 84		2.88	−13.14	−15.64	0.71	0.67	1.01	0.77	0.95	+19	+27	+13	+10	+ 1	–26	+10	+14	+21	+23	0	0.85
110911	H 22 28 13.23	+23 31 57.6	8.50		H	337.055 110 12	+23.532 670 41	A	21.59	38.52	−40.03	1.97	1.76	2.01	2.29	2.57	+35	+ 2	– 1	–32	– 8	+ 1	– 9	–17	– 1	+54	0	0.94
110912	22 28 13.24	−39 05 21.0	7.47		H	337.055 172 42	−39.089 162 61		2.49	32.37	−11.85	0.68	0.49	0.85	0.78	0.52	+	4	–16	– 1	+14	– 5	+ 5	– 4	– 4	– 2	+ 4	3	2.47
110913	22 28 13.91	+24 47 33.4	6.78		H	337.057 973 60	+24.792 603 74		3.73	7.94	1.93	0.63	0.61	0.83	0.68	0.83	+31	+22	+15	+17	+ 3	–24	+10	+13	+14	+34	0	–0.35
110914	22 28 15.54	−64 17 22.9	8.19		H	337.064 743 01	−64.289 688 05		1.56	15.84	−19.29	0.58	0.61	0.96	0.71	0.68	–12	+ 7	– 1	– 2	+ 5	+ 1	+ 4	– 6	–14	+ 5	0	–0.94
110915	22 28 15.70	+37 21 33.9	8.76		G	337.065 420 82	+37.359 427 65		4.63	−9.14	−27.82	0.88	0.77	1.18	1.23	1.23	+13	+18	–11	–23	– 3	– 5	+ 3	–21	+30	+14	0	0.65
110916	22 28 16.10	+28 06 42.9	11.00		G	337.067 068 33	+28.111 929 62		10.77	223.52	27.27	1.32	1.29	1.93	1.69	1.53	+	5	– 2	+13	+47	– 5	– 2	– 7	+17	+21	– 6	0	–0.66
110917	22 28 17.89	−56 30 42.9	8.81		H	337.074 556 78	−56.511 906 46		8.14	−87.25	1.36	0.86	0.65	1.17	0.98	0.64	+	6	–20	–28	+19	– 7	+12	+ 1	+ 4	–11	+12	0	–1.39
110918	22 28 18.67	+37 08 23.4	8.17		G	337.077 787 60	+37.139 833 10		−0.92	−2.27	−5.51	0.77	0.69	1.02	1.00	1.02	+13	+21	–11	–23	– 7	– 9	– 2	–31	+22	+16	4	1.82
110919	22 28 19.48	+64 05 06.8	6.30		H	337.081 152 62	+64.085 231 69		8.65	9.63	−31.44	0.50	0.50	0.59	0.64	0.60	–18	+ 3	+ 2	+21	+13	–25	+18	–25	+26	–13	0	0.93
110920	22 28 19.53	−04 50 05.3	10.38		G	337.081 387 05	−04.834 805 15		13.48	148.21	−162.46	1.77	1.09	1.94	2.46	1.34	+32	– 2	–14	+27	+ 3	+23	– 3	–43	+33	+25	0	–1.84
110921	22 28 22.54	+47 26 59.4	8.52	2	H	337.093 897 34	+47.449 824 39		1.40	−2.65	−5.54	0.62	0.62	0.88	0.64	0.69	–21	+10	+ 7	+ 1	+ 8	–12	+13	–12	+21	–11	0	2.25
110922	H 22 28 23.41	−25 54 04.7	11.97		H	337.097 534 55	−25.901 310 26	A	40.81	16.67	−340.28	8.39	6.43	7.66	7.71	5.50	+28	+10	– 9	–22	+10	+ 7	+12	– 4	+27	+22	3	2.01
110923	22 28 23.99	+57 39 42.6	8.30	2	H	337.099 972 90	+57.661 846 64		1.17	−5.35	−5.76	0.70	0.63	0.83	0.89	0.85	+	1	+18	+15	+17	+ 5	+11	+ 0	+ 8	–21	+ 1	0	1.32
110924	22 28 25.54	+51 18 22.5	7.73		H	337.106 405 40	+51.306 244 91		1.61	0.66	−0.90	0.52	0.49	0.68	0.54	0.49	–14	+ 1	+ 5	–12	+14	– 3	+16	–20	+23	+ 8	0	–0.21
110925	22 28 25.95	+58 25 20.3	8.51		H	337.108 130 11	+58.422 293 31		4.26	21.33	4.88	0.87	0.69	0.91	1.20	0.89	–13	+13	+10	+44	– 9	+23	–10	+13	+ 5	–11	0	0.37
110926	22 28 26.72	+21 23 40.6	8.43		H	337.111 341 72	+21.394 601 20		3.15	−11.63	7.61	1.02	0.77	1.27	1.10	1.06	–	6	+15	–24	–30	+12	– 6	+18	–31	+41	– 5	0	–0.34
110927	22 28 27.74	+37 27 13.8	8.22		G	337.115 571 97	+37.453 839 08		0.44	−0.16	−0.66	0.83	0.73	1.08	1.28	1.19	+	7	+10	– 5	–30	– 5	–11	– 2	–31	+18	0	–0.88
110928	22 28 28.48	+39 53 59.5	8.98		H	337.118 652 68	+39.899 863 91		3.04	−4.80	−7.28	0.85	0.83	1.11	1.09	1.11	–11	+ 8	– 5	+10	+10	– 1	+ 8	–29	+15	–18	0	0.11
110929	H 22 28 29.33	+48 32 34.4	7.84		H	337.122 199 74	+48.542 894 19	A	2.09	−1.82	−4.17	0.78	0.82	1.02	0.77	0.76	–	8	+ 1	+ 0	–10	+10	+ 4	+15	–27	+20	+21	1	0.57
110930	22 28 29.80	−57 41 51.9	9.24		H	337.124 179 79	−57.697 744 10		1.50	0.84	6.74	0.83	0.80	1.31	0.97	0.83	–	6	–12	+ 2	+ 2	– 4	+13	– 2	– 3	–16	–12	0	1.67
110931	22 28 29.86	+52 51 54.3	7.74		H	337.124 409 72	+52.865 074 37		4.44	22.35	12.53	0.58	0.49	0.70	0.62	0.51	–10	+11	+11	– 7	+17	–12	+18	+ 1	+11	+10	0	1.51
110932	22 28 30.07	−51 47 16.9	7.20	1	H	337.125 310 05	−51.788 035 03		3.51	1.22	−5.80	0.52	0.52	0.92	0.73	0.58	+27	–25	–22	+29	– 7	+14	– 2	+ 5	+ 5	+25	1	–0.54
110933	22 28 34.50	+58 32 23.8	7.99		H	337.143 749 30	+58.539 943 19		4.53	20.64	11.33	0.72	0.62	0.77	0.93	0.77	–16	+ 5	+13	+41	–11	+ 6	–10	+ 9	+ 5	–14	0	–0.54
110934	22 28 35.72	+56 55 15.5	7.78		H	337.148 822 23	+56.920 976 88		4.52	29.81	6.44	0.60	0.59	0.75	0.69	0.63	–	4	+ 1	+23	– 7	+10	+ 3	+ 8	+ 2	– 8	+ 8	1	–0.86
110935	22 28 37.44	−67 29 20.0	5.56		H	337.156 004 83	−67.488 887 31		22.96	151.41	−70.67	0.42	0.40	0.60	0.50	0.40	–	6	– 8	–20	– 8	+11	+11	+12	–11	+ 6	+ 6	0	1.74
*110936	22 28 39.18	−39 07 53.0	5.47		G	337.163 257 85	−39.131 400 99		12.42	37.24	−160.72	0.59	0.40	0.74	0.68	0.41	+	8	–19	+ 5	+11	– 8	+ 8	– 7	–29	– 1	+11	2	2.34
*110937	22 28 39.05	+58 50 44.8	8.29	2	H	337.162 703 99	+58.845 790 81		1.42	−1.74	−5.60	0.67	0.61	0.77	0.77	0.72	–	8	+13	+15	+32	– 7	+ 6	– 4	+ 9	+19	– 6	0	0.99
110938	22 28 39.27	+48 15 01.2	8.18		H	337.163 611 16	+48.250 336 14		2.24	3.84	−0.69	0.51	0.52	0.76	0.54	0.53	–17	+ 1	+ 6	+ 0	+10	– 3	+12	–14	+16	+ 2	0	0.29
110939	22 28 40.41	−64 35 12.6	8.76		H	337.168 363 91	−64.586 821 10		12.19	−71.41	−59.56	0.63	0.71	1.04	0.75	0.71	–15	+10	–21	+13	+ 6	+ 8	+ 8	– 6	+ 0	– 2	0	–0.80
110940	22 28 41.24	+61 27 19.8	7.43		H	337.171 851 55	+61.455 498 81		5.06	−45.12	18.08	0.50	0.51	0.60	0.61	0.59	–20	– 3	+19	+17	+ 2	+ 8	– 3	–10	+ 9	–27	0	0.98
110941	22 28 41.30	−13 48 02.5	9.69		H	337.172 079 27	−13.800 696 56		7.20	−5.74	8.27	1.40	1.11	1.82	1.74	1.36	+19	+ 7	–39	+ 0	– 3	+16	+ 7	–17	+39	+33	0	1.25
110942	22 28 41.94	−16 11 03.7	9.27		H	337.174 749 04	−16.184 370 13		8.03	14.11	−57.59	1.42	0.91	1.61	1.81	1.12	+15	–14	–38	–23	+32	– 9	+21	–17	+28	+32	0	–0.64
110943	22 28 42.00	+13 22 06.1	8.91		H	337.174 993 26	+13.368 368 69		17.87	−64.03	−35.35	0.87	0.78	1.11	1.13	0.90	+28	+11	+16	– 4	+ 0	+ 8	– 3	–20	+18	+ 9	0	0.02
110944	22 28 42.08	−28 44 22.0	9.92		H	337.175 312 89	−28.739 454 09		2.86	27.42	−43.33	1.71	1.12	1.79	1.93	1.01	+22	– 3	–12	–44	+ 2	– 2	– 2	–33	+ 5	+17	2	0.68
110945	22 28 42.32	−33 46 14.7	7.72		H	337.176 320 28	−33.770 747 21		8.32	2.90	19.37	0.75	0.56	0.96	0.82	0.52	+35	– 7	– 8	+ 8	– 2	+17	– 2	–21	+ 9	+32	0	1.05
110946	22 28 43.43	+26 43 32.4	7.98		H	337.180 944 52	+26.725 669 87		12.81	42.59	−6.82	0.74	0.57	0.89	0.76	0.72	+	0	+33	– 6	+15	+ 0	–15	+ 7	+ 9	+24	+ 4	0	–0.72
110947	H 22 28 44.85	−38 39 30.2	9.99		H	337.186 865 19	−38.658 399 36	A	12.68	17.12	13.39	4.43	3.15	5.22	5.00	2.97	+11	+ 7	+ 0	+18	– 5	+ 9	– 7	–27	+23	– 4	2	2.88
110948	22 28 45.60	+50 08 16.8	8.75	2	H	337.189 993 83	+50.138 005 43	*	1.28	−2.16	−6.35	0.84	0.73	1.06	0.82	0.85	–10	+ 2	+ 1	+ 0	+27	–12	+33	–10	+11	+25	2	1.39
110949	22 28 45.68	+76 14 08.2	7.59		H	337.190 337 36	+76.235 608 90		2.13	−4.08	5.25	0.59	0.53	0.64	0.63	0.56	–	1	– 1	+29	+23	–11	–17	– 8	+11	+16	–11	0	–1.62
110950	22 28 45.82	−72 28 16.5	8.43		H	337.190 905 62	−72.471 250 74		2.36	−2.10	−2.61	0.65	0.62	0.87	0.76	0.64	–	5	–14	–13	+ 3	– 6	+ 1	– 5	–12	+ 1	– 7	0	0.31
110951	22 28 45.83	+18 55 55.2	10.73		G	337.190 978 78	+18.932 007 77		44.34	166.13	−128.26	1.42	1.32	1.81	1.44	1.40	+28	+ 5	+ 7	–10	– 4	+ 8	– 5	–23	+ 8	+22	2	0.84
110952	H 22 28 46.55	−49 15 54.6	10.59		G	337.193 955 39	−49.265 171 43	A	14.61	189.60	−92.09	4.35	3.78	4.94	5.12	4.01	+22	– 7	–17	–14	+ 0	– 1	+ 3	–24	+ 6	+11	2	0.61
110953	22 28 47.69	+46 37 51.1	9.10		H	337.198 690 78	+46.630 855 88		2.25	0.17	−3.67	0.82	0.77	1.17	0.79	0.80	–27	+31	+ 1	– 5	+15	+ 3	+23	–29	+16	–11	0	–1.30
110954	22 28 47.70	−49 35 06.8	9.72		G	337.198 770 56	−49.585 228 18		19.94	374.87	−28.44	1.08	0.96	1.57	1.45	1.08	+11	– 9	–20	+ 9	– 2	+ 5	+ 0	– 3	–11	+12	0	–0.43
110955	22 28 47.80	−02 25 13.5	8.96		H	337.199 181 57	−02.420 418 43		10.74	63.64	−29.66	1.13	0.86	1.29	1.70	1.09	+35	– 7	–20	+13	+ 1	+23	–10	–50	+22	+17	0	0.49
110956	22 28 48.48	−48 05 08.0	8.49		H	337.202 010 33	−48.085 565 85		3.55	56.36	−26.66	0.74	0.65	1.08	0.67	0.76	+24	–24	– 8	–42	– 5	+25	– 9	+ 2	+ 8	+36	0	1.44
110957	22 28 48.82	+17 07 55.8	8.73		H	337.203 413 56	+17.132 173 23		1.64	10.40	−5.67	0.94	0.75	1.10	1.06	0.87	+20	–10	+ 8	+35	– 3	–29	– 3	+ 5	– 7	+15	0	–0.86
110958	22 28 49.06	−22 04 13.4	7.36		H	337.204 408 84	−22.070 398 87		13.18	108.84	8.80	0.81	0.60	0.89	1.10	0.60	+16	+ 5	–12	– 5	+16	+ 1	+10	–19	+ 9	– 2	2	0.37
110959	22 28 49.10	+31 39 57.5	8.92		H	337.204 580 36	+31.665 968 57		−0.68	8.16	−8.44	0.67	0.78	1.03	0.78	0.99	+39	– 1	– 4	+ 3	+ 6	– 6	+ 8	– 4	+ 7	+55	0	–0.90
110960	H 22 28 49.80	−00 01 12.2	3.65		G	337.207 502 31	−00.020 063 04	A	31.53	191.32	37.47	1.76	1.89	1.50	1.81	1.68	+58	+ 9	– 4	+ 3	– 6	+ 9	–50	–85	+10	+ 6	21	1.72
110961	22 28 49.99	−18 43 21.0	9.25		H	337.208 312 07	−18.722 501 02		2.36	14.46	−13.33	1.17	0.97	1.41	1.62	1.13	+39	–27	–42	+ 2	+ 4	+ 5	+ 1	–31	+22	+40	0	0.13
*110962	H 22 28 53.27	+45 27 36.6	9.28		H	337.221 963 53	+45.460 159 12	A	1.04	−2.95	−10.21	5.04	3.73	1.58	1.28	1.14	+15	+ 2	– 4	+ 2	+ 4	–11	+ 5	–11	– 3	+ 3	0	–0.66
*110963	22 28 53.53	−16 09 07.2	8.73		H	337.223 059 28	−16.152 006 31		2.70	25.24	−5.66	1.16	0.84	1.50	1.55	0.99	+33	–17	–42	–14	+24	–24	+10	–18	+15	+47	0	1.83
*110964	22 28 50.09	+58 12 39.4	11.21	3	H	337.208 716 94	+58.210 950 88		0.22	−2.03	−1.48	2.45	1.94	2.52	3.39	2.99	–15	+20	– 1	+37	– 6	+ 6	– 8	+17	– 8	–19	2	–0.33
110965	22 28 55.74	−60 03 14.5	6.88		H	337.232 266 20	−60.054 014 04		6.31	−16.49	−4.02	0.40	0.44	0.70	0.40	0.43	–20	+ 1	–13	+ 3	+10	+ 9	+11	–19	+ 9	–22	0	0.63
110966	22 28 56.67	−24 07 56.2	8.15		H	337.236 122 61	−24.132 288 73		3.92	−32.97	−13.96	1.01	0.66	1.09	1.16	0.65	+	9	+21	–13	–15	+ 5	+ 7	+ 5	– 9	+ 0	+ 2	0	0.37
110967	22 28 56.76	+56 36 11.7	9.36		G	337.236 509 48	+56.603 242 62		−0.77	−3.24	−2.18	0.90	0.81	1.08	0.99	0.86	–22	–19	+29	–24	+15	+13	+11	– 6	– 5	–10	1	0.01
110968	22 28 58.32	+50 57 47.3	7.86	2	T	337.243 015 36	+50.963 142 36		0.67	−2.31	−2.62	0.56	0.51	0.70	0.58	0.53	–12	+ 4	+ 4	–10	+21	–10	+23	–11	+20	+ 8	0	–1.07
110969	22 28 59.11	+47 10 17.5	8.83	1	H	337.246 277 00	+47.171 524 18		2.99	8.39	7.72	0.74	0.66	1.02	0.70	0.70	–20	+32	– 7	+10	+ 4	+ 1	+13	–18	+23	–13	0	0.42
110970	22 28 59.83	−45 34 01.8	8.85		H	337.249 271 80	−45.567 162 89		1.59	13.66	−9.53	1.04	0.77	1.28	1.45	0.86	+	7	– 2	–27	– 6	– 3	– 8	– 3	+17	+12	– 2	2	–1.60
110972	22 29 00.91	+40 18 55.9	8.97	3	T	337.253 809 90	+40.315 524 03		1.50	−7.50	−5.37	1.21	1.10	1.65	1.41	1.68	+18	+20	+18	+32	– 1	–14	+ 1	– 4	+ 9	+ 9	3	0.24
110973	22 29 01.41	−59 13 50.4	8.83		H	337.255 868 30	−59.230 653 15		4.02	34.01	−10.93	0.71	0.74	1.14	0.85	0.78	–	5	–16	– 5	– 6	+ 7	+17	+ 8	–10	+ 6	+ 6	1	0.31
110974	H 22 29 02.65	−09 56 08.8	8.61		H	337.261 051 52	−09.935 766 69	A	8.63	17.79	1.07	2.75	1.43	1.64	1.75	1.16	+55	+ 1	–16	– 3	+ 1	+27	+ 0	– 6	+ 6	+ 7	2	–0.38
110975	22 29 03.33	+29 47 43.7	7.88		H	337.263 890 24	+29.795 459 28		2.43	8.72	−3.31	0.58	0.58	0.84	0.60	0.71	+13	+ 6	– 6	– 8	+11	–10	+11	+ 0	+ 8	+37	0	0.25
110976	22 29 03.61	−09 56 42.0	9.56		H	337.265 022 09	−09.944 994 22		7.07	19.20	0.26	1.64	1.18	1.87	1.86	1.24	+12	– 2	–11	–25	– 7	+45	– 2	–29	+ 7	+10	0	–1.17
110977	22 29 04.03	+51 30 29.5	7.53		H	337.266 804 19	+51.508 182 78		3.16	23.92	11.23	0.56	0.50	0.69	0.61	0.53	–19	– 6	+ 6	–28	+22	+ 6	+17	–22	+25	+ 7	0	–0.28
110978	22 29 04.21	−13 42 01.6	9.25		H	337.267 545 55	−13.700 453 44		0.92	−11.82	−17.25	1.78	1.64	1.91	2.81	1.87	+51	–33	–71	–61	–67	+59	–54	–67	+48	+71	2	1.30
110979	22 29 04.89	−09 44 27.5	7.71		G	337.270 361 67	−09.740 961 90		12.55	44.60	−87.74	0.87	0.64	0.97	0.98	0.68	+15	+ 5	– 8	–10	+ 2	+29	+ 5	– 5	+10	+12	0	0.69
110980	22 29 05.84	+01 39 49.9	10.51		G	337.274 328 32	+01.663 856 79		45.69	44.84	−196.61	1.77	1.27	1.92	2.10	1.38	+13	+ 4	+ 5	–21	+10	+ 6	+ 5	–39	+21	– 6	0	–0.20
110981	22 29 05.95	+49 25 23.5	9.19		H	337.274 771 61	+49.423 207 02		0.98	−4.57	−8.73	0.66	0.64	0.89	0.67	0.66	–	2	+ 0	+13	– 6	+18	+ 6	+18	– 9	+14	+11	0	–0.06
110982	22 29 06.41	−20 24 32.0	8.19		H	337.276 710 81	−20.408 877 44		7.40	33.07	1.49	0.97	0.62	1.05	1.24	0.65	+17	+12	–15	– 4	+17	–15	+13	+ 7	+ 3	+18	0	0.74
110983	22 29 06.47	+21 23 35.3	7.77		G	337.276 942 45	+21.393 138 54		2.22	−2.01	−21.05	0.78	0.60	0.88	0.81	0.69	+	0	+16	+ 3	+ 6	+ 3	– 5	+ 6	+ 0	+14	+ 7	0	0.88
110984	22 29 07.25	−36 58 12.2	7.60		H	337.280 222 11	−36.970 043 03		5.35	33.27	7.93	0.74	0.55	0.95	0.92	0.57	+18	–13	– 7	+ 9	– 7	+13	– 4	–48	+13	+25	0	1.08
110985	22 29 07.78	+29 01 45.0	7.16		H	337.282 412 11	+29.029 163 38		3.85	20.30	8.26	0.58	0.54	0.76	0.69	0.69	+	3	+ 5	– 9	+39	– 3	–15	– 3	+13	+16	+ 3	0	–0.49
110986	22 29 07.95	+09 07 44.7	5.60		H	337.283 135 45	+09.129 083 95		5.63	51.63	−20.51	0.67	0.52	0.85	0.99	0.66	+33	+10	+17	+ 5	+30	+21	+25	+12	–18	+ 8	0	0.73
110987	22 29 08.60	−36 58 58.5	9.47		H	337.285 840 19	−36.982 922 28		14.82	220.61	−63.74	1.21	0.96	1.63	1.50	1.00	+18	– 9	– 3	+ 5	– 3	+20	– 2	–44	+14	+27	1	0.33
110988	22 29 09.23	+58 24 14.7	6.31		G	337.288 459 10	+58.404 088 65		3.43	16.48	4.70	0.57	0.52	0.64	0.76	0.71	–11	+ 8	+14	+32	–11	+ 0	–11	+14	– 7	– 4	0	–0.03
110989	22 29 09.43	−20 46 07.3	9.94		H	337.289 310 72	−20.768 705 72		4.49	2.31	−8.73	1.48	0.99	1.57	1.91	1.01	+19	– 3	+ 7	+14	+ 6	+ 6	+ 0	–27	– 4	+ 7	0	0.33
110990	22 29 09.64	−68 03 46.0	9.35		H	337.290 155 72	−68.062 782 82		0.39	9.48	12.36	0.90	0.83	1.29	1.03	0.82	–	3	+10	–14	–18	+ 8	– 9	+ 6	–18	+ 4	+ 3	2	1.32
*110991	22 29 10.25	+58 24 54.7	4.07	3	T	337.292 699 75	+58.415 189 90		3.32	16.47	3.55	0.53	0.49	0.58	0.69	0.64	–12	+ 4	+18	+39	–14	– 9	–11	+23	– 2	– 3	0	0.41
*110992	22 29 10.21	+26 45 47.6	5.79		H	337.292 543 82	+26.763 209 24		2.97	26.09	−4.42	0.54	0.45	0.66	0.56	0.56	+	8	+21	– 6	+18	+ 1	– 8	+ 4	+ 1	+12	+15	0	–0.51
110993	22 29 12.45	+64 31 39.1	9.23		H	337.301 894 00	+64.527 538 99		3.21	27.38	1.48	0.88	0.86	1.01	1.26	1.04	–	9	+17	+ 3	+29	+10	– 8	+13	–17	+14	– 7	3	1.70
110994	22 29 13.49	+61 45 43.3	8.56		H	337.306 222 34	+61.762 021 07		1.82	−3.74	−7.60	0.63	0.60	0.72	0.76	0.72	–25	+ 5	+14	+23	– 3	+ 5	–10	–11	+ 7	–42	0	0.30
110995	22 29 15.06	+07 36 57.5	8.82		H	337.312 741 26	+07.615 980 04		0.54	−6.86	−22.19	1.50	0.85	1.44	2.33	1.04	–	1	+29	+22	–56	+29	–27	+43	–12	+ 9	–38	2	–0.04
110996	22 29 15.09	−30 00 59.2	7.65		H	337.312 865 07	−30.016 432 12		64.74	221.82	−813.00	0.78	0.62	1.07	0.81	0.57	+48	+ 5	+ 6	+21	–12	+28	–13	–17	+22	+46	0	0.93
110997	22 29 16.15	−43 29 44.0	3.97		G	337.317 308 66	−43.495 554 33		11.03	25.62	−4.23	0.70	0.45	0.85	0.93	0.50	–	1	+ 5

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
110901	10.674	0.046	9.964	0.039		0.640	0.046	T	0.70	0.04	L	10.0069	0.0025	0.024	83		9.94	10.05		C			1							
110902	8.855	0.017	8.370	0.017	*	0.469	0.019	T	0.54	0.02	L *	8.4064	0.0019	0.014	60	*	8.38	8.42		D	22281−1153	I 1	2 C A	AB	118	0.307	0.004	0.38	0.04	S
110903	10.717	0.039	8.856	0.015		1.547	0.033	T	1.61	0.07	L	8.7785	0.0017	0.018	117		8.75	8.81		C			1							
110904	10.708	0.035	9.347	0.019		1.153	0.031	T	1.12	0.03	L	9.3961	0.0020	0.018	112		9.36	9.43					1							
110905	9.202	0.018	8.998	0.020		0.195	0.025	T	0.21	0.03	L	9.0543	0.0022	0.017	72		9.03	9.09		C			1							
110906	8.911	0.012	8.683	0.013		0.218	0.017	T	0.24	0.02	L	8.7285	0.0020	0.017	135		8.70	8.75					1							
110907	7.743	0.006	6.596	0.005		0.986	0.006	T	0.97	0.01	L	6.6465	0.0009	0.008	112		6.63	6.66					1							S
110908	9.631	0.026	8.131	0.014		1.262	0.023	T	1.22	0.02	L	8.1369	0.0017	0.014	72		8.12	8.16					1							S
110909	8.532	0.013	7.515	0.009	*	0.887	0.012	T	0.89	0.01	L *	7.6035	0.0021	0.017	93	*	7.59	7.67		D	22282+1716	I 1	2 C A	AB	114	9.079	0.006	1.92	0.03	S
110910	9.249	0.015	7.695	0.008		1.304	0.013	T	1.26	0.01	L	7.7088	0.0015	0.011	75		7.69	7.73					1							S
110911	9.492	0.030	8.523	0.021	*	0.851	0.027	T	0.87	0.02	L *	8.6585	0.0021	0.013	71	*	8.63	8.69		D	22282+2332	I 1	2 C A	AB	334	5.508	0.004	0.64	0.02	
110912	9.491	0.016	7.647	0.007		1.500	0.040	G	1.75	0.02	A	7.5764	0.0017	0.016	117		7.55	7.60					1							S
110913	6.728	0.005	6.769	0.005		−0.033	0.006	T	−0.01	0.01	L	6.7748	0.0011	0.009	80		6.76	6.79		C			1							S
110914	10.109	0.020	8.363	0.009		1.456	0.017	T	1.46	0.03	L	8.3286	0.0016	0.018	185		8.30	8.36		C			1							
110915	9.333	0.017	8.837	0.017		0.511	0.015	G	0.58	0.02	H	8.8659	0.0026	0.018	100		8.84	8.90		C			1							
110916	11.748	0.110	10.896	0.081		0.740	0.015	G	0.79	0.01	H	11.1581	0.0037	0.034	107		11.10	11.20		C			1							G
110917	9.546	0.016	8.872	0.014		0.613	0.016	T	0.68	0.01	L	8.9359	0.0025	0.024	147		8.88	8.98					1							
110918	8.070	0.008	8.145	0.010		−0.065	0.002	G	−0.04	0.00	H	8.1533	0.0016	0.012	105		8.13	8.18					1							S
110919	7.722	0.007	6.412	0.004		1.113	0.006	T	1.08	0.01	L	6.4632	0.0008	0.007	101		6.45	6.48					1							S
110920	11.603	0.092	10.380	0.049		1.016	0.006	G	1.06	0.01	I	10.5139	0.0029	0.027	83		10.46	10.56					1							
110921	8.564	0.010	8.515	0.012		0.050	0.014	T	0.06	0.01	L	8.5447	0.0108	0.085	144		8.41	8.62		U 2 C			1							
110922											T *	12.1070	0.0107	0.085	71	*	11.93	12.22		D	22284−2554	I 1	2 C D	AB	218	3.917	0.089	1.03	0.33	G D
110923	8.583	0.011	8.315	0.012		0.255	0.015	T	0.29	0.02	L	8.3682	0.0025	0.025	101		8.34	8.44		U 2	22281+5741	I 2	1							
110924	7.719	0.006	7.732	0.009		−0.007	0.010	T	0.01	0.01	L	7.7349	0.0009	0.012	146		7.71	7.75					1							S
110925	8.530	0.014	8.480	0.018		0.026	0.015	G	0.04	0.01	H	8.5230	0.0020	0.018	105		8.49	8.55			22284+5825	I 1	1							
110926	9.707	0.022	8.557	0.014		0.988	0.020	T	0.97	0.02	L	8.5930	0.0019	0.013	78		8.58	8.63		C			1							
110927	9.432	0.017	8.328	0.012		1.008	0.015	G	0.98	0.01	H	8.3955	0.0019	0.015	98		8.37	8.42		C	22285+3727	I 1	1							
110928	9.126	0.015	9.006	0.018		0.116	0.022	T	0.13	0.02	L	9.0243	0.0027	0.024	98		8.99	9.08					1							
110929	9.809	0.019	8.034	0.008	A	1.800	0.495	G	1.43	0.04	L *	7.9814	0.0012	0.014	176	*	7.96	8.01		D	22285+4833	I 1	2 C A	AB	127	2.282	0.019	3.33	0.11	
110930	10.791	0.031	9.372	0.016		1.198	0.027	T	1.16	0.03	L	9.4028	0.0025	0.029	175		9.34	9.45					1							
110931	9.321	0.015	7.867	0.008		1.226	0.013	T	1.18	0.01	L	7.8982	0.0010	0.010	126		7.88	7.92		C			1							
110932	9.304	0.010	7.388	0.004		1.625	0.009	T	1.90	0.03	O	7.2876	0.0015	0.018	225		7.26	7.31		U 2	22285−5147	I 1	1							S
110933	8.180	0.011	8.002	0.013		0.145	0.003	G	0.16	0.00	H	8.0398	0.0016	0.013	111		8.02	8.07					1							
110934	9.315	0.017	7.914	0.010		1.184	0.015	T	1.14	0.01	L	7.9453	0.0013	0.013	118		7.93	7.97		C			1							
110935	5.814	0.002	5.590	0.003		0.208	0.004	T	0.23	0.01	L	5.6281	0.0009	0.009	162		5.61	5.64					1							S
110936	6.693	0.004	5.577	0.003		0.959	0.007	G	1.01	0.07	F	5.6330	0.0007	0.007	149		5.62	5.65			22287−3908	I 1	1							S
110937	8.689	0.011	8.322	0.011		0.348	0.014	T	0.41	0.02	L	8.3766	0.0019	0.019	120		8.32	8.40		U 2			1							
110938	8.185	0.007	8.166	0.009		0.022	0.011	T	0.04	0.01	L	8.1978	0.0015	0.016	174		8.16	8.23					1							S
110939	9.422	0.015	8.818	0.013		0.562	0.015	T	0.64	0.01	L	8.8840	0.0019	0.023	183		8.85	8.93					1							
110940	8.590	0.010	7.526	0.007		0.922	0.009	T	0.92	0.01	L	7.5940	0.0009	0.009	119		7.57	7.61		C			1							
110941	10.374	0.041	9.742	0.036		0.582	0.040	T	0.65	0.04	L	9.8111	0.0027	0.026	68		9.78	9.86		C			1							
110942	9.856	0.031	9.308	0.030		0.520	0.032	T	0.59	0.03	L	9.3811	0.0033	0.022	90		9.35	9.42		C			1							S
110943	9.799	0.026	8.954	0.020		0.759	0.025	T	0.80	0.02	L	9.0587	0.0022	0.016	83		9.03	9.09		C			1							
110944	10.381	0.040	10.015	0.045		0.357	0.053	T	0.42	0.06	L	9.9992	0.0039	0.024	65		9.95	10.03					1							
110945	8.122	0.009	7.759	0.008		0.354	0.011	T	0.42	0.01	L	7.8072	0.0017	0.015	119		7.78	7.84					1							S
110946	8.692	0.013	8.033	0.011		0.611	0.014	T	0.68	0.01	L	8.1119	0.0016	0.012	93		8.09	8.14					1							
110947	11.029	0.045	10.069	0.029	*	0.831	0.042	T	0.85	0.03	L *	10.1371	0.0026	0.030	146	*	10.08	10.19		D	22287−3840	H 1	2 C A	AB	287	0.941	0.054	2.43	0.22	
110948	10.977	0.064	9.072	0.022		1.616	0.056	T	3.28	0.06	O	8.5789	0.0101	0.095	140		8.47	8.83		U 2			1 V							
110949	9.846	0.021	7.794	0.008		1.699	0.018	T	1.72	0.02	L	7.6941	0.0012	0.013	122		7.67	7.71		R			1							
110950	9.870	0.018	8.542	0.011		1.127	0.017	T	1.09	0.02	L	8.5959	0.0017	0.017	150		8.57	8.64					1							
110951						1.359	0.020	G	1.59	0.04	I	10.8434	0.0027	0.026	71		10.81	10.93		C			1							G
110952	12.261	0.170	10.773	0.071	*	0.983	0.004	G	1.03	0.00	I *	10.7375	0.0040	0.042	132	*	10.65	10.80		D	22288−4916	I 1	2 C A	AB	100	0.985	0.011	0.19	0.05	G
110953	9.010	0.010	9.074	0.013		−0.054	0.015	T	−0.03	0.01	L	9.0912	0.0024	0.023	163		9.05	9.14					1							
110954	10.826	0.039	9.832	0.025		0.882	0.002	G	0.93	0.00	H	9.8664	0.0033	0.030	127		9.82	9.91					1							
110955	9.546	0.018	9.017	0.018		0.470	0.015	G	0.54	0.02	H	9.0622	0.0018	0.015	80		9.03	9.10		D			1							
110956	9.952	0.017	8.617	0.010		1.132	0.015	T	1.10	0.02	L	8.6583	0.0015	0.019	155		8.63	8.70					1							
110957	9.047	0.014	8.754	0.015		0.279	0.019	T	0.32	0.02	L	8.8003	0.0027	0.017	89		8.77	8.84					1							
110958	7.807	0.009	7.407	0.008		0.408	0.015	G	0.47	0.02	H	7.4550	0.0009	0.010	74		7.44	7.47		C			1							S
110959	11.073	0.048	9.087	0.016		1.646	0.040	T	1.67	0.04	L	9.0266	0.0020	0.021	147		8.99	9.06					1							
110960	4.643	0.058	4.151	0.056	A	0.406	0.015	G	0.50	0.02	A *	3.7450	0.0008	0.006	72	*	3.74	3.78		D	22288−0001	I 1	2 C A	AB	202	1.877	0.006	0.20	0.01	S
110961	10.623	0.044	9.350	0.025		1.084	0.040	T	1.05	0.03	L	9.4230	0.0021	0.020	72		9.39	9.45					1							
110962	9.427	0.014	9.291	0.017	*	0.131	0.021	T	0.15	0.02	L *	9.3278	0.0028	0.028	177	*	9.28	9.37		D	22289+4528	M 1	2 C A	AB	76	0.302	0.008	1.04	0.12	
110963	8.833	0.015	8.728	0.018		0.095	0.021	T	0.11	0.02	L	8.7650	0.0019	0.015	90		8.74	8.79		C			1							S
110964											T	11.3553	0.0396	0.265	88		11.04	11.75	7.23	P 1 A			1							D
110965	8.094	0.006	6.988	0.004		0.954	0.006	T	0.94	0.00	L	7.0462	0.0008	0.010	208		7.03	7.06					1							S
110966	9.429	0.020	8.273	0.013		0.993	0.019	T	0.97	0.01	L	8.3190	0.0016	0.015	74		8.30	8.35		C			1							S
110967	9.721	0.022	9.452	0.026		0.330	0.015	G	0.38	0.02	H	9.4523	0.0024	0.024	112		9.41	9.50					1							G
110968	8.763	0.011	7.941	0.009		0.741	0.011	T	0.79	0.01	L	7.9600	0.0095	0.094	139		7.83	8.07	2.91	P 1 A			1							
110969	9.184	0.012	8.854	0.013		0.290	0.015	G	0.33	0.02	H	8.9000	0.0026	0.025	144		8.86	8.94		U			1							
110970	10.505	0.034	9.001	0.017		1.265	0.030	T	1.22	0.03	L	9.0134	0.0019	0.019	93		8.98	9.05		C			1							
110972	10.517	0.064	9.098	0.033		1.198	0.056	T	3.91	0.96	Q	9.7133	0.2444	1.493	107		8.06	11.74	239.20	P 1 B			1							G P
110973	9.197	0.012	8.870	0.013		0.314	0.019	T	0.36	0.03	L	8.9057	0.0018	0.021	137		8.86	8.94					1							
110974	9.192	0.020	8.681	0.020	*	0.480	0.025	T	0.55	0.03	L *	8.7185	0.0022	0.014	63	*	8.69	8.74		C	22290−0957	I 2	2 C A	AD	71	0.429	0.029	2.63	0.17	S
110975	9.234	0.017	7.998	0.011		1.055	0.016	T	1.02	0.01	L	8.0436	0.0012	0.012	116		8.02	8.07					1							
110976	10.196	0.040	9.495	0.035		0.646	0.043	T	0.71	0.04	L	9.6970	0.0051	0.029	62		9.62	9.74			22290−0957	I 2	1 S							
110977	7.832	0.007	7.548	0.009		0.270	0.011	T	0.30	0.01	L	7.6033	0.0011	0.012	144		7.59	7.63		C			1							S
110978	11.065	0.067	9.362	0.027		1.422	0.057	T	1.41	0.09	L	9.3899	0.0028	0.021	68		9.37	9.43					1 G							
110979	8.482	0.013	7.755	0.011		0.652	0.015	G	0.72	0.01	H	7.8352	0.0010	0.010	67		7.82	7.85		D			1							S
110980						1.431	0.006	G	1.75	0.01	I	10.5979	0.0033	0.029	77		10.55	10.64		C			1							G
110981	9.238	0.014	9.165	0.019		0.072	0.022	T	0.08	0.02	L	9.2216	0.0014	0.019	159		9.18	9.26					1 S							
110982	8.480	0.013	8.234	0.014		0.230	0.019	T	0.26	0.02	L	8.2590	0.0031	0.016	68		8.24	8.28					1							S
110983	8.207	0.008	7.789	0.009		0.379	0.009	G	0.44	0.01	H	7.8585	0.0015	0.010	80		7.84	7.88		C			1							S
110984	9.142	0.013	7.728	0.008		1.194	0.012	T	1.15	0.01	L	7.7615	0.0010	0.011	137		7.75	7.79			22291−3658	I 2	1							S
110985	8.643	0.010	7.276	0.006		1.158	0.009	T	1.12	0.01	L	7.3268	0.0011	0.010	110		7.31	7.34		C			1							S
110986	7.666	0.008	5.766	0.004		1.578	0.007	T	1.60	0.01	L	5.7141	0.0008	0.008	92		5.70	5.73					1							S
110987	10.236	0.034	9.540	0.029		1.183	0.002	G	1.30	0.00	I	9.5944	0.0037	0.030	128		9.53	9.64			22291−3658	I 2	1							S
110988	6.247	0.004	6.266	0.008		−0.033	0.006	G	−0.01	0.01	H	6.3014	0.0008	0.010	92		6.29	6.32			22292+5825	I 2	1							S
110989	11.311	0.084	10.025	0.043		1.094	0.074	T	1.06	0.08	L	10.1067	0.0027	0.019	64		10.07	10.14		D			1							
110990	10.640	0.031	9.427	0.018		1.037	0.028	T	1.01	0.02	L	9.5188	0.0021	0.025	141		9.47	9.58					1							
110991	5.021	0.052	4.150	0.033		0.778	0.046	T	0.81	0.03	L	4.2767	0.0402	0.252	93		3.81	4.49	5.37	P 1 A	22292+5825	I 2	1							S P
110992	7.400	0.006	5.912	0.004		1.252	0.006	T	1.21	0.01	L	5.9534	0.0006	0.006	93		5.94	5.96		C			1							S
110993	9.503	0.018	9.290	0.020		0.203	0.025	T	0.22	0.03	L	9.2984	0.0020	0.022	104		9.27	9.34		C			1 S							
110994	8.705	0.010	8.571	0.012		0.129	0.015	T	0.14	0.01	L	8.6041	0.0013	0.012	126		8.59	8.62					1							
110995	9.306	0.017	8.837	0.017		0.442	0.022	T	0.51	0.02	L	8.9178	0.0027	0.018	87		8.88	8.95		C	22293+0737	I 1	1 S							S
110996	9.070	0.012	7.773	0.007		1.080	0.027	G	1.13	0.02	A	7.7843	0.0011	0.010	128		7.77	7.81		C			1							S
110997	5.285	0.003	4.078	0.002		1.022	0.004	G	0.98	0.02	A	4.1394	0.0008	0.005	96		4.13	4.15			22293−4330	I 1	1 S							S
110998	8.494	0.011	8.058	0.011		0.425	0.013	T	0.49	0.01	L	8.0951	0.0020	0.024	124		8.07	8.14		U 2			1							S
110999	9.019	0.011	7.790	0.007	*	1.050	0.010	T	1.02	0.01	L *	7.8295	0.0015	0.013	146	*	7.81	7.86		D	22293−6926	H 1	2 C A	AB	85	0.376	0.008	2.08	0.05	S
111000	9.204	0.012	8.812	0.012		0.383	0.014	T	0.45	0.01	L	8.8685	0.0017	0.018	158		8.84	8.90		C			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
111001 H	22 29 18.55	−09 39 45.8	8.62	H	337.327 297 04	−09.662 717 09	A	1.03	18.46	−0.23	1.89	1.35	1.80	2.04	1.31	+ 4	− 6	−11	+ 4	+ 1	+21	+ 1	− 5	+ 3	− 6		2	0.04
111002	22 29 19.95	+27 25 40.9	7.72	H	337.333 144 33	+27.428 026 34		5.00	26.87	−13.55	0.61	0.53	0.80	0.78	0.65	+ 0	+ 8	+ 2	+53	−11	+ 5	−12	+12	+11	− 7		0	0.27
*111003	22 29 21.11	+77 34 56.6	7.76	2 H	337.337 953 31	+77.582 383 78		1.31	−13.18	−9.73	0.58	0.56	0.64	0.69	0.63	− 5	− 2	+23	+25	− 5	− 8	− 4	+13	+11	− 5		1	−0.70
*111004	22 29 21.10	−03 13 43.4	8.49	H	337.337 937 38	−03.228 714 78		5.51	17.48	−18.28	0.99	0.74	1.22	1.29	0.94	+31	+ 7	−25	− 0	−14	+28	+ 1	−41	+41	+45		0	0.02
111005	22 29 21.96	−49 25 47.0	9.87	H	337.341 512 00	−49.429 724 95		6.41	36.95	11.84	0.97	1.01	1.71	1.24	1.00	+15	−11	−35	−11	+ 5	+ 0	+ 3	−13	+ 0	+18		0	0.49
111006	22 29 22.34	+54 14 45.3	6.78	H	337.343 078 14	+54.245 915 46		0.45	2.38	0.45	0.43	0.41	0.55	0.46	0.43	− 7	+ 8	+ 9	+ 2	+ 8	− 3	+10	− 3	+16	+ 8		1	−0.78
111007	22 29 22.36	−52 06 02.5	9.53	H	337.343 186 42	−52.100 683 14		7.82	−12.04	−11.27	0.75	0.79	1.28	1.01	0.89	+34	−19	− 8	+27	− 2	+16	+ 2	− 1	− 5	+34		0	0.18
*111008	22 29 23.73	+80 50 34.4	10.49	H	337.348 867 74	+80.842 892 46	B	9.81	11.56	8.83	11.20	10.35	5.37	8.67	7.94	−11	−20	+17	− 3	− 7	+ 4	−10	+ 2	+ 6	−18		10	1.22
*111009	22 29 23.70	−04 11 17.1	8.98	H	337.348 738 14	−04.188 091 63		0.75	−0.60	0.77	1.22	0.77	1.42	1.74	1.08	+27	+16	−16	+21	+ 0	+18	+ 7	−38	+39	+32		0	0.59
111010 H	22 29 23.76	+63 14 15.2	9.72	G	337.348 985 41	+63.237 547 87	A	−0.19	−3.84	−0.91	2.55	2.28	2.11	2.46	1.98	− 7	− 2	+20	− 1	+16	+ 4	+11	−25	+25	−16		1	−0.01
111011 H	22 29 23.76	−48 30 22.0	8.71	H	337.348 990 86	−48.506 102 73	A	9.04	−5.66	21.40	1.90	1.48	1.69	1.17	1.09	+16	−11	−22	−31	− 8	+12	− 3	−14	+21	+28		1	0.13
111012	22 29 24.05	+14 54 38.0	8.90	H	337.350 223 87	+14.910 552 00		2.54	−1.04	−21.03	0.96	0.82	1.21	1.10	0.92	+22	− 1	+ 0	+ 5	+11	−12	+10	+ 0	+ 5	+11		0	−0.21
111013	22 29 24.83	−28 43 40.0	8.59	H	337.353 451 82	−28.727 789 55		10.75	36.91	−98.35	1.31	0.83	1.27	1.38	0.79	+11	+ 6	−13	−48	+ 5	+10	+ 6	−27	+ 4	+ 8		0	1.01
111014	22 29 25.26	−07 03 10.0	8.92	H	337.355 260 15	−07.052 775 33		2.72	18.41	7.18	1.39	0.83	1.69	1.87	1.06	+17	− 5	−44	+18	+ 9	−25	− 7	−46	+48	− 3		0	0.23
111015	22 29 25.85	−28 39 34.3	7.19	H	337.357 701 98	−28.659 517 32		5.49	3.37	−17.67	1.13	0.70	1.09	1.08	0.63	+ 3	+15	−18	−47	+ 9	+ 5	+12	−37	+17	+ 5		2	0.75
*111016	22 29 28.37	+80 50 23.5	9.33	H	337.368 191 40	+80.839 856 33	A	4.66	11.60	7.87	2.36	2.48	2.03	2.58	2.86	−10	−16	+15	− 4	− 3	+ 1	− 6	− 5	+ 5	−15		10	1.22
*111017	22 29 28.36	−66 13 23.6	9.38	H	337.368 182 42	−66.223 231 40		2.75	15.39	−13.12	0.82	0.84	1.21	0.95	0.81	−12	+ 6	−10	+ 4	− 8	−11	− 9	− 2	− 3	−22		1	1.75
111018	22 29 30.35	+70 26 08.6	7.28	H	337.376 468 33	+70.435 721 34		6.61	45.08	15.15	0.55	0.51	0.61	0.72	0.62	+ 0	+ 3	+ 5	+15	+ 9	+11	+10	+ 5	+15	+16		0	−1.16
111019	22 29 30.89	−29 04 45.4	8.88	H	337.378 700 64	−29.079 290 96		1.48	−10.22	−3.78	1.33	0.90	1.38	1.54	0.84	+11	+12	−18	−42	+10	− 4	+ 7	−34	+14	+ 7		0	0.02
111020	22 29 31.81	+03 40 42.4	9.74	H	337.382 529 23	+03.678 442 99		−1.54	−5.24	−4.00	1.30	1.01	1.54	1.67	1.25	+20	−14	−13	+ 7	+ 8	−15	+ 3	−11	+ 7	+ 8		5	0.68
111021	22 29 31.81	+08 00 17.2	8.14	H	337.382 539 77	+08.004 764 96		2.14	3.76	−2.25	0.87	0.62	1.09	1.47	0.69	+24	+18	+32	−20	+20	+ 9	+15	−17	− 6	−30		0	0.49
111022	22 29 31.82	+47 42 24.8	4.34	2 H	337.382 594 73	+47.706 894 88		2.80	−0.60	−3.37	0.33	0.35	0.50	0.33	0.36	−18	+ 6	+ 8	+ 1	+ 5	− 2	+ 8	−13	+14	− 8		0	1.44
111023	22 29 32.41	−33 51 04.3	7.54	H	337.385 022 61	−33.851 204 96		2.75	8.54	−4.96	0.73	0.59	0.95	0.76	0.52	+36	+ 1	+ 3	−10	−17	+32	−20	−37	+13	+28		0	0.51
111024 H	22 29 32.61	+29 59 19.5	7.95	H	337.385 878 29	+29.988 755 90	A	7.80	−6.49	−13.98	0.80	0.80	1.18	0.75	0.97	+20	−23	+ 9	− 1	+14	− 5	+14	+ 8	− 5	+63		1	−0.10
111025 H	22 29 32.80	−00 12 18.1	7.74	G	337.386 663 22	−00.205 026 76	A	8.21	86.66	−14.27	1.43	1.24	1.65	1.89	1.37	+51	− 7	−32	+18	+ 2	−13	−12	−42	+35	+22		2	0.45
111026	22 29 32.95	−40 01 11.3	9.23	1 H	337.387 299 90	−40.019 806 98		0.29	13.54	−13.86	1.02	0.70	1.32	1.18	0.71	+ 4	+ 6	− 7	− 1	− 3	+20	− 2	−29	+ 0	+ 4		0	−0.58
111027	22 29 33.17	−48 31 48.2	8.53	H	337.388 223 64	−48.530 066 48		13.30	135.62	−61.91	0.67	0.64	1.11	0.73	0.75	+18	−19	− 8	−30	+ 0	+19	− 4	− 4	+13	+33		2	2.41
111028	22 29 33.47	+52 29 30.8	8.10	H	337.389 463 13	+52.491 879 98		5.53	52.33	17.29	0.65	0.55	0.81	0.65	0.57	−11	−10	+17	−15	+15	− 9	+16	−14	+13	+13		0	−2.18
111029	22 29 34.58	+52 23 24.5	8.41	H	337.394 084 97	+52.390 138 45		23.23	166.25	45.83	0.68	0.59	0.85	0.75	0.61	−17	+ 7	+13	−15	+ 8	−12	+12	−17	+15	+ 3		0	−0.03
111030	22 29 35.32	+05 38 29.6	8.60	H	337.397 168 48	+05.641 555 18		0.64	8.30	−4.49	1.38	0.83	1.47	1.59	1.17	− 2	+33	+ 3	−29	+19	− 3	+28	−23	+29	+ 1		0	−1.42
111031	22 29 35.72	+10 22 13.4	8.73	H	337.398 815 77	+10.370 402 69		11.97	51.84	−2.81	1.09	0.94	1.35	1.41	1.28	+26	+11	+22	−11	+20	+ 9	+21	− 2	+10	+27		0	1.69
111032	22 29 37.03	+35 56 16.1	7.71	H	337.404 299 29	+35.937 806 55		8.61	22.84	−62.40	0.60	0.57	0.86	0.76	0.78	+ 0	+16	−19	+ 8	+ 4	+ 5	+11	−15	+31	+ 6		0	0.23
111033	22 29 37.44	+32 49 43.9	7.49	H	337.405 999 49	+32.828 850 66		1.54	−18.98	12.93	0.55	0.62	0.84	0.67	0.79	+21	+14	+ 7	+12	− 8	−17	− 4	−16	+ 4	+26		0	1.50
111034 H	22 29 39.06	+05 39 50.8	10.52	H	337.412 764 31	+05.664 113 63	B	3.03	19.10	−8.01	4.20	2.62	3.67	4.20	2.73	+ 9	+18	+ 6	−34	+19	+ 2	+27	−37	+20	− 8		0	0.20
111035	22 29 40.15	+45 01 21.5	8.29	H	337.417 310 15	+45.022 632 48		2.88	17.80	4.00	0.57	0.60	0.95	0.59	0.68	−32	+ 2	+ 5	−14	+20	− 6	+22	−16	+21	−19		0	0.50
111036	22 29 42.27	+20 19 48.8	8.72	H	337.426 138 15	+20.330 221 77		1.87	14.73	10.28	1.00	0.75	1.17	1.17	0.93	+13	+27	− 6	−24	− 3	− 7	+ 4	−21	+25	+ 0		0	0.96
111037	22 29 42.65	+60 22 51.5	9.32	H	337.427 700 19	+60.380 962 04		3.66	23.48	14.86	0.83	0.76	0.94	1.00	0.80	−11	− 7	+22	− 3	−13	− 1	−12	−14	+ 7	− 5		1	0.91
111038	22 29 42.69	+40 55 19.1	9.62	H	337.427 865 07	+40.921 982 65		1.87	0.52	−2.45	0.80	1.05	1.57	0.89	1.19	−16	+ 6	+24	+45	+11	+16	+ 5	−12	+24	−20		0	1.65
111039	22 29 42.71	+42 14 31.0	9.29	H	337.427 949 28	+42.241 938 79		3.61	−7.14	−13.47	0.61	0.76	1.22	0.68	0.90	−42	+ 4	+ 0	+24	− 4	− 2	+ 0	− 8	+24	−33		0	0.70
111040	22 29 43.88	−49 51 56.9	8.23	H	337.432 833 64	−49.865 794 33		2.49	−3.86	0.96	0.71	0.60	1.02	0.76	0.65	+ 3	− 7	−17	−18	+ 5	+ 8	+ 4	− 8	+ 5	+16		0	−0.49
111041	22 29 44.05	+35 43 32.6	6.56	H	337.433 528 71	+35.725 724 90		8.69	−14.53	−38.63	0.50	0.49	0.73	0.61	0.67	− 1	+18	−15	+13	+ 3	+ 5	+ 8	−19	+36	− 2		0	0.99
111042	22 29 44.91	+66 28 39.4	8.20	G	337.437 135 92	+66.477 612 33		1.43	−1.72	−2.19	0.65	0.63	0.75	0.76	0.77	−15	−15	+12	+ 0	+ 4	+ 9	+ 1	− 6	+ 5	−23		0	0.13
111043	22 29 45.45	−43 44 57.2	4.12	2 H	337.439 356 10	−43.749 228 04	*	10.04	−14.93	1.79	1.94	1.09	1.11	1.35	0.77	+22	−39	−21	−55	−34	+50	−23	−53	+16	+41		0	0.35
111044	22 29 45.57	−11 42 51.4	8.61	H	337.439 878 30	−11.714 281 61		2.73	−4.07	−2.28	1.27	0.73	1.18	1.45	0.79	−10	+11	−15	−19	+15	+ 1	+19	+ 6	+25	−17		0	2.39
111045	22 29 45.94	−27 06 26.0	5.95	H	337.441 420 48	−27.107 234 81		23.76	119.31	−20.31	0.74	0.57	0.81	0.97	0.64	+32	−21	−13	−35	+ 9	+15	+ 3	+ 2	+ 9	+37		0	0.88
111046	22 29 46.19	+68 13 16.2	7.85	H	337.442 468 36	+68.221 176 87		1.40	−2.35	−6.02	0.54	0.60	0.65	0.59	0.60	− 7	+ 2	+27	+13	+11	+10	+ 9	−18	− 2	− 5		0	1.66
111047	22 29 47.08	−41 36 38.9	9.26	H	337.446 173 64	−41.610 800 77		4.19	30.82	−0.44	1.13	0.77	1.45	1.47	0.85	+ 8	+ 2	−28	+25	−21	+29	− 7	−40	+25	+24		0	−0.67
111048	22 29 50.44	−44 44 48.2	10.13	H	337.460 154 26	−44.746 733 21		13.19	−6.30	−28.22	1.46	0.97	1.87	2.23	1.09	+ 1	+15	−24	− 4	+ 2	+32	+ 9	+ 2	+ 6	+12		0	−0.13
*111049	22 29 50.91	−78 12 47.4	6.80	H	337.462 140 31	−78.213 160 96		3.75	2.22	−12.22	0.51	0.48	0.62	0.71	0.56	− 2	−10	− 5	+16	+ 8	+20	+ 8	− 6	− 6	− 3		1	−0.13
*111050	22 29 50.84	+35 11 18.4	9.18	H	337.461 850 41	+35.188 439 19		13.27	188.79	33.08	0.93	0.83	1.24	1.17	1.16	− 3	+ 0	−18	+39	−11	− 6	−19	−22	+39	−18		0	1.03
111051 H	22 29 51.74	−31 00 48.0	9.56	G	337.465 582 86	−31.013 332 13	*	14.10	130.42	26.28	1.20	0.98	1.65	1.42	1.03	+42	+ 2	− 9	+21	−17	+35	−11	−24	+29	+51		0	2.66
111052	22 29 51.81	−46 04 29.3	7.47	H	337.465 861 65	−46.074 812 94		4.40	−5.36	6.10	0.69	0.54	0.86	0.76	0.58	+ 5	+ 3	− 4	+ 6	− 9	+24	− 8	+26	+ 0	+ 5		0	−0.17
111053	22 29 52.48	+53 47 30.5	9.56	H	337.468 680 11	+53.791 803 13		1.55	2.09	1.19	0.78	0.80	1.05	0.87	0.85	−10	−11	+22	+ 3	+12	−10	+18	−13	− 1	+14		0	−0.68
111054	22 29 52.53	−23 51 19.6	7.93	G	337.468 879 11	−23.855 437 33		9.79	−32.69	−50.22	0.86	0.65	0.99	1.02	0.62	+17	+11	−13	−10	+10	+11	+11	+ 5	− 1	+ 6		0	0.37
111055	22 29 52.60	+45 44 41.1	7.80	H	337.469 184 67	+45.744 747 26		1.73	1.41	−2.34	0.56	0.61	0.87	0.62	0.68	−31	− 1	+ 1	−25	+18	−10	+19	−29	+13	−17		0	−1.35
111056	22 29 52.97	+78 49 27.6	5.45	H	337.470 700 72	+78.824 337 33		13.75	3.47	−21.67	0.46	0.42	0.52	0.62	0.48	−12	−16	+22	+ 3	+ 2	+23	− 4	+ 1	+ 2	−21		1	0.05
111057	22 29 53.21	−68 08 34.2	9.90	H	337.471 695 09	−68.142 827 42		−0.66	34.23	−1.90	0.99	0.89	1.40	1.11	0.87	− 2	−13	−29	−10	+ 4	+ 2	+ 6	−20	− 4	+ 3		0	−0.35
111058	22 29 53.47	+52 24 59.6	6.51	H	337.472 780 57	+52.416 557 71		7.91	11.40	20.70	0.50	0.43	0.62	0.53	0.45	−18	+ 1	+11	−16	+15	− 9	+15	−10	+15	+ 5		0	0.47
111059	22 29 53.49	−00 39 57.4	8.78	H	337.472 871 23	−00.665 955 78		8.80	20.13	−14.21	1.26	1.07	1.57	1.65	1.28	+50	− 9	−33	− 9	−13	−20	−37	−69	+42	+14		0	0.68
111060	22 29 54.50	+56 47 01.9	8.72	H	337.477 063 12	+56.783 857 61		4.96	17.26	4.59	0.67	0.64	0.84	0.76	0.71	−19	−12	+24	−10	+10	+ 9	+ 9	− 2	−17	− 8		0	0.72
111061	22 29 55.91	−08 25 08.0	8.32	H	337.482 959 11	−08.418 900 94		14.69	−59.26	−25.14	1.10	0.67	1.17	1.55	0.92	+ 4	+10	−19	−26	+21	+14	+25	−32	+35	+ 7		0	−0.18
111062 H	22 29 57.95	+04 25 55.4	5.51	H	337.491 452 07	+04.432 057 25	A	18.93	−18.89	−151.08	1.35	1.13	1.23	1.63	1.17	+58	+ 8	− 2	− 9	−16	+18	−29	−53	+ 2	+42		0	0.39
111063	22 29 58.76	−16 28 06.7	8.16	G	337.494 842 29	−16.468 528 32		21.66	58.50	−77.92	1.06	0.79	1.36	1.28	0.86	+42	−34	−51	−15	+13	−21	+ 0	−29	+11	+46		0	−0.68
111064	22 30 00.33	+70 10 17.3	7.15	1 G	337.501 394 70	+70.171 466 95		2.95	7.42	−2.58	0.53	0.49	0.59	0.68	0.58	− 5	− 8	+ 0	+17	+ 9	+ 3	+10	− 3	+10	+ 9		0	−0.71
111065	22 30 01.34	+38 43 30.9	10.76	H	337.505 588 54	+38.725 242 04		2.24	1.54	−0.72	1.52	1.50	2.04	1.83	1.88	+ 8	+ 3	+10	+27	−10	−11	+ 7	−31	+18	+32		2	−0.03
111066	22 30 01.39	−12 54 54.4	6.41	H	337.505 779 70	−12.915 117 81		12.33	160.94	0.54	0.74	0.67	1.05	0.89	0.67	+21	−11	−54	−12	−21	+38	− 4	−19	+42	+30		0	−0.10
111067 H	22 30 01.78	+25 56 27.4	8.32	H	337.507 434 07	+25.940 958 08	A	12.21	121.10	11.98	1.28	1.13	1.49	1.32	1.66	+23	+15	− 6	−40	−11	− 8	+ 2	−32	+36	+27		0	0.26
111068	22 30 01.79	+32 34 21.6	5.64	H	337.507 469 56	+32.572 672 45		8.01	30.94	−14.03	0.41	0.48	0.65	0.47	0.59	+21	+12	+11	+10	+ 0	−14	+ 5	−15	+13	+24		0	−0.31
111069	22 30 03.60	+59 58 55.6	8.98	H	337.514 985 42	+59.982 098 37		3.16	15.14	6.92	0.75	0.69	0.85	0.84	0.76	−11	+16	+12	+15	−17	+ 8	−15	+ 2	+10	−14		0	0.53
111070	22 30 05.01	−47 14 16.0	9.51	G	337.520 858 26	−47.237 782 96		4.52	−10.58	8.05	1.32	0.83	1.40	1.56	0.83	+ 1	−10	−26	+21	−31	+18	−28	− 4	+12	− 9		0	0.17
111071	22 30 05.74	+54 47 24.6	9.69	2 G	337.523 898 41	+54.790 169 09		1.33	−2.73	−2.29	0.85	0.82	1.08	0.96	0.87	+ 3	+ 2	+ 9	− 5	+ 9	− 1	+ 9	− 3	+13	+20		3	−0.16
111072	22 30 06.53	+49 21 23.3	6.41	2 H	337.527 192 68	+49.356 485 61		8.18	−25.06	−30.28	0.41	0.41	0.56	0.39	0.40	−15	+16	+ 8	−10	+17	− 2	+21	−18	+21	− 5		0	−1.52
111073	22 30 07.07	−69 16 15.4	8.60	H	337.529 449 91	−69.270 938 78		2.36	13.51	−1.34	0.71	0.74	1.01	0.75	0.72	−11	− 2	−26	−23	+10	+ 2	+12	−23	−11	+ 1		1	0.47
111074	22 30 07.98	+33 15 27.8	7.69	H	337.533 253 67	+33.257 729 04		3.25	−11.39	−19.99	0.61	0.61	0.88	0.75	0.71	+23	+14	+ 6	− 7	−14	−10	− 9	−16	+27	+16		0	−1.16
111075	22 30 08.40	+31 12 57.0	6.59	H	337.534 980 47	+31.215 821 40		4.83	−15.16	−12.46	0.43	0.47	0.69	0.54	0.63	+36	− 4	− 9	+ 9	+14	−12	+14	+10	+ 0	+49		0	−1.19
111076 H	22 30 09.27	−29 24 25.1	10.50	H	337.538 613 33	−29.406 960 88	A	12.81	79.92	28.35	3.77	3.09	3.82	3.86	2.59	+22	−10	+ 7	−25	− 2	+25	− 1	−26	+10	+22		2	−0.34
111077	22 30 09.48	+42 51 39.8	8.32	H	337.539 518 45	+42.861 068 69		3.91	−16.46	−13.56	0.48	0.60	0.96	0.56	0.71	−45	+ 9	− 2	+ 3	+ 0	− 8	+ 3	−17	+22	−43		1	0.41
111078 H	22 30 09.70	−44 22 46.0	10.89	H	337.540 433 67	−44.379 452 54	A	28.63	122.68	−109.45	5.19	3.69	5.59	6.29	3.63	+ 7	+ 9	−26	− 5	− 3	+23	+ 5	−26	+ 7	+22		2	1.46
111079	22 30 09.92	+00 08 18.0	7.32	H	337.541 351 64	+00.138 328 74		0.98	−13.32	−9.64	0.80	0.72	0.98	0.97	0.85	+39	−19	−26	−20	−23	+41	−24	−57	+32	+35		0	3.78
111080	22 30 12.33	+44 26 18.1	8.89	H	337.551 373 24	+44.438 365 79		1.52	0.99	−2.21	0.65	0.70	1.11	0.74	0.81	−29	+13	− 7	+ 3	+17	+10	+20	−11	+12	−20		0	−1.07
111081	22 30 12.88	+40 57 56.1	7.41	G	337.553 685 80	+40.965 588 03		19.96	−30.18	−36.73	0.44	0.59	0.95	0.49	0.75	−29	+ 6	− 6	+33	+ 5	+ 4	+ 6	−14	+39	−28		0	−0.74
*111082 H	22 30 14.51	+22 28 00.2	7.99	G	337.560 474 40	+22.466 712 94	A	6.51	24.80	−22.32	2.38	2.12	1.89	1.64	1.73	+28	+ 6	− 1	− 3	+ 3	−24	+ 6	− 1	+24	+34		1	0.22
*111083	22 30 14.51	−24 42 15.8	9.34	H	337.560 462 65	−24.704 375 97		5.24	61.13	−23.67	1.17	0.86	1.33	1.49	0.85	+19	+ 0	− 8	−18	+12	+14	+11	− 4	+16	+13		0	−0.31
111084	22 30 15.34	+38 41 04.5	8.46	H	337.563 916 05	+38.684 589 03		6.12	3.52	−17.83	0.91	0.85	1.24	1.04	1.07	+12	+27	− 5	+31	+ 4	+ 5	+20	−21	+30	+30		0	0.01
111085	22 30 15.72	−42 17 27.8	6.94	H	337.565 500 44	−42.291 065 42		6.06	32.04	−1.69	0.62	0.45	0.81	0.72	0.51	+11	−16	−21	+10	− 9	+22	− 5	−15	+20	+23		0	0.35
111086	22 30 17.33	−14 35 08.3	6.36	H	337.572 208 33	−14.585 650 69		5.15	34.25	−34.49	0.75	0.61	0.90	0.90	0.85	+29	−11	−21	− 7	+13	+30	+12	+16	+32	+53		0	1.26
111087	22 30 17.75	−62 16 56.2	7.80	H	337.573 958 94	−62.282 274 36		3.88	−19.45	12.05	0.46	0.56	0.89	0.54	0.55	−22	+ 3	−13	+ 1	+ 3	−10	+ 2	−15	− 9	−21		2	−0.62
*111088	22 30 18.71	+57 13 31.6	6.62	1 H	337.577 947 32	+57.225 450 13		−0.32	−3.26	−1.85	0.50	0.48	0.63	0.62	0.59	− 9	+ 7	+21	+ 1	+ 4	+ 4	+ 1	+ 6	−21	− 8		0	1.66
*111089	22 30 18.70	+60 38 29.9	8.92	G	337.577 932 15	+60.641 649 13		1.08	−2.55	−1.41	0.80	0.68	0.86	1.01	0.78	−23	−14	+21	+ 4	− 9	− 4	− 9	− 3	+11	−20		1	1.81
111090	22 30 20.98	+02 02 30.8	7.91	H	337.587 437 25	+02.041 895 12		8.94	11.89	−55.63	0.90	0.63	1.10	1.16	0.77	+25	+ 9	+ 0	+21	+ 3	+28	− 3	−21	+18	+32		4	−0.76
111091	22 30 21.13	−35 29 43.0	9.09	H	337.588 060 53	−35.495 290 17		2.79	46.13	−26.57	1.17	0.83	1.47	1.40	0.86	+19	+ 5	+12	+ 1	+ 2	+25	+ 2	−36	+ 7	+27		0	0.45
111092	22 30 21.32	+16 53 23.9	9.68	H	337.588 830 68	+16.889 960 47		2.95	−41.35	−20.75	1.09	0.99	1.49	1.31	1.22	+21	+ 2	−13	+ 5	+13	−28	+11	+10	+ 5	+14		0	−0.27
111093	22 30 22.56	−36 00 26.0	9.61	H	337.593 980 54	−36.007 233 08		5.01	62.76	−40.31	1.25	0.88	1.67	1.39	0.92	+11	+ 9	+ 6	−10	+ 3	+38	+ 5	−44	+19	+27		0	−0.65
111094	22 30 24.13	+54 37 55.4	12.02	H	337.600 539 22	+54.632 044 79		−0.33	−5.28	−7.67	2.09	2.10	2.73	2.37	2.31	+ 5	+ 8	+ 5	− 3	+ 0	+ 1	+ 4	−14	+15	+26		2	1.35
111095	22 30 24.44	−66 23 27.6	8.48	H	337.601 839 34	−66.391 003 72		3.24	7.62	−5.77	0.70	0.71	1.03	0.84	0.69	−26	+ 4	−18	+ 4	− 4	−14	− 5	−14	+ 3	−27		0	0.93
111096	22 30 24.71	−76 40 58.2	8.11	H	337.602 966 48	−76.682 827 21		12.43	10.74	−86.28	0.58	0.54	0.71	0.73	0.60	−10	− 1	−13	+ 5	+ 9	− 7	+ 8	− 7	+ 3	− 2		0	−1.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
111001	10.352	0.041	8.798	0.019	A	1.200	0.495	G	1.17	0.06	L *	8.7789	0.0026	0.016	65	*	8.75	8.81		D	22293−0940	I 1	2 C A	AB	291	9.021	0.030	2.88	0.10	
111002	8.052	0.007	7.756	0.008		0.303	0.004	G	0.35	0.01	H	7.7982	0.0012	0.010	131		7.78	7.82		C			1							S
111003	10.171	0.026	8.022	0.009		1.776	0.022	T	1.80	0.02	L	7.8534	0.0031	0.028	129		7.81	7.89		U 2			1							
111004	9.452	0.017	8.580	0.014		0.779	0.017	T	0.81	0.01	L	8.6396	0.0015	0.015	94		8.62	8.68		C			1 G							S
111005	10.450	0.027	9.911	0.027		0.513	0.029	T	0.59	0.03	L	9.9776	0.0022	0.025	139		9.92	10.04					1							
111006	6.718	0.004	6.776	0.004		−0.048	0.005	T	−0.03	0.01	L	6.7741	0.0008	0.008	141		6.76	6.79					1							S
111007	10.075	0.017	9.554	0.017		0.498	0.018	T	0.57	0.02	L	9.6368	0.0021	0.027	216		9.59	9.69					1							
111008	10.745	0.048	10.521	0.061	B	0.214	0.073	T	0.24	0.08	L	10.6823	0.0358			B				D	22294+8050	I 2	1 C I A							
111009	10.413	0.036	9.124	0.021		1.096	0.033	T	1.06	0.03	L	9.1488	0.0019	0.015	86		9.12	9.18		C			1							
111010	10.214	0.034	9.828	0.037	*	0.380	0.015	G	0.44	0.02	H *	9.8387	0.0033	0.022	94	*	9.80	9.87		D	22294+6314	H 1	2 C A	AB	72	0.438	0.005	0.75	0.03	G
111011	9.250	0.011	8.763	0.011	*	0.470	0.012	T	0.54	0.01	L *	8.8117	0.0017	0.021	173	*	8.78	8.84			22294−4830	H 1	2 C A	AB	99	0.402	0.025	3.37	0.16	S
111012	10.280	0.036	9.006	0.020		1.070	0.020	G	1.03	0.02	H	9.0641	0.0023	0.018	86		9.02	9.09		C			1							
111013	9.203	0.018	8.647	0.017		0.500	0.015	G	0.57	0.02	H	8.6967	0.0026	0.018	69		8.66	8.72					1							S
111014	10.281	0.034	9.053	0.019		1.049	0.030	T	1.02	0.03	L	9.0853	0.0018	0.018	76		9.05	9.12		C			1							
111015	8.694	0.013	7.330	0.008		1.155	0.012	T	1.12	0.01	L	7.3614	0.0012	0.011	75		7.34	7.38		D	22294−2840	I 1	1 S							S
111016	9.644	0.020	9.344	0.021	A	0.285	0.027	T	0.32	0.03	L	9.4033	0.0158	0.093	113	A	9.31	9.58		D	22294+8050	I 2	1 C P A							
111017	9.977	0.018	9.413	0.017		0.532	0.018	T	0.60	0.02	L	9.4946	0.0031	0.031	156		9.44	9.54					1							
111018	7.530	0.005	7.312	0.008		0.208	0.009	T	0.23	0.01	L	7.3509	0.0010	0.009	116		7.34	7.37		C			1							S
111019	10.488	0.037	9.023	0.019		1.234	0.033	T	1.19	0.03	L	9.0409	0.0021	0.017	82		9.01	9.07		C			1							
111020	11.234	0.083	9.869	0.040		1.156	0.072	T	1.12	0.07	L	9.9073	0.0028	0.027	72		9.86	9.95					1							
111021	8.183	0.009	8.141	0.011		0.043	0.013	T	0.06	0.01	L	8.1632	0.0014	0.012	105		8.14	8.19		C			1							S
111022	6.449	0.005	4.541	0.004		1.679	0.005	G	1.90	0.03	G	4.4280	0.0045	0.040	140		4.39	4.56		U 2			1 S							S
111023	9.047	0.012	7.658	0.007		1.175	0.011	T	1.14	0.01	L	7.7095	0.0011	0.010	110		7.69	7.72		C			1							S
111024	8.182	0.009	7.981	0.009	*	0.192	0.012	T	0.21	0.01	L *	8.0083	0.0009	0.013	148	*	7.99	8.03		D	22295+2959	I 1	2 C A	AB	206	0.748	0.013	2.97	0.07	S
111025	8.491	0.016	7.937	0.015	A	0.544	0.015	G	0.62	0.01	H *	7.8486	0.0019	0.012	67	*	7.83	7.87		D	22295−0012	I 1	2 C A	AB	2	1.677	0.006	1.72	0.02	S
111026	11.070	0.043	9.369	0.017		1.420	0.037	T	1.40	0.06	L	9.3662	0.0023	0.026	166		9.32	9.41		U			1							
111027	9.172	0.010	8.598	0.010		0.556	0.015	G	0.63	0.01	H	8.6528	0.0016	0.019	178		8.62	8.69					1							S
111028	8.813	0.011	8.176	0.010		0.592	0.013	T	0.66	0.01	L	8.2279	0.0015	0.015	129		8.21	8.25		C			1							S
111029	9.296	0.015	8.486	0.012		0.716	0.015	T	0.77	0.01	L	8.5520	0.0014	0.015	126		8.53	8.58					1							
111030	10.015	0.034	8.717	0.019		1.083	0.197	G	1.04	0.07	L	8.7716	0.0020	0.017	69		8.74	8.80		D	22296+0539	I 2	1							
111031	10.024	0.033	8.813	0.020		1.036	0.030	T	1.01	0.03	L	8.8925	0.0021	0.017	73		8.87	8.92		C			1							
111032	8.112	0.008	7.741	0.009		0.351	0.011	T	0.41	0.01	L	7.7900	0.0014	0.014	128		7.77	7.81					1							S
111033	9.499	0.016	7.647	0.007		1.540	0.014	T	1.59	0.03	L	7.6074	0.0019	0.014	133		7.59	7.63					1							S
111034	11.035	0.076	10.699	0.090	B						T *	10.5310	0.0035	0.024	66	*	10.45	10.58		D	22296+0539	I 2	2 C A	BC	314	3.420	0.019	1.66	0.11	G
111035	8.447	0.007	8.313	0.008		0.129	0.010	T	0.14	0.01	L	8.3382	0.0015	0.016	182		8.31	8.37					1							
111036	10.225	0.034	8.834	0.019		1.176	0.031	T	1.14	0.03	L	8.8853	0.0019	0.018	76		8.85	8.93					1							
111037	9.836	0.021	9.356	0.021		0.452	0.027	T	0.52	0.03	L	9.4176	0.0025	0.019	115		9.39	9.45					1							G
111038	9.910	0.017	9.653	0.020		0.245	0.025	T	0.27	0.03	L	9.6948	0.0024	0.027	168		9.64	9.74					1							G
111039	9.472	0.011	9.299	0.013		0.166	0.016	T	0.18	0.02	L	9.3501	0.0016	0.025	267		9.31	9.39					1							
111040	8.651	0.009	8.256	0.009		0.359	0.015	G	0.42	0.02	H	8.3124	0.0019	0.020	158		8.28	8.34					1							S
111041	6.626	0.003	6.563	0.004		0.057	0.004	T	0.07	0.00	L	6.5870	0.0008	0.007	121		6.58	6.60					1							S P
111042	8.787	0.011	8.278	0.011		0.478	0.014	T	0.55	0.01	L	8.3222	0.0013	0.014	107		8.30	8.35		C			1							
111043	6.168	0.005	4.334	0.004		1.570	0.110	G	2.49	0.02	A	4.1414	0.0035	0.033	91		4.10	4.20		U 2	22298−4345	I 1	1 V							S
111044	10.051	0.033	8.682	0.018		1.159	0.029	T	1.12	0.03	L	8.7776	0.0021	0.018	56		8.74	8.81		C			1							
111045	6.351	0.005	5.980	0.005		0.362	0.006	T	0.42	0.01	L	6.0317	0.0008	0.006	76		6.02	6.04		C			1 G							S
111046	9.124	0.014	7.974	0.009		0.988	0.013	T	0.97	0.01	L	8.0111	0.0016	0.014	115		7.99	8.04					1							S
111047	9.861	0.023	9.333	0.022		0.504	0.024	T	0.58	0.03	L	9.3673	0.0023	0.020	109		9.33	9.41		C			1							
111048	11.097	0.060	10.157	0.040		0.816	0.056	T	0.84	0.04	L	10.2762	0.0027	0.025	91		10.21	10.31		C			1							
111049	8.753	0.011	6.957	0.005		1.495	0.010	T	1.52	0.01	L	6.9255	0.0010	0.009	125		6.91	6.94		C			1							S
111050	9.962	0.024	9.251	0.021		0.641	0.024	T	0.71	0.02	L	9.3141	0.0023	0.020	107		9.28	9.36		C			1							
111051	10.558	0.035	9.685	0.027	*	0.785	0.002	G	0.83	0.00	H *	9.7038	0.0024	0.025	125	*	9.66	9.76		C	22299−3101	H 1	2 C S A	AB	337	0.186	0.015	0.45	0.43	
111052	8.636	0.011	7.577	0.008		0.918	0.010	T	0.92	0.01	L	7.6351	0.0009	0.011	101		7.62	7.65			22299−4604	I 1	1							S
111053	9.599	0.018	9.527	0.024		0.071	0.028	T	0.08	0.03	L	9.5952	0.0024	0.022	131		9.56	9.63					1							G
111054	8.492	0.013	7.990	0.011		0.491	0.015	G	0.56	0.02	H	8.0362	0.0011	0.010	78		8.02	8.05		C			1							S
111055	9.533	0.013	7.941	0.007		1.334	0.012	T	1.30	0.01	L	7.9525	0.0011	0.014	181		7.93	7.98		C			1							
111056	5.565	0.003	5.462	0.003		0.093	0.004	T	0.11	0.00	L	5.4933	0.0006	0.005	104		5.48	5.51		C			1							S
111057	10.465	0.026	9.933	0.026		0.507	0.028	T	0.58	0.03	L	10.0119	0.0020	0.027	138		9.96	10.06					1							
111058	7.793	0.007	6.633	0.005		0.996	0.007	T	0.97	0.01	L	6.6759	0.0008	0.008	133		6.66	6.69		C	22299+5225	I 1	1							S
111059	9.316	0.021	8.838	0.021		0.450	0.027	T	0.52	0.03	L	8.8779	0.0018	0.017	62		8.85	8.91		C			1							
111060	8.845	0.012	8.712	0.014		0.128	0.017	T	0.14	0.02	L	8.7696	0.0017	0.014	122		8.75	8.79		C			1							
111061	8.949	0.014	8.391	0.013		0.522	0.017	T	0.59	0.02	L	8.4371	0.0014	0.012	85		8.42	8.46		C			1							S
111062	5.974	0.004	5.551	0.004	*	0.385	0.002	G	0.40	0.03	C *	5.5934	0.0009	0.007	69	*	5.58	5.60		D	22300+0426	I 1	2 C A	AB	117	0.592	0.004	1.54	0.01	S
111063	8.861	0.015	8.231	0.014		0.599	0.015	G	0.67	0.01	H	8.2828	0.0015	0.011	93		8.27	8.30		C			1							S
111064	7.073	0.005	7.142	0.006		−0.046	0.001	G	−0.02	0.00	H	7.1491	0.0012	0.014	105		7.13	7.17		U 2			1							S
111065	10.981	0.055	10.695	0.066		0.140	0.040	G	0.15	0.04	R	10.8070	0.0044	0.038	92		10.74	10.88		C			1							G
111066	6.815	0.005	6.439	0.006		0.356	0.007	T	0.42	0.01	L	6.4930	0.0008	0.006	58		6.48	6.50		C			1							S
111067	8.983	0.017	8.449	0.016	A	0.559	0.072	G	0.55	0.04	L *	8.4241	0.0013	0.014	76	*	8.40	8.44		D	22300+2556	M 1	2 C A	AB	77	5.609	0.016	2.62	0.08	
111068	5.588	0.003	5.625	0.003		−0.031	0.004	T	−0.01	0.00	L	5.6334	0.0006	0.005	138		5.62	5.64		C			1							S
111069	9.641	0.018	9.058	0.017		0.545	0.022	T	0.62	0.02	L	9.1036	0.0013	0.013	122		9.08	9.12					1							
111070	10.112	0.026	9.600	0.026		0.566	0.007	G	0.64	0.01	H	9.6334	0.0034	0.024	101		9.60	9.69		C			1							
111071	10.001	0.024	9.834	0.031		0.200	0.015	G	0.22	0.02	H	9.7867	0.0055	0.050	123		9.72	9.86	1.51	P 1 A			1 S							G
111072	7.932	0.008	6.554	0.005		1.166	0.007	T	1.13	0.01	L	6.5720	0.0047	0.035	161		6.51	6.64	17.74	P 1 A	22302+4921	I 1	1							S P
111073	10.371	0.026	8.740	0.012		1.365	0.023	T	1.33	0.03	L	8.7502	0.0016	0.020	143		8.72	8.79					1							
111074	9.239	0.014	7.825	0.008		1.194	0.013	T	1.15	0.01	L	7.8526	0.0013	0.012	114		7.84	7.88		C			1							
111075	6.657	0.003	6.594	0.004		0.063	0.005	T	0.07	0.01	L	6.6133	0.0005	0.007	172		6.60	6.63					1							S
111076	11.727	0.106	10.659	0.063	*	0.916	0.097	T	0.91	0.07	L *	10.6394	0.0034	0.030	75	*	10.56	10.69		D	22302−2924	H 1	2 C A	AB	202	0.697	0.013	1.30	0.07	
111077	8.610	0.008	8.348	0.008		0.249	0.011	T	0.28	0.01	L	8.3885	0.0009	0.017	275		8.36	8.42					1							S
111078						1.300	0.200	G	1.26	0.21	R *	11.0435	0.0086	0.057	98	*	10.94	11.14			22302−4423	H 1	2 C B	AB	352	1.042	0.052	2.23	0.29	G
111079	7.294	0.007	7.314	0.008		−0.014	0.010	T	0.01	0.01	L	7.3250	0.0027	0.018	64		7.30	7.36		R	22302+0008	I 1	1							S
111080	8.937	0.009	8.892	0.011		0.046	0.013	T	0.06	0.01	L	8.9063	0.0018	0.021	184		8.87	8.94					1							
111081	7.938	0.006	7.465	0.006		0.446	0.008	T	0.52	0.01	L	7.5128	0.0010	0.011	178		7.49	7.53		C			1							S
111082	8.432	0.012	8.037	0.012	*	0.364	0.019	G	0.43	0.02	H *	8.0695	0.0015	0.013	97	*	8.04	8.09		D	22302+2228	I 1	2 C A	AB	53	0.461	0.003	0.05	0.02	S
111083	10.070	0.030	9.387	0.025		0.620	0.029	T	0.69	0.03	L	9.4741	0.0023	0.018	68		9.44	9.52		C			1							S
111084	8.800	0.011	8.498	0.011		0.287	0.015	T	0.33	0.02	L	8.5307	0.0024	0.019	93		8.49	8.56					1							
111085	6.869	0.004	6.919	0.005		−0.046	0.006	G	−0.05	0.02	A	6.9228	0.0008	0.009	138		6.91	6.94		C			1							S
111086	6.291	0.005	6.342	0.005		−0.047	0.007	G	−0.03	0.01	H	6.3474	0.0011	0.006	56		6.34	6.36		C			1							S
111087	9.123	0.009	7.919	0.006		1.030	0.008	T	1.00	0.01	L	7.9695	0.0013	0.019	227		7.94	8.00					1							S
111088	7.281	0.005	6.744	0.006		0.715	0.015	G	0.77	0.01	H	6.7650	0.0018	0.017	118		6.74	6.79		U 2	22303+5714	I 1	1 S							S
111089	9.746	0.024	8.997	0.020		0.710	0.015	G	0.76	0.01	H	8.9874	0.0022	0.017	112		8.96	9.01		C			1							
111090	8.533	0.011	7.979	0.011		0.531	0.015	G	0.60	0.02	H	8.0264	0.0016	0.011	84		8.01	8.04		C			1							S
111091	10.380	0.031	9.209	0.019		1.004	0.028	T	0.98	0.02	L	9.2577	0.0028	0.025	111		9.22	9.31					1							
111092	10.247	0.032	9.773	0.034		0.446	0.043	T	0.52	0.05	L	9.7818	0.0026	0.019	85		9.74	9.83		C			1							
111093	10.789	0.044	9.749	0.028		0.904	0.039	T	0.95	0.04	L	9.7518	0.0022	0.024	123		9.71	9.79		C			1							
111094											T	12.0410	0.0102	0.073	118		11.91	12.16					1 S							D P
111095	10.235	0.022	8.613	0.011		1.358	0.019	T	1.33	0.02	L	8.6290	0.0017	0.020	158		8.59	8.66					1							
111096	8.637	0.009	8.168	0.008		0.471	0.003	G	0.54	0.00	H	8.2126	0.0011	0.013	151		8.19	8.24		C			1							S
111097	9.099	0.016	7.722	0.010		1.165	0.015	T	1.13	0.01	L	7.7660	0.0018	0.012	74		7.74	7.78		C			1							S
111098	8.401	0.010	7.844	0.009		0.546	0.015	G	0.62	0.01	H	7.9027	0.0012	0.013	108		7.88	7.93		C			1							S
111099	9.960	0.016	8.898	0.011	A	0.900	0.495	G	0.90	0.02	L *	8.8711	0.0018	0.021	197	*	8.83	8.91		D	22304−5133	I 1	2 C A	AB	255	2.599	0.013	2.41	0.05	S
111100	8.684	0.013	7.382	0.008		1.107	0.012	T	1.07	0.01	L	7.4115	0.0011	0.009	99		7.39	7.43					1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
111101	22 30 26.95	+43 31 38.2	9.28	H	337.612 301 93	+43.527 272 37		0.21	1.53	−4.83	0.70	0.83	1.29	0.78	0.99	−34	+ 6	+ 7	+ 8	+10	+ 0	+12	− 8	+ 5	−30	0	−1.49
111102	22 30 27.81	−04 49 00.1	8.06	H	337.615 862 21	−04.816 693 20		6.69	97.69	50.88	1.11	0.69	1.31	1.67	0.96	+24	+ 8	−16	+15	+10	+19	+ 6	−42	+45	+16	0	−0.22
111103	22 30 28.89	+86 31 46.4	9.34	H	337.620 372 16	+86.529 558 31		4.87	18.53	46.95	0.72	0.70	0.84	0.91	0.82	+ 6	− 1	+ 9	+20	+ 0	−24	+ 2	+ 8	+ 1	+ 5	1	−0.95
111104	22 30 29.26	+43 07 24.2	4.52	H	337.621 923 33	+43.123 389 85		2.38	−2.05	−5.76	0.35	0.44	0.64	0.39	0.49	−52	+15	−10	−12	+12	− 1	+16	−22	+22	−48	0	0.51
111105	22 30 29.85	+37 24 35.9	10.84	H	337.624 387 41	+37.409 961 32		−0.76	−2.77	−2.88	3.61	3.52	5.07	4.52	4.75	+ 1	+13	−12	−31	+ 1	+ 5	+ 6	−31	+35	+11	0	
111106	22 30 29.89	+40 12 03.8	8.24	H	337.624 521 26	+40.201 066 86		4.13	6.31	9.43	0.77	0.77	1.10	0.85	0.97	− 7	+14	− 2	+13	− 5	− 7	+ 1	−22	+31	− 5	0	−0.09
111107	22 30 30.85	−47 57 38.8	8.79	H	337.628 525 82	−47.960 768 68		3.09	−3.82	−16.89	0.76	0.66	1.19	0.75	0.70	+23	−32	−22	−29	−13	+18	−12	− 9	+ 7	+23	2	1.70
111108	22 30 31.02	+16 01 00.3	8.11	G	337.629 256 84	+16.016 753 91		12.77	−39.05	−42.80	0.97	0.69	1.09	1.37	0.90	+ 9	+12	+ 3	−36	+15	−10	+22	− 7	+ 9	−16	0	−0.01
111109 H	22 30 31.27	+22 32 14.5	9.07	G	337.630 274 93	+22.537 363 74	*	2.84	11.13	−3.67	0.98	0.83	1.21	1.13	1.01	+17	+ 8	+ 6	+27	− 6	−16	− 5	+ 0	+24	+ 5	0	1.06
111110	22 30 32.13	+13 43 25.8	9.04	H	337.633 868 75	+13.723 847 17		1.71	−3.24	−34.17	1.01	0.82	1.22	1.21	0.93	+24	+22	+18	−12	+ 1	+ 2	− 1	−21	+ 0	+10	2	0.80
111111	22 30 32.33	−07 43 13.9	9.67	H	337.634 706 28	−07.720 516 27		1.47	−3.19	−5.62	1.54	0.86	1.68	1.95	1.11	+20	+ 2	−19	+20	+ 1	+ 2	− 2	−38	+41	+12	0	−0.05
111112 H	22 30 32.63	+61 37 25.6	6.98	H	337.635 952 69	+61.623 768 99	A	2.13	7.59	0.60	1.17	1.16	0.68	0.67	0.67	+20	− 1	+12	− 5	+ 4	+12	+ 6	− 5	+10	− 7	2	−1.27
111113 H	22 30 32.77	−08 06 52.7	7.37	H	337.636 551 09	−08.114 625 26	A	10.27	50.48	−2.42	1.80	1.00	1.64	2.48	1.14	+27	+11	− 4	+39	+11	+18	+ 5	−25	+32	+13	2	0.42
111114	22 30 34.69	−52 54 59.6	11.19	G	337.644 538 38	−52.916 554 84		8.80	222.90	−68.10	1.33	1.41	2.27	1.78	1.56	+28	− 4	−10	+14	−12	+26	− 6	−20	+ 6	+36	0	1.05
111115 H	22 30 35.57	+53 31 43.3	7.65	G	337.648 208 11	+53.528 680 74	A	2.93	13.99	0.68	1.29	1.22	1.39	1.32	1.21	− 6	− 1	+15	−19	+18	− 3	+18	−12	+ 4	− 2	2	2.82
111116	22 30 36.41	−08 42 14.7	10.11	G	337.651 728 84	−08.704 079 25		6.48	35.60	−1.13	1.50	1.01	1.68	1.87	1.15	+16	+16	− 7	−16	+ 7	+22	+ 8	−35	+25	+ 2	0	1.38
111117	22 30 36.46	+37 33 16.5	9.42	H	337.651 905 49	+37.554 590 64		3.62	5.05	−0.13	1.17	0.91	1.43	1.94	1.54	− 1	+ 6	−10	−31	− 1	+ 2	− 1	−27	+23	+17	0	1.28
111118	22 30 36.84	−30 07 51.8	8.80	H	337.653 495 81	−30.131 054 24		4.63	−27.22	−8.55	0.91	0.75	1.21	0.98	0.76	+44	−11	− 7	+ 2	−23	+30	−23	−26	+27	+49	0	0.44
111119	22 30 36.87	+12 02 09.4	8.77	2 H	337.653 638 19	+12.035 954 00		1.82	2.00	2.40	0.91	0.74	1.13	1.11	0.91	+24	+ 7	− 1	+11	+ 9	−29	+ 9	+12	+ 6	+14	0	0.85
111120	22 30 38.13	+18 08 20.5	8.22	H	337.658 860 87	+18.139 016 91		3.28	18.75	7.04	0.85	0.67	1.06	0.89	0.84	+23	+27	+ 3	+10	+10	− 7	+ 9	+ 4	− 7	+26	0	−0.25
111121	22 30 38.57	+46 50 30.4	9.74	H	337.660 699 10	+46.841 772 53		0.29	−2.72	−1.84	0.90	0.86	1.25	0.88	0.91	−23	+24	+ 3	− 5	+11	− 5	+18	−25	+18	−10	0	−0.42
111122	22 30 38.79	−17 45 36.8	8.92	H	337.661 610 53	−17.760 213 00		1.48	34.44	−32.77	1.22	0.93	1.42	1.60	1.05	+28	−32	−43	−12	+21	− 7	+14	−19	+ 8	+24	0	0.00
111123 H	22 30 38.82	−10 40 40.4	4.82	G	337.661 729 18	−10.677 886 19	A	12.29	1.79	−26.26	1.24	0.97	1.32	1.29	0.88	+25	+33	−13	+13	− 7	+34	− 1	−23	+31	+ 3	3	2.12
111124	22 30 40.46	+04 19 54.6	7.29	H	337.668 584 77	+04.331 823 68		4.56	−4.29	−35.13	0.84	0.61	0.91	1.22	0.74	+16	−16	−17	− 6	+ 6	+ 9	− 4	−36	+ 6	−18	0	1.49
111125 H	22 30 42.61	+17 58 28.0	8.50	H	337.677 539 24	+17.974 453 80	*	8.23	68.76	16.09	0.85	0.77	1.10	0.93	0.99	+27	+17	− 2	+20	+ 8	−21	+ 8	+13	+ 4	+27	0	−1.37
111126 H	22 30 42.73	+48 55 51.3	9.63	H	337.678 061 19	+48.930 916 89	A	−0.05	−0.23	−3.74	3.37	3.76	1.68	1.27	1.29	+47	+ 3	+ 2	− 3	+ 5	+13	+ 6	−13	+ 2	+44	2	−0.39
111127	22 30 42.91	−44 05 37.4	6.95	H	337.678 778 53	−44.093 714 13		8.64	5.21	16.72	0.88	0.45	0.89	1.08	0.62	− 9	+ 4	−23	+12	− 8	+ 7	+13	−12	− 3	+32	0	0.42
111128	22 30 46.44	+46 31 43.7	8.60	H	337.693 502 26	+46.528 794 73		2.12	−0.51	−1.59	0.67	0.71	1.01	0.74	0.84	−30	+19	− 2	− 9	+19	− 5	+23	−16	+12	− 9	1	−0.95
111129	22 30 46.67	−46 44 25.0	8.82	1 H	337.694 469 23	−46.740 265 08		0.57	−6.11	−26.11	0.87	0.62	1.05	0.94	0.63	+ 6	−14	− 8	+17	−23	+24	−21	− 1	+ 5	+ 4	0	0.74
111130	22 30 46.87	+21 00 44.6	8.30	H	337.695 308 87	+21.012 390 86		9.95	30.87	−12.65	0.97	0.66	1.05	1.11	0.75	+ 6	+20	+ 9	−35	+ 6	+ 8	+ 8	−19	+ 3	− 4	0	−0.57
111131 H	22 30 47.24	+06 30 01.5	9.75	G	337.696 814 22	+06.500 429 08	A	10.71	35.98	−47.63	2.70	2.46	2.86	2.82	2.74	+17	+13	− 5	−12	− 9	+16	−11	−47	+32	+27	0	0.43
111132	22 30 47.52	+48 45 06.4	8.25	H	337.697 998 68	+48.751 765 26		6.36	17.16	−5.36	0.56	0.59	0.83	0.67	0.74	−13	+12	+ 0	− 2	+10	+12	+ 9	−16	− 5	−15	0	−1.16
111133 H	22 30 49.33	−24 10 05.7	7.89	H	337.705 524 10	−24.168 250 32	*	2.62	17.96	−13.18	5.65	2.41	1.64	1.53	1.16	+38	+20	−16	−27	− 4	+31	+ 7	−17	+16	+22	0	0.48
111134	22 30 49.66	−67 18 13.4	8.07	G	337.706 916 21	−67.303 713 72		10.67	59.56	36.24	0.59	0.60	0.89	0.70	0.60	− 3	− 4	−21	− 9	+13	+10	+15	−17	+ 1	+10	0	1.67
111135	22 30 50.06	+36 00 45.8	9.33	H	337.708 574 67	+36.012 716 52		2.56	−12.69	−8.30	0.84	0.79	1.20	1.10	1.10	+ 9	+12	−26	+ 1	+ 9	− 6	+13	−21	+41	+11	0	0.74
111136	22 30 50.14	+40 43 19.1	8.17	H	337.708 916 53	+40.721 959 42		15.54	−214.58	41.02	0.60	0.76	1.17	0.80	0.97	−12	+ 3	− 9	−12	−11	+ 9	− 6	−27	+37	− 3	0	−1.48
111137	22 30 53.18	−41 40 28.2	8.77	H	337.721 568 92	−41.674 503 87		3.53	31.34	−53.05	1.01	0.62	1.25	1.25	0.67	+ 3	−10	−27	+27	−15	+29	+ 1	−43	+29	+27	0	−0.80
111138	22 30 53.75	−26 04 24.8	6.43	G	337.723 946 11	−26.073 568 83		8.17	39.22	−75.53	0.78	0.61	0.88	0.94	0.65	+34	−10	−14	−20	+12	+ 1	+ 7	+ 9	+ 3	+41	0	1.22
111139	22 30 54.40	+43 25 40.2	8.29	H	337.726 686 00	+43.427 820 40		1.19	0.63	−3.39	0.53	0.64	1.00	0.60	0.77	−40	− 2	+10	+ 9	+ 3	−10	+ 4	− 6	+16	−42	0	−0.62
111140	22 30 57.05	+08 25 36.5	7.55	H	337.737 689 26	+08.426 801 30		3.61	−14.10	−27.21	0.80	0.60	1.02	1.37	0.72	+31	+15	+20	− 6	+23	+12	+13	−14	+ 6	−19	0	1.27
111141	22 30 58.03	−14 34 00.9	7.75	H	337.741 808 14	−14.566 928 41		4.35	86.43	−25.22	0.89	0.76	1.06	1.02	0.93	+28	−11	−38	−13	− 3	+17	+ 0	+ 5	+ 6	+42	0	0.41
111142	22 30 58.83	−48 18 56.5	7.70	H	337.745 144 92	−48.315 708 25		9.43	42.62	−25.28	0.56	0.53	0.95	0.56	0.59	+18	−29	−12	−30	− 1	+19	− 5	− 2	+16	+26	1	0.78
111143	22 31 00.49	−49 25 58.1	6.81	H	337.752 035 07	−49.432 798 54		24.54	−135.16	−194.06	0.56	0.46	0.81	0.66	0.47	+ 9	−16	−23	− 8	− 1	+ 0	− 1	−12	+ 3	+ 8	0	0.34
111144	22 31 03.48	−38 24 45.2	9.30	H	337.764 493 21	−38.412 557 46		1.67	−7.64	−14.57	1.07	0.71	1.32	1.29	0.70	+14	− 3	− 4	+26	−14	+10	−16	−51	+14	+ 9	0	−1.68
111145	22 31 04.32	−50 23 47.0	8.33	G	337.768 012 20	−50.396 397 73		10.56	−16.71	22.95	0.76	0.66	1.13	0.85	0.71	+17	−18	−27	−20	− 3	+14	− 3	−11	+10	+28	2	−1.39
111146	22 31 05.60	+69 11 59.2	9.51	H	337.773 353 92	+69.199 784 74		1.21	6.04	0.86	0.73	0.72	0.86	0.87	0.76	− 5	−16	+15	+ 5	− 9	− 2	−11	−12	+20	− 4	0	−0.80
111147	22 31 05.78	+50 21 53.0	7.73	2 H	337.774 095 73	+50.364 720 40		3.77	5.56	0.33	0.52	0.50	0.72	0.51	0.49	− 7	+20	+ 7	− 1	+17	−15	+25	−13	+26	+ 4	0	−1.00
111148	22 31 05.87	+45 08 42.0	7.68	H	337.774 460 29	+45.145 011 81		23.14	−176.51	34.98	0.50	0.54	0.82	0.53	0.59	−34	+ 9	− 5	−22	+21	− 7	+23	−29	+18	−22	1	−2.00
111149	22 31 06.22	+09 43 48.1	12.04	G	337.775 906 72	+09.730 026 03		9.33	−63.07	−71.36	3.13	2.45	3.92	3.62	3.02	+25	+15	+10	−26	+ 4	+ 6	+ 1	−35	+17	+18	2	1.38
111150	22 31 07.28	−26 21 13.8	9.37	H	337.780 322 51	−26.353 838 33		17.79	120.31	−94.53	1.38	0.96	1.46	1.68	1.04	+15	+10	−15	−39	+16	−22	+ 8	−12	− 6	+24	0	1.21
111151	22 31 07.90	−71 14 20.1	8.53	H	337.782 911 32	−71.238 903 52		11.93	84.21	−62.34	0.62	0.68	0.88	0.70	0.72	− 6	− 4	−24	+10	− 7	− 5	− 9	+ 2	+10	−17	0	−1.06
111152	22 31 08.65	+47 07 23.1	9.11	H	337.786 055 15	+47.123 081 97		2.00	−3.45	−5.80	0.75	0.66	1.04	0.73	0.76	−14	+18	− 5	+ 8	+ 3	−12	+13	−23	+24	+ 4	0	0.89
111153	22 31 09.14	−80 41 45.4	8.97	H	337.788 087 86	−80.695 949 18		16.56	16.41	−29.19	0.70	0.69	0.86	0.82	0.77	− 1	− 8	− 7	+10	+ 5	− 1	+ 5	− 1	− 9	− 8	1	−0.96
111154	22 31 09.88	+15 27 58.8	8.72	H	337.791 159 61	+15.466 341 41		−0.08	6.17	−12.88	1.05	0.82	1.28	1.48	1.07	+15	+16	− 5	−28	+14	+ 6	+20	−15	+24	−10	0	0.75
111155	22 31 11.11	+39 36 28.6	9.57	H	337.796 291 45	+39.607 942 77		1.53	−9.86	−2.73	1.14	0.97	1.55	1.60	1.33	− 3	− 2	− 3	+21	+ 5	+11	+ 2	−17	+39	− 2	0	−0.07
111156	22 31 11.27	+44 11 26.9	10.80	H	337.796 942 41	+44.190 793 69		3.06	−25.94	−0.71	1.14	1.29	1.97	1.29	1.51	−26	+ 7	+ 0	+ 7	+15	− 1	+17	−12	+14	−20	1	−0.57
111157	22 31 11.59	+40 08 23.4	9.77	G	337.798 286 75	+40.139 838 18		−0.12	−2.22	−7.42	1.08	1.02	1.43	1.29	1.36	− 1	+ 9	− 8	+ 9	− 9	+ 3	− 5	−28	+28	+ 5	0	0.81
111158	22 31 11.74	−19 29 08.1	9.85	H	337.798 927 84	−19.485 578 11		3.63	−23.60	−39.18	1.41	1.08	1.55	1.93	1.21	+25	+ 2	− 4	− 9	+28	−11	+23	+ 3	− 6	+25	0	−0.22
111159	22 31 12.99	+23 58 33.7	7.63	H	337.804 116 85	+23.976 028 88		3.54	25.38	2.13	0.67	0.60	0.97	0.67	0.88	+16	+37	− 4	+ 7	+ 5	− 3	+20	+ 3	+39	+30	0	0.60
111160	22 31 13.25	−64 28 34.1	9.34	H	337.805 207 19	−64.476 141 27		3.14	4.97	8.30	0.74	0.85	1.26	0.82	0.81	−24	+11	−22	+ 2	+ 5	+ 6	+ 6	−10	− 2	−21	0	−0.95
*111161 H	22 31 13.57	+65 27 58.5	8.79	G	337.806 560 11	+65.466 251 08	A	0.31	0.90	−2.52	1.75	1.78	1.88	2.07	2.00	− 5	−12	+15	+ 1	+ 1	− 2	+ 3	− 2	− 4	− 7	3	2.18
*111162	22 31 13.42	−22 59 47.5	8.12	2 H	337.805 927 65	−22.996 538 75		6.25	−7.87	−21.42	0.95	0.70	1.07	1.21	0.66	+21	+ 9	−10	− 8	+26	− 3	+21	+ 3	+ 6	+ 4	0	0.35
111163	22 31 14.54	+04 15 16.9	9.37	H	337.810 576 70	+04.254 689 75		3.90	47.12	−26.65	1.32	0.88	1.49	2.12	1.14	+ 8	+ 8	−17	− 6	+12	+11	+ 5	−37	+31	−26	0	−0.33
111164 H	22 31 15.02	+50 52 20.5	7.74	H	337.812 581 55	+50.872 350 26	A	4.09	16.80	2.75	0.94	0.85	1.10	0.89	0.79	− 5	+16	+ 4	−11	+18	− 7	+24	−22	+32	+10	1	−0.25
111165 H	22 31 15.69	+38 19 56.9	9.75	H	337.815 370 67	+38.332 461 70	*	4.75	18.43	32.13	2.93	3.07	1.85	1.92	1.97	+ 7	− 7	− 6	− 3	− 7	−14	− 2	−25	+18	+35	1	−0.11
111166	22 31 15.78	+63 31 21.5	8.95	3 H	337.815 749 01	+63.522 649 63	*	1.28	2.68	1.32	1.52	1.40	1.28	1.77	1.30	−41	+40	−27	−60	+36	−30	+39	−58	+44	−33	0	0.06
111167	22 31 16.74	+39 14 38.2	7.71	H	337.819 735 22	+39.243 952 01		7.37	−17.01	−54.04	0.73	0.68	0.99	0.93	0.85	− 5	+ 9	+ 4	+20	− 7	+ 7	+ 3	−30	+28	+12	0	−1.18
111168	22 31 16.97	+38 01 38.5	10.17	H	337.820 703 40	+38.027 351 73		1.49	1.42	−5.69	1.23	1.21	1.66	1.68	1.71	+10	+ 0	+16	−10	− 5	+ 9	− 3	−19	+24	+30	0	0.43
111169	22 31 17.38	+50 16 56.8	3.76	H	337.822 398 98	+50.282 449 76		31.86	137.22	17.15	0.38	0.38	0.54	0.34	0.36	−12	+23	+21	−17	+ 8	− 9	+15	−11	+24	−13	0	−0.28
111170	22 31 18.22	−06 33 17.6	6.15	G	337.825 907 86	−06.554 887 34	+	39.18	160.65	−108.63	8.83	2.23	1.83	1.15	0.80	+38	−74	−62	+22	+32	−18	−42	−52	+52	− 6	2	2.09
111171	22 31 18.42	−02 54 40.3	6.15	G	337.826 770 55	−02.911 181 94		6.89	−9.38	−38.68	0.80	0.57	0.90	1.05	0.76	+23	− 3	− 3	+15	+ 8	+23	+ 7	−37	+21	+19	0	−0.72
111172 H	22 31 18.63	+41 13 47.3	9.66	H	337.827 635 72	+41.229 815 06	B	8.07	7.02	−15.13	2.68	3.62	5.00	2.90	4.50	−19	+10	−13	+36	+ 7	+ 3	− 1	−24	+36	−36	2	2.51
*111173	22 31 19.08	−09 25 33.0	11.16	G	337.829 484 28	−09.425 844 61		18.91	−140.52	−195.41	2.22	1.36	2.36	2.84	1.58	+11	− 4	− 2	−16	+13	+24	+ 7	−35	+20	− 4	0	0.51
*111174	22 31 19.03	+63 49 03.4	7.18	H	337.829 304 62	+63.817 616 77		5.15	9.29	5.73	0.57	0.61	0.70	0.72	0.69	−17	+13	+ 1	+ 8	+15	−20	+20	−33	+30	−17	0	−0.14
111175	22 31 20.20	+41 13 07.0	8.04	H	337.834 173 05	+41.218 610 88		3.74	−9.59	−8.20	0.51	0.80	1.15	0.58	1.05	−28	+ 2	+ 0	+34	+11	+ 4	+ 9	−27	+26	−32	0	−1.66
111176	22 31 21.33	+26 16 26.6	8.46	H	337.838 856 95	+26.274 064 89		1.39	31.77	1.97	0.80	0.87	1.14	0.95	1.57	+31	+21	+ 2	+ 7	−12	−11	+ 0	−21	+24	+51	0	−0.67
111177	22 31 21.77	+08 57 51.0	9.01	H	337.840 705 64	+08.964 179 99		10.83	40.24	−143.46	1.07	0.90	1.37	1.55	1.08	+42	+20	+20	+14	+16	+32	+ 2	−15	− 4	+10	2	0.36
111178	22 31 22.52	+49 53 17.7	9.46	H	337.843 836 86	+49.888 263 71		1.39	4.39	1.38	0.69	0.74	1.03	0.71	0.76	−17	+11	+ 5	− 3	+16	−17	+22	−16	+31	− 4	1	−0.20
111179	22 31 22.87	+56 00 28.8	8.88	H	337.845 277 45	+56.008 011 76		2.10	4.37	−0.93	0.69	0.66	0.84	0.86	0.73	−12	−15	+24	− 5	+23	+15	+17	+12	− 2	+ 4	0	−1.20
111180	22 31 23.26	+39 48 14.0	10.38	G	337.846 904 11	+39.803 896 04		3.02	1.51	−5.42	1.23	1.21	1.62	1.80	1.83	+ 1	+ 3	− 4	+17	+ 3	+ 3	+ 8	−21	+16	+13	0	1.31
111181 H	22 31 23.53	+47 52 49.8	9.74	H	337.848 039 65	+47.880 509 00	A	1.35	0.72	−3.53	2.02	1.83	2.61	1.99	1.78	+ 0	+ 4	+ 0	+ 5	+13	− 2	+20	− 8	+19	+22	1	1.08
111182	22 31 23.63	−42 37 53.5	9.73	H	337.848 465 79	−42.631 531 56		4.18	58.36	−44.61	1.08	0.79	1.40	1.31	0.88	+17	−15	−23	+ 3	−15	+31	− 7	−31	+21	+30	0	−0.91
111183	22 31 23.86	−41 25 59.2	8.16	H	337.849 417 21	−41.433 123 29		1.13	17.28	−22.06	0.87	0.52	1.03	0.99	0.56	+ 1	−15	−13	+ 8	− 8	+27	+ 5	−46	+21	+28	1	0.22
111184	22 31 24.61	+51 07 26.5	8.33	H	337.852 531 07	+51.124 020 95		2.70	8.26	0.47	0.70	0.60	0.87	0.71	0.62	−19	+ 8	+10	−13	+21	+ 0	+25	−24	+27	− 1	0	−1.02
111185	22 31 26.89	+27 59 45.0	9.03	H	337.862 053 72	+27.995 820 04		1.98	10.26	−24.41	0.86	0.83	1.27	1.09	1.26	+ 6	− 7	+ 0	+50	−13	−13	−17	− 6	+17	+ 3	0	−2.71
111186	22 31 28.17	+31 51 37.5	8.56	H	337.867 368 69	+31.860 424 41		9.32	47.23	−9.01	0.63	0.61	0.97	0.68	0.76	+16	+ 6	−10	+13	+12	−18	+14	+ 5	+12	+25	0	0.03
111187	22 31 28.59	−50 56 15.8	7.03	H	337.869 118 73	−50.937 726 39		9.70	57.49	−1.63	0.68	0.51	0.97	0.67	0.55	+ 4	− 4	−27	−35	+ 2	+17	+ 3	−19	+16	+33	1	−0.33
111188	22 31 30.29	−32 20 45.7	4.29	H	337.876 206 51	−32.346 027 98		21.99	59.64	−18.70	0.62	0.48	0.78	0.64	0.46	+37	− 1	+ 0	− 1	−12	+22	−12	−14	+18	+37	0	1.20
111189	22 31 31.64	+42 13 18.2	7.95	H	337.881 818 18	+42.221 729 97		5.99	−17.62	−35.23	0.42	0.53	0.85	0.50	0.68	−35	+ 5	+ 4	+26	− 2	− 3	+ 1	− 8	+26	−31	1	−0.29
111190	22 31 33.26	−53 22 57.0	8.23	2 H	337.888 565 17	−53.382 491 53		−1.39	12.61	−7.25	0.65	0.65	1.09	0.85	0.71	+21	− 4	− 1	+11	− 3	+42	− 2	−12	+17	+32	0	−0.34
111191	22 31 34.37	+29 32 34.2	6.33	1 H	337.893 213 98	+29.542 838 95		8.00	−30.20	−33.19	0.47	0.48	0.73	0.47	0.58	+18	+18	+16	+ 1	+12	− 5	+20	+ 2	+21	+38	0	−1.50
111192	22 31 34.93	−22 40 36.8	8.93	H	337.895 554 88	−22.676 877 91		6.70	14.31	−123.19	1.04	0.81	1.23	1.35	0.75	+19	+ 8	−21	−16	+25	− 7	+19	− 8	+11	+ 1	0	0.16
111193	22 31 35.16	−33 50 52.0	9.22	H	337.896 488 54	−33.847 770 90		6.68	−4.08	−12.26	0.92	0.70	1.25	1.01	0.69	+35	− 7	− 6	+ 4	−15	+19	−15	−26	+13	+35	3	0.86
111194	22 31 35.91	−13 48 44.5	8.99	H	337.899 605 38	−13.812 368 22		4.68	−12.59	−21.96	1.26	1.10	1.58	1.73	1.68	+23	+17	−23	+15	+11	+40	+23	+26	+24	+49	0	0.19
111195	22 31 36.19	+02 09 46.7	10.71	H	337.900 780 72	+02.162 975 98		8.99	51.69	−328.64	1.70	1.39	2.13	2.04	1.59	+34	+ 1	−10	+ 5	− 5	+29	− 9	−31	+35	+24	0	−0.36
111196	22 31 37.83	−85 58 02.6	5.76	G	337.907 616 19	−85.967 402 06		9.88	−37.64	61.25	0.42	0.42	0.51	0.51	0.46	+ 6	+ 1	− 2	+ 0	+ 9	+ 8	+ 9	−10	−10	+10	0	0.24
111197	22 31 38.52	+51 14 29.2	7.95	H	337.910 492 76	+51.241 440 61		3.52	8.36	1.49	0.55	0.51	0.71	0.58	0.55	−15	+ 3	+12	−11	+26	− 5	+27	−10	+19	+ 3	0	−0.96
111198	22 31 39.34	−51 13 40.9	11.42	G	337.913 902 56	−51.228 038 72		1.39	−8.91	−255.57	1.83	1.55	2.74	2.19	1.65	+12	− 6	−21	−10	+16	− 5	−28	+11	+24	+ 1	2	2.40
111199

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
111101	9.265	0.014	9.301	0.019		−0.028	0.022	T	−0.01	0.02	L	9.2841	0.0017	0.025	200		9.24	9.33					1							
111102	9.099	0.025	8.141	0.018		0.843	0.023	T	0.86	0.02	L	8.2118	0.0018	0.014	90		8.19	8.23		C			1							S
111103	9.936	0.026	9.368	0.024		0.531	0.031	T	0.60	0.03	L	9.4564	0.0019	0.017	118		9.43	9.50					1							
111104	4.394	0.001	4.508	0.002		−0.086	0.018	G	−0.09	0.03	C	4.4912	0.0004	0.006	225		4.48	4.50					1							S
111105	11.136	0.063	10.724	0.073		0.389	0.089	T	0.45	0.10	L	10.9221	0.0069	0.053	90		10.83	11.01					1 X							G
111106	8.404	0.009	8.257	0.010		0.141	0.013	T	0.16	0.01	L	8.2928	0.0018	0.018	114		8.26	8.32		C			1							
111107	10.146	0.021	8.902	0.013		1.061	0.019	T	1.03	0.02	L	8.9574	0.0015	0.019	153		8.92	8.99		C			1							
111108	8.688	0.012	8.172	0.011		0.506	0.015	G	0.58	0.02	H	8.2155	0.0018	0.012	86		8.19	8.24		C			1							S
111109	9.560	0.019	9.132	0.020	*	0.413	0.001	G	0.48	0.00	H *	9.1649	0.0026	0.020	94	*	9.13	9.20		C	22305+2232	I 1	2 C S B	AB	177	0.170	0.021	0.90	0.57	
111110	9.868	0.022	9.095	0.019		0.703	0.023	T	0.76	0.02	L	9.1756	0.0029	0.022	87		9.13	9.21					1							
111111	10.911	0.053	9.780	0.031		0.973	0.048	T	0.96	0.04	L	9.8402	0.0031	0.029	93		9.80	9.89					1							
111112	7.011	0.005	6.992	0.007	*	0.022	0.008	T	0.04	0.01	L *	6.9957	0.0009	0.007	112	*	6.98	7.01		D	22305+6137	I 1	2 C A	AB	220	0.317	0.001	0.29	0.02	S
111113	7.723	0.011	7.355	0.010	*	0.349	0.014	T	0.41	0.02	L *	7.4536	0.0015	0.012	88	*	7.44	7.48		D	22305−0807	I 1	2 C A	AB	328	8.056	0.004	0.96	0.02	S
111114						0.860	0.005	G	0.90	0.01	H	11.3529	0.0048	0.047	166		11.24	11.43					1							G
111115	8.815	0.018	8.485	0.020	B	0.341	0.001	G	0.40	0.00	H *	7.7379	0.0015	0.015	132	*	7.71	7.77		D	22306+5331	I 1	2 C A	AB	70	4.701	0.003	0.23	0.01	S
111116	11.384	0.080	10.191	0.044		0.840	0.020	G	0.86	0.01	H	10.2873	0.0027	0.025	89		10.22	10.33		C			1							
111117	9.601	0.021	9.421	0.027		0.172	0.032	T	0.19	0.03	L	9.4798	0.0025	0.022	89		9.43	9.53					1							
111118	10.137	0.024	8.896	0.014		1.059	0.022	T	1.03	0.02	L	8.9652	0.0016	0.015	108		8.94	8.99					1							
111119	10.995	0.055	9.006	0.019		1.685	0.048	T	2.40	0.11	O	8.8172	0.0148	0.071	82		8.72	8.94		U 2			1 S							
111120	9.575	0.021	8.330	0.013		1.062	0.019	T	1.03	0.02	L	8.3827	0.0018	0.014	79		8.36	8.41		C			1							
111121	9.790	0.018	9.747	0.025		0.044	0.029	T	0.06	0.02	L	9.7654	0.0026	0.032	151		9.70	9.82					1							G
111122	10.532	0.041	9.058	0.021		1.241	0.036	T	1.20	0.04	L	9.0871	0.0030	0.014	77		9.07	9.13					1							
111123	4.780	0.003	4.821	0.003	A	−0.053	0.007	G	−0.04	0.02	A *	4.8253	0.0007	0.005	75	*	4.82	4.84		C	22306−1041	H 1	2 C C	AB	10	3.744	0.045	3.60	0.45	S D
111124	8.556	0.012	7.393	0.008		0.998	0.011	T	0.98	0.01	L	7.4570	0.0007	0.008	71		7.44	7.47		D			1							S
111125	9.114	0.016	8.565	0.015	*	0.514	0.020	T	0.59	0.02	L *	8.6177	0.0020	0.013	81	*	8.60	8.64		D	22307+1758	I 1	2 C S A	BA	124	0.139	0.009	0.54	0.53	
111126	9.741	0.018	9.689	0.025	*	0.053	0.029	T	0.07	0.02	L *	9.6526	0.0021	0.022	155	*	9.61	9.69		D	22307+4856	I 1	2 C A	AB	35	0.305	0.005	0.05	0.08	G
111127	7.038	0.005	6.946	0.006		0.065	0.006	G	0.06	0.01	A	6.9712	0.0009	0.010	117		6.96	6.99		C			1 G							S
111128	8.547	0.008	8.593	0.010		−0.037	0.012	T	−0.01	0.01	L	8.5961	0.0017	0.021	161		8.56	8.63					1							S
111129	10.899	0.045	9.026	0.017		1.589	0.040	T	2.12	0.10	O	8.8893	0.0028	0.023	116		8.85	8.93		U			1							
111130	8.827	0.014	8.349	0.014		0.475	0.015	G	0.55	0.02	H	8.4055	0.0012	0.010	75		8.38	8.42					1							S
111131	10.607	0.044	9.873	0.037	A	0.747	0.007	G	0.79	0.01	H *	9.8811	0.0044	0.028	72	*	9.84	9.94			22308+0630	H 1	2 C B	AB	147	1.272	0.038	2.41	0.13	
111132	8.413	0.009	8.270	0.010		0.138	0.013	T	0.15	0.01	L	8.3052	0.0016	0.019	163		8.27	8.33					1 G							
111133	9.324	0.017	8.009	0.010	*	1.117	0.016	T	1.08	0.02	L *	8.0568	0.0013	0.012	74	*	8.03	8.08		D	22308−2410	H 1	2 C B	AB	11	0.222	0.040	2.53	0.47	S
111134	8.572	0.008	8.103	0.008		0.432	0.001	G	0.50	0.00	H	8.1622	0.0015	0.017	166		8.13	8.19					1							S
111135	9.629	0.016	9.375	0.019		0.242	0.023	T	0.27	0.03	L	9.3996	0.0016	0.018	126		9.35	9.44		C			1							
111136	9.028	0.010	8.259	0.009		0.700	0.011	T	0.76	0.01	L	8.3154	0.0016	0.016	129		8.29	8.34					1							
111137	9.265	0.014	8.831	0.014		0.424	0.016	T	0.49	0.02	L	8.8636	0.0015	0.016	124		8.84	8.89		C			1							
111138	7.828	0.010	6.556	0.006		1.083	0.002	G	1.05	0.00	H	6.6079	0.0012	0.010	70		6.59	6.63					1							S
111139	8.275	0.007	8.282	0.009		−0.002	0.010	T	0.02	0.01	L	8.2985	0.0013	0.017	213		8.27	8.33					1							
111140	8.958	0.013	7.668	0.008		1.097	0.012	T	1.06	0.01	L	7.7223	0.0013	0.012	100		7.70	7.74		C			1							S
111141	9.425	0.024	7.899	0.013		1.282	0.021	T	1.24	0.02	L	7.9125	0.0017	0.013	56		7.90	7.94					1							S
111142	7.963	0.005	7.726	0.006		0.221	0.008	T	0.24	0.01	L	7.7655	0.0009	0.015	187		7.74	7.79					1							S
111143	7.555	0.005	6.877	0.005		0.603	0.005	G	0.67	0.00	H	6.9407	0.0005	0.008	158		6.93	6.96			22310−4926	I 1	1							S
111144	11.265	0.045	9.437	0.015		1.538	0.040	T	1.59	0.09	L	9.4012	0.0022	0.025	193		9.34	9.44					1							
111145	8.835	0.009	8.380	0.009		0.463	0.015	G	0.53	0.02	H	8.4243	0.0017	0.018	154		8.39	8.46					1							S
111146	9.655	0.018	9.470	0.021		0.177	0.026	T	0.19	0.03	L	9.5733	0.0016	0.018	121		9.55	9.61		C			1							G
111147	7.657	0.008	7.721	0.011		−0.054	0.012	T	−0.03	0.01	L	7.7215	0.0020	0.022	142		7.69	7.75		U 2			1							S
111148	8.461	0.009	7.757	0.007		0.649	0.009	T	0.71	0.01	L	7.8120	0.0010	0.011	182		7.79	7.83					1							S
111149						1.280	0.014	G	1.34	0.14	K	12.1983	0.0076	0.063	65		12.06	12.29					1							G
111150	10.548	0.051	9.407	0.031		0.973	0.047	T	0.96	0.04	L	9.5145	0.0047	0.024	69		9.48	9.56					1							
111151	9.134	0.012	8.580	0.011		0.524	0.012	T	0.60	0.01	L	8.6415	0.0015	0.018	148		8.61	8.68		C			1							S
111152	9.182	0.012	9.105	0.015		0.076	0.018	T	0.09	0.02	L	9.1453	0.0022	0.021	151		9.11	9.19					1							
111153	9.780	0.017	9.057	0.015		0.650	0.017	T	0.71	0.01	L	9.1088	0.0018	0.019	142		9.07	9.14		C			1							
111154	10.433	0.035	8.851	0.017		1.326	0.031	T	1.29	0.04	L	8.8716	0.0020	0.021	76		8.83	8.91					1							
111155	9.665	0.021	9.560	0.028		0.108	0.015	G	0.12	0.02	H	9.6152	0.0028	0.032	93		9.57	9.66					1							
111156	11.949	0.109	10.967	0.073		0.849	0.102	T	0.89	0.11	L	10.9355	0.0036	0.042	176		10.86	11.01					1							G
111157	9.867	0.022	9.743	0.028		0.083	0.006	G	0.10	0.01	H	9.8068	0.0029	0.026	110		9.76	9.85		C			1							G
111158	11.201	0.070	9.956	0.037		1.062	0.062	T	1.03	0.05	L	10.0205	0.0035	0.026	77		9.97	10.08		C			1							
111159	9.623	0.020	7.767	0.009		1.543	0.017	T	1.60	0.04	L	7.7484	0.0008	0.009	83		7.74	7.76					1							S
111160	9.823	0.017	9.369	0.017		0.442	0.019	T	0.51	0.02	L	9.4418	0.0022	0.030	187		9.39	9.50					1							
111161	9.672	0.021	9.055	0.019	A	0.351	0.400	G	0.68	0.03	L *	9.0027	0.0020	0.020	120	*	8.97	9.04		D	22312+6528	I 1	2 C A	AB	179	4.846	0.022	2.54	0.11	
111162	8.826	0.014	8.257	0.013		0.536	0.014	T	0.61	0.01	L	8.2411	0.0023	0.094	67		8.22	8.66	2.07	P 1 A			1							S
111163	9.742	0.022	9.395	0.023		0.329	0.030	T	0.38	0.04	L	9.4557	0.0029	0.023	75		9.42	9.49					1							S
111164	7.799	0.011	7.675	0.019	*	0.120	0.021	T	0.13	0.02	L *	7.7852	0.0014	0.014	146	*	7.76	7.81		D	22312+5052	I 1	2 C A	AB	239	1.574	0.005	1.49	0.02	S
111165	10.489	0.034	9.806	0.029	*	0.631	0.037	T	0.70	0.03	L *	9.8855	0.0033	0.027	101	*	9.83	9.92			22313+3820	H 1	2 C A	AB	258	0.253	0.034	1.49	0.41	G
111166	9.482	0.018	9.067	0.018		0.392	0.024	T	0.46	0.03	L	9.0426	0.0033	0.155	102		9.01	9.58	3.38	P 1 A			1 V							
111167	7.999	0.010	7.745	0.010		0.238	0.014	T	0.27	0.02	L	7.7819	0.0017	0.015	89		7.76	7.81		C			1							S
111168	10.157	0.028	10.209	0.043		−0.007	0.011	G	0.01	0.01	H	10.1726	0.0031	0.029	100		10.13	10.23					1							G
111169	3.814	0.002	3.780	0.002		0.031	0.003	T	0.05	0.00	L	3.7820	0.0003	0.003	148		3.78	3.79		C	22313+5017	I 1	1							S
111170	6.834	0.005	6.220	0.004		0.565	0.012	G	0.64	0.02	A	6.2694	0.0009	0.007	86		6.26	6.28		C			1 O							S
111171	7.539	0.007	6.272	0.005		1.083	0.005	G	1.05	0.00	H	6.3169	0.0008	0.007	80		6.31	6.33		C			1							S
111172	10.191	0.029	9.525	0.026	*	0.617	0.033	T	0.69	0.03	L *	9.7913	0.0042	0.053	201	*	9.72	9.89		R	22313+4113	I 2	2 C A	BC	32	3.682	0.014	0.99	0.04	G
111173						1.202	0.013	G	1.34	0.02	I	11.2739	0.0051	0.050	101		11.15	11.37			22313−0926	I 1	1							G
111174	8.712	0.018	7.329	0.011		1.170	0.017	T	1.13	0.01	L	7.3477	0.0011	0.009	108		7.33	7.36		C			1							S
111175	9.642	0.012	8.153	0.007		1.289	0.218	G	1.21	0.03	L	8.1965	0.0015	0.017	208		8.17	8.23		D	22313+4113	I 2	1							
111176	10.027	0.027	8.596	0.015		1.208	0.024	T	1.17	0.02	L	8.6231	0.0018	0.015	75		8.59	8.66		C			1							
111177	9.584	0.018	9.045	0.017		0.505	0.022	T	0.58	0.02	L	9.1203	0.0027	0.018	83		9.08	9.16		C			1							S
111178	9.547	0.022	9.446	0.029		0.098	0.034	T	0.11	0.04	L	9.5031	0.0018	0.022	156		9.46	9.55		C			1							G
111179	9.021	0.013	8.866	0.015		0.149	0.019	T	0.16	0.02	L	8.9303	0.0018	0.014	122		8.90	8.95					1							
111180	10.371	0.033	10.248	0.044		0.055	0.006	G	0.07	0.01	H	10.4036	0.0040	0.029	98		10.35	10.49		C			1							G
111181	10.047	0.026	10.052	0.038	A	0.100	0.495	G	0.35	0.19	L *	9.8161	0.0020	0.027	159	*	9.77	9.87		D	22314+4753	I 1	2 C A	AB	271	2.025	0.009	1.25	0.04	G
111182	10.427	0.027	9.776	0.024		0.596	0.027	T	0.67	0.03	L	9.8580	0.0021	0.025	139		9.80	9.90					1							
111183	9.770	0.018	8.297	0.010		1.241	0.016	T	1.20	0.02	L	8.3217	0.0015	0.014	137		8.30	8.34					1							S
111184	10.274	0.028	8.487	0.012		1.488	0.024	T	1.51	0.04	L	8.4530	0.0016	0.016	144		8.43	8.48					1							
111185	10.523	0.037	9.173	0.020		1.144	0.033	T	1.11	0.03	L	9.1933	0.0021	0.021	111		9.15	9.22					1							
111186	9.121	0.012	8.608	0.012		0.482	0.015	T	0.55	0.02	L	8.6714	0.0013	0.015	137		8.65	8.71		C			1							
111187	8.118	0.008	7.138	0.005		0.859	0.007	T	0.87	0.01	L	7.1890	0.0014	0.013	156		7.17	7.21					1							S
111188	4.315	0.002	4.291	0.002		0.011	0.002	G	0.03	0.02	A	4.3003	0.0004	0.004	108		4.29	4.32			22315−3221	I 1	1							S
111189	8.150	0.007	7.965	0.007		0.177	0.009	T	0.19	0.01	L	8.0074	0.0011	0.013	245		7.99	8.03		C			1							S
111190	10.258	0.024	8.463	0.010		1.525	0.021	T	2.54	0.04	O	8.2391	0.0031	0.035	162		8.17	8.30		U 2			1							
111191	6.585	0.004	6.360	0.004		0.209	0.006	T	0.23	0.01	L	6.3917	0.0019	0.014	105		6.37	6.42	1.17	P 1 A			1							S
111192	9.840	0.029	8.996	0.022		0.742	0.028	T	0.79	0.02	L	9.0650	0.0022	0.013	68		9.04	9.09		C			1							
111193	9.819	0.021	9.249	0.020		0.537	0.021	T	0.61	0.02	L	9.3391	0.0022	0.018	133		9.31	9.37					1							
111194	10.485	0.049	9.075	0.025		1.191	0.043	T	1.15	0.04	L	9.1609	0.0037	0.021	50		9.11	9.19		C			1							
111195	11.260	0.087	10.775	0.095		0.520	0.044	G	0.59	0.05	H	10.8266	0.0030	0.024	64		10.78	10.87					1							G
111196	7.079	0.004	5.874	0.003		1.020	0.004	G	0.99	0.00	H	5.9251	0.0005	0.006	146		5.92	5.94					1							S
111197	7.997	0.007	7.957	0.008		0.042	0.010	T	0.06	0.01	L	7.9717	0.0012	0.013	150		7.95	7.99					1							S
111198	11.937	0.135	11.121	0.094		0.423	0.003	G	0.49	0.00	H	11.5487	0.0062	0.063	146		11.45	11.64					1							G
111199	9.185	0.011	7.987	0.007		1.025	0.010	T	1.00	0.01	L	8.0481	0.0014	0.016	160		8.02	8.08					1							S
111200	6.733	0.005	6.416	0.005		0.290	0.009	G	0.34	0.03	C	6.4696	0.0007	0.006	95		6.46	6.48		C			1 O							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
111201	22 31 41.89	−58 23 30.8	8.20	H	337.924 528 75	−58.391 893 88		1.41	9.80	−10.28	0.70	0.68	1.07	0.85	0.70	+ 4	− 2	− 5	−15	+ 2	+ 5	+ 2	+ 9	− 4	+ 5	0	−0.64
111202	22 31 43.72	+34 13 39.9	7.95	G	337.932 160 12	+34.227 749 96		3.32	−2.38	−21.54	0.71	0.72	1.00	1.07	1.13	+11	− 1	+ 3	+21	−11	−16	−12	− 6	+ 9	+ 8	0	−2.16
111203	22 31 43.86	+34 39 53.5	7.99	H	337.932 767 57	+34.664 866 31		8.71	27.36	−14.36	0.63	0.59	0.83	0.90	0.83	+14	+14	− 4	+14	−13	− 1	−14	− 7	+11	− 3	0	−0.70
111204	22 31 44.56	−21 53 07.7	9.38	H	337.935 653 12	−21.885 479 60		9.27	97.71	70.01	1.20	1.04	1.40	1.73	0.97	+26	− 8	−24	+16	− 8	+10	−10	− 5	+ 7	− 5	0	2.30
111205	22 31 44.59	+10 45 47.5	7.86	H	337.935 805 20	+10.763 189 10		5.59	−13.60	−13.63	0.89	0.66	1.00	1.24	0.76	+24	+19	+23	−22	+12	+ 3	+ 9	−22	+ 2	−11	0	1.81
111206	22 31 45.22	−35 17 25.6	6.60	H	337.938 399 06	−35.290 443 17		6.70	47.36	−2.07	0.74	0.47	0.94	0.87	0.52	+16	− 3	− 3	− 3	−16	+26	−12	−42	+21	+30	0	−0.25
111207	22 31 45.28	+43 16 52.2	9.95	H	337.938 668 03	+43.281 161 13		1.71	−2.12	−3.00	0.87	0.96	1.50	0.99	1.11	−45	+ 8	+ 1	+17	+ 0	−11	+ 3	−13	+21	−43	0	−0.42
111208 H	22 31 47.09	+80 10 34.3	8.94	H	337.946 197 14	+80.176 183 29	*	2.00	−8.63	−9.24	1.77	1.53	1.04	1.19	1.15	+ 4	− 2	+12	+11	+10	+12	+ 8	−14	− 5	+ 1	2	0.70
111209	22 31 47.50	+49 42 12.3	9.57	H	337.947 929 15	+49.703 414 81		19.77	358.98	132.42	0.83	0.83	1.23	0.84	0.88	−14	+10	− 2	−11	+15	−14	+19	−25	+32	− 3	0	−1.43
111210	22 31 47.60	−15 53 08.9	11.03	G	337.948 333 51	−15.885 809 77		19.27	217.31	79.07	2.09	2.03	2.46	2.96	2.49	+43	−30	−34	− 8	−11	+12	− 9	−34	+ 2	+36	0	−0.30
111211	22 31 47.81	−46 34 46.8	7.24	H	337.949 200 02	−46.579 655 11		7.05	−5.71	−17.18	0.63	0.45	0.77	0.67	0.46	+ 9	− 6	− 2	+ 9	−10	+24	−10	−13	+ 9	+ 9	0	0.17
111212	22 31 48.03	+07 47 27.6	8.03	H	337.950 133 83	+07.790 999 09		6.91	22.80	−17.19	0.81	0.65	1.18	1.52	0.96	+30	+ 1	− 4	−18	+22	+ 0	+ 6	−38	+35	−22	0	1.95
111213	22 31 49.10	+13 06 15.7	8.10	G	337.954 571 21	+13.104 355 69		8.40	61.45	33.91	0.78	0.65	0.94	0.96	0.81	+28	+12	+14	+ 8	+ 7	− 7	+ 8	+ 3	+ 4	+16	0	0.11
111214 H	22 31 51.20	+52 36 47.6	8.88	H	337.963 313 24	+52.613 217 78	*	2.54	2.55	−1.89	0.77	0.67	0.98	0.87	0.76	−11	− 3	+15	− 9	− 5	− 9	− 2	−15	+23	+ 6	1	−1.30
111215	22 31 51.71	−45 23 55.8	9.84	H	337.965 458 17	−45.398 838 87		9.64	−10.94	−17.92	1.32	0.81	1.45	1.74	0.79	+14	− 1	− 4	−14	−14	+15	−13	−50	+ 6	+11	0	−0.66
111216	22 31 52.51	+32 22 29.9	9.64	H	337.968 772 01	+32.374 980 70		1.96	12.80	5.82	0.79	0.90	1.24	0.98	1.21	+23	− 4	+ 1	+18	+ 4	−24	+ 5	+ 7	− 5	+30	0	0.04
111217	22 31 54.84	+37 12 13.8	9.09	H	337.978 498 76	+37.203 843 13		6.00	8.07	1.75	0.94	0.92	1.44	1.23	1.22	− 8	+23	−10	−19	+ 5	+ 7	+15	−31	+48	− 5	2	−0.65
111218	22 31 58.06	−28 07 55.1	9.85	H	337.991 912 36	−28.131 973 54		2.22	29.26	−65.12	1.44	1.12	1.54	1.48	1.06	+22	− 4	− 8	−41	− 3	+ 4	− 1	−16	+11	+14	0	−0.94
111219	22 31 58.40	−43 32 52.5	7.40	2 H	337.993 329 10	−43.547 904 73		3.81	18.08	−16.84	0.79	0.47	0.91	1.01	0.49	− 2	+ 4	−14	+31	+ 1	+19	+ 9	−25	+20	+13	0	0.59
111220	22 31 59.18	+60 42 04.2	9.67	G	337.996 563 12	+60.701 156 35		0.67	−3.49	−4.21	0.93	0.91	1.09	1.18	0.96	−22	−20	+31	−12	− 3	− 2	− 2	−15	+ 1	−18	0	0.21
111221	22 32 00.82	+63 11 30.6	9.99	2 H	338.003 424 87	+63.191 824 59	C	−3.83	−2.27	−3.82	2.16	1.98	2.06	2.57	2.15	−27	+12	− 3	− 5	+16	+ 1	+19	−27	+20	−23	8	1.85
111222	22 32 02.87	+40 23 40.7	9.64	H	338.011 944 49	+40.394 641 08		3.71	−0.98	−7.74	1.12	0.98	1.48	1.30	1.44	+ 3	+13	−14	+15	−10	+ 2	−10	−13	+25	+ 0	0	−0.47
111223	22 32 03.15	−42 44 24.4	8.35	H	338.013 105 36	−42.740 116 44		7.69	17.19	20.07	0.88	0.61	1.07	1.01	0.66	+ 4	−11	−11	+ 3	− 5	+19	+ 0	−33	+17	+18	0	−0.17
111224	22 32 03.26	−36 31 14.4	9.70	H	338.013 594 89	−36.520 675 88		4.03	3.14	9.57	1.22	0.79	1.55	1.26	0.84	− 2	+17	− 2	− 5	− 6	+30	+ 1	−56	+11	+12	0	−1.00
111225	22 32 03.30	−21 35 56.6	9.87	H	338.013 759 82	−21.599 064 31		4.55	6.23	−3.87	1.40	1.17	1.73	1.76	1.04	+38	−13	−32	+ 1	− 2	+ 4	− 8	−22	+20	+15	0	1.19
111226	22 32 05.38	−39 25 32.2	9.82	H	338.022 421 68	−39.425 607 77		7.03	−56.38	−25.44	1.08	0.69	1.33	1.27	0.70	+18	−23	+ 2	+32	− 3	− 1	+ 0	−33	+ 3	+24	0	−0.66
111227	22 32 06.64	+33 22 36.6	7.67	H	338.027 663 90	+33.376 831 88		3.20	54.16	3.78	0.62	0.60	0.90	0.88	0.89	+ 7	+26	− 4	+10	− 5	−13	− 4	+21	+ 7	+16	2	−1.40
111228	22 32 07.70	−31 10 23.6	8.52	G	338.032 085 63	−31.173 214 81		4.78	290.31	−156.65	0.85	0.73	1.14	0.90	0.74	+50	− 2	+ 7	+36	+ 5	+15	+ 5	+13	+ 8	+53	0	0.80
111229	22 32 07.89	−44 36 39.6	10.38	G	338.032 890 06	−44.611 011 70		1.68	4.78	−4.61	1.46	1.03	1.91	1.97	1.02	+ 9	+16	−20	− 9	−13	+32	− 3	−52	+21	+20	0	0.14
111230	22 32 08.87	−69 06 28.1	7.04	H	338.036 938 91	−69.107 809 19		10.11	124.21	−26.49	0.48	0.50	0.70	0.52	0.50	− 7	+ 1	−23	−12	+ 9	− 4	+ 8	− 9	−18	+ 3	2	−0.38
111231 H	22 32 08.90	−66 09 25.7	9.26	H	338.037 081 00	−66.157 147 71	A	8.20	37.92	−36.51	1.47	1.48	1.92	1.66	1.42	− 7	− 8	− 5	− 6	− 7	− 3	− 4	− 4	− 5	−15	2	−0.86
111232	22 32 09.24	−29 49 04.6	10.15	H	338.038 500 24	−29.817 951 72		−1.05	−14.59	−9.10	1.76	1.21	1.85	2.11	1.35	+ 3	− 5	− 8	−44	+17	+24	+15	−21	+33	+11	0	0.00
111233	22 32 09.31	+15 49 30.9	7.75	H	338.038 799 96	+15.825 256 39		−0.02	31.75	2.32	0.90	0.66	1.04	1.18	0.90	+10	+ 9	+ 0	−44	+12	− 2	+18	−20	+22	− 7	0	0.41
111234	22 32 09.41	−13 35 51.3	7.74	H	338.039 199 60	−13.597 588 56		9.78	−18.43	−66.63	0.93	0.71	1.10	1.27	1.02	+27	− 8	−28	+19	+ 7	+13	+ 8	+11	+30	+44	0	−1.15
111235	22 32 10.29	+31 07 31.1	9.58	H	338.042 881 00	+31.125 293 47		1.41	9.78	0.39	0.67	0.77	1.07	0.77	0.87	+34	+ 4	− 1	− 4	+ 0	+ 2	+ 2	−17	+15	+40	0	−1.19
111236	22 32 10.35	+72 51 21.6	8.36	H	338.043 131 43	+72.855 999 09		0.99	8.35	5.84	0.64	0.73	0.79	0.69	0.79	− 4	− 3	+19	−25	+18	− 2	+18	−20	+11	+ 9	0	1.16
111237	22 32 11.50	−43 15 47.1	6.91	H	338.047 935 48	−43.263 084 37		6.36	−13.22	7.73	0.66	0.43	0.80	0.80	0.45	+ 2	−15	−12	+21	+ 5	+ 5	+ 7	−23	+12	+10	0	2.84
111238	22 32 12.61	−04 03 45.6	8.18	H	338.052 549 47	−04.062 660 71		1.43	−2.90	−20.32	0.94	0.68	1.16	1.29	0.94	+33	+ 6	−13	+14	−10	+41	− 4	−38	+36	+42	0	−1.53
111239	22 32 13.85	+53 40 09.4	8.52	H	338.057 689 43	+53.669 282 84		2.93	16.73	1.97	0.60	0.56	0.76	0.65	0.59	− 9	− 9	+19	+ 4	+13	− 9	+15	− 4	+ 4	+10	0	−0.64
111240	22 32 15.95	−35 55 14.0	8.47	H	338.066 444 84	−35.920 559 76		1.40	7.41	9.25	0.87	0.58	1.13	1.05	0.66	+12	− 1	− 4	− 9	−14	+33	−11	−47	+19	+23	0	0.08
111241	22 32 16.06	+59 29 35.7	8.61	H	338.066 935 85	+59.493 248 29		8.35	203.15	−24.02	0.74	0.72	0.88	0.82	0.81	− 1	+24	+23	+29	− 6	+ 3	− 1	+10	+10	+ 8	0	1.02
111242	22 32 16.27	+76 13 35.3	5.70	H	338.067 812 35	+76.226 468 33		4.43	−19.96	−11.12	0.46	0.41	0.49	0.51	0.45	− 1	+ 5	+26	+19	−10	− 6	− 9	+13	+ 6	− 8	0	−1.44
111243 H	22 32 17.68	+55 11 57.7	8.34	H	338.073 649 78	+55.199 367 36	A	6.75	59.16	13.53	1.72	1.57	1.65	1.48	1.28	−12	−12	+16	− 6	+14	− 4	+13	−16	+12	+ 7	0	1.31
111244	22 32 17.78	+87 17 04.4	8.24	H	338.074 079 17	+87.284 557 61		3.44	−8.52	−8.29	0.53	0.55	0.65	0.69	0.64	+ 0	+ 8	+21	− 6	−16	−27	−10	− 3	+ 3	− 8	0	0.37
111245 H	22 32 18.41	+23 18 39.3	9.34	H	338.076 711 98	+23.310 923 37	*	2.16	6.83	−7.32	1.10	0.80	1.28	1.16	0.95	+12	+27	+13	−16	+ 6	+10	+10	−10	+17	+13	2	0.78
111246	22 32 18.62	−55 56 07.5	9.31	H	338.077 596 97	−55.935 419 72		5.79	−22.75	−16.51	0.87	0.82	1.31	1.04	0.82	− 2	− 6	−24	− 1	+10	− 9	+ 8	− 4	− 3	+ 9	0	0.76
111247	22 32 18.69	+54 02 13.2	6.41	H	338.077 863 12	+54.036 997 11		5.15	30.33	14.52	0.42	0.42	0.54	0.47	0.45	− 1	+ 3	+18	+11	+11	− 6	+15	+ 3	+ 8	+22	0	0.56
111248	22 32 19.56	+12 14 25.3	8.49	H	338.081 510 17	+12.240 354 18		11.52	64.99	−32.59	0.86	0.68	1.08	1.01	0.82	+21	+ 7	+12	+11	+ 5	−21	+ 9	+ 8	+19	+ 9	0	0.26
111249 H	22 32 20.23	+51 55 37.5	8.90	H	338.084 297 87	+51.927 084 66	A	1.97	3.45	−1.62	1.56	1.31	1.74	1.52	1.36	−12	− 7	+ 3	− 6	+17	− 1	+15	− 7	+29	+22	0	1.66
*111250	22 32 26.84	+58 37 05.8	10.58	3 H	338.111 827 64	+58.618 271 66		−2.88	6.20	2.48	5.53	3.69	3.97	7.28	5.54	− 2	−29	− 7	−78	− 8	+11	−18	−72	+27	+28	0	2.48
*111251	22 32 21.19	+45 49 29.1	9.46	H	338.088 306 08	+45.824 743 34		3.41	5.19	0.20	0.76	0.87	1.22	0.85	0.89	−26	+10	+ 7	− 7	+20	+ 0	+23	−22	+10	− 7	0	0.68
*111252	22 32 21.41	+40 36 54.2	8.01	1 H	338.089 219 11	+40.615 049 95		5.00	−15.84	−35.33	0.66	0.67	1.01	0.80	0.94	− 9	+10	− 4	+ 3	− 8	− 5	− 6	−18	+25	−10	0	−0.46
*111253	22 32 21.57	+60 20 04.5	8.40	H	338.089 875 96	+60.334 589 05		0.28	−3.35	−2.63	0.64	0.62	0.75	0.75	0.70	−12	+ 4	+19	+ 6	− 9	−10	− 7	−13	− 1	− 8	1	1.11
*111254	22 32 21.83	+02 35 10.4	7.07	H	338.090 948 69	+02.586 208 34		4.89	−35.36	−44.11	0.80	0.63	0.98	1.06	0.78	+20	−11	− 7	−12	+ 6	+24	− 3	−30	+41	+ 3	0	0.17
*111255	22 32 23.00	−67 04 00.9	9.17	H	338.095 849 33	−67.066 915 70		2.34	10.91	−4.39	0.85	0.90	1.23	0.96	0.91	−19	− 2	−22	−16	+13	− 4	+12	−15	− 7	− 4	1	0.50
*111256	22 32 24.35	−35 02 51.5	8.04	H	338.101 465 15	−35.047 639 13		2.73	10.57	−9.39	1.01	0.59	1.24	1.18	0.64	+13	+ 8	− 1	+26	−12	+19	− 3	−32	+21	+29	0	−1.82
*111257	22 32 25.08	+67 09 02.5	8.42	3 H	338.104 509 67	+67.150 694 65	*	1.74	−1.17	−4.79	0.70	0.78	0.83	0.85	0.84	−20	− 6	+25	− 3	+25	+17	+21	−29	+ 6	−10	0	2.75
*111258	22 32 26.12	−08 16 53.4	9.45	H	338.108 837 24	−08.281 486 95		1.73	12.60	−3.58	1.38	0.82	1.47	1.77	0.91	+22	+ 8	+ 4	+26	− 1	+16	−12	−27	+31	− 2	0	−0.48
*111259	22 32 26.37	+39 46 47.1	5.88	H	338.109 893 75	+39.779 755 11		5.19	4.73	−8.87	0.52	0.51	0.70	0.66	0.66	− 5	+11	− 4	+26	− 3	+ 3	+ 3	−21	+30	+ 3	2	1.19
*111260	22 32 26.52	+27 06 54.3	8.50	H	338.110 492 32	+27.115 078 69		3.72	−8.84	3.22	0.72	0.79	1.04	0.95	1.33	+29	+ 3	− 5	+49	− 9	+ 7	−12	−15	+19	+33	0	−0.70
*111261	22 32 26.66	−10 56 26.5	8.23	2 H	338.111 100 34	−10.940 683 90		2.15	−7.24	−0.91	1.01	0.69	1.44	1.43	1.02	+15	+ 3	−45	− 1	−17	+46	+ 5	−51	+62	+41	0	−1.58
111262	22 32 26.96	−45 00 16.7	9.31	G	338.112 337 89	−45.004 634 13		8.40	−24.58	6.20	1.30	0.78	1.51	1.70	0.76	+ 4	+14	− 5	−11	− 3	+27	+ 0	−51	+ 6	+ 9	0	−0.52
111263	22 32 27.44	+19 37 24.7	7.10	H	338.114 314 74	+19.623 528 79		3.91	36.89	37.15	0.67	0.54	0.86	0.71	0.71	+16	+25	+11	+ 3	− 7	−15	− 7	−14	− 7	+19	0	1.65
111264	22 32 27.71	+29 13 57.8	9.58	H	338.115 445 63	+29.232 729 24		9.90	31.01	−102.44	0.93	0.92	1.36	1.03	1.13	+ 7	+ 4	+ 5	+34	− 4	− 8	− 1	− 3	+17	+11	0	−1.64
111265	22 32 30.30	−31 14 39.3	10.43	H	338.126 261 94	−31.244 250 41		3.45	−16.90	12.10	1.37	1.23	1.86	1.44	1.18	+52	+ 0	+ 9	+35	+ 3	+10	+ 4	+14	+ 4	+52	1	1.34
111266 H	22 32 30.57	+59 01 37.4	8.60	H	338.127 375 43	+59.027 043 15	*	6.71	41.00	41.03	1.67	2.63	1.13	1.28	1.17	− 4	+ 9	+ 8	+20	+ 3	+ 9	+ 6	+ 5	+ 3	+19	2	1.67
111267	22 32 31.65	−62 44 13.0	9.17	H	338.131 887 72	−62.736 947 94		1.01	−39.12	−63.17	0.74	0.83	1.35	0.89	0.88	−20	+ 3	−19	+ 1	− 9	+ 7	− 7	− 9	−20	−20	0	0.58
111268	22 32 31.66	+33 48 51.1	7.96	G	338.131 935 33	+33.814 199 78		2.29	62.52	15.34	0.74	0.59	0.93	1.15	0.79	+ 5	− 3	+11	+37	−16	−33	−15	+ 5	+21	−11	0	−1.86
111269	22 32 31.96	+21 03 47.8	8.09	H	338.133 155 43	+21.063 264 81		1.20	8.54	4.06	0.96	0.74	1.11	1.04	0.82	+16	+19	+19	−29	+ 0	−20	+ 5	−11	+ 1	+ 8	0	−0.82
111270	22 32 32.09	+23 23 58.0	8.03	H	338.133 713 30	+23.399 432 08		8.14	37.79	−10.29	0.79	0.60	0.92	0.84	0.72	+ 7	+21	+ 8	−17	+ 8	− 8	+14	+ 7	+26	+ 6	0	2.24
111271	22 32 32.59	+01 34 57.3	7.80	H	338.135 797 49	+01.582 589 99		8.66	61.27	−56.20	0.98	0.81	1.28	1.13	1.16	+44	−26	−31	− 6	−20	+ 9	−33	−56	+55	+29	0	−0.50
111272	22 32 33.37	−58 46 59.8	9.73	G	338.139 025 19	−58.783 269 29		14.78	254.15	−354.68	1.03	1.04	1.60	1.14	1.00	−13	+10	−13	−12	+ 6	+10	+ 7	+ 0	+ 3	− 5	0	1.85
*111273	22 32 33.94	+07 25 05.6	9.32	H	338.141 430 82	+07.418 215 97	A	5.42	−22.16	−18.92	6.01	4.65	7.01	9.41	7.45	+27	+29	+ 9	−32	+16	−19	+20	−25	+28	−12	14	0.20
*111274	22 32 33.89	−06 28 02.1	6.94	H	338.141 201 37	−06.467 247 92		27.92	291.49	29.65	0.77	0.50	0.85	0.86	0.59	+22	− 1	+ 0	− 1	+11	+20	+10	−17	+18	+18	0	2.03
111275	22 32 34.37	−27 42 40.5	8.89	H	338.143 199 35	−27.711 255 94		3.37	16.58	1.33	1.15	0.91	1.31	1.45	0.92	+29	+13	− 7	−11	+12	− 3	+11	+ 0	+19	+21	0	−2.16
111276	22 32 34.69	+07 24 56.4	9.40	G	338.144 539 38	+07.415 667 58	B	5.85	27.76	22.43	9.06	6.83	8.49	10.92	7.46	+30	+28	+20	−14	+15	−15	+17	− 9	+25	−15	14	0.20
111277	22 32 34.81	+34 13 26.5	9.50	H																							
111278	22 32 35.38	+20 13 47.8	6.43	1 H	338.147 406 82	+20.229 944 80		18.90	166.66	30.52	0.73	0.54	0.83	0.94	0.69	+ 6	+13	+16	−27	+ 6	+ 2	+ 6	−12	−15	− 7	0	0.71
*111279	22 32 35.83	+34 13 43.7	7.94	G	338.149 276 12	+34.228 810 84		6.19	12.21	−12.20	0.78	0.69	0.97	1.14	0.96	+13	− 5	+ 2	+36	− 8	−16	−10	+12	+ 1	+ 3	0	−1.37
*111280	22 32 35.77	−62 05 25.3	8.91	H	338.149 023 73	−62.090 356 93		7.53	0.34	−10.09	0.67	0.72	1.23	0.83	0.80	−28	−13	+ 8	+11	−12	−10	−10	+ 1	− 8	−37	0	0.14
111281	22 32 36.73	−05 10 23.0	8.30	H	338.153 055 43	−05.173 067 88		2.24	16.84	2.12	1.11	0.70	1.30	1.76	0.91	+24	− 5	−27	+17	+20	+ 7	+ 6	−32	+42	+ 2	0	1.37
111282	22 32 39.37	+13 02 40.2	6.56	H	338.164 022 59	+13.044 492 73		11.46	122.68	17.63	0.63	0.51	0.75	0.72	0.64	+24	+11	+ 8	+ 2	+13	−12	+14	+13	− 8	+24	0	0.12
111283	22 32 39.58	−40 55 02.5	9.88	H	338.164 907 83	−40.917 355 97		10.04	56.58	−37.84	1.10	0.70	1.41	1.34	0.76	+12	−13	−16	+ 0	− 6	+34	+ 0	−32	+28	+34	1	−1.66
111284	22 32 40.51	+28 32 26.4	11.29	H	338.168 796 60	+28.540 669 36		7.46	−63.35	−246.93	1.50	1.50	2.21	1.91	2.24	+ 8	+ 2	+ 5	+28	−12	− 4	−11	−14	+27	+10	2	−0.78
111285	22 32 40.56	−50 15 13.4	9.51	H	338.169 010 79	−50.253 730 94		13.36	131.91	−93.09	0.99	0.84	1.46	1.17	0.89	+10	−15	−26	−14	+10	+ 1	+ 6	−12	+14	+22	0	0.24
111286	22 32 40.70	−65 26 07.3	9.05	G	338.169 600 10	−65.435 364 76		11.14	−98.10	−238.57	0.74	0.74	1.09	0.89	0.69	−10	− 4	−14	− 1	− 4	+18	− 1	−14	+ 0	−11	1	0.88
111287	22 32 41.33	+01 06 14.1	7.37	H	338.172 206 55	+01.103 920 49		5.16	10.38	−1.67	0.88	0.72	1.08	0.97	0.86	+35	−12	−28	−19	−11	+30	− 6	−38	+33	+35	0	−0.38
111288	22 32 41.76	−20 59 33.7	11.01	G	338.174 017 56	−20.992 691 08		36.11	344.09	−244.50	2.56	2.24	3.09	2.71	1.96	+51	−29	−56	−47	−20	+ 5	−32	−58	+45	+33	0	0.57
111289	22 32 42.72	−24 37 06.3	8.48	H	338.178 008 85	−24.618 407 56		8.31	138.55	−50.15	1.08	0.88	1.27	1.37	1.03	+16	+18	−28	−26	+17	+ 2	+18	+ 5	+14	+23	0	0.67
*111290	22 32 42.84	−30 24 03.9	10.63	H	338.178 489 90	−30.401 084 41		2.47	1.57	−2.79	1.53	1.25	1.99	1.65	1.32	+41	− 1	+12	+25	+ 7	+20	+ 6	+14	+12	+48	4	1.71
*111291	22 32 42.75	−55 59 14.0	8.56	H	338.178 125 85	−55.987 220 06		2.81	10.84	−12.53	0.73	0.63	1.08	0.85	0.63	− 5	−11	−11	+ 6	+ 4	− 4	+ 6	− 3	−10	+11	0	−0.70
111292	22 32 43.05	+46 16 20.7	10.10	H	338.179 371 80	+46.272 406 31		2.19	1.40	−5.29	0.91	1.06	1.50	1.18	1.52	−19	+ 3	+17	−17	+19	− 1	+17	−34	− 8	−29	0	1.65
*111293	22 32 46.16	+53 47 27.2	9.12	H																							
*111294	22 32 46.05	+40 49 48.9	9.08	1 G	338.191 887 41	+40.830 237 50		1.05	1.97	−6.33	0.82	0.86	1.34	0.96	1.09	−23	+ 8	−20	+ 8	+ 2	+ 0	+ 6	−29	+40	−17	0	0.25
111295	22 32 46.22	+03 00 18.9	7.30	H	338.192 590 13	+03.005 254 39		4.30	−65.21	−82.91	0.79	0.60	1.01	0.98	0.80	+19	+ 3	−19	−10	+ 5	+ 1	+ 3	−33	+49	+ 3	0	1.39
111296	22 32 46.90	+15 51 47.6	6.35	H	338.195 399 67	+15.863 221 96		4.67	20.43	17.10	0.62	0.50	0.73	0.74	0.54	+19	+14	+10	+ 2	− 2	−12	− 3	− 6	− 2	− 1	0	−0.85
111297	22 32 47.93	+65 59 57.7	8.47	H	338.199 693 39	+65.999 367 69		3.63	17.87	8.03	0.63	0.66	0.76	0.82	0.86	−18	−16	+15	+ 8	+ 5	+ 3	+ 3	−11	+ 3	−21	1	1.28
111298	22 32 48.23	+38 43 50.9	11.00	H	338.200 960 53	+38.730 803 30		−0.93	1.83	−5.58	1.68	1.50	2.22	2.08	1.83	+ 3	+13	− 6	+26	− 8	−13	+ 8	−31	+27	+24	2	0.13
111299	22 32 48.26	−34 59 14.9	10.16	H	338.201 076 35	−34.987 466 09		7.32	−4.15	8.50	1.31	0.87	1.70	1.50	0.97	+16	− 1	+ 2	− 8	−16	+26	−11	−49	+15	+31	0	0.97
111300	22 32 48.74	+10 24 19.5

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
111201	10.031	0.021	8.346	0.010		1.408	0.018	T	1.39	0.02	L	8.3464	0.0017	0.020	152		8.31	8.38		C			1							S
111202	8.579	0.009	8.021	0.009		0.522	0.011	T	0.59	0.01	L	8.0760	0.0019	0.016	116		8.05	8.10					1 S							S
111203	8.431	0.009	8.032	0.009		0.398	0.015	G	0.46	0.02	H	8.0789	0.0014	0.014	115		8.05	8.11		C			1							S
111204	10.180	0.034	9.491	0.030		0.624	0.034	T	0.69	0.03	L	9.5088	0.0019	0.015	66		9.48	9.54		D			1							
111205	8.353	0.011	7.897	0.011		0.430	0.014	T	0.50	0.01	L	7.9596	0.0014	0.011	75		7.94	7.98		C			1							S
111206	7.809	0.006	6.697	0.005		0.948	0.002	G	0.94	0.00	H	6.7605	0.0008	0.007	134		6.75	6.77		C			1							S
111207	9.931	0.025	9.966	0.038		−0.027	0.042	T	−0.01	0.04	L	9.9521	0.0026	0.033	226		9.90	10.01					1 S							G
111208	10.008	0.028	9.015	0.019	*	0.869	0.025	T	0.88	0.02	L *	9.0995	0.0021	0.018	115	*	9.07	9.14		D	22318+8011	H 1	2 C A	AB	202	0.289	0.009	1.49	0.11	
111209	10.595	0.040	9.684	0.028		0.798	0.004	G	0.84	0.00	H	9.7110	0.0021	0.028	149		9.67	9.76					1							G
111210						1.091	0.003	G	1.16	0.00	I	11.1873	0.0050	0.038	77		11.12	11.29					1							G
111211	7.784	0.006	7.290	0.005		0.465	0.011	G	0.53	0.02	A	7.3437	0.0013	0.014	138		7.32	7.36					1							S
111212	8.233	0.008	8.033	0.009		0.191	0.011	T	0.21	0.01	L	8.0946	0.0011	0.011	113		8.08	8.11		C			1							S
111213	8.584	0.012	8.154	0.012		0.425	0.015	G	0.49	0.02	H	8.1902	0.0017	0.012	86		8.16	8.21		C			1							S
111214	9.029	0.014	8.902	0.017	*	0.123	0.021	T	0.14	0.02	L *	8.9286	0.0018	0.018	122	*	8.89	8.96		D	22319+5237	H 1	2 C S A	AB	352	0.162	0.012	1.07	0.40	
111215	10.538	0.031	9.875	0.027		0.605	0.031	T	0.67	0.03	L	9.9690	0.0023	0.023	116		9.93	10.00		C			1							
111216	11.339	0.057	9.818	0.025		1.278	0.049	T	1.24	0.05	L	9.7992	0.0019	0.021	126		9.77	9.84		C			1							
111217	9.325	0.018	9.117	0.021		0.199	0.026	T	0.22	0.03	L	9.1550	0.0027	0.021	100		9.11	9.20					1							
111218	11.003	0.056	9.897	0.035		0.954	0.051	T	1.00	0.05	L	9.9954	0.0039	0.022	75		9.95	10.04		C			1							
111219	9.441	0.018	7.625	0.008		1.542	0.016	T	2.48	0.04	O	7.4143	0.0043	0.035	122		7.35	7.46		U 2 C			1							S
111220	10.188	0.031	9.660	0.030		0.530	0.015	G	0.60	0.02	H	9.7607	0.0021	0.021	107		9.72	9.79		C			1							G
111221	10.481	0.039	10.013	0.041	C	0.441	0.052	T	0.51	0.06	L	10.0921	0.0275	0.060	105	C	9.99	10.17		U 2	22320+6311	I 1	2 C A	CD	25	18.379	0.023	1.50	0.12	G
111222	9.755	0.021	9.642	0.028		0.110	0.033	T	0.12	0.03	L	9.6822	0.0032	0.029	114		9.64	9.73					1							
111223	9.495	0.014	8.448	0.010		0.909	0.013	T	0.91	0.01	L	8.5060	0.0016	0.017	141		8.47	8.53		C	22321−4244	I 1	1							
111224	10.433	0.029	9.739	0.025		0.628	0.029	T	0.70	0.03	L	9.8280	0.0024	0.024	152		9.78	9.87		C			1							
111225	10.954	0.057	9.974	0.040		0.836	0.004	G	0.85	0.00	H	10.0268	0.0043	0.024	64		9.98	10.10					1							
111226	10.424	0.025	9.860	0.023		0.532	0.025	T	0.60	0.03	L	9.9407	0.0023	0.027	161		9.88	9.98		C			1							
111227	7.696	0.007	7.660	0.008		0.038	0.010	T	0.05	0.01	L	7.6894	0.0012	0.011	102		7.67	7.71		C			1							S
111228	9.380	0.015	8.610	0.012		0.685	0.015	T	0.74	0.01	L	8.6539	0.0013	0.015	136		8.63	8.68					1							S
111229	10.989	0.042	10.346	0.037		0.570	0.020	G	0.64	0.02	H	10.5275	0.0023	0.028	126		10.47	10.57		C			1							
111230	7.581	0.005	7.092	0.005		0.460	0.006	T	0.54	0.02	A	7.1457	0.0008	0.010	147		7.13	7.16		C			1							S
111231	9.802	0.024	9.185	0.021	*	0.571	0.024	T	0.64	0.02	L *	9.3794	0.0030	0.029	150	*	9.34	9.43		D	22321−6609	I 1	2 C A	AB	356	6.462	0.012	1.82	0.05	
111232	11.127	0.077	10.180	0.057		0.835	0.071	T	0.85	0.05	L	10.3061	0.0036	0.020	65		10.26	10.35					1							
111233	9.807	0.025	7.970	0.011		1.528	0.022	T	1.57	0.05	L	7.8763	0.0020	0.016	83		7.84	7.90					1							S
111234	8.379	0.014	7.771	0.013		0.565	0.014	T	0.64	0.01	L	7.8675	0.0015	0.011	60		7.85	7.88		C			1							S
111235	9.644	0.016	9.587	0.020		0.057	0.024	T	0.07	0.02	L	9.6053	0.0018	0.020	161		9.58	9.65		C			1							
111236	10.447	0.029	8.538	0.011		1.585	0.025	T	1.60	0.03	L	8.4769	0.0016	0.019	121		8.45	8.51					1							
111237	8.165	0.008	7.016	0.005		0.964	0.047	G	0.96	0.02	A	7.0707	0.0010	0.010	128		7.06	7.08					1							S
111238	10.031	0.024	8.347	0.011		1.407	0.021	T	1.39	0.03	L	8.3199	0.0016	0.011	87		8.30	8.34		C			1							
111239	8.536	0.009	8.508	0.011		0.010	0.015	G	0.03	0.01	H	8.5307	0.0013	0.015	141		8.50	8.56			22322+5340	I 1	1							
111240	10.390	0.024	8.637	0.011		1.461	0.021	T	1.47	0.03	L	8.6024	0.0014	0.016	151		8.57	8.63					1							
111241	9.428	0.014	8.692	0.012		0.674	0.015	T	0.73	0.01	L	8.7526	0.0018	0.014	113		8.73	8.78		C			1							
111242	5.721	0.002	5.699	0.003		0.020	0.003	T	0.04	0.00	L	5.7143	0.0007	0.006	122		5.71	5.72		C			1							S
111243	8.703	0.015	8.248	0.012	*	0.429	0.017	T	0.50	0.02	L *	8.4397	0.0019	0.014	121	*	8.41	8.47		D	22323+5512	I 1	2 C A	AB	333	2.700	0.005	0.49	0.01	
111244	8.303	0.009	8.248	0.010		0.043	0.015	G	0.06	0.01	H	8.2659	0.0011	0.012	124		8.24	8.29					1							S
111245	9.850	0.026	9.431	0.026	*	0.396	0.034	T	0.46	0.04	L *	9.4323	0.0025	0.022	83	*	9.39	9.48		C	22323+2319	H 1	2 C S A	AB	70	0.164	0.010	0.48	0.52	
111246	9.809	0.019	9.294	0.018		0.484	0.024	T	0.56	0.03	L	9.4142	0.0029	0.026	141		9.36	9.46					1							
111247	7.741	0.006	6.521	0.004		1.043	0.006	T	1.01	0.01	L	6.5722	0.0008	0.007	146		6.56	6.59					1							S
111248	9.057	0.017	8.524	0.016		0.500	0.021	T	0.57	0.02	L	8.6024	0.0012	0.014	77		8.58	8.63		C			1							
111249	9.078	0.014	8.843	0.017	*	0.224	0.021	T	0.25	0.02	L *	8.9696	0.0023	0.021	133	*	8.93	9.01		R	22323+5156	I 1	2 C A	AB	134	7.134	0.006	1.06	0.03	
111250						2.998	0.400	G	3.01	0.41	J	10.4835	0.0769	0.391	44		10.27	11.13		U 2 C			1 S							G
111251	9.512	0.014	9.467	0.018		0.046	0.021	T	0.06	0.02	L	9.4799	0.0020	0.028	183		9.43	9.53		C			1							
111252	8.207	0.008	8.026	0.009		0.166	0.012	T	0.18	0.01	L	8.0621	0.0019	0.021	134		8.03	8.09		M			1							S
111253	8.655	0.010	8.422	0.012		0.236	0.016	G	0.26	0.02	H	8.4718	0.0015	0.015	113		8.45	8.50		C			1							
111254	9.028	0.018	7.228	0.009		1.499	0.016	T	1.53	0.02	L	7.1935	0.0014	0.011	69		7.17	7.21		C			1							S
111255	10.813	0.036	9.325	0.017		1.252	0.031	T	1.21	0.03	L	9.3293	0.0025	0.028	152		9.28	9.37					1							
111256	9.644	0.016	8.165	0.009		1.245	0.014	T	1.20	0.01	L	8.2007	0.0015	0.016	145		8.18	8.23					1							S
111257	9.384	0.018	8.613	0.014		0.686	0.017	T	0.74	0.01	L	8.5565	0.0158	0.187	111		8.45	9.29	5.10	P 1 A			1 V							
111258	9.711	0.021	9.453	0.025		0.246	0.031	T	0.28	0.04	L	9.5225	0.0025	0.025	106		9.48	9.58					1							
111259	6.086	0.003	5.905	0.003		0.166	0.004	T	0.18	0.00	L	5.9353	0.0006	0.006	107		5.93	5.95			22324+3946	I 1	1							S
111260	8.690	0.010	8.505	0.012		0.177	0.015	T	0.19	0.02	L	8.5613	0.0012	0.012	108		8.54	8.59					1							
111261	10.356	0.033	8.467	0.013		1.569	0.028	T	1.59	0.03	L	8.3541	0.0033	0.022	95		8.33	8.40		U 2	22324−1056	I 1	1 S							
111262	9.879	0.019	9.382	0.019		0.521	0.005	G	0.59	0.01	H	9.4213	0.0021	0.022	125		9.39	9.46					1							
111263	9.084	0.016	7.276	0.008		1.505	0.014	T	1.53	0.02	L	7.2283	0.0012	0.014	82		7.21	7.25					1							S
111264	10.559	0.041	9.665	0.031		0.795	0.038	T	0.83	0.03	L	9.7331	0.0025	0.028	100		9.69	9.78					1							
111265	11.097	0.050	10.491	0.047		0.563	0.051	T	0.64	0.05	L	10.5580	0.0035	0.030	125		10.49	10.62					1							
111266	9.096	0.013	8.663	0.013	*	0.401	0.036	G	0.47	0.04	H *	8.6895	0.0020	0.016	115	*	8.66	8.72		C	22325+5902	H 1	2 C A	AB	67	0.242	0.022	2.25	0.33	
111267	10.491	0.023	9.259	0.014		1.052	0.021	T	1.11	0.03	L	9.3070	0.0025	0.031	203		9.25	9.37					1 S							
111268	7.871	0.008	7.932	0.010		−0.062	0.002	G	−0.04	0.00	H	7.9416	0.0017	0.013	107		7.92	7.97					1							S
111269	9.961	0.026	8.214	0.012		1.457	0.023	T	1.46	0.04	L	8.2289	0.0018	0.012	73		8.21	8.25		C			1							
111270	8.345	0.011	8.054	0.012		0.262	0.009	G	0.29	0.01	H	8.1066	0.0020	0.013	83		8.08	8.12		C			1							S
111271	8.234	0.012	7.843	0.010		0.397	0.001	G	0.46	0.00	H	7.8938	0.0014	0.009	71		7.88	7.91		C			1							S
111272	10.616	0.029	9.827	0.023		0.741	0.009	G	0.79	0.01	H	9.8740	0.0027	0.029	150		9.83	9.94		C			1 S							
111273	9.794	0.023	9.393	0.024	A	0.448	0.024	G	0.52	0.03	H	9.4227	0.0178	0.119	102	A	9.32	9.78		D	22326+0725	I 2	1 C P A							
111274	7.759	0.007	7.021	0.005		0.668	0.003	G	0.73	0.00	H	7.0789	0.0007	0.006	87		7.07	7.09		C			1							S
111275	10.093	0.034	9.009	0.023		0.937	0.031	T	0.93	0.02	L	9.0532	0.0030	0.021	78		9.03	9.09		C			1							
111276	9.844	0.022	9.441	0.022	B	0.485	0.015	G	0.56	0.02	H	9.5186	0.0186			B				D	22326+0725	I 2	1 C I A							
111277											T	9.6347	0.0736	0.768	115		8.35	10.49		D	22326+3414	I 2	S							G
111278	6.833	0.005	6.473	0.006		0.350	0.007	T	0.41	0.01	L	6.5114	0.0018	0.017	70		6.48	6.53		U 2			1							S
111279	8.215	0.011	7.932	0.011		0.211	0.015	G	0.23	0.02	H	7.9957	0.0021	0.022	121		7.96	8.02		D	22326+3414	I 2	1 S							S
111280	9.455	0.012	8.977	0.012		0.463	0.013	T	0.53	0.01	L	9.0101	0.0018	0.024	219		8.97	9.05		C			1 S							
111281	10.279	0.035	8.449	0.014		1.522	0.030	T	1.56	0.04	L	8.4268	0.0018	0.016	80		8.40	8.45		C			1							
111282	6.955	0.005	6.592	0.005		0.344	0.007	T	0.40	0.01	L	6.6383	0.0007	0.007	84		6.63	6.65		C			1							S
111283	10.555	0.026	9.921	0.023		0.584	0.026	T	0.66	0.02	L	9.9998	0.0021	0.025	157		9.92	10.04					1							
111284	12.177	0.169	11.256	0.120		0.801	0.160	T	0.84	0.17	L	11.4222	0.0044	0.044	100		11.32	11.50					1							G
111285	10.364	0.024	9.614	0.020		0.670	0.024	T	0.73	0.02	L	9.6477	0.0024	0.033	159		9.58	9.71					1							
111286	9.880	0.016	9.113	0.013		0.672	0.003	G	0.73	0.00	H	9.1866	0.0024	0.024	174		9.15	9.24					1							
111287	8.802	0.014	7.497	0.009		1.109	0.013	T	1.07	0.01	L	7.5340	0.0018	0.012	74		7.51	7.56					1							S
111288						1.373	0.009	G	1.61	0.02	I	11.1124	0.0039	0.036	56		11.06	11.18					1							G
111289	9.106	0.016	8.530	0.015		0.523	0.015	G	0.60	0.02	H	8.5955	0.0020	0.014	63		8.57	8.63		C			1							S
111290	11.803	0.135	10.711	0.081		0.944	0.121	T	0.93	0.09	L	10.7948	0.0038	0.036	105		10.72	10.86					1 S							G
111291	9.892	0.020	8.680	0.012		1.036	0.018	T	1.01	0.01	L	8.7317	0.0020	0.021	147		8.70	8.77					1							
111292	10.105	0.023	10.141	0.035		−0.028	0.038	T	−0.01	0.04	L	10.0978	0.0035	0.035	173		10.04	10.17					1 G							G
111293						1.353	0.017	G	1.58	0.03	I	9.2236	0.0190	0.000	1		9.22	9.22			22327+5347	I 1	S							G
111294	9.085	0.013	9.106	0.017		0.013	0.025	G	0.03	0.02	H	9.0928	0.0023	0.027	143		9.05	9.15		U			1							
111295	9.109	0.017	7.485	0.009		1.360	0.015	T	1.33	0.02	L	7.4485	0.0010	0.010	73		7.43	7.47		C			1							S
111296	7.882	0.009	6.482	0.005		1.190	0.015	G	1.15	0.01	H	6.5163	0.0009	0.009	90		6.50	6.53		C			1							S
111297	9.938	0.020	8.614	0.012		1.124	0.018	T	1.09	0.02	L	8.6431	0.0014	0.013	128		8.62	8.67		C			1							
111298	11.168	0.063	10.840	0.079		0.170	0.040	G	0.19	0.04	R	11.0588	0.0052	0.046	104		10.99	11.14					1							G
111299	10.619	0.035	10.162	0.036		0.431	0.046	T	0.50	0.05	L	10.2530	0.0028	0.029	144		10.20	10.29		C			1							
111300	10.329	0.033	9.436	0.024		0.823	0.004	G	0.86	0.00	H	9.4851	0.0023	0.021	74		9.43	9.52		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
111301	22 32 50.46	+14 12 02.5	8.49	H	338.210 248 91	+14.200 683 98	1.97	12.12	−10.36	0.82	0.65	1.02	0.92	0.78	+15	+ 3	+22	− 8	+ 9	+ 0	+10	− 4	−14	+14	0	−0.73
111302	22 32 51.36	+74 04 24.1	6.96	H	338.214 015 28	+74.073 351 84	2.11	−0.23	−5.07	0.49	0.48	0.58	0.54	0.54	+ 0	− 6	+10	−11	− 4	+ 6	− 6	− 9	+25	+ 4	2	−2.07
111303 H	22 32 53.69	+49 23 14.7	7.70	H	338.223 718 59	+49.387 412 71 B	9.21	30.69	−15.98	2.32	2.36	0.98	1.16	1.17	+ 9	− 3	+ 4	− 6	+ 1	− 2	+ 4	−18	+ 4	+40	2	−0.54
111304	22 32 55.49	+48 15 20.9	8.71	H	338.231 224 57	+48.255 802 08	4.98	−10.37	−8.66	0.59	0.64	0.88	0.62	0.63	−17	+ 0	− 1	−16	+18	+10	+20	−28	+18	+11	0	−1.17
111305	22 32 56.69	+61 56 15.1	8.66	H	338.236 212 66	+61.937 536 66	2.85	−12.39	−13.05	0.65	0.66	0.76	0.76	0.70	−20	+10	+15	+22	+ 6	+ 6	+ 4	− 2	+ 9	−26	0	−0.87
111306	22 32 56.78	+05 36 52.4	10.55	H	338.236 592 51	+05.614 542 32	2.27	9.66	−6.08	1.91	1.38	2.04	2.53	1.70	+13	− 2	− 4	−26	+ 7	−13	− 1	−47	+21	−17	10	0.52
111307	22 32 57.84	+35 26 16.3	7.49	H	338.240 985 95	+35.437 853 18	6.83	−13.19	−10.45	0.55	0.53	0.75	0.65	0.67	+ 8	+15	− 6	+13	+ 4	− 8	+ 4	− 4	+ 2	+13	0	0.04
111308	22 32 58.55	+37 34 32.4	10.52	2 H	338.243 976 57	+37.575 677 59	5.45	−0.79	−3.39	1.42	1.19	1.81	1.99	1.64	+ 2	+ 0	− 2	−13	− 3	+16	− 2	−20	+24	+19	0	0.72
111309	22 32 59.75	+51 12 56.2	9.64	G	338.248 959 79	+51.215 602 10	1.57	−3.50	−3.62	0.88	0.81	1.13	0.99	0.89	−16	+ 3	+ 5	−11	+27	− 7	+28	−11	+21	+ 4	2	−0.43
111310	22 33 00.01	−61 58 55.5	4.91	2 H	338.250 052 60	−61.982 073 00	11.96	40.82	−20.14	0.32	0.38	0.60	0.34	0.37	−26	− 2	−14	− 3	+ 4	+ 3	+ 6	−15	−14	−16	0	−1.63
111311	22 33 00.33	−28 58 55.9	8.33	H	338.251 358 34	−28.982 192 69	3.66	17.68	−2.17	1.18	0.73	1.39	1.25	0.83	+ 3	+23	−15	−32	+ 2	+26	+18	−14	+52	+16	0	0.43
111312	22 33 01.49	−17 30 05.0	7.57	G	338.256 213 49	−17.501 385 37	14.28	−189.54	−40.79	0.86	0.67	0.98	1.10	0.78	+42	−11	−11	− 1	+36	−15	+30	+19	− 4	+53	2	0.78
111313	22 33 01.91	+09 22 39.5	10.36	G	338.257 949 72	+09.377 634 47	78.07	537.93	140.05	1.97	1.33	2.45	2.30	1.80	+12	+39	+ 6	−23	+19	+22	+29	−33	+30	+ 9	0	2.60
111314 H	22 33 02.70	+69 54 48.1	6.01	H	338.261 233 43	+69.913 372 19 A	13.11	128.63	71.24	1.37	1.09	0.56	0.69	0.70	−13	− 3	+ 4	+ 2	+11	+11	+ 5	− 2	+ 7	+14	2	0.87
111315	22 33 04.04	−07 10 26.2	8.75	2 H	338.266 829 58	−07.173 954 74	3.39	32.05	−36.48	1.39	0.72	1.35	2.18	0.90	− 2	+29	+ 2	−26	+24	−30	+23	−37	+33	−47	0	0.96
111316	22 33 04.23	+63 52 47.4	7.79	H	338.267 609 05	+63.879 837 90	3.88	25.41	14.49	0.66	0.67	0.81	0.85	0.81	−11	+17	− 3	+ 5	+ 7	−23	+13	−33	+31	−14	0	−0.25
111317	22 33 05.76	+55 05 53.8	8.66	H	338.274 007 57	+55.098 271 24	5.55	7.80	−4.90	0.62	0.58	0.78	0.73	0.70	+ 4	−12	+11	−19	− 2	+ 5	− 6	−12	+26	+22	0	−2.16
111318	22 33 07.16	+44 41 51.3	9.88	H	338.279 825 71	+44.697 591 00	4.03	6.82	−4.20	0.92	1.00	1.59	0.95	1.03	−28	+ 4	− 4	− 5	+23	+ 8	+28	−25	+ 2	− 6	0	0.82
111319 H	22 33 07.47	+68 30 17.9	7.73	H	338.281 114 82	+68.504 982 90 A	2.85	11.05	9.31	0.86	0.89	0.92	0.90	0.86	− 4	− 2	+18	+10	+ 7	+17	+ 9	−16	− 4	+10	1	0.38
*111320	22 33 07.82	−38 02 14.1	9.38	H	338.282 583 47	−38.037 255 69	3.87	12.83	−54.54	1.09	0.75	1.37	1.21	0.77	− 3	+ 9	+ 9	+10	+ 7	+19	+ 4	−47	− 2	− 7	0	−0.40
*111321	22 33 07.79	−19 23 27.8	9.03	H	338.282 440 37	−19.391 046 26	1.28	20.53	−0.02	1.11	1.02	1.35	1.27	0.90	+27	−20	+22	−19	+18	+12	+10	−29	−13	+12	0	0.34
111322	22 33 11.22	−60 25 58.9	7.00	H	338.296 748 59	−60.433 018 68	4.95	7.87	35.03	0.36	0.47	0.77	0.39	0.45	−39	+ 4	−16	+ 7	+ 9	+11	+ 9	−20	−15	−40	1	−0.44
111323	22 33 13.14	−00 54 41.3	8.29	H	338.304 740 26	−00.911 466 48	5.94	−1.75	−18.21	1.16	0.70	1.42	1.54	1.06	+15	+20	−10	+ 0	+ 6	−20	+13	−24	+42	+ 9	0	0.99
111324	22 33 13.21	+17 47 06.4	7.78	H	338.305 024 84	+17.785 110 44	8.89	73.07	4.42	0.75	0.58	0.93	0.74	0.68	+16	+24	+ 2	+ 7	− 3	−11	+ 1	−18	+17	+11	0	0.34
111325 H	22 33 16.76	+70 22 25.3	6.26	H	338.319 830 37	+70.373 681 42 A	8.15	40.26	13.37	0.59	0.55	0.60	0.69	0.61	+20	− 3	− 1	+ 6	+17	+13	+16	+ 6	+ 0	+35	2	0.25
111326	22 33 17.12	−35 08 19.1	7.08	1 H	338.321 347 55	−35.138 646 02	4.43	6.90	−25.70	0.84	0.48	1.01	1.05	0.56	+18	−18	−13	+26	−17	+11	− 9	−32	+24	+35	0	−0.64
111327	22 33 18.94	−24 01 18.7	10.19	H	338.328 930 16	−24.021 858 40	3.37	4.43	10.92	1.44	1.11	1.63	1.79	1.33	+21	+ 1	− 9	−17	+10	+13	+10	+ 1	+14	+23	0	1.45
111328	22 33 19.43	+46 06 55.3	7.94	H	338.330 955 29	+46.115 360 74	4.46	−11.79	−9.94	0.55	0.61	0.88	0.62	0.71	−28	+ 4	+ 7	−17	+16	− 1	+18	−22	+ 6	−17	0	0.72
111329	22 33 19.95	+42 23 41.8	9.19	H	338.333 110 18	+42.394 937 45	3.20	0.48	−3.63	0.66	0.80	1.26	0.76	1.02	−37	+13	− 5	+30	− 4	+ 8	+ 2	− 7	+25	−28	2	0.00
*111330 H	22 33 20.60	−60 49 01.9	8.44	H	338.335 835 18	−60.817 203 62 A	5.83	8.87	0.71	0.92	1.18	1.75	0.98	1.05	−39	+ 2	−15	+ 9	− 7	+17	− 4	− 8	−12	−38	3	1.02
*111331	22 33 20.58	−59 08 35.3	9.70	H	338.335 744 87	−59.143 128 42	5.83	43.26	−36.15	1.00	0.99	1.53	1.09	0.92	− 5	− 6	−27	−19	− 7	+21	− 1	−10	− 4	− 8	0	0.40
111332	22 33 21.35	−09 03 48.3	8.73	G	338.338 964 74	−09.063 406 66	15.05	296.95	−61.39	1.12	0.71	1.21	1.54	0.87	+11	− 3	−24	− 9	+ 8	+19	+ 1	−51	+35	− 7	0	0.11
111333	22 33 22.04	−17 46 21.8	8.24	H	338.341 826 56	−17.772 712 28	2.90	−33.09	−47.71	0.95	0.73	1.09	1.14	0.75	+32	− 1	+11	− 3	+19	+ 1	+16	+ 7	+ 6	+31	2	−0.20
111334	22 33 22.13	+52 41 17.5	10.09	H	338.342 207 46	+52.688 182 19	2.59	132.57	71.19	0.92	0.79	1.12	1.06	0.89	−17	− 2	+ 9	−28	+ 9	−11	+ 8	−18	+18	+ 8	0	−0.35
111335 H	22 33 22.56	+38 07 36.5	7.89	1 H	338.343 985 23	+38.126 810 91 A	10.30	43.04	−32.37	1.23	1.23	1.46	1.38	1.40	+ 2	−16	− 4	+19	− 2	+ 5	+ 1	− 5	+23	+30	4	0.93
111336	22 33 23.05	+00 16 11.0	9.47	H	338.346 048 83	+00.269 733 63	0.21	9.35	−15.11	1.20	0.89	1.48	1.48	1.18	+22	+ 6	− 2	−11	− 6	+47	+ 0	−38	+20	+35	0	−0.35
111337 H	22 33 23.47	+39 34 30.6	8.17	G	338.347 788 77	+39.575 165 59 *	2.35	−1.53	−4.29	0.85	0.79	1.13	1.18	1.12	+ 5	+ 5	− 2	+38	− 2	+ 9	+ 4	−12	+34	+16	0	0.26
111338	22 33 23.73	−56 08 40.9	8.86	H	338.348 868 81	−56.144 684 94	7.27	−15.06	−15.23	0.81	0.74	1.21	1.00	0.73	+ 5	−12	+10	+ 6	− 5	+ 2	− 4	− 6	+ 1	+ 6	0	0.66
111339	22 33 23.90	−59 59 31.0	7.90	G	338.349 594 92	−59.991 947 28	3.83	−3.40	3.00	0.54	0.58	0.95	0.54	0.57	−35	+ 1	−14	+ 1	+ 8	+10	+ 9	−19	−12	−38	1	0.90
111340	22 33 25.08	+46 51 27.0	9.39	H	338.354 481 09	+46.857 486 71	1.38	−1.02	−4.08	0.82	0.85	1.21	0.88	0.98	− 5	+11	+ 4	− 5	+ 5	+ 3	−12	+10	−21	+17	+15	0	0.73
111341	22 33 25.22	−28 08 51.2	8.84	H	338.355 075 95	−28.147 543 25	4.81	11.96	−13.11	1.28	0.90	1.45	1.32	0.95	+19	+ 1	+ 1	−43	+ 3	+20	+ 2	−17	+46	+24	0	−0.42
111342	22 33 25.53	+34 18 09.5	9.00	H	338.356 375 84	+34.302 649 88	−0.18	−2.90	−10.51	0.89	0.86	1.16	1.30	1.36	+23	−21	− 4	+15	+ 7	−22	+ 6	+18	− 2	+20	0	−0.25
111343	22 33 25.75	−50 59 13.9	8.88	H	338.357 300 93	−50.987 190 70	4.21	16.35	−1.40	1.07	0.77	1.35	1.12	0.86	+13	+ 0	− 5	−28	− 1	+10	− 2	−19	+ 4	+34	0	−1.15
111344	22 33 25.76	+42 37 47.0	8.96	H	338.357 351 72	+42.629 729 54	2.16	−1.32	−7.91	0.62	0.78	1.20	0.71	0.96	−48	+12	− 5	+15	+ 0	− 4	+ 4	−12	+23	−44	3	−1.21
111345	22 33 26.24	+25 58 26.5	8.98	H	338.359 316 90	+25.974 041 03	3.24	3.65	−0.69	0.89	0.75	1.10	0.92	0.93	+23	+36	+22	+19	− 1	−15	+ 6	+ 9	+ 6	+25	2	2.01
111346	22 33 26.39	+55 55 42.3	7.41	H	338.359 965 67	+55.928 427 89	1.66	5.73	1.25	0.58	0.51	0.69	0.72	0.55	−12	−16	+20	− 2	+23	+17	+17	− 1	+ 7	+ 6	0	−0.90
111347	22 33 28.79	−38 11 44.1	10.02	H	338.369 948 23	−38.195 582 06	6.14	27.86	−37.01	1.15	0.86	1.49	1.45	0.91	+ 8	− 7	+17	+15	+ 8	+19	+ 2	−43	−12	+ 3	1	2.28
111348	22 33 30.37	−63 28 18.7	7.42	H	338.376 541 07	−63.471 872 48	3.85	61.27	6.01	0.50	0.52	0.80	0.65	0.57	−18	+ 8	−14	+ 2	+ 4	+ 1	+ 3	− 3	−17	+ 3	0	1.31
111349	22 33 30.45	−35 26 39.2	7.80	G	338.376 869 90	−35.444 210 68	31.25	329.22	−137.54	0.81	0.49	1.00	0.91	0.55	+12	+ 2	− 9	− 9	−22	+24	−15	−47	+22	+37	0	−0.14
111350	22 33 33.52	−29 39 53.7	7.50	1 H	338.389 679 10	−29.664 920 98	5.66	19.94	0.23	0.98	0.57	1.04	1.14	0.59	+ 3	+17	− 3	−20	+12	+ 3	+14	−13	+21	− 4	2	1.43
111351	22 33 33.87	+37 05 55.8	10.05	H	338.391 112 71	+37.098 838 42	7.95	8.34	−2.68	1.19	1.10	1.86	1.65	1.53	−15	+12	−20	−20	+ 8	+21	+16	−32	+43	− 8	3	−0.13
111352	22 33 34.22	+31 17 02.2	7.97	G	338.392 578 44	+31.283 949 46	6.64	15.78	−57.70	0.54	0.57	0.92	0.60	0.76	+26	− 1	+ 3	+12	+12	−13	+15	+ 2	+22	+33	0	0.10
111353	22 33 34.36	−74 39 54.8	9.23	H	338.393 165 53	−74.665 208 79	2.09	13.83	−18.61	0.87	0.78	1.06	1.03	0.91	−13	−14	−22	−20	+ 3	+18	+ 9	−14	− 9	−13	4	−1.25
111354	22 33 34.44	−27 58 17.3	9.74	H	338.393 495 53	−27.971 459 46	5.68	−7.99	9.61	1.49	1.06	1.59	1.62	1.12	+19	− 7	+ 0	−37	− 3	+ 6	− 6	−30	+34	+18	0	−0.48
111355	22 33 34.61	+40 49 08.5	6.54	H	338.394 201 02	+40.819 014 88	3.84	10.93	3.60	0.49	0.54	0.84	0.59	0.71	−18	+12	−20	− 8	+ 1	− 4	+ 7	−30	+41	−10	2	−0.67
111356	22 33 35.07	+49 26 48.2	9.36	H	338.396 113 04	+49.446 720 26	1.49	−3.91	−4.36	0.68	0.73	1.01	0.74	0.80	− 9	+ 5	+ 6	+ 8	+ 6	−15	+16	−24	+16	+11	0	0.90
111357	22 33 36.65	−58 12 50.8	7.92	G	338.402 725 45	−58.214 100 33	10.03	−25.61	4.76	0.58	0.60	0.93	0.71	0.61	+ 6	−10	− 4	−10	+ 0	+10	+ 0	+17	+ 0	+10	3	−0.50
111358	22 33 37.54	−51 23 08.4	8.42	H	338.406 414 25	−51.385 675 15	2.47	−26.78	−12.69	0.75	0.69	1.17	0.88	0.76	+21	− 7	−15	− 9	− 4	+20	− 1	−15	+ 5	+36	1	0.36
111359	22 33 37.55	+29 35 24.3	8.09	H	338.406 438 55	+29.590 089 63	2.51	12.99	−31.19	0.55	0.62	1.00	0.59	0.85	+29	+ 2	−10	− 3	+ 8	− 1	+14	−11	+24	+54	0	−0.93
111360	22 33 37.57	+46 33 55.0	7.38	1 H	338.406 561 44	+46.565 281 60	4.02	13.59	−5.46	0.50	0.56	0.80	0.51	0.60	−21	+20	−10	−14	+11	−14	+18	−34	+22	− 2	1	−0.66
111361	22 33 39.50	−41 59 06.5	8.35	H	338.414 572 05	−41.985 145 06	1.36	13.91	−36.20	0.88	0.62	1.14	1.01	0.65	+12	−17	−26	+ 7	−15	+26	− 3	−43	+24	+31	0	1.35
111362	22 33 40.57	+56 37 28.7	5.72	1 H	338.419 027 99	+56.624 637 22	9.60	78.48	41.08	0.43	0.40	0.53	0.54	0.47	−23	−13	+21	− 8	+ 7	+25	+ 4	+ 3	−13	−30	0	0.32
111363	22 33 40.76	+56 31 34.7	10.09	H	338.419 848 68	+56.526 308 50	0.98	−2.12	−4.06	1.06	0.93	1.27	1.24	1.10	−19	−21	+12	−18	+ 8	+23	+ 6	− 7	− 2	−18	0	2.39
111364	22 33 41.10	−10 31 15.5	8.47	H	338.421 237 65	−10.520 980 37	1.78	6.03	−15.58	1.11	0.72	1.35	1.29	0.99	+16	−17	−37	−29	− 5	+36	+ 2	−54	+51	+26	0	0.74
111365	22 33 41.14	+01 11 34.3	8.11	2 H	338.421 405 59	+01.192 855 89	3.05	13.98	−3.98	0.98	0.83	1.14	1.17	0.99	+39	−10	−21	+ 2	−20	+13	−28	−53	+33	+26	0	−0.30
*111366	22 33 42.00	+25 06 14.0	8.43	H	338.424 998 92	+25.103 886 33	4.86	26.82	−8.23	0.82	0.70	1.05	0.91	0.89	+14	+11	+23	+ 1	+ 6	− 6	+11	+ 3	+16	+12	2	1.94
*111367	22 33 41.87	−77 08 39.3	8.31	H	338.424 475 32	−77.144 260 64	3.67	65.51	−32.25	0.63	0.59	0.77	0.84	0.68	− 5	− 8	−11	+14	+ 4	+ 1	+ 5	− 1	− 1	+ 6	1	−1.09
111368	22 33 43.19	+43 29 07.2	8.06	1 H	338.429 961 67	+43.485 343 99	3.77	7.58	10.41	0.52	0.63	1.00	0.58	0.70	−44	+ 6	− 1	−18	+16	−15	+19	−29	+26	−33	0	−0.23
111369	22 33 43.35	+24 57 47.5	10.20	H	338.430 636 60	+24.963 205 80	18.14	26.54	153.59	1.39	1.11	1.71	1.50	1.45	+15	+22	+11	+11	+12	− 4	+18	+15	+19	+13	2	0.96
111370	22 33 44.87	−25 39 57.6	9.53	H	338.436 965 08	−25.665 999 07	1.65	−5.77	3.50	1.34	1.21	1.64	1.52	1.21	+49	−20	−21	−13	+ 4	+14	+ 7	+16	− 2	+43	4	1.48
111371	22 33 45.75	−33 52 34.5	7.88	1 G	338.440 615 03	−33.876 249 99	3.25	−26.19	−24.55	0.69	0.48	0.93	0.80	0.55	+24	− 5	−12	+ 5	−25	+24	−21	−36	+21	+34	0	0.45
111372	22 33 47.10	−42 03 11.6	9.65	G	338.446 265 77	−42.053 220 56	5.68	−60.75	−250.77	1.16	0.81	1.54	1.40	0.83	+20	−19	−27	+ 9	−13	+24	− 5	−51	+31	+36	0	−0.05
111373	22 33 47.22	−04 27 56.0	8.99	H	338.446 755 80	−04.465 548 32	1.68	−6.67	−3.96	1.16	0.90	1.56	1.57	1.08	+32	− 4	−44	+14	− 5	+29	+ 5	−29	+39	+37	0	−1.16
111374	22 33 47.50	+01 51 35.6	7.86	H	338.447 914 48	+01.859 886 66	15.14	34.27	−3.69	0.86	0.70	1.02	1.05	0.81	+36	−12	−27	+ 1	−15	+25	−21	−51	+31	+22	0	−0.61
111375	22 33 48.14	+41 40 27.7	9.94	H	338.450 583 67	+41.674 373 32	2.07	0.41	−5.11	1.26	1.72	2.51	1.33	2.03	−18	+17	− 7	+47	+ 5	+10	+10	−23	+34	−14	0		
111376	22 33 48.57	−12 23 17.5	8.86	H	338.452 369 48	−12.388 188 12	10.96	−39.61	−50.97	1.26	0.93	1.74	1.87	1.33	+25	− 3	−50	+ 2	+ 1	− 8	− 4	−61	+55	+22	0	1.94
111377	22 33 50.89	−49 47 21.0	9.03	G	338.462 055 86	−49.789 178 74	4.03	11.27	−3.12	0.88	0.81	1.42	1.07	0.80	+16	−18	−34	− 1	−12	+12	− 9	−20	+13	+16	2	0.33
111378	22 33 51.06	+35 52 24.1	8.64	G	338.462 752 85	+35.873 355 75	6.12	36.71	−10.84	0.79	0.68	1.01	0.91	0.78	+ 9	+21	+10	+ 9	+ 4	−11	+ 6	+ 2	+10	+ 3	0	0.53
111379	22 33 53.12	+61 46 41.1	6.55	H	338.471 341 80	+61.778 093 80	5.67	21.61	14.22	0.45	0.45	0.52	0.54	0.48	−26	+ 4	+19	+12	+ 1	+11	− 3	+ 7	+ 2	−34	0	−0.55
111380	22 33 53.92	+36 48 00.3	8.10	H	338.474 672 03	+36.800 094 78	5.52	8.64	−59.36	0.71	0.60	0.98	1.08	0.87	−10	+ 3	− 7	− 5	+ 2	+ 5	+ 3	− 9	+32	−15	0	−0.10
111381	22 33 54.37	−04 53 06.4	7.93	H	338.476 538 85	−04.885 124 10	3.95	14.91	4.18	1.19	0.70	1.27	1.54	0.91	+10	+ 3	−35	+36	−18	+16	−12	−42	+46	+19	0	−1.49
111382	22 33 54.70	−44 41 25.2	6.78	G	338.477 905 97	−44.690 328 48	5.95	17.36	−34.01	0.73	0.46	0.88	0.82	0.45	+ 0	+28	+ 2	− 2	+ 5	+18	+ 5	−31	− 1	+ 6	0	0.64
111383	22 33 57.17	+09 12 02.2	8.08	G	338.488 219 34	+09.200 613 50	4.57	24.96	−2.95	1.08	0.71	1.26	1.27	0.92	+ 1	+38	− 5	−13	+14	+17	+20	−36	+16	+ 6	0	−0.13
111384	22 33 57.60	+19 39 47.7	8.97	H	338.489 991 59	+19.663 247 54	8.25	23.35	−6.40	1.07	0.84	1.36	1.25	1.08	+ 6	+23	− 8	− 6	+ 1	−22	+ 1	−10	+ 9	+ 2	0	3.01
111385	22 33 58.33	+24 33 54.0	9.66	3 H	338.493 053 87	+24.564 992 38	2.02	0.55	0.48	2.71	1.39	3.01	2.27	1.41	+59	+85	+63	−66	−34	−52	+ 8	−19	+ 9	+ 1	4	0.62
*111386	22 33 58.46	−32 39 46.7	8.91	H	338.493 593 51	−32.662 972 67	3.01	36.00	0.16	0.88	0.72	1.24	0.92	0.73	+35	−10	+ 7	+ 0	−26	+28	−33	−45	+17	+34	0	−1.00
*111387	22 33 58.41	+65 13 23.0	7.91	H	338.493 386 61	+65.223 056 09	3.42	6.76	2.25	0.64	0.60	0.74	0.89	0.76	−17	−11	+ 6	+13	+ 1	+ 2	− 1	− 4	+20	−16	1	1.42
111388	22 33 59.02	+06 42 11.5	9.05	H	338.495 923 90	+06.703 202 21	10.14	−5.60	−14.39	1.26	0.81	1.35	1.85	1.17	+ 7	+18	− 9	−57	+28	−22	+38	−25	+28	−24	0	−0.39
111389	22 34 00.16	−43 21 13.0	8.94	H	338.500 659 61	−43.353 624 78	7.00	22.98	−27.74	0.98	0.60	1.22	1.25	0.61	+11	+ 3	−15	+33	− 8	+28	+ 1	−38	+17	+23	0	1.20
111390	22 34 00.44	+29 44 35.2	8.32	H	338.501 831 33	+29.743 124 01 A	0.49	27.79	0.68	0.95	1.14	1.69	0.99	1.47	+46	−26	−20	−17	−10	+10	− 5	−26	+19	+71	1	1.27
111391	22 34 00.55	−25 14 30.1	11.25	G	338.502 306 91	−25.241 690 67	63.98	−122.39	−302.87	2.41	1.66	2.55	2.72	1.86	+17	+12	− 7	−40	+10	+ 2	+ 9	−14	− 6	+19	0	1.34
111392	22 34 01.59	−60 08 36.7	8.15	H	338.506 614 99	−60.143 537 39	8.67	30.15	−16.11	0.48	0.61	1.01	0.53	0.61	−34	− 1	−23	− 2	+ 9	+12	+11	−20	−12	−40	3	0.44
111393	22 34 01.71	−35 09 35.2	9.47	H	338.507 140 05	−35.159 784 86	4.53	7.37	−1.24	1.22	0.73	1.58	1.45	0.85	+11	+ 1	−12	+11	−24	+19	−13	−50	+28	+30	0	−0.92
111394	22 34 02.89	−01 34 27.0	5.88	H	338.512 037 05	−01.574 179 24	7.35	39.70	−37.28	0.80	0.59	0.86	1.08	0.73	+30	+ 6	+ 0	+16	−13	+19	−18	−46	+11	+21	2	0.84
111395	22 34 03.02	−41 43 46.6	8.36	H	338.512 597 82	−41.729 612 27	3.18	31.87	−2.28	1.07	0.60	1.17	1.21	0.63	+10	−17	−22	+29	− 8	+ 6	+ 5	−34	+16	+32	0	0.84
111396	22 34 04.58	−12 09 29.6	9.03	G	338.519 102 25	−12.158 231 92	0.51	−0.07	3.82	1.31	0.78	1.61	1.57	1.19	+20	−13	−43	−36	−18	+36	− 3	−65	+59	+42	0	0.38
111397	22 34 05.22	−32 08 31.5	6.68	H	338.521 750 47	−32.142 096 80	2.80	8.54	−11.61	0.57	0.43	0.83	0.61	0.45	+31	+ 0	+ 7	+10	−17	+25	−20	−31	+14	+32	0	0.71
111398	22 34 06.63	−09 36 30.5	6.54	H	338.527 604 25	−09.608 476 19	3.98	−18.92	−7.35	0.81	0.56	1.04	1.03	0.71	+24	−27	−36	−25	−10	+46	− 8	−51	+47	+27	0	−0.58
111399	22 34 07.07	+09 25 41.2	8.43	G	338.529 477 22	+09.428 109 85	7.48	9.11	−6.55	1.13	0.73	1.26	1.45	0.96	+ 4	+13	− 7	−18	+10

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
111301	8.941	0.013	8.538	0.014		0.381	0.018	T	0.45	0.02	L	8.5783	0.0016	0.014	88		8.55	8.60		C			1							S
111302	8.817	0.012	7.118	0.006		1.419	0.011	T	1.40	0.02	L	7.1008	0.0010	0.009	120		7.09	7.12		C			1							S
111303	8.231	0.008	7.751	0.009	*	0.452	0.011	T	0.52	0.01	L *	7.8060	0.0009	0.011	159	*	7.79	7.83		D	22329+4923	I 1	2 C	A	BA	144	0.317	0.003	0.11	0.03	S
111304	9.046	0.011	8.748	0.012		0.283	0.015	T	0.32	0.02	L	8.7843	0.0016	0.017	184		8.75	8.82					1							
111305	9.009	0.012	8.681	0.013		0.311	0.017	T	0.36	0.02	L	8.7366	0.0021	0.017	121		8.71	8.77					1							
111306	11.171	0.069	10.492	0.060		0.578	0.072	G	0.65	0.07	R	10.6722	0.0050	0.032	62		10.61	10.72		C			1							G
111307	7.811	0.006	7.504	0.007		0.292	0.009	T	0.33	0.01	L	7.5701	0.0013	0.013	134		7.55	7.59		C			1							S
111308	11.484	0.088	10.522	0.059		0.138	0.009	G	0.15	0.01	H	10.5676	0.0050	0.048	103		10.49	10.63		U			1	S						G
111309	9.635	0.017	9.588	0.023		0.000	0.015	G	0.02	0.01	H	9.6499	0.0023	0.024	139		9.61	9.69					1							G
111310	6.959	0.008	5.129	0.008		1.612	0.013	G	2.50	0.02	A	4.9252	0.0130	0.093	213		4.79	5.06		U 2			1	S						S
111311	9.872	0.029	8.460	0.016		1.193	0.026	T	1.15	0.02	L	8.4977	0.0033	0.019	64		8.46	8.54					1							
111312	8.625	0.013	7.648	0.009		0.827	0.002	G	0.85	0.00	H	7.7221	0.0010	0.008	87		7.71	7.73		C			1							S
111313						1.501	0.010	G	2.04	0.02	A	10.4480	0.0029	0.025	70		10.40	10.49		C			1	S						G
111314	6.401	0.003	6.049	0.004	*	0.334	0.005	T	0.39	0.01	L *	6.0886	0.0007	0.007	104	*	6.08	6.10		D	22330+6954	I 1	2 C	A	AB	100	0.319	0.002	0.35	0.02	S
111315	11.042	0.062	9.019	0.019		1.676	0.052	T	1.70	0.05	L	8.8549	0.0065	0.047	81		8.81	8.94		U 2			1	S						
111316	9.433	0.015	7.919	0.008		1.273	0.013	T	1.23	0.01	L	7.9467	0.0013	0.012	112		7.93	7.96		C			1							
111317	9.160	0.013	8.694	0.013		0.410	0.015	G	0.48	0.02	H	8.7497	0.0013	0.012	116		8.72	8.77		C			1							
111318	10.314	0.023	9.907	0.026		0.385	0.032	T	0.45	0.04	L	9.9611	0.0026	0.032	172		9.91	10.02		C			1							G
111319	8.029	0.008	7.765	0.008	A	0.500	0.495	G	0.25	0.02	L *	7.7971	0.0013	0.010	112	*	7.78	7.82		D	22331+6830	I 1	2 C	C	AB	18	2.834	0.034	3.79	0.19	S
111320	10.159	0.022	9.443	0.019		0.645	0.022	T	0.71	0.02	L	9.5128	0.0020	0.025	158		9.46	9.55		C			1							
111321	9.106	0.018	9.024	0.022		0.074	0.026	T	0.09	0.03	L	9.0573	0.0033	0.016	55		9.03	9.08					1							S
111322	8.350	0.006	7.113	0.003		1.056	0.005	T	1.02	0.00	L	7.1652	0.0009	0.011	308		7.15	7.18					1							S
111323	8.890	0.015	8.340	0.014		0.515	0.018	T	0.59	0.02	L	8.4019	0.0017	0.014	67		8.38	8.42		C			1							S
111324	8.455	0.010	7.861	0.010		0.568	0.011	G	0.64	0.01	H	7.9064	0.0016	0.014	84		7.89	7.93		C			1							S
111325	6.266	0.003	6.247	0.004	*	0.018	0.004	T	0.04	0.00	L *	6.2785	0.0009	0.007	107	*	6.27	6.29		D	22333+7022	I 1	2 C	A	AB	47	9.609	0.013	3.15	0.05	S
111326	9.026	0.010	7.232	0.005		1.494	0.009	T	1.52	0.01	L	7.2023	0.0012	0.012	151		7.18	7.23		M			1							S
111327	10.620	0.050	10.183	0.055		0.426	0.060	T	0.49	0.06	L	10.2818	0.0054	0.032	68		10.22	10.33		C			1							
111328	8.234	0.008	7.970	0.008		0.251	0.011	T	0.28	0.01	L	8.0065	0.0015	0.017	173		7.98	8.03					1							S
111329	9.142	0.010	9.174	0.014		−0.025	0.016	T	0.00	0.02	L	9.1924	0.0017	0.024	210		9.15	9.23					1							
111330	8.988	0.011	8.391	0.010	*	0.557	0.013	T	0.63	0.01	L *	8.5630	0.0015	0.021	292	*	8.53	8.60		D	22333−6049	I 1	2 C	A	AB	123	4.299	0.005	1.31	0.02	
111331	10.471	0.028	9.772	0.024		0.644	0.030	T	0.71	0.03	L	9.8347	0.0030	0.035	152		9.77	9.89					1							
111332	9.444	0.018	8.805	0.016		0.576	0.008	G	0.65	0.01	H	8.8621	0.0016	0.016	107		8.83	8.89		C			1							S
111333	9.714	0.023	8.374	0.013		1.136	0.021	T	1.10	0.02	L	8.4058	0.0021	0.012	75		8.38	8.42		C	22334−1746	I 1	1							S
111334	11.305	0.070	10.240	0.044		0.913	0.065	T	0.91	0.05	L	10.2388	0.0025	0.026	126		10.20	10.29					1	S						G
111335	9.031	0.012	8.014	0.009	*	0.887	0.011	T	0.89	0.01	L *	8.0495	0.0022	0.019	113	*	8.02	8.08		U	22334+3808	M 1	2 C	C	AB	143	0.745	0.041	3.54	0.18	S
111336	9.780	0.022	9.486	0.026		0.280	0.032	T	0.32	0.04	L	9.5486	0.0024	0.018	68		9.51	9.58		C			1							
111337	8.110	0.008	8.169	0.010	*	−0.035	0.004	G	−0.01	0.00	H *	8.1597	0.0022	0.016	107	*	8.13	8.18		D	22334+3935	M 1	2 C	S A	AC	181	0.175	0.005	0.32	0.20	S
111338	9.287	0.014	8.904	0.014		0.363	0.018	T	0.42	0.02	L	8.9511	0.0023	0.021	136		8.92	8.99		C			1							
111339	9.054	0.009	8.004	0.006		0.930	0.015	G	0.92	0.01	H	8.0550	0.0013	0.016	223		8.03	8.08		C			1							S
111340	9.721	0.018	9.428	0.020		0.279	0.025	T	0.32	0.03	L	9.4649	0.0025	0.025	151		9.42	9.51					1							
111341	10.069	0.028	8.932	0.018		0.978	0.026	T	0.96	0.02	L	9.0041	0.0025	0.022	80		8.96	9.04		C			1							
111342	11.006	0.047	9.140	0.018		1.551	0.040	T	1.57	0.04	L	9.1176	0.0023	0.019	107		9.09	9.16					1							
111343	10.435	0.026	9.020	0.013		1.195	0.023	T	1.15	0.02	L	9.0473	0.0026	0.026	139		9.00	9.09					1							
111344	9.143	0.009	8.962	0.010		0.173	0.013	T	0.19	0.01	L	9.0149	0.0017	0.026	235		8.98	9.05					1							
111345	9.019	0.015	8.978	0.018		0.043	0.022	T	0.06	0.02	L	8.9985	0.0017	0.014	82		8.97	9.02		C			1							
111346	9.151	0.015	7.538	0.008		1.351	0.013	T	1.32	0.01	L	7.5569	0.0009	0.009	118		7.54	7.58		C			1							
111347	10.567	0.030	10.001	0.028		0.534	0.030	T	0.61	0.03	L	10.1322	0.0022	0.023	151		10.08	10.17		C			1							
111348	8.714	0.009	7.538	0.006		1.008	0.008	T	0.98	0.01	L	7.5888	0.0009	0.012	169		7.57	7.62		C			1							S
111349	8.699	0.010	7.883	0.008		0.721	0.003	G	0.77	0.00	H	7.9458	0.0007	0.009	163		7.93	7.97					1							S
111350	7.893	0.011	7.527	0.009		0.363	0.015	G	0.42	0.02	H	7.5856	0.0019	0.015	75		7.55	7.62		U			1							S
111351	10.501	0.040	10.157	0.046		0.390	0.040	G	0.46	0.04	R	10.1344	0.0035	0.032	99		10.08	10.19		C			1							G
111352	8.755	0.010	8.027	0.009		0.659	0.015	G	0.72	0.01	H	8.1008	0.0010	0.010	144		8.08	8.13		C			1							S
111353	10.869	0.041	9.361	0.019		1.268	0.036	T	1.23	0.04	L	9.3902	0.0018	0.021	134		9.35	9.43		C			1							
111354	10.164	0.035	9.757	0.036		0.398	0.042	T	0.46	0.05	L	9.8299	0.0028	0.021	76		9.79	9.86		C			1							
111355	8.143	0.008	6.674	0.004		1.238	0.007	T	1.20	0.01	L	6.6989	0.0010	0.008	133		6.68	6.71			22336+4049	I 1	1							S
111356	9.325	0.015	9.335	0.020		−0.004	0.023	T	0.02	0.02	L	9.3663	0.0022	0.024	161		9.32	9.41					1							
111357	8.330	0.009	7.957	0.008		0.382	0.015	G	0.45	0.02	H	8.0080	0.0018	0.018	159		7.98	8.04		C			1							S
111358	9.679	0.016	8.526	0.011		0.990	0.015	T	0.97	0.01	L	8.5864	0.0021	0.020	156		8.55	8.61		C			1							
111359	9.387	0.014	8.189	0.009		1.000	0.015	G	0.98	0.01	H	8.2545	0.0013	0.016	168		8.23	8.28					1							
111360	7.336	0.005	7.378	0.006		−0.030	0.004	G	−0.01	0.00	H	7.3760	0.0021	0.025	160		7.33	7.40	1.95	P 1 A			1							S
111361	10.321	0.023	8.539	0.010		1.484	0.020	T	1.50	0.03	L	8.4791	0.0016	0.016	160		8.45	8.51		C			1							
111362	6.955	0.005	5.833	0.003		0.966	0.005	T	0.95	0.00	L	5.8826	0.0006	0.007	125		5.87	5.90		M			1							S
111363	10.437	0.036	10.072	0.042		0.350	0.015	G	0.41	0.02	H	10.1723	0.0033	0.030	123		10.12	10.21					1							G
111364	9.981	0.025	8.603	0.014		1.166	0.022	T	1.13	0.02	L	8.6352	0.0021	0.018	112		8.61	8.67		C			1							
111365	10.216	0.029	8.358	0.013		1.577	0.026	T	2.64	0.04	O	8.1039	0.0061	0.039	74		8.05	8.16		U 2			1	S						P
111366	9.734	0.024	8.542	0.015		1.021	0.022	T	0.99	0.02	L	8.5946	0.0018	0.012	82		8.57	8.62		C	22337+2506	I 1	1							
111367	9.730	0.017	8.456	0.011		1.085	0.016	T	1.05	0.01	L	8.4827	0.0017	0.016	141		8.46	8.51					1							
111368	10.303	0.020	8.269	0.007		1.684	0.017	T	1.71	0.02	L	8.1667	0.0017	0.022	238		8.14	8.21		U			1							
111369	11.500	0.087	10.299	0.046		1.028	0.077	T	1.00	0.06	L	10.3677	0.0052	0.031	79		10.31	10.41		C			1							G
111370	10.011	0.027	9.603	0.029		0.399	0.033	T	0.46	0.04	L	9.6184	0.0036	0.029	75		9.57	9.66					1							S
111371	8.889	0.009	7.963	0.007		0.825	0.015	G	0.85	0.01	H	8.0289	0.0015	0.018	161		8.00	8.06		U			1							S
111372	10.123	0.020	9.726	0.021		0.432	0.034	G	0.50	0.04	H	9.7537	0.0019	0.023	160		9.71	9.80		C			1							
111373	9.467	0.017	9.054	0.018		0.390	0.023	T	0.46	0.03	L	9.0754	0.0020	0.016	76		9.05	9.12		D			1							S
111374	8.322	0.012	7.900	0.012		0.422	0.015	G	0.49	0.02	H	7.9536	0.0010	0.009	71		7.94	7.97					1							S
111375	9.910	0.016	9.914	0.023		0.001	0.026	T	0.02	0.02	L	9.9474	0.0029	0.034	204		9.88	10.01					1 X							G
111376	9.581	0.019	8.935	0.017		0.592	0.019	T	0.66	0.02	L	8.9908	0.0017	0.019	79		8.97	9.03		C			1							
111377	10.141	0.021	9.152	0.015		0.885	0.003	G	0.89	0.00	H	9.1971	0.0025	0.023	159		9.16	9.25					1							
111378	9.168	0.012	8.669	0.012		0.460	0.015	G	0.53	0.02	H	8.7363	0.0019	0.020	120		8.71	8.78					1							
111379	6.752	0.004	6.569	0.004		0.175	0.005	T	0.19	0.01	L	6.6133	0.0007	0.008	120		6.60	6.63					1							S
111380	8.383	0.009	8.127	0.010		0.244	0.013	T	0.27	0.02	L	8.1682	0.0018	0.015	108		8.15	8.20					1							S
111381	9.168	0.015	8.037	0.011		0.973	0.014	T	0.96	0.01	L	8.0935	0.0015	0.014	86		8.07	8.12		C			1 G							S
111382	7.973	0.007	6.888	0.004		0.918	0.043	G	0.93	0.02	A	6.9450	0.0011	0.012	144		6.93	6.96					1							S
111383	8.574	0.013	8.118	0.012		0.418	0.015	G	0.48	0.02	H	8.1817	0.0017	0.016	86		8.15	8.20		C			1							S
111384	9.568	0.019	9.016	0.018		0.517	0.023	T	0.59	0.02	L	9.0818	0.0026	0.017	79		9.05	9.11		C			1							
111385	11.193	0.082	9.835	0.041		1.165	0.076	T	3.23	0.57	O	9.4828	0.2100	1.083	53		7.94	11.61	420.40	P 1 B			1	S						G P
111386	10.322	0.024	9.003	0.014		1.120	0.022	T	1.08	0.02	L	9.0767	0.0013	0.016	151		9.04	9.10					1							
111387	8.104	0.010	7.931	0.010		0.166	0.013	T	0.18	0.01	L	7.9665	0.0016	0.015	119		7.94	7.99					1							S
111388	9.608	0.020	9.104	0.019		0.474	0.025	T	0.55	0.03	L	9.1543	0.0021	0.021	106		9.11	9.18		C			1							
111389	9.444	0.014	8.985	0.014		0.446	0.016	T	0.52	0.02	L	9.0366	0.0017	0.018	139		9.01	9.08		C			1							
111390	9.644	0.015	8.424	0.009	A	1.030	0.015	G	1.00	0.01	H	8.4873	0.0058	0.017	194	A	8.46	8.52			22340+2945	I 1	2 C	A	AB	165	12.683	0.024	3.01	0.09	
111391						1.494	0.006	G	2.03	0.03	I	11.3312	0.0063	0.043	61		11.25	11.41		C			1							G
111392	8.441	0.006	8.192	0.007		0.233	0.009	T	0.26	0.01	L	8.2237	0.0013	0.017	262		8.19	8.26			22340−6009	I 1	1							S
111393	10.452	0.027	9.541	0.019		0.808	0.025	T	0.83	0.02	L	9.6257	0.0019	0.020	154		9.59	9.65					1							
111394	7.127	0.006	5.991	0.004		0.977	0.006	T	0.96	0.01	L	6.0431	0.0008	0.007	70		6.03	6.06		C	22340−0134	I 1	1							S
111395	10.077	0.021	8.508	0.011		1.316	0.019	T	1.28	0.02	L	8.5165	0.0013	0.018	162		8.48	8.56					1							
111396	8.912	0.013	8.993	0.018		−0.086	0.027	G	−0.07	0.03	H	8.9997	0.0013	0.011	86		8.98	9.03					1							
111397	6.585	0.003	6.668	0.004		−0.071	0.005	T	−0.05	0.01	L	6.6641	0.0009	0.009	160		6.65	6.68					1							S
111398	8.099	0.009	6.684	0.005		1.195	0.008	T	1.15	0.01	L	6.7078	0.0007	0.007	110		6.70	6.72		C			1							S
111399	9.046	0.015	8.476	0.014		0.508	0.015	G	0.58	0.02	H	8.5410	0.0018	0.015	82		8.51	8.57		C			1							S
111400	8.624	0.011	8.675	0.014		−0.046	0.007	G	−0.02	0.01	H	8.6955	0.0059	0.040	96		8.62	8.75	1.43	P 1 A	22341+3920	I 1	1							P

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)												Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
111401	22 34 07.92	−19 21 43.5	8.63	H	338.532 998 82	−19.362 093 13		2.02	−4.85	9.67	0.99	0.79	1.15	1.13	0.76	+33	−20	−21	−25	+	0	+	7	−	9	−45	+23	+15	0	1.28
111402	22 34 08.09	+47 04 16.3	10.55	H	338.533 713 13	+47.071 197 77		3.89	1.78	−3.45	1.19	1.22	1.87	1.27	1.31	−15	+20	−	1	+14	+	0	−13	+16	−25	+27	+	9	0	0.54
111403	22 34 09.31	−23 17 35.3	9.04	H	338.538 785 36	−23.293 133 06		−1.36	−6.57	−17.09	1.20	0.89	1.40	1.68	0.99	+23	+	6	−	8	+	4	+21	+	6	+19	+	8	+16	+18	2	−0.35
111404	22 34 09.58	−42 16 21.9	9.77	H	338.539 928 18	−42.272 759 66		6.52	4.60	−3.10	1.20	0.77	1.54	1.43	0.80	+14	−	8	−21	+11	−13	+29	−	2	−49	+30	+33		0	−0.23
111405 H	22 34 10.06	+54 05 07.0	7.69	H	338.541 933 51	+54.085 290 09	*	4.39	12.10	−1.82	1.00	0.76	0.82	0.75	0.63	−13	−	1	+13	−	2	+	8	−	1	+11	−14	+26	+18	1	0.66
111406 H	22 34 10.47	−18 41 11.9	8.65	H	338.543 640 01	−18.686 643 29	*	7.70	−22.44	−14.80	1.05	0.86	1.27	1.19	0.86	+38	−22	−	4	−16	−	4	+18	−11	−45	+10	+30		2	0.89
111407	22 34 10.68	−43 04 04.2	8.84	H	338.544 505 38	−43.067 820 91		20.44	140.71	38.58	0.92	0.65	1.22	1.07	0.66	+11	+	5	−16	+	6	+	1	+21	+	6	−34	+19	+19	1	1.61
111408	22 34 13.19	+37 06 16.9	9.76	H	338.554 962 43	+37.104 680 81		5.09	−4.29	−4.17	1.09	0.99	1.64	1.46	1.35	−16	+	4	−	8	−22	+13	+21	+15	−17	+34	−	5	0	−1.33
111409	22 34 13.28	−36 40 15.7	8.05	H	338.555 350 85	−36.671 018 03		7.44	104.34	−14.63	0.78	0.53	1.02	0.84	0.58	+11	+12	+	5	+	6	−10	+28	−13	−36	−	5	+	8	0	0.01
111410	22 34 17.97	+17 09 12.6	7.56	H	338.574 862 11	+17.153 495 72		4.39	36.92	5.22	0.78	0.56	0.86	0.79	0.58	+18	+25	+14	+37	−	6	−14	−	7	+	2	+	5	+	2	0	−0.73
111411	22 34 18.64	−54 17 52.3	7.40	2 H	338.577 675 23	−54.297 871 54		8.40	23.32	−20.63	0.50	0.48	0.81	0.61	0.50	+10	−11	−21	+	5	−12	+27	−	5	−28	+15	+21		0	−0.58
111412	22 34 18.78	−50 48 13.5	8.27	2 G	338.578 236 80	−50.803 752 25		13.12	183.71	3.06	0.86	0.72	1.25	0.94	0.74	+19	−13	−19	−28	+	3	+18	+	1	−13	+14	+37		2	−0.61
111413 H	22 34 19.35	+03 44 33.4	8.48	H	338.580 637 89	+03.742 612 63	*	10.47	−18.86	−28.68	1.03	0.76	1.33	1.54	0.94	+26	+	5	−20	+14	−	5	+42	−11	−46	+41	+11		0	−3.14
111414	22 34 20.63	−09 18 18.7	8.49	H	338.585 937 98	−09.305 195 74		2.87	−12.12	−11.30	1.05	0.76	1.33	1.43	0.98	+20	−14	−36	−13	−	3	+27	−	6	−51	+51	+13		0	−0.45
111415	22 34 20.75	+50 12 58.4	8.42	H	338.586 451 50	+50.216 224 40		3.89	3.53	−4.96	0.57	0.55	0.82	0.55	0.59	−16	+19	−	3	+	8	+13	−13	+24	−23	+38	−	5	1	−0.82
111416 H	22 34 21.73	−22 36 07.7	8.41	H	338.590 528 31	−22.602 139 13	A	4.87	17.32	16.83	2.46	1.87	2.39	2.87	1.74	+51	+11	−	5	+11	+	9	+	2	+	5	+	3	+29	+12	1	0.71
111417	22 34 21.79	+15 03 03.4	8.62	G	338.590 776 71	+15.050 936 08		6.99	−51.01	−8.15	0.92	0.68	1.10	1.22	0.87	+13	+18	+17	−13	+	8	+	3	+	5	−	8	−19	−	4	2	0.20
111418	22 34 24.54	+18 23 05.5	9.61	H	338.602 256 30	+18.384 865 16		3.91	9.32	5.35	0.99	0.77	1.28	1.05	0.97	+13	+	7	+10	+	3	−	2	−	5	−	2	−21	−11	+16	0	0.66
111419	22 34 24.61	−38 20 43.2	10.05	H	338.602 531 53	−38.345 320 87		1.35	13.95	20.68	1.22	0.93	1.63	1.51	1.00	+18	−	4	−	2	+22	+	1	+30	+	0	−34	+	4	+17	2	1.25
111420	22 34 24.66	−19 03 10.0	8.60	G	338.602 738 24	−19.052 776 17		9.01	108.21	−83.80	0.98	0.71	1.15	1.08	0.74	+28	−24	−	3	−21	−	1	+18	−	9	−49	+16	+20		0	−0.14
111421	22 34 24.77	−55 19 22.7	8.27	H	338.603 200 82	−55.322 960 40		−0.07	−5.25	5.27	0.69	0.65	1.06	0.84	0.72	+	0	−14	−	6	+	2	+	3	−	1	+	5	−	6	−12	+12	0	−0.59
111422	22 34 25.03	+13 24 36.4	7.62	H	338.604 298 19	+13.410 107 40		2.93	−4.72	−18.09	0.80	0.60	0.95	0.92	0.68	+28	+32	+14	−10	+12	−	5	+13	+	1	+	1	+12		0	0.54
111423	22 34 25.91	+57 23 44.5	9.98	H	338.607 964 51	+57.395 693 92		3.66	8.74	0.34	0.89	0.84	1.09	1.19	1.03	−19	+	8	+19	+20	−	7	+	9	−10	+13	−14	−25		1	1.03
111424	22 34 26.86	−15 07 05.3	8.65	H	338.611 910 98	−15.118 139 71		4.70	1.62	−0.34	1.10	0.81	1.35	1.26	1.00	+23	+12	−31	−14	−14	+26	+	0	−40	+26	+37		2	−0.13
111425	22 34 27.07	−34 40 30.9	6.84	H	338.612 808 49	−34.675 254 15		6.61	−21.60	−5.70	0.64	0.45	0.88	0.74	0.52	+24	−11	−16	−	2	−24	+29	−18	−36	+22	+38		0	0.31
111426	22 34 27.63	−57 22 44.6	9.35	H	338.615 141 82	−57.379 051 61		10.95	−0.37	−35.58	0.75	0.76	1.19	0.89	0.73	−	1	−	2	−10	+	8	+	7	+13	+	8	+	3	−	3	+	8	2	0.31
111427 H	22 34 28.50	−76 02 19.2	9.21	H	338.618 755 44	−76.038 671 33	A	4.36	−6.41	−7.34	1.76	1.67	1.92	1.85	1.71	−23	+	0	−12	+12	−	2	−	3	+	1	−	2	−	5	−15		6	3.41
111428	22 34 28.52	−40 12 10.5	10.16	H	338.618 813 32	−40.202 917 08		7.92	−5.92	−43.81	1.20	0.83	1.57	1.63	0.91	+18	−	5	−21	+	3	−12	+37	−	1	−42	+34	+39		0	0.73
111429	22 34 30.19	+40 46 29.7	7.02	H	338.625 782 79	+40.774 906 88		3.45	−0.68	−3.45	0.56	0.55	0.90	0.66	0.71	−23	+19	−23	−18	+	5	−	3	+14	−32	+47	−11		0	−0.74
111430	22 34 30.62	+18 59 00.7	9.97	H	338.627 567 76	+18.983 525 04		3.92	9.55	−23.92	1.31	1.03	1.64	1.31	1.31	+13	+27	−18	+23	−12	+	2	−10	−48	+20	+15		5	0.31
111431	22 34 30.75	+63 49 10.9	8.02	G	338.628 119 64	+63.819 688 02		6.54	78.99	36.88	0.65	0.63	0.76	0.84	0.70	−12	+	9	+	9	+	6	+	5	−17	+	8	−18	+19	−15	0	−0.58
111432	22 34 30.92	−76 02 13.1	9.18	H																												
111433	22 34 31.58	+04 13 20.6	7.55	G	338.631 582 81	+04.222 389 85	A	10.16	19.80	0.25	2.74	2.00	2.42	3.02	2.12	+26	+	2	−	8	−20	−	6	+36	−	5	−42	+41	+28		1	1.05
111434	22 34 32.12	+04 13 09.7	9.02	H	338.633 844 94	+04.219 351 58	B	9.58	19.97	1.16	17.42	13.02	7.30	7.96	6.55	+31	+	0	−	3	−15	−	8	+37	−	8	−38	+44	+30		1	1.05
111435	22 34 32.49	+15 41 57.2	7.64	H	338.635 362 57	+15.699 214 26		3.96	13.82	−0.94	0.73	0.60	0.89	0.93	0.67	+17	+12	+16	−	5	+	6	−	1	+	5	−	3	−	4	−	1	0	0.31
111436	22 34 32.50	+58 09 46.8	7.25	1 H	338.635 401 49	+58.163 001 29		2.15	−20.79	−23.34	0.65	0.52	0.71	0.82	0.60	−10	+20	+11	+29	+	0	−	8	−	2	+10	−12	−	9	0	−1.79
111437	22 34 32.90	+16 03 37.9	8.55	H	338.637 076 62	+16.060 541 44		−0.11	−18.93	−15.06	0.92	0.71	1.10	1.07	0.81	+16	+	4	+22	−	6	−	3	−22	+	2	−	9	+	0	+	4	0	0.50
*111438	22 34 33.93	+37 06 08.6	8.21	H	338.641 365 80	+37.102 402 39		1.86	2.60	−9.34	0.82	0.69	1.09	1.10	0.88	−12	+	3	+	2	−20	+14	+15	+14	−18	+12	−	8	0	0.59
*111439	22 34 33.88	−55 15 15.0	8.97	H	338.641 149 87	−55.254 163 16		−0.46	10.53	−10.31	0.88	0.71	1.27	0.95	0.76	−	4	−11	−11	+	1	−	2	+	2	+	1	−	5	−22	+	8	1	0.83
111440	22 34 34.01	+12 50 53.2	9.72	3 H	338.641 694 74	+12.848 115 69		−0.19	7.45	−8.67	1.21	1.06	1.46	1.55	1.44	+32	+10	+16	+	1	+	6	+10	+	4	−	8	−	3	+27		2	0.97
111441	22 34 35.95	+00 35 43.3	6.72	H	338.649 805 68	+00.595 360 75		3.81	−23.49	−75.39	0.81	0.62	0.91	0.97	0.76	+23	−13	−17	−13	+	1	+18	+	2	−30	+11	+17		0	−1.89
111442	22 34 36.34	+48 45 22.4	7.75	H	338.651 418 42	+48.756 222 77		9.81	−0.42	−18.46	0.49	0.52	0.73	0.57	0.68	−12	+	8	−	6	−	3	+11	−10	+10	−29	+16	−	5	0	−0.52
111443	22 34 36.55	+26 35 53.6	6.88	H	338.652 278 44	+26.598 209 31		2.73	−8.36	0.23	0.61	0.58	0.78	0.69	0.68	+23	+21	+15	+35	−11	−	9	−10	−10	+	1	+20		0	−1.31
111444	22 34 37.14	+45 00 17.9	7.54	H	338.654 734 96	+45.004 982 06		2.79	12.42	0.74	0.47	0.51	0.79	0.51	0.56	−35	+	3	+	0	−17	+23	−10	+24	−28	+22	−24		0	−1.41
111445	22 34 37.72	−47 35 48.9	8.73	H	338.657 154 43	−47.596 910 86		11.38	−4.87	19.30	0.93	0.63	1.14	0.82	0.66	+	9	−15	−18	−22	−	6	+23	−	5	−14	+19	+21		0	−0.72
111446	22 34 38.11	−03 18 23.5	7.60	G	338.658 798 03	−03.306 516 55		14.59	−34.03	4.98	0.90	0.62	1.00	1.19	0.77	+15	−	1	−17	−14	+	9	+19	+10	−29	+22	+	8	0	−1.21
111447	22 34 39.41	−44 38 01.8	9.44	H	338.664 199 30	−44.633 836 98		13.56	91.89	−30.72	1.19	0.78	1.43	1.44	0.76	−	3	+23	−	8	−18	−	1	+26	+	6	−51	+19	+	9	1	1.47
111448	22 34 39.74	+46 45 55.0	10.24	H	338.665 573 14	+46.765 276 49		0.54	−3.57	−5.64	1.94	2.04	2.89	2.08	2.18	−	9	+12	+	5	−10	+	0	−	1	+	5	−25	+18	+	7	2		
111449	22 34 41.50	−20 42 28.3	5.21	H	338.672 911 35	−20.707 859 49		43.97	221.60	−146.58	0.67	0.47	0.75	0.79	0.48	+22	−	9	+	1	−13	+17	+	5	+14	−	8	+	3	+15		0	0.11
111450	22 34 41.84	−37 26 10.1	9.48	H	338.674 321 10	−37.436 139 59		7.59	−13.08	4.34	1.06	0.75	1.34	1.22	0.79	+	4	−	7	+	7	+26	−	4	+10	−	7	−33	−12	−	5	0	1.65
111451	22 34 41.86	−08 36 36.0	9.27	H	338.674 420 81	−08.610 012 80		4.40	−12.24	−0.37	1.59	0.92	1.83	2.19	1.24	+	8	+	0	−39	+26	−14	+17	−15	−48	+58	+	0	0	0.70
*111452	22 34 41.96	−19 51 35.2	8.10	3 T	338.674 834 14	−19.859 789 27		8.92	17.13	−8.33	0.92	0.64	1.06	1.15	0.68	+21	−28	−19	−21	+15	+10	+	6	−37	+16	+	6	0	0.59
*111453	22 34 41.95	−61 07 29.9	9.13	H	338.674 799 87	−61.124 961 64		4.17	6.59	−2.68	0.68	0.83	1.39	0.75	0.82	−33	−10	+	1	−12	+	6	+22	+10	−27	−32	−34		1	−0.10
111454	22 34 42.11	−03 35 58.0	9.23	2 H	338.675 456 88	−03.599 439 91		7.16	73.12	−21.51	1.22	0.86	1.46	1.75	1.08	+28	−13	−28	+	1	+	9	+20	+	1	−39	+31	+10	0	−2.31
111455	22 34 47.43	+29 57 26.6	7.15	H	338.697 620 68	+29.957 402 65		3.20	−7.25	−4.73	0.44	0.53	0.85	0.51	0.74	+38	−10	−	5	−10	+	4	+11	+	7	−13	+22	+64	0	−1.66
111456	22 34 47.73	−45 47 04.6	7.78	H	338.698 867 74	−45.784 615 73		9.92	27.46	22.33	0.84	0.56	0.97	1.09	0.55	+	3	+13	−19	−	7	+	1	+	7	+	5	−41	+24	+	8	0	0.83
111457 H	22 34 48.08	+57 14 59.3	9.81	H	338.700 323 15	+57.249 819 36	A	1.10	−1.56	−1.47	1.51	1.39	1.64	1.71	1.47	−19	+	3	+20	+	6	−	7	+13	−13	+	4	−	1	−26	1	−0.13
111458	22 34 50.47	+40 43 57.2	8.52	H	338.710 276 89	+40.732 546 87		5.13	−0.71	−1.75	0.84	0.74	1.21	1.00	0.96	−17	+14	−20	−	9	+	1	+	0	+10	−35	+44	−	1	0	−1.35
111459	22 34 54.47	+50 59 47.3	8.89	H	338.726 978 64	+50.996 470 74		2.58	4.55	3.97	0.71	0.74	0.98	0.77	0.80	−13	+	8	+	7	−15	+23	−12	+27	−22	+27	−	1	0	0.02
111460 H	22 34 55.25	+41 34 19.0	8.09	H	338.730 188 92	+41.571 953 28	A	5.75	2.28	−38.87	0.93	1.21	1.57	0.96	1.53	−17	+13	−15	+42	+	2	+	5	+	4	−	3	+19	−22	1	0.04
111461	22 34 55.75	−31 58 27.4	9.23	H	338.732 270 98	−31.974 284 67		2.56	13.73	−10.22	0.94	0.71	1.39	1.07	0.78	+34	−	1	−	1	+14	−27	+27	−26	−40	+19	+39		0	−2.55
111462	22 34 57.80	+22 18 04.9	7.84	H	338.740 826 45	+22.301 350 47		4.88	18.46	−2.91	0.77	0.64	0.94	0.89	0.74	+25	+18	+13	+	3	−	7	−12	−10	−15	−15	+12		0	−0.75
111463	22 34 58.01	+22 06 15.5	9.15	G	338.741 705 89	+22.104 295 43		6.52	40.25	1.26	1.00	0.81	1.25	1.13	1.02	+22	+16	+	6	−	7	+	4	−19	+	3	+	2	+18	+23	0	−0.22
111464	22 34 58.51	−34 23 03.3	8.99	H	338.743 811 49	−34.384 245 57		7.32	30.57	8.11	0.92	0.60	1.30	1.01	0.74	+19	+	0	−	9	+	1	−19	+31	−15	−26	+25	+39	0	−1.04
111465	22 34 58.98	−48 33 28.4	9.85	G	338.745 767 27	−48.557 895 09		3.12	54.55	−18.39	0.81	0.80	1.40	0.81	0.81	+25	−20	−19	−26	−	4	+15	−	6	−14	+22	+25		3	1.61
111466	22 34 59.88	+04 09 46.0	8.07	H	338.749 487 57	+04.162 778 90		6.71	−16.13	−21.55	0.90	0.74	1.11	1.15	0.90	+32	−	2	−	6	−	8	−	9	+40	−14	−48	+29	+26		0	0.81
111467	22 35 00.07	+58 41 30.0	9.72	G	338.750 290 62	+58.691 663 24		0.75	3.63	−9.10	1.08	0.99	1.31	1.38	1.12	−	5	+	0	+23	+30	+	2	−21	+10	+13	+	4	+12		5	0.07
111468	22 35 00.17	−32 55 08.4	9.19	H	338.750 713 76	−32.918 989 09		9.21	−12.95	11.19	0.92	0.64	1.27	1.05	0.73	+22	−	8	−	8	+	7	−24	+26	−21	−45	+23	+32		0	0.38
111469 H	22 35 00.43	+60 49 34.9	7.08	H	338.751 778 02	+60.826 373 21	*	15.80	−107.99	−17.43	0.98	0.90	0.77	0.80	0.71	−14	−	7	+16	−	5	−	2	−	8	+	2	−	7	−21	−16	1	−0.06
111470	22 35 00.62	+16 40 48.2	9.00	H	338.752 588 78	+16.680 060 52		2.21	−19.48	−9.74	0.98	0.80	1.21	1.06	0.86	+27	+22	+25	+21	−	4	−20	−	2	+	4	−	3	+12		0	−0.35
111471	22 35 02.34	+30 48 11.2	7.38	H	338.759 769 53	+30.803 118 01		2.61	18.04	−30.72	0.48	0.55	0.87	0.57	0.71	+24	+	3	−	3	+	5	+	4	+11	+	8	−13	+29	+40	1	1.09
111472	22 35 04.71	−16 27 40.0	10.72	G	338.769 645 42	−16.461 113 30		11.78	222.66	−58.12	1.86	1.25	2.14	2.57	1.48	+22	−	2	−	4	+	1	+16	−17	+13	−31	−	3	+23		0	1.61
111473	22 35 05.87	+11 52 55.9	8.66	G	338.774 446 73	+11.882 199 45		23.10	−335.37	−326.10	0.98	0.96	1.14	1.07	1.13	+46	+	4	+	3	−	2	−25	−10	−34	−55	+18	+26		2	0.06
111474	22 35 06.15	−01 31 29.0	7.86	H	338.775 609 03	−01.524 715 20		8.48	26.90	0.30	0.99	0.64	1.10	1.29	0.82	+20	+	4	−13	+25	−	9	+25	−10	−40	+32	+17		0	1.88
111475	22 35 06.23	−11 14 21.4	9.26	H	338.775 942 89	−11.239 290 89		16.23	−25.47	−136.62	1.32	0.97	1.86	1.87	1.38	+	3	+21	−47	−	3	−	8	+42	+23	−53	+57	+35		2	−0.74
111476	22 35 07.05	−22 04 47.8	9.85	H	338.779 362 08	−22.079 944 80		0.48	22.48	2.11	1.35	0.83	1.62	1.72	0.92	+23	+14	−	7	+20	−	1	+	8	+	1	−20	+34	+15		0	1.44
111477 H	22 35 09.62	−18 24 58.8	8.85	H	338.790 075 36	−18.416 344 60	A	9.29	3.86	9.19	2.33	1.53	2.11	2.22	1.42	+31	−	2	−	5	−33	+	2	+	6	−	1	−41	+26	+13	2	−0.56
111478	22 35 11.21	−72 33 06.3	8.01	H	338.796 705 14	−72.551 742 96		21.06	−134.42	90.02	0.58	0.58	0.77	0.65	0.56	−	4	−12	−17	+	2	−	3	−11	−	5	−	8	+	5	−	7	0	0.28
111479	22 35 11.52	−08 23 56.9	9.16	H	338.798 005 50	−08.399 143 48		6.02	−30.68	−3.39	1.25	0.78	1.39	1.73	1.01	+16	−14	−38	+	0	−	4	+	9	−	9	−46	+42	+	8	2	0.80
111480 H	22 35 12.10	+14 36 37.9	7.48	H	338.800 432 52	+14.610 538 48	A	2.08	−2.36	−2.42	1.29	1.04	1.34	1.43	1.12	+21	+25	+	8	+11	−	1	−10	+	5	−16	+17	+13		1	0.44
111481	22 35 12.21	+02 40 24.4	8.96	H	338.800 872 13	+02.673 440 92		8.12	132.62	67.35	1.13	1.05	1.32	1.35	1.31	+48	−25	−26	−	6	−21	+	9	−31	−53	+29	+33		0	−0.26
111482	22 35 12.55	−47 22 33.1	10.04	H	338.802 291 36	−47.375 860 47		−0.31	21.18	3.31	1.48	0.90	1.63	1.74	0.95	+	0	−14	−16	+19	−	7	+20	−	3	−11	+13	+	8	0	1.07
111483	22 35 12.62	+30 53 46.6	9.05	H	338.802 592 97	+30.896 281 71		2.20	−4.34	−3.99	0.67	0.74	1.16	0.81	0.98	+28	+	0	−13	+	4	+	4	+	2	+	7	−15	+29	+40	0	−1.54
111484	22 35 13.90	−03 56 52.3	8.39	H	338.807 935 58	−03.947 856 49		3.44	0.99	−7.91	0.97	0.67	1.14	1.16	0.80	+24	−11	−19	−13	+	6	+30	+	8	+28	+24	+17		0	0.57
111485	22 35 14.13	−49 59 28.8	7.94	1 H	338.808 876 59	−49.991 341 73		1.01	5.13	−18.58	0.71	0.61	1.04	0.84	0.66	+15	−15	−12	−	8	−	2	+	5	−	4	−13	+14	+21		0	−1.55
*111486	22 35 15.71	−78 36 50.5	7.89	G	338.815 455 91	−78.614 018 94		14.81	−38.45	−24.91	0.56	0.58	0.71	0.76	0.59	−	4	−	9	−19	+	4	+	1	+19	+	5	−11	−	4	−	7	0	0.72
*111487	22 35 15.67	+45 09 12.3	6.99	H	338.815 270 97	+45.153 422 45		3.32	−4.94	−7.53	0.44	0.50	0.73	0.47	0.53	−36	+	4	+	0	−20	+22	−	3	+23	−28	+17	−25		0	1.07
111488	22 35 16.04	+53 39 57.9	9.08	H	338.816 838 87	+53.666 075 90		2.07	−23.81	−12.86	0.68	0.67	0.91	0.73	0.76	−10	−	2	+	8	−	2	+10	−	6	+12	−	8	+24	+12	0	0.45
111489	22 35 17.36	+51 55 30.0	8.90	G	338.822 313 36	+51.924 996 09		7.04	59.23	39.39	0.77	0.63	0.97	0.79	0.68	−10	−	1	+	7	+	3	+12	+	3	+14	−16	+38	+	8	0	0.64
111490	22 35 17.66	−30 37 37.1	10.69	H	338.823 581 29	−30.626 963 50		7.38	81.60	−19.02	1.54	1.12	1.95	1.60	1.21	+29	−	3	+19	+	0	−27	+	7	−30	−52	−	4	+30		2	0.90
111491	22 35 18.11	+43 40 51.9	8.33	H	338.825 456 84	+43.681 082 82		3.92	−0.10	−3.22	0.49	0.60	0.93	0.53	0.62	−43	+11	−	8	−19	+19	−12	+22	−33	+26	−29		0	0.57
111492	22 35 18.31	+54 20 47.4	8.95	H	338.826 291 62	+54.346 508 32		8.21	70.21	18.29	0.62	0.59	0.79	0.74	0.71	−	9	+	6	+11	+	9	+	9	−	9	+14	−	3	+10	+12	1	0.29
111493	22 35 18.84	+32 49 17.8	8.35	G	338.828 486 65	+32.821 619 12		11.89	−83.81	−59.32	0.60	0.66	0.94	0.82	0.87	+16	+	6	−10	+14	−12	−11	−13	−	9	+12	+	6	0	0.29
111494	22 35 19.17	+74 41 18.1	11.32	H	338.829 856 36	+74.688 351 27		27.56	256.69	81.19	1.42	1.29	1.57	1.78	1.56	+	1	+	1	+	8	−10	+	2	+	3	+	2	−	7	+22	−	5	0	0.21
111495	22 35 20.32	−02 15 26.0	8.07	H	338.834 671 97	−02.257 223 99		2.21	3.50	−16.68	0.87	0.67	1.04	1.25	0.84	+29	−	2	−24	+20	−12	+37	−10	−39	+25	+26		0	0.82
111496	22 35 21.20	+64 22 53.0	9.36	H	338.838 338 28	+64.381 380 77		22.45	200.62	29.07	0.98	0.87	1.15	1.29	1.02	−	4	+16	+11	+13	−	3	−12	+	3	−	6	+27	−	8	0	−1.03
111497	22 35 21.33	−00 07 02.5

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
111401	10.166	0.033	8.757	0.018		1.190	0.029	T	1.15	0.03	L	8.7963	0.0019	0.013	74		8.77	8.82		C			1							
111402	10.888	0.043	10.601	0.053		0.272	0.071	T	0.31	0.09	L	10.6270	0.0040	0.039	143		10.56	10.69					1 S							G
111403	10.265	0.032	9.139	0.020		0.969	0.029	T	0.95	0.02	L	9.2020	0.0028	0.023	67		9.17	9.25					1							
111404	10.289	0.024	9.787	0.023		0.483	0.025	T	0.55	0.03	L	9.8793	0.0021	0.024	166		9.83	9.92					1 S							
111405	7.761	0.007	7.700	0.009	*	0.061	0.010	T	0.07	0.01	L *	7.7183	0.0008	0.011	144	*	7.70	7.74		D	22342+5405	I 1	2 C A	AB	255	0.263	0.003	0.04	0.05	S
111406	9.268	0.020	8.694	0.018	*	0.540	0.020	T	0.61	0.02	L *	8.7676	0.0017	0.014	76	*	8.72	8.78		D	22342−1841	I 1	2 C S A	AS	16	0.126	0.015	0.66	0.78	S
111407	9.862	0.018	8.920	0.013		0.817	0.017	T	0.84	0.01	L	8.9852	0.0019	0.021	151		8.95	9.02					1							
111408	10.031	0.028	9.738	0.033		0.200	0.040	G	0.22	0.05	R	9.8215	0.0033	0.024	102		9.79	9.88		C			1							G
111409	9.376	0.013	8.184	0.009		1.021	0.012	T	0.99	0.01	L	8.2193	0.0011	0.012	148		8.19	8.24					1							S
111410	8.847	0.013	7.662	0.008		1.015	0.012	T	0.99	0.01	L	7.7308	0.0013	0.011	89		7.71	7.75		C			1							S
111411	7.675	0.007	7.438	0.007		0.226	0.009	T	0.25	0.01	L	7.4721	0.0024	0.024	155		7.44	7.51		U 2			1							S
111412	9.609	0.016	8.396	0.010		1.027	0.002	G	1.07	0.00	I	8.4319	0.0020	0.020	140		8.40	8.47		U			1							
111413	9.056	0.016	8.535	0.016	*	0.489	0.021	T	0.56	0.02	L *	8.5945	0.0019	0.012	71	*	8.58	8.61		C	22343+0345	H 1	2 C S A	AB	357	0.134	0.005	0.60	0.34	S
111414	10.284	0.032	8.675	0.015		1.348	0.028	T	1.31	0.03	L	8.6466	0.0019	0.017	94		8.62	8.68		C			1							
111415	8.428	0.010	8.444	0.013		−0.010	0.015	T	0.01	0.01	L	8.4275	0.0015	0.015	153		8.40	8.46					1							
111416	9.108	0.017	8.531	0.016	A	1.100	0.495	G	0.61	0.03	L *	8.5260	0.0017	0.014	76	*	8.49	8.56		D	22344−2236	I 1	2 C A	AB	339	1.512	0.020	2.28	0.19	S
111417	9.165	0.016	8.655	0.015		0.480	0.015	G	0.55	0.02	H	8.7235	0.0012	0.015	86		8.69	8.75					1							
111418	10.190	0.034	9.644	0.033		0.512	0.042	T	0.58	0.04	L	9.7188	0.0021	0.017	85		9.68	9.75		C			1							
111419	10.499	0.029	10.025	0.031		0.459	0.033	T	0.53	0.04	L	10.1505	0.0031	0.023	124		10.11	10.19		C			1							
111420	9.170	0.019	8.643	0.019		0.541	0.015	G	0.61	0.02	H	8.7118	0.0016	0.013	84		8.69	8.73		C			1							S
111421	10.240	0.028	8.429	0.012		1.507	0.024	T	1.54	0.04	L	8.3939	0.0019	0.019	135		8.36	8.43					1							S
111422	9.062	0.015	7.729	0.009		1.131	0.014	T	1.09	0.01	L	7.7845	0.0015	0.011	90		7.77	7.81		C			1							S
111423	10.224	0.031	9.974	0.037		0.238	0.045	T	0.27	0.06	L	10.0445	0.0018	0.019	115		10.01	10.08					1							G
111424	9.255	0.017	8.720	0.016		0.509	0.017	T	0.58	0.02	L	8.7616	0.0022	0.018	80		8.73	8.80		C			1							S
111425	8.192	0.008	6.958	0.004		1.054	0.007	T	1.02	0.01	L	7.0097	0.0010	0.012	171		6.99	7.03					1							S
111426	9.868	0.019	9.394	0.018		0.459	0.020	T	0.53	0.02	L	9.4467	0.0018	0.024	152		9.40	9.49					1							
111427	11.457	0.075	9.615	0.024	A	1.648	0.082	G	2.47	0.38	K *	9.2281	0.0097	0.083	134	*	9.11	9.37		D	22345−7602	I 2	2 C C	AC	100	3.770	0.061	3.33	0.39	
111428	10.791	0.037	10.175	0.034		0.571	0.037	T	0.64	0.03	L	10.2818	0.0024	0.026	134		10.23	10.32		C			1							
111429	6.849	0.005	6.987	0.006		−0.119	0.007	T	−0.10	0.01	L	6.9800	0.0013	0.011	120		6.97	7.00		C	22345+4046	I 1	1							S
111430	11.197	0.058	10.074	0.036		0.967	0.053	T	0.95	0.04	L	10.1397	0.0036	0.026	84		10.09	10.19					1							
111431	8.680	0.011	8.083	0.010		0.568	0.015	G	0.64	0.01	H	8.1477	0.0018	0.015	122		8.12	8.17					1							
111432											T	9.3181	0.0125	0.154	133		9.18	9.83		D	22345−7602	I 2	S							G
111433	7.563	0.009	7.552	0.010	A	0.024	0.015	G	0.04	0.01	H	7.5300	0.0170	0.055	78	A	7.49	7.63		D	22345+0413	I 2	1 C P A							S
111434	9.327	0.025	8.958	0.026	B	0.353	0.015	G	0.38	0.08	L	9.1685	0.0732			B				D	22345+0413	I 2	1 C I A							
111435	8.956	0.014	7.752	0.010		1.030	0.013	T	1.00	0.01	L	7.8095	0.0011	0.011	87		7.79	7.84					1							S
111436	9.431	0.019	7.442	0.008		1.649	0.016	T	1.67	0.02	L	7.3538	0.0014	0.014	101		7.34	7.39		U			1							S
111437	10.367	0.038	8.689	0.017		1.402	0.033	T	1.38	0.04	L	8.6975	0.0013	0.015	83		8.66	8.72		C			1							
111438	10.300	0.030	8.414	0.012		1.567	0.026	T	1.59	0.03	L	8.3225	0.0016	0.017	109		8.30	8.35					1							
111439	10.624	0.036	9.121	0.017		1.264	0.031	T	1.22	0.03	L	9.1292	0.0022	0.021	128		9.09	9.16					1							
111440	10.321	0.034	9.751	0.033		0.533	0.042	T	0.61	0.04	L	9.8350	0.0025	0.020	77		9.78	9.87		U			1							
111441	8.709	0.016	6.892	0.008		1.534	0.008	G	1.68	0.05	F	6.8264	0.0014	0.011	78		6.81	6.85					1							S
111442	8.317	0.008	7.799	0.008		0.486	0.010	T	0.56	0.01	L	7.8544	0.0010	0.011	172		7.83	7.87					1 G							S
111443	8.792	0.015	7.018	0.007		1.478	0.013	T	1.49	0.02	L	7.0080	0.0013	0.012	89		6.99	7.03					1							S
111444	7.616	0.006	7.538	0.006		0.077	0.008	T	0.09	0.01	L	7.5681	0.0011	0.012	192		7.55	7.59					1							S
111445	9.388	0.015	8.820	0.014		0.535	0.015	T	0.61	0.02	L	8.8496	0.0016	0.021	133		8.81	8.88			22346−4736	I 1	1 S							S
111446	8.053	0.012	7.655	0.009		0.377	0.014	T	0.44	0.01	L	7.6954	0.0017	0.013	76		7.68	7.72					1							S
111447	10.315	0.024	9.515	0.019		0.708	0.023	T	0.76	0.02	L	9.5768	0.0025	0.022	143		9.54	9.61					1							
111448	10.257	0.027	10.296	0.042		−0.031	0.046	T	−0.01	0.05	L	10.2379	0.0034	0.040	157		10.17	10.30		R			1 X							G
111449	5.734	0.003	5.262	0.003		0.446	0.009	G	0.49	0.02	A	5.3105	0.0006	0.005	97		5.30	5.32		C			1							S
111450	9.876	0.022	9.481	0.022		0.386	0.026	T	0.45	0.03	L	9.5689	0.0028	0.023	125		9.53	9.61					1							
111451	10.677	0.051	9.389	0.027		1.096	0.045	T	1.06	0.05	L	9.4349	0.0024	0.020	85		9.40	9.47		C			1							S
111452	8.529	0.010	8.140	0.011		0.380	0.013	T	0.44	0.01	L	8.1218	0.0193	0.180	92		8.02	8.64	0.51	P 1 A			1							S
111453	10.445	0.022	9.243	0.013		1.029	0.020	T	1.00	0.02	L	9.2950	0.0021	0.033	255		9.24	9.35					1							
111454	10.038	0.032	9.390	0.029		0.601	0.037	T	0.67	0.03	L	9.3558	0.0036	0.025	65		9.33	9.72		U 2 C			1							S P
111455	8.826	0.008	7.286	0.004		1.293	0.007	T	1.25	0.01	L	7.3115	0.0009	0.011	233		7.29	7.33		C			1							S
111456	8.212	0.007	7.823	0.008		0.368	0.015	G	0.42	0.02	A	7.8708	0.0010	0.013	143		7.84	7.90					1							S
111457	10.057	0.025	10.003	0.037	A						T *	9.8699	0.0025	0.025	123	*	9.83	9.90		D	22348+5715	H 1	2 C A	AB	103	2.288	0.028	2.65	0.12	G
111458	8.438	0.010	8.506	0.014		−0.058	0.015	T	−0.04	0.01	L	8.5109	0.0019	0.021	122		8.47	8.55					1							
111459	9.073	0.014	8.918	0.016		0.149	0.020	T	0.16	0.02	L	8.9446	0.0025	0.023	132		8.91	8.98					1							
111460	8.933	0.010	8.486	0.010	A	0.400	0.495	G	0.43	0.05	L *	8.1786	0.0012	0.016	216	*	8.16	8.21		D	22349+4134	I 1	2 C A	AB	299	3.678	0.004	0.92	0.01	S
111461	10.753	0.032	9.375	0.016		1.166	0.028	T	1.13	0.03	L	9.3979	0.0020	0.022	167		9.36	9.44		C			1							
111462	9.022	0.015	7.937	0.010		0.938	0.014	T	0.93	0.01	L	8.0027	0.0012	0.011	94		7.98	8.03		C	22350+2218	I 1	1							S
111463	9.889	0.025	9.194	0.021		0.620	0.020	G	0.69	0.02	H	9.2730	0.0019	0.020	93		9.25	9.30		C			1							
111464	9.657	0.016	9.052	0.015		0.563	0.016	T	0.64	0.01	L	9.1156	0.0016	0.020	170		9.08	9.15					1							
111465	10.475	0.024	9.888	0.022		0.589	0.005	G	0.66	0.01	H	9.9847	0.0018	0.025	180		9.93	10.03		C			1							
111466	8.488	0.012	8.087	0.012		0.379	0.016	T	0.44	0.02	L	8.1535	0.0013	0.011	77		8.13	8.17					1							S
111467	10.112	0.035	9.671	0.036		0.362	0.015	G	0.42	0.02	H	9.7896	0.0025	0.024	96		9.74	9.84		C			1							G
111468	9.754	0.014	9.235	0.014		0.497	0.015	T	0.57	0.02	L	9.2954	0.0017	0.017	163		9.26	9.32		C			1							
111469	7.543	0.006	7.131	0.007	*	0.403	0.007	T	0.47	0.01	L *	7.1708	0.0009	0.008	99	*	7.16	7.19		D	22350+6050	H 1	2 C D	AB	294	0.240	0.057	3.24	0.39	S D
111470	10.408	0.030	9.129	0.018		1.089	0.027	T	1.05	0.03	L	9.1632	0.0023	0.020	91		9.12	9.20					1							
111471	9.114	0.011	7.543	0.006		1.340	0.015	G	1.30	0.02	H	7.5367	0.0014	0.013	164		7.52	7.56			22350+3048	I 1	1							S
111472	11.551	0.102	10.727	0.080		0.734	0.005	G	0.78	0.01	H	10.8635	0.0047	0.031	89		10.80	10.90		C			1							G
111473	9.783	0.026	8.789	0.019		0.866	0.003	G	0.91	0.00	H	8.8135	0.0023	0.016	78		8.78	8.84					1							
111474	8.487	0.014	7.918	0.012		0.566	0.015	G	0.64	0.01	H	7.9792	0.0013	0.008	63		7.96	8.00					1							S
111475	10.040	0.028	9.364	0.025		0.625	0.031	T	0.69	0.03	L	9.3918	0.0023	0.020	82		9.36	9.43		C			1							
111476	10.144	0.029	9.899	0.035		0.229	0.046	T	0.25	0.06	L	9.9230	0.0033	0.026	98		9.87	9.97					1							
111477	9.498	0.015	8.945	0.015	*	0.524	0.016	T	0.60	0.02	L *	8.9672	0.0028	0.021	117	*	8.93	9.00		D	22352−1825	I 1	2 C A	AB	99	0.586	0.021	2.56	0.08	S
111478	8.684	0.010	8.079	0.009		0.563	0.010	T	0.64	0.01	L	8.1329	0.0011	0.013	147		8.11	8.16		C			1							S
111479	9.692	0.025	9.195	0.025		0.467	0.032	T	0.54	0.03	L	9.2630	0.0030	0.019	81		9.23	9.29		C			1							
111480	9.076	0.013	7.632	0.008	*	1.218	0.012	T	1.18	0.01	L *	7.6407	0.0011	0.010	86	*	7.63	7.66		D	22352+1437	I 1	2 C A	AB	218	0.605	0.006	1.80	0.03	S
111481	9.570	0.020	9.017	0.019		0.518	0.025	T	0.59	0.03	L	9.0758	0.0017	0.016	80		9.05	9.11					1							
111482	11.235	0.062	10.116	0.037		0.964	0.056	T	0.95	0.04	L	10.2070	0.0030	0.033	117		10.15	10.28					1							
111483	10.305	0.028	9.189	0.018		0.962	0.026	T	0.95	0.02	L	9.2106	0.0020	0.022	154		9.18	9.26					1							
111484	8.789	0.013	8.424	0.014		0.346	0.018	T	0.41	0.02	L	8.4738	0.0020	0.015	81		8.45	8.50		C			1 S							S
111485	9.963	0.019	8.145	0.008		1.513	0.016	T	1.55	0.02	L	8.0655	0.0026	0.025	144		8.03	8.11		U			1							S
111486	8.699	0.010	7.967	0.008		0.669	0.015	G	0.73	0.01	H	8.0232	0.0013	0.014	137		8.00	8.05					1							S
111487	8.769	0.008	7.125	0.004		1.375	0.007	T	1.35	0.01	L	7.1351	0.0007	0.009	202		7.12	7.15					1							S
111488	10.520	0.035	9.217	0.019		1.107	0.031	T	1.07	0.03	L	9.2507	0.0022	0.022	143		9.22	9.29					1							
111489	9.490	0.019	8.927	0.018		0.480	0.015	G	0.55	0.02	H	9.0029	0.0017	0.020	139		8.97	9.03		C			1							
111490	11.502	0.080	10.493	0.051		0.870	0.074	T	0.88	0.05	L	10.8243	0.0029	0.034	124		10.76	10.88					1							G
111491	8.243	0.006	8.309	0.007		−0.056	0.008	T	−0.03	0.01	L	8.3146	0.0014	0.017	251		8.29	8.34					1							S
111492	9.558	0.018	9.009	0.017		0.505	0.015	G	0.58	0.02	H	9.0621	0.0016	0.015	137		9.04	9.09		C			1							
111493	8.954	0.013	8.406	0.012		0.513	0.015	G	0.59	0.02	H	8.4662	0.0013	0.012	120		8.45	8.49					1							
111494						1.448	0.020	G	1.80	0.09	I	11.4027	0.0034	0.036	116		11.34	11.47		C			1							G
111495	9.642	0.024	8.211	0.013		1.208	0.021	T	1.17	0.02	L	8.2355	0.0016	0.010	78		8.22	8.26		C			1							S
111496	10.421	0.034	9.447	0.024		0.842	0.032	T	0.89	0.03	L	9.4925	0.0027	0.025	100		9.44	9.53					1							G
111497	3.944	0.003	4.026	0.003		−0.083	0.007	G	−0.07	0.02	A	4.0159	0.0005	0.004	69		4.01	4.02		C			1							S
111498	8.943	0.009	7.953	0.006		0.867	0.008	T	0.88	0.01	L	8.0055	0.0012	0.017	230		7.98	8.03					1							S
111499	10.080	0.025	8.958	0.017	*	0.966	0.023	T	0.95	0.02	L *	8.9633	0.0032	0.022	105	*	8.92	9.00		R	22354+5959	H 1	2 C S B	AB	22	0.123	0.047	2.01	1.19	
111500	9.380	0.020	8.903	0.019	*	0.541	0.005	G	0.61	0.01	R *	9.0308	0.0016	0.018	123	*	9.00	9.07		D	22354−4137	I 1	2 C A	AB	48	5.218	0.006	0.40	0.02	

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA		Dec	V		α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s		±° ′ ″	mag		deg		deg	mas	mas/yr		mas		mas	mas/yr													%			
1 2	3		4	5	6 7	8		9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
111501 H	22 35 25.98		−55 11 03.0	7.69	G	338.858 261 38		−55.184 161 89	* 1.62	−2.96	1.56	0.67	0.58	1.03	0.82	0.62	+11	− 2	+ 1	+21	+ 9	+ 9	+ 9	+ 1	− 2	+15		0	1.54
111502	22 35 26.07		−50 09 21.1	8.75	H	338.858 642 97		−50.155 849 20	2.93	30.25	15.67	0.85	0.72	1.23	1.04	0.80	+ 9	−12	− 7	− 7	− 1	+ 3	− 1	−13	+ 3	+20		0	−0.96
111503	22 35 26.11		−50 01 49.5	9.03	H	338.858 801 76		−50.030 407 73	5.21	−25.30	10.54	0.88	0.77	1.30	1.16	0.85	+11	−16	−18	+ 1	− 8	+ 3	− 7	−10	+ 3	+12		0	−1.20
111504	22 35 26.36		−78 46 17.6	6.15	H	338.859 843 61		−78.771 566 77	2.99	54.18	−7.50	0.44	0.44	0.54	0.56	0.46	− 1	−11	−19	− 2	+ 2	+ 9	+ 3	− 9	− 1	− 9		1	−1.56
*111505	22 35 27.52		+39 35 08.8	7.22	H	338.864 667 49		+39.585 767 60	8.30	15.05	7.08	0.64	0.58	0.79	0.84	0.68	+ 1	+19	+ 2	+20	− 3	+ 5	+ 3	−13	+12	+11		0	0.22
*111506	22 35 27.51		−17 15 26.8	8.81	2 H	338.864 639 10		−17.257 454 30	−0.72	20.50	−6.17	0.95	0.66	1.15	1.04	0.73	+27	−12	+ 7	−19	+ 2	− 1	+ 2	−48	+ 3	+29		0	0.82
111507	22 35 28.32		−38 25 58.8	8.66	H	338.868 008 69		−38.432 987 90	3.55	38.06	−20.65	0.92	0.68	1.18	1.16	0.75	+17	− 3	− 5	+28	+ 6	+30	+ 6	−27	− 1	+14		0	−0.77
111508 H	22 35 29.81		+02 33 42.6	8.46	G	338.874 194 53		+02.561 827 28	A 8.80	15.80	−21.77	2.58	2.18	2.47	2.81	2.15	+59	− 6	−11	− 1	− 3	− 3	−11	−28	+25	+19		1	0.02
111509	22 35 30.48		−65 25 14.1	9.64	H	338.877 019 94		−65.420 574 32	7.29	−56.21	−31.79	0.89	0.95	1.34	1.08	0.88	−12	+ 0	−12	− 7	+ 1	+25	+ 4	−19	− 5	−13		0	−0.40
111510	22 35 31.28		−32 46 20.9	9.07	H	338.880 348 48		−32.772 481 55	12.50	−120.82	−137.07	0.86	0.64	1.24	0.93	0.75	+27	− 8	− 8	− 3	−25	+33	−22	−45	+27	+41		0	0.09
111511	22 35 31.68		−50 35 16.7	8.28	H	338.882 017 55		−50.587 972 06	2.64	26.79	−16.88	0.77	0.62	1.08	0.88	0.65	+17	−14	− 1	−24	− 1	+ 6	− 4	−21	+ 7	+32		1	−0.24
111512	22 35 33.12		−51 36 14.2	6.77	H	338.888 010 35		−51.603 951 17	4.20	−20.66	−4.78	0.51	0.50	0.90	0.63	0.54	+27	−18	−21	− 5	−11	+35	− 5	−28	+28	+47		1	−0.38
111513 H	22 35 34.86		−38 43 28.3	7.62	G	338.895 255 68		−38.724 535 06	A 7.86	−12.00	25.48	1.04	0.76	1.12	1.17	0.78	+ 5	+ 2	−16	+30	+ 2	+11	+ 0	−24	+ 6	+ 4		2	0.13
111514 H	22 35 36.33		−53 24 24.1	9.36	H	338.901 394 20		−53.406 705 07	* 3.53	8.48	−56.52	0.82	0.91	1.39	1.07	0.92	+22	−12	−28	+ 8	−19	+32	−12	−44	+24	+29		0	−1.19
111515	22 35 36.36		−23 59 27.9	5.97	H	338.901 496 75		−23.991 078 68	9.66	25.95	−6.34	0.74	0.57	0.85	0.89	0.67	+25	− 4	+10	−31	− 9	− 2	− 8	−52	− 2	+26		0	0.84
111516	22 35 37.02		+43 07 12.6	9.50	2 H	338.904 264 00		+43.120 173 01	3.94	7.63	0.56	1.08	1.33	2.07	1.17	1.43	−41	+ 4	− 1	−11	+11	+ 4	+15	−31	+11	−24		2	
111517	22 35 37.92		+05 22 26.0	8.26	H	338.907 989 47		+05.373 880 43	12.43	426.72	−207.06	1.04	0.75	1.34	1.27	0.95	+12	+26	−31	−17	+ 6	+ 3	+13	−51	+49	+ 0		0	2.08
111518	22 35 38.80		+10 19 38.4	7.58	H	338.911 678 62		+10.327 335 87	5.03	6.81	−11.02	0.87	0.66	0.99	1.23	0.87	+17	− 1	− 1	−15	+ 8	+ 4	+ 4	−28	+ 8	− 2		0	−1.20
111519	22 35 39.04		−39 31 48.8	8.66	H	338.912 669 03		−39.530 235 08	−0.01	−4.49	−20.30	1.01	0.62	1.15	1.27	0.73	+ 7	−18	−13	+36	− 4	+12	+ 1	−26	+16	+16		0	2.25
111520 H	22 35 40.03		−28 07 57.9	10.23	G	338.916 779 55		−28.132 743 20	* 21.75	193.73	−158.94	3.35	2.64	2.49	2.64	1.61	+22	+ 7	+ 0	−24	+ 3	+ 0	+ 5	−42	+26	+ 6		0	0.37
111521	22 35 40.24		+70 14 34.4	7.27	H	338.917 672 76		+70.242 887 61	4.30	4.35	1.64	0.54	0.51	0.61	0.71	0.64	− 3	−11	− 3	+14	+ 3	+ 5	+ 6	− 8	+ 3	+ 9		0	−0.28
111522	22 35 40.72		−17 37 12.3	7.59	H	338.919 670 37		−17.620 077 20	2.17	30.81	19.61	0.89	0.58	1.06	0.99	0.63	+26	+ 0	− 5	−42	+ 1	− 2	− 1	−50	+24	+21		0	0.25
111523	22 35 40.80		+14 25 41.1	9.56	2 H	338.920 016 25		+14.428 095 16	−11.33	9.40	7.40	5.50	4.62	6.56	6.34	5.78	+29	+10	+13	−17	+ 0	− 7	− 1	−31	−19	+24		0	
111524	22 35 41.10		+06 14 12.1	8.80	H	338.921 269 80		+06.236 688 17	9.52	72.52	5.95	1.18	0.78	1.32	1.99	1.07	+ 4	+10	− 7	−56	+28	+ 2	+30	−45	+33	−32		0	1.01
111525	22 35 41.28		+45 26 06.9	9.78	H	338.921 997 51		+45.435 244 08	0.79	−2.56	−5.48	0.87	0.90	1.34	0.94	1.00	−28	+10	− 7	+ 5	+27	− 4	+32	−13	+16	− 2		1	−0.33
111526	22 35 42.25		+04 16 17.1	9.02	H	338.926 056 60		+04.271 413 02	3.11	−16.95	−5.38	1.17	0.97	1.37	1.47	1.09	+31	− 2	−11	− 2	−12	+35	−20	−54	+25	+17		0	0.76
111527	22 35 42.41		+32 47 20.7	7.45	H	338.926 687 81		+32.789 095 33	7.53	24.72	−3.70	0.51	0.56	0.82	0.63	0.82	+12	+ 9	−13	+24	− 8	−14	− 9	−22	+36	+ 2		0	0.44
111528	22 35 42.60		+53 12 14.0	8.19	H	338.927 509 48		+53.203 894 82	13.78	68.96	45.74	0.62	0.56	0.79	0.65	0.58	− 1	− 9	+11	− 1	+ 9	+ 1	+10	−13	+20	+23		1	−0.09
111529	22 35 44.82		+06 32 08.1	11.01	H	338.936 751 20		+06.535 583 73	0.37	1.01	−15.36	2.04	1.45	2.36	3.05	2.02	+12	+ 8	−12	−52	+21	−13	+24	−39	+39	−28		0	0.12
111530	22 35 45.37		−37 26 24.8	9.37	H	338.939 062 28		−37.440 230 34	2.07	4.74	−2.63	1.02	0.75	1.38	1.11	0.80	+10	+ 3	− 7	+ 8	+ 3	+20	+ 3	−23	− 6	+ 5		0	−0.10
111531	22 35 45.70		−06 45 08.2	9.03	H	338.940 428 52		−06.752 281 15	2.26	32.26	−22.02	1.19	0.77	1.33	1.28	0.85	+15	+12	−15	−12	+ 0	+25	+ 6	−27	+21	+13		2	0.10
111532	22 35 45.78		+73 38 35.3	5.08	H	338.940 736 18		+73.643 127 07	17.70	173.32	25.14	0.43	0.42	0.50	0.48	0.48	− 2	− 8	+ 3	−19	− 9	+ 0	−10	−17	+20	+ 4		1	−0.86
*111533	22 35 47.83		−15 40 55.1	10.31	H	338.949 277 01		−15.681 981 21	5.25	−89.30	−7.49	1.64	1.10	1.88	2.01	1.38	+31	− 1	+ 0	+ 5	− 1	+ 6	+ 1	−34	+12	+36		2	0.93
*111534	22 35 47.25		−12 52 32.0	8.51	H	338.946 891 32		−12.875 558 83	7.98	−13.29	−87.47	1.19	0.90	1.28	1.50	1.11	+31	−10	−40	−36	−18	+ 2	−21	−73	+32	+29		0	−1.24
*111535 H	22 35 47.27		+19 42 59.8	7.07	H	338.946 964 66		+19.716 598 70	A 6.78	3.91	−2.00	1.24	0.86	1.16	1.43	0.92	+ 7	+12	−14	−35	+11	+ 1	+20	+ 1	+ 4	− 9		1	−0.34
*111536	22 35 47.55		−58 49 15.0	9.23	H	338.948 134 49		−58.820 837 73	8.41	−16.73	−45.80	0.89	0.86	1.36	1.01	0.75	− 3	+ 4	−31	−13	−14	+ 1	−10	+ 8	+ 3	− 7		1	−0.47
*111537	22 35 47.73		−30 20 09.0	7.67	1 H	338.948 874 27		−30.335 826 86	2.35	23.68	11.97	0.93	0.56	1.05	1.10	0.63	+10	+ 2	+10	−18	− 6	+14	− 9	−49	− 2	+ 7		0	−0.71
111538	22 35 48.06		+40 05 27.5	9.48	G	338.950 235 86		+40.090 958 97	2.97	0.89	−6.98	1.17	0.98	1.40	1.47	1.17	+ 1	− 3	−14	+39	− 7	−10	+ 0	−23	+20	+13		0	0.24
111539	22 35 48.82		−17 27 37.1	6.39	H	338.953 426 40		−17.460 313 68	7.01	−30.42	−45.32	0.71	0.48	0.87	0.80	0.53	+28	−15	+ 6	−21	+ 4	+ 2	+ 2	−41	+ 7	+30		0	0.77
111540 H	22 35 49.27		+47 13 11.5	9.15	G	338.955 295 14		+47.219 852 04	* 5.06	14.19	3.81	1.38	1.59	1.50	1.06	1.06	−13	+11	− 9	+ 2	− 7	+ 5	+ 3	−28	+20	+33		0	0.29
111541	22 35 49.68		+20 16 28.4	6.61	H	338.957 020 27		+20.274 560 12	9.77	15.74	−96.47	0.98	0.55	0.86	1.82	0.76	−27	−26	+28	−69	+42	+45	+38	−41	−28	−41		0	−0.62
111542	22 35 51.81		+64 35 20.5	8.24	H	338.965 885 98		+64.589 015 98	3.35	14.22	5.32	0.72	0.66	0.79	0.95	0.74	−20	+ 1	+ 0	+29	+ 1	− 8	+ 0	− 1	+13	−21		0	0.41
111543	22 35 51.98		+56 04 14.1	6.37	H	338.966 579 40		+56.070 576 02	9.28	14.11	−0.72	0.44	0.41	0.55	0.58	0.49	−13	−15	+19	+ 1	+12	+24	+ 8	− 1	+ 3	+ 0		1	−1.09
*111544	22 35 52.10		+39 37 41.4	6.60	H	338.967 093 29		+39.628 160 44	B 12.92	−14.36	−5.71	16.62	14.32	9.26	13.00	10.42	+ 7	+ 9	− 4	+18	−17	+ 8	− 9	−21	+11	+21		3	0.12
*111545	22 35 52.07		−07 20 22.4	8.28	H	338.966 975 77		−07.339 543 01	2.60	2.47	−16.71	1.01	0.68	1.17	1.26	0.83	+18	− 5	−32	+ 8	−11	+30	− 6	−44	+37	+19		0	1.58
111546	22 35 52.28		+39 38 03.6	5.73	G	338.967 851 92		+39.634 341 36	A 5.10	1.11	−4.39	1.89	1.68	1.79	2.42	1.91	+ 7	+ 8	− 5	+15	−16	+ 8	−10	−23	+11	+18		3	0.12
111547 H	22 35 52.79		−61 04 46.0	9.81	H	338.969 948 41		−61.079 447 39	A 3.54	11.13	12.98	3.18	2.78	4.48	3.20	2.49	−26	+14	−13	− 5	+ 4	+14	+ 3	−23	−18	−23		3	1.15
111548	22 35 52.84		−57 53 01.4	6.22	H	338.970 145 94		−57.883 728 42	14.79	87.98	−9.91	0.38	0.44	0.66	0.45	0.43	− 2	−11	−14	−21	+ 1	+14	− 1	+14	+ 1	+ 6		1	0.91
111549 H	22 35 53.16		+76 29 31.1	9.39	G	338.971 517 03		+76.491 985 76	* 9.82	−214.74	158.14	1.86	1.42	1.13	1.13	1.11	+19	−12	+16	+14	+ 1	− 2	+ 2	+ 5	+12	+38		0	−0.32
111550	22 35 53.38		+50 04 14.8	6.29	H	338.972 403 30		+50.070 787 96	1.97	6.19	−0.03	0.39	0.44	0.58	0.38	0.45	−15	+14	− 7	− 4	+12	−12	+20	−36	+31	− 2		0	0.16
111551	22 35 53.95		−20 56 05.0	7.54	H	338.974 787 62		−20.934 713 43	3.43	5.19	−21.85	0.90	0.55	0.98	1.12	0.67	+ 2	+ 0	− 1	−39	+24	+13	+21	−36	+30	+ 4		0	0.21
111552	22 35 54.48		+43 41 26.4	9.66	H	338.977 007 39		+43.690 669 84	2.36	−0.58	−4.08	0.75	0.86	1.42	0.77	0.89	−49	+30	−28	−11	+20	−14	+29	−34	+41	−31		1	0.44
111553	22 35 56.44		−59 51 51.3	7.95	H	338.985 171 43		−59.864 261 05	20.98	−108.27	−85.39	0.52	0.55	0.98	0.52	0.53	−35	+ 7	−24	+12	− 4	+ 7	− 3	− 4	− 6	−37		0	−1.06
111554	22 35 57.49		+47 35 23.0	9.05	H	338.989 529 80		+47.589 715 94	2.04	−4.05	−2.06	0.70	0.70	1.06	0.72	0.75	−10	+14	+ 0	+ 6	+13	− 1	+20	−16	+15	+14		0	0.63
111555	22 35 59.86		+05 35 55.1	9.24	H	338.999 423 62		+05.598 634 93	2.49	−12.61	−1.21	1.30	0.92	1.66	1.69	1.26	+14	+10	−24	−14	+ 8	− 5	+ 6	−41	+52	− 7		0	−1.37
111556	22 36 00.46		−40 18 48.2	8.71	H	339.001 899 49		−40.313 386 19	2.55	12.54	−12.28	0.92	0.71	1.23	1.24	0.79	+23	−14	−30	+ 6	−14	+32	− 5	−34	+29	+36		0	−0.22
111557	22 36 02.20		−07 04 33.7	8.44	H	339.009 151 16		−07.076 038 72	−0.43	−16.20	−24.67	1.04	0.70	1.23	1.23	0.88	+19	− 9	−33	− 9	− 7	+21	− 6	−48	+46	+20		0	1.52
111558	22 36 03.25		−51 38 13.8	9.56	G	339.013 554 35		−51.637 179 54	12.87	275.06	79.40	0.86	0.93	1.48	1.05	0.98	+31	−10	−14	− 1	− 8	+31	− 4	−19	+14	+41		1	1.73
111559	22 36 03.60		+34 37 05.8	9.12	H	339.015 016 97		+34.618 286 06	−1.40	−17.80	−18.41	0.82	0.84	1.12	1.12	1.11	+18	+ 4	+ 0	+16	− 6	−14	+ 0	−31	+ 5	+30		0	2.34
111560	22 36 03.75		+23 19 57.1	8.79	H	339.015 610 05		+23.332 533 66	3.01	16.86	29.99	0.96	0.72	1.15	1.06	0.84	+11	+24	+ 8	−19	− 5	−18	− 4	−20	− 1	+13		0	0.80
111561	22 36 05.37		−41 10 29.1	8.88	H	339.022 365 72		−41.174 751 95	2.08	−3.81	−27.09	0.97	0.66	1.28	1.12	0.78	+14	− 1	−20	+ 0	− 7	+37	+ 4	−24	+34	+39		0	−0.86
111562	22 36 05.74		+36 29 39.4	9.53	H	339.023 918 32		+36.494 269 86	1.85	−6.57	−7.77	1.07	0.90	1.28	1.60	1.11	+ 0	− 5	+15	−26	+ 4	− 7	+ 5	−25	− 5	− 3		0	0.25
111563	22 36 06.43		−16 23 16.6	6.84	H	339.026 806 67		−16.387 944 75	0.27	5.62	−17.77	0.77	0.52	0.88	0.94	0.55	+27	+ 3	+21	+ 9	+ 2	+ 7	− 7	−37	+ 4	+12		0	1.19
111564	22 36 06.67		−70 57 49.8	7.14	H	339.027 773 21		−70.963 839 50	3.14	14.32	4.65	0.51	0.56	0.72	0.57	0.52	−18	+15	−35	+ 5	− 1	+ 5	+ 3	−17	+ 5	− 8		0	−1.93
111565	22 36 07.34		−54 36 35.9	7.58	G	339.030 574 83		−54.609 986 08	30.98	362.84	−261.28	0.58	0.50	0.84	0.67	0.55	+18	− 6	− 8	+ 3	− 1	+ 9	+ 2	− 9	−15	+26		1	1.46
111566	22 36 07.88		−66 55 27.9	9.62	H	339.032 831 21		−66.924 421 88	32.38	−211.33	−187.07	0.91	1.01	1.40	1.07	1.06	−18	+ 1	−19	− 9	+ 3	+ 0	+ 3	− 8	+ 2	−16		1	2.59
111567	22 36 07.90		+35 34 39.5	6.11	H	339.032 908 31		+35.577 645 81	7.81	5.29	−58.50	0.56	0.55	0.78	0.68	0.71	+11	+19	− 7	+ 9	+11	−23	+11	− 8	−11	+26		0	−0.24
111568	22 36 07.92		+32 32 45.0	8.73	H	339.032 998 94		+32.545 828 03	5.74	26.60	18.69	0.75	0.82	1.14	0.90	1.05	+ 4	+17	−24	+31	−19	− 1	−16	−42	+38	+ 1		0	−0.21
111569	22 36 08.33		+69 03 40.3	8.41	G	339.034 695 72		+69.061 199 11	4.55	4.87	5.23	0.62	0.59	0.72	0.69	0.66	−12	−18	+19	+ 6	−11	+ 4	−16	+ 0	+21	−13		0	−1.14
111570	22 36 08.65		+72 52 51.1	7.58	G	339.036 051 64		+72.880 855 50	11.91	89.19	45.64	0.57	0.59	0.67	0.68	0.72	− 8	−10	+ 7	− 8	+14	− 5	+17	−19	− 1	+16		1	−1.07
111571	22 36 09.65		−00 50 24.5	9.98	G	339.040 213 14		−00.840 150 99	57.04	48.76	−630.00	1.62	1.14	1.77	1.89	1.40	+15	+ 6	+ 1	−17	+ 0	+30	+ 1	−42	+16	+16		2	0.89
111572	22 36 09.94		+08 16 21.1	9.06	H	339.041 424 02		+08.272 531 85	1.47	−7.44	−3.78	1.12	0.80	1.38	1.57	1.00	+16	+17	−11	− 8	+10	+26	+12	−29	+18	+ 8		0	−0.12
111573	22 36 12.03		+21 42 20.5	8.71	H	339.050 121 62		+21.705 705 98	7.22	160.58	116.94	0.89	0.73	1.18	1.01	0.97	+21	+26	+10	− 5	−11	−31	− 8	−20	+ 2	+19		0	0.14
111574	22 36 13.76		+66 05 48.3	8.70	H	339.057 351 29		+66.096 753 01	1.75	−0.56	−4.50	0.64	0.64	0.75	0.80	0.79	−20	−17	+16	+ 2	+ 6	− 1	+ 4	−19	+11	−17		1	−0.35
111575	22 36 15.20		+72 52 20.3	8.41	G	339.063 338 06		+72.872 318 65	11.81	91.53	48.50	0.72	0.77	0.86	0.85	0.93	− 5	−11	+ 9	− 5	+16	− 1	+21	−19	− 4	+24		1	1.29
111576	22 36 16.67		+40 05 19.6	8.30	H	339.069 447 28		+40.088 775 89	3.07	0.94	−3.22	0.86	0.72	1.01	1.05	0.81	+ 1	+ 2	− 6	+38	− 4	−12	+ 2	−25	+17	+11		0	−1.32
111577	22 36 17.02		−07 39 51.8	7.03	H	339.070 914 89		−07.664 382 26	6.57	58.10	8.20	1.01	0.73	1.32	1.62	0.92	+ 5	− 7	−60	−24	+37	−29	+ 7	−67	+65	−40		0	0.82
111578	22 36 17.23		−27 09 12.0	8.91	H	339.071 785 83		−27.153 337 35	2.19	6.02	−11.93	1.01	0.63	1.29	1.29	0.81	+24	− 7	−13	−16	−12	+26	−11	−34	+47	+34		0	0.79
111579	22 36 17.81		−34 33 06.4	9.01	H	339.074 196 74		−34.551 780 74	4.34	45.07	−15.67	1.02	0.71	1.34	1.06	0.78	+25	− 2	−10	− 4	−25	+30	−23	−38	+17	+32		0	−0.59
*111580	22 36 17.96		+46 02 29.8	10.34	H	339.074 849 71		+46.041 613 32	C 7.04	11.62	−6.98	11.06	12.41	3.43	2.48	2.47	−18	− 1	+ 4	− 4	+ 3	+ 3	+ 3	− 9	+24	− 4		0	−0.90
*111581	22 36 17.95		−05 09 16.8	8.31	2 H	339.074 797 08		−05.154 660 36	2.85	−10.85	−28.01	1.06	0.65	1.08	1.34	0.74	+26	+20	+ 5	+31	− 6	+ 9	−13	−34	+10	+11		0	0.25
111582	22 36 18.93		+46 02 43.1	10.29	H	339.078 886 49		+46.045 300 12	A 7.04	11.62	−6.98	2.68	2.97	3.43	2.48	2.47	−23	+ 3	+ 3	−11	+17	+ 3	+20	−29	+24	− 4		0	−0.90
111583	22 36 19.36		−00 11 11.1	7.77	H	339.080 681 03		−00.186 408 35	7.39	22.34	−11.95	0.83	0.69	1.03	1.06	0.88	+31	+ 6	− 7	− 6	−10	+40	− 7	−46	+26	+36		0	−0.70
111584	22 36 19.77		+46 02 34.1	10.52	H	339.082 391 45		+46.042 817 22	B 7.04	11.62	−6.98	146.69	155.11	3.43	2.48	2.47	−16	− 6	+ 4	+ 8	+ 1	+ 3	+ 3	− 5	+24	− 4		0	−0.90
111585	22 36 21.03		+71 08 01.1	8.97	H	339.087 629 01		+71.133 649 14	2.37	29.20	19.23	0.68	0.70	0.79	0.83	0.76	+ 1	− 5	− 2	+24	+15	− 3	+15	− 9	+18	+12		0	1.12
111586	22 36 21.63		+27 07 18.4	7.41	G	339.090 140 63		+27.121 790 71	8.66	5.84	−7.51	0.62	0.61	0.91	0.79	0.70	+22	+16	+35	+46	− 7	+ 1	−17	−20	− 7	+ 3		0	0.44
111587	22 36 21.70		−72 42 46.3	6.72	G	339.090 420 45		−72.712 870 01	5.70	104.89	−31.82	0.47	0.47	0.63	0.56	0.45	− 2	− 5	−31	+ 9	− 3	− 3	− 4	− 9	+ 3	− 7		0	1.08
111588	22 36 22.24		+40 23 03.5	9.01	H	339.092 654 37		+40.384 318 84	4.82	−8.22	−3.66	1.09	0.86	1.34	1.11	0.97	−13	+30	−13	+21	+ 1	−10	+13	−19	+30	− 2		1	0.63
111589	22 36 22.33		+37 50 32.1	6.84	H	339.093 026 70		+37.842 240 24	2.92	−0.89	−5.34	0.61	0.48	0.72	0.79	0.56	− 6	− 2	+ 9	+ 3	+ 8	+ 3	+ 8	− 9	+ 7	+ 6		0	0.88
111590	22 36 22.99		+38 06 18.4	9.84	2 G	339.095 781 76		+38.105 112 27	2.34	−2.93	−7.89	1.09	0.87	1.36	1.42	1.09	+ 7	− 4	− 3	+16	+ 5	−11	+ 3	−15	+17	+ 1		0	1.68
111591	22 36 25.04		+46 55 39.0	10.37	H	339.104 339 68		+46.927 505 96	2.15	−0.31	−3.88	1.09	1.10	1.67	1.11	1.19	− 6	+22	− 4	+14	− 1	+ 3	+ 9	−21	+20	+14		1	1.96
111592	22 36 27.57		+58 25 34.0	7.57	3 T	339.114 860 71		+58.426 103 95	* 0.73	−4.92	−3.56	0.85	0.76	0.84	1.23	1.03	− 3	+10	+33	−42	− 2	−11	+ 2	−52	−25	− 1		0	0.97
111593	22 36 28.19		+06 30 44.0	7.13	H	339.117 478 72		+06.512 223 19	3.33	−4.42	−6.80	0.84	0.61	0.99	1.33	0.79	+13	+ 4	−28	−49	+22	−11	+17	−53	+41	−33		0	−1.59
111594	22 36 29.27		−40 34 57.0	6.28	H	339.121 967 71		−40.582 513 33	14.41	46.18	−72.18	0.58	0.47	0.81	0.71	0.53	+21	−16	−24	+ 7	−12	+37	− 4	−21	+22	+35		2	1.14
111595	22 36 30.45		+58 36 16.4	9.01	H	339.126 861 22		+58.604 553 57	3.83	−2.02	−12.63	0.87	0.74	0.98	1.10	0.87	− 6	− 4	+11	+31	+ 1	−19	+ 6	+17	− 8	+12		0	0.47
111596	22 36 31.08		−21 35 05.8	9.10	H	339.129

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
111501	8.984	0.012	7.804	0.008	*	1.020	0.015	G	0.99	0.01	H *		7.8541	0.0014	0.013	129	*	7.83	7.87		D	22354−5511	H 1	2 C S A	AB	141	0.191	0.013	1.72	0.23	S
111502	10.101	0.022	8.847	0.013		1.069	0.020	T	1.03	0.02	L		8.9176	0.0018	0.018	136		8.89	8.96		C			1							
111503	9.595	0.015	9.088	0.015		0.487	0.016	T	0.56	0.02	L		9.1359	0.0019	0.022	137		9.10	9.17					1							S
111504	7.926	0.007	6.302	0.004		1.368	0.002	G	1.34	0.00	H		6.2950	0.0009	0.009	154		6.28	6.31					1							S
111505	7.558	0.006	7.253	0.007		0.290	0.009	T	0.33	0.01	L		7.2998	0.0011	0.011	119		7.28	7.32		C	22358+3937	I 3	1							S
111506	9.029	0.013	8.872	0.015		0.151	0.019	T	0.17	0.02	L		8.8610	0.0077	0.124	119		8.79	9.10	266.50	P 1 A			1 S							
111507	9.911	0.020	8.753	0.013		0.994	0.019	T	0.97	0.01	L		8.8248	0.0018	0.016	121		8.79	8.86		C			1							
111508	9.413	0.019	8.732	0.016	*	0.639	0.015	G	0.70	0.01	H *		8.5861	0.0017	0.014	80	*	8.57	8.62		D	22355+0234	I 1	2 C A	AB	187	1.141	0.011	0.65	0.02	S
111509	10.423	0.024	9.689	0.020		0.658	0.024	T	0.72	0.02	L		9.7774	0.0021	0.031	168		9.72	9.82		C			1							
111510	9.865	0.016	9.147	0.014		0.652	0.002	G	0.72	0.00	H		9.2088	0.0016	0.018	170		9.18	9.24		C			1							
111511	10.215	0.023	8.417	0.010		1.497	0.020	T	1.52	0.03	L		8.4108	0.0022	0.020	135		8.37	8.44					1							
111512	8.128	0.008	6.889	0.005		1.070	0.015	G	1.03	0.02	A		6.9420	0.0007	0.008	155		6.93	6.96		C			1							S
111513	8.130	0.010	7.633	0.009	*	0.476	0.015	G	0.55	0.02	H *		7.7262	0.0016	0.013	125	*	7.70	7.75		D	22356−3843	I 1	2 C A	AB	166	5.205	0.006	2.30	0.04	S
111514	10.340	0.026	9.467	0.019	*	0.764	0.025	T	0.80	0.02	L *		9.4980	0.0017	0.019	158	*	9.46	9.54		D	22356−5324	H 1	2 C S C	AB	127	0.158	0.068	1.95	1.12	
111515	7.235	0.005	6.082	0.004		0.984	0.001	G	0.96	0.00	H		6.1396	0.0005	0.006	101		6.13	6.15					1							S
111516	9.611	0.012	9.499	0.016		0.109	0.019	T	0.12	0.02	L		9.5408	0.0028	0.035	243		9.48	9.59		U	22356+4307	I 1	1 X S							
111517	9.088	0.016	8.335	0.014		0.678	0.001	G	0.74	0.00	H		8.3916	0.0016	0.012	74		8.38	8.41		C			1							S
111518	9.173	0.015	7.706	0.009		1.236	0.014	T	1.19	0.01	L		7.7421	0.0016	0.014	91		7.72	7.77		C			1							S
111519	10.315	0.027	8.784	0.013		1.286	0.024	T	1.25	0.03	L		8.8197	0.0015	0.016	115		8.79	8.85		C			1							
111520	11.993	0.120	10.349	0.042	*	1.256	0.003	G	1.42	0.01	I *		10.3210	0.0036	0.026	123	*	10.28	10.36			22357−2808	H 1	2 C A	AB	139	0.246	0.008	0.29	0.16	
111521	8.576	0.011	7.390	0.007		1.016	0.010	T	0.99	0.01	L		7.4413	0.0012	0.011	101		7.43	7.46					1							S
111522	9.429	0.015	7.731	0.007		1.423	0.020	G	1.41	0.03	H		7.7274	0.0010	0.009	131		7.71	7.74		C			1							S
111523	11.198	0.061	9.711	0.028		1.252	0.053	T	1.21	0.05	L		9.7196	0.0055	0.049	88		9.65	9.80		U 2			1 X S							
111524	9.453	0.016	8.835	0.015		0.575	0.019	T	0.65	0.02	L		8.9282	0.0018	0.014	99		8.90	8.95					1							
111525	9.867	0.017	9.823	0.024		0.045	0.027	T	0.06	0.02	L		9.8049	0.0027	0.030	190		9.74	9.85					1							G
111526	10.567	0.043	9.157	0.023		1.191	0.038	T	1.15	0.03	L		9.1797	0.0024	0.019	73		9.15	9.21					1							
111527	7.560	0.006	7.460	0.007		0.090	0.002	G	0.10	0.00	H		7.4895	0.0012	0.011	125		7.47	7.51		C			1							S
111528	8.927	0.011	8.253	0.010		0.610	0.015	G	0.68	0.01	H		8.3247	0.0015	0.015	140		8.30	8.36		C	22357+5312	I 1	1 S							
111529	12.183	0.156	11.091	0.101		1.294	0.020	G	1.35	0.14	K		11.1532	0.0041	0.039	105		11.09	11.21					1							G
111530	10.827	0.042	9.494	0.022		1.131	0.037	T	1.09	0.04	L		9.5395	0.0023	0.018	115		9.50	9.57		C			1							
111531	10.433	0.038	9.169	0.022		1.077	0.034	T	1.04	0.03	L		9.1927	0.0024	0.022	90		9.16	9.23					1							S
111532	5.563	0.002	5.124	0.002		0.395	0.005	G	0.46	0.01	H		5.1679	0.0005	0.005	113		5.16	5.18		C			1							S
111533	11.391	0.074	10.362	0.046		0.885	0.068	T	0.89	0.05	L		10.4503	0.0038	0.030	91		10.39	10.50		C			1							
111534	9.062	0.015	8.571	0.015		0.474	0.016	T	0.55	0.02	L		8.6191	0.0014	0.014	91		8.59	8.64		C			1							S
111535	8.276	0.010	7.181	0.007	*	0.946	0.009	T	0.94	0.01	L *		7.2279	0.0011	0.011	90	*	7.21	7.25		D	22358+1943	H 1	2 C A	AB	39	0.668	0.023	3.25	0.09	S
111536	9.881	0.018	9.288	0.016		0.554	0.018	T	0.63	0.02	L		9.3469	0.0030	0.027	158		9.30	9.39					1							
111537	9.746	0.018	7.869	0.008		1.593	0.016	T	1.97	0.05	O		7.7582	0.0018	0.015	123		7.73	7.78		M			1							S
111538	9.485	0.018	9.470	0.024		0.029	0.018	G	0.05	0.01	H		9.4925	0.0030	0.023	107		9.45	9.54		C			1							
111539	8.258	0.007	6.546	0.004		1.420	0.015	G	1.42	0.02	A		6.5269	0.0006	0.006	129		6.51	6.54		C			1							S
111540	9.663	0.017	9.256	0.018	*	0.430	0.015	G	0.50	0.02	H *		9.2502	0.0022	0.025	147	*	9.20	9.29		D	22358+4713	M 1	2 C A	AB	62	0.237	0.005	0.52	0.11	
111541	8.040	0.010	6.734	0.006		1.110	0.009	T	1.07	0.01	L		6.7816	0.0011	0.009	83		6.77	6.79		C			1 G							S
111542	8.620	0.011	8.288	0.011		0.315	0.015	T	0.36	0.02	L		8.3176	0.0015	0.015	116		8.29	8.34		C			1							
111543	6.503	0.004	6.393	0.004		0.107	0.002	G	0.12	0.00	H		6.4157	0.0006	0.007	124		6.40	6.43					1							S
111544	6.226	0.004	6.393	0.006	B	−0.148	0.014	G	−0.26	0.03	C		6.4879	0.0488			B				D	22358+3937	I 3	1 C I B							S
111545	9.771	0.023	8.437	0.013		1.132	0.021	T	1.10	0.02	L		8.4507	0.0018	0.012	92		8.42	8.48		C			1							S
111546	5.500	0.003	5.682	0.004	A	−0.160	0.064	G	−0.30	0.03	C		5.6818	0.0281	0.069	114	A	5.51	5.74		D	22358+3937	I 3	1 C P B							S
111547	10.582	0.025	9.983	0.023	*	0.558	0.025	T	0.63	0.02	L *		9.9369	0.0026	0.037	251	*	9.86	10.01		D	22359−6105	I 1	2 C A	AB	86	0.665	0.007	0.80	0.02	
111548	6.480	0.003	6.252	0.003		0.212	0.004	T	0.23	0.01	L		6.2911	0.0009	0.009	153		6.28	6.31					1							S
111549	10.046	0.025	9.481	0.023	*	0.540	0.020	G	0.61	0.02	H *		9.5238	0.0019	0.019	114	*	9.49	9.55		D	22359+7630	H 1	2 C A	AB	11	0.237	0.005	0.29	0.11	
111550	6.191	0.003	6.274	0.004		−0.071	0.004	T	−0.05	0.00	L		6.2704	0.0008	0.007	132		6.26	6.28					1							S
111551	9.400	0.018	7.700	0.009		1.437	0.013	G	1.43	0.02	H		7.6795	0.0010	0.010	115		7.66	7.69		C	22359−2056	I 1	1							S
111552	9.663	0.013	9.650	0.019		0.017	0.021	T	0.04	0.02	L		9.6738	0.0019	0.030	249		9.62	9.73					1 S							G
111553	8.702	0.007	8.026	0.006		0.614	0.007	T	0.68	0.01	L		8.0847	0.0012	0.017	218		8.06	8.11					1							S
111554	8.909	0.011	9.023	0.015		−0.099	0.017	T	−0.08	0.02	L		9.0193	0.0020	0.025	157		8.98	9.06					1							
111555	9.835	0.024	9.279	0.024		0.510	0.020	G	0.58	0.02	H		9.3540	0.0028	0.024	71		9.32	9.41		C			1							
111556	10.415	0.027	8.858	0.013		1.307	0.024	T	1.27	0.03	L		8.8651	0.0020	0.018	124		8.84	8.90		C			1							
111557	10.420	0.036	8.636	0.015		1.486	0.031	T	1.51	0.05	L		8.5633	0.0019	0.018	91		8.52	8.59		C			1							
111558	10.365	0.031	9.600	0.026		0.594	0.007	G	0.66	0.01	H		9.6882	0.0023	0.025	148		9.64	9.73		C			1							
111559	10.759	0.041	9.193	0.018		1.314	0.035	T	1.28	0.04	L		9.2725	0.0022	0.019	111		9.24	9.30		C			1							
111560	10.206	0.035	8.907	0.020		1.104	0.032	T	1.07	0.03	L		8.9544	0.0023	0.017	77		8.92	8.99					1 G							
111561	10.135	0.022	8.988	0.015		0.986	0.021	T	0.97	0.02	L		9.0387	0.0016	0.018	124		8.99	9.07		C			1							
111562	9.633	0.020	9.542	0.025		0.108	0.016	G	0.12	0.02	H		9.5684	0.0025	0.021	105		9.53	9.61					1							
111563	6.637	0.003	6.803	0.005		−0.145	0.005	T	−0.14	0.01	L		6.7857	0.0013	0.010	103		6.77	6.81					1							S
111564	8.830	0.010	7.272	0.006		1.308	0.009	T	1.27	0.01	L		7.2924	0.0011	0.013	147		7.27	7.32					1							S
111565	8.392	0.009	7.663	0.007		0.670	0.007	G	0.74	0.02	A		7.7160	0.0010	0.012	151		7.69	7.74		C			1							S
111566	11.019	0.042	9.737	0.023		1.103	0.004	G	1.18	0.01	I		9.7483	0.0034	0.029	154		9.69	9.81					1							
111567	7.386	0.006	6.224	0.004		0.997	0.006	T	0.98	0.01	L		6.2738	0.0006	0.006	108		6.27	6.28		C	22361+3535	I 1	1							S
111568	9.730	0.019	8.814	0.014		0.812	0.018	T	0.84	0.01	L		8.8789	0.0015	0.017	126		8.84	8.92					1							
111569	8.710	0.011	8.462	0.012		0.236	0.015	T	0.26	0.02	L		8.4786	0.0015	0.015	119		8.46	8.51		C			1							
111570	8.084	0.009	7.624	0.008		0.461	0.019	G	0.52	0.02	L		7.6849	0.0011	0.013	125		7.66	7.70		D	22362+7253	I 2	1 S							S
111571						1.411	0.028	G	1.86	0.01	A		10.0720	0.0038	0.029	75		10.02	10.13					1 S							
111572	10.460	0.036	9.195	0.020		1.078	0.032	T	1.04	0.03	L		9.2269	0.0020	0.016	86		9.20	9.26		C			1							
111573	9.357	0.018	8.775	0.016		0.544	0.021	T	0.62	0.02	L		8.8277	0.0022	0.018	90		8.80	8.86					1							S
111574	9.137	0.013	8.768	0.014		0.495	0.015	G	0.57	0.02	H		8.8108	0.0014	0.014	119		8.79	8.84		C			1							
111575	8.952	0.012	8.452	0.012		0.490	0.015	G	0.56	0.02	H		8.5416	0.0020	0.020	127		8.51	8.57			22362+7253	I 2	1							
111576	8.158	0.008	8.282	0.011		−0.099	0.002	G	−0.08	0.00	H		8.2732	0.0021	0.016	104		8.24	8.30					1							
111577	7.510	0.006	7.067	0.005		0.409	0.015	G	0.48	0.02	H		7.1183	0.0009	0.008	86		7.10	7.14		C			1							S
111578	9.191	0.012	8.931	0.014		0.244	0.019	T	0.27	0.02	L		8.9828	0.0017	0.016	122		8.95	9.01					1							
111579	10.548	0.029	9.144	0.015		1.187	0.026	T	1.15	0.02	L		9.1789	0.0017	0.022	136		9.15	9.22					1							
111580	12.103	0.137	10.951	0.079	C						T		10.4855	0.0198	0.206	186	−	10.21	10.84		D	22363+4603	I 3	1 C F C							G
111581	10.309	0.030	8.557	0.013		1.490	0.027	T	2.64	0.05	O		8.3100	0.0092	0.079	91		8.19	8.39		U 2			1 S							P
111582	11.088	0.045	10.610	0.047	A						T		10.4353	0.0124	0.146	183	−	10.23	10.72		D	22363+4603	I 3	1 C P C							G G
111583	7.944	0.009	7.782	0.009		0.156	0.012	T	0.17	0.01	L		7.8292	0.0012	0.010	76		7.81	7.85					1							S
111584											T		10.6587	0.0296	0.275	183	−	10.27	11.43		D	22363+4603	I 3	1 C F C							G G
111585	10.997	0.049	9.120	0.018		1.560	0.041	T	1.58	0.04	L		9.0874	0.0024	0.023	123		9.06	9.12					1							
111586	7.818	0.006	7.459	0.006		0.340	0.008	T	0.40	0.01	L		7.5118	0.0010	0.010	126		7.49	7.53		C			1							S
111587	8.205	0.008	6.850	0.004		1.145	0.003	G	1.11	0.00	H		6.8846	0.0007	0.010	142		6.87	6.90		C			1							S
111588	9.284	0.017	9.043	0.020		0.225	0.026	T	0.25	0.03	L		9.0822	0.0021	0.026	112		9.05	9.13			22364+4023	I 1	1 S							
111589	6.669	0.004	6.821	0.005		−0.131	0.008	G	−0.12	0.01	H		6.8014	0.0009	0.009	130		6.78	6.82					1							S
111590	9.901	0.026	9.910	0.037		0.017	0.002	G	0.04	0.00	H		9.8777	0.0025	0.032	113		9.82	9.96		U 2			1							G
111591	10.455	0.029	10.354	0.041		0.098	0.047	T	0.11	0.05	L		10.4050	0.0040	0.039	152		10.32	10.47					1							G
111592	9.961	0.030	7.788	0.011		1.795	0.026	T	1.82	0.03	L		7.5716	0.0396	0.260	102		7.33	7.97		U 2 B			1 V							
111593	8.654	0.010	7.262	0.006		1.177	0.009	T	1.14	0.01	L		7.2924	0.0012	0.011	122		7.27	7.31					1 S							S
111594	6.436	0.004	6.291	0.004		0.119	0.001	G	0.13	0.00	H		6.3230	0.0007	0.008	137		6.31	6.34		C			1							S
111595	9.162	0.019	9.008	0.023		0.148	0.028	T	0.16	0.03	L		9.0607	0.0021	0.017	98		9.03	9.09					1							
111596	9.672	0.021	9.156	0.020		0.494	0.022	T	0.57	0.02	L		9.2093	0.0019	0.015	107		9.18	9.23		C			1							S
111597	11.243	0.066	9.868	0.032		1.164	0.057	T	1.13	0.05	L		9.9290	0.0026	0.023	113		9.88	9.97		C			1							G
111598	9.172	0.016	8.442	0.014		0.670	0.017	T	0.73	0.01	L		8.4759	0.0037	0.021	79		8.44	8.50		U			1							S
111599	10.447	0.036	10.087	0.042		0.270	0.040	G	0.30	0.05	R		10.1410	0.0022	0.028	117		10.09	10.19		C			1							G
111600	7.221	0.004	5.937	0.003		1.074	0.015	G	1.09	0.06	F		5.9843	0.0005	0.006	195		5.97	5.99		C	22366−3139	I 2	1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
111601	22 36 36.34	+11 41 47.8	6.42	H	339.151 409 74	+11.696 621 47	8.68	−13.72	6.11	0.65	0.52	0.77	0.75	0.62	+26 +12 − 3 +14 − 6 −15 −10 −31 +16 +14	0	1.55
111602	22 36 36.39	+38 10 02.9	9.53	H	339.151 619 47	+38.167 482 87	3.79	15.91	−35.54	1.08	0.91	1.35	1.28	1.00	− 5 + 5 + 9 + 8 + 9 − 8 +10 −16 +25 − 4	0	−1.15
111603	22 36 36.82	−18 16 16.9	7.89	H	339.153 405 46	−18.271 371 35	2.69	−4.58	−26.97	0.80	0.52	0.96	0.89	0.59	+27 −21 − 6 −37 + 0 +16 − 5 −49 +24 +28	0	0.35
111604	22 36 36.89	+71 20 39.7	8.70	H	339.153 711 27	+71.344 348 40	4.01	24.87	11.97	0.68	0.63	0.75	0.78	0.74	− 3 + 7 +10 +33 + 4 − 1 + 7 − 1 +18 + 0	0	0.14
111605	22 36 37.17	+37 43 45.6	8.24	1 H	339.154 859 72	+37.729 328 09	1.52	−2.91	−7.03	0.75	0.61	0.94	1.05	0.76	+ 2 + 0 − 1 + 4 + 5 − 4 + 6 − 7 + 3 +15	0	−1.32
111606	22 36 37.34	−13 20 32.1	10.83	2 H													
111607	22 36 37.70	+13 27 52.7	8.06	H	339.157 099 89	+13.464 642 30	1.06	1.41	−20.35	0.81	0.72	1.01	0.95	0.89	+24 − 1 − 4 −22 − 7 + 9 − 8 −44 +19 +20	0	2.07
111608	22 36 38.21	+27 47 03.0	7.17	H	339.159 228 05	+27.784 180 34	5.91	49.65	11.52	0.62	0.59	0.88	0.74	0.72	+21 +16 +25 +40 −12 −19 − 9 − 7 + 8 +13	0	0.48
111609	22 36 38.43	−53 07 36.9	8.74	H	339.160 120 19	−53.126 907 21	3.06	−14.98	5.43	0.64	0.79	1.19	0.81	0.85	+24 −13 −22 − 3 −19 +28 −15 −38 +27 +30	0	−0.47
111610	22 36 38.96	−48 18 21.8	6.65	2 H	339.162 332 78	−48.306 047 16	3.63	23.09	−0.88	0.53	0.47	0.83	0.50	0.50	+17 −24 − 8 −31 − 4 +12 − 5 −14 + 7 +24	2	1.44
111611	22 36 39.26	−31 38 30.1	7.46	G	339.163 573 22	−31.641 703 64	4.31	−8.91	−3.05	0.69	0.48	1.01	0.75	0.53	+26 − 6 − 1 +31 −29 +24 −31 −30 +31 +30	0	−1.17
111612	22 36 39.71	+59 35 47.0	8.11	H	339.165 444 91	+59.596 382 54	9.67	−61.62	−69.04	0.61	0.63	0.74	0.74	0.72	−13 +12 +22 +31 − 8 + 9 − 9 + 3 − 5 −13	0	1.76
111613	22 36 40.02	+00 21 50.6	7.96	G	339.166 737 91	+00.364 061 51	6.10	1.10	−8.61	0.92	0.83	1.06	1.08	0.99	+42 −11 −14 − 7 −21 +26 −27 −56 +28 +35	0	−0.16
111614	22 36 41.50	+28 35 42.1	9.36	H	339.172 915 28	+28.595 020 88	5.87	−31.01	−44.17	0.87	0.87	1.23	1.11	1.17	+21 +10 +18 +21 − 7 − 6 − 4 − 1 +11 +24	0	−0.05
111615	22 36 41.83	+13 09 20.8	7.06	H	339.174 278 92	+13.155 767 01	4.10	28.71	9.48	0.74	0.63	0.91	0.81	0.76	+22 +18 −10 −15 − 8 − 1 − 4 −42 +24 +21	0	2.23
111616	22 36 42.42	−43 28 15.5	6.75	G	339.176 734 00	−43.470 959 42	18.39	269.30	−5.62	0.63	0.43	0.75	0.75	0.44	+11 −16 − 6 +24 − 3 + 4 − 1 −14 + 5 +14	1	0.69
111617	22 36 42.62	+65 15 26.7	7.61	H	339.177 584 70	+65.257 430 21	5.54	20.57	36.68	0.66	0.59	0.73	0.95	0.69	−21 −13 + 9 +10 +11 + 6 + 7 −10 +16 −16	2	−0.89
111618 H	22 36 44.08	−37 59 53.6	8.99	H	339.183 657 45	−37.998 221 75 A	7.03	−11.60	−2.32	2.99	1.98	2.16	2.36	1.59	+29 − 3 − 3 +13 + 9 + 6 − 1 −29 + 1 + 8	1	0.36
111619	22 36 45.05	+30 47 29.2	7.59	H	339.187 690 97	+30.791 448 10	6.72	−26.79	−16.43	0.48	0.51	0.77	0.56	0.66	+26 + 0 − 8 + 7 +10 −12 +11 − 3 + 7 +36	0	0.39
111620	22 36 45.11	+10 27 17.4	11.66	G	339.187 971 57	+10.454 826 79	4.30	9.63	−7.22	2.80	2.06	3.16	4.31	2.69	+18 +18 − 1 −35 + 8 −16 + 8 −37 +21 −12	2	−0.02
111621	22 36 45.93	−64 23 23.0	7.58	H	339.191 360 73	−64.389 728 77	5.07	18.71	20.52	0.47	0.49	0.71	0.56	0.50	−16 + 2 −10 + 1 + 2 + 3 + 1 −11 − 4 −22	2	0.18
111622	22 36 46.79	−21 05 22.7	7.43	H	339.194 953 37	−21.089 631 97	10.48	−11.35	17.22	0.91	0.53	0.94	1.13	0.64	− 8 + 4 + 6 −46 +29 +11 +27 −43 +29 − 7	0	1.41
111623	22 36 47.20	−45 07 03.7	9.46	G	339.196 647 39	−45.117 684 38	8.75	40.57	−7.13	1.26	0.81	1.30	1.75	0.85	− 5 + 5 −16 −22 + 7 +12 + 8 −32 +10 + 4	3	0.60
111624	22 36 47.38	+44 13 56.9	10.11	H	339.197 426 37	+44.232 480 05	4.19	13.09	−0.07	0.87	0.90	1.34	0.93	0.99	−28 +16 − 6 − 4 +13 + 4 +18 −31 +18 −20	1	2.10
111625	22 36 47.58	+54 25 24.1	7.44	H	339.198 234 28	+54.423 369 78	3.65	10.86	−2.53	0.48	0.46	0.60	0.53	0.52	− 1 + 7 + 9 +19 + 6 −10 +10 + 9 +13 +11	1	−3.07
111626	22 36 47.94	+47 53 01.3	8.39	G	339.199 765 85	+47.883 690 91 A	4.56	12.75	3.34	0.98	1.09	1.34	0.95	1.05	−13 +12 + 1 −11 +13 + 4 +21 −32 +12 +18	1	0.54
111627	22 36 48.69	+35 39 08.7	6.28	H	339.202 857 66	+35.652 423 06	4.66	−5.28	−1.83	0.53	0.54	0.78	0.66	0.69	+12 +18 +15 + 7 − 1 −25 + 6 −23 −13 +29	0	−0.93
111628	22 36 49.11	−35 29 26.6	8.90	H	339.204 639 50	−35.490 709 29	5.34	−0.03	−30.19	1.12	0.71	1.27	1.32	0.72	+12 − 1 −14 +35 −25 +11 −24 −18 +10 + 7	0	−0.18
111629	22 36 50.91	−35 27 22.6	8.93	G	339.212 120 71	−35.456 272 83	21.87	−73.20	−63.29	1.13	0.68	1.28	1.30	0.72	+14 − 3 − 5 +30 −16 + 9 −14 −19 +14 +17	0	−1.65
111630	22 36 51.71	+21 44 54.3	9.11	H	339.215 444 61	+21.748 426 18	7.28	−23.51	−51.92	0.97	0.77	1.17	1.09	0.98	+16 +20 + 5 + 5 − 3 − 9 − 4 −20 − 4 +14	0	−1.80
111631	22 36 52.03	−36 01 53.5	10.84	G	339.216 803 18	−36.031 536 94	5.27	23.92	−40.49	1.53	1.00	1.88	1.69	1.09	+14 + 3 + 0 + 2 − 9 +12 − 8 −27 − 2 +18	0	1.03
111632	22 36 52.32	−71 36 58.3	8.66	H	339.218 000 35	−71.616 186 81	1.88	10.69	−3.75	0.64	0.79	0.98	0.74	0.77	− 7 − 2 −31 − 1 + 0 −17 − 6 −11 +13 −21	0	0.95
*111633	22 36 53.96	+56 54 21.0	8.86	2 T	339.224 827 13	+56.905 837 71	0.14	−4.11	−3.40	0.72	0.64	0.85	0.87	0.75	−20 −15 +11 − 2 + 4 +14 + 3 − 4 + 0 −23	1	−0.01
*111634	22 36 53.95	+07 46 56.5	7.64	G	339.224 809 68	+07.782 350 60	13.63	63.69	−34.47	0.80	0.60	0.97	1.25	0.73	+19 −11 −28 −12 + 3 +15 − 5 −42 +19 −19	0	−1.78
111635	22 36 55.18	+11 24 05.5	8.77	H	339.229 904 48	+11.401 527 87	3.79	29.29	−6.27	1.00	0.77	1.17	1.21	0.94	+24 + 9 − 6 − 3 − 5 −12 −10 −39 +17 + 7	2	0.90
111636 H	22 36 55.43	+37 40 32.1	10.40	G	339.230 962 35	+37.675 586 20 A	2.78	−4.51	−10.47	2.59	1.96	2.74	3.20	2.22	+16 + 9 + 2 −15 − 3 + 1 − 2 −23 +11 +29	1	0.18
111637	22 36 55.75	−09 23 21.6	8.94	H	339.232 293 52	−09.389 328 79	0.89	−4.01	−3.77	1.13	0.97	1.52	1.67	1.27	+34 − 1 −42 + 2 −24 +36 − 7 −50 +46 +51	0	−0.31
111638	22 36 56.92	+51 06 40.2	8.09	G	339.237 157 78	+51.111 170 09	3.37	5.15	0.54	0.55	0.55	0.76	0.56	0.60	−16 + 9 +14 + 1 +12 − 3 +21 −25 +18 + 3	0	0.66
111639	22 36 57.23	+63 44 41.2	8.30	G	339.238 459 94	+63.744 780 09	2.61	−2.81	−12.61	0.64	0.64	0.76	0.85	0.78	−16 +12 + 3 + 2 + 9 −22 +10 −19 + 8 −18	0	−0.36
111640	22 36 57.37	−18 53 13.2	9.58	H	339.239 029 26	−18.886 996 37	20.22	118.08	−42.99	1.12	0.71	1.32	1.34	0.84	+19 − 5 + 1 −11 +10 + 7 + 8 −31 +21 +21	0	0.11
111641	22 36 58.67	−26 03 12.5	8.38	H	339.244 453 54	−26.053 470 50	2.65	35.25	−5.21	1.06	0.64	1.17	1.28	0.79	+ 6 −21 −11 −46 + 3 +37 + 0 −58 +30 +10	0	0.64
111642	22 36 58.72	−15 43 25.7	9.55	H	339.244 683 29	−15.723 809 23	8.80	24.24	−46.44	1.33	1.01	1.56	1.50	1.09	+34 +14 +23 −12 − 5 +15 −13 −54 + 3 +22	0	0.07
111643 H	22 36 58.82	−40 35 27.1	5.85	G	339.245 082 93	−40.590 865 11 A	14.86	45.18	−69.65	0.72	0.59	0.85	0.81	0.62	+23 −16 −10 − 4 −11 +34 − 6 −33 + 6 +29	1	−0.02
111644	22 36 59.48	−87 19 13.4	7.47	H	339.247 819 20	−87.320 391 30	3.49	−1.39	16.75	0.57	0.50	0.63	0.68	0.54	+ 0 −19 −11 + 0 + 7 +12 +10 − 3 −12 + 7	0	−0.62
111645	22 37 00.17	−47 48 39.8	8.89	H	339.250 709 33	−47.811 049 26	7.46	24.35	−6.11	0.99	0.69	1.16	0.90	0.79	+13 −18 − 6 −19 − 7 +13 − 7 − 7 − 4 +21	0	−0.25
111646	22 37 00.77	−14 37 52.6	9.49	H	339.253 200 86	−14.631 273 33	0.00	2.93	10.46	1.44	0.83	1.61	1.53	1.00	+22 +31 − 3 + 1 − 2 +11 + 4 −38 +11 +29	0	−1.06
111647	22 37 00.82	−07 33 58.0	7.48	2 G	339.253 417 45	−07.566 116 10	10.55	186.90	−170.61	0.95	0.66	1.19	1.06	0.79	+14 − 4 −51 −17 − 4 +15 + 2 −54 +53 +17	0	1.71
111648	22 37 04.02	−59 33 34.2	8.20	G	339.266 751 84	−59.559 492 22	33.14	−253.00	79.76	0.55	0.55	0.95	0.55	0.54	−28 − 2 −12 + 2 − 2 +19 + 0 − 9 − 7 −28	0	−2.24
111649	22 37 04.86	+12 34 36.8	6.30	H	339.270 233 57	+12.576 894 55	3.90	−12.94	−32.49	0.64	0.57	0.77	0.72	0.70	+32 + 4 − 9 −11 −10 + 1 −11 −42 +15 +26	0	1.15
111650	22 37 05.24	+28 22 37.1	9.15	H	339.271 837 00	+28.376 980 42	3.14	−7.39	−9.80	0.84	0.85	1.13	1.02	1.00	+30 +22 +23 +27 −10 − 5 −12 −14 + 4 +16	0	−1.77
111651	22 37 05.40	−12 53 52.2	7.52	H	339.272 491 39	−12.897 838 71	0.21	−2.03	−7.87	1.06	0.72	1.17	1.21	0.86	+19 + 4 −34 −18 −10 − 1 − 7 −53 +25 +27	0	−2.15
111652	22 37 06.29	−11 43 51.6	7.25	H	339.276 223 27	−11.731 008 77	2.98	92.85	−21.02	0.98	0.84	1.11	1.25	1.01	+24 − 5 −38 −39 −14 +25 − 8 −68 +27 +23	0	0.33
111653	22 37 07.47	−63 48 58.5	8.68	H	339.281 127 08	−63.816 244 95	3.90	19.41	−20.62	0.66	0.72	1.04	0.79	0.77	−22 + 8 −17 − 1 +10 − 8 + 8 − 3 + 3 −21	0	−0.47
111654	22 37 07.94	+49 09 17.2	9.43	H	339.283 094 38	+49.154 790 43	−0.48	1.66	−5.92	0.73	0.75	1.11	0.75	0.81	−20 +14 −18 + 1 +16 −15 +21 −14 +28 + 7	0	−0.35
111655	22 37 08.04	−40 30 38.4	9.10	G	339.283 484 17	−40.510 672 33	−0.47	50.25	−25.55	1.03	0.79	1.34	1.32	0.93	+21 −11 −31 + 0 −11 +31 − 3 −26 +28 +33	0	−1.60
111656	22 37 08.29	−57 46 06.0	9.05	H	339.284 525 29	−57.768 327 41	0.06	3.90	−2.68	0.79	0.76	1.31	0.92	0.78	+ 7 −34 − 3 −22 − 7 +31 − 9 − 5 +12 +10	0	−0.74
111657	22 37 08.89	+11 59 04.3	10.59	G	339.287 031 57	+11.984 527 38	23.30	−248.61	−188.71	1.52	1.38	1.78	1.84	1.58	+33 + 3 − 3 −11 −10 + 0 −17 −45 +18 +11	0	−0.45
111658	22 37 10.24	+17 16 58.0	7.51	G	339.292 667 80	+17.282 786 91	9.12	37.87	2.14	0.74	0.53	0.86	0.72	0.58	+14 +33 +12 +27 − 5 − 8 − 6 − 6 − 5 +13	0	−0.44
111659	22 37 12.58	+23 28 24.4	7.15	G	339.302 418 65	+23.473 435 98	11.37	34.63	−2.36	0.71	0.58	0.90	0.81	0.70	+23 +20 − 1 −20 −10 −32 −12 −23 − 6 +26	0	0.03
*111660	22 37 12.86	+75 22 18.5	5.80	1 H	339.303 595 77	+75.371 791 80	5.23	44.70	7.85	0.46	0.43	0.51	0.54	0.53	+ 0 − 2 +15 +13 − 6 −14 − 4 + 1 + 9 + 3	0	−0.36
*111661	22 37 12.70	−13 39 58.7	8.28	H	339.302 927 72	−13.666 319 43	4.48	−2.71	8.79	1.07	0.83	1.19	1.27	1.03	+27 − 8 + 2 −18 − 6 +13 − 4 −49 − 6 +28	0	0.82
111662	22 37 13.83	−34 26 29.2	10.01	H	339.307 611 49	−34.441 435 09	3.61	−41.61	2.93	1.24	0.94	1.58	1.42	1.09	+25 −13 −11 − 3 −19 +19 −18 −24 +10 +28	0	−1.35
111663 H	22 37 14.89	+51 17 09.4	8.27	G	339.312 060 43	+51.285 938 78 A	2.49	7.62	2.23	0.81	0.84	1.03	0.82	0.87	−11 −11 +12 − 9 +14 −12 +14 − 9 + 5 +19	1	−0.42
111664	22 37 14.95	+42 48 37.2	6.87	H	339.312 292 37	+42.810 341 56	5.08	24.34	1.06	0.41	0.50	0.79	0.45	0.54	−33 + 6 − 9 + 4 +10 + 5 +17 −27 +23 −12	0	0.63
111665	22 37 15.82	−14 58 24.1	9.30	H	339.315 931 22	−14.973 364 22	1.31	12.06	1.81	1.31	0.74	1.44	1.30	0.90	+20 +24 − 1 − 3 − 3 +12 + 3 −39 + 6 +28	0	0.58
111666	22 37 16.07	+51 00 55.6	8.69	H	339.316 953 25	+51.015 451 68	0.59	−1.83	−2.03	0.63	0.65	0.92	0.61	0.64	−15 +24 + 8 + 3 +14 − 5 +23 −27 +24 − 4	0	0.58
111667	22 37 16.62	+01 55 30.1	8.10	H	339.319 260 96	+01.925 017 94	8.96	−9.36	−32.13	0.95	0.69	1.07	1.24	1.00	+18 −17 + 2 −11 + 0 +21 − 2 −36 +13 +22	0	0.14
111668	22 37 17.91	−06 04 02.5	7.62	H	339.324 616 09	−06.067 369 56	4.18	−34.72	−30.23	1.04	0.59	1.04	1.33	0.72	+16 −13 −18 +37 − 9 +17 −21 −33 +38 + 1	0	0.85
111669	22 37 18.24	+19 08 45.4	8.80	H	339.326 005 90	+19.145 943 88	3.98	−3.41	−21.01	1.00	0.69	1.15	1.02	0.76	+ 5 +26 +12 +13 − 7 −21 − 4 − 9 +11 − 5	0	0.58
111670 H	22 37 19.13	+69 12 31.1	7.30	H	339.329 692 65	+69.208 632 70 A	6.97	12.82	−1.29	0.69	0.80	0.72	0.72	0.68	− 5 + 3 +12 +11 + 2 +15 − 2 + 3 + 8 − 5	1	0.82
111671	22 37 20.51	+04 27 30.3	9.60	H	339.335 455 48	+04.458 412 15	5.20	20.79	−5.83	1.65	1.15	1.92	2.06	1.48	+15 +22 −18 −18 − 1 + 7 + 3 −49 +28 +10	0	1.24
*111672	22 37 22.12	−45 50 08.6	10.13	H	339.342 185 92	−45.835 711 94	15.81	98.92	−176.30	1.52	1.10	1.85	2.11	1.20	+14 − 5 −13 − 3 − 2 + 9 + 1 −24 + 6 +34	3	2.83
*111673	22 37 22.11	−51 55 14.1	9.09	H	339.342 106 48	−51.920 587 44	5.22	53.72	−17.22	0.70	0.84	1.23	0.91	0.86	+28 −21 −36 − 8 −23 +30 −15 −45 +23 +35	1	−0.65
111674	22 37 22.47	+51 32 43.3	4.64	H	339.343 607 49	+51.545 373 99	18.95	−51.31	−103.34	0.41	0.37	0.54	0.44	0.44	−15 + 9 + 2 + 0 +11 −10 +19 −24 +29 + 0	0	0.04
111675	22 37 23.26	+68 04 55.2	8.40	H	339.346 913 24	+68.081 997 75	6.81	1.19	10.22	0.64	0.63	0.70	0.74	0.67	− 1 − 7 +23 +37 +17 + 7 +21 − 5 − 5 +15	0	1.00
111676	22 37 23.82	+20 39 24.1	10.00	H	339.349 244 40	+20.656 695 08	8.95	203.44	48.96	1.35	0.89	1.47	1.36	1.05	+ 4 +27 − 5 −25 + 6 −16 + 8 −26 + 9 + 4	0	−1.85
111677	22 37 24.65	+43 10 19.0	9.35	2 H	339.352 728 85	+43.171 948 65	1.95	8.46	1.13	0.63	0.74	1.13	0.74	0.95	−17 +14 + 2 + 4 + 4 − 9 + 7 −20 +12 −15	4	1.80
111678	22 37 26.20	+25 50 30.2	8.83	H	339.359 147 35	+25.841 733 84	3.98	−5.44	−21.01	0.87	0.71	1.09	0.96	0.83	+ 2 +20 +11 +23 − 6 −25 + 1 +10 +15 + 2	0	−0.39
111679	22 37 26.85	+38 55 01.8	9.44	H	339.361 871 64	+38.917 159 27 B	3.79	−8.73	−5.60	24.14	17.29	5.38	7.50	5.32	+ 5 + 7 + 1 +35 − 4 − 6 + 2 −16 + 5 +16	8	1.28
111680 H	22 37 27.03	+23 56 16.5	9.62	G	339.362 611 93	+23.937 919 04 A	20.12	86.65	−24.69	2.71	2.70	2.23	2.39	2.47	+34 + 0 + 0 − 5 + 1 −20 − 7 −14 − 4 +16	1	−0.59
111681	22 37 27.63	+38 54 42.3	9.14	H	339.365 136 41	+38.911 757 71 A	3.62	−5.73	−5.07	3.26	2.62	3.03	3.92	2.84	+ 5 +15 + 7 +26 − 6 + 0 − 2 −25 + 8 +12	8	1.28
111682 H	22 37 28.16	+41 00 19.0	9.63	G	339.367 352 03	+41.005 284 27 A	1.23	−0.78	−4.94	1.64	1.65	2.35	1.85	1.93	−16 + 6 − 4 + 8 − 7 + 4 − 6 − 4 +21 −13	1	0.30
111683	22 37 28.72	+39 26 20.0	7.59	G	339.369 683 25	+39.438 878 38	3.07	−0.34	−5.04	0.66	0.56	0.79	0.92	0.63	+ 6 + 8 + 1 +18 − 3 + 5 + 0 −14 +12 +12	0	−0.17
111684	22 37 29.83	−20 22 41.2	7.57	H	339.374 281 47	−20.378 107 17	9.20	37.49	−44.63	0.78	0.49	0.94	0.97	0.59	+14 −14 + 2 −19 +13 +21 + 7 −36 +29 +20	0	1.66
111685 H	22 37 29.89	+39 22 54.6	9.41	G	339.374 533 63	+39.381 839 12 *	52.94	21.64	−340.77	18.42	6.34	1.94	2.08	1.66	−50 + 5 − 1 − 1 − 2 +16 + 4 − 9 +23 +27	5	0.69
111686 H	22 37 30.21	−67 06 10.6	9.77	G	339.375 880 06	−67.102 931 01 A	32.04	−214.96	−193.29	1.85	1.97	2.30	2.02	1.81	−11 − 3 − 3 + 3 +13 +11 +12 −13 + 1 − 2	0	−0.22
*111687	22 37 31.83	−34 21 26.9	9.70	H	339.382 618 65	−34.357 467 59 A	5.16	49.11	−7.68	2.38	1.91	2.56	2.09	1.61	+17 − 9 −16 + 9 −11 +14 − 9 −22 + 8 +24	5	0.63
*111688	22 37 31.06	+15 37 48.7	9.26	H	339.379 432 92	+15.630 189 40	1.92	−12.52	−11.07	1.10	0.84	1.33	1.37	1.09	+15 + 0 − 2 − 4 + 6 −17 + 6 −12 − 1 + 9	0	0.92
*111689	22 37 30.98	−44 34 31.9	9.51	G	339.379 083 42	−44.575 532 11	9.18	−70.63	−227.81	1.17	0.84	1.47	1.46	0.86	− 1 +22 −24 −10 − 4 +22 + 6 −33 +23 +10	0	−0.48
*111690	22 37 31.68	−65 33 57.1	7.34	H	339.382 009 13	−65.565 870 25	3.56	3.14	7.39	0.52	0.53	0.78	0.61	0.54	− 7 + 4 −10 − 7 − 1 − 3 − 1 −13 +14 + 5	0	0.47
*111691	22 37 31.76	−16 22 14.7	8.47	H	339.382 324 24	−16.370 739 63	3.02	20.81	−12.24	1.16	0.65	1.09	1.40	0.77	+21 − 8 − 6 +31 −15 + 9 −24 −43 +11 +15	0	2.64
111692	22 37 32.09	−28 46 25.5	9.27	G	339.383 726 56	−28.773 745 77	−0.14	12.74	2.38	1.29	0.76	1.41	1.34	0.85	+ 7 +15 +17 −36 + 2 + 1 + 3 −47 − 1 + 7	0	2.41
111693	22 37 32.37	−58 45 55.0	9.15	H	339.384 871 38	−58.765 288 23	2.64	42.65	−23.10	0.82	0.81	1.33	0.97	0.78	− 9 − 7 −11 −21 −13 +12 − 7 + 1 −11 −21	0	−1.41
111694 H	22 37 33.37	+24 00 04.9	7.02	H	339.389 023 31	+24.001 368 92 *	5.53	−21.74	−17.77	0.62	0.53	0.80	0.66	0.63	+13 + 6 + 2 + 2 + 1 −13 + 1 −19 − 1 + 9	0	−1.44
111695	22 37 33.68	+44 31 42.1	8.43	H	339.390 340 30	+44.528 362 75	3.87	14.53	−3.27	0.66	0.77	1.14	0.65	0.74	−42 +15 −12 −18 +27 − 4 +32 −39 +25 −22	0	0.24
111696 H	22 37 35.17	+27 26 22.6	8.06	H	339.396 557 15	+27.439 603 54 A	8.78	35.24	31.15	0.96	0.93	1.21	1.04	1.09	+33 + 9 +14 +41 − 6 − 4 −13 − 9 +12 +23	0	−0.72
111697	22 37 36.03	−21 47 50.5	8.26	H	339.400 138 60	−21.797 365 05	10.39	79.19	−11.90	0.95	0.71	1.18	1.33	0.92	+33 − 9 −17 −18 −13 − 7 −14 −65 +25 +35	0	0.71
111698	22 37 36.52	−28 05 26.9	10.67	G	339.402 164 49	−28.090 809 52	24.90	334.15	−211.86	1.62	1.07	1.94	2.05	1.27	+28 −11 + 2 − 2 −10 +10 − 9 −41 +32 +34	3	−0.01
111699	22 37 36.53	+40 08 59.2	8.64	H	339.402 228 03	+40.149 766 17	1.86	−14.22	−19.20	0.95	0.72	1.07	1.16	0.83	− 5 + 9 + 7 +37 − 7 −11 − 3 −18 +12 − 3	0	0.03
111700	22 37 37.78	+27 31 27.6	9.01	H	339.407 424 14	+27.524 322 10	1.70	18.29	1.70	0.81	0.74	1.14	0.98	0.86	+10 + 6 +18 +44 − 8 −16 − 6 + 3 + 1 + 6	0	0.13

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
111601	6.454	0.004	6.430	0.004		0.027	0.005	T	0.04	0.00	L	6.4394	0.0009	0.006	95		6.43	6.46		C			1							S
111602	9.970	0.027	9.538	0.027		0.408	0.035	T	0.47	0.04	L	9.6242	0.0029	0.026	105		9.59	9.68		C			1							
111603	9.343	0.013	8.018	0.008		1.125	0.012	T	1.09	0.01	L	8.0615	0.0008	0.009	159		8.05	8.08		C			1							S
111604	9.897	0.021	8.813	0.014		0.937	0.019	T	0.93	0.01	L	8.8645	0.0018	0.017	128		8.84	8.90		C			1							
111605	8.160	0.008	8.241	0.010		−0.069	0.012	T	−0.05	0.01	L	8.2222	0.0024	0.021	115		8.18	8.26		U	22366+3744	I 1	1							S
111606											T	10.9760	0.0123	0.123	83		10.86	11.30		U 2	22366−1321	I 1	S							G G
111607	9.767	0.025	8.218	0.013		1.300	0.022	T	1.26	0.02	L	8.2205	0.0014	0.013	85		8.20	8.24		C			1							
111608	8.456	0.011	7.278	0.007		1.010	0.010	T	0.99	0.01	L	7.3337	0.0011	0.009	112		7.32	7.35		C	22366+2747	I 1	1 S							S
111609	10.077	0.020	8.843	0.012		1.054	0.018	T	1.02	0.01	L	8.9051	0.0015	0.019	166		8.87	8.95					1							
111610	8.695	0.009	6.867	0.004		1.552	0.008	T	2.30	0.03	O	6.6985	0.0034	0.037	148		6.65	6.76		U 2			1 S							S P
111611	9.083	0.010	7.580	0.006		1.255	0.015	G	1.23	0.02	A	7.6179	0.0008	0.011	186		7.60	7.64		C	22366−3139	I 2	1							S
111612	9.157	0.013	8.198	0.010		0.844	0.012	T	0.86	0.01	L	8.2636	0.0013	0.014	109		8.24	8.29					1							
111613	8.385	0.012	8.004	0.012		0.358	0.008	G	0.41	0.02	A	8.0527	0.0014	0.014	74		8.03	8.07		D			1							S
111614	9.838	0.022	9.400	0.023		0.413	0.029	T	0.48	0.03	L	9.4550	0.0025	0.017	103		9.40	9.49					1							
111615	9.105	0.015	7.229	0.007		1.570	0.015	G	1.58	0.09	H	7.1747	0.0013	0.011	87		7.16	7.20					1							S
111616	7.390	0.005	6.824	0.005		0.529	0.007	G	0.60	0.02	A	6.8731	0.0008	0.008	129		6.86	6.89					1							S
111617	9.112	0.013	7.756	0.008		1.149	0.012	T	1.11	0.01	L	7.7820	0.0014	0.012	119		7.77	7.81		C			1							
111618	9.925	0.021	9.417	0.021	A	0.500	0.495	G	0.52	0.08	L *	9.0920	0.0026	0.026	99	−	9.06	9.14		D	22367−3800	I 1	3 C B							S G
111619	7.738	0.006	7.601	0.007		0.132	0.009	T	0.15	0.01	L	7.6383	0.0010	0.011	149		7.62	7.67					1							S
111620						1.490	0.020	G	1.62	0.15	K	11.8483	0.0082	0.062	77		11.73	11.95					1							G
111621	9.113	0.010	7.724	0.006		1.175	0.009	T	1.14	0.01	L	7.7486	0.0010	0.012	187		7.73	7.77		C			1							S
111622	7.572	0.005	7.438	0.006		0.114	0.015	G	0.13	0.01	H	7.4709	0.0009	0.011	130		7.46	7.49		C			1							S
111623	10.376	0.030	9.517	0.023		0.732	0.005	G	0.78	0.00	H	9.6153	0.0027	0.027	104		9.57	9.67					1							
111624	10.584	0.030	10.151	0.031		0.409	0.040	T	0.48	0.04	L	10.2111	0.0027	0.038	220		10.14	10.28					1 S							G
111625	7.348	0.005	7.420	0.007		−0.061	0.008	T	−0.04	0.01	L	7.4220	0.0009	0.010	141		7.41	7.44		C			1							S
111626	8.765	0.010	8.422	0.011	A	0.334	0.012	G	0.39	0.02	H	8.4848	0.0059	0.017	173	A	8.45	8.52		C	22368+4753	I 1	2 C B	AB	257	11.431	0.034	3.46	0.14	
111627	8.107	0.009	6.442	0.004		1.392	0.008	T	1.37	0.01	L	6.4287	0.0011	0.009	117		6.41	6.45					1							S
111628	10.223	0.024	9.026	0.014		1.025	0.022	T	1.00	0.02	L	9.0657	0.0020	0.018	124		9.03	9.10					1							
111629	10.032	0.022	8.991	0.015		0.860	0.015	G	0.90	0.01	H	9.0760	0.0017	0.019	121		9.04	9.11		C			1							
111630	9.821	0.024	9.150	0.021		0.621	0.027	T	0.69	0.02	L	9.2395	0.0016	0.016	91		9.22	9.27		C			1							
111631	11.465	0.078	10.759	0.062		0.649	0.015	G	0.71	0.01	H	10.9836	0.0042	0.036	125		10.92	11.04					1							G
111632	10.247	0.024	8.774	0.012		1.241	0.021	T	1.20	0.02	L	8.8227	0.0016	0.018	153		8.79	8.87					1							
111633	9.298	0.016	8.902	0.016		0.375	0.021	T	0.44	0.02	L	8.8675	0.0226	0.167	118		8.73	9.14	1.64	P 1 A			1							
111634	8.148	0.009	7.690	0.008		0.432	0.011	T	0.50	0.01	L	7.7381	0.0010	0.010	99		7.72	7.76					1							S
111635	10.194	0.028	8.901	0.016		1.100	0.025	T	1.06	0.03	L	8.9437	0.0028	0.020	85		8.91	8.97		R			1							
111636	10.733	0.048	10.480	0.062	A	0.130	0.042	G	0.14	0.04	R *	10.4838	0.0035	0.032	121	*	10.43	10.53		D	22369+3741	I 1	2 C A	AB	164	5.173	0.025	2.22	0.12	G
111637	11.138	0.072	9.094	0.021		1.692	0.060	T	1.72	0.06	L	9.0481	0.0028	0.024	72		9.01	9.08					1 S							
111638	8.056	0.010	8.104	0.013		−0.020	0.015	G	0.00	0.01	H	8.0998	0.0013	0.013	129		8.08	8.12		C			1							
111639	8.922	0.013	8.379	0.012		0.544	0.015	G	0.62	0.01	H	8.4221	0.0020	0.015	120		8.40	8.44		C			1							
111640	10.587	0.033	9.675	0.024		0.794	0.032	T	0.83	0.02	L	9.7241	0.0020	0.023	133		9.68	9.76		C			1							
111641	10.232	0.026	8.533	0.012		1.419	0.023	T	1.40	0.04	L	8.5199	0.0015	0.016	132		8.50	8.56					1							S
111642	10.111	0.028	9.574	0.027		0.511	0.029	T	0.58	0.03	L	9.6648	0.0020	0.022	96		9.61	9.70					1							
111643	5.950	0.003	5.884	0.003	A	0.060	0.009	G	0.06	0.00	L *	5.8877	0.0005	0.005	128	*	5.88	5.90		D	22370−4035	I 1	2 C B	AB	265	2.734	0.037	4.12	0.13	S
111644	9.102	0.013	7.621	0.007		1.247	0.012	T	1.21	0.01	L	7.6340	0.0014	0.011	133		7.62	7.65		C			1							S
111645	9.333	0.018	8.926	0.019		0.398	0.022	T	0.46	0.02	L	8.9785	0.0018	0.018	102		8.95	9.02		C			1							S
111646	11.388	0.080	9.618	0.027		1.475	0.067	T	1.49	0.10	L	9.6279	0.0020	0.023	89		9.59	9.67		C			1							
111647	7.810	0.008	7.518	0.010		0.294	0.021	G	0.34	0.03	H	7.5459	0.0048	0.037	79		7.44	7.59		U 2 C			1							S
111648	9.113	0.009	8.280	0.007		0.739	0.005	G	0.79	0.01	H	8.3417	0.0014	0.017	227		8.31	8.37					1							
111649	8.190	0.009	6.460	0.005		1.431	0.005	G	1.41	0.02	L	6.4402	0.0008	0.008	91		6.43	6.45					1							S
111650	9.374	0.017	9.140	0.019		0.223	0.024	T	0.25	0.03	L	9.2236	0.0022	0.019	101		9.19	9.26		C			1							
111651	9.435	0.020	7.673	0.009		1.469	0.017	T	1.48	0.03	L	7.6514	0.0012	0.009	83		7.63	7.67		C			1							S
111652	8.912	0.015	7.391	0.008		1.278	0.013	T	1.24	0.01	L	7.4114	0.0010	0.009	70		7.40	7.43		C			1							S
111653	9.941	0.017	8.793	0.011		0.986	0.016	T	0.97	0.01	L	8.8481	0.0019	0.025	188		8.81	8.89					1							
111654	9.396	0.015	9.420	0.020		−0.017	0.023	T	0.01	0.02	L	9.4314	0.0024	0.029	161		9.38	9.48					1							
111655	10.024	0.021	9.208	0.017		0.773	0.014	G	0.81	0.01	H	9.2539	0.0025	0.021	119		9.21	9.29		C			1							
111656	10.269	0.022	9.176	0.015		0.944	0.020	T	0.93	0.01	L	9.2092	0.0022	0.027	151		9.18	9.25		C			1							
111657	12.238	0.161	10.654	0.065		1.271	0.022	G	1.45	0.04	I	10.6858	0.0031	0.036	92		10.56	10.73					1							G
111658	8.047	0.010	7.563	0.007		0.473	0.015	G	0.54	0.02	H	7.6063	0.0014	0.011	90		7.59	7.62		C			1							S
111659	7.492	0.008	7.169	0.007		0.331	0.015	G	0.39	0.02	H	7.2208	0.0010	0.009	87		7.21	7.23		C			1							S
111660	7.857	0.008	5.978	0.005		1.594	0.008	T	1.81	0.03	O	5.8915	0.0009	0.010	116		5.87	5.91		M			1							S
111661	9.667	0.021	8.402	0.013		1.078	0.019	T	1.04	0.02	L	8.4482	0.0017	0.014	91		8.43	8.48		C			1							S
111662	10.832	0.042	10.079	0.034		0.673	0.041	T	0.73	0.03	L	10.1432	0.0024	0.026	132		10.09	10.18		C			1							
111663	8.351	0.013	8.331	0.016	A	0.154	0.015	G	0.17	0.01	H *	8.2697	0.0018	0.015	131	*	8.25	8.30			22372+5117	I 1	2 C A	AB	280	5.521	0.017	3.25	0.08	
111664	8.755	0.009	7.014	0.004		1.452	0.008	T	1.45	0.01	L	7.0008	0.0010	0.011	207		6.98	7.02					1							S
111665	10.783	0.052	9.358	0.025		1.203	0.045	T	1.16	0.04	L	9.4697	0.0023	0.015	88		9.44	9.50		C			1							
111666	8.695	0.013	8.720	0.017		0.101	0.015	G	0.11	0.02	H	8.7316	0.0021	0.018	131		8.71	8.77					1							
111667	9.500	0.022	8.218	0.013		1.011	0.015	G	0.99	0.01	H	8.2682	0.0016	0.011	74		8.25	8.29		C			1							
111668	9.521	0.019	7.775	0.009		1.456	0.017	T	1.46	0.03	L	7.7521	0.0022	0.017	80		7.73	7.78					1							S
111669	9.065	0.018	8.796	0.020		0.256	0.025	T	0.29	0.03	L	8.8741	0.0028	0.019	86		8.84	8.91					1							S
111670	7.716	0.007	7.337	0.008	*	0.359	0.010	T	0.42	0.01	L *	7.3834	0.0008	0.011	118	*	7.36	7.40		D	22373+6913	M 1	2 C A	AB	0	0.533	0.005	2.41	0.03	S
111671	10.514	0.046	9.673	0.034		0.756	0.043	T	0.80	0.03	L	9.7504	0.0040	0.023	70		9.70	9.79					1							S
111672	11.575	0.090	10.293	0.046		1.086	0.081	T	1.16	0.12	L	10.2622	0.0036	0.033	104		10.17	10.32		C			1 S							
111673	9.690	0.014	9.124	0.014		0.534	0.015	T	0.61	0.02	L	9.2008	0.0020	0.023	179		9.16	9.24					1							
111674	4.949	0.002	4.678	0.002		0.254	0.006	G	0.28	0.03	C	4.7078	0.0005	0.004	122		4.70	4.72					1							S
111675	9.440	0.016	8.502	0.012		0.828	0.015	T	0.85	0.01	L	8.5527	0.0018	0.019	118		8.53	8.59					1							
111676	10.744	0.048	10.040	0.039		0.649	0.050	T	0.71	0.04	L	10.1333	0.0032	0.025	87		10.08	10.17		C			1							
111677	9.652	0.013	9.373	0.014		0.265	0.018	T	0.30	0.02	L	9.4276	0.0032	0.041	241		9.35	9.49		U 2			1 S							
111678	9.285	0.016	8.856	0.017		0.405	0.022	T	0.47	0.02	L	8.9217	0.0023	0.017	92		8.89	8.95		C			1							
111679	11.320	0.092	9.482	0.028	B						T	9.6224	0.0519			B				D	22375+3855	I 2	1 C I A							
111680	10.956	0.059	9.700	0.032	−	1.080	0.030	G	1.15	0.04	I *	9.6145	0.0027	0.026	89	−	9.57	9.65		D	22375+2356	I 1	3 C B							G
111681	9.038	0.015	9.070	0.020	A	−0.025	0.023	T	0.00	0.02	L	9.1395	0.0378	0.088	107	A	8.91	9.21		D	22375+3855	I 2	1 C P A							
111682	9.741	0.017	9.661	0.023	A	0.068	0.003	G	0.08	0.00	H *	9.6699	0.0025	0.026	139	*	9.62	9.72		C	22375+4100	I 1	2 C C	AB	1	8.129	0.066	3.50	0.30	
111683	7.436	0.007	7.560	0.009		−0.108	0.003	G	−0.09	0.00	H	7.5543	0.0013	0.011	120		7.53	7.57					1							S
111684	7.814	0.006	7.588	0.007		0.210	0.009	T	0.23	0.01	L	7.6311	0.0009	0.009	142		7.61	7.65		C			1							S
111685	11.245	0.086	9.569	0.031	*	1.367	0.020	G	1.60	0.04	I *	9.4797	0.0034	0.031	117	*	9.42	9.54			22375+3923	H 1	2 C C	AB	355	0.144	0.019	0.44	0.96	
111686	11.428	0.068	9.994	0.030	A	1.223	0.007	G	1.38	0.01	I *	9.8689	0.0023	0.031	151	*	9.80	9.92		D	22375−6706	I 1	2 C A	AB	296	1.438	0.016	1.76	0.08	
111687	10.307	0.031	9.702	0.029	A	0.563	0.031	T	0.64	0.03	L	9.8225	0.0160	0.121	136	A	9.74	10.85		D	22375−3421	I 1	2 C B	AB	355	11.044	0.035	2.54	0.14	P
111688	11.160	0.066	9.409	0.026		1.460	0.056	T	1.47	0.09	L	9.3890	0.0027	0.021	87		9.35	9.43		C			1							
111689	10.287	0.027	9.601	0.023		0.592	0.002	G	0.66	0.00	H	9.6467	0.0027	0.028	108		9.59	9.68					1							
111690	8.850	0.009	7.474	0.006		1.165	0.008	T	1.13	0.01	L	7.5085	0.0010	0.015	175		7.48	7.54					1							S
111691	9.983	0.023	8.605	0.013		1.166	0.021	T	1.13	0.02	L	8.6383	0.0016	0.012	106		8.62	8.66		C			1 G							
111692	11.175	0.054	9.421	0.020		1.455	0.020	G	1.46	0.03	I	9.4107	0.0022	0.022	133		9.38	9.45		C			1							
111693	10.499	0.026	9.286	0.016		1.037	0.024	T	1.01	0.02	L	9.3215	0.0015	0.027	179		9.27	9.38					1 S							
111694	7.230	0.006	7.041	0.006	*	0.181	0.008	T	0.20	0.01	L *	7.0798	0.0012	0.009	91	*	7.07	7.09			22376+2400	H 1	2 C S A	AB	176	0.104	0.007	0.82	0.57	S
111695	9.865	0.019	8.560	0.011		1.109	0.017	T	1.07	0.02	L	8.5937	0.0017	0.021	209		8.56	8.63					1							
111696	8.707	0.010	8.173	0.010	A	0.200	0.495	G	0.56	0.02	L *	8.1715	0.0010	0.011	118	*	8.16	8.19		D	22376+2726	I 1	2 C A	AB	59	2.003	0.016	2.70	0.05	S
111697	8.946	0.012	8.347	0.011		0.558	0.012	T	0.63	0.01	L	8.3841	0.0014	0.013	120		8.37	8.41		C			1							S
111698						1.290	0.015	G	1.48	0.03	I	10.7397	0.0032	0.033	134		10.67	10.80		C	22375−2805	I 1	1							G
111699	10.894	0.048	8.834	0.015		1.705	0.040	T	1.73	0.04	L	8.7442	0.0030	0.023	111		8.71	8.78					1							
111700	10.786	0.042	9.160	0.018		1.361	0.036	T	1.33	0.04	L	9.1557	0.0021	0.017	107		9.13	9.19		R			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
111701	22 37 38.88	+63 46 09.6	6.66	H	339.412 013 17	+63.769 324 48	7.98	62.12	4.65	0.49	0.50	0.59	0.64	0.56	−18 +14 + 7 + 5 + 3 −24 + 5 −14 +11 −24	0	−1.11
111702	22 37 40.36	+58 38 36.1	8.27	G	339.418 184 49	+58.643 361 61	−0.06	5.04	−2.06	0.72	0.63	0.83	0.89	0.68	−13 + 2 +14 +28 − 8 −13 − 2 + 3 + 2 + 2	0	0.78
111703	22 37 41.23	−25 09 59.5	9.38	H	339.421 773 88	−25.166 537 88	1.08	−3.70	−12.71	1.33	0.75	1.41	1.53	0.88	− 1 +13 − 1 −33 +12 +19 +14 −43 +18 − 6	0	−0.23
111704	22 37 42.18	+09 11 43.2	9.92	H	339.425 743 56	+09.195 346 50	5.11	74.69	−39.41	1.47	1.06	1.76	2.23	1.41	+15 +12 −16 −19 + 8 −10 + 3 −38 +16 − 9	0	−0.68
111705	22 37 42.66	−29 02 40.2	7.99	H	339.427 738 20	−29.044 507 30	11.94	57.11	4.81	0.97	0.54	1.06	0.99	0.64	− 1 +11 − 2 −29 + 6 +21 + 9 −46 +13 + 5	3	−0.30
111706	22 37 42.95	+62 10 37.6	9.44	H	339.428 951 48	+62.177 101 23	1.95	1.72	−12.92	0.74	0.71	0.84	0.84	0.77	−22 + 8 +10 + 4 +12 − 6 +12 −19 +13 −26	0	0.65
111707	22 37 43.75	−73 25 55.9	8.04	H	339.432 310 92	−73.432 184 06	13.01	101.24	−52.15	0.76	0.66	0.84	0.90	0.71	+ 3 + 4 −30 −10 −10 − 7 −14 −12 +12 +21	0	0.63
111708 T	22 37 43.95	−52 52 33.0	9.86	H	339.433 105 30	−52.875 825 39 A	18.11	−140.81	−78.74	2.46	2.83	3.62	3.09	2.56	+23 − 7 −10 +24 −28 +31 −26 −29 +21 +17	1	0.71
111709	22 37 44.29	−41 47 42.9	9.65	H	339.434 558 01	−41.795 258 58	15.19	25.66	−125.55	1.30	0.86	1.57	1.49	0.93	+22 −17 −15 +20 − 2 +14 + 1 −27 +15 +29	0	−0.97
111710	22 37 45.42	−04 13 39.9	5.04	H	339.439 254 19	−04.227 762 91	13.92	−68.36	−120.47	0.75	0.47	0.75	0.92	0.52	+ 1 + 2 − 1 −14 +12 +27 +12 −22 + 8 −12	0	−0.83
111711	22 37 45.77	−42 24 16.5	8.81	H	339.440 726 58	−42.404 576 62	2.55	8.81	1.86	0.93	0.71	1.26	1.10	0.75	+17 − 6 −11 +19 − 3 +19 + 3 −29 +18 +31	0	1.12
111712 H	22 37 45.79	−57 51 10.5	8.76	H	339.440 786 06	−57.852 922 56 A	6.85	20.15	40.61	1.14	1.23	1.65	1.20	1.09	+ 1 −15 −21 −12 − 1 +14 + 2 + 5 + 5 + 4	0	−0.18
111713	22 37 46.39	+26 25 18.6	7.65	G	339.443 308 16	+26.421 820 77	2.15	8.98	−1.36	0.64	0.57	0.91	0.80	0.72	+12 +16 + 2 +41 − 3 + 4 − 6 − 5 +12 + 3	0	0.22
111714 H	22 37 46.51	−50 03 59.8	8.24	H	339.443 780 43	−50.066 618 98 *	4.09	26.75	−16.31	0.79	0.71	1.19	0.97	0.76	+23 −21 −30 + 1 − 6 − 8 −10 − 1 +14 +16	0	1.17
*111715	22 37 46.71	−52 52 24.9	12.09	H	339.444 630 77	−52.873 570 98 B	−5.87	−14.20	−22.14	24.67	28.70	22.46	18.60	15.74	+20 − 1 −17 +29 −21 +25 −17 −31 +12 +17	1	0.71
*111716	22 37 46.69	+45 24 29.3	7.77	G	339.444 528 23	+45.408 141 89	5.55	−25.78	−5.44	0.53	0.56	0.84	0.56	0.59	−33 + 7 + 0 −19 +26 − 6 +28 −29 +24 −20	0	−1.29
111717	22 37 47.07	+29 09 17.4	9.11	H	339.446 116 87	+29.154 825 84	2.29	0.57	−0.55	0.67	0.80	1.28	0.78	1.01	+37 + 5 +20 − 9 − 4 −22 + 6 −23 −20 +66	0	−0.59
111718 H	22 37 47.75	−39 51 25.6	6.54	1 G	339.448 946 98	−39.857 119 35 A	10.02	−16.32	2.12	0.89	0.66	1.00	1.02	0.72	+ 0 − 4 − 4 +34 + 6 − 1 + 2 −10 − 8 −12	1	0.26
111719	22 37 47.83	+01 32 04.4	10.99	3 H	339.449 284 53	+01.534 554 54	0.71	42.21	−65.94	1.83	1.47	2.28	2.58	1.98	+30 + 8 + 2 + 1 − 1 +40 − 3 −44 +20 +30	5	−0.30
111720	22 37 49.55	−44 09 42.0	10.28	H	339.456 470 45	−44.161 672 03	4.01	25.28	−3.46	1.50	1.04	1.84	1.75	1.05	+11 + 6 − 4 +15 − 9 +33 − 6 −36 +15 +18	0	−1.60
111721	22 37 50.55	+35 24 24.8	8.69	H	339.460 638 66	+35.406 877 42	1.99	9.14	−0.96	0.67	0.75	0.95	0.76	0.95	+14 +22 − 1 − 1 − 5 −12 + 3 −40 +15 +23	0	0.10
111722	22 37 50.95	−60 05 40.7	8.69	H	339.462 288 88	−60.094 636 58	6.59	22.56	−5.25	0.54	0.61	1.09	0.58	0.62	−33 + 1 − 7 +19 − 5 +14 − 4 + 1 −15 −32	1	−0.28
111723	22 37 52.32	+14 59 12.7	7.86	G	339.467 986 01	+14.986 853 23	20.45	36.35	−156.15	0.89	0.69	1.04	1.27	0.81	+16 + 0 − 9 −27 + 8 + 8 + 4 −36 +11 −12	2	1.45
111724 H	22 37 52.89	+05 54 25.7	9.14	H	339.470 365 56	+05.907 150 43 A	6.43	−6.01	5.54	3.05	2.11	2.98	4.11	2.57	+42 + 9 − 9 −50 + 1 − 9 + 1 −48 +41 − 4	1	0.36
111725	22 37 53.08	−69 16 58.5	8.46	H	339.471 163 20	−69.282 924 05	6.60	76.25	−40.36	0.61	0.60	0.83	0.72	0.66	+ 0 − 8 −17 −14 + 6 + 6 + 9 + 0 −13 − 9	1	−1.04
111726	22 37 53.22	−13 22 14.8	8.72	H	339.471 748 77	−13.370 782 65	1.35	−34.08	−16.58	1.27	0.79	1.31	1.31	0.91	+10 +13 − 7 −28 + 7 −14 + 5 −21 −16 +19	0	−0.02
111727	22 37 55.15	+24 09 36.7	9.30	H	339.479 772 53	+24.160 194 97	−0.23	5.35	−0.53	0.97	0.92	1.26	1.11	1.14	+18 + 8 + 9 + 7 − 8 −10 − 6 −31 −15 +24	0	0.61
111728	22 37 55.72	+29 55 25.8	7.29	H	339.482 160 90	+29.923 820 68	6.75	72.64	−22.13	0.45	0.51	0.81	0.53	0.66	+39 − 3 + 8 − 3 + 7 − 7 + 9 − 2 − 4 +52	0	0.59
111729	22 37 56.44	+38 56 58.2	7.78	H	339.485 183 78	+38.949 503 86	12.27	214.43	110.07	0.80	0.58	0.89	1.02	0.70	− 6 +15 + 2 +44 − 8 − 6 − 6 − 7 + 0 − 3	3	1.10
111730	22 37 58.56	−22 38 39.7	9.10	H	339.494 008 60	−22.644 353 13	1.45	173.41	−55.79	1.11	0.73	1.32	1.55	0.87	+34 + 0 + 0 + 5 −15 −10 −13 −49 + 4 +37	2	1.56
111731	22 37 59.31	−58 05 30.1	9.64	H	339.497 104 65	−58.091 707 25	5.86	11.23	−73.96	0.84	0.90	1.33	1.05	0.93	− 3 − 8 − 2 −10 + 5 − 2 + 4 + 5 + 0 + 2	0	−0.83
111732	22 37 59.94	+13 22 26.6	9.20	H	339.499 754 29	+13.374 046 54	13.43	109.00	13.14	1.12	0.85	1.27	1.29	1.04	+15 +10 − 5 −34 + 0 + 3 + 1 −40 − 4 +11	0	1.30
111733	22 38 02.16	−33 28 12.6	7.54	H	339.508 994 37	−33.470 162 02	8.46	54.61	−38.41	0.72	0.52	0.95	0.86	0.59	+23 −11 −15 +18 −21 +19 −18 −34 +22 +30	0	0.30
111734	22 38 02.28	+33 13 34.7	7.90	H	339.509 519 75	+33.226 305 27	5.01	5.88	−27.26	0.66	0.64	1.06	1.06	1.01	+11 + 0 − 7 +23 −20 + 7 −20 −25 +36 + 5	2	1.74
111735	22 38 02.37	−52 46 14.4	8.10	H	339.509 884 30	−52.770 671 77	1.51	−4.94	−9.16	0.59	0.64	1.05	0.81	0.71	+25 −16 − 9 +24 − 8 +17 − 8 −21 +23 +27	0	−0.15
111736	22 38 02.69	−55 28 17.7	7.93	H	339.511 227 71	−55.471 592 07	0.42	12.29	−6.88	0.66	0.59	0.96	0.83	0.60	+13 − 6 + 1 +18 + 0 − 5 + 1 − 7 −11 +13	0	2.56
111737	22 38 03.78	−48 45 33.5	9.60	G	339.515 749 90	−48.759 292 97	4.97	26.89	−8.42	0.81	0.84	1.38	0.85	0.94	+23 −24 −19 −30 − 6 + 9 − 8 − 3 + 6 +27	1	−1.30
111738	22 38 04.40	−46 42 34.4	7.68	G	339.518 321 99	−46.709 569 41	9.26	87.55	−67.91	0.69	0.54	0.85	0.83	0.64	+ 6 −16 − 8 +10 + 7 +13 + 7 − 4 + 6 + 1	0	0.63
111739	22 38 05.16	+32 14 37.4	7.97	H	339.521 484 48	+32.243 721 40	9.14	153.46	28.32	0.59	0.62	0.93	0.75	0.97	+14 + 4 + 0 +24 + 1 −21 + 3 + 0 +19 +14	0	−0.98
111740	22 38 05.47	+60 37 26.0	8.68	H	339.522 805 01	+60.623 899 42	3.37	−7.22	−18.13	0.66	0.64	0.77	0.83	0.70	−16 − 6 +22 − 7 − 5 − 2 − 4 −14 − 4 −13	0	−0.56
111741	22 38 06.69	−02 53 54.7	8.29	H	339.527 856 28	−02.898 536 81	3.83	−43.07	−31.90	0.94	0.66	1.05	1.20	0.78	+19 + 4 − 5 + 2 + 4 +23 + 4 −17 +14 +10	0	0.02
111742	22 38 07.88	−25 08 28.6	10.13	H	339.532 843 07	−25.141 283 98	22.14	−110.78	−76.84	1.51	1.01	2.14	1.80	1.31	+ 8 +26 −31 −18 −13 +36 + 9 −60 +53 +25	0	−1.64
111743	22 38 08.99	+41 07 15.1	7.47	H	339.537 449 78	+41.120 856 46	1.70	−1.80	−6.86	0.46	0.57	0.84	0.53	0.67	−20 + 8 − 2 +27 + 0 +16 + 2 − 3 +10 −15	0	−1.53
111744	22 38 09.41	−34 17 18.7	9.51	H	339.539 202 00	−34.288 518 13	7.97	−12.00	−101.11	1.12	0.81	1.45	1.13	0.84	+24 + 3 − 6 + 1 −21 +27 −20 −29 +12 +26	0	−0.23
111745	22 38 09.66	+17 49 12.4	9.83	H	339.540 248 08	+17.820 118 70	4.52	56.64	2.81	1.10	0.90	1.43	1.19	1.18	+17 + 1 +29 + 7 − 3 −13 + 3 −20 −15 +26	0	1.04
111746	22 38 10.73	−27 26 36.5	7.89	H	339.544 699 88	−27.443 474 00	25.22	446.05	16.26	0.87	0.52	1.05	1.07	0.62	+19 + 7 − 1 − 7 − 6 + 4 − 5 −36 +21 +18	0	0.39
111747	22 38 10.84	+66 08 38.7	7.38	H	339.545 157 57	+66.144 092 44	6.33	16.18	−9.31	0.50	0.47	0.55	0.58	0.50	−21 −13 +18 + 4 +11 + 7 + 9 −23 + 4 −16	0	−0.44
111748	22 38 11.71	+45 49 41.6	7.06	H	339.548 811 77	+45.828 226 80	19.75	−101.23	−174.70	0.46	0.50	0.74	0.50	0.53	−31 +12 − 7 −13 +21 −11 +25 −27 +27 −17	0	−0.13
111749	22 38 12.30	−25 39 22.7	7.82	H	339.551 237 83	−25.656 319 23	9.57	64.63	−40.74	1.02	0.57	1.14	1.15	0.74	+ 3 − 1 −23 −46 − 1 +26 + 5 −59 +45 +11	0	1.22
111750	22 38 14.06	+26 40 43.5	9.68	H	339.558 565 40	+26.678 743 92	0.70	−0.17	−3.34	1.01	0.85	1.35	1.35	1.01	+14 +16 +21 +45 − 3 + 7 −14 −20 + 7 − 9	0	−0.45
111751	22 38 14.71	+42 24 29.5	9.93	H	339.561 311 79	+42.408 195 13	1.52	−14.36	−10.90	0.95	1.07	1.55	1.02	1.22	−12 +21 −27 +49 + 6 +14 +16 − 2 +16 + 1	0	1.08
111752	22 38 15.79	−53 57 05.6	8.95	H	339.565 791 79	−53.951 548 04	1.24	27.85	3.05	0.75	0.74	1.19	0.97	0.83	+14 + 0 −13 +21 + 4 +13 + 7 + 1 − 7 +25	0	1.31
111753	22 38 17.41	+45 10 58.6	6.38	H	339.572 524 72	+45.182 951 48	6.24	−5.22	−6.67	0.41	0.46	0.66	0.44	0.47	−37 + 3 − 1 −22 +27 + 0 +28 −33 +17 −17	1	−1.35
111754	22 38 19.11	+13 08 47.6	8.05	G	339.579 629 86	+13.146 550 11	4.46	40.81	6.28	0.82	0.65	0.95	0.99	0.80	+20 − 3 − 4 −22 − 1 +16 − 2 −37 + 4 +12	0	1.92
111755	22 38 20.37	−44 08 39.3	10.42	H	339.584 887 28	−44.144 260 58	24.45	117.99	−3.39	1.54	1.08	1.87	1.82	1.08	+ 9 +15 −11 +25 −10 +30 − 5 −37 +16 +14	0	0.15
111756	22 38 21.40	+52 22 33.9	9.13	G	339.589 179 19	+52.376 090 39 A	−3.13	0.91	−3.54	2.17	2.05	2.21	2.30	1.95	−18 −10 +19 − 6 +16 + 7 +15 −16 +23 +10	5	2.38
111757	22 38 21.47	−37 39 36.7	10.03	H	339.589 466 18	−37.660 194 76	3.55	45.32	3.72	1.18	0.86	1.46	1.33	1.00	+18 + 1 −13 +16 + 4 +11 + 7 + 0 +11 +29	0	−0.90
111758	22 38 21.56	+07 26 50.6	7.89	G	339.589 830 74	+07.447 398 89	3.39	−18.17	−11.86	0.85	0.63	1.13	1.38	0.81	+25 − 3 −20 + 0 + 8 +18 − 6 −38 +40 −15	0	−2.67
111759	22 38 21.83	+10 36 57.5	7.92	H	339.590 976 30	+10.615 960 82	1.74	−0.85	0.78	1.70	0.91	1.20	1.89	1.04	−33 −12 −12 −59 +31 +12 +23 −47 +21 −20	2	2.62
111760	22 38 22.10	−26 52 11.2	8.18	H	339.592 089 59	−26.869 774 14	1.74	−1.25	2.35	1.03	0.58	1.06	1.18	0.70	− 5 − 4 − 2 −51 +18 +15 +18 −50 +23 − 6	0	−0.43
111761 H	22 38 22.10	−07 53 51.2	6.23	G	339.592 089 79	−07.897 556 54 *	7.10	71.26	−2.61	0.96	0.71	1.31	1.35	0.87	+24 −22 −56 + 7 +20 −28 −12 −56 +58 −14	0	1.43
111762	22 38 22.18	+52 22 05.8	9.98	H	339.592 422 74	+52.368 275 69 B	8.98	−0.85	−5.59	4.44	4.20	3.27	3.28	2.89	−16 − 8 +12 − 3 +21 + 3 +22 − 9 +14 + 7	5	2.38
111763	22 38 22.22	+65 28 31.5	9.63	H	339.592 574 56	+65.475 410 33	2.38	0.73	−2.50	0.91	0.88	1.09	1.28	0.95	−11 −17 +27 + 2 +12 +14 + 6 − 9 + 6 − 5	0	0.20
111764	22 38 22.64	+09 51 32.6	10.61	H	339.594 316 19	+09.859 063 43	16.02	−181.78	−176.89	1.67	1.36	1.96	2.27	1.69	+29 −17 − 9 −14 − 1 + 3 −13 −41 +27 + 1	0	−0.48
111765 H	22 38 23.32	+29 42 43.3	8.35	H	339.597 153 08	+29.712 014 65 A	5.24	12.60	−8.90	2.56	1.67	1.30	0.84	0.97	+56 + 2 +15 − 7 + 3 − 2 + 2 − 4 − 5 +52	0	−0.89
*111766 H	22 38 28.59	−65 22 41.2	11.50	G	339.619 115 18	−65.378 115 71 A	67.44	833.28	−160.26	4.75	6.02	6.47	5.04	6.28	− 5 − 9 − 9 −13 + 9 − 2 + 7 −30 −13 +12	4	4.20
*111767	22 38 24.18	−22 44 19.2	7.88	H	339.600 750 59	−22.738 679 60	1.11	−19.74	−19.49	0.89	0.60	1.03	1.23	0.71	+33 + 2 − 4 +19 − 8 +15 −11 −50 +13 +30	0	−0.23
*111768	22 38 24.70	+36 32 43.7	11.28	G	339.602 919 06	+36.545 472 11	0.70	10.50	−1.73	1.67	1.49	2.12	2.52	2.08	+ 7 + 0 + 3 −20 + 5 − 4 + 5 −23 − 2 +33	0	−0.27
*111769	22 38 26.68	+49 32 26.2	7.77	H	339.611 147 38	+49.540 603 15	2.64	−17.63	−28.03	0.51	0.55	0.76	0.53	0.62	−30 +15 −17 −11 +20 −23 +25 −32 +29 −12	0	1.19
*111770	22 38 26.93	+09 15 30.3	7.47	H	339.612 218 12	+09.258 419 29	2.71	17.14	4.19	0.91	0.64	1.03	1.34	0.79	+15 −22 −25 −10 + 6 − 8 −10 −40 +32 −27	0	0.44
*111771	22 38 27.90	−36 53 42.3	9.15	2 H	339.616 265 99	−36.895 087 18	2.80	13.10	−2.51	1.13	0.73	1.36	1.18	0.79	+13 +18 −17 + 0 + 5 + 8 + 9 − 3 +14 +25	0	0.22
*111773	22 38 28.29	+64 31 48.5	9.54	H	339.617 877 48	+64.530 132 80	−0.37	−4.02	−1.28	1.05	0.92	1.16	1.43	1.11	− 1 +14 + 7 +23 − 6 + 9 − 6 + 9 + 6 − 5	0	−0.18
111774	22 38 28.82	+21 13 38.7	7.65	H	339.620 065 58	+21.227 425 18	2.15	−1.64	4.57	0.82	0.56	0.97	0.88	0.62	+10 +24 + 4 + 3 − 5 −35 − 6 −10 + 6 − 6	0	0.44
111775 H	22 38 29.22	+02 17 56.5	8.15	H	339.621 742 85	+02.299 018 12 A	12.86	60.50	−30.66	2.22	1.81	2.13	2.28	1.80	+48 +12 −11 + 4 − 1 + 7 − 9 −38 +31 +20	5	1.33
111776	22 38 29.25	−35 46 02.5	10.16	H	339.621 871 77	−35.767 365 83	5.51	−6.15	14.20	1.44	0.92	1.61	1.67	0.96	+13 − 4 −11 +36 − 8 + 7 − 8 − 3 + 6 + 9	0	−0.11
111777	22 38 29.34	−14 03 32.9	8.69	G	339.622 236 73	−14.059 128 62	6.52	−27.86	−32.80	1.03	0.76	1.18	1.26	0.93	+29 + 8 + 5 + 7 + 7 +14 + 6 −19 − 9 +27	0	1.65
111778	22 38 29.45	−59 59 04.0	8.06	H	339.622 710 32	−59.984 435 35	3.35	16.55	−7.19	0.51	0.57	1.00	0.53	0.56	−34 + 2 −12 + 3 + 4 +11 + 7 −17 − 8 −26	0	−0.47
111779	22 38 29.72	+03 20 32.8	9.14	H	339.623 824 85	+03.342 432 86	2.69	11.63	−1.41	1.24	0.97	1.46	1.77	1.33	+29 − 2 −13 − 2 − 7 +21 −12 −56 +19 +19	0	1.82
111780	22 38 30.10	−16 28 21.9	8.72	H	339.625 410 57	−16.472 753 98	4.54	24.55	−14.57	1.03	0.68	1.15	1.37	0.78	+24 − 2 − 5 + 4 − 6 + 3 −10 −32 +21 +12	2	2.14
111781	22 38 30.44	+14 11 19.1	8.67	H	339.626 834 24	+14.188 628 22	1.00	4.13	2.70	0.94	0.80	1.12	1.13	0.93	+33 + 3 − 4 + 9 − 8 − 1 −19 −45 +14 + 9	0	0.07
111782	22 38 30.48	−42 51 26.8	9.89	H	339.626 986 72	−42.857 433 41	5.66	15.69	1.39	1.13	0.88	1.46	1.27	0.93	+14 − 5 −12 + 5 − 5 +30 − 1 − 4 + 5 +22	0	−0.06
111783	22 38 31.07	+10 32 26.3	9.50	H	339.629 466 24	+10.540 645 03	16.15	−277.76	−535.32	1.59	0.97	1.49	2.53	1.22	− 4 +20 −12 −51 +21 −15 +22 −47 +19 −36	0	−1.53
111784	22 38 31.41	−48 40 50.2	7.95	H	339.630 877 68	−48.680 617 26	1.91	4.25	2.25	0.62	0.62	1.06	0.64	0.71	+17 −24 −11 −27 + 2 +17 + 0 + 3 + 7 +27	2	0.88
111785	22 38 31.83	+55 50 05.4	9.17	2 H	339.632 635 69	+55.834 835 24	2.12	−1.38	−2.31	0.77	0.68	0.97	0.94	0.78	−10 −18 +23 + 4 +13 +29 + 5 + 0 +18 +11	0	−2.20
111786 H	22 38 32.36	−20 50 01.3	9.31	H	339.634 828 43	−20.833 690 86 A	5.29	0.84	16.74	2.30	1.72	2.50	2.69	1.89	+17 +10 −14 −25 + 1 +10 + 4 −52 +43 +21	2	0.25
111787	22 38 32.88	+60 46 10.1	9.15	H	339.636 997 59	+60.769 485 66	3.60	−15.73	−12.95	0.70	0.68	0.81	0.92	0.78	−15 + 0 +11 −10 + 2 +14 + 1 −15 − 6 −23	0	−1.81
111788	22 38 33.33	−49 17 39.7	9.48	H	339.638 888 88	−49.294 363 15	5.04	37.65	−25.56	0.82	0.88	1.41	0.92	0.95	+23 −17 −30 −19 − 4 + 7 − 1 + 1 − 7 +23	0	−0.07
111789	22 38 33.72	+44 40 08.5	7.18	H	339.640 489 24	+44.669 035 74	6.45	29.56	−4.77	0.43	0.47	0.75	0.43	0.50	−37 + 1 + 9 −11 +21 + 3 +23 −25 +11 −22	1	−0.16
111790	22 38 34.64	−14 04 01.3	7.49	G	339.644 345 47	−14.067 029 48	10.65	53.32	5.54	0.85	0.63	0.98	1.05	0.73	+30 +10 +16 +10 +10 +10 + 5 −18 −11 +22	0	0.45
111791	22 38 35.66	−63 34 21.2	8.97	2 H	339.648 582 44	−63.572 545 69	2.42	21.25	−21.63	0.72	0.76	1.10	0.86	0.78	−14 +11 −21 − 4 + 9 + 0 + 8 − 8 + 0 −12	2	−0.10
111792	22 38 35.77	−05 52 52.3	9.34	H	339.649 041 66	−05.881 182 05	3.23	−1.49	−5.26	1.30	0.94	1.60	1.84	1.16	+26 −11 −44 +10 − 6 + 4 −19 −54 +49 + 2	2	−0.32
111793	22 38 36.54	−80 25 41.6	8.59	H	339.652 265 05	−80.428 209 76	4.91	0.31	1.48	0.64	0.69	0.81	0.74	0.73	− 7 − 4 −16 +20 + 0 + 3 − 1 + 0 −14 −14	0	−1.65
111794	22 38 36.70	−47 42 36.2	8.42	H	339.652 897 74	−47.710 051 99	3.44	59.21	−57.89	0.93	0.70	1.14	0.94	0.76	+15 −26 −13 −26 − 6 +30 + 0 −13 − 8 +15	0	0.21
111795	22 38 37.87	+56 47 44.6	5.11	2 H	339.657 780 29	+56.795 710 12	7.59	52.42	−32.28	0.44	0.44	0.57	0.57	0.50	−17 −14 + 6 − 2 − 4 +27 − 6 − 8 + 4 −20	0	0.29
111796	22 38 38.17	+33 32 41.9	8.11	H	339.659 026 46	+33.544 975 56	9.23	−29.04	−23.53	0.65	0.64	1.07	1.01	0.99	+15 −10 − 7 +13 − 4 −22 − 9 −15 +36 + 6	0	−0.31
111797	22 38 39.05	+63 35 04.3	5.19	H	339.662 727 50	+63.584 521 20	10.20	−1.16	−20.23	0.43	0.42	0.51	0.48	0.45	−19 +20 +18 + 9 − 5 −21 − 2 − 8 +10 −34	1	−1.04
111798	22 38 39.74	+52 52 25.8	8.03	H	339.665 601 99	+52.873 829 60	3.01	−5.34	−7.14	0.60	0.53	0.78	0.70	0.59	−11 −10 +13 + 3 + 2 + 5 + 7 −20 +20 +24	0	0.48
111799	22 38 40.69	+30 30 36.4	9.25	H	339.669 556 91	+30.510 115 27	2.03	22.92	1.00	0.74	0.86	1.27	0.90	1.04	+31 + 9 + 8 + 3 + 6 −13 + 8 − 4 − 8 +45	0	1.16
111800	22 38 41.00	+29 42 41.2	7.54	H	339.670 853 17	+29.711 456 33	5.49	15.44	−6.72	0.47	0.59	0.87	0.54	0.67	+53 +16 +28 − 7 − 1 − 7 + 0 −11 − 7 +58	0	−1.93

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
111701	8.142	0.008	6.780	0.005		1.154	0.007	T	1.12	0.01	L	6.8262	0.0009	0.009	116		6.81	6.84					1							S
111702	8.680	0.012	8.283	0.012		0.372	0.005	G	0.43	0.01	H	8.3554	0.0019	0.014	103		8.33	8.38		C			1							
111703	10.734	0.036	9.497	0.020		1.056	0.032	T	1.02	0.03	L	9.5504	0.0018	0.018	127		9.52	9.59		C			1							
111704	10.960	0.060	10.030	0.041		0.822	0.054	T	0.84	0.04	L	10.0705	0.0033	0.027	73		10.02	10.12		C			1							
111705	8.542	0.010	8.057	0.010		0.476	0.015	G	0.55	0.02	H	8.1000	0.0013	0.014	130		8.08	8.13					1							S
111706	9.855	0.023	9.462	0.024		0.372	0.031	T	0.43	0.03	L	9.5307	0.0022	0.020	115		9.50	9.56		C			1							G
111707	8.669	0.010	8.107	0.009		0.530	0.010	T	0.60	0.01	L	8.1550	0.0013	0.013	127		8.14	8.19		C			1	G						S
111708	11.070	0.043	9.964	0.027	A	0.946	0.040	T	0.94	0.03	L	10.0085	0.0145	0.039	172	A	9.95	10.07		D	22377−5253	I 2	1	C	P	D				D
111709	10.764	0.047	9.717	0.030		0.899	0.044	T	0.90	0.03	L	9.7991	0.0031	0.021	100		9.76	9.85					1							
111710	6.510	0.004	5.161	0.003		1.140	0.002	G	1.10	0.00	H	5.2036	0.0008	0.006	75		5.20	5.22			22377−0414	I 1	1							S
111711	10.829	0.040	8.964	0.015		1.550	0.034	T	1.62	0.05	L	8.9208	0.0025	0.025	126		8.88	8.96					1							
111712	9.219	0.011	8.817	0.012	*	0.393	0.013	T	0.46	0.01	L	* 8.8519	0.0022	0.020	160	*	8.82	8.88		D	22378−5751	I 1	2	C	A		AB	104	0.759	0.014	2.61	0.06	S
111713	9.192	0.014	7.764	0.008		1.205	0.013	T	1.16	0.01	L	7.8039	0.0011	0.010	117		7.78	7.83		C	22378+2625	I 1	1							S
111714	8.680	0.010	8.295	0.010	*	0.364	0.013	T	0.43	0.01	L	* 8.3265	0.0018	0.017	129	*	8.30	8.36			22378−5004	H 1	2	C	S	A	AB	195	0.148	0.007	0.59	0.33	S
111715											T	12.1855	0.0765			B				D	22377−5253	I 2	1	C	I	D							D
111716	9.105	0.010	7.886	0.006		1.060	0.015	G	1.03	0.01	H	7.9345	0.0012	0.014	208		7.91	7.96					1							
111717	10.706	0.032	9.271	0.015		1.211	0.028	T	1.17	0.03	L	9.2655	0.0020	0.022	196		9.23	9.31					1							
111718	7.210	0.009	6.611	0.008	*	0.539	0.002	G	0.61	0.00	H	* 6.6860	0.0031	0.025	109	*	6.65	6.72	0.87	P 1 A	22378−3951	I 1	2	C	C		AB	277	3.405	0.040	3.93	0.14	S
111719	11.047	0.077	10.715	0.093		0.315	0.113	T	0.36	0.15	L	11.0702	0.0462	0.293	66		10.52	11.27	0.06	P 1 A			1							G P
111720	12.095	0.131	10.424	0.044		1.397	0.109	T	1.37	0.13	L	10.4192	0.0034	0.026	107		10.37	10.46		C			1							
111721	8.739	0.012	8.710	0.015		0.031	0.018	T	0.05	0.01	L	8.7097	0.0014	0.015	114		8.68	8.74					1							
111722	9.165	0.008	8.726	0.009		0.417	0.006	G	0.48	0.01	H	8.7883	0.0013	0.022	275		8.75	8.83					1							S
111723	8.498	0.010	7.906	0.010		0.576	0.015	G	0.65	0.01	H	7.9760	0.0015	0.011	83		7.95	8.01		C			1							S
111724	9.560	0.024	9.043	0.024	*	0.486	0.031	T	0.56	0.03	L	* 9.2475	0.0020	0.020	100	*	9.22	9.30		R	22379+0554	I 1	2	C	A		AB	4	7.165	0.007	0.70	0.02	S
111725	8.868	0.011	8.491	0.011		0.357	0.014	T	0.42	0.01	L	8.5453	0.0015	0.018	145		8.52	8.58					1							S
111726	10.199	0.030	8.839	0.017		1.152	0.027	T	1.11	0.02	L	8.8886	0.0024	0.018	81		8.87	8.92					1							
111727	9.280	0.018	9.256	0.023		0.027	0.027	T	0.04	0.02	L	9.3212	0.0021	0.020	83		9.28	9.36		C			1							
111728	8.881	0.009	7.418	0.005		1.230	0.015	G	1.19	0.06	F	7.4524	0.0009	0.013	205		7.43	7.48		C			1							S
111729	8.422	0.011	7.861	0.009		0.525	0.013	T	0.60	0.01	L	7.8988	0.0012	0.013	111		7.87	7.93					1							S
111730	9.687	0.017	9.150	0.016		0.505	0.028	G	0.58	0.03	H	9.2086	0.0015	0.018	129		9.18	9.25					1							
111731	10.554	0.028	9.725	0.022		0.730	0.027	T	0.78	0.02	L	9.7801	0.0022	0.025	155		9.75	9.83					1	S						
111732	10.103	0.028	9.274	0.022		0.730	0.027	T	0.77	0.02	L	9.3311	0.0018	0.019	88		9.28	9.36		C			1							
111733	7.904	0.006	7.581	0.006		0.293	0.002	G	0.33	0.00	H	7.6129	0.0011	0.012	133		7.59	7.63		C	22380−3328	I 1	1							S
111734	8.209	0.007	7.920	0.009		0.275	0.011	T	0.31	0.01	L	7.9742	0.0014	0.014	120		7.94	8.00					1							S
111735	9.953	0.018	8.241	0.008		1.429	0.016	T	1.42	0.03	L	8.2334	0.0014	0.016	193		8.21	8.27					1							S
111736	9.569	0.016	8.038	0.009		1.286	0.014	T	1.25	0.01	L	8.0844	0.0013	0.018	134		8.06	8.12					1							S
111737	10.131	0.019	9.632	0.019		0.483	0.005	G	0.55	0.01	H	9.7104	0.0018	0.023	167		9.67	9.74		C			1							
111738	8.186	0.009	7.727	0.009		0.432	0.007	G	0.49	0.02	A	7.7855	0.0017	0.016	105		7.76	7.81					1	G						S
111739	9.391	0.014	8.092	0.008		1.104	0.013	T	1.07	0.01	L	8.1398	0.0012	0.013	134		8.12	8.17		C			1							
111740	9.068	0.014	8.721	0.015		0.360	0.015	G	0.42	0.02	H	8.7695	0.0015	0.013	104		8.75	8.79		C			1							
111741	9.533	0.021	8.384	0.014		0.987	0.020	T	0.97	0.02	L	8.4595	0.0017	0.015	81		8.44	8.49		C			1							S
111742	11.367	0.065	10.256	0.039		1.005	0.015	G	1.05	0.02	I	10.2952	0.0030	0.027	130		10.25	10.34		C			1							
111743	7.399	0.005	7.467	0.006		−0.050	0.008	G	−0.03	0.01	H	7.4615	0.0010	0.011	161		7.44	7.48					1							S
111744	10.321	0.027	9.620	0.023		0.633	0.027	T	0.70	0.02	L	9.6463	0.0024	0.029	141		9.61	9.70					1							
111745	10.349	0.035	9.862	0.036		0.458	0.046	T	0.53	0.05	L	9.9328	0.0026	0.022	86		9.89	9.97		C			1							
111746	8.682	0.010	7.959	0.008		0.640	0.000	G	0.70	0.00	H	8.0198	0.0012	0.010	128		8.00	8.04		C			1							S
111747	7.463	0.006	7.386	0.008		0.076	0.009	T	0.09	0.01	L	7.4138	0.0007	0.007	123		7.40	7.43		C			1							S
111748	7.750	0.005	7.124	0.005		0.582	0.006	T	0.65	0.01	L	7.1840	0.0007	0.010	192		7.17	7.20		C			1							S
111749	8.197	0.008	7.850	0.009		0.318	0.015	G	0.37	0.02	H	7.8978	0.0010	0.012	138		7.87	7.92					1							S
111750	11.381	0.067	9.786	0.026		1.337	0.057	T	1.30	0.07	L	9.8295	0.0024	0.019	124		9.80	9.86		C			1							
111751	10.179	0.023	9.883	0.027		0.281	0.033	T	0.32	0.04	L	10.0057	0.0029	0.037	167		9.94	10.08					1							G
111752	10.337	0.025	9.051	0.015		1.094	0.023	T	1.06	0.02	L	9.1195	0.0021	0.023	153		9.07	9.16					1							
111753	7.329	0.004	6.468	0.004		0.771	0.004	T	0.81	0.00	L	6.5256	0.0006	0.008	204		6.51	6.54		C			1							S
111754	8.405	0.011	8.057	0.011		0.314	0.001	G	0.36	0.00	H	8.1154	0.0016	0.012	101		8.09	8.14		C			1							S
111755	11.857	0.104	10.517	0.048		1.350	0.020	G	1.57	0.04	I	10.5258	0.0041	0.033	105		10.47	10.58					1							
111756	9.198	0.014	9.129	0.017	A	0.050	0.015	G	0.06	0.01	H	9.1553	0.0052	0.027	132	A	9.11	9.19		D	22384+5222	I 2	1	C	P	B				
111757	10.603	0.033	10.097	0.034		0.486	0.036	T	0.56	0.04	L	10.1382	0.0029	0.028	103		10.09	10.18		C			1							
111758	8.260	0.010	7.902	0.011		0.368	0.007	G	0.43	0.01	H	7.9660	0.0017	0.013	91		7.94	7.98		C			1							S
111759	9.231	0.016	8.015	0.010		1.039	0.015	T	1.01	0.01	L	8.0867	0.0021	0.015	81		8.07	8.12					1	G						S
111760	9.687	0.018	8.296	0.011		1.176	0.017	T	1.14	0.01	L	8.3480	0.0012	0.014	128		8.33	8.37		C			1							S
111761	7.223	0.005	6.336	0.005	*	0.783	0.003	G	0.82	0.00	H	* 6.3862	0.0007	0.006	66	*	6.38	6.40		C	22384−0754	I 1	2	C	S	A	AB	146	0.099	0.011	1.47	0.89	S
111762	11.780	0.138	10.152	0.046	B	1.363	0.114	T	1.33	0.13	L	10.2013	0.0095			B				D	22384+5222	I 2	1	C	I	B				
111763	10.130	0.028	9.665	0.029		0.438	0.037	T	0.51	0.04	L	9.7268	0.0021	0.022	112		9.69	9.76		C			1							G
111764	11.568	0.095	10.615	0.061		0.850	0.040	G	0.89	0.04	R	10.7547	0.0038	0.032	80		10.67	10.81		C			1							G
111765	8.807	0.008	8.395	0.008	*	0.389	0.010	T	0.45	0.01	L	* 8.4365	0.0013	0.016	218	*	8.41	8.46		D	22384+2943	I 1	2	C	A		AB	255	0.323	0.006	1.31	0.07	S
111766						1.593	0.009	G	2.71	0.01	A	* 11.4441	0.0044	0.049	160	*	11.34	11.54		D	22384−6523	I 1	2	C	C		AC	16	0.769	0.010	0.13	0.07	G
111767	9.768	0.020	8.065	0.010		1.422	0.018	T	1.41	0.03	L	8.0166	0.0012	0.013	133		8.00	8.04		C			1							S
111768						0.130	0.040	G	0.14	0.04	R	11.3400	0.0057	0.045	118		11.26	11.42		C			1							G
111769	9.769	0.019	7.930	0.008		1.530	0.016	T	1.57	0.04	L	7.8914	0.0011	0.013	159		7.87	7.92					1							
111770	9.336	0.017	7.628	0.008		1.426	0.015	T	1.41	0.02	L	7.6111	0.0013	0.012	81		7.59	7.63		C			1							S
111771	11.279	0.060	9.379	0.020		1.612	0.052	T	2.36	0.11	O	9.1943	0.0143	0.147	105		8.99	9.41		U 2			1							
111773	9.965	0.026	9.596	0.028		0.410	0.015	G	0.48	0.02	H	9.6357	0.0030	0.022	98		9.60	9.68		C			1							G
111774	9.319	0.015	7.797	0.009		1.279	0.014	T	1.24	0.01	L	7.8068	0.0012	0.012	88		7.79	7.83					1							S
111775	8.887	0.014	8.261	0.012	*	0.582	0.016	T	0.65	0.01	L	* 8.2798	0.0017	0.014	77	*	8.26	8.31		D	22385+0218	I 1	2	C	A		AB	106	0.537	0.007	1.55	0.03	S
111776	11.113	0.052	10.177	0.037		0.813	0.049	T	0.84	0.04	L	10.3040	0.0033	0.034	117		10.25	10.39					1							
111777	9.224	0.026	8.675	0.025		0.518	0.015	G	0.59	0.02	H	8.7882	0.0024	0.015	86		8.76	8.81		C	22385−1404	I 2	1							S
111778	9.691	0.012	8.207	0.007		1.249	0.011	T	1.21	0.01	L	8.2230	0.0012	0.018	266		8.20	8.26					1							S
111779	10.973	0.058	9.287	0.024		1.500	0.040	G	1.50	0.10	R	9.2697	0.0020	0.014	63		9.24	9.29		C			1							
111780	9.993	0.026	8.827	0.016		1.000	0.024	T	0.98	0.02	L	8.8838	0.0019	0.016	98		8.85	8.91		C			1							
111781	10.274	0.028	8.794	0.015		1.246	0.025	T	1.20	0.03	L	8.8311	0.0019	0.016	92		8.80	8.86		C			1							
111782	10.203	0.024	9.883	0.027		0.307	0.039	T	0.35	0.05	L	9.9641	0.0027	0.028	105		9.92	10.02		C			1							
111783	10.382	0.038	9.582	0.031		0.764	0.011	G	0.81	0.01	H	9.6395	0.0025	0.022	74		9.60	9.67		C			1							
111784	9.844	0.016	8.093	0.007		1.460	0.014	T	1.47	0.02	L	8.0775	0.0010	0.015	163		8.05	8.11					1							S
111785	9.689	0.022	9.230	0.022		0.380	0.015	G	0.44	0.02	H	9.2608	0.0031	0.032	119		9.22	9.35		U 2			1							G
111786	9.803	0.019	9.439	0.021	*	0.355	0.025	T	0.42	0.03	L	* 9.3947	0.0022	0.021	121	*	9.36	9.42		C	22385−2050	I 1	2	C	A		AB	335	0.590	0.005	1.51	0.03	
111787	9.394	0.017	9.183	0.019		0.202	0.024	T	0.22	0.03	L	9.2126	0.0025	0.019	109		9.19	9.25					1							
111788	9.995	0.019	9.540	0.019		0.443	0.021	T	0.51	0.02	L	9.5814	0.0022	0.025	152		9.53	9.62		C			1							
111789	7.219	0.004	7.177	0.005		0.043	0.006	T	0.06	0.01	L	7.1967	0.0007	0.011	212		7.18	7.22		C			1							S
111790	7.809	0.008	7.500	0.010		0.296	0.015	G	0.34	0.02	H	7.5569	0.0015	0.012	87		7.54	7.58			22385−1404	I 2	1							S
111791	10.162	0.020	9.090	0.013		0.928	0.018	T	0.92	0.01	L	9.1341	0.0034	0.035	190		9.09	9.18		U 2			1							
111792	10.777	0.051	9.468	0.026		1.112	0.045	T	1.07	0.05	L	9.5125	0.0018	0.018	84		9.48	9.54		C			1							
111793	9.887	0.020	8.690	0.013		1.025	0.019	T	1.00	0.02	L	8.7528	0.0019	0.019	132		8.72	8.79		C			1							
111794	10.122	0.035	8.588	0.018		1.289	0.031	T	1.25	0.03	L	8.5789	0.0023	0.018	93		8.55	8.61					1							
111795	7.163	0.007	5.354	0.005		1.537	0.007	T	2.58	0.02	O	5.1170	0.0032	0.035	110		5.05	5.18		U 2	22386+5648	I 1	1		S					S
111796	8.603	0.010	8.158	0.010		0.420	0.013	T	0.49	0.01	L	8.2056	0.0013	0.013	123		8.18	8.23		C			1							S
111797	5.288	0.003	5.203	0.002		0.083	0.003	T	0.10	0.00	L	5.2207	0.0005	0.005	125		5.21	5.23		C			1							S
111798	10.025	0.021	8.200	0.009		1.518	0.018	T	1.55	0.03	L	8.1530	0.0013	0.014	140		8.12	8.17		C			1							
111799	10.751	0.038	9.374	0.018		1.165	0.033	T	1.13	0.03	L	9.4095	0.0023	0.024	147		9.38	9.46					1							
111800	7.610	0.005	7.540	0.006		0.069	0.007	T	0.08	0.01	L	7.5686	0.0007	0.010	216		7.55	7.59		C			1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA		Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	$\alpha*$	$\mu_{\alpha*}$	δ	μ_δ	$\alpha*$	$\mu_{\alpha*}$	δ	π	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s		±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	μ_δ	$\mu_{\alpha*}$	%	
1 2	3		4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
111801	22 38 44.70		−28 44 53.5	6.46	G	339.686 260 16	−28.748 185 38		8.09	−47.11	−11.75	0.70	0.44	0.80	0.75	0.50	+18	− 2	− 8	−25	− 7	+14	− 6	−39	+26	+21	3	0.60
111802	22 38 45.29		−20 37 15.4	9.06	1 G	339.688 727 96	−20.620 940 06		115.71	450.58	−79.86	1.21	0.83	1.50	1.61	1.15	+22	− 1	− 9	−26	− 4	+18	− 1	−53	+38	+33	0	−0.62
111803	22 38 45.34		+25 34 13.2	10.03	G	339.688 918 90	+25.570 324 72		10.94	226.72	19.84	1.28	1.02	1.70	1.46	1.37	+ 7	+20	+ 5	+ 9	− 1	−24	+ 4	+ 3	+24	− 1	4	−0.34
111804 H	22 38 45.76		−53 43 53.1	7.86	G	339.690 652 85	−53.731 429 48	A	11.98	20.97	−2.01	0.90	0.89	1.33	1.05	0.89	+22	−11	− 5	+32	+ 5	+25	+ 7	+12	− 3	+28	2	−0.12
111805 H	22 38 47.28		+44 18 49.5	6.82	H	339.697 000 74	+44.313 739 17	*	26.33	234.36	65.85	0.81	0.71	0.80	0.59	0.66	−16	+ 0	− 1	−19	+22	− 2	+26	−34	+15	−26	1	0.35
111806	22 38 47.90		−30 12 35.8	9.67	H	339.699 582 01	−30.209 950 19		14.90	97.28	−159.55	1.55	0.89	1.77	1.51	0.94	+ 7	+30	− 4	−38	+ 3	+10	+14	−35	+35	+ 3	2	−0.33
111807	22 38 50.03		+04 31 48.8	6.82	G	339.708 462 46	+04.530 211 96		11.41	35.21	−5.30	0.89	0.63	1.00	1.15	0.76	+12	+ 4	−23	−25	+ 7	+ 3	+ 6	−39	+21	− 2	0	0.67
111808	22 38 50.12		+04 58 11.2	11.63	G	339.708 832 08	+04.969 763 97		24.60	86.65	74.70	2.79	2.42	3.48	3.55	3.04	+52	−20	−30	−20	−10	− 2	−31	−62	+38	+13	0	2.32
111809	22 38 51.46		−33 04 53.0	5.66	1 G	339.714 431 25	−33.081 382 95		7.50	4.25	14.57	0.56	0.46	0.76	0.62	0.52	+34	− 9	−10	− 2	−27	+21	−25	−36	+18	+40	2	−0.67
111810	22 38 52.62		+19 31 21.0	5.84	H	339.719 242 03	+19.522 491 81		8.55	−45.17	−94.22	0.71	0.47	0.75	0.87	0.54	+ 3	+10	+ 9	−31	+13	+10	+14	−10	−12	−14	0	0.05
111811	22 38 53.66		+24 49 39.9	8.92	H	339.723 566 15	+24.827 755 63		−0.88	−5.96	−18.79	0.93	0.80	1.23	1.02	0.98	+ 3	+15	+16	+ 2	− 9	−33	+ 1	−26	− 9	+21	0	−0.18
111812	22 38 53.76		+08 22 26.8	8.12	H	339.723 992 50	+08.374 123 86		18.12	257.74	24.63	0.94	0.68	1.18	1.21	0.78	+11	+20	−15	+12	− 3	+42	+ 6	−30	+30	+14	0	0.05
111813	22 38 54.20		+38 37 05.7	9.77	G	339.725 814 04	+38.618 245 23		1.42	−3.10	−5.96	1.18	1.01	1.45	1.60	1.25	− 2	+ 6	− 5	+28	+ 7	−23	+ 4	−18	+16	− 9	0	0.88
111814	22 38 54.91		+36 55 42.2	9.72	H	339.728 809 42	+36.928 399 19		4.06	−2.83	−4.82	1.06	0.95	1.41	1.46	1.45	+11	+ 6	+ 2	−20	−10	+ 9	− 4	−37	+ 0	+39	0	−0.38
111815	22 38 55.61		−38 28 38.3	6.58	H	339.731 712 09	−38.477 299 38		2.15	−22.19	−18.31	0.66	0.49	0.86	0.84	0.59	+13	−10	−25	+22	− 5	+30	+ 4	−15	+19	+26	0	0.82
111816	22 38 55.97		−50 00 54.0	9.01	H	339.733 220 43	−50.014 986 76		1.01	−11.26	5.84	0.83	0.80	1.27	1.01	0.87	+16	−13	−26	−14	− 7	+13	− 5	− 6	+12	+14	0	−1.03
111817	22 38 56.20		+54 54 19.1	8.52	H	339.734 150 88	+54.905 296 18		2.30	5.67	−5.76	0.55	0.56	0.71	0.67	0.68	− 9	+ 0	+16	+ 1	+ 7	+ 8	+ 5	+12	+ 3	+ 0	1	−1.65
111818	22 38 56.50		−03 01 33.0	8.08	H	339.735 417 15	−03.025 824 34		4.58	0.40	−14.62	0.89	0.61	0.96	1.11	0.70	+19	− 2	+ 1	+13	+ 0	+24	− 4	−25	+ 9	+ 9	2	0.74
111819	22 38 56.53		−39 09 17.7	6.95	H	339.735 528 78	−39.154 909 07		1.82	2.51	−6.77	0.67	0.53	0.84	0.84	0.67	+13	−20	−18	+11	− 2	+20	+ 2	−20	+ 7	+16	0	−0.34
111820	22 38 57.35		−08 41 05.5	8.97	H	339.738 945 43	−08.684 856 09		12.23	−49.50	−31.30	1.39	1.17	1.86	2.33	1.61	+37	−21	−42	+ 3	+12	− 5	−11	−59	+51	+13	0	−1.13
111821	22 38 57.39		+02 31 20.5	9.99	H	339.739 104 68	+02.522 373 83		7.01	12.53	−10.18	1.50	1.06	1.73	1.87	1.43	+29	+13	+ 5	− 1	−10	− 7	−10	−47	+25	+19	2	−0.70
111822	22 38 57.59		−10 06 08.3	8.23	H	339.739 960 03	−10.102 314 49		9.53	27.24	26.33	1.05	0.96	1.20	1.39	1.22	+47	−31	−34	− 9	−28	+26	−30	−64	+31	+43	0	1.75
111823	22 38 57.82		+17 05 59.7	7.76	G	339.740 918 83	+17.099 922 89		16.69	175.70	140.32	0.82	0.59	0.96	0.80	0.70	+17	+36	+ 1	+24	+ 5	− 2	+ 2	− 7	−13	+25	0	0.41
111824 H	22 38 58.82		−36 31 59.8	11.64	G	339.745 071 10	−36.533 281 10	A	22.13	−187.09	−227.47	5.72	3.53	4.96	4.61	3.61	+24	− 4	− 5	− 6	−11	+24	− 6	−25	+ 5	+39	4	0.52
111825	22 39 00.08		−82 48 49.8	8.15	H	339.750 332 93	−82.813 838 57		6.88	−38.72	−11.95	0.60	0.62	0.73	0.70	0.71	− 3	−22	−13	+ 3	+ 7	−10	+ 5	+21	+ 3	− 6	1	0.67
111826	22 39 01.64		+32 18 04.5	10.53	H	339.756 813 55	+32.301 258 15		8.84	−89.47	−153.44	1.12	1.16	1.82	1.36	1.68	+ 8	+ 9	−10	+24	+ 0	−14	− 2	+ 2	+ 8	+ 6	3	−0.04
111827	22 39 02.98		−37 02 34.0	8.23	G	339.762 412 63	−37.042 777 22		10.80	−83.94	0.98	0.79	0.58	0.97	0.86	0.64	+21	− 1	− 8	+ 3	+ 6	+17	+ 7	+ 8	+ 6	+30	0	−1.10
111828 H	22 39 04.59		+37 22 31.6	6.83	1 H	339.769 106 39	+37.375 431 97	A	1.16	−3.20	−5.65	0.83	0.74	0.89	0.90	0.78	+27	+ 6	+14	−17	−11	− 2	−11	−24	− 9	+41	3	1.36
111829	22 39 05.30		+58 55 39.0	7.02	H	339.772 068 63	+58.927 487 93		9.20	79.97	−1.06	0.56	0.50	0.62	0.66	0.53	−15	+ 7	+ 8	+37	− 3	−10	+ 2	+ 2	− 6	− 2	0	1.90
111830	22 39 06.10		−22 38 16.5	8.25	H	339.775 414 85	−22.637 911 93		4.29	16.50	−60.24	0.94	0.69	1.16	1.29	0.85	+32	− 5	− 6	+ 4	+ 3	+ 4	− 1	−36	+17	+28	0	−0.45
111831	22 39 06.61		+42 59 17.7	9.38	H	339.777 560 18	+42.988 239 12		3.74	−7.77	−16.33	1.17	1.35	1.95	1.26	1.33	−24	+ 8	− 7	− 4	+17	+ 6	+22	−31	+ 4	+ 0	0	
111832	22 39 07.17		−17 47 54.8	8.81	H	339.779 859 44	−17.798 544 60		2.24	12.25	−27.33	0.97	0.57	1.05	1.12	0.67	+10	−11	− 3	− 8	+16	− 2	+12	−19	+22	+ 5	0	1.23
111833	22 39 08.40		−52 41 31.0	6.67	1 H	339.785 018 43	−52.691 952 31		7.62	−3.30	−7.89	0.43	0.50	0.82	0.61	0.50	+23	−12	−37	+20	−20	+30	− 9	−26	+16	+26	0	−1.12
111834 H	22 39 08.88		−58 48 29.0	8.61	H	339.786 999 89	−58.808 056 63	A	2.96	9.05	−6.31	1.11	1.06	1.67	1.19	0.98	−19	− 6	− 1	− 9	−15	+12	−12	+ 2	− 7	−23	1	0.68
111835	22 39 10.07		+06 14 51.4	9.17	H	339.791 941 52	+06.247 599 99		−1.42	−16.04	−24.04	3.02	2.14	1.78	6.54	3.98	−11	−25	−25	−81	+14	+29	+15	−86	+33	−28	3	0.54
111836	22 39 12.07		+29 24 31.1	8.70	1 G	339.800 311 80	+29.408 629 77		4.22	18.62	−3.93	0.58	0.68	1.01	0.61	0.75	+48	+16	+32	−23	− 9	− 5	− 6	−24	− 4	+59	0	−1.82
111837	22 39 12.81		+15 25 11.8	9.01	H	339.803 366 71	+15.419 943 60		6.40	19.91	11.24	0.96	0.84	1.22	1.18	1.08	+26	+ 5	− 3	− 3	+ 0	−23	+ 0	−16	+18	+18	2	0.54
111838	22 39 12.95		−30 29 28.0	9.43	G	339.803 974 50	−30.491 115 51		10.63	179.44	−36.75	1.41	0.83	1.55	1.53	0.93	+ 8	+ 8	− 7	−39	+ 1	+ 8	+ 4	−35	+34	+11	2	2.82
111839	22 39 13.05		+64 51 28.9	9.50	2 T	339.804 373 33	+64.858 039 57		0.22	90.61	189.10	0.96	0.86	1.09	1.38	1.00	− 9	+ 0	+15	+10	− 2	+ 1	− 2	− 7	+13	− 8	0	0.06
111840	22 39 15.57		−03 36 26.6	8.01	H	339.814 865 23	−03.607 395 26		4.21	16.35	−29.06	1.00	0.62	1.00	1.52	0.76	+ 5	− 3	−10	+12	+ 3	+10	− 9	−31	+27	−26	0	2.08
111841	22 39 15.68		+39 03 01.0	4.89	H	339.815 328 83	+39.050 283 01		3.08	−0.29	−5.70	0.50	0.44	0.62	0.66	0.52	−10	+18	+ 3	+28	− 4	− 2	+ 2	−14	+10	+ 0	0	−0.87
111842 H	22 39 15.83		+33 53 22.2	8.87	H	339.815 976 76	+33.889 503 95	A	2.18	−8.06	−6.07	1.20	1.37	1.47	1.35	1.23	+ 2	+ 0	+ 8	+13	+ 0	+ 4	− 2	−13	+27	+13	1	0.74
111843	22 39 16.06		−10 01 40.0	6.93	H	339.816 898 00	−10.027 782 42		14.53	−45.44	−6.97	0.94	0.82	1.15	1.17	0.92	+41	−22	−50	−10	−19	+ 4	−24	−55	+30	+36	2	0.42
111844	22 39 16.42		−00 42 57.1	8.47	H	339.818 425 77	−00.715 870 70		11.14	−5.52	6.92	0.93	0.68	1.04	1.03	0.81	+25	− 7	−13	− 8	+15	+20	+20	+ 4	+ 3	+22	2	−1.12
111845	22 39 16.60		+17 41 49.6	9.49	H	339.819 176 94	+17.697 112 69		3.05	8.90	−15.31	1.07	0.89	1.38	1.16	1.29	+17	− 8	+14	− 8	−13	−11	− 5	−43	−15	+32	0	0.11
111846	22 39 18.13		−30 20 42.7	9.74	H	339.825 552 66	−30.345 186 66		0.02	18.16	−1.50	1.52	0.92	1.72	1.98	1.10	+ 6	+ 7	−23	−32	+ 7	− 5	+ 6	−37	+32	+10	0	0.77
111847	22 39 18.62		+45 19 42.2	8.90	H	339.827 567 51	+45.328 400 56		4.99	35.49	16.02	0.71	0.73	1.08	0.74	0.76	−27	+13	− 8	−13	+21	− 6	+26	−35	+22	−11	1	0.15
111848	22 39 22.55		+59 00 25.8	9.69	H	339.843 956 98	+59.007 166 60		−0.33	−0.36	−4.06	0.91	0.79	1.01	1.18	0.90	−16	+ 8	+ 2	+32	+ 1	− 7	+ 2	+ 1	+ 1	−11	0	1.12
111849	22 39 22.88		+75 39 27.5	8.15	2 H	339.845 330 66	+75.657 625 73		3.77	7.97	0.67	0.56	0.52	0.61	0.67	0.64	+ 1	− 7	+13	+34	− 2	−13	+ 1	+16	+ 6	+11	1	0.09
*111850	22 39 24.53		+65 56 40.9	9.37	H	339.852 209 95	+65.944 693 54		3.26	9.58	3.75	0.81	0.78	0.92	1.05	0.79	−10	−12	+26	+17	+12	+ 5	+10	−19	− 2	− 4	1	0.70
*111851	22 39 24.52		−55 09 13.9	8.74	H	339.852 167 74	−55.153 849 98		−0.16	38.18	−12.23	0.75	0.71	1.13	0.85	0.70	+14	+ 2	−10	+ 3	+ 9	+ 8	+ 9	+ 1	− 8	+18	0	0.13
111852 H	22 39 24.82		+81 23 31.4	6.82	H	339.853 408 73	+81.392 054 87	*	3.31	23.03	9.47	0.47	0.45	0.52	0.49	0.46	− 5	+ 4	+21	+15	− 6	+ 5	− 8	+ 1	+ 6	−13	1	0.56
111853 H	22 39 25.91		+55 02 55.6	8.34	H	339.857 951 35	+55.048 771 40	*	1.83	1.10	−1.45	0.57	0.53	0.69	0.72	0.67	−10	−12	+16	− 7	+18	+ 8	+17	− 2	− 7	− 7	0	−2.34
111854	22 39 25.92		+57 19 27.2	10.74	G	339.857 991 12	+57.324 217 28		24.86	−128.91	−280.73	1.23	1.12	1.45	1.50	1.33	−25	+ 0	+10	+16	− 1	+ 5	− 3	− 1	+ 4	−31	0	−2.31
111855	22 39 27.56		−43 16 21.1	8.32	G	339.864 820 22	−43.272 527 62		3.67	56.99	−15.40	0.80	0.61	1.01	0.91	0.60	+ 5	+ 7	−13	− 3	− 1	+24	+ 3	−19	+12	+16	2	0.24
111856	22 39 28.23		−50 40 53.2	7.77	2 H	339.867 631 29	−50.681 444 96		−0.22	−1.77	−10.70	0.74	0.65	1.08	0.82	0.69	+21	−11	−30	−32	− 6	+13	− 8	−10	+20	+35	1	−0.81
111857	22 39 28.36		+07 10 24.0	8.97	H	339.868 184 71	+07.173 338 27	A	11.82	35.82	−3.51	3.87	2.88	3.84	5.44	3.32	+40	−16	−12	−18	− 6	+17	−23	−50	+45	+14	3	2.37
111858	22 39 28.71		+39 51 18.2	11.89	3 H																							
111859	22 39 28.78		+41 26 30.9	8.71	H	339.869 935 21	+41.441 911 37		1.73	8.44	−3.45	0.57	0.75	1.12	0.61	0.80	−13	+ 3	+16	+43	+ 8	+16	+11	−19	+ 6	− 4	0	−2.05
111860	22 39 29.15		−55 12 59.7	8.77	H	339.871 445 33	−55.216 587 91		6.51	4.01	19.47	0.71	0.69	1.04	0.82	0.71	+ 9	+ 4	− 9	+ 7	+21	− 8	+17	+12	−18	+23	0	1.12
111861	22 39 29.76		+07 10 29.2	10.72	H	339.874 008 42	+07.174 778 65	B	6.61	47.91	−18.02	39.43	29.35	20.07	24.72	19.40	+37	−14	−11	−10	− 5	+11	−21	−45	+45	+12	3	2.37
*111862	22 39 30.38		−68 03 37.2	6.90	H	339.876 567 52	−68.060 337 90		4.42	96.43	−26.06	0.50	0.47	0.72	0.58	0.47	− 1	− 4	−18	+ 0	+16	−14	+13	− 2	−10	+14	0	0.02
*111863	22 39 30.37		−07 36 16.4	7.73	H	339.876 525 55	−07.604 548 76		2.24	9.90	−16.30	0.99	0.85	1.29	1.23	1.09	+42	−21	−46	+ 1	−11	+23	− 6	−40	+38	+47	0	0.89
111864	22 39 31.33		+37 21 13.1	6.65	H	339.880 552 83	+37.353 644 03		8.44	−21.28	−10.78	0.55	0.51	0.74	0.72	0.70	+ 7	+ 7	+ 3	−20	− 6	+11	− 5	−26	− 2	+27	0	1.45
111865	22 39 32.07		−22 46 44.0	8.26	H	339.883 634 03	−22.778 878 18		1.52	10.90	−9.35	0.94	0.62	1.16	1.31	0.75	+19	+ 8	− 2	+ 1	+ 8	+19	+ 4	−33	+33	+ 8	0	−1.58
111866	22 39 33.01		+38 44 54.5	6.96	H	339.887 542 45	+38.748 484 59		12.58	−13.61	−10.73	0.64	0.51	0.80	0.74	0.60	− 5	+22	− 1	+29	+ 0	− 6	+ 6	−18	+21	− 1	2	0.97
111867	22 39 33.96		+47 29 44.6	9.43	H	339.891 513 19	+47.495 730 81		−2.08	4.63	−5.37	0.84	0.83	1.21	0.93	1.24	− 4	+ 7	+ 6	+13	+ 1	− 5	+ 2	−24	+ 6	+11	0	−0.66
111868	22 39 34.05		+51 09 19.9	6.79	H	339.891 886 05	+51.155 516 61		11.85	180.18	50.89	0.44	0.47	0.64	0.43	0.50	−14	+12	+ 9	− 6	+12	− 9	+18	−19	+23	− 3	0	−0.55
111869	22 39 34.32		+37 35 34.1	6.03	H	339.893 018 14	+37.592 813 97		3.61	11.22	1.16	0.54	0.49	0.72	0.74	0.65	+ 3	+ 0	+ 8	− 7	− 3	+ 4	− 1	−18	+ 0	+20	0	1.06
111870 H	22 39 34.49		−12 36 53.3	7.74	G	339.893 708 31	−12.614 814 12	A	25.42	228.45	−151.91	2.84	1.84	2.08	4.22	1.74	+11	+ 9	−11	+ 3	+27	−18	+ 7	−21	+ 0	− 2	3	0.88
111871	22 39 35.81		+11 21 11.9	10.47	H	339.899 214 67	+11.353 317 78		15.54	263.87	85.90	1.41	1.19	1.82	1.75	1.50	+36	+ 1	−19	−13	− 1	−19	− 9	−38	+23	+14	4	2.22
111872	22 39 37.24		+37 23 51.2	8.26	H	339.905 177 47	+37.397 543 24		4.89	40.96	5.54	0.75	0.70	1.04	1.11	1.02	+ 7	+ 6	+ 3	− 3	−11	+ 3	− 7	−19	+ 3	+29	2	2.38
111873	22 39 37.59		−06 58 48.0	9.17	G	339.906 612 22	−06.980 008 79		12.05	198.04	−38.32	1.18	0.94	1.49	1.64	1.16	+28	−24	−42	− 6	− 9	+34	− 5	−39	+34	+23	0	0.47
111874	22 39 37.91		+41 23 45.1	8.49	H	339.907 950 14	+41.395 860 24		6.31	36.96	16.82	0.56	0.71	1.06	0.60	0.82	−16	+ 1	+ 5	+39	+ 7	+10	+11	−11	+ 9	− 7	0	−1.31
111875	22 39 39.56		+42 12 03.7	7.54	1 H	339.914 834 03	+42.201 026 98		5.37	21.48	−3.52	0.44	0.50	0.73	0.48	0.55	− 9	+13	+ 3	+38	+ 8	+ 8	+12	−19	+ 4	− 1	0	−1.09
111876 H	22 39 40.57		−78 05 56.8	8.78	H	339.919 046 70	−78.099 121 94	A	11.42	96.92	−110.15	3.12	2.81	1.22	1.43	1.03	−62	+ 1	− 7	+ 7	− 4	+25	− 2	− 3	+ 4	−32	1	−0.47
111877	22 39 40.91		+47 03 33.3	8.13	2 H	339.920 441 11	+47.059 239 60		2.78	−4.31	−22.87	0.57	0.60	0.89	0.58	0.61	−15	+12	+ 1	+ 5	+ 2	− 8	+12	−30	+13	+ 8	0	0.42
111878	22 39 42.69		+31 08 44.7	7.86	H	339.927 864 67	+31.145 738 46		2.44	−17.81	−5.18	0.64	0.59	0.92	0.83	0.77	+11	+ 3	+ 5	+29	+ 1	−12	+ 0	+ 2	− 1	+ 5	0	−0.10
111879	22 39 44.12		−28 19 32.0	6.30	G	339.933 836 71	−28.325 560 40		7.00	94.84	−41.22	0.76	0.52	0.94	0.90	0.62	+23	− 5	−20	−31	−16	+31	−12	−44	+36	+30	0	−0.03
111880	22 39 44.17		−32 04 16.5	11.10	G	339.934 026 02	−32.071 249 23		26.45	−181.30	−189.18	1.64	1.27	2.19	1.92	1.50	+30	+ 7	−10	+30	−29	+26	−24	−26	+ 5	+40	0	1.43
111881	22 39 45.75		+01 02 19.8	8.54	H	339.940 608 19	+01.038 843 12		6.13	31.52	12.41	0.96	0.70	1.08	1.13	0.91	+24	− 3	+ 3	+ 3	+ 1	+ 8	+ 0	−19	+10	+22	2	−0.81
111882 H	22 39 46.42		−28 20 53.0	7.11	G	339.943 428 66	−28.348 054 38	B	7.73	93.80	−38.62	1.38	1.05	1.34	1.28	0.88	+33	− 6	−28	−23	−25	+ 9	−26	−55	+28	+32	1	1.54
111883	22 39 46.98		+47 44 21.3	8.77	H	339.945 762 72	+47.739 252 14		35.34	−29.36	−376.65	2.40	2.49	3.44	2.55	2.54	− 3	+ 7	+ 5	−11	+ 3	+10	+ 7	−39	+ 7	+12	0	
111884	22 39 47.01		+19 40 52.1	6.33	H	339.945 886 94	+19.681 148 62		5.13	−2.07	−9.71	0.72	0.47	0.77	0.87	0.55	− 2	− 3	+13	−29	+15	+16	+15	−16	−20	−16	0	0.01
111885	22 39 48.20		−46 41 09.2	8.86	H	339.950 832 18	−46.685 882 14		7.67	73.17	−68.30	0.88	0.71	1.11	0.94	0.75	+17	−17	−14	− 7	+ 6	+16	+ 8	−11	+ 2	+23	0	2.10
111886	22 39 49.64		+03 14 32.8	8.47	H	339.956 817 41	+03.242 450 20		3.48	12.68	−3.10	1.05	0.79	1.26	1.39	1.00	+26	− 5	+10	+10	+ 6	+37	− 2	−30	+11	+21	2	0.51
111887	22 39 50.07		+39 42 49.2	8.71	G	339.958 644 03	+39.713 678 60		2.75	6.49	−0.64	0.86	0.79	1.13	1.20	0.95	+ 0	+ 1	+ 0	+29	+ 2	− 2	+ 3	−12	+12	+ 3	0	−0.43
111888	22 39 50.66		+04 06 57.1	8.48	G	339.961 092 14	+04.115 852 15		44.10	178.99	108.31	0.96	0.77	1.12	1.24	1.03	+25	+11	+ 1	+14	− 3	+28	− 1	−30	+12	+29	0	2.07
111889	22 39 52.31		−73 57 00.4	9.32	H	339.967 969 20	−73.950 102 89		8.33	−27.05	−17.95	0.88	0.80	1.05	1.15	0.85	+ 2	−11	−26	+ 8	+ 5	+ 2	+ 5	+ 6	+ 4	− 1	1	−0.11
111890	22 39 54.29		−41 57 11.6	9.79	G	339.976 203 80	−41.953 219 66		9.99	−27.87	−61.00	1.39	0.94	1.59	1.61	1.00	+ 3	−12	+ 5	+28	− 6	+ 1	− 6	−32	+ 5	+ 4	0	0.15
111891	22 39 54.87		+42 39 11.0	8.74	H	339.978 629 71	+42.653 066 75		4.59	9.47	1.27	0.67	0.71	1.06	0.69	0.75	− 9	+ 7	− 5	+35	+13	+ 3	+21	−18	+13	+ 7	0	−0.04
111892	22 39 55.34		−14 33 06.8	7.80	G	339.980 598 99	−14.551 899 09		13.59	35.71	−187.95	1.10	0.60	1.01	1.31	0.69	+ 3	+ 0	− 4	+23	− 4	− 0	−18	−18	+16	− 7	0	0.24
111893	22 39 55.75		+22 52 37.2	7.48	H	339.982 278 12	+22.876 996 42		2.72	−33.92	−15.01	0.75	0.58	0.90	0.81	0.66	+15	+20	+ 6	−30	− 4	−34	− 1	+14	+ 4	+12	0	0.28
111894	22 39 56.80		−47 44 39.8	8.00	H	339.986 678 74	−47.744 391 48		2.96	17.95	3.32	0.95	0.68	1.12	1.02	0.77	+12	−20	−14	−15	−14	+22	−10	−24	+ 3	+24	0	0.21
111895	22 39 57.51		+23 47 48.3	8.60	H	339.989 623 29	+23.796 759 36		3.52	14.18	−12.75	0.82	0.70	1.11	0.93	0.88	+ 7	+13	+12	− 7	+ 1	−26	+ 4	−14	−12	+13	0	0.17
111896	22 39 57.87		+63 34 47.1	8.51	H	339.991 117 55	+63.579 736 13		4.69	13.00	5.57	0.67	0.66	0.78	0.80	0.76	−21	+13	+ 8	+13	− 5	−21	− 5	+ 1	+ 9	−36	0	−0.64
111897	22 39 58.13		−35 10

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
111801	7.793	0.006	6.578	0.004		1.034	0.003	G	1.01	0.00	H	6.6257	0.0006	0.006	131		6.62	6.64		C			1							S
111802	10.956	0.046	9.335	0.020		1.466	0.005	G	2.21	0.02	A	9.1319	0.0037	0.025	116		9.08	9.17		U	22388−2037	I 1	1							
111803	11.014	0.050	10.083	0.036		0.820	0.010	G	0.86	0.01	H	10.1724	0.0038	0.035	94		10.06	10.22					1 S							G
111804	8.333	0.010	7.932	0.010	A	0.423	0.015	G	0.49	0.02	H *	7.9571	0.0012	0.017	157	*	7.93	7.99		D	22388−5344	I 1	2 C B	AB	170	1.781	0.029	3.82	0.16	S
111805	7.522	0.005	6.897	0.004	*	0.581	0.005	T	0.65	0.01	L *	6.9470	0.0007	0.010	231	*	6.93	6.96		D	22388+4419	I 1	2 C A	AB	337	0.214	0.003	0.51	0.07	S
111806	10.957	0.043	9.769	0.025		0.949	0.003	G	1.00	0.00	I	9.8385	0.0023	0.023	121		9.80	9.88		C			1 S							
111807	7.043	0.006	6.846	0.008		0.200	0.015	G	0.22	0.02	H	6.8754	0.0010	0.007	66		6.86	6.89		C			1							S
111808						1.410	0.019	G	1.54	0.15	K	11.7010	0.0058	0.055	74		11.58	11.77					1							G
111809	5.714	0.003	5.672	0.003		0.037	0.005	G	0.05	0.00	H	5.6829	0.0005	0.006	139		5.68	5.72		U 2 C			1							S
111810	7.009	0.004	5.945	0.004		0.922	0.004	T	0.92	0.00	L	6.0019	0.0008	0.007	93		5.99	6.02		C	22389+1931	I 1	1							S
111811	10.467	0.041	9.042	0.021		1.203	0.036	T	1.16	0.04	L	9.0868	0.0027	0.017	68		9.06	9.13		C			1							
111812	8.866	0.012	8.186	0.011		0.629	0.014	T	0.70	0.01	L	8.2516	0.0016	0.015	83		8.23	8.28		C			1							S
111813	9.730	0.020	9.749	0.029		0.017	0.004	G	0.04	0.00	H	9.7852	0.0029	0.032	110		9.72	9.84					1							G
111814	9.779	0.021	9.685	0.028		0.092	0.033	T	0.10	0.04	L	9.7560	0.0026	0.022	122		9.72	9.80		C			1							
111815	8.445	0.009	6.730	0.004		1.423	0.002	G	1.41	0.00	H	6.7208	0.0006	0.008	120		6.71	6.73					1							S
111816	10.450	0.029	9.119	0.016		1.129	0.026	T	1.09	0.03	L	9.1741	0.0023	0.019	128		9.14	9.21		C			1							
111817	8.724	0.010	8.534	0.012		0.182	0.015	T	0.20	0.02	L	8.5775	0.0012	0.015	145		8.55	8.61		C			1							
111818	9.369	0.019	8.175	0.012		1.022	0.018	T	1.00	0.01	L	8.2429	0.0019	0.015	82		8.22	8.26		C			1							S
111819	8.272	0.009	7.058	0.005		1.038	0.008	T	1.01	0.01	L	7.1164	0.0011	0.008	109		7.10	7.13		C			1							S
111820	9.577	0.025	9.010	0.024		0.530	0.031	T	0.60	0.03	L	9.0821	0.0024	0.019	55		9.05	9.11		C			1							
111821	10.608	0.049	10.082	0.049		0.494	0.062	T	0.57	0.07	L	10.1019	0.0032	0.022	70		10.06	10.14		C			1							
111822	8.962	0.016	8.313	0.014		0.602	0.018	T	0.67	0.02	L	8.3622	0.0021	0.013	62		8.34	8.38		C			1							S
111823	8.386	0.012	7.806	0.010		0.558	0.015	G	0.63	0.01	H	7.8776	0.0021	0.015	94		7.85	7.90					1							S
111824						1.278	0.016	G	1.46	0.03	I *	11.7679	0.0055	0.051	107	*	11.67	11.84		D	22390−3632	M 1	2 C C	AB	300	2.305	0.021	0.12	0.07	G
111825	8.523	0.009	8.192	0.009		0.321	0.015	G	0.37	0.02	H	8.2333	0.0015	0.013	127		8.21	8.26					1							S
111826	11.458	0.068	10.608	0.053		0.762	0.065	T	0.80	0.05	L	10.6815	0.0033	0.034	133		10.63	10.76		C			1							G
111827	8.748	0.010	8.247	0.010		0.463	0.015	G	0.53	0.02	H	8.3304	0.0014	0.013	112		8.31	8.36		C			1							S
111828	6.677	0.005	6.814	0.005	*	−0.118	0.006	T	−0.10	0.01	L *	6.7916	0.0014	0.013	128	*	6.77	6.81		M	22391+3723	I 1	2 C A	AC	50	0.610	0.022	3.69	0.12	S
111829	7.438	0.007	7.055	0.007		0.363	0.009	T	0.42	0.01	L	7.1053	0.0006	0.007	115		7.09	7.12					1							S
111830	9.818	0.021	8.396	0.012		1.201	0.019	T	1.16	0.02	L	8.4135	0.0015	0.017	107		8.39	8.45		C			1							
111831	9.619	0.015	9.365	0.017		0.242	0.021	T	0.27	0.03	L	9.4493	0.0024	0.029	201		9.41	9.50					1 X S							
111832	8.950	0.012	8.811	0.015		0.126	0.018	T	0.14	0.02	L	8.8590	0.0014	0.015	107		8.81	8.89		C			1							
111833	7.074	0.004	6.702	0.004		0.357	0.005	G	0.42	0.01	H	6.7513	0.0017	0.019	202		6.72	6.78	0.13	P 1 A	22391−5242	I 1	1							S P
111834	9.761	0.022	8.643	0.014	*	0.963	0.020	T	0.95	0.02	L *	8.7726	0.0016	0.022	193	*	8.73	8.82		D	22392−5848	I 1	2 C A	AB	272	4.339	0.010	2.13	0.04	
111835	10.943	0.054	9.308	0.022		1.368	0.046	T	1.34	0.06	L	9.3118	0.0015	0.019	93		9.27	9.37		D			1 G							
111836	8.934	0.008	8.726	0.010		0.174	0.015	G	0.19	0.02	H	8.7624	0.0011	0.017	215		8.74	8.80		M			1							
111837	9.318	0.020	8.993	0.022		0.309	0.028	T	0.35	0.04	L	9.0879	0.0018	0.017	79		9.06	9.11		C			1							
111838	10.122	0.025	9.482	0.022		0.600	0.004	G	0.67	0.00	H	9.5503	0.0025	0.023	107		9.51	9.59					1							
111839	9.986	0.026	9.542	0.027		0.419	0.034	T	0.49	0.04	L	9.4947	0.0407	0.251	105		9.26	9.83	0.31	P 1 A			1							G
111840	9.669	0.022	8.153	0.012		1.274	0.020	T	1.23	0.02	L	8.1718	0.0013	0.011	79		8.14	8.21		C			1							S
111841	4.616	0.002	4.855	0.002		−0.207	0.003	T	−0.23	0.03	C	4.8135	0.0006	0.004	119		4.80	4.82			22393+3903	I 1	1							S
111842	9.529	0.015	8.916	0.014	*	0.571	0.018	T	0.64	0.02	L *	8.9918	0.0022	0.019	126	*	8.96	9.02		D	22393+3353	H 1	2 C A	AB	161	0.494	0.011	2.49	0.06	
111843	7.678	0.008	7.010	0.007		0.619	0.009	T	0.69	0.01	L	7.0664	0.0012	0.009	63		7.05	7.08		C			1							S
111844	9.055	0.017	8.511	0.016		0.510	0.021	T	0.58	0.02	L	8.5778	0.0017	0.015	83		8.55	8.61		C			1							S
111845	11.420	0.075	9.670	0.028		1.488	0.066	T	1.83	0.20	O	9.5891	0.0027	0.018	91		9.55	9.62		C			1							
111846	10.339	0.029	9.764	0.029		0.537	0.036	T	0.61	0.04	L	9.8573	0.0032	0.030	108		9.81	9.91					1							
111847	9.176	0.010	8.927	0.011		0.237	0.014	T	0.26	0.02	L	8.9718	0.0020	0.023	190		8.93	9.01					1							
111848	10.355	0.034	9.788	0.032		0.530	0.042	T	0.60	0.04	L	9.8141	0.0024	0.023	114		9.77	9.86					1 S							G
111849	8.099	0.008	8.145	0.010		−0.036	0.011	G	−0.01	0.01	H	8.1486	0.0053	0.031	117		8.11	8.20	2.04	P 1 A			1							S P
111850	9.879	0.023	9.411	0.023		0.441	0.030	T	0.51	0.03	L	9.4729	0.0019	0.021	125		9.44	9.51					1							
111851	10.047	0.020	8.881	0.013		1.000	0.019	T	0.98	0.01	L	8.9432	0.0021	0.019	135		8.91	8.97		C			1							
111852	7.765	0.007	6.922	0.006	*	0.757	0.007	T	0.80	0.01	L *	6.9699	0.0008	0.008	130	*	6.96	6.99		D	22394+8124	M 1	2 C S A	AB	95	0.133	0.006	1.18	0.32	S
111853	8.470	0.009	8.367	0.011	*	0.100	0.013	T	0.11	0.01	L *	8.3790	0.0015	0.014	143	*	8.35	8.40		C	22394+5503	M 1	2 C S B	AB	26	0.133	0.026	1.09	0.64	
111854	11.755	0.130	10.781	0.094		1.281	0.020	G	1.46	0.03	I	10.8978	0.0036	0.035	117		10.82	10.95		C			1							G
111855	9.839	0.019	8.476	0.011		1.154	0.017	T	1.11	0.02	A	8.4979	0.0019	0.017	124		8.47	8.53		C			1							
111856	9.868	0.019	8.006	0.008		1.629	0.020	G	2.39	0.02	A	7.8019	0.0096	0.074	120		7.74	7.93		U 2			1							S P
111857	9.586	0.021	9.038	0.020	A	0.513	0.026	T	0.59	0.03	L	9.0811	0.0315	0.043	81	A	8.94	9.14		D	22395+0710	I 2	1 C P A							
111858						0.058	0.015	G	0.07	0.01	H	11.9132	0.0469	0.478	99		10.97	12.51		U			S							D Y
111859	8.801	0.008	8.711	0.009		0.088	0.011	T	0.10	0.01	L	8.7486	0.0015	0.021	205		8.72	8.79					1							
111860	9.201	0.012	8.810	0.012		0.370	0.016	T	0.43	0.02	L	8.8611	0.0021	0.020	139		8.83	8.90					1							
111861	10.999	0.078	10.215	0.057	B	0.579	0.072	G	0.65	0.07	R	10.9793	0.1441			B				D	22395+0710	I 2	1 C I A							
111862	8.289	0.008	7.013	0.005		1.086	0.007	T	1.05	0.01	L	7.0699	0.0013	0.012	144		7.05	7.09					1							S
111863	9.395	0.020	7.874	0.011		1.278	0.018	T	1.24	0.02	L	7.8861	0.0015	0.010	64		7.87	7.91					1							S
111864	7.843	0.008	6.743	0.006		0.950	0.008	T	0.94	0.01	L	6.8109	0.0012	0.012	128		6.79	6.83					1							S
111865	9.977	0.025	8.382	0.012		1.332	0.010	G	1.30	0.01	H	8.4137	0.0014	0.015	108		8.39	8.44		C			1							
111866	7.282	0.006	6.980	0.006		0.284	0.012	G	0.32	0.01	H	7.0310	0.0014	0.011	114		7.02	7.05		C			1							S
111867	9.441	0.015	9.412	0.019		0.031	0.022	T	0.05	0.02	L	9.4447	0.0028	0.027	163		9.39	9.49					1 G							
111868	7.301	0.005	6.834	0.005		0.440	0.006	T	0.51	0.01	L	6.8919	0.0010	0.009	141		6.88	6.91		C			1							S
111869	7.099	0.006	6.126	0.004		0.854	0.005	T	0.87	0.00	L	6.1846	0.0008	0.007	118		6.17	6.20		C	22396+3736	I 1	1							S
111870	9.381	0.055	8.407	0.042	B	0.764	0.019	G	0.81	0.00	A *	7.8836	0.0021	0.013	63	*	7.86	7.90		D	22395−1237	I 1	2 C A	AB	289	3.308	0.005	0.01	0.02	S
111871	11.375	0.079	10.533	0.062		1.310	0.040	G	1.51	0.06	R	10.5958	0.0038	0.025	83		10.53	10.64					1							G
111872	9.507	0.018	8.355	0.012		0.990	0.017	T	0.97	0.01	L	8.4209	0.0016	0.016	117		8.39	8.45					1							
111873	9.843	0.027	9.214	0.025		0.621	0.003	G	0.69	0.00	H	9.3040	0.0024	0.015	67		9.27	9.34		C			1							
111874	8.882	0.008	8.509	0.009		0.353	0.011	T	0.41	0.01	L	8.5726	0.0017	0.018	202		8.54	8.60			22396+4123	I 1	1							
111875	7.811	0.006	7.563	0.006		0.236	0.008	T	0.26	0.01	L	7.6056	0.0019	0.020	193		7.58	7.63		U 2			1							S
111876	9.516	0.018	8.869	0.016	*	0.593	0.018	T	0.66	0.02	L *	8.9044	0.0023	0.021	125	*	8.88	8.93		D	22397−7806	H 1	2 C A	AB	311	0.307	0.004	0.07	0.06	
111877	10.309	0.025	8.393	0.010		1.625	0.022	T	2.67	0.03	O	8.1273	0.0048	0.050	175		8.03	8.21		U 2			1 S							
111878	9.601	0.017	7.986	0.009		1.352	0.015	T	1.32	0.02	L	8.0062	0.0018	0.016	121		7.98	8.04					1							
111879	7.586	0.006	6.424	0.004		1.006	0.005	G	0.98	0.00	H	6.4805	0.0009	0.010	115		6.47	6.51		D	22397−2820	I 2	1							S
111880						1.367	0.022	G	1.60	0.04	I	11.1886	0.0038	0.037	144		11.12	11.25		C			1							G
111881	8.976	0.015	8.577	0.016		0.355	0.007	G	0.42	0.01	H	8.6273	0.0016	0.011	74		8.61	8.65		C			1							S
111882	7.941	0.019	7.434	0.018	B	0.464	0.013	G	0.53	0.01	R *	7.2245	0.0010	0.010	114	*	7.21	7.25		D	22397−2820	I 2	2 C A	BC	68	3.124	0.006	1.06	0.01	S
111883	9.864	0.019	8.856	0.013		0.869	0.018	T	0.88	0.01	L	8.9128	0.0019	0.021	164		8.87	8.95					1 X							
111884	6.372	0.004	6.334	0.004		0.035	0.005	T	0.05	0.00	L	6.3519	0.0010	0.007	89		6.34	6.37		C			1							S P
111885	9.438	0.019	8.923	0.018		0.493	0.020	T	0.57	0.02	L	8.9660	0.0015	0.017	90		8.94	8.99					1							S
111886	10.447	0.043	8.609	0.016		1.529	0.036	T	1.57	0.08	L	8.5907	0.0016	0.011	73		8.56	8.61					1							
111887	8.720	0.011	8.697	0.014		0.047	0.007	G	0.06	0.01	H	8.7245	0.0023	0.020	104		8.69	8.76		C			1							
111888	9.650	0.023	8.588	0.016		0.938	0.002	G	0.98	0.00	I	8.6143	0.0019	0.015	73		8.58	8.64		C			1							
111889	10.121	0.025	9.395	0.021		0.652	0.025	T	0.72	0.02	L	9.4533	0.0025	0.024	131		9.41	9.50		C			1							
111890	10.602	0.043	9.862	0.034		0.657	0.005	G	0.72	0.00	H	9.9328	0.0025	0.023	89		9.90	9.98		C			1							
111891	8.852	0.009	8.756	0.011		0.094	0.013	T	0.11	0.01	L	8.7790	0.0021	0.023	168		8.74	8.83					1							
111892	8.460	0.013	7.856	0.011		0.578	0.015	G	0.65	0.01	H	7.9224	0.0015	0.014	83		7.90	7.95		C			1 G							S
111893	8.793	0.013	7.581	0.009		1.036	0.012	T	1.01	0.01	L	7.6439	0.0018	0.013	94		7.61	7.67					1							S
111894	9.620	0.021	8.138	0.012		1.248	0.019	T	1.21	0.02	L	8.1638	0.0021	0.015	92		8.14	8.19		C			1							S
111895	8.762	0.014	8.608	0.016		0.148	0.020	T	0.16	0.02	L	8.6563	0.0020	0.014	88		8.62	8.68		C			1							
111896	8.688	0.013	8.528	0.015		0.154	0.019	T	0.17	0.02	L	8.5652	0.0019	0.017	127		8.54	8.59		C			1							
111897	8.794	0.010	7.208	0.006		1.330	0.009	T	1.29	0.01	L	7.2253	0.0009	0.010	131		7.21	7.25		C			1							S
111898	7.051	0.005	6.715	0.005	*	0.319	0.007	T	0.37	0.01	L *	6.7558	0.0009	0.009	130	*	6.74	6.77			22400−8315	H 1	2 C B	AB	329	0.119	0.024	1.85	0.82	S
111899	11.063	0.054	9.438	0.022		1.360	0.046	T	1.33	0.05	L	9.4184	0.0020	0.021	117		9.38	9.45		C			1							
111900	8.910	0.014	8.216	0.012	*	0.335	0.015	G	0.39	0.02	H *	8.2203	0.0022	0.013	74	*	8.19	8.24		D	22400+0113	I 1	2 C A	AB	160	0.662	0.003	1.09	0.01	S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	δ	δ	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	$\alpha*$	δ	π	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5 6 7		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28											29	30
111901	22 40 02.09	−46 26 24.1	9.67	G	340.008 727 61	−46.440 023 47		3.36	26.79	−29.10	1.06	0.84	1.35	1.26	0.92	+10	−	8	−	7	−12	+	0	+	2	+	0	−16	+11	+25								0	1.72
111902	22 40 02.44	+14 39 51.7	8.51	H	340.010 170 34	+14.664 358 07		5.76	−16.66	−16.87	0.98	0.70	1.07	1.25	0.89	+12	+	7	+	4	−35	+	6	−	6	+	8	−26	+20	−	7								2	−1.19
111903	22 40 02.69	−19 11 52.2	7.28	G	340.011 218 27	−19.197 845 55	A	15.83	16.86	−34.15	1.01	0.71	1.21	1.13	0.85	+30	+	8	−	9	−19	+12	+14	+15	−23	+49	+43								1	0.20
111904	22 40 03.81	+46 06 41.4	9.99	2 H	340.015 874 34	+46.111 509 61		3.56	25.62	4.85	1.04	1.11	1.67	1.18	1.16	−17	+16	−20	+12	+22	−18	+24	−17	+30	−	7								0	1.12
111905	22 40 04.69	+41 18 51.3	7.49	1 H	340.019 554 33	+41.314 253 57		1.39	24.77	0.45	0.45	0.59	0.82	0.50	0.63	−14	+	5	+12	+26	+	6	+11	+	8	−16	+	4	−	6								0	−2.38
111906	22 40 04.92	−42 41 28.6	9.89	H	340.020 517 52	−42.691 271 23		3.95	5.21	−16.93	1.12	0.92	1.54	1.16	0.95	+15	−	7	−10	−	6	−	9	+29	−	8	−22	+24	+19								3	0.45
111907	22 40 05.76	+40 40 12.7	6.78	2 H	340.023 991 83	+40.670 201 17		1.85	−1.93	−23.24	0.68	0.53	0.79	0.69	0.62	+	2	+33	+13	+20	−10	+	1	−16	−16	−	4	−13								0	−1.42
111908	22 40 06.83	−20 00 35.0	8.52	H	340.028 447 40	−20.009 729 48		3.57	−53.64	−52.40	1.01	0.72	1.32	1.29	0.96	+39	−	8	−16	−10	−18	+18	−15	−45	+42	+47											0	0.08
111909	22 40 07.11	−49 35 53.2	7.37	H	340.029 629 69	−49.598 111 01		10.89	78.36	−63.69	0.58	0.59	0.96	0.68	0.65	+18	−14	−27	−12	−	2	+23	+	1	+10	+14	+24											0	0.29
111910	22 40 07.88	−09 21 33.7	6.89	H	340.032 833 72	−09.359 350 10		19.49	169.62	45.93	0.91	0.78	1.19	1.35	1.02	+38	−	6	−42	+	3	−21	+34	−10	−48	+42	+47											0	−0.41
*111911	H 22 40 08.12	−15 57 31.3	8.60	H	340.033 819 60	−15.958 685 47	A	3.62	9.81	−32.29	3.67	2.42	2.63	2.69	2.02	+76	+	2	−11	+	6	−	9	+24	−	7	−20	+37	+43								1	−0.64
*111912	22 40 08.12	+34 06 29.3	10.63	H	340.033 813 26	+34.108 129 23		4.17	−9.51	−19.96	1.23	1.15	1.72	1.61	1.55	+13	−11	+14	+	8	+	3	+	0	+	5	−13	+	8	+27								0	−1.46
111913	22 40 09.30	−15 16 11.2	8.80	H	340.038 743 88	−15.269 765 01		10.49	−39.51	−71.77	1.01	0.65	1.18	1.26	0.74	+18	+13	−14	+18	−	7	+20	−	1	−20	+20	+24											0	−1.29
111914	22 40 09.87	−29 18 45.6	8.63	H	340.041 129 89	−29.312 672 44		3.96	−3.62	−31.68	1.11	0.61	1.19	1.15	0.70	+	3	+14	−10	−38	+	7	+	5	+13	−30	+35	+	6											0	1.83
111915	22 40 12.46	−06 32 03.8	7.17	H	340.051 901 79	−06.534 383 12		9.90	−10.83	−36.68	1.04	0.68	1.20	1.31	0.86	+37	−34	−48	+36	−	4	+	9	−19	−38	+47	+20											0	1.06
111916	22 40 12.54	+38 58 24.6	9.59	G	340.052 267 20	+38.973 496 23		2.79	−2.07	−6.15	1.12	0.92	1.47	1.47	1.15	−	3	+20	−14	+27	+	5	−	6	+13	−14	+32	+	8								0	1.39
*111917	22 40 12.85	+67 09 14.2	8.41	H	340.053 551 80	+67.153 949 57		1.95	−3.31	−3.78	0.57	0.60	0.70	0.67	0.68	−12	−17	+17	+	2	+	3	+19	−	1	−	9	−	4	−20								2	1.39
*111918	22 40 12.80	+24 23 22.5	8.52	H	340.053 315 08	+24.389 575 71		7.80	1.69	−16.77	0.94	0.65	1.13	0.88	0.77	+	2	+34	+13	−10	−18	+	9	−22	+	9	−18	−20	+16								0	0.38
111919	H 22 40 13.71	+37 31 40.5	7.97	G	340.057 135 09	+37.527 907 02	A	8.80	33.59	−2.82	1.96	2.02	1.82	1.92	1.93	+39	−	6	+	5	−15	−17	−14	−15	−24	+	0	+51										2	0.01
111920	22 40 14.71	+16 58 47.4	9.08	H	340.061 287 44	+16.979 827 99		3.49	9.39	−17.32	1.02	0.82	1.29	1.10	1.08	+19	+29	−	6	+16	+	3	+10	+	6	−15	−	6	+32										0	0.24
111921	H 22 40 15.91	−04 44 44.6	9.86	H	340.066 294 65	−04.745 727 80	A	4.97	−14.71	−7.82	2.71	2.15	2.87	3.10	2.40	+21	−17	−28	−17	−	1	+11	−13	−53	+44	+	0											0	0.30
111922	22 40 17.53	+35 33 28.2	8.57	H	340.073 039 94	+35.557 823 52		2.20	−0.94	−7.32	0.74	0.85	1.11	0.87	1.11	+14	+13	−	8	+	9	+	2	−16	+	2	−44	+28	+	6								0	−0.70
111923	22 40 17.54	+41 27 44.6	9.64	H	340.073 092 27	+41.462 380 26		0.89	13.73	0.84	0.72	0.93	1.24	0.76	0.95	−13	+15	+10	+43	+	6	+16	+	9	−20	+	4	−	7								0	0.53
111924	22 40 17.68	+51 32 51.9	7.38	G	340.073 677 14	+51.547 747 69		11.24	−8.20	18.21	0.51	0.51	0.72	0.56	0.56	−	9	+	7	+11	+	4	+	8	−12	+16	−14	+18	+10								0	1.15
111925	22 40 18.40	+53 50 45.5	5.94	H	340.076 670 29	+53.845 972 14		9.49	6.41	−18.33	0.39	0.41	0.54	0.43	0.48	−10	+	1	+	0	+	5	−	5	−	7	−	1	−18	+25	+	3					1	−1.48
111926	22 40 18.53	−65 46 40.4	8.53	H	340.077 208 75	−65.777 883 49		2.92	13.17	21.99	0.64	0.69	1.00	0.78	0.77	−	4	+	4	−	9	−	2	+	0	+	0	+	1	−15	−	8	+10					0	0.65
111927	22 40 19.43	+47 02 50.1	9.62	H	340.080 942 43	+47.047 244 38		2.97	−0.51	−1.24	0.82	0.82	1.26	0.82	0.84	−20	+16	+	0	+14	+	6	+	2	+20	−26	+24	+10										0	0.71
111928	22 40 19.81	+31 47 15.5	8.06	G	340.082 559 34	+31.787 638 31		10.26	81.41	−18.58	0.59	0.56	0.88	0.69	0.80	+14	+	2	+	8	+13	+	3	−18	+	4	+14	+	8	+15								2	0.17
111929	22 40 20.01	+52 16 50.3	9.04	H	340.083 364 01	+52.280 642 14		2.25	−6.04	−7.31	0.81	0.68	0.97	0.85	0.72	−12	−	7	+	5	−	7	+13	+	8	+15	−23	+11	+	6								0	0.80
111930	22 40 20.72	−11 36 18.7	7.94	1 H	340.086 324 23	−11.605 201 29		1.64	−2.48	−7.96	0.94	0.63	0.96	1.07	0.75	+	9	−	1	+	4	−35	+21	+19	+22	−24	−	7	+	2								0	−0.28
111931	22 40 20.89	−14 36 14.6	8.11	H	340.087 032 84	−14.604 059 40		2.50	−22.23	−19.42	0.96	0.63	1.06	1.28	0.75	+20	+11	−	8	+	8	+	8	+	4	+	7	−11	+22	+	6								0	−0.11
111932	22 40 21.08	+07 54 06.3	11.76	2 G	340.087 835 35	+07.901 753 33		41.53	187.10	−177.12	15.67	12.04	20.00	19.19	15.25	+27	+18	−10	−11	−	9	+32	−	4	−48	+24	+25		0											
*111933	22 40 22.39	−32 38 19.0	7.78	H	340.093 299 59	−32.638 606 39		3.11	3.99	−1.80	0.64	0.54	0.92	0.72	0.63	+37	−	4	−12	+	9	−30	+25	−26	−32	+21	+46		1	0.76										
*111934	22 40 22.38	−30 39 30.1	5.88	G	340.093 248 45	−30.658 361 59		5.08	−107.65	−209.53	0.85	0.47	0.81	0.88	0.53	−	6	+	2	−15	−50	+11	+	9	+13	−36	+25	+	2								0	1.80
111935	22 40 26.47	+19 27 52.9	8.42	H	340.110 280 15	+19.464 701 91		3.45	−10.10	−6.16	0.97	0.66	1.14	1.22	0.92	+	6	−11	+11	−30	+16	+26	+17	−12	−10	+	2		0	−0.31										
111936	22 40 26.98	−55 33 04.4	9.49	H	340.112 408 65	−55.551 225 40		3.67	42.83	−39.95	0.93	0.80	1.35	1.04	0.77	+	0	+11	−	1	+13	+18	+18	+20	−	4	+16	+17		0	−0.80										
111937	22 40 27.05	+28 12 42.4	7.57	G	340.112 722 73	+28.211 766 74		8.80	−41.21	−57.15	0.51	0.53	0.80	0.49	0.59	+28	+30	+19	−	2	+	4	−	8	+14	−10	+14	+45		1	0.28										
111938	22 40 27.16	+04 34 31.1	6.81	H	340.113 148 55	+04.575 319 25		8.94	106.99	−123.85	0.81	0.62	1.04	1.16	0.84	+31	+	5	−15	−	6	+	4	+	3	−	5	−46	+30	+	5	0	0.09										
*111939	22 40 27.73	+38 43 35.0	10.13	G	340.115 520 90	+38.726 402 65		2.66	−1.21	−6.10	2.50	2.15	3.11	2.96	2.58	+	3	+11	−	3	+10	−	7	+	0	−	5	−21	+	4	+	9	0										
*111940	22 40 27.69	+48 32 50.9	9.26	H	340.115 388 18	+48.547 471 70		3.34	22.23	6.28	0.71	0.68	1.02	0.74	0.73	+	1	+	0	−	7	+	5	+	6	−	1	+11	−23	+28	+22	0	−0.66										
111941	22 40 28.37	+03 07 58.2	8.60	H	340.118 191 76	+03.132 828 97		8.29	−20.76	−14.72	1.06	0.94	1.32	1.46	1.10	+37	−	3	−	9	+11	−10	+41	−19	−41	+29	+21		4	−1.03										
111942	22 40 30.22	+43 00 48.6	9.83	G	340.125 911 00	+43.013 496 44		23.29	96.86	−132.67	0.97	0.96	1.42	1.03	1.05	−12	+	2	+	8	+15	+19	−	2	+23	−	8	+	5	+	1	1	2.14										
111943	22 40 30.65	+20 02 29.5	7.37	H	340.127 693 86	+20.041 516 25		10.37	43.97	−12.08	0.80	0.54	0.90	0.92	0.65	+	4	+21	+	4	−29	+	9	−14	+	8	−17	−	5	−	2	0	−0.21										
111944	22 40 30.78	+44 16 34.6	4.50	H	340.128 259 81	+44.276 280 68		10.81	94.18	10.00	0.31	0.36	0.56	0.32	0.39	−39	+	3	+	7	−19	+14	+	4	+15	−21	+	2	−31		0	−0.14										
111945	22 40 30.78	+04 41 49.0	8.96	1 H	340.128 267 51	+04.696 956 62		1.86	−0.81	−16.75	1.21	0.92	1.46	1.65	1.26	+24	+	1	+	2	−	7	+	4	−15	+	1	−28	+19	+	6	4	−0.02										
111946	22 40 33.49	−61 33 13.5	8.68	3 T	340.139 531 54	−61.553 755 41	*	4.13	−5.88	−3.32	0.72	0.86	1.38	0.82	0.81	−34	+	0	−17	−23	−	1	+12	+	4	−25	−10	−14		2	0.37										
111947	H 22 40 34.73	+06 31 42.9	9.11	G	340.144 701 86	+06.528 575 67	B	5.26	83.67	28.36	4.07	3.93	3.83	4.49	3.57	+46	+	8	−	8	−15	−14	−37	−24	−43	+33	+15		1	0.15										
111948	22 40 36.06	−68 43 35.7	9.14	H	340.150 263 12	−68.726 589 23		2.35	−10.29	7.88	0.77	0.82	1.12	0.86	0.81	+	0	+	1	−23	+	2	+11	−	8	+	9	−10	−	4	+	8	0	0.40										
111949	22 40 36.07	+53 03 39.5	9.47	H	340.150 306 17	+53.060 982 59		4.40	59.02	−1.68	0.72	0.68	0.97	0.90	0.87	−	9	−	8	+12	−	6	+11	−	1	+12	−	9	+	7	+26	0	−0.28										
111950	22 40 38.07	+65 15 45.7	8.49	H	340.158 627 05	+65.262 683 81		0.92	−1.32	−2.46	0.71	0.68	0.84	0.97	0.71	−13	−15	+23	+	0	+10	+16	+	4	−	8	+	9	−	7	0	2.07										
111951	22 40 38.19	−39 16 35.3	9.91	H	340.159 141 72	−39.276 465 02		8.34	−57.12	−43.25	1.29	1.07	1.67	1.70	1.39	+19	−19	−12	+11	+	2	+18	+	5	−17	+	8	+26		0	1.82										
111952	22 40 38.48	+01 47 40.6	9.94	H	340.160 321 08	+01.794 598 07		6.18	−5.00	−29.52	1.22	0.96	1.48	1.52	1.24	+35	+	2	−	5	+	4	+	0	+18	−	3	−26	+30	+24		0	0.20										
111953	22 40 39.04	−16 46 15.3	7.58	H	340.162 647 41	−16.770 919 61		2.10	41.00	−4.26	0.77	0.49	0.84	0.97	0.58	+17	+	0	−	2	+10	+	2	+10	+	0	−12	+22	+10		0	0.63										
111954	22 40 39.33	−27 02 37.0	4.18	H	340.163 856 53	−27.043 614 80		4.38	22.01	−0.88	0.94	0.50	0.87	1.51	0.79	−12	−12	+	2	−62	+21	+14	+24	−38	−	1	−29		0	−1.24										
111955	22 40 39.62	−75 05 25.0	9.08	H	340.165 093 97	−75.090 280 64		1.30	4.68	−8.42	0.77	0.73	0.94	0.89	0.82	−22	−10	−12	−17	+14	+12	+17	−12	−16	−15		0	−1.67										
111956	22 40 40.10	+20 04 50.0	8.74	H	340.167 073 30	+20.080 567 65		6.18	17.94	10.80	0.95	0.67	1.06	1.05	0.78	+10	+16	+	3	−20	+	1	−	1	+	0	−25	−	4	+	2	0	−0.21										
111957	22 40 40.36	+26 44 16.4	7.84	2 H	340.168 153 84	+26.737 901 31		2.62	14.01	−6.92	0.70	0.58	0.98	0.89	0.74	+	6	+	6	−	6	+55	−13	+	3	−22	−12	+19	−11		1	1.60										
*111958	H 22 40 43.21	−43 58 54.6	10.34	G	340.180 028 12	−43.981 835 79	A	29.76	177.98	−144.90	2.84	2.05	3.19	3.40	1.98	+	6	+	0	−22	+18	−19	+34	−	9	−33	+25	+20		1	0.59										
*111959	22 40 43.01	−35 28 06.6	9.00	H	340.179 194 28	−35.468 498 40		10.74	9.39	−27.08	0.97	0.69	1.16	1.10	0.79	+27	−	4	+	3	+37	+13	+16	+14	+18	+	6	+34		0	−0.51										
*111960	22 40 43.13	−29 40 28.0	7.83	G	340.179 701 96	−29.674 437 76		73.85	380.21	−17.42	1.05	0.59	1.13	1.18	0.70	−	5	+12	−20	−44	+	8	+13	+	15	−43	+40	+	0		0	1.94										
111961	22 40 43.84	+43 29 35.8	7.86	H	340.182 646 89	+43.493 267 62		1.96	59.62	15.02	0.51	0.61	0.93	0.59	0.67	−43	+	4	−	7	−21	+21	−12	+20	−23	+	9	−28		0	−0.93										
111962	22 40 45.12	+78 01 19.5	7.96	H	340.187 993 15	+78.022 086 60		6.22	19.78	7.60	0.57	0.56	0.64	0.71	0.65	−15	−10	+27	+17	−	6	+	2	−	6	−11	−	9	−14		0	1.70										
111963	22 40 47.27	+55 01 06.4	8.79	H	340.196 977 85	+55.018 431 90		3.24	12.21	−1.95	0.62	0.64	0.79	0.76	0.72	−21	−	8	+21	−21	+18	+	9	+16	−21	+	4	+14		0	1.42										
111964	22 40 47.60	+59 41 13.9	10.32	G	340.198 347 88	+59.687 185 04		0.24	−1.79	−2.05	1.07	1.03	1.23	1.35	1.18	−13	−	4	+	9	+24	+	8	−	9	+11	−	2	+10	+	0	0	−1.77										
111965	H 22 40 47.96	−03 33 14.9	6.32	G	340.199 835 25	−03.554 134 15	B	29.86	−11.22	−43.17	1.58	1.46	1.07	1.46	1.13	−	6	−	5	−16	−	5	+	2	+	5	−12	−36	+45	−13		0	1.38										
111966	22 40 48.03	−67 41 18.6	7.26	H	340.200 130 13	−67.688 499 82		0.01	−25.27	−26.36	0.51	0.46	0.68	0.62	0.49	+	4	−18	−21	−	6	+	5	+	3	+	5	+	4	+	0	+	2	0	−0.14										
111967	22 40 48.86	−57 25 20.3	5.98	H	340.203 570 13	−57.422 306 00		2.66	56.62	−6.61	0.38	0.44	0.66	0.44	0.47	−11	−21	+	5	−	7	+	1	+22	+	2	−	2	−	9	−	9	1	−0.84										
111968	22 40 49.46	+46 30 29.2	9.86	H	340.206 089 18	+46.508 119 29		3.29	3.28	−4.05	1.02	0.93	1.53	1.02	1.04	−15	+19	−16	+23	+19	−	7	+30	−13	+33	+	6		0	2.25										
111969	H 22 40 49.93	−57 06 10.9	8.91	H	340.208 061 30	−57.103 038 10	A	1.51	15.17	−16.69	1.64	2.41	1.97	1.53	1.79	−	2	+	0	−16	+	5	+12	+11	+20	+	7	−	8	+	3	1	−0.44										
111970	22 40 51.08	+62 02 53.5	8.74	H	340.212 816 26	+62.048 184 69		2.48	11.75	3.98	0.75	0.74	0.87	0.89	0.82	−20	+10	+	8	+20	+	6	−15	+	5	−10	−	7	−24		0	0.08										
111971	22 40 51.36	−45 12 14.2	8.13	H	340.214 004 25	−45.203 957 26		10.94	−69.41	−82.16	0.87	0.64	1.11	1.24	0.65	+	9	+13	−36	−	1	−	4	+	0	+	0	−21	+21	+27		0	−1.29										
111972	22 40 52.15	+56 49 46.1	8.56	3 T	340.217 291 62	+56.829 474 10		2.04	−2.95	−3.16	0.72	0.66	0.89	0.99	0.77	−22	−12	+14	+	8	+	6	+22	+	1	−	7	+	4	−25		0	0.58										
111973	22 40 52.47	+20 49 22.2	8.24	H	340.218 616 10	+20.822 837 98		3.40	6.25	−0.45	0.96	0.64	1.15	1.01	0.75	+	9	+30	+	0	−	4	−	5	−32	−	2	−21	+22	−	8	0	0.97										
111974	H 22 40 52.52	+14 32 55.9	5.72	H	340.218 826 25	+14.548 860 51	A	30.49	272.25	123.47	1.24	0.83	0.95	1.22	0.79	+38	−	7	−	6	−32	+	1	+14	−	3	−36	+	6	−15		2	1.30										
111975	22 40 52.68	−45 30 21.5	7.84	H	340.219 483 02	−45.505 983 82		3.97	103.45	−64.48	0.89	0.60	1.06	1.28	0.64	+	8	+14	−15	+	6	+10	+	2	+11	−16	+15	+23		0	−0.31										
111976	22 40 53.47	+64 54 24.7	12.42	H	340.222 777 37	+64.906 870 19		17.69	363.35	150.10	2.52	2.24	2.85	3.28	2.38	−	6	+	3	+28	+10	+12	+	1	+12	−	4	+	8	+	2	0	−0.89										
111977	22 40 54.40	+66 31 20.9	7.46	H	340.226 654 42	+66.522 486 07		34.05	217.26	388.34	0.52	0.53	0.60	0.63	0.57	−15	−	1	+20	+	3	+	9	+	9	+	8	−20	−	5	−12	0	0.34										
111978	22 40 54.93	−31 59 24.4	7.41	H	340.228 892 18	−31.990 109 79		37.45	343.45	20.39	0.68	0.55	0.92	0.75	0.62	+38	−	7	−	8	+	9	−31	+19	−30	−34	+16	+45		0	0.88										
111979	22 40 56.36	−13 51 22.6	9.65	H	340.234 830 90	−13.856 283 68		6.13	70.62	−43.84	1.43	0.86	1.62	1.51	1.09	+12	+30	−15	−28	+	0	+	3	+14	−34	+42	+	8		2	−1.50										
111980	22 40 56.83	−45 13 33.9	9.41	G	340.236 770 93	−45.226 088 58		6.12	−17.85	−16.88	1.22	0.80	1.44	1.84	0.90	+	7	+10	−21	+	3	+11	+	3	+11	−	4	+22	+30		0	−1.98										
111981	22 40 58.40	+18 56 08.6	10.40	G	340.243 346 36	+18.935 727 58		13.91	285.65	159.11	1.50	1.12	1.83	1.74	1.69	+20	+10	+	5	+	9	−	5	+	1	−	4	−29	+	1	+22	0	−0.33										
*111982	22 40 58.93	−84 08 12.1	8.81	H	340.245 542 66	−84.136 681 81		11.23	−10.44	−106.99	0.64	0.62	0.81	0.77	0.74	+19	−18	−	7	−13	+	7	+	2	+	9	+	4	−	6	+10	0	1.13										
*111983	22 40 58.61	−46 12 07.0	9.14	G	340.244 223 75	−46.201 947 69		43.65	102.14	−20.15	1.08	0.80	1.30	1.44	0.85	+21	−13	−18	+	2	+11	−	5	+	8	−10	+	8	+30		2	−0.61										
*111984	22 40 58.61	−39 18 24.9	9.39	H	340.244 223 45	−39.306 919 89		10.03	−89.73	−123.27	1.14	0.98	1.47	1.48	1.23	+31	−25	−31	+20	−	5	+15	−	2	−21	+16	+34		0	0.43										
*111985	22 40 58.70	+42 35 54.4	8.41	H	340.244 594 42	+42.598 446 97		3.66	4.37	1.30	0.66	0.68	1.04	0.68	0.69	+	0	+18	+	3	+39	+12	+11	+20	−24	+	5	+14		0	2.60										
111986	H 22 40 59.90	+72 27 39.1	8.99	H	340.249 569 10	+72.460 873 46	*	4.05	3.11	−7.06	1.34	1.58	1.05	1.03	0.99	−11	−12	+17	−16	+13	+11	+14	−28	−	4	−	7		1	0.33										
111987	22 41 00.08	+25 12 37.1	7.23	G	340.250 348 71	+25.210 296 38		5.58	−55.65	−35.68	0.66	0.55	0.91	0.78	0.68	+19	+25	+	5	+	2	−	2	−45	−	5	+	4	−23	+28	0	0.76										
111988	22 41 02.76	+51 45 30.5	6.77	H	340.261 494 86	+51.758 483 01		1.28	−0.26	−0.66	0.51	0.47	0.68	0.58	0.53	−	8	−	1	+	8	+	2	+12	−13

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
111901	10.837	0.051	9.773	0.033		0.921	0.005	G	0.92	0.00	H	9.8297	0.0027	0.024	100		9.79	9.89		C			1							
111902	8.909	0.016	8.553	0.016		0.375	0.015	G	0.44	0.02	H	8.5953	0.0020	0.015	86		8.57	8.62		C			1							S
111903	7.809	0.007	7.325	0.006	A	0.488	0.015	G	0.56	0.02	H	7.3837	0.0038	0.009	141	A	7.36	7.40			22400−1912	I 1	2 C	C	AB	227	10.908	0.042	3.83	0.13	S
111904	10.390	0.027	10.055	0.029		0.318	0.037	T	0.37	0.05	L	10.0733	0.0036	0.038	176		9.99	10.16		U			1	S						G
111905	8.730	0.008	7.587	0.005		0.983	0.007	T	0.96	0.01	L	7.6553	0.0013	0.015	196		7.63	7.68		M			1							S
111906	10.336	0.026	9.905	0.028		0.421	0.031	T	0.49	0.03	L	9.9895	0.0018	0.022	107		9.95	10.03					1							
111907	9.045	0.014	7.042	0.006		1.696	0.013	T	2.66	0.05	O	6.7849	0.0164	0.127	95		6.72	7.09		U 2			1	S						S
111908	10.082	0.029	8.638	0.015		1.218	0.026	T	1.18	0.03	L	8.6855	0.0014	0.012	100		8.66	8.71		C			1							
111909	8.700	0.009	7.486	0.006		1.038	0.008	T	1.01	0.01	L	7.5386	0.0013	0.012	143		7.52	7.56					1							S
111910	7.521	0.007	6.946	0.006		0.513	0.004	G	0.59	0.00	H	6.9996	0.0009	0.008	61		6.99	7.02		C			1							S
111911	9.158	0.015	8.679	0.015	*	0.463	0.016	T	0.53	0.02	L *	8.6986	0.0020	0.015	94	*	8.67	8.75		D	22401−1558	I 1	2 C	A	AB	243	0.412	0.004	0.20	0.05	S
111912	11.200	0.059	10.566	0.053		0.589	0.069	T	0.66	0.06	L	10.7602	0.0041	0.035	131		10.70	10.82		C			1							G
111913	9.491	0.019	8.873	0.017		0.572	0.019	T	0.64	0.02	L	8.9271	0.0011	0.012	85		8.89	8.95					1	G						S
111914	9.977	0.022	8.737	0.014		1.058	0.020	T	1.02	0.02	L	8.7967	0.0019	0.016	110		8.76	8.82					1							
111915	8.035	0.011	7.254	0.008		0.719	0.010	G	0.77	0.01	H	7.3104	0.0015	0.013	74		7.28	7.33		C			1							S
111916	9.736	0.030	9.606	0.039		0.140	0.010	G	0.15	0.01	H	9.6282	0.0027	0.027	118		9.57	9.67					1							
111917	9.352	0.015	8.538	0.012		0.735	0.015	T	0.78	0.01	L	8.5544	0.0017	0.017	138		8.52	8.59					1							
111918	9.008	0.014	8.542	0.014		0.439	0.018	T	0.51	0.02	L	8.6136	0.0013	0.016	79		8.58	8.65		D			1							
111919	8.659	0.011	8.053	0.010	*	0.602	0.015	G	0.67	0.01	H *	8.0922	0.0015	0.014	118	*	8.07	8.12		D	22402+3732	I 1	2 C	A	AS	208	0.358	0.003	0.36	0.03	S
111920	10.203	0.031	9.140	0.021		0.921	0.028	T	0.92	0.02	L	9.2432	0.0025	0.020	81		9.20	9.28					1							
111921	10.521	0.043	9.854	0.039	A	0.700	0.495	G	0.67	0.07	B *	9.9907	0.0043	0.023	60	*	9.95	10.04		C	22403−0445	I 1	2 C	C	AB	324	2.764	0.120	3.86	0.48	
111922	10.105	0.025	8.695	0.014		1.191	0.022	T	1.15	0.02	L	8.7322	0.0018	0.018	112		8.70	8.76		C			1							
111923	9.899	0.015	9.671	0.018		0.218	0.022	T	0.24	0.03	L	9.7080	0.0022	0.028	203		9.66	9.76					1							G
111924	7.706	0.006	7.421	0.007		0.271	0.009	T	0.31	0.01	L	7.4579	0.0010	0.011	130		7.44	7.48		C			1							S
111925	7.139	0.004	6.032	0.003		0.946	0.004	T	0.94	0.00	L	6.0886	0.0006	0.007	145		6.08	6.10					1							S
111926	9.057	0.011	8.560	0.010		0.467	0.013	T	0.54	0.01	L	8.6353	0.0015	0.022	176		8.61	8.67		C			1							S
111927	9.602	0.015	9.577	0.021		0.028	0.024	T	0.04	0.02	L	9.6359	0.0023	0.030	167		9.57	9.68					1	S						G
111928	8.800	0.010	8.136	0.009		0.631	0.015	G	0.70	0.01	H	8.1851	0.0012	0.014	138		8.16	8.21		C			1							S
111929	10.395	0.029	9.196	0.017		1.026	0.026	T	1.00	0.02	L	9.2077	0.0016	0.018	126		9.18	9.24					1							
111930	10.008	0.027	8.099	0.011		1.585	0.023	T	1.60	0.02	L	8.0529	0.0018	0.016	75		8.02	8.07		M			1							
111931	9.444	0.018	8.241	0.012		1.029	0.017	T	1.00	0.01	L	8.2796	0.0016	0.012	80		8.25	8.30		C			1							S
111932						1.433	0.017	G	1.75	0.04	I	11.6420	0.0237	0.130	70		11.31	11.88		U 2			1	X	S					D P
111933	9.029	0.011	7.888	0.008		0.981	0.011	T	0.96	0.01	L	7.9403	0.0010	0.011	152		7.92	7.96					1							S
111934	7.574	0.005	6.026	0.003		1.297	0.005	G	1.28	0.06	F	6.0355	0.0009	0.008	118		6.02	6.05					1							S
111935	8.894	0.015	8.444	0.015		0.424	0.019	T	0.49	0.02	L	8.5165	0.0020	0.013	88		8.49	8.55		C			1							S
111936	10.020	0.021	9.512	0.020		0.488	0.022	T	0.56	0.02	L	9.6016	0.0018	0.020	136		9.57	9.65		D			1							
111937	7.900	0.007	7.601	0.008		0.312	0.003	G	0.36	0.00	H	7.6482	0.0013	0.010	134		7.63	7.67		C			1							S
111938	8.177	0.013	6.947	0.007		1.050	0.012	T	1.02	0.01	L	6.9769	0.0011	0.009	88		6.96	7.00		C			1							S
111939	10.154	0.032	10.100	0.045		0.086	0.002	G	0.10	0.00	H	10.1750	0.0034	0.032	116		10.12	10.23		C			1	X						G
111940	9.576	0.016	9.294	0.018		0.268	0.023	T	0.30	0.03	L	9.3334	0.0020	0.025	160		9.30	9.38					1							
111941	9.745	0.025	8.710	0.018		0.900	0.023	T	0.90	0.02	L	8.7577	0.0028	0.017	73		8.73	8.79		C			1							S
111942	11.374	0.062	9.960	0.028		1.094	0.009	G	1.17	0.01	I	9.9585	0.0023	0.032	168		9.92	10.03					1							G
111943	7.823	0.007	7.409	0.008		0.415	0.015	G	0.48	0.02	H	7.4612	0.0011	0.009	86		7.44	7.48					1	G						S
111944	6.208	0.002	4.650	0.001		1.318	0.003	G	1.25	0.03	C	4.6569	0.0004	0.006	238		4.65	4.67					1							S
111945	10.677	0.046	9.112	0.021		1.313	0.040	T	1.27	0.05	L	9.1178	0.0024	0.020	88		9.08	9.16		U			1	S						
111946	10.398	0.027	8.826	0.013		1.319	0.024	T	1.28	0.03	L	9.0966	0.1555	1.596	186		7.56	11.37	254.10	P 1 B			1	V						G P
111947	9.695	0.023	9.194	0.022	*	0.445	0.015	G	0.51	0.02	H *	9.1931	0.0023	0.018	79	*	9.17	9.22		D	22406+0632	I 1	2 C	A	BA	145	0.422	0.003	0.02	0.02	
111948	10.357	0.026	9.261	0.017		0.947	0.024	T	0.94	0.02	L	9.3063	0.0023	0.026	139		9.26	9.35					1							
111949	10.130	0.026	9.512	0.024		0.575	0.031	T	0.65	0.03	L	9.5914	0.0020	0.020	142		9.56	9.63		C			1							G
111950	8.897	0.014	8.511	0.014		0.365	0.018	T	0.43	0.02	L	8.5798	0.0015	0.017	121		8.55	8.60		C			1							
111951	10.549	0.037	9.921	0.033		0.579	0.037	T	0.65	0.03	L	10.0360	0.0032	0.027	93		9.99	10.08		C			1							
111952	10.490	0.040	9.956	0.038		0.501	0.050	T	0.57	0.05	L	10.0479	0.0026	0.021	77		10.01	10.09		C			1							
111953	8.988	0.014	7.698	0.009		1.097	0.013	T	1.06	0.01	L	7.7483	0.0010	0.009	97		7.73	7.77		C			1							S
111954	4.060	0.002	4.170	0.002		−0.105	0.010	G	−0.07	0.02	A	4.1591	0.0005	0.004	93		4.15	4.17					1	G						S
111955	11.010	0.046	9.212	0.017		1.497	0.039	T	1.52	0.06	L	9.2070	0.0020	0.023	143		9.17	9.25					1							
111956	8.963	0.015	8.785	0.017		0.171	0.021	T	0.19	0.02	L	8.7991	0.0022	0.016	78		8.77	8.82		C			1							
111957	9.919	0.019	8.066	0.009		1.573	0.017	T	2.48	0.04	O	7.8535	0.0030	0.037	129		7.79	7.91		U 2	22407+2644	I 1	1	S						
111958	12.166	0.152	10.842	0.074	A	1.304	0.006	G	1.50	0.01	I *	10.4438	0.0022	0.026	98	*	10.38	10.49		D	22407−4359	I 1	2 C	A	AB	214	5.358	0.010	1.09	0.04	
111959	9.641	0.018	9.093	0.017		0.520	0.018	T	0.59	0.02	L	9.1152	0.0020	0.018	111		9.09	9.15		C			1	S						
111960	9.335	0.016	7.969	0.010		1.143	0.007	G	1.25	0.02	A	7.9566	0.0015	0.015	110		7.94	7.98					1							S
111961	9.707	0.012	8.018	0.006		1.411	0.011	T	1.39	0.01	L	8.0058	0.0012	0.017	243		7.98	8.04					1							
111962	8.017	0.008	7.958	0.009		0.059	0.011	T	0.07	0.01	L	7.9887	0.0010	0.010	110		7.97	8.01		C			1							S
111963	8.968	0.012	8.818	0.014		0.144	0.017	T	0.16	0.02	L	8.8404	0.0015	0.014	134		8.81	8.87					1							
111964	11.264	0.072	10.369	0.052		1.100	0.015	G	1.06	0.02	I	10.4543	0.0028	0.027	102		10.41	10.50		C			1							G
111965	6.941	0.006	6.380	0.005	*	0.520	0.004	G	0.63	0.07	F *	6.4267	0.0011	0.007	76	*	6.42	6.44		D	22408−0333	I 1	2 C	A	BA	129	0.349	0.004	1.02	0.02	S
111966	7.246	0.005	7.254	0.006		−0.006	0.007	T	0.01	0.01	L	7.2677	0.0010	0.013	143		7.25	7.29					1							S
111967	7.880	0.006	6.139	0.003		1.450	0.000	G	1.45	0.00	H	6.1172	0.0008	0.008	156		6.10	6.13					1							S
111968	9.956	0.018	9.882	0.026		0.073	0.029	T	0.08	0.03	L	9.8863	0.0034	0.032	178		9.84	9.95					1							G
111969	10.349	0.026	9.041	0.015	*	1.111	0.023	T	1.07	0.02	L *	9.0783	0.0025	0.025	137	*	9.04	9.13		D	22408−5706	I 1	2 C	A	AB	175	0.420	0.011	1.85	0.08	
111970	9.064	0.014	8.789	0.015		0.262	0.019	T	0.29	0.02	L	8.8126	0.0015	0.019	117		8.78	8.84					1							
111971	8.683	0.012	8.186	0.011		0.488	0.020	G	0.56	0.02	A	8.2370	0.0013	0.012	100		8.20	8.26					1							S
111972	10.037	0.025	8.687	0.014		1.144	0.022	T	1.11	0.02	L	8.7880	0.0290	0.231	108		8.11	9.00	10.88	P 1 A			1							
111973	10.018	0.026	8.382	0.013		1.369	0.023	T	1.34	0.03	L	8.3876	0.0021	0.017	84		8.36	8.41					1							
111974	6.643	0.005	5.815	0.004	*	0.723	0.004	G	0.83	0.07	F *	5.8645	0.0008	0.005	90	*	5.86	5.88		D	22409+1433	I 1	2 C	A	AB	63	0.467	0.002	0.82	0.02	S
111975	8.991	0.015	7.951	0.011		0.904	0.014	T	0.91	0.01	L	7.9971	0.0017	0.015	93		7.97	8.02					1							S
111976						2.005	0.400	G	3.78	1.18	I	12.0034	0.0066	0.076	97		11.83	12.15					1							D
111977	8.235	0.009	7.533	0.009		0.635	0.015	G	0.70	0.01	H	7.5959	0.0009	0.011	123		7.58	7.62		C			1							S
111978	8.402	0.008	7.491	0.006		0.789	0.028	G	0.80	0.02	A	7.5491	0.0008	0.012	153		7.53	7.57		C			1							S
111979	10.899	0.068	9.804	0.042		0.946	0.061	T	0.99	0.07	L	9.7914	0.0024	0.018	78		9.75	9.83		C			1							
111980	10.015	0.025	9.521	0.025		0.530	0.015	G	0.60	0.02	H	9.5437	0.0026	0.023	89		9.49	9.58		C			1							
111981	11.653	0.109	10.471	0.061		0.920	0.015	G	0.96	0.02	I	10.5506	0.0032	0.028	83		10.50	10.59		C			1							G
111982	9.375	0.015	8.883	0.014		0.474	0.016	T	0.55	0.02	L	8.9196	0.0019	0.017	130		8.90	8.96		C			1							
111983	10.497	0.039	9.256	0.023		1.044	0.000	G	1.10	0.00	I	9.2444	0.0025	0.022	91		9.19	9.29					1							
111984	10.257	0.029	9.468	0.024		0.759	0.003	G	0.80	0.00	H	9.5258	0.0026	0.020	92		9.49	9.56					1							
111985	10.578	0.029	8.605	0.010		1.636	0.024	T	1.66	0.03	L	8.5248	0.0018	0.023	173		8.49	8.57					1							
111986	10.432	0.035	9.156	0.020	*	1.086	0.031	T	1.05	0.03	L *	9.1549	0.0022	0.018	121	*	9.13	9.18		D	22410+7228	I 1	2 C	A	AB	111	0.253	0.011	1.54	0.15	
111987	7.555	0.007	7.269	0.007		0.272	0.009	T	0.31	0.01	L	7.3061	0.0011	0.011	86		7.28	7.32					1							S
111988	8.754	0.011	6.931	0.005		1.517	0.010	T	1.55	0.01	L	6.8930	0.0009	0.010	128		6.88	6.91					1							S
111989	10.076	0.022	8.289	0.010		1.518	0.020	T	2.52	0.04	O	8.0717	0.0054	0.056	126		7.99	8.16		U 2			1	S						S
111990	8.834	0.011	6.839	0.005		1.653	0.010	T	1.68	0.01	L	6.7476	0.0018	0.015	122		6.72	6.77		U 2			1							S
111991	10.051	0.021	9.915	0.028		0.131	0.033	T	0.15	0.03	L	9.9563	0.0025	0.030	177		9.90	10.02					1							G
111992	7.772	0.007	7.161	0.007		0.567	0.007	T	0.64	0.01	L	7.2250	0.0015	0.011	93		7.21	7.24					1							S
111993	9.232	0.012	8.121	0.008		0.939	0.002	G	0.99	0.00	I	8.1778	0.0014	0.016	186		8.15	8.21					1							S
111994	9.035	0.014	8.438	0.013		0.554	0.015	G	0.63	0.01	H	8.4922	0.0018	0.017	100		8.46	8.52					1							S
111995	9.040	0.016	7.785	0.010		1.070	0.015	T	1.03	0.01	L	7.8247	0.0014	0.011	93		7.81	7.84					1							S
111996	8.813	0.013	8.701	0.016		0.101	0.019	T	0.11	0.02	L	8.7348	0.0014	0.013	99		8.71	8.76					1							S
111997	9.889	0.018	9.997	0.028		−0.093	0.030	T	−0.07	0.04	L	9.9572	0.0030	0.035	206		9.89	10.02					1							G
111998	9.054	0.010	8.547	0.009		0.487	0.010	T	0.56	0.01	L	8.5952	0.0016	0.019	184		8.56	8.63					1							S
111999	9.879	0.026	9.628	0.031		0.239	0.038	T	0.27	0.05	L	9.6673	0.0021	0.019	108		9.64	9.70					1							G
112000	7.552	0.005	7.211	0.005		0.323	0.007	T	0.37	0.01	L	7.2560	0.0011	0.016	226		7.23	7.28	1.52	P 1 A			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
112001	22 41 10.59	−41 24 41.3	9.94	H	340.294 142 26	−41.411 462 36		12.49	139.35	−6.95	1.13	0.98	1.52	1.26	1.04	+19	−14	− 2	−17	− 5	+33	− 5	−31	− 1	+14		0	0.73
112002	22 41 13.42	−65 32 34.3	8.62	H	340.305 914 46	−65.542 870 47		17.72	−33.26	−119.86	0.74	0.80	1.14	0.86	0.83	−17	+ 5	− 9	−11	+ 7	+15	+12	−36	− 6	+ 1		2	0.00
112003	22 41 13.75	+22 51 51.1	8.31	H	340.307 300 00	+22.864 205 14		6.38	44.94	9.73	0.87	0.63	1.01	0.98	0.74	+ 8	+12	+19	−12	− 9	−24	− 1	−15	+ 4	+10		0	1.08
112004	22 41 15.11	+49 03 09.0	9.52	H	340.312 960 19	+49.052 508 38		−1.47	−1.19	−3.30	0.80	0.79	1.20	0.81	0.83	−29	+21	−21	−11	+20	−12	+27	−32	+42	−11		0	−1.91
112005	22 41 15.47	−57 01 41.7	7.24	2 H	340.314 470 79	−57.028 244 83		0.61	−14.04	3.55	0.52	0.52	0.82	0.61	0.55	+ 3	−17	+ 0	+10	+12	+25	+13	+ 2	− 2	+13		0	−1.27
112006 H	22 41 16.82	+72 43 40.1	8.49	H	340.320 097 99	+72.727 811 88	A	0.62	3.87	−3.07	1.50	1.46	1.50	1.38	1.36	+ 2	−11	+26	−20	+10	+16	+ 9	−27	−12	+ 9		2	−0.03
112007	22 41 17.11	+04 15 30.3	9.13	H	340.321 278 20	+04.258 422 30		5.18	27.87	−24.27	1.23	0.98	1.54	1.74	1.31	+33	+ 9	−14	− 4	− 2	+17	− 9	−51	+33	+13		0	1.45
112008 H	22 41 17.72	+13 10 31.8	8.74	H	340.323 817 19	+13.175 494 26	A	16.29	95.92	−73.64	1.81	1.48	1.95	2.07	1.80	+19	+ 7	−20	− 9	+ 6	− 6	+ 7	−16	+21	+ 9		1	0.40
112009	22 41 18.67	−43 50 28.3	8.92	2 H	340.327 785 83	−43.841 196 04		4.46	−1.80	−32.88	0.97	0.78	1.26	1.14	0.81	+ 9	−15	−17	− 5	− 5	+15	− 4	−16	+16	+22		0	−1.26
112010	22 41 19.48	+22 45 59.9	9.08	H	340.331 175 23	+22.766 625 09		0.61	5.48	1.54	1.14	0.75	1.28	1.30	0.88	+ 3	+25	+ 9	−21	− 2	−22	− 1	−13	− 6	− 8		0	0.71
112011	22 41 20.43	−40 28 35.0	10.40	H	340.335 104 24	−40.476 386 57		0.82	60.20	−71.56	1.33	1.13	1.98	1.70	1.31	+16	+11	−12	+14	+ 0	+43	+ 6	−12	− 2	+17		0	−0.35
*112012	22 41 20.82	−42 22 50.4	10.38	2 G	340.336 741 16	−42.380 672 16		7.61	69.24	−39.23	1.42	1.16	1.88	1.57	1.19	+ 6	− 6	−15	+13	− 5	+20	− 5	−33	+14	+ 3		0	−0.47
*112013 H	22 41 20.79	−39 20 54.6	8.83	H	340.336 614 20	−39.348 497 66	A	19.97	−100.90	−22.37	1.47	1.33	1.74	1.78	1.45	+39	−23	−22	+ 8	− 7	+10	− 5	−19	+ 6	+37		2	−0.14
112014	22 41 21.86	+52 22 44.2	9.51	H	340.341 098 16	+52.378 938 73		0.30	−2.33	−3.70	0.82	0.74	1.06	0.91	0.84	− 9	−12	+16	− 2	+14	+ 6	+14	−11	+11	+13		0	1.13
112015	22 41 22.62	−25 21 01.1	7.36	H	340.344 232 41	−25.350 293 08		10.09	162.21	4.81	0.74	0.53	0.89	0.86	0.59	+25	+ 7	+ 0	−20	− 1	+11	− 1	−29	+17	+22		0	0.07
112016	22 41 22.88	+50 05 33.5	7.91	H	340.345 315 43	+50.092 632 78		2.38	0.10	−2.74	0.54	0.57	0.74	0.57	0.60	−27	+ 3	+ 4	+ 4	+20	− 5	+26	−28	+16	− 9		2	−0.76
112017	22 41 23.73	+41 02 16.0	9.35	H	340.348 887 49	+41.037 782 15		2.27	−1.04	−5.40	0.97	0.92	1.33	1.20	1.06	− 5	+ 0	+ 5	−10	−13	+14	−10	−33	+ 9	+ 8		1	0.38
112018	22 41 23.93	+38 49 03.2	8.47	H	340.349 697 38	+38.817 550 71		3.30	−4.07	−8.29	0.90	0.71	1.12	1.09	0.99	− 3	+17	−10	+34	− 8	− 1	+ 5	−23	+19	+18		0	0.94
112019	22 41 24.51	−05 39 19.2	8.98	H	340.352 129 90	−05.655 340 53		2.12	31.18	−6.86	1.22	1.01	1.56	2.20	1.33	+15	− 1	−45	− 6	− 1	+24	+ 3	−36	+36	− 3		0	−0.34
112020	22 41 25.21	+43 38 55.2	10.52	H	340.355 055 57	+43.648 654 99		5.05	−8.49	−6.64	0.99	1.09	1.71	1.09	1.09	−39	+ 5	− 1	+ 0	+19	− 6	+22	−22	− 7	−13		0	2.96
112021	22 41 25.64	−12 13 47.7	6.78	H	340.356 825 42	−12.229 906 42		4.07	13.84	−12.29	0.87	0.53	0.91	1.07	0.68	+10	+14	+ 7	−11	+24	+24	+25	−14	+ 2	+ 5		0	0.95
*112022	22 41 25.74	+23 50 47.8	7.39	G	340.357 246 11	+23.846 611 47		0.07	−14.16	−14.05	0.62	0.51	0.79	0.65	0.61	+10	+12	+24	+ 3	− 2	−13	+ 0	−22	−16	+11		0	1.85
*112023	22 41 25.73	−41 15 25.7	8.84	H	340.357 187 65	−41.257 137 47		4.42	−12.69	−19.76	0.88	0.74	1.16	1.01	0.82	+20	−12	− 5	−13	− 5	+29	− 4	−27	− 4	+13		0	0.05
112024	22 41 26.14	−27 15 25.3	7.81	G	340.358 908 31	−27.257 036 59		3.15	−12.24	−10.02	0.88	0.61	1.00	1.07	0.73	+15	− 7	+ 2	−34	+ 4	+15	+ 4	−38	+ 5	+12		0	0.52
112025	22 41 26.35	+73 15 24.9	7.67	H	340.359 807 70	+73.256 911 53		3.92	30.36	16.84	0.55	0.52	0.63	0.64	0.59	− 4	−11	+11	−11	− 1	− 3	− 1	− 9	+ 1	+16		1	−0.45
112026	22 41 26.53	+56 25 58.1	8.87	3 T	340.360 542 61	+56.432 794 37		0.94	−2.49	−3.25	0.77	0.70	0.95	1.05	0.84	−29	−20	+20	+13	+ 7	+18	+ 2	+ 3	+14	−12		0	0.78
112027	22 41 26.83	+50 55 44.7	8.04	H	340.361 807 56	+50.929 096 05		0.00	−1.44	−4.86	0.59	0.61	0.85	0.58	0.63	−15	+ 9	+ 8	− 6	+11	−10	+17	−21	+29	− 4		0	−0.69
112028	22 41 27.50	+50 13 11.7	8.33	H	340.364 590 20	+50.219 923 48		3.32	−5.04	−4.32	0.68	0.74	0.95	0.67	0.73	−29	+11	−11	− 1	+20	− 3	+31	−40	+20	− 1		1	0.81
112029	22 41 27.67	+10 49 53.0	3.41	G	340.365 311 81	+10.831 391 11		15.64	77.38	−10.98	0.61	0.51	0.75	0.68	0.58	+23	− 5	−31	+ 6	−10	−11	−22	−47	+32	+ 1		0	0.85
112030	22 41 28.38	−01 26 03.6	9.90	H	340.368 254 49	−01.434 329 97		6.35	−68.63	−89.48	1.30	1.01	1.45	1.43	1.14	+19	+10	+11	−18	+ 1	+31	− 2	−39	+12	+17		0	1.65
112031	22 41 28.65	+40 13 31.7	5.25	2 G	340.369 381 27	+40.225 463 14		2.34	−0.75	−5.90	0.54	0.42	0.62	0.69	0.53	− 5	+ 8	+ 4	+33	− 4	+ 0	− 4	−14	+ 1	− 6		0	0.05
112032	22 41 31.28	+30 57 57.1	6.36	1 H	340.380 312 52	+30.965 858 75		3.92	48.80	1.14	0.48	0.46	0.73	0.59	0.61	+16	+19	+24	+ 3	− 9	−15	− 6	−14	+ 0	+ 9		0	1.39
112033	22 41 31.28	−51 54 10.4	9.57	H	340.380 342 54	−51.902 890 10		8.45	52.47	−36.33	0.84	0.95	1.53	1.04	0.89	+38	−19	−40	−12	−31	+37	−20	−22	+22	+41		0	0.18
112034	22 41 31.41	+26 35 47.1	9.47	H	340.380 882 31	+26.596 412 02		5.81	13.02	−12.29	0.86	0.75	1.28	1.13	1.07	+10	+ 6	+ 4	+46	− 9	− 2	−17	−17	+10	− 4		0	0.84
112035	22 41 32.91	−31 31 58.0	9.94	H	340.387 137 70	−31.532 783 99		3.61	48.58	4.57	1.37	0.99	1.57	1.48	1.08	+24	−12	− 8	−26	−12	+ 7	−12	−28	+ 6	+27		0	−1.89
112036	22 41 33.27	+77 36 54.8	7.32	H	340.388 614 93	+77.615 218 53		3.98	5.17	0.38	0.54	0.48	0.58	0.64	0.58	−19	−15	+23	+ 0	+ 2	+ 3	+ 0	−12	− 3	−27		0	1.00
112037	22 41 33.82	+42 24 48.9	8.35	H	340.390 903 85	+42.413 582 12		6.54	−16.34	−42.47	0.61	0.64	1.00	0.66	0.71	− 1	+ 8	+ 7	+41	+ 9	+ 5	+16	−14	+ 8	+13		0	0.38
112038 H	22 41 34.28	+54 23 12.2	7.82	G	340.392 824 03	+54.386 736 00	A	5.12	11.64	−1.01	1.57	1.75	0.83	0.75	0.81	+36	− 3	+ 5	+ 2	+ 3	+ 0	+12	− 6	+ 1	+22		1	−0.10
112039	22 41 34.48	+46 27 06.5	9.62	H	340.393 674 72	+46.451 792 97		−0.46	−0.04	0.02	0.89	0.89	1.41	0.91	0.92	−18	+12	−11	+16	+12	− 8	+21	−27	+19	+ 1		0	0.66
112040	22 41 34.84	+18 49 27.0	10.82	H	340.395 176 21	+18.824 169 45		27.99	240.21	56.20	1.74	1.64	2.27	2.04	1.92	+19	+13	−23	+ 6	− 6	−11	− 8	−26	+ 2	+19		0	2.28
112041	22 41 35.94	+41 32 56.3	5.93	H	340.399 758 15	+41.548 977 66		10.08	140.88	59.98	0.33	0.46	0.65	0.36	0.51	−15	+12	+ 2	+30	+ 3	+13	+ 6	−26	+ 2	− 9		0	−1.38
112042	22 41 37.90	+44 27 01.1	7.93	H	340.407 902 31	+44.450 314 21		18.90	277.20	160.73	0.54	0.62	0.92	0.53	0.59	−40	+13	− 4	−20	+25	+ 3	+27	−30	+ 6	−17		0	−2.08
112043 H	22 41 38.71	−02 33 09.3	8.83	2 H	340.411 292 85	−02.552 576 54	A	11.01	89.74	−65.38	4.47	3.36	4.12	5.07	3.20	+62	+ 0	−22	+29	+14	+10	−20	−36	+58	−22		9	1.04
112044	22 41 38.88	+45 11 41.3	8.74	H	340.411 985 03	+45.194 796 67		2.23	−3.14	−10.72	0.76	0.77	1.17	0.81	0.78	−37	+16	− 9	−17	+29	−15	+31	−28	+16	−19		1	−0.51
112045	22 41 39.30	+47 01 57.2	9.56	H	340.413 730 54	+47.032 549 10		1.92	−9.58	−4.91	0.87	0.85	1.22	0.87	0.89	−14	+ 7	+ 5	+ 7	+ 9	+ 3	+19	−31	+12	+ 9		0	1.32
112046	22 41 40.59	−34 05 57.8	10.07	H	340.419 142 67	−34.099 388 04		3.51	−18.95	−2.11	1.19	0.92	1.63	1.36	0.99	+24	− 2	− 6	+30	− 3	+18	− 3	+ 2	+11	+22		0	−1.38
112047	22 41 41.73	+44 00 06.0	9.12	2 H	340.423 872 33	+44.001 654 60		0.37	1.98	1.39	0.73	0.83	1.31	0.82	0.87	−35	− 1	+12	+ 1	+12	− 1	+16	−19	− 6	−17		1	−0.24
112048	22 41 43.08	−63 16 12.6	8.93	H	340.429 486 30	−63.270 158 67		2.85	−30.35	−6.66	0.84	0.78	1.21	0.99	0.80	−23	− 4	−10	−13	+ 6	+10	+ 8	−18	− 4	−19		2	−0.67
112049	22 41 43.74	−83 27 49.7	9.39	H	340.432 256 25	−83.463 796 93		23.29	39.11	−40.85	0.80	0.76	0.94	0.96	0.96	+10	−20	−15	+ 4	+ 8	−13	+ 8	+17	−10	+ 8		0	0.66
112050	22 41 44.93	+12 34 27.7	7.89	2 H	340.437 191 13	+12.574 359 05		0.44	−11.85	−17.54	0.81	0.67	1.01	0.98	0.88	+21	+11	−15	−20	− 2	+ 7	+ 2	−26	+23	+20		0	0.66
112051	22 41 45.41	+29 18 27.7	4.80	H	340.439 207 24	+29.307 689 20		10.70	−2.03	−19.96	0.39	0.44	0.69	0.53	0.54	+42	+14	+18	− 0	+ 8	− 9	+ 7	− 9	+ 7	+18		0	−2.64
112052	22 41 45.43	−39 27 41.3	8.96	H	340.439 311 54	−39.461 467 57		18.88	52.71	−71.86	1.12	0.88	1.37	1.28	1.03	+28	−23	− 5	+26	+ 4	+ 3	+ 9	−12	− 8	+28		0	0.31
112053	22 41 45.71	−12 52 54.9	9.51	H	340.440 472 87	−12.881 920 32		9.18	60.29	−42.07	1.61	0.97	1.59	3.30	1.36	− 4	+11	−21	−28	+31	−15	+20	−48	+25	−38		0	−0.22
112055	22 41 46.78	+36 49 28.2	10.27	H	340.444 907 77	+36.824 506 74		1.19	−3.48	−6.38	1.13	1.23	1.71	1.67	1.65	+19	+10	+ 6	− 9	−19	+20	−12	−45	+ 7	+38		3	1.60
112056	22 41 48.20	+10 31 06.2	8.72	H	340.450 812 89	+10.518 395 16		0.34	−12.49	−18.58	1.09	0.79	1.41	1.44	1.05	+13	+22	−27	−14	+ 6	−15	+ 6	−41	+44	−16		0	0.98
112057	22 41 48.38	+21 10 12.6	9.80	2 H	340.451 564 01	+21.170 175 89		−0.92	−14.29	−12.52	1.12	0.86	1.39	1.16	1.11	+14	+28	− 6	−11	− 1	+ 0	+ 5	−30	+18	+14		0	0.85
112058	22 41 49.59	+22 23 21.6	7.45	2 H	340.456 630 35	+22.389 323 01		4.19	41.94	14.85	0.74	0.51	0.87	0.82	0.59	+ 7	+24	+ 9	−16	− 6	−31	+ 0	−12	+13	− 4		0	−0.79
112059	22 41 50.11	−38 03 53.4	9.23	H	340.458 773 38	−38.064 828 86		7.86	36.60	−50.60	1.00	0.79	1.41	1.19	0.99	+19	−11	−25	+23	− 3	+19	+ 2	+ 5	+22	+39		0	−0.27
112060	22 41 50.68	+09 07 41.0	9.24	H	340.461 151 48	+09.128 065 17		4.23	30.35	−11.31	1.10	0.85	1.37	1.49	1.19	+24	−11	− 6	− 1	+ 1	+ 1	− 9	−26	+33	+ 0		0	0.76
112061	22 41 50.81	−69 17 55.0	8.98	H	340.461 691 20	−69.298 611 78		5.13	−32.69	−3.21	0.79	0.75	1.06	0.93	0.74	+ 1	− 9	−26	−24	+ 2	+ 5	+ 4	−14	− 2	− 2		0	−0.37
112062	22 41 51.11	−18 33 41.9	8.95	H	340.462 963 21	−18.561 635 81		5.44	−12.92	3.93	1.06	0.76	1.31	1.36	1.01	+26	− 6	− 5	−37	− 7	+26	− 8	−52	+40	+33		0	1.85
112063 H	22 41 51.63	+21 25 53.5	8.21	G	340.465 131 86	+21.431 527 60	A	12.82	63.26	−70.64	1.56	1.25	1.56	1.29	1.16	+26	+10	+ 1	+ 9	− 1	+ 2	− 8	−27	+13	+ 8		0	−1.02
112064	22 41 51.90	−31 54 55.4	10.51	G	340.466 232 03	−31.915 387 02		15.69	202.19	−82.91	1.52	1.16	1.98	1.70	1.27	+34	− 2	− 2	+21	−24	+14	−21	−28	+12	+39		3	0.33
112065	22 41 54.18	−30 01 42.8	7.78	H	340.475 769 00	−30.028 557 96		2.96	−17.86	0.47	1.03	0.61	1.17	1.23	0.69	+ 0	+14	−31	−32	+ 8	− 2	+11	−31	+35	+ 8		0	2.51
112066	22 41 57.01	−71 31 42.9	8.52	H	340.487 548 75	−71.528 579 24		3.38	8.86	−9.97	0.63	0.72	0.92	0.71	0.69	− 8	− 8	−29	+ 2	+ 1	− 8	− 2	−23	+ 1	−15		0	−0.28
112067	22 41 57.40	+14 30 59.2	5.92	G	340.489 161 13	+14.516 444 44		12.22	94.55	−21.21	0.73	0.51	0.79	0.95	0.68	+ 8	+ 3	− 7	−41	+10	− 9	+13	−26	+21	−13		0	−1.41
112068 H	22 41 58.76	+15 13 16.4	8.15	2 H	340.494 826 02	+15.221 215 33	*	6.90	19.33	3.74	1.57	1.07	1.25	1.41	1.02	+12	+ 4	−18	+ 3	− 6	+13	−14	−41	+14	− 4		0	−0.03
112069	22 41 58.92	−21 44 10.6	10.85	H	340.495 516 76	−21.736 274 55		26.55	150.04	−161.28	1.94	1.27	2.10	2.41	1.48	+11	+ 1	−10	−36	+24	− 5	+21	−30	+18	+ 7		0	1.09
112070	22 41 59.42	−20 47 03.3	9.30	2 G	340.497 591 42	−20.784 263 17		1.64	16.66	−40.15	1.14	0.83	1.37	1.47	0.98	+35	−11	−13	+ 2	+ 2	+ 8	− 1	−26	+14	+32		4	−0.33
112071	22 41 59.94	−10 07 32.0	8.23	G	340.499 748 25	−10.125 562 94		6.64	−14.75	−1.03	0.93	0.66	1.02	1.19	0.84	+26	− 4	− 8	+ 7	+11	− 4	+10	− 7	+ 4	+24		0	−0.54
112072	22 42 00.20	−53 56 57.2	9.41	H	340.500 827 98	−53.949 220 23		5.55	−33.81	−27.96	0.83	0.88	1.33	1.38	1.04	+12	− 1	−11	+24	− 2	+ 9	+ 2	+17	−10	− 3		0	1.65
112073	22 42 01.63	+09 46 09.0	11.99	G	340.506 805 96	+09.769 175 62		22.84	15.85	22.46	3.02	1.96	3.40	4.51	2.96	+ 8	+ 7	−10	−34	+13	+ 0	+15	−35	+29	−16		0	0.46
112074	22 42 02.02	−23 08 43.6	9.88	H	340.508 410 06	−23.145 432 99		2.98	41.21	−18.97	1.26	0.96	1.61	1.78	1.20	+27	+ 7	−15	+ 6	+ 5	+20	+ 6	−27	+38	+25		0	−1.86
112075	22 42 02.65	+22 06 00.7	7.13	H	340.511 061 00	+22.100 199 54		5.24	−17.96	−36.39	0.69	0.49	0.81	0.74	0.56	+ 8	+23	+ 5	− 4	− 2	−15	− 1	−17	+ 9	+ 0		0	−0.61
112076 H	22 42 04.95	+20 13 13.1	9.44	H	340.520 625 41	+20.220 309 77	A	2.10	13.18	−10.42	4.72	2.60	4.25	4.05	3.41	+22	+20	−16	−10	−12	−22	−10	−25	+20	+31		2	1.13
112077	22 42 05.09	−33 34 28.3	9.26	H	340.521 217 81	−33.574 528 27		0.64	−12.82	−6.96	0.93	0.75	1.28	1.03	0.84	+25	−11	− 9	+27	−14	+16	−13	− 8	+12	+27		0	0.18
112078 H	22 42 05.99	−05 06 06.6	6.28	2 H	340.524 940 82	−05.101 838 94	*	2.44	68.82	−53.26	0.83	0.67	1.12	1.17	0.84	+17	− 2	−40	−14	−10	+44	+ 5	−42	+46	+22		2	0.66
112079	22 42 06.59	−03 28 24.2	7.18	H	340.527 455 88	−03.473 396 65		8.93	26.39	−12.36	0.79	0.59	0.97	0.98	0.73	+22	−11	−21	+ 6	−10	+30	−12	−33	+45	+19		0	−0.48
112080	22 42 06.89	−68 23 56.6	7.86	H	340.528 714 54	−68.399 048 41		2.05	−9.29	8.58	0.59	0.61	0.87	0.66	0.57	+ 1	− 7	−19	− 2	+10	−21	+ 6	−10	− 1	+ 2		0	−0.33
112081	22 42 07.96	−48 10 32.1	8.81	H	340.533 176 82	−48.175 589 05		2.61	−6.77	0.38	1.09	0.80	1.37	0.83	0.89	+ 7	−42	−24	−41	+ 2	+27	+13	−14	− 9	+13		1	0.44
112082	22 42 08.14	+11 05 07.9	7.54	G	340.533 934 37	+11.085 525 65		13.17	32.47	−7.74	0.76	0.60	0.97	0.86	0.80	+24	−11	−20	+13	− 5	− 3	−13	−26	+41	+ 9		0	−0.39
*112083 H	22 42 08.57	−37 08 57.4	9.24	H	340.535 690 48	−37.149 288 95	A	13.32	83.55	44.83	2.07	1.50	2.25	2.34	1.66	+11	−12	−19	+ 2	− 2	+ 6	+ 2	−19	+19	+19		4	0.78
*112084	22 42 08.52	+31 41 59.2	8.77	H	340.535 490 63	+31.699 772 99		3.32	155.96	−221.66	0.69	0.68	1.06	0.82	0.86	+14	+ 8	+16	+19	−16	−23	−15	−13	+ 5	+ 8		0	0.32
*112085	22 42 08.50	−57 02 24.1	8.72	H	340.535 435 85	−57.040 033 76		1.40	53.62	5.95	0.73	0.83	1.15	0.90	0.90	+ 0	−19	−13	+ 8	+15	+ 1	+15	+ 6	−11	+ 1		0	−0.27
112086	22 42 09.12	+59 55 55.7	8.39	H	340.538 015 21	+59.932 142 63		1.40	13.42	7.39	0.60	0.57	0.69	0.80	0.62	−17	+ 1	+16	+22	+ 4	+ 6	+ 3	−11	− 2	−14		0	−1.01
112087	22 42 10.12	+08 04 29.3	7.70	H	340.542 147 41	+08.074 792 30		4.24	−9.34	−18.23	1.05	0.85	1.32	1.42	1.02	+21	+15	−34	− 1	− 8	+ 4	−14	−53	+33	− 1		0	−0.08
112088	22 42 10.27	+75 26 11.1	8.69	2 H	340.542 789 89	+75.436 414 63		0.78	4.42	−6.22	0.62	0.56	0.68	0.71	0.69	+ 7	− 4	+12	+ 2	− 1	−12	+ 0	− 2	+ 9	+ 8		0	−0.32
112089	22 42 11.94	+35 06 51.4	8.79	2 H	340.549 735 28	+35.114 266 65		2.76	17.67	−1.30	0.81	0.69	1.12	0.93	0.81	− 2	+18	+19	+10	+ 2	−13	+ 8	−24	+ 8	− 1		0	−0.86
112090	22 42 13.26	−39 05 03.0	8.84	H	340.555 265 30	−39.084 158 59		3.12	37.66	−20.86	0.94	0.86	1.38	1.19	1.02	+28	−14	−24	+10	−14	+29	− 6	−14	+34	+39		0	−0.54
112091	22 42 14.86	−34 16 38.7	7.99	H	340.561 916 10	−34.277 418 17		4.08	13.36	−3.69	0.72	0.56	0.91	0.75	0.60	+20	+ 0	−13	+14	+ 1	+15	+ 3	+10	− 5	+20		0	1.16
112092	22 42 15.38	−80 56 19.3	9.01	H	340.564 076 18	−80.938 683 10		2.98	−7.79	−0.24	0.73	0.73	0.90	0.83	0.81	+ 3	−19	−19	+10	+ 8	− 2	+ 8	− 3	− 6	− 4		0	0.40
112093	22 42 15.71	+57 36 29.3	8.22	H	340.565 447 35	+57.608 144 73		2.89	7.64	2.05	0.58	0.55	0.70	0.63	0.60	−26	+11	+ 4	+13	− 3	+ 1	− 1	+ 3	+20	−25		0	1.72
112094	22 42 17.06	−67 50 00.5	8.85	H	340.571 098 13	−67.833 466 14		3.37	14.28	−5.69	0.70	0.65	0.96	0.80	0.70	+ 0	−20	−19	− 8	+ 1	− 7	+ 1	+11	− 6	− 4		0	−0.71
112095	22 42 17.15	−05 43 59.4	9.56	G	340.571 474 97	−05.733 163 41		26.54	206.14	19.66	1.43	1.36	1.94	2.57	2.11	+36	− 3	−28	+ 1	−23	+53	−15	−53	+41	+42		0	−0.04
*112096	22 42 18.29	−27 22 57.0	7.68	2 H	340.576 216 74	−27.382 491 59		0.38	0.43	−5.68	0.93	0.62	1.02	1.22	0.75	+10	− 6	+ 2	−32	+ 7	+12	+ 5	−36	+10	+ 8		0	0.01
*112097	22 42 18.28	+49 15 19.6	8.18	H	340.576 149 45	+49.255 432 88		3.21	16.85	−2.93	0.55	0.56	0.81	0.59	0.60	−33	+19	−14	−13	+21	−19	+28	−34	+34	−14		0	−0.10
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No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
112001	10.909	0.050	10.033	0.038		0.767	0.048	T	0.81	0.03	L	10.0786	0.0022	0.026	93		10.04	10.13		C			1							
112002	9.404	0.013	8.671	0.011		0.672	0.014	T	0.73	0.01	L	8.7580	0.0019	0.024	167		8.72	8.80					1							S
112003	8.542	0.011	8.340	0.012		0.193	0.015	T	0.21	0.02	L	8.3733	0.0017	0.013	93		8.35	8.39		C			1 G							S
112004	9.565	0.015	9.535	0.020		0.032	0.023	T	0.05	0.02	L	9.5377	0.0023	0.028	162		9.50	9.59					1							G
112005	9.398	0.014	7.443	0.006		1.657	0.013	T	2.13	0.04	O	7.3053	0.0024	0.027	142		7.27	7.36		U 2			1							S
112006	9.119	0.021	8.433	0.015	*	0.634	0.021	T	0.70	0.02	L *	8.6213	0.0022	0.017	119	*	8.60	8.65		D	22413+7244	I 1	2 C	A	AB	138	2.682	0.004	0.69	0.02	S
112007	9.685	0.025	9.178	0.024		0.476	0.031	T	0.55	0.03	L	9.2391	0.0016	0.020	68		9.21	9.28		D			1							S
112008	9.698	0.028	8.790	0.022	*	0.806	0.027	T	0.83	0.02	L *	8.8950	0.0023	0.016	85	*	8.87	8.93		D	22413+1311	I 1	2 C	A	AB	148	4.463	0.005	1.15	0.02	
112009	9.519	0.017	9.009	0.017		0.489	0.018	T	0.56	0.02	L	9.0271	0.0028	0.093	96		8.99	9.54	2.97	P 1 A			1	S						
112010	10.852	0.046	9.197	0.021		1.384	0.040	T	1.36	0.05	L	9.2312	0.0027	0.022	95		9.19	9.26					1							
112011	10.958	0.052	10.439	0.051		0.497	0.055	T	0.57	0.06	L	10.5156	0.0028	0.023	79		10.47	10.56		C			1							
112012	11.038	0.049	10.442	0.047		0.600	0.020	G	0.67	0.02	H	10.5254	0.0041	0.030	95		10.46	10.57		U			1							
112013	9.849	0.022	8.953	0.017	A	0.764	0.096	G	0.85	0.03	L *	8.9880	0.0026	0.022	90	*	8.96	9.02		D	22413−3921	I 1	2 C	A	AB	237	8.172	0.032	2.95	0.11	
112014	9.590	0.016	9.525	0.022		0.065	0.025	T	0.07	0.03	L	9.5384	0.0023	0.023	123		9.50	9.58		C			1							G
112015	7.897	0.008	7.421	0.007		0.448	0.010	T	0.52	0.01	L	7.4630	0.0007	0.008	105		7.45	7.48					1							S
112016	7.937	0.008	7.916	0.009		0.024	0.011	T	0.04	0.01	L	7.9280	0.0013	0.016	155		7.90	7.96					1							S
112017	9.358	0.014	9.350	0.018		0.029	0.009	G	0.05	0.01	H	9.3615	0.0027	0.026	122		9.32	9.42		C			1							
112018	9.827	0.023	8.595	0.014		1.052	0.021	T	1.02	0.02	L	8.6389	0.0024	0.025	113		8.60	8.68		R			1							
112019	10.509	0.043	9.107	0.023		1.185	0.038	T	1.15	0.03	L	9.1478	0.0016	0.017	63		9.11	9.17		D			1							
112020	10.833	0.034	10.505	0.041		0.311	0.050	T	0.36	0.07	L	10.5978	0.0034	0.042	241		10.53	10.67					1	S						G
112021	8.560	0.013	6.926	0.007		1.367	0.012	T	1.34	0.01	L	6.9250	0.0013	0.010	72		6.90	6.94					1							S
112022	7.197	0.005	7.354	0.009		−0.136	0.003	G	−0.13	0.00	H	7.3399	0.0011	0.009	94		7.33	7.36		C			1							S
112023	10.195	0.027	8.946	0.016		1.065	0.025	T	1.03	0.02	L	9.0075	0.0020	0.014	97		8.99	9.03		C			1							
112024	8.007	0.007	7.806	0.010		0.149	0.002	G	0.16	0.00	H	7.8617	0.0013	0.013	104		7.84	7.88		C			1							S
112025	7.689	0.006	7.675	0.008		0.018	0.009	T	0.04	0.01	L	7.6826	0.0012	0.011	120		7.66	7.70		C			1							S
112026	9.912	0.024	8.960	0.017		0.838	0.022	T	0.86	0.02	L	8.9986	0.0350	0.324	117		8.60	9.37	6.42	P 1 A			1							
112027	9.607	0.017	8.181	0.009		1.204	0.015	T	1.16	0.01	L	8.2046	0.0013	0.016	152		8.18	8.23		C			1							
112028	9.994	0.021	8.446	0.011		1.300	0.019	T	1.26	0.02	L	8.4890	0.0016	0.020	153		8.46	8.54		C			1							
112029	3.320	0.002	3.402	0.002		−0.086	0.008	G	−0.06	0.03	C	3.3887	0.0004	0.004	87		3.38	3.40			22415+1050	I 1	1							S
112030	10.738	0.051	9.945	0.040		0.719	0.050	T	0.77	0.04	L	10.0422	0.0041	0.023	60		10.00	10.08					1							
112031	5.046	0.005	5.213	0.005		−0.137	0.008	G	−0.13	0.01	H	5.2003	0.0049	0.042	101		5.14	5.25	0.19	P 1 A	22415+4014	I 1	1							S
112032	8.461	0.012	6.560	0.005		1.579	0.010	T	1.60	0.01	L	6.4778	0.0012	0.010	124		6.46	6.49		M			1							S
112033	10.113	0.022	9.635	0.023		0.463	0.025	T	0.53	0.03	L	9.6761	0.0029	0.023	141		9.62	9.73					1							
112034	9.982	0.023	9.533	0.024		0.424	0.031	T	0.49	0.03	L	9.5604	0.0019	0.019	124		9.53	9.61		C			1							
112035	11.063	0.054	10.025	0.035		0.903	0.048	T	0.90	0.04	L	10.1042	0.0024	0.027	105		10.06	10.16					1							
112036	7.590	0.007	7.367	0.007		0.213	0.009	T	0.24	0.01	L	7.3861	0.0010	0.010	105		7.37	7.40		C			1							S
112037	9.793	0.015	8.486	0.009		1.111	0.014	T	1.07	0.01	L	8.5192	0.0018	0.020	181		8.49	8.55					1							
112038	7.875	0.007	7.833	0.008	*	0.030	0.015	G	0.05	0.01	H *	7.8515	0.0011	0.011	149	*	7.83	7.87		D	22416+5423	H 1	2 C	A	AB	216	0.326	0.014	2.53	0.12	S
112039	9.729	0.016	9.639	0.022		0.088	0.025	T	0.10	0.03	L	9.6559	0.0026	0.036	183		9.60	9.72					1	S						G
112040	12.523	0.308	10.894	0.103		1.631	0.082	G	2.68	0.20	I	10.8009	0.0045	0.033	80		10.74	10.85		C			1 G							G
112041	7.209	0.003	6.046	0.002		0.998	0.003	T	0.98	0.00	L	6.0929	0.0006	0.007	213		6.08	6.10					1							S
112042	8.766	0.010	8.024	0.008		0.679	0.010	T	0.74	0.01	L	8.0738	0.0012	0.017	246		8.05	8.10					1							S
112043	9.928	0.027	9.177	0.023	A	1.000	0.495	G	0.72	0.11	L *	8.9611	0.0232	0.165	66	*	8.90	9.58		U	22416−0233	I 1	2 C	A	AB	2	2.430	0.021	0.85	0.06	S
112044	10.900	0.037	8.979	0.012		1.595	0.031	T	1.61	0.03	L	8.8578	0.0021	0.027	214		8.81	8.90					1	S						
112045	9.811	0.017	9.553	0.019		0.246	0.024	T	0.28	0.03	L	9.6252	0.0028	0.029	175		9.58	9.68		C			1	S						G
112046	10.921	0.051	10.140	0.040		0.694	0.049	T	0.75	0.04	L	10.2059	0.0028	0.027	115		10.17	10.25		C			1 G							
112047	11.295	0.049	9.401	0.015		1.500	0.040	G	1.50	0.10	R	9.2499	0.0053	0.060	249		9.15	9.33		U 2			1	S						
112048	9.482	0.015	8.967	0.015		0.480	0.100	G	0.53	0.05	L	9.0285	0.0019	0.027	186		8.98	9.07		D	22417−6316	I 1	1	S						
112049	10.632	0.035	9.502	0.022		0.972	0.032	T	0.96	0.03	L	9.5543	0.0024	0.022	121		9.52	9.59					1							
112050	10.129	0.026	8.109	0.010		1.673	0.022	T	1.70	0.02	L	7.9962	0.0022	0.022	91		7.96	8.06		U 2			1							S
112051	4.790	0.002	4.796	0.002		−0.013	0.002	G	0.02	0.03	C	4.8053	0.0004	0.005	211		4.80	4.82					1 G							S
112052	9.769	0.023	9.031	0.019		0.661	0.023	T	0.72	0.02	L	9.0912	0.0020	0.018	82		9.06	9.13					1 G							
112053	10.056	0.033	9.567	0.033		0.472	0.036	T	0.54	0.04	L	9.6101	0.0026	0.019	65		9.58	9.64		C			1							
112055	10.473	0.039	10.282	0.051		0.139	0.002	G	0.15	0.00	H	10.3223	0.0036	0.027	111		10.27	10.38					1	S						G
112056	10.151	0.031	8.835	0.018		1.118	0.028	T	1.08	0.03	L	8.8907	0.0021	0.017	88		8.85	8.92		C			1							
112057	11.370	0.075	9.946	0.036		1.219	0.069	T	4.29	0.11	O	9.1096	0.0212	0.171	91		8.90	9.36		U 2 C			1	S						P
112058	7.513	0.008	7.465	0.010		0.049	0.012	T	0.06	0.01	L	7.4685	0.0023	0.020	93		7.44	7.66		U 2 C			1							S P
112059	9.895	0.020	9.277	0.019		0.572	0.020	T	0.64	0.02	L	9.3521	0.0020	0.019	99		9.32	9.38					1							
112060	9.689	0.021	9.276	0.022		0.390	0.028	T	0.46	0.03	L	9.3290	0.0034	0.024	82		9.29	9.39					1							
112061	10.388	0.027	9.123	0.016		1.078	0.025	T	1.04	0.02	L	9.1499	0.0022	0.020	123		9.11	9.18		C			1							
112062	9.443	0.019	8.996	0.019		0.435	0.021	T	0.50	0.02	L	9.0467	0.0016	0.014	103		9.02	9.07					1							S
112063	9.068	0.015	8.370	0.013	A	0.629	0.015	G	0.70	0.01	H *	8.3332	0.0017	0.013	90	*	8.31	8.35		D	22419+2126	I 1	2 C	A	AB	64	1.183	0.004	1.00	0.02	S
112064	12.014	0.123	10.586	0.054		1.121	0.007	G	1.21	0.01	I	10.6392	0.0033	0.038	132		10.58	10.69					1	S						G
112065	8.983	0.014	7.881	0.009		0.951	0.013	T	0.94	0.01	L	7.9376	0.0013	0.013	109		7.92	7.96					1							S
112066	10.322	0.025	8.661	0.012		1.389	0.022	T	1.36	0.03	L	8.6609	0.0015	0.017	152		8.63	8.69					1							
112067	7.339	0.006	6.044	0.004		1.114	0.003	G	1.08	0.00	H	6.0867	0.0010	0.009	89		6.07	6.11					1							S
112068	8.900	0.015	8.254	0.013	*	0.600	0.017	T	0.67	0.01	L *	8.2804	0.0023	0.033	93	*	8.25	8.35		U 2	22420+1513	I 1	2 C	A	AB	327	0.219	0.008	1.30	0.15	S
112069											T	10.9837	0.0035	0.042	94		10.92	11.05					1	S						G
112070	11.178	0.058	9.458	0.022		1.485	0.020	G	1.50	0.03	I	9.4327	0.0084	0.069	97		9.35	9.54		U 2			1							
112071	8.580	0.011	8.245	0.012		0.328	0.015	G	0.38	0.02	H	8.3029	0.0017	0.013	77		8.28	8.33		C			1							S
112072	9.872	0.019	9.439	0.020		0.423	0.022	T	0.49	0.02	L	9.5092	0.0022	0.028	136		9.47	9.56		C			1 G							
112073						1.326	0.020	G	1.39	0.14	K	12.1044	0.0066	0.070	82		11.99	12.22					1	S						G
112074	11.167	0.058	9.968	0.032		1.026	0.052	T	1.00	0.04	L	10.0416	0.0028	0.025	91		10.01	10.08		C			1							
112075	8.489	0.012	7.250	0.007		1.057	0.011	T	1.02	0.01	L	7.2958	0.0009	0.008	95		7.28	7.31		C			1							S
112076	10.874	0.057	9.566	0.030	*	1.111	0.050	T	1.07	0.05	L *	9.6103	0.0032	0.020	77	*	9.57	9.65		D	22421+2013	H 1	2 C	B	AB	91	0.619	0.050	2.63	0.24	
112077	10.734	0.038	9.368	0.020		1.157	0.034	T	1.12	0.03	L	9.4309	0.0020	0.019	126		9.40	9.46		C			1							
112078	8.443	0.019	6.662	0.019	*	1.569	0.082	G	1.50	0.16	L *	6.4037	0.0060	0.128	61	*	6.30	6.64		U 2	22421−0507	I 1	2 C	S A	AD	354	0.135	0.008	0.32	0.26	S
112079	7.208	0.005	7.168	0.007		0.042	0.008	T	0.06	0.01	L	7.1958	0.0012	0.010	78		7.18	7.21					1							S
112080	9.378	0.014	7.988	0.008		1.176	0.013	T	1.14	0.01	L	8.0215	0.0016	0.015	149		7.99	8.05					1							S
112081	10.400	0.032	8.946	0.017		1.226	0.028	T	1.18	0.03	L	8.9776	0.0020	0.019	106		8.94	9.01					1							
112082	8.040	0.010	7.578	0.008		0.448	0.015	G	0.52	0.02	H	7.6368	0.0013	0.008	87		7.62	7.65		C			1							S
112083	10.232	0.027	9.431	0.022	*	0.709	0.027	T	0.76	0.02	L *	9.3750	0.0021	0.015	99	*	9.35	9.41		D	22421−3709	I 1	2 C	A	AB	275	0.937	0.006	0.80	0.03	
112084	9.810	0.018	8.870	0.014		0.830	0.017	T	0.85	0.01	L	8.9290	0.0020	0.019	124		8.90	8.96					1							
112085	10.067	0.021	8.835	0.013		1.052	0.019	T	1.02	0.02	L	8.8919	0.0015	0.023	150		8.85	8.94		D			1							
112086	8.570	0.010	8.400	0.011		0.150	0.015	G	0.17	0.01	H	8.4438	0.0013	0.011	113		8.41	8.46					1							
112087	8.862	0.013	7.797	0.010		0.923	0.012	T	0.92	0.01	L	7.8560	0.0020	0.016	70		7.83	7.90					1							S
112088	11.146	0.059	8.994	0.018		1.779	0.049	T	1.81	0.05	L	8.7907	0.0049	0.043	114		8.74	8.86	132.90	P 1 A			1	S						
112089	9.204	0.014	8.824	0.015		0.360	0.019	T	0.42	0.02	L	8.8757	0.0037	0.028	114		8.84	8.93		U			1							
112090	10.441	0.034	8.957	0.017		1.249	0.030	T	1.21	0.03	L	9.0010	0.0022	0.019	86		8.95	9.03		C			1							
112091	9.038	0.013	8.084	0.010		0.840	0.012	T	0.86	0.01	L	8.1424	0.0013	0.012	108		8.12	8.16		C			1							S
112092	10.877	0.046	9.151	0.020		1.440	0.040	T	1.44	0.06	L	9.1386	0.0024	0.025	141		9.10	9.18		R			1	S						
112093	8.225	0.008	8.212	0.010		0.017	0.012	T	0.04	0.01	L	8.2295	0.0011	0.010	121		8.21	8.25					1							
112094	8.984	0.011	8.856	0.013		0.116	0.016	T	0.13	0.02	L	8.8980	0.0020	0.020	147		8.86	8.94					1							
112095	10.920	0.071	9.614	0.037		1.031	0.003	G	1.08	0.00	I	9.6915	0.0025	0.020	50		9.65	9.73		C			1							
112096	9.802	0.022	7.882	0.009		1.594	0.019	T	1.61	0.02	L	7.7926	0.0040	0.026	98		7.76	7.84		U 2			1							S
112097	8.259	0.008	8.192	0.009		0.067	0.011	T	0.08	0.01	L	8.2028	0.0013	0.015	166		8.18	8.23		C			1							S
112098	8.278	0.010	6.307	0.004		1.634	0.009	T	1.66	0.01	L	6.2530	0.0009	0.009	140		6.24	6.27					1							S
112099	7.628	0.006	7.398	0.008		0.219	0.009	T	0.24	0.01	L	7.4358	0.0012	0.012	114		7.41	7.45					1							S
112100	9.475	0.023	8.813	0.021		0.614	0.026	T	0.68	0.02	L	8.8715	0.0020	0.016	60		8.85	8.90		C			1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA		Dec	V		α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s		±° ′ ″	mag		deg		deg	mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3		4	5	6 7	8		9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
112101	22 42 21.99		−30 41 10.8	9.26	G	340.591 644 81		−30.686 335 23	11.35	166.77	−91.37	1.35	0.88	1.40	1.66	1.07	+ 4	+ 3	− 3	−34	+20	− 2	+19	−33	+13	+17	0	2.44
112102	22 42 22.08		−29 21 39.6	6.12	2 H	340.591 984 18		−29.360 999 24	5.37	16.24	−19.19	0.72	0.45	0.78	0.76	0.50	+ 9	+ 6	−11	−27	+ 3	+ 8	+ 5	−19	+22	+12	2	−0.44
112103	22 42 23.80		+00 46 13.8	8.51	G	340.599 169 48		+00.770 502 53	2.76	16.40	−19.49	1.05	0.74	1.16	1.45	0.86	+19	− 8	−13	−20	+12	+19	+10	−26	+18	−10	4	−0.20
112104 H	22 42 23.95		−00 47 29.9	9.36	H	340.599 793 73		−00.791 631 99 *	2.52	13.04	0.14	1.38	1.02	1.51	1.58	1.22	+18	+ 5	− 4	−24	+12	+28	+16	−16	+11	+16	0	−0.51
112105 H	22 42 24.03		+54 14 54.2	7.53	H	340.600 114 76		+54.248 396 65 A	5.52	12.76	−0.59	0.64	0.67	0.77	0.68	0.73	− 6	+ 9	+11	− 2	+ 7	+17	+ 6	−17	+ 5	+ 7	1	1.00
112106	22 42 25.02		−30 39 00.2	8.59	H	340.604 234 44		−30.650 042 28	4.17	−24.90	1.37	1.16	0.74	1.29	1.41	0.87	+ 5	+ 6	−22	−35	+ 7	− 7	+ 6	−37	+22	+10	0	1.04
112107	22 42 25.92		+45 31 00.9	10.00	H	340.608 003 56		+45.516 918 69	2.89	15.20	−2.41	0.89	0.96	1.56	1.00	1.07	−24	+21	−17	− 2	+27	−22	+29	−12	+22	− 5	1	1.59
112108	22 42 26.55		+58 31 33.2	7.94	H	340.610 635 48		+58.525 892 45	1.79	16.43	−1.91	0.66	0.57	0.76	0.78	0.62	−15	+19	+ 9	+21	−12	−13	− 4	− 9	+ 2	+ 1	0	0.94
112109	22 42 30.97		−09 55 07.9	8.68	H	340.629 022 96		−09.918 863 10	2.98	34.00	−10.72	1.19	0.77	1.30	1.56	1.00	+21	+18	− 9	+ 6	+15	+11	+17	− 8	+11	+17	0	0.31
112110 H	22 42 31.89		+02 54 08.2	9.16	G	340.632 871 53		+02.902 284 42 A	4.54	−16.06	−8.43	1.97	1.32	2.03	2.29	1.55	+17	+15	+ 7	+ 6	+11	+28	+10	−18	+28	+14	0	−0.28
112111	22 42 32.26		−12 33 34.9	7.44	H	340.634 397 54		−12.559 691 34	4.35	−30.59	−8.23	0.97	0.57	0.91	1.81	0.75	− 9	+ 8	−25	−33	+28	−12	+22	−40	+15	−46	0	0.77
112112	22 42 34.66		−36 30 10.0	10.60	H	340.644 406 85		−36.502 785 82	3.26	20.94	12.93	1.31	1.00	1.78	1.62	1.26	+19	+ 5	−17	+10	− 3	+34	+ 6	− 5	+24	+43	2	2.48
112113	22 42 34.99		−73 14 30.0	8.10	G	340.645 771 51		−73.241 663 97	20.40	157.61	−279.58	0.67	0.61	0.83	0.80	0.63	+ 2	− 2	−29	+23	+ 9	−12	+ 9	+ 0	− 8	+16	1	0.04
112114	22 42 35.98		+74 19 52.4	7.84	G	340.649 923 71		+74.331 216 27	15.20	83.17	−19.56	0.63	0.59	0.70	0.81	0.75	− 5	− 6	+10	+ 3	−20	+11	−21	− 2	+ 9	+ 7	1	0.59
112115	22 42 35.99		−02 02 41.6	8.80	H	340.649 948 87		−02.044 892 91	6.46	−28.72	−6.15	1.39	0.84	1.52	1.81	1.16	− 7	+30	−20	−36	+18	−17	+26	−45	+57	−35	0	1.08
112116	22 42 36.44		+18 46 41.7	8.24	H	340.651 819 34		+18.778 243 78	2.73	−27.17	−7.25	0.90	0.67	1.08	1.01	0.85	+12	+12	− 7	+ 4	− 1	+11	− 1	−20	+12	+ 6	0	2.10
112117	22 42 36.88		−47 12 36.0	5.99	G	340.653 655 18		−47.210 007 78	42.47	6.15	−331.43	0.57	0.45	0.72	0.63	0.51	+19	−17	−23	+ 5	+ 0	+25	+ 6	− 7	+12	+35	0	0.90
112118	22 42 37.26		+05 42 09.1	8.97	H	340.655 262 66		+05.702 537 73	3.17	46.97	−7.98	1.14	0.88	1.37	1.72	1.24	+27	+15	− 5	−39	+ 6	−20	+ 7	−38	+26	−10	4	0.42
112119	22 42 37.81		−20 56 43.8	8.56	H	340.657 546 73		−20.945 490 00	3.75	9.88	−17.01	1.03	0.69	1.21	1.35	0.79	+25	− 3	−15	+ 0	+11	+12	+ 9	−18	+25	+20	4	−0.27
112120	22 42 38.08		+17 40 04.7	11.78	G	340.658 656 88		+17.667 983 81	47.13	1106.85	514.80	2.42	1.80	2.96	2.56	2.40	+19	− 2	+ 0	+19	− 1	−15	− 1	−10	+ 3	+20	0	−0.68
112121	22 42 39.11		+14 02 00.7	7.88	G	340.662 971 03		+14.033 522 04	6.88	−6.88	−41.11	0.86	0.65	1.07	1.17	0.97	+19	−11	−18	+ 3	+ 5	− 4	+ 0	−19	+20	+ 4	0	0.29
112122	22 42 39.93		−46 53 04.4	2.07	2 H	340.666 395 31		−46.884 565 94	19.17	135.68	−4.51	0.58	0.49	0.75	0.64	0.53	+29	−25	−30	+ 6	− 8	+27	+ 0	−12	+13	+38	0	0.21
112123	22 42 41.88		−43 11 00.5	9.13	H	340.674 518 69		−43.183 483 48	14.00	89.49	−11.92	1.13	0.94	1.44	1.28	1.06	+ 1	− 3	−23	+ 0	+ 3	+22	+ 9	− 7	+ 7	+ 7	0	0.02
112124	22 42 41.97		−35 48 21.5	9.22	H	340.674 861 07		−35.805 974 56	9.51	101.50	5.31	1.09	0.77	1.35	1.34	0.87	+26	− 7	−16	+43	+10	+ 5	+11	+19	+14	+29	0	−1.07
112125	22 42 42.58		+00 04 15.8	7.19	G	340.677 435 99		+00.071 058 47	5.83	−23.59	−21.11	0.81	0.56	0.89	0.97	0.65	+21	−13	− 3	+21	+ 2	+ 6	− 9	−15	+28	+ 1	0	1.96
112126	22 42 42.93		+50 08 29.4	8.01	H	340.678 875 89		+50.141 501 32	5.20	− 9.15	−13.94	0.56	0.59	0.81	0.58	0.60	−26	+11	− 9	+ 3	+14	− 2	+25	−35	+30	+ 0	1	−2.47
112127	22 42 43.05		−44 14 53.2	6.06	G	340.679 391 48		−44.248 122 16	10.19	33.74	35.43	0.65	0.48	0.82	0.90	0.55	+15	−11	−20	+29	− 7	+26	+ 5	−13	+17	+36	2	2.91
112128	22 42 43.56		−35 20 48.0	8.91	H	340.681 512 56		−35.346 657 21	7.74	58.95	4.79	0.85	0.68	1.11	0.96	0.79	+24	+ 3	− 1	+23	+14	+22	+14	+23	+11	+33	0	0.60
112129	22 42 45.92		−37 20 43.7	7.93	H	340.691 351 20		−37.345 464 84	6.29	3.55	−29.59	0.76	0.61	1.04	0.85	0.71	+24	−16	−31	− 8	−16	+31	−10	− 7	+16	+38	0	0.61
112130	22 42 46.08		+51 02 37.0	8.80	H	340.692 007 20		+51.043 602 13	3.36	8.32	−3.64	0.68	0.67	0.94	0.66	0.72	−14	+12	+ 0	− 3	+10	−12	+17	−24	+30	− 2	0	−0.60
112131	22 42 49.18		+00 13 54.6	6.97	1 G	340.704 907 62		+00.231 842 22	6.61	23.95	−2.15	0.79	0.54	0.87	0.96	0.63	+18	− 2	− 2	+13	+ 3	+ 3	− 3	−13	+29	− 3	0	0.60
112132	22 42 49.63		+29 43 42.7	9.02	H	340.706 773 49		+29.728 536 50	−0.06	4.01	−5.00	0.74	0.83	1.19	0.85	1.00	+43	+19	+14	−17	− 8	+ 1	− 8	−18	+ 1	+48	0	−1.37
112133	22 42 51.28		+50 46 25.9	8.47	G	340.713 665 81		+50.773 865 52	2.59	2.72	−15.13	0.58	0.58	0.79	0.61	0.66	−18	+ 7	− 1	+ 6	+11	− 8	+17	−18	+23	− 1	0	1.37
112134	22 42 51.90		+54 45 26.6	7.37	H	340.716 257 24		+54.757 383 22	3.34	12.37	9.05	0.50	0.50	0.62	0.61	0.58	−22	− 7	+11	−12	+15	+ 3	+16	−32	+ 2	−13	0	−1.85
112135	22 42 51.99		−04 59 54.0	10.60	G	340.716 638 34		−04.998 326 19	24.85	15.22	−357.25	1.99	1.78	2.52	2.74	2.52	+36	−23	−37	−18	−27	+46	−18	−58	+37	+43	0	0.25
112136	22 42 52.20		−27 53 12.3	8.27	H	340.717 492 57		−27.886 744 16	8.81	72.52	−61.08	0.98	0.69	1.18	1.41	0.82	+ 5	+11	− 5	−29	+15	+19	+14	−39	+27	−13	0	−2.04
112137	22 42 52.94		−25 40 52.9	9.55	H	340.720 602 14		−25.681 348 33	10.06	123.80	−36.62	1.16	0.77	1.27	1.31	0.90	+11	+ 8	− 4	−31	+ 7	+ 9	+ 8	−29	+ 0	+12	0	1.00
112138	22 42 52.98		+04 58 07.5	6.78	H	340.720 763 58		+04.968 762 50	3.63	28.49	11.51	0.75	0.64	0.98	1.07	0.87	+46	+ 6	+ 5	−20	+ 5	+ 6	− 1	−34	+22	+12	0	−0.93
112139 H	22 42 53.81		−04 41 39.3	9.06	H	340.724 209 60		−04.694 256 66 A	7.88	−33.37	9.19	2.37	2.06	2.56	2.94	2.49	+36	−20	−40	+ 0	+ 3	+ 3	−18	−61	+41	+ 4	0	−0.22
112140	22 42 54.16		+37 26 50.4	7.27	H	340.725 667 41		+37.447 321 18	9.87	30.72	−5.70	0.60	0.56	0.83	0.83	0.70	+17	+14	+12	−15	−18	− 4	−13	−28	+11	+25	0	−0.05
112141	22 42 55.05		+58 25 35.6	8.08	H	340.729 364 15		+58.426 544 03	3.15	14.68	2.13	0.65	0.55	0.75	0.74	0.61	−16	+23	+10	+10	− 8	−16	− 1	− 9	+ 7	− 4	1	−0.07
112142	22 42 55.11		+48 02 24.5	9.63	H	340.729 625 91		+48.040 139 85	2.95	0.27	−0.72	0.81	0.81	1.21	0.89	0.93	+ 7	+ 7	− 5	−21	− 4	+ 7	− 1	−28	+22	+22	0	2.36
112143	22 42 55.20		+12 20 00.0	11.53	H	340.729 982 41		+12.333 330 27	18.03	−132.39	−133.63	2.72	2.37	3.65	3.54	3.01	+26	+18	−27	−22	− 9	+11	− 3	−46	+36	+17	0	1.64
112144	22 42 55.45		+37 48 09.9	6.43	H	340.731 031 52		+37.802 747 48	2.71	−1.12	−5.30	0.66	0.51	0.79	0.95	0.61	+ 9	+14	+12	−17	−18	−20	−10	−33	+ 8	+21	0	0.58
112145	22 42 55.70		−72 08 20.2	9.62	H	340.732 090 49		−72.138 957 44	4.02	−39.63	−5.88	0.88	1.04	1.30	1.10	0.95	−18	+11	−40	+ 2	+11	−15	+ 5	−19	+13	−21	1	0.13
112146	22 42 56.55		−85 30 35.9	7.88	H	340.735 614 05		−85.509 960 88	2.30	7.05	−9.67	0.54	0.56	0.68	0.67	0.61	+ 5	+ 0	− 6	+14	+ 8	+ 5	+ 6	− 4	− 5	+ 1	0	1.69
112147	22 42 56.58		+07 46 27.3	8.94	H	340.735 743 36		+07.774 259 21	8.08	39.25	−7.05	1.12	1.01	1.60	1.57	1.50	+33	+21	−24	+ 0	−32	+48	−12	−58	+42	+53	0	0.45
112148 H	22 42 57.31		+44 43 18.3	8.75	1 G	340.738 774 44		+44.721 746 53 A	3.90	−2.82	−3.16	0.93	1.00	1.34	0.88	0.92	−27	+ 2	+10	−18	+16	− 2	+18	−25	+ 2	−11	2	0.64
112149	22 42 57.66		−02 40 57.2	8.25	H	340.740 256 42		−02.682 548 39	4.67	17.64	6.45	1.07	0.69	1.24	1.64	0.89	+ 2	+11	− 8	−10	+12	+35	+12	−37	+35	−11	0	0.24
112150	22 42 57.75		+47 08 08.7	9.87	H	340.740 622 87		+47.135 737 32	4.06	17.42	1.23	0.93	0.97	1.35	0.95	0.97	−17	+15	+ 5	+ 5	+17	− 1	+23	−29	+ 7	+ 2	2	−0.14
112151	22 42 57.87		+00 24 08.2	7.73	H	340.741 128 45		+00.402 269 30	11.30	146.54	−161.09	0.87	0.57	0.93	1.07	0.67	+13	− 5	+ 2	− 2	+ 4	+ 9	− 3	−23	+26	− 9	0	1.22
112152	22 42 57.96		+27 59 19.1	7.33	H	340.741 494 42		+27.988 651 96	5.38	11.90	−10.32	0.50	0.46	0.76	0.46	0.52	+23	+22	+12	− 5	+13	−11	+20	− 7	+ 6	+45	0	−0.75
112153 H	22 42 58.09		+01 13 02.6	6.93	H	340.742 060 64		+01.217 383 69 A	6.26	−10.01	−16.48	1.12	0.84	1.17	1.32	0.89	+26	+ 1	− 4	+12	+12	+18	+10	− 2	+24	+14	4	2.06
112154	22 42 58.73		−30 16 55.8	8.63	H	340.744 726 47		−30.282 165 32	0.53	−19.30	−13.86	1.33	0.72	1.27	1.55	0.87	+ 0	+22	−15	−39	+10	−15	+ 9	−24	+11	+17	0	0.22
112155	22 42 58.94		+28 09 25.7	8.86	2 H	340.745 568 52		+28.157 134 27	3.66	43.59	−7.82	0.66	0.70	1.15	0.73	0.86	+33	+ 4	+ 4	+ 0	+22	+10	+23	+ 7	+20	+56	0	−0.81
112156	22 42 59.78		−09 09 15.6	8.47	H	340.749 083 81		−09.154 345 54	2.68	−12.18	−36.26	1.18	0.69	1.18	1.77	0.92	+11	− 2	− 6	+13	+21	− 4	+15	−14	+17	− 2	0	1.65
112157	22 43 00.01		−62 03 56.9	8.59	H	340.750 045 50		−62.065 803 66	0.50	36.29	−20.22	0.61	0.61	0.99	0.70	0.66	−22	− 3	−14	−10	+ 7	+ 8	+ 7	− 6	+ 2	− 3	0	0.40
112158	22 43 00.13		+30 13 16.7	2.93	H	340.750 535 73		+30.221 308 66 +	15.18	13.11	−26.11	0.56	0.64	0.79	0.57	0.59	+45	+29	+39	+ 7	−14	−16	−11	−16	− 5	+29	0	−0.78
112159	22 43 00.16		−38 46 37.7	10.02	H	340.750 684 92		−38.777 132 06	5.70	21.21	21.26	1.17	1.02	1.69	1.47	1.20	+32	− 9	−21	+21	− 7	+29	+ 2	− 7	+19	+47	0	0.36
112160	22 43 00.63		−51 20 44.9	9.50	H	340.752 631 03		−51.345 801 69	4.48	7.58	−36.71	1.14	1.12	1.88	1.25	1.10	+ 5	−14	−37	−27	− 9	+18	− 6	−32	+30	+ 5	0	0.02
112161	22 43 01.22		−10 06 09.8	7.04	H	340.755 091 73		−10.102 710 78	7.08	−11.27	10.08	0.83	0.54	0.89	1.10	0.67	+19	+ 9	−11	+ 8	+14	+12	+15	− 2	+ 4	+14	0	−1.58
112162	22 43 01.68		−21 39 27.1	7.14	H	340.757 002 87		−21.657 518 22	5.58	17.09	6.97	0.79	0.53	0.91	0.93	0.61	+17	− 2	+ 0	−27	+15	+13	+13	−24	+28	+14	0	0.40
112163	22 43 01.71		+14 45 33.4	8.14	G	340.757 121 10		+14.759 288 82	16.07	45.78	12.31	0.93	0.62	1.07	1.23	0.91	+11	−15	−13	+ 8	+ 0	− 4	− 8	−21	+27	− 3	0	0.47
112164	22 43 02.22		−47 44 51.7	8.81	H	340.759 253 75		−47.747 707 01	6.16	37.93	−17.78	1.11	0.78	1.29	1.26	0.85	+ 6	−13	−21	+ 2	+ 6	+29	+16	− 3	− 7	+20	0	0.19
112165	22 43 02.78		+81 53 46.2	7.57	H	340.761 577 46		+81.896 170 65	3.48	−2.52	−15.84	0.51	0.52	0.60	0.54	0.52	− 2	− 4	+16	+ 5	− 3	+ 9	− 5	− 8	+11	− 6	0	0.90
112166	22 43 02.90		+16 30 15.3	9.97	H	340.762 065 51		+16.504 248 74	0.00	−10.30	−7.33	1.19	0.95	1.51	1.17	1.18	+13	+36	−11	−11	+ 7	− 2	+14	−16	+18	+22	0	−0.38
112167	22 43 03.35		+38 46 07.1	8.68	G	340.763 962 22		+38.768 647 57	1.80	0.67	−4.97	0.94	0.73	1.13	1.03	0.92	− 7	+26	− 8	+41	−11	+ 3	+ 4	−30	+21	+11	0	2.37
112168 H	22 43 03.40		−08 18 41.2	6.45	G	340.764 184 47		−08.311 431 05 A	5.28	17.25	−3.96	1.69	1.24	1.75	1.72	1.52	−11	+11	−22	− 3	− 8	−14	+ 4	−41	+39	+32	1	0.76
*112169	22 43 04.37		+65 20 10.5	6.76	H	340.768 208 74		+65.336 255 95	2.92	6.65	−0.83	0.50	0.46	0.58	0.73	0.51	−14	−16	+22	− 2	+10	+19	+ 5	− 3	− 2	−10	1	0.47
*112170 H	22 43 04.32		+47 10 07.5	6.39	H	340.767 988 25		+47.168 761 37 B	0.88	2.26	−2.69	1.08	1.05	1.21	0.87	0.83	−17	+ 4	+ 5	+ 8	+16	− 1	+17	−16	+17	−12	3	1.20
112171	22 43 04.41		−37 40 13.8	7.91	H	340.768 375 27		−37.670 505 42	4.04	91.71	−10.07	0.77	0.68	1.13	0.87	0.74	+28	−14	−38	+ 4	−15	+29	− 6	− 3	+13	+39	0	−1.59
112172	22 43 04.86		+83 16 14.5	7.57	H	340.770 264 59		+83.270 690 10	2.75	8.98	5.71	0.51	0.48	0.56	0.63	0.52	−10	−11	+20	+ 7	− 7	+10	− 9	+ 7	+ 0	−16	1	−0.89
112173	22 43 05.22		+35 19 48.0	8.34	H	340.771 733 25		+35.329 992 78	1.74	2.51	−11.29	0.66	0.59	0.99	0.76	0.75	+ 1	+19	+14	+11	+ 7	−18	+15	−12	− 1	+15	0	0.51
112174	22 43 06.11		+23 01 57.5	7.89	H	340.775 441 43		+23.032 632 75	3.83	−15.39	−27.40	0.79	0.59	0.92	0.86	0.69	+ 1	+12	+ 9	−25	+ 0	−13	+ 2	−15	+ 9	+ 1	0	0.93
112175	22 43 07.17		+36 57 58.6	9.25	G	340.779 864 55		+36.966 276 38	1.73	−2.34	−5.73	0.86	0.87	1.30	1.10	0.98	+14	+ 9	+26	− 9	−11	+ 5	−11	−33	− 2	+18	2	0.95
112176	22 43 10.94		−28 09 04.7	8.13	H	340.795 596 99		−28.151 314 86	8.90	128.94	26.24	0.97	0.64	1.03	1.11	0.73	+ 0	+19	− 4	−38	+15	+14	+19	−38	+20	− 7	0	−0.94
112177	22 43 12.89		+45 31 42.7	8.15	H	340.803 716 62		+45.528 516 47	2.81	5.78	0.03	0.56	0.62	0.94	0.61	0.63	−30	+21	− 6	−15	+26	−18	+28	−20	+18	−13	1	0.10
112178	22 43 12.92		−07 12 54.2	7.66	H	340.803 825 20		−07.215 054 91	5.08	29.20	0.68	1.00	0.82	1.20	1.33	1.17	+39	−23	−38	+ 7	−30	+33	−24	−51	+38	+48	0	−0.62
112179	22 43 14.25		−06 57 46.5	6.40	G	340.809 364 58		−06.962 912 46	8.87	26.27	−10.08	0.91	0.72	1.02	1.08	0.92	+42	−32	−42	+ 7	−28	+20	−29	−54	+29	+40	0	0.22
112180	22 43 14.53		−17 50 43.0	8.84	1 H	340.810 556 98		−17.845 279 95	1.14	10.64	−10.25	1.34	0.85	1.47	1.81	1.11	+25	+ 7	− 8	+17	−13	+ 1	−12	−45	+25	+22	0	−0.60
112181	22 43 15.08		−25 40 00.0	8.14	G	340.812 848 56		−25.666 668 57	12.31	−89.62	−46.87	0.86	0.61	1.04	1.02	0.71	+25	− 1	− 4	−15	+ 4	+10	+ 4	−22	+12	+28	0	0.69
112182	22 43 15.22		+43 46 25.3	10.50	H	340.813 403 09		+43.773 698 54	3.77	− 1.02	− 5.11	1.09	1.15	1.64	1.19	1.13	−35	+ 5	+ 2	+ 8	+16	− 4	+22	−28	− 7	−14	0	0.50
112183	22 43 15.39		+56 24 29.7	6.91	H	340.814 136 38		+56.408 237 73	13.85	96.96	39.15	0.51	0.50	0.66	0.69	0.57	−24	−14	+20	+11	+ 2	+25	− 4	− 9	+ 7	−20	0	−0.38
112184	22 43 16.76		+16 16 39.4	8.75	H	340.819 825 17		+16.277 601 19	2.83	− 1.39	−20.04	0.92	0.72	1.13	0.92	0.94	+21	+32	+ 3	+12	− 7	+ 5	+ 1	−21	+17	+32	0	−0.67
112185	22 43 16.93		−40 00 32.6	7.76	H	340.820 532 60		−40.009 046 19	1.33	36.40	−39.56	0.73	0.61	0.97	0.84	0.70	+ 9	−19	− 3	+20	− 1	− 2	+ 0	− 1	+ 0	+12	0	0.60
112186	22 43 17.68		−41 32 36.3	8.27	H	340.823 655 33		−41.543 409 94	2.26	23.60	−7.69	0.82	0.61	0.99	0.98	0.70	+ 6	− 7	− 7	− 4	+ 8	+18	+ 8	−19	+ 1	+ 0	0	0.13
112187	22 43 18.29		+17 15 05.0	7.92	G	340.826 227 33		+17.251 382 19	10.26	47.36	−27.80	0.81	0.64	1.07	0.81	0.88	+23	+ 6	−12	+11	− 7	− 6	− 6	−26	+30	+25	0	0.36
112188	22 43 19.78		+47 14 30.4	10.58	H	340.832 436 16		+47.241 765 29	−0.02	− 2.77	− 3.09	1.12	1.11	1.66	1.14	1.12	−21	+10	+ 9	+10	+17	− 9	+24	−20	+13	− 4	1	0.96
112189	22 43 20.61		−78 09 53.6	9.10	H	340.835 866 34		−78.164 891 69	1.27	25.89	−4.85	0.84	0.80	1.05	1.14	0.78	−13	+ 3	−34	+19	−10	+21	− 1	− 8	+13	− 5	2	−1.45
112190	22 43 21.39		−06 24 00.4	8.11	G	340.839 138 63		−06.400 115 87	46.46	−154.73	−290.19	1.10	0.95	1.31	1.71	1.33	+34	−13	−40	+14	−22	+19	−23	−44	+34	+29	0	0.92
112191	22 43 22.00		+26 05 50.8	10.74	H	340.841 683 92		+26.097 443 67	4.95	56.29	16.33	1.20	1.13	1.86	1.53	1.58	+24	+ 9	+23	+42	− 8	− 8	−15	−18	−15	+12	0	−0.64
112192	22 43 22.34		−15 53 48.5	8.73	H	340.843 078 32		−15.896 814 40	4.79	17.69	3.31	0.95	0.65	1.19	1.06	0.79	+20	+19	−18	+ 5	−12	+31	+ 1	−22	+41	+30	0	0.20
112193	22 43 23.78		−47 58 10.7	10.21	G	340.849 075 73		−47.969 630 65	2.87	−50.53	− 7.85	1.41	0.99	1.55	1.24	1.15	− 6	−15	− 6	−39	+ 8	+25	+12	−28	− 1	+16	0	0.92
112194	22 43 24.20		+18 21 08.8	8.91	H	340.850 836 71		+18.352 442 32	8.07	22.59	17.21	1.13	0.76	1.34	1.21	1.05	+12	+17	−11	+29	− 2	− 2	− 3	−15	+25	+ 5	0	1.37
112195	22 43 25.06		+44 13 56.5	10.04	H	340.854 429 08		+44.232 373 79	0.99	14.01	− 1.17	0.83	0.99	1.63	0.88	0.97	−40	−12	+18	−26	+17	+12	+16	−27	−15	−18	2	−0.50
*112196	22 43 25.65		−34 29 20.5	8.08	H	340.856 879 24		−34.489 037 72	4.28	21.84	−6.61	0.73	0.59	0.95	0.79	0.67	+20	+ 1	− 4	+13	+10	+20	+11	+16	− 1	+26	0	0.02
*112197	22 43 25.63		+62 40 17.0	6.74	H	340.856 804 01		+62.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
112101	10.043	0.024	9.325	0.021		0.641	0.002	G	0.71	0.00	H	9.3938	0.0021	0.019	102		9.36	9.42				1							
112102	8.133	0.009	6.342	0.005		1.522	0.008	T	2.39	0.03	O	6.1570	0.0035	0.029	102		6.11	6.19		U 2		1 S							S
112103	9.816	0.024	8.619	0.015		1.011	0.002	G	1.02	0.02	A	8.6761	0.0019	0.012	70		8.66	8.71		C		1							
112104	9.946	0.030	9.427	0.028	*	0.487	0.037	T	0.56	0.04	L *	9.4660	0.0037	0.026	74	*	9.41	9.51			22424−0048	I 1	2 C S A	AB	175	0.159	0.008	0.48	0.40	S
112105	7.583	0.008	7.510	0.010	*	0.072	0.012	T	0.08	0.01	L *	7.5606	0.0009	0.010	146	*	7.54	7.58		D	22424+5415	I 1	2 C A	AB	243	5.785	0.017	3.48	0.09	S
112106	9.706	0.018	8.682	0.013		0.892	0.017	T	0.90	0.01	L	8.7519	0.0021	0.014	105		8.72	8.78		C		1							
112107	10.380	0.024	9.998	0.026		0.362	0.033	T	0.42	0.04	L	10.0865	0.0022	0.030	207		10.02	10.15				1							G
112108	8.075	0.010	7.963	0.010		0.109	0.013	T	0.12	0.01	L	7.9849	0.0016	0.014	108		7.96	8.01				1							S
112109	9.077	0.015	8.714	0.016		0.344	0.020	T	0.40	0.03	L	8.7644	0.0018	0.019	68		8.73	8.80				1							S
112110	9.594	0.021	9.194	0.022	*	0.397	0.015	G	0.46	0.02	H *	9.2476	0.0020	0.021	76	*	9.20	9.28		D	22425+0254	H 1	2 C A	AB	87	0.734	0.029	3.03	0.21	
112111	7.369	0.007	7.431	0.009		−0.042	0.002	G	−0.02	0.00	H	7.4301	0.0012	0.009	76		7.42	7.45		C		1							S
112112	11.035	0.051	10.761	0.067		0.402	0.015	G	0.47	0.02	H	10.6967	0.0034	0.024	100		10.65	10.75		C		1							G
112113	9.015	0.012	8.176	0.010		0.735	0.002	G	0.78	0.00	H	8.2428	0.0020	0.016	129		8.22	8.27				1							S
112114	8.358	0.009	7.886	0.008		0.445	0.011	T	0.51	0.01	L	7.9430	0.0011	0.011	116		7.92	7.96		C		1 G							S
112115	10.049	0.030	8.939	0.020		0.957	0.028	T	0.94	0.02	L	8.9650	0.0033	0.017	61		8.92	8.99				1							
112116	9.963	0.027	8.384	0.014		1.324	0.024	T	1.29	0.03	L	8.3955	0.0016	0.012	90		8.37	8.42		C		1							
112117	6.680	0.004	6.061	0.004		0.584	0.003	G	0.66	0.02	A	6.1070	0.0007	0.007	105		6.09	6.13			22426−4713	I 1	1						S
112118	10.539	0.039	9.080	0.018		1.230	0.034	T	1.19	0.03	L	9.1332	0.0023	0.016	87		9.09	9.17		C			1						
112119	10.566	0.037	8.720	0.014		1.535	0.031	T	1.58	0.07	L	8.6753	0.0021	0.014	103		8.65	8.70		C	22426−2057	I 1	1						
112120						1.501	0.038	G	2.08	0.29	I	11.7790	0.0070	0.050	77		11.68	11.85					1						G
112121	8.486	0.012	7.930	0.012		0.531	0.015	G	0.60	0.02	H	7.9938	0.0014	0.011	91		7.97	8.02					1						S
112122	4.143	0.008	2.299	0.010		1.610	0.300	G	2.60	0.02	A	2.0699	0.0143	0.084	73		1.97	2.19		U 2			1 S						S
112123	9.852	0.020	9.209	0.018		0.590	0.020	T	0.66	0.02	L	9.2562	0.0019	0.025	97		9.20	9.31					1						S
112124	10.011	0.022	9.268	0.018		0.665	0.022	T	0.73	0.02	L	9.3516	0.0017	0.016	101		9.31	9.38					1						
112125	7.610	0.008	7.220	0.010		0.376	0.008	G	0.44	0.01	H	7.2690	0.0011	0.010	81		7.26	7.29					1						S
112126	8.221	0.008	8.034	0.009		0.179	0.011	T	0.20	0.01	L	8.0682	0.0011	0.014	154		8.04	8.10					1						S
112127	7.290	0.006	6.179	0.004		0.956	0.037	G	0.96	0.02	A	6.2298	0.0008	0.009	101		6.22	6.24					1						S
112128	9.408	0.015	8.957	0.016		0.439	0.017	T	0.51	0.02	L	9.0135	0.0020	0.017	104		8.99	9.06		C			1						
112129	9.217	0.013	8.044	0.009		1.006	0.012	T	0.98	0.01	L	8.0970	0.0015	0.013	104		8.08	8.12					1						S
112130	8.943	0.011	8.804	0.013		0.130	0.015	G	0.14	0.01	H	8.8457	0.0015	0.019	154		8.81	8.89					1						
112131	7.337	0.007	7.009	0.006		0.313	0.005	G	0.38	0.02	A	7.0520	0.0011	0.011	77		7.03	7.08		M			1						S
112132	11.004	0.054	9.131	0.019		1.556	0.045	T	1.57	0.05	L	9.1353	0.0017	0.022	162		9.10	9.18		C			1						
112133	8.791	0.011	8.518	0.012		0.288	0.015	G	0.33	0.02	H	8.5498	0.0011	0.019	162		8.52	8.58		C			1						
112134	9.257	0.016	7.528	0.008		1.442	0.014	T	1.44	0.02	L	7.5068	0.0012	0.012	144		7.49	7.53					1						S
112135	11.945	0.179	10.691	0.096		1.145	0.007	G	1.24	0.01	I	10.7237	0.0036	0.023	51		10.69	10.76					1						G
112136	9.389	0.016	8.380	0.012		0.881	0.015	T	0.89	0.01	L	8.4305	0.0017	0.015	99		8.41	8.46		C			1						
112137	10.476	0.035	9.616	0.027		0.754	0.034	T	0.80	0.02	L	9.6909	0.0021	0.018	103		9.66	9.72		C			1						
112138	8.865	0.012	6.958	0.005		1.583	0.010	T	1.60	0.01	L	6.8891	0.0014	0.011	108		6.87	6.91					1						S
112139	9.992	0.029	9.148	0.023	*	0.758	0.028	T	0.80	0.02	L *	9.2117	0.0023	0.018	62	*	9.18	9.25		D	22429−0442	I 1	2 C A	AB	296	0.789	0.013	1.82	0.05	S
112140	7.467	0.006	7.291	0.007		0.169	0.009	T	0.18	0.01	L	7.3290	0.0015	0.011	106		7.31	7.35					1						S
112141	8.089	0.009	8.092	0.011		0.002	0.013	T	0.02	0.01	L	8.0894	0.0013	0.011	114		8.07	8.11		C			1						
112142	9.625	0.015	9.639	0.021		−0.008	0.024	T	0.01	0.02	L	9.6397	0.0025	0.026	159		9.60	9.68		C			1						G
112143											T	11.6625	0.0078	0.055	92		11.56	11.75					1 S						G
112144	6.266	0.004	6.405	0.004		−0.119	0.005	T	−0.10	0.01	L	6.3908	0.0010	0.008	105		6.38	6.40					1						S
112145	10.296	0.025	9.685	0.023		0.567	0.025	T	0.64	0.02	L	9.7462	0.0029	0.026	141		9.70	9.78			22429−7208	I 1	1						
112146	9.571	0.015	8.026	0.008		1.297	0.013	T	1.26	0.01	L	8.0338	0.0017	0.017	132		8.01	8.06					1						
112147	9.457	0.018	8.952	0.018		0.475	0.023	T	0.55	0.02	L	9.0420	0.0024	0.016	74		9.01	9.07		C			1						
112148	8.873	0.009	8.811	0.011	A	0.090	0.015	G	0.06	0.01	L *	8.7837	0.0023	0.030	242	*	8.74	8.83		U	22430+4443	I 1	2 C B	AB	101	2.476	0.050	3.52	0.20	
112149	8.199	0.011	8.240	0.014		−0.011	0.014	G	0.01	0.01	H	8.2542	0.0031	0.015	64		8.23	8.29					1						S
112150	10.195	0.021	9.852	0.024		0.325	0.030	T	0.38	0.04	L	9.9492	0.0026	0.033	168		9.89	10.00					1						G
112151	8.830	0.014	7.845	0.010		0.865	0.001	G	0.94	0.02	A	7.8902	0.0011	0.010	72		7.88	7.91		C			1						S
112152	7.241	0.005	7.312	0.008		−0.060	0.009	T	−0.04	0.01	L	7.3140	0.0009	0.010	142		7.30	7.33					1						S
112153	7.191	0.008	6.931	0.009	*	0.248	0.011	T	0.28	0.01	L *	6.9961	0.0015	0.010	79	*	6.98	7.01		D	22430+0113	I 1	2 C A	AB	51	4.517	0.020	2.97	0.07	S
112154	10.277	0.027	8.781	0.014		1.259	0.024	T	1.22	0.03	L	8.7959	0.0017	0.018	98		8.76	8.84					1						
112155	10.369	0.028	8.983	0.015		1.188	0.026	T	4.25	0.05	O	8.1782	0.0133	0.205	173		8.08	8.54		U 2 C			1 S						
112156	10.341	0.043	8.645	0.018		1.416	0.037	T	1.40	0.06	L	8.6132	0.0023	0.014	66		8.59	8.64		C			1						
112157	9.908	0.016	8.697	0.010		1.036	0.015	T	1.01	0.01	L	8.7575	0.0016	0.024	207		8.73	8.80					1						
112158	4.017	0.002	3.036	0.002		0.852	0.008	G	0.87	0.03	C	3.0897	0.0004	0.004	139		3.08	3.10			22430+3014	I 1	1 O						S
112159	10.610	0.037	10.027	0.035		0.546	0.038	T	0.62	0.04	L	10.1355	0.0027	0.023	94		10.09	10.18		C			1						
112160	9.968	0.021	9.573	0.022		0.386	0.026	T	0.45	0.03	L	9.5926	0.0032	0.028	109		9.54	9.66					1						S
112161	8.291	0.011	7.153	0.007		0.979	0.010	T	0.96	0.01	L	7.2042	0.0014	0.011	79		7.19	7.22		C			1						S
112162	8.283	0.010	7.234	0.006		0.911	0.009	T	0.91	0.01	L	7.2972	0.0009	0.011	110		7.28	7.32					1						S
112163	8.767	0.011	8.217	0.010		0.541	0.015	G	0.61	0.02	H	8.2602	0.0014	0.015	101		8.24	8.29					1						S
112164	9.412	0.016	8.852	0.015		0.529	0.016	T	0.60	0.02	L	8.9206	0.0026	0.024	100		8.88	8.96		C			1						S
112165	9.081	0.013	7.697	0.008		1.171	0.012	T	1.13	0.01	L	7.7407	0.0014	0.013	130		7.72	7.77					1						S
112166	11.691	0.097	10.059	0.038		1.366	0.082	T	1.33	0.10	L	10.1186	0.0031	0.025	85		10.06	10.15					1						
112167	8.590	0.010	8.608	0.012		−0.050	0.009	G	−0.03	0.01	H	8.6475	0.0020	0.020	114		8.61	8.68					1						
112168	6.804	0.021	6.653	0.021	A	0.166	0.005	G	0.18	0.01	H *	6.5136	0.0009	0.007	72	*	6.50	6.52		D	22430−0818	I 1	2 C A	AB	307	2.450	0.009	1.17	0.02	S
112169	6.715	0.004	6.761	0.004		−0.025	0.004	G	0.00	0.00	H	6.7647	0.0010	0.009	124		6.75	6.78					1						S
112170	6.941	0.004	6.478	0.004	*	0.450	0.005	T	0.52	0.01	L *	6.4926	0.0008	0.009	168	*	6.48	6.51		D	22431+4710	I 1	2 C A	BA	126	0.496	0.002	0.07	0.01	S D
112171	9.496	0.016	8.040	0.009		1.227	0.014	T	1.19	0.01	L	8.0684	0.0015	0.013	102		8.05	8.10		C			1						S
112172	7.621	0.007	7.584	0.008		0.039	0.010	T	0.05	0.01	L	7.5924	0.0010	0.011	134		7.57	7.62					1						S
112173	8.267	0.009	8.329	0.012		−0.052	0.014	T	−0.03	0.01	L	8.3257	0.0015	0.015	121		8.30	8.36					1						S
112174	9.108	0.015	7.981	0.010		0.970	0.014	T	0.95	0.01	L	8.0497	0.0015	0.012	89		8.02	8.08		C			1						S
112175	9.227	0.016	9.265	0.022		0.020	0.017	G	0.04	0.02	H	9.2642	0.0020	0.015	106		9.23	9.30		C			1						
112176	8.707	0.011	8.180	0.010		0.505	0.015	G	0.58	0.02	H	8.2436	0.0014	0.015	99		8.23	8.27		C			1						S
112177	10.177	0.019	8.315	0.008		1.548	0.016	T	1.61	0.04	L	8.2646	0.0012	0.016	223		8.24	8.29		C			1						
112178	8.902	0.016	7.780	0.011		0.954	0.020	G	0.94	0.01	H	7.8279	0.0012	0.010	63		7.81	7.85					1						S
112179	6.367	0.004	6.406	0.006		−0.039	0.008	G	−0.02	0.01	H	6.4028	0.0009	0.005	61		6.39	6.41		C			1						S
112180	10.633	0.044	8.982	0.019		1.381	0.038	T	1.35	0.05	L	8.9879	0.0039	0.025	76		8.95	9.03		U			1						
112181	8.679	0.011	8.192	0.010		0.461	0.015	G	0.53	0.02	H	8.2378	0.0011	0.010	102		8.22	8.26		C			1						S
112182	10.633	0.028	10.522	0.041		0.108	0.046	T	0.12	0.05	L	10.5373	0.0035	0.047	217		10.45	10.61					1 S						G
112183	7.264	0.006	6.933	0.005		0.314	0.007	T	0.36	0.01	L	6.9866	0.0011	0.009	119		6.97	7.00					1						S
112184	10.097	0.028	8.865	0.017		1.052	0.026	T	1.02	0.02	L	8.9126	0.0020	0.018	93		8.88	8.95		C			1						
112185	9.368	0.017	7.904	0.009		1.234	0.015	T	1.19	0.01	L	7.9174	0.0014	0.013	98		7.89	7.95					1						S
112186	10.234	0.037	8.462	0.016		1.501	0.061	G	1.89	0.02	A	8.3566	0.0023	0.018	101		8.33	8.38					1						S
112187	8.317	0.011	7.973	0.011		0.326	0.015	T	0.38	0.02	L	8.0087	0.0018	0.012	90		7.99	8.03					1						S
112188	10.656	0.031	10.563	0.048		0.091	0.053	T	0.10	0.06	L	10.6110	0.0033	0.038	162		10.54	10.68					1						G
112189	10.986	0.045	9.255	0.018		1.444	0.038	T	1.44	0.06	L	9.2430	0.0024	0.019	123		9.20	9.27					1						
112190	9.358	0.021	8.221	0.014		0.966	0.002	G	1.01	0.00	I	8.2426	0.0015	0.013	57		8.22	8.27		C			1						S
112191	11.249	0.064	10.579	0.054		0.620	0.070	T	0.69	0.06	L	10.8669	0.0029	0.024	107		10.83	10.90					1						G
112192	9.060	0.015	8.773	0.017		0.272	0.024	T	0.31	0.03	L	8.8060	0.0011	0.012	93		8.78	8.83		D			1						S
112193	10.993	0.052	10.269	0.042		0.610	0.020	G	0.68	0.02	H	10.3642	0.0030	0.028	105		10.31	10.42		C			1						
112194	9.780	0.023	8.972	0.019		0.730	0.023	T	0.78	0.02	L	9.0526	0.0018	0.016	77		9.03	9.08		C			1						
112195	10.237	0.019	10.055	0.024		0.174	0.029	T	0.19	0.03	L	10.0965	0.0028	0.040	264		10.03	10.16					1 S						G
112196	9.676	0.019	8.194	0.010		1.248	0.017	T	1.21	0.02	L	8.2387	0.0016	0.011	105		8.21	8.26					1						S
112197	7.895	0.008	6.830	0.005		0.923	0.007	T	0.92	0.01	L	6.8962	0.0008	0.009	120		6.88	6.91		C			1						S
112198	10.837	0.054	8.898	0.019		1.609	0.045	T	1.63	0.05	L	8.8483	0.0027	0.024	110		8.81	8.89					1						
112199	8.787	0.015	8.246	0.015		0.507	0.019	T	0.58	0.02	L	8.3036	0.0017	0.011	73		8.28	8.33		C			1						
112200	10.077	0.028	8.801	0.016		1.086	0.025	T	1.05	0.02	L	8.8545	0.0015	0.012	92		8.83	8.87		C			1						

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
112201	22 43 28.63	−64 48 42.9	8.26	H	340.869 298 77	−64.811 914 81		19.24	126.99	−31.95	0.64	0.66	0.93	0.85	0.76	−12	+ 1	+ 1	+13	− 6	+ 0	− 4	−15	− 5	− 9	0	−1.61
112202	22 43 28.65	+02 05 19.3	9.43	H	340.869 393 05	+02.088 705 99		−0.52	3.73	−9.49	1.21	0.85	1.38	1.66	1.03	+28	− 5	−15	+12	+17	−17	+ 8	−12	+11	+ 2	0	1.86
112203	22 43 29.97	−41 24 50.8	4.84	G	340.874 869 57	−41.414 118 43		14.71	10.23	−93.95	0.62	0.46	0.76	0.69	0.51	+ 1	− 6	−10	− 3	+ 5	+22	+ 8	− 4	−13	− 9	0	−2.24
*112204	22 43 30.21	+25 47 04.0	8.81	H	340.875 877 63	+25.784 434 96		3.91	−3.91	2.23	0.82	0.76	1.21	1.03	0.94	+15	+16	+26	+17	− 6	−15	− 7	− 7	−16	+ 6	2	−0.84
*112205	22 43 30.21	−40 07 43.5	7.54	2 H	340.875 866 75	−40.128 747 65		3.63	31.76	−26.39	0.78	0.59	0.95	0.92	0.65	+ 8	− 8	− 7	+31	− 4	+11	− 6	− 3	+ 6	+ 3	0	−0.92
112206	22 43 31.49	+48 15 19.5	9.09	2 H	340.881 213 43	+48.255 412 96		0.38	0.56	−2.50	0.72	0.76	1.17	0.74	0.82	+ 4	+11	−13	−14	−13	+ 8	− 4	−34	+39	+21	0	−1.08
112207	22 43 32.06	−44 33 59.3	9.49	G	340.883 586 97	−44.566 478 06		1.76	−9.12	−6.13	1.08	0.85	1.47	1.30	0.91	+12	+ 7	−26	+ 5	− 7	+29	+ 2	− 6	+ 3	+31	0	0.36
112208	22 43 32.22	+31 13 38.4	8.85	H	340.884 232 43	+31.227 320 03		5.22	36.06	−14.54	0.69	0.72	1.06	0.73	0.90	+29	+15	+29	+13	−16	−19	−15	−13	+ 3	+19	0	−0.34
112209 H	22 43 32.30	−16 08 15.7	8.47	H	340.884 594 81	−16.137 683 47 A		11.22	86.71	−30.98	2.98	1.91	2.79	2.69	2.00	+24	+12	− 7	+ 6	− 4	+13	+ 0	− 7	+43	+28	0	0.95
112210	22 43 33.13	−19 20 56.8	8.78	H	340.888 031 70	−19.349 115 45		4.56	1.81	−19.46	1.02	0.76	1.22	1.20	0.89	+32	−23	−12	−17	+13	− 1	+12	−27	+ 0	+33	0	−0.06
112211	22 43 35.25	−18 49 49.1	4.68	G	340.896 885 64	−18.830 307 16		6.73	−31.40	−28.02	0.75	0.52	0.85	0.92	0.62	+27	−20	−11	+ 3	+ 7	+ 7	+ 7	−14	+ 7	+30	0	2.18
112212	22 43 35.29	+32 49 19.4	7.27	2 H	340.897 052 32	+32.822 064 82		1.92	−1.00	−3.11	0.52	0.49	0.81	0.68	0.64	+ 6	+ 8	+14	+ 9	+ 0	− 8	+ 2	+ 0	+16	+ 4	0	0.89
112213	22 43 36.69	+40 23 06.4	9.92	H	340.902 879 70	+40.385 109 29		4.63	−2.60	−5.55	1.30	1.02	1.67	1.53	1.43	+ 8	+15	+ 2	+42	+ 1	− 1	+14	−18	+10	+26	3	−0.58
112214 H	22 43 37.93	+42 25 38.7	10.03	H	340.908 043 14	+42.427 424 44 A		4.30	10.21	−0.99	2.10	2.81	2.49	1.45	1.75	+ 1	+12	+14	+35	+ 3	+13	+10	−13	+ 9	+12	1	−0.16
112215	22 43 38.04	+39 39 21.9	9.09	G	340.908 512 57	+39.656 095 77		1.27	0.12	−5.58	1.06	0.89	1.32	1.54	1.25	−17	+19	−26	+38	+ 4	+ 1	+ 6	−15	+12	−15	0	0.53
112216	22 43 38.89	−64 38 57.3	9.83	H	340.912 022 50	−64.649 246 69 B		2.10	12.67	10.66	5.81	6.66	5.67	5.46	6.02	−17	−10	+ 0	+21	+ 8	−13	+ 5	−19	+ 3	−20	16	2.70
112217	22 43 38.89	+44 31 49.9	7.22	H	340.912 043 43	+44.530 520 62		6.56	14.40	−2.03	0.46	0.52	0.81	0.46	0.50	−44	−11	+16	−27	+21	+ 5	+22	−30	− 4	−24	1	−1.47
112218	22 43 39.54	+32 13 43.1	8.28	2 H	340.914 766 00	+32.228 644 81		2.43	1.50	−6.40	0.65	0.61	0.99	0.75	0.76	+10	+14	+19	+28	− 3	−26	+ 5	+ 9	+17	+ 4	0	−0.13
112219	22 43 40.30	+30 05 32.8	7.99	H	340.917 933 17	+30.092 454 00		22.27	239.73	23.50	0.60	0.60	0.97	0.69	0.75	+34	+24	+20	+ 4	− 8	−10	− 7	−13	− 1	+27	0	0.45
112220	22 43 40.45	−64 38 53.4	8.78	H	340.918 530 70	−64.648 159 79 A		5.73	17.99	−3.10	1.86	1.90	2.06	2.15	1.96	−15	− 7	+ 5	+16	+ 5	− 9	+ 5	−18	− 3	−15	16	2.70
112221 H	22 43 41.59	+47 24 42.4	6.78	1 H	340.923 295 93	+47.411 785 87 *		0.76	0.04	−1.67	1.21	1.65	1.07	0.76	0.75	−34	+17	− 8	+ 2	+16	− 1	+22	−24	+16	+ 0	4	0.62
112222	22 43 42.69	+10 56 23.2	6.51	H	340.927 871 81	+10.939 786 18		24.86	9.80	−171.17	0.71	0.67	0.93	1.11	1.25	+22	−15	−21	+16	−40	−17	−32	−52	+51	+ 9	0	2.10
112223	22 43 42.71	−60 43 26.9	7.61	H	340.927 959 65	−60.724 130 63		9.83	−41.43	−23.19	0.41	0.46	0.77	0.49	0.46	−29	+ 0	−20	+ 1	− 1	+ 3	+ 1	−12	+ 2	−19	3	0.73
112224	22 43 46.46	+37 41 58.6	8.27	H	340.943 581 77	+37.699 602 87		3.63	15.93	−0.79	0.84	0.68	1.04	1.12	0.83	+20	+30	+13	−34	−20	−22	−13	−37	+ 9	+22	2	0.01
112225	22 43 47.86	−17 36 02.0	9.09	H	340.949 425 64	−17.600 567 35		8.00	−20.99	−28.68	1.18	0.84	1.31	1.72	1.09	+27	+ 3	− 6	+14	−10	+20	−13	−44	+20	+21	0	0.85
112226	22 43 48.88	+27 41 01.9	8.14	H	340.953 664 44	+27.683 849 84		7.75	−28.32	−52.34	0.57	0.53	0.93	0.59	0.70	+14	+14	− 2	− 1	+ 7	− 9	+15	−12	+ 5	+47	1	0.00
112227	22 43 49.18	+33 55 34.4	7.82	1 H	340.954 899 34	+33.926 214 78		0.74	−5.53	−7.18	0.66	0.55	0.92	0.92	0.73	+ 7	+ 5	+ 7	+21	+ 9	− 6	+10	− 1	− 7	+10	0	−0.24
112228 H	22 43 50.14	+29 35 15.4	8.06	H	340.958 937 29	+29.587 600 19 A		11.01	43.17	−53.70	0.87	0.94	1.27	0.89	1.10	+39	+10	+12	− 1	+ 5	− 5	+ 7	− 2	− 6	+56	1	−0.44
112229	22 43 50.63	+03 53 09.7	7.41	H	340.960 957 90	+03.886 033 84		23.66	150.64	331.61	0.79	0.60	0.97	1.11	0.75	+35	− 1	+17	+ 9	+22	+21	+12	− 6	+13	+ 9	0	−1.05
*112230 H	22 43 50.71	+78 31 05.7	7.32	H	340.961 293 68	+78.518 254 25 A		3.77	11.28	1.21	0.88	0.84	0.91	1.13	0.93	+ 6	−21	+25	+ 8	+ 1	+16	+ 1	+ 3	−17	+10	0	0.33
*112231	22 43 50.71	+42 53 30.5	9.19	H	340.961 277 55	+42.891 817 75		4.39	−5.16	−2.26	0.80	0.87	1.33	0.87	0.91	−21	+ 7	− 1	+ 9	+12	+11	+17	−26	+27	− 2	0	0.87
112232	22 43 50.74	−11 28 59.8	8.91	H	340.961 401 63	−11.483 277 12		9.78	79.32	47.13	0.96	0.72	1.11	1.17	0.88	+27	− 3	− 5	− 6	+ 0	+26	− 1	−32	+10	+19	0	−0.54
112233	22 43 50.93	−26 57 14.5	9.78	H	340.962 203 81	−26.954 023 99		4.29	35.62	23.20	1.61	1.00	1.78	1.80	1.23	+ 3	− 2	−13	−49	+ 6	+16	+ 8	−38	+37	+ 3	0	−0.34
112234	22 43 56.18	+49 30 14.0	9.18	H	340.984 067 35	+49.503 901 69		−0.03	−2.20	−6.38	0.72	0.77	1.08	0.81	0.86	−28	+ 3	− 5	−15	+28	−12	+28	−23	+28	− 6	0	0.82
112235	22 43 56.80	+29 16 37.3	7.66	G	340.986 678 47	+29.277 034 38		2.27	−6.26	−14.39	0.47	0.49	0.79	0.51	0.62	+33	+15	+16	+ 1	+ 6	− 4	+10	+ 0	+ 6	+44	0	−1.61
112236 H	22 43 58.87	−44 06 28.9	9.21	G	340.995 301 79	−44.108 025 80 *		6.49	28.84	3.09	1.13	0.87	1.49	1.52	0.95	+ 4	− 4	−35	+31	−24	+36	− 3	−16	− 2	+20	0	−1.22
112237	22 44 00.90	−33 27 42.6	8.41	H	341.003 765 99	−33.461 843 93		3.33	−1.11	4.43	0.78	0.68	1.06	0.86	0.76	+31	+ 0	− 7	+38	+ 5	+19	+ 7	+28	+ 3	+33	2	−0.08
112238	22 44 03.04	−12 41 10.1	8.61	H	341.012 672 81	−12.686 129 76		4.45	−11.16	−28.09	1.19	0.78	1.34	2.27	1.01	+ 8	+11	−28	−12	+24	−10	+13	−37	+34	−37	0	−0.35
112239	22 44 04.88	−42 29 32.5	10.55	G	341.020 341 17	−42.492 374 93		4.05	18.06	19.41	1.46	1.24	2.01	1.66	1.28	+ 8	+ 3	−21	+18	− 8	+18	− 5	−24	+14	+ 9	0	1.27
112240	22 44 04.96	+06 44 11.4	7.66	G	341.020 663 79	+06.736 507 10		17.23	65.65	−71.02	0.94	0.77	1.20	1.35	0.99	+11	+ 2	−28	−22	− 5	+32	+ 3	− 52	+38	+21	0	−0.30
112241 H	22 44 05.21	+39 27 55.5	5.93	G	341.021 717 45	+39.465 417 36 A		5.04	7.68	−28.38	0.70	0.62	0.81	0.98	0.81	+ 5	− 5	−16	+13	− 9	+ 9	−12	−16	+ 6	− 1	0	0.09
112242	22 44 05.49	+41 49 09.2	5.11	H	341.022 856 29	+41.819 227 14		11.89	−8.33	3.11	0.29	0.42	0.60	0.31	0.46	−14	+10	+ 3	+38	+ 2	+15	+ 9	−27	+ 6	− 1	0	−0.84
112243	22 44 05.53	−28 55 53.0	8.97	H	341.023 033 48	−28.931 381 64		14.80	52.12	−45.18	1.05	0.74	1.22	1.34	0.90	+12	+ 0	−14	−21	+13	+15	+14	−22	+18	+20	0	−0.47
112244	22 44 05.69	+50 48 35.9	8.20	H	341.023 708 02	+50.809 984 06		1.30	2.93	0.04	0.61	0.66	0.89	0.63	0.69	−13	+ 4	+ 5	− 1	+ 4	− 6	+ 9	−25	+30	− 1	0	−0.54
112245	22 44 05.76	+64 34 17.0	7.50	G	341.023 990 13	+64.571 393 72		39.82	50.54	−297.83	0.62	0.56	0.71	0.80	0.56	−12	−13	+29	+15	+ 8	−11	+12	− 7	− 8	− 4	0	0.33
112246	22 44 06.34	+80 26 13.5	7.02	H	341.026 405 00	+80.437 070 43		4.92	21.47	16.39	0.52	0.50	0.57	0.61	0.55	−11	+ 1	+14	+20	− 4	− 4	− 5	+ 3	+ 4	−22	1	−1.27
112247	22 44 07.50	+55 35 21.2	8.83	2 H	341.031 251 51	+55.589 228 17		1.40	4.96	−0.98	0.72	0.64	0.90	0.85	0.68	−21	−18	+22	+ 5	+ 4	+20	− 1	− 8	+11	−10	0	0.01
112248	22 44 07.91	+61 30 42.6	7.47	H	341.032 962 53	+61.511 838 51		0.95	2.60	−4.30	0.61	0.61	0.70	0.74	0.68	−19	+11	+12	+ 6	+ 0	+ 1	− 3	−17	+ 0	−33	0	1.68
112249	22 44 08.93	+37 31 26.3	9.73	H	341.037 222 86	+37.523 967 76		1.73	16.28	−0.64	1.01	0.93	1.47	1.53	1.20	+13	+16	+17	−12	−15	−15	− 7	−29	+ 7	+27	0	1.17
112250	22 44 08.98	+27 35 50.6	7.85	2 H	341.037 417 94	+27.597 395 45		1.43	1.44	−9.97	0.57	0.59	0.94	0.63	0.75	+23	+15	− 6	+ 1	+ 1	−10	+ 9	−17	+ 4	+52	3	0.72
112251	22 44 09.11	−52 24 33.9	9.05	H	341.037 975 79	−52.409 422 82		3.12	49.59	19.07	0.65	0.73	1.20	0.83	0.83	+20	−10	−14	+18	+ 0	+16	+ 4	+10	− 3	+30	0	0.72
112252	22 44 09.63	+46 37 06.9	8.71	H	341.040 117 23	+46.618 597 21		7.63	29.50	−27.61	0.63	0.68	1.04	0.66	0.66	−20	+ 1	+ 9	+10	+14	− 3	+21	−20	− 2	+ 9	1	0.12
112253	22 44 09.97	+14 31 20.7	8.32	H	341.041 537 85	+14.522 417 74		4.28	−26.15	−20.60	0.87	0.70	1.08	1.12	1.06	+27	− 3	−11	−21	− 8	+ 3	− 9	−36	+29	+18	0	−0.66
112254	22 44 11.12	+61 43 42.6	8.57	2 H	341.046 321 53	+61.728 507 75		0.23	−4.74	−4.93	0.71	0.73	0.82	0.89	0.90	−26	+ 6	+ 0	− 3	+ 1	+11	+ 1	−12	+ 7	−37	3	0.99
112255 H	22 44 11.93	−00 57 12.6	8.99	H	341.049 692 55	−00.953 489 06 *		0.89	−2.09	−7.42	2.42	1.98	1.64	1.58	1.36	+29	− 7	−11	−17	−18	+54	−17	−38	+37	+49	1	0.04
112256	22 44 12.67	−27 06 00.2	11.00	G	341.052 803 28	−27.100 049 11		4.14	10.28	−25.24	1.94	1.41	2.33	2.32	1.62	+18	−17	− 1	−33	+ 0	+29	− 4	−32	+24	+16	0	−0.44
112257	22 44 16.03	+20 56 13.7	7.56	H	341.066 772 90	+20.937 147 70		5.50	34.98	18.05	0.71	0.52	0.85	0.74	0.67	+ 9	+24	− 3	+11	− 1	− 2	+ 4	−10	+17	+12	0	−0.33
112258	22 44 16.18	+41 31 00.1	8.79	H	341.067 428 35	+41.516 683 18		7.03	−5.45	−13.94	0.55	0.79	1.14	0.57	0.83	− 2	+ 8	+ 1	+43	+ 1	+19	+11	−41	+22	+14	0	−0.60
112259 H	22 44 16.48	−60 29 58.8	6.29	H	341.068 647 46	−60.499 666 89 *		7.38	2.92	20.07	0.33	0.38	0.64	0.37	0.38	−29	+ 4	−18	− 1	+ 0	+ 5	+ 3	−12	− 4	−15	0	−0.27
112260	22 44 17.30	−14 36 42.3	7.59	H	341.072 084 31	−14.611 748 56		4.54	6.13	−2.32	0.87	0.61	1.02	1.07	0.72	+16	+17	−24	− 5	− 6	+16	+ 2	−31	+31	+15	0	−2.11
112261	22 44 17.33	+49 24 43.6	7.05	2 H	341.072 192 86	+49.412 098 40		0.28	−5.61	−5.90	0.47	0.49	0.69	0.52	0.53	−26	+ 6	+ 0	−14	+16	− 7	+21	−29	+25	− 1	0	−0.42
112262	22 44 18.87	+46 21 48.7	9.66	H	341.078 640 19	+46.363 539 08		3.35	25.60	4.33	0.81	0.88	1.38	0.90	0.87	−12	− 4	+14	+ 5	+24	−16	+29	−11	− 8	+21	1	0.88
112263	22 44 19.39	+51 26 57.9	7.50	H	341.080 792 56	+51.449 416 88		12.36	128.76	74.61	0.52	0.54	0.75	0.54	0.58	−18	+ 1	+ 9	− 2	+ 1	− 1	+ 4	−24	+19	− 4	2	−1.28
112264	22 44 20.60	+01 09 36.2	9.06	G	341.085 842 23	+01.160 054 43		2.63	12.72	0.06	1.10	0.84	1.28	1.48	1.10	+29	− 3	−10	+ 8	+ 1	+15	− 4	−25	+25	+14	0	1.55
112265	22 44 20.89	−74 49 14.1	7.77	G	341.087 031 16	−74.820 583 92		7.95	−39.46	−20.87	0.57	0.53	0.71	0.63	0.54	− 9	− 2	−20	− 9	+11	+ 3	+12	− 5	−12	− 6	0	0.43
112266	22 44 21.12	−39 44 19.9	8.51	H	341.087 998 25	−39.738 870 82		0.82	58.69	−58.20	0.86	0.67	1.08	1.02	0.74	+12	−12	−11	+29	− 6	+14	− 6	+ 0	+11	+10	0	−1.08
112267	22 44 21.33	−14 40 33.9	7.09	1 H	341.088 875 47	−14.676 071 90		2.32	−2.95	−4.65	0.80	0.53	0.89	0.94	0.65	+16	+11	−11	−15	+ 0	+13	+ 5	−28	+28	+16	0	−1.65
112268	22 44 25.00	+17 33 25.1	10.31	H	341.104 169 51	+17.556 965 58		19.03	−137.19	−148.58	1.47	1.12	1.88	1.49	1.51	+22	+ 3	+ 1	+ 6	− 8	−10	− 9	−33	+29	+15	0	−1.28
112269	22 44 25.43	−23 45 53.8	8.48	H	341.105 968 44	−23.764 954 58		3.60	13.67	0.68	1.02	0.66	1.12	1.39	0.77	+ 6	+27	+ 5	−16	+21	− 3	+17	−31	+ 9	−16	0	0.41
112270	22 44 28.36	−31 07 47.1	8.83	G	341.118 178 99	−31.129 762 21		10.23	45.72	−29.63	1.27	0.77	1.24	1.23	0.81	+ 3	− 1	−23	−44	+ 7	+10	+ 9	−22	+11	+ 8	0	−0.24
112271	22 44 28.82	−03 04 51.2	9.83	H	341.120 103 44	−03.080 884 62		−0.77	−6.63	−4.28	1.58	1.17	2.17	2.28	1.69	+25	−11	−40	−14	−16	+45	− 7	−54	+53	+33	0	−2.31
112272	22 44 28.93	−26 17 33.3	8.95	H	341.120 531 94	−26.292 585 71		3.28	−26.24	−16.88	1.25	0.74	1.39	1.57	0.95	+ 4	+18	−18	−30	+ 9	+ 7	+15	−27	+33	+ 7	0	−0.46
112273	22 44 29.00	+40 46 19.1	10.37	H	341.120 834 05	+40.771 961 72		−6.22	−14.66	21.04	4.19	3.72	5.29	4.65	4.32	+ 1	+18	− 5	−15	− 6	+10	+ 4	−42	+23	+22	0	
112274	22 44 29.18	+21 57 06.7	7.67	H	341.121 588 55	+21.951 855 10		2.70	29.53	−3.57	0.86	0.61	1.11	0.98	0.87	+10	+19	− 2	+ 9	+ 0	−31	+ 4	+ 0	+20	+10	0	−1.99
112275	22 44 29.37	+14 17 26.1	7.36	H	341.122 355 27	+14.290 573 10		8.34	12.39	−3.31	0.78	0.57	1.12	0.94	0.93	+11	+14	−22	−25	+11	−25	+14	−26	+57	− 8	0	0.26
112276	22 44 29.47	+09 04 45.8	9.78	H	341.122 810 57	+09.079 393 00		−0.57	6.44	−13.48	1.44	1.28	1.66	1.78	1.84	+52	−25	−18	−36	−25	+10	−36	−64	+28	+31	0	1.42
112277	22 44 29.98	+53 45 23.3	7.49	H	341.124 923 99	+53.756 465 38		3.18	−2.46	−18.48	0.49	0.50	0.65	0.56	0.62	− 8	+ 1	+ 2	+16	+ 5	− 4	+ 8	− 2	+15	+ 6	1	0.05
112278	22 44 31.39	+58 31 10.2	8.86	H	341.130 807 54	+58.519 501 82		1.38	20.99	2.50	0.78	0.68	0.89	0.86	0.70	−19	+19	+ 3	+12	−10	+ 0	− 5	−14	+ 7	− 9	0	0.59
112279 H	22 44 32.82	+45 12 44.2	9.85	H	341.136 755 53	+45.212 285 76 *		2.06	4.57	−5.61	3.25	2.45	2.01	1.24	1.32	+ 7	+14	− 3	− 4	+13	−21	+11	−12	+19	−12	0	0.35
112280	22 44 33.37	−69 46 39.1	8.62	H	341.139 034 26	−69.777 533 25		1.18	21.06	10.41	0.67	0.65	0.93	0.75	0.67	−13	+ 6	−20	− 9	+ 0	−16	− 3	−10	+ 1	−11	0	0.45
112281	22 44 33.93	−63 57 14.0	6.93	H	341.141 377 19	−63.953 894 61		9.88	−16.73	−5.61	0.43	0.44	0.66	0.50	0.45	−14	+ 6	−10	− 4	+ 8	− 5	+ 7	−15	− 3	− 5	0	−0.73
112282	22 44 35.32	+55 51 24.6	8.35	G	341.147 176 69	+55.856 829 42		6.58	2.37	−17.33	0.67	0.66	0.87	0.81	0.68	−18	−14	+38	+16	+ 1	+12	− 5	+ 3	+ 3	−16	0	−1.53
112283	22 44 35.70	−07 37 01.8	8.02	1 H	341.148 748 91	−07.617 177 32		5.47	−1.99	−0.74	0.98	0.62	1.02	1.22	0.75	+23	+ 4	− 8	+29	+ 5	+ 1	+ 2	− 9	+ 8	+14	0	−1.79
112284	22 44 35.75	+49 58 18.9	9.32	2 H	341.148 966 42	+49.971 921 96		−0.34	−1.11	−2.07	0.71	0.78	1.01	0.79	0.84	−31	+11	−10	−18	+16	−10	+21	−39	+25	−13	0	0.26
112285	22 44 36.87	−56 09 46.8	8.78	H	341.153 640 43	−56.162 998 51		0.82	−6.60	−14.07	0.81	0.82	1.20	0.92	0.82	+ 7	+ 2	−21	− 4	+18	+ 6	+16	+ 8	− 5	+23	0	0.68
112286	22 44 37.23	−62 32 53.9	6.78	H	341.155 112 14	−62.548 306 32		5.33	34.00	−25.05	0.41	0.42	0.66	0.47	0.41	−21	+ 5	−11	+ 6	+ 5	− 5	+ 6	−12	+ 4	− 9	0	0.61
112287	22 44 38.63	+52 37 26.6	8.58	H	341.160 956 20	+52.624 063 67		1.74	1.85	−3.04	0.62	0.60	0.81	0.72	0.76	− 6	−11	+ 7	− 8	+ 7	+ 1	+ 5	+ 2	+10	+15	1	−1.41
112288	22 44 39.08	+13 51 42.1	8.79	H	341.162 829 13	+13.861 694 09		6.02	−17.71	−14.18	0.97	0.72	1.26	1.26	1.08	+21	− 7	−17	− 9	− 1	− 2	− 9	−38	+43	− 2	0	−0.22
112289	22 44 39.52	+63 48 58.9	10.64	H	341.164 652 72	+63.816 372 03		−0.67	−3.40	−3.05	0.97	0.99	1.17	1.17	1.09	−13	+ 5	+20	+12	− 8	−16	− 5	+ 0	− 1	−12	0	0.51
112290	22 44 39.74	−57 27 28.3	7.89	H	341.165 577 51	−57.457 859 30		2.88	−8.49	5.54	0.52	0.62	0.95	0.60	0.65	− 5	−23	+ 6	−16	− 6	+27	− 3	− 6	+14	−11	0	0.21
112291	22 44 40.27	−60 07 00.8	7.93	H	341.167 798 07	−60.116 880 43		3.75	45.20	−25.59	0.47	0.55	0.92	0.53	0.56	−29	− 6	− 9	+ 1	+ 6	+ 9	+10	−20	− 9	−17	1	−0.98
112292	22 44 40.93	+49 43 57.3	9.83	3 H	341.170 535 48	+49.732 581 70		1.67	−6.18	−6.58	0.96	1.01	1.35	1.01	1.02	−33	+12	− 4	−29	+22	− 6	+27	−45	+26	−15	0	−1.03
112293	22 44 43.32	+40 33 16.1	9.93	H	341.180 491 99	+40.554 474 58		3.30	−1.66	−5.41	1.37	0.98	1.61	1.48	1.34	−11	+34	−21	+21	+ 7	+10	+29	−30	+27	+ 0	3	1.05
112294	22 44 43.54	+26 41 51.1	8.59	2 H	341.181 412 18	+26.697 515 31		2.60	9.33	1.37	0.79	0.68	1.13	0.99	0.88	+10	− 3	+16	+50	−12	−28	−12	+ 9	− 6	+ 7	0	−1.39
112295	22 44 44.44	−60 07 01.3	10.05	H	341.185 183 63	−60.117 015 69		5.79	45.05	−25.66	1.23	1.50	2.48	1.36	1.54	−30	− 5	−14	+ 3	+ 7	+ 7	+11	−15	−13	−15	2	−1.72
112296	22 44 45.27	−67 37 51.9	9.13	H	341.188 624 64	−67.631 075 05		0.98	5.30	−3.70	0.76	0.74	1.07	0.95	0.80	+ 0	−13	−27	−18	+ 5	+ 2	+ 5	− 6	− 2	+ 0	2	−1.54
112297	22 44 45.68	−58 28 06.0	8.59	H	341.190 324 53	−58.468 334 16		2.53	5.45	−3.20	0.66	0.69	1.21	0

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
112201	9.104	0.011	8.327	0.009		0.707	0.011	T	0.76	0.01	L	8.3984	0.0018	0.024	161		8.36	8.44					1							S
112202	11.698	0.124	9.652	0.034		1.694	0.102	T	1.72	0.10	L	9.5341	0.0025	0.019	67		9.49	9.56		C			1							
112203	6.141	0.004	4.954	0.002		1.027	0.004	G	1.01	0.02	A	5.0001	0.0005	0.005	100		4.99	5.01		C	22435−4125	I 1	1							S
112204	10.911	0.053	8.953	0.018		1.624	0.045	T	1.65	0.05	L	8.9155	0.0020	0.014	97		8.89	8.95					1							
112205	9.377	0.016	7.775	0.008		1.366	0.015	T	2.85	0.03	O	7.4816	0.0061	0.063	91		7.38	7.58		U 2			1 S							S
112206	8.970	0.011	9.060	0.015		−0.077	0.017	T	−0.06	0.02	L	9.0671	0.0032	0.037	155		9.01	9.12		U 2			1							
112207	11.045	0.052	9.647	0.026		1.226	0.003	G	1.23	0.00	A	9.6532	0.0034	0.025	86		9.61	9.69					1							
112208	9.510	0.018	8.889	0.016		0.578	0.021	T	0.65	0.02	L	8.9711	0.0015	0.015	119		8.94	9.00			22435+3114	I 1	1							
112209	9.318	0.021	8.769	0.020	*	0.520	0.022	T	0.59	0.02	L *	8.5792	0.0020	0.014	90	*	8.56	8.60		D	22435−1608	I 1	2 C A	AB	102	1.420	0.009	0.02	0.03	S
112210	9.410	0.016	8.861	0.016		0.520	0.017	T	0.59	0.02	L	8.8923	0.0015	0.015	114		8.86	8.92					1							S
112211	6.465	0.005	4.837	0.003		1.358	0.047	G	1.35	0.02	A	4.8257	0.0009	0.006	84		4.82	4.84					1							S
112212	9.371	0.014	7.451	0.006		1.628	0.013	T	1.82	0.05	O	7.3624	0.0043	0.038	136		7.32	7.42		U 2			1							S
112213	10.017	0.032	9.902	0.041		0.100	0.040	G	0.11	0.04	R	9.9636	0.0039	0.029	102		9.90	10.01					1							G
112214	10.355	0.026	10.000	0.030	*	0.337	0.037	T	0.39	0.05	L *	10.1088	0.0030	0.034	175	*	10.06	10.17		D	22436+4226	M 1	2 C A	AB	0	0.379	0.018	1.93	0.13	G
112215	9.222	0.014	9.114	0.017		0.100	0.001	G	0.11	0.00	H	9.1145	0.0026	0.025	108		9.07	9.16		C			1 S							
112216	10.273	0.028	9.782	0.027	B	0.462	0.035	T	0.53	0.04	L	9.9657	0.0142			B				D	22437−6439	I 2	1 C I A							
112217	8.747	0.008	7.354	0.005		1.178	0.007	T	1.14	0.01	L	7.3815	0.0008	0.013	262		7.36	7.41					1							S
112218	10.466	0.029	8.523	0.011		1.612	0.025	T	1.63	0.03	L	8.3935	0.0029	0.025	130		8.36	8.44		U 2			1 S							
112219	8.848	0.015	8.055	0.013		0.703	0.015	T	0.76	0.01	L	8.1315	0.0018	0.018	144		8.10	8.16					1							S
112220	9.172	0.013	8.778	0.013	A	0.373	0.017	T	0.44	0.02	L	8.8730	0.0061	0.037	156	A	8.84	8.97		D	22437−6439	I 2	1 C P A							S
112221	8.509	0.008	6.932	0.004	*	1.322	0.007	T	1.28	0.01	L *	6.9306	0.0013	0.014	175	*	6.91	6.95		M	22437+4725	H 1	2 C A	AB	344	0.290	0.025	2.95	0.31	S
112222	7.102	0.005	6.567	0.006		0.502	0.007	T	0.57	0.01	L	6.6231	0.0011	0.007	90		6.61	6.64					1 G							S
112223	8.006	0.005	7.652	0.006		0.372	0.004	G	0.43	0.00	H	7.6992	0.0011	0.016	265		7.67	7.73					1							S
112224	8.673	0.011	8.289	0.011		0.375	0.013	T	0.44	0.01	L	8.3532	0.0012	0.015	108		8.33	8.38		C			1							S
112225	9.559	0.022	9.158	0.023		0.392	0.027	T	0.46	0.03	L	9.1782	0.0022	0.018	76		9.15	9.21		C			1							S
112226	8.612	0.010	8.178	0.010		0.422	0.015	G	0.49	0.02	H	8.2314	0.0011	0.013	143		8.21	8.25		C			1							S
112227	10.030	0.022	8.005	0.009		1.677	0.019	T	1.70	0.02	L	7.9295	0.0019	0.015	121		7.90	7.96		M			1							
112228	8.584	0.009	8.125	0.009	*	0.433	0.012	T	0.50	0.01	L *	8.1615	0.0014	0.014	155	*	8.14	8.19		D	22438+2935	H 1	2 C B	AB	4	0.677	0.023	3.65	0.14	S
112229	8.020	0.009	7.470	0.008		0.515	0.011	T	0.59	0.01	L	7.5191	0.0011	0.010	93		7.50	7.54					1 S							S
112230	7.273	0.006	7.282	0.010	*	−0.004	0.011	T	0.02	0.01	L *	7.3288	0.0014	0.011	124	*	7.31	7.35		D	22438+7831	I 1	2 C A	AB	275	2.270	0.008	2.15	0.04	S
112231	9.641	0.017	9.215	0.017		0.402	0.022	T	0.47	0.02	L	9.2784	0.0023	0.026	159		9.23	9.33		C			1							
112232	9.480	0.020	8.979	0.020		0.482	0.022	T	0.55	0.02	L	9.0174	0.0016	0.012	79		8.99	9.05					1							
112233	10.809	0.047	9.955	0.037		0.750	0.046	T	0.79	0.03	L	9.9155	0.0026	0.020	89		9.88	9.94		C			1							
112234	9.166	0.013	9.191	0.017		−0.018	0.020	T	0.00	0.02	L	9.1825	0.0020	0.020	158		9.15	9.23		C			1							
112235	7.510	0.005	7.630	0.006		−0.103	0.003	G	−0.09	0.00	H	7.6223	0.0010	0.013	180		7.60	7.65					1							S
112236	9.719	0.022	9.280	0.022	*	0.400	0.015	G	0.47	0.02	H *	9.3169	0.0036	0.021	85	*	9.27	9.36		C	22440−4406	H 1	2 C S C	AB	111	0.142	0.046	1.26	1.71	
112237	9.961	0.022	8.545	0.012		1.196	0.020	T	1.16	0.02	L	8.5736	0.0018	0.016	122		8.55	8.60					1							
112238	10.023	0.025	8.777	0.015		1.063	0.023	T	1.03	0.02	L	8.7812	0.0021	0.018	84		8.74	8.81		C			1							
112239	11.130	0.058	10.519	0.053		0.510	0.020	G	0.58	0.02	H	10.6800	0.0037	0.032	95		10.62	10.73		C			1							G
112240	8.214	0.010	7.733	0.010		0.453	0.013	T	0.52	0.01	L	7.7621	0.0012	0.008	74		7.74	7.78		C			1 G							S
112241	8.013	0.009	6.165	0.004	A	1.490	0.012	G	1.49	0.09	R *	6.0596	0.0009	0.009	113	*	6.05	6.07		D	22441+3928	I 1	2 C A	AB	278	2.883	0.011	2.83	0.04	S
112242	6.329	0.003	5.215	0.002		0.960	0.003	T	0.95	0.00	L	5.2724	0.0004	0.006	231		5.26	5.28		C	22441+4149	I 1	1							S
112243	9.791	0.022	9.058	0.018		0.657	0.022	T	0.72	0.02	L	9.1029	0.0022	0.015	94		9.07	9.13		C			1							
112244	10.012	0.023	8.337	0.011		1.400	0.020	T	1.38	0.02	L	8.3488	0.0014	0.018	154		8.32	8.39					1							
112245	8.381	0.009	7.587	0.008		0.719	0.015	G	0.77	0.01	H	7.6351	0.0012	0.013	117		7.61	7.66					1							
112246	8.237	0.008	7.120	0.006		0.962	0.008	T	0.95	0.01	L	7.1852	0.0009	0.011	124		7.17	7.21		C			1							S
112247	8.857	0.011	8.818	0.014		0.031	0.015	G	0.05	0.01	H	8.8430	0.0108	0.057	127		8.77	8.92	9.49	P 1 A			1							P
112248	9.704	0.019	7.684	0.008		1.673	0.016	T	1.70	0.02	L	7.5802	0.0018	0.016	112		7.56	7.61					1							
112249	10.041	0.026	9.755	0.031		0.272	0.038	T	0.31	0.05	L	9.8085	0.0029	0.025	96		9.77	9.86		C			1							
112250	10.141	0.026	8.111	0.010		1.681	0.022	T	1.71	0.02	L	7.9567	0.0021	0.026	140		7.90	8.00		U 2			1							
112251	9.346	0.012	9.063	0.013		0.241	0.003	G	0.27	0.00	H	9.1203	0.0018	0.023	176		9.09	9.18					1							
112252	9.209	0.011	8.754	0.011		0.448	0.001	G	0.52	0.00	H	8.8128	0.0018	0.023	181		8.77	8.84					1							
112253	9.920	0.022	8.446	0.012		1.241	0.020	T	1.20	0.02	L	8.4880	0.0015	0.014	100		8.47	8.52		D			1							
112254	12.381	0.197	9.124	0.018		2.700	0.450	G	2.70	0.46	J	8.5524	0.0078	0.082	103		8.44	8.68		U 2			1 S							
112255	9.322	0.018	9.022	0.019	*	0.285	0.024	T	0.32	0.03	L *	9.0667	0.0021	0.014	77	*	9.04	9.09		D	22442−0057	I 1	2 C A	AB	237	0.227	0.011	0.25	0.33	S
112256						0.860	0.020	G	0.87	0.01	H	11.1595	0.0043	0.036	94		11.10	11.22		C			1							G
112257	8.942	0.014	7.663	0.009		1.089	0.013	T	1.05	0.01	L	7.7264	0.0012	0.011	101		7.70	7.75					1							S
112258	9.146	0.010	8.820	0.010		0.309	0.013	T	0.35	0.02	L	8.8648	0.0016	0.021	191		8.83	8.91					1							
112259	6.977	0.003	6.365	0.003	*	0.568	0.003	T	0.64	0.00	L *	6.4138	0.0006	0.008	300	*	6.40	6.43		D	22443−6030	H 1	2 C S A	AB	58	0.112	0.005	0.87	0.25	S
112260	9.282	0.016	7.713	0.009		1.316	0.014	T	1.28	0.02	L	7.7401	0.0016	0.013	89		7.72	7.76					1 S							S
112261	9.326	0.014	7.267	0.006		1.704	0.012	T	1.73	0.01	L	7.1520	0.0019	0.021	150		7.12	7.18		U 2 C			1							S
112262	10.206	0.023	9.652	0.022		0.519	0.028	T	0.59	0.03	L	9.7742	0.0032	0.033	182		9.72	9.83					1							G
112263	8.178	0.008	7.581	0.007		0.593	0.007	G	0.66	0.01	H	7.6314	0.0011	0.014	145		7.61	7.66					1							S
112264	10.811	0.060	9.188	0.025		1.420	0.015	G	1.42	0.09	H	9.1968	0.0020	0.018	77		9.17	9.23		C			1							
112265	8.295	0.010	7.819	0.008		0.476	0.015	G	0.55	0.02	H	7.8737	0.0014	0.014	150		7.85	7.90		C			1							S
112266	9.850	0.021	8.648	0.013		1.029	0.019	T	1.00	0.02	L	8.6811	0.0015	0.015	107		8.65	8.71		C			1							
112267	9.151	0.015	7.258	0.007		1.572	0.013	T	1.59	0.01	L	7.2057	0.0033	0.019	91		7.17	7.23		U 2			1							S
112268	11.734	0.090	10.405	0.048		1.592	0.197	G	2.58	0.45	I	10.3178	0.0039	0.036	85		10.27	10.38					1							G
112269	8.513	0.010	8.486	0.013		0.025	0.014	T	0.04	0.01	L	8.4938	0.0020	0.017	91		8.47	8.52		C			1							S
112270	9.467	0.017	8.896	0.016		0.559	0.015	G	0.63	0.01	H	8.9398	0.0018	0.022	86		8.90	8.98		C			1							S
112271	11.037	0.065	9.954	0.040		0.937	0.058	T	0.93	0.04	L	9.9896	0.0028	0.023	65		9.94	10.02		C			1							
112272	10.241	0.029	9.054	0.018		1.017	0.027	T	0.99	0.02	L	9.1139	0.0029	0.019	92		9.08	9.16		C			1							
112273	10.662	0.045	10.322	0.051		0.260	0.040	G	0.29	0.05	R	10.4390	0.0031	0.029	99		10.35	10.51					1 X							G G
112274	9.781	0.023	7.865	0.010		1.591	0.020	T	1.61	0.02	L	7.7839	0.0018	0.016	86		7.75	7.81					1							S
112275	8.809	0.012	7.483	0.008		1.125	0.011	T	1.09	0.01	L	7.5279	0.0013	0.011	100		7.51	7.55		C			1							S
112276	11.723	0.124	9.963	0.039		1.496	0.107	T	1.72	0.17	K	9.8863	0.0042	0.025	71		9.84	9.93					1							
112277	9.107	0.013	7.615	0.007		1.256	0.012	T	1.21	0.01	L	7.6472	0.0011	0.011	137		7.63	7.67		C			1							S
112278	9.151	0.015	8.929	0.018		0.212	0.022	T	0.23	0.03	L	8.9317	0.0019	0.021	115		8.90	8.96					1							
112279	10.217	0.020	9.890	0.024	*	0.310	0.029	T	0.36	0.04	L *	9.9223	0.0027	0.035	215	*	9.87	9.99			22445+4513	H 1	2 C A	AB	343	0.206	0.012	0.44	0.35	G
112280	10.537	0.028	8.770	0.012		1.472	0.024	T	1.49	0.04	L	8.7524	0.0019	0.021	144		8.71	8.79		C			1							
112281	7.061	0.004	6.943	0.004		0.107	0.005	T	0.12	0.01	L	6.9776	0.0010	0.012	192		6.96	7.00			22446−6357	I 1	1							S
112282	8.679	0.010	8.379	0.011		0.277	0.012	G	0.31	0.01	H	8.4379	0.0014	0.015	123		8.41	8.47		C			1							
112283	8.314	0.011	8.054	0.011		0.248	0.015	T	0.28	0.02	L	8.0944	0.0032	0.019	78		8.07	8.13		U			1							S
112284	9.935	0.021	9.384	0.020		0.516	0.026	T	0.59	0.03	L	9.4354	0.0045	0.059	159		9.33	9.51		U 2			1							
112285	10.304	0.028	8.928	0.015		1.149	0.003	G	1.11	0.00	H	8.9498	0.0023	0.023	123		8.92	9.00					1							
112286	8.237	0.007	6.901	0.004		1.133	0.006	T	1.10	0.01	L	6.9456	0.0009	0.011	196		6.93	6.96					1							S
112287	9.908	0.025	8.685	0.015		1.045	0.023	T	1.02	0.02	L	8.7447	0.0017	0.015	120		8.72	8.77					1							
112288	9.130	0.015	8.800	0.017		0.313	0.021	T	0.36	0.03	L	8.8640	0.0022	0.016	87		8.84	8.90		C			1							S
112289	11.249	0.058	10.718	0.062		0.498	0.076	T	0.57	0.08	L	10.7563	0.0028	0.022	132		10.70	10.79					1							G
112290	9.434	0.012	8.024	0.007		1.191	0.011	T	1.15	0.01	L	8.0545	0.0014	0.017	168		8.03	8.08		C			1							S
112291	9.056	0.008	8.012	0.006		1.054	0.120	G	0.90	0.02	L	8.0887	0.0013	0.017	287		8.06	8.12		D	22447−6007	I 2	1							S
112292	11.988	0.136	10.390	0.053		1.363	0.120	T	2.50	0.72	K	9.8460	0.0298	0.299	155		9.54	10.29		U 2 C			1 S							G P
112293	10.004	0.027	9.901	0.035		0.064	0.005	G	0.07	0.01	H	9.9513	0.0031	0.030	96		9.89	10.01					1							G
112294	10.685	0.035	8.857	0.014		1.552	0.031	T	2.69	0.04	O	8.5848	0.0059	0.059	122		8.49	8.68		U 2			1 S							
112295	10.565	0.022	10.027	0.022		0.645	0.126	G	0.71	0.11	R	10.1854	0.0037	0.061	276		10.05	10.28		D	22447−6007	I 2	1 S							
112296	11.240	0.054	9.295	0.017		1.614	0.045	T	1.64	0.05	L	9.2415	0.0017	0.023	140		9.20	9.28					1							
112297	10.023	0.017	8.696	0.010		1.126	0.015	T	1.09	0.02	L	8.7582	0.0016	0.022	207		8.72	8.79			22448−5828	I 1	1							
112298	10.189	0.032	9.684	0.031		0.485	0.034	T	0.56	0.04	L	9.7775	0.0033	0.023	91		9.74	9.82					1							
112299	10.030	0.024	8.785	0.015		1.062	0.022	T	1.03	0.02	L	8.8345	0.0019	0.014	85		8.82	8.87					1							
112300	8.449	0.012	6.595	0.005		1.541	0.010	T	1.60	0.02	L	6.5432	0.0009	0.009	135		6.53	6.56					1							S

Number HIP 1 2	Descriptor: epoch J1991.25 RA h m s 3	Dec ±° ′ ″ 4	V mag 5	6 7	Position: epoch J1991.25 α (ICRS) deg 8	δ deg 9	10	Par. π mas 11	Proper Motion $\mu_{\alpha*}$ mas/yr 12	μ_δ 13	Standard Errors $\alpha*$ mas 14	δ 15	π mas 16	$\mu_{\alpha*}$ mas/yr 17	μ_δ 18	Astrometric Correlations (%) 19	20	21	22	23	24	25	26	27	28	Soln F1 % 29	F2 30
112301	22 44 49.21	−40 46 04.8	7.05	H	341.205 059 52	−40.767 994 67		5.38	−41.05	−42.98	0.62	0.49	0.80	0.72	0.54	+ 5	+ 2	− 8	+15	− 4	+36	− 2	− 7	− 5	+ 0	0	0.04
112302	22 44 49.98	−56 49 37.3	7.09	H	341.208 254 18	−56.827 019 85		1.45	14.52	−5.49	0.53	0.55	0.80	0.60	0.57	+ 6	− 3	−13	+14	+13	+12	+17	− 4	−10	+18	2	−1.74
112303	22 44 50.45	+24 22 42.7	7.25	H	341.210 205 58	+24.378 530 21		7.69	22.29	−2.71	0.65	0.52	0.91	0.71	0.62	+ 7	+20	+11	+12	− 7	−44	+ 0	+ 6	+16	+ 1	0	1.37
112304	22 44 51.33	+60 48 52.6	8.06	H	341.213 856 60	+60.814 601 01		1.15	25.94	14.39	0.57	0.62	0.73	0.74	0.65	−14	+10	+14	+ 8	+ 7	+18	+ 3	−15	+ 9	−21	0	−0.08
112305	22 44 52.97	+39 12 03.9	6.47	H	341.220 699 59	+39.201 075 70		4.69	16.39	−20.04	0.59	0.50	0.73	0.80	0.71	− 2	+13	+ 4	+31	−11	− 4	−11	−15	− 2	− 2	0	0.01
112306	22 44 53.28	+18 06 55.7	10.89	3 H	341.222 008 46	+18.115 458 72		0.87	0.53	−3.39	2.41	1.49	2.64	2.40	1.88	+18	+25	+ 5	+25	−10	− 4	−16	−36	+22	− 4	0	1.44
112307	22 44 53.29	−18 49 05.4	8.58	H	341.222 043 16	−18.818 175 48		6.28	11.29	57.18	1.03	0.64	1.13	1.40	0.76	+17	− 1	−16	−10	+ 8	+ 0	+ 5	−25	+ 7	+ 4	2	2.28
112308 H	22 44 53.99	−06 54 11.7	8.35	H	341.224 950 48	−06.903 254 66	*	7.53	21.59	−2.28	1.33	0.76	1.26	1.94	0.94	+15	−30	−37	+51	− 1	−26	−24	−15	+12	−19	0	0.24
112309	22 44 54.44	−04 54 56.6	8.88	H	341.226 834 35	−04.915 726 26		1.57	−1.62	−9.37	1.23	1.03	1.64	2.10	1.77	+39	− 8	−27	+19	−17	+46	−12	−51	+51	+49	0	0.61
112310	22 44 55.88	−02 21 10.7	11.50	G	341.232 816 31	−02.352 962 07		7.51	736.27	−245.58	3.67	2.62	4.39	4.72	3.66	+ 1	+14	−52	−44	+18	−18	+14	−68	+58	−17	0	−1.60
112311	22 44 57.50	+02 35 19.6	9.70	H	341.239 569 73	+02.588 785 26		0.26	14.43	0.98	1.33	0.96	1.55	1.66	1.15	+24	− 6	−14	− 6	+ 5	+28	+ 7	−18	+11	+11	0	−0.42
112312	22 44 57.84	−33 15 00.7	11.70	2 G	341.240 989 47	−33.250 183 99		42.35	183.12	−118.87	2.31	2.05	3.37	2.50	2.21	+38	− 1	−21	+26	+ 2	+14	+ 5	+16	− 2	+44	0	0.00
*112314	22 44 58.77	−43 05 39.7	10.71	G	341.244 855 36	−43.094 357 10		1.42	−19.16	0.90	1.46	1.25	2.06	1.69	1.50	+18	−12	−24	− 2	−11	+30	− 3	−24	+17	+28	0	−1.76
*112315	22 44 59.10	−56 41 41.8	8.50	H	341.246 240 34	−56.694 932 45		13.94	−13.10	−0.88	0.75	0.76	1.10	0.91	0.79	+10	− 8	−13	+18	+18	+ 2	+20	+ 1	−15	+24	0	−2.01
*112316	22 44 58.43	+49 28 53.0	10.30	3 H																							
*112317 H	22 45 02.60	+68 07 58.4	8.63	3 H	341.260 834 56	+68.132 902 33	A	5.95	18.94	5.78	4.55	3.08	2.57	3.81	2.52	+ 9	−10	− 2	−84	− 1	+20	+ 9	−67	+ 1	−22	34	3.57
*112318	22 45 00.27	+43 49 53.2	10.32	H	341.251 123 68	+43.831 438 65		0.47	−8.37	−1.85	0.99	1.02	1.59	1.12	1.21	−29	+ 0	+ 2	+18	+ 9	− 7	+18	−16	+ 5	− 6	1	2.37
*112319	22 45 00.30	−00 43 55.0	7.59	H	341.251 248 43	−00.731 944 34		10.69	127.34	21.29	0.81	0.64	0.99	0.98	0.88	+29	−10	−26	+ 2	− 8	+24	− 4	−31	+34	+34	0	−1.13
*112320	22 45 01.57	−57 05 29.6	7.89	H	341.256 552 62	−57.091 541 82		3.13	101.75	−35.32	0.56	0.67	0.98	0.78	0.79	− 7	+ 1	− 6	−14	+ 1	+ 5	+ 8	+11	−10	−24	0	−1.29
*112321	22 45 01.64	−22 59 06.7	8.60	H	341.256 829 50	−22.985 196 71		4.28	−10.74	0.90	0.98	0.69	1.14	1.29	0.80	+15	+ 3	+ 5	−10	+16	+ 2	+10	−33	+15	+ 2	0	−1.28
112322	22 45 03.00	+46 13 58.9	9.94	H	341.262 488 26	+46.233 018 02		−0.40	0.21	−1.91	0.97	0.96	1.48	0.99	0.92	−20	+21	− 7	+ 8	+20	−12	+28	−19	+14	+ 7	0	1.01
112323	22 45 03.07	+38 40 39.6	8.52	1 H	341.262 785 00	+38.677 669 45	A	6.19	17.54	−23.64	1.31	1.04	1.46	1.43	1.37	+ 5	+16	+ 4	+40	−15	−10	−15	−18	−17	+18	4	−0.12
112324	22 45 03.70	+58 08 50.6	6.45	H	341.265 416 56	+58.147 383 18		27.87	−62.39	−137.19	0.48	0.47	0.59	0.49	0.50	−13	+21	+ 1	+ 5	−10	− 1	− 5	−25	+10	− 5	0	0.86
112325 H	22 45 04.43	−02 39 23.2	9.44	G	341.268 470 60	−02.656 441 57	B	−0.33	9.14	−82.81	16.14	9.90	5.07	6.54	4.23	+37	− 5	−15	+ 3	− 4	+15	−11	−26	+59	+ 1	0	−2.66
*112326	22 45 04.85	−02 39 42.2	9.36	G	341.270 222 10	−02.661 733 13	A	−0.33	9.14	−82.81	4.83	3.34	5.07	6.54	4.23	+26	+ 0	−43	+20	+ 4	+15	− 8	−55	+59	+ 1	0	−2.66
*112327	22 45 04.74	−10 30 27.8	9.88	G	341.269 737 22	−10.507 716 40		7.62	−31.49	−82.36	1.38	0.94	1.58	1.79	1.25	+21	+ 7	− 8	+10	− 6	+23	− 3	−26	+28	+24	0	−1.25
112328	22 45 04.87	+48 02 56.0	9.05	H	341.270 302 27	+48.048 876 64		2.60	−14.64	−24.62	0.71	0.71	1.10	0.72	0.71	−10	+ 5	+21	+ 2	+ 8	− 4	+13	− 9	+18	+ 7	1	0.12
112329	22 45 06.69	+36 19 42.7	8.83	H	341.277 859 79	+36.328 520 31		−0.34	−13.14	−7.32	0.88	0.77	1.17	1.22	0.90	+ 2	+ 9	+11	+ 8	+18	− 6	+16	+10	− 5	+21	0	−0.04
112330	22 45 09.96	−45 35 05.6	8.80	H	341.291 498 50	−45.584 888 71		10.67	55.99	−3.55	1.14	0.79	1.23	1.59	0.88	+21	+17	− 4	+19	+17	+ 2	+15	+21	+ 2	+33	4	−1.05
112331 H	22 45 10.20	−23 06 20.5	8.98	G	341.292 500 60	−23.105 704 39	A	16.82	145.46	−110.00	1.70	1.30	1.84	2.00	1.28	+22	+20	+19	−18	+ 4	−15	+ 1	−46	+ 8	+ 5	1	−0.56
112332	22 45 10.42	+11 41 10.4	7.56	H	341.293 412 63	+11.686 223 37		9.96	−9.46	−20.92	0.76	0.58	0.95	0.97	0.74	+18	+ 0	−14	−27	+ 0	+20	+ 0	−40	+34	+ 2	0	0.11
112333	22 45 11.04	−63 27 41.6	7.94	1 H	341.295 996 20	−63.461 546 89		1.42	−10.31	−29.42	0.59	0.60	0.90	0.69	0.62	−17	− 2	− 3	−14	+ 6	+ 6	+ 6	−17	−13	−18	0	−0.07
112334	22 45 11.83	+38 33 35.3	12.15	H	341.299 300 96	+38.559 811 56		12.47	−5.80	−17.76	4.90	3.59	5.57	5.45	4.75	+23	+20	+28	+49	−11	+ 1	−27	−20	+ 7	− 5	0	0.34
112335	22 45 12.51	+05 57 03.6	8.78	H	341.302 134 66	+05.951 001 55		14.99	39.00	−4.97	1.03	0.84	1.34	1.42	1.20	+34	+13	+ 0	−22	+ 8	−16	+13	−14	+35	+ 5	0	−2.02
112336	22 45 13.47	+06 24 09.5	8.39	G	341.306 144 74	+06.402 642 69		10.81	35.09	−17.40	1.09	0.72	1.25	1.31	0.88	+16	+27	+15	− 8	+12	+23	+12	−25	+18	+ 5	0	1.17
112337	22 45 14.45	−45 32 46.8	8.92	H	341.310 215 25	−45.546 346 37		10.19	52.42	−2.34	1.13	0.80	1.27	1.59	0.89	+18	+11	−16	+20	+ 7	+ 5	+ 9	+15	+ 2	+32	0	−1.35
112338	22 45 15.69	+63 31 27.3	9.49	H	341.315 378 34	+63.524 242 22		3.00	6.20	5.09	0.75	0.76	0.90	0.88	0.89	−14	+ 9	+10	+ 4	− 4	−11	− 2	− 2	+11	−20	1	−1.52
112339	22 45 15.85	+47 12 13.6	7.88	2 H	341.316 044 17	+47.203 789 14		1.37	17.65	−1.88	0.59	0.61	0.91	0.58	0.59	−24	+12	+10	+ 5	+14	− 3	+18	−21	+ 3	−10	1	0.55
112340	22 45 17.17	−16 35 16.4	9.33	H	341.321 534 30	−16.587 889 23		5.77	−0.39	−46.92	1.22	1.03	1.51	1.47	1.24	+45	−10	− 9	− 8	−23	+39	−25	−40	+33	+49	0	−1.17
112341	22 45 17.21	−62 33 44.8	9.40	2 H	341.321 699 90	−62.562 449 46		1.45	18.05	2.72	0.86	0.84	1.30	0.97	0.83	−19	− 8	− 2	− 4	+ 3	− 9	+ 2	− 9	+ 8	−25	1	1.73
112342	22 45 18.43	+43 30 14.1	9.30	H	341.326 780 33	+43.503 917 24		5.59	10.82	−8.57	0.88	0.90	1.32	0.88	0.86	− 9	+23	+ 6	+24	+20	+17	+28	−30	+17	+ 8	0	0.43
112343	22 45 19.44	+57 08 25.4	7.99	H	341.331 012 66	+57.140 384 98		4.08	15.06	−2.66	0.54	0.51	0.64	0.71	0.60	−20	+ 5	+ 4	+25	+ 7	+ 1	+13	−12	+11	− 3	0	2.27
112344	22 45 20.07	−01 10 42.9	8.08	G	341.333 613 33	−01.178 580 31		8.06	18.13	−24.14	0.87	0.69	1.11	1.09	0.88	+28	−15	−29	−16	−17	+47	− 9	−42	+34	+32	0	−0.57
112345	22 45 20.49	+34 19 18.3	8.01	H	341.335 363 19	+34.321 755 61		−0.69	4.21	4.86	0.69	0.59	0.96	0.84	0.68	+ 5	+11	+19	+26	+ 9	−14	+15	−13	+ 7	+ 9	0	−2.42
112346	22 45 20.79	−09 38 40.2	7.43	G	341.336 609 72	−09.644 508 92	A	11.82	19.04	−11.80	1.19	0.84	1.20	1.60	0.98	+29	−15	− 6	+10	− 3	+12	− 7	−30	+19	+30	2	0.33
112347	22 45 21.73	+03 41 23.6	7.56	H	341.340 556 12	+03.689 902 16		6.23	41.74	−11.75	0.80	0.60	0.98	1.16	0.78	+41	− 6	− 3	+ 9	+24	+ 4	+20	+ 1	+ 9	+11	0	−0.56
112348 H	22 45 22.23	+51 29 18.8	8.50	H	341.342 638 73	+51.488 554 97	*	2.16	2.56	0.15	0.65	0.69	0.94	0.67	0.72	− 9	+ 5	+ 3	− 8	+ 6	− 2	+ 7	−14	+22	+ 0	0	−0.35
112349	22 45 22.58	−25 22 40.5	10.83	H	341.344 069 46	−25.377 910 62		3.06	−2.55	−23.33	1.83	1.25	2.16	2.06	1.46	+20	− 4	−22	−43	− 3	+15	− 1	−35	+29	+23	0	0.25
112350	22 45 22.89	+01 45 09.7	7.45	H	341.345 371 12	+01.752 693 15		6.67	−97.49	−49.66	0.93	0.66	1.28	1.17	0.97	+19	− 5	−28	−17	+11	− 9	+ 1	−43	+59	−10	0	3.02
112351	22 45 24.47	+44 45 08.8	7.00	H	341.351 967 27	+44.752 449 39		4.62	11.79	−7.95	0.40	0.46	0.68	0.41	0.45	−42	− 3	+ 9	−27	+24	− 4	+25	−31	+12	−24	1	1.47
112352	22 45 27.09	−13 00 24.7	7.79	H	341.362 862 44	−13.006 869 69		8.82	45.64	−30.75	1.03	0.60	1.01	1.88	0.74	− 4	+16	−15	−25	+33	− 4	+26	−34	+20	−48	0	0.88
112353	22 45 27.23	−29 09 29.2	9.96	H	341.363 439 13	−29.158 123 18		3.34	−5.48	−13.91	1.42	1.04	1.63	1.64	1.31	+ 6	+ 0	−19	−31	+ 9	+ 3	+10	−11	+14	+ 8	7	2.37
112354 H	22 45 27.86	+11 11 32.4	9.81	G	341.366 087 98	+11.192 340 59	A	24.37	13.82	−162.90	2.99	2.54	3.30	2.96	2.92	+35	−15	−16	−21	−10	+23	−14	−33	+48	+29	1	−0.76
*112355	22 45 29.59	−88 49 05.5	6.55	1 G	341.373 311 27	−88.818 207 40		9.99	22.14	−35.70	0.48	0.43	0.54	0.55	0.45	+ 0	−13	−21	+21	+ 7	− 9	+ 7	+ 9	−20	− 4	1	−0.63
*112356	22 45 27.99	−15 34 59.9	7.01	1 H	341.366 618 32	−15.583 305 77		6.21	16.92	−37.19	0.79	0.58	0.99	0.94	0.75	+25	+10	−19	− 4	−13	+34	− 3	−36	+43	+37	0	−0.20
*112357 H	22 45 28.20	−21 23 21.7	10.36	H	341.367 502 98	−21.389 367 35	*	7.71	10.40	3.46	7.74	10.12	2.49	2.35	1.75	− 5	+ 3	− 7	− 7	+ 1	+16	− 3	−16	+38	+36	0	−0.32
*112358	22 45 28.19	+19 21 59.1	6.27	H	341.367 469 71	+19.366 420 20		9.29	−26.07	58.04	0.75	0.51	0.87	0.86	0.66	+ 9	+16	−11	−11	− 1	+11	+ 4	−22	+27	+ 3	0	1.08
*112359	22 45 29.09	+24 18 52.7	8.66	H	341.371 213 67	+24.314 636 80		10.38	53.63	−36.27	0.90	0.61	1.17	0.89	0.79	+ 1	+38	+ 1	+ 7	− 7	−31	+ 0	−13	+16	+ 2	2	0.55
112360 H	22 45 31.34	+33 59 10.4	9.82	H	341.380 581 15	+33.986 215 10	A	4.08	−6.44	−20.90	2.31	2.07	2.92	2.82	2.05	+ 8	+ 1	+29	+18	+ 3	−12	+ 7	− 5	−10	− 5	0	0.10
112361	22 45 32.31	+53 22 28.6	7.51	H	341.384 637 10	+53.374 619 72		4.22	7.36	−1.11	0.46	0.48	0.65	0.56	0.60	− 9	− 1	+ 7	− 1	+11	−11	+12	− 3	+12	+13	1	−1.02
112362	22 45 32.36	−25 14 13.0	6.52	1 H	341.384 825 54	−25.236 941 38		10.75	85.46	5.89	0.68	0.49	0.82	0.81	0.58	+26	− 1	− 4	−11	+ 0	+11	+ 0	−14	+26	+29	0	1.31
112363	22 45 32.72	+48 09 41.8	8.68	H	341.386 318 98	+48.161 602 99		0.59	−1.44	−7.58	0.62	0.65	1.02	0.64	0.66	−22	+21	− 1	− 6	+ 5	+ 2	+13	−18	+25	+ 0	0	−0.73
112364	22 45 33.14	+39 05 39.4	8.56	H	341.388 082 54	+39.094 273 49		12.96	−22.21	−11.44	0.96	0.76	1.21	1.31	0.93	+ 7	+16	+21	+34	−12	−12	− 3	−15	+ 4	+13	3	−0.40
112365	22 45 33.48	−32 06 22.8	8.71	H	341.389 487 37	−32.106 343 31		2.93	14.30	−2.38	1.12	0.84	1.23	1.21	0.85	+ 5	+ 5	−25	−29	+24	− 6	+23	+ 6	+ 1	+ 4	0	0.74
112366	22 45 34.02	−35 36 59.3	10.12	H	341.391 745 12	−35.616 460 78		5.86	−9.95	−31.99	1.27	1.02	1.67	1.57	1.34	+36	−15	− 8	+26	+ 6	+19	+ 9	− 2	+25	+55	0	−0.85
112367	22 45 34.15	−16 34 23.1	9.19	H	341.392 294 55	−16.573 089 88		6.46	7.80	6.00	1.25	1.00	1.52	1.43	1.15	+39	+12	−12	−10	−24	+28	−17	−39	+30	+43	0	−1.28
112368	22 45 34.64	+30 26 36.3	6.37	H	341.394 326 91	+30.443 406 69		17.57	−250.94	−349.50	0.49	0.49	0.76	0.58	0.60	+17	+ 5	+35	+14	+ 0	− 7	+ 2	+10	+ 2	+ 7	1	−1.69
112369	22 45 36.07	+52 53 25.2	6.99	H	341.400 298 97	+52.890 344 98		4.44	10.99	−14.29	0.48	0.44	0.62	0.52	0.51	− 5	− 7	+ 7	+ 6	− 2	+ 3	− 2	− 1	+15	+11	2	−1.18
112370	22 45 36.34	+58 37 32.5	9.62	H	341.401 435 16	+58.625 693 74		2.47	−17.71	−16.23	0.95	0.85	1.10	1.13	0.96	−21	+14	− 1	+10	−10	− 1	− 6	−12	+ 7	−12	0	2.01
112371	22 45 36.44	+04 30 21.6	8.54	H	341.401 829 37	+04.506 000 21		6.48	13.34	−25.13	0.92	0.68	1.14	1.35	0.89	+34	+12	+15	−16	+20	+ 1	+21	− 7	+22	− 3	0	−0.76
112372	22 45 37.51	−83 44 30.8	7.85	H	341.406 290 85	−83.741 880 10		8.35	16.56	−21.44	0.65	0.64	0.68	0.87	0.69	− 2	− 9	−14	−24	+13	− 5	+10	− 8	+ 0	−10	1	0.97
112373	22 45 37.59	+74 33 14.8	7.46	H	341.406 634 71	+74.554 098 09		1.79	−4.90	−2.51	0.52	0.52	0.60	0.61	0.59	+ 1	+ 0	+ 5	+ 8	−12	+ 9	−12	− 5	+12	− 4	0	−0.75
112374	22 45 37.85	−53 30 00.6	4.84	1 G	341.407 716 90	−53.500 163 16		8.27	30.62	17.34	0.42	0.41	0.62	0.53	0.44	+17	− 1	−11	+31	+11	+16	+12	+18	+ 3	+20	0	0.66
112375	22 45 37.95	−37 07 09.1	9.47	H	341.408 138 94	−37.119 202 21		6.35	37.55	−2.82	1.06	0.89	1.44	1.31	1.06	+38	−24	−32	− 9	−18	+25	−12	−19	+16	+50	0	−1.68
112376	22 45 37.99	+03 37 52.1	7.89	H	341.408 297 65	+03.631 152 41		3.22	19.14	2.09	0.81	0.63	0.98	1.10	0.84	+38	− 9	+15	+16	+21	+15	+14	− 4	+ 1	+20	2	0.33
112377	22 45 38.11	+41 52 58.5	7.86	H	341.408 807 64	+41.882 913 46		1.71	2.55	−1.63	0.38	0.58	0.84	0.40	0.69	−12	+ 9	− 4	+45	+ 0	+13	+11	−30	+18	+ 4	0	−0.60
112378	22 45 38.20	−66 05 59.1	8.03	H	341.409 178 95	−66.099 758 15		2.88	25.92	−22.13	0.60	0.57	0.86	0.68	0.58	− 6	+ 1	−16	− 3	+ 3	+ 8	+ 5	−17	− 2	+ 4	0	0.50
112379 H	22 45 39.58	+45 23 22.9	10.46	G	341.414 911 61	+45.389 691 40	A	24.47	332.22	74.17	2.89	3.72	3.45	2.12	2.23	− 1	+17	+ 2	− 8	+12	−21	+21	−18	+12	− 8	1	0.72
112380	22 45 40.54	+10 16 34.2	9.77	H	341.418 924 77	+10.276 164 19		1.74	−1.02	−3.75	1.38	1.20	1.71	1.72	1.64	+40	+ 6	−16	+ 2	−17	+ 5	−25	−52	+31	+19	0	1.51
112381	22 45 40.81	−46 32 50.3	5.52	H	341.420 031 43	−46.547 299 92		4.91	−29.41	−11.39	0.55	0.45	0.71	0.63	0.50	+16	−15	−26	+ 2	+ 1	+22	+ 4	+ 0	+21	+34	2	0.10
112382	22 45 41.64	+41 12 09.4	9.01	1 H	341.423 509 20	+41.202 624 16		16.69	162.68	118.40	0.76	0.84	1.28	0.87	1.09	− 7	+12	−18	+ 5	+ 2	+22	+16	−36	+28	+16	0	0.16
*112383	22 45 42.34	−26 58 44.9	7.76	H	341.426 404 36	−26.979 130 15		4.85	14.40	−32.69	1.06	0.68	1.14	1.24	0.82	− 1	−10	−21	−46	+13	+22	+19	−27	+17	− 4	0	1.93
*112384	22 45 42.30	−38 05 09.9	9.02	H	341.426 256 72	−38.086 093 54		9.59	85.99	42.93	0.94	0.77	1.36	1.08	0.90	+21	−12	−27	+15	− 3	+12	+ 1	− 3	+10	+31	2	−0.06
112385	22 45 42.72	+65 16 26.9	10.12	H	341.427 997 99	+65.274 127 01		0.19	−2.67	−3.99	0.99	0.88	1.12	1.42	0.99	− 5	−13	+15	− 1	+14	+13	+10	−11	+ 2	+ 2	0	−0.12
112386 H	22 45 44.11	+29 23 41.3	8.42	H	341.433 771 11	+29.394 815 42	A	1.18	−8.90	−28.35	1.78	1.71	2.11	1.56	1.48	+24	+18	+ 1	+ 1	+ 2	+ 8	+ 7	−10	+25	+22	0	−0.35
112387	22 45 44.71	−68 15 14.3	8.33	H	341.436 270 99	−68.253 960 41		9.58	13.34	22.48	0.65	0.63	0.89	0.79	0.61	+ 3	− 2	−20	+14	+11	−14	+ 7	− 5	− 4	+ 4	0	−0.73
112388	22 45 46.15	+01 41 23.4	11.98	G	341.442 291 83	+01.689 844 83		42.55	201.89	−46.31	3.52	2.52	4.25	4.47	3.56	+29	+ 0	−15	+ 2	− 4	+ 1	−13	−47	+46	+ 5	0	1.69
112389	22 45 47.31	+19 04 53.8	10.76	H	341.447 129 04	+19.081 617 51		25.98	193.91	67.03	2.19	1.25	2.13	2.48	1.61	+ 0	+ 2	+ 2	−52	+15	+17	+19	−23	+15	− 3	0	−0.54
112390	22 45 47.85	−49 16 43.8	9.74	H	341.449 364 03	−49.278 837 00		1.85	−22.16	−4.20	0.77	1.02	1.39	0.91	1.11	+31	−23	−18	−29	−13	+23	−11	−19	+10	+27	0	−1.10
112391	22 45 48.01	−74 46 26.2	8.90	H	341.450 032 90	−74.773 948 13		7.11	−54.76	−15.58	0.72	0.65	0.88	0.84	0.70	− 6	+ 5	−14	− 5	+ 1	+ 6	+ 2	+ 5	− 9	− 7	0	−0.89
112392	22 45 49.69	−00 55 58.4	8.05	H	341.457 062 48	−00.932 884 27		2.89	21.69	2.56	0.89	0.72	1.17	1.01	0.88	+31	−12	−30	− 7	−15	+33	−15	−43	+46	+27	0	−0.80
112393	22 45 50.09	−41 48 16.9	9.60	H	341.458 691 43	−41.804 707 29		5.56	−0.62	12.59	1.02	0.90	1.32	1.14	1.01	+17	−15	− 2	− 7	− 2	+31	+ 0	−12	−13	+ 6	0	−1.21
112394	22 45 51.21	+55 04 35.5	10.15	2 H	341.463 381 94	+55.076 517 97		1.35	−5.05	−7.70	1.13	1.16	1.48	1.41	1.33	−20	−24	+23	−12	+ 3	+ 7	+ 3	−22	+ 0	+ 0	1	1.95
112395	22 45 53.97	+11 12 01.3	7.20	H	341.474 879 63	+11.200 361 75		4.18	15.88	−5.37	0.81	0.62	0.97	0.99	0.82	+21	+ 2	−14	−39	− 4	+22	+ 0	−46	+30	+16	0	0.78
112396	22 45 57.36	−42 25 20.0	9.80	H	341.488 989 11	−42.422 218 00		14.90	−208.84	−69.77	1.27	1.04	1.67	1.62	1.19	+15	− 8	−25	+30	−13	+25	− 5	−29	+ 3	+18	0	−0.09
112397	22 45 57.48	−33 48 41.6	8.90	H	341.489 495 03	−33.811 551 22		4.22	14.04	−6.30	0.87	0.75	1.20	0.97	0.82	+31	− 5	−19	+37	+ 3	+12	+ 6	+21	+ 2	+36	0	1.66
112398	22 45 58.83	+54 51 52.2	8.99	H	341.495 140 14	+54.864 489 35		2.56	10.27	1.31	0.67	0.71	0.87	0.80	0.81	−17	−13	+ 3	−15	+ 6	+ 7	+ 6	−25	+11	− 2	0	−0.75
112399	22 45 59.45	+28 40 04.2	10.14	2 H	341.497 703 94	+28.667 821 61		−1.46	−3.58	−10.76	0.88	0.89	1.53	1.05	1.16	+41	+ 6	+ 9	+15	+12	− 4	+15	+ 4	+ 7	+45	1	−0.44
112400	22 46 00.00	−19 41 46.9	11.12	G	341.500 017 94	−19.696 358 07		16.57	125.96	−307.40	7.58	5.14	8.57	8.50	5.62	+22

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
112301	8.429	0.011	7.180	0.006		1.065	0.010	T	1.03	0.01	L	7.2215	0.0011	0.009	105		7.20	7.24		C			1							S
112302	8.686	0.009	7.223	0.005		1.233	0.008	T	1.19	0.01	L	7.2514	0.0009	0.010	138		7.23	7.27		C			1							S
112303	8.406	0.011	7.361	0.007		0.908	0.010	T	0.91	0.01	L	7.4105	0.0012	0.011	99		7.39	7.43		C	22448+2423	I 1	1							S
112304	8.338	0.009	8.084	0.010		0.270	0.015	G	0.30	0.02	H	8.1287	0.0014	0.013	113		8.10	8.15		C			1							
112305	8.423	0.008	6.624	0.004		1.498	0.007	T	1.52	0.01	L	6.5904	0.0013	0.011	111		6.57	6.61					1							S
112306	13.394	0.552	10.935	0.099		2.500	0.200	G	2.50	0.21	J	10.9054	0.0537	0.279	72		10.29	11.30		U 2			1 S							G
112307	9.349	0.022	8.665	0.019		0.620	0.022	T	0.69	0.02	L	8.7156	0.0011	0.010	79		8.69	8.73					1							S
112308	8.857	0.015	8.413	0.015	*	0.419	0.019	T	0.49	0.02	L *	8.4507	0.0020	0.013	69	*	8.42	8.48		C	22449−0654	H 1	2 C S A	AB	342	0.105	0.012	0.79	0.77	S
112309	9.204	0.018	8.904	0.020		0.285	0.025	T	0.32	0.03	L	8.9555	0.0030	0.021	61		8.92	8.99					1							S
112310						0.673	0.021	G	0.73	0.02	H	11.6450	0.0092	0.056	60		11.51	11.72					1							G
112311	11.780	0.116	9.992	0.041		1.489	0.097	T	1.51	0.14	L	9.8028	0.0030	0.023	69		9.77	9.86					1							
112312						1.300	0.020	G	1.49	0.03	I	12.0467	0.0085	0.076	120		11.81	12.16		U 2	22450−3315	I 1	1 S							G
112314	11.145	0.057	10.627	0.058		0.480	0.020	G	0.55	0.02	H	10.8417	0.0041	0.030	88		10.79	10.89		C			1							G
112315	9.155	0.012	8.561	0.011		0.555	0.012	T	0.63	0.01	L	8.6176	0.0023	0.020	134		8.59	8.65					1							S
112316						2.300	0.410	G	2.73	0.08	B	10.2715	0.0272	0.310	142		10.06	11.28		R 2	22450+4929	I 1	S							G Y
112317	8.895	0.018	8.595	0.020	*	0.285	0.029	T	0.32	0.04	L *	8.7106	0.0855	0.559	118	*	8.55	10.17		P 1	22450+6808	I 1	2 C B	AB	201	3.626	0.016	1.23	0.05	
112318	10.510	0.026	10.311	0.034		0.190	0.040	T	0.21	0.05	L	10.3887	0.0030	0.040	214		10.31	10.46					1							G
112319	8.212	0.010	7.646	0.010		0.534	0.015	G	0.61	0.02	H	7.7031	0.0011	0.011	79		7.68	7.72		C			1							S
112320	9.380	0.013	8.010	0.008		1.160	0.012	T	1.12	0.01	L	8.0572	0.0017	0.016	161		8.03	8.08					1 G							S
112321	9.693	0.021	8.698	0.015		0.563	0.005	G	0.64	0.01	H	8.7231	0.0017	0.016	96		8.69	8.75					1 S							
112322	10.048	0.021	9.924	0.029		0.120	0.034	T	0.13	0.04	L	9.9859	0.0033	0.039	183		9.93	10.05					1 S							G
112323	8.721	0.011	8.523	0.013	A	0.182	0.016	T	0.20	0.02	L	8.5831	0.0261	0.025	117	A	8.53	8.63		U	22451+3841	H 1	2 C D	AB	331	20.052	0.054	2.62	0.26	D
112324	6.956	0.005	6.500	0.005		0.430	0.006	T	0.50	0.01	L	6.5519	0.0008	0.006	114		6.54	6.57		C			1							S
112325	10.187	0.034	9.520	0.030	*	0.660	0.042	G	0.72	0.04	R	9.3926	0.0180	0.146	60	–	9.09	9.55		D	22451−0240	I 2	2 C F C	BC	92	0.650	0.041	0.99	0.20	G
112326	9.992	0.029	9.374	0.028	A	0.550	0.040	G	0.62	0.04	R	9.2787	0.0159	0.109	61	–	9.04	9.43		D	22451−0240	I 2	1 C P C							G
112327	10.786	0.053	9.952	0.040		0.724	0.015	G	0.78	0.01	H	10.0307	0.0017	0.023	69		9.99	10.07		C			1							
112328	9.448	0.015	9.054	0.015		0.373	0.020	T	0.44	0.02	L	9.1335	0.0022	0.026	170		9.09	9.18					1							
112329	10.561	0.034	8.961	0.016		1.341	0.030	T	1.31	0.04	L	8.9871	0.0013	0.019	113		8.95	9.02					1							
112330	9.443	0.018	8.846	0.016		0.557	0.018	T	0.63	0.02	L	8.9218	0.0020	0.021	92		8.88	8.96		C			1							S
112331	9.890	0.024	9.070	0.019	A	0.724	0.003	G	0.77	0.00	H *	9.1222	0.0023	0.017	94	*	9.09	9.15		C	22452−2306	I 1	2 C B	AB	36	4.279	0.057	3.70	0.22	
112332	7.969	0.010	7.606	0.009		0.344	0.013	T	0.40	0.02	L	7.6449	0.0008	0.009	99		7.63	7.67		D			1							S
112333	9.760	0.015	8.100	0.008		1.388	0.013	T	1.36	0.02	L	8.0882	0.0018	0.021	201		8.06	8.12		U			1							S
112334						0.120	0.005	G	0.13	0.01	H	12.1935	0.0132	0.093	86		12.00	12.39					1							D
112335	9.466	0.018	8.871	0.016		0.555	0.021	T	0.63	0.02	L	8.8990	0.0026	0.019	81		8.87	8.95					1							
112336	8.866	0.013	8.416	0.013		0.430	0.015	G	0.50	0.02	H	8.4830	0.0016	0.012	77		8.46	8.51		C			1							S
112337	9.579	0.019	8.985	0.017		0.555	0.019	T	0.63	0.02	L	9.0373	0.0034	0.023	96		8.98	9.08					1							S
112338	9.806	0.020	9.521	0.022		0.271	0.028	T	0.31	0.04	L	9.5678	0.0020	0.020	131		9.53	9.60					1							G
112339	9.923	0.019	8.146	0.009		1.510	0.017	T	2.82	0.03	O	7.8323	0.0049	0.046	175		7.73	7.89		U 2 C			1							
112340	9.842	0.024	9.368	0.024		0.459	0.026	T	0.53	0.03	L	9.4323	0.0029	0.027	73		9.40	9.47		C			1							S
112341	10.996	0.041	9.524	0.018		1.240	0.035	T	1.20	0.03	L	9.5602	0.0029	0.030	178		9.50	9.62		U			1 S							
112342	9.628	0.016	9.357	0.020		0.258	0.024	T	0.29	0.03	L	9.3743	0.0026	0.031	148		9.33	9.42					1							
112343	8.216	0.010	8.008	0.011		0.205	0.003	G	0.23	0.00	H	8.0512	0.0011	0.010	110		8.04	8.07		C			1							
112344	8.633	0.013	8.104	0.012		0.513	0.015	G	0.59	0.02	H	8.1876	0.0015	0.010	83		8.17	8.20		C			1							S
112345	10.089	0.023	8.191	0.010		1.576	0.020	T	1.59	0.02	L	8.1234	0.0018	0.016	116		8.10	8.15		C			1							
112346	7.678	0.008	7.425	0.009	A	0.200	0.015	G	0.22	0.02	H	7.4918	0.0058	0.012	77	A	7.48	7.52			22453−0939	I 1	2 C B	AB	61	11.037	0.029	3.08	0.10	S
112347	8.982	0.013	7.685	0.008		1.103	0.012	T	1.07	0.01	L	7.7227	0.0013	0.010	105		7.71	7.75					1							S
112348	8.521	0.010	8.503	0.012	*	0.021	0.015	T	0.04	0.01	L *	8.5125	0.0018	0.017	149	*	8.48	8.55		D	22454+5129	I 1	2 C S A	AB	186	0.198	0.004	0.16	0.13	S
112349						2.525	0.400	G	2.52	0.41	J	10.8490	0.0045	0.035	99		10.79	10.91					1							G
112350	8.625	0.012	7.559	0.009		0.924	0.011	T	0.92	0.01	L	7.6067	0.0017	0.010	71		7.59	7.63		C			1 S							S
112351	6.961	0.003	6.994	0.004		−0.026	0.005	T	0.00	0.01	L	7.0000	0.0009	0.012	261		6.98	7.02					1							S
112352	8.319	0.009	7.825	0.011		0.465	0.013	T	0.54	0.01	L	7.8900	0.0012	0.012	85		7.87	7.91		C			1							S
112353	10.608	0.040	10.065	0.039		0.516	0.042	T	0.59	0.04	L	10.0741	0.0030	0.022	90		10.02	10.12		C			1							
112354	11.534	0.099	10.123	0.043	A	1.131	0.001	G	1.22	0.00	I *	9.9127	0.0024	0.022	74	*	9.84	9.94		D	22455+1112	I 1	2 C A	AB	354	2.400	0.014	1.21	0.08	
112355	6.911	0.004	6.582	0.005		0.292	0.008	G	0.33	0.01	H	6.6318	0.0016	0.012	121		6.62	6.65	0.12	P 1 A			1							S P
112356	8.982	0.014	7.202	0.007		1.513	0.013	T	2.02	0.04	O	7.0876	0.0020	0.015	76		7.07	7.11		M			1							S
112357	10.962	0.046	10.361	0.045	*	0.560	0.047	T	0.63	0.04	L *	10.4799	0.0039	0.038	111	*	10.43	10.54			22455−2123	H 1	2 C B	AB	248	0.228	0.036	0.16	0.40	
112358	7.622	0.007	6.383	0.004		1.057	0.006	T	1.02	0.01	L	6.4378	0.0008	0.007	90		6.43	6.45		C			1							S
112359	9.902	0.023	8.783	0.016		0.964	0.022	T	0.95	0.02	L	8.8296	0.0019	0.015	100		8.81	8.86					1							
112360	9.597	0.035	9.062	0.030	*	0.502	0.041	T	0.57	0.04	L *	9.9293	0.0025	0.019	123	*	9.88	9.97		D	22455+3359	I 1	2 C A	AB	321	2.030	0.004	0.55	0.02	
112361	9.210	0.014	7.662	0.008		1.300	0.013	T	1.26	0.01	L	7.6642	0.0012	0.011	132		7.65	7.68		C			1							
112362	6.741	0.005	6.552	0.004		0.181	0.006	T	0.20	0.01	L	6.5828	0.0015	0.014	105		6.56	6.61		U 2			1							S
112363	8.683	0.009	8.684	0.012		0.004	0.014	T	0.02	0.01	L	8.6890	0.0018	0.020	159		8.65	8.73					1							
112364	9.310	0.016	8.624	0.014		0.634	0.018	T	0.70	0.02	L	8.6942	0.0016	0.017	112		8.65	8.72					1							
112365	10.581	0.042	8.840	0.017		1.452	0.036	T	1.45	0.06	L	8.8458	0.0020	0.019	85		8.81	8.88		C			1							
112366	10.802	0.045	10.166	0.041		0.585	0.045	T	0.66	0.04	L	10.2442	0.0036	0.032	105		10.20	10.30					1							
112367	10.465	0.038	9.285	0.023		1.011	0.035	T	0.99	0.03	L	9.3516	0.0027	0.022	70		9.31	9.38					1							
112368	7.563	0.005	6.496	0.005		0.933	0.009	G	0.98	0.01	I	6.5370	0.0007	0.007	134		6.52	6.55		C	22456+3027	I 1	1							S
112369	8.423	0.010	7.125	0.006		1.104	0.009	T	1.07	0.01	L	7.1584	0.0012	0.010	130		7.14	7.18		C			1							S
112370	10.098	0.028	9.680	0.029		0.395	0.037	T	0.46	0.04	L	9.7132	0.0024	0.023	106		9.68	9.75					1							G
112371	8.988	0.014	8.575	0.014		0.409	0.015	G	0.48	0.02	H	8.6326	0.0015	0.016	98		8.61	8.66		C			1							S
112372	8.328	0.009	7.897	0.010		0.415	0.015	G	0.48	0.02	H	7.9470	0.0011	0.012	135		7.93	7.97		C			1 G							S
112373	9.648	0.016	7.636	0.007		1.667	0.014	T	1.69	0.01	L	7.5649	0.0011	0.011	115		7.55	7.58		C			1							
112374	6.360	0.003	4.983	0.002		1.180	0.015	G	1.21	0.02	A	5.0034	0.0007	0.008	160		4.99	5.02		M	22456−5330	I 1	1							S
112375	9.951	0.025	9.516	0.026		0.424	0.029	T	0.49	0.03	L	9.5670	0.0018	0.014	84		9.55	9.59					1							
112376	7.823	0.008	7.884	0.010		−0.042	0.019	G	−0.02	0.02	H	7.8889	0.0016	0.012	101		7.87	7.91					1							S
112377	7.912	0.006	7.859	0.007		0.054	0.009	T	0.07	0.01	L	7.8893	0.0010	0.014	230		7.87	7.91					1							S
112378	9.233	0.012	8.128	0.008		0.953	0.011	T	0.94	0.01	L	8.1887	0.0013	0.017	167		8.17	8.22		C			1							
112379	12.073	0.121	10.653	0.050	*	1.240	0.015	G	1.40	0.02	I *	10.5819	0.0036	0.046	228	*	10.49	10.66		D	22457+4523	M 1	2 C A	AC	20	0.407	0.025	1.81	0.12	G
112380	11.197	0.078	9.902	0.040		1.101	0.069	T	1.06	0.07	L	9.9379	0.0026	0.023	78		9.89	9.98					1							
112381	7.227	0.004	5.655	0.003		1.302	0.051	G	1.27	0.02	A	5.6708	0.0008	0.007	107		5.66	5.69					1							S
112382	10.012	0.024	9.101	0.018		0.793	0.023	T	0.82	0.02	L	9.1544	0.0021	0.025	138		9.11	9.21		U			1							
112383	9.754	0.022	7.927	0.010		1.520	0.019	T	1.56	0.03	L	7.8838	0.0015	0.015	82		7.86	7.91		C			1							S
112384	9.501	0.018	9.058	0.018		0.432	0.020	T	0.50	0.02	L	9.1185	0.0018	0.018	93		9.09	9.15		C			1							
112385	10.511	0.035	10.139	0.041		0.352	0.050	T	0.41	0.06	L	10.2063	0.0021	0.023	115		10.17	10.25			22460+6517	I 1	1							G
112386	9.970	0.018	8.583	0.010	*	1.173	0.016	T	1.13	0.01	L *	8.5838	0.0017	0.019	164	*	8.55	8.62		D	22457+2924	I 1	2 C A	AB	286	0.439	0.003	0.59	0.02	
112387	8.800	0.010	8.375	0.010		0.417	0.015	G	0.48	0.02	H	8.4276	0.0017	0.017	148		8.40	8.46		C			1							S
112388						1.459	0.000	G	1.85	0.00	I	12.0763	0.0104	0.059	63		11.95	12.17					1							G
112389	11.960	0.132	11.046	0.097		1.592	0.197	G	2.58	0.45	I	10.7639	0.0045	0.032	88		10.72	10.82		C			1							G
112390	11.068	0.047	9.886	0.026		1.013	0.042	T	0.99	0.03	L	9.9025	0.0026	0.025	147		9.84	9.95					1							
112391	9.533	0.015	8.960	0.014		0.539	0.015	T	0.61	0.02	L	9.0212	0.0016	0.018	154		8.98	9.05		C			1							
112392	9.692	0.020	8.188	0.011		1.265	0.018	T	1.22	0.02	L	8.2041	0.0017	0.011	91		8.19	8.23		C			1							S
112393	10.643	0.042	9.680	0.030		0.847	0.038	T	0.86	0.03	L	9.7613	0.0030	0.024	94		9.72	9.80		C			1							
112394	12.073	0.192	10.532	0.074		2.020	0.510	G	2.00	0.52	J	10.2294	0.0070	0.068	123		10.12	10.30		U 2			1							G
112395	8.274	0.012	7.316	0.009		0.843	0.011	T	0.86	0.01	L	7.3595	0.0008	0.008	88		7.34	7.38					1							S
112396	10.803	0.050	9.879	0.035		0.809	0.004	G	0.85	0.00	H	9.9379	0.0029	0.021	80		9.89	9.99		C			1							
112397	10.304	0.026	9.008	0.015		1.102	0.023	T	1.06	0.02	L	9.0652	0.0017	0.015	113		9.04	9.09		C			1							
112398	9.132	0.016	9.024	0.020		0.105	0.024	T	0.12	0.03	L	9.0351	0.0021	0.019	135		9.01	9.07					1							
112399	12.054	0.099	10.188	0.029		1.584	0.085	T	3.39	0.84	K	9.9081	0.0044	0.055	216		9.81	9.98		U 2			1							G
112400						1.252	0.003	G	1.41	0.01	I	11.2352	0.0037	0.037	103		11.14	11.30					1 X							G G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$						F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr																						%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28										29	30
112401 H	22 46 01.20	+21 42 07.0	8.83 H		341.504 990 10	+21.701 939 40	*	4.32	54.01	−8.03	0.96	0.66	1.17	1.09	0.93	+ 3	+17	− 8	+ 8	+ 5	−22	+ 8	+ 6	+24	+ 4													0	0.07
112402	22 46 01.79	+35 40 18.7	7.56 G		341.507 472 37	+35.671 862 14		14.35	145.81	70.88	0.57	0.53	0.83	0.66	0.66	+ 4	+ 9	+20	+12	+15	− 9	+22	− 1	+ 5	+23													0	1.27
112403	22 46 02.71	−47 12 26.0	9.19 H		341.511 278 76	−47.207 229 54		10.65	115.23	−65.31	0.95	0.75	1.14	1.02	0.85	+ 8	−17	−20	− 1	+ 2	+24	+ 7	+ 0	+ 8	+26													0	−1.39
112404	22 46 02.90	+62 37 05.3	9.62 H		341.512 079 02	+62.618 132 75		3.33	−7.70	−4.26	0.92	0.86	1.07	1.15	1.08	−23	+ 9	−10	+18	+ 0	−21	− 3	− 8	+11	−29													0	−1.77
*112405	22 46 03.72	−81 22 53.8	4.13 H		341.515 513 93	−81.381 617 31		23.23	−55.35	0.88	0.40	0.41	0.50	0.48	0.48	+ 0	− 4	− 9	+ 1	+ 6	− 9	+ 6	+ 0	− 7	−10													2	0.76
*112406	22 46 03.67	−46 21 41.1	9.10 H		341.515 277 90	−46.361 410 51		9.71	9.77	−77.34	2.50	1.93	2.96	3.25	2.17	+12	− 7	−17	− 3	+ 4	− 1	+ 3	− 8	+ 5	+23													0	
112407	22 46 04.32	−45 50 30.8	8.01 G		341.518 010 69	−45.841 889 43		6.57	77.60	14.72	0.94	0.66	1.08	1.36	0.79	+ 9	+ 4	−26	+ 8	+ 6	+ 3	+ 7	+ 2	+24	+32													0	−1.52
112408	22 46 04.73	−55 03 48.9	6.62 G		341.519 726 48	−55.063 590 42		5.42	−18.10	−3.80	0.49	0.48	0.72	0.54	0.48	+15	+ 3	− 6	+ 7	+18	+ 4	+16	+22	−12	+20													0	0.23
112409	22 46 05.22	−14 32 10.7	9.41 H		341.521 748 18	−14.536 311 91		3.70	81.90	−24.41	1.58	0.90	1.67	1.78	1.19	+ 6	+39	− 8	−30	+11	+ 3	+24	−32	+36	+ 3													0	−0.74
112410	22 46 06.24	+38 29 58.3	7.62 H		341.525 996 93	+38.499 530 29		7.12	0.96	13.72	0.78	0.64	1.00	0.93	0.75	+16	+29	+20	+23	− 6	−14	+ 6	−26	+ 2	+27													0	−0.73
112411	22 46 06.48	+52 06 17.3	7.45 H		341.527 013 52	+52.104 794 13		0.62	−2.94	−3.82	0.55	0.53	0.74	0.59	0.58	− 4	+ 5	+11	+ 5	+ 4	+ 9	+ 5	− 4	+12	+10													0	−1.53
112412	22 46 06.60	−13 50 09.7	8.42 H		341.527 502 41	−13.836 034 51		3.92	27.58	−10.94	1.32	0.67	1.29	1.66	0.87	−13	+19	−22	−34	+26	+14	+34	−40	+35	−19													0	0.36
112413	22 46 07.33	−11 32 19.4	8.34 H		341.530 535 37	−11.538 716 58		2.56	11.56	−2.40	0.90	0.61	1.01	1.02	0.71	+20	+ 0	−17	+ 0	− 3	+14	− 2	−21	+24	+12													2	0.81
112414	22 46 07.85	−48 58 43.3	6.63 G		341.532 706 84	−48.978 704 81		25.88	207.28	−48.44	0.48	0.54	0.79	0.56	0.59	+21	−22	−19	−27	− 9	+22	− 8	−33	+18	+28													1	0.03
112415	22 46 08.75	−12 09 31.9	8.38 H		341.536 440 67	−12.158 847 32		7.86	51.01	20.76	1.19	0.67	1.24	1.54	0.83	+ 5	+ 1	−19	−42	+20	+10	+26	−17	− 8	−22													0	2.02
112416	22 46 09.75	+26 50 47.7	8.51 G		341.540 616 03	+26.846 581 26		6.27	−14.98	−16.10	0.72	0.63	1.00	0.86	0.79	+15	+20	+14	+44	−13	−10	−16	− 3	+ 0	+ 3													0	1.19
112417	22 46 10.11	+44 32 45.5	5.84 H		341.542 105 25	+44.545 976 54		18.79	142.77	32.07	0.36	0.42	0.64	0.35	0.41	−46	− 5	+11	−38	+23	− 2	+21	−32	+11	−31													0	0.49
112418	22 46 11.23	+40 06 26.3	9.28 H		341.546 788 49	+40.107 312 00		−0.31	−2.46	−3.39	1.03	0.83	1.28	1.19	0.99	− 1	+14	+ 3	+35	+ 9	− 7	+21	−19	+ 4	+20													0	0.91
112419	22 46 12.99	+42 51 35.5	8.25 H		341.554 136 32	+42.859 861 16		3.42	40.12	−10.33	0.59	0.72	1.03	0.72	0.86	−14	+12	−11	+ 2	+ 6	+12	+19	−39	+30	+18													0	−1.29
112420	22 46 14.23	−11 09 58.4	6.67 2 H		341.559 282 72	−11.166 229 70		2.13	−11.76	−31.59	0.73	0.48	0.79	0.83	0.55	+13	+ 4	− 8	− 9	+ 2	+20	+ 4	−16	+18	+ 8													2	0.60
112421	22 46 16.50	−25 45 36.6	9.56 H		341.568 740 90	−25.760 172 21		5.26	59.49	−18.82	1.03	0.84	1.29	1.18	0.95	+36	− 5	− 3	−19	− 5	+29	− 6	−18	+28	+40													0	0.10
112422 H	22 46 18.63	+33 19 14.8	10.17 H		341.577 624 46	+33.320 772 00	*	15.11	149.86	29.52	1.09	0.95	1.59	1.55	1.21	+18	+15	+21	+13	+ 3	− 2	+ 2	− 8	+ 9	+ 2													0	−0.63
112423	22 46 18.91	−48 23 24.1	8.35 H		341.578 780 10	−48.390 024 73		−0.63	12.91	5.74	0.81	0.71	1.10	0.70	0.78	+20	−19	−20	−40	− 6	+24	− 4	−20	+17	+30													0	0.91
112424	22 46 19.12	+43 22 16.5	8.95 G		341.579 663 32	+43.371 236 58		2.88	3.90	−7.42	0.81	0.84	1.25	0.86	0.93	−13	+22	+ 0	+30	+18	+14	+35	−25	+26	+17													0	0.28
112425	22 46 19.23	−09 41 54.6	8.27 H		341.580 142 03	−09.698 502 13		1.87	−34.61	−89.52	1.02	0.67	1.17	1.52	0.92	+18	+ 3	−22	− 1	+ 6	+11	+ 6	−30	+31	+13													0	−1.14
112426	22 46 20.16	+50 12 35.9	7.87 H		341.583 984 76	+50.209 970 93		33.54	242.29	−2.00	0.53	0.58	0.81	0.59	0.71	−26	+11	+ 2	+ 6	+ 7	−12	+ 9	− 7	+10	−14													0	−0.20
112427	22 46 20.73	−08 23 21.3	8.16 H		341.586 390 42	−08.389 241 63		2.59	41.26	0.41	1.01	0.66	1.06	1.23	0.85	+16	−10	−10	+ 4	+13	+ 1	+14	− 6	− 4	+12													0	0.03
112428	22 46 21.06	+46 12 54.5	6.55 H		341.587 729 56	+46.215 134 24		3.54	10.26	−21.32	0.40	0.45	0.68	0.42	0.45	−21	+16	+ 7	− 4	+16	−13	+21	−17	+ 7	− 2													0	−0.46
112429	22 46 23.29	−75 25 19.8	7.31 H		341.597 033 95	−75.422 166 14		6.27	−12.97	1.66	0.53	0.49	0.65	0.59	0.53	− 6	− 4	−23	+ 1	+16	− 5	+15	+ 3	−11	+10													0	0.51
112430	22 46 24.78	+59 26 31.9	9.59 2 H		341.603 231 73	+59.442 208 05		1.67	−2.75	−2.15	0.89	0.85	1.06	1.23	1.06	−20	− 9	+ 5	+24	+ 1	−14	+ 8	−17	− 2	− 2													0	0.38
112431	22 46 25.33	−36 08 26.5	9.16 H		341.605 530 22	−36.140 703 12		6.27	43.57	−7.49	1.19	0.90	1.53	1.47	1.08	+31	−28	−34	+37	−15	+ 6	− 9	−14	+13	+39													0	−1.21
112432	22 46 28.22	−49 41 06.4	6.49 G		341.617 564 51	−49.685 120 13		4.29	86.51	−275.57	0.50	0.51	0.75	0.56	0.56	+24	−24	−13	−23	−14	+23	−12	−28	+ 6	+26													0	−1.53
112433	22 46 28.59	+07 34 58.6	6.91 G		341.619 127 24	+07.582 935 15		7.18	60.56	−1.31	0.78	0.56	0.96	0.97	0.70	+25	+23	+ 5	+ 1	+ 6	+28	+ 4	−23	+ 9	+12													2	1.28
112434	22 46 29.59	+54 52 19.5	6.85 G		341.623 276 29	+54.872 095 55		4.02	5.51	−1.78	0.44	0.47	0.58	0.53	0.55	−16	−11	+11	− 2	+ 2	+ 8	+ 2	−19	+ 7	− 4													0	−1.79
112435	22 46 29.67	+09 28 17.1	9.45 G		341.623 620 60	+09.471 409 63		6.43	12.78	3.91	1.43	1.13	1.84	2.27	1.70	+19	+27	−34	−47	+ 7	−24	+ 6	−56	+38	− 6													0	1.54
112436	22 46 30.00	+56 49 31.6	10.40 3 H		341.624 998 81	+56.825 455 44		−0.61	2.15	0.29	1.12	0.95	1.28	1.61	1.05	−20	−12	+12	+13	+ 1	+17	+ 1	−18	+ 9	− 8													0	−0.99
112437 H	22 46 30.64	+59 41 04.9	9.08 H		341.627 680 54	+59.684 692 16	A	1.42	15.01	1.23	1.09	1.06	1.14	1.27	1.07	−20	− 1	+19	+27	− 2	+ 0	− 1	− 5	+11	−18													0	0.09
112438	22 46 30.82	−18 17 11.4	7.70 H		341.628 415 50	−18.286 488 64		3.71	3.61	4.34	1.06	0.60	1.09	1.34	0.76	+ 9	− 1	− 9	+13	+19	−12	+17	− 4	+24	+ 3													0	0.72
112439	22 46 31.34	−52 57 55.7	8.37 H		341.630 577 86	−52.965 473 31		2.39	20.93	−17.90	0.53	0.63	1.02	0.72	0.69	+22	− 4	−18	+30	+ 2	+23	+ 6	+ 6	+10	+23													0	1.29
112440	22 46 31.84	+23 33 56.4	3.97 H		341.632 676 63	+23.565 679 39		8.26	56.99	−10.46	0.58	0.46	0.70	0.57	0.55	+15	+13	+ 5	+11	+ 4	−16	+ 6	+ 6	+ 5	+17													0	−0.09
112441	22 46 36.81	−56 35 57.8	8.96 H		341.653 382 47	−56.599 386 00		22.97	−54.23	−60.88	0.82	0.88	1.25	0.96	1.00	+ 6	+ 3	+ 1	+ 4	+18	+ 7	+15	+ 8	−23	+23													0	−0.57
*112442	22 46 37.74	+70 14 36.1	10.25 H		341.657 241 68	+70.243 368 49		2.19	−3.94	−1.39	0.99	0.83	1.11	1.13	0.92	+ 6	+16	+ 3	+ 6	+ 2	− 3	+ 6	−10	+28	+ 3													5	1.37
*112443	22 46 37.58	−20 15 40.6	8.60 H		341.656 590 13	−20.261 288 08		5.79	16.38	−12.18	1.12	0.75	1.57	1.30	1.03	+22	− 4	− 8	−33	+10	+24	+ 8	−29	+55	+33													0	1.32
112444	22 46 40.25	+04 54 28.9	7.83 H		341.667 722 25	+04.908 016 83		5.51	8.04	−5.59	0.97	0.61	1.08	1.67	0.89	+13	+24	− 4	−44	+26	−22	+35	−13	+22	−26													0	0.33
112446	22 46 41.22	+69 26 40.8	8.85 H		341.671 769 53	+69.444 661 42		1.78	4.52	−0.32	0.66	0.60	0.75	0.81	0.61	− 4	+ 2	+19	+ 3	+ 7	+18	+ 3	− 5	+ 3	− 6													0	−1.23
112447	22 46 41.44	+12 10 26.7	4.20 G		341.672 672 95	+12.174 083 81		61.54	233.06	−492.04	0.68	0.51	0.77	0.80	0.61	+17	−20	−15	−30	− 4	+24	− 7	−45	+20	+ 3													2	−1.32
112448	22 46 41.56	−51 03 00.7	7.50 2 H		341.673 150 66	−51.050 183 18		3.07	6.17	−7.72	0.71	0.60	0.94	0.86	0.68	+10	−13	−18	−29	−10	+ 8	−10	−28	+14	+ 8													2	1.61
112449	22 46 43.64	−46 56 22.1	6.56 G		341.681 812 67	−46.939 478 90	A	13.51	52.38	13.61	1.11	0.92	1.05	1.13	0.94	+12	−19	−32	+ 0	+ 1	+12	+ 4	− 1	+ 9	+29													3	−0.16
112450	22 46 44.28	−46 56 30.2	10.01 H		341.684 479 70	−46.941 734 16	B	8.65	44.37	16.00	35.43	23.52	11.79	22.77	16.41	+13	−16	−29	− 1	+ 0	+ 2	− 1	+ 1	+ 5	+31													3	−0.16
112451	22 46 44.85	+14 59 42.2	7.62 H		341.686 861 59	+14.995 049 72		4.64	−35.29	−24.47	0.80	0.59	0.96	0.84	0.76	+21	−18	−12	+16	−13	−24	−29	−40	+43	− 5													2	1.59
112452	22 46 44.87	−63 18 04.3	11.51 H		341.686 978 72	−63.301 193 03		38.88	196.52	−113.05	1.93	1.86	2.90	2.26	1.97	−19	−11	+10	− 6	+ 1	+ 6	+ 1	−10	− 5	−21													3	0.45
112453	22 46 44.98	+25 48 12.2	7.95 H		341.687 416 74	+25.803 393 45		6.12	−5.70	−10.61	0.61	0.56	0.87	0.72	0.71	+16	+10	+10	+37	− 3	− 8	− 4	+ 9	+ 3	+ 8													0	0.27
112454	22 46 45.65	+76 40 19.6	8.36 H		341.690 214 38	+76.672 103 89		2.77	−46.10	−35.56	0.74	0.65	0.78	0.85	0.76	− 8	+ 3	+13	+28	− 3	−11	− 1	− 2	− 7	− 4													0	0.50
112455	22 46 45.79	−39 19 24.5	10.30 H		341.690 787 49	−39.323 458 58		5.80	17.59	−21.77	1.21	1.01	1.64	1.49	1.13	+16	− 4	−18	+26	− 6	+20	− 2	− 5	+16	+22													2	1.45
112456	22 46 47.61	+41 17 46.4	9.76 H		341.698 372 10	+41.296 217 14		3.79	4.31	−2.14	0.86	1.05	1.60	0.93	1.19	− 7	+14	− 3	+32	+ 5	+17	+17	−30	+27	+12													0	−0.98
112457	22 46 48.05	−31 52 18.1	8.46 H		341.700 228 26	−31.871 684 65		1.51	56.11	−148.35	1.15	0.72	1.18	1.31	0.79	+ 8	+ 3	−16	− 7	+30	−22	+27	+11	+ 7	+ 8													4	−1.14
112458 H	22 46 48.41	−48 18 53.7	8.05 H		341.701 725 63	−48.314 916 89	A	8.05	48.75	−22.67	1.47	1.21	1.74	1.26	1.17	+31	−14	−35	−41	−12	+16	−16	−12	+27	+39													3	0.51
112459 H	22 46 48.55	−42 31 59.1	8.14 H		341.702 297 13	−42.533 077 12	A	4.54	9.36	−18.56	1.45	1.12	1.58	1.75	1.34	+ 6	+ 3	− 2	+44	−12	+29	+ 0	−12	+32	+27													1	0.80
*112460	22 46 50.31	+44 20 06.4	10.29 H		341.709 612 16	+44.335 107 74		198.07	−704.66	−459.39	1.15	1.25	2.05	1.19	1.33	−38	+ 1	− 4	−30	+16	− 6	+16	−33	+28	−21													0	0.85
*112461	22 46 49.79	+19 01 02.5	8.97 H		341.707 446 74	+19.017 350 44		13.38	−62.20	−171.96	1.24	0.90	1.60	1.59	1.31	+26	−17	+ 4	−28	− 5	+40	−11	−30	+27	+28													4	0.04
*112462	22 46 50.25	−20 47 26.3	7.92 H		341.709 374 24	−20.790 639 22		18.74	4.82	33.13	0.83	0.62	1.11	1.00	0.75	+34	−27	− 2	−27	+ 0	+38	−10	−31	+38	+44													0	−0.56
*112463	22 46 50.30	+22 41 54.8	8.12 H		341.709 569 00	+22.698 564 23		2.13	2.91	−25.00	0.91	0.59	1.03	1.07	0.85	− 4	−25	+11	−31	+16	+22	+16	− 2	+ 1	+ 0													0	−0.06
112464	22 46 50.54	−46 04 39.0	8.72 H		341.710 569 23	−46.077 491 95		6.08	53.14	2.96	1.09	0.79	1.33	1.42	0.83	− 2	+18	−33	+17	+ 2	+ 7	+10	− 4	+17	+24													0	−1.47
112465	22 46 51.68	+44 20 22.3	11.59 H																																			
112466	22 46 51.94	−37 30 26.3	9.55 H		341.716 422 47	−37.507 292 82		−1.13	0.42	−34.90	1.10	0.90	1.50	1.36	1.15	+27	−10	−17	+ 2	− 2	+22	− 1	− 1	+26	+46													0	−1.29
112467	22 46 52.01	−45 03 04.5	8.26 H		341.716 715 74	−45.051 257 66		7.19	85.44	−1.04	0.94	0.65	1.08	1.09	0.69	+ 4	+19	−24	+ 3	+10	+ 3	+ 8	+ 4	− 9	+22													0	−1.88
112468	22 46 53.30	−69 31 39.5	7.65 H		341.722 084 36	−69.527 647 40		2.38	14.63	−13.72	0.52	0.48	0.70	0.60	0.50	+ 3	− 5	−11	−12	− 1	− 5	− 1	−13	− 5	+ 6													0	0.16
112469	22 46 53.94	+58 05 24.2	10.00 H																																			
112470	22 46 54.11	+58 05 03.6	8.59 1 G		341.725 474 38	+58.084 322 77		−0.79	−1.74	−2.52	0.83	0.75	1.00	0.84	0.81	−16	+24	− 7	+20	− 7	− 1	+ 1	−13	+25	−10													1	1.27
112471	22 46 54.29	+28 31 11.4	8.85 H		341.726 214 63	+28.519 842 53		4.31	1.13	4.97	0.59	0.56	1.05	0.69	0.70	+34	+ 2	+14	+10	− 1	−10	− 1	−12	+ 2	+29													1	0.92
112472	22 46 54.37	−33 10 56.9	6.81 H		341.726 557 28	−33.182 482 39		6.15	49.58	2.97	0.59	0.54	0.85	0.66	0.62	+38	+ 9	− 4	+40	+ 6	+24	+ 7	+24	+ 3	+45													0	−1.81
112473	22 46 54.45	+60 36 41.0	8.83 H		341.726 858 32	+60.611 379 65		3.59	13.97	2.88	0.70	0.71	0.84	0.87	0.87	−17	+ 7	+19	+ 9	+ 7	+ 9	+ 4	− 9	− 7	−25													3	1.86
112474	22 46 54.99	+47 10 53.0	8.71 G		341.729 110 45	+47.181 400 90		4.50	−75.93	−41.23	0.66	0.70	1.02	0.66	0.69	−30	+12	+11	+13	+11	−10	+18	−17	+ 6	−16													0	1.00
112475	22 46 55.79	+39 25 01.7	7.58 G		341.732 467 05	+39.417 132 52		18.18	−50.92	38.93	0.68	0.57	0.89	1.02	0.64	+ 5	+17	+16	+ 9	+ 6	+ 4	+10	−18	+ 6	+24													1	−1.28
112476	22 46 56.66	+36 47 02.2	10.27 H		341.736 093 11	+36.783 940 84		0.51	0.22	0.55	1.14	0.96	1.63	1.50	1.23	+10	+22	+27	+ 6	+ 1	+ 0	+ 1	+ 2	− 3	+13													0	0.95
112477 H	22 46 59.36	+44 46 22.6	8.33 H		341.747 315 18	+44.772 956 27	B	2.81	6.60	−4.70	1.70	1.91	2.54	1.67	1.76	−33	−14	+ 6	− 5	+19	− 9	+19	−19	+14	−16													2	2.17
112478	22 46 59.87	+53 45 24.2	8.28 H		341.749 448 22	+53.756 712 15		2.96	7.56	−0.89	0.54	0.55	0.74	0.61	0.67	−15	+ 5	+ 4	+11	+ 8	− 4	+13	− 9	+19	+ 1													0	−0.48
112479	22 46 59.97	−16 24 37.8	8.14 H		341.749 861 17	−16.410 498 64		5.66	12.11	−3.11	0.91	0.68	1.06	1.21	0.88	+31	+10	− 7	+18	− 2	+25	+ 0	−20	+12	+31													0	0.30
112480	22 47 01.10	+50 14 36.6	9.80 H		341.754 587 75	+50.243 501 47		3.49	11.60	−4.38	0.80	0.82	1.19	0.84	0.88	−20	+ 1	+14	+ 8	+ 3	−10	+ 5	− 7	+27	−15													0	0.11
112481	22 47 01.43	+06 33 44.1	8.10 H		341.755 968 69	+06.562 236 75		2.87	−8.02	2.54	0.97	0.62	1.14	1.39	0.79	+24	+26	+16	+ 1	+19	+22	+10	−22	+ 6	− 6													0	−1.47
*112482	22 47 02.51	+17 13 59.1	7.34 1 G		341.760 455 83	+17.233 090 23		1.53	−4.26	−16.06	0.73	0.52	0.92	0.76	0.79	+17	−10	−13	+35	− 5	−23	−11	−20	+29	+13													0	2.48
*112483	22 47 02.43	−54 24 44.1	8.36 H		341.760 111 13	−54.412 242 96		3.62	−39.81	4.93	0.65	0.69	1.08	0.81	0.69	+15	+ 0	−14	+20	+ 8	+19	+10	+ 8	+ 3	+17													0	1.13
112484	22 47 03.18	+48 36 19.9	10.65 H		341.763 270 12	+48.605 533 91		−0.50	4.55	−0.76	1.22	1.21	1.87	1.20	1.20	−22	+15	+ 0	−25	+17	−13	+22	−28	+36	− 8													0	0.38
112485	22 47 03.83	+04 09 44.9	8.90 H		341.765 973 53	+04.162 472 42		6.64	12.27	34.22	1.01	0.74	1.24	1.66	0.95	+27	+ 7	− 7	− 9	+15	+ 3	+ 5	−29	+20	−20													0	0.08
112486	22 47 03.89	+29 51 08.6	11.70 G		341.766 214 41	+29.852 385 03		0.80	452.94	−65.51	1.63	1.57	2.65	2.17	2.34	+28	+ 9	+12	+13	+10	+ 8	+10	+20	− 2	+16													3	1.35
112487	22 47 04.60	+14 52 54.5	7.91 H		341.769 157 97	+14.881 814 88		3.18	30.81	6.97	0.75	0.63	1.00	0.83	0.83	+27	− 3	−13	− 3	−12	−12	−17	−38	+40	+11													0	0.69
112488	22 47 05.84	−30 46 50.5	10.31 H		341.774 344 27	−30.780 697 28		3.01	17.89	10.38	1.69	1.10	1.87	1.89	1.07	+ 0	+19	−33	−29	+15	−11	+17	− 8	+24	− 4													0	0.33
112489	22 47 06.63	−60 04 33.0	8.31 G		341.777 621 60	−60.075 830 47		9.00	78.76	−30.61	0.51	0.63	1.03	0.60	0.64	−37	− 5	−15	+ 2	+ 5	+ 6	+ 9	−24	− 7	−30													0	0.92
112490	22 47 08.76	−43 53 45.7	8.73 H		341.786 498 57	−43.896 018 79		3.49	14.08	−3.10	1.03	0.78	1.21	1.33	0.98	+10	− 5	− 7	+39	+ 2	+20	+ 5	+15	−10	+10													0	−1.30
*112491	22 47 09.16	−32 40 30.8	7.58 G		341.788 177 81	−32.675 233 21		36.73	247.65	−91.85	0.78	0.62	0.99	0.88	0.74	+41	− 1	− 2	+41	+17	+14	+19	+25	+10	+49													2	−0.95
*112492	22 47 09.10	−41 41 30.7	6.84 H		341.787 898 55	−41.691 863 31		4.31	26.05	6.97	0.67	0.52	0.82	0.79	0.62	+ 4	−16	−11	−12	+ 1	+27	+ 3	−19	+11

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
112401	9.372	0.016	8.884	0.016	*	0.459	0.021	T	0.53	0.02	L *	8.9331	0.0024	0.017	97	*	8.91	8.96			22460+2142	H 1	2 C S A	AB	117	0.129	0.010	0.41	0.64	
112402	8.085	0.008	7.621	0.007		0.437	0.010	T	0.51	0.01	L	7.6623	0.0012	0.009	134		7.65	7.69					1						S
112403	9.898	0.022	9.239	0.019		0.602	0.022	T	0.67	0.02	L	9.3241	0.0024	0.019	96		9.28	9.36		C			1						
112404	10.010	0.024	9.658	0.026		0.334	0.033	T	0.39	0.04	L	9.7031	0.0024	0.022	114		9.65	9.75		C			1						G
112405	4.399	0.002	4.162	0.002		0.208	0.005	G	0.24	0.02	A	4.1964	0.0004	0.005	135		4.19	4.21		D			1 G						S
112406	9.909	0.021	9.185	0.018		0.651	0.021	T	0.71	0.02	L	9.2291	0.0020	0.017	95		9.20	9.26		C			1 X						
112407	8.465	0.010	8.077	0.010		0.380	0.011	G	0.45	0.00	A	8.1098	0.0016	0.016	98		8.07	8.14					1						S
112408	8.180	0.008	6.754	0.004		1.189	0.003	G	1.15	0.00	H	6.7875	0.0009	0.009	124		6.77	6.81		C			1						S
112409	10.735	0.047	9.522	0.027		1.037	0.042	T	1.09	0.05	L	9.5524	0.0021	0.019	82		9.51	9.59		C			1						
112410	8.879	0.012	7.735	0.008		0.983	0.011	T	0.96	0.01	L	7.7815	0.0012	0.014	118		7.76	7.81		C			1						S
112411	7.755	0.008	7.474	0.007		0.267	0.010	T	0.30	0.01	L	7.5247	0.0011	0.010	135		7.51	7.54		C	22461+5206	I 1	1						S
112412	9.957	0.027	8.569	0.015		1.174	0.024	T	1.14	0.02	L	8.5874	0.0017	0.011	78		8.56	8.61					1						
112413	9.800	0.021	8.479	0.013		1.122	0.019	T	1.08	0.02	L	8.5100	0.0016	0.013	90		8.48	8.53		C			1						
112414	7.417	0.005	6.710	0.004		0.636	0.006	G	0.70	0.07	F	6.7680	0.0009	0.008	151		6.75	6.78					1						S
112415	9.480	0.018	8.462	0.013		0.888	0.017	T	0.89	0.01	L	8.5373	0.0025	0.020	90		8.51	8.57					1 G						
112416	8.732	0.010	8.552	0.011		0.172	0.014	T	0.19	0.01	L	8.5746	0.0016	0.014	136		8.55	8.60		C			1						
112417	6.255	0.002	5.877	0.002		0.358	0.003	T	0.42	0.00	L	5.9267	0.0004	0.007	273		5.91	5.94		C			1						S
112418	9.466	0.016	9.302	0.020		0.157	0.024	T	0.17	0.03	L	9.3346	0.0028	0.024	115		9.29	9.37					1						
112419	9.716	0.017	8.395	0.010		1.122	0.015	T	1.08	0.02	L	8.4217	0.0018	0.015	143		8.39	8.46					1						
112420	8.837	0.013	6.874	0.006		1.664	0.012	T	2.10	0.04	O	6.7428	0.0032	0.026	88		6.71	6.78		U 2 C			1 S						S P
112421	10.669	0.042	9.642	0.028		0.894	0.038	T	0.90	0.03	L	9.7188	0.0019	0.017	101		9.69	9.75		C			1						
112422	11.424	0.072	10.334	0.043	*	0.942	0.064	T	0.93	0.05	L *	10.3309	0.0026	0.031	134	*	10.27	10.38		C	22463+3319	H 1	2 C S D	AB	70	0.171	0.077	1.43	1.01	G D
112423	10.343	0.030	8.523	0.012		1.546	0.027	T	1.66	0.09	O	8.4609	0.0019	0.018	120		8.43	8.50					1						
112424	9.275	0.014	8.992	0.015		0.305	0.015	G	0.35	0.02	H	9.0278	0.0018	0.023	146		9.00	9.07		C			1						
112425	9.679	0.025	8.409	0.015		1.082	0.023	T	1.04	0.02	L	8.4332	0.0013	0.014	74		8.41	8.47		D			1						
112426	8.887	0.010	7.959	0.008		0.803	0.003	G	0.84	0.00	H	8.0141	0.0014	0.013	164		7.99	8.04					1 G						
112427	9.742	0.023	8.306	0.013		1.212	0.021	T	1.17	0.02	L	8.3226	0.0019	0.015	72		8.30	8.36		C			1						S
112428	8.526	0.008	6.712	0.004		1.510	0.007	T	1.54	0.01	L	6.6761	0.0009	0.009	195		6.66	6.69					1						S
112429	7.425	0.005	7.317	0.006		0.098	0.007	T	0.10	0.02	A	7.3463	0.0013	0.012	139		7.33	7.37					1						S
112430	11.303	0.073	9.781	0.028		1.279	0.061	T	1.24	0.06	L	9.7389	0.0236	0.145	115		9.60	9.95	6.23	P 1 A			1						G
112431	10.260	0.028	9.227	0.019		0.899	0.025	T	0.90	0.02	L	9.3175	0.0019	0.017	90		9.29	9.35		C			1						
112432	7.956	0.007	6.621	0.003		1.162	0.003	G	1.12	0.00	H	6.6543	0.0008	0.010	149		6.64	6.68		R 2			1						S
112433	7.436	0.007	6.947	0.006		0.458	0.015	G	0.53	0.02	H	7.0068	0.0010	0.009	88		6.99	7.02		C			1						S
112434	6.929	0.004	6.857	0.005		0.068	0.003	G	0.08	0.00	H	6.8833	0.0007	0.008	133		6.87	6.90		C			1						S
112435	9.811	0.025	9.427	0.026		0.422	0.015	G	0.49	0.02	H	9.5407	0.0023	0.020	75		9.52	9.58		C			1						
112436	10.484	0.041	10.412	0.063		0.065	0.068	T	0.07	0.07	L	10.4319	0.0049	0.086	105		10.38	10.89	1.54	P 1 A			1						G
112437	9.472	0.017	9.146	0.019	A	0.322	0.155	G	0.35	0.10	L *	9.1593	0.0021	0.017	119	*	9.14	9.19		C	22465+5941	H 1	2 C B	AB	324	9.591	0.040	3.51	0.15	
112438	8.844	0.014	7.810	0.010		0.900	0.013	T	0.90	0.01	L	7.8634	0.0018	0.013	77		7.85	7.89		C			1						S
112439	10.386	0.024	8.537	0.010		1.537	0.021	T	1.59	0.05	L	8.4864	0.0016	0.017	212		8.45	8.52					1						
112440	5.338	0.003	4.075	0.002		1.070	0.002	G	0.99	0.03	C	4.1320	0.0005	0.005	96		4.12	4.14					1						S
112441	10.185	0.026	9.070	0.017		0.953	0.025	T	1.00	0.02	L	9.1044	0.0025	0.025	119		9.06	9.15		C			1						
112442	10.504	0.033	10.359	0.044		0.140	0.052	T	0.15	0.05	L	10.2981	0.0024	0.025	127		10.25	10.35		C			1 S						G
112443	10.252	0.029	8.731	0.014		1.263	0.002	G	1.22	0.00	H	8.7615	0.0024	0.020	111		8.73	8.80		R			1						
112444	8.104	0.010	7.849	0.011		0.256	0.003	G	0.29	0.00	H	7.8989	0.0014	0.010	91		7.88	7.93		C			1						S
112446	8.999	0.013	8.845	0.015		0.148	0.019	T	0.16	0.02	L	8.8991	0.0012	0.016	130		8.87	8.92		C			1						
112447	4.800	0.003	4.265	0.003		0.502	0.007	G	0.60	0.03	G	4.3058	0.0006	0.005	88		4.30	4.32			22467+1211	I 1	1						S
112448	9.533	0.021	7.724	0.009		1.537	0.019	T	2.47	0.04	O	7.5178	0.0036	0.028	120		7.48	7.57		U 2			1 S						S
112449	6.960	0.005	6.632	0.005	A	0.314	0.006	G	0.34	0.02	A	6.6843	0.0033	0.011	102	A	6.67	6.70		D	22467−4656	I 2	1 C P A						S
112450	10.726	0.050	9.903	0.038	B	0.742	0.048	T	0.79	0.03	L	10.2092	0.0752			B				D	22467−4656	I 2	1 C I A						
112451	8.857	0.013	7.708	0.009		0.987	0.012	T	0.97	0.01	L	7.7839	0.0017	0.010	88		7.77	7.81					1						S
112452						1.633	0.082	G	2.68	0.20	I	11.4872	0.0046	0.067	166		11.37	11.60					1						G
112453	8.049	0.007	7.966	0.009		0.082	0.011	T	0.09	0.01	L	7.9831	0.0010	0.011	127		7.96	8.01		C			1						S
112454	9.854	0.018	8.492	0.011		1.154	0.017	T	1.12	0.01	L	8.5320	0.0018	0.015	117		8.50	8.55		C			1						
112455	10.795	0.039	10.266	0.038		0.505	0.041	T	0.58	0.04	L	10.4111	0.0034	0.029	112		10.36	10.45		C			1						
112456	9.806	0.018	9.764	0.024		0.043	0.028	T	0.06	0.02	L	9.7827	0.0026	0.029	162		9.72	9.83		C			1 S						G
112457	9.437	0.018	8.569	0.014		0.776	0.017	T	0.81	0.01	L	8.6112	0.0018	0.017	89		8.58	8.64		C			1						S
112458	9.137	0.029	8.068	0.020	*	0.926	0.027	T	0.92	0.02	L *	8.2120	0.0016	0.017	114	*	8.18	8.25		D	22468−4819	I 1	2 C A	AB	1	4.246	0.004	1.12	0.02	S
112459	9.620	0.022	8.303	0.013	A	1.300	0.495	G	1.10	0.03	L *	8.3034	0.0018	0.022	89	*	8.27	8.34			22468−4232	I 1	2 C A	AB	4	3.349	0.023	3.15	0.11	S
112460	12.054	0.103	10.396	0.035		1.540	0.510	G	2.89	0.91	K	10.2245	0.0034	0.054	233		10.14	10.32		D	22468+4420	I 2	1 S						G
112461	9.773	0.022	9.059	0.019		0.657	0.024	T	0.72	0.02	L	9.0986	0.0045	0.033	92		9.05	9.15		R			1						S
112462	8.568	0.009	7.980	0.009		0.534	0.015	G	0.61	0.02	H	8.0333	0.0012	0.013	123		8.02	8.06		C			1						S
112463	9.940	0.025	8.260	0.012		1.404	0.022	T	1.38	0.03	L	8.2568	0.0012	0.015	97		8.23	8.28		C			1						
112464	9.154	0.014	8.761	0.015		0.384	0.017	T	0.45	0.02	L	8.8103	0.0023	0.020	98		8.76	8.85					1						S
112465											T	11.7532	0.0228	0.315	230		10.66	12.16		D	22468+4420	I 2	S						G
112466	10.697	0.041	9.623	0.027		0.930	0.037	T	0.92	0.03	L	9.7136	0.0031	0.023	94		9.68	9.76					1						
112467	8.678	0.012	8.279	0.012		0.367	0.009	G	0.42	0.02	A	8.3400	0.0019	0.017	99		8.31	8.37					1						S
112468	9.303	0.013	7.793	0.007		1.270	0.012	T	1.23	0.01	L	7.8110	0.0013	0.015	148		7.79	7.84					1						S
112469											T	10.1451	0.0852	0.775	109		8.96	11.23		D	22469+5805	I 2	S						G
112470	8.925	0.016	8.632	0.018		0.334	0.041	G	0.39	0.06	H	8.6688	0.0029	0.023	117		8.63	8.71	2.11	P 1 A	22469+5805	I 2	1 S						G P
112471	9.053	0.009	8.866	0.011		0.179	0.013	T	0.20	0.01	L	8.9129	0.0013	0.018	206		8.88	8.95					1						
112472	8.047	0.006	6.917	0.005		0.972	0.006	T	0.96	0.01	L	6.9760	0.0009	0.008	144		6.96	6.99		C			1						S
112473	9.235	0.014	8.860	0.014		0.355	0.018	T	0.42	0.02	L	8.9158	0.0016	0.016	108		8.89	8.95					1						
112474	9.255	0.012	8.792	0.012		0.450	0.013	T	0.52	0.01	L	8.8240	0.0016	0.019	169		8.79	8.86					1						
112475	8.141	0.009	7.628	0.008		0.496	0.015	G	0.57	0.02	H	7.6875	0.0014	0.012	120		7.67	7.71		C			1						S
112476	10.443	0.032	10.303	0.043		0.130	0.040	G	0.14	0.04	R	10.3134	0.0029	0.026	109		10.27	10.36					1						G
112477	8.702	0.007	8.563	0.010	*	0.134	0.011	T	0.15	0.01	L *	8.3785	0.0018	0.022	267	*	8.34	8.42		D	22470+4446	I 1	2 C A	BA	25	1.004	0.003	0.10	0.01	S
112478	8.299	0.008	8.275	0.010		0.020	0.015	G	0.04	0.01	H	8.2948	0.0013	0.013	126		8.27	8.33					1						
112479	8.344	0.010	8.143	0.012		0.185	0.015	T	0.20	0.02	L	8.2052	0.0016	0.012	70		8.18	8.23					1						S
112480	10.259	0.027	9.800	0.027		0.433	0.035	T	0.50	0.04	L	9.8958	0.0026	0.026	167		9.84	9.95		C			1						G
112481	10.130	0.030	8.276	0.012		1.541	0.026	T	1.60	0.06	L	8.2196	0.0014	0.010	87		8.19	8.24		C			1						
112482	7.143	0.006	7.313	0.007		−0.131	0.004	G	−0.12	0.01	H	7.2983	0.0016	0.013	94		7.28	7.32		M			1						S
112483	8.889	0.010	8.415	0.010		0.480	0.015	G	0.55	0.02	H	8.4710	0.0015	0.016	135		8.44	8.50		D			1						S
112484	11.097	0.056	10.709	0.065		0.367	0.080	T	0.43	0.09	L	10.7367	0.0045	0.045	142		10.65	10.80					1 S						G
112485	9.456	0.017	8.950	0.016		0.476	0.021	T	0.55	0.02	L	9.0020	0.0020	0.017	98		8.98	9.04		C			1						S
112486						0.710	0.020	G	0.76	0.02	H	11.7046	0.0044	0.043	140		11.60	11.77					1 S						G
112487	10.012	0.028	8.101	0.012		1.587	0.024	T	1.61	0.03	L	8.0285	0.0015	0.013	88		8.01	8.06					1						
112488	10.792	0.051	10.382	0.057		0.401	0.063	T	0.47	0.07	L	10.4015	0.0034	0.034	85		10.33	10.45					1						
112489	9.212	0.009	8.386	0.007		0.742	0.015	G	0.79	0.01	H	8.4489	0.0013	0.019	270		8.41	8.49					1						S
112490	9.958	0.023	8.826	0.015		0.960	0.064	G	0.94	0.02	A	8.8888	0.0019	0.020	97		8.85	8.92		D			1 S						
112491	8.520	0.009	7.662	0.007		0.744	0.003	G	0.79	0.00	H	7.7314	0.0018	0.015	110		7.71	7.76					1						S
112492	8.491	0.012	6.975	0.007		1.274	0.011	T	1.25	0.02	A	6.9970	0.0016	0.011	91		6.97	7.01					1						S
112493	9.585	0.017	9.212	0.018		0.353	0.023	T	0.41	0.03	L	9.2560	0.0029	0.018	113		9.23	9.29					1						
112494	8.177	0.011	7.743	0.011		0.410	0.014	T	0.48	0.01	L	7.7778	0.0020	0.011	64		7.76	7.80		C			1 G						S
112495	8.252	0.009	7.990	0.011		0.249	0.013	T	0.28	0.02	L	8.0052	0.0010	0.013	102		7.99	8.03		D	22472+2359	I 1	1						S
112496	10.369	0.032	9.172	0.020		1.048	0.007	G	1.10	0.01	I	9.1450	0.0019	0.018	93		9.11	9.19		C			1						
112497	9.488	0.016	8.886	0.015		0.555	0.001	G	0.60	0.02	A	8.9393	0.0023	0.017	88		8.91	8.97		C			1						S
112498	9.142	0.012	7.978	0.008		0.999	0.011	T	0.98	0.01	L	8.0376	0.0017	0.014	113		8.02	8.06					1						S
112499	10.376	0.027	9.270	0.018		0.954	0.025	T	0.94	0.02	L	9.3705	0.0020	0.024	136		9.32	9.41		C			1						
112500	7.053	0.005	6.880	0.005	*	0.166	0.007	T	0.18	0.01	L *	6.9067	0.0007	0.008	142	*	6.89	6.92		D	22473+5323	H 1	2 C A	AB	173	0.743	0.013	3.53	0.07	S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\mu_{\alpha*}$	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
112501	22 47 19.21	−34 09 42.4	6.28	G	341.830 024 39	−34.161 787 32		10.18	−62.59	27.01	0.65	0.52	0.90	0.82	0.62	+27	−11	−31	+35	−11	+21	−	3	+	1	+18	+38	0	0.08
112502	22 47 20.06	+31 02 14.7	7.84	H	341.833 570 01	+31.037 421 56		7.56	30.55	−11.88	0.59	0.55	0.90	0.63	0.76	+	26	+	9	+20	+18	−	3	−25	+	4	+	0	+	9	+28	0	−0.11
112503	22 47 20.10	+12 47 07.9	11.28	H	341.833 765 40	+12.785 514 49		13.64	231.52	−79.37	2.21	1.51	2.63	2.81	2.09	+	16	−	8	−	9	−	3	−	2	+	0	−14	−38	+38	−11	2	0.13
112504 H	22 47 20.53	−16 08 46.4	7.35	G	341.835 525 66	−16.146 229 08	A	29.51	366.43	−55.29	1.65	1.06	1.44	1.65	1.03	+32	+29	−	1	+	7	−	8	+	3	−	9	−24	−	1	+38	8	2.01
112505	22 47 21.68	+14 07 23.5	6.95	H	341.840 347 88	+14.123 188 22		5.84	−11.37	−27.99	0.69	0.51	0.88	0.84	0.71	+19	+	0	−21	−20	+	3	−19	−	1	−33	+37	−	4	0	−0.90
112506	22 47 21.84	+17 48 47.2	7.99	H	341.840 993 72	+17.813 119 22		25.56	−231.76	−137.06	0.83	0.61	1.03	0.90	0.92	+19	+	9	−14	+29	−12	+	3	−11	−34	+23	+21	0	1.97
112507	22 47 22.30	−06 43 49.2	7.86	H	341.842 915 03	−06.730 326 70		8.65	55.87	4.57	1.03	0.59	0.98	1.78	0.76	+10	−	3	−13	+17	+23	+	1	+11	−	5	−	4	−25	0	−0.32
112508	22 47 23.23	+58 28 58.8	6.33	H	341.846 791 75	+58.483 012 54		3.41	7.77	7.61	0.52	0.47	0.61	0.56	0.50	−18	+21	−	1	+20	−14	+	1	−	8	−15	+13	−10		0	0.75
112509	22 47 23.27	+71 32 54.2	8.42	G	341.846 952 07	+71.548 378 25		6.38	−25.84	−24.60	0.63	0.60	0.70	0.72	0.70	−12	−	4	+	1	+21	+13	−11	+19	−16	+12	+	5	0	−0.48
112510	22 47 24.19	−27 23 00.9	8.01	H	341.850 794 44	−27.383 585 77		5.87	50.95	−16.11	1.02	0.69	1.15	1.18	0.84	+14	−13	−17	−42	−	1	+20	+	0	−31	+19	+19	0	−0.06
112511	22 47 24.31	+46 12 27.9	7.95	H	341.851 311 61	+46.207 737 95		0.46	1.63	−2.32	0.48	0.56	0.84	0.51	0.58	−17	+17	+	1	+	9	+14	−	5	+19	−10	+10	+	5	0	0.32
112512	22 47 25.11	−17 33 02.7	6.80	H	341.854 625 62	−17.550 754 10		21.59	105.95	−0.86	0.78	0.57	0.86	0.97	0.69	+29	−15	−10	+13	+14	−	1	+11	+12	+14	+29		0	0.19
112513	22 47 26.35	+37 40 36.7	9.13	H	341.859 805 40	+37.676 863 12		3.51	38.19	14.86	0.94	0.85	1.33	1.36	1.09	+18	+36	+27	−	3	−21	−11	−20	−10	−12	+13		0	−0.62
112514	22 47 26.68	−07 26 05.9	9.14	H	341.861 183 84	−07.434 983 31		10.77	56.52	0.26	1.48	0.70	1.19	2.03	0.91	+	7	−21	−	4	+62	−	5	−11	−13	−	5	+	7	−	5	2	0.93
112515	22 47 26.77	−44 57 54.7	7.22	H	341.861 520 84	−44.965 190 93		30.40	−33.85	11.40	0.71	0.57	0.91	0.90	0.64	+	7	+10	−20	+10	+	5	+26	+11	−	4	−	5	+19	0	−0.67
112516	22 47 28.08	−17 34 42.2	8.69	H	341.867 007 73	−17.578 387 88		0.03	3.49	−17.45	1.10	0.77	1.23	1.35	0.95	+29	−11	−14	+16	+15	+	2	+12	+11	+23	+29		0	1.14
112517	22 47 28.24	−34 49 33.4	7.26	H	341.867 672 56	−34.825 950 23		4.18	−8.28	−8.43	0.65	0.56	0.91	0.76	0.73	+31	−	6	−17	+	1	−	9	+32	−	4	−	6	+22	+50	0	−1.05
112518	22 47 28.89	+07 42 31.4	7.40	G	341.870 385 72	+07.708 731 75		6.74	29.71	−15.20	0.97	0.57	1.06	1.51	0.78	+22	+23	+14	+22	+	8	+	5	−	5	−22	+18	−20		0	0.39
112519	22 47 28.95	+83 09 13.4	4.77	H	341.870 614 29	+83.153 715 58		10.06	23.65	47.21	0.47	0.41	0.51	0.53	0.43	−	9	−	4	+25	+	4	−10	+20	−18	−	1	+	7	−29	1	2.46
112520	22 47 29.76	−01 47 19.5	7.44	H	341.873 979 19	−01.788 757 92		4.85	0.16	−10.44	0.84	0.69	1.06	1.07	1.01	+29	−	9	−29	−20	−15	+36	−	3	−48	+35	+41	0	2.22
112521	22 47 29.79	+05 53 18.0	7.55	G	341.874 142 16	+05.888 339 41		18.89	85.59	−94.07	0.83	0.58	0.97	1.16	0.75	+18	+	9	+	1	−12	+14	−	5	+13	−14	+16	−10	0	0.15
112522	22 47 30.10	+02 19 40.5	11.93	G	341.875 430 61	+02.327 919 07		13.42	238.20	−101.96	3.20	2.14	4.17	4.72	2.90	+14	+	5	+	4	−	5	+	4	+54	−	2	−42	+27	+13	4	5.30
112523	22 47 30.50	+19 13 28.0	10.39	H	341.877 081 09	+19.224 451 72		29.13	−80.92	−75.25	1.77	1.25	2.11	1.98	1.76	+20	+	2	−	9	−21	−11	+	7	−12	−42	+33	+12	2	0.62
112524	22 47 31.39	−24 33 37.1	10.03	G	341.880 795 52	−24.560 309 98		26.95	102.23	−9.77	1.33	0.99	1.74	1.76	1.20	+16	+	5	−17	−14	+	9	+16	+10	−26	+42	+	3	0	−0.21
112525 H	22 47 32.35	−69 28 28.4	6.86	G	341.884 777 45	−69.474 552 50	*	7.79	−24.16	20.48	0.46	0.42	0.62	0.52	0.42	+	3	+	0	−11	−16	−	1	−	3	−	1	−12	−	6	+	6	1	0.93
112526	22 47 32.41	−15 07 57.5	8.72	H	341.885 040 45	−15.132 632 81		3.95	2.04	−1.46	0.99	0.74	1.32	1.30	1.00	+27	+18	−22	+	3	−	4	+27	+10	−24	+48	+35	0	0.03
112527	22 47 32.68	+83 41 48.3	7.53	H	341.886 178 81	+83.696 744 76		50.15	−152.20	116.76	0.64	0.49	0.64	0.81	0.53	−	8	−22	+18	−11	−14	+	3	−11	+	4	+	4	−17	0	−1.81
112528	22 47 32.82	−35 31 12.9	8.55	H	341.886 746 65	−35.520 254 47		1.87	−6.86	−21.15	0.90	0.87	1.30	1.03	1.03	+35	−15	−27	−	3	−17	+28	−11	−10	+	9	+46	0	−0.31
112529	22 47 33.19	−19 36 46.3	5.24	G	341.888 281 34	−19.612 874 45		12.26	−102.20	−205.95	0.74	0.51	0.87	0.94	0.62	+24	−15	−	8	−	6	−11	+34	−17	−32	+36	+21	0	0.54
112530	22 47 33.30	−19 09 46.2	8.30	H	341.888 770 18	−19.162 836 18		11.15	73.44	11.77	0.95	0.59	1.17	1.21	0.81	+19	−	1	−	9	+	8	−10	+29	−	8	−19	+49	+28	0	1.62
112531	22 47 34.28	+31 58 03.3	9.37	H	341.892 830 98	+31.967 582 77		2.28	−1.24	2.60	0.84	0.81	1.35	0.98	0.97	+18	+28	+39	+23	−18	−19	−	6	−21	+11	+10		0	0.62
112532	22 47 34.67	−39 03 32.8	10.75	2 H	341.894 438 35	−39.059 111 75		0.55	27.37	−23.99	1.55	1.28	2.04	1.75	1.37	+	7	+	7	−19	+23	−10	+22	−	5	−	9	+	5	+	9	2	−0.23
112533	22 47 35.71	−65 33 36.8	6.49	G	341.898 774 27	−65.560 235 45		5.15	−30.76	−6.88	0.46	0.46	0.66	0.56	0.49	−16	−	2	−16	−	6	+	2	+	8	+	4	−19	+	4	−	9	0	−0.82
112534	22 47 36.30	−18 04 55.0	8.36	H	341.901 258 29	−18.081 940 89		2.24	10.45	−0.14	1.02	0.66	1.10	1.30	0.76	+16	+	3	−	6	+20	−	3	+12	−	6	−11	+28	+	1	0	−0.78
112535	22 47 36.42	+19 50 49.1	11.63	G	341.901 751 34	+19.846 975 80		17.51	329.70	83.89	2.71	1.71	3.11	2.72	2.25	+13	+35	−	2	−25	−	3	−11	+	5	−28	+23	+	6	0	1.57
112536	22 47 36.62	+59 42 12.1	8.35	G	341.902 571 58	+59.703 348 57		2.77	−15.37	−6.49	0.59	0.64	0.73	0.81	0.75	−22	−	1	+12	+20	+	5	−	3	+	5	−15	+	3	−19	1	−1.93
112537 H	22 47 37.50	−23 10 20.2	8.81	H	341.906 250 49	−23.172 291 66	A	11.83	25.95	−12.90	1.84	1.29	2.03	2.18	1.44	+12	+13	−20	−19	+19	−16	+18	−27	+38	+	7		1	1.41
112538	22 47 37.85	−73 52 03.8	9.81	H	341.907 694 90	−73.867 718 73		3.80	45.91	−16.44	0.88	0.79	1.05	1.14	0.91	−	3	−	3	−14	−	7	+	5	−11	+	4	−	5	+	4	−10	1	1.96
112539	22 47 39.80	+35 41 02.2	9.31	H	341.915 829 21	+35.683 933 74		9.91	186.79	119.08	0.83	0.83	1.23	0.94	1.04	+11	+10	+16	+	5	+	8	−14	+14	−	5	+	6	+25	3	0.30
112540	22 47 40.84	−47 41 36.6	10.35	G	341.920 158 74	−47.693 496 58		4.51	−43.07	−45.00	1.55	1.17	1.88	1.73	1.24	+18	−	4	−24	−	6	−	5	+33	+	2	−10	+22	+37	0	−0.05
112541	22 47 41.64	−42 53 11.8	9.91	H	341.923 506 42	−42.886 614 87		6.54	15.16	2.25	1.18	1.17	1.75	1.41	1.53	+13	−13	−26	+	8	−17	+32	−	9	−16	+12	+25	0	1.86
112542	22 47 42.75	−14 03 23.1	5.68	H	341.928 129 04	−14.056 405 41		12.55	29.03	−9.44	1.09	0.64	1.19	1.40	0.92	−	1	+23	−10	−32	+12	+26	+23	−43	+41	+	2	0	2.41
112543	22 47 43.07	+66 52 24.0	9.00	H	341.929 463 51	+66.873 327 53		3.16	26.84	4.78	0.70	0.64	0.79	0.85	0.67	−14	−	9	+27	−	9	+	9	+15	+	6	−18	−13	−18	1	−0.81
112544	22 47 43.09	+00 20 07.2	10.71	H	341.929 561 68	+00.335 325 77		6.95	−3.84	−4.96	1.67	1.43	1.97	2.19	1.94	+42	−14	−24	−	1	−22	+31	−31	−63	+32	+30	0	0.91
112545	22 47 43.43	+55 09 30.3	8.34	3 H	341.930 958 59	+55.158 428 11		0.26	−2.92	−3.69	0.67	0.63	0.80	0.80	0.86	−	8	−18	+10	−	0	+	1	+11	−	7	−18	+	5	−	7	0	0.23
112546	22 47 43.49	−31 18 37.0	10.07	H	341.931 205 11	−31.310 280 49		3.82	64.96	−44.89	1.68	1.08	1.70	1.58	1.12	+	7	+23	−17	−37	+25	−	6	+27	+	8	+16	+15	2	2.06
112547	22 47 43.52	+10 20 17.3	8.14	H	341.931 319 81	+10.338 129 98		4.76	−20.09	−24.48	0.94	0.76	1.37	1.13	1.13	+25	+17	−38	−12	−	4	−11	−	2	−48	+43	+19	0	0.72
112548	22 47 44.03	+30 07 47.3	7.25	H	341.933 450 02	+30.129 797 05		10.20	−10.86	−29.00	0.56	0.49	0.83	0.69	0.73	+21	+17	+16	+23	+	5	−	6	+	6	+29	−	4	+	7	3	−0.43
112549 H	22 47 44.34	−54 29 48.1	8.27	H	341.934 752 44	−54.496 706 18	A	13.53	12.36	42.84	1.06	1.10	1.52	1.25	1.03	+19	+12	−	7	+21	+	7	+20	+10	−	4	+	3	+28	2	−0.27
112550	22 47 44.61	−02 49 32.0	9.20	H	341.935 870 71	−02.825 560 12		3.65	15.04	−11.20	1.61	1.22	2.09	2.71	1.88	+	7	+15	−49	−27	+22	−35	+	7	−71	+52	−14	0	1.95
112551	22 47 44.73	−12 30 22.2	8.71	H	341.936 385 14	−12.506 164 27		3.39	−5.36	7.00	1.11	0.72	1.20	1.23	0.88	+	7	+14	−21	−24	+	6	+15	+15	−19	+25	+	9	0	0.61
112552	22 47 45.22	+41 04 55.1	8.95	H	341.938 401 25	+41.081 968 05		11.47	68.39	36.01	0.89	0.74	1.14	0.94	0.86	−	4	+13	−	3	−	2	+	8	+	6	+13	−24	+14	+11	0	0.96
112553 H	22 47 47.14	−30 04 07.6	10.37	H	341.946 399 67	−30.068 770 22	A	2.03	13.05	−6.34	3.56	1.88	2.46	3.00	1.79	+	0	+	7	−24	−53	+30	−	3	+34	−35	+	8	−30	3	0.02
112554	22 47 47.19	−38 13 18.9	6.72	G	341.946 644 58	−38.221 916 04		14.75	−61.84	−76.94	0.65	0.48	0.78	0.68	0.53	+	9	−	7	−	2	+15	−	4	+	8	−	4	+	3	+	4	+12	0	0.27
112555	22 47 47.75	+51 10 36.9	9.20	H	341.948 949 82	+51.176 919 35		8.59	78.24	8.89	0.78	0.84	1.13	0.79	0.82	−	5	+13	+21	+	8	+	6	+	6	+	7	−11	+	9	+	1	1	1.39
112556	22 47 47.86	+47 48 44.0	8.20	H	341.949 419 52	+47.812 224 59		0.16	−0.38	−4.16	0.55	0.57	0.89	0.56	0.56	−22	+23	+	0	+	6	+11	−17	+18	−11	+22	−	8	1	0.92
112557	22 47 48.30	+49 10 42.9	8.03	H	341.951 263 98	+49.178 585 15		6.49	0.18	4.57	0.58	0.57	0.82	0.67	0.61	−26	+	5	+12	−28	+21	−	3	+21	−29	+	3	−	2	0	0.25
112558	22 47 49.57	+58 08 49.5	10.19	G	341.956 557 29	+58.147 091 39		1.49	−2.55	−0.83	1.27	1.07	1.47	1.33	1.17	−14	+27	+	4	+25	−	4	+	5	+	2	−11	+15	−11	3	0.38
112559 H	22 47 50.30	−04 13 41.8	6.67	G	341.959 589 60	−04.228 275 11	A	31.94	−206.00	−311.74	1.74	1.52	1.66	1.63	1.39	+37	−20	−20	−	5	−24	−	5	−27	−59	+15	+34	9	1.79
112560	22 47 50.68	−24 07 17.9	9.30	H	341.961 155 89	−24.121 627 13		5.28	48.35	4.85	1.10	0.87	1.42	1.45	0.98	+25	−	3	−22	−	4	+	5	+26	+	5	−28	+31	+16	4	0.75
112561 H	22 47 51.28	−57 05 26.4	8.86	H	341.963 662 53	−57.090 653 36	*	4.53	58.03	−53.25	0.76	0.85	1.35	0.80	0.80	+11	+	0	−	7	−20	−15	+18	−13	−	4	−16	+	5	0	−0.21
112562	22 47 52.94	+65 03 43.8	6.87	2 H	341.970 602 34	+65.062 167 15	*	1.54	−2.23	−0.59	0.79	0.84	0.66	0.80	0.60	−	3	−10	+25	+21	+	7	−10	+	9	−	5	−	7	+	4	3	0.46
112563	22 47 53.79	−32 47 08.6	10.15	H	341.974 138 40	−32.785 734 33		4.37	33.58	−14.62	3.02	2.57	4.18	3.37	2.92	+34	−	3	−10	+	4	−	1	+11	+	1	−	2	+	4	+42	3	
112564	22 47 54.46	+45 23 36.6	8.31	H	341.976 935 96	+45.393 487 23		3.91	−3.02	−10.62	0.57	0.67	1.05	0.64	0.70	−35	+12	−	7	−	4	+23	−15	+29	−26	+16	−	8	1	−1.07
112565	22 47 54.69	+51 58 45.9	7.14	H	341.977 855 54	+51.979 407 16		4.92	34.81	5.45	0.51	0.47	0.69	0.51	0.50	−14	+	3	+	7	−	3	−	6	+10	−	5	−17	+20	−	5	0	−0.17
112566	22 47 55.81	+66 55 42.4	7.99	H	341.982 539 60	+66.928 440 13		9.34	37.63	10.75	0.56	0.53	0.66	0.73	0.59	−13	−	7	+27	+	5	+	7	+15	+	3	−	8	−15	−20	4	1.15
112567	22 47 56.13	−25 54 42.3	6.31	H	341.983 885 82	−25.911 747 58		6.31	107.02	−115.39	0.68	0.49	0.81	0.78	0.57	+24	−	6	−	9	−18	+	1	+15	+	1	−15	+23	+26	0	0.72
112568	22 47 56.55	+48 52 26.3	8.19	G	341.985 623 78	+48.873 975 68		11.20	−29.64	9.96	0.61	0.61	0.91	0.63	0.59	−14	+10	+18	−24	+	8	−	1	+11	−25	+18	+	8	0	−0.50
112569	22 47 57.40	−58 41 05.0	7.11	H	341.989 149 06	−58.684 730 97		3.07	11.56	−11.25	0.49	0.45	0.76	0.56	0.49	−15	−10	−	3	−22	−10	+10	−	7	−19	−11	−23	0	2.58
112570	22 47 59.85	−77 27 54.2	8.84	H	341.999 389 67	−77.465 043 08		1.49	35.71	−13.16	0.77	0.73	0.95	1.08	0.75	+	5	−15	−15	+12	+	0	+13	−	2	−	5	+	8	−11	1	−1.88
112571	22 48 01.11	−28 31 13.5	8.45	H	342.004 609 94	−28.520 403 14		2.39	−9.40	−33.18	1.00	0.70	1.13	1.37	0.85	+	6	+	4	−30	−34	+10	+	3	+11	−28	+24	+	2	0	0.20
112572	22 48 02.11	−09 25 31.2	10.94	H	342.008 811 49	−09.425 335 07		6.09	32.26	21.82	2.48	1.50	3.14	3.66	2.07	+13	+23	−29	+	0	+18	−25	+14	−34	+50	−16		0	1.11
112573	22 48 02.41	+30 37 32.9	7.87	H	342.010 041 34	+30.625 818 04		3.55	8.79	−0.43	0.61	0.51	0.92	0.73	0.73	+14	+	7	+22	+23	+	2	−17	+	8	+19	+	9	+14	0	1.17
112574	22 48 04.01	+10 34 21.4	8.59	2 H	342.016 701 76	+10.572 618 58		0.13	−1.42	−6.28	1.07	0.95	1.40	1.27	1.44	+41	−10	−24	−	2	−20	+17	−16	−45	+32	+49		0	0.97
112575	22 48 04.01	−51 30 45.6	7.03	H	342.016 722 62	−51.512 678 26		6.18	46.15	3.47	0.58	0.53	0.85	0.68	0.58	+	8	−15	−19	−11	+	7	+11	+	7	+	1	+	4	+14	4	1.21
112576	22 48 04.45	−06 33 03.5	9.64	H	342.018 553 08	−06.550 964 49		6.08	28.39	−17.58	1.44	0.87	1.44	2.49	1.14	+	8	+	4	−15	+	3	+19	+	1	+12	−11	−	4	−23	0	2.64
112577	22 48 05.94	+04 00 40.3	8.12	1 H	342.024 738 22	+04.011 185 71		3.89	−22.07	1.58	0.87	0.70	1.14	1.33	0.95	+35	+	0	−18	−	6	+	6	+13	−	4	−40	+30	+	2	0	0.88
112578	22 48 06.04	−21 37 45.8	8.67	H	342.025 156 27	−21.629 389 61		7.68	10.53	−5.93	0.93	0.69	1.12	1.09	0.75	+32	−	8	−12	−	6	+19	+	0	+17	+	5	+10	+28	0	−0.04
112579	22 48 06.27	+01 20 25.5	9.15	H	342.026 117 58	+01.340 429 07		4.56	−2.15	27.06	1.29	0.92	1.68	1.78	1.37	+	6	+13	−35	−26	+16	−18	+12	−51	+59	−19		0	−2.48
112580	22 48 06.74	+13 00 32.8	8.30	H	342.028 075 30	+13.009 111 24		18.42	53.63	−44.03	0.92	0.70	1.17	1.14	0.98	+24	−10	−16	−	8	−	4	−	5	−15	−40	+37	−	2	0	−0.14
112581	22 48 06.80	−37 45 24.0	7.49	H	342.028 345 66	−37.756 664 76		25.34	156.91	1.59	0.71	0.55	0.88	0.78	0.62	+17	+	5	−	4	+	5	+	3	+16	+	5	+	2	+	8	+28	0	0.79
112582	22 48 06.89	+39 16 16.8	8.15	G	342.028 727 09	+39.271 333 73		6.61	12.58	−8.22	0.76	0.65	1.02	1.02	0.77	+18	+25	+29	+22	−	6	−20	+	5	−21	−16	+35		2	0.18
112583	22 48 07.37	−55 47 28.1	9.11	H	342.030 724 76	−55.791 136 77		0.69	5.46	0.57	0.92	0.91	1.33	1.08	0.98	+	8	−	7	−11	+	3	+	8	−	1	+	7	+	7	−	4	+18	0	−0.44
112584	22 48 07.58	+69 04 30.1	9.12	H	342.031 602 02	+69.075 033 23		15.48	0.89	−0.26	0.79	0.67	0.83	0.92	0.69	−	7	+	4	+	1	+28	+	3	+	2	+	4	−	7	+	9	−	4	0	−1.19
112585	22 48 08.01	+49 34 57.8	6.81	2 H	342.033 377 04	+49.582 719 36		4.38	32.36	−5.71	0.46	0.50	0.69	0.52	0.53	−22	+	9	+15	−	7	+11	−10	+14	−	8	+15	−10	0	−0.64
112586	22 48 09.35	+05 52 45.1	7.75	G	342.038 951 00	+05.879 181 20		16.12	34.91	−35.79	0.85	0.56	0.99	1.10	0.78	+17	−	9	+	5	+	0	+10	+10	+	7	−25	+	4	+	6	0	−1.27
112587	22 48 09.74	−40 45 13.6	10.63	H	342.040 566 12	−40.753 787 57		5.22	67.96	−60.50	1.44	1.15	1.79	1.70	1.16	+11	+	6	−18	+26	−20	+22	−16	−	7	+	5	+	7	0	−1.37
112588	22 48 10.01	+25 54 36.4	8.63	H	342.041 722 10	+25.910 101 40		7.63	19.69	2.71	0.81	0.56	1.01	1.02	0.79	−	2	+12	−	1	+57	−19	−	6	−27	−	2	+	7	−15	0	3.57
112589	22 48 10.82	+33 01 50.5	8.31	H	342.045 068 88	+33.030 689 79		0.83	0.24	2.10	0.70	0.65	1.09	1.00	0.78	+23	+14	+34	−	7	−	1	+	9	−	3	−19	+	6	+26	0	0.33
112590	22 48 11.07	+37 25 00.6	5.82	H	342.046 112 34	+37.416 842 26		8.96	−42.58	−63.48	0.52	0.45	0.76	0.71	0.58	+	0	+15	+24	−15	+	2	+	3	+	1	−12	+	0	+11	0	−0.28
112591	22 48 11.55	−38 02 51.1	9.23	H	342.048 134 67	−38.047 515 71		1.89	12.06	−3.34	1.00	0.80	1.32	1.14	0.89	+15	−	8	−	7	+	7	−	7	+	9	+20	+21	0	0.00
112592	22 48 12.97	+84 46 33.6	7.09	H	342.054 054 59	+84.776 005 79		4.57	50.98	−3.67	0.49	0.45	0.53	0.56	0.47	−	2	+	2	+	9	−	9	−10	+	7	−	9	−	1	+	3	−10	0	0.05
112593	22 48 13.54	−56 59 20.4	9.20	H	342.056 408 24	−56.989 013 76		1.71	−1.24	−0.20	0.73	0.94	1.41	0.80	0.92	−	5	−	7	−	4	−29	−	9	+17	−	6	−10	−19	−	6	1	0.88
*112594	22 48 14.10	+21 59 51.9	8.93	H	342.058 739 57	+21.997 755 44		1.22	−4.05	−16.11	0.97	0.64	1.16	1.03	0.88	+	6	+13	−15	−	7	+	5	−17	+	6	−12	+20	+11	4	0.27
*112595	22 48 14.07	+41 31 58.2	8.04	H	342.058 623 02	+41.532 832 32	

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
112501	7.767	0.008	6.417	0.005		1.145	0.003	G	1.11	0.00	H	6.4543	0.0009	0.009	112		6.44	6.47					1							S
112502	8.150	0.007	7.869	0.008		0.267	0.010	T	0.30	0.01	L	7.9134	0.0011	0.012	141		7.89	7.94					1							S
112503						0.663	0.400	G	2.09	0.30	S	11.3537	0.0064	0.051	89		11.25	11.45		R			1							G
112504	8.280	0.012	7.521	0.010	A	0.684	0.005	G	0.74	0.00	H *	7.4734	0.0015	0.009	72	*	7.45	7.49		D	22473−1609	I 1	2 C	A	AB	332	2.714	0.008	2.24	0.05	S
112505	8.563	0.011	7.069	0.006		1.257	0.010	T	1.22	0.01	L	7.1069	0.0010	0.010	100		7.09	7.12					1							S
112506	8.853	0.013	8.067	0.011		0.690	0.020	G	0.75	0.02	H	8.1337	0.0014	0.011	96		8.12	8.16		C			1							
112507	8.329	0.012	7.913	0.010		0.413	0.015	G	0.48	0.02	H	7.9591	0.0013	0.012	78		7.94	7.99		C			1							S
112508	6.332	0.003	6.319	0.005		0.017	0.005	T	0.04	0.01	L	6.3403	0.0010	0.008	110		6.33	6.35		C			1							S
112509	8.899	0.011	8.444	0.011		0.443	0.009	G	0.51	0.01	H	8.5070	0.0018	0.016	118		8.48	8.54					1							
112510	9.365	0.016	8.124	0.010		1.059	0.015	T	1.03	0.01	L	8.1790	0.0022	0.015	94		8.15	8.20					1							S
112511	8.045	0.007	7.970	0.008		0.074	0.010	T	0.09	0.01	L	7.9863	0.0015	0.015	202		7.96	8.01					1							S
112512	7.364	0.005	6.854	0.006		0.500	0.015	G	0.57	0.02	H	6.9079	0.0009	0.007	79		6.90	6.92		C			1							S
112513	9.537	0.017	9.168	0.018		0.350	0.023	T	0.41	0.03	L	9.2113	0.0022	0.020	105		9.17	9.26		C			1							
112514	9.786	0.027	9.199	0.025		0.548	0.033	T	0.62	0.03	L	9.2570	0.0014	0.014	66		9.23	9.27		D			1							
112515	7.949	0.009	7.286	0.007		0.598	0.005	G	0.65	0.02	A	7.3488	0.0018	0.012	93		7.32	7.37					1							S
112516	10.769	0.050	8.865	0.018		1.615	0.044	T	1.83	0.12	O	8.7745	0.0031	0.023	77		8.74	8.81					1							
112517	8.632	0.010	7.379	0.006		1.068	0.009	T	1.03	0.01	L	7.4309	0.0012	0.009	116		7.42	7.45					1							S
112518	7.730	0.008	7.426	0.009		0.299	0.015	G	0.34	0.02	H	7.4806	0.0013	0.010	87		7.46	7.50		C			1							S
112519	6.426	0.003	4.919	0.002		1.257	0.008	G	1.25	0.03	C	4.9247	0.0005	0.005	130		4.92	4.94		C	22475+8309	I 1	1							S
112520	8.917	0.014	7.565	0.009		1.153	0.005	G	1.12	0.01	H	7.6079	0.0013	0.011	83		7.59	7.63		C			1							S
112521	8.102	0.009	7.580	0.007		0.508	0.015	G	0.58	0.02	H	7.6551	0.0012	0.010	87		7.64	7.67		C			1							S
112522						1.202	0.020	G	1.34	0.04	I	12.1170	0.0080	0.060	70		12.01	12.22					1	S						G
112523	11.830	0.108	10.465	0.055		1.582	0.197	G	2.56	0.45	I	10.3980	0.0032	0.027	82		10.35	10.45		C			1							G
112524	11.456	0.091	10.016	0.038		1.170	0.015	G	1.28	0.03	I	10.1307	0.0021	0.023	82		10.09	10.18		C			1							
112525	7.175	0.005	6.892	0.005	*	0.308	0.006	G	0.35	0.01	H *	6.9297	0.0008	0.009	148	*	6.91	6.95		D	22475−6928	H 1	2 C	S A	AB	283	0.136	0.004	0.70	0.28	S
112526	9.148	0.016	8.748	0.016		0.391	0.019	T	0.46	0.02	L	8.8065	0.0019	0.015	74		8.78	8.84		C			1							S
112527	8.631	0.010	7.625	0.007		0.867	0.010	T	0.88	0.01	L	7.6727	0.0010	0.011	122		7.65	7.69		C			1							S
112528	10.215	0.024	8.689	0.012		1.282	0.021	T	1.24	0.02	L	8.7085	0.0020	0.020	101		8.68	8.74					1							
112529	6.439	0.005	5.352	0.004		0.941	0.002	G	0.93	0.00	H	5.4042	0.0008	0.005	81		5.40	5.41		C			1							S
112530	8.791	0.015	8.346	0.015		0.434	0.017	T	0.50	0.02	L	8.3946	0.0014	0.011	70		8.37	8.42		C			1							S
112531	9.798	0.019	9.404	0.020		0.373	0.026	T	0.44	0.03	L	9.4558	0.0024	0.023	137		9.41	9.49					1							
112532	11.084	0.053	10.732	0.063		0.334	0.077	T	0.39	0.10	L	10.8248	0.0210	0.157	105		10.55	11.05	0.88	P 1 A			1							G
112533	8.051	0.007	6.619	0.005		1.208	0.002	G	1.18	0.02	A	6.6568	0.0010	0.011	167		6.64	6.67		C	22476−6533	I 1	1							S
112534	9.552	0.022	8.435	0.015		0.962	0.021	T	0.95	0.02	L	8.5203	0.0019	0.014	80		8.50	8.55		C			1							
112535						1.310	0.015	G	1.51	0.02	I	11.7522	0.0053	0.046	74		11.67	11.83					1							G
112536	8.498	0.010	8.357	0.012		0.136	0.015	T	0.15	0.01	L	8.4086	0.0014	0.012	116		8.39	8.43		C			1							
112537	9.492	0.019	8.902	0.018	A	0.400	0.495	G	0.57	0.04	L *	8.9150	0.0018	0.021	86	*	8.87	8.94		D	22476−2310	I 1	2 C	B	AB	243	4.006	0.052	3.23	0.14	S
112538	10.339	0.028	9.809	0.027		0.497	0.035	T	0.57	0.04	L	9.9205	0.0027	0.029	140		9.86	9.96		C			1							
112539	10.101	0.022	9.415	0.019		0.634	0.024	T	0.70	0.02	L	9.4479	0.0022	0.023	133		9.41	9.49		C			1							
112540	10.921	0.054	10.427	0.055		0.640	0.020	G	0.70	0.02	H	10.5016	0.0032	0.031	85		10.46	10.59		C			1							
112541	10.449	0.033	9.923	0.032		0.502	0.035	T	0.57	0.04	L	10.0218	0.0040	0.025	85		9.97	10.07					1							
112542	5.656	0.003	5.676	0.004		−0.016	0.004	T	0.01	0.00	L	5.6870	0.0011	0.006	66		5.68	5.70		C	22477−1403	I 1	1							S
112543	9.446	0.018	9.057	0.018		0.368	0.024	T	0.43	0.03	L	9.0821	0.0012	0.017	123		9.06	9.11					1							
112544						1.559	0.197	G	1.56	0.22	R	10.8317	0.0041	0.030	84		10.76	10.87		C			1							G
112545	11.551	0.093	8.784	0.016		2.326	0.078	T	2.50	0.72	K	8.3556	0.0300	0.247	126		7.93	8.70		U 2 C			1 G							
112546	10.816	0.057	10.118	0.046		0.631	0.055	T	0.70	0.05	L	10.1996	0.0036	0.028	86		10.15	10.24		C			1							
112547	9.568	0.021	8.277	0.013		1.098	0.019	T	1.06	0.02	L	8.3036	0.0012	0.013	92		8.28	8.34		D			1							
112548	7.524	0.004	7.282	0.005		0.231	0.006	T	0.26	0.01	L	7.3146	0.0009	0.010	152		7.30	7.33		C			1							S
112549	8.951	0.018	8.269	0.015	*	0.619	0.017	T	0.69	0.01	L *	8.4049	0.0020	0.018	142	*	8.38	8.43		D	22477−5430	I 1	2 C	A	AB	274	4.314	0.008	2.24	0.05	S
112550	9.669	0.025	9.233	0.025		0.412	0.033	T	0.48	0.04	L	9.2926	0.0034	0.017	60		9.25	9.32					1	S						
112551	9.073	0.014	8.735	0.015		0.321	0.019	T	0.37	0.03	L	8.7910	0.0021	0.017	82		8.77	8.83		C			1							S
112552	9.646	0.017	8.986	0.015		0.612	0.019	T	0.68	0.02	L	9.0780	0.0020	0.020	117		9.05	9.12		C			1							
112553	11.356	0.083	10.453	0.058	*	0.802	0.075	T	0.83	0.05	L *	10.5259	0.0036	0.026	85	*	10.46	10.57		D	22478−3004	I 1	2 C	A	AB	115	1.085	0.031	1.90	0.09	
112554	7.287	0.006	6.761	0.005		0.480	0.004	G	0.55	0.00	H	6.8286	0.0009	0.008	107		6.81	6.84					1							S
112555	9.886	0.021	9.254	0.019		0.587	0.025	T	0.66	0.02	L	9.3297	0.0023	0.025	138		9.27	9.38		C			1							
112556	8.224	0.007	8.200	0.009		0.027	0.011	T	0.04	0.01	L	8.2180	0.0015	0.017	169		8.19	8.24		C			1							S
112557	9.127	0.013	8.124	0.009		0.876	0.012	T	0.89	0.01	L	8.1854	0.0014	0.014	140		8.17	8.21		C			1							
112558	10.505	0.038	10.214	0.047		0.400	0.015	G	0.47	0.02	H	10.3094	0.0031	0.030	111		10.26	10.37		C			1							D
112559	7.411	0.010	6.671	0.009	*	0.654	0.002	G	0.72	0.00	H *	6.8071	0.0012	0.008	82	*	6.79	6.83		D	22478−0413	I 1	2 C	A	AB	289	2.182	0.003	0.31	0.01	S
112560	10.785	0.048	9.428	0.024		1.150	0.042	T	1.11	0.04	L	9.4703	0.0020	0.021	86		9.44	9.52		C			1							
112561	9.482	0.014	8.932	0.013	*	0.521	0.014	T	0.59	0.01	L *	8.9705	0.0019	0.021	168	*	8.94	9.02		D	22479−5705	I 1	2 C	S A	AB	69	0.200	0.005	0.24	0.18	
112562	7.166	0.009	6.908	0.010		0.242	0.014	T	0.27	0.02	L	6.9398	0.0082	0.097	116		6.89	7.14	1.77	P 1 A			1 V							S
112563	10.783	0.045	10.237	0.042		0.512	0.055	T	0.58	0.06	L	10.2622	0.0024	0.026	108		10.22	10.31		C			1 X	S						
112564	10.155	0.020	8.436	0.009		1.435	0.017	T	1.43	0.03	L	8.4511	0.0015	0.019	237		8.42	8.48					1	S						
112565	7.428	0.006	7.160	0.006		0.255	0.008	T	0.29	0.01	L	7.2108	0.0010	0.010	132		7.19	7.22					1							S
112566	8.514	0.009	8.030	0.009		0.451	0.013	G	0.52	0.01	H	8.0871	0.0013	0.010	128		8.07	8.11					1							S
112567	7.464	0.007	6.416	0.004		0.913	0.003	G	0.91	0.00	H	6.4703	0.0007	0.008	103		6.46	6.48		C			1							S
112568	8.790	0.010	8.245	0.010		0.534	0.015	G	0.61	0.02	H	8.3051	0.0017	0.019	147		8.28	8.34					1							
112569	9.148	0.010	7.281	0.005		1.552	0.009	T	1.57	0.01	L	7.2243	0.0012	0.013	195		7.21	7.25					1							S
112570	10.446	0.031	8.983	0.015		1.233	0.027	T	1.19	0.03	L	9.0040	0.0024	0.020	120		8.97	9.04					1	S						
112571	9.882	0.023	8.595	0.014		1.095	0.021	T	1.06	0.02	L	8.6190	0.0016	0.012	92		8.59	8.64		C			1							
112572	11.814	0.135	10.980	0.101		0.750	0.128	T	0.79	0.09	L	11.0848	0.0069	0.041	75		11.02	11.15		C			1							G
112573	9.955	0.018	8.052	0.008		1.580	0.016	T	1.60	0.02	L	7.9816	0.0014	0.015	148		7.96	8.01					1							P
112574	10.725	0.044	8.864	0.016		1.547	0.037	T	1.61	0.08	L	8.7013	0.0062	0.051	87		8.63	8.78		U 2			1	S						
112575	8.287	0.011	7.146	0.006		0.981	0.010	T	0.96	0.01	L	7.1939	0.0009	0.009	115		7.18	7.21					1							S
112576	10.320	0.033	9.714	0.030		0.565	0.039	T	0.64	0.04	L	9.7680	0.0031	0.024	76		9.72	9.80		C			1							
112577	9.378	0.016	8.233	0.011		0.984	0.015	T	0.96	0.01	L	8.2900	0.0015	0.013	104		8.27	8.31		U			1							
112578	9.828	0.021	8.771	0.014		0.917	0.019	T	0.92	0.01	L	8.8351	0.0017	0.013	107		8.81	8.87					1							
112579	10.498	0.039	9.265	0.024		1.053	0.036	T	1.02	0.03	L	9.3139	0.0026	0.020	76		9.28	9.35		C			1							
112580	9.001	0.013	8.375	0.012		0.582	0.015	T	0.65	0.01	L	8.4277	0.0014	0.015	97		8.40	8.45					1							S
112581	8.202	0.009	7.561	0.007		0.589	0.008	T	0.66	0.01	L	7.6175	0.0014	0.013	108		7.59	7.64					1							S
112582	8.368	0.010	8.177	0.011		0.192	0.003	G	0.21	0.00	H	8.2100	0.0018	0.016	107		8.18	8.24					1							S
112583	10.644	0.037	9.228	0.019		1.196	0.033	T	1.16	0.03	L	9.2805	0.0029	0.029	120		9.24	9.33					1							
112584	9.844	0.022	9.175	0.019		0.620	0.024	T	0.69	0.02	L	9.2477	0.0024	0.024	119		9.21	9.28					1							
112585	8.869	0.011	7.033	0.005		1.559	0.010	T	2.41	0.02	O	6.8383	0.0019	0.022	146		6.80	6.88		U 2			1							S
112586	8.304	0.012	7.778	0.012		0.491	0.015	G	0.56	0.02	H	7.8549	0.0014	0.010	85		7.84	7.87		C			1							S
112587	11.333	0.070	10.725	0.069		0.574	0.072	G	0.65	0.07	R	10.7559	0.0029	0.031	95		10.69	10.80					1							G
112588	9.032	0.012	8.660	0.012		0.352	0.016	T	0.41	0.02	L	8.7095	0.0011	0.013	142		8.69	8.73					1							
112589	10.263	0.026	8.485	0.011		1.481	0.022	T	1.50	0.03	L	8.4352	0.0013	0.015	129		8.41	8.46					1							
112590	7.121	0.004	5.925	0.003		1.024	0.004	T	1.00	0.00	L	5.9819	0.0006	0.006	114		5.97	5.99		C			1							S
112591	10.863	0.039	9.364	0.019		1.261	0.034	T	1.22	0.04	L	9.3878	0.0024	0.020	99		9.35	9.42			22482−3803	I 1	1							
112592	8.474	0.009	7.207	0.006		1.079	0.008	T	1.04	0.01	L	7.2615	0.0009	0.010	146		7.25	7.28					1							S
112593	10.517	0.029	9.328	0.017		1.018	0.026	T	0.99	0.02	L	9.3690	0.0022	0.028	160		9.33	9.42					1							
112594	10.990	0.048	9.134	0.017		1.575	0.042	T	2.08	0.10	O	9.0040	0.0038	0.021	104		8.97	9.04					1							
112595	8.849	0.009	8.126	0.008		0.664	0.010	T	0.73	0.01	L	8.1770	0.0013	0.017	204		8.15	8.21		C			1							
112596	10.744	0.044	10.097	0.039		0.600	0.051	T	0.67	0.04	L	10.1596	0.0035	0.024	100		10.12	10.21		C			1							
112597	10.318	0.026	9.904	0.028		0.391	0.035	T	0.46	0.04	L	9.9667	0.0032	0.044	169		9.89	10.04					1	S						G
112598	10.075	0.026	8.268	0.011		1.504	0.022	T	1.53	0.03	L	8.2342	0.0018	0.013	84		8.21	8.26		C			1							S
112599	10.518	0.045	10.129	0.050		0.368	0.062	T	0.43	0.07	L	10.1423	0.0028	0.029	129		10.10	10.18		C			1							G
112600	10.219	0.028	10.051	0.037		0.270	0.040	G	0.30	0.05	R	9.9953	0.0033	0.029	112		9.96	10.05					1							G

Number HIP 1 2	Descriptor: epoch J1991.25 RA h m s 3	Dec ±° ′ ″ 4	V mag 5 6 7	Position: epoch J1991.25 α (ICRS) deg 8	δ deg 9 10	Par. π mas 11	Proper Motion $\mu_{\alpha*}$ mas/yr 12	μ_δ 13	Standard Errors α* mas 14	δ 15	π mas 16	$\mu_{\alpha*}$ mas/yr 17	μ_δ 18	Astrometric Correlations (%) 19 20 21 22 23 24 25 26 27 28	Soln F1 % 29	F2 30
112601	22 48 21.02	−44 30 04.3	8.87 H	342.087 573 15	−44.501 195 13	1.42	−16.45	−18.52	1.02	0.77	1.21	1.33	0.85	+ 4 +16 −17 +33 + 5 +19 + 9 − 9 − 2 +13	0	1.60
112602 H	22 48 21.17	−45 14 55.8	8.69 G	342.088 191 64	−45.248 834 13 A	5.69	−41.22	−5.87	2.89	1.97	2.64	3.44	2.01	+ 0 +22 − 9 +13 − 6 +20 −11 + 0 − 9 −40	1	1.80
112603	22 48 21.30	−61 41 03.7	6.36 G	342.088 729 69	−61.684 356 01	8.29	73.06	−3.29	0.35	0.37	0.56	0.38	0.36	−21 + 9 −12 + 3 + 5 + 4 + 8 −24 + 3 − 8	0	1.49
112604	22 48 22.52	−08 06 44.3	7.36 H	342.093 826 80	−08.112 304 30	2.13	1.34	1.04	0.87	0.61	0.96	1.05	0.76	+22 + 0 −14 +23 + 0 + 7 + 0 − 2 +21 +20	4	1.25
112605	22 48 22.75	−68 16 12.4	9.21 H	342.094 778 63	−68.270 098 82	4.94	−18.42	−11.26	0.75	0.77	1.09	0.89	0.83	+ 4 − 6 −14 − 1 − 3 −12 − 3 + 7 −20 + 2	0	1.98
112606	22 48 23.66	−57 55 33.5	9.35 H	342.098 566 42	−57.925 959 55	4.36	18.84	−14.46	0.77	0.80	1.27	0.84	0.82	−17 − 9 − 8 −10 −17 +14 −14 − 9 −10 −28	1	−0.27
112607	22 48 23.84	+46 05 29.8	9.88 H	342.099 319 95	+46.091 599 62	4.44	1.86	−3.29	0.89	0.94	1.47	0.94	0.95	−20 +12 − 2 − 3 +18 + 2 +23 −22 +19 + 3	1	0.75
112608	22 48 25.41	+55 47 58.7	8.88 H	342.105 892 14	+55.799 643 05	10.31	31.44	−51.73	0.73	0.64	0.88	0.97	0.81	−18 −18 + 7 + 0 + 5 +17 + 4 − 5 + 4 − 4	3	−0.89
112609	22 48 25.82	+36 26 08.8	9.63 1 H	342.107 602 54	+36.435 788 39	−0.12	0.80	−0.06	1.08	0.75	1.44	1.54	1.06	+ 6 + 8 +11 +10 + 0 −24 + 8 −11 + 8 +22	2	0.57
*112610	22 48 35.44	+24 43 26.4	10.95 H	342.147 662 15	+24.724 007 07	32.08	175.82	9.23	1.77	1.19	2.05	2.41	1.78	− 6 +12 −12 −21 +14 − 4 +18 − 8 + 9 −22	0	0.73
*112611 H	22 48 27.40	+31 06 02.5	7.43 H	342.114 172 11	+31.100 695 37 *	3.06	−10.88	−6.13	0.90	1.24	1.04	0.79	0.76	+15 +12 +25 + 4 − 5 −27 + 6 − 1 +22 +17	1	−0.79
*112612	22 48 28.19	−27 33 50.7	6.83 H	342.117 451 71	−27.564 087 53	5.35	−12.94	−111.01	0.79	0.56	0.90	0.96	0.67	+24 −18 −25 −26 + 4 +10 + 4 −15 + 7 +25	0	2.29
*112613	22 48 29.40	−46 03 47.9	10.04 G	342.122 494 24	−46.063 295 58	4.84	33.49	−305.71	1.33	0.89	1.47	1.86	1.08	+10 − 8 −12 − 5 + 3 +19 + 5 − 6 + 3 +28	4	−0.39
*112614	22 48 29.77	+28 07 18.7	8.32 H	342.124 026 05	+28.121 854 18	14.97	−64.46	−34.23	0.57	0.60	0.98	0.61	0.70	+47 +16 +24 −11 − 5 − 4 − 1 −15 +11 +50	0	−1.82
*112615	22 48 30.19	−10 33 19.8	6.19 1 H	342.125 797 44	−10.555 496 75	8.64	30.86	7.62	0.82	0.50	0.83	1.14	0.56	+ 3 + 8 − 5 −23 +19 +20 +19 −24 + 5 −30	2	0.32
*112616	22 48 30.26	−43 26 47.0	7.06 H	342.126 069 61	−43.446 399 54	5.49	−16.04	−11.07	0.66	0.57	0.86	0.80	0.68	+13 − 4 − 8 +26 + 6 +21 + 9 + 3 + 3 +17	0	1.84
*112617 H	22 48 30.69	−04 34 31.8	8.03 H	342.127 859 79	−04.575 510 45 A	3.58	14.57	−5.43	1.47	1.30	1.30	1.55	0.98	+18 + 6 −16 +36 + 6 − 9 − 4 −23 +22 + 2	0	−0.36
*112618	22 48 31.00	+16 30 30.2	8.75 H	342.129 160 94	+16.508 383 30	0.88	1.83	−6.42	0.96	0.70	1.27	1.07	1.05	+19 +21 −14 − 6 − 7 − 4 − 3 −41 +32 +14	2	3.18
*112619	22 48 31.83	+28 43 29.5	8.44 H	342.132 613 45	+28.724 852 12	13.12	−93.89	−139.67	0.60	0.59	1.00	0.63	0.76	+33 +10 +10 + 4 + 3 −12 + 6 − 1 + 7 +35	0	−1.09
*112620	22 48 32.31	−70 56 00.2	7.18 2 H	342.134 644 66	−70.933 402 00	2.04	22.56	−3.06	0.52	0.54	0.70	0.56	0.50	− 2 − 6 −25 − 8 − 1 +10 + 1 −21 − 1 − 2	1	1.20
*112621 H	22 48 32.83	−05 35 36.6	9.34 G	342.136 792 23	−05.593 498 33 A	11.96	−186.83	15.59	1.75	1.08	1.64	2.56	1.34	+24 + 0 −15 +28 +19 + 2 + 0 −20 +10 + 0	0	−0.18
*112622	22 48 33.18	−66 17 42.7	9.59 H	342.138 263 58	−66.295 180 75	3.28	6.80	−27.28	0.82	0.89	1.24	0.92	0.89	− 1 −13 −27 − 3 +11 + 5 +12 −12 + 1 + 5	0	0.40
*112623	22 48 33.20	−51 19 00.1	3.49 G	342.138 321 36	−51.316 703 54	25.16	108.47	−65.93	0.52	0.44	0.68	0.56	0.47	+ 4 −12 −13 −11 +14 − 2 +14 − 2 − 9 + 7	0	−1.14
112624	22 48 35.61	−17 15 21.5	8.24 H	342.148 379 27	−17.255 982 85	6.12	60.95	−35.42	1.00	0.60	1.06	1.34	0.74	+14 +12 − 8 + 9 + 7 +13 + 8 − 8 +23 + 3	0	0.56
112625	22 48 36.26	+33 26 36.7	7.76 2 H	342.151 080 60	+33.443 533 82	3.32	−11.73	−35.77	0.70	0.57	1.06	0.94	0.67	+15 +31 +36 − 7 + 0 −12 + 6 −15 + 5 +10	0	0.95
112626	22 48 38.00	+56 19 17.6	8.89 3 T	342.158 329 64	+56.321 543 27	0.34	−2.54	−1.19	0.68	0.66	0.85	0.91	0.78	−21 − 7 +13 − 5 + 5 +17 + 3 −16 + 5 −17	0	0.12
112627	22 48 39.62	+38 17 58.9	10.43 H	342.165 087 90	+38.299 704 94 B	−2.22	5.28	−16.11	20.42	18.66	9.98	15.94	14.88	+ 9 +25 +23 +20 −23 − 6 −17 −26 − 8 +26	10	1.21
112628	22 48 39.75	+38 18 17.2	8.79 H	342.165 622 06	+38.304 788 46 A	0.92	27.33	−1.41	2.69	2.32	2.71	2.87	2.57	+14 +27 +24 +20 −18 − 9 −16 −19 −13 +23	10	1.21
112629	22 48 40.31	−34 13 43.4	10.57 H	342.167 938 02	−34.228 712 16	4.50	−1.95	−0.27	1.43	1.21	1.95	1.88	1.57	+39 − 6 −17 +29 −15 +13 − 4 −16 +11 +57	2	−1.36
112630	22 48 40.60	+07 50 43.1	7.83 H	342.169 177 26	+07.845 301 98	2.82	−8.82	−10.26	0.89	0.58	1.01	1.31	0.76	+19 − 7 + 7 +11 +11 + 7 − 1 −17 +16 −12	0	−0.30
112631	22 48 40.83	−34 46 23.2	7.69 H	342.170 130 81	−34.773 101 66	5.87	−12.64	4.29	0.67	0.62	0.97	0.80	0.77	+39 −11 −19 + 6 −12 +27 − 7 − 7 +14 +53	0	−0.70
*112632	22 48 43.28	+55 07 33.8	8.52 H	342.180 347 87	+55.126 059 67	0.95	−4.82	−5.83	0.64	0.60	0.81	0.79	0.76	−17 −24 + 7 − 7 + 2 +12 − 1 −13 +12 − 2	0	−0.87
*112633	22 48 43.23	+33 10 18.2	8.40 H	342.180 129 38	+33.171 722 52	2.41	7.63	−2.66	0.72	0.64	1.05	0.90	0.66	+13 +20 +44 − 6 + 5 − 2 + 6 −19 − 2 +12	0	−0.18
112634	22 48 43.89	−54 21 35.6	9.17 H	342.182 881 56	−54.359 895 64	2.38	11.89	−26.59	0.83	0.84	1.27	1.02	0.88	+23 − 2 −14 +24 + 5 +12 + 7 + 3 −11 +24	0	0.76
112635	22 48 44.24	+62 56 18.7	6.07 H	342.184 331 98	+62.938 531 33	5.10	13.87	−49.67	0.45	0.47	0.54	0.53	0.54	−22 + 5 − 4 +10 − 3 − 6 − 2 −23 +18 −22	0	−1.73
112636	22 48 44.68	+26 00 18.8	8.50 H	342.186 151 07	+26.005 234 05	3.10	12.50	3.53	0.81	0.62	1.08	1.00	0.86	+ 7 +12 + 3 +53 −15 − 2 −19 + 4 +19 − 4	0	0.01
112637	22 48 46.76	−36 53 24.3	9.72 G	342.194 851 65	−36.890 088 69	27.27	80.83	−243.81	1.21	0.98	1.66	1.49	1.20	+30 − 9 −31 +17 − 5 +23 + 3 −17 +35 +49	2	−1.30
112638	22 48 46.84	−63 33 06.6	8.61 1 H	342.195 167 79	−63.551 827 41	1.18	41.12	−5.76	0.71	0.77	1.10	0.88	0.78	−11 + 8 −18 + 9 + 7 − 5 + 6 −16 + 9 −10	0	−0.16
112639	22 48 47.20	+46 22 11.1	9.03 H	342.196 658 54	+46.369 739 45	2.31	0.61	−1.98	0.67	0.77	1.18	0.71	0.74	−18 + 8 +16 +14 + 9 − 1 +17 −20 +21 + 0	0	0.35
112640	22 48 47.22	+14 17 20.5	8.86 H	342.196 753 19	+14.289 037 41	6.58	57.95	17.03	0.89	0.68	1.15	1.05	1.00	+27 −11 −17 − 1 − 7 − 5 +15 −35 +39 +12	0	−2.06
112641	22 48 47.88	+54 24 53.6	6.14 H	342.199 516 51	+54.414 897 06	5.42	13.25	−2.09	0.40	0.42	0.53	0.48	0.51	−20 − 1 + 7 + 6 +11 +12 +11 − 7 + 3 −14	1	−1.27
112642	22 48 47.89	−64 27 27.8	8.67 H	342.199 548 78	−64.457 719 61	2.11	12.53	−10.62	0.71	0.80	1.10	0.88	0.83	− 4 + 3 − 9 − 3 + 2 + 5 + 3 −14 − 5 +13	0	−1.06
112643	22 48 51.80	−26 32 32.8	9.14 H	342.215 814 02	−26.542 431 76	18.54	−127.16	−67.81	1.12	0.80	1.26	1.38	1.03	+25 + 6 −12 −18 − 1 + 3 + 0 −12 +11 +38	0	1.01
112644	22 48 52.23	+18 52 08.4	8.18 H	342.217 617 89	+18.869 010 40	3.48	23.62	−9.14	0.91	0.60	1.06	1.18	0.90	+ 6 − 2 − 3 − 6 − 3 +17 − 4 −25 +14 + 5	0	0.30
112645	22 48 52.62	+20 46 41.4	9.06 H	342.219 251 55	+20.778 153 77	6.25	−73.17	−85.93	1.03	0.74	1.27	1.11	1.01	+18 +17 −10 − 6 − 4 +14 + 1 −33 +29 +12	2	3.19
112646	22 48 52.64	+60 21 38.2	8.36 H	342.219 352 37	+60.360 607 38	4.75	8.66	9.68	0.73	0.66	0.79	0.90	0.83	−26 − 1 +20 +34 + 6 − 6 + 6 −19 − 1 −32	0	−0.61
112647	22 48 52.81	+61 09 41.2	7.92 H	342.220 044 50	+61.161 441 90	4.11	−39.47	−7.91	0.77	0.69	0.89	0.90	0.86	−28 +32 − 6 − 3 +11 − 1 +12 −27 +18 −46	2	−0.04
112648	22 48 53.06	−28 50 00.9	10.67 H	342.221 084 13	−28.833 573 19	23.03	−170.09	−242.43	1.74	1.29	2.04	2.37	1.42	+ 5 +14 −27 −25 +12 − 4 +13 −24 +25 −12	0	0.07
112649	22 48 53.69	+10 31 56.8	7.66 H	342.223 706 72	+10.532 449 84	3.37	−0.03	−14.18	0.81	0.66	1.02	0.93	0.89	+31 + 3 −21 − 7 −14 + 7 −13 −48 +25 +28	0	0.43
112650 H	22 48 53.72	−20 29 02.2	10.37 G	342.223 829 96	−20.483 944 31 *	8.29	202.66	43.09	3.47	2.38	2.44	2.19	1.67	+21 − 3 + 3 −22 + 0 +10 − 3 −30 +24 +34	1	−0.55
112651	22 48 53.87	−16 59 43.0	7.88 1 H	342.224 438 59	−16.995 272 07	1.32	−3.19	−1.26	0.93	0.64	1.09	1.16	0.81	+23 +19 −15 +11 +13 +20 +19 + 6 +22 +24	0	−0.85
112652	22 48 54.25	−54 18 48.5	11.25 G	342.226 043 11	−54.313 459 38	30.22	263.41	−355.54	1.55	1.54	2.34	1.96	1.58	+25 + 0 − 8 +31 + 7 +19 + 9 + 2 − 1 +25	4	3.61
112653	22 48 54.68	+63 08 57.1	9.29 H	342.227 824 58	+63.149 205 47	4.00	12.39	6.35	0.78	0.74	0.91	0.89	0.91	−11 − 1 − 4 − 1 − 2 − 3 − 3 −25 +13 −11	1	−1.58
112654	22 48 54.83	+09 19 48.2	10.71 H	342.228 470 23	+09.330 063 06	2.57	41.72	21.20	2.16	1.42	2.60	3.59	2.18	+12 +36 −14 −39 +12 −38 +16 −27 +26 −19	0	1.78
112655	22 48 55.27	−63 43 06.3	6.51 H	342.230 311 21	−63.718 416 05	3.11	2.34	5.03	0.42	0.41	0.62	0.49	0.43	−11 + 3 −11 + 0 + 6 − 6 + 7 −11 + 0 + 4	0	0.06
112656	22 48 55.44	−08 51 53.5	9.63 H	342.231 020 41	−08.864 874 84	2.67	−0.66	5.72	1.48	0.94	1.64	1.96	1.23	+12 +11 −15 −17 +12 − 4 +11 −30 +33 −11	5	−1.13
112657	22 48 55.61	−68 48 20.7	8.65 H	342.231 706 13	−68.805 760 88	6.67	43.69	−67.95	0.68	0.63	0.89	0.78	0.62	− 1 + 2 −13 + 7 − 3 − 1 − 4 − 5 −11 − 6	1	−0.89
112658	22 48 56.11	+04 17 34.6	7.24 G	342.233 797 73	+04.292 948 46	13.03	51.38	−69.29	0.78	0.55	0.97	1.28	0.75	+24 − 4 −10 + 1 + 7 +20 −11 −44 +34 −14	0	0.56
112659	22 48 57.06	+08 32 34.5	8.92 H	342.237 749 18	+08.542 914 68	−0.37	10.56	0.42	1.05	0.69	1.18	1.48	0.95	+21 −11 + 6 + 1 +12 + 0 + 8 − 9 + 8 − 7	0	1.18
112660	22 48 57.14	−22 39 17.2	8.60 H	342.238 092 39	−22.654 767 45	4.53	−3.45	−14.70	0.95	0.62	1.10	1.13	0.75	+18 + 1 −12 −16 +12 + 4 +12 − 9 +27 +21	0	1.71
112661	22 48 57.41	−46 25 48.5	9.84 H	342.239 205 90	−46.430 147 42	10.10	147.50	21.92	1.25	0.97	1.50	1.64	1.12	+ 7 − 3 −17 − 8 +12 +10 +11 − 6 +14 +30	0	0.26
112662	22 48 58.24	−03 20 19.3	9.92 G	342.242 655 35	−03.338 707 76	22.03	254.12	−109.96	1.83	1.10	1.93	3.15	1.53	+25 −13 −36 +28 +14 + 2 − 6 −46 +26 − 5	0	−1.19
112663	22 48 58.48	−44 36 14.0	8.52 H	342.243 671 25	−44.603 875 45	13.33	35.10	−121.28	0.95	0.74	1.14	1.23	0.84	+ 7 − 3 −20 +25 − 9 +25 + 0 −17 + 3 +17	0	0.00
112664	22 48 58.65	−32 03 52.9	10.57 H	342.244 380 18	−32.064 690 71	1.40	12.36	−12.23	1.79	1.21	1.87	1.89	1.40	+10 + 9 − 6 −24 +25 − 5 +23 +13 +10 +22	0	2.70
112665	22 48 59.43	+39 48 42.4	8.50 H	342.247 614 63	+39.811 790 56	2.66	23.74	4.12	0.93	0.79	1.23	1.12	0.87	+25 +34 +31 +12 + 3 + 4 + 4 −26 − 8 +33	1	0.68
112666	22 48 59.88	+77 57 10.9	10.16 G	342.249 497 17	+77.953 039 60	11.27	236.94	−13.63	1.05	0.95	1.12	1.25	1.11	−11 −10 +13 +16 − 6 + 8 −10 −21 − 4 −18	0	0.37
112667	22 48 59.97	+46 47 15.6	10.64 H	342.249 860 96	+46.787 670 84	0.86	−0.28	−3.23	1.21	1.20	1.81	1.33	1.29	−25 +10 + 6 +18 +17 − 9 +26 −14 +17 − 2	0	0.81
*112668	22 49 00.70	−30 51 36.2	10.09 H	342.252 931 66	−30.860 042 50	0.07	14.18	−7.37	1.63	1.04	1.63	1.96	1.14	+ 3 + 5 −14 −23 +38 −10 +34 + 9 + 8 + 5	0	1.36
*112669	22 49 00.80	−03 23 15.3	8.58 H	342.253 351 16	−03.387 587 70	12.63	51.88	−11.46	1.35	0.78	1.38	2.28	1.08	+23 −14 −36 +31 +13 + 3 − 7 −44 +26 − 9	0	0.66
*112670 H	22 49 00.68	+68 34 12.2	6.19 H	342.252 834 76	+68.570 063 92 A	16.01	117.30	67.39	1.00	0.95	0.89	0.96	0.72	+ 2 − 2 +14 +18 +13 −12 +17 − 9 + 4 +17	6	1.31
112671	22 49 01.03	−24 55 22.3	8.15 H	342.254 273 30	−24.922 873 21	7.09	26.42	−61.86	0.86	0.61	1.01	1.19	0.73	+15 +11 + 1 − 1 +14 +16 +11 −20 +23 + 1	0	0.84
112672	22 49 01.48	−39 32 43.1	9.94 G	342.256 186 56	−39.545 311 19	2.27	27.30	−24.52	1.08	0.97	1.46	1.28	1.02	+19 − 5 − 4 +13 −10 +20 −11 −12 +21 +15	0	0.60
112673	22 49 01.79	+51 58 17.8	8.08 H	342.257 471 76	+51.971 598 49	5.20	−4.96	−5.79	0.57	0.57	0.79	0.61	0.65	−16 − 2 +16 − 1 − 2 − 2 − 1 − 3 +10 + 1	1	−0.54
112674	22 49 02.94	+49 33 58.8	7.88 H	342.262 257 64	+49.566 346 50	6.78	14.04	4.30	0.54	0.58	0.85	0.56	0.58	−17 +11 +21 − 5 + 9 − 6 +13 − 4 +22 − 9	0	0.67
112675	22 49 03.18	+56 25 41.5	8.41 2 T	342.263 267 67	+56.428 206 74	0.57	−3.97	−1.83	0.64	0.61	0.79	0.86	0.71	−23 − 8 + 4 + 4 − 1 +22 − 2 −11 +11 −16	0	−0.83
112676 H	22 49 03.33	−55 36 22.7	11.02 G	342.263 878 12	−55.606 313 21 A	7.12	192.00	−137.18	3.23	3.31	4.11	3.87	3.20	+17 + 4 + 4 +36 +29 − 3 +25 +11 −14 +25	2	1.17
112677	22 49 04.07	−29 52 30.5	9.12 H	342.266 963 57	−29.875 129 45	0.83	7.99	−2.26	1.13	0.88	1.27	1.23	0.92	+15 − 4 −10 −32 +18 +16 +23 + 3 +12 + 5	0	0.36
112678	22 49 04.47	+10 36 20.2	10.50 G	342.268 634 58	+10.605 604 47	27.85	179.97	26.33	1.70	1.38	2.05	1.97	1.93	+39 −25 −15 −29 −20 +32 −21 −51 +24 +37	0	−1.44
*112679	22 49 04.73	+65 59 13.0	8.79 H	342.269 707 65	+65.986 931 42	4.92	−11.71	−15.44	0.71	0.66	0.81	0.91	0.70	−13 − 6 +21 +13 +12 +15 +10 −16 −12 − 6	0	0.30
*112680	22 49 04.55	+27 21 28.7	8.79 2 H	342.268 959 87	+27.357 972 53	1.56	−1.72	4.94	0.61	0.59	1.01	0.64	0.71	+38 +16 +13 −11 + 4 − 6 +10 −10 + 9 +54	0	1.62
112681	22 49 05.20	−39 52 23.7	7.77 H	342.271 686 77	−39.873 262 01	3.49	69.20	−21.30	0.67	0.61	0.91	0.80	0.66	+26 −11 − 8 +26 + 0 +11 + 0 + 6 +11 +24	0	1.07
112682	22 49 05.61	−51 55 00.9	8.42 H	342.273 389 45	−51.916 914 25	1.66	4.58	−8.78	0.83	0.77	1.23	0.89	0.84	+ 1 −16 −12 −16 +12 +22 +10 − 5 +17 +17	0	−0.19
112683 H	22 49 05.98	+05 20 35.1	10.52 H	342.274 932 30	+05.343 069 92 A	2.72	46.74	−9.04	6.34	4.31	6.38	8.54	5.45	+47 + 6 −29 −10 +15 −41 − 3 −41 +54 −26	1	1.53
112684	22 49 06.78	−34 02 36.9	10.27 H	342.278 267 81	−34.043 585 34	6.84	116.60	−12.87	1.30	1.24	1.84	1.57	1.60	+45 −15 −15 +23 −15 +15 −10 −12 +14 +60	0	0.77
112685	22 49 08.09	+73 36 27.4	9.96 H	342.283 714 24	+73.607 599 37	3.68	17.91	9.15	0.87	0.79	0.98	1.12	0.92	+ 5 − 2 + 7 − 2 − 3 −18 − 2 − 1 + 1 +12	1	−1.49
112686	22 49 10.99	−33 53 07.0	10.62 H	342.295 809 11	−33.885 267 51	2.71	29.66	−11.12	1.44	1.42	2.13	1.79	1.93	+42 − 3 − 3 +19 − 8 +18 − 6 − 1 + 5 +60	0	0.54
112687	22 49 11.83	+26 30 47.2	8.22 H	342.299 287 55	+26.513 114 13	4.97	6.56	−9.02	0.71	0.55	0.95	0.85	0.73	+ 3 + 1 +12 +51 −15 −15 −19 + 6 +19 − 8	0	1.55
112688	22 49 12.10	−32 45 02.6	8.91 H	342.300 434 94	−32.750 734 74	12.59	47.24	40.06	1.00	0.79	1.31	1.15	0.97	+32 + 1 − 6 +13 + 8 +14 +10 + 5 +19 +46	0	−0.70
112689	22 49 15.01	+23 53 38.8	7.64 H	342.312 540 26	+23.894 103 97	3.81	−6.02	−20.49	0.77	0.56	1.01	0.77	0.79	+ 4 +28 −12 +28 −11 − 5 − 2 −17 +37 + 6	0	1.75
112690	22 49 15.14	−29 32 36.1	8.44 H	342.313 098 05	−29.543 353 01	−0.04	−37.67	−27.41	1.04	0.74	1.15	1.21	0.78	+ 5 +11 −24 −19 +11 + 2 +14 −12 +11 −11	0	−2.05
112691	22 49 16.44	+63 43 06.1	8.40 H	342.318 516 21	+63.718 353 70	4.36	16.18	−5.84	0.62	0.62	0.71	0.70	0.68	−18 + 5 + 6 +21 − 2 − 4 − 2 − 2 + 5 −18	0	−1.79
112692	22 49 17.01	−31 12 13.0	8.05 H	342.320 858 45	−31.203 609 81	0.64	18.27	−11.64	1.07	0.65	1.05	1.15	0.70	− 1 +23 −14 −36 +35 −23 +32 + 7 + 8 + 5	0	2.35
112693	22 49 17.17	−23 05 33.1	6.93 H	342.321 548 86	−23.092 539 10	5.51	−10.46	−3.31	0.70	0.53	0.90	0.87	0.63	+34 −12 − 7 + 1 + 6 +17 + 1 −11 +34 +32	2	0.41
*112694	22 49 17.45	−70 20 53.0	6.35 H	342.322 701 49	−70.348 062 01	9.98	12.96	32.95	0.44	0.43	0.59	0.47	0.40	− 1 − 2 −29 −12 + 0 − 1 + 0 −24 + 7 + 7	1	1.10
*112695 H	22 49 17.31	+15 16 32.6	8.43 H	342.322 120 74	+15.275 710 97 *	10.05	−9.77	−48.11	2.78	1.59	1.47	1.21	1.19	+24 +14 − 7 −12 − 3 −11 + 2 −26 +25 +21	3	0.08
*112696	22 49 17.33	+23 24 49.5	10.12 H	342.322 209 07	+23.413 748 95	2.22	8.13	−6.91	1.39	1.02	1.87	1.70	1.51	+ 2 +15 −14 + 6 + 6 −33 + 4 − 5 +19 − 7	0	−0.13
112697	22 49 17.58	+50 58 37.4	6.75 H	342.323 267 11	+50.977 059 91	15.03	−18.84	−145.23	0.43	0.47	0.63	0.47	0.51	−18 + 2 +20 +10 + 6 − 7 +10 − 4 + 6 − 8	0	0.69
112698	22 49 17.68	+47 55 48.3	7.84 2 H	342.323 685 20	+47.930 087 87	0.87	−7.63	−6.79	0.47	0.49	0.76	0.49	0.50	−18 +18 + 3 + 5 +13 −17 +19 − 4 +17 + 0	1	0.13
112699	22 49 19.36	−25 32 57.3	10.37 G	342.330 659 46	−25.549 244 99	0.47	4.76	−8.65	1.61	1.17	1.85	2.03	1.42	+14 − 2 − 7 −26 + 7 +14 + 7 −32 + 8 + 8	0	0.18
112700	22 49 21.64	+45 53 50.5	8.48 H	342.340 153 48	+45.897 361 13	2.02	0.72	−2.33	0.56	0.67	1.04	0.59	0.69	−30 + 4 +10 − 2 +15 − 1 +21 −22 +18 − 5	2	−0.67

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
112601	10.318	0.032	9.006	0.018		1.114	0.029	T	1.02	0.02	A	9.0415	0.0021	0.015	88		9.01	9.07		C			1							
112602	9.466	0.018	8.961	0.018	A	0.436	0.003	G	0.53	0.02	A *	8.7881	0.0019	0.018	95	*	8.75	8.83		D	22484−4515	I 1	2 C	A	AB	40	1.199	0.008	0.43	0.03	S
112603	7.718	0.005	6.487	0.003		1.059	0.003	G	1.03	0.00	H	6.5347	0.0006	0.008	212		6.52	6.55					1							S
112604	9.293	0.021	7.522	0.010		1.476	0.018	T	1.49	0.03	L	7.4977	0.0025	0.014	71		7.47	7.52					1							S
112605	9.893	0.019	9.269	0.017		0.577	0.019	T	0.65	0.02	L	9.3296	0.0022	0.025	149		9.29	9.39					1							
112606	9.770	0.014	9.381	0.015		0.380	0.017	T	0.44	0.02	L	9.4325	0.0020	0.028	210		9.38	9.49					1							
112607	9.995	0.020	9.889	0.027		0.103	0.031	T	0.12	0.03	L	9.9181	0.0027	0.034	206		9.86	9.98					1							G
112608	9.423	0.017	8.931	0.017		0.450	0.015	G	0.52	0.02	H	8.9834	0.0017	0.017	121		8.95	9.01		C			1							
112609	11.913	0.103	9.892	0.027		1.711	0.088	T	2.09	0.26	K	9.7057	0.0028	0.027	113		9.65	9.75		U			1							
112610						1.590	0.082	G	2.02	0.23	K	11.0310	0.0052	0.041	88		10.95	11.09		C			1							G
112611	7.511	0.005	7.439	0.006	*	0.071	0.007	T	0.08	0.01	L *	7.4628	0.0009	0.010	146	*	7.45	7.48		D	22485+3106	I 1	2 C	A	AB	96	0.206	0.005	0.94	0.11	S
112612	7.993	0.010	6.934	0.006		0.918	0.009	T	0.92	0.01	L	6.9927	0.0008	0.007	89		6.98	7.01		C			1							S
112613	10.586	0.036	10.100	0.038		0.453	0.043	G	0.52	0.05	H	10.1430	0.0024	0.021	92		10.10	10.18		C			1							
112614	8.958	0.009	8.377	0.008		0.522	0.021	G	0.59	0.02	H	8.4331	0.0011	0.015	220		8.41	8.46		C			1							S
112615	6.515	0.004	6.218	0.004		0.274	0.005	G	0.31	0.01	H	6.2648	0.0016	0.011	86		6.24	6.28		M			1							S P
112616	8.315	0.010	7.173	0.006		0.960	0.039	G	0.98	0.02	A	7.2301	0.0012	0.011	95		7.21	7.25		C			1							S
112617	9.222	0.016	8.151	0.011	*	0.927	0.014	T	0.92	0.01	L *	8.1920	0.0016	0.012	88	*	8.17	8.22		D	22485−0435	H 1	2 C	A	AB	1	0.389	0.009	2.41	0.05	S
112618	10.654	0.047	8.893	0.019		1.468	0.040	T	1.48	0.06	L	8.8900	0.0018	0.017	83		8.86	8.93		C			1	S						
112619	9.131	0.010	8.500	0.009		0.582	0.010	T	0.65	0.01	L	8.5637	0.0015	0.015	181		8.54	8.60		C			1							
112620	9.360	0.014	7.383	0.006		1.675	0.013	T	2.02	0.04	O	7.2651	0.0022	0.023	141		7.23	7.30		U 2			1							S
112621	10.007	0.026	9.432	0.026	A	0.599	0.002	G	0.67	0.00	H *	9.4685	0.0026	0.019	80	*	9.44	9.50			22485−0536	M 1	2 C	D	AC	103	2.720	0.088	3.75	0.25	D
112622	10.241	0.023	9.643	0.021		0.558	0.023	T	0.63	0.02	L	9.7064	0.0021	0.023	155		9.65	9.75		C			1							
112623	3.608	0.002	3.499	0.002		0.083	0.007	G	0.10	0.02	A	3.5190	0.0005	0.004	114		3.51	3.53		C			1							S
112624	8.470	0.012	8.262	0.013		0.192	0.017	T	0.21	0.02	L	8.3050	0.0018	0.016	77		8.28	8.34					1							S
112625	9.815	0.018	7.925	0.008		1.570	0.016	T	1.59	0.02	L	7.8777	0.0028	0.022	129		7.84	7.91		U 2			1							
112626	9.952	0.021	8.978	0.015		0.855	0.019	T	0.87	0.01	L	9.0669	0.0416	0.306	122		8.55	9.50	4.98	P 1 A			1							G
112627	12.011	0.137	10.230	0.042	B						T	10.4258	0.0560			B				D	22487+3818	I 2	1 C	I A							
112628	10.402	0.030	8.906	0.016	A	1.259	0.027	T	1.22	0.03	L	8.9529	0.0181	0.058	98	A	8.84	9.05		D	22487+3818	I 2	1 C	P A						
112629	11.020	0.051	10.555	0.055		0.451	0.059	T	0.52	0.06	L	10.6744	0.0038	0.031	105		10.62	10.72		C			1							G
112630	9.234	0.015	7.950	0.009		1.093	0.014	T	1.05	0.01	L	8.0017	0.0011	0.012	92		7.98	8.02		C			1							S
112631	7.863	0.008	7.703	0.009		0.146	0.011	T	0.16	0.01	L	7.7470	0.0010	0.010	110		7.73	7.76		C			1							S
112632	8.558	0.010	8.520	0.012		0.040	0.014	T	0.06	0.01	L	8.5376	0.0012	0.014	126		8.52	8.56		C			1							
112633	8.426	0.008	8.401	0.010		0.028	0.012	T	0.04	0.01	L	8.4127	0.0015	0.015	125		8.39	8.44					1							
112634	10.829	0.039	9.334	0.018		1.258	0.034	T	1.22	0.04	L	9.3361	0.0024	0.023	156		9.30	9.37		C			1	S						
112635	7.613	0.006	6.200	0.004		1.194	0.006	T	1.15	0.01	L	6.2347	0.0005	0.005	123		6.22	6.24					1							S
112636	9.655	0.015	8.597	0.011		0.918	0.014	T	0.92	0.01	L	8.6568	0.0016	0.017	148		8.63	8.69					1							S
112637	10.987	0.048	9.816	0.027		1.002	0.010	G	1.05	0.01	I	9.8564	0.0029	0.022	91		9.83	9.90		C			1							
112638	10.077	0.022	8.728	0.012		1.143	0.020	T	1.11	0.02	L	8.7813	0.0022	0.024	172		8.73	8.82		U			1							
112639	9.147	0.010	9.030	0.013		0.113	0.015	T	0.13	0.01	L	9.0698	0.0023	0.023	200		9.02	9.10					1							
112640	10.031	0.027	8.961	0.019		0.927	0.025	T	0.92	0.02	L	9.0220	0.0018	0.015	101		9.00	9.05					1							
112641	6.025	0.003	6.122	0.003		−0.083	0.004	T	−0.06	0.01	L	6.1128	0.0007	0.007	134		6.10	6.13					1							S
112642	10.534	0.028	8.811	0.012		1.438	0.024	T	1.43	0.04	L	8.8065	0.0023	0.024	163		8.76	8.85					1							
112643	10.026	0.028	9.223	0.021		0.711	0.027	T	0.77	0.02	L	9.2746	0.0022	0.020	98		9.24	9.31		C			1							
112644	8.377	0.011	8.182	0.012		0.187	0.015	T	0.21	0.02	L	8.2465	0.0015	0.012	91		8.23	8.27					1							S
112645	9.667	0.020	9.093	0.018		0.537	0.024	T	0.61	0.03	L	9.1732	0.0019	0.016	94		9.14	9.20		C			1							
112646	8.527	0.009	8.366	0.011		0.155	0.013	T	0.17	0.01	L	8.4163	0.0016	0.013	119		8.38	8.43		C			1	G						
112647	9.226	0.014	8.033	0.009		1.022	0.013	T	1.00	0.01	L	8.0877	0.0019	0.016	107		8.06	8.13					1							
112648	12.274	0.229	10.780	0.089		1.358	0.003	G	1.59	0.01	I	10.7702	0.0038	0.033	86		10.71	10.83					1							G
112649	9.041	0.013	7.763	0.008		1.088	0.012	T	1.05	0.01	L	7.8317	0.0017	0.013	105		7.81	7.85					1							S
112650	11.560	0.093	10.444	0.053	*	0.974	0.002	G	1.02	0.00	I *	10.5117	0.0032	0.024	105	*	10.48	10.56		C	22489−2029	H 1	2 C	C	AB	239	0.274	0.070	1.67	0.64	
112651	9.965	0.029	8.086	0.012		1.561	0.025	T	1.58	0.03	L	8.0014	0.0025	0.017	74		7.98	8.03		U			1							S
112652						1.410	0.020	G	1.70	0.05	I	11.3437	0.0037	0.043	155		11.25	11.41		C			1							G
112653	9.656	0.020	9.327	0.021		0.312	0.027	T	0.36	0.04	L	9.3649	0.0018	0.018	118		9.33	9.40		C			1							
112654	11.726	0.103	10.868	0.077		0.768	0.097	T	0.81	0.07	L	10.8601	0.0047	0.041	93		10.75	10.95		C			1							G
112655	6.437	0.003	6.492	0.003		−0.047	0.004	T	−0.03	0.00	L	6.4999	0.0007	0.008	171		6.49	6.51		C			1							S
112656	11.080	0.068	9.758	0.035		1.122	0.060	T	1.08	0.06	L	9.7934	0.0039	0.026	70		9.74	9.83					1							
112657	9.307	0.013	8.715	0.012		0.553	0.013	T	0.63	0.01	L	8.7648	0.0019	0.018	137		8.73	8.80		C			1							S
112658	7.784	0.007	7.275	0.007		0.478	0.015	G	0.55	0.02	H	7.3434	0.0013	0.010	97		7.33	7.36					1							S
112659	11.144	0.057	9.100	0.017		1.692	0.047	T	1.72	0.05	L	9.0265	0.0022	0.021	94		8.99	9.06					1							
112660	9.940	0.024	8.725	0.015		1.039	0.022	T	1.01	0.02	L	8.7711	0.0019	0.016	96		8.75	8.81		C			1							
112661	10.704	0.041	9.907	0.033		0.706	0.040	T	0.76	0.03	L	9.9725	0.0032	0.023	84		9.94	10.01		C			1							
112662	11.046	0.060	10.030	0.041		0.876	0.004	G	0.92	0.00	H	10.0617	0.0024	0.024	63		10.01	10.09					1							
112663	9.297	0.017	8.589	0.014		0.634	0.005	G	0.68	0.02	A	8.6468	0.0018	0.016	87		8.61	8.69					1							S
112664	11.234	0.071	10.644	0.069		0.551	0.087	T	0.62	0.08	L	10.6897	0.0039	0.029	80		10.64	10.73		C			1							G
112665	9.945	0.021	8.622	0.012		1.123	0.019	T	1.09	0.02	L	8.6691	0.0027	0.022	120		8.63	8.71		R			1							
112666	11.170	0.059	10.167	0.038		0.760	0.020	G	0.80	0.02	H	10.3025	0.0027	0.024	120		10.25	10.34		C			1							G
112667	11.090	0.048	10.736	0.058		0.344	0.067	T	0.40	0.09	L	10.7257	0.0036	0.038	187		10.65	10.79					1	S						G
112668	10.519	0.040	10.124	0.045		0.386	0.051	T	0.45	0.06	L	10.1815	0.0041	0.028	83		10.14	10.23		C			1							
112669	9.207	0.017	8.643	0.016		0.528	0.021	T	0.60	0.02	L	8.6926	0.0020	0.012	66		8.67	8.71					1							S
112670	6.660	0.006	6.193	0.006	*	0.440	0.007	T	0.51	0.01	L *	6.2901	0.0006	0.006	124	*	6.28	6.30		D	22490+6834	I 1	2 C	A	AB	57	4.474	0.002	0.12	0.01	S
112671	8.538	0.011	8.195	0.011		0.340	0.015	G	0.40	0.02	H	8.2354	0.0013	0.013	96		8.22	8.28		D			1							S
112672	10.498	0.033	9.968	0.032		0.550	0.020	G	0.62	0.02	H	10.0801	0.0028	0.025	107		10.04	10.12		C			1							
112673	9.365	0.017	8.188	0.011		1.009	0.016	T	0.98	0.01	L	8.2472	0.0016	0.013	129		8.22	8.26		C			1							
112674	8.051	0.008	7.883	0.009		0.161	0.011	T	0.18	0.01	L	7.9327	0.0015	0.015	145		7.91	7.96		C			1							S
112675	9.430	0.015	8.501	0.011		0.821	0.014	T	0.84	0.01	L	8.4877	0.0339	0.185	127		8.34	8.76	5.44	P 1 A			1							
112676	12.299	0.187	11.156	0.109	A	0.906	0.005	G	0.95	0.01	I *	11.1750	0.0052	0.051	119	*	11.06	11.27			22491−5536	H 1	2 C	D	AB	190	1.048	0.056	2.11	0.25	G D
112677	10.506	0.037	9.213	0.021		1.100	0.033	T	1.06	0.03	L	9.2948	0.0022	0.016	83		9.26	9.32		C			1							
112678	12.135	0.174	10.562	0.062		1.234	0.020	G	1.39	0.02	I	10.6471	0.0035	0.026	98		10.60	10.69		C			1							G
112679	9.001	0.017	8.820	0.020		0.173	0.025	T	0.19	0.03	L	8.8474	0.0017	0.018	126		8.82	8.88					1							
112680	10.599	0.026	9.004	0.012		1.360	0.024	T	4.06	0.04	O	8.2205	0.0104	0.105	235		8.02	8.51		U 2 C			1	S						
112681	9.446	0.016	7.928	0.009		1.276	0.014	T	1.24	0.01	L	7.9323	0.0013	0.013	103		7.91	7.95					1							S
112682	10.434	0.034	8.591	0.014		1.533	0.029	T	1.58	0.06	L	8.5394	0.0024	0.021	113		8.50	8.58					1							
112683	11.505	0.084	10.800	0.076	A	0.630	0.126	G	0.70	0.11	R *	10.6513	0.0049	0.044	91	*	10.58	10.74		D	22491+0521	M 1	2 C	A	AB	21	2.535	0.031	1.06	0.10	G
112684	11.096	0.054	10.310	0.043		0.698	0.053	T	0.75	0.04	L	10.4073	0.0033	0.027	117		10.35	10.45		C			1							
112685	10.366	0.028	10.000	0.032		0.347	0.040	T	0.41	0.05	L	10.0430	0.0022	0.024	115		10.00	10.08		C			1							G
112686	11.244	0.056	10.700	0.057		0.517	0.060	T	0.59	0.06	L	10.7329	0.0042	0.036	119		10.67	10.78					1							G
112687	8.648	0.009	8.256	0.009		0.371	0.012	T	0.43	0.01	L	8.3090	0.0015	0.015	143		8.29	8.34		C			1							S
112688	9.528	0.021	8.975	0.020		0.524	0.022	T	0.60	0.02	L	9.0238	0.0025	0.016	90		8.99	9.05		C			1							S
112689	9.094	0.015	7.764	0.009		1.129	0.014	T	1.09	0.01	L	7.8109	0.0011	0.011	99		7.79	7.83		C			1							S
112690	10.056	0.025	8.566	0.013		1.254	0.022	T	1.21	0.02	L	8.6019	0.0025	0.017	91		8.57	8.63					1							S
112691	8.655	0.010	8.425	0.011		0.219	0.014	T	0.24	0.02	L	8.4677	0.0015	0.017	134		8.44	8.49					1							
112692	8.094	0.008	8.054	0.010		0.036	0.011	T	0.05	0.01	L	8.0720	0.0014	0.014	88		8.05	8.10		C			1							S
112693	8.632	0.011	7.063	0.006		1.316	0.010	T	1.28	0.01	L	7.0817	0.0007	0.008	101		7.07	7.09					1							S
112694	6.450	0.003	6.350	0.004		0.071	0.004	G	0.08	0.00	H	6.3766	0.0007	0.008	140		6.36	6.39		C			1							S
112695	9.246	0.015	8.499	0.013	*	0.683	0.016	T	0.74	0.01	L *	8.5713	0.0020	0.018	113	*	8.55	8.60			22493+1517	H 1	2 C	A	AB	343	0.225	0.026	2.34	0.39	S
112696	11.544	0.078	10.194	0.040		1.144	0.069	T	1.11	0.06	L	10.2821	0.0036	0.028	94		10.22	10.34		C			1							G
112697	7.408	0.004	6.816	0.004		0.552	0.005	T	0.62	0.01	L	6.8739	0.0008	0.009	156		6.86	6.89		C			1							S
112698	7.721	0.006	7.823	0.009		−0.087	0.009	T	−0.07	0.01	L	7.8143	0.0018	0.020	175		7.78	7.85		U 2 C			1							S
112699	12.101	0.162	10.568	0.065		1.425	0.020	G	1.41	0.03	I	10.5077	0.0031	0.028	90		10.46	10.57		C			1							
112700	8.636	0.008	8.496	0.009		0.135	0.011	T	0.15	0.01	L	8.5358	0.0015	0.023	219		8.50	8.58					1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
112701	22 49 22.55	+32 31 46.4	7.87	H	342.343 938 45	+32.529 568 62		5.45	2.60	−2.44	0.62	0.57	1.01	0.79	0.77	+25	+21	+37	− 6	−13	−18	− 6	−27	−10	+33	3	−1.00
112702	22 49 23.09	+48 53 28.5	9.74	H	342.346 213 58	+48.891 241 00		1.24	1.65	0.04	0.88	0.91	1.33	0.97	0.97	−14	+ 8	+14	−15	+21	− 6	+22	− 9	+ 7	+ 4	2	0.58
*112703	22 49 25.74	−58 15 10.7	10.78	G	342.357 262 67	−58.252 968 33		29.44	267.90	−187.62	1.27	1.26	2.22	1.53	1.31	−29	+ 1	−14	− 2	−14	+ 3	−12	− 3	− 3	−38	2	3.35
*112704	22 49 25.73	+16 21 10.9	8.30	H	342.357 204 20	+16.353 016 90		4.35	−20.93	−35.93	0.76	0.62	1.03	0.77	0.82	+21	+ 9	−11	+ 8	− 9	+ 0	− 7	−34	+46	+13	0	1.73
112705	22 49 26.49	−11 20 57.3	7.62	G	342.360 381 67	−11.349 255 39		9.13	39.12	8.65	0.86	0.58	0.99	1.07	0.75	+21	+10	− 3	+ 0	+ 6	+14	+ 8	−15	+31	+16	0	1.78
112706	22 49 27.54	−48 25 46.5	10.05	H	342.364 744 36	−48.429 570 66		3.74	38.04	−27.59	1.33	1.13	1.56	1.16	1.18	+41	−21	−19	−38	−23	+19	−24	−17	+11	+42	1	1.43
112707	22 49 28.36	+43 50 36.8	8.03	2 H	342.368 163 75	+43.843 557 40		2.79	−9.54	−10.86	0.64	0.66	0.98	0.73	0.68	− 5	+14	+ 5	+23	+12	− 6	+26	−33	+14	+21	2	−2.08
112708	22 49 28.39	−34 59 03.6	7.87	H	342.368 277 86	−34.984 334 21		3.77	12.36	−3.20	0.67	0.64	0.97	0.82	0.80	+39	−12	−28	+17	+ 2	+30	+ 8	+19	+16	+53	3	0.06
112709	22 49 28.70	−32 33 34.7	9.66	H	342.369 596 80	−32.559 642 92		0.73	47.00	−12.05	1.30	0.91	1.50	1.53	1.11	+16	− 1	−10	−21	+18	+ 0	+15	+ 0	+18	+30	0	−0.07
112710	22 49 29.45	+45 46 59.5	9.87	H	342.372 696 97	+45.783 187 51		2.13	0.40	−3.25	0.83	0.94	1.55	0.91	1.00	−24	+11	+ 4	+11	+12	− 3	+20	−19	+10	+ 3	0	0.74
112711	22 49 30.64	+50 36 57.0	9.60	H	342.377 653 99	+50.615 829 14		−0.02	3.53	−0.64	0.74	0.77	1.08	0.82	0.88	−19	− 1	+20	+10	+ 1	− 3	+ 3	+ 3	+ 6	− 8	0	1.14
112712	22 49 31.40	+35 29 58.0	9.24	H	342.380 832 32	+35.499 454 30		4.76	−10.57	−41.87	0.87	0.77	1.22	0.96	0.97	− 3	+26	+ 9	+11	+ 2	+ 5	+13	−29	+24	+ 7	0	0.95
112713	22 49 31.74	+45 20 33.3	10.57	H	342.382 256 35	+45.342 590 52		3.16	−8.71	−2.05	1.06	1.19	1.81	1.08	1.17	−37	+21	−13	− 1	+23	− 8	+34	−32	+24	− 4	1	0.18
112714	22 49 32.10	+10 28 43.3	6.55	H	342.383 758 66	+10.478 701 57		14.57	65.30	−35.28	0.72	0.52	0.83	0.84	0.67	+22	+ 2	− 3	−21	+ 1	+ 4	+ 0	−35	+ 5	+12	0	0.85
112715	22 49 35.05	−53 18 33.7	8.29	H	342.396 027 46	−53.309 349 86		4.83	12.61	−11.00	0.56	0.69	1.01	0.75	0.72	+25	− 1	− 4	+29	+ 7	+19	+ 7	+ 2	+ 7	+22	0	2.52
112716	22 49 35.51	−13 35 33.1	4.05	1 H	342.397 957 61	−13.592 537 56		8.58	−12.58	−38.80	1.01	0.59	0.98	1.92	0.84	−13	+ 9	−30	−33	+24	− 1	+25	−40	+35	−46	0	0.71
112717 H	22 49 36.20	+66 33 13.9	7.00	H	342.400 853 59	+66.553 868 54	A	4.03	8.51	−0.85	0.81	0.74	0.81	0.94	0.73	−10	−22	+13	− 7	+ 5	+ 8	+ 7	−13	− 6	− 5	3	0.87
112718	22 49 36.46	+62 19 58.0	9.20	H	342.401 899 12	+62.332 776 27		−0.49	−5.46	−4.50	0.89	0.89	1.06	1.03	1.05	−18	+24	−15	+13	+ 7	−11	+ 9	−20	+20	−19	0	−1.29
112719	22 49 38.40	+42 02 55.6	8.31	H	342.409 980 26	+42.048 783 17		5.40	0.99	−46.73	0.48	0.68	0.98	0.51	0.73	−12	+ 0	+14	+45	+ 4	+ 4	+22	−33	+ 4	+16	0	0.95
112720	22 49 38.74	+42 37 51.6	7.34	H	342.411 432 95	+42.630 994 92		4.73	29.32	0.09	0.43	0.53	0.76	0.45	0.56	−13	+13	+ 8	+ 7	+13	+ 9	+24	−39	+ 4	+10	1	−1.55
112721	22 49 39.88	+80 22 03.8	7.00	H	342.416 159 18	+80.367 715 84		5.13	15.45	4.32	0.49	0.48	0.55	0.57	0.56	− 9	+ 3	+12	+21	+ 1	+ 0	− 1	− 8	+ 4	−17	0	0.81
*112722 H	22 49 41.43	+40 30 55.2	7.40	2 H	342.422 624 12	+40.515 320 24	A	13.11	1.04	−38.75	2.29	1.68	2.36	2.41	1.57	+ 9	+ 9	+10	− 6	− 5	− 1	+ 3	−37	+ 4	+23	7	1.51
*112723 H	22 49 40.97	+31 18 41.2	8.21	H	342.420 709 10	+31.311 446 14	B	8.29	−4.22	−13.21	2.50	2.00	2.62	2.17	1.71	+26	+10	+18	+ 8	+ 2	− 7	+ 8	+ 5	+25	+17	4	1.16
*112724	22 49 40.91	+66 12 02.6	3.50	H	342.420 467 35	+66.200 710 89		28.27	−66.10	−124.74	0.45	0.41	0.52	0.58	0.43	−14	− 8	+28	+20	+13	+17	+ 9	− 6	− 5	− 9	1	0.85
*112725	22 49 40.90	−77 03 03.8	6.73	H	342.420 408 79	−77.051 045 99		9.81	84.89	−3.46	0.50	0.46	0.59	0.64	0.50	−10	− 5	−16	+17	+ 2	− 2	+ 1	−13	+ 0	−11	1	−1.32
*112726	22 49 40.95	−58 55 45.6	7.41	H	342.420 624 47	−58.929 324 57		1.87	21.41	0.41	0.49	0.52	0.87	0.53	0.55	−22	−12	− 4	− 2	− 2	+12	+ 0	−11	−18	−33	0	−0.44
112727	22 49 42.94	+02 55 15.2	10.97	H	342.428 921 98	+02.920 885 84		4.47	0.22	−4.81	1.83	1.31	2.23	2.95	1.88	+26	− 2	+ 2	−31	+15	+ 3	+ 3	−48	+25	−18	0	−0.12
112728	22 49 44.29	+27 35 16.7	8.95	H	342.434 556 32	+27.587 968 43		1.57	−19.76	−9.75	0.62	0.59	1.09	0.67	0.74	+39	+ 6	+11	−16	+ 2	+ 2	+ 7	−15	+11	+59	0	0.85
112729 H	22 49 45.17	−71 11 57.2	9.40	H	342.438 221 31	−71.199 208 85	A	4.85	−7.64	−21.77	1.36	1.39	1.58	1.30	1.30	+ 3	−14	−13	− 6	+ 3	+16	+ 8	−10	− 8	− 1	2	0.34
112730	22 49 46.14	−37 51 14.0	8.21	G	342.442 253 18	−37.853 901 25		18.27	−55.34	−234.17	0.73	0.61	0.94	0.78	0.65	+19	+ 4	− 9	− 1	− 6	+21	− 4	− 7	+10	+24	0	0.45
112731	22 49 46.23	+55 54 09.7	5.43	H	342.442 619 13	+55.902 684 37		8.78	83.41	38.00	0.45	0.44	0.58	0.58	0.51	−28	−15	+13	− 7	+ 2	+18	− 1	−13	+14	−19	0	−1.00
112732	22 49 47.14	−76 20 59.4	9.05	H	342.446 436 76	−76.349 823 42		5.77	24.67	−4.36	0.73	0.69	0.86	0.83	0.72	− 9	+ 3	−16	− 9	+ 7	+ 5	+ 9	−26	+ 6	+ 4	0	−0.82
112733	22 49 47.40	+28 56 39.6	7.59	H	342.447 497 28	+28.944 333 07		5.59	40.99	23.54	0.51	0.47	0.85	0.55	0.61	+28	+16	+26	+ 1	− 6	−14	− 4	− 5	+ 0	+21	0	0.96
112734	22 49 47.62	+54 50 48.6	7.55	1 H	342.448 436 72	+54.846 827 74		2.84	2.98	−6.58	0.47	0.50	0.63	0.56	0.66	−14	− 7	+ 7	+ 0	+ 7	+ 8	+ 7	− 6	+17	− 2	0	−1.33
112735	22 49 51.15	−44 25 24.8	8.07	H	342.463 107 97	−44.423 544 26		2.59	6.74	0.08	0.95	0.67	1.00	1.33	0.87	+13	− 9	−14	+49	− 3	+17	+ 0	− 1	+16	+17	0	0.73
112736	22 49 52.85	−00 08 13.7	9.23	H	342.470 208 36	−00.137 137 14		2.82	−3.21	−17.08	1.44	1.02	1.49	2.20	1.53	+22	− 8	−22	−37	− 3	+ 7	− 9	−68	+23	+10	0	0.95
112737 H	22 49 54.17	+61 18 35.7	9.63	G	342.475 707 79	+61.309 925 45	A	−1.25	−4.95	−0.78	3.63	2.77	3.25	4.72	3.57	−21	− 4	+ 5	−26	+ 7	+12	+ 9	−13	+25	−39	2	0.90
112738	22 49 54.60	+75 09 44.2	7.79	H	342.477 485 22	+75.162 272 22		2.71	8.26	−0.13	0.54	0.51	0.60	0.60	0.58	− 7	−10	+ 6	+11	−14	+ 3	−15	+ 5	+15	− 4	0	−0.32
112739	22 49 55.44	−26 30 06.4	9.36	H	342.480 984 17	−26.501 766 13		7.53	22.78	1.74	1.16	0.88	1.37	1.49	1.10	+23	− 5	−19	−21	+ 9	+ 6	+ 8	−13	+14	+31	0	1.51
112740	22 49 55.84	+07 39 38.1	9.95	H	342.482 651 82	+07.660 571 43		3.38	−5.09	−12.52	1.57	0.92	1.87	2.87	1.32	+20	+20	− 1	+ 0	+24	− 1	+ 5	−45	+22	−29	0	0.95
112741	22 49 56.01	−20 17 06.2	7.46	H	342.483 377 96	−20.285 066 19		5.75	−7.36	−12.60	0.84	0.58	0.94	1.05	0.68	+22	−12	+ 5	+18	+ 1	+15	− 3	−10	+ 7	+16	0	−0.21
112742	22 49 56.16	−02 49 17.9	8.52	H	342.484 020 80	−02.821 644 31		9.60	−24.97	−59.64	1.15	0.78	1.33	1.39	1.11	+11	+ 5	−42	−22	+ 2	+ 5	+10	−46	+35	+16	0	1.27
112743	22 49 56.87	+20 58 14.6	8.90	H	342.486 939 73	+20.970 728 42		13.72	118.92	−14.74	1.02	0.80	1.35	1.08	1.10	+16	+12	−22	+14	−11	− 8	−12	−39	+40	+ 9	0	0.84
*112744	22 49 56.96	+41 14 09.1	9.72	H	342.487 345 33	+41.235 867 32		1.29	19.04	−6.14	0.96	0.86	1.35	1.00	0.97	− 4	+11	+ 9	+11	+ 8	+13	+13	−24	+ 7	+ 9	1	0.46
*112745	22 49 56.96	+50 00 59.7	7.92	H	342.487 338 70	+50.016 573 77		17.35	146.02	46.85	0.56	0.60	0.83	0.60	0.64	−15	+11	+ 7	+11	+ 0	− 9	+ 2	− 3	+ 5	− 8	2	0.18
112746 H	22 49 59.25	−32 48 19.4	6.34	H	342.496 856 41	−32.805 399 96	*	14.29	−34.56	−23.53	0.67	0.54	0.88	0.82	0.73	+38	−12	− 7	+ 0	− 4	+27	− 3	− 9	+29	+59	0	1.33
112747	22 49 59.58	−72 44 20.4	10.15	G	342.498 256 81	−72.738 994 70		11.10	95.16	−148.31	1.04	1.00	1.32	1.30	1.01	− 6	+ 2	−19	+13	+13	−15	+12	−25	+ 2	+ 2	1	0.77
112748	22 50 00.10	+24 36 06.1	3.51	H	342.500 418 10	+24.601 684 86		27.95	144.11	−43.44	0.58	0.48	0.77	0.67	0.71	+ 7	+14	−14	+16	− 6	−19	− 5	−16	+22	+12	0	1.51
112749 H	22 50 00.82	+72 08 42.1	8.42	H	342.503 434 88	+72.145 035 52	*	2.33	−8.91	−2.02	1.70	2.43	0.95	0.96	0.93	− 8	−14	+12	−12	+ 6	+ 8	+14	−20	−27	+ 9	2	−0.70
112750	22 50 00.94	−55 14 02.7	7.06	2 H	342.503 922 53	−55.234 091 50		1.68	22.14	−11.66	0.53	0.53	0.83	0.64	0.56	+24	+ 1	− 4	+15	+20	+12	+19	+16	− 9	+37	0	1.44
112751	22 50 01.91	+39 41 26.2	8.35	G	342.507 947 72	+39.690 614 02		4.00	37.23	−21.67	0.81	0.67	1.05	1.16	0.85	+ 9	+11	+13	+11	− 7	−15	+ 5	−29	−15	+41	1	−0.96
112752	22 50 02.89	+43 30 49.8	9.77	H	342.512 026 61	+43.513 834 06		2.34	−16.38	−9.00	0.95	1.06	1.55	1.08	1.10	+ 0	+ 7	+16	+36	+ 7	+ 4	+26	−32	− 2	+33	0	−2.06
112753	22 50 05.15	−66 03 01.6	7.75	H	342.521 470 37	−66.050 441 31		18.15	−70.67	−11.64	0.52	0.54	0.77	0.65	0.59	− 6	+ 2	−22	+ 3	+ 5	− 3	+ 5	−10	+11	− 1	0	−0.92
112754	22 50 05.47	+29 16 44.4	8.53	H	342.522 773 95	+29.278 991 26		6.32	35.29	−0.20	0.63	0.55	0.99	0.69	0.74	+26	+13	+18	− 5	+ 5	+ 0	− 6	− 4	− 2	+18	0	−0.38
112755	22 50 05.82	−16 18 49.6	8.56	H	342.524 245 12	−16.313 771 51		8.05	1.34	−13.51	0.99	0.64	1.07	1.08	0.81	+23	+17	− 9	+14	+15	+14	+20	+10	+12	+29	0	−1.48
112756	22 50 06.65	+18 46 25.1	8.66	H	342.527 728 71	+18.773 645 93		12.47	−4.29	−57.87	1.02	0.71	1.22	1.15	1.01	+17	+ 3	+ 0	−19	− 3	+ 7	− 2	−28	+33	+10	2	−0.30
112757	22 50 06.94	−10 24 28.1	8.17	H	342.528 911 68	−10.407 794 71		5.45	−10.45	−19.66	0.98	0.65	1.11	1.39	0.84	+18	+ 6	−17	+11	+ 2	+12	+ 1	−19	+32	+ 2	0	1.25
112758	22 50 07.24	+48 32 30.5	9.38	H	342.530 155 78	+48.541 807 28		6.25	16.73	1.91	0.85	0.84	1.21	0.90	0.87	−32	+10	+ 5	−20	+26	− 6	+30	−29	+22	− 7	0	−0.41
112759	22 50 09.68	+61 56 52.9	9.28	G	342.540 320 33	+61.948 035 66		0.53	−13.02	−9.85	0.92	0.88	1.06	1.10	1.07	−19	+17	− 4	+ 2	+ 3	−10	+ 2	−24	+22	−36	3	−0.50
112760	22 50 09.76	+53 55 45.5	7.93	H	342.540 659 83	+53.929 301 75		0.39	−2.02	−3.86	0.59	0.60	0.76	0.70	0.78	− 9	+ 2	− 1	+ 5	+27	− 2	+29	+ 2	+ 3	+ 8	0	−0.05
112761	22 50 10.09	+50 40 36.9	6.23	G	342.542 045 08	+50.676 919 66		1.99	3.72	−1.03	0.40	0.44	0.59	0.43	0.45	−26	+ 2	+13	+ 9	+ 5	− 8	+ 7	− 4	+12	−17	0	1.55
*112762	22 50 10.91	+69 55 10.8	9.12	H	342.545 467 48	+69.919 674 59		7.87	−15.56	−18.77	0.72	0.67	0.83	0.84	0.70	− 8	+ 9	+ 5	+ 1	+ 2	+ 1	+ 4	−13	+24	− 9	3	−0.28
*112763	22 50 10.81	−41 29 22.6	7.77	G	342.545 051 33	−41.489 598 49		35.87	−365.36	−209.05	0.72	0.66	1.01	0.93	0.81	+29	− 7	−15	+ 1	− 8	+38	− 4	− 7	+24	+46	0	−1.59
112764	22 50 13.16	−55 54 54.0	8.03	H	342.554 833 24	−55.914 996 64		1.32	−8.67	3.62	0.68	0.71	1.06	0.83	0.77	+11	+ 4	+ 4	+12	+15	+ 5	+13	+10	−17	+23	0	1.24
112765 H	22 50 13.70	+18 09 48.8	9.30	H	342.557 078 60	+18.163 556 36	A	5.16	−16.90	−9.77	1.97	1.37	1.96	1.87	1.78	+48	− 9	− 1	−27	−15	+30	−17	−42	+20	+34	1	−0.96
112766	22 50 13.99	−40 57 41.8	10.15	G	342.558 293 01	−40.961 610 46		0.64	38.34	−118.93	1.23	1.05	1.71	1.59	1.31	+28	− 7	−17	+16	−12	+36	− 4	− 6	+24	+47	0	−0.98
112767	22 50 14.00	+51 16 48.0	9.41	H	342.558 342 67	+51.280 006 57		0.56	13.08	11.19	0.70	0.76	1.04	0.78	0.75	−21	+ 0	+25	− 5	+ 7	+ 3	+ 9	−15	+11	− 2	0	−0.18
112768	22 50 14.21	+36 42 15.4	8.34	H	342.559 223 93	+36.704 279 68		30.30	68.07	−71.19	0.78	0.61	1.10	1.03	0.78	+ 5	+ 9	+24	+ 9	− 3	+ 0	+ 1	− 9	+19	+17	0	−1.12
112769	22 50 14.23	−07 27 35.3	7.99	H	342.559 285 48	−07.459 814 78		8.01	23.45	−10.31	1.00	0.61	1.00	1.62	0.79	+13	− 7	− 7	+26	+ 7	+20	− 6	−12	+ 9	−21	0	2.30
112770	22 50 15.80	+12 48 22.3	9.23	H	342.565 848 03	+12.806 206 51		10.39	−20.17	−37.60	1.06	0.89	1.35	1.30	1.42	+39	−14	−15	−11	−16	+ 0	−22	−50	+28	+30	0	1.14
112771	22 50 16.07	+72 35 28.5	8.15	G	342.566 962 71	+72.591 243 61		6.39	11.94	−6.97	0.53	0.57	0.63	0.63	0.68	−10	− 4	+10	− 2	+ 5	+ 5	+ 6	−20	− 5	− 3	0	0.35
112772	22 50 18.63	+58 39 37.8	9.89	G	342.577 639 36	+58.660 494 98		1.14	−1.07	0.18	1.13	1.02	1.35	1.22	1.14	−17	+19	+ 9	+ 1	− 6	+ 4	− 6	−12	+ 8	−20	0	−0.56
112773	22 50 18.87	−36 17 39.9	8.96	H	342.578 622 24	−36.294 404 71		5.49	51.80	0.13	1.06	0.75	1.26	1.27	0.89	+15	−15	−14	+39	− 3	+ 4	− 2	+ 1	+16	+21	0	0.83
112774	22 50 19.49	−07 05 25.3	9.86	G	342.581 195 52	−07.090 357 55		71.43	−103.03	103.08	1.70	1.09	1.84	3.13	1.56	+ 9	+ 9	−27	−12	+14	− 6	+ 4	−45	+35	−32	0	1.79
112775	22 50 19.70	+35 04 19.0	8.14	H	342.582 065 86	+35.071 945 59		7.25	11.78	5.90	0.71	0.59	1.03	0.80	0.76	− 1	+23	+12	+12	+ 6	−13	+18	−18	+20	+10	0	−3.01
112776	22 50 20.45	+20 18 52.6	9.31	H	342.585 202 31	+20.314 608 42		1.39	−11.81	−3.32	1.22	0.89	1.48	1.34	1.27	+23	+19	− 8	− 2	−13	+28	− 5	−41	+30	+31	0	0.23
112777	22 50 21.45	−78 40 42.1	11.95	H	342.589 356 09	−78.678 361 23	B	4.78	162.53	−64.32	60.85	59.48	3.01	43.45	33.92	− 9	− 2	+ 5	− 3	− 7	− 4	− 5	−10	− 1	+ 8	0	2.27
112778 H	22 50 21.77	+41 57 12.3	5.91	1 H	342.590 701 73	+41.953 403 25	A	3.00	8.28	−3.93	0.57	0.72	0.75	0.42	0.54	+ 8	+ 2	+15	+21	+ 6	+ 7	+22	−22	+ 5	+17	2	2.02
112779	22 50 21.85	+33 31 00.7	9.56	H	342.591 051 97	+33.516 873 03		3.58	0.23	−0.88	0.98	0.86	1.53	1.36	1.20	+21	+32	+38	− 6	+ 2	−16	+10	−12	+ 2	+16	0	−1.26
*112780	22 50 22.85	+58 43 48.5	8.96	H	342.595 214 80	+58.730 149 32		4.32	−5.05	−13.58	0.85	0.79	1.03	1.02	0.98	−20	+17	+11	+12	− 8	+ 3	−11	− 9	− 7	−30	3	0.95
*112781	22 50 22.75	−80 07 25.7	5.32	1 T	342.594 775 16	−80.123 814 46		7.35	20.14	−12.76	0.38	0.39	0.47	0.45	0.41	− 7	−14	−16	+12	+ 1	−10	+ 1	−18	− 4	− 8	0	1.72
112782	22 50 24.15	−14 03 33.5	7.78	H	342.600 635 53	−14.059 300 74		8.78	10.50	−17.34	1.03	0.70	1.19	1.52	0.93	+12	+15	−28	−16	+21	+ 0	+24	−17	+25	− 3	0	0.95
112783	22 50 24.51	−78 40 27.5	9.61	H	342.602 134 63	−78.674 302 00	A	4.78	−0.18	−14.82	3.08	3.21	3.01	3.57	2.87	−13	− 5	−23	+ 0	−10	+21	− 4	−11	+ 0	−11	0	2.27
112784	22 50 24.83	+17 53 36.6	9.25	3 H	342.603 438 03	+17.893 486 35	*	2.12	5.77	−5.71	2.21	1.17	2.99	1.79	1.90	− 9	+68	−17	+18	−14	+36	+34	−58	+47	+31	0	−1.35
112785	22 50 25.40	+11 28 49.4	9.32	H	342.605 814 63	+11.480 396 51		−0.81	−14.74	−23.44	1.13	0.80	1.40	1.70	1.15	+22	+ 9	−18	−22	+ 0	+ 7	− 2	−46	+24	+ 2	0	0.28
112786	22 50 25.48	−33 39 07.6	10.32	H	342.606 167 84	−33.652 116 18		9.72	−38.03	−25.94	1.22	1.19	1.98	1.44	1.52	+47	− 8	−23	+15	−15	+34	− 9	−11	+25	+63	0	2.09
112787	22 50 25.51	−55 49 13.1	8.71	H	342.606 292 83	−55.820 305 16		5.08	−9.90	−24.15	0.79	0.79	1.16	0.93	0.83	+27	−14	−10	+17	+ 8	+ 3	+10	+23	−10	+29	0	−0.68
112788	22 50 26.10	−35 59 35.9	8.70	H	342.608 754 73	−35.993 318 74		6.99	74.04	−65.11	0.88	0.72	1.13	1.02	0.84	+23	−15	−12	+34	+ 0	+ 7	+ 1	+10	+13	+32	0	1.45
112789	22 50 27.55	+68 27 14.1	8.89	H	342.614 796 35	+68.453 909 06		7.02	−5.31	−15.37	0.64	0.58	0.71	0.75	0.63	− 7	+ 3	+11	+14	+ 8	− 4	+ 8	− 8	+ 7	− 9	0	0.87
112790	22 50 28.24	−13 18 44.2	10.11	G	342.617 667 25	−13.312 282 44		2.83	−18.97	−13.19	1.49	1.19	1.80	1.94	1.60	+27	+19	−12	−19	+ 6	+16	+14	−24	+32	+18	0	0.73
112791	22 50 28.25	−59 31 31.9	7.47	1 H	342.617 727 89	−59.525 534 61		6.80	26.25	3.98	0.48	0.53	0.90	0.59	0.66	−43	−10	+ 1	+36	−13	+14	−16	+ 6	−21	−58	1	0.18
112792	22 50 28.35	+67 09 52.8	8.42	H	342.618 119 85	+67.164 663 79		3.30	3.46	−1.58	0.61	0.58	0.69	0.80	0.69	−17	+ 0	+17	+16	+10	+ 5	+ 5	−11	− 1	−29	0	0.29
112793	22 50 28.73	−37 27 03.3	8.80	H	342.619 693 23	−37.450 910 21		2.89	41.06	−15.18	0.90	0.69	1.08	1.05	0.75	+15	+ 2	− 6	− 1	− 5	+12	− 4	−19	+ 8	+15	0	0.68
112794	22 50 29.29	−61 03 20.2	9.05	H	342.622 059 68	−61.055 622 35		5.19	−7.69	−3.67	0.59	0.70	1.05	0.70	0.69	−29	− 2	− 7	− 2	+ 9	+18	+11	−26	−12	−27	0	−0.41
112795	22 50 29.90	+77 13 40.9	8.36	H	342.624 571 07	+77.228 034 90		2.74	−2.09	−5.23	0.69	0.65	0.77	0.83	0.74	+ 1	− 5	+32	+ 4	+14	+ 3	+13	−18	− 9	− 2	0	−0.48
112796	22 50 31.13	−06 54 48.6	7.80	H	342.629 712 29	−06.913 506 76		3.14	−68.64	−105.05	1.03	0.69	1.20	1.45	0.88	+19	+15	− 6	+ 0	+11	+34	+15	−11	+21	+ 4	0	1.63
112797	22 50 33.49	−14 43 53.8	8.94	H	342.639 540 53	−14.731 606 52		5.25	13.36	3.39	1.35	0.77	1.30	1.63	0.99	− 4	+14	−25	−38	+25	+ 9	+35	−10	+12	−10	0	−1.82
112798	22 50 33.96	−55 13 09.6	8.01	H

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
112701	8.097	0.009	7.895	0.009		0.193	0.012	T	0.21	0.01	L	7.9329	0.0010	0.010	135		7.91	7.95					1								S
112702	9.885	0.019	9.804	0.026		0.080	0.030	T	0.09	0.03	L	9.7759	0.0025	0.029	147		9.72	9.83					1 S								G
112703	12.331	0.147	10.996	0.071		1.330	0.020	G	1.54	0.03	I	10.8990	0.0034	0.046	206		10.81	10.98					1								G
112704	8.581	0.011	8.346	0.012		0.224	0.015	T	0.25	0.02	L	8.3681	0.0016	0.014	95		8.34	8.39					1								
112705	8.022	0.009	7.648	0.009		0.354	0.012	T	0.42	0.01	L	7.7210	0.0014	0.014	86		7.70	7.75		C			1								S
112706	10.675	0.041	10.092	0.037		0.545	0.049	T	0.62	0.04	L	10.1723	0.0046	0.033	107		10.12	10.25					1								
112707	8.107	0.007	8.029	0.008		0.077	0.010	T	0.09	0.01	L	8.0610	0.0018	0.022	138		8.03	8.12		U 2			1								S
112708	7.840	0.008	7.863	0.010		−0.016	0.012	T	0.01	0.01	L	7.8761	0.0011	0.011	107		7.86	7.89		C			1								S
112709	9.863	0.023	9.686	0.029		0.170	0.007	G	0.19	0.01	H	9.7212	0.0030	0.020	81		9.68	9.74		C			1								
112710	10.048	0.019	9.843	0.024		0.196	0.029	T	0.21	0.03	L	9.9349	0.0025	0.032	219		9.88	10.00		C			1								G
112711	9.639	0.016	9.620	0.022		0.022	0.025	T	0.04	0.02	L	9.6110	0.0024	0.024	154		9.57	9.65		C			1								G
112712	9.760	0.018	9.274	0.018		0.457	0.023	T	0.53	0.02	L	9.3384	0.0028	0.027	141		9.28	9.38					1								
112713	11.060	0.038	10.631	0.042		0.405	0.052	T	0.47	0.06	L	10.6651	0.0037	0.043	243		10.58	10.73					1 S								G
112714	6.886	0.005	6.567	0.005		0.289	0.010	G	0.33	0.01	H	6.6191	0.0008	0.008	108		6.61	6.63		C			1								S
112715	9.769	0.016	8.408	0.009		1.153	0.014	T	1.12	0.01	L	8.4601	0.0016	0.018	171		8.43	8.50		C			1								
112716	6.103	0.005	4.222	0.003		1.570	0.000	G	1.72	0.02	A	4.1494	0.0018	0.008	57		4.13	4.16		M	22495−1335	I 1	1								S
112717	7.024	0.007	6.982	0.006	*	0.038	0.008	T	0.05	0.01	L *	7.0178	0.0010	0.009	118	*	7.01	7.03		D	22496+6633	I 1	2 C A	AB	4	2.693	0.004		1.43	0.02	S
112718	9.946	0.024	9.289	0.021		0.600	0.024	T	0.67	0.02	L	9.3262	0.0033	0.026	110		9.29	9.37					1								
112719	10.344	0.020	8.492	0.008		1.540	0.017	T	1.59	0.04	L	8.4306	0.0014	0.017	221		8.40	8.45		C			1								
112720	7.523	0.005	7.367	0.006		0.150	0.007	T	0.17	0.01	L	7.3960	0.0011	0.013	161		7.37	7.42					1								S
112721	8.322	0.010	7.115	0.006		1.032	0.009	T	1.00	0.01	L	7.1647	0.0008	0.008	120		7.15	7.18					1								S
112722	8.041	0.013	7.401	0.012	*	0.594	0.016	T	0.66	0.01	L *	7.5294	0.0017	0.016	118	*	7.50	7.58		U 2	22497+4031	I 1	2 C A	AB	260	5.333	0.005		0.12	0.02	S
112723	8.617	0.016	8.192	0.017	*	0.401	0.021	T	0.47	0.02	L *	8.3074	0.0017	0.017	136	*	8.28	8.34		D	22497+3119	I 1	2 C A	BA	118	4.190	0.004		0.03	0.01	S
112724	4.857	0.002	3.621	0.002		1.053	0.004	G	1.06	0.03	C	3.6704	0.0005	0.004	117		3.66	3.68					1								S
112725	6.877	0.005	6.739	0.005		0.109	0.006	G	0.12	0.01	H	6.7696	0.0009	0.010	127		6.75	6.79					1								S
112726	9.442	0.012	7.580	0.006		1.548	0.011	T	1.61	0.02	L	7.5224	0.0013	0.013	185		7.50	7.55					1								S
112727	12.481	0.194	11.015	0.088		1.471	0.004	G	1.54	0.14	K	11.0969	0.0048	0.042	123		10.98	11.16					1								G
112728	10.257	0.019	9.071	0.012		1.016	0.018	T	0.99	0.01	L	9.1195	0.0013	0.018	246		9.09	9.16		C			1								
112729	10.192	0.023	9.565	0.021	A	0.600	0.495	G	0.61	0.06	L *	9.5181	0.0018	0.025	152	*	9.46	9.56		D	22498−7112	I 1	2 C A	AB	72	1.235	0.014		1.92	0.06	
112730	9.024	0.013	8.285	0.011		0.640	0.001	G	0.70	0.00	H	8.3416	0.0016	0.014	110		8.31	8.37					1								S
112731	6.942	0.004	5.566	0.003		1.167	0.005	G	1.13	0.01	H	5.5957	0.0005	0.005	119		5.59	5.60					1								S
112732	9.659	0.016	9.099	0.015		0.529	0.016	T	0.60	0.02	L	9.1643	0.0022	0.021	138		9.13	9.21					1								
112733	8.196	0.007	7.650	0.006		0.512	0.008	T	0.58	0.01	L	7.7043	0.0010	0.013	172		7.68	7.73					1								S
112734	7.516	0.005	7.554	0.007		−0.030	0.008	T	−0.01	0.01	L	7.5502	0.0015	0.013	130		7.53	7.57		M			1								S
112735	8.123	0.009	8.065	0.010		0.045	0.003	G	0.04	0.00	A	8.0862	0.0018	0.014	92		8.06	8.11		C			1								S
112736	11.430	0.078	9.493	0.024		1.607	0.065	T	1.63	0.07	L	9.3495	0.0028	0.021	77		9.31	9.38					1								
112737	10.486	0.041	9.968	0.039	*	0.560	0.015	G	0.63	0.01	H *	9.8113	0.0023	0.021	99	*	9.78	9.85		D	22499+6119	I 1	2 C A	AB	114	0.848	0.005		0.18	0.02	G
112738	7.781	0.008	7.794	0.010		−0.007	0.012	T	0.01	0.01	L	7.7981	0.0015	0.011	121		7.77	7.82		C	22499+7510	I 1	1								S
112739	9.871	0.024	9.363	0.024		0.488	0.026	T	0.56	0.03	L	9.4693	0.0026	0.022	92		9.43	9.50					1								S
112740	11.567	0.082	10.062	0.036		1.266	0.070	T	1.22	0.07	L	10.1150	0.0028	0.025	103		10.07	10.16		C			1								
112741	7.641	0.008	7.472	0.008		0.162	0.011	T	0.18	0.01	L	7.5150	0.0009	0.009	74		7.50	7.53		D			1								S
112742	9.307	0.018	8.608	0.016		0.644	0.020	T	0.71	0.02	L	8.6577	0.0015	0.012	82		8.63	8.68					1								S
112743	9.799	0.023	8.970	0.019		0.747	0.023	T	0.79	0.02	L	9.0467	0.0023	0.021	95		9.01	9.08		C			1								S
112744	10.127	0.025	9.722	0.026		0.383	0.033	T	0.45	0.04	L	9.8061	0.0022	0.027	145		9.74	9.85					1 S								G
112745	8.622	0.009	7.992	0.008		0.586	0.010	T	0.66	0.01	L	8.0454	0.0014	0.014	163		8.02	8.08		C			1								S
112746	6.709	0.006	6.373	0.004	*	0.317	0.012	G	0.37	0.02	H *	6.4201	0.0008	0.007	88	*	6.41	6.43		D	22500−3248	I 1	2 C S A	AS	18	0.132	0.007		0.11	0.29	S
112747	11.072	0.045	10.201	0.033		0.741	0.002	G	0.79	0.00	H	10.2878	0.0024	0.030	139		10.24	10.34		C			1								
112748	4.689	0.002	3.610	0.002		0.933	0.010	G	0.89	0.03	C	3.6685	0.0004	0.004	94		3.66	3.68					1								S
112749	8.553	0.009	8.433	0.010	*	0.116	0.012	T	0.13	0.01	L *	8.4686	0.0017	0.014	121	*	8.44	8.50		C	22500+7209	H 1	2 C A	AB	92	0.231	0.027		2.47	0.36	S
112750	9.078	0.012	7.273	0.006		1.533	0.011	T	2.34	0.03	O	7.0975	0.0040	0.049	130		7.01	7.17		U 2			1 S								S
112751	8.763	0.010	8.378	0.010		0.337	0.015	G	0.39	0.02	H	8.4406	0.0021	0.021	120		8.40	8.48					1								
112752	10.228	0.026	9.660	0.024		0.531	0.031	T	0.60	0.03	L	9.8415	0.0024	0.028	149		9.78	9.90		C			1								G
112753	8.325	0.008	7.808	0.007		0.519	0.015	G	0.59	0.02	H	7.8613	0.0013	0.012	151		7.84	7.88		C			1								S
112754	8.762	0.009	8.550	0.010		0.197	0.004	G	0.22	0.01	H	8.5908	0.0014	0.015	169		8.57	8.62		C			1								
112755	9.078	0.015	8.611	0.015		0.453	0.017	T	0.52	0.02	L	8.6605	0.0014	0.012	76		8.64	8.68		C			1								S
112756	9.485	0.018	8.758	0.015		0.667	0.019	T	0.73	0.02	L	8.8040	0.0021	0.016	103		8.77	8.83		C			1								S
112757	9.945	0.024	8.325	0.012		1.356	0.021	T	1.32	0.02	L	8.3225	0.0017	0.014	80		8.30	8.35		C			1								S
112758	9.773	0.017	9.415	0.019		0.339	0.024	T	0.40	0.03	L	9.4588	0.0032	0.029	152		9.41	9.50					1								
112759	9.803	0.023	9.311	0.022		0.460	0.015	G	0.53	0.02	H	9.4030	0.0026	0.021	96		9.37	9.45					1								G
112760	9.944	0.021	8.101	0.009		1.533	0.018	T	1.58	0.04	L	8.0546	0.0012	0.012	137		8.04	8.08		C			1								
112761	7.650	0.005	6.357	0.003		1.129	0.000	G	1.09	0.00	H	6.3980	0.0009	0.009	173		6.39	6.42					1								S
112762	9.572	0.015	9.162	0.015		0.388	0.020	T	0.45	0.02	L	9.2073	0.0018	0.016	138		9.18	9.24		C			1								
112763	8.696	0.011	7.847	0.009		0.741	0.003	G	0.80	0.02	A	7.9155	0.0012	0.012	95		7.90	7.94					1								S
112764	9.883	0.020	8.190	0.009		1.414	0.017	T	1.39	0.03	L	8.1692	0.0023	0.017	127		8.14	8.21					1								S
112765	9.865	0.025	9.356	0.025	*	0.478	0.032	T	0.55	0.03	L *	9.4047	0.0028	0.020	103	*	9.37	9.44		C	22502+1810	H 1	2 C A	AB	70	0.611	0.055		3.21	0.18	
112766	10.771	0.048	10.281	0.050		0.520	0.012	G	0.59	0.01	H	10.2775	0.0028	0.024	89		10.21	10.33					1								
112767	9.675	0.017	9.401	0.019		0.261	0.024	T	0.29	0.03	L	9.4858	0.0018	0.019	146		9.45	9.52		D			1								G
112768	9.430	0.014	8.434	0.010		0.859	0.013	T	0.90	0.01	L	8.4830	0.0022	0.015	119		8.46	8.51		C			1								
112769	8.299	0.010	8.014	0.011		0.271	0.014	T	0.31	0.02	L	8.0672	0.0016	0.012	80		8.05	8.10					1								S
112770	9.837	0.020	9.266	0.018		0.510	0.015	G	0.58	0.02	H	9.3428	0.0022	0.018	99		9.31	9.38		C			1								
112771	8.779	0.011	8.200	0.010		0.566	0.015	G	0.64	0.01	H	8.2696	0.0011	0.011	121		8.25	8.29		C			1								
112772	10.328	0.034	9.942	0.037		0.440	0.015	G	0.51	0.02	H	9.9885	0.0021	0.022	110		9.95	10.02		C			1								G
112773	9.908	0.022	9.019	0.017		0.777	0.021	T	0.81	0.01	L	9.1034	0.0026	0.018	98		9.07	9.13		C			1								
112774	11.633	0.103	10.110	0.046		1.452	0.010	G	1.86	0.01	A	9.9393	0.0018	0.020	75		9.90	9.98		C			1								
112775	8.453	0.008	8.168	0.009		0.271	0.011	T	0.31	0.01	L	8.2100	0.0014	0.013	132		8.18	8.24					1								S
112776	10.642	0.039	9.406	0.023		1.055	0.035	T	1.02	0.03	L	9.4756	0.0027	0.023	101		9.43	9.51		C			1								
112777											T	11.8892	0.2552			B				D	22504−7840	I 2	1 C L D								D
112778	5.996	0.002	5.934	0.002	*	0.062	0.003	T	0.07	0.00	L *	5.9390	0.0016	0.022	227	*	5.91	5.98	10.08	P 1 A	22504+4157	H 1	2 C A	AB	12	0.387	0.013		3.37	0.08	S
112779	11.598	0.073	9.747	0.023		1.571	0.063	T	1.75	0.21	K	9.6565	0.0026	0.023	118		9.62	9.70					1								
112780	9.198	0.016	8.958	0.018		0.229	0.023	T	0.25	0.03	L	9.0279	0.0026	0.019	103		9.00	9.06					1								
112781	5.155	0.002	5.300	0.002		−0.126	0.003	T	−0.12	0.00	L	5.2851	0.0014	0.016	145		5.26	5.31	1.77	P 1 A			1								S
112782	8.129	0.010	7.809	0.012		0.317	0.015	G	0.37	0.02	H	7.8545	0.0015	0.011	71		7.83	7.88		C			1								S
112783	10.608	0.031	9.637	0.022	A	0.853	0.028	T	0.87	0.02	L	9.7715	0.0398	0.040	132	A	9.70	9.83		D	22504−7840	I 2	1 C P D								D
112784	12.033	0.166	9.218	0.024		2.366	0.138	T	2.63	0.57	K	9.2413	0.1764	0.814	85		8.36	11.71	307.50	P 1 B			1 V								G P
112785	11.091	0.051	9.500	0.022		1.334	0.044	T	1.30	0.05	L	9.4721	0.0022	0.019	110		9.44	9.52		C			1								
112786	11.114	0.048	10.411	0.042		0.635	0.048	T	0.70	0.04	L	10.4485	0.0030	0.026	132		10.40	10.50		C			1								
112787	9.459	0.015	8.777	0.013		0.619	0.015	T	0.69	0.01	L	8.8390	0.0020	0.024	120		8.80	8.88		C			1								S
112788	9.512	0.017	8.763	0.014		0.670	0.017	T	0.73	0.01	L	8.8373	0.0017	0.018	111		8.80	8.86		C			1								S
112789	9.257	0.014	8.927	0.016		0.313	0.020	T	0.36	0.03	L	8.9679	0.0017	0.017	128		8.94	9.00					1								
112790	9.997	0.036	10.197	0.062		−0.119	0.004	G	−0.12	0.02	A	10.0929	0.0030	0.026	68		10.03	10.14		C			1								
112791	7.842	0.005	7.501	0.005		0.323	0.007	T	0.37	0.01	L	7.5502	0.0015	0.018	245		7.52	7.58		U			1								S
112792	8.890	0.011	8.473	0.011		0.394	0.014	T	0.46	0.01	L	8.5093	0.0012	0.012	133		8.49	8.54		C			1								
112793	9.296	0.015	8.839	0.014		0.431	0.019	T	0.50	0.02	L	8.8968	0.0021	0.017	102		8.87	8.92		C			1								S
112794	9.555	0.012	9.092	0.012		0.436	0.016	T	0.50	0.02	L	9.1512	0.0020	0.026	208		9.10	9.20					1								
112795	8.482	0.010	8.362	0.012		0.116	0.015	T	0.13	0.01	L	8.4096	0.0019	0.013	114		8.38	8.43		C			1								S
112796	9.026	0.015	7.922	0.010		0.952	0.014	T	0.94	0.01	L	7.9659	0.0017	0.013	78		7.94	7.99		C			1								S
112797	9.464	0.019	8.973	0.019		0.474	0.021	T	0.55	0.02	L	9.0467	0.0018	0.013	68		9.02	9.08		C			1								
112798	7.966	0.006	7.994	0.008		−0.023	0.009	T	0.00	0.01	L	8.0077	0.0012	0.013	134		7.99	8.03		C			1								S
112799	9.942	0.025	8.568	0.015		1.163	0.023	T	1.12	0.02	L	8.5996	0.0015	0.012	76		8.58	8.62		C			1								
112800						1.523	0.018	G	2.25	0.14	I	11.7913	0.0071	0.054	123		11.71	11.87					1								G

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
112801	22 50 37.96	+32 26 35.8	8.24	H	342.658 146 02	+32.443 281 75	3.95	7.36	−12.95	0.64	0.55	0.97	0.74	0.70	+18	+16	+31	+ 6	+ 8	− 7	+13	− 6	− 5	+31	0	0.50
112802	22 50 38.34	+04 04 06.1	7.12	H	342.659 735 66	+04.068 361 33	4.11	21.63	−63.73	0.80	0.56	1.04	1.25	0.80	+26	+10	−10	+ 6	+ 8	+17	− 3	−43	+35	− 3	3	−0.12
112803	22 50 39.10	+19 08 28.4	6.52	H	342.662 919 69	+19.141 213 95	6.27	58.97	−7.54	0.79	0.49	0.94	0.79	0.66	+ 3	+30	−23	−10	− 7	− 8	+ 1	−42	+35	+ 6	4	−1.21
112804	22 50 40.47	−22 42 38.4	8.58	H	342.668 626 04	−22.710 665 81	−0.59	8.06	−6.43	1.00	0.71	1.37	1.07	0.83	+28	+ 6	+ 1	−26	+ 5	+14	+ 8	−11	+54	+22	0	0.22
112805 H	22 50 40.50	+51 06 57.9	8.30	H	342.668 747 79	+51.116 069 62 B	2.00	−1.12	−6.07	1.21	1.48	1.70	1.27	1.32	−22	−13	+30	−10	+10	−11	+13	−23	− 8	+16	1	0.89
112806	22 50 41.40	−43 36 21.3	9.59	G	342.672 493 46	−43.605 907 77	8.21	−18.61	13.47	1.02	0.94	1.36	1.20	1.14	+10	− 1	− 3	+ 4	+ 2	+19	+ 3	+ 0	− 4	+12	0	2.74
112807	22 50 42.44	−00 34 40.1	7.47	G	342.676 846 00	−00.577 808 04	8.99	4.50	7.23	0.93	0.65	1.18	1.35	1.00	+18	− 4	−39	−17	+ 8	+ 5	+ 6	−47	+48	+ 9	0	1.61
112808	22 50 44.03	+40 28 01.2	10.02	H	342.683 473 55	+40.466 995 81	3.30	3.76	1.50	1.27	0.90	1.56	1.37	1.05	+11	+35	+11	+13	+ 3	− 5	+16	−28	+ 6	+31	3	−0.95
112809	22 50 44.52	+25 28 17.0	8.41	H	342.685 489 79	+25.471 386 67	3.14	12.73	6.45	0.68	0.57	1.03	0.85	0.93	+16	+ 7	− 5	+40	− 5	− 5	− 5	− 3	+26	+17	0	−0.37
112810	22 50 44.96	+42 00 26.4	8.36	G	342.687 318 51	+42.007 334 12	9.36	20.85	−17.68	0.48	0.62	0.92	0.49	0.65	− 9	+ 2	+17	+48	+ 6	+ 6	+19	−25	− 1	+12	0	0.29
112811	22 50 45.88	+01 51 57.9	9.33	G	342.691 173 92	+01.866 095 12	16.66	100.05	−385.44	1.14	0.82	1.43	1.56	1.09	+28	−11	−23	−21	− 3	+32	− 8	−53	+31	+10	0	−0.60
112812	22 50 46.21	+52 03 39.7	7.22	H	342.692 537 27	+52.061 022 92	31.95	143.90	170.56	0.50	0.50	0.70	0.52	0.52	−15	− 3	+21	− 3	− 7	+ 3	− 8	+ 3	+21	−10	1	−1.89
112813	22 50 46.32	−07 18 42.8	7.01	H	342.692 985 21	−07.311 890 44	4.30	−21.99	−13.83	0.95	0.56	0.93	1.63	0.74	+ 2	+ 7	−14	− 6	+19	+ 7	+13	−20	+11	−33	0	1.88
*112814	22 50 46.86	−68 58 24.6	8.07	H	342.695 233 95	−68.973 489 41	2.38	14.36	20.15	0.60	0.53	0.77	0.72	0.54	− 2	− 3	−13	+11	− 4	+ 2	− 3	− 7	− 2	− 4	0	−0.03
*112815 H	22 50 46.82	−31 12 58.0	10.21	H	342.695 096 20	−31.216 109 81 A	3.03	−21.92	−4.61	6.84	3.52	5.12	7.31	3.49	− 2	+25	− 6	−43	+28	−16	+33	−20	+ 5	−27	4	1.09
112816 H	22 50 47.15	−65 42 51.8	8.43	1 H	342.696 446 05	−65.714 380 21 *	26.17	117.32	83.25	0.64	0.66	0.94	0.79	0.69	−11	+ 0	−23	+ 4	+ 8	+ 3	+ 8	−12	+11	− 6	0	−0.61
112817	22 50 47.97	+66 44 16.4	7.09	H	342.699 869 34	+66.737 880 32	4.85	31.63	−9.23	0.55	0.49	0.60	0.71	0.57	−16	−17	+17	+14	+ 5	+ 2	+ 4	−12	− 6	−18	0	1.07
112818	22 50 48.30	+64 20 56.6	9.80	H	342.701 267 49	+64.349 066 43	1.11	1.13	−8.98	0.89	0.83	1.03	1.13	0.98	−11	−11	+15	+13	+ 2	−14	+ 4	+ 2	+ 3	+ 0	0	−0.36
112819	22 50 48.83	+44 56 17.2	7.95	H	342.703 455 86	+44.938 117 22	5.66	−5.11	−10.93	0.52	0.65	1.00	0.53	0.64	−46	+ 2	− 4	−32	+21	− 8	+21	−33	+18	−19	1	0.61
112820	22 50 49.12	+45 08 10.8	9.18	H	342.704 678 55	+45.136 328 56	6.13	8.16	−8.75	0.60	0.70	1.00	0.68	0.84	−28	+15	− 2	−34	+16	−16	+18	−35	+12	−14	1	0.89
112821	22 50 52.12	+18 00 07.5	7.46	H	342.717 151 42	+18.002 088 28	10.74	56.91	7.65	0.74	0.51	0.93	0.81	0.68	+11	+ 7	−17	− 8	− 4	+19	− 2	−39	+33	+ 8	2	−0.49
112822	22 50 52.88	+64 33 41.0	8.52	H	342.720 333 42	+64.561 381 78	5.59	−23.57	−18.20	0.62	0.59	0.72	0.77	0.71	−11	+ 4	+13	+ 1	− 2	−11	− 1	− 1	−13	−13	0	1.26
*112823	22 50 54.03	+36 03 58.9	11.55	H	342.725 137 32	+36.066 357 81	22.39	−372.36	−120.20	5.27	4.55	7.56	6.37	5.87	+ 9	+18	+16	−18	−11	− 1	− 8	−21	+18	+13	3	
*112824	22 50 53.83	−27 17 08.6	9.48	H	342.724 298 77	−27.285 711 24	2.05	5.54	−21.87	1.33	0.93	1.55	1.51	1.06	+21	+ 0	−29	−30	+11	− 7	+ 8	−11	+28	+23	0	1.21
112825	22 50 54.18	−67 23 48.0	9.38	1 H	342.725 750 70	−67.396 676 87	5.60	−10.29	−25.35	0.80	0.82	1.16	0.96	0.87	+ 3	−15	−19	+ 1	+ 2	+ 0	+ 2	− 7	− 6	− 6	0	−1.88
112826	22 50 54.55	−62 48 52.8	7.58	H	342.727 275 87	−62.814 678 54	12.00	−19.43	−1.60	0.48	0.49	0.76	0.53	0.48	−19	+ 2	−15	− 5	+10	+ 3	+10	− 6	− 2	− 7	0	1.18
112827	22 50 56.15	−18 44 18.5	8.54	H	342.733 960 36	−18.738 473 35	7.23	56.43	−0.20	1.08	0.67	1.35	1.31	0.89	+20	+ 3	−17	+22	−11	+21	− 9	−25	+53	+20	0	−0.27
*112828	22 50 58.89	−76 47 23.4	9.00	H	342.745 372 28	−76.789 831 54	5.32	−30.65	28.30	0.78	0.75	0.94	0.95	0.75	− 7	− 4	−15	+11	+ 6	+ 7	+ 7	−20	+ 4	− 1	1	−0.06
*112829	22 50 59.22	+54 08 33.4	8.46	H	342.746 740 58	+54.142 599 70	25.00	−190.75	−103.96	0.63	0.60	0.81	0.75	0.74	−19	− 3	+11	+14	+10	+10	+12	− 8	+ 9	− 7	0	−0.40
*112830	22 51 01.46	−59 36 50.3	11.77	2 G	342.756 098 16	−59.613 976 14	11.17	127.44	−45.87	1.37	1.70	2.83	1.81	2.17	−42	− 4	−16	+ 8	− 4	+10	− 2	− 3	− 5	−47	0	1.89
*112831	22 50 58.46	+39 53 02.7	11.38	H	342.743 568 83	+39.884 081 23	4.24	−8.71	−4.90	1.89	1.74	2.62	2.59	2.29	+16	+24	+17	+22	+ 6	+ 8	+20	−22	− 4	+51	0	0.05
*112832	22 51 02.15	−39 09 24.5	5.43	H	342.758 940 36	−39.156 817 79	2.95	18.26	−6.50	0.58	0.45	0.69	0.63	0.49	+12	− 6	+ 5	+24	+ 2	+11	+ 1	+ 0	+ 3	+14	0	0.76
*112833	22 51 02.94	+85 22 24.5	5.89	H	342.762 238 99	+85.373 461 00	7.14	13.22	114.38	0.41	0.40	0.46	0.46	0.43	− 1	+ 3	+ 4	− 8	−14	+ 7	−12	+ 1	+ 7	−14	1	0.08
*112834	22 51 03.49	−73 18 26.9	8.94	H	342.764 549 16	−73.307 477 28	2.16	3.39	−8.60	0.77	0.74	0.98	0.95	0.80	− 9	+10	−17	+13	+ 9	−15	+ 9	−10	+ 2	+ 2	4	0.10
*112835	22 51 03.90	+52 16 06.0	7.43	H	342.766 233 23	+52.268 323 50	10.72	−28.05	−18.17	0.52	0.50	0.71	0.57	0.53	−11	− 4	+21	+ 7	− 9	− 3	− 8	+ 2	+20	− 2	2	0.73
*112836 H	22 51 04.74	+44 05 05.7	9.57	H	342.769 763 48	+44.084 905 57 A	1.94	5.87	−3.44	1.57	1.54	2.18	1.65	1.65	−11	− 7	+13	+14	− 1	−17	+12	−30	+ 0	+17	1	−0.48
*112837	22 51 05.65	+34 23 01.2	7.36	H	342.773 537 90	+34.383 680 18	9.87	44.39	4.73	0.62	0.52	0.91	0.76	0.67	+ 0	+20	+28	+ 8	+ 8	+ 2	+14	−19	+11	+ 9	0	0.23
*112838	22 51 06.14	+43 14 17.0	7.45	H	342.775 576 42	+43.238 056 03	5.13	−10.14	−15.68	0.49	0.59	0.81	0.59	0.61	− 7	+ 7	+10	+ 0	+ 8	+ 2	+19	−39	+ 6	+24	0	0.21
*112839	22 51 06.51	−56 28 44.2	7.86	H	342.777 127 79	−56.478 954 32	5.56	−9.08	−28.12	0.61	0.63	0.94	0.66	0.62	+ 6	− 4	−11	− 4	− 2	+ 8	− 1	− 3	− 5	+ 1	1	−1.03
*112840	22 51 06.71	+35 41 10.2	8.73	H	342.777 964 42	+35.686 177 55	0.34	1.01	−5.58	0.77	0.65	1.12	0.90	0.84	+ 2	+10	+19	+21	−10	− 3	− 7	−12	+16	+ 4	0	0.74
*112841	22 51 07.11	+44 40 53.3	11.05	H	342.779 619 23	+44.681 475 00	7.52	175.86	51.95	1.21	1.46	2.33	1.29	1.48	−40	− 3	+10	−22	+19	− 1	+22	−30	+15	− 6	1	3.40
*112842	22 51 07.25	+37 41 14.5	9.64	H	342.780 204 04	+37.687 357 47	1.60	−3.79	−22.52	1.07	0.79	1.46	1.53	1.16	+10	+27	+15	+ 3	−10	− 4	− 1	−16	+18	+16	0	−0.79
*112843	22 51 01.90	−47 13 35.7	11.61	G	342.757 900 17	−47.226 587 87	25.41	167.94	−90.10	2.27	1.94	2.93	2.41	2.09	+18	−21	−18	−22	−14	+35	−12	−35	+26	+30	0	−1.89
112844	22 51 08.92	−71 25 30.7	7.65	H	342.787 158 83	−71.425 196 19	7.65	21.78	19.07	0.56	0.56	0.74	0.56	0.54	−11	− 1	−24	− 5	+ 6	+ 7	+10	−13	− 3	+ 4	1	−1.19
112845	22 51 09.76	−01 26 50.3	9.05	H	342.790 651 89	−01.447 311 00	10.50	62.08	11.41	1.12	0.83	1.26	1.44	1.13	+30	−16	−32	+17	−11	+13	−12	−40	+17	+25	0	1.21
112846	22 51 10.31	+53 55 11.3	8.47	G	342.792 965 58	+53.919 794 95	2.67	4.46	−3.26	0.60	0.60	0.79	0.74	0.71	−15	− 2	+17	+11	+16	+ 1	+17	−17	+ 6	− 8	1	−1.30
112847	22 51 10.54	−62 51 07.2	8.57	H	342.793 926 46	−62.852 006 27	6.63	−10.76	−7.71	0.62	0.64	0.97	0.66	0.60	−21	+ 0	−14	− 5	+ 7	+ 7	+ 8	− 9	+ 2	−12	0	0.84
112848	22 51 11.64	−59 05 50.5	7.32	H	342.798 502 60	−59.097 371 46	10.16	44.40	3.98	0.44	0.50	0.83	0.48	0.55	−31	− 9	−14	+11	− 2	+16	+ 1	− 1	−20	−40	0	0.00
112849	22 51 12.27	−09 19 30.4	8.42	H	342.801 135 29	−09.325 111 79	2.10	0.62	−19.26	1.21	0.75	1.30	1.66	0.96	− 5	+19	−35	−21	+12	−13	+12	−42	+46	−36	0	1.06
112850	22 51 13.31	+48 43 59.7	6.88	H	342.805 478 40	+48.733 245 06	2.67	3.66	−1.64	0.43	0.47	0.68	0.45	0.50	−24	+10	+ 7	−14	+13	− 6	+16	−14	+18	−13	0	−0.39
*112851	22 51 13.36	−37 06 35.3	8.93	H	342.805 652 68	−37.109 813 05	−1.10	11.45	−17.73	1.05	0.72	1.19	1.16	0.80	+15	+ 7	+ 5	+24	+ 1	+11	+ 3	− 1	+12	+20	0	1.61
*112852	22 51 13.34	+02 52 00.3	8.64	H	342.805 574 15	+02.866 758 23	0.75	−30.92	−25.78	0.94	0.68	1.21	1.37	0.99	+26	− 6	+ 5	−27	+11	+20	+ 0	−48	+25	+ 3	0	−0.12
112853	22 51 13.94	−49 09 21.4	10.06	H	342.808 104 15	−49.155 948 77	6.30	79.03	−21.41	1.07	1.13	1.64	2.05	1.40	+36	− 8	−21	−53	−22	+ 5	−29	−12	+18	+49	1	0.21
112854	22 51 16.00	+29 14 02.2	8.50	H	342.816 650 95	+29.233 939 59	6.23	8.40	−8.00	1.11	0.96	1.76	1.16	1.46	+26	+19	+10	−15	− 3	+ 2	+ 0	− 5	+15	+28	0	
112855	22 51 16.41	−32 58 10.6	9.13	H	342.818 366 69	−32.969 624 47	0.83	−23.03	−51.79	1.14	0.89	1.40	1.29	1.06	+35	−22	−37	−10	−10	+20	− 5	−11	+11	+46	2	0.53
112856	22 51 17.25	+29 14 07.1	8.86	H																						
112857	22 51 17.45	+47 32 54.1	9.92	H	342.822 722 90	+47.548 348 22	−0.19	0.57	−0.57	0.88	0.93	1.42	0.91	1.00	−20	+16	− 8	+ 0	+ 8	−15	+17	−29	+29	− 2	0	1.08
112858	22 51 17.70	−23 45 55.3	7.56	H	342.823 735 11	−23.765 361 32	2.99	−10.89	5.04	0.75	0.55	0.92	0.97	0.68	+29	+14	+ 0	− 7	+ 4	− 3	+ 6	−19	+27	+26	2	−1.00
112859	22 51 19.61	−84 15 49.5	9.88	1 H	342.831 726 58	−84.263 741 48	15.86	168.93	−76.31	0.90	0.87	1.07	1.04	0.94	+17	−14	− 5	−15	− 5	− 7	− 4	− 4	− 5	+15	1	−0.39
112860	22 51 20.37	−41 34 54.9	7.45	H	342.834 882 38	−41.581 913 56	4.14	−10.33	−20.53	0.69	0.56	0.86	0.79	0.64	+15	− 1	−10	+ 7	+ 5	+21	+ 7	+ 4	+14	+29	0	0.86
112861	22 51 20.49	+29 47 58.0	8.17	H	342.835 354 65	+29.799 445 05	1.56	3.70	−7.54	0.65	0.54	1.03	0.83	0.83	+21	− 4	+ 5	+ 0	− 3	+ 2	− 4	− 7	+ 5	+18	0	0.54
112862	22 51 20.94	−29 32 10.6	5.99	H	342.837 268 23	−29.536 273 81	8.80	−7.54	−14.49	0.70	0.49	0.76	0.80	0.57	+10	− 1	−10	−22	+16	+20	+21	+ 1	− 2	+ 2	0	0.44
112863	22 51 22.32	+36 55 33.0	9.35	H	342.842 986 19	+36.925 833 69	2.65	4.00	−1.67	0.93	0.71	1.40	1.44	1.13	−12	+13	+15	+ 9	− 7	− 7	− 3	+ 2	−20	−11	0	−0.26
112864 H	22 51 22.51	+61 41 47.9	5.61	G	342.843 784 64	+61.696 638 51 A	14.34	97.14	41.95	0.74	0.79	0.76	0.70	0.78	−10	+22	+ 1	−14	+ 9	+ 6	+13	−25	+27	−23	1	0.73
112865 H	22 51 22.74	−57 33 27.7	9.48	H	342.844 763 70	−57.557 687 08 A	6.04	15.95	5.63	1.96	2.27	3.67	1.75	1.86	−31	−11	−14	−28	− 2	+32	+ 3	−24	−10	−27	1	0.88
112866	22 51 22.96	−03 14 05.9	9.11	H	342.845 670 84	−03.234 972 22	3.93	−11.10	−14.03	1.62	0.80	1.51	2.77	1.15	−18	+15	−35	−34	+40	−46	+29	−47	+30	−43	0	1.93
*112867	22 51 23.30	−42 05 43.5	10.78	G	342.847 064 98	−42.095 425 06	9.42	120.41	−31.74	1.48	1.35	1.92	1.75	1.64	+13	− 7	− 5	+ 4	+ 9	+21	+ 9	+15	+11	+26	2	−0.44
*112868	22 51 23.17	+18 07 07.9	9.48	2 H	342.846 561 52	+18.118 868 78 *	0.93	21.34	−16.73	1.60	1.05	1.55	1.38	1.17	+40	+ 8	+ 5	−32	−15	+23	−19	−49	+26	+17	0	0.43
112869	22 51 25.63	−59 21 33.9	8.09	H	342.856 802 76	−59.359 421 68	3.39	21.13	−10.91	0.52	0.62	1.02	0.61	0.70	−36	−11	−10	+13	− 4	+13	− 3	− 5	−17	−46	2	−0.67
112870	22 51 26.11	+13 58 10.2	8.29	G	342.858 809 20	+13.969 491 65	47.56	404.92	201.91	0.88	0.65	1.18	1.07	1.01	+27	− 6	−21	− 9	−14	−15	−20	−56	+36	+17	0	0.49
*112871 H	22 51 26.66	+26 23 27.6	6.94	H	342.861 080 97	+26.391 007 69 A	6.89	−2.89	4.33	2.12	1.63	1.62	1.42	1.48	− 8	− 7	− 3	− 1	+10	− 3	+14	− 4	+10	+30	0	−0.18
*112872	22 51 26.63	−31 50 41.1	10.21	H	342.860 948 84	−31.844 742 05	2.39	2.96	−22.60	1.65	1.18	1.85	1.85	1.44	+15	+21	− 8	−30	+19	−11	+21	−12	+18	+25	0	0.19
112873	22 51 27.61	+05 00 25.3	8.65	H	342.865 047 21	+05.007 033 64	4.08	69.13	10.47	1.10	0.72	1.35	1.65	1.07	+14	+12	−17	−27	+15	− 7	+ 4	−58	+44	−24	0	0.21
112874	22 51 28.06	−43 05 06.9	9.86	G	342.866 902 85	−43.085 245 17	7.75	14.71	−24.16	1.09	1.03	1.46	1.23	1.20	+ 9	−12	−11	+17	+ 4	+13	+ 7	+ 2	− 3	+13	0	−0.22
112875	22 51 28.15	+21 17 10.4	9.24	H	342.867 271 87	+21.286 210 94	4.08	−19.44	−20.15	1.15	0.71	1.51	1.25	1.14	− 1	+28	−22	+23	− 5	− 9	+ 8	−30	+44	+ 7	0	−0.51
112876	22 51 29.45	+62 58 20.3	6.65	H	342.872 717 32	+62.972 301 58	12.10	12.93	−49.46	0.48	0.49	0.57	0.57	0.54	−19	+ 4	− 1	+ 9	− 7	− 2	− 4	−22	+15	−15	0	−1.23
112877	22 51 30.05	+06 36 41.8	8.78	2 H	342.875 205 43	+06.611 598 86	2.92	−3.47	−8.73	1.02	0.72	1.36	1.37	0.96	+21	+10	−26	+ 4	− 8	+ 4	− 8	+34	− 5	−52	+38	+14	0	0.53
112878	22 51 30.10	−31 57 39.4	8.76	H	342.875 411 90	−31.960 939 88	1.04	13.49	−1.19	1.40	0.80	1.38	1.43	1.15	− 2	+14	− 9	−40	+14	+ 9	+20	−25	+28	+28	0	0.44
112879	22 51 33.05	+05 46 58.9	8.57	H	342.887 695 97	+05.783 019 97	1.50	17.61	5.10	1.08	0.76	1.29	1.40	0.97	+26	+12	+15	− 2	+ 1	+40	−16	−60	+ 7	+ 7	0	−1.65
112880	22 51 33.44	−01 48 46.3	8.17	H	342.889 320 82	−01.812 856 01	4.21	−3.50	−7.18	0.94	0.62	1.10	1.12	0.88	+22	+ 3	−23	− 5	+ 3	+15	+10	−24	+26	+25	0	0.69
*112881	22 51 33.78	+59 00 30.8	7.20	2 G	342.890 754 56	+59.008 558 85	−0.27	−5.01	−7.07	0.57	0.55	0.71	0.74	0.66	−22	+ 1	+17	+ 4	− 5	+ 2	− 5	−14	+ 6	−24	0	1.17
*112882	22 51 33.68	+85 02 46.9	7.32	2 H	342.890 328 49	+85.046 364 67	2.85	26.84	4.21	0.52	0.50	0.58	0.59	0.53	− 5	− 3	+12	−12	− 6	+ 9	− 6	+ 5	+ 5	−12	2	0.08
112883	22 51 34.06	+32 48 56.2	7.16	H	342.891 929 42	+32.815 604 88	7.57	34.57	−11.36	0.62	0.48	0.93	0.84	0.65	+ 8	+19	+38	−15	+20	+14	+12	− 2	− 7	+18	3	−0.70
112884	22 51 35.55	+38 41 17.3	8.49	H	342.898 145 27	+38.688 130 07	−1.20	−12.03	−12.00	0.85	0.68	1.16	1.05	0.95	+15	+27	+27	+18	− 9	−10	+ 2	−24	− 2	+28	0	−0.95
112885	22 51 35.97	−43 49 57.0	10.61	H	342.899 861 98	−43.832 491 71	3.05	4.32	−22.03	1.40	1.29	1.81	1.69	1.50	+ 8	+ 1	−27	+15	− 4	+19	+ 1	− 2	− 2	+ 5	0	−0.79
112886	22 51 38.58	−20 56 22.1	9.17	H	342.910 765 32	−20.939 484 03	5.34	21.66	34.76	1.19	0.79	1.46	1.42	1.01	+27	−14	−22	−17	+15	− 3	+ 9	−15	+31	+29	0	−0.63
112887	22 51 38.92	+51 50 42.5	12.26	2 H	342.912 162 23	+51.845 125 71	0.42	−2.15	−3.81	2.52	2.33	3.55	2.67	2.36	−14	− 2	+28	+ 4	− 4	+ 1	− 3	− 5	+11	+ 3	3	0.52
112888	22 51 38.95	+41 18 31.6	8.94	G	342.912 293 14	+41.308 769 13	4.57	7.33	−7.90	0.75	0.76	1.17	0.79	0.83	− 3	+ 7	+19	+38	+ 8	+12	+17	−22	− 1	+17	0	−0.86
112889	22 51 39.25	+58 52 42.9	9.10	H	342.913 561 25	+58.878 589 02	6.24	29.99	8.44	0.88	0.85	1.10	1.13	0.99	−22	+ 5	+17	+ 2	− 2	+ 2	− 2	−16	+ 4	−25	0	−1.01
112890	22 51 41.41	+01 46 43.5	8.87	H	342.922 543 75	+01.778 739 30	11.23	−54.81	−22.12	1.04	0.80	1.47	1.60	1.29	+43	−12	−17	−18	−11	+41	−15	−59	+36	+36	0	0.04
112891	22 51 41.59	+04 47 09.5	7.09	G	342.923 290 38	+04.785 983 52	4.63	35.03	5.74	0.74	0.50	0.91	1.01	0.76	+16	+ 2	− 9	−25	+ 9	+ 0	+ 5	−47	+38	− 4	0	−1.55
112892	22 51 42.05	−56 29 27.4	10.22	2 H	342.925 221 67	−56.490 930 93	21.79	225.77	48.65	15.83	14.81	23.20	17.32	13.90	− 6	+ 0	−12	−12	−10	+ 6	− 8	−29	+ 7	−13	0	
112893	22 51 42.79	+66 00 34.3	9.22	H	342.928 276 29	+66.009 540 02	5.09	−3.44	−11.15	0.87	0.78	0.98	1.18	0.91	−10	− 8	+22	+14	+16	+17	+12	+ 9	− 3	− 2	0	−0.15
112894	22 51 44.68	+30 02 41.4	7.91	H	342.936 166 60	+30.044 843 83	1.17	−6.48	−0.54	0.63	0.52	0.93	0.75	0.73	+16	+ 2	+19	+17	− 6	−16	− 3	+ 1	+21	+11	0	0.93
112895	22 51 45.00	−59 52 52.9	6.47	G	342.937 503 05	−59.881 347 24	9.13	−42.35	−4.66	0.38	0.45	0.70	0.48	0.51	−38	− 8	− 2	− 2	+ 1	+11	+ 2	−11	− 4	−32	0	0.24
112896	22 51 45.05	+53 01 42.6	7.27	H	342.937 702 37	+53.028 499 29	0.58	−3.27	−4.71	0.49	0.47	0.67	0.53	0.51	−11	+ 6	+17	− 5	− 2	− 4	− 1	− 1	+14	− 5	0	−1.44
112897	22 51 45.54	+08 59 45.2	10.14	H	342.939 733 75	+08.995 895 02	−0.86	10.30	−28.69	1.63	0.88	1.75	2.53	1.34	+ 2	+27	− 8	−46	+19	−27	+22	−45	+26	−27	3	0.90
112898 H	22 51 45.66	−35 53 18.8	7.43	G	342.940 262 20	−35.888 554 36 A	8.58	46.36	−14.15	1.04	0.85	1.18	1.12	0.96	+22	+13	−15	+32	− 6	+27	− 1	+11	+16	+40	2	0.36
112899	22 51 45.96	−08 33 31.7	9.50	H	342.941 487 57	−08.558 801 97	1.42	19.78	−26.40	1.28	0.82	1.37	1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
112801	8.306	0.008	8.241	0.009		0.065	0.011	T	0.07	0.01	L	8.2683	0.0012	0.015	145		8.25	8.30		C			1							S
112802	8.534	0.009	7.244	0.006		1.097	0.008	T	1.06	0.01	L	7.2892	0.0007	0.011	109		7.28	7.31					1							S
112803	7.934	0.007	6.636	0.004		1.104	0.006	T	1.07	0.01	L	6.6859	0.0006	0.007	102		6.67	6.70					1							S
112804	10.294	0.029	8.717	0.014		1.322	0.025	T	1.28	0.03	L	8.7352	0.0024	0.018	95		8.70	8.78					1							
112805	8.312	0.010	8.157	0.012	*	0.149	0.015	T	0.16	0.01	L *	8.3582	0.0017	0.015	144	*	8.34	8.39		D	22507+5107	I 1	2 C	A	BA	17	1.874	0.004	0.87	0.01	
112806	10.255	0.030	9.697	0.028		0.562	0.002	G	0.64	0.00	H	9.7236	0.0026	0.024	92		9.67	9.76		C			1							
112807	7.714	0.008	7.498	0.008		0.206	0.015	G	0.23	0.02	H	7.5313	0.0013	0.010	78		7.52	7.55		C			1							S
112808	10.134	0.026	10.045	0.037		0.122	0.002	G	0.14	0.00	H	10.0669	0.0025	0.024	114		10.00	10.11		C			1							G
112809	9.745	0.016	8.522	0.011		1.045	0.015	T	1.02	0.01	L	8.5806	0.0013	0.014	136		8.56	8.61					1							
112810	8.901	0.008	8.426	0.008		0.447	0.010	T	0.52	0.01	L	8.4708	0.0011	0.018	232		8.43	8.50					1							
112811	10.178	0.027	9.409	0.022		0.683	0.004	G	0.74	0.00	H	9.4602	0.0028	0.019	108		9.44	9.49					1							
112812	7.916	0.006	7.281	0.006		0.590	0.007	T	0.66	0.01	L	7.3429	0.0010	0.011	139		7.32	7.36					1							S
112813	8.539	0.011	7.128	0.007		1.192	0.010	T	1.15	0.01	L	7.1725	0.0015	0.009	81		7.16	7.19		C			1							S
112814	9.345	0.013	8.184	0.008		0.997	0.012	T	0.98	0.01	L	8.2344	0.0012	0.014	152		8.20	8.26					1							
112815	11.287	0.076	10.740	0.072	A	0.600	0.495	G	0.61	0.07	B *	10.3268	0.0041	0.026	84	*	10.28	10.38		D	22508−3113	I 1	2 C	A	AB	59	3.038	0.014	0.11	0.02	
112816	9.371	0.014	8.529	0.011	*	0.740	0.014	T	0.79	0.01	L *	8.5736	0.0026	0.025	154	*	8.53	8.61		U	22508−6543	H 1	2 C S	C	AB	255	0.150	0.059	1.67	1.17	
112817	8.905	0.013	7.236	0.007		1.395	0.012	T	1.37	0.01	L	7.2350	0.0010	0.010	116		7.22	7.25		C			1							S
112818	10.265	0.028	9.821	0.029		0.419	0.037	T	0.49	0.04	L	9.8992	0.0025	0.024	128		9.85	9.95					1							G
112819	9.744	0.013	8.100	0.006		1.375	0.011	T	1.35	0.01	L	8.0923	0.0011	0.019	282		8.06	8.13					1							
112820	9.573	0.011	9.196	0.012		0.357	0.015	T	0.42	0.02	L	9.2652	0.0021	0.027	266		9.22	9.32					1							
112821	8.239	0.010	7.508	0.007		0.647	0.007	G	0.71	0.01	H	7.5913	0.0008	0.009	113		7.58	7.61		C			1							S
112822	8.865	0.010	8.528	0.011		0.320	0.014	T	0.37	0.02	L	8.5972	0.0017	0.014	127		8.58	8.62		C			1							
112823											T	11.6953	0.0056	0.065	123		11.55	11.82					1 X	S						G
112824	10.143	0.029	9.549	0.027		0.555	0.029	T	0.63	0.03	L	9.6016	0.0032	0.026	94		9.56	9.65		C			1							
112825	9.972	0.021	9.408	0.020		0.532	0.021	T	0.60	0.02	L	9.5033	0.0023	0.025	127		9.44	9.55		U			1							
112826	8.482	0.008	7.670	0.006		0.747	0.015	G	0.79	0.01	H	7.7282	0.0009	0.013	196		7.70	7.76					1							S
112827	9.127	0.016	8.596	0.015		0.506	0.016	T	0.58	0.02	L	8.6525	0.0015	0.016	72		8.62	8.68		C			1							S
112828	10.166	0.025	9.106	0.017		0.919	0.023	T	0.92	0.02	L	9.1632	0.0016	0.020	125		9.12	9.19					1							
112829	9.518	0.017	8.577	0.013		0.817	0.017	T	0.86	0.02	L	8.5998	0.0017	0.018	142		8.57	8.63					1							
112830						1.230	0.015	G	1.43	0.02	A	11.9052	0.0041	0.062	224		11.74	12.02		U 2			1							G
112831	11.330	0.062	11.241	0.102		−0.060	0.040	G	−0.04	0.04	R	11.3712	0.0053	0.055	120		11.24	11.45					1							G
112832	7.301	0.007	5.570	0.004		1.444	0.006	T	1.44	0.01	L	5.5622	0.0008	0.007	102		5.55	5.58					1							S
112833	7.649	0.007	6.050	0.003		1.340	0.006	T	1.30	0.01	L	6.0479	0.0008	0.007	141		6.03	6.06					1							S
112834	10.118	0.023	9.032	0.015		0.939	0.021	T	0.93	0.01	L	9.0984	0.0022	0.021	128		9.07	9.13		C			1							
112835	7.730	0.007	7.453	0.007		0.264	0.009	T	0.30	0.01	L	7.4984	0.0010	0.013	141		7.47	7.52					1							S
112836	9.702	0.020	9.613	0.026	A	0.100	0.495	G	0.06	0.04	L *	9.5938	0.0025	0.028	139	*	9.55	9.64		D	22511+4405	I 1	2 C	A	AB	331	4.302	0.027	2.71	0.11	
112837	7.843	0.006	7.408	0.006		0.428	0.015	G	0.50	0.02	H	7.4575	0.0010	0.011	131		7.44	7.48		C			1							S
112838	8.649	0.008	7.554	0.006		0.946	0.008	T	0.94	0.01	L	7.6105	0.0011	0.013	161		7.59	7.64					1							
112839	9.065	0.012	7.967	0.008		0.948	0.011	T	0.94	0.01	L	8.0189	0.0015	0.017	139		7.99	8.05					1							S
112840	10.278	0.023	8.822	0.012		1.227	0.020	T	1.19	0.02	L	8.8935	0.0015	0.016	138		8.86	8.92		C			1							
112841	11.673	0.064	11.147	0.065		0.667	0.020	G	0.73	0.02	R	11.1869	0.0034	0.050	237		11.09	11.27					1							G
112842	11.232	0.053	9.722	0.023		1.270	0.045	T	1.23	0.05	L	9.8004	0.0020	0.020	119		9.76	9.86					1							
112843						1.390	0.015	G	1.36	0.02	J	11.7249	0.0091	0.045	78		11.63	11.80					1							G
112844	8.379	0.009	7.719	0.007		0.602	0.009	T	0.67	0.01	L	7.7792	0.0013	0.011	146		7.75	7.80		C			1							S
112845	9.665	0.019	9.111	0.018		0.519	0.023	T	0.59	0.02	L	9.1675	0.0031	0.018	84		9.13	9.20		C			1							S
112846	8.501	0.009	8.468	0.011		0.040	0.015	G	0.06	0.01	H	8.4930	0.0012	0.014	145		8.47	8.52		C			1							
112847	9.129	0.011	8.628	0.010		0.482	0.011	T	0.55	0.01	L	8.6788	0.0019	0.021	184		8.64	8.72					1							S
112848	7.676	0.005	7.350	0.005		0.313	0.008	T	0.36	0.01	L	7.3936	0.0010	0.013	207		7.37	7.42					1							S
112849	10.150	0.033	8.552	0.016		1.339	0.029	T	1.30	0.03	L	8.5735	0.0022	0.013	64		8.54	8.60		C			1							
112850	6.774	0.004	6.863	0.004		−0.076	0.005	T	−0.06	0.01	L	6.8597	0.0009	0.009	164		6.85	6.88					1							S
112851	10.998	0.049	9.127	0.017		1.588	0.043	T	1.99	0.10	O	9.0120	0.0027	0.030	107		8.97	9.07					1							
112852	9.899	0.019	8.756	0.013		0.983	0.018	T	0.96	0.01	L	8.8051	0.0015	0.016	142		8.78	8.84					1							
112853	10.762	0.031	10.119	0.028		0.597	0.036	T	0.67	0.03	L	10.1878	0.0028	0.037	162		10.12	10.25					1 G							
112854	8.581	0.008	8.516	0.010		0.058	0.140	G	0.03	0.02	L	8.5098	0.0024	0.027	179		8.48	8.56		D	22513+2914	I 2	1 X	S							
112855	10.467	0.047	9.264	0.026		1.029	0.042	T	1.00	0.03	L	9.2992	0.0029	0.019	82		9.27	9.35		C			1							
112856											T	8.9936	0.0650	0.567	175		8.56	10.39		D	22513+2914	I 2		S						G
112857	9.970	0.019	9.925	0.026		0.046	0.030	T	0.06	0.02	L	9.9455	0.0028	0.034	184		9.88	10.00					1	S						G
112858	8.941	0.013	7.671	0.008		1.073	0.020	G	1.04	0.02	H	7.7237	0.0012	0.011	110		7.70	7.75					1							S
112859	11.056	0.046	9.924	0.028		0.966	0.043	T	1.01	0.04	L	10.0199	0.0032	0.029	134		9.96	10.07		U			1							
112860	9.544	0.016	7.646	0.007		1.598	0.020	G	1.88	0.02	A	7.5455	0.0018	0.012	108		7.52	7.57					1							S
112861	10.201	0.023	8.336	0.010		1.550	0.020	T	1.62	0.03	L	8.2864	0.0013	0.015	164		8.26	8.32					1							
112862	7.130	0.005	6.088	0.003		0.907	0.006	G	0.91	0.00	H	6.1478	0.0010	0.006	92		6.14	6.16		C			1							S
112863	9.832	0.018	9.389	0.019		0.418	0.024	T	0.48	0.03	L	9.4489	0.0024	0.025	117		9.41	9.49		C			1							
112864	6.897	0.028	5.924	0.020	A	0.775	0.007	G	0.81	0.01	R *	5.7603	0.0008	0.007	106	*	5.75	5.77		D	22514+6142	I 1	2 C	A	AB	286	1.493	0.004	1.06	0.01	S
112865	9.731	0.015	9.284	0.016	*	0.496	0.005	G	0.57	0.01	R *	9.5905	0.0023	0.027	243	*	9.53	9.65		D	22514−5733	I 1	2 C	A	AB	171	7.616	0.007	0.61	0.02	
112866	11.180	0.072	9.293	0.024		1.568	0.060	T	1.59	0.06	L	9.2306	0.0022	0.020	77		9.19	9.27		C			1							
112867	11.997	0.151	10.995	0.095		0.800	0.020	G	0.84	0.02	H	10.9706	0.0046	0.037	92		10.90	11.05		C			1							G
112868	10.967	0.046	9.613	0.024		1.162	0.043	T	4.12	0.08	O	8.8840	0.0179	0.149	106		8.56	9.03		U 2 C			1 V							
112869	9.725	0.013	8.235	0.007		1.254	0.012	T	1.21	0.01	L	8.2533	0.0014	0.019	245		8.23	8.28					1	S						S
112870	9.352	0.016	8.370	0.012		0.849	0.003	G	0.89	0.00	H	8.4274	0.0015	0.014	114		8.40	8.46			22514+1359	I 1	1							
112871	7.246	0.004	6.976	0.005	*	0.227	0.005	G	0.25	0.01	R *	7.0121	0.0008	0.009	167	*	7.00	7.03		D	22514+2623	I 1	2 C	A	AB	29	0.406	0.003	0.18	0.01	S
112872	10.618	0.046	10.262	0.054		0.337	0.066	T	0.39	0.09	L	10.2914	0.0035	0.027	80		10.26	10.36		C			1							
112873	9.900	0.018	8.756	0.012		0.983	0.017	T	0.96	0.01	L	8.8161	0.0013	0.019	139		8.78	8.86					1							S
112874	10.327	0.030	9.910	0.032		0.446	0.005	G	0.52	0.01	H	9.9608	0.0028	0.030	88		9.92	10.01		C			1							
112875	10.764	0.046	9.352	0.023		1.193	0.040	T	1.15	0.04	L	9.4021	0.0021	0.020	99		9.37	9.44		C			1							
112876	7.583	0.007	6.737	0.005		0.759	0.006	T	0.80	0.00	L	6.8011	0.0011	0.012	119		6.79	6.82					1							S
112877	10.931	0.039	9.017	0.014		1.623	0.034	T	2.47	0.06	O	8.8070	0.0041	0.043	126		8.74	8.91		U 2			1	S						
112878	10.306	0.033	8.876	0.017		1.207	0.029	T	1.17	0.03	L	8.9233	0.0024	0.019	78		8.89	8.94		C			1							
112879	10.567	0.029	8.729	0.012		1.529	0.025	T	1.57	0.05	L	8.6924	0.0015	0.018	119		8.67	8.74					1							
112880	8.354	0.009	8.189	0.010		0.158	0.013	T	0.17	0.01	L	8.2215	0.0014	0.011	104		8.20	8.24		C	22516−0149	I 1	1							S
112881	7.874	0.007	7.300	0.007		0.577	0.013	G	0.65	0.01	H	7.3419	0.0026	0.023	102		7.31	7.38		U 2			1							S
112882	9.175	0.012	7.574	0.006		1.365	0.011	T	3.29	0.03	O	7.1135	0.0107	0.095	138		6.98	7.27		U 2			1	S						S P
112883	7.379	0.005	7.186	0.005		0.185	0.007	T	0.20	0.01	L	7.2231	0.0011	0.011	137		7.21	7.24					1							S
112884	10.046	0.021	8.637	0.012		1.190	0.019	T	1.15	0.02	L	8.6537	0.0020	0.018	120		8.63	8.68		C			1							
112885	11.148	0.056	10.682	0.060		0.510	0.020	G	0.58	0.02	H	10.7221	0.0047	0.034	94		10.66	10.78		C			1							G
112886	9.591	0.022	9.217	0.023		0.365	0.028	T	0.43	0.03	L	9.2547	0.0019	0.020	91		9.22	9.28		C			1							S
112887											T	12.3036	0.0115	0.099	117		12.11	12.47		U			1	S						D
112888	8.981	0.014	8.909	0.017		0.080	0.015	G	0.09	0.02	H	8.9634	0.0019	0.023	156		8.93	9.00			22518+4119	I 3	1	S						
112889	9.523	0.020	9.158	0.022		0.346	0.028	T	0.41	0.04	L	9.1869	0.0027	0.025	109		9.15	9.23					1							
112890	9.511	0.015	8.909	0.013		0.561	0.017	T	0.63	0.02	L	8.9921	0.0020	0.018	130		8.97	9.03					1							S
112891	7.503	0.006	7.124	0.005		0.374	0.015	G	0.44	0.02	H	7.1763	0.0011	0.010	139		7.16	7.20		C			1							S
112892	11.142	0.051	10.316	0.038		0.754	0.003	G	0.80	0.00	H	10.3629	0.0040	0.055	142		10.25	10.44		U			1 X	S						G
112893	9.455	0.021	9.275	0.026		0.172	0.031	T	0.19	0.03	L	9.2795	0.0023	0.023	114		9.24	9.31		C			1							
112894	9.036	0.010	7.992	0.007		0.907	0.009	T	0.91	0.01	L	8.0685	0.0012	0.015	161		8.05	8.09		C			1							S
112895	7.933	0.005	6.583	0.003		1.132	0.002	G	1.10	0.00	H	6.6334	0.0006	0.010	261		6.62	6.65					1							S
112896	7.523	0.006	7.303	0.007		0.210	0.009	T	0.23	0.01	L	7.3356	0.0012	0.012	145		7.31	7.36					1							S
112897	11.912	0.102	10.103	0.032		1.506	0.085	T	1.54	0.13	L	10.2502	0.0024	0.026	118		10.21	10.29					1							
112898	7.725	0.006	7.496	0.007	A	0.227	0.003	G	0.25	0.00	H *	7.5002	0.0011	0.010	116	*	7.49	7.52		D	22518−3553	I 1	2 C	B	AB	276	4.923	0.037	3.40	0.10	S
112899	11.055	0.061	9.653	0.030		1.185	0.053	T	1.15	0.05	L	9.6589	0.0030	0.024	76		9.62	9.69		C			1							
112900	7.120	0.004	7.020	0.005		0.085	0.002	G	0.10	0.00	H	7.0522	0.0008	0.009	143		7.04	7.07					1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
112901 H	22 51 46.61	+41 20 02.4	8.07	H	342.944 187 54	+41.333 991 31 C	4.01	7.35	−6.47	0.92	1.04	1.45	0.87	0.97	+ 1 +16 +10 +36 + 6 +17 +19 −26 +10 +23	1	0.41
112902	22 51 46.92	−19 28 12.6	8.67	H	342.945 507 67	−19.470 165 12	1.81	−23.30	−39.28	1.04	0.72	1.13	1.32	0.84	+18 −14 + 7 +22 − 6 +23 −16 −16 +16 + 7	0	−0.52
112903	22 51 47.96	+39 42 52.4	8.55	H	342.949 828 01	+39.714 552 27	2.98	10.68	4.05	0.87	0.69	1.10	1.16	0.88	+18 +18 +17 + 7 + 4 − 8 + 8 −22 −17 +41	0	−1.78
112904	22 51 48.31	+53 11 29.2	8.05	H	342.951 293 46	+53.191 447 16	10.06	84.64	38.10	0.53	0.53	0.74	0.59	0.58	− 3 +12 +25 −14 + 4 − 4 + 5 + 0 + 4 − 1	0	−0.74
112905	22 51 49.41	+41 18 46.7	7.07	G	342.955 886 43	+41.312 972 00	4.47	15.79	−2.73	0.47	0.50	0.74	0.48	0.51	− 5 + 6 +11 +32 + 7 +10 +20 −27 + 5 +19	0	−0.37
112906	22 51 50.19	+39 08 41.7	9.49	H	342.959 107 40	+39.144 910 34	2.19	0.30	−5.12	1.07	0.86	1.41	1.54	1.09	+29 +29 +27 + 4 − 9 −21 + 2 −27 −15 +54	0	−0.09
112907	22 51 50.84	+46 44 08.0	7.16	H	342.961 847 83	+46.735 543 51	3.55	−1.66	−10.39	0.43	0.49	0.72	0.47	0.54	−22 +14 + 0 + 9 + 9 − 7 +19 −25 +24 − 3	1	1.91
112908 H	22 51 51.19	−46 46 36.8	8.75	H	342.963 270 96	−46.776 895 52 A	23.18	−2.03	−50.95	2.88	2.81	2.78	2.92	2.37	+24 −11 −15 −20 −19 +27 −18 −45 + 7 +22	4	0.71
112909	22 51 53.18	+31 45 15.6	11.66	G	342.971 565 18	+31.754 337 73	70.30	527.01	−50.59	1.84	1.38	2.71	2.35	2.04	+15 + 8 +18 +26 + 5 + 3 +10 − 7 + 3 +29	0	1.51
112910	22 51 55.43	−37 11 31.4	9.69	H	342.980 951 26	−37.192 042 62	1.79	−27.68	−2.99	1.09	0.82	1.35	1.12	0.90	+13 + 9 + 8 − 4 − 2 +27 − 3 − 9 + 8 +21	0	0.06
112911	22 51 57.69	−82 42 07.4	8.39	H	342.990 364 34	−82.702 054 94	8.54	15.72	38.98	0.63	0.57	0.70	0.81	0.76	− 1 −11 −11 − 6 +11 −13 +11 + 2 − 6 − 2	1	−0.76
112912	22 51 58.26	+53 42 35.3	8.48	H	342.992 736 75	+53.709 792 98	0.53	−3.25	−4.66	0.60	0.60	0.80	0.70	0.66	−16 + 8 +21 −10 +16 +11 +13 − 6 − 4 −12	0	−0.15
112913	22 51 59.61	−53 14 43.3	9.82	H	342.998 371 44	−53.245 372 46	18.69	73.29	9.52	0.80	1.06	1.57	1.10	1.16	+30 − 6 − 6 +35 + 9 +20 + 9 + 4 + 4 +26	0	−0.20
112914	22 51 59.68	+31 43 45.3	9.67	H	342.998 666 24	+31.729 236 82	25.71	−317.94	−374.08	1.06	0.79	1.59	1.24	1.13	+ 6 +19 + 4 +22 + 6 + 1 +16 −11 +16 +23	0	1.47
112915 H	22 52 00.65	+57 43 02.8	8.01	H	343.002 724 77	+57.717 444 23 A	41.17	−93.06	−219.50	1.38	1.26	1.35	1.27	1.22	−17 +19 − 6 +44 + 3 − 6 +15 +16 +33 + 1	2	1.63
112916	22 52 01.43	−64 29 52.5	8.48	H	343.005 952 44	−64.497 911 96	7.56	5.56	−1.45	0.62	0.64	0.94	0.75	0.63	− 6 + 4 −19 − 1 + 3 − 2 + 5 −18 + 9 +13	0	−1.59
112917	22 52 01.95	+43 18 44.5	4.95	1 H	343.008 113 65	+43.312 364 94	9.99	109.36	21.54	0.39	0.44	0.64	0.45	0.45	− 9 + 6 +21 + 3 +10 + 6 +16 −30 − 1 +16	1	−0.43
112918	22 52 02.44	+23 24 49.0	9.79	H	343.010 149 00	+23.413 612 60	36.83	132.92	−154.13	1.21	0.95	1.72	1.40	1.36	− 1 +23 −12 −19 + 3 −39 + 7 −40 +42 −18	4	0.15
112919	22 52 02.96	+12 20 11.5	9.99	2 H	343.012 321 37	+12.336 529 63	2.70	−10.19	−15.21	1.39	0.96	1.74	1.85	1.36	+19 − 7 −16 −21 + 2 −26 −11 −55 +28 −11	0	1.44
112920	22 52 05.71	−14 25 55.5	9.71	G	343.023 790 12	−14.432 077 03	12.02	56.10	6.51	1.93	0.93	1.69	2.39	1.33	− 7 +18 − 6 −31 +32 + 7 +41 −10 +25 −16	0	1.91
112921	22 52 08.08	+35 32 51.7	8.42	H	343.033 678 84	+35.547 702 59	2.40	19.28	−2.06	0.69	0.57	1.01	0.77	0.74	+ 0 +14 +22 +15 − 2 −15 + 8 − 4 +23 + 3	0	−0.15
112922	22 52 09.08	−38 57 07.6	7.60	H	343.037 822 65	−38.952 105 24	1.65	26.40	−4.28	0.75	0.58	0.90	0.83	0.63	+18 −19 − 7 +39 − 3 + 9 − 3 + 3 +10 +18	0	0.72
112923	22 52 09.28	−00 30 41.7	10.09	H	343.038 683 18	−00.511 584 73	0.25	12.44	−0.05	1.41	1.00	1.62	1.99	1.55	+32 −23 −19 + 4 − 8 +24 −15 −48 +29 +24	0	0.73
112924 H	22 52 09.98	−63 11 18.8	6.14	H	343.041 581 92	−63.188 568 25 A	8.13	26.40	−40.68	0.49	0.49	0.65	0.51	0.47	−13 −13 − 9 + 0 − 3 + 8 + 0 − 4 − 9 −12	1	−0.63
112925	22 52 10.74	−34 38 03.0	7.85	H	343.044 737 32	−34.634 167 36	4.51	22.54	−11.55	0.75	0.65	1.02	0.92	0.79	+36 −14 −23 +37 − 6 +10 − 1 + 7 +18 +49	0	0.73
112926	22 52 10.81	−10 57 29.8	8.83	H	343.045 036 01	−10.958 273 18	7.59	73.42	−60.76	1.12	0.76	1.50	1.67	1.23	+26 + 6 −25 − 2 − 8 +39 + 3 −43 +54 +36	3	1.68
112927	22 52 14.71	+20 03 51.5	8.90	H	343.061 279 68	+20.064 305 18	18.99	188.02	−97.90	1.10	0.67	1.36	1.15	0.95	+ 0 +36 −19 − 5 − 1 +26 +16 −34 +28 +16	0	−0.28
112928	22 52 14.80	+38 44 44.7	8.34	2 H	343.061 659 17	+38.745 737 96 *	0.93	14.31	−1.56	0.94	0.69	1.24	1.20	0.94	+ 3 +14 +21 +22 − 5 −18 + 7 −16 + 3 +20	3	−1.62
112929	22 52 17.79	+22 52 58.9	8.42	H	343.074 139 87	+22.883 018 28	2.15	−9.37	−11.59	0.98	0.65	1.24	1.06	0.97	+ 3 +17 −16 −27 + 3 −18 + 7 −33 +39 − 5	0	−1.03
112930	22 52 18.48	−47 34 30.6	7.36	H	343.077 018 93	−47.575 174 83	11.09	14.73	−5.92	0.71	0.60	0.93	0.79	0.69	+12 −11 −13 − 8 −19 +41 −15 −33 +30 +31	0	1.91
112931	22 52 20.39	+40 15 55.8	7.88	H	343.084 948 05	+40.265 502 17	1.20	−6.28	−2.13	0.79	0.63	1.02	0.90	0.80	+11 +36 +14 +12 − 4 + 2 +12 −35 + 4 +40	0	−1.09
112932	22 52 20.65	+10 24 51.9	6.86	H	343.086 044 23	+10.414 425 38	17.10	55.71	−28.13	0.73	0.48	0.83	0.84	0.61	+12 −10 + 9 −33 +11 +20 +12 −30 − 1 + 4	2	−0.57
112933	22 52 21.78	+15 52 56.6	7.01	H	343.090 765 26	+15.882 402 35	4.20	30.70	−22.55	0.72	0.51	0.93	0.80	0.72	+14 +12 −19 +18 − 7 + 2 − 6 −38 +32 +12	2	−0.22
112934	22 52 22.22	−19 42 03.4	10.83	G	343.092 573 15	−19.700 943 47	3.74	−65.89	−189.65	2.04	1.25	2.25	2.85	1.58	+11 + 7 −16 −17 +15 − 1 +15 −19 +19 + 2	0	−2.37
112935	22 52 23.77	+09 50 08.0	5.16	H	343.099 027 15	+09.835 557 33	37.25	521.86	44.10	0.65	0.46	0.76	0.69	0.59	+24 +15 + 5 + 6 − 8 −16 − 7 −31 + 1 +23	0	−2.22
112936 H	22 52 23.79	−21 42 29.4	8.16	H	343.099 113 21	−21.708 163 30 A	8.13	35.18	−22.52	2.43	1.84	3.12	2.79	2.44	+26 + 0 −17 −35 +15 +17 +14 −14 +46 +46	0	2.11
112937	22 52 24.99	+44 17 13.2	8.33	H	343.104 106 55	+44.286 992 67	5.13	17.62	3.05	0.61	0.66	1.04	0.68	0.75	−16 − 1 +15 − 6 − 5 −11 + 5 −35 − 2 +13	0	−0.36
112938	22 52 26.01	−39 18 01.8	7.87	H	343.108 372 79	−39.300 496 18	1.19	22.35	−5.87	0.75	0.60	0.93	0.85	0.66	+11 + 0 −11 +26 − 6 +13 − 4 + 4 + 1 +12	2	1.83
112939	22 52 26.46	−45 59 29.0	7.26	H	343.110 229 84	−45.991 385 42	2.56	−11.92	−29.97	0.84	0.62	0.97	1.10	0.71	+ 7 + 7 −10 − 3 + 5 +21 + 8 −17 + 9 +24	0	−0.60
112940	22 52 27.10	−47 59 34.4	7.49	H	343.112 918 56	−47.992 876 13	4.54	23.43	−20.29	0.80	0.60	0.93	0.88	0.62	+ 9 − 4 −27 − 4 −24 +37 −15 −25 +16 +18	0	1.04
112941	22 52 27.26	−16 39 24.0	8.25	H	343.113 588 49	−16.656 661 72	0.48	−6.49	−7.94	0.96	0.74	1.18	1.03	0.86	+28 +16 − 2 − 3 −15 +41 −12 −34 +28 +33	0	1.03
112942	22 52 27.35	+39 02 15.5	9.66	H	343.113 944 24	+39.037 643 28	0.93	23.22	4.97	1.11	0.92	1.50	1.53	1.20	+23 +27 +26 + 5 − 9 −20 + 6 −31 −14 +54	0	−2.39
112943	22 52 27.63	+55 23 42.1	8.93	H	343.115 137 85	+55.395 029 03	1.97	−2.66	−7.28	0.68	0.68	0.88	0.90	0.86	−21 − 9 + 3 −11 + 3 +11 + 3 −26 +25 − 4	0	0.23
112944	22 52 28.43	−21 10 58.9	8.76	G	343.118 463 65	−21.183 034 94	5.63	3.34	14.33	1.15	0.73	1.48	1.39	1.02	+26 − 1 − 2 −14 +17 + 9 +16 − 6 +41 +34	0	−1.68
112945	22 52 29.33	+41 22 28.0	9.50	G	343.122 226 92	+41.374 453 59	1.72	7.75	−5.82	0.76	0.87	1.28	0.81	0.99	+ 2 + 4 +20 +30 + 1 +11 +10 −33 − 2 +20	0	0.51
112946	22 52 30.05	+67 59 36.5	7.53	G	343.125 198 08	+67.993 469 16	17.21	80.88	59.22	0.51	0.50	0.59	0.56	0.52	−12 + 2 + 9 +22 + 5 − 1 + 4 − 6 +13 −13	0	0.33
112947	22 52 30.56	+62 26 26.0	8.01	H	343.127 323 00	+62.440 548 28	0.22	−1.63	−2.72	0.65	0.73	0.81	0.73	0.80	−12 +23 − 9 + 0 − 2 −14 + 2 −41 +23 −14	0	−2.23
112948 H	22 52 31.56	−32 52 31.6	4.46	G	343.131 491 28	−32.875 450 19 A	14.67	−33.32	−22.15	0.81	0.59	0.81	0.94	0.69	+27 +16 −15 −12 +18 −26 + 6 − 5 −12 +34	3	1.12
112949	22 52 32.46	+47 45 36.5	8.14	H	343.135 239 21	+47.760 134 19	1.25	1.62	−1.89	0.54	0.55	0.88	0.53	0.61	−27 +32 − 9 − 2 +14 −12 +28 −29 +31 − 7	0	−1.37
112950	22 52 32.87	+03 33 08.1	6.64	H	343.136 947 46	+03.552 238 23	3.65	10.35	−2.90	0.74	0.51	0.95	1.18	0.75	+25 + 3 −18 + 1 + 9 + 8 − 9 −54 +40 −12	0	−0.92
112951	22 52 33.03	+76 01 39.5	9.37	H	343.137 615 18	+76.027 630 64	21.14	288.37	112.46	0.73	0.70	0.82	0.83	0.81	− 1 − 2 +11 +10 −10 −16 − 8 −10 + 1 + 8	0	0.41
112952	22 52 33.90	+35 20 15.4	7.13	H	343.141 266 45	+35.337 605 13	2.79	14.79	−7.25	0.57	0.47	0.83	0.66	0.63	+ 9 +29 +24 +23 − 7 − 5 + 1 −13 +10 +12	0	0.72
112953	22 52 34.22	+07 39 26.5	7.71	G	343.142 568 58	+07.657 374 79	6.86	−41.80	−79.57	0.96	0.59	1.22	1.53	1.00	+21 −17 −26 − 4 +13 −10 −11 −55 +45 −16	0	0.73
112954	22 52 34.95	−45 52 52.0	10.30	G	343.145 629 15	−45.881 111 86	7.63	3.00	−21.57	1.86	1.16	1.93	2.53	1.40	− 5 + 4 − 8 − 8 +17 +27 +19 −11 + 7 +16	4	1.14
112955	22 52 35.25	+06 01 14.2	8.55	H	343.146 892 43	+06.020 602 22	7.23	85.28	54.87	1.05	0.63	1.29	1.48	0.94	+14 +11 −15 +13 + 0 +37 + 4 −41 +33 +14	0	−1.01
112956	22 52 35.29	+56 31 13.1	7.58	H	343.147 033 22	+56.520 296 89	0.60	1.58	−1.68	0.52	0.53	0.68	0.66	0.63	−17 − 1 + 7 + 1 + 4 +12 + 4 −12 +19 − 2	0	−1.54
112957	22 52 35.38	+56 42 34.9	7.39	G	343.147 398 19	+56.709 700 19	8.57	93.70	34.90	0.53	0.49	0.66	0.66	0.61	−18 − 4 +11 +11 − 6 + 5 − 6 − 7 + 8 − 1	0	0.01
112958	22 52 35.71	−19 02 16.4	6.99	G	343.148 783 46	−19.037 884 97	13.32	−94.84	−32.21	0.90	0.53	0.93	1.05	0.62	+10 + 0 + 0 +29 − 7 + 8 −11 − 7 +29 − 1	2	1.88
112959	22 52 35.98	−15 18 20.6	9.62	G	343.149 918 51	−15.305 712 28	11.00	203.83	−75.36	1.46	0.86	1.60	1.94	1.22	+ 3 +31 −20 −26 +22 + 6 +35 −18 +40 − 6	0	0.57
112960	22 52 36.08	+10 13 14.0	7.26	1 H	343.150 321 48	+10.220 548 15	16.26	166.57	−89.35	0.72	0.51	0.86	0.85	0.67	+22 + 1 +10 −13 + 3 +14 + 1 −33 + 1 +15	0	−0.13
112961	22 52 36.86	−07 34 46.8	3.73	2 H	343.153 601 92	−07.579 678 78 *	8.33	19.51	32.71	1.17	0.64	1.13	1.63	0.82	+14 −17 − 1 −25 +18 +38 +10 −46 +11 −16	0	0.31
112962	22 52 37.42	−20 04 13.7	9.51	H	343.155 897 66	−20.070 463 29	7.97	81.30	−47.08	1.32	0.89	1.48	1.79	1.11	+17 − 2 − 9 −15 +17 + 6 +14 −19 +23 + 1	0	−0.66
112963	22 52 37.79	+13 23 27.9	9.34	H	343.157 459 56	+13.391 088 50	5.41	−64.66	−19.87	1.13	0.81	1.45	1.52	1.31	+21 + 9 −22 −35 − 6 −11 − 5 −55 +31 +14	0	0.43
112964	22 52 38.10	+50 42 17.7	7.07	2 H	343.158 729 40	+50.704 929 07	1.65	−21.41	−11.98	0.44	0.51	0.70	0.48	0.50	−25 −11 +36 − 3 + 3 − 5 + 7 −13 + 5 − 5	2	0.36
112965	22 52 38.17	−52 13 30.8	8.17	H	343.159 043 68	−52.225 208 66	10.42	−23.15	−48.22	0.76	0.66	1.00	0.76	0.69	+ 4 + 7 − 1 −10 +18 +19 +19 + 8 +16 +12	0	0.18
112966	22 52 39.14	+47 44 03.5	9.26	H	343.163 074 81	+47.734 302 14	3.69	−5.65	−10.85	0.70	0.74	1.17	0.70	0.80	−23 +23 + 0 − 4 +11 −17 +24 −28 +30 − 6	1	−1.03
112967 H	22 52 40.03	−02 37 33.2	7.73	H	343.166 787 71	−02.625 881 55 A	3.23	23.72	5.72	1.21	0.78	1.16	1.30	0.98	+19 − 5 −18 −13 + 4 +17 +11 −25 + 0 +22	0	−0.15
112968	22 52 41.31	+42 33 12.1	9.31	H	343.172 114 22	+42.553 359 31	3.67	4.89	−6.21	0.73	0.76	1.25	0.76	0.78	− 5 +19 + 9 +21 +15 +10 +24 −20 +17 +15	0	1.46
112969	22 52 41.89	+58 48 23.2	7.88	H	343.174 542 94	+58.806 451 34	4.14	26.47	4.68	0.69	0.66	0.85	0.80	0.78	−22 +14 + 9 + 8 − 1 + 6 − 1 − 8 +12 −31	0	0.59
*112970 H	22 52 42.16	+67 59 24.0	6.98	G	343.175 659 65	+67.990 011 47 A	17.27	78.49	63.42	0.98	1.16	0.68	0.67	0.61	−26 + 7 − 1 +14 − 2 + 7 + 2 −25 +14 − 3	2	−0.01
*112971	22 52 42.15	−29 10 53.9	7.69	H	343.175 640 24	−29.181 636 68	2.34	24.30	−8.16	0.77	0.61	0.89	0.98	0.69	+28 + 5 − 1 + 9 +19 +12 +19 +18 − 2 +17	0	−0.44
112972 H	22 52 45.81	+60 54 58.7	7.42	2 H	343.190 855 44	+60.916 307 34 A	3.89	−5.33	−11.10	0.88	0.94	0.98	1.11	1.06	−19 +12 − 3 +22 +23 + 4 +15 −12 +12 −25	2	0.28
112973	22 52 45.88	−54 00 16.7	9.74	H	343.191 160 64	−54.004 633 67	10.87	−38.12	−55.09	1.47	1.71	2.43	1.80	1.72	+17 − 8 + 1 +14 − 3 + 9 − 3 −19 − 5 +15	0	
112974	22 52 46.36	−10 03 32.0	6.74	G	343.193 185 15	−10.058 885 74	25.59	251.14	7.35	1.08	0.55	1.17	1.84	0.95	− 1 +27 − 9 −17 +24 −31 +27 −28 +54 −44	0	−0.48
112975	22 52 48.06	−64 54 28.5	7.61	H	343.200 251 13	−64.907 929 76	2.81	46.15	−26.07	0.53	0.54	0.77	0.64	0.55	−18 + 6 −16 + 1 + 6 + 6 +10 −20 + 4 + 0	0	−1.31
*112976	22 52 48.27	−66 43 45.0	8.91	H	343.201 131 68	−66.729 172 70	10.73	106.05	−88.10	0.69	0.73	0.99	0.85	0.78	+ 6 −10 −25 − 1 + 3 − 3 + 2 + 6 −10 + 9	0	0.35
*112977	22 52 48.17	−25 30 49.7	8.36	H	343.200 716 26	−25.513 809 95	8.48	7.06	−23.45	1.07	0.80	1.16	1.34	0.88	+16 − 5 −27 −30 + 6 + 5 + 2 −47 +19 − 1	0	1.01
112978	22 52 48.35	−28 47 40.3	11.82	G	343.201 440 81	−28.794 518 06	51.42	−407.77	−277.61	2.61	1.87	2.90	3.45	2.20	+15 + 2 −13 −13 +17 − 2 +15 − 4 + 2 + 9	0	−1.07
112979	22 52 48.70	+29 26 27.7	8.46	H	343.202 904 10	+29.441 029 35	7.48	−49.13	−28.88	0.69	0.52	1.11	0.84	0.79	+15 + 5 +17 −23 − 5 +17 − 6 −19 +29 +17	0	0.37
112980	22 52 49.22	−13 05 58.7	8.08	H	343.205 069 92	−13.099 645 89	2.00	−33.89	−22.57	0.92	0.65	1.07	1.08	0.84	+23 + 9 −13 + 2 +10 +29 +18 + 8 +20 +31	0	0.82
112981	22 52 49.35	+46 32 54.3	6.82	H	343.205 622 55	+46.548 430 06	4.38	10.72	−8.05	0.38	0.42	0.64	0.42	0.48	−26 +15 + 4 + 6 +10 −10 +19 −26 +22 −11	0	1.19
112982	22 52 50.03	−41 00 13.3	8.34	H	343.208 455 60	−41.003 681 29	4.62	10.51	5.68	0.77	0.65	1.07	0.93	0.79	+16 − 3 −18 +18 − 4 +32 + 2 + 9 +24 +34	0	0.11
112983	22 52 50.20	+63 24 48.4	8.98	H	343.209 177 63	+63.413 449 54	1.39	−2.92	−3.94	0.77	0.75	0.90	0.90	0.86	−14 − 8 + 5 + 8 − 6 + 1 − 7 − 7 +12 −18	1	−0.95
112984	22 52 50.88	−62 48 57.0	7.56	H	343.211 997 56	−62.815 837 71	3.80	28.64	13.51	0.47	0.51	0.76	0.54	0.55	−12 + 1 −14 − 7 + 8 + 0 + 7 − 2 −12 + 3	0	0.29
112985	22 52 51.87	−25 12 24.9	8.37	1 H	343.216 107 13	−25.206 922 95	2.49	6.15	−6.08	1.42	1.00	1.55	1.69	1.12	+40 −31 −49 −40 −13 +16 −18 −47 +39 +34	0	0.06
112986	22 52 52.23	+50 24 44.2	6.46	H	343.217 643 68	+50.412 288 25	4.12	15.76	−1.34	0.40	0.45	0.60	0.43	0.49	−18 + 1 +24 + 1 + 2 −14 + 8 −13 + 2 − 3	1	1.33
112987	22 52 54.24	+38 36 57.8	6.93	1 H	343.225 980 06	+38.616 043 94	−0.08	10.92	−13.15	0.64	0.49	0.87	0.74	0.59	+ 2 +26 +25 +25 − 4 − 1 + 9 −27 + 0 +21	0	−1.36
112988	22 52 54.61	+59 44 34.5	8.65	H	343.227 532 96	+59.742 913 40	1.06	−2.87	4.99	0.75	0.72	0.86	1.02	0.85	−32 − 3 +10 +33 −13 −14 −14 −11 +17 −39	0	0.01
112989	22 52 56.47	−30 13 25.4	8.47	H	343.235 278 21	−30.223 718 37	4.72	−11.99	−30.92	1.00	0.69	1.08	1.26	0.82	+ 7 + 6 − 3 −15 +24 + 2 +25 +11 − 2 − 1	0	0.61
112990	22 52 58.59	+49 51 53.2	8.51	G	343.244 117 10	+49.864 786 33	−0.62	−5.27	−4.29	0.62	0.66	0.95	0.64	0.72	− 8 +16 +11 + 3 + 4 − 5 + 8 − 6 +12 + 5	2	0.52
112991	22 52 59.47	−27 14 38.6	11.09	G	343.247 786 64	−27.244 052 40	5.71	111.12	−55.03	2.12	1.48	2.26	2.36	1.50	+ 7 +13 −23 −43 +24 −14 +26 −14 +21 − 7	0	−0.74
112992	22 53 00.04	−51 40 51.2	9.70	H	343.250 179 60	−51.680 885 53	8.87	4.89	−84.29	1.05	0.97	1.49	1.27	1.03	+11 − 2 − 8 − 1 +12 + 9 +11 + 1 +17 + 0	0	1.26
112993	22 53 00.73	+04 02 08.5	8.38	H	343.253 039 38	+04.035 692 33	−0.41	11.20	−16.21	1.03	0.67	1.21	1.97	1.07	+15 +10 −11 −27 +20 − 9 + 7 −55 +31 −29	0	−0.77
112994	22 53 01.05	+15 47 17.2	10.58	3 H	343.254 382 47	+15.788 101 53	−0.21	−24.17	−65.42	1.43	0.96	1.82	1.60	1.39	+19 +14 − 7 + 1 −11 +17 −12 −53 +30 +13	3	0.66
112995	22 53 01.13	−44 51 31.4	7.90	H	343.254 700 38	−44.858 734 52	2.62	30.44	−40.94	0.79	0.66	1.02	1.06	0.77	+ 7 + 4 −23 +22 −13 +27 − 6 −12 + 5 +12	0	0.22
112996	22 53 01.64	−54 49 45.6	9.31	H	343.256 820 14	−54.829 345 19	3.77	5.23	−12.04	0.84	0.97	1.38	1.14	1.05	+24 + 4 −23 +24 +19 + 5 +21 + 8 − 5 +42	0	−0.07
112997	22 53 02.28	+16 50 28.5	5.86	2 H	343.259 494 61	+16.841 261 06	10.33	−20.97	−27.59	0.63	0.43	0.76	0.61	0.57	+13 + 5 −21 + 9 −12 −10 −18 −48 +24 + 7	2	0.26
112998	22 53 03.77	+60 06 03.7	6.01	G	343.265 707 20	+60.101 023 27	2.51	12.75	2.24	0.47	0.49	0.57	0.62	0.59	−26 +14 + 2 +16 +11 −10 +17 −10 −29	0	−0.75
112999	22 53 04.38	+45 25 46.2	10.01	H	343.268 240 09	+45.429 499 73	−0.38	6.59	−5.33	0.82	0.96	1.55	0.84	0.96	−33 + 9 + 8 + 3 +15 − 4 +24 −21 +17 − 7	0	3.10
113000	22 53 05.14	+02 30 24.0	9.60	G	343.271 431 93	+02.506 672 47	14.46	−150.16	−83.37	1.21	0.90	1.53	1.95	1.40	+30 −14 − 8 −23 + 8 +15 −10 −61 +26 + 2	0	1.49

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
112901	8.206	0.008	8.103	0.009	C	0.110	0.400	G	0.09	0.02	L *		8.0983	0.0014	0.015	162	*	8.07	8.13		D	22518+4119	I 3	2 C A	CD	139	5.025	0.023	3.09	0.10	S
112902	9.878	0.028	8.764	0.018		0.960	0.026	T	0.95	0.02	L		8.8307	0.0022	0.014	71		8.81	8.86		C			1							
112903	8.853	0.010	8.591	0.011		0.249	0.014	T	0.28	0.02	L		8.6190	0.0015	0.017	119		8.59	8.66			22518+3943	I 1	1							
112904	8.535	0.009	8.100	0.009		0.438	0.015	G	0.51	0.02	H		8.1488	0.0017	0.013	138		8.13	8.17			22518+5311	I 1	1							
112905	7.076	0.005	7.056	0.005		0.010	0.015	G	0.02	0.01	L		7.0767	0.0013	0.012	158		7.06	7.10		D	22518+4119	I 3	1							S
112906	9.450	0.015	9.484	0.021		−0.002	0.002	G	0.02	0.00	H		9.4966	0.0024	0.020	110		9.46	9.53					1							
112907	8.319	0.007	7.273	0.005		0.909	0.006	T	0.91	0.00	L		7.3193	0.0009	0.011	204		7.30	7.34		C			1							S
112908	9.395	0.027	8.599	0.023	*	0.925	0.015	G	0.92	0.01	H *		8.8979	0.0019	0.018	85	*	8.86	8.92		D	22518−4647	I 1	2 C A	AB	340	1.912	0.004	0.17	0.02	
112909						1.500	0.020	G	2.07	0.15	I		11.6358	0.0044	0.047	152		11.56	11.73					1							G
112910	10.304	0.031	9.749	0.029		0.525	0.032	T	0.60	0.03	L		9.8077	0.0030	0.027	102		9.76	9.85		C			1							
112911	9.608	0.017	8.500	0.011		0.955	0.016	T	0.94	0.01	L		8.5546	0.0013	0.012	120		8.53	8.58		C			1							
112912	8.500	0.009	8.481	0.012		0.022	0.014	T	0.04	0.01	L		8.4994	0.0014	0.017	148		8.47	8.53					1							
112913	10.868	0.035	9.928	0.025		0.816	0.033	T	0.84	0.02	L		9.9614	0.0026	0.034	182		9.88	10.02					1	S						
112914	11.091	0.042	9.806	0.023		1.060	0.020	G	1.12	0.03	I		9.8044	0.0035	0.033	156		9.74	9.86		R			1							
112915	9.444	0.017	8.224	0.011	*	1.043	0.016	T	1.01	0.01	L *		8.1803	0.0019	0.017	118	*	8.16	8.20		D	22520+5743	I 1	2 C A	AB	163	0.808	0.003	0.85	0.01	
112916	9.049	0.010	8.544	0.010		0.485	0.011	T	0.56	0.01	L		8.5890	0.0016	0.017	172		8.55	8.62					1							S
112917	7.002	0.005	5.126	0.002		1.559	0.010	G	1.71	0.05	F		5.0542	0.0006	0.007	148		5.04	5.07		M	22520+4319	I 1	1							S
112918	11.411	0.066	9.930	0.029		1.200	0.015	G	1.33	0.03	I		9.9099	0.0031	0.027	96		9.87	9.95					1							
112919	12.173	0.122	10.183	0.033		1.649	0.101	T	1.67	0.10	L		10.1065	0.0057	0.057	127		10.05	10.21		U 2			1	S						
112920	10.393	0.042	9.796	0.039		0.642	0.005	G	0.71	0.00	H		9.8099	0.0026	0.017	63		9.77	9.85					1							
112921	8.560	0.009	8.435	0.010		0.121	0.013	T	0.14	0.01	L		8.4658	0.0018	0.018	146		8.43	8.49					1							
112922	9.121	0.015	7.718	0.009		1.186	0.014	T	1.15	0.01	L		7.7662	0.0017	0.011	95		7.74	7.79					1							S
112923	10.793	0.051	10.135	0.044		0.610	0.057	T	0.68	0.05	L		10.2158	0.0026	0.022	90		10.18	10.26		C			1							
112924	7.468	0.005	6.265	0.003	*	1.025	0.001	G	1.00	0.00	K *		6.3029	0.0007	0.009	188	*	6.29	6.32		D	22522−6311	I 1	2 C A	AB	340	0.855	0.006	2.59	0.02	S
112925	8.194	0.009	7.874	0.008		0.262	0.002	G	0.29	0.00	H		7.9257	0.0011	0.012	110		7.91	7.95					1							S
112926	9.450	0.020	8.920	0.019		0.497	0.025	T	0.57	0.03	L		8.9363	0.0020	0.015	69		8.92	8.97		C			1							S
112927	9.882	0.022	8.970	0.016		0.794	0.021	T	0.83	0.01	L		9.0373	0.0012	0.018	116		9.01	9.07		D			1							
112928	8.595	0.009	8.381	0.010		0.204	0.013	T	0.22	0.01	L		8.4066	0.0015	0.017	112		8.38	8.46		P 1 A			1 V							
112929	10.350	0.033	8.586	0.014		1.470	0.028	T	1.48	0.04	L		8.5473	0.0017	0.017	110		8.52	8.58					1							
112930	7.861	0.007	7.405	0.008		0.430	0.015	G	0.50	0.02	H		7.4522	0.0016	0.013	80		7.43	7.47					1							S
112931	9.983	0.023	8.061	0.010		1.595	0.020	T	1.61	0.02	L		7.9937	0.0018	0.018	114		7.97	8.02					1							
112932	7.321	0.005	6.900	0.005		0.398	0.007	T	0.46	0.01	L		6.9501	0.0009	0.009	126		6.94	6.97					1							S
112933	8.807	0.010	7.161	0.005		1.377	0.009	T	1.35	0.01	L		7.1623	0.0012	0.013	137		7.14	7.18					1							S
112934	11.753	0.124	10.929	0.099		0.664	0.015	G	0.73	0.01	H		10.9731	0.0042	0.034	68		10.92	11.02		C			1							G
112935	5.731	0.003	5.212	0.003		0.487	0.004	T	0.56	0.00	L		5.2642	0.0006	0.006	128		5.26	5.28					1							S
112936	8.527	0.011	8.114	0.012	*	0.390	0.015	T	0.46	0.02	L *		8.2474	0.0015	0.011	110	*	8.23	8.27		D	22524−2143	I 1	2 C A	AB	278	2.837	0.004	0.10	0.02	S
112937	8.638	0.009	8.327	0.010		0.295	0.013	T	0.34	0.02	L		8.4085	0.0017	0.019	163		8.38	8.44					1							
112938	9.123	0.014	7.980	0.010		0.983	0.013	T	0.96	0.01	L		8.0314	0.0014	0.012	95		8.00	8.05					1							S
112939	9.149	0.017	7.429	0.008		1.439	0.039	G	1.56	0.02	A		7.3853	0.0017	0.016	84		7.36	7.41					1							S
112940	8.857	0.013	7.610	0.008		1.064	0.012	T	1.03	0.01	L		7.6545	0.0017	0.012	88		7.64	7.68		C			1							S
112941	9.884	0.026	8.396	0.014		1.252	0.023	T	1.21	0.02	L		8.4095	0.0011	0.011	72		8.39	8.42		D			1							S
112942	9.986	0.022	9.715	0.025		0.258	0.031	T	0.29	0.04	L		9.7277	0.0028	0.026	119		9.69	9.78		C			1							
112943	11.266	0.065	9.154	0.019		1.786	0.056	T	2.50	0.09	O		8.9545	0.0020	0.023	119		8.92	8.99					1							
112944	9.120	0.015	8.775	0.016		0.280	0.015	G	0.32	0.02	H		8.8417	0.0018	0.016	88		8.82	8.86		C			1							S
112945	9.606	0.018	9.471	0.022		0.120	0.015	G	0.13	0.01	H		9.5347	0.0025	0.025	157		9.49	9.58		C			1							
112946	8.063	0.009	7.568	0.007		0.470	0.012	G	0.54	0.01	H		7.6389	0.0013	0.013	140		7.61	7.66			22526+6759	I 2	1							S
112947	8.577	0.011	8.074	0.010		0.484	0.011	T	0.56	0.01	L		8.1182	0.0017	0.015	117		8.10	8.14		C			1							
112948	3.962	0.020	3.977	0.024	*	−0.037	0.007	G	−0.01	0.02	A *		4.4672	0.0007	0.005	84	*	4.46	4.48		D	22525−3253	I 1	2 C A	AB	258	4.101	0.025	3.70	0.09	S
112949	8.180	0.007	8.126	0.009		0.055	0.011	T	0.07	0.01	L		8.1649	0.0014	0.014	179		8.14	8.20		C			1							S
112950	6.834	0.004	6.656	0.004		0.171	0.005	T	0.19	0.01	L		6.6941	0.0006	0.006	131		6.68	6.71					1							S
112951	10.458	0.035	9.425	0.023		0.888	0.033	T	0.93	0.03	L		9.5129	0.0023	0.018	107		9.49	9.54					1							
112952	7.314	0.005	7.144	0.005		0.163	0.007	T	0.18	0.01	L		7.1878	0.0010	0.011	144		7.17	7.21		C			1							S
112953	8.150	0.007	7.748	0.007		0.397	0.015	G	0.46	0.02	H		7.8010	0.0009	0.009	111		7.78	7.82		C			1							S
112954	11.131	0.066	10.402	0.059		0.680	0.020	G	0.74	0.02	H		10.4629	0.0048	0.035	64		10.40	10.52		C			1							
112955	9.086	0.012	8.608	0.012		0.450	0.015	T	0.52	0.02	L		8.6510	0.0022	0.021	117		8.62	8.70					1							S
112956	9.765	0.020	7.752	0.008		1.668	0.017	T	1.69	0.02	L		7.6838	0.0013	0.012	125		7.66	7.70		C			1							
112957	8.037	0.008	7.467	0.009		0.548	0.011	G	0.62	0.01	H		7.5118	0.0009	0.009	125		7.50	7.53		C			1 G							S
112958	7.557	0.008	7.061	0.008		0.495	0.015	G	0.57	0.02	H		7.0966	0.0015	0.008	75		7.08	7.11					1							S
112959	10.408	0.040	9.670	0.033		0.678	0.003	G	0.74	0.00	H		9.7619	0.0020	0.019	71		9.73	9.80		C			1							
112960	7.822	0.006	7.310	0.007		0.498	0.015	G	0.57	0.02	H		7.3645	0.0028	0.020	126		7.34	7.40	0.81	P 1 A			1							S
112961	5.852	0.005	3.938	0.005		1.626	0.044	G	2.07	0.02	A		3.8072	0.0040	0.029	66		3.78	3.85		U 2			1 V							S
112962	10.151	0.033	9.584	0.031		0.534	0.034	T	0.61	0.04	L		9.6256	0.0023	0.019	65		9.59	9.66		C			1							S
112963	10.038	0.025	9.367	0.022		0.621	0.028	T	0.69	0.03	L		9.4701	0.0021	0.020	110		9.43	9.51					1							
112964	9.283	0.013	7.301	0.005		1.679	0.011	T	2.35	0.03	O		7.1209	0.0027	0.025	151		7.08	7.16		U 2			1	S						S
112965	8.700	0.011	8.234	0.010		0.451	0.014	G	0.52	0.01	H		8.2737	0.0017	0.015	110		8.25	8.31		C			1							S
112966	9.418	0.014	9.253	0.017		0.158	0.021	T	0.17	0.02	L		9.3174	0.0020	0.022	176		9.28	9.35		C			1							
112967	8.931	0.013	7.845	0.009	*	0.939	0.012	T	0.93	0.01	L *		7.8914	0.0014	0.011	107	*	7.88	7.91		D	22527−0238	H 1	2 C A	AB	118	0.669	0.016	3.04	0.07	S
112968	9.471	0.014	9.320	0.017		0.130	0.015	G	0.14	0.01	H		9.3594	0.0019	0.024	184		9.31	9.41		C			1							
112969	8.014	0.010	7.891	0.011		0.111	0.014	T	0.12	0.01	L		7.9261	0.0016	0.016	110		7.90	7.96					1							S
112970	7.477	0.006	7.014	0.006	*	0.420	0.015	G	0.49	0.02	H *		7.0744	0.0011	0.011	140	*	7.06	7.09		C	22526+6759	I 2	2 C C	AD	334	0.374	0.025	3.68	0.16	S
112971	8.957	0.014	7.797	0.009		0.996	0.013	T	0.97	0.01	L		7.8555	0.0013	0.011	88		7.83	7.87		C			1							S
112972	8.079	0.025	7.444	0.021	*	0.590	0.029	T	0.66	0.03	L *		7.5501	0.0037	0.046	112	*	7.52	7.65	1.18	P 1 A	22528+6055	I 1	2 C A	AB	138	8.387	0.011	2.51	0.06	S
112973	10.598	0.033	9.820	0.026		0.692	0.032	T	0.75	0.03	L		9.8771	0.0034	0.036	137		9.79	9.95					1 X							
112974	7.377	0.007	6.801	0.006		0.524	0.003	G	0.60	0.00	H		6.8508	0.0009	0.008	67		6.84	6.87					1							S
112975	9.401	0.013	7.758	0.007		1.375	0.012	T	1.35	0.01	L		7.7541	0.0012	0.014	169		7.73	7.78					1							S
112976	10.183	0.023	8.975	0.014		1.033	0.021	T	1.08	0.03	L		9.0429	0.0021	0.019	137		9.01	9.10		C			1							
112977	8.926	0.015	8.423	0.015		0.495	0.015	G	0.57	0.02	H		8.4674	0.0013	0.015	89		8.44	8.50		D			1							S
112978						1.533	0.015	G	2.32	0.11	I		11.9409	0.0083	0.061	86		11.83	12.06					1							G
112979	8.958	0.009	8.507	0.009		0.430	0.015	G	0.50	0.02	H		8.5560	0.0012	0.015	190		8.53	8.58		C			1							
112980	9.855	0.024	8.222	0.012		1.367	0.021	T	1.34	0.03	L		8.2339	0.0015	0.015	86		8.21	8.27					1							S
112981	6.769	0.003	6.810	0.004		−0.033	0.005	T	−0.01	0.01	L		6.8179	0.0008	0.010	222		6.80	6.83		C			1							S
112982	8.788	0.012	8.381	0.012		0.400	0.015	G	0.47	0.02	H		8.4265	0.0015	0.016	97		8.39	8.46					1							S
112983	9.720	0.021	9.090	0.018		0.581	0.020	T	0.65	0.02	L		9.1077	0.0016	0.018	116		9.08	9.14		C			1							
112984	8.680	0.008	7.650	0.006		0.897	0.007	T	0.90	0.01	L		7.7166	0.0011	0.014	196		7.69	7.74					1							S
112985	9.571	0.021	8.474	0.014		0.947	0.019	T	0.94	0.01	L		8.5334	0.0040	0.028	86		8.50	8.57		U			1 G							S
112986	6.402	0.003	6.457	0.004		−0.047	0.004	T	−0.03	0.00	L		6.4562	0.0008	0.008	160		6.44	6.47					1							S
112987	9.140	0.012	7.113	0.005		1.716	0.011	T	1.92	0.03	O		7.0151	0.0016	0.019	127		6.99	7.05		U 2			1							S
112988	10.169	0.029	8.743	0.016		1.204	0.026	T	1.16	0.03	L		8.8106	0.0017	0.015	113		8.78	8.86		C			1							
112989	10.049	0.025	8.603	0.014		1.219	0.022	T	1.18	0.02	L		8.6367	0.0020	0.013	86		8.61	8.67		C	22529−3013	I 1	1							
112990	8.455	0.008	8.466	0.011		−0.016	0.009	G	0.01	0.01	H		8.5131	0.0020	0.022	149		8.47	8.54					1							
112991						0.684	0.015	G	0.74	0.01	H		11.2474	0.0052	0.042	92		11.18	11.31		C			1							G
112992	10.647	0.036	9.757	0.027		0.777	0.035	T	0.81	0.03	L		9.8368	0.0031	0.026	102		9.78	9.89		C			1							
112993	10.409	0.027	8.548	0.011		1.547	0.023	T	1.61	0.05	L		8.4923	0.0017	0.017	117		8.46	8.53					1							
112994	11.024	0.045	10.418	0.041		0.565	0.053	T	0.64	0.05	L		10.6627	0.0268	0.216	120		10.22	10.88	0.64	P 1 A			1	S						G
112995	9.554	0.021	8.066	0.011		1.252	0.019	T	1.21	0.02	L		8.0641	0.0014	0.013	80		8.04	8.09		C			1							
112996	11.401	0.063	9.515	0.021		1.600	0.055	T	2.09	0.12	O		9.3828	0.0029	0.024	135		9.34	9.44					1							
112997	7.346	0.006	6.012	0.005		1.132	0.006	T	1.10	0.01	L		6.0330	0.0033	0.042	138		6.00	6.12		U 2 C			1							S
112998	8.276	0.010	6.210	0.004		1.748	0.015	G	1.80	0.01	M		6.1201	0.0012	0.010	120		6.11	6.14					1							S
112999	10.205	0.017	10.020	0.021		0.177	0.025	T	0.19	0.03	L		10.0712	0.0029	0.039	247		10.00	10.13					1							G
113000	10.628	0.036	9.661	0.024		0.807	0.005	G	0.85	0.01	H		9.7467	0.0018	0.020	125		9.71	9.78		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s	±° ′ ″	mag	6 7	deg	deg	10	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	% 29	30
113001	22 53 05.96	+07 28 19.8	11.35	G	343.274 834 39	+07.472 166 85		18.31	60.00	−82.13	2.67	1.70	3.09	4.61	2.61	+30	− 7	−10	+ 9	+11	+14	−26	−66	+26	−20	0	0.06
113002	22 53 06.58	−25 08 52.9	8.00	H	343.277 411 29	−25.148 037 88		7.95	−38.35	−17.78	1.17	0.87	1.41	1.36	0.96	+50	−44	−53	−42	−18	+28	−21	−45	+40	+44	0	0.33
113003	22 53 07.35	+43 03 21.5	8.80	H	343.280 620 23	+43.055 964 28		2.85	−0.18	−6.00	0.65	0.74	1.12	0.69	0.75	−12	+10	+12	+13	+16	+ 4	+23	−26	+10	+ 5	0	0.17
113004	22 53 07.41	−49 33 38.9	9.45	G	343.280 858 61	−49.560 809 67		3.79	−19.81	4.30	0.75	0.93	1.37	0.85	0.97	+21	− 8	−29	−25	− 4	+ 9	− 4	− 7	+ 8	+30	0	−0.19
113005	22 53 09.17	+26 58 39.0	7.42	H	343.288 187 93	+26.977 486 66		3.87	−3.10	−34.14	0.49	0.44	0.84	0.56	0.65	+38	+ 0	+ 2	− 1	+ 4	+ 4	+14	−12	+11	+65	0	−1.22
113006 H	22 53 10.13	+50 09 01.8	9.84	H	343.292 215 14	+50.150 486 67	A	1.44	−7.34	−4.65	1.47	1.59	2.06	1.42	1.47	+ 3	+12	+34	+ 7	+ 7	+ 0	+12	− 8	− 2	+21	1	−0.02
113007	22 53 10.23	+23 57 32.3	10.46	H	343.292 614 04	+23.958 966 41		4.66	−101.91	−67.71	1.36	0.92	1.71	1.56	1.40	+ 8	+ 7	− 9	+12	− 5	−11	−11	−33	+34	− 9	0	1.77
113008	22 53 11.12	+01 14 44.7	9.82	H	343.296 344 41	+01.245 756 62		3.95	8.64	−1.70	1.49	0.98	1.86	2.13	1.75	+29	− 1	− 5	−14	− 2	+24	+ 4	−46	+30	+35	0	1.26
113009	22 53 11.37	+40 10 02.6	6.33	H	343.297 375 55	+40.167 383 20		2.57	9.14	−8.93	0.58	0.48	0.79	0.71	0.59	+11	+32	+20	+17	+ 0	−10	+17	−30	− 7	+44	0	−0.45
*113010 H	22 53 11.69	−37 50 20.4	9.36	H	343.298 695 70	−37.839 010 53	A	21.08	118.58	−66.10	1.90	2.74	2.10	1.82	1.60	+15	−10	− 9	+ 0	− 2	+24	+ 0	− 6	+11	+37	1	1.13
*113011	22 53 11.61	−05 20 02.6	9.61	H	343.298 369 66	−05.334 041 81		−0.39	−2.55	−7.39	1.40	0.96	1.81	1.70	1.45	+31	− 6	−21	− 1	− 4	+16	− 5	−34	+50	+26	2	1.22
113012	22 53 12.02	+45 41 35.2	7.98	H	343.300 074 46	+45.693 102 14		4.50	−3.51	−15.26	0.47	0.55	0.90	0.53	0.61	−31	− 4	+14	− 3	+16	− 6	+19	−16	+ 8	− 6	1	−0.45
113013	22 53 12.82	+49 20 56.2	9.19	H	343.303 396 01	+49.348 947 76		2.43	16.84	2.34	0.74	0.79	1.12	0.85	1.01	−14	+ 1	+20	− 4	+ 7	− 3	+ 8	+ 8	+13	− 3	1	2.13
113014 H	22 53 14.34	−11 02 25.6	9.17	H	343.309 740 21	−11.040 436 50	*	1.81	12.05	−25.22	2.13	5.07	2.23	2.85	2.25	+36	− 1	−16	+10	−26	+37	−19	−56	+28	+46	1	0.58
*113015	22 53 15.21	−17 09 54.6	8.74	G	343.313 354 61	−17.165 163 57		3.95	10.15	−0.89	0.99	0.72	1.27	1.15	0.97	+22	+16	−17	− 9	− 8	+27	+ 4	−28	+43	+32	2	1.65
*113016	22 53 15.13	−52 08 05.0	9.59	H	343.313 024 01	−52.134 711 90		10.14	4.98	0.81	1.01	1.01	1.53	1.16	1.11	+ 9	−13	+12	− 9	+ 3	+13	+ 0	− 5	+16	+12	0	−0.81
*113017 H	22 53 15.61	+62 08 45.0	9.34	G	343.315 022 00	+62.145 840 12	A	1.19	−0.44	−4.37	1.49	1.53	1.71	1.57	1.69	−11	+27	− 4	+ 1	+ 5	− 5	+ 8	−21	+27	−16	1	1.74
*113018	22 53 15.46	−45 08 51.7	6.85	G	343.314 402 98	−45.147 694 90		7.28	62.67	−9.00	0.78	0.56	0.91	1.05	0.68	+ 5	+ 7	−20	+ 8	− 1	+18	+ 4	−13	+ 7	+14	0	−0.92
113019	22 53 16.02	−63 45 53.4	7.60	G	343.316 734 34	−63.764 831 37		11.97	56.76	−41.37	0.49	0.49	0.71	0.60	0.55	− 6	+ 0	−12	+ 9	+ 2	− 1	+ 3	− 6	+ 5	+ 9	1	−0.64
113020	22 53 16.16	−14 15 43.4	10.16	G	343.317 316 28	−14.262 058 42		212.69	960.33	−675.64	1.86	1.20	2.10	3.75	1.64	+15	+13	−25	− 2	+37	−18	+26	−13	+35	−24	0	−0.76
113021	22 53 17.04	−18 35 30.9	10.63	3 H	343.320 981 51	−18.591 925 46		2.14	10.26	−6.48	1.78	1.05	1.88	2.16	1.25	+ 8	+ 2	− 2	+ 1	+ 4	− 3	+ 2	−14	+30	−10	0	0.16
113022	22 53 18.13	−57 51 15.2	7.95	H	343.325 552 92	−57.854 221 41		1.99	24.89	−17.99	0.54	0.56	0.93	0.57	0.55	−15	−10	−14	−24	− 7	+24	− 2	−22	− 9	−14	0	−1.67
113023	22 53 20.42	+52 43 50.6	8.67	H	343.335 063 56	+52.730 721 17		4.21	3.21	−5.10	0.64	0.61	0.86	0.73	0.64	− 1	− 2	+25	− 2	+ 0	−10	+ 3	− 1	+ 5	+10	0	1.97
113024	22 53 23.47	−23 55 44.2	7.92	G	343.347 802 02	−23.928 935 96		7.96	−3.30	−38.11	0.78	0.61	0.97	1.01	0.75	+33	−13	−26	−10	+ 4	− 4	− 1	−20	+24	+35	0	−0.21
113025	22 53 24.55	+30 46 12.6	11.05	H	343.352 285 90	+30.770 180 29		10.63	−146.42	−176.97	1.47	1.01	2.28	1.59	1.70	+17	+19	+13	− 3	− 8	− 7	− 4	−23	+21	+15	0	−0.54
113026 H	22 53 24.99	−09 05 34.1	9.59	G	343.354 131 51	−09.092 813 44	A	31.02	247.29	12.53	2.20	1.46	2.20	2.30	1.81	+28	+ 8	− 1	−10	− 4	+17	− 2	−35	+27	+26	0	−0.23
113027	22 53 26.77	−28 24 56.2	7.72	H	343.361 537 04	−28.415 601 07		3.66	11.16	−19.23	0.85	0.61	0.95	1.06	0.68	+22	+ 1	− 7	+ 1	+13	− 9	+13	+13	+ 8	+16	0	−1.05
113028	22 53 27.59	−05 59 16.5	6.94	H	343.364 971 24	−05.987 928 45		9.19	−67.41	−47.29	0.76	0.48	0.86	0.92	0.65	+24	+ 5	− 7	+ 5	+ 3	+23	+ 4	−25	+27	+21	0	0.53
113029	22 53 28.28	+08 26 19.1	9.56	2 H	343.367 814 06	+08.438 632 27		0.41	9.84	−3.38	1.26	0.89	1.45	1.86	1.37	+23	− 8	− 8	−20	− 2	+17	− 9	−52	+19	+ 5	0	0.44
*113030	22 53 28.96	−30 53 45.2	9.48	G	343.370 653 92	−30.895 876 94		18.90	−8.69	−194.58	15.11	11.28	16.59	16.45	12.30	+14	− 5	−21	−39	+ 6	+11	+ 8	−21	− 1	+16	0	
*113031	22 53 28.69	−11 36 59.5	5.80	H	343.369 546 39	−11.616 518 87		4.96	23.03	1.93	0.77	0.50	0.84	1.23	0.68	+13	− 3	− 5	− 8	+16	+25	+13	−20	+13	− 6	2	−1.20
*113032	22 53 28.88	+27 43 39.1	10.69	H	343.370 322 35	+27.727 532 58		4.38	−65.36	−119.22	1.17	0.85	1.99	1.48	1.61	+31	+ 6	+13	+ 6	− 5	− 6	− 6	−10	+13	+26	0	0.45
113033	22 53 29.17	+27 45 19.5	11.46	G	343.371 551 14	+27.755 409 41		12.98	502.45	−186.49	1.67	1.18	2.65	2.15	2.30	+30	− 2	+18	+15	− 7	− 5	−13	−12	+ 6	+24	1	0.28
113034	22 53 30.58	−39 25 11.8	7.30	H	343.377 420 48	−39.419 935 03		1.87	33.89	12.80	0.68	0.57	0.96	0.89	0.77	+20	− 3	−14	+19	− 9	+36	− 1	−10	+35	+43	0	0.42
113035	22 53 31.22	+23 24 41.3	8.41	H	343.380 068 64	+23.411 478 40		3.05	18.40	−2.79	0.93	0.65	1.31	0.95	1.04	+18	+20	− 8	+13	−13	−22	−15	−45	+37	+ 2	0	−0.02
113036	22 53 31.24	+38 26 40.8	7.84	G	343.380 180 48	+38.444 660 69		4.92	6.63	−1.92	0.78	0.55	1.00	0.91	0.74	+ 8	+32	+22	+35	+ 0	+ 6	+21	−25	+10	+36	0	−1.40
113037	22 53 32.69	−02 18 20.3	8.54	H	343.386 193 10	−02.305 644 95		12.88	169.45	−32.64	0.91	0.59	1.02	1.08	0.85	+29	− 4	+ 0	+ 9	+ 6	+20	+ 8	−23	+ 8	+30	0	−1.91
113038 H	22 53 34.49	+52 41 54.0	8.37	H	343.393 725 83	+52.698 336 51	A	0.84	−2.28	−2.78	1.01	1.00	1.11	0.89	0.80	−13	+ 1	+30	−13	+ 4	+ 4	+ 3	−14	+10	− 8	0	0.31
113039	22 53 34.95	+30 45 45.6	7.54	H	343.395 627 55	+30.762 653 49		7.73	42.07	−0.81	0.59	0.44	0.92	0.63	0.70	+19	+22	+15	+ 9	− 2	−20	+ 8	+ 1	+24	+20	0	−0.04
113040	22 53 35.06	−44 52 26.2	8.58	H	343.396 099 35	−44.873 937 43		16.84	−38.54	5.18	0.98	0.75	1.17	1.28	0.91	+10	+ 5	−18	+32	− 4	+21	+ 2	− 5	+13	+17	0	0.83
113041	22 53 35.37	+04 14 03.6	8.41	H	343.397 388 08	+04.234 322 88		0.21	13.02	−2.63	1.08	0.67	1.21	1.64	1.01	+ 6	+14	−18	−43	+17	−15	+15	−54	+44	−33	0	0.66
113042	22 53 36.39	+48 46 24.6	8.89	H	343.401 612 95	+48.773 489 93		0.22	−17.05	−12.32	0.71	0.79	1.19	0.78	0.88	−26	− 3	+ 6	−15	+19	+ 0	+19	−25	+18	−23	1	−0.11
113043	22 53 37.15	+32 46 39.1	11.11	H	343.404 783 12	+32.777 535 27		4.71	149.38	80.59	1.50	0.98	2.25	2.25	1.53	− 1	+ 8	+28	+ 3	+12	+ 0	+16	− 7	+15	+11	0	−1.80
113044	22 53 37.74	−48 35 53.1	6.03	H	343.407 251 24	−48.598 087 59		30.04	216.70	−81.49	0.56	0.47	0.73	0.51	0.50	+23	−20	−34	−36	−18	+18	−18	−26	+18	+29	1	2.22
113045 H	22 53 37.88	−06 06 31.5	8.26	H	343.407 812 76	−06.108 743 11	A	2.18	−8.33	−1.12	1.58	1.05	1.64	2.19	1.26	+25	−12	−29	+13	+10	+ 6	−11	−37	+34	−21	0	−0.04
113046	22 53 38.46	+78 54 06.7	7.30	H	343.410 240 71	+78.901 870 82		3.74	8.63	4.91	0.57	0.53	0.64	0.79	0.64	− 4	−14	+18	− 1	+ 6	+ 7	+ 5	−14	− 8	− 3	0	−0.90
113047	22 53 38.71	−16 14 28.7	8.96	H	343.411 282 89	−16.241 301 36		4.61	11.17	−25.84	1.20	0.80	1.33	1.50	1.05	+12	+23	− 9	−23	+ 7	+ 7	+11	−41	+33	− 2	0	−0.35
113048 H	22 53 40.16	+44 44 57.1	5.79	G	343.417 328 10	+44.749 201 48	A	19.22	−2.97	−15.72	0.52	0.54	0.68	0.42	0.45	− 9	+ 0	+ 4	−26	+ 3	− 7	+ 1	−24	+14	+ 7	4	0.10
113049	22 53 40.22	+44 19 24.8	10.40	H	343.417 594 95	+44.323 547 49		−2.68	−1.24	−3.15	1.04	1.00	1.60	1.18	1.17	− 3	+ 2	+15	+ 9	+ 2	+17	+15	−25	−10	+29	1	1.40
113050	22 53 40.85	−15 37 33.5	8.85	H	343.420 216 51	−15.625 979 51		8.41	−67.39	−57.10	1.13	0.83	1.46	1.53	1.04	+23	+15	+ 3	− 4	+ 2	+41	− 1	−35	+36	+12	0	0.68
113051	22 53 41.39	+63 25 04.7	10.16	G	343.422 439 53	+63.417 984 18		−0.12	−2.41	−2.15	0.97	1.03	1.20	1.21	1.23	−11	− 6	+ 4	+ 6	− 7	+ 3	− 8	−10	+12	−15	1	−0.59
113052	22 53 41.59	+37 56 18.5	8.90	3 T	343.423 301 05	+37.938 477 34		12.30	88.16	10.79	0.94	0.63	1.26	1.25	0.82	+ 4	+35	+20	+ 9	− 5	+ 8	+ 9	−16	+22	+ 8	0	0.52
113053	22 53 42.27	+79 04 22.3	8.56	H	343.426 124 43	+79.072 873 93		2.11	2.27	−1.55	0.64	0.62	0.75	0.86	0.75	−14	−22	+24	+ 0	+ 8	+28	+ 3	−20	−13	−19	0	−0.63
113054	22 53 42.35	−37 35 31.9	9.12	H	343.426 474 01	−37.592 196 06		9.34	57.76	−33.00	1.05	0.80	1.23	1.17	0.91	+19	+ 9	− 5	+13	− 8	+20	− 8	− 5	+ 4	+16	0	0.29
113055 H	22 53 43.83	+25 58 00.5	10.38	H	343.432 628 17	+25.966 814 05	*	7.43	19.64	−39.31	0.98	0.80	1.62	1.07	1.17	+24	+11	+ 9	+15	+ 0	+ 4	+11	−13	+27	+46	0	0.87
113056	22 53 44.15	−04 39 26.6	7.64	H	343.433 946 62	−04.657 397 27		4.82	−0.69	−5.60	0.93	0.55	1.06	1.45	0.77	+20	+ 5	+12	+18	+20	+43	+ 9	−23	+18	+ 9	0	−0.48
113057	22 53 44.37	−45 47 36.6	10.48	H	343.434 881 57	−45.793 490 94		5.47	−53.54	−5.90	1.70	1.29	1.97	2.58	1.57	+17	− 5	− 9	−13	−17	+33	−14	−31	− 1	+12	0	1.33
113058 H	22 53 45.64	−35 59 12.6	9.24	H	343.440 148 05	−35.986 825 95	A	0.85	−12.54	−4.94	1.74	1.68	1.81	1.73	1.43	+ 9	+ 9	+ 7	+36	− 9	+16	− 9	+12	− 5	+20	1	−0.52
113059	22 53 46.57	−07 23 21.7	8.37	H	343.444 024 83	−07.389 358 96		1.44	10.10	14.44	1.09	0.67	1.19	1.74	0.93	+17	+ 1	−18	+ 3	+11	+14	+ 0	−38	+29	−15	0	1.39
113060	22 53 46.92	+16 17 31.0	10.31	H	343.445 481 50	+16.291 942 12		−4.23	−2.08	−5.26	1.57	1.02	1.93	1.65	1.52	+19	−22	− 6	+ 3	−13	−11	−26	−48	+31	+ 6	0	0.81
113061	22 53 48.27	−45 07 02.3	10.21	H	343.451 107 15	−45.117 313 29		6.02	−4.43	−21.48	1.44	1.17	1.94	2.05	1.55	+ 7	+19	− 5	+12	− 2	+35	+ 2	+ 1	+11	+23	0	1.05
113062	22 53 48.58	+48 34 25.5	8.21	H	343.452 416 11	+48.573 755 11		6.16	38.16	13.71	0.59	0.64	0.89	0.69	0.77	−40	+12	− 6	−20	+26	+ 2	+29	−34	+18	−32	0	−1.40
113063	22 53 48.77	+28 37 33.5	7.39	H	343.453 206 86	+28.625 964 04		4.56	−1.38	−52.75	0.49	0.41	0.82	0.53	0.64	+23	+11	+ 3	+ 3	− 8	− 7	− 4	−21	+26	+25	0	0.34
113064	22 53 52.15	+01 50 35.5	6.81	H	343.467 285 13	+01.843 182 02		1.92	14.86	−14.94	0.73	0.51	1.02	1.17	0.88	+37	− 4	−13	− 1	+ 8	+34	+ 9	−30	+38	+33	0	−0.86
113065	22 53 54.04	+62 35 48.4	9.06	2 H	343.475 187 09	+62.596 772 56		0.67	−3.85	−2.33	0.85	0.84	1.02	0.98	0.99	− 6	+12	− 4	+ 3	− 7	− 4	− 4	−24	+24	− 6	0	−1.90
113066	22 53 55.20	+80 14 23.9	7.78	H	343.480 012 93	+80.239 968 95		4.95	−11.76	22.40	0.60	0.52	0.63	0.65	0.60	− 9	− 1	+13	+21	− 4	+ 7	− 8	− 7	+ 4	−20	1	−1.61
113067	22 53 58.72	−18 03 33.1	8.63	H	343.494 667 11	−18.059 190 32		3.22	28.59	−21.47	0.98	0.66	1.08	1.33	0.82	+22	+ 1	− 5	+15	− 1	+19	− 4	−21	+16	+12	0	−1.55
113068	22 53 59.69	−01 32 42.6	10.39	H	343.498 703 33	−01.545 162 03		7.08	167.52	−80.79	1.50	0.89	1.59	1.94	1.26	+23	−21	−12	+16	+ 9	−16	+ 1	−31	+10	+ 8	2	−0.57
113069	22 53 59.77	+26 57 09.2	11.41	G	343.499 044 23	+26.952 567 27		11.45	157.00	−320.30	1.43	1.22	2.59	1.78	2.08	+40	+ 9	+18	+ 3	+ 1	+ 6	+ 8	−10	+15	+56	0	2.94
113070	22 54 00.00	−13 31 22.5	10.99	G	343.500 018 69	−13.522 918 50		7.08	−49.47	−103.39	2.07	1.32	2.32	2.48	1.79	+19	+18	−14	− 9	+11	+ 5	+17	−13	+27	+17	0	0.49
113071	22 54 00.30	−54 43 38.4	8.89	1 H	343.501 267 66	−54.727 338 84		1.30	10.24	−8.71	0.74	0.77	1.13	0.92	0.86	+19	+ 2	− 5	+18	+25	+ 7	+26	+ 5	− 2	+40	0	0.13
113072	22 54 00.78	+24 51 22.5	10.39	H	343.503 247 35	+24.856 250 63		−2.51	−10.72	−9.07	1.21	0.77	1.59	1.56	1.28	+14	+ 6	− 1	+45	−11	− 4	−25	−26	+19	− 8	0	−2.36
113073	22 54 01.18	+42 01 13.5	8.24	H	343.504 934 50	+42.020 427 75		3.26	−5.52	−6.63	0.47	0.61	0.93	0.48	0.62	− 5	+ 3	+12	+39	+ 6	+11	+22	−35	+ 8	+23	0	1.65
113074	22 54 01.50	+60 51 12.1	8.55	H	343.506 263 61	+60.853 373 88		5.74	−4.71	−21.61	0.66	0.65	0.79	0.88	0.80	−23	+ 6	− 5	+ 9	+18	−11	+17	−24	+18	−23	0	0.24
113075	22 54 01.84	+40 35 31.1	9.97	H	343.507 683 85	+40.591 958 48		4.96	15.54	−2.77	1.22	0.97	1.60	1.58	1.32	+22	+33	+29	+ 7	+ 0	− 1	+ 9	−27	−12	+51	0	1.68
113076	22 54 02.09	+34 11 57.4	7.61	H	343.508 712 52	+34.199 280 19		23.50	−73.88	−236.01	0.63	0.45	0.88	0.77	0.70	+ 7	+15	+27	+14	+ 7	−11	+16	− 5	− 9	+27	0	−1.25
113077	22 54 02.59	−49 32 11.8	8.93	G	343.510 803 40	−49.536 604 59		1.61	32.88	5.73	0.64	0.80	1.15	0.71	0.86	+20	− 9	−32	−23	+ 2	+18	+ 3	+ 4	+11	+34	1	−1.15
113078	22 54 04.54	−21 19 51.7	9.56	H	343.518 916 12	−21.331 038 89		−0.37	3.79	−5.42	1.61	0.87	1.69	1.87	1.12	+ 3	+ 4	+ 8	− 4	+ 1	− 2	+ 1	−18	+35	− 3	0	0.79
113079	22 54 05.49	+06 28 04.5	9.50	H	343.522 862 71	+06.467 912 01		4.18	−8.16	−9.19	1.38	1.01	1.84	1.90	1.29	+21	+22	−24	+ 6	−10	+34	− 5	−45	+42	+ 3	0	0.31
113080	22 54 05.60	−19 10 30.5	6.37	H	343.523 326 89	−19.175 138 59		6.78	81.90	−4.30	0.90	0.52	0.95	1.06	0.65	+23	+ 8	− 4	+27	+10	+ 6	+11	− 1	+25	+19	0	0.74
113081 H	22 54 05.71	+44 32 45.6	9.08	H	343.523 805 67	+44.546 006 46	A	3.49	0.83	−6.28	1.16	1.23	1.60	1.01	1.10	− 5	+15	+16	−10	− 4	− 4	+ 3	−35	− 3	+25	3	0.49
113082	22 54 05.82	+38 12 31.7	9.01	H	343.524 258 52	+38.208 797 59		1.95	10.86	−9.46	0.91	0.64	1.23	1.12	0.85	+ 6	+31	+17	+19	+ 3	+ 4	+17	−20	+17	+28	0	−2.67
113083	22 54 06.70	+74 36 43.2	7.52	H	343.527 937 34	+74.612 001 95		8.06	2.59	−12.58	0.49	0.48	0.57	0.57	0.54	− 4	+ 1	− 1	+ 8	−11	+10	−10	− 1	+18	+ 0	0	−0.61
113084	22 54 06.91	+40 22 36.6	5.82	G	343.528 794 93	+40.376 836 33		9.63	97.09	28.91	0.62	0.48	0.79	0.71	0.57	+14	+40	+24	+21	+ 1	− 6	+21	−31	− 2	+46	0	−0.07
113085	22 54 07.09	−12 11 25.1	6.86	H	343.529 553 49	−12.190 309 07		4.10	50.88	−46.30	0.78	0.52	0.84	0.91	0.68	+17	−10	− 7	−22	+14	+26	+19	−12	+11	+14	0	−2.40
113086	22 54 07.45	+19 53 32.5	7.02	H	343.531 038 23	+19.892 371 28		22.89	−61.61	−135.54	0.71	0.43	0.86	0.80	0.62	+ 1	+20	−18	− 2	− 1	+14	+ 2	−41	+23	− 1	1	0.16
113087	22 54 08.26	+45 11 15.9	10.45	2 H	343.534 398 91	+45.187 760 70		−1.38	−6.40	−6.61	1.47	1.75	2.67	1.51	1.65	−22	+ 1	+13	−28	+ 9	+ 0	+10	−31	+ 8	− 2	1	
113088	22 54 08.36	−30 54 45.1	9.02	H	343.534 825 34	−30.912 527 08		3.48	29.29	1.43	1.24	0.85	1.44	1.63	1.21	+14	+ 1	− 9	−17	+ 8	+30	+12	−13	+22	+30	0	0.57
113089	22 54 08.84	+14 21 09.9	8.48	H	343.536 838 66	+14.352 756 48		3.49	25.97	11.43	0.92	0.78	1.11	0.99	1.11	+42	− 6	−15	−14	−29	+ 1	−28	−57	+20	+47	0	−0.39
113090	22 54 10.05	+05 35 02.8	8.85	H	343.541 858 38	+05.584 114 16		7.03	45.25	−22.56	1.04	0.69	1.39	1.41	0.95	+19	+ 7	− 8	− 1	− 3	+53	+ 1	−41	+29	+24	0	0.95
113091	22 54 10.60	−04 26 01.2	9.76	H	343.544 157 35	−04.433 667 68		0.76	12.22	4.31	1.59	0.89	1.79	2.18	1.21	+14	− 8	+12	+22	+11	+48	− 3	−24	+15	+ 7	0	−0.10
113092	22 54 11.41	+28 00 59.8	7.71	1 H	343.547 540 55	+28.016 602 83	A	14.18	−63.44	−38.22	0.93	0.76	1.29	0.94	1.17	+29	− 2	+ 4	− 1	− 6	− 7	− 7	−13	+ 8	+33	2	0.88
113093	22 54 11.97	+65 22 47.3	9.07	H	343.549 868 87	+65.379 801 52		3.58	6.98	−1.07	0.80	0.79	0.98	1.09	0.91	+ 1	−27	+16	+10	+20	− 2	+23	− 1	−20	+25	3	−0.49
113094	22 54 14.16	+60 41 44.0	9.85	H	343.558 995 88	+60.695 569 21		1.96	12.77	3.67	0.90	0.91	1.09	1.19	1.13	−24	+ 5	− 6	− 1	+20	−15	+19	−29	+26	−26	0	0.13
113095	22 54 14.27	+00 24 54.6	8.63	2 H	343.559 467 22	+00.415 165 42		2.82	−19.34	−12.96	1.07	0.64	1.19	1.48	0.98	+18	− 9	−19	+ 4	+16	+ 7	+12	−25	+32	+ 8	0	−0.60
*113096 H	22 54 14.86	+76 20 17.2	7.44	G	343.561 912 44	+76.338 100 00	A	7.36	58.75	−11.10	0.97	1.02	0.99	1.09	1.15	− 4	− 4	+19	+ 5	− 1	−16	+ 8	−23	− 5	+21	2	0.32
*113097	22 54 14.84	+22 24 07.1	8.39	H	343.561 831 86	+22.401 964 87		1.84	16.97	9.80	1.08	0.56	1.14	1.23	0.92	− 2	−11	− 3	−35	+ 5	+ 8	+ 7	−30	+13	+ 4	0	−0.18
113098	22 54 15.30	+46 56 07.4	10.14	H	343.563 737

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
113001						1.240	0.020	G	1.20	0.02	H		11.4861	0.0062	0.043	93		11.40	11.55					1							G
113002	8.656	0.013	8.058	0.012		0.564	0.015	G	0.64	0.01	H		8.1244	0.0016	0.012	87		8.11	8.14					1 G							S
113003	8.808	0.009	8.788	0.012		0.023	0.014	T	0.04	0.01	L		8.8124	0.0019	0.021	170		8.77	8.85					1							
113004	10.162	0.021	9.499	0.019		0.636	0.005	G	0.70	0.00	H		9.5935	0.0022	0.023	153		9.54	9.63					1							
113005	8.883	0.007	7.530	0.004		1.147	0.006	T	1.11	0.01	L		7.5836	0.0008	0.012	285		7.56	7.61					1							S
113006	10.209	0.024	9.971	0.030	A	0.207	0.141	G	0.23	0.16	R	*	9.9087	0.0028	0.031	152	*	9.86	9.96		D	22532+5009	M 1	2 C	A	AB	288	4.759	0.024	2.53	0.10	G
113007	10.937	0.042	10.607	0.050		0.450	0.040	G	0.52	0.04	R		10.5560	0.0038	0.029	116		10.49	10.60		C			1							G
113008	11.185	0.051	9.881	0.026		1.108	0.045	T	1.07	0.05	L		9.9909	0.0033	0.030	124		9.93	10.04					1							
113009	6.223	0.004	6.309	0.004		−0.074	0.005	T	−0.05	0.01	L		6.3082	0.0012	0.011	120		6.29	6.33					1							S P
113010	10.491	0.036	9.475	0.024	*	0.875	0.034	T	0.88	0.03	L	*	9.5065	0.0025	0.025	97	*	9.46	9.55			22532−3750	I 1	2 C	C	AC	346	0.596	0.095	4.05	0.60	
113011	10.896	0.051	9.695	0.029		1.028	0.046	T	1.00	0.04	L		9.7751	0.0027	0.028	93		9.74	9.85		C			1							
113012	9.362	0.010	8.105	0.006		1.100	0.015	G	1.06	0.02	H		8.1515	0.0013	0.017	261		8.12	8.18					1							
113013	9.428	0.014	9.231	0.017		0.188	0.021	T	0.21	0.02	L		9.2530	0.0018	0.024	150		9.21	9.30		C			1 S							P
113014	10.562	0.041	9.264	0.024	*	1.104	0.038	T	1.07	0.04	L	*	9.3452	0.0036	0.022	69	*	9.31	9.37		C	22532−1102	H 1	2 C	C	AB	210	0.248	0.136	3.17	1.68	
113015	9.314	0.016	8.823	0.015		0.470	0.015	G	0.54	0.02	H		8.8545	0.0022	0.016	78		8.83	8.89		C	22533−1710	I 1	1	S							S
113016	10.316	0.027	9.645	0.024		0.611	0.027	T	0.68	0.02	L		9.7159	0.0032	0.031	104		9.67	9.76					1							
113017	10.057	0.027	9.374	0.023	A	−0.240	0.170	G	0.73	0.04	L	*	9.3212	0.0036	0.024	112	*	9.28	9.36		D	22533+6209	I 1	2 C	A	AB	329	7.766	0.024	2.49	0.07	G W
113018	8.280	0.012	6.966	0.006		1.104	0.045	G	1.06	0.00	A		7.0182	0.0014	0.009	77		7.00	7.03					1							S
113019	8.299	0.008	7.653	0.007		0.588	0.001	G	0.66	0.00	H		7.7199	0.0011	0.012	172		7.70	7.74		C			1							S
113020						1.597	0.035	G	2.77	0.01	A		10.1480	0.0045	0.027	67		10.09	10.19					1							
113021	11.378	0.083	10.712	0.070		0.617	0.091	T	0.69	0.08	L		10.7613	0.0451	0.260	79		10.32	11.15	78.57	P 1 A			1							G
113022	9.526	0.012	8.077	0.007		1.222	0.011	T	1.18	0.01	L		8.1154	0.0012	0.014	216		8.09	8.15					1							S
113023	8.803	0.011	8.688	0.013		0.111	0.016	T	0.12	0.02	L		8.7155	0.0013	0.014	139		8.69	8.75		C			1							
113024	8.444	0.011	7.973	0.010		0.468	0.015	G	0.54	0.02	H		8.0171	0.0012	0.011	108		7.99	8.04					1							S
113025											T		11.1867	0.0030	0.032	182		11.12	11.23					1							G
113026	10.976	0.054	9.733	0.031	A	1.099	0.005	G	1.17	0.01	I	*	9.7205	0.0028	0.021	73	*	9.69	9.77		C	22534−0906	H 1	2 C	C	AB	42	1.200	0.073	3.21	0.21	
113027	9.102	0.015	7.841	0.009		1.075	0.014	T	1.04	0.01	L		7.8923	0.0017	0.013	89		7.87	7.91					1							S
113028	7.320	0.007	6.966	0.006		0.336	0.009	T	0.39	0.01	L		7.0191	0.0008	0.006	97		7.00	7.03		C			1							S
113029	11.004	0.057	9.660	0.030		1.140	0.050	T	1.10	0.05	L		9.7332	0.0047	0.040	102		9.68	9.80		U			1							
113030	10.594	0.040	9.608	0.029		0.856	0.004	G	0.90	0.00	H		9.6257	0.0035	0.029	75		9.59	9.68		C	22535−3054	I 1	1 X								G
113031	5.690	0.003	5.775	0.004		−0.082	0.004	G	−0.07	0.02	A		5.7735	0.0007	0.005	74		5.76	5.78		C			1							S
113032	11.536	0.058	10.761	0.045		0.705	0.057	T	0.76	0.05	L		10.8318	0.0028	0.033	220		10.78	10.89		C			1							G
113033						0.800	0.020	G	0.84	0.02	H		11.6574	0.0039	0.051	214		11.57	11.74					1							G
113034	9.042	0.014	7.454	0.007		1.331	0.012	T	1.29	0.01	L		7.4503	0.0016	0.012	99		7.43	7.47					1							S
113035	9.819	0.020	8.510	0.012		1.112	0.018	T	1.07	0.02	L		8.5752	0.0012	0.014	125		8.55	8.60		C			1							S
113036	8.143	0.007	7.885	0.008		0.252	0.015	G	0.28	0.02	H		7.9158	0.0011	0.013	125		7.89	7.94		C			1							S
113037	9.255	0.015	8.620	0.013		0.590	0.017	T	0.66	0.02	L		8.6638	0.0016	0.016	120		8.64	8.69		C			1							S
113038	8.408	0.010	8.382	0.013	*	0.029	0.015	T	0.05	0.01	L	*	8.3902	0.0016	0.016	139	*	8.36	8.41		D	22536+5242	H 1	2 C	A	AB	310	0.594	0.016	2.95	0.08	
113039	7.782	0.005	7.563	0.006		0.209	0.007	T	0.23	0.01	L		7.6059	0.0009	0.010	186		7.59	7.62			22536+3046	I 1	1								S
113040	9.254	0.017	8.677	0.016		0.542	0.017	T	0.62	0.02	L		8.6994	0.0018	0.015	86		8.67	8.74		C			1							S
113041	8.739	0.011	8.434	0.012		0.290	0.015	T	0.33	0.02	L		8.4807	0.0015	0.013	107		8.45	8.52					1	S						S
113042	11.297	0.064	9.071	0.016		1.880	0.054	T	2.26	0.12	O		8.9516	0.0025	0.022	155		8.92	9.00					1							
113043											T		11.2497	0.0029	0.034	169		11.17	11.30					1							G
113044	6.789	0.004	6.095	0.003		0.621	0.005	G	0.69	0.00	H		6.1609	0.0006	0.006	121		6.15	6.17		C			1							S
113045	9.780	0.020	8.442	0.012	A	1.060	0.197	G	1.08	0.04	L	*	8.4330	0.0016	0.012	92	*	8.41	8.46		D	22536−0607	H 1	2 C	A	AB	250	9.722	0.042	3.07	0.09	
113046	9.027	0.012	7.428	0.007		1.340	0.011	T	1.30	0.01	L		7.4574	0.0008	0.009	124		7.44	7.47		C			1							S
113047	9.529	0.022	8.995	0.021		0.509	0.023	T	0.58	0.02	L		9.0692	0.0024	0.017	80		9.04	9.10		C			1							S
113048	6.150	0.003	5.836	0.003	*	0.282	0.018	G	0.30	0.03	C	*	5.8443	0.0005	0.007	221	*	5.83	5.86		D	22537+4445	I 1	2 C	A	AB	216	0.951	0.003	1.80	0.01	S
113049	10.493	0.031	10.491	0.047		0.007	0.052	T	0.03	0.05	L		10.4091	0.0028	0.039	154		10.34	10.48					1							G
113050	9.607	0.028	8.921	0.024		0.616	0.015	G	0.68	0.01	H		8.9779	0.0021	0.018	73		8.94	9.01		C			1							S
113051	10.692	0.045	10.109	0.042		0.619	0.067	G	0.69	0.06	H		10.2737	0.0029	0.028	113		10.23	10.32					1							G
113052	9.841	0.020	8.984	0.015		0.752	0.019	T	0.80	0.01	L		9.0035	0.0291	0.280	133		8.80	9.55	0.32	P 1 A			1	S						
113053	8.554	0.010	8.550	0.012		0.008	0.014	T	0.03	0.01	L		8.5723	0.0016	0.015	124		8.55	8.60		C			1							
113054	9.960	0.021	9.208	0.018		0.672	0.021	T	0.73	0.02	L		9.2548	0.0021	0.021	100		9.21	9.29		C			1							
113055	11.241	0.046	10.405	0.035	*	0.752	0.044	T	0.80	0.03	L	*	10.5289	0.0023	0.030	208	*	10.48	10.58		C	22537+2558	H 1	2 C S	B	AB	330	0.180	0.018	0.73	0.40	G
113056	9.017	0.013	7.755	0.009		1.075	0.012	T	1.04	0.01	L		7.8108	0.0014	0.011	92		7.79	7.83		C			1							S
113057	11.219	0.078	10.496	0.069		0.494	0.072	G	0.57	0.08	R		10.5922	0.0051	0.032	69		10.51	10.64					1							
113058	10.585	0.033	9.416	0.021	*	1.003	0.030	T	0.98	0.02	L	*	9.4026	0.0024	0.022	107	*	9.37	9.44		D	22538−3559	H 1	2 C	A	AB	164	0.481	0.010	2.01	0.05	
113059	9.904	0.029	8.522	0.017		1.169	0.026	T	1.13	0.02	L		8.5337	0.0015	0.013	92		8.51	8.56		C			1							
113060	11.649	0.075	10.319	0.039		0.700	0.040	G	0.76	0.03	R		10.4494	0.0034	0.032	119		10.39	10.49					1							G
113061	10.892	0.055	10.350	0.051		0.515	0.056	T	0.59	0.06	L		10.3247	0.0032	0.031	79		10.27	10.39		C			1							
113062	8.427	0.009	8.212	0.010		0.205	0.013	T	0.23	0.01	L		8.2706	0.0015	0.017	172		8.24	8.30		C			1							S
113063	8.874	0.008	7.508	0.005		1.157	0.007	T	1.12	0.01	L		7.5566	0.0009	0.012	223		7.54	7.58					1							S
113064	8.975	0.011	7.003	0.005		1.635	0.010	T	1.66	0.01	L		6.9170	0.0010	0.010	142		6.90	6.93					1							S
113065	9.730	0.021	9.165	0.020		0.533	0.021	T	0.61	0.02	L		9.1751	0.0026	0.028	114		9.15	9.25		U 2 C			1							
113066	9.223	0.014	7.895	0.008		1.127	0.013	T	1.09	0.01	L		7.9476	0.0010	0.013	129		7.92	7.97		C			1							
113067	9.933	0.023	8.739	0.015		1.022	0.021	T	1.00	0.02	L		8.8002	0.0022	0.015	80		8.78	8.82		C			1							
113068	11.146	0.048	10.459	0.043		0.644	0.002	G	0.71	0.00	H		10.5199	0.0033	0.028	115		10.48	10.58		C			1							
113069						1.141	0.020	G	1.23	0.03	I		11.5278	0.0029	0.044	274		11.45	11.60					1	S						G
113070						0.617	0.002	G	0.69	0.00	H		11.1429	0.0035	0.034	79		11.08	11.20		C			1							G
113071	8.990	0.012	8.901	0.015		0.080	0.017	T	0.09	0.02	L		8.9261	0.0025	0.027	138		8.88	8.98		U			1							
113072	10.432	0.027	10.365	0.038		0.067	0.043	T	0.08	0.05	L		10.4231	0.0025	0.025	160		10.38	10.46		C			1							G
113073	10.469	0.024	8.427	0.009		1.691	0.020	T	1.72	0.02	L		8.3465	0.0016	0.019	233		8.31	8.38					1							
113074	8.816	0.011	8.582	0.012		0.223	0.015	T	0.25	0.02	L		8.6213	0.0012	0.012	114		8.60	8.64					1							
113075	10.275	0.030	9.966	0.035		0.294	0.043	T	0.34	0.06	L		10.0465	0.0029	0.026	101		9.99	10.08					1							G
113076	8.198	0.007	7.673	0.006		0.493	0.008	T	0.57	0.01	L		7.7223	0.0010	0.011	164		7.70	7.74		C			1							S
113077	9.003	0.011	8.936	0.013		0.101	0.006	G	0.11	0.01	H		8.9654	0.0020	0.021	156		8.93	9.00					1							
113078	11.606	0.096	9.734	0.032		1.589	0.083	T	1.86	0.18	K		9.6553	0.0042	0.033	79		9.60	9.71					1							S
113079	10.935	0.061	9.647	0.032		1.096	0.054	T	1.06	0.06	L		9.6700	0.0022	0.024	86		9.63	9.72		C			1							
113080	8.359	0.010	6.552	0.005		1.515	0.003	G	1.51	0.03	L		6.4987	0.0009	0.007	77		6.48	6.51		C			1							S
113081	9.154	0.010	9.074	0.012	*	0.079	0.015	T	0.09	0.02	L	*	9.1167	0.0021	0.022	184	*	9.08	9.16			22541+4433	H 1	2 C	D	AB	298	0.624	0.043	3.55	0.17	D
113082	10.877	0.042	9.138	0.016		1.450	0.036	T	1.45	0.06	L		9.1459	0.0018	0.019	129		9.12	9.18		C			1							
113083	8.050	0.007	7.570	0.007		0.452	0.009	T	0.52	0.01	L		7.6206	0.0010	0.010	130		7.60	7.64		C			1							S
113084	7.290	0.006	5.942	0.003		1.136	0.005	G	1.10	0.01	H		5.9826	0.0005	0.005	112		5.97	5.99					1							S
113085	8.678	0.012	7.021	0.006		1.386	0.011	T	1.36	0.01	L		7.0025	0.0013	0.010	95		6.98	7.02					1							S
113086	7.641	0.007	7.074	0.005		0.530	0.008	T	0.60	0.01	L		7.1347	0.0007	0.009	147		7.12	7.15		C			1							S
113087	10.681	0.024	10.468	0.031		0.203	0.037	T	0.22	0.04	L		10.5083	0.0036	0.051	266		10.41	10.60		U			1 X							G
113088	10.271	0.033	9.116	0.021		0.992	0.030	T	0.97	0.02	L		9.1806	0.0019	0.014	75		9.15	9.22		C			1							
113089	10.007	0.023	8.611	0.013		1.180	0.021	T	1.14	0.02	L		8.6496	0.0015	0.015	108		8.62	8.68		C			1							
113090	9.677	0.023	8.932	0.020		0.681	0.024	T	0.74	0.02	L		8.9897	0.0019	0.016	88		8.97	9.03		C			1							S
113091	11.096	0.049	9.859	0.028		1.056	0.044	T	1.02	0.04	L		9.9272	0.0029	0.028	94		9.87	9.98		C			1							
113092	8.276	0.006	7.740	0.006	A	0.510	0.006	T	0.58	0.01	L		7.8263	0.0073	0.019	216	A	7.80	7.85		U	22542+2801	I 1	2 C	A	AB	138	17.445	0.020	2.72	0.09	S
113093	9.293	0.016	9.060	0.018		0.222	0.023	T	0.24	0.03	L		9.1392	0.0027	0.022	105		9.11	9.18					1							
113094	10.208	0.028	9.892	0.032		0.300	0.040	T	0.34	0.05	L		9.9234	0.0025	0.026	108		9.88	9.96					1							G
113095	10.929	0.045	8.936	0.016		1.652	0.038	T	1.67	0.04	L		8.7464	0.0039	0.034	107		8.70	8.80		U 2			1	S						
113096	7.971	0.018	7.830	0.024	A	0.246	0.006	G	0.28	0.01	H	*	7.4937	0.0009	0.008	102	*	7.48	7.51		D	22542+7620	I 1	2 C	A	AB	1	1.968	0.002	0.68	0.01	S
113097	10.107	0.026	8.526	0.013		1.326	0.023	T	1.29	0.03	L		8.5380	0.0013	0.016	120		8.50	8.57					1							
113098	10.383	0.024	10.185	0.031		0.189	0.037	T	0.21	0.04	L		10.1990	0.0019	0.032	188		10.15	10.25		C			1	S						G
113099	9.895	0.021	9.324	0.019		0.534	0.025	T	0.61	0.03	L		9.4123	0.0019	0.017	120		9.39	9.45		C			1							
113100	9.012	0.016	8.352	0.014		0.590	0.009	G	0.66	0.00	A		8.4208	0.0020	0.018	79		8.40	8.46					1							S

Number HIP 1 2	Descriptor: epoch J1991.25 RA h m s 3	Dec ±° ′ ″ 4	V mag 5 6 7	Position: epoch J1991.25 α (ICRS) deg 8	δ deg 9 10	Par. π mas 11	Proper Motion $\mu_{\alpha*}$ mas/yr 12	μ_δ mas/yr 13	Standard Errors α* mas 14	δ 15	π mas 16	$\mu_{\alpha*}$ mas/yr 17	μ_δ 18	Astrometric Correlations (%) 19 20 21 22 23 24 25 26 27 28	Soln F1 % 29	F2 30
113101	22 54 17.11	−02 51 25.5	8.74 H	343.571 277 46	−02.857 087 00	12.14	−67.56	−145.72	1.01	0.80	1.21	1.38	1.32	+36 + 0 + 0 − 2 −16 +32 − 9 −55 +11 +45	0	−0.79
113102	22 54 17.17	+56 19 58.9	6.85 H	343.571 557 31	+56.333 015 41	5.17	−11.66	−7.05	0.47	0.49	0.62	0.61	0.56	−17 − 4 − 4 + 4 − 8 +19 − 4 −13 +18 + 5	0	−1.13
113103	22 54 17.37	−43 00 37.5	9.95 H	343.572 360 56	−43.010 413 61	22.40	1.89	26.59	1.23	0.97	1.47	1.51	1.24	+ 6 − 7 −10 +17 − 8 +19 − 3 −15 + 9 +18	0	−1.33
113104	22 54 17.45	+55 24 28.8	8.39 H	343.572 698 23	+55.407 986 52	1.05	5.39	−3.55	0.60	0.63	0.77	0.77	0.71	−24 − 8 +19 + 7 + 3 + 4 + 3 − 6 +11 −12	0	−2.13
113105	22 54 18.08	+17 47 42.2	6.60 H	343.575 339 46	+17.795 055 49	6.51	9.31	−24.60	0.64	0.44	0.77	0.68	0.59	+14 + 2 −17 − 6 − 8 + 2 −15 −49 +19 + 2	0	1.18
113106	22 54 18.08	−01 02 57.0	8.37 H	343.575 342 86	−01.049 160 04	3.76	18.94	−44.78	1.08	0.60	1.13	1.46	0.84	+15 − 9 − 8 − 6 +22 − 4 +17 −22 +15 − 5	0	0.72
113107	22 54 19.24	−24 58 49.1	7.42 H	343.580 187 08	−24.980 291 76	3.50	67.56	41.73	0.81	0.60	0.97	1.03	0.72	+23 − 7 −28 −13 +10 +10 +10 −18 +32 +21	0	1.19
113108	22 54 19.86	+81 56 06.0	7.59 H	343.582 745 30	+81.935 009 82	3.41	16.14	−4.00	0.52	0.49	0.58	0.56	0.49	− 8 − 7 +14 +10 − 1 +13 − 4 − 1 + 5 −13	0	−0.55
113109	22 54 20.81	+20 29 12.0	9.10 H	343.586 724 41	+20.486 679 00	1.61	5.98	9.89	1.08	0.69	1.30	1.16	1.00	+ 2 +28 −16 +11 − 6 −11 − 5 −38 +14 + 5	0	−0.51
*113110	22 54 21.21	+43 31 42.7	7.77 H	343.588 383 23	+43.528 526 31	3.18	0.09	−4.79	0.52	0.54	0.85	0.61	0.58	+ 1 + 7 +17 + 8 + 3 − 1 +10 −22 + 2 +22	0	0.45
*113111 H	22 54 21.20	+47 23 14.2	9.51 H	343.588 349 28	+47.387 285 47 A	3.08	13.75	−2.36	3.20	3.35	1.94	1.33	1.41	+32 + 7 + 7 + 9 + 2 − 3 + 9 −10 +12 +32	1	−0.26
113112	22 54 21.35	+66 51 51.8	9.02 H	343.588 978 53	+66.864 393 94	3.78	0.31	5.61	0.77	0.68	0.85	1.00	0.82	−17 −18 +10 + 9 +13 − 4 +11 −13 + 6 −19	0	0.89
113113	22 54 21.51	−65 04 53.1	8.61 G	343.589 625 16	−65.081 417 07	16.14	319.53	−205.40	0.62	0.70	0.97	0.72	0.69	− 6 − 5 −22 − 3 + 7 + 8 + 8 −14 +12 + 5	0	1.37
113114	22 54 23.39	+64 06 54.4	8.44 G	343.597 456 70	+64.115 123 40	11.77	−10.23	−3.43	0.61	0.68	0.78	0.71	0.80	−11 + 6 +15 + 4 + 4 + 5 + 2 −10 − 5 −18	1	0.68
113115	22 54 23.66	+15 59 50.2	9.58 H	343.598 569 97	+15.997 274 98	3.11	8.62	−17.79	1.31	0.95	1.60	1.49	1.48	+30 − 5 − 3 + 5 −20 − 7 −28 −54 +19 +21	0	0.85
113116	22 54 24.38	+84 20 46.0	4.70 H	343.601 601 44	+84.346 118 56	8.35	98.45	23.89	0.46	0.39	0.48	0.57	0.42	− 4 − 3 +16 −16 − 5 + 3 − 4 − 7 + 6 −21	0	−0.03
113117	22 54 25.06	−15 00 35.7	8.39 H	343.604 432 84	−15.009 929 87	10.11	87.03	10.74	1.30	0.71	1.48	1.45	1.00	+ 0 +28 −20 −38 + 8 +26 +29 −45 +50 + 2	0	1.03
113118	22 54 28.05	−74 51 53.5	7.40 G	343.616 855 55	−74.864 872 55	7.62	14.59	−2.22	0.56	0.50	0.67	0.71	0.54	− 9 + 9 −25 +11 + 9 + 2 +10 − 4 +13 − 5	0	−0.70
113119	22 54 28.24	+13 06 45.0	10.40 H	343.617 680 29	+13.112 498 02	15.10	97.98	−239.87	1.58	1.02	1.87	2.05	1.45	+22 +28 + 9 −21 + 4 −11 + 7 −24 + 9 − 2	0	1.19
113120	22 54 28.26	+30 19 52.2	9.20 H	343.617 748 98	+30.331 163 20	3.71	−4.59	−3.26	0.81	0.62	1.28	0.92	0.97	+15 + 5 +22 +11 −13 −19 − 8 −11 +37 + 8	0	0.66
113121	22 54 29.24	−72 11 09.1	8.70 H	343.621 842 11	−72.185 862 36	2.83	8.66	−14.55	0.76	0.74	0.99	0.93	0.80	−15 + 4 − 7 − 7 +17 −26 +15 −14 −16 + 7	0	0.98
113122	22 54 29.84	−08 20 59.4	9.86 H	343.624 320 08	−08.349 825 99	0.23	5.74	−29.76	1.75	1.12	1.88	2.58	1.53	+36 + 0 + 6 +36 +12 +32 −12 −43 +19 + 9	2	1.13
113123	22 54 30.03	−10 17 58.2	7.69 H	343.625 128 54	−10.299 507 50	3.58	24.06	−37.69	1.11	0.60	1.25	1.81	1.01	+ 0 + 9 −15 − 4 +19 −24 +12 −26 +57 −36	0	0.95
113124	22 54 30.68	+23 31 05.8	11.13 G	343.627 850 87	+23.518 291 16	32.39	258.62	75.59	1.72	1.29	2.34	1.86	2.12	+21 +21 + 6 + 0 −17 −23 −18 −45 +11 +15	0	1.27
113125	22 54 31.23	+77 50 33.6	7.98 H	343.630 133 19	+77.842 653 20	7.11	−13.65	−17.61	0.66	0.59	0.72	0.74	0.70	−10 −13 +18 +14 − 3 + 7 − 6 −12 −11 −20	0	−0.18
113126	22 54 32.00	−41 49 44.1	8.01 H	343.633 336 17	−41.828 914 86	15.15	8.38	58.43	0.71	0.61	0.91	0.81	0.73	+12 + 2 −13 + 4 − 2 +22 − 1 +20 +13 +26	0	1.12
113127	22 54 34.13	−07 12 16.3	6.20 H	343.642 210 27	−07.204 540 57	5.35	−15.11	−35.05	0.82	0.52	0.90	1.19	0.70	+18 +14 + 2 − 6 +11 +27 + 5 −39 +15 − 6	2	0.20
113128	22 54 34.65	−17 48 40.0	10.33 H	343.644 360 18	−17.811 110 64	18.22	27.74	−106.37	1.47	1.12	1.76	1.98	1.31	+26 + 7 −16 + 3 + 4 +16 + 5 −12 +25 + 9	0	0.44
113129	22 54 35.17	+47 16 56.1	8.12 1 H	343.646 521 50	+47.282 247 70	1.26	1.63	−3.75	0.57	0.62	0.91	0.61	0.68	−23 +18 − 3 + 6 + 9 −14 +20 −25 +16 + 1	0	−0.77
113130	22 54 35.17	−34 33 51.6	9.10 H	343.646 556 08	−34.564 328 07	1.18	4.07	−5.54	0.80	0.75	1.16	0.90	0.86	+37 − 8 −20 +34 − 5 +14 − 2 + 4 +11 +44	0	−2.12
113131	22 54 35.62	+16 56 30.7	6.39 2 H	343.648 408 34	+16.941 853 15 *	3.37	15.09	−8.01	0.88	0.57	0.94	0.80	0.78	+19 + 6 −13 + 0 − 9 + 4 − 6 −31 +18 +24	0	0.96
113132	22 54 35.62	+29 21 30.8	8.76 H	343.648 432 05	+29.358 568 07	7.70	36.57	7.30	0.74	0.56	1.15	0.88	0.85	+17 − 4 + 8 −17 − 8 +12 − 9 −27 +25 +27	0	−0.01
113133 T	22 54 36.60	+20 19 59.4	8.78 H	343.652 488 69	+20.333 154 34	10.96	19.49	−33.63	7.77	5.46	9.17	8.79	7.87	+19 +10 − 6 − 2 −15 −13 −21 −52 +25 + 5	0	
113134 H	22 54 37.10	+10 53 52.8	8.38 H	343.654 581 84	+10.897 988 37 *	5.12	21.05	−7.28	4.13	2.01	1.40	1.49	1.20	−47 + 7 − 9 −14 + 4 − 6 − 2 − 9 + 9 +19	0	−0.48
113135	22 54 38.72	−35 20 22.2	10.37 H	343.661 351 81	−35.339 496 49	8.74	73.80	−11.30	1.08	1.00	1.47	1.18	1.19	+28 + 4 + 1 +17 − 9 +14 −11 − 1 − 6 +28	0	−1.06
113136	22 54 39.04	−15 49 14.7	3.27 H	343.662 663 50	−15.820 759 94	20.44	−44.08	−24.81	1.99	1.37	2.26	2.32	1.69	+13 + 0 −17 −30 + 0 +28 + 5 −34 +36 +12	0	
113137	22 54 39.56	−70 04 26.0	6.04 G	343.664 821 52	−70.073 886 67	37.71	−43.19	73.20	0.42	0.42	0.58	0.43	0.38	− 1 − 4 −34 −14 + 2 + 4 + 3 −23 +13 + 7	0	0.97
113138 H	22 54 39.80	−67 36 43.3	7.47 G	343.665 824 62	−67.612 026 80 A	8.67	60.21	−39.35	0.80	0.74	0.95	0.85	0.69	− 3 − 1 − 7 +22 − 2 + 6 − 1 +10 − 8 + 0	1	−0.30
113139	22 54 40.36	+24 23 13.6	7.42 2 H	343.668 173 86	+24.387 114 41	1.19	8.61	9.04	0.79	0.49	1.00	0.95	0.85	+16 + 4 − 6 − 5 − 3 −11 − 8 −32 +29 − 3	0	0.30
113140	22 54 40.70	+12 13 52.2	9.37 1 H	343.669 581 60	+12.231 156 36	3.07	9.95	−62.26	1.20	0.91	1.44	1.54	1.14	+25 − 5 +13 + 9 + 0 − 9 − 6 −10 +18 − 4	0	−0.33
113141	22 54 42.19	+34 14 32.7	8.78 H	343.675 790 98	+34.242 418 94	1.31	0.88	−3.86	0.82	0.57	1.16	1.01	0.96	− 4 +11 +32 +13 + 4 − 8 +18 − 9 − 1 +25	0	−0.75
113142	22 54 42.30	−46 24 48.5	9.37 G	343.676 249 09	−46.413 465 85	13.16	−0.89	25.63	1.19	1.00	1.33	1.41	1.03	+16 −13 −19 −23 −11 +11 − 9 −31 + 1 +14	0	1.45
113143	22 54 42.73	+11 29 16.8	8.27 H	343.678 049 42	+11.488 005 22	3.32	−1.75	−51.89	1.01	0.77	1.24	1.29	0.98	+27 +21 + 9 − 4 + 9 −15 +15 + 4 +19 − 3	0	−0.24
113144	22 54 43.59	+35 59 01.1	7.47 H	343.681 628 06	+35.983 633 03	8.33	92.42	5.73	0.65	0.47	0.93	0.87	0.60	+ 3 +17 +36 + 5 − 1 − 4 + 5 − 2 +10 +12	0	−0.87
113145	22 54 43.91	+42 30 38.6	7.83 G	343.682 952 56	+42.510 717 08	3.74	1.50	−2.53	0.46	0.52	0.84	0.49	0.56	−11 + 6 +12 +19 +11 + 4 +20 −26 + 8 +10	0	0.46
113146	22 54 44.24	+07 15 27.3	7.31 H	343.684 343 75	+07.257 570 52	2.18	−26.14	−30.01	0.98	0.68	1.25	1.93	1.02	+16 + 7 −15 + 6 + 6 + 3 − 6 −29 +46 −42	0	0.09
113147	22 54 44.80	+31 28 43.6	7.40 H	343.686 648 88	+31.478 776 30	3.70	10.62	−10.01	0.60	0.43	0.83	0.70	0.59	+11 +12 +20 +31 + 1 − 9 + 6 − 4 +16 + 9	0	0.09
113148	22 54 45.60	−16 16 18.3	5.53 H	343.690 020 10	−16.271 742 07	23.27	−223.65	−88.58	0.71	0.50	0.80	0.86	0.59	+15 + 5 +10 −11 + 9 +32 + 4 −27 +13 + 0	0	−0.70
113149	22 54 45.81	+31 03 16.8	8.77 H	343.690 886 91	+31.054 676 94	2.59	−11.60	−11.49	0.82	0.59	1.09	0.91	0.76	+16 +10 +11 − 6 − 8 − 1 − 3 −30 +16 +25	0	−0.74
113150	22 54 46.49	−06 57 50.6	10.75 G	343.693 699 64	−06.964 042 83	−1.12	2.34	−8.72	2.21	1.29	2.25	3.04	1.75	+12 +13 + 5 −30 +17 +23 +11 −52 +15 −13	2	−0.76
113151	22 54 47.52	+16 18 33.9	8.57 H	343.698 018 66	+16.309 415 43	3.11	49.31	−5.05	1.01	0.74	1.25	1.01	1.12	+39 −19 −14 +12 −19 −19 −38 −53 +33 +17	2	0.92
113152	22 54 48.22	+50 57 49.1	8.71 H	343.700 927 79	+50.963 628 42	1.11	−1.75	−5.29	0.62	0.68	0.91	0.71	0.75	−25 − 6 +22 +15 + 4 − 5 + 8 − 9 + 7 − 9	3	1.73
113153	22 54 49.13	−08 15 38.6	10.07 H	343.704 712 88	−08.260 720 40	0.16	−6.83	−21.75	1.83	1.24	2.13	2.78	1.63	+32 + 6 + 3 +17 +15 +25 − 9 −43 +29 − 3	0	−1.46
113154	22 54 49.51	−23 06 32.2	8.50 H	343.706 285 90	−23.108 945 97	1.39	−1.46	−1.70	0.95	0.65	1.12	1.18	0.83	+23 − 9 −24 −25 +14 + 1 +10 −14 +29 +31	0	−0.13
113155	22 54 49.57	+77 30 20.6	8.77 H	343.706 529 45	+77.505 708 59	3.25	13.01	9.64	0.76	0.63	0.80	0.89	0.78	−15 −27 +26 +24 − 4 −13 + 1 −13 −16 −14	0	0.46
113156	22 54 50.44	+15 06 27.5	8.64 H	343.710 182 48	+15.107 642 73	6.25	15.39	−14.30	0.93	0.85	1.19	1.07	1.37	+42 +17 − 4 + 3 −27 − 1 −22 −53 +14 +49	0	0.76
113157	22 54 51.71	+71 21 19.8	8.75 H	343.715 461 33	+71.355 508 57	3.55	−6.08	−11.00	0.66	0.66	0.81	0.73	0.70	− 6 − 8 +28 + 3 +15 + 7 +14 −11 −16 − 7	0	0.49
113158 H	22 54 52.91	+58 21 55.3	8.98 H	343.720 471 33	+58.365 369 00 A	2.55	26.75	−8.24	1.61	1.41	1.72	1.75	1.72	−18 +25 + 4 +21 − 5 +20 − 5 − 6 + 8 −28	3	0.36
113159	22 54 54.74	−22 22 06.5	6.76 H	343.728 095 65	−22.368 459 29	24.67	60.18	−202.36	0.70	0.51	0.81	0.81	0.58	+26 −14 −12 −38 + 5 +19 + 2 −31 +29 +25	0	0.30
113160	22 54 55.30	−65 19 52.1	7.87 1 H	343.730 433 78	−65.331 146 60	1.15	5.87	−14.61	0.58	0.61	0.87	0.67	0.58	−11 + 1 −26 + 2 + 4 + 4 + 5 −14 +10 − 2	1	−1.57
113161	22 54 55.64	−27 02 03.7	11.37 G	343.731 838 34	−27.034 365 35	8.51	193.20	−56.89	2.31	1.64	2.56	2.68	2.06	+15 −14 − 3 −30 +21 +24 +26 − 7 − 2 +12	2	−0.02
113162	22 54 56.69	+50 59 37.4	8.91 H	343.736 189 19	+50.993 723 92	0.79	−17.63	−13.37	0.66	0.76	1.00	0.75	0.74	−15 + 2 +28 +15 + 1 − 3 + 4 − 2 +10 − 1	1	0.24
113163 H	22 54 56.91	−19 18 42.7	8.68 H	343.737 118 90	−19.311 864 84 *	7.16	55.12	−50.55	6.78	2.89	2.57	2.62	2.11	+52 − 4 −25 +12 − 2 +14 − 1 −21 +54 +41	0	0.01
113164	22 54 57.75	−00 47 05.0	8.76 H	343.740 622 18	−00.784 727 00	11.26	80.96	−41.50	1.00	0.66	1.10	1.22	0.89	+32 −13 − 9 +24 +13 + 4 +10 − 5 +12 +24	0	0.96
*113165 H	22 54 59.59	+81 17 28.3	8.25 G	343.748 281 14	+81.291 205 30 *	3.31	−0.90	−8.85	0.61	0.58	0.67	0.74	0.64	+ 4 −11 + 5 +23 + 5 − 3 +10 + 7 − 9 +25	0	−0.68
*113166 H	22 54 59.51	+51 31 31.9	9.20 1 G	343.747 977 63	+51.525 537 12 *	3.18	16.12	−4.07	0.88	0.91	1.29	0.95	0.98	−23 + 3 +27 +12 − 4 + 1 − 2 + 7 +18 −12	1	1.45
*113167	22 54 59.47	+01 03 53.6	6.11 G	343.747 808 83	+01.064 891 17	10.61	20.32	5.48	0.66	0.47	0.77	0.85	0.67	+34 −19 −12 − 7 +14 + 2 +14 −12 + 5 +17	0	0.33
*113168	22 54 59.55	−68 25 07.1	9.38 H	343.748 143 84	−68.418 646 35	5.99	6.92	−24.97	0.78	0.81	1.06	0.95	0.94	−16 − 2 − 9 + 2 − 1 −10 − 4 −20 + 0 −27	0	−0.36
113169	22 54 59.78	−79 43 10.1	8.16 H	343.749 083 44	−79.719 475 60	3.55	5.80	−12.38	0.56	0.55	0.67	0.65	0.57	− 5 − 9 −17 +18 − 1 − 7 − 1 − 7 − 3 − 2	0	0.77
113170	22 54 59.89	−47 29 05.5	9.17 H	343.749 523 74	−47.484 860 41	3.45	11.19	−15.20	1.03	0.92	1.30	1.08	0.98	+ 7 −22 −32 −18 −10 +28 − 4 −32 +20 +16	0	−1.05
113171 H	22 55 00.05	−40 55 34.9	8.28 H	343.750 210 36	−40.926 373 64 *	6.51	11.65	14.90	1.32	1.23	1.24	1.15	1.09	+ 6 − 1 − 6 +24 + 2 + 7 + 2 +32 +14 +17	1	0.45
113172	22 55 00.89	+61 36 55.4	8.55 H	343.753 706 53	+61.615 391 19	6.61	34.61	10.93	0.69	0.73	0.82	0.83	0.83	−32 − 1 + 0 + 9 +17 − 9 +16 −31 +14 −33	0	−0.21
113173	22 55 00.98	+19 33 35.2	7.41 2 H	343.754 084 69	+19.559 790 36	1.41	−9.94	−25.54	0.79	0.50	0.94	0.82	0.71	+12 +21 −16 −15 −10 +12 − 1 −39 +27 +19	0	−0.80
113174	22 55 02.58	+37 04 36.5	5.91 H	343.760 766 44	+37.076 804 79	24.24	88.52	9.25	0.50	0.37	0.68	0.62	0.44	− 8 +13 +25 − 8 +14 +12 +12 − 6 +12 + 5	3	−2.71
113175 H	22 55 03.10	+44 27 27.3	8.89 H	343.762 898 49	+44.457 578 13 *	5.11	12.61	−12.23	0.72	0.74	1.18	0.77	0.73	+ 1 +15 +12 + 7 + 2 −18 +14 −25 + 7 +24	1	−0.09
113176	22 55 03.77	−69 06 15.1	7.69 G	343.765 713 10	−69.104 203 61	10.13	76.98	−27.27	0.53	0.50	0.69	0.61	0.50	− 5 + 1 −16 + 0 − 3 + 5 − 2 −14 + 2 − 9	0	−0.41
113177	22 55 03.90	+49 28 24.1	7.87 H	343.766 247 68	+49.473 351 57	12.55	99.83	−16.87	1.19	1.29	1.84	1.25	1.34	−12 − 3 +13 −14 + 4 + 7 + 6 −28 +13 +13	0	
113178	22 55 05.99	−55 40 44.1	9.13 H	343.774 950 00	−55.678 909 66	3.30	20.63	−13.07	0.77	0.75	1.18	0.82	0.69	+ 1 + 9 −20 − 2 +10 + 6 +10 − 9 + 4 + 5	0	−0.45
113179	22 55 07.00	−30 50 05.8	9.42 H	343.779 156 77	−30.834 932 96	10.01	73.08	2.77	1.41	1.03	1.71	1.96	1.41	+27 −13 −20 −15 + 1 +31 + 6 −18 +14 +35	0	1.87
113180	22 55 07.10	+09 27 35.2	7.50 H	343.779 575 76	+09.459 779 89	0.87	−0.41	−4.30	0.80	0.68	0.99	0.92	0.88	+32 +15 −16 +13 − 3 + 4 − 2 −16 +28 +24	0	0.05
113181	22 55 08.64	+45 34 49.8	8.28 G	343.786 009 61	+45.580 500 48	3.89	−18.48	−11.75	0.47	0.58	0.95	0.51	0.61	−33 − 2 +18 − 7 +15 − 6 +18 −13 + 6 −12	0	0.91
113182	22 55 09.34	−73 04 10.3	8.84 H	343.788 919 24	−73.069 514 75	3.30	13.34	−6.24	0.70	0.66	0.87	0.85	0.71	+ 0 − 2 −11 +12 + 4 − 9 + 5 − 5 − 9 +11	0	0.12
113183	22 55 10.52	−23 58 08.9	8.37 H	343.793 817 69	−23.969 135 84	4.88	18.25	−15.53	0.94	0.68	1.16	1.19	0.86	+28 − 5 −32 −14 +16 −13 +11 −14 +26 +35	0	−2.96
113184 H	22 55 10.94	−04 59 16.4	5.72 G	343.795 601 12	−04.987 878 12 A	11.13	29.13	−8.54	1.03	0.63	0.95	1.30	0.71	+12 − 9 + 7 −18 +27 +16 +14 −44 + 5 −20	3	−0.49
113185	22 55 11.14	−46 40 43.9	7.53 H	343.796 402 21	−46.678 871 03	7.75	58.67	−74.22	0.77	0.68	0.98	0.98	0.75	+10 + 2 −14 + 7 −18 +36 − 8 −44 +19 +25	0	0.48
113186	22 55 13.62	+08 48 57.9	4.91 H	343.806 768 09	+08.816 095 36	11.55	81.88	29.03	0.70	0.52	0.95	0.76	0.68	+ 7 +29 −25 + 2 + 1 −16 +11 −19 +52 − 8	0	0.80
113187	22 55 13.80	+46 22 20.2	8.30 H	343.807 488 76	+46.372 273 74	1.91	1.34	−2.92	0.49	0.55	0.88	0.55	0.63	−30 + 8 + 7 + 2 +18 − 5 +23 −19 +12 −10	0	1.41
113188	22 55 14.12	+49 58 42.2	8.78 H	343.808 826 09	+49.978 400 75	1.59	−1.97	−3.50	0.66	0.74	1.08	0.70	0.80	−10 + 2 +12 − 4 + 0 + 1 + 5 −23 +21 + 9	1	−1.69
113189	22 55 14.87	−36 23 18.9	6.40 G	343.811 964 04	−36.388 580 56	4.51	45.00	0.62	0.62	0.48	0.76	0.68	0.52	+14 + 3 + 1 +32 − 9 +17 −10 + 0 − 3 +10	0	0.04
113190	22 55 16.19	−48 29 30.8	6.67 G	343.817 474 79	−48.491 886 25	21.47	−226.02	55.73	0.68	0.52	0.80	0.58	0.60	+16 −21 −30 −42 −16 +22 −16 −27 +22 +24	2	1.50
113191 H	22 55 16.35	−48 27 57.4	7.04 G	343.818 108 12	−48.465 946 07 B	21.58	−226.19	60.52	2.16	1.83	1.70	1.13	1.31	− 5 −20 −13 −21 + 0 +22 − 1 − 5 +19 +12	1	0.57
113192	22 55 21.21	−05 41 22.8	7.18 1 H	343.838 385 56	−05.689 661 22	3.22	−5.63	−4.75	0.89	0.51	1.00	1.06	0.68	+25 − 4 −10 + 5 +10 − 5 + 2 −30 +33 + 3	0	−1.61
113193	22 55 22.63	−38 02 20.5	8.89 H	343.844 282 82	−38.039 039 60	3.04	16.15	−4.59	0.91	0.80	1.16	1.04	0.93	+24 − 4 −12 + 4 − 1 +14 + 0 + 7 − 2 +29	0	−0.79
113194	22 55 23.36	−13 44 26.3	9.16 H	343.847 338 22	−13.740 637 49	0.95	−2.25	−7.40	1.30	1.09	1.71	1.65	1.53	+43 +14 −10 − 7 − 9 +36 + 1 −30 +44 +49	0	−0.41
113195	22 55 24.86	+70 17 50.2	7.48 H	343.853 567 86	+70.297 281 89	11.92	39.42	0.38	0.53	0.48	0.60	0.62	0.52	−15 − 3 +12 − 4 − 3 +12 − 5 − 5 +11 −25	2	−0.16
113196	22 55 25.13	−42 53 03.8	8.47 H	343.854 710 18	−42.884 401 48	8.41	45.90	−19.52	1.00	0.71	1.13	1.21	0.87	+15 −20 −15 +44 − 2 + 8 + 4 − 7 +15 +30	0	0.69
113197	22 55 26.31	+72 35 53.7	8.05 G	343.859 645 13	+72.598 241 89	6.79	46.39	36.46	0.57	0.56	0.67	0.62	0.67	+ 0 + 1 + 9 + 4 +18 − 4 +19 +11 + 5 + 8	0	0.62
113198	22 55 26.34	+03 14 34.5	9.88 H	343.859 748 60	+03.242 905 11	−2.90	−27.99	−21.46	1.52	1.26	1.86	2.76	2.21	+39 + 8 −20 +22 + 6 +13 + 6 −10 +27 +26	0	1.36
113199	22 55 26.48	−10 06 47.1	9.02 H	343.860 353 46	−10.113 085 23	5.41	7.21	−20.10	1.35	0.73	1.69	1.91	1.18	+15 +19 −16 +14 +13 −10 +14 −22 +60 −11	0	−0.23
113200	22 55 26.67	+36 09 39.6	7.50 H	343.861 124 35	+36.160 996 91	3.07	25.05	−3.92	0.62	0.44	0.93	0.87	0.59	− 3 + 5 +41 + 3 + 5 + 6 + 6 − 6 + 5 +17	0	−1.72

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
113101	9.431	0.017	8.813	0.015		0.575	0.020	T	0.65	0.02	L	8.8633	0.0020	0.021	116		8.83	8.90		C			1								S
113102	8.032	0.009	6.966	0.006		0.924	0.008	T	0.92	0.01	L	7.0127	0.0011	0.008	119		7.00	7.03					1								S
113103	11.215	0.058	10.079	0.034		0.969	0.053	T	1.02	0.05	L	10.0914	0.0032	0.030	99		10.03	10.13					1								
113104	10.446	0.037	8.552	0.014		1.573	0.031	T	1.59	0.03	L	8.5106	0.0015	0.014	115		8.48	8.53					1								
113105	7.884	0.006	6.717	0.004		1.001	0.006	T	0.98	0.01	L	6.7647	0.0007	0.007	137		6.75	6.78					1								S
113106	9.708	0.018	8.488	0.011		1.043	0.016	T	1.01	0.01	L	8.5332	0.0014	0.015	114		8.50	8.56		C			1								S
113107	8.618	0.012	7.538	0.009		0.934	0.011	T	0.93	0.01	L	7.5848	0.0014	0.013	89		7.56	7.60		C			1								S
113108	8.811	0.011	7.694	0.007		0.962	0.010	T	0.95	0.01	L	7.7567	0.0011	0.013	132		7.74	7.78		C			1								S
113109	10.924	0.044	9.234	0.017		1.412	0.037	T	1.39	0.04	L	9.2453	0.0015	0.017	134		9.21	9.29					1								
113110	7.698	0.006	7.749	0.008		−0.043	0.009	T	−0.02	0.01	L	7.7601	0.0016	0.015	153		7.74	7.79					1								S
113111	9.901	0.018	9.556	0.020	*	0.327	0.025	T	0.38	0.03	L	* 9.5843	0.0025	0.028	176	*	9.54	9.63		D	22544+4723	I 1	2 C	A	AB	225	0.303	0.004	0.28	0.07	
113112	9.139	0.016	9.051	0.020		0.086	0.024	T	0.10	0.03	L	9.0559	0.0018	0.017	108		9.03	9.09		C			1								
113113	9.433	0.013	8.693	0.011		0.676	0.009	G	0.74	0.01	H	8.7414	0.0018	0.019	164		8.71	8.79					1								S
113114	9.108	0.012	8.481	0.010		0.579	0.015	G	0.65	0.01	H	8.5632	0.0018	0.016	133		8.54	8.59					1								
113115	11.016	0.047	9.682	0.025		1.132	0.042	T	1.10	0.04	L	9.7499	0.0027	0.022	107		9.71	9.78		C			1								
113116	6.568	0.004	4.853	0.002		1.418	0.001	G	1.38	0.02	G	4.8398	0.0006	0.007	120		4.83	4.86					1								S
113117	8.987	0.015	8.431	0.014		0.526	0.015	T	0.60	0.02	L	8.5033	0.0015	0.013	75		8.48	8.54					1								S
113118	7.923	0.006	7.441	0.006		0.431	0.001	G	0.50	0.00	H	7.5021	0.0011	0.012	142		7.48	7.52					1								S
113119	11.394	0.080	10.390	0.051		0.820	0.040	G	0.86	0.04	R	10.5408	0.0032	0.029	98		10.49	10.59		C			1								G
113120	9.686	0.013	9.233	0.013		0.427	0.017	T	0.49	0.02	L	9.2937	0.0018	0.021	178		9.25	9.33					1								
113121	10.301	0.026	8.848	0.013		1.225	0.023	T	1.18	0.02	L	8.8662	0.0017	0.019	146		8.83	8.91					1								
113122	11.631	0.088	9.975	0.035		1.385	0.075	T	1.36	0.09	L	10.0115	0.0036	0.023	85		9.96	10.05		C			1	S							
113123	9.041	0.015	7.814	0.010		1.048	0.014	T	1.02	0.01	L	7.8611	0.0014	0.009	75		7.85	7.88		C			1								S
113124						1.400	0.015	G	1.67	0.04	I	11.2115	0.0038	0.037	131		11.13	11.27		C			1								G
113125	9.382	0.014	8.110	0.009		1.083	0.013	T	1.05	0.01	L	8.1470	0.0014	0.015	121		8.12	8.17					1								
113126	8.520	0.009	8.063	0.009		0.457	0.017	G	0.53	0.02	H	8.1139	0.0016	0.013	106		8.09	8.14		C			1								S
113127	7.860	0.007	6.332	0.004		1.284	0.006	T	1.24	0.01	L	6.3595	0.0007	0.007	91		6.35	6.37		C			1								S
113128	11.966	0.133	10.441	0.052		1.170	0.015	G	1.13	0.01	I	10.4609	0.0040	0.025	79		10.40	10.51		C			1								
113129	10.373	0.026	8.342	0.009		1.682	0.022	T	1.71	0.02	L	8.2294	0.0016	0.018	177		8.19	8.26		U			1								
113130	10.303	0.025	9.163	0.016		0.980	0.023	T	0.96	0.02	L	9.2607	0.0022	0.018	132		9.23	9.29		C			1								
113131	8.698	0.010	6.655	0.004		1.729	0.009	T	2.81	0.05	O	6.3460	0.0164	0.100	119		6.24	6.47		U 2			1 V								S P
113132	9.357	0.012	8.795	0.011		0.500	0.015	G	0.57	0.02	H	8.8653	0.0014	0.018	187		8.83	8.90		C			1								
113133	9.696	0.017	9.030	0.015		0.617	0.019	T	0.69	0.02	L	8.9074	0.0020	0.017	137		8.88	8.94		R	22546+2020	I 1	1 X	S							S G
113134	8.839	0.014	8.409	0.015	*	0.406	0.019	T	0.47	0.02	L	* 8.4723	0.0018	0.017	84	*	8.45	8.51		D	22546+1054	H 1	2 C	A	AB	35	0.204	0.015	0.79	0.29	S
113135	11.185	0.053	10.477	0.044		0.639	0.052	T	0.70	0.05	L	10.5001	0.0039	0.033	120		10.45	10.56					1								
113136	3.365	0.002	3.277	0.002		0.066	0.003	G	0.08	0.02	A	3.2964	0.0006	0.005	80		3.29	3.31					1 X								S
113137	6.876	0.004	6.131	0.003		0.660	0.001	G	0.72	0.07	F	6.1865	0.0007	0.007	160		6.18	6.20					1								S
113138	7.919	0.007	7.550	0.007	A	0.392	0.004	G	0.46	0.00	H	* 7.5574	0.0012	0.012	147	*	7.53	7.58		D	22547−6737	I 1	2 C	A	AB	263	1.529	0.020	3.22	0.09	S
113139	9.464	0.014	7.657	0.007		1.535	0.013	T	2.64	0.02	O	7.4041	0.0038	0.049	160		7.32	7.47		U 2			1	S							S
113140	10.570	0.042	9.427	0.027		0.983	0.039	T	0.96	0.03	L	9.5326	0.0023	0.024	95		9.47	9.57		U			1								
113141	10.152	0.019	8.895	0.012		1.071	0.018	T	1.04	0.01	L	8.9435	0.0016	0.016	156		8.91	8.97		C			1								
113142	10.177	0.027	9.453	0.023		0.649	0.005	G	0.71	0.00	H	9.5146	0.0033	0.025	89		9.45	9.55		C			1								
113143	9.560	0.021	8.359	0.014		1.028	0.020	T	1.00	0.02	L	8.4351	0.0020	0.017	76		8.40	8.46					1								S
113144	8.767	0.009	7.590	0.006		1.010	0.015	G	0.99	0.01	H	7.6402	0.0008	0.010	160		7.62	7.66		C			1								S
113145	8.429	0.008	7.896	0.007		0.520	0.015	G	0.59	0.02	H	7.9457	0.0011	0.012	188		7.93	7.97		C			1								S
113146	9.050	0.019	7.447	0.010		1.343	0.017	T	1.31	0.02	L	7.4618	0.0011	0.011	62		7.44	7.47		C	22547+0715	I 1	1								S
113147	7.392	0.004	7.392	0.005		−0.011	0.002	G	0.01	0.00	H	7.4060	0.0010	0.011	174		7.38	7.42					1								S
113148	6.959	0.006	5.659	0.004		1.111	0.005	G	1.07	0.01	H	5.6970	0.0007	0.005	81		5.69	5.71		C			1								S
113149	8.992	0.009	8.796	0.011		0.187	0.013	T	0.21	0.01	L	8.8329	0.0022	0.019	169		8.80	8.86					1								S
113150						1.210	0.015	G	1.17	0.01	I	10.9969	0.0051	0.040	91		10.92	11.06					1								G
113151	8.754	0.011	8.595	0.012		0.153	0.015	T	0.17	0.01	L	8.6237	0.0021	0.015	112		8.60	8.65					1								
113152	8.709	0.010	8.711	0.013		0.010	0.015	G	0.03	0.01	H	8.7258	0.0021	0.018	143		8.70	8.75					1								
113153	11.959	0.138	10.144	0.045		1.510	0.115	T	1.54	0.17	L	10.2082	0.0048	0.031	90		10.16	10.27					1	S							
113154	10.276	0.030	8.641	0.014		1.368	0.026	T	1.34	0.03	L	8.6505	0.0019	0.016	105		8.62	8.68		C			1								
113155	8.825	0.012	8.757	0.014		0.068	0.017	T	0.08	0.02	L	8.7995	0.0015	0.014	101		8.77	8.82		C			1								
113156	8.915	0.013	8.644	0.015		0.258	0.019	T	0.29	0.02	L	8.7105	0.0018	0.019	99		8.68	8.75					1								
113157	8.956	0.012	8.749	0.014		0.172	0.015	G	0.19	0.01	H	8.8044	0.0021	0.017	113		8.78	8.83		C			1								
113158	9.318	0.015	9.025	0.016	A	0.100	0.495	G	0.28	0.07	L	* 9.0479	0.0021	0.022	110	*	9.02	9.09		C	22549+5822	I 1	2 C	B	AB	0	2.647	0.044	3.32	0.22	
113159	7.323	0.004	6.812	0.005		0.469	0.005	G	0.54	0.01	H	6.8681	0.0008	0.007	129		6.85	6.88					1								S
113160	9.664	0.016	8.011	0.008		1.382	0.014	T	1.35	0.02	L	8.0124	0.0014	0.017	166		7.98	8.04		M			1								S
113161						1.029	0.015	G	1.08	0.02	I	11.5287	0.0052	0.050	89		11.39	11.62					1								G
113162	9.004	0.011	8.917	0.014		0.085	0.017	T	0.10	0.02	L	8.9444	0.0020	0.018	144		8.91	8.98		C			1								
113163	9.185	0.017	8.757	0.017	*	0.418	0.019	T	0.48	0.02	L	* 8.7797	0.0020	0.015	78	*	8.75	8.81		D	22549−1919	H 1	2 C	B	AB	184	0.259	0.039	2.82	0.34	S
113164	9.490	0.017	8.841	0.015		0.602	0.020	T	0.67	0.02	L	8.8909	0.0020	0.020	107		8.86	8.93					1								S
113165	8.474	0.008	8.306	0.010	*	0.128	0.015	G	0.14	0.01	H	* 8.3603	0.0014	0.015	150	*	8.33	8.38		C	22550+8117	H 1	2 C S	A	AB	20	0.129	0.015	0.84	0.65	S
113166	9.965	0.021	9.321	0.018	*	0.585	0.015	G	0.66	0.01	H	* 9.3623	0.0036	0.033	143	*	9.31	9.42		U	22550+5132	I 1	2 C S	A	AB	317	0.176	0.013	0.45	0.43	
113167	6.341	0.003	6.129	0.004		0.192	0.001	G	0.21	0.00	H	6.1667	0.0007	0.007	121		6.16	6.18					1								S
113168	9.862	0.017	9.409	0.018		0.441	0.020	T	0.51	0.02	L	9.4765	0.0023	0.027	144		9.43	9.53					1								
113169	9.571	0.016	8.280	0.010		1.098	0.015	T	1.06	0.02	L	8.3301	0.0015	0.016	147		8.30	8.35					1								
113170	9.484	0.017	9.200	0.019		0.269	0.027	T	0.30	0.03	L	9.2427	0.0032	0.025	98		9.20	9.27					1								S
113171	8.828	0.013	8.330	0.012	*	0.468	0.016	T	0.54	0.02	L	* 8.3846	0.0012	0.010	85	*	8.37	8.41		D	22550−4056	I 1	2 C	A	AB	8	0.225	0.004	0.50	0.10	
113172	8.917	0.012	8.587	0.012		0.335	0.015	G	0.39	0.02	H	8.6295	0.0012	0.014	118		8.60	8.67		C			1								
113173	9.615	0.017	7.660	0.007		1.657	0.015	T	2.65	0.06	O	7.4021	0.0181	0.108	143		7.14	7.53		U 2 C			1	S							S
113174	6.372	0.003	5.952	0.003		0.397	0.004	T	0.46	0.00	L	6.0024	0.0005	0.006	157		5.99	6.01		C			1								S
113175	9.229	0.012	8.924	0.013	*	0.290	0.017	T	0.33	0.02	L	* 8.9647	0.0024	0.024	174	*	8.93	9.01			22551+4427	H 1	2 C S	B	AB	244	0.159	0.036	1.42	0.62	
113176	8.128	0.008	7.725	0.008		0.406	0.015	G	0.47	0.02	H	7.7858	0.0012	0.012	147		7.77	7.81		C			1								S
113177	8.588	0.009	7.939	0.008		0.612	0.015	G	0.68	0.01	H	8.0035	0.0014	0.015	151		7.98	8.02					1 X								S
113178	9.470	0.014	9.170	0.015		0.285	0.019	T	0.32	0.02	L	9.2017	0.0027	0.028	145		9.16	9.26					1	S							
113179	10.223	0.032	9.456	0.027		0.683	0.032	T	0.74	0.03	L	9.5578	0.0037	0.023	67		9.52	9.59		C			1								
113180	9.293	0.018	7.658	0.010		1.368	0.016	T	1.34	0.02	L	7.6453	0.0012	0.010	75		7.63	7.66		C	22551+0928	I 1	1	S							S
113181	8.600	0.006	8.306	0.007		0.303	0.015	G	0.35	0.02	H	8.3556	0.0011	0.017	258		8.33	8.39					1								
113182	10.106	0.022	8.951	0.014		0.992	0.020	T	0.97	0.02	L	9.0008	0.0020	0.019	135		8.97	9.05		C			1								
113183	9.797	0.023	8.466	0.014		1.129	0.021	T	1.09	0.02	L	8.5411	0.0015	0.012	93		8.52	8.57		C			1								
113184	6.871	0.005	5.849	0.003	*	0.881	0.002	G	0.89	0.00	H	* 5.8916	0.0005	0.005	109	*	5.88	5.90		D	22552−0459	I 1	2 C	A	AB	321	0.683	0.002	1.66	0.01	S
113185	8.957	0.013	7.656	0.008		1.106	0.012	T	1.07	0.01	L	7.6980	0.0015	0.015	93		7.68	7.72					1								S
113186	4.908	0.003	4.906	0.003		−0.003	0.003	G	0.00	0.02	A	4.9155	0.0007	0.005	64		4.90	4.93					1								S
113187	8.392	0.007	8.298	0.008		0.092	0.010	T	0.10	0.01	L	8.3372	0.0012	0.015	212		8.31	8.37		C			1								S
113188	8.819	0.011	8.784	0.014		0.037	0.016	T	0.05	0.01	L	8.8013	0.0018	0.018	141		8.77	8.84					1								
113189	8.122	0.008	6.556	0.005		1.313	0.003	G	1.27	0.00	H	6.5577	0.0010	0.008	111		6.55	6.57		C			1								S
113190	7.209	0.006	6.715	0.006		0.458	0.011	G	0.53	0.01	L	6.7670	0.0010	0.010	105		6.75	6.78		D	22553−4829	I 2	1								S
113191	7.727	0.008	7.104	0.008	*	0.560	0.007	G	0.64	0.07	F	* 7.1512	0.0010	0.009	105	*	7.14	7.17		D	22553−4829	I 2	2 C	A	BA	354	0.455	0.003	0.24	0.01	S
113192	9.330	0.015	7.384	0.007		1.614	0.013	T	1.64	0.01	L	7.2913	0.0016	0.013	108		7.27	7.31		U 2			1								S
113193	10.293	0.030	8.992	0.017		1.106	0.027	T	1.07	0.03	L	9.0608	0.0029	0.020	98		9.02	9.10					1								
113194	10.374	0.035	9.259	0.022		0.961	0.032	T	0.95	0.03	L	9.3233	0.0031	0.026	78		9.28	9.36		C			1								
113195	7.827	0.008	7.513	0.007		0.298	0.010	T	0.34	0.01	L	7.5530	0.0009	0.010	130		7.54	7.57		C			1								S
113196	9.052	0.013	8.521	0.013		0.510	0.016	G	0.58	0.02	A	8.5805	0.0023	0.017	99		8.55	8.62					1								S
113197	8.557	0.010	8.097	0.009		0.434	0.012	T	0.50	0.01	L	8.1524	0.0013	0.015	121		8.12	8.17					1								S
113198	11.250	0.094	9.977	0.045		1.084	0.081	T	1.05	0.07	L	10.0485	0.0034	0.024	59		9.99	10.09		C			1								
113199	10.277	0.036	9.096	0.021		1.012	0.032	T	0.99	0.03	L	9.1831	0.0023	0.018	73		9.15	9.21		C			1								S
113200	9.325	0.013	7.642	0.006		1.406	0.011	T	1.38	0.01	L	7.6421	0.0009	0.010	167		7.62	7.66		C			1								

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)													Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		%													
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
113201	22 55 27.06	−52 18 08.4	11.60	2 H	343.862 761 57	−52.302 343 71		40.44	140.02	−116.79	1.98	2.05	3.02	2.28	2.31	+19	−20	− 6	− 7	− 3	+18	+ 0	−24	−11	+15		3	−2.13
113202	22 55 27.59	+52 37 19.4	7.89	G	343.864 966 91	+52.622 063 78		11.56	21.98	−25.63	0.57	0.54	0.79	0.62	0.54	−14	− 1	+13	− 5	+ 7	+12	+ 5	− 9	+22	− 2		2	0.33
113203	22 55 30.24	−46 19 41.6	7.54	H	343.876 002 17	−46.328 225 05		7.80	7.70	7.89	0.82	0.67	0.92	1.03	0.71	+10	− 9	−21	−18	− 9	+19	− 6	−38	+13	+13		0	0.34
113204	22 55 30.57	−20 08 21.7	6.36	H	343.877 367 53	−20.139 366 53		4.69	43.98	−15.25	0.84	0.49	0.89	1.07	0.65	+ 8	+12	+ 1	+15	− 8	+15	− 8	−16	+31	+11		0	1.88
113205	22 55 30.66	+12 54 19.3	9.66	H	343.877 769 74	+12.905 369 39		4.70	29.11	−14.35	1.38	1.04	1.59	1.76	1.35	+26	+18	+14	−10	+ 6	+ 2	+10	− 1	+13	− 1		0	−0.23
113206	22 55 30.90	+17 47 48.2	7.92	G	343.878 738 08	+17.796 722 21		5.74	10.81	−12.71	0.79	0.53	0.98	0.82	0.77	+14	+11	−12	− 1	− 8	− 5	− 9	−41	+17	+10		0	0.28
113207	22 55 30.92	+31 33 15.5	8.88	H	343.878 846 48	+31.554 317 57		10.19	− 7.81	−40.58	0.78	0.61	1.11	0.89	0.82	+12	+13	+14	+23	− 3	−16	+ 3	−18	+12	+13		1	−0.07
113208	22 55 31.46	+43 17 35.8	8.35	H	343.881 085 85	+43.293 290 60		2.99	0.01	− 3.65	0.62	0.67	1.03	0.69	0.73	− 6	− 3	+13	+27	+14	−11	+26	−18	+ 9	+19		0	0.45
113209	22 55 32.88	−41 53 45.3	8.90	H	343.886 985 80	−41.895 920 23		3.13	−28.32	−11.53	0.86	0.81	1.12	1.00	0.98	+17	+ 1	− 7	+ 9	+ 4	+20	+ 3	+31	+13	+28		0	−0.79
113210	22 55 34.09	−43 39 29.6	9.38	H	343.892 040 43	−43.658 232 81		7.46	60.89	0.67	1.11	1.03	1.46	1.22	1.28	+17	− 9	− 5	+ 0	+15	+23	+14	+16	+18	+34		0	−0.59
113211	22 55 34.23	+18 11 46.0	7.67	G	343.892 616 24	+18.196 117 78		7.45	19.18	−0.47	0.81	0.51	0.94	0.80	0.67	+ 8	+17	−18	−19	− 9	+ 2	− 5	−46	+29	+10		0	0.63
113212	22 55 36.03	+66 19 17.1	10.06	H	343.900 145 44	+66.321 410 19		2.35	− 5.31	2.54	0.93	0.87	1.08	1.30	1.10	−10	− 9	+16	+ 6	+15	+12	+12	− 2	+ 4	− 5		0	−1.00
113213 H	22 55 36.13	−31 45 42.0	9.68	G	343.900 537 66	−31.761 662 06	A	15.62	−34.49	−29.40	5.56	3.62	4.67	6.39	3.92	+ 2	− 1	−34	−48	+31	− 3	+32	−13	− 1	−28		1	3.07
113214	22 55 39.77	−22 35 53.0	8.85	H	343.915 693 48	−22.598 054 02		10.12	−12.79	−34.80	1.03	0.78	1.27	1.22	0.92	+32	−17	−28	−35	+ 4	+16	+ 2	−32	+30	+34		0	−0.53
113215	22 55 39.79	−64 22 37.6	9.06	H	343.915 807 40	−64.377 098 97		0.35	16.13	−22.76	0.74	0.85	1.18	0.90	0.88	−13	+ 7	−25	− 9	− 1	− 5	− 2	− 5	+ 7	− 8		0	−0.84
113216	22 55 40.12	+68 37 02.1	7.49	H	343.917 148 73	+68.617 250 70		5.00	20.98	−35.51	0.49	0.48	0.56	0.59	0.55	−18	+ 1	+14	+ 4	+ 7	+ 8	+ 4	−14	+ 3	−27		2	0.38
113217	22 55 40.25	+18 52 30.8	8.02	2 H	343.917 712 20	+18.875 210 92		3.88	24.02	− 5.98	0.85	0.54	1.02	0.87	0.74	+11	+24	−21	−19	−11	− 7	− 9	−46	+20	+13		0	−0.36
113218	22 55 42.46	+62 18 22.8	8.03	H	343.926 914 62	+62.306 346 72		1.25	− 2.31	− 3.84	0.66	0.67	0.82	0.70	0.77	−12	+35	+ 2	+ 2	+ 1	+ 0	+ 7	−27	+21	−16		0	−0.17
113219	22 55 43.32	−50 38 20.8	10.17	G	343.930 507 13	−50.639 109 13		15.12	292.87	70.45	1.04	1.17	1.65	1.14	1.18	+13	−15	−16	−20	+ 4	+ 3	+ 0	+ 6	+17	+13		0	1.43
113220 H	22 55 43.43	+15 46 45.3	8.67	G	343.930 940 76	+15.779 249 47	A	14.64	119.97	27.53	2.30	1.89	2.29	1.91	2.31	+47	− 6	− 8	+ 0	−20	+ 2	−30	−43	+25	+37		3	0.07
113221	22 55 43.64	−30 22 40.5	11.71	G	343.931 845 44	−30.377 912 37		31.31	353.83	190.60	2.58	2.00	3.13	3.07	2.58	+25	−26	−22	−29	+ 5	+27	+13	−16	+ 2	+24		0	0.84
113222	22 55 44.49	+36 21 05.0	5.73	H	343.935 388 34	+36.351 393 64		3.90	19.89	− 1.54	0.54	0.34	0.70	0.74	0.44	+ 0	+21	+21	+24	+ 6	+10	+13	− 1	+21	+18		0	−1.33
113223 H	22 55 44.72	+50 39 04.7	9.99	H	343.936 334 58	+50.651 315 38	A	3.56	1.28	− 0.41	3.79	5.59	2.35	1.59	1.98	+21	− 6	+18	− 2	+ 1	−18	+12	−14	+ 7	+27		1	0.89
113224	22 55 45.80	+57 36 06.9	10.12	G	343.940 812 98	+57.601 925 14		0.39	− 1.55	− 0.34	0.98	0.87	1.13	1.28	1.16	−21	+19	+ 6	+37	−18	− 1	−12	+16	+ 4	+ 0		0	−0.32
113225 H	22 55 46.65	+72 50 35.6	8.01	G	343.944 388 11	+72.843 228 21	D	4.14	18.82	9.95	1.05	1.01	1.06	1.08	1.01	− 3	− 1	− 9	+18	+ 1	+ 2	− 4	− 1	+ 9	−10		1	0.80
*113226	22 55 47.06	+43 33 33.5	7.98	2 H	343.946 102 10	+43.559 299 84	A	4.01	−0.33	−4.29	1.37	1.39	1.61	1.42	1.40	− 8	+ 6	+12	+ 7	+ 6	− 5	+18	−24	+ 1	+25		3	0.55
*113227	22 55 47.02	+44 18 29.7	6.81	H	343.945 913 03	+44.308 251 68		5.74	4.47	−5.69	0.49	0.47	0.74	0.57	0.56	+ 0	+16	+16	+18	+ 4	−16	+ 6	−12	− 0	+ 9		1	−0.03
113228	22 55 47.66	+43 33 05.9	9.73	2 H	343.948 586 26	+43.551 636 24	B	7.06	1.49	−0.37	7.18	7.20	5.97	4.69	5.04	+ 0	+ 3	+18	+11	+ 5	− 1	+14	−22	+10	+23		3	0.55
113229	22 55 47.90	−75 27 21.9	10.42	G	343.949 570 92	−75.456 090 56		116.02	−1027.28	−1061.60	1.18	0.97	1.33	1.50	1.04	− 2	− 2	−19	+ 0	+ 2	− 7	+ 1	−14	+16	+ 0		0	−0.60
113230	22 55 48.31	+72 00 57.6	8.01	1 H	343.951 285 50	+72.016 012 09		1.94	−10.22	10.19	0.59	0.58	0.69	0.66	0.70	− 4	− 7	+16	+11	+16	+ 3	+18	− 6	− 6	+ 6		0	0.95
113231	22 55 49.65	−07 49 21.0	8.01	H	343.956 885 53	−07.822 487 88		28.72	553.31	−50.20	1.08	0.62	1.30	1.87	1.02	+12	+25	−14	+ 0	+20	+13	+17	−40	+52	−16		0	1.27
113232	22 55 49.98	−48 42 28.3	7.97	H	343.958 251 69	−48.707 871 78		5.09	56.54	−70.79	0.70	0.64	1.00	0.63	0.72	+ 6	−16	−17	−32	+ 5	+15	+ 5	+ 0	+ 7	+15		3	0.29
113233	22 55 50.34	+60 00 34.5	9.60	H	343.959 733 25	+60.009 594 84		2.30	6.35	− 2.11	0.89	0.88	1.09	1.22	1.08	−21	+ 5	−14	+23	+ 7	−28	+ 0	−28	+33	−37		0	−0.91
113234	22 55 51.54	−31 37 59.5	6.09	G	343.964 760 13	−31.633 204 69		3.44	−13.79	−10.96	0.82	0.55	0.89	0.95	0.70	+10	−21	−25	−31	+12	+27	+17	− 2	+ 8	+18		0	3.53
113235	22 55 52.29	+70 53 56.5	9.50	H	343.967 872 76	+70.899 019 54		3.17	0.27	− 1.80	1.69	1.52	1.88	1.93	1.61	−11	−13	+11	−18	+ 3	+15	+ 1	−21	+ 3	−10		0	
113236	22 55 52.62	+63 28 23.2	8.89	H	343.969 267 23	+63.473 110 80		1.94	− 3.69	− 7.81	0.69	0.77	0.89	0.87	0.90	−14	−21	+16	+ 1	− 4	− 4	− 4	−21	+ 2	−13		0	−1.45
113237	22 55 52.94	+41 58 32.0	8.13	H	343.970 576 58	+41.975 566 19		2.21	− 0.68	− 4.78	0.47	0.65	0.96	0.51	0.72	− 2	− 3	+16	+47	− 4	+ 2	+20	−37	− 1	+31		0	−1.64
113238	22 55 53.56	−26 39 30.0	8.11	G	343.973 168 53	−26.658 330 11		26.39	228.60	−178.18	1.04	0.68	1.06	1.22	0.78	− 1	+ 3	− 4	−36	+26	+18	+30	−12	+12	−11		0	−0.78
113239	22 55 53.81	+45 04 58.6	10.21	H	343.974 218 03	+45.082 953 64		0.19	− 0.37	− 2.68	0.97	1.18	1.75	1.05	1.15	−11	+ 5	+17	− 9	− 1	− 9	+ 4	−18	+ 5	+14		0	0.92
113240	22 55 54.32	−41 05 48.5	6.72	H	343.976 330 18	−41.096 812 23		8.07	75.24	23.54	0.63	0.49	0.79	0.77	0.58	+ 4	− 2	−16	+33	− 9	+25	− 3	+ 6	+16	+18		0	−1.01
113241	22 55 54.69	+54 15 13.2	8.27	G	343.977 880 64	+54.253 667 03		3.84	68.92	40.57	0.57	0.59	0.77	0.70	0.60	−16	−11	+35	+ 9	+ 7	− 2	+ 8	− 8	+ 2	− 7		4	−1.27
113242	22 55 54.90	−20 31 53.6	8.55	H	343.978 763 45	−20.531 560 81		5.22	23.57	−10.21	0.97	0.66	1.07	1.22	0.76	+19	− 6	+ 7	+10	− 1	+25	−10	−19	+16	+ 2		0	0.44
113243	22 55 55.85	+68 14 56.0	8.04	G	343.982 721 60	+68.248 883 71		0.96	3.04	1.37	0.56	0.55	0.65	0.62	0.56	−12	+ 0	+17	+20	+ 1	+ 3	− 2	− 9	+10	−19		0	2.13
113244	22 55 56.61	+05 45 20.7	11.23	G	343.985 877 67	+05.755 749 99		41.15	356.62	−269.74	2.10	1.70	2.65	2.76	2.06	+29	+ 1	−28	−11	−15	+35	−11	−37	+26	+14		0	−1.16
113245	22 55 56.70	+41 20 06.5	7.32	H	343.986 267 51	+41.335 128 03		9.83	80.08	−35.59	0.54	0.63	0.87	0.57	0.92	+17	+17	+26	+41	+ 8	+12	− 8	−50	−11	+ 9		1	−0.08
113246	22 55 56.89	−32 32 22.9	4.20	G	343.987 050 05	−32.539 701 96		19.14	10.84	30.32	1.08	0.58	0.87	1.12	0.71	−30	− 1	−27	−63	+38	+ 4	+40	−36	+19	−19		0	0.55
113247	22 55 57.59	−74 59 43.1	7.76	H	343.989 953 33	−74.995 306 49		3.26	20.44	−10.18	0.64	0.54	0.72	0.79	0.59	− 5	− 4	−13	+ 5	+ 5	+ 2	+ 4	− 5	+ 8	− 9		0	−0.22
113248 H	22 55 57.92	−42 45 39.5	10.00	H	343.991 330 88	−42.760 980 61	*	8.72	58.42	−23.35	1.37	1.19	1.72	1.70	1.46	+15	−13	−17	+16	+ 2	+16	+ 5	+ 0	+11	+28		0	−1.21
113249	22 55 58.35	+62 25 56.2	6.53	H	343.993 128 16	+62.432 279 21		2.77	23.34	− 1.77	0.51	0.54	0.67	0.57	0.67	−14	+25	+ 6	+ 6	− 7	−15	− 4	−27	− 3	− 7		0	−0.12
113250	22 55 58.43	−12 57 46.3	11.54	G	343.993 461 62	−12.962 850 92		16.95	149.17	−128.20	2.39	1.83	2.89	2.81	2.36	+34	+ 4	− 1	− 4	+ 8	+31	+11	−13	+24	+31		0	−1.26
113251	22 55 58.55	+10 02 28.2	9.24	H	343.993 969 55	+10.041 160 34		0.71	13.59	−0.24	1.22	1.03	1.40	1.35	1.32	+48	−27	−15	−37	−17	+34	−17	−36	+20	+37		0	2.69
113252	22 55 59.99	+35 11 44.6	8.19	2 T	343.999 937 83	+35.195 724 18		1.55	−10.99	5.84	0.69	0.53	1.00	0.85	0.91	+ 6	+ 7	+23	+18	− 5	−20	+ 8	+ 0	+15	+29		0	0.33
113253	22 56 02.24	−28 01 25.5	8.22	H	344.009 336 18	−28.023 762 41		3.47	54.30	−29.20	0.98	0.67	1.07	1.15	0.83	+15	+ 4	− 4	−27	+27	−11	+27	+ 3	+ 9	+19		0	2.15
113254	22 56 02.25	+46 41 51.2	8.38	H	344.009 378 46	+46.697 558 05		2.28	44.49	13.64	0.57	0.63	0.97	0.64	0.72	−28	+ 5	+15	+12	+15	− 1	+20	− 4	+ 4	− 4		1	0.79
113255	22 56 03.35	+58 11 45.0	7.06	G	344.013 976 12	+58.195 839 15		4.33	19.89	3.07	0.53	0.50	0.65	0.64	0.63	−25	+23	+ 6	+24	− 3	+15	− 2	+ 0	+ 5	−25		0	0.77
113256	22 56 04.53	−43 37 04.4	10.37	H	344.018 876 96	−43.617 887 91		4.90	17.81	0.71	1.39	1.28	1.88	1.62	1.59	+14	− 5	−20	− 7	− 1	+20	+ 2	− 4	+11	+29		0	1.11
113257	22 56 05.23	−83 21 05.7	8.33	H	344.021 806 46	−83.351 573 48		8.52	10.28	−8.58	0.69	0.61	0.77	0.81	0.68	+ 2	−17	− 5	+13	+ 2	−11	+ 2	+ 0	− 7	− 2		0	0.46
113258	22 56 05.84	−31 34 05.7	10.46	G	344.024 314 19	−31.568 261 06		11.67	123.12	−30.19	1.74	1.39	2.07	2.27	1.75	+16	− 1	−35	−27	+ 7	+10	+10	−20	+18	+26		0	1.33
113259	22 56 07.27	−43 08 39.4	8.61	H	344.030 312 10	−43.144 290 49		10.42	45.91	−15.70	0.88	0.77	1.18	1.04	0.93	+20	−14	−28	+16	− 6	+18	+ 0	−10	+18	+33		2	−1.01
113260	22 56 07.39	+54 13 45.6	9.27	2 H	344.030 791 16	+54.229 338 52		1.87	− 5.58	− 0.58	0.67	0.70	0.90	0.84	0.74	−16	− 8	+33	+16	+10	− 3	+12	− 3	− 5	− 9		1	0.22
113261	22 56 08.35	−18 22 02.8	9.81	H	344.034 810 26	−18.367 448 04		9.84	84.18	−11.82	1.34	1.04	1.85	1.93	1.36	+31	+ 6	−23	+ 4	− 7	+30	− 2	−29	+51	+25		0	−0.25
113262	22 56 08.36	+35 41 39.9	7.83	H	344.034 826 97	+35.694 427 51		3.24	−32.01	− 0.55	0.71	0.51	1.03	0.86	0.71	+ 6	+17	+34	+ 6	− 1	− 9	+ 9	− 8	+13	+19		1	−0.30
113263	22 56 08.55	+58 53 15.1	8.33	1 G	344.035 636 13	+58.887 526 05		0.67	− 3.95	− 1.45	0.83	0.73	0.99	0.99	0.94	−27	+24	− 8	+11	+ 7	+ 5	+11	−16	+23	−31		0	1.10
113264	22 56 09.53	−12 24 08.2	9.72	H	344.039 723 20	−12.402 270 48		14.41	−30.29	− 1.62	1.42	0.98	1.65	1.86	1.22	+24	+ 4	+ 0	− 7	+12	+24	+ 9	−23	+20	+ 4		0	−0.64
113265	22 56 09.85	+49 32 32.3	9.81	H	344.041 022 77	+49.542 308 01		1.61	7.57	− 2.10	0.85	0.94	1.31	0.89	0.98	−20	− 9	+21	−20	+ 2	− 3	+ 5	− 3	+ 9	+ 2		0	−0.24
113266	22 56 09.98	+45 47 29.9	8.56	H	344.041 583 44	+45.791 642 63		9.32	− 9.80	−38.19	0.52	0.66	1.09	0.59	0.69	−37	− 4	+20	− 2	+21	− 5	+24	−12	+ 7	−13		1	0.43
113267 H	22 56 10.69	+66 49 13.3	8.73	H	344.044 541 98	+66.820 351 13	A	1.66	− 8.22	− 3.91	1.19	1.11	1.21	1.43	1.29	− 3	−13	− 1	+13	+19	−11	+17	− 5	+10	+ 1		1	−0.65
113268	22 56 10.75	+56 27 01.6	7.26	H	344.044 793 12	+56.450 439 62		1.77	9.89	1.93	0.48	0.48	0.61	0.61	0.55	−17	−15	+13	+ 7	− 8	+ 7	− 9	+ 2	+12	+ 1		1	0.95
113269	22 56 11.53	+58 40 01.8	11.35	2 H	344.048 048 79	+58.667 159 68		3.50	2.25	2.28	1.82	1.60	2.15	2.08	2.07	−25	+21	+ 1	+12	+ 6	+13	+ 9	−11	+17	−24		0	0.95
113270	22 56 11.53	+13 54 23.0	8.84	H	344.048 062 08	+13.906 380 10		11.90	− 6.87	−129.60	1.00	0.82	1.14	1.06	0.95	+33	+ 2	+ 5	+ 4	−13	−17	−16	−21	+ 6	+21		0	−1.95
113271	22 56 11.90	+50 43 35.2	8.57	H	344.049 579 76	+50.726 434 16		2.53	29.87	− 7.39	0.66	0.79	1.05	0.71	0.82	−17	+ 1	+29	+ 8	+ 3	− 2	+ 7	−13	+10	− 5		1	1.15
113272	22 56 12.12	−36 40 49.0	8.33	H	344.050 503 93	−36.680 291 31		11.32	31.92	−72.01	0.82	0.67	1.02	0.96	0.75	+20	− 5	−11	+36	− 6	+11	− 4	+12	− 6	+16		0	0.56
113273 H	22 56 13.13	+72 50 14.5	7.38	H	344.054 694 57	+72.837 355 49	A	5.58	2.83	− 8.61	1.51	1.21	0.99	1.02	0.92	−18	− 2	− 4	− 5	+ 6	+ 5	+ 7	− 2	+15	−17		2	−0.10
113274	22 56 13.68	−33 52 49.6	9.01	H	344.056 985 23	−33.880 445 71		4.73	38.59	−32.13	0.76	0.72	1.11	0.89	0.93	+37	+ 1	− 9	+10	− 3	+23	− 1	+ 1	+21	+53		0	0.15
113275	22 56 14.75	+04 21 01.5	9.11	H	344.061 459 57	+04.350 428 12		12.87	51.79	−68.27	1.16	0.99	1.43	1.58	1.54	+27	− 1	−28	−21	+16	−23	+14	− 4	+20	+19		0	0.32
113276	22 56 14.83	−24 09 01.4	8.39	H	344.061 799 33	−24.150 377 08		5.00	25.25	0.58	0.89	0.67	1.13	1.08	0.77	+25	− 4	−36	−15	+16	−11	+10	−13	+35	+20		2	0.60
113277	22 56 18.17	+07 44 17.9	10.46	H	344.075 705 90	+07.738 313 36		13.92	10.91	− 8.55	2.05	1.51	2.46	2.48	1.96	+34	−30	−15	−31	− 5	+17	−12	−30	+35	+ 1		0	1.08
113278	22 56 18.24	−59 31 29.3	10.74	H	344.076 012 41	−59.524 816 86		3.83	59.96	−16.90	1.53	1.79	2.92	1.90	2.01	−36	− 6	+ 6	− 7	+ 4	+17	+ 6	−19	−16	−28		0	
113279	22 56 20.44	−06 32 44.9	8.11	H	344.085 181 85	−06.545 792 76		6.55	− 1.52	−18.76	0.97	0.64	1.14	1.16	0.92	+37	+19	+10	+12	+ 4	+24	+ 5	−31	+23	+34		0	1.18
113280 H	22 56 23.51	+17 27 10.2	8.90	G	344.097 961 43	+17.452 842 55	A	31.07	211.33	−184.75	1.86	1.39	2.07	1.91	1.85	+36	+ 6	+ 8	− 2	−11	+27	−20	−40	+ 9	+26		0	−0.29
113281	22 56 23.63	+41 36 14.0	5.60	1 H	344.098 462 42	+41.603 886 27		2.71	−0.99	−4.25	0.34	0.48	0.69	0.36	0.51	+ 3	+ 8	+22	+31	− 3	+ 9	+14	−40	− 3	+30		0	0.63
113282 H	22 56 23.68	+22 57 21.2	7.38	H	344.098 653 03	+22.955 901 80	A	1.90	55.37	− 3.29	1.29	0.77	1.51	1.28	1.11	+11	+17	+ 6	+13	−12	−34	−14	−20	+17	− 5		1	0.92
113283	22 56 23.83	−31 33 54.6	6.48	G	344.099 277 60	−31.565 178 71		130.94	330.53	−159.86	0.84	0.60	0.92	1.00	0.75	+10	− 7	−26	−27	+ 9	+21	+14	− 7	+10	+18		0	0.48
113284	22 56 23.87	−37 45 39.2	10.24	H	344.099 460 79	−37.760 898 32		1.70	25.09	6.33	1.36	1.10	1.77	1.47	1.36	+16	+18	−12	− 8	+ 3	+30	+10	+ 0	+22	+35		0	0.06
113285	22 56 24.65	+13 03 16.6	7.73	H	344.102 714 68	+13.054 598 47		2.97	77.85	−28.33	0.83	0.69	1.02	0.96	0.82	+24	+ 9	+ 0	+ 0	+ 3	−23	+ 6	+ 9	+21	+ 6		0	0.21
113286	22 56 24.82	−08 45 17.2	10.60	H	344.103 421 55	−08.754 767 24		12.54	61.77	−61.80	1.98	1.25	2.50	2.85	1.87	+24	− 4	−28	− 2	+ 7	+24	+ 2	−46	+51	+10		0	−0.92
113287	22 56 25.79	−57 46 47.6	8.82	H	344.107 451 11	−57.779 890 02		1.91	11.42	−16.84	0.64	0.66	1.09	0.68	0.66	+ 2	−17	−23	−18	−15	+25	− 9	−15	+ 2	+ 2		0	0.78
113288	22 56 26.00	+49 44 00.8	4.99	2 H	344.108 327 84	+49.733 550 94		1.74	0.05	− 2.87	0.36	0.44	0.58	0.37	0.48	−23	+ 6	+ 8	+ 2	+ 4	− 6	+ 9	−24	+20	−13		0	−1.10
113289	22 56 26.45	+64 27 53.9	9.05	1 H	344.110 213 94	+64.464 962 68		0.62	− 4.81	− 0.49	0.74	0.85	0.95	0.81	0.91	− 6	+11	+17	− 6	− 1	− 7	− 1	−30	− 8	− 7		0	0.37
113290	22 56 26.56	−68 47 01.6	7.89	H	344.110 646 18	−68.783 779 57		2.54	−21.02	8.78	0.54	0.50	0.69	0.69	0.54	− 6	− 8	− 9	+ 8	− 4	+ 2	− 3	−17	− 1	− 8		0	−0.95
113291	22 56 27.55	−28 36 21.4	8.14	H	344.114 796 62	−28.605 956 23		8.57	− 3.77	− 5.15	0.88	0.64	0.99	1.11	0.76	+26	+ 5	− 6	+ 3	+20	− 9	+19	+20	+ 4	+30		0	3.31
113292	22 56 30.13	−14 59 22.4	8.01	H	344.125 555 64	−14.989 547 55		1.16	−20.13	− 9.93	1.23	0.67	1.34	1.48	0.91	− 5	+22	−20	−33	+12	+18	+25	−40	+46	−12		0	0.01
113293	22 56 31.11	−76 47 52.5	9.56	G	344.129 623 79	−76.797 913 12		13.22	−182.90	35.91	0.91	0.88	1.10	1.05	0.82	−11	+ 9	−27	+ 4	+ 3	+16	+11	−29	+ 8	+ 7		2	−0.42
113294	22 56 32.03	+06 48 19.6	7.52	G	344.133 438 95	+06.805 456 08		12.40	149.08	− 9.94	0.98	0.62	1.12	1.84	0.96	+19	− 6	−13	+24	+ 5	+13	−12	−15	+27	−29		0	0.11
113295	22 56 33.16	−24 42 22.0	9.93	H	344.138 153 83	−24.706 114 41		0.42	−10.55	−24.26	1.29	1.00	1.58	1.51	1.06	+33	− 6	−30	− 7	+ 5	−11	− 1	−21	+22	+23		0	−2.24
113296	22 56 35.43	+16 33 14.8	8.68	G	344.147 642 41	+16.554 122 09		145.27	−1033.21	−283.33	1.01	0.89	1.22	1.08	1.42	+47	+10	− 8	− 9	−22	− 4

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
113201						1.653	0.082	G	2.73	0.24	I	11.5784	0.0068	0.053	105		11.32	11.67		U			1							G
113202	8.364	0.010	7.929	0.009		0.405	0.022	G	0.47	0.02	H	7.9870	0.0013	0.014	145		7.96	8.01		C			1							S
113203	7.975	0.009	7.578	0.008		0.377	0.007	G	0.45	0.02	A	7.6280	0.0011	0.011	81		7.61	7.65		C			1							S
113204	8.201	0.010	6.513	0.004		1.429	0.003	G	1.42	0.01	H	6.4942	0.0007	0.007	81		6.48	6.51		D			1 G							S
113205	10.179	0.030	9.680	0.030		0.469	0.038	T	0.54	0.04	L	9.7599	0.0028	0.026	77		9.69	9.80		C			1							
113206	8.112	0.008	7.915	0.008		0.191	0.015	G	0.21	0.02	H	7.9726	0.0012	0.012	121		7.95	7.99					1							S
113207	9.770	0.015	8.946	0.012		0.743	0.015	T	0.79	0.01	L	9.0286	0.0016	0.019	161		9.00	9.08		C			1							
113208	8.406	0.008	8.363	0.010		0.044	0.012	T	0.06	0.01	L	8.3756	0.0018	0.018	167		8.35	8.41		C			1							S
113209	10.217	0.025	8.999	0.016		1.041	0.023	T	1.01	0.02	L	9.0640	0.0021	0.019	99		9.03	9.09		C			1							
113210	9.966	0.024	9.425	0.023		0.514	0.025	T	0.59	0.03	L	9.4955	0.0032	0.034	97		9.43	9.55					1							S
113211	8.104	0.007	7.723	0.007		0.372	0.015	G	0.43	0.02	H	7.7610	0.0012	0.012	129		7.74	7.79		C			1							S
113212	10.423	0.040	10.140	0.046		0.269	0.057	T	0.30	0.07	L	10.1400	0.0029	0.024	100		10.10	10.18		C			1							G
113213	9.795	0.052	9.074	0.030	*	0.900	0.015	G	0.90	0.01	I *	9.7657	0.0040	0.028	78	*	9.69	9.81		D	22556−3146	I 1	2 C B	AB	146	1.802	0.004	0.10	0.03	
113214	9.506	0.016	8.909	0.015		0.557	0.016	T	0.63	0.01	L	8.9688	0.0015	0.016	127		8.95	9.00		C			1							S
113215	10.240	0.023	9.145	0.015		0.946	0.021	T	0.94	0.01	L	9.2181	0.0026	0.024	158		9.17	9.26					1							
113216	8.663	0.010	7.597	0.007		0.924	0.009	T	0.92	0.01	L	7.6561	0.0008	0.009	136		7.64	7.68		C			1							S
113217	10.084	0.022	8.234	0.009		1.570	0.020	T	2.21	0.05	O	8.0816	0.0023	0.021	128		8.05	8.13		U 2			1							S
113218	8.580	0.011	8.083	0.010		0.479	0.011	T	0.55	0.01	L	8.1334	0.0012	0.012	117		8.11	8.15		C			1							
113219	11.154	0.051	10.227	0.038		0.824	0.005	G	0.86	0.01	H	10.3104	0.0034	0.037	129		10.24	10.39					1							
113220	9.597	0.021	8.844	0.018	*	0.670	0.015	G	0.73	0.01	H *	8.7767	0.0018	0.015	81	*	8.76	8.81		D	22557+1547	I 1	2 C A	AB	86	0.964	0.006	0.58	0.02	
113221						1.408	0.015	G	1.39	0.02	J	11.8066	0.0070	0.044	74		11.72	11.88					1							G
113222	5.662	0.002	5.723	0.003		−0.051	0.003	T	−0.03	0.00	L	5.7221	0.0004	0.006	165		5.71	5.73		C	22557+3621	I 1	1							S
113223	10.155	0.025	9.985	0.032	*	0.163	0.038	T	0.18	0.04	L *	10.0462	0.0028	0.023	140	*	9.99	10.10		D	22557+5039	H 1	2 C A	AB	208	0.357	0.014	1.20	0.16	G
113224	10.412	0.040	10.235	0.050		0.220	0.015	G	0.24	0.02	H	10.2267	0.0028	0.026	111		10.19	10.28		C			1							G
113225	8.054	0.011	7.941	0.013	*	0.080	0.015	G	0.09	0.02	H *	8.0576	0.0013	0.012	115	*	8.04	8.08		D	22560+7250	I 2	2 C A	DE	220	2.875	0.004	0.88	0.02	S
113226	8.030	0.008	7.979	0.009	A	0.046	0.011	T	0.06	0.01	L	8.0006	0.0063	0.023	165	A	7.97	8.06		U 2	22558+4334	M 2	1 C P D							S D
113227	7.876	0.007	6.908	0.005		0.850	0.006	T	0.86	0.00	L	6.9655	0.0007	0.009	153		6.95	6.98		D			1 G							S
113228	9.762	0.025	9.645	0.032	B	0.113	0.038	T	0.13	0.04	L	9.7474	0.0222			B				U 2	22558+4334	M 2	1 C I D							D
113229	12.320	0.169	10.549	0.050		1.485	0.015	G	2.43	0.02	A	10.3732	0.0032	0.033	151		10.30	10.44		C			1							G
113230	10.233	0.027	8.260	0.011		1.636	0.023	T	1.66	0.02	L	8.1263	0.0024	0.021	122		8.09	8.17		U			1							
113231	8.795	0.012	8.080	0.010		0.659	0.003	G	0.70	0.02	A	8.1434	0.0015	0.012	93		8.12	8.17			22558−0750	I 1	1							S
113232	9.410	0.017	8.093	0.010		1.118	0.015	T	1.08	0.02	L	8.1326	0.0017	0.016	126		8.11	8.16		C			1							S
113233	9.761	0.019	9.555	0.023		0.160	0.015	G	0.18	0.01	H	9.6604	0.0024	0.023	124		9.63	9.72					1							G
113234	7.863	0.009	6.231	0.004		1.358	0.003	G	1.33	0.00	H	6.2427	0.0011	0.007	81		6.23	6.25		C			1							S
113235	10.206	0.027	9.537	0.024		0.620	0.030	T	0.69	0.03	L	9.6288	0.0026	0.024	114		9.58	9.67		C			1 X							G
113236	9.124	0.015	8.892	0.017		0.221	0.021	T	0.24	0.02	L	8.9614	0.0016	0.016	119		8.93	8.99					1							
113237	9.853	0.016	8.289	0.008		1.312	0.014	T	1.27	0.02	L	8.2902	0.0013	0.018	221		8.26	8.32					1							
113238	9.172	0.015	8.193	0.011		0.821	0.004	G	0.86	0.00	H	8.2709	0.0020	0.015	99		8.25	8.30					1							S
113239	10.360	0.019	10.226	0.026		0.129	0.030	T	0.14	0.03	L	10.2548	0.0031	0.046	242		10.16	10.33					1 S							G
113240	8.026	0.009	6.844	0.005		1.013	0.008	T	0.99	0.01	L	6.8883	0.0011	0.009	88		6.87	6.90		C			1							S
113241	9.595	0.017	8.376	0.011		1.040	0.015	G	1.01	0.01	H	8.4365	0.0012	0.013	138		8.41	8.46		D			1							
113242	9.919	0.026	8.665	0.016		1.069	0.024	T	1.03	0.02	L	8.7191	0.0020	0.013	73		8.69	8.74		C			1							
113243	8.205	0.008	8.084	0.009		0.117	0.011	T	0.13	0.01	L	8.1010	0.0015	0.016	139		8.07	8.14					1							S
113244						1.433	0.010	G	1.75	0.03	I	11.3040	0.0040	0.032	71		11.21	11.36		C			1							G
113245	7.878	0.007	7.372	0.007		0.476	0.009	T	0.55	0.01	L	7.4208	0.0011	0.011	141		7.41	7.44					1 G							S
113246	5.448	0.003	4.327	0.002		0.952	0.032	G	0.96	0.02	A	4.3677	0.0006	0.004	69		4.36	4.38			22559−3232	I 1	1							S
113247	9.133	0.012	7.860	0.007		1.084	0.011	T	1.05	0.01	L	7.9237	0.0013	0.013	133		7.90	7.94		C			1							S
113248	10.687	0.040	10.021	0.035	*	0.607	0.040	T	0.68	0.04	L *	10.1268	0.0037	0.027	90	*	10.07	10.18		C	22560−4246	H 1	2 C S A	AB	184	0.157	0.018	0.57	0.66	
113249	8.925	0.012	6.754	0.005		1.820	0.015	G	1.83	0.09	H	6.6273	0.0012	0.011	114		6.61	6.64					1 G							S
113250						1.338	0.007	G	1.55	0.01	I	11.6575	0.0064	0.046	84		11.56	11.75					1							G
113251	11.030	0.072	9.459	0.029		1.160	0.040	G	1.12	0.04	R	9.4110	0.0024	0.023	75		9.36	9.44		C			1							
113252	10.219	0.019	8.370	0.008		1.537	0.016	T	1.59	0.04	L	8.2285	0.0196	0.168	161		8.19	8.60	192.00	P 1 A			1							
113253	8.527	0.010	8.244	0.011		0.268	0.015	T	0.30	0.02	L	8.2882	0.0015	0.012	92		8.27	8.31		C			1							S
113254	9.474	0.013	8.482	0.009		0.868	0.012	T	0.88	0.01	L	8.5386	0.0013	0.015	194		8.51	8.57		C			1							S
113255	6.971	0.004	7.060	0.006		−0.054	0.009	G	−0.03	0.01	H	7.0499	0.0009	0.008	122		7.04	7.07					1							S
113256	10.891	0.051	10.369	0.048		0.499	0.053	T	0.57	0.06	L	10.4809	0.0043	0.036	87		10.42	10.55		C			1							
113257	8.894	0.012	8.388	0.012		0.490	0.015	G	0.56	0.02	H	8.4354	0.0016	0.016	119		8.41	8.47		C			1							S
113258	11.549	0.093	10.499	0.057		0.804	0.015	G	0.84	0.01	H	10.6068	0.0040	0.028	73		10.55	10.65		C			1							
113259	9.153	0.015	8.667	0.015		0.469	0.016	T	0.54	0.02	L	8.7196	0.0026	0.017	96		8.70	8.74					1							S
113260	12.205	0.177	9.640	0.025		2.110	0.144	T	2.15	0.15	L	9.3402	0.0190	0.154	144		9.19	9.64		U 2 C			1 S							
113261	10.701	0.054	9.851	0.041		0.747	0.052	T	0.79	0.04	L	9.9544	0.0029	0.024	77		9.91	10.02		C			1							
113262	9.217	0.010	7.946	0.006		1.082	0.009	T	1.04	0.01	L	8.0008	0.0014	0.014	172		7.98	8.03					1							S
113263	9.338	0.016	8.497	0.013		0.821	0.028	G	0.84	0.02	H	8.5035	0.0042	0.032	107		8.46	8.55	1.63	P 1 A			1							
113264	10.551	0.040	9.769	0.032		0.695	0.039	T	0.75	0.03	L	9.8559	0.0028	0.026	83		9.81	9.90					1							
113265	10.207	0.024	9.900	0.028		0.292	0.035	T	0.33	0.05	L	9.8789	0.0027	0.025	141		9.84	9.91					1 S							G
113266	9.296	0.010	8.621	0.009		0.625	0.011	T	0.69	0.01	L	8.6964	0.0012	0.018	243		8.66	8.73					1							
113267	9.037	0.014	8.826	0.016	A	0.100	0.495	G	0.19	0.05	L *	8.7862	0.0025	0.017	106	*	8.76	8.81		D	22562+6649	I 1	2 C A	AB	172	1.049	0.011	2.13	0.05	
113268	7.323	0.007	7.266	0.007		0.057	0.009	T	0.07	0.01	L	7.2811	0.0011	0.012	123		7.26	7.30					1							S
113269						0.810	0.190	G	0.84	0.14	R	11.5014	0.0099	0.093	105		11.34	11.64		U 2			1							G
113270	9.658	0.019	8.910	0.016		0.684	0.020	T	0.74	0.02	L	8.9772	0.0021	0.017	89		8.95	9.00		C			1							S
113271	9.912	0.020	8.697	0.013		1.039	0.019	T	1.01	0.02	L	8.7409	0.0019	0.018	143		8.70	8.77					1							
113272	8.906	0.012	8.383	0.011		0.500	0.012	T	0.57	0.01	L	8.4411	0.0018	0.016	98		8.42	8.47					1							S
113273	7.653	0.006	7.419	0.007	*	0.223	0.008	T	0.25	0.01	L *	7.4478	0.0010	0.010	111	*	7.43	7.47		D	22560+7250	I 2	2 C A	AB	109	0.379	0.002	0.49	0.02	S
113274	9.557	0.018	9.054	0.018		0.484	0.019	T	0.56	0.02	L	9.1146	0.0019	0.015	117		9.09	9.14		C			1							
113275	10.005	0.037	9.173	0.029		0.749	0.036	T	0.79	0.03	L	9.2578	0.0028	0.015	65		9.23	9.29		C			1							S
113276	8.774	0.013	8.423	0.014		0.350	0.015	G	0.41	0.02	H	8.4729	0.0020	0.016	95		8.45	8.50					1							S
113277	11.669	0.139	10.627	0.086		0.906	0.123	T	0.91	0.09	L	10.6203	0.0055	0.043	67		10.55	10.67					1							G
113278	11.580	0.055	10.765	0.044		0.736	0.054	T	0.78	0.04	L	10.8810	0.0030	0.047	255		10.79	10.96		C			1 X							G
113279	9.187	0.013	8.214	0.010		0.854	0.012	T	0.87	0.01	L	8.2659	0.0018	0.015	115		8.24	8.29					1							S
113280	10.275	0.037	9.117	0.023	A	1.000	0.015	G	1.04	0.02	I *	8.9944	0.0020	0.017	97	*	8.96	9.03		D	22564+1728	I 1	2 C A	AB	225	4.615	0.011	1.67	0.03	
113281	5.398	0.002	5.569	0.002		−0.149	0.002	T	−0.15	0.00	L	5.5503	0.0011	0.013	184		5.53	5.57	0.17	P 1 A	22564+4136	I 1	1							S P
113282	7.859	0.007	7.443	0.006	*	0.393	0.008	T	0.46	0.01	L *	7.4647	0.0010	0.010	187	*	7.44	7.49		D	22564+2257	I 1	2 C A	AB	291	0.739	0.004	0.93	0.01	S
113283	7.899	0.008	6.599	0.005		1.094	0.006	G	1.20	0.02	A	6.6027	0.0013	0.010	84		6.58	6.62		C			1							S
113284	10.704	0.038	10.278	0.043		0.402	0.053	T	0.47	0.06	L	10.3334	0.0028	0.027	88		10.29	10.38		C			1							
113285	8.877	0.013	7.857	0.009		0.889	0.012	T	0.89	0.01	L	7.8916	0.0012	0.013	79		7.87	7.91		C			1							S
113286	11.763	0.120	10.637	0.070		0.969	0.108	T	0.95	0.09	L	10.7668	0.0030	0.030	91		10.73	10.83		C			1 S							G
113287	10.014	0.017	8.938	0.012		0.931	0.016	T	0.93	0.01	L	8.9827	0.0019	0.025	196		8.94	9.02					1							
113288	7.305	0.007	5.190	0.004		1.778	0.013	G	1.87	0.03	C	5.0835	0.0030	0.023	158		5.03	5.11		U 2 C			1							S
113289	10.006	0.025	9.181	0.019		0.743	0.024	T	0.79	0.02	L	9.1991	0.0030	0.026	116		9.16	9.25		U			1							
113290	8.007	0.007	7.906	0.009		0.091	0.010	T	0.10	0.01	L	7.9287	0.0016	0.019	148		7.90	7.96					1							S
113291	8.492	0.011	8.182	0.011		0.340	0.015	G	0.40	0.02	H	8.2211	0.0013	0.012	79		8.20	8.25					1							S
113292	9.644	0.020	8.145	0.011		1.261	0.018	T	1.22	0.02	L	8.1722	0.0014	0.011	73		8.16	8.20		C			1							S
113293	10.416	0.029	9.658	0.024		0.696	0.005	G	0.75	0.00	H	9.6934	0.0021	0.026	127		9.64	9.73		C			1							
113294	8.167	0.012	7.569	0.009		0.558	0.015	G	0.63	0.01	H	7.6356	0.0015	0.012	68		7.61	7.65		C			1							S
113295	11.299	0.069	9.983	0.035		1.118	0.061	T	1.08	0.06	L	10.0934	0.0025	0.029	87		10.04	10.14		C			1							
113296	10.551	0.043	8.875	0.018		1.507	0.015	G	2.10	0.00	A	8.7104	0.0017	0.014	79		8.69	8.74		C			1							
113297	10.969	0.042	9.683	0.022		1.094	0.037	T	1.06	0.04	L	9.7377	0.0024	0.026	122		9.69	9.78					1							
113298	8.091	0.006	8.057	0.008		0.036	0.009	T	0.05	0.01	L	8.0830	0.0012	0.012	150		8.06	8.11		C			1							S
113299	8.504	0.015	7.609	0.011	*	0.796	0.014	T	0.83	0.01	L *	7.7538	0.0016	0.016	128	*	7.73	7.79		D	22567+7830	I 1	2 C A	AB	4	5.485	0.004	0.98	0.02	S
113300	9.692	0.017	9.270	0.017		0.399	0.022	T	0.46	0.02	L	9.3264	0.0023	0.026	154		9.29	9.37		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	29	30
	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18												
113301	22 56 42.55	+62 37 29.6	8.76	G	344.177 302 54	+62.624 884 76	1.31	−1.20	−3.70	0.81	0.79	0.96	0.88	0.90	− 3	+ 9	+10	+ 7	−11	+ 0	−12	−16	+ 9	− 9	0	−0.87
113302	22 56 42.71	+29 30 15.4	10.38	G	344.177 939 78	+29.504 290 53	23.13	248.21	16.44	1.09	0.92	1.67	1.28	1.27	+18	− 5	− 9	− 1	− 9	−13	−10	−25	+16	+21	0	−1.41
113303	22 56 43.31	−03 31 37.0	8.35	H	344.180 441 94	−03.526 936 11	9.64	28.09	−26.91	1.00	0.59	1.05	1.21	0.83	+13	− 2	− 7	− 7	+ 9	+21	+10	−26	+20	+ 8	0	−2.18
113304	22 56 43.38	−42 52 54.6	10.77	G	344.180 760 30	−42.881 824 72	3.10	49.23	2.44	1.59	1.43	2.02	2.03	1.62	+14	−10	−25	+24	− 2	+ 2	− 1	− 5	+12	+17	0	0.63
113305	22 56 44.75	+48 38 50.7	9.97	H	344.186 442 18	+48.647 414 99	0.75	−2.99	−1.36	0.85	1.04	1.51	0.92	1.08	−31	−12	+25	−14	+13	− 5	+15	−21	+11	−17	0	−0.53
113306 H	22 56 47.19	+62 43 37.7	7.64	G	344.196 621 86	+62.727 132 16 A	1.20	0.53	−3.72	0.86	0.86	0.92	0.90	0.90	− 5	+18	+14	+ 1	−12	− 2	−12	−15	−10	−15	6	−0.06
113307	22 56 47.82	−47 58 09.2	5.72	H	344.199 258 94	−47.969 225 86	11.98	−26.30	1.82	0.62	0.50	0.77	0.67	0.56	+ 7	−22	−27	−10	−13	+37	− 2	−33	+12	+19	0	0.33
113308	22 56 48.38	+40 14 16.6	9.34	H	344.201 582 00	+40.237 954 50	3.58	−6.60	−6.00	1.07	0.80	1.35	1.17	0.95	+11	+38	+22	+22	+ 1	+ 7	+24	−36	+ 3	+49	0	2.05
113309	22 56 48.63	+51 32 29.1	9.67	H	344.202 630 59	+51.541 424 85	−1.61	−1.29	−3.97	0.91	0.86	1.28	1.03	0.97	−16	+ 5	+26	+36	− 7	− 6	+ 1	+ 9	+22	− 3	1	1.02
113310	22 56 49.39	−10 15 46.6	8.15	H	344.205 809 34	−10.262 933 49	5.91	25.97	−15.15	1.12	0.59	1.21	1.26	0.86	+23	+27	− 8	+ 8	+23	+ 3	+34	+ 0	+38	+20	2	−0.70
113311 H	22 56 51.44	+11 50 54.0	6.53	G	344.214 320 71	+11.848 345 33 A	12.26	53.09	−3.53	0.99	0.85	1.12	1.13	1.12	+47	−13	−11	−18	+ 1	−12	+ 4	−10	+18	+22	2	−0.99
113312	22 56 52.53	+26 13 32.1	9.66	H	344.218 886 59	+26.225 594 70	1.60	−2.20	−6.93	0.68	0.69	1.30	0.77	0.91	+43	− 3	+ 2	−14	−11	+ 8	− 4	−30	+21	+64	0	−0.03
113313	22 56 53.38	+06 06 05.2	9.01	H	344.222 411 49	+06.101 435 32	5.22	20.62	−8.18	1.12	0.85	1.38	1.78	1.16	+23	− 7	−31	+17	−11	+27	−17	−27	+33	− 6	0	−0.28
113314	22 56 53.76	−16 16 13.8	8.82	H	344.223 994 57	−16.270 498 48	2.55	9.50	−4.71	1.09	0.76	1.24	1.65	0.93	+17	+ 9	−19	− 5	+17	− 3	+11	−22	+27	−16	0	−1.06
113315	22 56 55.76	+01 36 35.2	8.90	H	344.232 329 75	+01.609 776 63	8.24	176.36	−18.15	1.11	0.79	1.15	1.54	1.04	+29	−17	−13	−17	+30	+11	+42	+29	−14	− 1	0	−0.25
113316	22 56 56.12	+59 57 42.1	7.21	1 H	344.233 829 15	+59.961 695 04	3.21	14.18	3.26	0.52	0.55	0.65	0.71	0.66	−26	+ 7	− 5	+12	+13	−19	+12	−32	+26	−30	0	−0.97
113317	22 56 56.22	+26 23 16.5	8.61	H	344.234 238 38	+26.387 905 87	0.90	−16.90	−16.10	0.57	0.57	1.06	0.65	0.77	+45	+ 5	+ 6	−10	−13	+10	− 7	−31	+16	+56	0	0.25
113318	22 56 56.60	+43 17 27.7	9.59	H	344.235 832 41	+43.291 031 23	1.06	1.32	−4.22	0.82	0.85	1.34	0.84	0.85	− 8	+ 3	+12	+24	+15	+ 4	+25	−27	+ 8	+14	2	0.76
113319	22 56 57.54	+12 51 40.6	8.43	H	344.239 745 13	+12.861 272 04	5.22	−58.95	−32.77	1.07	0.90	1.30	1.27	1.20	+31	+32	+10	−21	+ 8	− 6	+18	+ 3	+20	+14	0	−0.84
113320	22 56 59.96	+49 22 29.3	9.25	H	344.249 822 84	+49.374 814 23	0.02	0.28	−3.93	0.70	0.81	1.12	0.73	0.84	−24	− 7	+15	−15	+ 9	− 1	+12	−26	+ 9	− 3	0	−0.90
113321	22 57 00.24	+14 25 08.1	7.76	2 H	344.250 979 89	+14.418 925 69	3.15	4.74	0.28	0.80	0.69	0.97	0.84	0.85	+34	+13	+ 4	− 1	− 2	−18	− 2	− 8	+ 2	+26	0	1.15
113322	22 57 01.24	+36 30 20.0	8.60	H	344.255 169 46	+36.505 550 23	4.14	55.98	−6.05	0.87	0.54	1.16	1.24	0.72	− 4	+14	+35	+21	− 1	+10	+ 5	− 9	+ 9	+17	1	−3.07
113323 H	22 57 02.47	+24 40 55.9	8.66	H	344.260 297 84	+24.682 203 53 *	11.55	0.36	9.94	0.91	0.60	1.28	1.13	1.01	+13	− 1	− 9	+53	−20	− 6	−36	−32	+26	− 5	0	1.17
113324	22 57 02.70	+56 29 26.3	7.45	G	344.261 235 91	+56.490 629 89	4.15	−15.82	−29.36	0.49	0.50	0.64	0.65	0.61	−21	− 7	+12	+15	−14	+16	−15	+12	+ 5	− 7	0	1.99
113325	22 57 03.38	−44 44 23.7	8.73	H	344.264 080 09	−44.739 908 58	4.38	−14.10	−14.46	1.06	0.91	1.32	1.41	0.99	+14	− 7	−23	+29	− 5	+14	− 4	−27	+28	+14	0	−0.28
113326	22 57 04.29	−22 03 32.5	10.44	H	344.267 869 17	−22.059 025 15	2.22	10.15	1.48	1.76	1.18	2.00	2.29	1.66	+26	−18	−15	−19	+ 6	+10	+ 2	−15	+31	+35	0	0.32
113327	22 57 04.49	+48 41 02.7	5.34	2 H	344.268 724 27	+48.684 081 17	2.97	9.59	−5.43	0.36	0.44	0.61	0.38	0.44	−33	− 8	+31	−14	+ 8	+ 1	+ 7	− 5	+11	−30	0	−1.35
113328	22 57 04.50	+83 03 09.6	8.24	H	344.268 764 65	+83.052 677 66	2.17	27.36	6.88	0.62	0.58	0.70	0.73	0.61	− 5	− 6	+21	+10	− 4	+16	−12	− 9	+ 2	−27	0	0.47
113329	22 57 04.57	−06 48 56.4	9.35	H	344.269 039 93	−06.815 679 41	2.02	16.70	−8.56	1.28	0.81	1.68	1.83	1.27	+24	− 1	−22	− 9	+ 0	+40	+ 0	−48	+52	+19	2	0.00
113330	22 57 05.78	−57 24 03.7	7.43	3 H	344.274 102 28	−57.401 038 95	4.57	66.28	−56.73	0.46	0.52	0.85	0.51	0.52	− 8	−14	−18	−25	−13	+22	− 8	−24	− 3	− 5	2	1.28
*113331	22 57 06.84	−03 14 42.9	6.60	1 H	344.278 502 65	−03.245 253 60	11.76	29.27	15.64	0.75	0.47	0.77	0.90	0.60	+10	− 1	− 4	−12	+ 9	+24	+10	−22	+ 5	+ 1	0	1.02
*113332	22 57 06.79	−26 09 19.2	10.88	G	344.278 271 25	−26.155 330 37	7.19	105.89	15.82	2.17	1.31	2.09	2.40	1.54	+ 0	+ 6	− 3	−39	+22	+ 4	+26	−17	+12	− 9	8	−0.73
113333	22 57 07.13	+28 00 07.5	9.93	2 G	344.279 692 22	+28.002 097 01 A	34.86	351.56	−58.78	1.66	1.58	2.45	1.70	1.93	+33	+ 4	+ 3	+ 5	−15	− 3	−13	−23	+24	+38	2	0.42
113334	22 57 08.01	+14 00 51.2	7.96	G	344.283 378 10	+14.014 230 64	3.52	14.96	0.98	0.82	0.67	0.96	0.86	0.77	+28	− 1	+ 4	− 2	− 3	−16	− 3	− 7	+ 3	+22	0	−1.88
113335	22 57 08.72	+34 54 43.1	8.10	G	344.286 340 81	+34.911 967 83	6.67	−8.20	−33.94	0.67	0.49	0.87	0.79	0.65	+12	+13	+18	+31	− 1	−15	+12	− 5	+16	+24	0	−0.30
*113336	22 57 08.83	+24 15 50.0	8.75	H	344.286 784 19	+24.263 883 33	10.40	22.02	−40.85	1.06	0.88	1.31	1.28	1.09	− 2	− 7	−10	−21	+ 2	− 7	− 4	−39	+28	− 6	0	0.63
*113337	22 57 08.83	+47 11 07.8	9.16	G	344.286 778 50	+47.185 493 32	2.89	28.29	−5.03	0.70	0.79	1.19	0.79	0.81	−33	+ 6	+11	+16	+ 9	−15	+15	− 5	+ 7	−11	0	−0.57
113338	22 57 09.75	−19 33 12.9	7.97	H	344.290 616 09	−19.553 585 41	3.99	−7.47	−17.32	1.00	0.63	1.16	1.22	0.74	+21	+15	− 8	+14	− 5	+15	− 4	−21	+36	+ 5	0	−0.08
113339	22 57 10.00	−27 45 35.2	9.76	H	344.291 687 00	−27.759 775 98	3.88	−28.38	−16.82	1.32	0.95	1.45	1.51	1.21	+11	− 7	+ 6	−33	+25	+16	+28	−11	− 5	+13	0	1.47
113340	22 57 11.36	+17 31 41.5	7.98	H	344.297 334 09	+17.528 186 77	1.76	4.56	−8.61	0.88	0.67	1.08	0.88	0.95	+35	+13	− 5	− 2	− 8	+ 3	− 8	−29	+22	+23	0	1.75
113341	22 57 11.37	+15 25 25.3	8.34	G	344.297 389 62	+15.423 698 55	2.61	0.72	−11.74	0.89	0.71	1.08	0.95	0.87	+29	+18	+ 2	+22	+ 3	−21	+ 2	+ 8	+13	+11	0	0.60
113342	22 57 15.52	+32 11 57.4	7.95	H	344.314 680 49	+32.199 274 80	4.06	9.34	0.86	0.67	0.56	0.95	0.75	0.63	+ 1	+23	+ 1	+ 4	+ 8	−14	+14	−19	+27	+ 1	3	1.65
113343	22 57 16.38	+07 36 44.3	9.56	H	344.318 236 61	+07.612 298 36	4.69	−3.75	−106.41	1.32	1.01	1.60	1.94	1.41	+28	−15	−15	− 3	− 1	+10	−12	−26	+35	− 8	0	1.13
113344	22 57 16.61	−75 44 23.9	9.19	H	344.319 226 87	−75.739 968 86	4.19	25.79	−10.68	0.83	0.75	1.00	0.94	0.75	+ 2	−10	−28	−16	+ 5	−11	+ 1	−16	+ 8	− 4	2	1.37
113345	22 57 17.21	−04 48 36.3	6.31	G	344.321 691 31	−04.810 091 68	7.90	−17.59	−1.27	0.84	0.53	0.95	1.16	0.69	+23	− 3	−13	+ 6	+ 2	+37	−10	−47	+23	− 2	0	−0.94
113346	22 57 17.47	−81 06 34.0	9.05	H	344.322 800 00	−81.109 453 33	5.46	30.78	−7.01	0.71	0.69	0.84	0.83	0.79	+ 4	− 9	−18	+ 6	+ 4	+10	+ 7	− 7	+ 6	+11	0	−0.56
113347	22 57 17.68	+50 43 36.8	8.78	H	344.323 683 12	+50.726 896 87	3.48	−11.22	−5.15	0.64	0.77	0.99	0.72	0.90	−19	+ 3	+20	+10	+ 2	− 9	+ 8	−16	+ 8	− 6	1	−0.39
113348	22 57 18.75	−23 50 20.2	8.52	H	344.328 125 72	−23.838 935 64	0.80	−9.77	−11.08	1.04	0.75	1.29	1.26	0.87	+22	− 1	−27	−21	+20	− 8	+16	−15	+38	+12	0	0.33
113349	22 57 20.49	+47 34 47.7	9.41	H	344.335 386 41	+47.579 916 21	−0.31	−2.11	−2.66	0.79	0.87	1.27	0.88	0.99	−31	+13	+18	− 7	+19	−19	+26	−10	+10	−22	0	−1.00
113350	22 57 20.87	+66 03 00.0	8.84	H	344.336 947 63	+66.050 003 22	3.27	35.45	10.69	0.78	0.79	0.93	1.17	0.95	− 3	+ 0	+18	+18	+18	+13	+14	+ 2	+ 1	+ 2	0	1.03
113351	22 57 21.99	−56 52 30.8	7.06	H	344.341 633 80	−56.875 223 42	6.76	16.85	12.33	0.39	0.40	0.67	0.43	0.40	−20	− 9	−13	−13	−13	+13	−10	−10	− 1	−19	0	1.23
113352 H	22 57 22.05	−54 56 23.5	9.16	H	344.341 855 56	−54.939 872 22 A	4.24	−17.47	4.66	1.51	1.54	2.10	1.61	1.56	+22	−10	−17	+23	+18	+14	+20	+13	+ 3	+32	2	0.67
113353	22 57 25.44	+57 00 46.5	7.97	H	344.356 016 38	+57.012 920 06	7.33	−14.38	10.43	0.59	0.58	0.72	0.75	0.74	−26	− 4	+ 8	+18	−21	+12	−22	+23	+10	−16	0	−0.79
113354 T	22 57 25.69	+43 00 46.1	6.64	H	344.357 026 14	+43.012 803 19	5.71	30.64	6.61	0.43	0.50	0.78	0.48	0.53	− 9	+10	+14	+11	+13	+11	+18	−23	+ 9	+ 8	1	2.44
113355	22 57 25.90	−03 09 25.7	7.73	H	344.357 895 94	−03.157 128 87	22.41	45.25	−122.96	0.85	0.56	0.91	0.96	0.69	+21	+ 6	+ 0	− 6	+15	+14	+18	+ 0	+10	+10	0	−0.02
113356	22 57 26.92	+46 49 21.7	8.09	H	344.362 160 56	+46.822 691 21	1.70	−9.67	−11.51	0.54	0.61	0.92	0.60	0.67	−27	+12	+ 0	+17	+13	− 7	+19	− 2	+ 3	+ 3	0	1.02
113357	22 57 27.85	+20 46 07.3	5.45	H	344.366 044 41	+20.768 684 10	65.10	208.06	60.96	0.64	0.41	0.76	0.64	0.57	+11	+ 9	− 6	− 5	− 8	−21	−10	−33	+17	+ 7	3	−0.15
113358	22 57 29.35	−26 47 47.3	9.39	H	344.372 284 68	−26.796 459 73	6.64	−8.75	−2.62	1.11	0.91	1.36	1.36	1.16	+21	− 1	+17	−20	+19	+22	+18	−12	−11	+16	0	−0.95
113359	22 57 30.46	+48 38 58.2	9.84	1 H	344.376 905 65	+48.649 499 58	1.75	2.82	−2.28	0.80	0.96	1.40	0.89	0.99	−30	−16	+34	− 8	+10	− 2	+11	−12	+ 2	−13	0	0.29
113360	22 57 32.76	+03 48 36.6	6.28	G	344.386 519 71	+03.810 164 46	7.08	67.60	31.69	0.77	0.59	0.86	1.08	0.84	+26	− 1	−20	−21	+23	−17	+28	+15	+ 5	+ 6	0	0.58
113361	22 57 33.52	+04 54 36.0	9.52	H	344.389 651 03	+04.910 001 17	3.02	9.25	20.56	1.42	1.13	1.79	1.95	1.74	+24	+ 7	−34	−13	− 1	+20	+10	−21	+29	+35	2	3.85
113362	22 57 33.96	−33 54 57.3	8.31	H	344.391 496 08	−33.915 906 08	3.09	6.41	−6.80	0.74	0.66	1.00	0.82	0.77	+32	+ 3	+ 3	+ 9	− 4	+21	− 5	− 3	+ 9	+39	0	0.24
113363	22 57 34.32	−16 32 01.7	8.91	H	344.392 983 31	−16.533 808 62	7.52	41.57	−7.38	1.21	0.81	1.29	1.54	1.05	+25	+ 9	− 2	+ 4	+24	+13	+25	+ 4	+ 5	+12	0	−1.63
113364	22 57 34.62	+37 22 18.7	7.87	H	344.394 244 29	+37.371 873 56	2.92	−11.85	−11.67	0.62	0.41	0.84	0.79	0.54	−11	+20	+15	− 8	+13	+16	+13	− 8	+11	+ 5	0	−1.24
113365	22 57 36.92	+39 23 19.5	7.43	G	344.403 837 29	+39.388 747 53	6.13	55.72	−3.48	0.70	0.49	0.89	0.83	0.55	−12	+24	+23	+ 3	+17	+13	+26	−22	+12	+24	0	−0.05
113366	22 57 37.06	−20 16 28.5	7.45	H	344.404 403 06	−20.274 569 99	1.57	18.55	13.28	0.87	0.56	0.95	1.09	0.65	+16	− 3	−22	+ 8	+ 1	+ 6	+ 0	−10	+30	+ 5	0	2.78
113367	22 57 38.46	−25 26 52.7	8.65	H	344.410 251 56	−25.447 981 91	9.78	164.76	−25.52	0.99	0.67	1.06	1.19	0.77	+17	+ 7	− 6	− 4	+22	− 7	+19	+12	+10	+16	0	−0.80
113368	22 57 38.83	−29 37 18.6	1.17	G	344.411 773 23	−29.621 837 01	130.08	329.22	−164.22	0.79	0.64	0.92	1.05	0.73	+43	−16	−38	−39	−21	+32	− 6	− 7	+23	+49	6	2.95
113369	22 57 39.24	−45 05 33.0	9.10	H	344.413 489 65	−45.092 495 51	8.22	−22.33	−42.25	1.11	0.92	1.39	1.35	1.00	+10	+13	−19	+ 5	−10	+24	− 3	−29	+28	+15	0	−1.88
113370	22 57 40.00	+55 59 51.6	8.13	G	344.416 650 04	+55.997 670 66	8.53	28.58	−13.84	0.57	0.57	0.74	0.74	0.62	−19	− 9	+19	+10	− 7	+19	− 8	+ 1	+ 5	− 1	0	1.22
113371	22 57 40.74	+39 18 31.6	6.17	H	344.419 742 56	+39.308 789 22	2.39	0.46	−5.13	0.52	0.37	0.66	0.58	0.42	− 7	+27	+15	+18	+14	+ 6	+24	−17	+ 8	+18	0	−1.25
113372	22 57 40.83	−61 51 39.9	8.84	H	344.420 111 44	−61.861 078 00	3.83	4.88	−23.27	0.64	0.70	1.03	0.75	0.85	−25	−11	+ 3	+11	+ 5	+ 7	+ 7	− 2	−15	−22	0	−1.41
113373	22 57 40.97	+58 49 12.6	12.30	2 H	344.420 720 06	+58.820 154 11	3.38	−5.12	−7.18	6.61	5.98	8.31	8.24	8.26	−46	+40	−47	+ 6	+ 3	+ 2	+16	−34	+42	−45	3	1.53
*113374	22 57 41.42	−33 12 11.2	9.65	H	344.422 567 36	−33.203 104 84	12.13	−3.70	7.59	1.46	1.07	1.57	1.82	1.33	+ 6	+ 5	−12	−33	+11	− 6	+10	−25	+10	+12	0	1.59
*113375	22 57 41.40	+11 20 58.7	9.35	H	344.422 487 14	+11.349 642 11	3.88	−3.60	−6.57	1.22	1.03	1.47	1.54	1.32	+40	−20	−18	−13	− 8	+ 4	−18	−35	+18	+ 4	0	−0.54
113376	22 57 42.01	−47 16 12.8	9.43	H	344.425 049 52	−47.270 234 97	1.95	21.34	−10.31	0.96	0.83	1.23	1.13	1.01	+ 7	−16	− 9	+ 5	− 6	+34	− 3	−15	+10	+15	0	1.65
113377	22 57 42.82	−27 57 57.9	7.62	H	344.428 420 55	−27.966 094 55	2.38	36.63	−4.62	0.93	0.65	0.97	1.07	0.79	+ 8	− 5	− 5	−33	+25	+13	+29	− 3	− 9	+ 2	0	0.86
113378	22 57 43.34	−14 26 54.4	9.06	H	344.430 566 69	−14.448 444 61	−0.76	23.35	−0.17	1.28	0.74	1.35	1.93	0.98	+ 7	+19	−16	−10	+16	−11	+15	−25	+32	−20	0	2.04
113379	22 57 43.64	−06 35 08.6	8.49	H	344.431 853 06	−06.585 730 05	8.14	−0.19	−51.32	1.07	0.64	1.29	1.40	1.00	+30	−10	−18	+25	− 5	+29	−19	−44	+55	+19	0	−0.02
113380	22 57 44.05	+55 50 21.3	8.90	H	344.433 536 19	+55.839 245 81	6.17	136.54	45.14	0.72	0.67	0.90	0.98	0.81	−29	−17	+24	+ 1	+ 0	+15	− 4	+ 1	+ 4	−16	0	0.35
113381	22 57 45.75	−33 11 47.4	7.91	G	344.440 616 82	−33.196 506 50	12.39	−8.59	4.63	1.10	0.72	1.02	1.30	0.88	−12	+ 1	− 8	−47	+26	− 3	+26	−32	+ 3	−11	0	0.03
113382	22 57 46.02	−70 35 56.2	8.33	H	344.441 753 96	−70.598 954 73	3.16	−0.47	−4.06	0.65	0.61	0.85	0.74	0.62	+ 6	− 9	−18	+ 1	+ 5	+ 5	+ 6	− 9	+11	+15	0	0.14
113383	22 57 46.21	−22 36 37.9	8.39	H	344.442 555 47	−22.610 535 32	4.35	10.11	11.92	0.98	0.78	1.32	1.19	0.94	+39	−18	−35	−25	+10	+13	+ 4	−19	+45	+34	0	−0.87
113384 H	22 57 46.80	+23 39 05.7	8.18	H	344.445 019 31	+23.651 591 00 A	3.99	−10.08	−23.78	1.22	0.81	1.42	1.21	1.17	+ 5	+11	− 6	+ 9	− 9	−24	−12	−34	+38	− 6	1	0.30
113385	22 57 47.32	+68 24 26.0	8.15	3 H	344.447 151 09	+68.407 235 88 *	0.39	−0.78	−0.80	0.75	0.71	0.79	0.84	0.70	− 2	− 5	+10	+13	+13	− 2	+10	−10	+ 4	− 5	3	1.55
113386 H	22 57 48.09	−26 06 27.2	7.60	G	344.450 370 63	−26.107 565 15 A	14.55	168.06	−280.92	1.48	1.05	1.44	1.53	1.10	+24	−16	−10	−22	+ 7	+13	+ 9	−22	+14	+28	3	0.99
113387	22 57 48.12	+73 08 00.9	6.54	H	344.450 500 82	+73.133 573 87	6.19	−24.60	−28.92	0.44	0.43	0.51	0.52	0.50	− 4	− 5	+10	+ 4	− 3	− 2	− 4	+10	+ 0	+ 2	2	0.84
113388	22 57 50.73	−69 27 07.2	8.78	H	344.461 386 40	−69.452 012 26	3.99	15.26	−44.70	0.76	0.73	0.95	0.79	0.70	− 7	+ 5	−31	−25	− 7	+11	− 3	−25	+ 8	−10	0	1.46
113389	22 57 50.76	−34 59 54.6	9.08	H	344.461 493 13	−34.998 489 52	3.18	14.11	−2.02	0.87	0.78	1.16	0.95	0.82	+32	− 1	+ 3	+39	−16	+ 6	−17	−10	+ 6	+30	1	0.37
113390	22 57 51.75	+18 01 00.9	10.45	3 H	344.465 641 93	+18.016 912 31	−0.26	18.39	−13.67	2.12	1.46	2.20	2.28	2.19	+50	+17	+10	−41	−24	+ 3	−19	−40	+10	+41	0	0.72
113391	22 57 52.58	−03 39 14.4	8.49	H	344.469 084 90	−03.653 989 96	7.79	21.20	−9.48	1.11	0.70	1.16	1.28	0.89	+10	+16	−16	−22	+ 6	+10	+11	−29	+19	+ 2	0	−1.83
113392	22 57 53.24	−37 56 06.1	7.30	H	344.471 815 11	−37.935 021 82	4.53	54.45	−3.22	0.73	0.59	0.95	0.87	0.78	+19	+ 8	−10	−13	− 5	+31	+ 0	− 6	+34	+42	0	0.46
113393 H	22 57 54.08	+33 43 14.0	8.68	H	344.475 343 47	+33.720 566 20 *	10.08	47.73	12.83	0.84	0.63	1.12	1.09	0.76	− 1	+10	− 9	+ 9	+ 3	− 5	+ 6	− 7	+28	+ 2	0	−0.58
113394	22 57 54.24	−71 43 05.4	8.28	H	344.476 016 44	−71.718 163 46	4.42	−1.28	4.15	0.62	0.56	0.78	0.71	0.62	− 7	+11	−16	+10	+ 8	− 6	+ 6	+ 9	−11	+20	2	−0.64
113395	22 57 54.61	−14 17 29.1	8.89	H	344.477 533 61	−14.291 424 82	1.11	27.41	−10.27	1.27	0.73	1.39	1.48	0.97	+10	+31	− 9	−24	+12	+ 3	+24	−24	+39	− 2	0	2.13
113396	22 57 54.74	+24 05 35.4	8.76	H	344.478 101 55	+24.093 155 31	4.25	35.22	−8.40	1.03	0.64	1.24	1.28	1.06	+11	−16	+ 0	−13	− 7	− 1	−14	−33	+17	+ 1	0	−0.31
113397 H	22 57 55.90	−47 03 36.2	9.32	G	344.482 908 81	−47.060 060 06 A	5.83	42.36	−20.70	1.69	1.62	1.79	1.70	1.62	+10	+ 1	−35	+19	−14	+29	− 8	−11	+16	+ 1	1	−0.07
113398 H	22 57 56.26	+13 36 41.6	7.47	H	344.484 399 72	+13.611 542 54 A	10.88	74.59	43.78	2.29	1.35	1.02	1.02	0.92

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
113301	9.529	0.020	8.862	0.018		0.608	0.020	T	0.68	0.02	L	8.8792	0.0020	0.018	105		8.85	8.90		C			1							
113302	11.918	0.109	10.550	0.051		1.235	0.004	G	1.39	0.00	I	10.4969	0.0023	0.027	145		10.45	10.54		C			1							G
113303	8.937	0.012	8.406	0.012		0.498	0.015	T	0.57	0.02	L	8.4637	0.0011	0.014	101		8.44	8.49		D			1							S
113304	11.295	0.076	10.903	0.087		0.490	0.020	G	0.56	0.02	H	10.9011	0.0046	0.035	89		10.84	10.95		C			1							G
113305	9.983	0.044	9.976	0.063		0.011	0.071	T	0.03	0.07	L	9.9828	0.0022	0.025	160		9.94	10.03		C			1							G
113306	8.329	0.010	7.762	0.009	A	0.596	0.005	G	0.67	0.01	H *	7.7575	0.0018	0.014	104	*	7.74	7.78			22568+6244	I 1	2 C A	AB	355	2.810	0.025	3.56	0.16	S
113307	5.998	0.004	5.738	0.003		0.226	0.004	G	0.23	0.03	C	5.7836	0.0008	0.007	88		5.77	5.80					1							S
113308	9.618	0.017	9.368	0.021		0.238	0.025	T	0.27	0.03	L	9.4122	0.0025	0.030	121		9.37	9.46					1							
113309	9.748	0.018	9.671	0.024		0.076	0.028	T	0.09	0.03	L	9.6999	0.0028	0.026	144		9.64	9.75					1							G
113310	8.298	0.010	8.166	0.012		0.127	0.015	T	0.14	0.01	L	8.1979	0.0015	0.013	86		8.17	8.22		C			1							S
113311	6.710	0.006	6.507	0.009	*	0.170	0.013	G	0.19	0.01	H *	6.5795	0.0016	0.009	73	*	6.57	6.59		D	22569+1151	I 1	2 C A	AB	14	3.978	0.013	2.85	0.05	S
113312	9.932	0.013	9.675	0.016		0.245	0.019	T	0.27	0.02	L	9.7299	0.0017	0.025	271		9.69	9.79					1							
113313	9.559	0.023	9.049	0.022		0.479	0.029	T	0.55	0.03	L	9.1124	0.0023	0.021	73		9.07	9.15					1							
113314	10.240	0.030	8.935	0.017		1.109	0.027	T	1.07	0.03	L	8.9941	0.0019	0.016	80		8.97	9.02		C			1							
113315	9.532	0.019	8.969	0.018		0.527	0.023	T	0.60	0.02	L	9.0138	0.0021	0.015	76		8.98	9.04					1							S
113316	7.129	0.005	7.202	0.006		−0.050	0.015	G	−0.03	0.01	H	7.2034	0.0020	0.023	124		7.18	7.24	1.27	P 1 A			1							S
113317	10.322	0.018	8.740	0.009		1.326	0.016	T	1.29	0.02	L	8.7644	0.0012	0.015	257		8.74	8.79		C			1							
113318	9.646	0.017	9.586	0.023		0.060	0.027	T	0.07	0.02	L	9.6132	0.0023	0.026	165		9.56	9.66					1							
113319	10.113	0.031	8.553	0.015		1.309	0.027	T	1.27	0.03	L	8.5782	0.0020	0.013	65		8.56	8.60		C			1							
113320	9.293	0.013	9.231	0.017		0.062	0.020	T	0.07	0.02	L	9.2738	0.0022	0.022	153		9.24	9.32					1							
113321	9.878	0.023	7.993	0.010		1.599	0.021	T	2.45	0.05	O	7.7882	0.0055	0.051	89		7.71	7.86		U 2			1 S							S
113322	9.080	0.009	8.647	0.010		0.409	0.012	T	0.48	0.01	L	8.6942	0.0015	0.018	143		8.66	8.73					1							S
113323	9.560	0.014	8.760	0.012	*	0.724	0.014	T	0.78	0.01	L *	8.8074	0.0014	0.017	178	*	8.78	8.84		D	22570+2441	I 1	2 C S D	AP	277	0.130	0.014	0.64	0.46	D
113324	7.859	0.008	7.486	0.007		0.368	0.015	G	0.43	0.02	H	7.5498	0.0008	0.009	128		7.53	7.57		C			1							S
113325	9.973	0.025	8.865	0.017		0.955	0.024	T	0.94	0.02	L	8.8904	0.0019	0.015	84		8.87	8.93		C			1							
113326	11.741	0.112	10.540	0.059		1.028	0.099	T	1.00	0.08	L	10.6076	0.0043	0.031	80		10.54	10.65					1							
113327	5.203	0.004	5.321	0.004		−0.102	0.005	T	−0.09	0.01	L	5.3058	0.0023	0.034	162		5.27	5.43		U 2			1							S
113328	9.658	0.020	8.371	0.012		1.095	0.018	T	1.06	0.02	L	8.4115	0.0019	0.018	136		8.39	8.44		R			1							
113329	10.845	0.042	9.463	0.021		1.169	0.037	T	1.13	0.03	L	9.5212	0.0021	0.019	111		9.48	9.56					1							
113330	8.973	0.009	7.553	0.005		1.216	0.008	T	3.99	0.04	O	6.8593	0.0160	0.175	216		6.62	7.26		U 2 C			1 S							S
113331	6.891	0.004	6.643	0.005		0.218	0.003	G	0.24	0.00	H	6.6677	0.0007	0.007	99		6.66	6.69		U 2	22571−0315	I 1	1 S							S
113332	12.125	0.176	10.764	0.085		0.838	0.005	G	0.88	0.01	H	11.0469	0.0028	0.030	87		11.00	11.11		C			1							G
113333	11.497	0.075	9.982	0.029	A	1.180	0.020	G	1.30	0.04	I	10.0304	0.0148	0.039	158	A	9.99	10.14		U	22571+2800	I 1	2 C C	AB	148	10.159	0.095	4.01	0.59	
113334	8.409	0.014	7.960	0.011		0.400	0.004	G	0.47	0.00	H	8.0398	0.0010	0.010	86		8.01	8.07					1							S
113335	8.660	0.008	8.148	0.008		0.493	0.015	G	0.57	0.02	H	8.2083	0.0012	0.012	151		8.19	8.24		C			1							S
113336	9.459	0.014	8.809	0.013		0.603	0.016	T	0.67	0.01	L	8.8793	0.0018	0.020	158		8.84	8.91					1 G							S
113337	9.628	0.015	9.176	0.015		0.371	0.001	G	0.43	0.00	H	9.2678	0.0024	0.025	175		9.23	9.31					1							
113338	9.440	0.020	8.103	0.012		1.134	0.018	T	1.10	0.02	L	8.1372	0.0019	0.015	79		8.11	8.16					1							S
113339	10.408	0.034	9.830	0.033		0.543	0.035	T	0.62	0.03	L	9.8721	0.0024	0.028	91		9.81	9.91					1							
113340	9.247	0.020	8.086	0.014		0.997	0.019	T	0.98	0.01	L	8.1460	0.0016	0.012	80		8.12	8.17		C			1							S
113341	8.716	0.011	8.365	0.012		0.324	0.015	G	0.38	0.02	H	8.4150	0.0021	0.015	87		8.39	8.44		C			1							S
113342	9.795	0.019	8.103	0.009		1.413	0.017	T	1.39	0.03	L	8.0896	0.0013	0.012	121		8.07	8.11		C			1							
113343	10.277	0.041	9.692	0.040		0.546	0.051	T	0.62	0.05	L	9.6782	0.0028	0.022	72		9.64	9.73		C			1							
113344	11.036	0.047	9.408	0.019		1.363	0.040	T	1.33	0.05	L	9.3384	0.0021	0.021	140		9.31	9.38		C			1							
113345	7.521	0.006	6.417	0.004		0.948	0.006	G	0.94	0.00	H	6.4717	0.0008	0.008	100		6.46	6.49					1							S
113346	9.695	0.017	9.116	0.016		0.541	0.021	T	0.61	0.02	L	9.1635	0.0015	0.023	149		9.12	9.22					1							
113347	9.010	0.011	8.812	0.013		0.189	0.016	T	0.21	0.02	L	8.8454	0.0022	0.020	147		8.81	8.88					1							
113348	9.773	0.022	8.628	0.015		0.984	0.021	T	0.96	0.02	L	8.6858	0.0018	0.016	96		8.66	8.71		C			1							
113349	9.408	0.014	9.371	0.018		0.039	0.021	T	0.05	0.02	L	9.4314	0.0020	0.027	170		9.39	9.47		C			1							
113350	9.531	0.018	8.871	0.016		0.612	0.020	T	0.68	0.02	L	8.9741	0.0015	0.020	108		8.94	9.01		C			1							
113351	7.351	0.004	7.093	0.004		0.242	0.006	T	0.27	0.01	L	7.1296	0.0008	0.011	261		7.11	7.15					1							S
113352	10.253	0.025	9.280	0.018	*	0.854	0.023	T	0.87	0.02	L *	9.3188	0.0024	0.034	137	*	9.26	9.38			22574−5456	H 1	2 C D	AB	300	0.806	0.042	3.35	0.18	D
113353	8.219	0.010	7.986	0.011		0.222	0.014	T	0.24	0.02	L	8.0396	0.0012	0.012	117		8.01	8.07					1							S
113354	8.727	0.009	6.838	0.004		1.569	0.008	T	1.59	0.01	L	6.7606	0.0010	0.010	166		6.75	6.78			22574+4301	I 1	1 S							S
113355	8.347	0.009	7.792	0.011		0.549	0.015	G	0.62	0.01	H	7.8469	0.0014	0.013	99		7.83	7.88					1							S
113356	9.220	0.011	8.205	0.008		0.885	0.010	T	0.89	0.01	L	8.2463	0.0011	0.014	189		8.22	8.28		C			1							S
113357	6.268	0.003	5.524	0.003		0.666	0.007	G	0.69	0.01	G	5.5865	0.0005	0.005	162		5.58	5.60		C			1							S
113358	10.326	0.036	9.494	0.028		0.749	0.035	T	0.79	0.03	L	9.5388	0.0026	0.019	86		9.51	9.57		C			1							
113359	10.099	0.044	9.818	0.052		0.267	0.064	T	0.30	0.08	L	9.9177	0.0028	0.027	159		9.86	9.96		U			1							G
113360	7.760	0.009	6.407	0.006		1.122	0.002	G	1.08	0.00	H	6.4550	0.0007	0.005	65		6.44	6.47					1							S
113361	10.469	0.047	9.650	0.036		0.739	0.045	T	0.79	0.03	L	9.6619	0.0029	0.019	70		9.62	9.69		D			1 S							
113362	9.774	0.022	8.444	0.013		1.129	0.020	T	1.09	0.02	L	8.4831	0.0013	0.014	108		8.45	8.52					1							
113363	9.439	0.019	8.960	0.019		0.451	0.025	T	0.52	0.03	L	9.0154	0.0020	0.012	69		8.99	9.04					1							S
113364	9.831	0.014	8.027	0.006		1.502	0.012	T	1.53	0.02	L	7.9927	0.0012	0.011	168		7.97	8.02		C			1							
113365	8.821	0.010	7.550	0.006		1.100	0.015	G	1.06	0.02	H	7.5903	0.0014	0.013	145		7.57	7.61					1							S
113366	9.006	0.014	7.587	0.008		1.198	0.013	T	1.16	0.01	L	7.6097	0.0015	0.011	84		7.59	7.63		C			1							S
113367	9.237	0.016	8.725	0.015		0.481	0.020	T	0.55	0.02	L	8.7545	0.0015	0.014	97		8.73	8.78		C			1 G							S
113368	1.407	0.009	1.248	0.007		0.145	0.011	T	0.16	0.01	L	1.1808	0.0007	0.004	67		1.18	1.19					1 G							S
113369	9.693	0.021	9.172	0.020		0.498	0.022	T	0.57	0.02	L	9.2122	0.0028	0.022	86		9.17	9.25		C			1							S
113370	8.559	0.011	8.156	0.011		0.380	0.017	G	0.44	0.02	H	8.2174	0.0015	0.012	131		8.19	8.24		C			1							
113371	5.968	0.003	6.138	0.004		−0.148	0.004	T	−0.15	0.01	L	6.1204	0.0005	0.006	149		6.11	6.13					1							S
113372	10.402	0.023	8.943	0.012		1.230	0.020	T	1.19	0.02	L	9.0036	0.0015	0.023	190		8.97	9.05					1							
113373						1.500	0.300	G	1.53	0.45	J	12.4293	0.0223	0.169	101		12.19	12.86		U			1 S							D
113374	10.362	0.045	9.718	0.041		0.591	0.045	T	0.66	0.04	L	9.7781	0.0039	0.027	83		9.71	9.83			22577−3312	I 2	1							
113375	10.765	0.054	9.517	0.030		1.064	0.048	T	1.03	0.04	L	9.5176	0.0020	0.014	68		9.49	9.55					1							
113376	9.473	0.018	9.438	0.023		0.032	0.026	T	0.05	0.02	L	9.4443	0.0025	0.019	92		9.42	9.49		C			1							
113377	8.922	0.013	7.732	0.009		1.019	0.012	T	0.99	0.01	L	7.7873	0.0019	0.014	90		7.77	7.81					1							S
113378	11.134	0.063	9.239	0.021		1.574	0.053	T	1.59	0.05	L	9.1803	0.0020	0.017	85		9.15	9.20		C			1							
113379	8.979	0.012	8.535	0.012		0.419	0.016	T	0.49	0.02	L	8.5891	0.0013	0.016	110		8.57	8.62		C			1							
113380	9.533	0.019	8.959	0.018		0.520	0.015	G	0.59	0.02	H	9.0181	0.0014	0.015	115		8.99	9.05					1							
113381	8.393	0.015	7.934	0.016		0.436	0.015	G	0.50	0.02	H	8.0082	0.0017	0.015	86		7.99	8.04			22577−3312	I 2	1							S
113382	9.720	0.016	8.452	0.010		1.080	0.015	T	1.04	0.01	L	8.4981	0.0021	0.019	157		8.47	8.53					1 S							
113383	9.833	0.023	8.518	0.013		1.117	0.021	T	1.08	0.02	L	8.5608	0.0023	0.018	108		8.53	8.59					1							
113384	8.438	0.008	8.200	0.009	*	0.227	0.011	T	0.25	0.01	L *	8.2484	0.0012	0.013	163	*	8.23	8.27		C	22578+2339	H 1	2 C C	AB	253	0.981	0.056	3.88	0.11	S
113385	8.559	0.010	8.279	0.010		0.264	0.015	T	0.30	0.02	L	8.2205	0.0082	0.107	125		8.16	9.06		P 1 A			1 V							
113386	8.393	0.012	7.663	0.011	A	0.679	0.015	G	0.74	0.01	H *	7.5135	0.0016	0.014	91	*	7.50	7.54		D	22578−2606	I 1	2 C A	AB	343	9.086	0.005	1.58	0.03	S
113387	7.900	0.008	6.649	0.005		1.067	0.007	T	1.03	0.01	L	6.7047	0.0009	0.008	112		6.69	6.72		C			1							S
113388	9.516	0.016	8.828	0.014		0.635	0.018	T	0.70	0.02	L	8.9133	0.0020	0.019	137		8.88	8.95					1							
113389	10.379	0.029	9.203	0.019		1.008	0.027	T	0.98	0.02	L	9.2456	0.0016	0.017	130		9.21	9.28		C			1							
113390						1.500	0.510	G	3.92	0.96	K	9.9596	0.0260	0.215	94		9.72	10.34		U 2			1 S							G
113391	8.850	0.017	8.504	0.017		0.328	0.022	T	0.38	0.03	L	8.5710	0.0019	0.017	78		8.55	8.60		C			1							S
113392	8.555	0.010	7.402	0.007		0.990	0.010	T	0.97	0.01	L	7.4631	0.0010	0.009	96		7.45	7.48		C			1							S
113393	9.278	0.014	8.732	0.013	*	0.512	0.017	T	0.58	0.02	L *	8.7875	0.0018	0.018	122	*	8.76	8.82			22579+3343	H 1	2 C S B	AB	244	0.137	0.035	0.79	1.03	S
113394	8.549	0.009	8.318	0.010		0.215	0.013	T	0.24	0.01	L	8.3442	0.0015	0.017	149		8.32	8.37		C			1							S
113395	10.300	0.032	9.021	0.019		1.089	0.029	T	1.05	0.03	L	9.0568	0.0025	0.018	89		9.02	9.09		C			1							
113396	9.452	0.015	8.823	0.014		0.585	0.018	T	0.66	0.02	L	8.8839	0.0017	0.017	144		8.85	8.91		C			1							S
113397	9.967	0.024	9.370	0.022	*	0.548	0.005	G	0.62	0.01	H *	9.4385	0.0025	0.020	89	*	9.41	9.47		D	22579−4704	H 1	2 C D	AB	199	0.482	0.107	3.96	0.44	D
113398	7.975	0.009	7.507	0.009	*	0.441	0.012	T	0.51	0.01	L *	7.5653	0.0011	0.007	80	*	7.55	7.58		D	22579+1337	I 1	2 C A	AB	70	0.344	0.006	1.20	0.06	S
113399	9.628	0.020	8.527	0.014		0.950	0.019	T	0.94	0.01	L	8.5914	0.0019	0.013	77		8.56	8.61		C			1							
113400	10.614	0.047	9.655	0.032		0.777	0.003	G	0.82	0.00	H	9.7395	0.0027	0.023	86		9.70	9.78		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
113401	22 57 58.27	−45 09 29.5	7.73	H	344.492 774 21	−45.158 184 19		8.91	86.23	−46.85	0.80	0.68	1.00	1.05	0.74	+12	+ 5	−27	− 2	−20	+25	−12	−35	+28	+18		0	−1.16
113402	22 57 59.33	−59 05 21.8	6.70	1 H	344.497 212 51	−59.089 383 05		13.75	91.35	−48.06	0.35	0.40	0.66	0.39	0.42	−34	− 7	+ 0	+15	+ 3	+14	+ 4	−11	−11	−31		1	0.37
113403 H	22 57 59.94	+49 53 52.8	10.22	H	344.499 751 12	+49.897 992 06	A	1.48	2.39	1.10	3.14	2.97	3.82	3.28	3.32	−	2	− 1	+24	− 5	+ 7	− 3	+14	−19	−12	+34		2	0.66
113404	22 58 01.36	−38 05 54.1	9.98	H	344.505 678 94	−38.098 360 52		4.40	2.41	−24.61	1.09	1.06	1.58	1.40	1.40	+27	+ 0	−13	−10	− 2	+42	+ 0	+ 6	+27	+49		0	−1.54
113405	22 58 03.05	+42 44 11.2	9.65	3 H	344.512 706 06	+42.736 432 68		−0.19	−3.29	−9.35	0.71	0.79	1.35	0.81	1.01	−18	+17	+ 3	+ 2	+ 5	− 5	+20	−35	+11	+13		0	−0.38
113406	22 58 03.23	−18 58 22.3	8.15	H	344.513 456 07	−18.972 861 73		0.11	−8.40	−14.18	0.95	0.61	1.02	1.23	0.74	+19	+11	− 1	+ 6	+ 4	+ 8	+ 3	−15	+19	+ 5		0	−0.10
113407	22 58 03.40	−66 20 08.9	7.90	H	344.514 146 90	−66.335 797 83		3.25	59.70	−0.12	0.61	0.62	0.88	0.74	0.60	−	4	− 5	−29	+ 3	+ 9	−11	+ 7	−15	− 4	+ 2	0	0.58
113408	22 58 05.83	+08 34 52.0	9.58	G	344.524 283 24	+08.581 099 70		2.28	32.21	17.18	1.29	0.95	1.71	1.54	1.24	+23	+19	− 9	−16	− 4	− 3	+ 4	−25	+52	−11		0	−0.27
113409	22 58 06.24	−13 38 30.3	10.13	G	344.526 011 13	−13.641 746 57		36.96	35.82	−329.25	1.42	1.06	1.88	1.78	1.44	+32	+13	− 5	− 1	− 5	+45	+ 1	−32	+41	+38		0	−0.61
113410	22 58 06.40	+21 30 47.7	7.31	2 H	344.526 659 58	+21.513 254 17		3.84	30.85	−32.36	0.86	0.47	0.94	1.00	0.72	+	1	− 4	− 2	−35	+ 8	+ 9	+11	−25	+22	−10	3	0.52
113411 H	22 58 06.68	+41 56 04.0	9.01	H	344.527 827 92	+41.934 447 69	A	2.96	0.41	−3.98	0.96	1.32	1.78	0.96	1.45	+	7	+ 4	+19	+40	− 2	+ 9	+17	−32	− 5	+36	1	0.71
113412	22 58 07.19	−11 07 55.1	9.31	H	344.529 978 29	−11.131 965 84		8.03	36.64	−9.86	1.30	0.90	1.45	2.05	1.19	+30	− 3	− 1	+14	+22	+ 6	+11	−11	+17	+ 0		0	−2.50
113413	22 58 07.97	+20 44 33.4	8.12	H	344.533 227 77	+20.742 610 40		4.40	−16.16	−9.11	0.88	0.53	1.13	0.93	0.84	+15	+15	−12	− 2	+ 1	−18	+ 2	−24	+36	− 1		2	2.82
113414	22 58 09.01	+30 21 55.3	9.61	1 H	344.537 539 31	+30.365 367 26		−0.44	−3.62	1.91	0.97	0.91	1.48	1.08	1.14	+22	− 4	+ 4	− 8	− 6	− 3	− 3	−28	− 1	+33		0	−0.01
113415	22 58 09.31	−17 41 35.8	8.14	H	344.538 782 56	−17.693 280 88		5.59	−18.61	−18.85	0.85	0.58	1.08	1.05	0.81	+18	+13	+ 1	−11	+ 9	+32	+15	−13	+45	+22		2	1.38
113416	22 58 09.55	−05 41 08.0	8.44	H	344.539 798 03	−05.685 552 32		7.06	78.48	11.82	1.04	0.63	1.34	1.38	0.88	+18	− 5	+ 1	+ 0	+ 8	+51	+ 1	−27	+42	+21		0	0.31
113417	22 58 10.83	−15 54 21.4	8.87	H	344.545 130 23	−15.905 947 43		3.16	18.49	−25.42	1.57	0.77	1.44	1.69	1.02	−	7	+37	− 9	−40	+23	+ 4	+35	−27	+22	−17		0	0.37
113418	22 58 12.58	+14 43 16.9	7.91	H	344.552 401 92	+14.721 369 45		3.59	−29.88	−86.68	0.83	0.67	1.03	0.90	0.83	+30	+24	+ 3	+ 8	+ 4	−17	+ 5	+ 1	+13	+ 9		0	−1.52
113419	22 58 12.78	+48 38 13.1	9.94	H	344.553 237 80	+48.636 981 28		3.04	10.90	−1.78	0.80	0.95	1.36	0.89	0.99	−28	−18	+28	− 8	+13	− 4	+16	−19	+ 1	− 4		0	−0.92
113420	22 58 13.50	+30 21 54.8	8.47	1 H	344.556 254 14	+30.365 224 98		−0.09	−6.73	−4.78	0.75	0.69	1.10	0.82	0.83	+	8	− 1	− 1	−10	+ 2	−11	+ 5	−29	− 1	+20	0	0.97
113421	22 58 15.54	−02 23 43.2	6.17	H	344.564 770 26	−02.395 346 11		50.71	−6.05	−16.03	0.70	0.53	0.75	0.83	0.61	+15	− 5	− 4	+ 8	+ 5	+15	+ 5	+ 9	+ 4	+ 5		0	−0.83
113422	22 58 15.82	−44 28 23.8	10.10	H	344.565 917 29	−44.473 279 80		18.02	46.28	60.61	1.42	1.15	1.60	1.80	1.20	+	3	− 6	−20	+34	−21	+19	−19	−13	+10	− 5	0	−0.01
113423	22 58 17.69	−41 51 25.9	8.57	G	344.573 695 90	−41.857 182 23		28.14	202.11	−42.41	0.84	0.76	1.16	1.00	0.97	+16	−11	−10	+ 8	− 7	+32	− 7	+10	+20	+33		0	0.03
113424	22 58 18.46	−33 16 06.5	9.00	H	344.576 903 33	−33.268 484 08		2.77	39.25	8.51	1.33	0.98	1.35	1.58	1.14	−	1	+17	+19	−39	+21	− 7	+22	−25	+ 0	− 6	0	1.03
113425	22 58 18.80	−45 55 35.6	9.81	H	344.578 347 55	−45.926 545 25		6.55	0.69	−50.07	1.53	1.04	1.52	2.21	1.27	+	9	−13	−19	−12	−19	+19	−16	−21	+10	+ 6	0	1.02
113426	22 58 19.40	+65 01 46.4	10.70	H	344.580 851 70	+65.029 562 17		−0.33	−4.82	−4.62	1.19	1.21	1.46	1.49	1.55	−12	− 1	+25	− 7	− 5	− 5	− 5	−20	−20	− 8		3	−0.33
113427	22 58 20.19	+11 17 14.3	7.87	H	344.584 118 60	+11.287 299 27		7.73	−20.32	56.08	0.87	0.73	1.05	1.09	0.92	+29	−14	− 8	−14	− 6	+ 2	−12	−28	+23	− 1		0	−2.01
113428 H	22 58 20.77	−38 16 13.8	10.50	G	344.586 529 26	−38.270 495 32	A	3.89	1.01	−27.52	6.38	7.77	3.16	2.82	2.77	+20	− 3	−12	+10	− 3	+22	+ 3	− 2	+36	+46		1	−0.41
113429	22 58 21.00	−59 24 29.9	8.97	1 H	344.587 491 27	−59.408 314 69		4.19	23.84	4.67	0.63	0.70	1.16	0.75	0.77	−30	− 5	− 3	− 6	+ 2	+ 9	+ 3	− 6	− 8	−15		0	0.18
*113430	22 58 22.30	−65 22 17.5	8.05	H	344.592 916 02	−65.371 540 86		16.76	146.04	−25.79	0.57	0.62	0.87	0.65	0.60	+	0	− 6	−35	+ 8	+ 8	+ 5	+10	− 1	− 8	+ 4	0	0.43
*113431	22 58 22.30	−32 03 09.5	11.59	G	344.592 903 89	−32.052 628 48		15.49	173.76	−59.26	2.57	1.90	2.85	3.14	2.54	+	7	− 5	−10	−39	+ 9	+25	+11	−11	+15	+16	4	−0.61
113432	22 58 22.87	−73 46 37.1	8.03	H	344.595 311 29	−73.776 965 13		3.84	−19.54	21.78	0.66	0.59	0.79	0.72	0.62	−12	+ 3	−25	−10	+17	− 4	+16	− 4	+ 8	+ 0		0	1.02
113433	22 58 23.61	−01 24 36.7	6.38	H	344.598 381 62	−01.410 192 67		10.28	85.47	−6.67	0.74	0.56	0.80	0.92	0.64	+19	+ 8	− 1	+ 8	+ 8	− 2	+ 9	+13	+11	+ 0		0	−1.27
113434	22 58 25.18	−50 47 55.3	8.71	H	344.604 916 59	−50.798 690 09		4.64	87.48	−34.01	0.74	0.74	1.06	0.88	0.74	+26	−11	−14	+ 8	+ 7	+ 3	+ 9	+10	−19	+23		0	0.25
113435	22 58 26.61	−65 31 07.1	9.22	H	344.610 880 71	−65.518 631 65		7.12	27.67	−34.96	0.75	0.80	1.12	0.98	0.89	+	2	−15	−26	− 9	+ 4	+ 6	+ 8	−12	−12	+ 5	2	0.55
113436	22 58 26.94	+35 16 57.4	7.02	H	344.612 238 44	+35.282 624 80		7.42	−23.66	−78.19	0.59	0.46	0.80	0.68	0.59	+	7	+26	+10	+24	+ 1	− 5	+14	−12	+21	+20	0	1.45
113437 H	22 58 28.25	+67 05 16.8	8.44	G	344.617 722 64	+67.087 991 67	A	8.19	92.85	25.98	1.50	1.48	1.52	1.80	1.66	+	1	− 8	−16	+ 2	+20	−14	+18	− 1	+ 9	+ 4	0	0.41
113438	22 58 29.80	+09 49 31.9	7.67	G	344.624 178 69	+09.825 524 86		22.87	129.81	5.89	0.86	0.63	1.03	1.07	0.82	+24	−22	− 3	−36	+ 4	+40	+ 4	−19	+20	+15		0	−0.19
113439	22 58 30.33	−51 07 38.2	7.82	H	344.626 368 00	−51.127 285 94		12.84	−33.67	16.04	0.68	0.64	0.95	0.83	0.66	+16	− 1	− 6	−10	+ 4	− 3	+ 2	+ 8	−11	+22		0	−0.49
113440	22 58 30.37	−04 30 07.6	8.74	H	344.626 521 05	−04.502 107 61		−1.76	8.68	−1.81	1.47	0.82	1.32	2.31	1.08	+10	− 1	+ 9	+40	+ 7	+18	−19	−33	+ 3	−29		5	2.77
113441	22 58 30.68	+03 26 52.0	8.66	H	344.627 814 06	+03.447 774 97		4.59	−5.25	−15.47	1.24	0.82	1.23	2.25	1.24	+13	+14	− 9	−34	+33	− 7	+43	+15	+14	−21		0	−1.16
113442	22 58 31.95	−42 17 16.6	10.27	2 H	344.633 133 07	−42.287 941 86		6.02	8.06	−29.05	2.10	2.04	2.79	2.36	2.45	+18	− 4	− 3	+ 0	+ 3	+15	+ 1	+20	+ 8	+30		0	
113443 H	22 58 33.25	+63 42 24.3	7.41	G	344.638 555 56	+63.706 751 24	*	0.98	−1.50	−2.04	0.49	0.56	0.61	0.62	0.67	−11	− 2	+ 7	− 1	− 3	+ 0	− 3	−30	+ 0	−12		0	0.54
113444	22 58 33.53	+12 03 04.8	8.21	H	344.639 714 80	+12.051 323 01		9.81	111.99	−41.21	0.96	0.78	1.18	1.19	0.97	+23	+ 4	−20	−26	+ 0	− 1	+ 1	−29	+28	− 6		0	−1.83
113445	22 58 34.85	+09 21 26.0	6.43	G	344.645 196 27	+09.357 217 74		32.32	396.72	−147.73	0.72	0.56	0.89	0.85	0.71	+28	−15	− 6	−21	+ 0	+28	− 2	−19	+26	+17		0	−0.46
*113446	22 58 35.10	+51 36 28.4	8.01	1 H	344.646 234 75	+51.607 875 89		1.40	5.14	−0.28	0.54	0.57	0.81	0.57	0.59	−19	+ 7	+14	+16	− 3	− 2	+ 3	−12	+14	− 4		0	0.05
*113447	22 58 35.01	−35 31 22.6	6.15	H	344.645 879 27	−35.522 958 31		12.86	−5.98	−112.30	0.52	0.45	0.67	0.55	0.50	+28	+ 1	− 2	+17	− 2	+14	− 2	+ 8	− 1	+31		0	−0.38
*113448	22 58 35.44	+12 01 44.9	8.30	H	344.647 663 75	+12.029 133 13		11.51	110.53	−34.67	0.97	0.79	1.17	1.19	1.05	+31	−11	−19	−20	− 6	+ 8	− 7	−27	+14	+ 7		0	−0.34
*113449	22 58 35.36	+50 41 52.8	7.43	H	344.647 339 95	+50.698 005 98		3.88	−0.80	−20.31	0.51	0.62	0.80	0.56	0.68	−17	− 4	+22	+12	− 8	− 5	− 4	−11	+12	− 2		1	−0.98
113450 H	22 58 35.49	+69 50 21.8	9.35	H	344.647 862 92	+69.839 393 41	A	0.45	−5.02	−2.75	3.27	3.03	2.99	3.70	2.91	+	4	+11	+ 7	− 1	+ 4	+13	+ 2	− 6	+ 9	−32	2	3.34
113451	22 58 35.61	−05 40 26.0	8.43	H	344.648 389 56	−05.673 891 33		0.43	−15.62	−9.04	1.11	0.67	1.27	1.52	1.09	+12	−12	−11	−22	+ 9	+31	+ 8	−29	+43	+17		0	1.24
113452	22 58 35.67	+49 17 44.8	9.00	H	344.648 641 46	+49.295 772 30		2.22	2.80	−1.37	0.63	0.75	1.02	0.67	0.76	−23	− 8	+27	−14	+10	+ 2	+10	−18	+ 4	− 4		0	−0.89
113453	22 58 35.86	+08 48 19.9	8.79	H	344.649 414 73	+08.805 533 79		1.67	−12.72	−8.36	0.94	0.75	1.22	1.00	0.97	+24	+19	−20	− 4	− 2	+ 9	+ 8	−16	+38	+23		0	−0.31
113454 H	22 58 36.35	−45 31 10.0	7.67	G	344.651 448 45	−45.519 456 23	A	22.68	73.22	52.87	2.29	1.47	1.59	1.76	1.14	+19	+ 4	−25	−31	−26	+19	−16	−33	+15	+19		5	0.44
113455	22 58 37.39	+39 47 33.8	7.83	H	344.655 803 82	+39.792 726 99		4.56	−18.42	−26.46	0.77	0.53	0.95	0.85	0.69	+	9	+38	+33	+31	+17	+10	+ 6	−24	− 8	− 4	0	−0.54
*113456	22 58 37.60	−08 27 21.8	9.07	G	344.656 670 32	−08.456 058 34		13.11	223.63	−86.98	1.40	0.66	1.29	2.17	0.90	+27	−25	−11	+33	+32	− 9	+ 1	−34	+15	−20		0	−2.23
*113457	22 58 37.59	+18 23 30.5	9.43	H	344.656 644 68	+18.391 810 61		4.35	21.28	43.59	1.65	0.97	1.71	1.45	1.39	+33	+41	− 3	−25	−17	− 5	+ 8	−37	+13	+42		0	0.60
113458	22 58 38.78	+48 16 00.7	9.25	H	344.661 579 59	+48.266 852 50		0.65	−4.61	−8.93	0.75	0.89	1.25	0.85	0.98	−25	+ 2	+27	−16	+21	+ 5	+19	− 2	+ 3	−15		1	−1.12
113459	22 58 39.22	−28 18 20.1	8.81	H	344.663 398 94	−28.305 592 19		1.07	7.22	−29.06	1.49	0.92	1.43	1.64	1.20	−	5	+12	−31	−52	+34	−11	+37	−23	+27	+ 3	0	1.40
113460	22 58 39.42	−55 48 39.0	9.70	H	344.664 244 12	−55.810 821 63		2.66	−11.82	−15.27	0.92	0.93	1.59	1.07	0.88	−11	− 5	−25	− 7	−15	+14	−12	−27	− 3	−30		0	0.77
113461 H	22 58 39.80	+63 04 37.8	7.43	2 H	344.665 829 52	+63.077 156 90	*	−0.14	−2.59	−4.14	1.59	3.17	1.43	1.52	1.30	−18	− 6	+ 7	+ 2	− 6	+ 2	−11	−19	+ 5	− 8		5	1.25
113462	22 58 40.75	−28 08 59.1	8.12	G	344.669 790 54	−28.149 762 74		12.43	126.03	−10.26	0.97	0.73	1.12	1.20	1.02	+25	−24	−23	−33	+ 8	+19	+10	−22	+19	+31		0	4.18
113463	22 58 42.23	+53 36 39.9	9.20	H	344.675 946 10	+53.611 072 79		0.67	−0.22	−0.66	0.75	0.75	1.04	0.86	0.77	−18	+ 9	+28	−17	+13	+ 2	+13	−18	+14	−21		3	1.18
113464	22 58 42.34	+05 20 31.0	7.62	H	344.676 422 13	+05.341 936 48		3.93	4.92	7.84	0.91	0.72	1.13	1.37	1.11	+36	+ 3	−22	+21	+ 8	+34	+17	+ 4	+24	+37		0	1.97
113465	22 58 42.64	+07 20 24.9	6.35	H	344.677 680 44	+07.340 239 12		10.41	−29.32	−67.77	0.76	0.55	0.90	1.18	0.74	+19	−16	−21	− 6	− 1	+16	− 7	−20	+31	−17		0	0.35
113466	22 58 42.68	−39 55 10.7	8.60	H	344.677 814 94	−39.919 650 95		1.89	−9.96	−5.02	0.84	0.76	1.08	0.99	0.91	+18	−15	− 5	+29	+ 3	+11	+ 6	+ 1	+ 0	+24		0	−0.75
113467	22 58 44.77	+28 58 50.2	8.94	H	344.686 551 28	+28.980 621 76		5.45	27.05	1.00	0.69	0.69	1.14	0.81	0.86	+23	+ 6	−15	− 1	−16	+14	−10	−36	+30	+34		0	0.93
113468	22 58 45.44	+45 19 12.0	9.39	H	344.689 334 01	+45.319 993 37		0.31	2.13	−0.98	0.67	0.92	1.37	0.69	0.86	−10	− 2	+30	−29	−11	− 3	−10	−27	− 2	+ 6		2	2.15
113469	22 58 45.74	+43 50 19.6	7.18	1 H	344.690 585 55	+43.838 766 46		2.74	0.67	−5.75	0.47	0.46	0.72	0.52	0.50	−	4	+12	+ 1	+ 6	+ 6	− 7	+14	−18	+12	+25	1	−0.21
113470	22 58 46.64	+51 01 05.3	8.48	H	344.694 316 75	+51.018 152 00		1.02	−1.81	−11.72	0.63	0.77	1.00	0.71	0.85	−11	+ 0	+22	+10	− 5	− 6	− 1	− 7	+ 8	+ 6		1	0.11
113471	22 58 46.70	−23 26 57.3	7.87	H	344.694 579 16	−23.449 248 97		2.89	−30.30	−13.36	0.85	0.64	1.02	0.98	0.76	+34	−14	−14	−19	+25	+18	+23	+ 3	+24	+36		0	0.34
113472 H	22 58 47.77	+38 08 27.3	8.81	H	344.699 043 78	+38.140 908 97	*	2.34	5.11	−1.07	0.89	0.51	1.11	1.02	0.66	−	7	+36	+13	+13	+14	+ 7	+24	− 8	+13	+23	0	−1.08
113473	22 58 48.92	−23 25 50.5	8.65	H	344.703 835 72	−23.430 694 69		10.50	65.40	−13.28	0.97	0.72	1.15	1.09	0.79	+27	− 9	−23	−29	+13	+ 9	+12	−20	+26	+20		0	0.34
113474	22 58 49.58	+46 19 38.3	8.24	H	344.706 571 05	+46.327 292 79		1.83	−0.01	−3.92	0.47	0.56	0.89	0.56	0.64	−30	+ 6	+ 5	+10	+17	−10	+21	− 1	+ 4	+ 1		0	−0.10
113475	22 58 49.94	−56 46 24.1	8.35	H	344.708 087 29	−56.773 364 54		3.62	−3.33	−3.83	0.54	0.54	0.96	0.57	0.52	−17	−14	−13	−16	−12	+16	− 9	−15	+ 0	−18		0	0.01
113476	22 58 51.23	+17 03 19.7	9.19	H	344.713 474 47	+17.055 479 76		7.19	−2.01	−46.79	1.00	0.75	1.20	0.96	0.97	+36	+15	− 3	+ 6	− 2	+ 1	− 7	−18	− 2	+18		0	1.04
113477	22 58 52.84	+69 01 47.5	8.76	G	344.720 159 77	+69.029 868 43		24.52	593.24	299.10	0.68	0.62	0.77	0.74	0.67	−13	+ 7	+ 5	+16	+ 0	− 1	+ 1	+ 1	+21	−18		0	0.90
113478	22 58 52.89	−00 18 57.5	7.42	2 H	344.720 367 42	−00.315 973 26		6.78	56.03	13.88	0.81	0.67	0.88	1.10	0.93	+44	− 8	− 3	+ 8	+28	+ 5	+33	+31	+ 3	+23		0	−0.14
113479	22 58 54.15	−61 02 14.8	8.87	H	344.725 604 52	−61.037 443 79		7.41	16.17	−1.40	0.65	0.71	1.01	0.82	0.78	−30	− 4	− 9	− 3	+ 6	+ 2	+ 6	− 7	− 7	−21		0	2.34
113480	22 58 54.18	+10 39 34.2	12.44	G	344.725 767 59	+10.659 493 16		4.07	−32.35	−84.31	4.13	3.29	4.90	6.77	4.76	+37	+ 5	+ 4	− 8	− 6	+16	−18	−36	+19	−10		3	−0.84
113481	22 58 54.91	+27 29 58.6	8.02	H	344.728 789 47	+27.499 616 85		5.54	2.89	−7.64	0.55	0.54	0.93	0.59	0.72	+28	+10	− 7	+ 2	−10	− 4	− 5	−24	+31	+32		0	1.01
113482	22 58 55.01	−20 53 25.3	9.08	H	344.729 199 73	−20.890 353 74		9.13	49.87	−27.34	1.27	0.76	1.29	1.66	0.95	+23	−15	−28	+17	+ 5	+ 4	+ 4	− 9	+14	+18		0	−0.18
113483	22 58 55.28	−30 27 42.2	9.68	H	344.730 335 46	−30.461 730 65		7.23	64.10	4.69	1.41	1.09	1.81	1.62	1.34	+19	+10	−35	−25	+ 9	+ 6	+11	− 2	+23	+39		0	1.89
113484	22 58 56.59	+09 48 17.2	9.23	H	344.735 788 35	+09.804 791 53		8.82	−4.56	−9.77	1.12	0.85	1.38	1.36	1.11	+31	−24	−12	−36	− 7	+44	− 8	−29	+33	+25		0	−0.42
113485	22 58 57.59	+42 47 11.8	10.02	G	344.739 943 81	+42.786 604 08		6.12	1.73	−6.84	0.87	1.09	1.52	0.91	1.13	−	1	+12	+14	+18	+12	+ 8	+25	−37	+14	+24	0	0.53
113486 H	22 58 58.50	+27 44 45.1	8.27	H	344.743 744 12	+27.745 864 22	A	7.41	10.15	−0.05	1.04	1.04	1.57	1.05	1.20	+30	+ 7	− 8	+ 2	−11	+ 2	− 9	−24	+28	+37		3	0.71
113487	22 58 58.95	+34 04 00.9	7.55	2 H	344.745 617 05	+34.066 905 04		6.31	22.33	−22.10	0.61	0.51	0.81	0.71	0.57	+	6	+ 4	− 3	+29	− 3	−10	− 2	−19	+31	+ 3	2	0.13
113488	22 58 59.65	−08 12 47.9	8.38	H	344.748 547 64	−08.213 313 33	A	5.11	7.01	1.19	2.26	1.32	2.08	3.42	1.57	+22	+12	+22	+ 8	+30	−12	+ 8	−43	−10	−19		1	1.09
113489	22 59 01.26	−43 56 07.8	9.44	H	344.755 234 33	−43.935 507 98		4.24	7.63	0.74	1.12	0.99	1.55	1.24	1.15	+12	−11	− 4	−21	−12	+32	−15	−13	+38	+28		0	−0.91
113490	22 59 02.01	−45 27 21.5	8.28	H	344.758 366 89	−45.455 984 38		8.46	70.74	−9.12	1.00	0.71	1.09	1.25	0.77	+	0	+13	−20	−13	−24	+22	−16	−28	+13	+ 0	0	−2.49
113491	22 59 03.96	−37 16 51.5	8.90	H	344.766 515 78	−37.280 965 81		1.16	10.75	−13.68	0.97	0.84	1.28	1.16	1.01	+21	− 5	−28	+22	− 6	+31	+ 3	+12	+17	+33		0	1.13
113492	22 59 04.18	−67 32 37.0	8.01	H	344.767 400 32	−67.543 609 72		1.54	−18.92	6.03	0.57	0.56	0.78	0.62	0.53	−13	+ 3	−23	− 9	+ 2	− 7	+ 0	− 1	− 9	−10		0	0.12
113493	22 59 04.37	+47 20 44.6	9.67	H	344.768 224 07	+47.345 719 39		0.43	−4.07	−4.07	0.82	0.97	1.39	0.96	0.99	−32	+17	+11	+ 3	+22	−19	+ 5	+ 8	+ 4	+ 0		0	−0.52
113494	22 59 05.22	+23 14 31.4	8.43	H	344.771 751 72	+23.242 050 98		4.34	−16.14	−2.11	0.91	0.64	1.12	0.95	0.97	+14	+12	− 2	+24	−14	− 7	−18	−27	+31	+ 5		0	−2.40
113495	22 59 05.86	+15 32 53.4	10.91	2 H	344.774 429 84	+15.548 153 75		23.12	160.29	−77.76	3.56	2.72	4.11	3.64	3.11	+29	+11	+ 2	− 3	− 1	− 9	− 1	+14	+10	+13		4	
113496	22 59 08.45	−01 10 56.3	8.37	H	344.785 194 05	−01.182 299 50		7.46	2.37	−21.82	0.94	0.74	1.02	1.19	0.90	+23	+ 3	−12	+16	+12	+ 1	+13	+25	+ 5	+

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
113401	8.133	0.009	7.761	0.010		0.369	0.003	G	0.42	0.02	A	7.8134	0.0014	0.013	88		7.79	7.84		C			1							S
113402	7.095	0.003	6.732	0.004		0.344	0.005	T	0.40	0.01	L	6.7818	0.0012	0.018	270		6.75	6.81	0.69	P 1 A			1							S
113403	10.727	0.039	10.392	0.046	*	0.318	0.056	T	0.37	0.08	L *	10.2979	0.0036	0.034	140	*	10.22	10.35		D	22580+4954	H 1	2 C A	AB	245	0.779	0.006	0.70	0.03	G
113404	10.582	0.034	10.014	0.032		0.531	0.042	T	0.60	0.04	L	10.0944	0.0038	0.025	95		10.06	10.13		C			1							
113405	11.747	0.086	9.848	0.026		1.611	0.074	T	2.82	0.91	Q	9.6088	0.0402	0.476	169		8.99	10.39		P 1 A			1 S							G
113406	10.091	0.030	8.324	0.014		1.472	0.026	T	1.49	0.04	L	8.2775	0.0021	0.013	81		8.25	8.31					1							
113407	9.718	0.017	8.052	0.009		1.393	0.015	T	1.37	0.02	L	8.0483	0.0016	0.016	140		8.03	8.07					1							S
113408	10.206	0.033	9.671	0.033		0.553	0.005	G	0.63	0.01	H	9.6928	0.0030	0.024	73		9.65	9.73		C			1							
113409	11.691	0.097	10.263	0.046		1.233	0.006	G	1.39	0.01	I	10.2206	0.0030	0.030	88		10.18	10.27		C			1							
113410	9.296	0.015	7.538	0.007		1.495	0.014	T	2.59	0.03	O	7.3025	0.0024	0.029	130		7.24	7.35	6.62	P 1 A			1 S							S P
113411	9.151	0.013	9.166	0.017	A	0.141	0.140	G	0.12	0.07	B *	9.0475	0.0020	0.023	202	*	9.01	9.09		D	22581+4156	I 1	2 C A	AB	96	9.103	0.011	2.45	0.05	
113412	9.907	0.026	9.350	0.023		0.521	0.031	T	0.59	0.03	L	9.4212	0.0025	0.019	86		9.39	9.47		C			1							
113413	9.383	0.013	8.244	0.009		0.979	0.012	T	0.96	0.01	L	8.2882	0.0015	0.015	149		8.27	8.31			22581+2045	I 1	1 S							
113414	11.352	0.066	9.694	0.026		1.616	0.143	G	1.75	0.21	K	9.7120	0.0027	0.029	111		9.66	9.76		U	22582+3022	I 2	1							
113415	8.369	0.011	8.157	0.012		0.202	0.015	T	0.22	0.02	L	8.2080	0.0015	0.017	82		8.18	8.24					1							S
113416	8.803	0.012	8.448	0.013		0.337	0.016	T	0.39	0.02	L	8.5216	0.0020	0.017	88		8.49	8.54		C			1							S
113417	10.227	0.031	8.987	0.018		1.058	0.028	T	1.02	0.02	L	9.0422	0.0024	0.020	74		9.00	9.08		C			1							
113418	9.479	0.019	8.048	0.011		1.208	0.017	T	1.17	0.02	L	8.0707	0.0013	0.011	89		8.05	8.09		C			1							S
113419	10.210	0.034	9.997	0.042		0.203	0.051	T	0.22	0.06	L	10.0012	0.0022	0.026	163		9.95	10.04					1							G
113420	10.672	0.036	8.651	0.012		1.616	0.143	G	1.75	0.21	K	8.5721	0.0034	0.027	108		8.53	8.61		U	22582+3022	I 2	1							
113421	7.104	0.005	6.256	0.005		0.744	0.006	G	0.79	0.01	H	6.3124	0.0009	0.006	65		6.30	6.33		C			1							S
113422	11.262	0.068	10.119	0.037		0.975	0.061	T	0.96	0.05	L	10.2455	0.0039	0.032	92		10.18	10.30		C			1							
113423	9.625	0.018	8.648	0.013		0.846	0.004	G	0.89	0.00	H	8.7266	0.0020	0.016	95		8.69	8.76					1							
113424	10.700	0.050	9.116	0.023		1.500	0.040	G	1.53	0.06	R	9.1231	0.0024	0.017	85		9.09	9.16		C			1							
113425	10.422	0.036	9.840	0.033		0.546	0.036	T	0.62	0.03	L	9.9277	0.0029	0.030	76		9.88	9.98		C			1							
113426	10.919	0.059	10.723	0.078		0.187	0.092	T	0.21	0.11	L	10.7651	0.0032	0.041	117		10.68	10.82					1 G							G
113427	8.516	0.012	7.929	0.011		0.548	0.014	T	0.62	0.01	L	7.9934	0.0010	0.014	76		7.97	8.02		C			1							S
113428	11.377	0.064	10.469	0.045	*	0.671	0.015	G	0.73	0.01	H *	10.6544	0.0040	0.033	104	*	10.61	10.72			22583−3816	H 1	2 C B	AB	358	0.330	0.051	2.14	0.36	G
113429	10.464	0.021	9.077	0.011		1.173	0.019	T	1.13	0.02	L	9.1330	0.0017	0.027	272		9.08	9.19		U			1 S							
113430	8.578	0.009	8.104	0.009		0.476	0.001	G	0.55	0.00	H	8.1567	0.0016	0.015	139		8.13	8.19					1							S
113431						1.065	0.005	G	1.12	0.01	I	11.7358	0.0054	0.049	80		11.65	11.82					1							G
113432	9.349	0.014	8.145	0.009		1.030	0.013	T	1.00	0.01	L	8.1968	0.0011	0.017	129		8.17	8.23					1							
113433	6.794	0.005	6.419	0.005		0.366	0.006	T	0.43	0.01	L	6.4631	0.0009	0.006	63		6.45	6.47		C			1							S
113434	9.250	0.014	8.752	0.013		0.480	0.015	T	0.55	0.02	L	8.8182	0.0024	0.021	123		8.77	8.86					1							S
113435	9.944	0.020	9.274	0.017		0.610	0.020	T	0.68	0.02	L	9.3517	0.0019	0.019	132		9.30	9.38					1							
113436	8.633	0.010	7.164	0.006		1.238	0.009	T	1.20	0.01	L	7.1832	0.0008	0.009	133		7.17	7.20					1							S
113437	8.752	0.020	8.274	0.021	*	0.450	0.026	T	0.52	0.03	L *	8.5532	0.0021	0.019	120	*	8.52	8.58		R	22585+6705	I 1	2 C A	AB	258	1.545	0.004	0.36	0.02	S
113438	8.396	0.015	7.727	0.010		0.617	0.015	G	0.69	0.01	H	7.7992	0.0012	0.009	82		7.78	7.82		C			1							S
113439	8.865	0.011	7.909	0.008		0.840	0.015	G	0.86	0.02	A	7.9730	0.0017	0.016	121		7.95	8.00					1							S
113440	10.383	0.050	8.880	0.024		1.264	0.044	T	1.22	0.05	L	8.8919	0.0031	0.018	58		8.87	8.95					1							
113441	10.083	0.032	8.829	0.019		1.069	0.029	T	1.03	0.02	L	8.8267	0.0031	0.013	65		8.80	8.86					1							
113442	10.796	0.045	10.328	0.047		0.454	0.051	T	0.52	0.05	L	10.3755	0.0036	0.064	87		10.30	10.73	1.40	P 1 A			1 X							
113443	7.712	0.006	7.435	0.007	*	0.261	0.009	T	0.29	0.01	L *	7.4770	0.0007	0.011	134	*	7.46	7.49		D	22586+6342	H 1	2 C S A	AB	285	0.179	0.016	1.88	0.46	S
113444	8.674	0.015	8.275	0.015		0.453	0.015	G	0.52	0.02	H	8.3094	0.0028	0.015	72		8.29	8.33			22586+1202	I 2	1							S
113445	7.229	0.005	6.513	0.006		0.640	0.000	G	0.70	0.00	H	6.5710	0.0008	0.006	74		6.56	6.58			22586+0921	I 1	1							S
113446	7.998	0.007	8.006	0.008		−0.003	0.010	T	0.02	0.01	L	8.0133	0.0015	0.016	148		7.99	8.04		M			1							S
113447	6.848	0.005	6.214	0.003		0.582	0.006	G	0.62	0.07	F	6.2734	0.0008	0.007	114		6.26	6.29		C			1							S
113448	8.812	0.015	8.367	0.015		0.428	0.015	G	0.50	0.02	H	8.3960	0.0015	0.011	71		8.38	8.41		C	22586+1202	I 2	1							S
113449	9.325	0.013	7.577	0.006		1.457	0.011	T	1.46	0.02	L	7.5663	0.0011	0.013	148		7.55	7.59					1							S
113450	9.126	0.041	8.812	0.046	*	0.298	0.058	T	0.34	0.08	L *	9.4316	0.0018	0.019	115	*	9.39	9.47		D	22586+6950	I 1	2 C A	AB	28	1.286	0.012	0.40	0.05	
113451	10.457	0.041	8.664	0.017		1.493	0.035	T	1.52	0.05	L	8.5561	0.0026	0.016	84		8.53	8.58		C			1							
113452	9.010	0.011	8.984	0.014		0.029	0.016	T	0.05	0.01	L	9.0200	0.0014	0.017	161		8.99	9.06		C			1							
113453	8.747	0.013	8.750	0.017		0.002	0.020	T	0.02	0.02	L	8.7955	0.0023	0.017	80		8.77	8.82					1							
113454	8.445	0.013	7.766	0.010	*	0.644	0.005	G	0.71	0.00	H *	7.8040	0.0017	0.013	84	*	7.78	7.83		D	22586−4531	I 1	2 C A	AB	86	0.468	0.005	0.58	0.03	S
113455	8.249	0.007	7.868	0.008		0.359	0.015	G	0.42	0.02	H	7.9120	0.0013	0.015	150		7.89	7.94					1 G							S
113456	9.770	0.018	9.124	0.016		0.566	0.002	G	0.64	0.00	H	9.1971	0.0019	0.018	117		9.17	9.24		C	22586−0827	I 1	1							
113457	10.469	0.038	9.499	0.026		0.852	0.034	T	0.87	0.03	L	9.5815	0.0025	0.022	91		9.55	9.63		C			1							S
113458	9.537	0.016	9.290	0.018		0.235	0.023	T	0.26	0.03	L	9.3223	0.0019	0.027	169		9.28	9.37					1							
113459	10.290	0.030	8.927	0.017		1.154	0.027	T	1.12	0.02	L	8.9720	0.0026	0.018	84		8.94	9.01		C			1							
113460	11.138	0.041	9.816	0.020		1.122	0.036	T	1.08	0.04	L	9.8687	0.0028	0.032	185		9.81	9.92					1 S							
113461	7.824	0.008	7.474	0.008	*	0.332	0.010	T	0.39	0.01	L *	7.5075	0.0015	0.013	102	*	7.49	7.54		P 1 A	22587+6305	H 1	2 C B	AB	253	0.240	0.038	2.57	0.51	S
113462	8.721	0.011	8.177	0.011		0.506	0.012	G	0.58	0.01	H	8.2371	0.0020	0.014	84		8.21	8.26					1							S
113463	9.274	0.016	9.215	0.021		0.059	0.025	T	0.07	0.02	L	9.2295	0.0020	0.016	111		9.19	9.26		C			1							
113464	8.852	0.014	7.730	0.010		0.966	0.013	T	0.95	0.01	L	7.7822	0.0011	0.010	65		7.77	7.80		D			1							S
113465	6.405	0.005	6.347	0.005		0.052	0.009	G	0.06	0.01	H	6.3686	0.0010	0.007	71		6.36	6.38		C			1							S
113466	9.993	0.026	8.688	0.015		1.109	0.023	T	1.07	0.02	L	8.7651	0.0016	0.018	93		8.73	8.79		C			1							S
113467	9.395	0.014	8.969	0.014		0.402	0.018	T	0.47	0.02	L	9.0328	0.0020	0.018	124		9.00	9.06		C			1							
113468	9.500	0.011	9.376	0.013		0.120	0.016	T	0.13	0.02	L	9.4421	0.0023	0.031	227		9.38	9.49					1 S							
113469	7.075	0.005	7.157	0.006		−0.070	0.007	T	−0.05	0.01	L	7.1576	0.0013	0.013	163		7.14	7.19		M			1							S
113470	10.366	0.026	8.645	0.011		1.436	0.022	T	1.43	0.04	L	8.6151	0.0022	0.024	158		8.57	8.66					1							
113471	9.159	0.013	7.973	0.009		1.016	0.012	T	0.99	0.01	L	8.0408	0.0015	0.012	121		8.02	8.07		C			1							S
113472	8.945	0.009	8.827	0.011	*	0.114	0.013	T	0.13	0.01	L *	8.8553	0.0017	0.019	162	*	8.82	8.89			22588+3808	H 1	2 C S A	AB	341	0.136	0.005	0.31	0.33	
113473	9.201	0.014	8.696	0.013		0.485	0.015	T	0.56	0.02	L	8.7583	0.0016	0.018	115		8.73	8.79		C			1							S
113474	8.301	0.006	8.236	0.008		0.065	0.009	T	0.07	0.01	L	8.2667	0.0009	0.016	230		8.24	8.30					1							S
113475	8.765	0.008	8.387	0.008		0.358	0.011	T	0.42	0.01	L	8.4404	0.0010	0.017	234		8.41	8.47					1							S
113476	9.819	0.024	9.248	0.023		0.540	0.015	G	0.61	0.02	H	9.3081	0.0022	0.016	81		9.28	9.34		C			1							
113477	9.774	0.022	8.810	0.016		0.782	0.002	G	0.82	0.00	H	8.8916	0.0019	0.019	114		8.86	8.92		C	22589+6902	I 1	1							
113478	8.729	0.013	7.541	0.009		1.031	0.015	G	1.00	0.01	H	7.5849	0.0071	0.062	86		7.48	7.66		U 2			1							S
113479	9.570	0.013	8.930	0.011		0.594	0.015	T	0.66	0.01	L	8.9962	0.0020	0.024	191		8.96	9.03					1							
113480						1.287	0.036	G	1.35	0.14	K	12.6444	0.0100	0.087	65		12.46	12.83					1							G
113481	9.113	0.011	8.106	0.008		0.879	0.010	T	0.89	0.01	L	8.1769	0.0012	0.013	165		8.15	8.20					1							
113482	9.798	0.025	9.173	0.023		0.577	0.025	T	0.65	0.02	L	9.2082	0.0028	0.017	71		9.17	9.23					1							S
113483	10.417	0.037	9.738	0.032		0.617	0.037	T	0.69	0.03	L	9.8114	0.0021	0.020	86		9.76	9.86					1							
113484	9.772	0.025	9.315	0.025		0.431	0.032	T	0.50	0.03	L	9.3234	0.0017	0.017	81		9.29	9.35		C			1							
113485	10.112	0.023	9.977	0.031		0.130	0.015	G	0.14	0.01	H	10.0624	0.0029	0.036	170		10.00	10.12					1 S							G
113486	8.769	0.011	8.254	0.010	*	0.508	0.015	G	0.58	0.02	H *	8.3787	0.0014	0.015	164	*	8.36	8.42		D	22590+2745	I 1	2 C A	AB	5	6.764	0.004	1.34	0.02	
113487	7.792	0.007	7.573	0.008		0.209	0.010	T	0.23	0.01	L	7.6145	0.0023	0.021	113		7.58	7.64		U 2			1							S
113488	8.320	0.009	8.340	0.011	A	−0.014	0.013	T	0.01	0.01	L	8.3832	0.0256	0.031	114	A	8.33	8.43		D	22590−0813	I 1	2 C B	AB	201	20.324	0.063	1.91	0.14	S
113489	9.945	0.023	9.488	0.023		0.444	0.026	T	0.51	0.03	L	9.5404	0.0026	0.026	95		9.48	9.59					1							S
113490	8.721	0.012	8.327	0.012		0.382	0.009	G	0.45	0.01	H	8.3714	0.0017	0.017	92		8.35	8.40		C			1							S
113491	10.811	0.053	9.032	0.020		1.482	0.045	T	1.50	0.07	L	9.0281	0.0019	0.015	77		8.99	9.06		C			1							
113492	9.361	0.013	8.125	0.008		1.055	0.012	T	1.02	0.01	L	8.1772	0.0016	0.017	167		8.16	8.21					1							
113493	9.773	0.017	9.662	0.021		0.108	0.025	T	0.12	0.03	L	9.7138	0.0028	0.029	168		9.67	9.76					1 S							G
113494	9.783	0.022	8.566	0.014		1.040	0.020	T	1.01	0.02	L	8.5999	0.0019	0.019	123		8.57	8.63					1							
113495	12.776	0.319	10.960	0.100		1.511	0.265	T	1.54	0.40	L	11.0401	0.0060	0.046	88		10.87	11.09		U			1 X S							G
113496	8.972	0.015	8.437	0.014		0.502	0.018	T	0.57	0.02	L	8.4841	0.0019	0.012	64		8.46	8.51		C			1							S
113497	10.198	0.022	8.887	0.013		1.114	0.020	T	1.08	0.02	L	8.9503	0.0016	0.018	145		8.91	8.98					1							
113498	6.466	0.003	6.458	0.003		0.012	0.004	T	0.03	0.00	L	6.4692	0.0007	0.007	123		6.46	6.48		C			1							S
113499	8.672	0.010	7.236	0.006		1.220	0.015	G	1.18	0.01	H	7.2777	0.0009	0.009	125		7.26	7.29			22592+8021	I 1	1							S
113500	8.997	0.013	8.476	0.012		0.531	0.015	G	0.60	0.02	H	8.5244	0.0014	0.017	117		8.49	8.55		C			1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
113501	22 59 10.37	+52 39 16.0	6.31	H	344.793 192 51	+52.654 452 83	4.85	−26.12	31.62	0.42	0.46	0.65	0.43	0.46	−14 − 6 +20	−15 + 1	+17 − 3	−10 +21	−10						1	−0.26
113502	22 59 11.16	+06 09 02.0	7.91	G	344.796 491 47	+06.150 564 11	15.10	160.97	−6.70	0.92	0.68	1.10	1.55	0.99	+23 − 2 −31	+18 + 6	+ 9 + 5	+ 0 +21	− 1						0	1.05
113503 H	22 59 11.80	+11 43 44.2	5.76	H	344.799 156 76	+11.728 941 02 A	12.26	26.84	−40.09	0.99	0.83	0.94	0.93	0.77	+36 −13 − 1	− 8 − 7	−15 −15	−25 +20	− 5						1	−0.18
113504	22 59 12.56	−17 09 34.1	8.07	H	344.802 334 87	−17.159 477 06	7.07	36.67	28.22	0.89	0.61	1.10	1.09	0.82	+21 + 6 −14	− 6 +10	+33 +18	−17 +38	+22						0	−0.65
113505	22 59 12.85	+52 18 10.8	6.98	H	344.803 525 74	+52.303 004 53	0.34	−1.38	−8.72	0.44	0.47	0.68	0.46	0.50	−18 − 2 +14	− 6 − 1 +14	− 3 − 8	+23 − 9							1	−0.64
113506	22 59 13.85	+24 01 58.9	11.45	H	344.807 719 59	+24.033 019 55 B	−11.51	35.06	17.17	44.60	26.69	16.49	19.17	15.39	− 9 +21	−22 −24	+16 −14	+22 − 9	+33 −11						1	0.38
*113507	22 59 14.92	+24 01 57.4	9.00	H	344.812 156 70	+24.032 598 93 A	6.14	25.32	41.73	2.66	2.06	2.58	2.82	2.55	− 6 +15	−21 −26	+11 −12	+15 −15	+33 − 8						1	0.38
*113508	22 59 14.80	+33 19 59.4	10.19	H	344.811 649 33	+33.333 162 17	0.43	−19.56	−15.58	1.21	1.08	1.75	1.62	1.20	− 2 +27	−24 + 9	+ 0 − 2	+ 3 −29	+25 − 6						0	−1.04
113509	22 59 15.62	−44 03 52.0	10.66	2 H	344.815 068 65	−44.064 436 69	2.66	−26.93	−11.23	1.47	1.36	1.92	1.76	1.49	+18 −15 −16	+ 4 − 6	+ 7 − 7	−10 +20	+23						4	−0.28
113510	22 59 16.92	−71 50 11.8	7.42	1 H	344.820 507 86	−71.836 600 43	2.55	8.53	−15.68	0.58	0.52	0.73	0.64	0.56	− 4 +17	−14 − 4	+ 7 −14	+ 2 + 3	−13 +23						3	−0.13
113511	22 59 17.19	−60 09 23.7	7.38	H	344.821 638 90	−60.156 593 79	4.28	9.51	5.53	0.43	0.47	0.70	0.53	0.51	−33 + 2 − 6	−10 + 9	+11 +10	−22 − 9	−31						0	2.11
113512	22 59 18.68	+53 42 44.0	8.40	H	344.827 844 74	+53.712 231 79	6.98	17.84	−1.56	0.60	0.65	0.87	0.71	0.65	−15 + 5 +31	−15 + 5	+ 2 + 5	−15 + 5	−15						3	0.84
113513	22 59 18.87	+04 21 31.4	7.20	H	344.828 630 70	+04.358 711 57	5.63	−15.28	−71.61	0.84	0.58	0.88	1.00	0.75	+12 − 6 −33	−30 +21	− 7 +24	+12 − 9	+ 7						2	−0.11
113514	22 59 19.26	+12 11 33.8	8.35	H	344.830 234 01	+12.192 714 30	20.59	334.25	−153.81	0.98	0.73	1.18	1.17	1.00	+13 +21 − 5	−24 + 6	− 9 +15	−12 +37	− 6						0	−0.08
113515	22 59 20.96	−30 42 01.5	9.41	H	344.837 343 13	−30.700 426 11	5.92	−24.69	−15.82	1.33	0.98	1.52	1.51	1.32	+19 + 1 −24	−34 − 2	+13 − 1	−11 +22	+38						0	0.02
113516	22 59 21.97	+40 52 59.4	8.22	H	344.841 550 83	+40.883 172 93	1.81	−6.31	−6.12	0.88	0.57	1.09	1.00	0.71	−18 +29 + 5	− 2 +11	− 6 +29	−31 +17	+27						0	−0.28
113517	22 59 25.47	+72 42 44.2	7.86	H	344.856 108 22	+72.712 289 35	16.86	−50.99	−83.46	0.50	0.54	0.63	0.57	0.62	+ 2 + 2 + 9	+ 2 + 3	− 3 + 4	+ 2 +10	+14						1	−0.59
113518	22 59 25.62	+73 55 24.9	8.48	H	344.856 732 15	+73.923 592 30	2.12	9.00	1.26	0.65	0.59	0.71	0.85	0.66	− 1 + 3 + 2	− 8 −11	− 2 − 9	+ 4 + 7	+ 0						0	0.25
113519	22 59 26.84	+20 10 10.6	11.10	H	344.861 835 97	+20.169 622 68	6.73	−14.97	−15.06	1.85	1.15	2.18	1.73	1.61	+22 +24 − 3	− 2 − 4	− 7 − 2	−25 +23	+13						0	2.07
113520	22 59 27.25	−64 10 56.3	8.16	H	344.863 545 47	−64.182 304 12	2.33	−5.53	−18.74	0.58	0.67	0.92	0.72	0.75	−15 + 6 −15	− 2 + 7	+ 5 + 9	−20 −11	+ 0						0	−1.24
113521	22 59 27.40	+00 57 47.1	5.43	H	344.864 177 26	+00.963 091 54	11.63	90.06	−67.66	0.74	0.64	0.93	1.06	0.90	+44 −16 −24	+ 6 + 4	+31 + 9	− 3 +10	+33						0	−2.18
113522	22 59 29.13	−06 36 27.0	8.44	H	344.871 362 30	−06.607 510 23	6.18	50.15	−40.92	1.07	0.64	1.22	1.44	0.91	+20 − 4 −16	+23 + 3	+ 8 − 6	−22 +46	+ 1						0	0.76
113523	22 59 29.24	−02 53 08.0	7.78	H	344.871 832 96	−02.885 542 58	4.83	12.21	−6.55	0.94	0.76	1.07	1.05	0.81	+21 + 3 −24	−19 −12	+23 − 7	−32 +17	+14						0	0.06
113524	22 59 30.44	+43 54 49.8	7.58	H	344.876 853 02	+43.913 830 36	4.73	2.86	−15.36	0.56	0.52	0.87	0.63	0.59	− 4 +10 + 0	+ 7 + 5	−11 +13	−15 +10	+26						1	−1.05
113525	22 59 31.55	+07 33 17.3	12.45	G	344.881 468 64	+07.554 808 35	3.52	−122.19	−106.95	4.39	3.04	4.75	6.30	4.47	+26 −14 −24	−37 − 2	+ 6 + 1	−28 +24	− 6						0	0.17
113526	22 59 32.65	−61 59 11.3	8.53	H	344.886 039 22	−61.986 481 66	6.08	29.60	−7.08	0.57	0.64	0.91	0.68	0.72	−24 + 4 −15	+19 + 3	− 4 + 2	+ 1 − 5	−24						0	0.47
113527	22 59 32.85	+61 08 24.6	9.24	G	344.886 870 08	+61.140 169 03	1.17	−7.18	−2.29	0.81	0.79	0.96	1.11	0.95	−27 + 4 + 8	− 5 +17	+ 3 +14	−31 +15	−33						0	0.08
113528	22 59 33.75	−30 56 55.3	9.38	H	344.890 633 22	−30.948 707 70	19.56	111.91	86.38	1.16	0.87	1.37	1.47	1.20	+23 −14 − 9	−32 − 3	+34 − 1	−18 +15	+36						0	1.23
113529	22 59 34.00	−12 45 37.6	9.67	H	344.891 662 92	−12.760 448 95	15.97	138.11	−52.19	1.32	0.91	1.83	1.75	1.33	+24 − 3 −15	+ 4 − 1	+21 − 5	−26 +59	+12						0	0.65
113530	22 59 35.26	−60 40 43.9	8.09	H	344.896 928 50	−60.678 861 61	12.39	65.25	20.07	0.51	0.54	0.82	0.62	0.60	−33 −17 − 4	+ 5 + 2	+ 3 + 3	− 4 − 9	−33						0	0.18
113531	22 59 35.68	−13 04 15.2	6.12	H	344.898 655 03	−13.070 891 29	4.97	−6.49	−1.58	0.79	0.51	0.90	0.93	0.63	+15 −12 + 5	−18 +12	+30 + 5	−25 +27	+ 5						0	−0.50
113532	22 59 35.76	−29 27 44.4	5.51	1 H	344.899 011 44	−29.462 323 52	8.90	−6.77	5.15	0.68	0.52	0.80	0.79	0.60	+24 −11 −36	−26 + 5	+10 + 7	− 8 +10	+32						0	2.16
113533	22 59 36.45	−16 06 33.4	8.76	H	344.901 868 00	−16.109 276 91	7.41	69.59	−35.11	1.46	0.81	1.95	1.61	1.36	+ 4 +50	−18 − 9	+ 7 +33	+44 −26	+64	+22					0	1.02
113534	22 59 38.32	−51 48 23.5	9.37	H	344.909 680 83	−51.806 525 34	8.38	45.34	−127.96	0.98	0.93	1.39	1.22	0.99	+14 −13 − 2	+ 4 + 0	+ 7 + 1	+ 9 − 3	+12						0	1.53
113535	22 59 38.85	+41 03 15.1	10.98	G	344.911 870 08	+41.054 187 43	20.90	−205.37	−201.67	1.80	1.20	2.20	2.46	1.62	− 4 +17	+19 −28	+ 0 −10	+ 4 −32	− 6	+51					0	−1.55
113536	22 59 40.42	+13 24 37.0	8.62	H	344.918 414 76	+13.410 286 18	4.39	8.24	−1.57	0.98	0.90	1.15	1.10	1.27	+47 + 0 − 9	+ 1 − 4	− 1 − 2	−10 + 6	+53						0	−0.09
113537 H	22 59 41.27	−04 21 51.4	7.96	2 G	344.921 969 90	−04.364 283 62 A	7.15	−11.33	−34.62	2.16	1.54	2.10	2.72	1.87	− 2 +26	−24 +39	−16 +34	− 7 −17	+18 − 4						7	1.73
113538 H	22 59 42.87	+62 46 38.4	8.99	G	344.928 629 11	+62.777 320 35 A	0.91	0.33	−4.15	1.63	1.81	1.73	1.80	1.68	− 1 + 9 + 6	+ 3 − 9	+10 −12	−10 + 4	− 5						6	1.01
113539	22 59 42.87	−32 01 10.7	9.52	H	344.928 634 60	−32.019 631 14	6.35	14.69	−1.43	1.36	1.04	1.55	1.80	1.28	+ 6 +15	−30 −32	+ 4 + 2	+ 6 −31	+15 + 5						0	−1.10
113540	22 59 44.19	−62 46 19.3	7.19	G	344.934 104 65	−62.772 023 29	10.12	74.58	−27.11	0.48	0.50	0.73	0.58	0.56	−12 − 2 −19	−16 − 1	+15 + 2	−18 − 2	+ 4						0	1.31
113541	22 59 45.98	−31 07 35.2	7.93	2 H	344.941 573 55	−31.126 442 04	1.85	17.16	0.07	0.97	0.73	1.17	1.22	0.94	+19 − 7 −17	−12 − 4	+27 + 0	−13 +19	+32						0	−0.69
113542	22 59 46.01	+25 38 37.9	8.75	G	344.941 705 87	+25.643 872 35	10.83	11.26	−0.53	0.57	0.60	1.09	0.65	0.76	+46 − 7 − 9	−16 −16	+14 −10	−34 +26	+64						1	−0.76
113543	22 59 46.73	−16 23 53.1	7.81	G	344.944 703 85	−16.398 091 82	19.96	18.03	−179.40	0.93	0.64	1.23	1.21	0.96	+20 +19 − 4	−10 + 9	+40 +21	−18 +48	+27						0	0.77
113544 H	22 59 47.53	+30 04 38.5	8.44	H	344.948 034 04	+30.077 347 59 A	3.39	30.27	−3.40	1.07	1.08	1.47	1.18	1.19	+29 + 3 + 4	+18 − 3	−23 + 3	−25 +20	+37						2	−0.01
113545	22 59 48.47	−10 53 05.6	9.06	H	344.951 966 95	−10.884 886 47	5.41	26.89	12.24	1.44	0.84	2.35	1.64	1.51	+20 +35	−32 − 4	+ 8 −12	+23 −50	+75 + 0						0	−1.18
113546	22 59 48.49	+35 57 58.7	11.32	G	344.952 050 06	+35.966 318 48	17.45	−224.43	−236.48	2.02	1.57	2.41	2.42	1.73	+20 + 1 +18	− 4 − 1	+ 8 − 2	−13 +14	+32						4	2.16
113547 H	22 59 49.43	−02 26 23.4	7.71	G	344.955 956 41	−02.439 846 39 A	8.58	40.90	15.01	1.34	1.09	1.33	1.65	1.12	+24 − 8 −22	−13 + 1	− 7 − 5	−26 + 8	−14						2	−0.15
113548	22 59 50.99	−66 25 28.5	9.51	H	344.962 446 61	−66.424 596 67	5.19	53.53	10.13	0.82	0.85	1.18	0.98	0.82	− 8 − 1 −23	+ 1 + 7	−16 + 3	− 5 − 6	− 8						0	−1.12
113549	22 59 51.26	−35 02 26.1	8.70	2 H	344.963 568 33	−35.040 573 63	0.30	−11.65	−5.59	0.83	0.74	1.14	0.93	0.79	+32 − 2 −12	+45 −15	+14 −11	− 5 + 8	+35						0	−0.12
113550	22 59 52.50	+13 51 44.1	7.62	H	344.968 730 25	+13.862 263 14	9.95	50.23	24.18	0.80	0.69	0.95	0.92	1.05	+39 + 5 − 1	− 2 + 3	− 8 + 5	+ 0 + 4	+45						0	−0.28
113551	22 59 53.20	+38 37 40.5	8.92	H	344.971 655 47	+38.627 917 35	3.41	4.07	−6.79	0.87	0.58	1.10	0.99	0.73	−23 +31 + 6	+13 + 6	− 6 +27	−23 +24	+12						1	−0.73
113552	22 59 53.51	−11 22 53.5	10.57	G	344.972 967 60	−11.381 526 18	37.87	219.36	−66.89	1.80	1.24	2.15	2.60	1.72	+29 −10 + 4	−12 + 9	+30 −10	−50 +31	+ 5						2	0.94
113553	22 59 55.19	+67 56 59.2	8.03	H	344.979 976 11	+67.949 785 11	1.97	6.84	−1.89	0.53	0.54	0.63	0.61	0.62	−17 + 8 − 8	+29 − 4 + 3	+ 0 − 7	+18 −11	+ 0						0	0.23
113554	22 59 56.35	−60 49 32.2	8.17	H	344.984 790 93	−60.825 616 93	3.90	38.24	−0.22	0.56	0.59	0.87	0.68	0.65	−32 −10 − 3	+ 5 + 0	+ 3 + 2	− 3 − 9	−25						0	0.16
113555	22 59 58.92	−02 51 24.2	9.08	H	344.995 517 75	−02.856 710 12	4.29	1.44	−11.54	1.10	0.94	1.32	1.41	0.99	+23 − 2 −24	+ 3 −18	+40 −15	−29 +14	+ 9						0	−0.83
113556	22 59 59.36	+05 09 34.5	7.15	2 T	344.997 351 39	+05.159 594 02	5.11	40.59	−5.96	0.90	0.64	1.00	1.23	0.90	+19 − 6 −13	+ 7 + 4	+25 + 7	+ 1 + 3	+12						4	1.80
113557	23 00 00.97	+57 46 22.4	7.45	G	345.004 059 91	+57.772 891 02	10.08	−2.49	−41.10	0.64	0.53	0.76	0.76	0.65	−15 +23 +13	+25 + 3	+ 0 + 1	− 2 − 8	−20						0	−1.21
113558	23 00 02.46	+29 00 16.0	9.25	2 H	345.010 239 55	+29.004 440 24	−1.53	−5.64	−18.56	0.88	0.73	1.36	0.96	0.92	+ 5 + 9	−10 +16	− 5 + 2	+ 4 −24	+38 +20						5	2.26
113559	23 00 02.71	−46 29 31.6	7.82	H	345.011 311 40	−46.492 103 10	7.67	62.26	−23.14	0.86	0.73	1.10	1.09	0.82	+12 −13 −34	+ 6 − 5	+ 0 − 6	−21 +17	+12						0	−0.60
113560	23 00 03.79	+21 13 11.0	7.64	G	345.015 772 62	+21.219 723 95	8.89	8.21	−48.06	0.94	0.58	1.03	1.16	0.79	+10 − 9 −15	−25 + 4	− 2 + 3	−21 +21	−21						0	0.44
113561	23 00 05.10	+56 56 43.4	5.10	2 T	345.021 266 22	+56.945 381 31	−0.15	−2.94	−3.09	0.43	0.44	0.57	0.53	0.46	−19 − 1 +20	+ 2 −15	+10 −15	+ 0 +15	−11						0	0.16
113562	23 00 05.77	−25 09 50.4	5.66	H	345.024 025 43	−25.163 986 77	4.62	35.14	−79.51	0.62	0.49	0.71	0.80	0.59	+33 − 5 − 5	+12 +29	− 3 +27	+25 +10	+31						0	−0.29
113563	23 00 06.41	−56 39 46.9	9.05	H	345.026 725 49	−56.663 024 53	3.25	63.21	−43.42	1.22	1.25	2.08	1.35	1.24	−20 + 1 −13	−22 − 4	+ 3 − 2	−26 − 3	−20	2						
113564 H	23 00 08.67	−51 42 04.4	7.29	G	345.036 120 04	−51.701 235 44 A	7.49	10.13	−7.08	0.93	0.95	1.23	1.12	0.89	+22 + 9 −31	+18 + 3	+24 +10	+19 − 5	+31		2	−0.08				
113565 H	23 00 09.05	+59 37 11.6	8.72	G	345.037 709 36	+59.619 894 92 A	0.78	−4.33	−2.51	1.44	1.45	1.66	1.77	1.63	−23 + 6 − 8	+ 9 +20	−12 +16	−27 +34	−25		2	−0.49				
113566	23 00 09.14	−26 39 53.1	8.91	H	345.038 080 93	−26.664 751 71	4.75	47.92	−1.03	1.08	0.86	1.27	1.28	1.08	+22 + 0 −17	−27 +17	+ 7 +20	− 9 + 6	+23						0	0.50
113567	23 00 09.56	+38 22 11.4	8.71	H	345.039 847 96	+38.369 843 95	3.55	6.76	2.58	0.87	0.56	1.12	0.99	0.70	− 6 +32	+ 8 +21	+ 7 + 6	+26 −20	+25 +25						0	−0.21
113568	23 00 09.58	+13 55 28.9	7.49	H	345.039 920 01	+13.924 700 54	5.48	14.80	6.75	0.85	0.70	0.99	0.99	1.12	+38 + 4 − 2	− 5 +10	− 3 +13	+10 − 1	+42						0	−0.57
113569	23 00 10.13	+60 55 38.4	10.86	G	345.042 199 95	+60.927 340 37	1.21	−3.23	−1.29	1.40	1.37	1.66	1.86	1.59	−25 + 7 + 0	+ 2 +10	−12 +10	−34 +23	−30						3	2.18
113570	23 00 10.23	−25 03 24.4	8.99	H	345.042 610 32	−25.056 780 16	1.82	14.52	2.83	1.04	0.83	1.26	1.30	1.03	+33 + 8 + 6	+ 7 +22	− 1 +22	+12 + 9	+35						0	−0.58
113571	23 00 13.04	−27 55 23.3	8.67	G	345.054 315 01	−27.923 137 21	7.68	45.38	−25.69	1.08	0.79	1.20	1.34	1.04	+17 −19 −24	−40 +16	+21 +21	− 9 +10	+17						0	2.44
113572	23 00 13.93	+02 24 25.1	9.15	H	345.058 031 37	+02.406 972 28	1.19	22.81	−16.75	1.18	0.91	1.35	1.78	1.30	+45 − 5 −11	+29 +18	−17 +12	+13 + 5	+16						0	1.19
113573	23 00 14.35	−34 39 09.6	9.71	G	345.059 784 89	−34.652 656 92	2.25	17.44	16.65	0.90	0.90	1.34	1.06	1.10	+29 − 8 +18	+29 + 1	+19 − 4	+20 +45	+32						0	1.71
113574	23 00 14.76	−27 05 45.5	8.14	H	345.061 487 15	−27.095 978 64	0.81	−6.06	−6.15	0.99	0.73	1.16	1.18	0.93	+25 −10 − 9	−12 +16	+27 +20	+ 0 +11	+30						2	0.24
113575	23 00 16.30	−52 49 18.7	9.02	H	345.067 905 33	−52.821 864 35	−0.39	−45.29	−21.51	0.71	0.88	1.25	0.87	0.98	+14 + 0 + 4	+20 +11	+15 +10	+22 + 3	+18						0	0.33
113576	23 00 16.69	−22 31 28.2	7.88	G	345.069 549 49	−22.524 488 01	122.80	−904.21	58.09	0.92	0.57	0.94	1.12	0.68	+19 −13 −14	−13 +12	+ 4 +10	−11 +16	+ 9						0	1.53
113577	23 00 18.21	+58 29 08.1	9.31	H	345.075 855 95	+58.485 583 69	−0.06	1.56	1.75	0.92	0.79	1.08	1.06	0.97	−20 +26 +12	+19 + 6	+ 0 +11	− 6 +16	−21						0	0.28
*113578	23 00 19.23	+41 46 23.7	9.07	H	345.080 111 31	+41.773 239 32	0.30	3.83	−7.37	0.56	0.73	1.14	0.59	0.82	+ 1 +13	+29 +53	+ 0 +15	+12 −33	− 2 +20						0	−0.61
*113579	23 00 19.22	−26 09 12.1	7.47	1 H	345.080 066 68	−26.153 359 40	31.22	108.87	−160.41	0.84	0.60	0.93	1.02	0.74	+18 + 1 − 4	−21 +17	− 7 +17	− 4 + 5	+20						2	−0.45
*113580	23 00 19.21	−47 41 57.8	9.48	G	345.080 025 37	−47.699 385 25	2.18	55.99	−3.30	1.03	1.00	1.38	1.11	1.10	+15 −14 −15	− 7 − 3	+29 + 2	−11 + 6	+19						0	1.08
113581 H	23 00 19.28	+14 00 03.1	8.22	H	345.080 343 56	+14.000 872 20 A	7.31	36.61	−9.01	1.68	1.22	1.74	1.73	1.77	+27 +25 + 4	−10 +10	− 1 +21	− 1 +29	+24						0	0.33
113582	23 00 19.85	+24 39 56.9	9.79	H	345.082 725 68	+24.665 804 20	4.12	−6.02	−8.25	0.80	0.81	1.32	0.95	1.00	+39 + 2 − 4	+13 −14	+ 7 + 0	−33 +19	+62						0	−0.04
113583	23 00 19.93	−08 52 49.7	6.81	H	345.083 054 85	−08.880 464 96	10.43	25.48	−26.37	0.98	0.48	0.92	1.67	0.67	+27 −10 + 2	+35 +36	+ 2 +12	−19 +20	−10						2	1.12
113584	23 00 20.00	+56 03 01.4	8.94	H	345.083 339 26	+56.050 380 28	2.17	10.05	−3.04	0.71	0.73	0.88	0.96	0.85	−25 + 1 +15	+28 − 6 + 5	− 6 +23	+16 −14							1	0.97
113585	23 00 21.32	−39 09 17.1	9.04	H	345.088 835 16	−39.154 749 35	5.94	−24.79	−11.34	0.88	0.77	1.14	1.03	0.92	+22 − 7 −12	+30 − 3	+ 6 + 2	−12 + 5	+32						0	−1.21
113586	23 00 21.65	−21 37 23.2	9.85	G	345.090 187 87	−21.623 122 07	9.71	14.54	0.85	1.44	1.02	1.73	1.76	1.17	+25 − 9 −38	− 4 + 6	+ 2 + 2	−21 +36	+13						0	−1.32
113587	23 00 22.20	+67 02 31.6	9.69	H	345.092 481 81	+67.042 102 83	3.97	−3.83	7.23	0.86	0.79	0.96	1.14	0.98	+ 5 −10 + 3	+30 +18	−10 +19	+ 6 + 9	+16						0	−0.08
113588	23 00 22.67	−38 52 37.7	10.15	H	345.094 465 03	−38.877 129 24	3.99	−35.18	−3.37	1.15	1.01	1.49	1.31	1.27	+23 − 8 − 5	+11 + 3	+12 + 3	+11 + 9	+35						0	−0.35
113589	23 00 22.95	+26 48 36.0	9.65	H	345.095 617 98	+26.810 010 36	2.44	2.88	−9.12	0.86	0.73	1.38	0.99	0.98	+20 +18 − 1	+25 −13 + 7	− 9 −26	+31 +18							0	−0.47
113590	23 00 23.68	−31 07 07.7	11.06	G	345.098 672 45	−31.118 810 14	35.66	−183.06	−460.40	2.01	1.48	2.30	2.41	2.00	+19 − 1 − 6	−27 + 4	+23 + 7	−17 + 4	+27						0	0.14
113591	23 00 23.90	+47 55 17.3	8.40	H	345.099 589 18	+47.921 462 70	1.28	9.18	3.13	0.70	0.73	1.12	0.76	0.79	−31 +16 +14	−10 + 8	− 4 + 9	−11 + 2	−26						0	−0.29
113592	23 00 24.19	−41 09 04.0	7.08	H	345.100 796 43	−41.151 122 48	5.73	−32.04	−38.45	0.63	0.59	0.88	0.76	0.74	+22 −27 − 9	+25 − 1	+12 + 0	+ 2 +16	+36						0	0.41
113593	23 00 24.58	−25 37 36.3	6.30	H	345.102 420 74	−25.626 743 94	7.61	90.70	−42.22	0.68	0.51	0.78	0.85	0.62	+29 − 4 − 5	+ 6 +21	− 4 +20	+10 + 6	+32						0	1.23
113594	23 00 24.77	+35 46 19.2	8.00	H	345.103 214 59	+35.771 991 43	6.40	−38.24	−30.18	0.69	0.59	0.95	0.80	0.67	+ 2 + 5 + 6	+15 − 5 − 2	+ 1 −24	+24 +12							0	0.64
113595	23 00 25.24	−46 26 01.8	10.14	H	345.105 162 36	−46.433 836 00	5.31	18.23	4.38	1.51	1.10	1.76	2.09	1.35	− 2 −18 −19	− 3 −17	+15 −16	−15 +20	− 5						0	−0.24
113596	23 00 26.19	−53 13 38.0	10.55	G	345.109 134 13	−53.227 235 53	23.71	−132.09	−228.86	0.98	1.46	1.84	1.24	1.67	+28 − 4 −10	+25 +21	+18 +22	+26 + 8	+35						1	−0.20
113597 H	23 00 27.88	−26 18 41.4	9.57	G	345.116 165 30	−26.311 494 47 A	33.29	113.63	−162.16	2.52	1.97	2.58	2.65	2.11	+34 −10 −11	−15 +12	− 5 +12	−15 + 9	+36						4	0.38
113598 H	23 00 28.12	−33 44 40.9	8.51	2 H	345.117 158 94	−33.744 690 11 A	15.20	61.75	−155.27	1.91	1.32	1.67	2.10	1.33	+12 +18 − 1	−14 +25	+11 +18

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
113501	8.162	0.008	6.469	0.004		1.414	0.007	T	1.39	0.01	L	6.4491	0.0008	0.009	148		6.43	6.47		C			1								S
113502	8.449	0.013	7.946	0.012		0.483	0.015	G	0.55	0.02	H	8.0090	0.0022	0.012	65		7.99	8.03		C			1								S
113503	6.106	0.005	5.799	0.003	*	0.293	0.006	T	0.33	0.01	L	* 5.8372	0.0009	0.007	78	*	5.82	5.85		D	22592+1144	I 1	2 C A	AB	317	0.538	0.003		1.43	0.01	S
113504	8.418	0.012	8.071	0.013		0.336	0.016	T	0.39	0.02	L	8.1512	0.0017	0.011	77		8.13	8.17		C			1								S
113505	6.926	0.004	6.969	0.005		−0.035	0.006	T	−0.01	0.01	L	6.9725	0.0009	0.009	143		6.96	6.99		C			1								S
113506											T	11.4049	0.0897			B				D	22592+2402	I 2	1 C I A								
113507	9.465	0.019	9.006	0.019	A	0.433	0.025	T	0.50	0.03	L	9.0969	0.0117	0.032	98	A	9.04	9.15		D	22592+2402	I 2	1 C P A								S
113508	11.787	0.102	10.335	0.042		1.224	0.087	T	1.18	0.09	L	10.3519	0.0030	0.023	99		10.31	10.39		C			1								G
113509	11.390	0.069	10.740	0.064		0.650	0.020	G	0.71	0.02	H	10.7971	0.0043	0.038	90		10.60	10.87		U			1								G
113510	9.416	0.015	7.619	0.007		1.527	0.014	T	2.09	0.04	O	7.4918	0.0018	0.019	137		7.45	7.52		U			1								S
113511	9.212	0.010	7.529	0.005		1.406	0.009	T	1.38	0.01	L	7.5268	0.0009	0.013	224		7.50	7.55					1								S
113512	9.655	0.021	8.509	0.013		0.985	0.019	T	0.97	0.01	L	8.5644	0.0019	0.016	125		8.54	8.59					1								
113513	7.812	0.010	7.261	0.010		0.541	0.004	G	0.61	0.00	H	7.3182	0.0012	0.011	69		7.31	7.34					1								S
113514	9.058	0.016	8.425	0.014		0.580	0.015	G	0.65	0.01	H	8.4796	0.0016	0.017	69		8.46	8.51		C			1								S
113515	10.094	0.029	9.464	0.025		0.581	0.028	T	0.65	0.03	L	9.5364	0.0037	0.023	81		9.50	9.58					1								
113516	10.129	0.021	8.381	0.009		1.457	0.018	T	1.46	0.03	L	8.3511	0.0015	0.016	127		8.32	8.38		C			1								
113517	8.492	0.012	7.922	0.010		0.554	0.015	G	0.63	0.01	H	7.9790	0.0013	0.010	110		7.96	7.99		C			1								S
113518	9.902	0.022	8.609	0.013		1.100	0.020	T	1.06	0.02	L	8.6503	0.0018	0.015	107		8.61	8.68					1								
113519	11.495	0.072	11.068	0.079		0.403	0.099	T	0.47	0.11	L	11.1850	0.0042	0.043	118		11.12	11.25					1								G
113520	10.154	0.022	8.380	0.010		1.508	0.020	T	2.43	0.04	O	8.1861	0.0019	0.024	162		8.15	8.22					1								S
113521	6.691	0.005	5.535	0.004		0.982	0.002	G	0.96	0.00	H	5.5933	0.0006	0.005	74		5.59	5.60		C	22595+0058	I 1	1								S
113522	8.863	0.013	8.476	0.014		0.366	0.018	T	0.43	0.02	L	8.5238	0.0015	0.014	93		8.50	8.55		C			1								S
113523	9.307	0.019	7.912	0.011		1.179	0.017	T	1.14	0.01	L	7.9404	0.0015	0.009	59		7.92	7.96		C			1								S
113524	9.197	0.012	7.724	0.007		1.241	0.011	T	1.20	0.01	L	7.7382	0.0013	0.013	152		7.72	7.77		C			1								
113525						1.389	0.150	G	1.64	0.28	I	12.5634	0.0088	0.095	61		12.40	12.73					1								G
113526	8.830	0.009	8.555	0.009		0.259	0.013	T	0.29	0.02	L	8.6017	0.0015	0.017	186		8.57	8.63		C			1								S
113527	9.511	0.017	9.265	0.020		0.230	0.015	G	0.26	0.02	H	9.3339	0.0022	0.018	107		9.30	9.36		C			1								G
113528	10.569	0.042	9.468	0.026		0.942	0.039	T	0.93	0.03	L	9.5286	0.0030	0.020	85		9.50	9.56					1								
113529	10.511	0.036	9.764	0.031		0.668	0.036	T	0.73	0.03	L	9.8032	0.0028	0.025	90		9.76	9.85		C			1								
113530	8.588	0.007	8.135	0.007		0.441	0.008	T	0.51	0.01	L	8.1870	0.0013	0.017	212		8.16	8.21					1								S
113531	8.022	0.007	6.282	0.004		1.459	0.002	G	1.47	0.00	H	6.2541	0.0011	0.008	99		6.24	6.27		C			1								S
113532	5.821	0.004	5.535	0.004		0.271	0.006	T	0.31	0.01	L	5.5777	0.0014	0.012	87		5.56	5.60	0.12	P 1 A			1								S
113533	9.294	0.018	8.819	0.017		0.460	0.019	T	0.53	0.02	L	8.8621	0.0015	0.014	70		8.83	8.89		D			1								S
113534	10.100	0.025	9.463	0.023		0.586	0.025	T	0.66	0.02	L	9.4949	0.0034	0.020	105		9.44	9.54					1								
113535						1.200	0.020	G	1.33	0.04	I	11.1262	0.0039	0.036	125		11.07	11.20		C			1								G
113536	9.931	0.025	8.770	0.016		0.997	0.023	T	0.98	0.02	L	8.7872	0.0016	0.013	82		8.77	8.81		C			1								
113537	8.725	0.018	8.226	0.017	A	0.496	0.015	G	0.57	0.02	H	* 8.0430	0.0027	0.025	52	*	8.03	8.11		U 2	22597−0422	I 1	2 C A	AB	280	8.819	0.011		1.33	0.04	S
113538	9.611	0.022	9.113	0.021	*	0.536	0.005	G	0.61	0.01	H	* 9.1174	0.0025	0.020	111	*	9.08	9.14		D	22597+6247	H 1	2 C A	AB	18	0.548	0.009		1.79	0.05	
113539	9.979	0.028	9.542	0.030		0.426	0.033	T	0.49	0.04	L	9.6125	0.0028	0.019	80		9.58	9.65		C			1								
113540	7.700	0.006	7.251	0.005		0.463	0.001	G	0.53	0.00	H	7.2954	0.0009	0.011	169		7.28	7.31		C			1								S
113541	10.003	0.029	8.139	0.012		1.582	0.026	T	2.22	0.07	O	7.9844	0.0030	0.024	87		7.95	8.03		U 2			1 S								S
113542	9.200	0.010	8.794	0.010		0.389	0.015	G	0.45	0.02	H	8.8488	0.0012	0.016	233		8.82	8.88		C			1								
113543	8.527	0.011	7.884	0.010		0.592	0.012	G	0.66	0.01	H	7.9362	0.0016	0.011	82		7.91	7.96					1								S
113544	8.987	0.011	8.599	0.012	A						T	* 8.5692	0.0018	0.019	119	*	8.54	8.60		D	22598+3005	I 1	2 C A	AB	30	1.556	0.009		2.08	0.03	S
113545	9.706	0.019	9.120	0.018		0.547	0.023	T	0.62	0.02	L	9.1765	0.0024	0.017	95		9.14	9.21		C			1								S
113546						1.233	0.020	G	1.39	0.02	I	11.4696	0.0068	0.054	85		11.38	11.55		C			1								G
113547	8.210	0.012	7.771	0.014	*	0.458	0.015	G	0.53	0.02	H	* 7.8065	0.0019	0.009	50	*	7.79	7.83		D	22598−0226	H 1	2 C A	AB	232	0.672	0.024		2.89	0.07	S
113548	9.970	0.020	9.542	0.021		0.418	0.024	T	0.48	0.03	L	9.6057	0.0023	0.026	137		9.56	9.64					1								
113549	10.841	0.037	8.899	0.013		1.646	0.032	T	2.07	0.08	O	8.7718	0.0036	0.034	141		8.71	8.87		U 2			1								
113550	8.039	0.009	7.654	0.008		0.372	0.003	G	0.43	0.00	H	7.7111	0.0019	0.015	78		7.69	7.74					1								S
113551	8.936	0.009	8.918	0.012		0.021	0.014	T	0.04	0.01	L	8.9389	0.0018	0.022	153		8.90	8.98					1								
113552	12.404	0.198	10.743	0.070		1.402	0.021	G	1.68	0.01	A	10.6859	0.0039	0.032	97		10.63	10.74		C			1								G
113553	8.062	0.007	8.028	0.009		0.036	0.011	T	0.05	0.01	L	8.0440	0.0014	0.011	133		8.03	8.07		C			1								
113554	9.365	0.011	8.276	0.007		0.941	0.010	T	0.93	0.01	L	8.3328	0.0014	0.017	206		8.30	8.37					1								
113555	10.649	0.058	9.206	0.027		1.217	0.050	T	1.18	0.05	L	9.2489	0.0016	0.014	54		9.24	9.28		C			1								
113556	8.637	0.014	7.280	0.008		1.150	0.013	T	1.11	0.01	L	7.3188	0.0080	0.032	64		7.28	7.38		U 2			1								S
113557	7.858	0.007	7.477	0.008		0.361	0.010	T	0.42	0.01	L	7.5411	0.0012	0.012	124		7.52	7.57					1 G								S
113558	11.210	0.058	9.407	0.021		1.501	0.049	T	1.53	0.07	L	9.3781	0.0031	0.032	128		9.30	9.41		U 2			1 S								
113559	8.373	0.013	7.871	0.011		0.483	0.013	T	0.55	0.01	L	7.9288	0.0018	0.014	80		7.90	7.97			23000−4630	I 1	1								S
113560	8.084	0.009	7.687	0.008		0.376	0.011	T	0.44	0.01	L	7.7290	0.0011	0.010	97		7.71	7.74		C			1								S
113561	6.386	0.005	5.207	0.005		1.011	0.006	T	0.99	0.01	L	5.2340	0.0067	0.044	119		5.18	5.29		U 2 C			1								S P
113562	7.266	0.005	5.803	0.003		1.253	0.005	G	1.21	0.01	H	5.8239	0.0010	0.007	102		5.81	5.84					1								S
113563	9.595	0.013	9.142	0.013		0.441	0.015	T	0.51	0.02	L	9.1510	0.0019	0.026	228		9.11	9.19			23001−5640	I 1	1 X S								
113564	7.596	0.007	7.331	0.007	*	0.268	0.015	G	0.30	0.02	H	* 7.3552	0.0012	0.014	108	*	7.34	7.38		D	23001−5142	H 1	2 C A	AB	188	0.762	0.008		2.28	0.03	S
113565	9.669	0.021	8.900	0.017	A	0.738	0.005	G	0.79	0.00	H	* 8.8664	0.0023	0.022	112	*	8.83	8.91		D	23001+5937	I 1	2 C B	AB	178	1.114	0.028		2.83	0.12	
113566	9.547	0.020	8.965	0.019		0.546	0.020	T	0.62	0.02	L	9.0310	0.0023	0.016	85		9.01	9.06		C			1								
113567	9.033	0.010	8.734	0.011		0.303	0.015	G	0.35	0.02	H	8.7826	0.0017	0.019	143		8.75	8.81					1								
113568	8.991	0.015	7.625	0.009		1.157	0.014	T	1.12	0.01	L	7.6560	0.0017	0.009	75		7.64	7.67		C			1								S
113569	11.985	0.193	11.110	0.137		1.010	0.015	G	0.99	0.01	I	10.9248	0.0038	0.035	101		10.86	10.99		C			1								G
113570	10.311	0.035	9.119	0.020		1.021	0.031	T	0.99	0.03	L	9.1595	0.0023	0.018	96		9.13	9.19		C			1								
113571	9.263	0.016	8.767	0.016		0.490	0.015	G	0.56	0.02	H	8.7876	0.0017	0.013	83		8.76	8.81					1								S
113572	9.529	0.024	9.198	0.026		0.314	0.033	T	0.36	0.04	L	9.2287	0.0031	0.017	61		9.21	9.28		C			1								
113573	10.145	0.024	9.788	0.027		0.378	0.008	G	0.44	0.01	H	9.8082	0.0026	0.022	124		9.77	9.85		C			1								
113574	9.868	0.025	8.282	0.013		1.330	0.022	T	1.29	0.03	L	8.2948	0.0029	0.020	88		8.26	8.33					1								S
113575	10.447	0.060	9.149	0.033		1.210	0.008	G	1.17	0.01	I	9.1488	0.0025	0.027	157		9.10	9.19					1								
113576	9.682	0.030	8.068	0.015		1.379	0.018	G	1.63	0.00	A	7.9710	0.0016	0.010	74		7.96	7.99					1								S
113577	9.436	0.017	9.284	0.021		0.146	0.025	T	0.16	0.03	L	9.3614	0.0020	0.020	112		9.32	9.39					1								G
113578	9.053	0.010	9.053	0.013		0.005	0.015	T	0.03	0.01	L	9.0838	0.0015	0.019	203		9.06	9.12					1								
113579	8.279	0.012	7.549	0.007		0.655	0.003	G	0.72	0.00	H	7.6090	0.0028	0.021	88		7.58	7.64		U 2			1								S
113580	10.107	0.032	9.570	0.031		0.556	0.005	G	0.63	0.01	H	9.5912	0.0034	0.028	74		9.55	9.63					1								
113581	8.674	0.014	8.312	0.014	A	0.700	0.495	G	0.40	0.05	L	* 8.3059	0.0014	0.012	82	*	8.28	8.33		D	23003+1400	I 1	2 C A	AB	121	3.311	0.023		2.79	0.10	S
113582	9.982	0.019	9.762	0.022		0.210	0.027	T	0.23	0.03	L	9.8554	0.0019	0.022	166		9.82	9.90					1								
113583	7.305	0.005	6.851	0.004		0.428	0.006	T	0.50	0.01	L	6.9039	0.0010	0.008	100		6.89	6.91		C			1								S
113584	9.135	0.014	8.943	0.016		0.184	0.020	T	0.20	0.02	L	8.9974	0.0016	0.017	124		8.97	9.03		C			1								
113585	9.472	0.018	9.076	0.019		0.387	0.022	T	0.45	0.02	L	9.1286	0.0025	0.021	94		9.10	9.16		C			1								
113586	10.559	0.043	9.942	0.039		0.590	0.020	G	0.66	0.02	H	9.9969	0.0034	0.017	61		9.95	10.02		C			1								
113587	9.925	0.023	9.698	0.027		0.217	0.033	T	0.24	0.04	L	9.7604	0.0028	0.022	120		9.72	9.80		C			1								G
113588	10.582	0.034	10.155	0.036		0.403	0.046	T	0.47	0.05	L	10.2367	0.0027	0.022	99		10.20	10.30		C			1								
113589	10.135	0.021	9.677	0.022		0.432	0.028	T	0.50	0.03	L	9.7409	0.0021	0.023	173		9.70	9.79		C			1								
113590						1.435	0.015	G	1.76	0.04	I	11.1707	0.0041	0.031	80		11.11	11.22		C			1								G
113591	9.761	0.017	8.521	0.011		1.058	0.016	T	1.02	0.01	L	8.5700	0.0018	0.021	174		8.54	8.61					1								
113592	8.335	0.009	7.190	0.007		0.984	0.009	T	0.96	0.01	L	7.2408	0.0012	0.009	89		7.23	7.26		C			1								S
113593	7.745	0.007	6.426	0.004		1.124	0.007	G	1.09	0.01	H	6.4650	0.0008	0.006	96		6.45	6.48					1								S
113594	9.540	0.017	8.139	0.010		1.184	0.015	T	1.14	0.01	L	8.1700	0.0016	0.015	96		8.15	8.20		C			1								
113595	10.556	0.040	10.127	0.044		0.419	0.048	T	0.49	0.05	L	10.2366	0.0053	0.041	71		10.15	10.29					1								
113596	12.150	0.167	10.662	0.060		1.192	0.005	G	1.32	0.01	I	10.6647	0.0032	0.045	177		10.59	10.74					1 S								G
113597	11.615	0.107	9.974	0.040	A	1.344	0.020	G	1.59	0.01	A	* 9.6975	0.0023	0.022	91	*	9.66	9.74		D	23005−2619	I 1	2 C A	AB	236	1.839	0.007		0.56	0.02	
113598	9.345	0.028	8.582	0.023	A	0.705	0.096	G	0.75	0.04	L	* 8.6502	0.0063	0.047	88	*	8.56	8.71	1.62	P 1 A	23005−3345	I 1	2 C D	AB	67	3.888	0.093		3.95	0.53	S D
113599	9.319	0.016	9.143	0.019		0.169	0.023	T	0.18	0.02	L	9.1535	0.0020	0.015	125		9.12	9.19		C			1								
113600	10.786	0.046	9.809	0.032		0.845	0.044	T	0.86	0.03	L	9.8984	0.0033	0.022	79		9.86	9.93		C			1								

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1 %	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10		mas 11	mas/yr 12	13	mas 14	15	mas 16	17	mas/yr 18	19	20	21	22	23	24	25	26	27	28	29	30
113601	23 00 32.36	+13 28 07.1	6.70	H	345.134 848 58	+13.468 647 67		4.52	19.99	−22.37	0.75	0.60	0.89	0.75	0.73	+37	+ 4	− 4	−14	−13	− 2	−14	−31	+28	+24	0	−0.30
113602	23 00 33.28	−23 57 07.3	11.56	G	345.138 666 96	−23.952 024 73		49.15	190.23	−345.10	2.45	2.02	3.03	2.84	2.27	+30	− 3	+ 1	−32	+11	−11	+11	−26	+ 2	+30	0	−2.37
113603	23 00 34.39	+45 22 29.3	6.51	H	345.143 293 81	+45.374 818 03		2.06	3.51	− 4.29	0.37	0.46	0.67	0.37	0.52	−16	+ 9	+11	−40	− 7	− 2	−11	−24	−10	− 8	0	0.58
113604	23 00 36.20	−50 14 49.5	9.63	H	345.150 838 95	−50.247 089 57		2.62	12.97	− 5.14	0.94	1.05	1.49	0.99	1.05	+13	− 8	−11	−20	+11	− 1	+11	− 3	− 9	+12	3	0.01
113605	23 00 36.47	−23 58 07.6	11.60	G	345.151 948 34	−23.968 785 07		49.36	195.27	−346.33	2.54	2.05	3.19	2.96	2.41	+31	+ 6	+11	−29	+14	− 5	+15	−20	+ 8	+33	0	−0.08
113606	23 00 36.88	+49 23 27.1	8.30	H	345.153 674 06	+49.390 869 73		7.48	−13.07	−28.17	0.58	0.63	0.88	0.63	0.68	−23	− 1	+22	− 1	+13	+ 0	+14	− 6	− 3	− 8	0	−0.38
113607	23 00 36.94	−52 16 03.7	9.86	H	345.153 896 29	−52.267 683 98		13.50	137.62	−122.12	1.14	1.16	1.62	1.33	1.22	+ 8	−18	−17	− 9	+ 3	+ 2	+ 3	+17	− 6	+11	3	0.24
113608	23 00 37.10	+08 45 01.6	8.07	H	345.154 577 76	+08.750 455 04		8.83	54.22	− 3.63	0.86	0.72	1.06	0.95	0.85	+27	+ 8	−28	+ 9	−13	+23	− 7	−26	+34	+25	0	−1.68
113609	23 00 37.31	+46 01 57.2	9.22	G	345.155 452 33	+46.032 561 17		2.73	− 3.61	− 3.72	0.63	0.77	1.26	0.69	0.76	−32	+ 7	+12	− 2	+14	− 7	+19	−15	+ 8	+ 0	1	0.83
113610	23 00 37.88	+00 11 09.0	6.22	H	345.157 831 82	+00.185 839 71		5.10	47.78	10.71	0.70	0.56	0.77	0.88	0.67	+19	−24	− 2	−15	+19	+ 5	+14	+ 0	+ 0	+13	0	0.87
113611	23 00 38.10	−04 33 10.7	8.71	H	345.158 742 67	−04.552 974 60		4.42	53.39	−19.24	1.31	0.79	1.40	1.56	1.01	− 7	+ 3	−17	−12	− 2	+35	+ 6	−18	+41	+ 3	0	−1.10
113612	23 00 39.10	−65 39 52.6	8.71	H	345.162 911 32	−65.664 616 61		5.89	13.25	7.84	0.72	0.79	1.10	0.85	0.74	+ 4	− 7	−39	+11	+12	−17	+ 5	− 2	− 4	+ 0	0	−1.35
113613	23 00 39.59	+44 33 17.5	9.65	H	345.164 954 16	+44.554 869 63		2.77	− 3.52	−12.04	0.93	0.94	1.46	1.03	0.96	−10	−11	+14	+22	+12	−15	+23	−19	+11	+18	1	−0.82
113614 H	23 00 40.41	+55 12 39.7	8.32	H	345.168 375 42	+55.211 014 55 A		11.92	−26.57	11.92	0.84	0.89	0.99	0.94	0.90	−29	− 9	+29	+ 4	+13	+15	+11	−16	− 8	−26	0	−0.31
*113615	23 00 40.78	−32 33 30.0	8.82	H	345.169 937 04	−32.558 337 33		3.09	− 8.90	− 7.19	1.30	0.82	1.25	1.30	0.92	−10	+22	− 8	−50	+19	− 3	+20	−29	− 2	−10	0	0.98
*113616	23 00 40.71	−29 03 50.8	10.10	H	345.169 604 35	−29.064 113 24		−3.29	4.52	− 8.87	1.44	1.13	1.69	1.98	1.49	+17	− 6	−36	−33	+26	−14	+17	−16	+21	+25	0	−0.11
113617	23 00 41.35	+49 57 21.8	7.90	H	345.172 285 40	+49.956 065 26		3.52	6.63	− 1.54	0.54	0.58	0.84	0.59	0.59	−24	−15	+24	− 1	+ 6	− 5	+ 8	−13	+11	− 6	2	−0.27
113618	23 00 41.83	+33 13 48.3	9.63	H	345.174 293 15	+33.230 087 77		2.16	− 7.50	− 1.01	1.18	0.85	1.54	1.60	1.09	+ 6	+20	− 2	+15	− 3	− 9	+ 4	−24	+21	+10	0	−0.80
113619	23 00 41.90	+10 17 47.1	8.45	G	345.174 570 53	+10.296 427 66		6.27	0.76	−19.28	1.12	0.75	1.35	1.53	1.14	+18	+ 0	−12	−43	+13	+ 7	+27	+ 1	+47	−12	0	−0.66
113620	23 00 42.02	+51 52 52.3	8.92	H	345.175 084 75	+51.881 207 07		3.26	− 2.72	−10.35	0.65	0.73	1.02	0.79	0.79	− 7	+ 4	+28	− 2	− 1	− 4	+ 2	− 8	+ 7	+11	2	−0.50
113621 H	23 00 42.40	+31 04 58.7	6.60	G	345.176 685 93	+31.082 964 33 A		5.74	17.07	0.04	0.68	0.73	0.97	0.77	0.77	+17	+ 7	+ 0	+ 3	−11	−19	−12	−45	+15	+17	1	0.26
113622	23 00 42.90	+03 00 43.2	5.85	H	345.178 739 68	+03.012 008 21		5.96	5.06	−83.58	0.72	0.54	0.80	1.27	0.75	+23	+ 6	−10	− 1	+18	+ 5	+18	+13	−18	−16	0	−0.51
113623	23 00 43.43	−24 59 40.0	8.67	G	345.180 937 53	−24.994 439 98		4.26	55.95	−179.78	0.97	0.70	1.13	1.21	0.87	+23	− 3	+ 2	+ 0	+21	− 6	+20	+ 4	+ 8	+24	0	0.72
113624	23 00 43.56	+03 34 51.9	9.40	H	345.181 513 63	+03.581 087 83		−2.22	3.55	4.82	1.29	1.05	1.46	1.73	1.47	+28	+ 0	−19	−20	+16	−12	+20	+ 8	− 4	+15	0	−0.22
113625	23 00 43.80	+51 00 51.8	7.97	H	345.182 487 23	+51.014 377 80		0.94	3.89	− 8.59	0.54	0.63	0.83	0.57	0.58	−17	+ 2	+28	+16	−15	−11	− 7	−13	+11	− 6	0	−1.27
113626	23 00 44.96	+65 34 34.1	9.24	H	345.187 350 66	+65.576 148 06		3.20	3.68	−16.14	0.87	0.81	1.02	1.26	0.98	− 5	−12	+14	+ 0	+ 3	−12	+ 4	−16	+ 8	+ 5	0	−1.17
113627	23 00 46.01	+03 20 37.7	8.58	H	345.191 701 16	+03.343 817 36		7.78	37.32	−52.76	1.09	0.77	1.26	1.80	1.06	+16	+ 6	−33	−41	+18	−24	+18	− 9	− 8	−13	0	−1.15
113628	23 00 46.72	+76 36 35.3	9.88	H	345.194 669 83	+76.609 818 51		20.23	131.03	− 0.77	1.02	0.96	1.15	1.25	1.18	−10	−17	+24	+16	− 3	−12	+ 3	− 7	−16	− 1	1	−0.60
113629	23 00 47.38	−49 27 05.6	7.33	H	345.197 424 91	−49.451 558 99		10.65	103.73	−12.29	0.49	0.59	0.84	0.60	0.65	+10	− 9	−13	−11	+10	+13	+12	+ 1	−13	+ 2	3	−0.48
*113630	23 00 47.87	+26 30 08.0	8.79	H	345.199 464 13	+26.502 226 92		4.77	29.97	−18.28	0.66	0.60	1.11	0.78	0.83	+30	− 1	− 4	+18	−13	− 2	−14	−30	+29	+28	0	−0.50
*113631	23 00 47.86	−14 15 30.0	8.26	G	345.199 403 26	−14.258 327 55		12.42	206.04	−25.59	1.03	0.66	1.16	1.16	0.86	+23	+19	− 3	−10	+14	+18	+22	− 6	+26	+18	0	0.87
113632	23 00 48.19	−39 53 42.1	8.25	H	345.200 804 31	−39.895 014 90		18.74	−22.84	26.02	0.76	0.71	1.00	0.88	0.79	+26	−16	− 8	+31	+13	+ 5	+14	+13	− 2	+29	0	0.77
113633	23 00 48.50	+32 30 43.4	11.18	H	345.202 068 61	+32.512 052 39		10.93	201.90	−31.45	1.79	1.47	2.63	2.34	1.65	+ 0	+34	− 9	− 8	+ 1	+29	+ 7	−27	+11	+ 3	0	2.05
113634	23 00 48.59	−35 28 11.9	9.72	H	345.202 474 39	−35.469 980 62		19.86	116.80	−52.31	0.97	0.90	1.33	1.09	1.10	+32	+ 3	+ 0	+35	+ 4	+19	+ 4	+20	+ 9	+42	0	−0.04
113635	23 00 49.17	+21 22 53.3	7.43	H	345.204 868 91	+21.381 466 70		5.71	36.66	15.59	0.90	0.68	0.96	0.98	0.68	− 1	−17	−12	−37	+ 2	+24	+ 3	−33	+12	−10	0	0.91
113636	23 00 50.76	+15 40 40.2	8.05	H	345.211 509 24	+15.677 827 15		3.30	12.21	12.17	0.85	0.67	1.06	0.86	0.97	+38	+ 0	+ 2	− 3	− 8	− 9	− 9	−19	+12	+35	0	−0.64
113637	23 00 51.92	−16 52 50.6	8.23	H	345.216 341 15	−16.880 733 55		2.08	20.86	− 1.65	1.05	0.65	1.15	1.49	0.87	+12	+ 8	+ 1	− 8	+20	+16	+18	−14	+32	− 7	2	1.52
113638	23 00 52.87	−52 45 14.8	4.11	G	345.220 309 79	−52.754 105 62		28.99	−65.09	−12.91	0.83	0.90	1.31	0.95	1.01	+11	+ 2	−16	− 4	+ 2	+16	+ 7	−19	+ 7	+26	0	
113639 H	23 00 54.55	+62 52 54.0	9.80	G	345.227 310 10	+62.881 663 26 A		1.50	− 1.68	− 1.43	2.61	2.31	2.71	2.92	2.53	−14	+ 4	−11	− 6	− 8	+14	− 8	−13	+21	−16	3	−0.16
113640	23 00 54.75	+38 42 28.3	6.57 2 H		345.228 122 55	+38.707 862 90		3.66	− 0.87	− 7.81	0.60	0.41	0.74	0.65	0.46	− 1	+31	+12	+16	+17	+ 3	+27	−13	+11	+27	0	−0.91
113641	23 00 55.42	−19 20 48.9	7.49	G	345.230 930 68	−19.346 915 15		3.17	7.68	− 0.22	0.94	0.60	1.00	1.17	0.79	+27	−21	−22	+12	+10	+ 4	+ 6	− 3	+23	+23	0	1.08
113642 H	23 00 55.69	+35 21 57.9	9.71	H	345.232 025 49	+35.366 082 66 A		16.10	91.17	−54.33	3.20	2.66	2.46	2.15	1.72	+ 2	+ 1	− 3	+13	+ 8	− 5	+ 4	−22	+20	+16	0	0.97
113643	23 00 55.93	−48 56 35.3	7.55	H	345.233 057 45	−48.943 146 74		3.72	59.25	−22.70	0.54	0.61	0.92	0.55	0.67	+ 2	−15	−14	−26	+11	+17	+15	− 7	−12	+ 4	3	0.14
113644	23 00 57.36	+46 58 44.1	8.58	H	345.238 994 98	+46.978 928 88		2.09	−20.84	−21.69	0.67	0.74	1.13	0.77	0.77	−33	+14	+ 5	+25	+16	−14	+26	−12	+23	−13	0	−1.30
113645	23 00 58.24	+22 38 53.7	8.15	G	345.242 664 99	+22.648 236 79		5.59	56.97	11.70	0.83	0.76	1.10	0.86	0.84	+13	+ 9	−10	+15	−13	−25	−14	−17	+37	− 4	0	0.89
113646	23 00 58.96	+24 24 39.5	9.50	H	345.245 677 07	+24.410 962 71		17.86	203.12	1.30	0.78	0.87	1.23	0.85	0.87	+45	+ 4	+ 1	+10	− 9	+10	− 2	−32	+22	+58	0	1.84
113647 H	23 01 00.91	−58 26 15.1	7.01	H	345.253 775 11	−58.437 534 62 A		10.54	71.34	− 1.20	0.52	0.56	0.82	0.54	0.53	−17	+ 9	− 8	+ 6	− 7	+16	− 6	− 4	− 8	−15	1	−0.18
*113648	23 01 00.98	+76 07 21.5	7.50	H	345.254 090 89	+76.122 625 16		7.84	32.48	− 0.64	0.88	0.80	0.96	0.99	0.93	− 9	−11	+11	− 4	− 4	− 6	− 4	−11	+ 3	−13	0	
*113649	23 01 00.93	−37 21 32.8	8.12	H	345.253 889 76	−37.359 119 41		7.24	37.35	− 5.20	0.83	0.68	1.09	1.01	0.91	+14	−12	−15	+21	− 5	+21	− 5	+ 9	+29	+32	0	1.51
113650	23 01 01.52	+43 16 56.7	9.96	H	345.256 347 68	+43.282 408 27		4.86	− 6.05	−12.50	0.90	0.96	1.49	1.01	1.07	+ 5	− 6	+22	+41	+ 7	−10	+27	−14	+ 5	+39	2	0.44
113651	23 01 02.07	+22 23 28.2	7.66	G	345.258 623 66	+22.391 173 94		8.20	157.68	25.39	0.72	0.65	0.94	0.75	0.70	+ 5	+14	−17	+10	−11	−22	−12	−10	+25	+ 0	0	0.15
*113652	23 01 06.18	−87 03 10.9	10.35 3 H		345.275 741 70	−87.053 030 79		−2.25	0.83	− 6.62	1.66	1.68	1.99	1.91	1.84	−33	−13	+16	−20	+22	+24	+22	−24	−29	− 8	2	−1.49
*113653	23 01 05.51	+48 08 47.8	8.98	H	345.272 968 83	+48.146 619 63		0.45	1.96	− 1.79	0.63	0.70	1.02	0.73	0.82	−26	+ 3	+21	−17	+20	+ 1	+18	− 9	− 7	− 9	0	−1.06
*113654 H	23 01 05.91	+26 46 52.8	8.14 2 H		345.274 641 96	+26.781 340 71 A		4.38	− 7.06	−16.18	1.06	1.02	1.49	1.14	1.21	+38	− 6	− 4	+23	−11	+15	−17	−21	+41	+34	1	0.97
*113655	23 01 06.09	−37 59 13.0	9.66	H	345.275 369 91	−37.986 937 92		6.49	−56.13	− 5.80	1.19	1.05	1.47	1.48	1.22	+26	− 5	−23	+18	+ 1	+11	+ 4	+ 3	+ 5	+28	0	0.98
113656	23 01 07.19	+76 52 10.1	7.88	H	345.279 957 68	+76.869 476 59		6.34	20.56	1.95	0.65	0.67	0.77	0.77	0.76	− 5	−18	+29	+25	+ 2	−13	+ 8	− 3	−17	+ 0	0	−1.06
113657	23 01 07.50	−50 57 00.1	5.68	H	345.281 235 80	−50.950 029 11		6.78	88.21	0.28	0.51	0.44	0.67	0.62	0.45	+10	+ 2	−13	− 6	+13	−14	+ 9	+10	− 6	+14	0	−0.55
113658	23 01 07.87	−09 33 13.3	7.86	H	345.282 809 67	−09.553 697 21		9.20	−25.13	−89.90	0.97	0.64	1.27	1.22	1.01	+31	−10	−10	−14	+ 0	+41	+ 0	−40	+48	+35	0	0.59
113659	23 01 07.97	−45 12 18.2	7.35	H	345.283 190 42	−45.205 066 71		4.87	46.21	−43.89	0.87	0.68	0.97	1.13	0.81	+16	− 7	−31	−14	−25	+25	−26	−29	+29	+26	0	0.11
113660	23 01 09.32	+36 40 02.3	12.08	H	345.288 827 27	+36.667 313 14		19.28	272.77	−33.52	3.17	2.62	4.12	4.91	3.19	+24	+32	+12	+10	−15	+15	− 1	−32	+11	+47	2	−0.67
113661	23 01 10.45	−37 45 26.2	9.84	H	345.293 523 78	−37.757 281 08		4.65	20.42	−13.87	1.24	1.01	1.52	1.34	1.26	+16	+18	− 8	+ 9	+ 3	+22	+ 5	+12	+ 0	+27	0	−0.95
113662 H	23 01 11.24	−32 32 28.7	10.46	H	345.296 848 30	−32.541 318 66 A		2.71	−14.17	− 8.18	4.01	2.63	3.46	4.12	2.83	+ 9	+10	− 8	−39	+13	− 3	+17	−23	+10	−10	3	0.63
113663	23 01 12.99	+07 59 47.9	8.30	H	345.304 144 03	+07.996 649 26		5.02	42.25	−10.10	0.95	0.76	1.28	1.11	1.08	+22	+16	−34	−12	+ 2	− 6	+ 8	−22	+49	+12	0	0.23
113664 H	23 01 14.77	+80 46 54.2	6.68	H	345.311 541 75	+80.781 729 68 *		7.26	29.53	25.18	0.83	0.68	0.53	0.87	0.73	+19	− 4	− 4	+10	− 8	− 3	− 7	+ 3	+ 5	+14	0	−0.52
113665	23 01 15.41	+44 11 55.0	7.35	H	345.314 195 69	+44.198 607 80		7.16	− 8.90	4.00	0.53	0.50	0.84	0.61	0.62	−11	+19	− 5	+ 4	+ 8	−17	+15	−11	+10	+14	1	−1.14
113666	23 01 16.14	−38 50 37.3	8.22	H	345.317 255 01	−38.843 703 75		2.94	− 1.16	− 5.39	0.73	0.66	0.95	0.92	0.81	+20	− 4	− 4	+ 8	− 3	+14	+ 0	− 8	+ 3	+31	0	−0.57
113667	23 01 16.38	+01 05 04.0	8.37 2 H		345.318 270 27	+01.084 452 25		2.02	11.01	− 9.92	0.97	0.70	1.14	1.52	0.93	+25	− 7	− 4	− 5	+14	+34	+15	+ 2	+10	− 1	0	0.74
113668	23 01 17.31	+21 12 58.9	8.78	H	345.322 139 46	+21.216 370 72		4.82	− 9.33	−25.60	1.09	0.94	1.27	1.40	1.10	+ 4	− 2	− 7	−20	+ 4	+ 8	+ 6	− 6	+15	+10	0	0.94
113669	23 01 19.35	−28 51 14.1	5.55	H	345.330 614 62	−28.853 908 21		5.58	58.42	−21.46	0.93	0.57	0.85	1.04	0.72	− 5	−17	−28	−56	+31	+ 7	+32	−13	+ 9	− 3	0	2.66
113670	23 01 21.17	−35 05 43.6	9.30	G	345.338 201 22	−35.095 445 62		14.67	232.71	−188.55	1.06	0.85	1.32	1.19	1.02	+27	−14	−12	+60	− 3	+ 8	− 3	+16	+15	+32	0	1.50
113671	23 01 21.23	+14 52 14.9	7.10	H	345.338 459 02	+14.870 813 55		6.51	−47.60	− 6.19	0.81	0.60	0.99	0.88	0.99	+36	+21	+ 0	+31	+ 5	−10	+ 3	+ 2	+16	+31	0	0.37
*113672	23 01 23.05	+00 07 16.9	7.80	H	345.346 057 20	+00.121 359 43		7.62	18.14	− 5.99	0.78	0.61	0.90	0.99	0.79	+31	−11	− 8	− 4	+ 9	− 2	+ 8	+ 0	+21	+ 6	0	−1.91
*113673	23 01 23.03	−22 47 27.0	6.27	G	345.345 944 56	−22.790 830 25		9.97	28.41	−25.13	0.68	0.48	0.74	0.81	0.53	+24	−12	− 1	+17	+ 6	+20	+ 3	+ 7	+ 9	+13	0	1.86
113674	23 01 23.65	−07 03 40.1	6.23	H	345.348 546 19	−07.061 133 57		7.79	−16.16	− 7.84	0.79	0.59	0.86	0.96	0.72	+16	+ 6	−17	+14	+ 5	+11	+ 7	+15	+ 2	+14	0	0.71
113675	23 01 24.83	−14 16 18.4	7.28	H	345.353 468 75	−14.271 781 64		5.23	39.14	−58.41	0.80	0.52	0.89	0.93	0.73	+22	+17	− 1	− 5	+18	+20	+26	+ 5	+25	+24	2	1.14
113676	23 01 25.05	+16 23 51.8	9.06	G	345.354 376 48	+16.397 724 20		2.81	−10.60	− 2.28	1.06	0.70	1.33	1.09	1.17	+34	+23	+11	+10	+ 1	− 9	+ 0	−14	+12	+15	0	−0.21
113677	23 01 25.52	−28 00 40.1	8.49	G	345.356 320 97	−28.011 140 89		10.30	221.44	−81.42	1.15	0.79	1.25	1.37	1.11	+17	−27	−23	−39	+14	+27	+22	− 4	+ 5	+20	0	2.80
113678	23 01 27.84	−18 18 18.1	9.40	G	345.365 997 49	−18.305 018 79		6.25	14.97	14.00	1.26	0.90	1.45	1.41	1.21	+24	− 1	−20	−22	+ 9	+21	+18	−11	+32	+23	0	−0.11
113679	23 01 28.09	+46 49 47.8	7.95	G	345.367 050 57	+46.829 951 38		6.18	−43.67	−23.81	0.49	0.57	0.87	0.55	0.65	−29	+11	+ 6	+17	+11	−14	+19	− 5	+21	−12	0	−0.31
113680	23 01 29.37	+62 05 21.9	9.61	G	345.372 371 52	+62.089 426 55		0.81	3.80	− 3.94	0.84	0.81	1.02	0.94	0.91	+ 0	+23	+17	+25	+ 0	− 1	+ 3	+ 3	+12	− 2	0	1.18
113681	23 01 29.78	−42 26 34.6	8.98	H	345.374 097 70	−42.442 948 85		11.36	68.77	5.30	0.94	0.90	1.30	1.04	1.08	+22	− 8	+ 0	+ 6	+ 1	+29	− 3	+19	+31	+35	0	0.91
113682	23 01 29.97	−78 53 26.6	8.80	H	345.374 875 17	−78.890 719 53		9.67	100.53	−78.38	0.72	0.69	0.86	0.85	0.78	− 7	−32	− 4	+ 5	+ 6	− 2	+ 5	−15	− 1	−14	0	2.43
113683	23 01 30.27	−54 30 10.4	12.31 2 G		345.376 138 16	−54.502 900 98		4.06	449.88	−317.13	9.69	9.69	14.90	11.46	10.40	− 6	+13	− 3	+ 6	+ 2	+14	− 4	−29	− 8	−22	0	
113684	23 01 30.72	+57 06 19.7	6.24	H	345.377 997 09	+57.105 474 92		2.76	− 4.42	− 7.10	0.49	0.46	0.62	0.60	0.49	−19	+ 0	+13	− 2	−14	+17	−14	− 6	+14	−14	0	1.32
113685	23 01 31.55	−15 22 27.5	8.90	H	345.381 450 60	−15.374 316 52		6.70	−26.13	−107.12	1.40	0.76	1.59	1.75	1.23	+15	+28	+ 0	−12	+18	+20	+32	−14	+47	+17	0	−1.61
113686	23 01 31.70	−04 42 41.3	5.94	H	345.382 091 54	−04.711 479 66		1.23	14.07	7.55	0.88	0.57	0.91	1.33	0.74	− 4	+ 5	−28	+ 9	− 9	+14	− 7	−14	+29	−26	0	0.33
113687	23 01 32.75	+32 36 46.8	7.55 2 H		345.386 465 34	+32.612 993 04		2.97	−12.62	0.21	0.77	0.61	1.04	1.10	0.80	+ 1	+22	−15	−13	+ 6	+17	+11	−20	+22	+21	2	0.90
113688	23 01 33.07	+19 16 11.2	8.68	G	345.387 773 13	+19.269 769 98		13.83	166.12	−59.62	0.98	0.76	1.12	1.00	1.08	+43	+24	+16	− 1	+ 0	− 9	+ 1	− 6	− 5	+41	0	0.05
113689	23 01 33.60	+49 02 31.5	7.87	H	345.389 999 72	+49.042 083 96		3.18	6.63	2.62	0.50	0.58	0.81	0.54	0.61	−27	− 3	+24	− 7	+15	− 1	+15	− 7	− 8	− 8	0	−1.01
113690	23 01 33.93	+45 30 36.7	7.74	H	345.391 354 93	+45.510 200 85		5.39	27.43	13.39	0.46	0.61	0.87	0.47	0.63	−13	+12	+16	−42	− 6	− 6	− 8	−31	− 8	+ 1	0	−0.15
113691	23 01 34.31	−22 25 09.5	7.41	G	345.392 977 01	−22.419 305 86		11.86	118.76	−47.49	0.88	0.57	0.91	1.13	0.64	+ 9	+ 3	−10	−20	+19	− 3	+20	− 8	+16	−17	0	1.83
113692	23 01 35.04	+23 04 23.9	7.65	G	345.396 006 65	+23.073 310 80		3.98	− 2.51	− 5.94	0.81	0.78	0.99	0.82	0.82	+15	+31	−14	+21	−17	+ 7	−17	−27	+14	+ 5	0	1.33
113693	23 01 35.28	−29 47 14.2	9.05	H	345.397 002 71	−29.787 271 55		5.39	−40.37	−17.46	1.17	0.87	1.38	1.67	1.08	+14	− 2	−34	−15	+ 5	+ 2	+ 5	−27	+18	+22	0	0.78
113694	23 01 35.32	−29 28 04.4	9.04	H	345.397 155 96	−29.467 875 08		8.99	−51.84	−148.43	1.08	0.87	1.24	1.46	1.19	+24	−12	−12	−24	+ 7	+ 8	+ 6	−23	+13	+34	0	0.88
113695	23 01 36.86	+36 59 07.5	7.74	H	345.403 599 37	+36.985 413 33		19.76	42.16	−35.44	0.72	0.62	1.01	0.93	0.69	+16	+32	+ 2	+ 3	+ 1	+18	+12	−23	+28	+42	0	1.11
113696	23 01 37.40	−57 17 16.9	8.23	H	345.405 835 38	−57.288 039 04		1.71	− 5.00	− 8.61	0.59	0.64	1.00	0.69	0.69	− 7	−14	−14	−17	−12	+19	− 9	−13	+ 2	− 1	1	1.05
113697	23 01 37.74	−44 59 19.0	8.93	H	345.407 256 39	−44.988 599 96		38.77	104.39	11.50	4.21	3.56	4.94	5.47	3.70	+21	− 6	−21	− 1	−24	+18	−21	−43	+22	+19	0	
113698	23 01 39

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
113601	8.253	0.009	6.834	0.006		1.198	0.008	T	1.16	0.01	L		6.8684	0.0008	0.006	81		6.86	6.88		C			1							S
113602						1.526	0.018	G	2.27	0.13	I		11.6323	0.0042	0.058	116		11.53	11.73					1							G
113603	6.852	0.002	6.539	0.003		0.299	0.004	T	0.34	0.01	L		6.5850	0.0006	0.009	229		6.57	6.60					1							S
113604	11.225	0.052	9.735	0.023		1.254	0.045	T	1.21	0.05	L		9.7935	0.0028	0.025	130		9.74	9.84					1							
113605						1.510	0.010	G	2.15	0.08	I		11.6562	0.0058	0.063	116		11.57	11.75					1							G
113606	8.679	0.009	8.340	0.010		0.322	0.013	T	0.37	0.02	L		8.3836	0.0014	0.019	173		8.35	8.41					1							
113607	11.306	0.077	9.909	0.034		1.181	0.066	T	1.30	0.12	L		9.9900	0.0039	0.030	105		9.94	10.05					1							
113608	8.831	0.013	8.140	0.012		0.638	0.015	T	0.70	0.01	L		8.2076	0.0026	0.015	78		8.18	8.23					1							S
113609	9.340	0.010	9.185	0.013		0.103	0.004	G	0.12	0.00	H		9.2468	0.0020	0.026	217		9.21	9.29					1							
113610	7.345	0.007	6.318	0.004		0.892	0.005	G	0.90	0.00	H		6.3822	0.0007	0.006	91		6.37	6.39					1	G						S
113611	9.932	0.038	8.835	0.026		0.947	0.035	T	0.94	0.03	L		8.8705	0.0020	0.015	56		8.84	8.89		C			1							S
113612	9.079	0.013	8.731	0.014		0.337	0.017	T	0.39	0.02	L		8.7935	0.0018	0.019	139		8.75	8.83					1							S
113613	9.976	0.026	9.671	0.029		0.290	0.036	T	0.33	0.04	L		9.7291	0.0026	0.028	122		9.67	9.77					1							G
113614	9.154	0.013	8.450	0.011	A	1.000	0.495	G	0.69	0.03	L	*	8.4547	0.0015	0.013	126	*	8.43	8.49		D	23007+5513	I 1	2	C	A	AB	124	5.431	0.016	3.01	0.08	
113615	9.046	0.015	8.849	0.017		0.188	0.021	T	0.21	0.02	L		8.8863	0.0024	0.018	83		8.86	8.91					1							S
113616	10.589	0.048	10.101	0.047		0.471	0.052	T	0.54	0.06	L		10.2062	0.0027	0.021	78		10.16	10.24		C			1							
113617	8.068	0.008	7.918	0.008		0.144	0.011	T	0.16	0.01	L		7.9542	0.0016	0.016	154		7.92	7.98					1							S
113618	11.042	0.045	9.724	0.024		1.119	0.040	T	1.08	0.04	L		9.7940	0.0019	0.019	104		9.77	9.83					1							
113619	8.847	0.014	8.473	0.014		0.364	0.015	G	0.43	0.02	H		8.5359	0.0017	0.017	80		8.51	8.57		C			1							S
113620	10.255	0.026	9.067	0.016		1.018	0.024	T	0.99	0.02	L		9.0819	0.0023	0.019	145		9.05	9.12		C			1							
113621	6.558	0.004	6.648	0.006	A	−0.040	0.042	G	−0.02	0.04	R	*	6.5760	0.0007	0.007	112	*	6.57	6.59		D	23007+3105	I 1	2	C	A	AB	93	3.246	0.008	2.83	0.04	S
113622	7.611	0.007	5.997	0.005		1.343	0.003	G	1.31	0.06	F		6.0051	0.0006	0.007	66		6.00	6.02		C			1							S
113623	9.494	0.019	8.738	0.016		0.675	0.003	G	0.73	0.00	H		8.8091	0.0020	0.019	96		8.78	8.84		C			1							S
113624	11.325	0.100	9.530	0.033		1.495	0.083	T	1.52	0.12	L		9.5247	0.0034	0.019	58		9.48	9.55		C			1							
113625	10.064	0.023	8.142	0.009		1.595	0.020	T	1.61	0.02	L		8.0780	0.0015	0.013	161		8.05	8.10		C			1							
113626	9.802	0.022	9.286	0.021		0.485	0.027	T	0.56	0.03	L		9.3490	0.0024	0.019	108		9.32	9.38					1							
113627	9.314	0.021	8.677	0.019		0.592	0.025	T	0.66	0.02	L		8.7062	0.0013	0.012	64		8.69	8.73		C			1							S
113628	11.002	0.054	9.980	0.034		0.880	0.050	T	0.92	0.05	L		10.0210	0.0030	0.028	107		9.98	10.07		C			1							G
113629	7.687	0.006	7.345	0.006		0.324	0.008	T	0.38	0.01	L		7.4058	0.0012	0.012	141		7.39	7.43		C			1							S
113630	9.289	0.012	8.828	0.012		0.435	0.016	T	0.50	0.02	L		8.8842	0.0013	0.017	176		8.85	8.91		C			1							
113631	9.008	0.014	8.346	0.013		0.608	0.002	G	0.68	0.00	H		8.3897	0.0017	0.013	85		8.37	8.41		C			1							S
113632	8.952	0.013	8.317	0.012		0.585	0.013	T	0.66	0.01	L		8.3761	0.0014	0.014	94		8.35	8.41		C			1							S
113633											T		11.3168	0.0047	0.045	104		11.23	11.39					1							G
113634	11.129	0.055	9.845	0.028		1.050	0.015	G	1.10	0.02	I		9.8564	0.0023	0.021	127		9.81	9.90		C			1							
113635	8.884	0.017	7.561	0.011		1.123	0.016	T	1.09	0.02	L		7.5974	0.0017	0.012	58		7.58	7.62					1							S
113636	9.663	0.021	8.185	0.012		1.245	0.019	T	1.20	0.02	L		8.2157	0.0010	0.009	89		8.20	8.24		C			1							
113637	9.821	0.021	8.359	0.012		1.232	0.019	T	1.19	0.02	L		8.3920	0.0018	0.015	92		8.36	8.41					1							
113638	5.359	0.002	4.227	0.002		0.960	0.033	G	1.01	0.02	A		4.2774	0.0005	0.005	146		4.27	4.30					1	X						S
113639	10.801	0.057	10.140	0.049	A	0.693	0.015	G	0.75	0.01	H	*	9.9324	0.0038	0.035	106	*	9.89	9.98		D	23009+6253	H 1	2	C	A	AB	341	1.716	0.012	1.32	0.06	G
113640	6.408	0.004	6.543	0.004		−0.116	0.005	T	−0.10	0.01	L		6.5292	0.0030	0.024	150		6.49	6.59		U 2 C			1							S
113641	8.751	0.013	7.611	0.009		0.984	0.009	G	0.96	0.01	H		7.6793	0.0014	0.010	80		7.66	7.70		C			1							S
113642	11.014	0.048	9.888	0.030	*	0.961	0.045	T	1.01	0.04	L	*	9.8497	0.0033	0.027	109	*	9.80	9.90		D	23009+3522	I 1	2	C	A	AB	281	0.399	0.008	0.93	0.05	
113643	9.305	0.015	7.701	0.008		1.344	0.013	T	1.31	0.01	L		7.7052	0.0013	0.011	128		7.69	7.72		C			1							S
113644	9.972	0.018	8.719	0.011		1.068	0.016	T	1.03	0.01	L		8.7507	0.0018	0.018	190		8.71	8.78					1	S						
113645	8.492	0.015	8.167	0.016		0.294	0.015	G	0.34	0.02	H		8.2344	0.0018	0.012	60		8.21	8.26		C			1							S
113646	10.526	0.034	9.584	0.025		0.817	0.033	T	0.84	0.02	L		9.6405	0.0019	0.019	142		9.60	9.68		C			1							
113647	7.307	0.003	7.055	0.004	A	0.200	0.495	G	0.23	0.01	L	*	7.0770	0.0008	0.010	240	*	7.06	7.10		D	23010−5826	I 1	2	C	A	AB	16	1.720	0.020	3.77	0.09	S
113648	8.574	0.011	7.596	0.008		0.858	0.010	T	0.87	0.01	L		7.6523	0.0012	0.012	104		7.64	7.68		D	23010+7607	I 1	1	X	S							S
113649	8.472	0.010	8.150	0.011		0.292	0.003	G	0.33	0.00	H		8.1964	0.0013	0.014	87		8.17	8.23		D			1							S
113650	10.259	0.024	9.987	0.028		0.259	0.035	T	0.29	0.04	L		10.0280	0.0026	0.031	173		9.97	10.08		C			1							G
113651	8.208	0.012	7.749	0.013		0.493	0.015	G	0.57	0.02	H		7.7668	0.0014	0.010	62		7.75	7.80					1							S
113652	12.281	0.194	10.830	0.087		1.242	0.175	T	1.93	0.56	K		10.4363	0.1752	1.149	76		9.84	12.90	177.90	P 1 A			1							D
113653	9.034	0.011	8.963	0.013		0.070	0.016	T	0.08	0.02	L		9.0118	0.0017	0.021	174		8.97	9.05					1							
113654	8.437	0.013	8.069	0.015	*	0.349	0.019	T	0.41	0.03	L	*	8.2191	0.0015	0.017	173	*	8.19	8.26		U 2	23011+2647	I 1	2	C	A	AB	36	3.961	0.007	1.45	0.02	S
113655	10.395	0.031	9.714	0.026		0.618	0.030	T	0.69	0.03	L		9.7895	0.0039	0.029	95		9.74	9.83					1							
113656	8.053	0.008	7.897	0.009		0.150	0.011	T	0.17	0.01	L		7.9370	0.0016	0.011	113		7.92	7.96		C			1							S
113657	7.539	0.006	5.841	0.003		1.411	0.003	G	1.38	0.06	F		5.8223	0.0008	0.007	126		5.81	5.84		C			1							S
113658	9.015	0.012	7.957	0.009		0.918	0.011	T	0.92	0.01	L		8.0187	0.0016	0.011	97		8.00	8.05					1							S
113659	9.205	0.016	7.519	0.008		1.408	0.014	T	1.39	0.02	L		7.4914	0.0016	0.013	88		7.47	7.52		C			1	G						S
113660											T		12.2430	0.0122	0.080	84		12.12	12.38					1							G
113661	10.402	0.033	9.918	0.033		0.456	0.043	T	0.53	0.05	L		9.9344	0.0032	0.025	90		9.88	10.00		C			1							
113662	11.167	0.069	10.830	0.083	A	0.474	0.100	G	0.55	0.11	R	*	10.5635	0.0039	0.031	79	*	10.50	10.61		D	23012−3232	H 1	2	C	A	AB	8	2.168	0.011	1.20	0.07	
113663	8.906	0.015	8.382	0.014		0.492	0.018	T	0.56	0.02	L		8.4108	0.0019	0.018	70		8.38	8.44		C			1							S
113664	6.961	0.005	6.708	0.005	*	0.241	0.007	T	0.27	0.01	L	*	6.7444	0.0007	0.009	144	*	6.73	6.76		D	23012+8047	I 1	2	C	A	AB	21	0.294	0.003	1.28	0.03	S
113665	7.774	0.006	7.378	0.006		0.375	0.008	T	0.44	0.01	L		7.4354	0.0010	0.011	142		7.42	7.46		C			1	S						S
113666	9.922	0.020	8.351	0.011		1.318	0.018	T	1.28	0.02	L		8.3694	0.0016	0.014	104		8.35	8.39		C			1							
113667	10.543	0.041	8.592	0.015		1.654	0.036	T	2.35	0.07	O		8.4107	0.0042	0.029	71		8.38	8.51		U 2			1	S						
113668	10.611	0.055	8.932	0.024		1.403	0.047	T	1.38	0.06	L		8.9306	0.0021	0.015	55		8.90	8.95		C			1							
113669	7.302	0.006	5.706	0.003		1.349	0.005	G	1.31	0.01	H		5.7046	0.0009	0.007	84		5.69	5.72		C			1							S
113670	10.119	0.024	9.348	0.020		0.695	0.004	G	0.75	0.00	H		9.4370	0.0020	0.021	126		9.41	9.47		C			1							
113671	8.341	0.009	7.200	0.008		0.981	0.009	T	0.96	0.01	L		7.2627	0.0011	0.008	90		7.25	7.28		C			1							S
113672	7.888	0.009	7.801	0.009		0.085	0.012	T	0.10	0.01	L		7.8337	0.0013	0.010	81		7.82	7.86			23014+0007	I 1	1							S
113673	6.442	0.004	6.293	0.005		0.126	0.002	G	0.14	0.00	H		6.3222	0.0008	0.005	79		6.31	6.33		C			1							S
113674	8.087	0.012	6.385	0.006		1.418	0.005	G	1.40	0.02	L		6.3714	0.0020	0.009	56		6.35	6.38					1							S
113675	8.772	0.014	7.401	0.008		1.161	0.013	T	1.12	0.01	L		7.4435	0.0011	0.010	89		7.43	7.46		C			1							S
113676	10.270	0.031	9.185	0.020		1.010	0.015	G	0.99	0.01	H		9.2088	0.0019	0.016	97		9.19	9.23		C			1							
113677	9.423	0.019	8.596	0.015		0.748	0.003	G	0.79	0.00	H		8.6417	0.0017	0.015	81		8.61	8.66		C			1							
113678	9.826	0.023	9.401	0.025		0.358	0.004	G	0.42	0.00	H		9.4977	0.0031	0.022	82		9.46	9.53		C			1							
113679	8.362	0.007	7.976	0.008		0.389	0.004	G	0.45	0.00	H		8.0350	0.0011	0.015	203		8.01	8.06		C			1							S
113680	9.913	0.022	9.610	0.025		0.331	0.044	G	0.39	0.06	H		9.6710	0.0021	0.026	123		9.62	9.72					1							G
113681	9.509	0.018	9.020	0.017		0.472	0.019	T	0.54	0.02	L		9.0869	0.0020	0.019	95		9.06	9.12		C			1							S
113682	9.342	0.014	8.856	0.014		0.469	0.015	T	0.54	0.02	L		8.9063	0.0022	0.019	136		8.86	8.95					1							
113683						1.340	0.020	G	1.55	0.03	I		12.4848	0.0101	0.114	142		12.21	12.73		U 2			1	X	S					G G
113684	8.136	0.009	6.382	0.004		1.499	0.001	G	1.53	0.00	H		6.3618	0.0011	0.008	117		6.35	6.38					1							S
113685	10.030	0.028	8.980	0.020		0.912	0.026	T	0.91	0.02	L		9.0624	0.0021	0.015	81		9.04	9.10		C			1							
113686	7.187	0.009	6.046	0.004		0.992	0.003	G	0.97	0.00	H		6.1025	0.0009	0.007	57		6.09	6.11		C			1							S
113687	9.280	0.014	7.776	0.008		1.285	0.013	T	3.38	0.04	O		7.3109	0.0127	0.092	104		7.12	7.43		U 2			1	S						S
113688	9.482	0.020	8.768	0.017		0.651	0.015	G	0.71	0.01	H		8.8183	0.0018	0.013	84		8.80	8.84					1							
113689	9.633	0.014	8.039	0.007		1.336	0.012	T	1.30	0.01	L		8.0225	0.0012	0.014	192		8.00	8.05					1							
113690	8.963	0.008	7.866	0.005		0.947	0.007	T	0.94	0.01	L		7.9065	0.0011	0.017	232		7.88	7.93					1	S						
113691	8.028	0.010	7.475	0.009		0.541	0.015	G	0.61	0.02	H		7.5166	0.0017	0.012	75		7.50	7.54		C			1							S
113692	8.513	0.015	7.744	0.012		0.700	0.015	T	0.76	0.01	L		7.7938	0.0016	0.013	62		7.78	7.83					1							S
113693	9.566	0.019	9.103	0.019		0.450	0.021	T	0.52	0.02	L		9.1505	0.0025	0.022	88		9.11	9.19					1							
113694	9.987	0.029	9.110	0.022		0.783	0.027	T	0.82	0.02	L		9.1954	0.0022	0.021	87		9.16	9.24		R			1							
113695	8.625	0.010	7.825	0.008		0.724	0.010	T	0.78	0.01	L		7.8799	0.0011	0.012	97		7.86	7.90		C			1							S
113696	10.018	0.018	8.377	0.009		1.373	0.016	T	1.34	0.02	L		8.3811	0.0018	0.022	194		8.35	8.42					1							S
113697	10.170	0.030	9.064	0.020		1.024	0.009	G	1.07	0.01	I		9.0666	0.0034	0.021	88		9.03	9.09					1	X						
113698	11.018	0.039	9.837	0.023		1.005	0.036	T	1.05	0.04	L		9.9039	0.0024	0.029	193		9.86	9.97					1							
113699	7.767	0.010	7.128	0.007		0.586	0.010	G	0.66	0.01	H		7.1873	0.0010	0.007	65		7.18	7.20		C			1	X						S
113700	9.098	0.012	7.533	0.007		1.313	0.011	T	1.27	0.01	L		7.5529	0.0011	0.011	119		7.53	7.57		M			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	mas/yr 13	mas 14	mas 15	mas 16	mas/yr 17	mas/yr 18	19	20	21	22	23	24	25	26	27	28	% 29	30
113701	23 01 42.19	−51 28 05.4	8.17	1 H	345.425 781 12	−51.468 157 37	32.76	−94.90	−89.28	0.77	0.78	1.10	0.99	0.83	+19	−11	−28	− 3	+10	+ 7	+ 6	+23	+13	+32	0	−0.40
113702	23 01 42.38	+61 14 13.0	10.34	H	345.426 568 01	+61.236 958 13	2.73	−2.35	−9.62	1.02	0.98	1.25	1.35	1.19	−21	+ 4	+ 0	+ 7	+ 2	− 1	+ 3	−15	+28	−20	0	−2.24
113703 H	23 01 42.46	+67 47 42.7	8.55	H	345.426 913 31	+67.795 202 20	A 9.21	71.79	49.90	1.35	1.24	1.36	1.43	1.39	+10	−10	− 4	+33	+16	− 5	+17	+15	+ 4	+16	0	−0.32
113704	23 01 43.22	−52 05 13.7	8.61	H	345.430 088 33	−52.087 136 65	−0.17	−10.45	−23.47	0.85	0.76	1.20	1.03	0.83	+10	+ 6	−15	+ 6	+ 4	+15	+ 6	+10	+ 7	+22	0	−0.85
113705	23 01 43.56	+03 31 51.7	6.44	H	345.431 509 31	+03.531 038 20	5.71	32.33	−52.74	0.79	0.61	0.88	0.99	0.84	+26	+13	− 2	−18	+13	−10	+13	+ 4	−22	+18	0	−0.20
113706	23 01 44.79	−66 52 40.7	9.30	H	345.436 639 93	−66.877 963 51	3.51	7.11	6.40	0.77	0.76	1.06	0.92	0.75	−13	+ 0	−22	+ 2	− 3	− 1	− 2	− 8	− 6	−10	0	−0.01
113707	23 01 44.80	+14 43 09.2	8.33	H	345.436 670 49	+14.719 235 97	0.41	11.34	−7.34	0.92	0.71	1.20	1.01	1.15	+38	+22	+ 2	+14	+ 2	−13	+ 5	− 2	+27	+25	2	0.97
113708	23 01 45.04	−43 34 25.5	10.15	H	345.437 676 93	−43.573 752 73	9.01	49.69	−6.18	1.25	1.16	1.67	1.41	1.33	+ 9	−16	−20	+ 3	−10	+10	−13	−19	+36	+12	0	2.81
113709	23 01 45.88	−06 57 37.4	7.69	H	345.441 156 35	−06.960 382 65	4.81	11.25	−16.42	0.96	0.68	0.99	1.27	0.82	+12	− 2	−17	+30	− 3	+ 3	− 4	+14	+ 6	+ 0	0	0.92
113710	23 01 46.41	+39 50 36.3	11.41	H	345.443 372 67	+39.843 416 27	2.07	−4.16	−6.30	1.93	1.19	2.30	2.11	1.44	−13	+17	+10	+16	+ 4	+ 7	+23	−31	+ 7	+27	1	−1.33
113711	23 01 46.90	−44 50 26.5	7.54	H	345.445 398 02	−44.840 689 09	10.49	−91.93	−45.55	0.79	0.70	0.97	1.05	0.72	+16	−11	−31	+22	−17	+13	−15	−26	+32	+12	0	0.89
113712	23 01 47.25	+05 10 44.8	11.04	G	345.446 895 77	+05.179 103 74	21.67	−63.87	−82.45	2.42	1.87	2.53	3.10	2.32	+14	− 8	−20	−17	+15	+16	+18	+ 7	−20	+ 4	0	1.57
113713	23 01 48.42	+39 49 46.5	9.79	H	345.451 750 94	+39.829 579 94	3.49	−3.30	−6.24	1.20	0.77	1.50	1.26	0.94	−17	+35	− 4	+11	+ 5	+11	+28	−32	+22	+26	1	−0.25
113714	23 01 48.81	+50 51 00.3	7.29	H	345.453 362 03	+50.850 070 26	4.59	−31.27	2.97	0.47	0.53	0.71	0.53	0.53	−17	− 2	+20	+19	−14	−14	− 5	− 8	+ 7	+ 2	0	0.31
113715 H	23 01 49.47	+45 53 09.1	9.66	3 H	345.456 126 83	+45.885 864 61	* 0.82	−3.85	0.71	0.62	0.79	1.26	0.67	0.86	−25	+17	+ 7	−12	+ 2	−13	+ 2	−11	− 4	+ 2	1	2.95
113716	23 01 50.38	+54 07 16.9	9.81	H	345.459 905 69	+54.121 357 28	3.80	27.55	−7.43	0.80	0.95	1.19	0.99	1.10	−28	− 9	+37	+ 3	− 3	− 9	− 2	−16	+10	−31	0	0.37
*113717	23 01 51.39	+39 06 28.8	8.16	H	345.464 122 32	+39.107 991 24	3.37	−8.73	−8.93	0.70	0.45	0.84	0.80	0.52	− 9	+26	+ 8	+12	+16	− 3	+27	−15	+16	+20	0	−1.02
*113718	23 01 51.31	−03 50 53.6	7.48	H	345.463 804 92	−03.848 231 01	+ 59.04	395.50	−207.11	0.87	0.71	3.40	1.21	1.17	+34	+ 8	− 3	+ 9	− 2	+49	+ 6	− 4	+73	+44	0	1.10
113719	23 01 51.44	+34 36 45.4	6.74	H	345.464 320 80	+34.612 618 48	12.46	24.68	−32.45	0.53	0.48	0.75	0.62	0.56	+11	+21	− 2	+20	− 4	− 3	+ 3	−24	+28	+12	0	−0.71
113720	23 01 53.35	+47 57 19.0	7.67	H	345.472 296 10	+47.955 265 59	3.79	13.28	0.87	0.48	0.56	0.82	0.50	0.59	−30	+10	+ 6	−13	+20	− 3	+19	− 7	+ 0	−12	0	−0.99
113721	23 01 53.55	+51 21 31.6	9.06	H	345.473 109 20	+51.358 789 51	−0.54	2.86	−0.83	0.67	0.78	1.05	0.73	0.75	−12	+15	+28	+16	− 9	−13	+ 0	+ 1	+17	− 6	1	0.63
113722	23 01 54.22	+08 39 25.3	8.65	H	345.475 898 74	+08.657 038 29	5.94	−23.70	−6.58	0.99	0.78	1.21	1.26	1.20	+36	+ 0	−17	+ 5	+ 4	+19	+ 9	+ 1	+24	+35	0	−1.19
113723	23 01 54.28	−05 57 58.4	7.85	H	345.476 168 87	−05.966 208 94	7.04	21.61	−32.33	0.97	0.67	1.04	1.22	0.78	+10	−12	−16	−22	+ 7	+21	+10	− 7	+19	− 6	0	0.04
113724	23 01 54.42	+19 50 15.9	7.18	H	345.476 765 77	+19.837 754 04	4.03	21.81	−12.31	0.85	0.66	1.02	0.79	0.78	+26	+36	− 6	+ 0	+ 1	−27	− 4	− 8	−12	+39	0	1.57
113725	23 01 55.04	−63 05 08.0	6.88	H	345.479 341 80	−63.085 551 69	5.38	18.93	21.50	0.45	0.49	0.70	0.54	0.53	− 9	− 7	−11	− 4	− 2	+15	+ 5	−27	− 8	+ 5	0	0.98
113726 H	23 01 55.25	+42 19 33.5	3.62	2 G	345.480 193 77	+42.325 978 66	* 4.71	22.47	0.24	0.30	0.43	0.67	0.32	0.44	− 2	+ 9	+39	+13	+ 4	+ 8	+ 5	−26	−13	+10	0	−1.16
113727	23 01 55.40	−02 41 09.7	7.63	H	345.480 840 87	−02.686 024 62	3.74	4.05	−13.11	0.91	0.68	1.09	1.34	0.87	+20	− 8	−17	− 2	+ 3	+17	+ 3	− 3	+37	− 6	0	−0.62
113728	23 01 56.83	+32 41 36.5	8.21	G	345.486 781 15	+32.693 459 15	10.18	49.40	42.77	0.78	0.67	1.12	1.16	0.82	+ 9	+10	−14	− 4	+ 0	+12	+ 7	−34	+33	+32	2	−0.23
113729 H	23 01 57.12	+47 59 54.8	7.94	H	345.487 984 48	+47.998 545 89	* 4.21	12.28	1.89	0.55	0.61	0.90	0.59	0.67	−29	+ 7	+10	− 9	+13	+ 1	+12	− 5	− 9	−14	0	−1.03
113730	23 01 58.26	−39 45 21.2	8.10	H	345.492 752 96	−39.755 890 38	5.80	22.38	−35.00	0.78	0.71	1.07	0.97	0.90	+20	+ 0	−17	+23	−16	+26	− 4	−22	+14	+39	2	0.69
113731	23 01 58.40	+47 00 59.8	8.41	H	345.493 318 68	+47.016 619 98	1.81	−1.47	−2.48	0.60	0.68	1.03	0.70	0.74	−36	+15	+ 2	+19	+16	−22	+25	−10	+20	−18	0	−0.33
113732	23 01 59.26	−29 15 04.3	9.13	H	345.496 927 94	−29.251 186 02	1.94	5.18	−20.89	1.16	0.92	1.29	1.59	1.35	+16	− 2	− 9	−37	+ 5	+ 2	+ 6	−35	+13	+26	0	−1.53
113733 H	23 01 59.63	−55 15 54.5	9.34	H	345.498 438 66	−55.265 144 02	A 6.28	12.33	−7.79	1.61	1.72	2.35	1.66	1.56	− 7	− 3	−11	− 5	− 8	+18	−14	−22	− 7	−33	2	−0.38
113734	23 02 01.60	−66 00 54.4	8.30	H	345.506 664 81	−66.015 120 94	4.81	−10.34	−28.25	0.66	0.74	0.99	0.79	0.68	− 3	− 4	−31	− 1	+10	−15	+ 5	−10	− 5	−10	0	0.85
113735	23 02 02.46	−59 27 46.4	9.15	1 H	345.510 253 75	−59.462 884 58	0.72	8.99	18.77	0.59	0.65	1.03	0.71	0.71	−20	− 8	− 8	− 6	+ 2	+ 7	+ 3	− 5	− 5	−13	1	1.18
113736	23 02 02.54	−01 12 33.4	9.24	G	345.510 586 71	−01.209 273 92	2.52	23.64	3.72	1.03	0.85	1.19	1.42	1.04	+43	−11	−15	+ 9	− 4	+12	−17	−29	+ 7	+ 6	0	−1.22
113737	23 02 03.15	+00 23 55.1	8.86	H	345.513 125 60	+00.398 646 89	4.00	29.40	−3.28	1.03	0.76	1.15	1.38	0.91	+25	+16	+ 8	−16	+17	+16	+21	+ 1	+ 9	− 3	0	0.05
113738	23 02 05.61	+62 30 43.6	8.14	2 H	345.523 374 32	+62.512 098 16	* 3.31	6.84	−8.36	0.90	0.89	0.92	0.84	0.84	− 2	+21	+ 8	+18	+ 0	+ 6	− 2	−19	+21	−15	3	1.75
113739	23 02 05.69	+20 21 21.5	8.21	H	345.523 712 41	+20.355 972 98	2.92	5.40	−2.52	0.90	0.82	1.11	0.94	0.88	+15	+10	−21	+ 6	+19	−21	+16	+21	+ 5	+20	0	0.78
113740	23 02 05.90	−03 51 01.6	8.81	H	345.524 566 83	−03.850 457 13	3.08	−18.92	−1.69	1.10	0.80	1.37	1.28	1.12	+15	+17	−17	−14	+ 4	+31	+18	− 3	+47	+28	0	−0.34
113741	23 02 06.31	+37 28 37.5	8.05	G	345.526 288 21	+37.477 088 36	8.47	61.08	−17.70	0.85	0.59	1.01	0.99	0.64	+ 5	+32	+11	−24	+12	+11	+13	−20	+22	+29	0	0.89
113742	23 02 06.38	−52 18 12.7	8.89	G	345.526 596 85	−52.303 537 77	6.70	−10.50	−25.17	0.91	0.88	1.25	1.02	0.91	+13	+ 2	−24	+10	+12	+ 6	+13	+26	− 6	+16	0	−0.44
113743	23 02 06.50	−46 42 03.7	8.57	H	345.527 088 44	−46.701 034 26	1.90	43.69	3.90	0.85	0.80	1.09	1.19	0.97	+27	− 9	− 9	+ 6	−19	+31	−18	−27	+25	+30	0	−0.63
113744	23 02 06.99	−18 28 02.7	8.96	H	345.529 105 25	−18.467 415 15	3.39	−0.66	−21.90	1.12	0.82	1.40	1.51	1.06	+24	+ 1	−29	−12	+ 1	+24	+ 7	−26	+42	+12	0	−0.07
113745	23 02 08.20	−70 37 37.2	8.47	H	345.534 151 78	−70.627 006 80	3.68	8.50	−27.50	0.66	0.61	0.84	0.80	0.67	+ 3	− 2	−16	+ 0	+10	− 3	+10	−13	+ 4	+19	1	−0.91
113746	23 02 09.83	−14 58 34.0	8.00	2 H	345.540 975 87	−14.976 124 13	3.14	8.52	−16.98	1.12	0.71	1.43	1.56	1.11	+26	+25	− 7	−10	+16	− 6	+24	−19	+49	+11	0	−0.90
113747	23 02 10.54	+47 38 45.6	9.16	H	345.543 929 90	+47.645 989 51	−0.35	−10.22	−7.40	0.63	0.76	1.08	0.78	0.89	−38	+13	+11	− 9	+18	−15	+22	−19	+ 8	−22	1	0.31
113748	23 02 11.19	−07 43 27.9	8.55	H	345.546 643 39	−07.724 408 02	5.08	13.14	−33.45	1.07	0.74	1.14	1.44	0.92	+ 8	+25	−15	+19	+ 2	+16	+ 5	+14	+ 4	+ 1	0	−0.80
113749	23 02 11.25	−69 40 54.1	9.11	H	345.546 888 94	−69.681 692 14	1.07	0.52	−4.65	0.75	0.81	1.03	0.78	0.89	− 3	− 6	−20	−24	+ 5	+ 4	+ 7	− 8	− 3	− 6	0	0.53
113750	23 02 11.32	+44 34 22.4	6.43	H	345.547 152 41	+44.572 902 12	9.08	10.44	−18.02	0.47	0.46	0.73	0.53	0.57	−19	+ 1	+ 9	+15	+ 2	−12	+11	−13	− 4	+ 9	0	−1.34
113751 H	23 02 11.35	+18 32 06.1	8.37	G	345.547 304 01	+18.535 038 18	* 2.83	3.58	−7.72	2.40	1.47	1.82	1.79	1.41	+26	+18	+15	−25	+ 4	+ 4	+ 7	−10	−16	− 5	0	1.11
113752	23 02 12.23	+12 32 12.7	8.86	H	345.550 950 62	+12.536 854 87	5.20	22.85	8.24	1.03	0.76	1.37	1.18	1.19	+23	+23	− 3	− 5	+ 5	−15	+16	+ 3	+49	+ 8	0	0.64
113753	23 02 12.36	+57 11 37.9	10.12	G	345.551 482 02	+57.193 862 26	−1.12	−4.56	−2.47	1.08	0.97	1.33	1.50	1.10	−16	+ 2	+ 6	+ 4	− 9	+24	−10	+ 8	+ 7	− 9	0	−0.05
113754	23 02 12.75	−25 05 36.0	8.89	H	345.553 115 67	−25.093 346 09	5.47	−5.28	41.33	1.05	0.82	1.26	1.36	1.07	+31	−13	− 9	+ 6	+23	+ 8	+22	+ 3	+15	+34	0	−0.26
113755	23 02 12.83	+58 15 17.1	8.66	H	345.553 443 35	+58.254 744 77	34.58	−162.54	−264.20	0.78	0.72	0.96	0.97	0.79	−16	+25	+15	+11	+ 7	−13	+12	− 8	+12	−14	0	−0.55
113756	23 02 13.76	+29 23 43.7	8.20	H	345.557 336 28	+29.395 476 49	3.58	14.96	0.61	0.71	0.58	1.11	0.83	0.71	+ 1	+ 6	−14	+ 7	−10	+ 3	+ 2	−39	+44	+22	0	0.37
113757	23 02 15.19	−32 15 11.0	9.99	H	345.563 289 61	−32.253 052 34	3.25	67.57	−29.11	1.34	1.06	1.52	1.48	1.11	+10	+10	−23	−33	+ 1	+12	+ 5	−21	+ 4	+ 5	0	1.20
113758	23 02 15.74	+72 43 49.5	8.05	H	345.565 584 31	+72.730 407 97	2.73	−3.69	−6.73	0.51	0.53	0.63	0.58	0.60	+ 2	+ 7	+ 9	+ 5	+ 8	− 1	+ 7	+15	+ 3	+11	0	−0.14
113759	23 02 15.99	−64 17 52.3	7.65	G	345.566 627 95	−64.297 849 42	9.15	27.80	−47.88	0.49	0.58	0.81	0.60	0.64	− 7	−10	− 7	+ 0	+ 3	+ 7	+ 7	−22	−28	− 4	0	−1.13
113760 H	23 02 16.19	−42 58 16.0	10.71	H	345.567 441 94	−42.971 116 36	A 24.70	69.78	−157.10	3.70	3.33	4.36	4.24	3.15	+13	− 4	−26	+14	−27	+28	−26	−18	+35	− 1	2	2.03
113761	23 02 16.58	−54 01 00.1	8.45	H	345.569 083 81	−54.016 692 76	4.11	5.62	−1.89	0.68	0.81	1.26	0.85	0.89	+20	−16	−30	+31	+ 5	+15	+13	+ 3	−14	+17	0	0.21
113762	23 02 18.10	−18 56 39.6	8.49	H	345.575 399 28	−18.944 341 12	3.56	22.58	−17.92	1.11	0.83	1.32	1.80	0.97	+28	−12	−47	+ 6	+20	+ 0	+15	− 6	+19	+ 4	2	1.54
113763	23 02 18.30	−72 01 01.3	8.52	H	345.576 264 50	−72.017 027 33	3.03	42.07	−0.56	0.72	0.68	0.91	0.84	0.73	−11	+22	−16	−10	+13	−21	+ 8	− 1	− 3	+16	4	1.59
113764	23 02 20.31	+53 48 34.4	7.69	2 H	345.584 641 21	+53.809 563 39	4.28	25.03	23.47	0.54	0.62	0.82	0.64	0.72	−20	+ 5	+34	− 3	+ 8	+ 4	+ 6	−18	+ 9	−28	1	1.33
113765	23 02 20.67	+19 41 08.0	8.32	G	345.586 129 97	+19.685 546 39	5.48	−21.31	−37.23	0.94	0.79	1.19	0.83	0.76	+11	+42	−26	+ 1	+ 2	−23	−10	− 6	+12	+26	0	0.58
113766	23 02 21.04	+23 20 25.7	6.84	H	345.587 674 21	+23.340 479 99	5.43	18.35	9.50	0.63	0.64	0.82	0.69	0.72	+16	+15	− 5	+ 1	− 4	−11	− 4	−17	+23	+ 1	0	0.92
113767 H	23 02 21.61	+64 12 37.1	8.02	H	345.590 058 78	+64.210 314 66	A 4.79	−26.64	−15.31	3.00	2.23	0.95	0.92	0.96	−48	+ 0	− 1	− 8	+ 0	+ 8	− 3	−19	+19	−21	1	0.20
113768 H	23 02 22.68	+18 36 31.9	8.90	G	345.594 514 33	+18.608 851 90	A 7.57	−30.81	−14.23	3.96	2.68	2.88	3.02	2.08	+28	+11	+14	−18	+ 6	+13	+ 5	−13	−14	− 8	0	0.37
113769 H	23 02 23.74	−11 18 44.2	8.37	H	345.598 896 71	−11.312 266 90	A 6.76	44.24	−26.14	2.30	1.56	2.68	2.55	1.82	+31	+ 9	−27	− 7	+22	−21	+10	−41	+52	− 8	1	0.69
113770	23 02 24.31	+00 26 21.1	7.38	H	345.601 282 08	+00.439 181 99	13.88	−61.19	69.21	0.79	0.59	0.91	1.01	0.72	+29	−13	− 5	− 8	+10	+20	+12	− 4	− 4	+ 4	0	−3.07
113771	23 02 24.60	−12 23 31.8	11.15	G	345.602 518 65	−12.392 156 76	30.39	18.91	207.26	2.33	1.29	2.66	2.76	1.80	+29	+ 6	− 4	−22	+13	+22	+13	−40	+38	+10	0	−0.48
113772	23 02 25.17	+59 51 09.7	7.00	H	345.604 866 89	+59.852 686 48	2.53	6.03	−2.01	0.47	0.53	0.60	0.61	0.61	−30	+ 4	+10	+ 5	+11	−11	+11	−12	+14	−36	0	−0.45
113773	23 02 26.60	−00 35 52.5	7.85	1 H	345.610 842 59	−00.597 923 51	1.55	5.07	−24.13	0.81	0.70	0.96	1.02	0.81	+46	−23	− 9	−16	+ 2	+ 8	− 7	−26	+21	+ 3	0	−0.64
113774	23 02 27.41	−45 18 14.2	7.21	H	345.614 192 62	−45.303 942 69	9.37	−22.06	−11.21	0.74	0.63	0.90	1.02	0.73	+20	−11	−21	− 1	−11	+15	− 9	−10	+23	+29	0	−0.23
113775	23 02 29.37	+34 37 15.3	8.57	H	345.622 383 47	+34.620 904 69	6.45	35.37	12.94	0.73	0.64	1.07	0.82	0.72	+ 5	+32	−13	+14	− 7	−11	+ 4	−34	+28	+12	0	1.59
113776	23 02 29.70	+09 34 57.6	9.02	H	345.623 752 56	+09.582 674 60	7.60	−57.08	−19.93	1.18	0.95	1.46	1.49	1.25	+35	−19	−31	−27	− 1	+19	+ 4	−10	+36	+11	0	−0.46
113777	23 02 31.22	−49 41 46.3	7.75	G	345.630 092 76	−49.696 204 77	15.47	187.78	−213.39	0.55	0.68	0.95	0.64	0.75	+11	−11	+ 3	−21	+11	+14	+11	− 5	− 6	+10	0	0.63
113778	23 02 31.82	−42 47 32.8	10.43	H	345.632 586 93	−42.792 439 92	4.38	−5.76	5.05	1.49	1.31	1.87	1.86	1.48	+16	−10	−23	+11	−16	+16	−14	−20	+27	+14	0	0.15
113779	23 02 31.93	−11 15 56.4	7.76	H	345.633 050 44	−11.265 657 25	9.23	−64.26	−16.10	0.99	0.54	1.17	1.20	0.74	+30	+11	− 7	+12	+16	−12	+ 7	−29	+48	− 6	0	−0.34
113780	23 02 32.01	+15 50 44.2	9.19	H	345.633 381 72	+15.845 599 95	4.67	10.61	−14.85	1.09	0.71	1.37	1.13	1.29	+40	+10	+ 5	+ 0	+ 3	−15	+11	− 4	+14	+33	0	0.62
113781	23 02 32.56	−06 34 26.1	6.18	1 H	345.635 670 45	−06.573 928 44	2.63	−7.36	−32.95	0.87	0.57	0.88	1.11	0.73	+ 9	−14	−15	− 9	+14	+17	+20	+15	− 3	− 3	0	0.76
113782	23 02 32.75	+05 43 06.0	11.51	G	345.636 478 99	+05.718 322 55	20.95	91.40	−84.04	3.01	2.04	3.26	5.08	2.83	+23	+ 5	−26	+24	+12	− 1	+ 7	+20	−12	−17	2	0.21
113783	23 02 33.35	+31 46 53.6	6.56	H	345.638 948 45	+31.781 543 58	8.54	40.83	21.74	0.49	0.49	0.77	0.53	0.59	+ 0	+30	−19	+14	+ 2	− 9	+14	−34	+36	+10	0	0.16
113784 H	23 02 34.07	−36 25 14.9	6.46	G	345.641 954 19	−36.420 805 97	A 7.85	42.54	−30.63	0.71	0.67	0.90	0.77	0.77	+27	+ 0	−26	+28	− 2	+32	+ 8	+ 6	+32	+50	0	0.01
113785	23 02 34.65	+29 48 18.2	8.85	H	345.644 379 38	+29.805 055 98	22.39	−122.30	3.10	0.84	0.96	1.23	1.02	1.67	+15	+ 2	−20	− 8	−39	+ 3	−23	−73	+40	+43	0	1.04
113786	23 02 35.11	+76 30 13.3	8.64	H	345.646 309 60	+76.503 686 88	15.22	151.92	46.61	0.72	0.71	0.81	0.81	0.80	− 8	−12	+23	+ 0	− 6	+ 2	− 8	−22	− 5	−14	0	−0.45
113787	23 02 35.17	+16 13 56.7	6.56	H	345.646 559 02	+16.232 415 10	1.20	−1.00	6.49	0.71	0.53	0.86	0.73	0.81	+39	+12	+15	+16	+ 0	+ 7	− 4	−13	+ 6	+29	0	−0.30
113788 H	23 02 36.34	+42 45 28.1	5.09	H	345.651 403 90	+42.757 806 20	A 9.33	55.67	−4.77	0.57	0.64	0.70	0.43	0.48	−15	+ 3	+21	+ 9	− 3	− 2	+ 4	−25	− 1	+19	2	−0.14
113789	23 02 36.67	+58 52 34.3	8.52	H	345.652 781 90	+58.876 186 34	16.36	−5.03	−105.94	0.71	0.67	0.87	0.87	0.87	−27	+26	+ 5	+ 5	+11	− 5	+14	−13	+13	−32	0	2.09
113790	23 02 37.38	+59 36 18.2	7.30	1 G	345.655 759 71	+59.605 068 04	7.46	0.64	−2.42	0.53	0.54	0.64	0.67	0.66	−27	+ 9	+ 6	+ 3	+17	− 4	+16	− 6	+15	−36	0	−0.21
*113791	23 02 37.79	−05 43 44.6	8.68	H	345.657 439 86	−05.729 056 68	4.17	9.62	13.38	1.16	0.73	1.18	1.67	0.96	+ 1	+10	− 8	−12	+13	+27	+17	+ 1	− 1	−12	0	−0.20
*113792 H	23 02 37.77	−18 32 30.1	6.78	H	345.657 392 39	−18.541 687 24	A 11.75	34.06	−6.56	1.07	0.79	1.11	1.38	0.92	+43	+ 0	−32	+14	+33	+ 2	+25	− 7	+33	+26	1	−0.87
113793	23 02 39.04	+63 20 27.0	6.85	H	345.662 683 43	+63.340 844 93	4.45	14.07	0.27	0.48	0.54	0.60	0.58	0.59	−14	+ 3	+ 9	− 9	+ 5	− 1	+ 5	−23	+ 9	−16	0	0.13
113794	23 02 41.86	−53 47 02.7	8.18	H	345.674 424 98	−53.784 080 72	3.37	4.21	−13.36	0.57	0.77	1.08	0.70	0.84	+19	−10	−12	+27	+13	+19	+16	+10	− 6	+20	0	−0.69
113795 H	23 02 42.98	−39 46 09.8	8.60	H	345.679 070 11	−39.769 379 59	A 7.42	−4.37	9.91	3.75	2.88	2.49	2.09	2.29	−19	+ 5	+ 1	+ 7	− 1	+20	+ 1	+ 2	+ 6	+34	1	−1.29
113796	23 02 43.63	+41 16 42.7	7.58	H	345.681 801 63	+41.278 516 48	9.52	−12.83	−110.34	0.53	0.43	0.81	0.56	0.53	−14	+ 5	+17	+46	− 4	+11	+19	−24	+14	+24	0	0.32
113797 H	23 02 43.88	+55 14 10.9	6.51	1 H	345.682 828 68	+55.236 374 55	A 4.51	17.29	3.45	0.67	0.71	0.82	0.66	0.63	−22	+ 0	+24	+20	− 5	+14	− 6	+ 3	− 1	− 4	2	2.17
113798	23 02 44.04	−14 15 12.7	8.14	H	345.683 504 50	−14.253 527 35	2.21	−8.05	−20.84	1.05	0.69

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
113701	9.231	0.014	8.274	0.011		0.827	0.002	G	0.87	0.00	H	8.3144	0.0017	0.019	112		8.28	8.36		U	23017−5128	I 1	1							S
113702	10.704	0.044	10.313	0.050		0.370	0.062	T	0.43	0.07	L	10.4215	0.0032	0.024	102		10.38	10.46		C			1							G
113703	8.896	0.019	8.399	0.016	*	0.467	0.023	T	0.54	0.02	L	* 8.6547	0.0018	0.016	128	*	8.62	8.68		D	23017+6748	I 1	2 C A	AB	216	2.055	0.006	1.47	0.03	S
113704	10.227	0.028	8.728	0.014		1.261	0.025	T	1.22	0.03	L	8.7750	0.0022	0.020	107		8.74	8.81		C			1							
113705	7.676	0.010	6.549	0.005		0.970	0.009	T	0.95	0.01	L	6.6083	0.0010	0.009	63		6.60	6.62					1							S
113706	9.562	0.015	9.317	0.017		0.233	0.021	T	0.26	0.03	L	9.3673	0.0017	0.020	149		9.33	9.40		C			1							
113707	10.279	0.033	8.479	0.014		1.499	0.028	T	1.53	0.04	L	8.4510	0.0023	0.015	95		8.42	8.48		C			1							
113708	10.767	0.042	10.216	0.042		0.522	0.044	T	0.59	0.05	L	10.2645	0.0039	0.034	87		10.19	10.33					1							
113709	8.957	0.018	7.801	0.012		0.993	0.017	T	0.97	0.01	L	7.8531	0.0022	0.011	54		7.84	7.87					1							S
113710	11.616	0.073	11.141	0.081		0.447	0.100	T	0.52	0.11	L	11.4667	0.0040	0.048	161		11.34	11.55					1							G
113711	8.074	0.010	7.578	0.009		0.463	0.000	G	0.53	0.00	H	7.6433	0.0015	0.012	93		7.62	7.67		C			1							S
113712						1.157	0.012	G	1.12	0.01	I	11.1774	0.0038	0.037	64		11.12	11.24					1 G							G
113713	11.478	0.057	9.955	0.024		1.280	0.049	T	1.24	0.05	L	9.9505	0.0026	0.029	166		9.89	9.99					1 S							G
113714	9.100	0.011	7.468	0.006		1.366	0.010	T	1.33	0.01	L	7.4413	0.0011	0.011	162		7.42	7.46		C			1							
113715	13.652	0.488	10.168	0.029	*						T *	9.7848	0.0305	0.247	226	*	9.33	9.97		U 2 C	23018+4553	H 1	2 C S B	AB	264	0.171	0.010	0.19	0.27	G W
113716	10.330	0.035	9.891	0.038		0.414	0.048	T	0.48	0.05	L	9.9087	0.0026	0.022	125		9.87	9.94					1 S							G
113717	8.273	0.008	8.165	0.009		0.096	0.005	G	0.11	0.01	H	8.1944	0.0013	0.013	154		8.17	8.22					1							S
113718	8.695	0.014	7.584	0.010		0.943	0.018	G	0.96	0.02	A	7.6232	0.0016	0.011	73		7.60	7.64					1 O							S
113719	7.214	0.004	6.793	0.005		0.398	0.006	T	0.46	0.01	L	6.8280	0.0008	0.008	113		6.81	6.84		C			1							S
113720	7.682	0.005	7.663	0.007		0.022	0.008	T	0.04	0.01	L	7.6851	0.0009	0.011	175		7.66	7.71					1							S
113721	9.051	0.012	9.069	0.015		−0.012	0.018	T	0.01	0.02	L	9.0643	0.0019	0.025	151		9.01	9.10					1							
113722	9.035	0.016	8.701	0.017		0.348	0.014	G	0.41	0.02	H	8.7358	0.0026	0.020	78		8.70	8.77					1							S
113723	9.004	0.021	7.943	0.015		0.920	0.020	T	0.92	0.01	L	8.0100	0.0015	0.010	61		8.00	8.04					1							S
113724	9.025	0.019	7.327	0.010		1.418	0.017	T	1.40	0.03	L	7.3248	0.0011	0.008	63		7.31	7.35		C			1							S
113725	8.649	0.009	7.034	0.005		1.352	0.008	T	1.32	0.01	L	7.0315	0.0009	0.010	168		7.01	7.05					1							S
113726	3.529	0.003	3.624	0.003	*	−0.099	0.003	G	−0.05	0.03	C *	3.6041	0.0029	0.038	200	*	3.57	3.67		U 2	23019+4220	M 1	2 C S A	AB	345	0.198	0.011	2.30	0.13	S
113727	9.705	0.028	7.799	0.012		1.583	0.024	T	1.60	0.03	L	7.7420	0.0022	0.017	57		7.72	7.77					1							S
113728	8.728	0.012	8.257	0.011		0.449	0.012	G	0.52	0.01	H	8.3220	0.0019	0.016	111		8.29	8.35					1							S
113729	8.147	0.008	7.971	0.008	*	0.169	0.010	T	0.18	0.01	L *	8.0024	0.0015	0.016	176	*	7.97	8.03		D	23020+4800	I 1	2 C S A	AB	289	0.162	0.005	0.15	0.27	S
113730	8.612	0.011	8.147	0.010		0.440	0.008	G	0.51	0.01	H	8.2035	0.0013	0.011	92		8.18	8.23					1							S
113731	8.430	0.007	8.411	0.009		0.022	0.011	T	0.04	0.01	L	8.4240	0.0012	0.016	192		8.40	8.46					1							
113732	10.716	0.051	9.258	0.025		1.229	0.045	T	1.19	0.04	L	9.2925	0.0021	0.014	82		9.26	9.31		C			1							
113733	9.370	0.038	8.891	0.037	*	0.463	0.041	T	0.53	0.04	L *	9.4387	0.0021	0.026	190	*	9.39	9.50		D	23020−5516	I 1	2 C A	AB	264	1.623	0.006	0.98	0.03	
113734	9.589	0.016	8.408	0.010		1.012	0.015	T	0.99	0.01	L	8.4636	0.0019	0.018	150		8.44	8.50					1							
113735	8.873	0.008	9.111	0.012		−0.200	0.001	G	−0.21	0.00	H	9.0802	0.0022	0.028	248		9.03	9.13		U			1							
113736	10.405	0.040	9.358	0.027		0.999	0.002	G	0.98	0.00	I	9.3930	0.0022	0.017	88		9.34	9.42		C			1							
113737	9.110	0.016	8.916	0.019		0.186	0.023	T	0.20	0.03	L	8.9242	0.0019	0.016	69		8.90	8.95					1							
113738	8.636	0.009	8.200	0.009		0.412	0.012	T	0.48	0.01	L	8.2345	0.0075	0.121	116		8.18	8.52	2.06	P 1 A	23021+6231	I 1	1 V							
113739	10.055	0.038	8.348	0.018		1.425	0.033	T	1.41	0.05	L	8.3509	0.0020	0.018	58		8.31	8.39					1							
113740	10.056	0.031	8.927	0.020		0.972	0.029	T	0.96	0.02	L	8.9695	0.0029	0.016	73		8.94	9.00					1 S							
113741	8.548	0.010	8.099	0.010		0.424	0.013	T	0.49	0.01	L	8.1549	0.0013	0.012	101		8.14	8.18		C			1							S
113742	9.631	0.021	8.973	0.019		0.604	0.015	G	0.67	0.01	H	9.0198	0.0028	0.022	108		8.98	9.05					1							
113743	9.814	0.024	8.657	0.016		0.993	0.022	T	0.97	0.02	L	8.7382	0.0023	0.014	74		8.70	8.76		C			1							
113744	9.628	0.021	8.971	0.019		0.600	0.021	T	0.67	0.02	L	9.0862	0.0017	0.018	75		9.06	9.11		C			1							
113745	9.982	0.019	8.583	0.010		1.183	0.017	T	1.14	0.01	L	8.6330	0.0018	0.021	157		8.60	8.67					1							
113746	10.070	0.025	8.266	0.011		1.502	0.022	T	1.53	0.03	L	8.1288	0.0031	0.021	83		8.09	8.18		U 2			1							S
113747	10.002	0.019	9.223	0.015		0.708	0.019	T	0.76	0.02	L	9.3076	0.0016	0.021	176		9.27	9.34					1 S							
113748	9.002	0.021	8.574	0.021		0.404	0.027	T	0.47	0.03	L	8.6410	0.0031	0.021	57		8.62	8.69					1							S
113749	10.563	0.030	9.269	0.017		1.100	0.027	T	1.06	0.03	L	9.2767	0.0025	0.024	141		9.24	9.31					1							
113750	7.640	0.007	6.527	0.004		0.959	0.006	T	0.95	0.00	L	6.5881	0.0008	0.007	135		6.57	6.60					1							S
113751	10.500	0.049	8.495	0.017	*	1.243	0.197	G	1.54	0.09	M *	8.4069	0.0020	0.013	80	*	8.39	8.43		C	23022+1832	H 1	2 C D	AB	159	0.253	0.072	3.32	0.48	D
113752	10.786	0.051	9.018	0.020		1.473	0.043	T	1.49	0.06	L	8.9948	0.0020	0.020	88		8.95	9.03					1 S							
113753	10.610	0.038	10.138	0.040		0.459	0.015	G	0.53	0.02	H	10.2195	0.0030	0.026	116		10.18	10.28		C			1							G
113754	9.443	0.018	8.976	0.018		0.453	0.020	T	0.52	0.02	L	8.9938	0.0024	0.021	93		8.95	9.02					1							S
113755	9.961	0.025	8.763	0.015		1.019	0.023	T	1.07	0.03	L	8.8015	0.0016	0.017	117		8.76	8.83					1							
113756	9.694	0.016	8.319	0.010		1.164	0.015	T	1.13	0.01	L	8.3664	0.0015	0.016	145		8.34	8.39					1							
113757	10.430	0.039	9.971	0.041		0.446	0.045	T	0.52	0.05	L	10.0902	0.0027	0.024	84		10.04	10.13					1							
113758	8.184	0.009	8.079	0.011		0.110	0.015	G	0.12	0.01	H	8.0911	0.0013	0.011	115		8.08	8.11		C			1							S
113759	8.018	0.008	7.669	0.007		0.334	0.015	G	0.39	0.02	H	7.7303	0.0013	0.016	158		7.71	7.76			23023−6418	I 1	1							S
113760						1.577	0.082	G	2.55	0.19	I *	10.7209	0.0042	0.040	95	*	10.65	10.79		D	23023−4258	M 1	2 C A	AB	271	3.193	0.018	1.35	0.10	G
113761	9.742	0.018	8.545	0.011		1.025	0.016	T	1.00	0.01	L	8.6187	0.0015	0.017	154		8.59	8.66		C			1							
113762	8.848	0.016	8.527	0.016		0.305	0.021	T	0.35	0.03	L	8.5711	0.0026	0.014	70		8.54	8.61		C			1							S
113763	9.936	0.022	8.651	0.013		1.093	0.020	T	1.05	0.02	L	8.6823	0.0017	0.019	130		8.65	8.72		C			1							
113764	8.100	0.009	7.708	0.008		0.355	0.021	G	0.42	0.02	H	7.7732	0.0026	0.025	117		7.73	7.80		U 2			1							S
113765	8.646	0.017	8.352	0.018		0.279	0.007	G	0.32	0.01	H	8.3899	0.0024	0.011	49		8.37	8.43		C			1							S
113766	6.906	0.006	6.842	0.008		0.064	0.009	T	0.07	0.01	L	6.8615	0.0014	0.009	54		6.85	6.88					1							S
113767	9.099	0.013	8.131	0.009	*	0.850	0.012	T	0.86	0.01	L *	8.1748	0.0013	0.012	127	*	8.15	8.20		D	23024+6413	I 1	2 C A	AB	117	0.301	0.004	0.81	0.07	
113768	9.610	0.025	8.931	0.021	*	0.550	0.015	G	0.62	0.01	H *	9.0358	0.0022	0.016	79	*	9.01	9.07		D	23024+1837	I 1	2 C A	AB	268	0.387	0.006	0.46	0.05	
113769	8.743	0.012	8.327	0.012	*	0.393	0.016	T	0.46	0.02	L *	8.4599	0.0015	0.013	108	*	8.44	8.49		D	23024−1119	I 1	2 C A	AB	38	8.502	0.005	0.64	0.01	S
113770	7.981	0.010	7.435	0.009		0.512	0.012	T	0.58	0.01	L	7.4913	0.0018	0.009	76		7.47	7.51					1							S
113771						1.318	0.008	G	1.52	0.01	I	11.2754	0.0034	0.035	105		11.22	11.33					1							G
113772	6.968	0.004	6.987	0.006		−0.015	0.006	T	0.01	0.01	L	7.0049	0.0009	0.012	117		6.99	7.02					1							S
113773	10.031	0.027	8.073	0.010		1.624	0.023	T	1.65	0.02	L	7.9663	0.0013	0.018	99		7.93	7.99		U			1							S
113774	7.728	0.008	7.249	0.007		0.444	0.009	G	0.51	0.01	H	7.3069	0.0012	0.011	89		7.29	7.32					1							S
113775	9.005	0.014	8.622	0.014		0.363	0.018	T	0.42	0.02	L	8.6572	0.0019	0.013	106		8.63	8.68					1							S
113776	9.708	0.025	9.041	0.023		0.618	0.028	T	0.69	0.03	L	9.1495	0.0020	0.027	77		9.10	9.20		C			1							
113777	8.799	0.010	7.843	0.007		0.849	0.011	G	0.86	0.01	H	7.9046	0.0016	0.014	149		7.88	7.93					1							S
113778	10.845	0.044	10.425	0.048		0.410	0.053	T	0.48	0.06	L	10.5243	0.0036	0.034	95		10.45	10.59		C			1							
113779	8.990	0.011	7.858	0.008		0.974	0.011	T	0.96	0.01	L	7.9209	0.0012	0.010	107		7.90	7.94		C			1							S
113780	9.733	0.021	9.236	0.021		0.443	0.020	G	0.51	0.02	R	9.2912	0.0015	0.014	110		9.27	9.31		C			1							
113781	8.216	0.014	6.365	0.008		1.590	0.002	G	1.99	0.05	F	6.2646	0.0030	0.016	56		6.24	6.29		U 2			1							S
113782						1.350	0.020	G	1.59	0.02	A	11.6517	0.0061	0.054	65		11.56	11.74					1							G
113783	6.966	0.005	6.595	0.005		0.342	0.005	G	0.40	0.01	H	6.6425	0.0007	0.007	122		6.63	6.66		C			1							S
113784	7.588	0.006	6.523	0.005	*	0.938	0.003	G	0.93	0.00	H *	6.6209	0.0011	0.008	118	*	6.61	6.64		D	23026−3625	I 1	2 C A	AB	294	2.057	0.008	2.80	0.03	S
113785	9.923	0.020	8.936	0.014		0.852	0.019	T	0.87	0.01	L	8.9916	0.0018	0.017	143		8.96	9.02		C			1 G							
113786	9.418	0.018	8.714	0.015		0.649	0.019	T	0.71	0.02	L	8.7765	0.0029	0.022	103		8.74	8.80			23026+7630	I 1	1							
113787	8.127	0.008	6.698	0.004		1.206	0.007	T	1.17	0.01	L	6.7277	0.0008	0.007	113		6.72	6.74		C			1							S
113788	5.204	0.002	5.102	0.002	*	0.094	0.003	G	0.11	0.00	H *	5.1243	0.0005	0.005	197	*	5.12	5.13		D	23026+4245	I 1	2 C A	AB	344	0.387	0.004	2.17	0.02	S
113789	9.495	0.020	8.587	0.015		0.791	0.019	T	0.82	0.01	L	8.6609	0.0015	0.014	106		8.64	8.69		C			1							
113790	7.669	0.008	7.335	0.007		0.320	0.015	G	0.37	0.02	H	7.3931	0.0025	0.021	117		7.36	7.42		U 2			1							S
113791	9.199	0.024	8.711	0.024		0.459	0.031	T	0.53	0.03	L	8.7778	0.0032	0.015	54		8.75	8.80					1							
113792	6.965	0.006	6.808	0.007	A	1.000	0.495	G	0.10	0.02	L *	6.8129	0.0010	0.009	77	*	6.80	6.83		D	23026−1833	I 1	2 C A	AB	60	1.104	0.007	2.18	0.02	S
113793	8.539	0.010	6.979	0.005		1.309	0.009	T	1.27	0.01	L	7.0017	0.0010	0.009	121		6.99	7.02					1							S
113794	9.479	0.015	8.299	0.010		1.011	0.014	T	0.99	0.01	L	8.3442	0.0015	0.018	162		8.31	8.37					1							S
113795	9.137	0.015	8.657	0.014	*	0.464	0.016	T	0.53	0.02	L *	8.6997	0.0021	0.018	96	*	8.67	8.73		D	23027−3946	I 1	2 C A	AS	208	0.398	0.004	0.02	0.02	S
113796	8.727	0.008	7.696	0.006		0.897	0.007	T	0.90	0.01	L	7.7379	0.0009	0.013	217		7.72	7.76					1							S
113797	6.416	0.004	6.508	0.005	*	−0.079	0.005	T	−0.06	0.01	L *	6.4875	0.0031	0.025	129	*	6.46	6.53	5.39	P 1 A	23027+5514	I 1	2 C B	AE	140	0.662	0.028	4.01	0.14	S W
113798	9.458	0.018	8.255	0.011		1.029	0.016	T	1.00	0.01	L	8.3049	0.0016	0.015	87		8.28	8.33		C			1							S
113799	8.453	0.009	7.352	0.006		0.950	0.008	T	0.94	0.01	L	7.4142	0.0013	0.014	169		7.39	7.44					1							S
113800	7.721	0.009	7.272	0.009		0.455	0.004	G	0.52	0.00	H	7.3156	0.0016	0.010	57		7.30	7.34					1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$						F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr															%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28						29	30
113801	23 02 44.29	−20 52 13.4	5.97		G	345.684 530 03	−20.870 396 19		13.01	−56.81	−129.81	0.74	0.47	0.78	0.87	0.54	+19	− 1	− 7	+ 8	+ 4	+ 6	+ 3	− 7	+21	+ 8						0	1.86
113802	H 23 02 45.15	+44 03 31.6	6.37		G	345.688 114 95	+44.058 765 04	A	2.77	2.19	−5.99	0.58	0.57	0.83	0.62	0.62	− 9	+17	+ 1	−11	+ 0	−11	+ 6	−28	+ 1	+18						2	−1.52
113803	23 02 45.28	+55 50 07.0	8.49		H	345.688 665 73	+55.835 287 11		3.45	4.44	−2.72	0.60	0.65	0.81	0.79	0.73	−23	− 1	+21	+20	− 6	+11	− 7	+14	+14	−13						2	0.39
113804	23 02 45.62	+39 53 28.5	8.36		H	345.690 069 71	+39.891 253 51		12.35	0.02	−44.85	0.86	0.55	1.02	0.92	0.66	−14	+35	+ 6	+16	+17	+ 5	+28	−12	+ 5	+23						0	−0.99
113805	23 02 45.62	−07 49 25.7	9.98		G	345.690 079 78	−07.823 815 57		7.54	37.88	2.14	1.59	1.50	1.91	2.00	1.86	+43	+26	+ 3	+32	+22	+39	+24	+34	+ 6	+41						0	−0.48
113806	23 02 46.16	+53 14 46.8	7.95		H	345.692 320 24	+53.246 341 83		1.20	16.45	6.47	0.57	0.67	0.92	0.72	0.75	−22	− 5	+37	−22	+19	+21	+12	−21	+ 6	−19						0	−2.17
113807	23 02 46.82	−82 42 28.1	7.77		G	345.695 064 55	−82.707 810 63		16.89	354.69	−121.07	0.60	0.50	0.65	0.74	0.59	+ 2	−26	− 4	+21	+ 0	− 6	+ 0	+10	− 1	− 2						0	−0.33
113808	23 02 47.31	+16 58 29.8	8.94		H	345.697 128 27	+16.974 946 81		1.54	−10.21	−19.74	1.02	0.69	1.32	1.00	1.20	+38	+31	+21	+ 2	+ 1	− 7	+13	+ 1	+27	+30						0	0.25
113809	H 23 02 50.93	+50 24 44.9	9.69		H	345.712 229 13	+50.412 477 32	A	−1.14	−3.09	−3.81	1.36	1.50	1.82	1.35	1.31	−17	−13	+12	+13	+ 4	− 6	+ 8	− 9	+14	+11						3	0.43
113810	H 23 02 52.06	−13 20 19.2	8.57		H	345.716 896 92	−13.338 654 45	*	1.84	−18.56	−13.33	1.08	0.68	1.21	1.30	0.96	+39	−13	− 6	+25	+25	+ 9	+21	+ 6	+28	+30						0	−0.65
113811	H 23 02 52.25	+07 37 47.4	7.85		H	345.717 717 56	+07.629 829 42	*	1.31	−14.28	1.95	0.97	0.74	1.12	1.28	1.02	+24	+17	−17	− 1	+22	−31	+24	+30	+14	+10						0	0.48
113812	23 02 52.35	−38 21 47.1	10.85		G	345.718 125 03	−38.363 089 92		17.57	−19.78	−9.93	1.47	1.43	1.95	1.72	1.81	+28	+ 6	−13	+ 2	− 3	+19	− 1	+ 5	− 1	+38						2	−0.12
113813	23 02 52.77	−34 21 56.1	9.18		H	345.719 857 04	−34.365 594 16		5.50	39.47	−15.47	1.31	0.90	1.27	1.36	1.09	− 8	+ 6	−26	−51	+28	+13	+37	+ 4	+ 2	− 6						0	−0.57
113814	23 02 53.22	+17 56 33.2	8.58		H	345.721 748 47	+17.942 564 71		8.45	−6.91	47.80	1.15	0.71	1.28	1.14	0.92	+16	+32	− 1	−34	+ 5	−18	+15	−12	+23	+ 4						2	−1.31
113815	23 02 53.34	−49 03 49.9	9.02		H	345.722 270 72	−49.063 852 65		1.97	22.68	−3.09	0.79	0.83	1.19	0.71	0.93	− 2	−19	− 1	−34	+11	+17	+14	+ 7	−16	+ 2						1	0.64
113816	23 02 53.59	+37 11 09.5	9.81		H	345.723 283 46	+37.185 982 55		1.91	−8.46	−22.74	1.08	0.98	1.44	1.46	1.05	+21	+20	+13	− 7	− 3	+21	+ 1	−30	+19	+41						0	0.50
113817	23 02 54.03	−29 51 09.5	9.07		H	345.725 134 77	−29.852 651 08		4.11	4.95	3.63	1.23	0.97	1.41	1.73	1.32	+ 7	+11	−27	−32	+13	− 1	+14	−26	+21	+17						0	−0.14
113818	23 02 54.82	−36 28 57.3	8.35		H	345.728 429 01	−36.482 588 68		2.29	3.61	−5.03	0.76	0.71	1.06	0.94	0.91	+31	−12	−24	+20	−10	+29	− 4	+ 0	+20	+45						0	1.77
113819	23 02 55.34	+52 11 53.7	9.53		H	345.730 567 65	+52.198 249 24		2.77	12.93	0.10	0.71	0.86	1.16	0.89	0.92	−13	+ 1	+37	− 6	+10	+16	+ 3	− 1	− 1	−11						0	−0.61
113820	23 02 56.62	+57 19 01.8	8.30		H	345.735 911 03	+57.317 173 50		3.64	18.29	−9.81	0.77	0.66	0.92	1.00	0.72	−16	+ 2	+23	− 7	+ 2	+15	− 1	−11	+ 8	−20						0	1.33
113821	23 02 56.76	−47 50 53.8	6.64		H	345.736 515 42	−47.848 288 50		5.32	31.57	−14.61	0.62	0.49	0.74	0.66	0.54	+ 5	− 5	+ 4	+ 5	+12	+25	+13	−18	−21	+ 1						0	0.68
113822	23 02 57.06	+81 51 21.4	8.12		H	345.737 760 52	+81.855 944 94		3.16	−20.32	−9.21	0.61	0.59	0.68	0.71	0.64	− 7	−16	+14	+ 8	+ 9	+ 5	+ 9	− 3	− 3	+ 0						0	−2.24
113823	23 03 00.37	−37 05 51.7	8.20		H	345.751 531 48	−37.097 695 47		5.14	−66.01	−27.43	0.92	0.70	1.05	1.10	0.91	+30	−14	− 6	+42	+10	+ 4	+13	+14	+ 6	+43						0	1.61
113824	23 03 00.46	+34 37 15.9	7.78		H	345.751 936 56	+34.621 071 42		3.12	−3.55	−9.10	0.61	0.53	0.91	0.69	0.62	+ 1	+27	−15	+21	− 1	− 8	+11	−24	+37	+ 8						0	0.66
113825	23 03 01.47	+63 41 53.4	8.21	2	H	345.756 120 06	+63.698 157 96		1.85	−0.81	−1.58	0.60	0.68	0.76	0.73	0.78	− 9	− 1	− 5	− 8	+ 4	− 1	+ 4	−34	+13	− 7						0	−0.28
113826	23 03 01.98	+27 41 42.9	8.84		H	345.758 258 90	+27.695 251 44		5.88	11.50	3.05	0.71	0.65	1.13	0.78	0.82	+24	+14	+13	+ 0	− 4	− 2	+ 3	−18	+21	+37						1	1.45
113827	23 03 02.91	−15 07 06.0	8.67		H	345.762 134 98	−15.118 324 95		7.95	72.95	−25.58	1.23	0.73	1.57	1.79	1.12	+19	+22	−11	− 3	+15	− 3	+19	−23	+57	− 8						0	1.05
113828	23 03 04.96	−09 34 15.0	9.39		H	345.770 668 13	−09.570 846 22		5.93	−4.40	−5.39	1.50	0.95	1.69	2.45	1.27	+ 9	− 9	−18	+45	−17	+34	−33	−14	+41	−17						0	−0.33
113829	23 03 05.05	+20 55 07.1	6.65		H	345.771 042 34	+20.918 643 14		41.19	−117.66	−28.13	0.76	0.62	0.87	0.88	0.66	+ 3	− 6	−16	−34	+ 9	+ 3	+14	+ 3	−19	−11						0	−0.37
113830	23 03 06.76	+42 13 13.0	8.21		H	345.778 150 57	+42.220 282 82		3.75	−6.67	2.30	0.52	0.58	1.00	0.57	0.66	−14	+ 6	+20	+15	− 2	+ 2	+11	−36	− 2	+11						0	0.24
113831	H 23 03 06.90	−33 30 01.2	8.85		G	345.778 745 54	−33.500 343 75	A	8.37	53.50	−20.36	1.93	1.27	1.84	1.92	1.32	− 1	+39	−17	−18	+17	−22	+28	−10	+40	−12						1	0.39
113832	H 23 03 07.05	+04 56 25.2	8.53		H	345.779 395 75	+04.940 340 56	A	7.91	37.47	−7.95	1.63	1.15	1.56	2.08	1.48	+33	− 7	−15	+ 6	− 2	+26	− 4	−17	− 3	+ 9						1	0.24
113833	23 03 07.41	−47 53 47.9	8.89		H	345.780 866 23	−47.896 632 11		11.05	79.22	−21.59	0.98	0.76	1.15	1.09	0.87	+ 6	− 4	+ 5	+ 0	+ 2	+31	+ 1	−18	−11	− 1						2	−0.80
113834	23 03 08.26	−00 25 45.2	7.78		G	345.784 404 95	−00.429 209 86		18.21	−89.15	−169.73	0.82	0.67	0.97	1.04	0.79	+37	−11	−20	−17	+ 7	− 2	+ 5	−14	+20	+ 5						0	−1.02
113835	23 03 08.33	+49 35 09.7	9.69		H	345.784 716 83	+49.586 035 57		3.14	−2.33	−1.53	0.87	0.92	1.37	0.92	0.95	−15	+ 6	+24	− 1	+12	− 4	+14	− 4	+ 3	− 6						1	0.33
113836	23 03 09.89	−48 04 20.5	8.87		H	345.791 201 08	−48.072 364 44		0.16	−12.27	−6.21	1.03	0.83	1.24	1.12	0.95	+ 0	−16	+ 9	−12	+ 6	+39	+ 7	−23	−17	− 2						0	1.38
113837	23 03 10.32	−62 22 58.3	7.76		H	345.792 981 85	−62.382 874 29		5.25	22.45	−2.56	0.54	0.59	0.85	0.69	0.68	− 5	+ 1	−12	− 7	− 7	+ 2	− 5	−16	− 2	+ 2						1	0.83
113838	23 03 10.73	−31 08 34.2	7.93		G	345.794 724 08	−31.142 839 01		9.59	−23.18	0.56	0.80	0.57	0.89	0.87	0.64	+12	+12	−11	−16	+ 4	+ 3	+ 5	+ 5	− 3	+10						0	0.91
113839	23 03 11.56	−47 15 18.3	7.80		H	345.798 180 11	−47.255 091 41		17.74	78.60	−82.64	0.72	0.61	0.86	0.85	0.69	+ 5	−22	+ 9	+34	+10	+11	+ 8	+11	− 4	+ 0						2	0.05
*113840	23 03 16.05	−86 22 27.9	8.77		H	345.816 879 36	−86.374 428 10		1.43	25.74	−22.47	0.74	0.67	0.83	0.98	0.79	+ 8	+ 0	− 9	−16	+ 6	+15	+ 5	− 1	+ 3	+23						0	−0.96
*113841	23 03 16.05	−62 49 00.7	9.38		G	345.816 863 87	−62.816 851 54		0.85	69.83	−67.11	0.88	0.96	1.37	1.08	1.01	− 2	− 7	−14	−15	− 5	+13	− 1	−22	−16	+ 0						0	1.79
*113842	23 03 15.81	−55 10 06.5	7.66		H	345.815 877 51	−55.168 482 38		14.82	160.71	−62.64	0.52	0.53	0.93	0.58	0.53	−10	+ 4	+ 4	−11	− 7	+10	− 9	−35	−16	−23						0	0.30
113843	23 03 17.38	+23 16 42.1	8.77		H	345.822 410 16	+23.278 347 28		0.96	−7.21	−24.56	1.04	0.93	1.27	1.14	1.04	+ 9	+14	−25	+28	− 7	− 3	−13	−22	+31	−11						0	−0.18
*113844	23 03 17.74	+31 41 21.8	7.63		H	345.823 919 21	+31.689 393 23		5.49	35.58	13.00	0.58	0.54	0.91	0.62	0.66	+ 2	+27	−18	+13	− 2	− 2	+11	−38	+40	+11						0	−0.09
*113845	23 03 17.73	+16 01 08.5	8.54		H	345.823 883 41	+16.019 023 94		1.94	35.05	−8.61	1.06	0.68	1.34	1.09	1.15	+33	+15	− 3	+ 2	+ 7	− 9	+14	− 4	+17	+21						0	−2.30
113846	23 03 18.09	−41 03 13.2	10.38		H	345.825 395 32	−41.053 670 34		6.52	98.63	42.73	1.54	1.24	1.82	1.88	1.49	+28	−14	−13	+38	+12	+ 2	+15	+ 2	+ 6	+36						0	0.28
113847	23 03 18.95	+38 17 55.1	7.24		H	345.828 975 11	+38.298 639 29		6.78	−27.57	−18.50	0.67	0.52	0.82	0.73	0.55	+10	+37	+12	+22	+ 9	+ 7	+24	−25	+16	+36						0	−0.13
113848	23 03 19.22	−42 02 00.3	10.42		H	345.830 080 59	−42.033 408 61		5.86	−11.23	−16.36	1.27	1.08	1.65	1.51	1.33	+14	−13	−19	− 3	− 6	+16	− 3	−15	+ 7	+18						0	−0.32
113849	23 03 20.13	+63 33 02.0	8.60		H	345.833 881 74	+63.550 550 74		1.81	−0.39	−1.18	0.69	0.72	0.84	0.87	0.81	−11	−10	+ 3	− 6	+10	+ 0	+ 8	−28	+12	− 8						0	−0.04
113850	23 03 20.89	−49 43 33.1	10.65		H	345.837 026 57	−49.725 855 78		48.15	−33.03	−109.37	1.17	1.39	1.93	1.36	1.52	+ 6	− 6	− 6	−26	+10	+11	+11	− 7	− 6	+ 2						0	0.96
113851	23 03 21.12	+62 38 32.8	8.19		H	345.838 013 82	+62.642 434 12		2.48	7.31	−2.26	0.63	0.63	0.77	0.70	0.70	−13	+19	+12	+13	− 5	+ 6	− 4	− 9	+ 9	−17						0	0.17
113852	H 23 03 21.33	+58 33 50.0	6.43		G	345.838 878 85	+58.563 875 86	A	11.39	48.37	−8.91	2.72	1.10	0.83	0.87	0.71	−24	+12	+ 4	− 2	+15	− 7	+ 7	− 7	−13	− 1	−25						2	0.59
113853	23 03 23.71	+60 26 43.5	6.74	1	H	345.848 776 97	+60.445 409 89		1.69	7.58	−0.41	0.50	0.53	0.61	0.66	0.60	−26	+ 5	+15	+ 4	+12	−15	+16	−23	+11	−21						0	−0.69
113854	23 03 24.99	−20 36 14.5	8.62		H	345.854 124 46	−20.604 014 30		−0.13	−7.33	−3.36	1.18	0.73	1.41	1.51	0.98	+17	+ 7	−18	+10	+13	−11	+12	− 7	+47	− 3						5	1.68
113855	23 03 25.36	−19 18 47.4	8.35		H	345.855 680 63	−19.313 175 22		9.80	56.57	−40.05	0.97	0.72	1.24	1.40	0.86	+29	+ 1	−30	+17	− 3	+31	+ 2	−18	+40	+19						2	1.26
113856	23 03 27.39	+53 18 07.6	7.61		H	345.864 145 16	+53.302 106 82		3.61	23.43	−13.03	0.54	0.60	0.87	0.70	0.68	−20	+ 3	+38	−13	+19	+27	+ 9	−24	− 4	−28						0	−1.17
113857	23 03 27.61	−44 47 55.7	8.36		H	345.865 061 08	−44.798 810 35		9.61	−14.51	−29.66	0.83	0.81	1.13	1.19	0.93	+ 8	− 1	−31	+17	−14	+24	− 5	− 9	+25	+18						0	−0.19
113858	23 03 28.55	−43 04 41.4	7.76		G	345.868 947 98	−43.078 176 57		15.45	−4.75	−128.97	0.75	0.68	1.01	0.92	0.77	+13	−13	−32	+31	−23	+29	−18	−14	+33	+19						0	1.49
113859	23 03 29.16	+08 57 44.1	8.17		G	345.871 499 85	+08.962 238 65		5.96	20.24	12.03	0.89	0.69	1.07	1.12	1.01	+39	−23	−23	−17	− 5	+31	+ 4	− 9	+ 4	+34						0	−1.99
113860	23 03 29.76	−34 44 58.6	5.12	1	H	345.874 012 66	−34.749 617 18	+	34.98	74.80	84.45	1.95	3.55	0.80	0.81	0.70	+93	− 6	− 9	+ 3	−15	+35	−41	−41	+26	+28						0	−0.74
113861	23 03 29.80	−38 26 00.4	7.26		H	345.874 153 03	−38.433 442 64		2.13	−9.46	0.68	0.67	0.67	0.95	0.75	0.81	+25	+12	−11	− 3	− 8	+25	− 7	− 3	− 8	+31						0	0.98
113862	23 03 31.27	+41 22 52.5	9.27	2	H	345.880 293 73	+41.381 240 21	A	0.78	10.07	5.18	1.79	1.54	2.69	1.72	1.85	− 7	− 1	+16	+41	− 4	+20	+21	−20	+19	+42						2	2.02
113863	23 03 31.66	−56 29 55.6	7.47		G	345.881 917 84	−56.498 768 85		7.24	−11.29	18.25	0.46	0.51	0.80	0.52	0.52	−20	− 2	−10	−27	+ 1	+12	+ 4	−29	− 6	−20						0	−1.86
113864	23 03 32.85	+67 12 33.1	5.25		G	345.886 867 82	+67.209 184 87		8.48	23.13	10.24	0.44	0.44	0.52	0.56	0.55	− 6	− 7	+ 2	+28	+10	+ 1	+12	+ 8	+ 7	+ 4						0	1.14
113865	23 03 33.89	−21 41 10.5	9.74		H	345.891 213 50	−21.686 249 23		6.01	45.46	−23.00	1.51	0.93	1.47	1.90	1.04	+10	+ 3	+ 6	+44	− 5	+22	−13	+ 3	+ 7	− 8						0	0.79
113866	23 03 33.97	−36 44 29.9	8.98		H	345.891 534 89	−36.741 634 11		4.38	10.16	−28.97	0.90	0.74	1.11	1.13	0.95	+21	− 8	−15	+25	−12	+12	− 7	− 5	+ 1	+31						0	0.46
113867	23 03 34.99	−63 58 41.3	9.76	2	H	345.895 803 61	−63.978 140 55		7.80	65.04	−74.97	0.92	1.03	1.51	1.06	1.17	− 6	+ 8	− 7	− 8	+ 2	− 3	+ 3	−23	−25	+14						0	1.87
113868	23 03 35.37	−57 05 42.5	10.10	2	H	345.897 368 62	−57.095 148 27		14.65	−76.86	24.89	0.92	1.01	1.80	1.05	1.13	− 6	−26	−14	−27	−12	+37	−10	− 8	+ 2	+ 3						2	0.03
113869	23 03 35.42	+23 22 43.0	7.68		H	345.897 597 59	+23.378 606 53		5.34	18.02	0.81	0.71	0.69	0.95	0.70	0.68	+12	+17	−24	− 9	− 3	− 8	+ 1	−39	+37	+13						0	0.79
113870	23 03 35.55	−69 02 55.9	9.83		H	345.898 121 27	−69.048 856 62		3.81	4.31	−8.21	0.89	0.92	1.17	1.13	1.03	+ 3	−12	−31	−13	−12	+ 9	−10	−16	+ 5	+ 1						0	−1.03
113871	H 23 03 36.47	+64 45 26.0	8.91		H	345.901 943 76	+64.757 233 29	A	2.81	−5.66	−6.70	1.28	1.27	1.22	1.24	1.26	−20	− 6	+12	−13	+ 7	+ 3	+ 4	−29	+13	−21						2	0.36
113872	23 03 38.12	−26 48 47.9	6.82	2	H	345.908 847 32	−26.813 316 49		2.91	26.16	9.06	0.73	0.60	0.93	0.90	0.77	+35	−18	−34	− 9	+16	+ 9	+13	+ 5	+25	+43						0	0.49
113873	23 03 39.03	+31 05 16.6	8.78		H	345.912 630 48	+31.087 952 15		0.55	13.81	−5.85	0.73	0.62	1.10	0.79	0.76	− 5	+16	−11	+10	− 4	+ 0	+ 9	−39	+43	+ 8						0	−1.05
113874	23 03 41.15	+36 00 19.8	9.03		H	345.921 438 45	+36.005 507 18		6.70	35.61	4.65	0.83	0.69	1.26	1.01	0.75	− 1	+20	−19	− 6	− 4	+17	+ 9	−40	+43	+18						0	−0.74
113875	23 03 41.75	+36 01 03.0	9.43		H	345.923 975 51	+36.017 494 39		1.38	−7.35	−3.60	0.86	0.74	1.29	1.08	0.80	+ 7	+11	−10	− 8	− 9	+24	− 1	−35	+34	+22						0	−2.64
113876	H 23 03 42.27	+29 53 59.0	8.16		H	345.926 131 02	+29.899 735 98	A	12.52	−43.49	−102.51	1.02	0.95	1.39	1.09	1.04	+13	+15	− 6	+14	− 1	− 2	+ 6	−25	+32	+13						1	−0.34
113877	23 03 42.49	−40 49 01.3	6.85	2	H	345.927 021 22	−40.817 038 52		2.24	45.21	−0.80	0.60	0.53	0.79	0.72	0.65	+23	−21	−19	+ 9	− 7	+ 5	− 7	−12	+15	+32						0	−0.52
113878	23 03 44.22	−30 26 41.6	6.78		H	345.934 233 39	−30.444 893 55		5.67	40.49	19.04	0.68	0.54	0.79	0.76	0.60	+20	+ 3	−10	−30	+ 7	+ 8	+ 8	− 6	+ 5	+21						0	−0.70
113879	23 03 45.02	+02 36 32.2	8.14		H	345.937 581 59	+02.608 931 57		5.53	2.76	−11.01	0.99	0.66	1.11	1.75	0.93	+23	+14	− 7	− 4	+14	+14	+16	− 1	+11	−21						0	1.76
113880	23 03 45.78	+11 52 58.0	8.03		H	345.940 760 24	+11.882 770 07		5.65	58.27	−39.93	0.82	0.59	1.07	0.96	0.87	+22	+17	−15	− 5	− 2	− 1	+ 6	−16	+51	+ 0						2	1.12
113881	23 03 46.33	+28 04 56.8	2.44	2	H	345.943 055 75	+28.082 454 62		16.37	187.76	137.61	0.46	0.46	0.72	0.52	0.56	+25	+15	+ 5	+14	− 8	− 1	+ 1	−23	+28	+36						1	−0.31
113882	23 03 48.43	−50 26 58.2	8.93		H	345.951 771 67	−50.449 500 62		2.26	−37.72	1.94	0.84	0.96	1.34	0.92	0.96	+ 7	−11	−18	−22	+13	− 1	+12	− 4	− 3	+ 5						0	−0.12
113883	23 03 48.75	−71 05 04.1	10.21		H	345.953 140 52	−71.084 467 31		1.00	6.28	−11.08	1.05	1.09	1.41	1.20	1.22	− 3	− 1	+ 3	+ 2	− 1	−10	+ 0	− 3	− 8	+ 7						0	1.10
113884	23 03 50.59	+21 35 54.3	7.22		H	345.960 786 27	+21.598 404 34		36.14	−4.80	−57.51	0.83	0.66	1.01	1.20	0.79	+ 7	+10	− 3	+ 7	−16	−49	−11	+ 3	+17	−14						0	0.23
113885	23 03 51.38	−59 30 58.9	8.91		H	345.964 084 08	−59.516 369 95		11.11	29.13	−0.40	0.65	0.69	1.15	0.74	0.72	−30	+ 3	−12	− 2	+ 1	+14	+ 3	− 2	− 5	−17						1	−1.48
113886	23 03 51.97	−32 06 36.6	8.04		H	345.966 528 04	−32.110 180 35		3.99	44.71	−12.12	0.90	0.63	0.99	1.04	0.72	+10	+12	−17	−10	+ 6	+ 4	+ 8	+ 7	+11	+11						0	1.76
*113887	23 03 52.01	−05 26 44.1	9.48		H	345.966 702 51	−05.445 577 42		12.51	1.88	−66.63	1.47	0.99	1.56	2.35	1.29	+10	+ 2	−12	+25	+ 0	+32	− 4	− 1	−16	−19						0	−0.86
*113888	23 03 52.00	−44 35 42.0	9.30		G	345.966 676 07	−44.595 010 81		3.34	24.33	−27.04	1.06	0.97	1.36	1.28	1.19	+12	−15	− 2	+ 7	−14	+28	−16	− 9	+23	+21						0	0.69
113889	23 03 52.61	+03 49 12.3	4.48	1	H	345.969 193 80	+03.820 069 98		6.62	12.86	−10.13	0.76	0.60	0.81	0.88	0.82	+32	− 1	−10	− 8	+27	−14	+32	+33	− 8	+26						2	−0.48
113890	23 03 52.72	−57 24 35.3	9.70		H	345.969 656 49	−57.409 799 17		6.93	−47.52	−45.00	0.87	1.03	1.48	0.92	0.91	− 5	− 8	−25	− 6	−14	+23	− 7	−19	− 2	− 4						0	0.70
113891	23 03 54.63	−25 45 22.9	8.10		H	345.977 643 09	−25.756 361 75		4.60	3.81	−7.04	0.90	0.73	1.10	1.18	0.96	+44	−27	−27	+ 1	+15	+13	+13	+ 4	+19	+50						0	1.27
113892	23 03 55.19	+40 52 29.7	9.19		H	345.979 961 65	+40.874 921 63		2.44	−2.02	−7.19	0.91	0.61	1.09	1.03	0.71	− 8	+18	+ 9	− 8	+ 5	− 6	+15	−27	+10	+25						0	0.19
113893	23 03 55.40	+25 10 06.6	9.11		H	345.980 832 26	+25.168 497 23		6.69	16.14	−3.15	0.75	0.80	1.25	0.77	0.89	+58	+ 2	+ 1	+11	+16	+12	+17	+ 9	+21	+58	

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags		AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61		62	63	64	65	66	67	68-70
113801	7.189	0.006	6.082	0.004		0.946	0.006	G	0.94	0.00	H	6.1336	0.0010	0.008	80		6.12	6.15		C			1								S
113802	6.338	0.003	6.377	0.004	*	−0.020	0.015	G	0.00	0.01	H *	6.3861	0.0009	0.009	140	*	6.37	6.40			23028+4404	I 1	2 C	B	AB	40	7.575	0.032	3.73	0.14	S
113803	8.674	0.011	8.502	0.012		0.165	0.015	T	0.18	0.01	L	8.5519	0.0016	0.015	126		8.52	8.58		C			1	S							
113804	8.860	0.009	8.409	0.009		0.425	0.012	T	0.49	0.01	L	8.4579	0.0015	0.016	144		8.43	8.49		C			1								
113805	10.648	0.064	10.102	0.067		0.574	0.015	G	0.65	0.01	H	10.0967	0.0046	0.028	47		10.04	10.14		C			1								
113806	9.746	0.021	8.121	0.010		1.360	0.018	T	1.33	0.02	L	8.1007	0.0014	0.012	113		8.08	8.12		C			1								
113807	8.919	0.012	7.854	0.008		0.898	0.002	G	0.90	0.00	H	7.9213	0.0013	0.015	142		7.90	7.95		C			1								S
113808	10.477	0.035	9.071	0.018		1.188	0.031	T	1.15	0.03	L	9.1026	0.0017	0.015	100		9.08	9.13		C			1								
113809	10.059	0.022	9.777	0.026	A	0.303	0.140	G	0.46	0.06	L *	9.7808	0.0022	0.027	150	*	9.72	9.84			23028+5025	H 1	2 C	D	AB	147	1.424	0.061	3.31	0.26	G D
113810	8.950	0.012	8.600	0.013	*	0.332	0.017	T	0.39	0.02	L *	8.6530	0.0018	0.017	101	*	8.63	8.69		C	23029−1320	H 1	2 C S	A	AB	352	0.146	0.005	0.27	0.29	S
113811	9.621	0.021	8.022	0.011	*	1.340	0.019	T	1.30	0.02	L *	8.0041	0.0019	0.014	65	*	7.98	8.02		D	23029+0738	H 1	2 C S	A	AB	145	0.182	0.005	0.33	0.13	S
113812	12.018	0.152	10.775	0.078		1.042	0.020	G	1.01	0.02	I	10.9183	0.0040	0.041	95		10.82	11.02					1								G
113813	9.802	0.024	9.238	0.023		0.532	0.025	T	0.60	0.03	L	9.2930	0.0036	0.022	89		9.26	9.34					1								
113814	9.350	0.018	8.635	0.016		0.657	0.019	T	0.72	0.02	L	8.7129	0.0017	0.014	80		8.69	8.75					1								S
113815	10.527	0.032	9.125	0.017		1.185	0.028	T	1.15	0.03	L	9.1817	0.0016	0.017	127		9.15	9.22					1								
113816	11.376	0.067	9.967	0.032		1.190	0.058	T	1.15	0.05	L	9.9753	0.0034	0.026	100		9.93	10.01					1								G
113817	10.529	0.037	9.165	0.020		1.155	0.033	T	1.12	0.03	L	9.2338	0.0021	0.020	89		9.20	9.27		C			1								
113818	9.485	0.014	8.438	0.010		0.909	0.013	T	0.91	0.01	L	8.5080	0.0014	0.013	118		8.48	8.54		C			1								
113819	9.924	0.021	9.622	0.024		0.287	0.030	T	0.33	0.04	L	9.6083	0.0023	0.023	149		9.57	9.65		C			1								G
113820	9.977	0.023	8.431	0.012		1.298	0.020	T	1.26	0.02	L	8.4589	0.0018	0.015	126		8.44	8.48					1								
113821	6.577	0.004	6.631	0.007		−0.046	0.007	T	−0.02	0.01	L	6.6377	0.0009	0.007	83		6.63	6.65		C			1								S
113822	9.933	0.023	8.287	0.011		1.377	0.020	T	1.35	0.02	L	8.2662	0.0017	0.015	128		8.24	8.29					1								
113823	9.637	0.018	8.313	0.011		1.124	0.017	T	1.09	0.02	L	8.3643	0.0015	0.015	104		8.34	8.39		C			1								S
113824	7.994	0.009	7.810	0.009		0.176	0.012	T	0.19	0.01	L	7.8421	0.0019	0.016	107		7.81	7.87					1								S
113825	8.896	0.010	8.292	0.009		0.563	0.012	T	0.64	0.01	L	8.3320	0.0017	0.015	127		8.30	8.37		U 2			1								
113826	9.218	0.015	8.858	0.016		0.341	0.020	T	0.40	0.03	L	8.9184	0.0018	0.021	144		8.88	8.96					1								
113827	9.275	0.015	8.737	0.014		0.512	0.015	T	0.58	0.02	L	8.7858	0.0020	0.017	87		8.76	8.82		C			1	S							S
113828	9.804	0.027	9.448	0.030		0.337	0.038	T	0.39	0.05	L	9.4741	0.0031	0.020	53		9.45	9.52		C			1								
113829	7.409	0.011	6.725	0.009		0.620	0.011	T	0.69	0.01	L	6.7846	0.0018	0.011	48		6.77	6.81					1								S
113830	10.324	0.029	8.387	0.011		1.642	0.026	T	1.67	0.08	O	8.3201	0.0014	0.018	225		8.29	8.35					1								
113831	9.511	0.020	8.948	0.019	A	0.499	0.005	G	0.57	0.01	H *	8.9585	0.0029	0.018	86	*	8.93	9.00		D	23031−3330	I 1	2 C	A	AB	255	1.645	0.017	2.21	0.07	S
113832	9.109	0.018	8.599	0.017	*	0.479	0.023	T	0.55	0.02	L *	8.6373	0.0022	0.016	75	*	8.61	8.66		D	23031+0456	H 1	2 C	A	AB	262	0.637	0.013	2.36	0.06	S
113833	9.484	0.018	8.946	0.017		0.512	0.019	T	0.58	0.02	L	9.0045	0.0018	0.014	79		8.98	9.04					1								S
113834	8.469	0.011	7.857	0.012		0.578	0.004	G	0.65	0.00	H	7.9103	0.0013	0.012	84		7.89	7.94		C			1								S
113835	9.605	0.018	9.732	0.028		−0.110	0.030	T	−0.09	0.04	L	9.6530	0.0023	0.027	155		9.60	9.70		C			1	S							G
113836	10.299	0.031	8.997	0.018		1.107	0.028	T	1.07	0.03	L	9.0405	0.0030	0.017	82		9.02	9.07					1								S
113837	7.948	0.007	7.793	0.008		0.141	0.010	T	0.16	0.01	L	7.8132	0.0014	0.013	169		7.79	7.84			23032−6223	I 1	1	S							S
113838	8.269	0.011	7.946	0.012		0.334	0.015	G	0.39	0.02	H	8.0004	0.0011	0.012	92		7.98	8.02		C			1								S
113839	8.441	0.011	7.850	0.009		0.523	0.012	G	0.60	0.01	H	7.9108	0.0020	0.015	84		7.89	7.93		C			1								S
113840	10.533	0.031	8.918	0.014		1.352	0.027	T	1.32	0.03	L	8.9206	0.0019	0.019	119		8.89	8.95					1								
113841	10.410	0.026	9.451	0.019		0.839	0.012	G	0.86	0.01	H	9.5387	0.0024	0.034	165		9.48	9.59					1								
113842	8.227	0.006	7.704	0.006		0.490	0.004	G	0.56	0.00	H	7.7635	0.0011	0.014	207		7.74	7.79					1								S
113843	10.221	0.039	8.877	0.022		1.140	0.035	T	1.10	0.04	L	8.9330	0.0031	0.020	58		8.91	8.96		C			1								
113844	8.075	0.008	7.676	0.008		0.396	0.015	G	0.46	0.02	H	7.7240	0.0008	0.011	135		7.71	7.74					1								S
113845	10.260	0.031	8.705	0.014		1.265	0.020	G	1.22	0.02	R	8.6976	0.0019	0.014	101		8.68	8.72					1								
113846	11.143	0.057	10.455	0.047		0.600	0.020	G	0.67	0.02	H	10.5113	0.0039	0.034	96		10.43	10.57		C			1								
113847	8.564	0.010	7.356	0.007		1.033	0.010	T	1.01	0.01	L	7.4120	0.0011	0.010	100		7.39	7.43					1								S
113848	10.822	0.039	10.423	0.043		0.390	0.049	T	0.46	0.05	L	10.5070	0.0040	0.026	98		10.45	10.55		C			1								
113849	8.951	0.012	8.632	0.013		0.306	0.019	T	0.35	0.03	L	8.6744	0.0016	0.016	125		8.65	8.70		C			1								
113850						1.643	0.082	G	1.88	0.19	S	10.7461	0.0041	0.040	148		10.66	10.81		R			1								G
113851	8.207	0.008	8.167	0.010		0.040	0.015	G	0.06	0.01	H	8.2045	0.0014	0.015	127		8.18	8.23					1								
113852	7.582	0.007	6.538	0.005	*	0.898	0.003	G	0.90	0.00	H *	6.5877	0.0008	0.006	115	*	6.58	6.60		D	23034+5834	H 1	2 C	A	AB	94	0.313	0.019	3.04	0.23	S
113853	6.682	0.004	6.734	0.005		−0.044	0.006	T	−0.02	0.01	L	6.7374	0.0011	0.011	117		6.72	6.75	4.18	P 1 A	23034+6027	I 1	1								S P
113854	10.364	0.040	8.759	0.018		1.345	0.035	T	1.31	0.04	L	8.7729	0.0023	0.016	67		8.74	8.81		C			1								
113855	8.802	0.015	8.408	0.015		0.385	0.018	T	0.45	0.02	L	8.4379	0.0013	0.012	70		8.41	8.46		D			1								S
113856	8.945	0.013	7.733	0.009		1.036	0.012	T	1.01	0.01	L	7.7798	0.0012	0.011	122		7.76	7.80					1								
113857	8.929	0.014	8.423	0.014		0.486	0.015	T	0.56	0.02	L	8.4663	0.0023	0.016	83		8.44	8.49		C			1								S
113858	8.422	0.011	7.837	0.009		0.547	0.006	G	0.62	0.01	H	7.8860	0.0011	0.014	109		7.86	7.91		C			1								S
113859	8.638	0.013	8.209	0.013		0.384	0.008	G	0.45	0.01	H	8.2704	0.0016	0.008	79		8.26	8.29		C			1								S
113860	5.474	0.003	5.163	0.003		0.305	0.023	G	0.37	0.02	A	5.2014	0.0011	0.009	105		5.19	5.21		M			1 O								S
113861	9.282	0.016	7.426	0.007		1.543	0.014	T	1.69	0.02	A	7.3655	0.0018	0.015	94		7.34	7.39					1								S
113862	9.391	0.011	9.252	0.014	A	0.134	0.017	T	0.15	0.02	L	9.3182	0.0173	0.064	202	A	9.23	9.42		U 2	23035+4123	H 1	2 C	A	AB	353	17.884	0.014	1.29	0.06	
113863	7.955	0.006	7.514	0.006		0.417	0.003	G	0.48	0.00	H	7.5683	0.0011	0.014	203		7.55	7.59					1								S
113864	6.859	0.004	5.368	0.003		1.248	0.003	G	1.21	0.00	H	5.4022	0.0005	0.005	127		5.39	5.41					1								S
113865	11.150	0.059	9.858	0.032		1.099	0.052	T	1.06	0.05	L	9.9054	0.0030	0.024	77		9.88	9.98		C			1								
113866	10.701	0.036	9.083	0.016		1.355	0.031	T	1.32	0.04	L	9.1301	0.0019	0.017	111		9.10	9.16		C			1								
113867	10.460	0.029	9.788	0.025		0.611	0.029	T	0.68	0.03	L	9.8911	0.0048	0.040	157		9.80	9.95		U			1	S							
113868	10.949	0.038	10.181	0.032		0.684	0.038	T	0.74	0.03	L	10.2350	0.0034	0.043	194		10.14	10.31		U			1	S							
113869	7.761	0.010	7.691	0.011		0.069	0.014	T	0.08	0.01	L	7.7054	0.0015	0.009	61		7.69	7.72					1								S
113870	10.005	0.022	9.855	0.027		0.136	0.033	T	0.15	0.03	L	9.8804	0.0022	0.032	123		9.82	9.93					1								
113871	9.278	0.014	8.969	0.015	*	0.294	0.020	T	0.34	0.03	L *	8.9835	0.0018	0.018	127	*	8.96	9.01		D	23036+6445	I 1	2 C	A	AB	295	0.527	0.007	1.89	0.03	
113872	8.943	0.013	7.014	0.006		1.635	0.012	T	2.00	0.05	O	6.8969	0.0048	0.025	102		6.86	6.94		U 2			1	S							S
113873	8.885	0.011	8.785	0.013		0.097	0.016	T	0.11	0.02	L	8.8169	0.0018	0.017	123		8.78	8.86					1								
113874	9.537	0.019	9.041	0.019		0.466	0.024	T	0.54	0.03	L	9.1358	0.0019	0.017	96		9.10	9.16		C			1								
113875	9.479	0.019	9.416	0.024		0.063	0.028	T	0.07	0.03	L	9.4563	0.0025	0.020	97		9.42	9.49					1								
113876	8.831	0.009	8.313	0.009	A	−0.300	0.495	G	0.55	0.06	L *	8.2673	0.0012	0.013	144	*	8.24	8.29		D	23037+2954	I 1	2 C	A	AB	172	2.678	0.012	2.29	0.05	
113877	8.956	0.012	7.041	0.006		1.624	0.011	T	1.94	0.04	O	6.9338	0.0027	0.021	95		6.90	6.96		U 2			1								S
113878	7.985	0.009	6.899	0.006		0.939	0.008	T	0.93	0.01	L	6.9458	0.0009	0.008	95		6.93	6.97					1								S
113879	9.586	0.025	8.269	0.015		1.118	0.023	T	1.08	0.02	L	8.3113	0.0022	0.017	63		8.28	8.34					1	S							
113880	8.598	0.011	8.096	0.011		0.493	0.015	G	0.57	0.02	H	8.1423	0.0012	0.012	97		8.12	8.16		C			1								S
113881	4.612	0.009	2.659	0.008		1.655	0.010	T	2.31	0.06	O	2.4861	0.0093	0.075	114		2.43	2.63		U 2 C	23038+2804	I 1	1	S							S
113882	10.472	0.029	9.065	0.016		1.189	0.026	T	1.15	0.02	L	9.0900	0.0021	0.022	125		9.06	9.13		C			1								
113883	11.589	0.074	10.354	0.039		1.054	0.065	T	1.02	0.05	L	10.3784	0.0036	0.034	137		10.31	10.45		C			1	S							
113884	7.979	0.013	7.296	0.010		0.631	0.015	G	0.70	0.01	H	7.3499	0.0013	0.010	47		7.32	7.36					1 G								S
113885	9.616	0.013	8.971	0.011		0.592	0.013	T	0.66	0.01	L	9.0430	0.0021	0.026	240		9.01	9.09					1								
113886	9.762	0.021	8.190	0.011		1.319	0.019	T	1.28	0.02	L	8.1929	0.0013	0.015	95		8.17	8.21					1								S
113887	10.208	0.043	9.559	0.039		0.602	0.050	T	0.67	0.04	L	9.6072	0.0027	0.017	49		9.57	9.64		C			1								
113888	10.180	0.030	9.436	0.025		0.737	0.016	G	0.78	0.01	H	9.4361	0.0028	0.022	79		9.40	9.48		C			1								
113889	4.345	0.003	4.474	0.003		−0.115	0.016	G	−0.09	0.02	A	4.4527	0.0012	0.008	69		4.42	4.47		U 2			1								S
113890	10.435	0.025	9.757	0.022		0.616	0.025	T	0.68	0.02	L	9.8324	0.0028	0.035	174		9.76	9.89					1								
113891	9.500	0.020	8.205	0.012		1.101	0.018	T	1.06	0.02	L	8.2670	0.0016	0.013	87		8.25	8.28		C			1								S
113892	9.430	0.014	9.193	0.016		0.226	0.020	T	0.25	0.02	L	9.2607	0.0019	0.022	150		9.23	9.30		C			1								
113893	10.427	0.027	9.220	0.016		1.032	0.024	T	1.00	0.02	L	9.2743	0.0016	0.021	179		9.25	9.33		C			1								
113894						1.410	0.020	G	1.70	0.05	I	12.3210	0.0089	0.076	75		12.00	12.45					1	S							D
113895	10.174	0.028	9.494	0.025		0.617	0.028	T	0.69	0.03	L	9.5160	0.0019	0.019	99		9.49	9.55					1								
113896	7.389	0.007	6.763	0.008		0.581	0.006	G	0.70	0.07	F	6.8189	0.0010	0.007	52		6.81	6.83		C			1								S
113897	9.222	0.016	9.025	0.019		0.250	0.015	G	0.28	0.02	H	9.0553	0.0034	0.034	116		9.00	9.20		U 2			1	S							P
113898	9.381	0.015	9.038	0.016		0.325	0.020	T	0.38	0.03	L	9.0834	0.0023	0.020	116		9.05	9.12		C			1								
113899	10.216	0.026	9.020	0.017		1.024	0.024	T	1.00	0.02	L	9.0800	0.0020	0.015	98		9.06	9.11		C			1								
113900	7.953	0.006	7.764	0.007		0.173	0.009	T	0.19	0.01	L	7.8001	0.0014	0.015	202		7.78	7.83					1								S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\mu_{\alpha*}$	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$			F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr															%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28			29	30
*113901 H	23 03 59.63	−46 10 03.8	8.12	G	345.998 474 80	−46.167 714 75	A	8.52	85.33	6.74	1.54	1.07	1.40	1.93	1.19	+19	−14	+ 0	+10	−10	+ 6	− 9	− 5	+16	+40			0	0.04
*113902	23 03 59.63	−41 28 44.5	5.79	G	345.998 457 00	−41.479 031 94		10.84	12.25	55.93	0.57	0.52	0.81	0.67	0.58	+17	−12	−29	+21	−14	+29	− 7	−14	+23	+26			0	1.08
113903	23 03 59.94	−36 52 56.3	10.35	2 H	345.999 750 80	−36.882 299 74		5.96	−1.97	−15.30	1.27	1.24	1.76	1.47	1.44	+32	+ 3	−18	+31	+ 2	+16	+ 7	+15	+ 2	+42			2	1.18
113904	23 04 00.80	+06 36 58.8	6.42	H	346.003 312 90	+06.616 320 17		12.01	−28.43	7.44	0.78	0.53	0.83	1.05	0.72	+24	−13	−17	−22	+15	− 5	+27	+16	−18	− 9			2	0.24
*113905	23 04 01.96	+74 28 38.4	8.12	H	346.008 174 39	+74.477 338 14		20.49	107.38	33.99	0.59	0.56	0.66	0.74	0.63	+ 4	+ 1	+ 9	+13	+ 2	−11	+ 1	+27	+ 5	+18			1	−0.07
*113906	23 04 01.94	−45 23 07.3	9.36	G	346.008 066 51	−45.385 371 32		10.44	11.19	−6.40	1.19	1.00	1.55	1.61	1.24	+15	+ 1	−23	− 3	−19	+24	−12	−17	+29	+31			0	−1.49
113907 H	23 04 02.23	+63 23 48.8	7.64	2 H	346.009 274 97	+63.396 880 15	A	1.38	−2.02	−0.77	1.12	1.01	0.97	1.03	0.90	+ 2	− 1	+ 2	−21	+10	+14	+ 6	−23	+12	+ 2			5	0.77
113908	23 04 03.01	+55 15 55.9	9.21	H	346.012 527 64	+55.265 538 04		2.65	−4.21	−1.67	0.66	0.72	0.91	0.75	0.83	−18	+ 5	+17	+13	− 5	− 6	− 1	+ 1	+14	− 6			0	−0.98
113909	23 04 03.02	−01 04 27.2	9.83	H	346.012 580 61	−01.074 211 78		3.91	36.70	−7.84	1.41	0.96	1.72	2.10	1.37	+29	−10	−10	−34	+ 9	− 3	+10	−18	+48	−24			0	−0.41
113910	23 04 03.60	−22 42 36.4	7.58	H	346.014 992 08	−22.710 108 35		4.45	23.30	4.66	0.93	0.60	0.95	1.15	0.76	+17	−13	+ 4	+24	+13	+ 2	+12	+12	+ 4	+18			0	0.92
113911	23 04 04.16	−68 20 53.2	8.71	H	346.017 333 79	−68.348 116 95		1.08	−12.38	−18.69	0.77	0.74	1.02	1.01	0.83	−10	+ 6	−23	+13	− 4	−14	− 7	−14	+20	−18			0	0.30
113912	23 04 04.37	−37 31 46.7	10.81	G	346.018 225 27	−37.529 633 63		9.16	54.55	−24.97	1.48	1.29	1.93	1.70	1.58	+20	+ 9	− 9	+24	−15	+19	−12	− 7	− 3	+29			0	1.22
113913	23 04 05.19	+03 17 36.3	7.40	G	346.021 609 61	+03.293 405 35		9.92	103.31	−54.96	0.84	0.64	0.89	1.01	0.87	+25	+ 5	−10	−22	+20	−10	+24	+17	− 2	+19			0	0.80
*113914	23 04 06.10	−34 05 51.4	9.65	H	346.025 435 67	−34.097 607 63		7.30	−12.87	−37.65	1.62	0.97	1.51	1.56	1.20	−	4	+22	−11	−41	+24	+ 1	+30	− 9	+20	+ 6		0	−0.74
*113915	23 04 06.09	−46 00 02.0	8.15	G	346.025 363 22	−46.000 552 76		10.32	−10.46	−67.93	0.98	0.67	1.08	1.20	0.77	+14	− 9	−15	−13	−23	+23	−21	−23	+27	+25			0	0.51
113916	23 04 06.92	−28 14 17.4	8.23	H	346.028 845 87	−28.238 155 71		1.53	−13.78	−15.73	1.01	0.75	1.22	1.17	0.93	+26	−32	−30	−34	− 7	+38	+ 5	−19	+ 5	+24			0	1.64
113917	23 04 08.12	+48 38 32.6	9.66	H	346.033 841 25	+48.642 379 77		−1.63	0.03	−3.34	0.73	0.82	1.22	0.77	0.79	−29	− 1	+ 9	− 5	+10	− 9	+11	− 9	+ 4	− 6			0	−0.85
113918	23 04 10.49	+59 43 36.5	8.62	G	346.043 714 10	+59.726 795 11		5.04	28.31	7.03	0.70	0.75	0.86	0.91	0.97	−22	+ 6	+12	+15	+11	− 1	+11	+ 0	+16	−30			0	−0.81
113919	23 04 10.83	+50 03 06.1	4.64	H	346.045 132 31	+50.051 683 97		18.20	166.70	167.30	0.37	0.43	0.57	0.37	0.43	−29	+ 3	+17	+ 2	− 7	− 6	− 5	+ 2	+15	−21			1	−0.18
113920	23 04 11.45	−22 14 04.7	7.46	H	346.047 723 50	−22.234 634 68		6.96	5.53	−34.45	0.84	0.57	0.94	1.03	0.70	+28	−15	+ 4	+19	+15	+14	+11	+ 4	+17	+24			0	2.46
113921 H	23 04 12.04	−55 01 29.2	8.18	G	346.050 181 34	−55.024 776 01	A	10.58	−0.62	74.41	2.24	1.73	2.38	2.12	1.56	−14	− 2	+15	+13	−18	+10	−22	−16	−26	−33			2	1.76
*113922	23 04 12.25	−50 15 58.8	8.63	H	346.051 051 88	−50.266 333 67		2.18	6.73	−1.82	0.78	0.84	1.22	0.87	0.93	+12	− 3	−17	−19	+ 3	+ 3	+ 5	+ 0	− 1	+ 3			0	−0.50
*113923	23 04 12.29	−33 48 06.3	9.60	H	346.051 206 58	−33.801 749 86		4.90	7.21	0.45	1.48	0.99	1.53	1.75	1.16	−	2	+22	−26	−29	+33	−17	+31	+ 4	+16	+ 6		0	0.30
*113924	23 04 12.23	−41 25 12.9	9.84	G	346.050 962 92	−41.420 263 16		1.30	−2.57	1.18	1.25	1.03	1.65	1.52	1.07	+ 6	+ 5	−31	+30	−20	+24	−11	−21	+26	+11			2	−0.91
113925	23 04 13.34	−12 47 26.7	9.02	H	346.055 598 06	−12.790 753 87		4.78	−15.60	−3.79	1.26	0.73	1.81	1.87	1.45	+33	+30	− 6	+21	+14	+52	+36	−13	+66	+55			0	−0.05
113926	23 04 13.36	−05 46 24.7	8.38	H	346.055 684 77	−05.773 530 14		12.21	91.15	19.08	1.03	0.93	1.26	1.49	1.13	+34	+ 1	−20	+27	+10	+43	+21	+34	− 7	+17			0	−0.59
113927	23 04 15.84	+45 28 53.6	8.92	H	346.065 995 78	+45.481 542 27		4.61	14.12	−5.61	0.57	0.66	1.06	0.59	0.74	−14	+14	+ 7	−33	− 1	−12	− 3	−21	− 5	+ 4			0	−2.19
113928	23 04 15.89	+75 31 01.9	7.83	H	346.066 191 24	+75.517 198 22		2.08	12.66	5.49	0.58	0.56	0.64	0.61	0.62	−18	−14	+18	+19	−18	+ 2	−21	+12	+ 8	−20			0	−0.35
113929	23 04 15.98	−33 02 31.1	7.92	H	346.066 586 35	−33.041 959 11		4.93	56.24	−31.31	1.14	0.69	1.12	1.41	0.81	−17	+29	−21	−49	+33	−16	+34	− 8	+26	−17			0	−0.03
113930	23 04 17.19	−16 00 35.5	9.25	2 H	346.071 632 41	−16.009 867 92		1.01	9.48	−34.03	1.62	0.79	1.46	1.75	1.04	+ 2	+13	−14	−44	+20	+ 7	+32	−24	+32	−14			0	0.21
113931	23 04 18.47	−01 53 59.5	9.12	H	346.076 948 91	−01.899 853 96		12.57	59.45	24.09	1.06	0.81	1.59	1.34	1.29	+40	−13	−23	− 5	+ 6	+ 2	− 2	−15	+62	+12			0	0.17
113932	23 04 18.91	+34 10 41.9	8.39	H	346.078 783 06	+34.178 295 62		2.06	−24.45	−22.24	1.28	1.18	1.76	1.53	1.31	+20	+12	− 7	+ 3	−14	− 9	− 3	−44	+26	+32			0	
113933	23 04 19.72	+70 38 03.6	8.32	G	346.082 155 27	+70.634 346 62		11.47	34.59	−1.54	0.68	0.58	0.78	0.81	0.65	−20	−22	+27	−10	+ 8	+30	+ 0	+ 2	+ 1	−24			0	0.44
113934 H	23 04 19.80	+51 30 58.2	9.46	H	346.082 497 33	+51.516 179 35	A	2.41	7.87	−6.01	1.29	1.47	1.73	1.30	1.28	−23	+ 1	+26	−26	+ 7	− 3	+ 9	−32	− 1	+ 0			0	−0.25
113935	23 04 20.39	−30 17 10.0	8.68	H	346.084 967 50	−30.286 097 53		1.55	9.78	−10.86	1.04	0.85	1.17	1.24	1.01	+ 9	+13	− 3	−42	+19	− 6	+21	− 2	+ 7	+ 4			4	−0.44
113936	23 04 22.83	−06 41 22.6	7.48	H	346.095 136 70	−06.689 607 21		3.19	−31.38	−32.80	1.14	0.83	1.23	1.40	1.11	+23	+12	− 3	− 7	+27	+16	+33	+26	+26	+19			0	1.02
113937	23 04 23.61	−24 06 56.0	9.06	H	346.098 382 60	−24.115 561 75		3.36	8.39	−0.07	0.98	0.79	1.22	1.24	1.02	+44	−24	−17	+ 3	+28	+17	+25	+17	+20	+50			0	−1.12
113938	23 04 24.93	+41 16 27.9	7.77	H	346.103 871 05	+41.274 416 02		3.61	17.23	−0.45	0.55	0.44	0.83	0.58	0.55	−	7	+ 9	+13	+53	+ 3	+14	+26	−15	+17	+30			0	−1.16
113939	23 04 25.16	+56 27 24.4	7.98	2 H	346.104 836 33	+56.456 779 56		0.71	−1.03	−9.06	0.64	0.61	0.83	0.82	0.63	−20	− 1	+22	+32	− 3	+10	− 3	+ 6	+27	− 9			0	1.07
113940	23 04 25.28	+46 32 42.8	9.43	H	346.105 330 22	+46.545 213 04		1.97	−4.30	−4.79	0.70	0.89	1.33	0.84	1.02	−31	+ 5	+15	+ 9	+14	−29	+27	−18	+12	− 9			0	0.20
113941	23 04 25.88	+57 14 15.6	11.14	G	346.107 831 99	+57.237 669 93		16.26	−279.39	11.45	1.52	1.42	1.97	2.20	1.64	−19	− 2	+14	− 5	+ 7	+22	+ 4	−14	+18	− 5			3	−1.70
113942	23 04 27.04	−40 07 50.7	11.17	H	346.112 662 62	−40.130 749 05		13.97	81.66	−4.38	1.52	1.39	2.03	1.79	1.69	+20	−14	−18	+14	+ 0	+ 7	+ 2	+ 2	+10	+34			0	0.68
113943	23 04 27.23	−42 04 27.5	9.24	H	346.113 452 93	−42.074 309 15		2.12	4.25	−10.69	0.99	0.87	1.35	1.04	0.99	+16	−13	−12	−11	− 9	+41	− 9	−14	+29	+28			0	1.18
113944	23 04 29.76	+66 45 52.5	9.86	H	346.123 988 52	+66.764 578 53		49.94	303.53	−79.87	0.90	0.83	1.04	1.14	1.13	+ 8	− 6	+ 3	+ 8	+13	−11	+15	− 5	+13	+16			0	−0.62
113945	23 04 30.21	−12 10 45.2	8.18	H	346.125 859 86	−12.179 209 79		3.07	1.87	−18.12	1.15	0.78	1.33	1.89	1.13	+37	+ 4	+ 2	+17	+36	+26	+31	+ 9	+33	+22			0	−0.42
113946	23 04 32.56	+26 27 57.8	10.15	H	346.135 654 63	+26.466 051 91		1.84	1.21	4.30	0.99	1.05	1.58	1.07	1.06	+39	+ 4	− 2	+19	+ 1	− 6	+ 1	− 8	+17	+34			0	0.06
113947	23 04 32.66	+63 14 26.1	6.63	H	346.136 063 13	+63.240 586 46		6.03	−2.55	34.74	0.49	0.53	0.61	0.59	0.57	−15	− 1	+ 8	−10	+ 7	+ 6	+ 5	−29	+12	−19			0	−0.05
113948	23 04 32.92	−25 41 26.7	8.05	H	346.137 182 88	−25.690 736 54		18.62	−81.03	−151.81	0.95	0.78	1.12	1.23	0.97	+27	−12	−27	−19	+25	+ 1	+23	− 1	+12	+29			0	1.13
113949	23 04 34.41	+46 19 48.2	9.29	H	346.143 356 32	+46.330 054 37		3.42	12.37	−1.73	0.67	0.85	1.25	0.79	1.00	−29	+12	+ 5	− 8	+13	−13	+18	−24	+ 2	− 6			0	0.59
113950	23 04 35.45	+44 13 10.1	10.36	H	346.147 712 73	+44.219 483 87		4.35	−0.06	−3.28	1.83	1.62	2.67	2.05	1.87	−	9	+13	+14	−13	+ 3	− 4	+ 7	−23	+ 7	+15			1	
113951	23 04 36.11	+52 26 37.3	8.86	G	346.150 469 81	+52.443 691 32		0.98	2.49	−1.93	0.64	0.80	1.07	0.79	0.83	−27	−14	+46	−16	+24	+27	+15	− 7	− 3	−31			0	−0.97
113952	23 04 36.36	+31 18 27.2	6.77	H	346.151 506 06	+31.307 545 96		14.60	85.81	−35.49	0.52	0.49	0.82	0.59	0.62	+	1	+18	−17	+22	− 5	−18	+ 6	−44	+40	+ 6		2	−1.00
113953	23 04 37.49	−68 22 45.2	9.18	H	346.156 202 50	−68.379 208 43		1.90	27.58	−2.52	0.83	0.88	1.15	1.08	0.89	−	8	− 1	−23	+13	− 4	−18	− 9	− 9	+16	−20		1	0.13
113954	23 04 38.04	−26 10 58.7	8.80	H	346.158 509 55	−26.182 976 76		6.63	61.54	49.02	1.11	0.84	1.24	1.46	1.15	+23	−14	−21	−16	+34	− 5	+29	+ 8	+15	+31			4	1.07
113955	23 04 38.31	−51 46 37.6	8.47	H	346.159 632 48	−51.777 118 41		1.90	21.05	−18.78	0.87	0.79	1.18	1.20	0.81	+19	− 8	−26	+19	+14	+ 3	+13	+11	+ 7	+28			0	1.04
113956	23 04 38.85	−03 29 40.2	9.33	H	346.161 863 89	−03.494 495 17		4.02	35.68	0.20	1.28	0.89	1.58	1.66	1.11	+11	+15	−25	+ 3	− 5	+30	+ 9	− 6	+36	+ 6			0	−1.21
113957	23 04 39.57	−53 57 52.7	5.37	G	346.164 878 64	−53.964 647 12		8.36	56.97	−106.16	0.38	0.42	0.68	0.42	0.41	−	4	− 5	−12	+ 8	− 9	+20	− 8	−12	− 4	−15		1	0.56
113958	23 04 39.95	+08 51 11.9	7.38	H	346.166 443 57	+08.853 318 55		6.54	1.94	−40.28	0.87	0.64	0.92	1.01	0.90	+29	−14	− 1	− 2	+21	+16	+26	+27	− 1	+25			0	−0.15
113959	23 04 40.05	−32 49 09.8	7.87	G	346.166 871 27	−32.819 382 27		12.50	63.67	−73.85	0.94	0.63	0.96	1.14	0.68	−	6	+18	−24	−35	+22	−12	+20	+ 5	+ 5	− 6		0	0.46
113960	23 04 40.68	+49 19 47.5	7.83	H	346.169 495 67	+49.329 863 66		7.19	49.80	20.69	0.49	0.55	0.77	0.52	0.56	−30	− 3	+20	+ 3	+ 6	−10	+10	− 8	− 2	− 9			1	−2.11
113961	23 04 41.21	−35 07 49.3	10.03	H	346.171 725 76	−35.130 349 84		4.35	−0.35	−22.99	1.07	1.10	1.62	1.23	1.38	+41	−21	−24	+24	−10	+17	− 5	− 7	+ 6	+49			0	−1.49
113962	23 04 44.90	+25 49 37.3	10.80	H	346.187 092 13	+25.827 031 29		−0.90	−1.98	−1.41	1.27	1.35	1.94	1.37	1.34	+50	+ 1	+12	− 1	− 6	+ 0	− 8	−16	+15	+38			1	1.85
113963	23 04 45.62	+15 12 19.3	2.49	G	346.190 070 20	+15.205 367 86		23.36	61.10	−42.56	0.61	0.43	0.76	0.63	0.60	+22	+14	+ 1	+15	+ 3	+ 1	+ 7	+ 6	+36	+11			0	−0.80
113964	23 04 46.61	−67 54 10.8	9.42	H	346.194 220 08	−67.903 000 16		8.69	−112.31	−38.07	0.83	0.82	1.11	1.00	0.92	−	2	− 5	−30	−25	− 1	+ 2	− 2	− 2	+ 5	+ 3		1	−0.84
113965	23 04 47.15	−05 09 47.4	8.58	H	346.196 447 16	−05.163 167 56		−0.28	6.44	−20.84	1.26	0.96	1.41	1.61	1.13	+18	+12	−29	+ 6	+21	+ 1	+24	+20	+11	+10			0	−0.78
113966	23 04 48.12	+09 04 12.2	8.19	H	346.200 511 56	+09.070 057 27		5.18	3.55	5.48	0.97	0.78	1.06	1.19	1.15	+33	− 1	− 2	−10	+12	+18	+16	+ 7	+ 2	+35			2	0.60
113967	23 04 50.20	−27 08 09.8	6.97	H	346.209 177 64	−27.136 048 37		9.72	−18.83	−4.06	0.75	0.58	0.86	0.90	0.76	+31	−12	−22	−13	+ 3	+ 5	+ 3	− 8	+14	+43			0	0.82
113968	23 04 51.44	−49 59 22.8	11.96	2 H	346.214 340 16	−49.989 659 47		21.33	64.21	−389.05	2.19	2.70	3.65	2.48	3.04	+11	− 7	−10	−12	+11	+ 0	+11	+15	+ 3	+ 8			0	−2.62
113969	23 04 52.15	−68 49 13.4	5.53	H	346.217 285 16	−68.820 379 73		18.08	44.78	63.39	0.45	0.41	0.56	0.53	0.43	+	4	− 3	−22	− 5	− 5	+ 2	− 4	−11	+ 4	+15		0	−1.21
113970	23 04 52.36	−67 07 45.4	8.62	H	346.218 183 89	−67.129 285 18		1.30	11.27	5.84	0.67	0.68	0.94	0.75	0.66	−11	− 1	−36	−14	− 5	+ 3	− 4	− 2	− 6	−10			3	0.51
113971	23 04 53.92	−76 55 43.0	8.31	H	346.224 670 61	−76.928 617 22		0.85	20.62	−14.92	0.66	0.61	0.80	0.78	0.61	+	0	+ 1	−25	+ 6	+ 4	+ 5	+ 8	−19	+10	+19		0	0.04
113972	23 04 53.95	−23 09 29.4	9.34	H	346.224 791 02	−23.158 169 53		9.18	−0.25	−30.48	1.21	0.80	1.31	1.66	1.17	+21	−19	−12	−26	+13	+21	+13	−18	+21	+25			0	0.12
113973	23 04 54.03	+10 16 23.1	8.67	H	346.225 131 54	+10.273 088 22		6.72	119.35	111.97	1.18	0.92	1.46	1.76	1.27	+26	− 6	−42	−27	+12	+ 0	+24	+ 9	+13	− 4			0	−1.07
113974	23 04 54.28	+07 53 05.1	8.40	H	346.226 148 33	+07.884 743 33		10.34	15.76	−11.89	1.01	0.68	1.09	1.11	0.91	+27	+25	−11	− 2	+22	−14	+26	+23	+ 5	+23			0	−0.24
113975	23 04 55.32	+56 41 26.1	6.81	H	346.230 480 39	+56.690 596 53		3.28	12.47	−7.59	0.50	0.46	0.62	0.69	0.50	−17	+ 6	+21	+28	− 5	+10	− 4	+ 1	+ 6	− 7			1	1.43
113976	23 04 57.17	+04 35 59.8	7.35	H	346.238 200 06	+04.599 933 14		1.92	31.51	−4.55	0.93	0.65	1.00	1.36	0.99	+30	+ 3	+ 0	+23	+21	+26	+22	+26	− 3	+17			0	0.29
113977	23 04 57.88	+06 31 02.7	7.92	H	346.241 185 38	+06.517 420 63		3.55	−8.93	1.73	0.89	0.67	1.01	1.32	0.89	+32	− 7	−11	+ 2	+12	+ 8	+16	+14	− 9	− 3			0	1.25
113978	23 04 59.26	+05 11 46.4	8.80	H	346.246 917 36	+05.196 229 67		5.63	−2.54	−17.02	1.18	0.93	1.42	1.84	1.28	+27	− 1	−36	+20	− 4	+16	− 3	+ 1	− 3	+ 3			0	−0.02
113979	23 04 59.84	+35 04 02.2	9.65	H	346.249 346 84	+35.067 274 19		4.77	5.79	−7.70	0.95	0.83	1.34	1.08	0.92	−	2	+ 9	− 8	+25	− 8	−19	+ 5	−41	+25	+13		0	1.57
113980	23 05 00.07	+04 13 32.9	7.07	H	346.250 297 53	+04.225 795 62		21.94	153.93	−161.72	0.86	0.60	0.92	1.15	0.83	+31	+12	+ 0	+25	+17	+22	+18	+18	+ 5	+20			0	1.12
*113981	23 05 00.60	+18 37 52.3	7.24	H	346.252 495 34	+18.631 205 05		12.98	124.03	7.19	0.77	0.74	0.96	0.81	0.80	+18	+19	−24	− 8	− 4	− 4	− 4	− 6	+ 4	+26			0	−0.63
*113982	23 05 00.59	−58 46 31.9	8.76	H	346.252 441 69	−58.775 522 71		3.91	17.64	0.17	0.54	0.58	0.93	0.59	0.59	−34	+ 7	− 7	+ 8	+ 5	+ 4	+ 6	− 9	+ 9	−27			0	0.47
113983	23 05 00.65	−23 50 31.3	8.51	H	346.252 700 59	−23.842 036 38		5.93	−29.19	−16.40	0.98	0.70	1.17	1.21	0.93	+41	−28	−28	+ 1	+18	+20	+18	+ 4	+22	+42			4	−0.58
113984 H	23 05 00.80	−51 21 20.8	8.82	H	346.253 314 97	−51.355 772 29	A	5.59	54.64	−13.91	3.13	2.50	3.31	3.22	2.15	−	3	+ 3	− 6	−14	+ 7	+18	+ 9	− 8	− 7	−21		1	2.94
113985 H	23 05 01.09	+33 23 08.8	7.46	H	346.254 526 82	+33.385 772 98	A	4.98	23.25	0.63	1.54	1.20	1.82	1.97	1.39	+12	− 5	−17	+27	− 1	−19	+ 1	−20	+41	+17			0	1.83
113986	23 05 01.86	−09 34 59.8	9.00	H	346.257 769 25	−09.583 286 06		1.05	19.07	−3.37	1.24	0.84	1.30	2.02	0.98	+10	− 4	−14	+23	− 5	+20	−15	− 8	+14	−37			0	1.30
113987	23 05 03.42	+24 31 18.6	7.10	H	346.264 234 07	+24.521 829 70		12.32	−32.70	1.06	0.46	0.52	0.76	0.49	0.53	+54	+ 6	+ 7	+ 7	− 3	+ 1	− 3	−16	+ 7	+53			0	−0.43
113988	23 05 04.39	−28 28 47.3	9.39	H	346.268 281 20	−28.479 807 04		1.23	17.54	−24.12	1.21	1.03	1.54	1.50	1.46	+34	−30	−21	−32	− 5	+36	+ 1	−18	+15	+42			0	−1.65
113989	23 05 05.15	+68 25 00.0	7.49	G	346.271 467 42	+68.416 668 24		33.65	592.20	162.21	0.48	0.52	0.59	0.58	0.69	−16	+ 3	− 3	+17	− 2	+ 2	− 1	+ 8	+14	−19			0	−0.77
113990	23 05 05.52	+20 51 21.8	8.63	H	346.273 015 33	+20.856 068 68		8.66	59.09	2.69	1.00	0.90	1.19	1.24	0.90	+19	+ 7	− 1	+ 0	− 9	−26	− 8	+ 5	− 3	+ 3			0	−1.24
113991	23 05 05.54	+34 05 20.2	8.03	G	346.273 063 99	+34.088 939 29		4.43	19.92	2.14	0.65	0.59	0.93	0.80	0.72	+	8	+10	− 1	+17	−11	− 7	+ 6	−37	+26	+32		0	−0.66
113992	23 05 05.98	+28 12 07.4	7.48	H	346.274 902 91	+28.202 067 74		2.42	9.40	−9.07	0.55	0.57	0.86	0.56	0.59	+23	+11	− 1	+ 7	− 9	− 2	− 4	−27	+38	+21			0	0.54
113993	23 05 06.32	+58 43 56.7	6.91	H	346.276 353 72	+58.732 406 53		3.75	14.30	3.94	0.57	0.51	0.66	0.69	0.58	−33	+25	+10	+ 8	+15	− 5	+17	−19	+17	−39			0	1.73
113994	23 05 06.40	+16 33 48.1	6.43	H	346.276 655 83	+16.563 349 67		24.78	−186.48	−210.97	0.73	0.63	0.94	0.66	0.76	+32	+30	− 1	+ 5	− 8	+ 1	− 2	−19	+23	+31			0	−1.10
113995	23 05 07.34	+17 19 36.8	8.26	H	346.280 581 73	+17.326 898 26		0.71	18.97	−21.51	1.12	0.89	1.33	1.17	1.11	+	4	+36	−17	−17	+17	−22	+12	+ 6	+ 0	+33		0	−0.59
113996 H	23 05 09.71	−07 41 37.7	5.44	H	346.290 478 74	−07.693 818 53	*	17.31	123.46	7.07	2.74	1.64	0.98	1.19

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
113901	8.925	0.015	8.398	0.014	A	0.503	0.002	G	0.58	0.00	H *		8.2372	0.0019	0.012	66	*	8.21	8.26		D	23040−4610	I 1	2 C A	AB	107	3.321	0.006	1.39	0.02	S
113902	7.164	0.005	5.912	0.003		1.069	0.003	G	1.03	0.00	H		5.9614	0.0006	0.006	98		5.95	5.97		C			1							S
113903	11.032	0.048	10.400	0.043		0.587	0.056	T	0.66	0.05	L		10.4744	0.0041	0.035	111		10.42	10.55		U			1							
113904	6.904	0.004	6.477	0.005		0.417	0.005	T	0.48	0.01	L		6.5162	0.0011	0.007	69		6.51	6.53					1							S
113905	8.868	0.012	8.184	0.010		0.632	0.013	T	0.70	0.01	L		8.2488	0.0019	0.017	123		8.22	8.29					1							
113906	10.248	0.033	9.423	0.026		0.677	0.003	G	0.74	0.00	H		9.4976	0.0034	0.019	82		9.46	9.53		C			1							
113907	8.052	0.011	7.703	0.010	*	0.339	0.013	T	0.40	0.02	L *		7.7179	0.0017	0.020	121	*	7.70	8.00		P 1 A	23040+6324	H 1	2 C A	AB	247	0.488	0.008	2.35	0.05	S
113908	9.377	0.017	9.252	0.021		0.121	0.025	T	0.14	0.03	L		9.2542	0.0017	0.016	113		9.22	9.28					1							
113909	10.303	0.036	9.914	0.040		0.368	0.050	T	0.43	0.06	L		9.9178	0.0031	0.032	101		9.84	9.97					1							
113910	9.272	0.018	7.703	0.010		1.316	0.016	T	1.28	0.02	L		7.7348	0.0019	0.011	71		7.71	7.76		C			1							S
113911	10.156	0.023	8.841	0.013		1.117	0.021	T	1.08	0.02	L		8.8802	0.0020	0.018	128		8.85	8.92		C			1							
113912	11.488	0.083	10.931	0.086		0.521	0.015	G	0.59	0.02	H		10.9300	0.0043	0.030	89		10.87	10.97		C			1							G
113913	7.909	0.010	7.438	0.011		0.465	0.015	G	0.54	0.02	H		7.5051	0.0013	0.011	67		7.48	7.52					1							S
113914	10.302	0.034	9.637	0.031		0.606	0.035	T	0.68	0.03	L		9.7777	0.0030	0.023	82		9.74	9.81		C			1							
113915	8.743	0.013	8.190	0.012		0.509	0.009	G	0.58	0.01	H		8.2644	0.0015	0.015	69		8.24	8.29		C			1							S
113916	10.283	0.030	8.416	0.013		1.584	0.027	T	1.92	0.08	O		8.3134	0.0023	0.018	89		8.29	8.35					1							S
113917	9.767	0.016	9.666	0.021		0.098	0.025	T	0.11	0.03	L		9.6966	0.0022	0.025	186		9.65	9.75		C			1							G
113918	8.962	0.017	8.654	0.018		0.294	0.018	G	0.34	0.02	H		8.7076	0.0016	0.014	107		8.69	8.74		C			1							
113919	6.004	0.003	4.762	0.002		1.058	0.003	G	1.02	0.03	C		4.8088	0.0005	0.005	155		4.80	4.82					1							S
113920	8.807	0.012	7.578	0.008		1.050	0.011	T	1.02	0.01	L		7.6312	0.0013	0.009	74		7.62	7.65		C			1							S
113921	8.871	0.008	8.308	0.007	*	0.534	0.015	G	0.61	0.02	H *		8.2794	0.0013	0.017	201	*	8.25	8.31		D	23042−5501	I 1	2 C A	AB	98	0.715	0.003	0.29	0.01	S
113922	9.757	0.017	8.722	0.012		0.900	0.016	T	0.90	0.01	L		8.7874	0.0020	0.020	128		8.76	8.83					1							
113923	9.972	0.029	9.585	0.031		0.378	0.036	T	0.44	0.04	L		9.6913	0.0032	0.027	78		9.65	9.75					1							
113924	10.271	0.030	9.908	0.034		0.418	0.005	G	0.48	0.01	H		9.9435	0.0031	0.024	95		9.91	10.00		C			1							
113925	9.364	0.017	9.011	0.018		0.343	0.022	T	0.40	0.03	L		9.1002	0.0021	0.016	96		9.07	9.13		C			1							S
113926	8.962	0.019	8.439	0.018		0.491	0.024	T	0.56	0.03	L		8.4876	0.0019	0.010	49		8.47	8.51		C			1							S
113927	9.433	0.010	8.946	0.010		0.458	0.013	T	0.53	0.01	L		9.0227	0.0016	0.024	234		8.98	9.06					1							
113928	7.863	0.009	7.833	0.011		0.032	0.013	T	0.05	0.01	L		7.8477	0.0010	0.010	113		7.83	7.87		C			1							S
113929	9.393	0.018	8.048	0.011		1.140	0.017	T	1.10	0.02	L		8.0901	0.0014	0.011	78		8.07	8.11		C			1 G							S
113930	11.139	0.054	9.535	0.024		1.368	0.049	T	3.23	0.12	O		9.0996	0.0370	0.224	88		8.89	9.43		U 2			1 S							
113931	9.985	0.028	9.232	0.023		0.688	0.029	T	0.75	0.02	L		9.2647	0.0026	0.018	87		9.22	9.29					1							
113932	9.831	0.021	8.540	0.013		1.098	0.019	T	1.06	0.02	L		8.5603	0.0015	0.015	104		8.53	8.60					1 X							
113933	8.814	0.010	8.354	0.010		0.448	0.015	G	0.52	0.02	H		8.4129	0.0016	0.016	128		8.39	8.44					1							
113934	9.688	0.018	9.555	0.023	*	0.128	0.027	T	0.14	0.03	L *		9.5084	0.0019	0.022	148	*	9.47	9.54		D	23043+5131	H 1	2 C A	AB	311	0.726	0.011	2.07	0.05	G
113935	10.426	0.032	8.822	0.015		1.344	0.028	T	1.31	0.03	L		8.8335	0.0015	0.016	94		8.81	8.87		C			1							
113936	9.039	0.020	7.610	0.012		1.206	0.018	T	1.17	0.02	L		7.6480	0.0024	0.011	51		7.63	7.67		C			1							S
113937	9.115	0.014	9.047	0.017		0.068	0.020	T	0.08	0.02	L		9.0929	0.0024	0.020	114		9.06	9.12					1							S
113938	7.726	0.005	7.765	0.007		−0.031	0.008	T	−0.01	0.01	L		7.7696	0.0010	0.014	193		7.75	7.79					1							S
113939	10.465	0.032	8.197	0.010		1.915	0.028	T	2.75	0.04	O		7.9580	0.0023	0.025	129		7.92	8.00		U 2			1							
113940	9.392	0.011	9.414	0.016		−0.015	0.018	T	0.01	0.02	L		9.4336	0.0019	0.024	200		9.39	9.48		C			1							
113941						1.194	0.020	G	1.32	0.04	I		11.2826	0.0044	0.046	123		11.20	11.35		C			1							G
113942	12.171	0.169	11.056	0.099		0.953	0.155	T	1.00	0.14	L		11.3068	0.0031	0.027	99		11.27	11.38					1							G
113943	10.615	0.033	9.336	0.019		1.089	0.030	T	1.05	0.03	L		9.4071	0.0023	0.023	98		9.37	9.45					1							
113944	11.681	0.084	10.000	0.030		1.392	0.009	G	1.65	0.02	I		9.9604	0.0021	0.019	119		9.93	9.99		C			1							G
113945	9.698	0.019	8.335	0.011		1.154	0.017	T	1.12	0.01	L		8.3511	0.0016	0.016	86		8.32	8.39		D			1							
113946	11.714	0.092	10.305	0.041		1.190	0.079	T	1.15	0.07	L		10.3215	0.0027	0.026	126		10.26	10.38					1							G
113947	7.935	0.008	6.738	0.005		1.025	0.007	T	1.00	0.01	L		6.7966	0.0009	0.008	123		6.78	6.81		C			1							S
113948	8.865	0.014	8.127	0.012		0.661	0.014	T	0.72	0.01	L		8.1822	0.0016	0.016	93		8.16	8.21					1							S
113949	9.411	0.011	9.301	0.014		0.107	0.017	T	0.12	0.02	L		9.3355	0.0019	0.029	219		9.29	9.38					1							
113950	10.479	0.029	10.479	0.045		0.005	0.049	T	0.03	0.04	L		10.3652	0.0047	0.038	139		10.28	10.43					1 X S							G
113951	9.006	0.012	8.893	0.015		0.110	0.015	G	0.12	0.01	H		8.9009	0.0019	0.020	143		8.87	8.94					1 S							
113952	7.239	0.005	6.818	0.004		0.398	0.006	T	0.46	0.01	L		6.8589	0.0007	0.008	149		6.85	6.87		C			1							S
113953	10.482	0.030	9.291	0.019		1.020	0.028	T	0.99	0.02	L		9.3483	0.0030	0.024	131		9.29	9.38					1							
113954	9.352	0.018	8.845	0.017		0.487	0.019	T	0.56	0.02	L		8.9117	0.0022	0.018	85		8.88	8.94			23046−2611	I 1	1							S
113955	9.764	0.021	8.596	0.014		1.002	0.020	T	0.98	0.02	L		8.6348	0.0024	0.025	122		8.60	8.67					1							
113956	10.126	0.037	9.408	0.030		0.660	0.038	T	0.72	0.03	L		9.4668	0.0030	0.019	55		9.44	9.51					1							
113957	7.285	0.004	5.542	0.002		1.453	0.005	G	1.55	0.06	F		5.5023	0.0007	0.008	182		5.49	5.52					1							S
113958	8.951	0.015	7.497	0.009		1.240	0.015	G	1.20	0.01	H		7.5376	0.0015	0.011	79		7.51	7.56		C			1							S
113959	8.463	0.012	7.914	0.011		0.523	0.015	G	0.60	0.02	H		7.9780	0.0015	0.011	83		7.96	8.00		C			1 G							S
113960	8.036	0.007	7.849	0.008		0.179	0.010	T	0.20	0.01	L		7.8875	0.0011	0.013	184		7.87	7.91					1							S
113961	10.619	0.039	10.068	0.037		0.522	0.040	T	0.59	0.04	L		10.1434	0.0024	0.023	109		10.10	10.18					1							
113962	12.450	0.210	10.888	0.079		1.311	0.177	T	1.27	0.21	L		10.9540	0.0033	0.034	139		10.90	11.01		C			1							G
113963	2.480	0.003	2.487	0.002		−0.002	0.003	T	0.00	0.03	G		2.4784	0.0004	0.003	98		2.47	2.48					1							S
113964	10.038	0.023	9.497	0.022		0.514	0.024	T	0.59	0.03	L		9.5319	0.0028	0.026	137		9.49	9.58					1							
113965	10.600	0.067	8.746	0.024		1.500	0.040	G	1.50	0.10	R		8.7106	0.0030	0.017	45		8.68	8.74		C			1							
113966	8.518	0.012	8.216	0.012		0.288	0.015	G	0.33	0.02	H		8.2695	0.0019	0.014	73		8.24	8.30		C			1							S
113967	7.241	0.005	6.998	0.006		0.221	0.002	G	0.24	0.00	H		7.0389	0.0009	0.007	93		7.03	7.05					1							S
113968						1.613	0.082	G	2.63	0.20	I		11.9494	0.0112	0.086	122		11.71	12.07		U 2			1							G
113969	5.976	0.003	5.558	0.003		0.395	0.004	T	0.46	0.00	L		5.6161	0.0007	0.007	132		5.61	5.63					1							S
113970	9.928	0.020	8.717	0.012		1.036	0.018	T	1.01	0.01	L		8.7884	0.0017	0.019	156		8.75	8.82		C			1							
113971	10.428	0.029	8.510	0.011		1.626	0.026	T	1.98	0.07	O		8.3973	0.0018	0.017	131		8.37	8.43		C			1							
113972	9.951	0.030	9.387	0.028		0.532	0.030	T	0.60	0.03	L		9.4555	0.0025	0.016	75		9.42	9.48		C			1							S
113973	9.805	0.026	8.748	0.018		0.907	0.025	T	0.95	0.03	L		8.8128	0.0027	0.017	80		8.79	8.85		C			1							
113974	9.098	0.016	8.472	0.014		0.582	0.019	T	0.65	0.02	L		8.5299	0.0017	0.013	78		8.50	8.55		C			1							S
113975	6.864	0.004	6.813	0.005		0.052	0.006	T	0.06	0.01	L		6.8306	0.0009	0.009	134		6.81	6.84					1							S
113976	9.273	0.020	7.515	0.010		1.465	0.018	T	1.47	0.03	L		7.4890	0.0016	0.010	62		7.47	7.51		C			1							S
113977	8.161	0.010	7.950	0.013		0.202	0.015	T	0.22	0.02	L		7.9863	0.0017	0.012	72		7.97	8.01		C			1							S
113978	9.493	0.022	8.896	0.020		0.557	0.026	T	0.63	0.02	L		8.9226	0.0034	0.028	63		8.87	8.96					1							S
113979	9.925	0.022	9.686	0.027		0.228	0.033	T	0.25	0.04	L		9.7118	0.0015	0.019	105		9.68	9.76		D			1							
113980	7.616	0.009	7.114	0.009		0.472	0.012	T	0.54	0.01	L		7.1727	0.0011	0.007	64		7.16	7.19		C			1							S
113981	7.632	0.010	7.265	0.010		0.383	0.001	G	0.45	0.00	H		7.3323	0.0010	0.007	58		7.31	7.35					1							S
113982	8.808	0.007	8.740	0.009		0.061	0.010	T	0.07	0.01	L		8.7847	0.0018	0.022	275		8.75	8.83					1							
113983	9.000	0.019	8.556	0.019		0.412	0.015	G	0.48	0.02	H		8.6077	0.0021	0.014	94		8.58	8.63		C			1							S
113984	9.591	0.023	8.802	0.019	*	0.700	0.023	T	0.76	0.02	L *		8.9609	0.0024	0.022	107	*	8.93	9.01		D	23050−5121	I 1	2 C A	AB	51	7.634	0.007	0.11	0.02	S
113985	7.556	0.007	7.434	0.008	*	0.118	0.010	T	0.13	0.01	L *		7.5099	0.0013	0.013	116	*	7.49	7.53		D	23050+3323	I 1	2 C A	AB	165	2.691	0.003	0.41	0.02	S
113986	9.456	0.021	9.017	0.022		0.414	0.028	T	0.48	0.03	L		9.0957	0.0027	0.014	57		9.06	9.12		C			1							
113987	7.574	0.005	7.150	0.004		0.433	0.004	G	0.50	0.00	H		7.1967	0.0006	0.009	198		7.18	7.22					1							S
113988	10.629	0.043	9.489	0.027		0.980	0.040	T	0.96	0.03	L		9.5515	0.0022	0.019	88		9.50	9.59		C			1							
113989	8.283	0.008	7.564	0.007		0.646	0.009	G	0.71	0.01	H		7.6181	0.0011	0.011	131		7.60	7.64					1							
113990	9.198	0.023	8.703	0.022		0.466	0.029	T	0.54	0.03	L		8.7290	0.0023	0.014	45		8.71	8.75		C			1							
113991	8.603	0.011	8.058	0.010		0.490	0.015	G	0.56	0.02	H		8.1323	0.0010	0.010	109		8.11	8.16					1							S
113992	9.784	0.033	7.684	0.013		1.737	0.028	T	1.76	0.03	L		7.5823	0.0017	0.015	111		7.56	7.61					1							S
113993	8.350	0.012	7.029	0.006		1.122	0.010	T	1.08	0.01	L		7.0821	0.0008	0.008	110		7.07	7.10		C			1							S
113994	7.549	0.009	6.533	0.006		0.886	0.008	T	0.89	0.01	L		6.5902	0.0010	0.007	81		6.58	6.60					1							S
113995	10.285	0.039	8.478	0.016		1.504	0.033	T	1.53	0.05	L		8.3877	0.0027	0.018	48		8.35	8.41		C			1							
113996	5.795	0.004	5.470	0.004	*	0.312	0.007	T	0.36	0.01	L *		5.5152	0.0008	0.005	53	*	5.51	5.52		D	23052−0743	I 2	2 C A	AB	74	0.202	0.012	0.15	0.32	S
113997	10.708	0.041	9.031	0.018		1.401	0.035	T	1.38	0.04	L		9.0525	0.0023	0.020	104		9.02	9.09		C			1							
113998	7.946	0.007	6.306	0.004		1.370	0.015	G	1.34	0.02	H		6.2992	0.0008	0.010	76		6.29	6.32			23052−1705	I 1	1							S
113999	8.666	0.012	8.456	0.014	*	0.249	0.005	G	0.28	0.01	H *		8.4433	0.0019	0.015	113	*	8.42	8.47		D	23052+5814	I 1	2 C A	AB	81	0.935	0.013	2.63	0.06	
114000	10.698	0.041	9.895	0.033	*	0.711	0.040	T	0.77	0.03	L *		9.9695	0.0042	0.041	83	*	9.90	10.03		U	23052−4412	H 1	2 C A	AB	337	0.387	0.031	2.38	0.19	

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr		19	20	21	22	23	24	25	26	27	28	%	
	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18											29	30
114001	23 05 15.13	−53 43 54.7	8.50	H	346.313 022 44	−53.731 854 31	2.38	30.11	−10.18	0.56	0.73	1.14	0.65	0.68	+12	− 8	− 6	+12	−16	+25	−16	−17	− 7	− 5	0	0.86
114002	23 05 15.44	−24 20 59.5	7.05	H	346.314 353 05	−24.349 873 29	7.15	−13.96	13.30	0.74	0.55	0.84	0.91	0.71	+34	−13	−11	− 8	+32	+ 1	+31	+19	+ 3	+40	2	0.12
114003	23 05 16.57	−36 56 43.7	9.17	H	346.319 044 08	−36.945 472 18	5.08	14.15	−24.36	0.97	0.98	1.33	1.15	1.17	+41	− 2	− 7	+23	− 5	+17	− 1	− 3	+11	+51	2	0.27
114004	23 05 17.26	+65 07 50.4	9.55	H	346.321 936 89	+65.130 654 86	0.99	6.11	−2.43	0.91	0.85	1.07	1.13	1.08	− 8	−19	+ 3	−15	− 9	− 1	−13	−18	+25	−17	0	0.29
114005	23 05 17.61	+01 18 25.8	6.39	G	346.323 386 22	+01.307 179 03	7.98	34.34	−21.23	0.75	0.58	0.88	1.04	0.70	+31	−17	−23	+10	+ 2	− 3	−10	−14	+28	−12	0	−0.09
114006	23 05 18.51	−07 45 16.8	7.09	H	346.327 111 73	−07.754 680 20	3.05	19.53	− 1.45	0.82	0.66	0.99	1.18	0.81	+18	+ 5	−18	+14	−12	+33	− 6	− 6	+30	+11	0	1.29
114007	23 05 20.25	−06 40 06.3	9.62	G	346.334 363 50	−06.668 418 35	24.39	−172.51	−201.31	1.50	1.00	1.75	2.01	1.46	+11	− 5	+ 2	−23	+13	+37	+14	+ 3	+40	+15	0	−0.35
114008	23 05 20.28	+24 02 20.9	10.49	H	346.334 504 90	+24.039 132 39	4.66	−10.95	−71.07	1.04	1.14	1.77	1.12	1.16	+61	− 9	− 4	+ 0	− 8	+20	−10	−25	+33	+63	0	−0.96
114009	23 05 21.36	+62 21 19.0	8.18	H	346.338 984 24	+62.355 283 14	1.75	− 7.63	− 8.12	0.67	0.63	0.79	0.76	0.68	− 8	+15	+16	+27	+ 0	+13	+ 0	−13	+13	− 7	0	0.00
114010	23 05 22.11	−16 53 54.4	6.86	H	346.342 116 00	−16.898 432 37	6.93	55.29	2.41	0.89	0.62	1.06	1.23	0.84	+24	+ 7	−33	− 2	+22	+21	+34	+ 1	+31	+20	0	1.62
114011	23 05 22.78	−20 38 27.9	9.21	H	346.344 903 57	−20.641 086 65	7.07	−11.06	−70.44	1.21	0.91	1.32	1.52	1.09	+32	+ 6	+ 8	+29	+19	+11	+17	+18	+14	+20	2	0.94
114012	23 05 22.85	+47 40 34.8	10.88	3 H	346.345 197 36	+47.676 322 05	−3.76	− 3.16	−11.26	2.84	3.07	4.64	3.32	3.21	−20	+18	+ 0	+ 0	+13	− 6	+21	−30	+ 5	+14	0	
*114013	23 05 23.60	−35 36 47.6	10.37	H	346.348 351 44	−35.613 230 40	0.00	50.60	−12.45	1.21	1.16	1.73	1.45	1.50	+36	−12	−22	+42	−14	+17	− 5	− 7	+ 2	+48	0	−1.24
*114014 H	23 05 23.60	−63 15 48.1	9.18	H	346.348 321 47	−63.263 363 02	A 6.55	64.36	−11.57	1.38	1.76	2.09	1.56	1.64	− 9	+ 2	−19	+ 7	+ 5	− 2	+ 7	−18	−21	+ 2	1	−0.30
114015	23 05 24.16	−62 23 27.4	7.77	H	346.350 684 96	−62.390 939 98	5.24	24.53	8.78	0.53	0.57	0.85	0.65	0.62	− 9	+ 1	−15	− 4	− 9	+ 1	− 6	−18	+ 0	− 1	0	−0.32
114016	23 05 24.34	−15 25 52.2	8.49	H	346.351 415 95	−15.431 156 46	11.57	−46.48	−53.78	1.18	0.73	1.44	1.61	0.95	+26	− 1	−30	− 4	+18	−22	+ 1	−39	+51	−19	0	−0.18
114017	23 05 25.52	−22 29 12.6	7.48	2 H	346.356 339 68	−22.486 834 03	* 4.10	47.44	− 3.20	1.12	0.74	1.26	1.46	1.17	+42	−16	−14	+11	+17	+ 7	+15	− 2	+32	+51	0	2.03
114018	23 05 25.82	+10 26 52.0	7.41	G	346.357 567 87	+10.447 765 73	5.66	36.42	−27.21	0.83	0.60	0.98	1.14	0.92	+32	−16	−22	− 4	+ 8	+ 1	+ 8	+ 2	+18	+ 7	0	−0.93
114019	23 05 27.10	−58 53 57.6	7.84	G	346.362 904 10	−58.899 341 69	6.73	32.64	14.31	0.44	0.48	0.78	0.50	0.51	−29	− 3	− 5	+ 6	− 3	+14	− 1	− 1	− 1	−17	0	−1.02
114020	23 05 27.22	+16 11 53.6	9.12	H	346.363 402 30	+16.198 222 49	2.97	114.79	16.90	1.09	0.84	1.43	1.01	1.00	+15	+31	−28	+11	− 9	+12	+ 1	−29	+32	+19	0	−0.17
114021	23 05 27.53	+01 45 46.2	8.59	H	346.364 703 57	+01.762 846 99	9.98	34.95	−85.73	0.96	0.76	1.14	1.44	0.93	+34	− 8	−20	+ 3	+10	− 9	+ 3	− 9	+12	− 8	0	0.79
114022	23 05 28.22	−30 48 40.0	8.13	2 H	346.367 566 49	−30.811 116 32	0.58	9.27	− 2.55	0.92	0.61	0.91	1.02	0.72	− 4	+ 0	+ 3	−38	+18	+15	+19	− 6	+ 5	− 5	0	−0.32
114023	23 05 28.51	+39 04 44.0	8.69	H	346.368 778 30	+39.078 878 45	7.70	1.98	− 3.18	0.87	0.67	1.06	1.05	0.73	+19	+38	+12	+14	+13	+11	+24	−16	+21	+45	0	−2.71
114024	23 05 29.02	+24 39 11.0	7.10	1 H	346.370 896 57	+24.653 043 35	4.41	− 5.36	− 8.05	0.47	0.52	0.76	0.50	0.55	+56	− 3	− 2	+ 1	− 9	+ 1	−12	−22	+11	+47	0	1.44
114025	23 05 29.24	+26 00 33.5	7.64	1 H	346.371 824 91	+26.009 300 48	5.33	52.25	− 4.03	0.61	0.62	0.91	0.67	0.70	+45	+ 5	+ 1	+23	+13	− 9	+14	+10	+21	+43	3	0.35
114026	23 05 29.73	+28 59 19.0	7.18	1 H	346.373 891 69	+28.988 614 29	3.89	79.29	8.61	0.61	0.53	0.92	0.77	0.67	+16	+ 9	− 1	− 1	− 7	+ 8	+ 0	−22	+33	+34	0	0.99
114027 H	23 05 30.15	+46 43 14.6	8.28	H	346.375 623 65	+46.720 728 07	A 4.18	− 6.55	− 3.50	1.31	1.44	1.72	1.12	1.31	−54	+18	−16	+ 1	+20	−16	+25	−23	+23	−25	1	0.95
114028	23 05 30.92	+14 27 05.2	7.10	H	346.378 848 64	+14.451 451 97	26.39	387.03	91.20	0.73	0.50	0.93	0.72	0.72	+29	+24	+ 0	+13	− 4	+11	+ 3	−13	+46	+17	0	−2.56
114029	23 05 31.74	+43 14 46.2	8.62	1 H	346.382 231 57	+43.246 176 36	3.00	17.44	3.83	0.55	0.58	1.01	0.58	0.70	−12	+13	+15	+18	− 1	− 8	+12	−16	+ 9	+11	0	−2.65
114030	23 05 32.94	−15 03 48.5	8.90	H	346.387 250 49	−15.063 484 02	7.37	86.33	−61.89	1.31	0.74	1.34	1.59	0.98	+15	+ 3	−10	−29	+19	+ 4	+18	−37	+31	−15	0	0.50
114031	23 05 33.03	+14 57 32.7	6.80	H	346.387 634 69	+14.959 083 03	8.09	15.76	−10.13	0.64	0.46	0.81	0.65	0.63	+22	+11	−16	+10	+ 0	+ 6	+ 4	− 9	+38	+18	0	0.02
114032	23 05 33.25	−54 17 07.1	8.89	H	346.388 558 73	−54.285 296 04	10.45	−13.58	−157.98	0.69	0.75	1.16	0.92	0.82	+ 0	− 6	+ 7	+23	−21	+19	−31	−26	−17	−33	0	0.04
114033	23 05 34.64	+14 43 17.6	9.32	H	346.394 322 87	+14.721 542 02	1.29	−17.41	− 6.84	1.23	0.82	1.42	1.17	1.08	+32	+ 2	− 8	+16	−10	− 1	−23	−29	+44	+ 2	4	0.30
114034	23 05 35.32	+20 14 27.2	7.26	H	346.397 178 02	+20.240 885 81	13.50	7.11	20.05	0.77	0.70	0.92	0.81	0.72	+18	+15	+ 2	+ 0	+ 2	−13	+ 0	− 6	− 5	+10	0	0.07
114035	23 05 35.49	−14 23 53.3	8.71	H	346.397 865 56	−14.398 129 07	2.92	17.04	8.07	1.05	0.67	1.14	1.21	0.86	+26	− 7	− 6	−20	+13	+25	+16	−25	+17	+ 8	0	0.55
114036	23 05 35.80	−45 43 26.9	9.34	H	346.399 157 23	−45.724 149 81	−0.75	− 5.47	−34.70	1.25	0.98	1.43	1.47	1.01	+16	+16	+14	− 8	−16	+ 3	−14	−19	+ 7	+15	0	0.40
114037	23 05 38.03	+28 55 29.3	9.99	H	346.408 458 14	+28.924 797 25	13.81	−120.04	−181.52	1.04	1.06	1.54	1.17	1.21	+24	+ 9	− 8	− 6	− 8	− 5	− 1	−34	+25	+39	0	1.49
114038	23 05 38.83	−62 22 36.3	9.31	H	346.411 809 40	−62.376 754 55	3.00	35.65	−17.48	0.84	0.86	1.30	1.09	1.00	− 6	− 8	− 9	− 3	−10	+ 0	− 9	− 9	+ 2	− 1	0	0.55
114039 H	23 05 39.51	−60 04 47.2	8.56	H	346.414 614 82	−60.079 773 05	* 8.75	32.86	−47.03	1.35	1.40	1.26	0.94	0.84	−24	− 1	−26	−11	+ 9	+ 8	+ 8	−10	− 4	+ 1	2	−0.41
114040	23 05 39.66	−47 52 22.9	8.66	H	346.415 268 93	−47.873 040 12	15.34	253.82	−157.65	0.98	0.74	1.06	1.22	0.87	− 0	− 9	− 7	−12	+14	+ 5	+12	−16	− 8	−11	0	1.14
114041	23 05 40.19	+69 16 35.2	8.93	H	346.417 467 11	+69.276 455 16	3.68	−10.64	− 9.56	0.69	0.71	0.84	0.79	0.81	− 6	+10	+12	+19	+ 2	+ 6	+ 3	− 3	+16	− 7	0	0.63
114042	23 05 40.31	−18 21 46.2	9.31	H	346.417 969 58	−18.362 837 82	5.57	−10.64	−46.92	1.16	0.89	1.50	1.32	1.34	+31	+ 9	−19	−11	+ 7	+36	+24	−12	+46	+41	0	−0.39
114043	23 05 40.98	−40 35 03.6	8.91	H	346.420 746 60	−40.584 330 45	2.98	24.57	− 0.90	0.80	0.81	1.15	0.91	0.89	+21	−22	−22	+ 0	− 9	+16	−10	−16	+23	+21	0	−0.45
114044	23 05 43.59	−34 22 15.3	10.73	H	346.431 606 01	−34.370 925 08	28.26	−20.74	−126.51	1.83	1.51	2.11	2.01	1.91	+11	+12	−20	−38	+ 9	+10	+13	−11	+14	+23	0	0.05
114045	23 05 44.78	+49 23 55.1	9.47	H	346.436 564 54	+49.398 635 03	3.44	2.91	− 3.26	0.81	0.92	1.36	0.85	0.87	−25	+ 1	+34	+ 8	+ 8	−14	+16	− 9	+ 3	−10	3	−1.80
*114046	23 05 47.17	−35 51 22.7	7.35	G	346.446 520 92	−35.856 297 10	303.90	6767.26	1326.66	0.61	0.59	0.87	0.70	0.74	+36	−11	− 8	+38	+ 3	+12	+ 6	+11	− 1	+46	0	0.69
*114047	23 05 46.94	−33 02 52.4	8.96	H	346.445 578 10	−33.047 883 84	3.99	9.48	−10.49	1.14	0.88	1.26	1.23	1.00	+ 4	+ 8	−27	−33	+20	+ 4	+24	+14	+ 8	+ 6	0	1.09
114048	23 05 47.32	+43 53 05.2	7.85	H	346.447 152 92	+43.884 791 29	6.09	6.47	−22.48	0.59	0.54	0.95	0.66	0.63	−10	+12	+30	− 2	+ 6	−16	+18	−20	− 2	+15	1	−0.89
114049	23 05 49.39	−61 11 33.5	7.80	H	346.455 774 63	−61.192 628 08	3.91	49.30	−34.87	0.49	0.52	0.79	0.57	0.54	−18	−11	−11	+15	− 8	− 3	− 5	−17	− 2	−14	0	1.37
114050	23 05 49.62	+35 16 13.4	8.01	H	346.456 764 38	+35.270 400 15	4.01	1.81	− 6.43	0.72	0.64	1.00	0.81	0.70	+ 8	+10	− 7	+22	− 6	+ 3	+ 7	−35	+38	+26	2	2.20
114051	23 05 49.82	−10 53 22.4	8.07	H	346.457 603 07	−10.889 550 91	9.23	34.82	4.92	1.06	0.77	1.22	1.24	0.96	+13	+18	− 8	−20	+17	+ 4	+28	+12	+40	+ 0	0	1.44
114052	23 05 50.55	−25 57 22.2	11.23	G	346.460 614 32	−25.956 179 84	−2.00	2.90	− 3.77	2.01	1.68	2.43	2.71	2.59	+34	−10	−10	−12	+13	+14	+16	−13	+19	+48	0	−1.68
114053	23 05 52.05	+08 53 45.7	7.53	2 H	346.466 869 62	+08.896 034 61	3.09	−32.09	−15.22	0.86	0.66	0.94	1.06	0.86	+26	−14	−14	−15	+13	+11	+20	+13	−15	+12	4	0.91
114054	23 05 52.52	−07 56 12.1	6.71	H	346.468 849 55	−07.936 695 75	5.96	11.74	− 6.85	0.76	0.59	0.98	0.96	0.71	+15	+10	−14	+ 5	−14	+41	− 5	−16	+43	+19	0	0.56
114055	23 05 52.88	−15 27 09.4	7.71	H	346.470 332 25	−15.452 610 64	14.55	23.28	− 7.46	0.98	0.61	1.17	1.36	0.79	+26	− 3	−32	− 7	+20	−20	+ 7	−29	+45	−14	0	1.85
114056	23 05 53.51	−10 26 16.3	7.30	H	346.472 978 44	−10.437 854 23	2.92	−17.16	−17.55	0.82	0.64	0.95	1.03	0.75	+15	− 2	+ 0	+ 2	+10	+29	+11	+15	+22	+ 7	0	1.09
114057	23 05 55.15	−65 20 23.9	8.78	1 H	346.479 796 61	−65.339 967 65	3.34	8.74	− 3.54	0.70	0.77	1.06	0.80	0.72	+ 0	−19	−32	−12	− 1	+15	+ 7	− 5	−20	−12	3	0.90
114058	23 05 56.47	−14 26 41.0	7.92	H	346.485 278 58	−14.444 712 22	1.02	11.18	−13.91	0.97	0.56	1.01	1.06	0.75	+19	−18	+ 5	−22	+19	+31	+23	−17	+ 8	+ 7	0	−0.81
114059	23 05 56.62	+18 05 14.1	7.54	G	346.485 928 12	+18.087 237 13	13.35	2.75	− 0.13	1.05	0.76	1.09	1.19	0.96	− 4	+11	− 7	−31	+16	−17	+16	− 4	+ 7	+ 0	0	0.89
114060	23 05 56.71	+64 17 42.6	7.64	H	346.486 283 62	+64.295 157 12	1.00	− 1.25	− 0.97	0.51	0.58	0.64	0.60	0.71	−13	+ 0	− 6	− 1	+ 0	− 4	+ 0	−31	+14	−13	0	−1.77
114061	23 05 57.83	+09 42 10.2	11.81	G	346.490 939 27	+09.702 825 89	16.44	141.97	−87.09	3.34	2.17	3.45	5.41	3.57	+28	+ 4	− 8	−24	+18	−19	+37	+26	+ 5	−15	0	0.65
114062	23 05 59.04	+05 39 29.3	9.40	G	346.495 990 46	+05.658 137 97	12.15	−37.41	−19.55	1.44	1.10	1.66	2.63	1.46	+33	+ 0	−27	+12	+21	− 6	+22	+24	+ 5	−10	0	1.43
114063 H	23 06 01.29	−74 45 58.0	8.65	H	346.505 365 15	−74.766 112 48	A 3.46	14.76	− 8.70	1.25	1.25	1.35	1.37	1.12	−18	− 7	−17	−18	+16	+ 4	+14	−25	+10	−19	1	−0.54
114064	23 06 02.14	−50 58 23.7	9.75	H	346.508 926 95	−50.973 248 81	1.66	63.00	− 9.40	1.03	1.12	1.52	1.20	1.22	+10	− 4	− 8	−21	+15	−10	+14	+17	− 7	+ 9	0	0.48
114065 H	23 06 02.26	+42 19 47.5	11.17	H	346.509 414 23	+42.329 849 58	A 17.54	48.49	−263.73	4.15	4.97	7.55	4.39	5.55	− 7	+12	+13	−10	− 2	+ 4	+ 3	−22	+ 8	+21	2	1.15
114066	23 06 04.62	+63 55 34.9	10.87	2 G	346.519 232 73	+63.926 352 85	40.09	171.01	−58.48	1.18	1.25	1.48	1.40	1.38	−10	+ 6	− 1	− 2	+ 2	+ 7	+ 2	−23	+20	−13	1	−0.18
114067	23 06 07.23	−42 32 26.5	10.34	H	346.530 114 63	−42.540 691 07	−0.03	1.79	12.78	1.38	1.22	1.74	1.54	1.44	+21	−14	−23	− 4	−13	+25	− 9	−22	+20	+27	0	−0.43
114068	23 06 07.33	−44 38 46.5	10.93	H	346.530 537 41	−44.646 253 55	9.43	7.84	−26.62	1.74	1.79	2.41	2.14	2.10	+24	−19	−22	− 3	−28	+31	−24	−37	+22	+30	2	−0.65
114069	23 06 08.90	+04 41 12.1	9.26	G	346.537 098 35	+04.686 700 26	16.91	248.22	13.30	1.31	0.96	1.49	2.04	1.40	+35	+ 8	−11	+22	+16	+24	+19	+20	+ 4	+13	0	0.10
114070	23 06 08.98	+63 12 46.1	7.44	H	346.537 415 18	+63.212 805 92	0.97	−1.66	− 1.81	0.54	0.55	0.67	0.68	0.61	− 6	+ 6	+15	− 3	+ 6	+ 9	+ 4	−19	+12	−11	1	−0.25
114071 H	23 06 09.71	+41 47 23.5	7.09	H	346.540 466 33	+41.789 859 78	A 3.71	− 5.20	−16.11	0.85	0.82	1.17	0.65	0.76	+ 4	+ 5	+ 6	+33	−15	+26	+10	−31	+12	+34	1	0.00
114072	23 06 10.88	−58 41 37.9	8.14	1 H	346.545 337 39	−58.693 861 09	5.17	−65.37	−14.29	0.46	0.50	0.84	0.57	0.61	−32	+ 2	− 6	+ 8	− 2	+ 2	− 2	− 1	+ 4	−37	1	−0.80
114073	23 06 11.87	−70 29 17.3	9.03	H	346.549 463 11	−70.488 148 45	1.83	− 8.52	− 7.91	0.75	0.77	1.02	0.91	0.85	− 4	− 8	−15	− 2	+ 6	− 1	+ 8	−14	−18	+ 2	0	0.28
114074	23 06 12.27	+36 49 13.0	6.76	H	346.551 109 21	+36.820 289 20	3.25	− 9.59	−13.47	0.56	0.51	0.86	0.76	0.55	+ 5	+15	−13	−12	− 1	+36	+ 9	−38	+40	+34	0	1.59
114075	23 06 13.27	+18 59 25.3	7.44	H	346.555 300 39	+18.990 347 96	4.63	1.60	3.05	0.81	0.73	0.98	0.74	0.83	+27	+35	− 7	+ 2	− 8	− 5	− 1	−19	+13	+43	0	−0.12
114076	23 06 14.91	−21 56 13.3	9.13	H	346.562 144 32	−21.937 032 78	2.73	15.39	− 1.35	1.19	0.84	1.37	1.60	1.10	+33	−10	− 9	+10	+13	+15	+11	− 4	+17	+27	0	0.12
114077	23 06 16.45	−44 33 34.3	8.72	H	346.568 538 70	−44.559 537 18	6.73	71.14	12.41	0.94	0.88	1.26	1.10	1.00	+19	−20	−29	+ 2	−23	+19	−20	−32	+16	+19	0	0.79
114078	23 06 16.65	+75 34 53.0	6.81	H	346.569 364 44	+75.581 396 73	2.05	12.24	3.96	0.47	0.46	0.53	0.51	0.50	−14	− 8	+21	+14	−13	− 2	−13	+14	+ 7	−18	1	−0.28
114079	23 06 17.16	−09 36 21.6	7.14	H	346.571 515 41	−09.605 987 73	4.00	95.42	−62.88	1.03	0.67	1.06	1.80	0.86	+ 7	+ 0	− 6	+33	− 5	+14	+11	− 8	+ 1	+19	−39	0	2.07
*114080	23 06 18.04	−72 58 16.6	8.97	2 H	346.575 179 53	−72.971 275 79	2.89	13.48	1.12	0.71	0.74	0.93	0.85	0.74	− 2	+ 2	−32	+25	+10	−16	+ 6	+17	+ 5	+ 7	0	−0.10
*114081	23 06 18.00	+18 31 03.4	6.16	H	346.575 009 37	+18.517 614 28	23.16	224.28	62.18	0.74	0.66	0.88	0.74	0.74	+23	+26	−12	−10	− 4	+ 6	+ 0	−15	+14	+35	0	1.19
114082	23 06 18.37	+64 52 08.0	9.05	H	346.576 557 27	+64.868 878 29	4.66	16.74	0.49	0.75	0.76	0.90	0.87	0.95	−10	− 5	+ 6	− 9	− 6	− 4	− 9	−24	+20	−21	0	−1.53
114083	23 06 20.80	+52 09 13.1	8.42	H	346.586 661 85	+52.153 652 32	0.28	6.70	− 2.85	0.62	0.72	0.96	0.81	0.73	−24	− 3	+35	− 4	+14	+15	+ 8	− 9	−15	−31	1	−0.15
114084	23 06 21.32	+51 26 27.0	10.16	H	346.588 843 26	+51.440 837 47	2.12	3.48	− 4.75	0.80	0.92	1.24	0.92	0.98	−17	+ 5	+23	− 7	− 1	− 2	− 1	− 7	−11	− 9	0	−0.80
114085 H	23 06 21.98	−47 47 07.8	8.14	H	346.591 600 65	−47.785 508 47	A 4.01	−25.13	− 8.43	1.18	1.05	1.28	1.17	1.07	+14	− 9	− 3	+11	+ 7	+15	+ 9	+10	−16	+ 9	1	0.55
114086	23 06 22.24	−55 57 56.6	8.15	H	346.592 669 27	−55.965 711 55	1.56	26.10	−36.13	0.64	0.65	1.09	0.71	0.67	− 7	− 3	− 4	− 7	− 7	+19	− 7	−19	− 2	−14	4	0.11
114087	23 06 23.45	+38 34 11.1	7.84	H	346.597 698 80	+38.569 756 23	2.81	24.87	21.19	0.79	0.70	1.02	0.82	0.71	+16	+41	+ 8	+18	− 2	+ 7	+20	−43	+22	+41	0	−1.12
114088 H	23 06 23.65	+12 36 27.1	11.46	G	346.598 552 71	+12.607 540 50	A 27.32	319.71	−59.54	8.88	5.10	6.68	8.10	5.29	+26	− 4	− 4	−15	+ 1	+23	+ 1	−10	+16	+33	2	−0.10
114089	23 06 25.73	+42 35 32.6	7.62	H	346.607 224 35	+42.592 383 36	2.25	− 9.17	−10.66	0.45	0.47	0.87	0.50	0.59	−10	+ 9	+13	+17	− 3	− 9	+ 7	− 9	+ 9	+20	0	−1.53
114090	23 06 27.46	−27 27 27.3	10.30	G	346.614 401 41	−27.457 595 27	1.28	56.57	16.23	1.49	1.27	1.89	1.90	1.74	+38	− 1	−20	− 6	+ 4	+ 8	+ 5	− 6	+31	+49	2	0.11
114091	23 06 28.28	−57 30 55.7	10.13	H	346.617 837 27	−57.515 477 91	10.45	−23.91	5.71	0.96	1.05	1.73	1.06	1.04	−19	+ 0	−11	− 4	+ 1	+26	+ 5	−22	+ 5	−11	0	2.02
114092 H	23 06 28.54	+61 26 24.6	6.75	G	346.618 897 81	+61.440 174 39	A 8.85	26.61	−20.04	0.62	0.59	0.66	0.70	0.59	−16	+ 2	+ 2	+35	− 7	+ 0	− 6	− 1	+12	− 5	0	−0.54
114093	23 06 30.26	+30 37 10.2	8.02	G	346.626 078 01	+30.619 508 18	5.09	−24.88	−19.25	0.70	0.57	1.08	0.79	0.71	− 2	+ 5	− 4	+ 3	− 4	+ 8	+ 4	−38	+37	+10	2	−0.53
114094	23 06 30.29	−13 45 07.4	8.92	2 H	346.626 209 65	−13.752 043 62	1.13	2.86	− 6.34	1.05	0.68	1.23	1.22	0.83	+31	− 7	− 6	− 1	+11	+26	+ 6	−18	+32	+13	0	−0.48
114096	23 06 31.71	+19 54 39.0	6.44	H	346.632 113 40	+19.910 841 31	35.32	287.21	4.75	0.71	0.63	0.85	0.75	0.69	+12	+ 9	+ 3	− 2	+ 5	−12	+ 6	+ 0	+ 5	+11	0	1.74
114097	23 06 32.18	+51 04 37.9	7.42	G	346.634 072 68	+51.077 205 65	2.41	− 0.28	− 4.13	0.46	0.52	0.67	0.52	0.52	−17	+ 0	+18	+18	− 9	− 4	− 5	+ 2	− 1	+ 5	0	0.12
114098	23 06 32.59	−00 11 45.8	9.33	G	346.635 811 64	−00.196 069 31	27.80	−236.03	−29.70	1.20	0.86	1.39	1.61	1.33	+26	+ 9	+ 3	−14	+21	+24	+19	−14	+36	+21	0	0.80
114099	23 06 32.81	+69 52 19.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
114001	10.060	0.020	8.647	0.011		1.194	0.018	T	1.15	0.02	L	8.6688	0.0013	0.019	198		8.64	8.70		C			1							
114002	8.271	0.008	7.152	0.006		0.964	0.008	T	0.95	0.01	L	7.2103	0.0012	0.009	115		7.19	7.23					1							S
114003	9.737	0.019	9.232	0.019		0.485	0.020	T	0.56	0.02	L	9.2754	0.0018	0.017	105		9.24	9.31		C			1							
114004	9.748	0.021	9.550	0.026		0.189	0.031	T	0.21	0.04	L	9.6128	0.0019	0.024	116		9.57	9.65					1							G
114005	7.590	0.007	6.492	0.006		0.928	0.045	G	0.94	0.02	A	6.5518	0.0011	0.007	70		6.54	6.57					1							S
114006	8.647	0.014	7.204	0.008		1.217	0.013	T	1.18	0.01	L	7.2508	0.0012	0.009	54		7.24	7.27		C	23052−0743	I 2	1							S
114007	10.922	0.078	9.665	0.041		0.988	0.003	G	1.03	0.00	I	9.7536	0.0044	0.023	47		9.71	9.79		C			1							
114008	11.455	0.058	10.644	0.044		0.733	0.056	T	0.78	0.04	L	10.6332	0.0031	0.034	192		10.56	10.70		C			1							G
114009	8.413	0.008	8.208	0.009		0.196	0.011	T	0.21	0.01	L	8.2378	0.0013	0.014	119		8.22	8.26		C			1							
114010	8.040	0.008	6.965	0.006		0.931	0.008	T	0.93	0.01	L	7.0235	0.0009	0.008	83		7.01	7.04		C			1							S
114011	10.271	0.028	9.273	0.020		0.873	0.026	T	0.88	0.02	L	9.3701	0.0027	0.019	77		9.34	9.41		C			1							
114012	11.049	0.042	10.885	0.057		0.150	0.067	T	0.17	0.07	L	10.9357	0.0089	0.124	184		10.81	11.45	0.94	P 1 A			1 X	S						G
114013	11.093	0.051	10.504	0.049		0.550	0.062	T	0.62	0.06	L	10.4877	0.0031	0.027	122		10.41	10.53					1							
114014	9.940	0.019	9.297	0.017	A	0.600	0.495	G	0.66	0.04	L *	9.3068	0.0021	0.031	145	*	9.26	9.35		D	23054−6316	I 1	2 C	B	AB	299	3.530	0.031	2.82	0.14	
114015	7.952	0.007	7.788	0.008		0.150	0.010	T	0.17	0.01	L	7.8241	0.0013	0.016	170		7.80	7.85					1							S
114016	9.606	0.017	8.575	0.012		0.887	0.016	T	0.89	0.01	L	8.6347	0.0019	0.016	101		8.61	8.66		C			1							
114017	9.517	0.022	7.713	0.010		1.532	0.020	T	2.56	0.07	O	7.4825	0.0169	0.116	68		7.33	7.71		U 2 C			1 V							S
114018	7.695	0.007	7.449	0.009		0.240	0.015	G	0.27	0.02	H	7.4678	0.0010	0.010	86		7.45	7.49					1							S
114019	8.174	0.005	7.861	0.006		0.300	0.006	G	0.34	0.01	H	7.9133	0.0011	0.015	269		7.89	7.94					1							S
114020	10.554	0.048	9.294	0.028		1.094	0.020	G	1.17	0.03	I	9.2891	0.0020	0.017	78		9.27	9.31		C			1							
114021	9.168	0.017	8.645	0.016		0.491	0.021	T	0.56	0.02	L	8.6935	0.0016	0.012	74		8.67	8.72					1							S
114022	10.256	0.029	8.323	0.012		1.639	0.026	T	1.96	0.10	O	8.2135	0.0093	0.078	95		8.10	8.36		U 2			1	S						S
114023	9.302	0.015	8.746	0.014		0.521	0.018	T	0.59	0.02	L	8.8007	0.0016	0.014	91		8.77	8.83		C			1							
114024	7.202	0.004	7.104	0.005		0.096	0.006	T	0.11	0.01	L	7.1352	0.0016	0.014	192		7.11	7.15	1.09	P 1 A			1							S
114025	9.112	0.012	7.777	0.008		1.134	0.000	G	1.10	0.00	H	7.8113	0.0035	0.030	131		7.77	7.85	5.06	P 1 A			1							S P
114026	9.274	0.016	7.376	0.007		1.610	0.014	T	1.96	0.04	O	7.2660	0.0017	0.013	103		7.24	7.29		U 2			1							S
114027	8.473	0.007	8.323	0.008	*	0.144	0.010	T	0.16	0.01	L *	8.3357	0.0015	0.020	209	*	8.30	8.37		D	23055+4643	I 1	2 C	A	AB	316	0.469	0.005	1.15	0.03	S
114028	7.812	0.006	7.169	0.006		0.597	0.007	T	0.67	0.01	L	7.2267	0.0008	0.010	124		7.21	7.25		C			1							S
114029	9.043	0.009	8.652	0.010		0.370	0.012	T	0.43	0.01	L	8.7090	0.0018	0.022	214		8.67	8.74		U			1							
114030	9.598	0.018	8.972	0.016		0.578	0.018	T	0.65	0.02	L	9.0253	0.0020	0.020	110		8.99	9.06		C			1							S
114031	6.786	0.005	6.767	0.005		0.006	0.005	G	−0.02	0.02	A	6.7883	0.0007	0.008	107		6.78	6.80		C			1							S
114032	9.640	0.013	8.951	0.011		0.624	0.013	T	0.69	0.01	L	9.0161	0.0019	0.020	184		8.98	9.05		C			1							
114033	11.596	0.092	9.527	0.025		1.712	0.076	T	1.74	0.08	L	9.4223	0.0020	0.024	102		9.38	9.46					1							
114034	7.944	0.009	7.326	0.009		0.573	0.010	G	0.65	0.01	H	7.3869	0.0012	0.007	49		7.37	7.40					1							S
114035	9.962	0.021	8.830	0.014		0.974	0.020	T	0.96	0.02	L	8.8771	0.0017	0.016	125		8.85	8.91		C			1							
114036	10.406	0.038	9.483	0.028		0.817	0.035	T	0.84	0.03	L	9.4957	0.0024	0.020	69		9.44	9.53		C			1							
114037	10.848	0.059	10.109	0.047		0.680	0.020	G	0.74	0.02	H	10.1271	0.0038	0.029	96		10.08	10.18		C			1							G
114038	9.792	0.016	9.290	0.016		0.472	0.021	T	0.54	0.02	L	9.4162	0.0022	0.025	159		9.38	9.47		C			1							
114039	9.304	0.011	8.642	0.010	*	0.604	0.011	T	0.67	0.01	L *	8.6873	0.0018	0.022	213	*	8.65	8.73		D	23057−6005	H 1	2 C	A	AB	270	0.239	0.004	0.34	0.07	S
114040	9.567	0.018	8.746	0.014		0.709	0.001	G	0.76	0.00	H	8.8009	0.0022	0.018	85		8.78	8.83		C			1 G							S
114041	9.242	0.018	8.951	0.020		0.277	0.025	T	0.31	0.03	L	9.0000	0.0019	0.018	127		8.97	9.03		C			1							
114042	9.891	0.027	9.390	0.026		0.482	0.029	T	0.55	0.03	L	9.4209	0.0024	0.016	80		9.39	9.45		C			1							
114043	10.417	0.031	9.036	0.017		1.169	0.028	T	1.13	0.03	L	9.0733	0.0018	0.016	102		9.04	9.10		C			1							
114044	12.392	0.225	10.941	0.100		1.255	0.015	G	1.31	0.14	K	10.8530	0.0043	0.035	84		10.78	10.91		C			1							G
114045	9.471	0.014	9.446	0.019		0.028	0.022	T	0.04	0.02	L	9.4843	0.0028	0.030	177		9.44	9.55					1	S						
114046						1.483	0.003	G	2.02	0.00	A	7.4182	0.0015	0.016	131		7.39	7.47					1							S
114047	10.037	0.027	9.069	0.019		0.850	0.025	T	0.86	0.02	L	9.1163	0.0021	0.017	75		9.09	9.15					1							
114048	9.357	0.012	7.996	0.007		1.153	0.011	T	1.12	0.01	L	8.0150	0.0011	0.014	156		7.99	8.04		C			1							
114049	9.766	0.015	7.978	0.007		1.489	0.013	T	1.51	0.02	L	7.9278	0.0013	0.013	187		7.89	7.95					1							S
114050	9.672	0.017	8.131	0.009		1.294	0.015	T	1.25	0.02	L	8.1712	0.0018	0.016	111		8.15	8.20					1							
114051	8.390	0.014	8.105	0.015		0.271	0.019	T	0.31	0.02	L	8.1435	0.0026	0.015	47		8.12	8.17					1							S
114052						0.950	0.020	G	0.94	0.01	K	11.3718	0.0064	0.044	84		11.31	11.44		C			1							G
114053	9.595	0.021	7.735	0.009		1.579	0.019	T	2.13	0.06	O	7.5973	0.0051	0.027	81		7.55	7.64		U 2			1							S
114054	6.692	0.004	6.697	0.006		−0.009	0.001	G	0.01	0.00	H	6.7127	0.0010	0.008	57		6.70	6.72					1							S
114055	8.170	0.008	7.748	0.009		0.412	0.010	T	0.48	0.01	L	7.8065	0.0013	0.011	99		7.79	7.82		C	23059−1527	I 1	1							S
114056	7.665	0.010	7.320	0.010		0.327	0.013	T	0.38	0.02	L	7.3776	0.0013	0.007	53		7.36	7.40		C			1							S
114057	10.782	0.042	8.950	0.016		1.524	0.036	T	1.56	0.05	L	8.9005	0.0021	0.026	134		8.86	8.95		U			1							
114058	9.200	0.012	8.047	0.008		0.990	0.011	T	0.97	0.01	L	8.0860	0.0011	0.012	120		8.06	8.10		C			1							S
114059	7.935	0.009	7.579	0.012		0.363	0.007	G	0.42	0.01	H	7.6227	0.0026	0.016	47		7.60	7.65					1							S
114060	8.241	0.009	7.701	0.009		0.506	0.011	T	0.58	0.01	L	7.7468	0.0011	0.013	121		7.73	7.77		C			1							S
114061						1.360	0.012	G	1.49	0.15	K	11.9518	0.0065	0.052	81		11.83	12.06					1							G
114062	10.291	0.040	9.461	0.032		0.739	0.002	G	0.79	0.00	H	9.5586	0.0034	0.016	60		9.52	9.61		C			1							
114063	8.843	0.017	8.536	0.020	*	0.293	0.028	T	0.33	0.04	L *	8.7291	0.0021	0.020	138	*	8.70	8.78		D	23060−7446	I 1	2 C	A	AB	68	3.934	0.009	1.97	0.05	S
114064	10.366	0.029	9.845	0.028		0.498	0.030	T	0.57	0.03	L	9.8575	0.0026	0.027	117		9.81	9.90		C			1							
114065						1.340	0.495	G	1.71	0.08	B *	11.2733	0.0053	0.060	233	*	11.16	11.38		R	23060+4220	I 1	2 C	A	AB	153	0.865	0.014	0.64	0.04	G
114066						1.440	0.015	G	1.77	0.04	I	10.8976	0.0054	0.051	130		10.82	10.99		U			1							G
114067	11.604	0.091	10.374	0.048		1.050	0.080	T	1.02	0.07	L	10.5136	0.0046	0.026	87		10.46	10.58		C			1							
114068	11.437	0.086	11.003	0.097		0.574	0.072	G	0.65	0.07	R	10.5536	0.0046	0.036	75		10.98	11.11		C			1							G
114069	10.066	0.031	9.356	0.027		0.665	0.003	G	0.73	0.00	H	9.3806	0.0028	0.018	71		9.35	9.41		C			1							
114070	7.858	0.008	7.497	0.008		0.342	0.011	T	0.40	0.01	L	7.5259	0.0013	0.011	119		7.51	7.55		C			1							S
114071	8.101	0.007	7.200	0.005	*	0.801	0.007	T	0.83	0.01	L *	7.2410	0.0008	0.009	211	*	7.23	7.26		D	23062+4147	I 1	2 C	A	AB	61	0.456	0.003	1.42	0.02	S
114072	8.472	0.006	8.169	0.006		0.300	0.007	G	0.34	0.01	H	8.2171	0.0015	0.022	291		8.18	8.25		U			1 G							S
114073	10.555	0.029	9.141	0.015		1.194	0.026	T	1.15	0.02	L	9.1910	0.0027	0.023	147		9.15	9.24					1							
114074	8.244	0.008	6.882	0.005		1.154	0.007	T	1.12	0.01	L	6.9255	0.0008	0.008	110		6.91	6.94					1							S
114075	8.858	0.017	7.570	0.011		1.096	0.016	T	1.06	0.02	L	7.6103	0.0010	0.010	53		7.59	7.63					1							S
114076	10.581	0.042	9.268	0.022		1.115	0.037	T	1.08	0.04	L	9.2956	0.0019	0.014	75		9.26	9.32		C			1							
114077	9.846	0.024	8.800	0.017		0.909	0.022	T	0.91	0.02	L	8.8788	0.0022	0.018	84		8.84	8.91					1							
114078	6.840	0.004	6.817	0.005		0.026	0.006	T	0.04	0.01	L	6.8236	0.0008	0.007	118		6.81	6.84		C			1							S
114079	8.473	0.019	7.248	0.008		1.047	0.016	T	1.02	0.01	L	7.3125	0.0020	0.011	49		7.30	7.33					1							S
114080	9.283	0.012	9.012	0.014		0.255	0.019	T	0.29	0.02	L	9.0417	0.0021	0.023	138		9.01	9.09		U 2			1							
114081	6.709	0.006	6.208	0.005		0.482	0.006	T	0.55	0.01	L	6.2656	0.0005	0.005	56		6.25	6.27		D			1							S
114082	9.209	0.014	9.074	0.017		0.130	0.021	T	0.14	0.02	L	9.0961	0.0025	0.021	117		9.07	9.13					1							
114083	8.453	0.008	8.421	0.010		0.034	0.012	T	0.05	0.01	L	8.4373	0.0013	0.018	148		8.41	8.47					1							S
114084	10.369	0.029	10.036	0.033		0.316	0.041	T	0.36	0.06	L	10.2152	0.0031	0.029	142		10.16	10.25					1							G
114085	9.433	0.018	8.323	0.012	A	1.200	0.495	G	0.91	0.02	L *	8.2968	0.0017	0.015	94	*	8.27	8.32		D	23064−4747	I 1	2 C	A	AB	155	2.824	0.012	2.55	0.06	S
114086	9.836	0.017	8.290	0.009		1.325	0.005	G	1.29	0.01	H	8.3033	0.0019	0.017	175		8.27	8.33					1							S
114087	9.123	0.014	7.972	0.009		0.989	0.013	T	0.97	0.01	L	8.0080	0.0014	0.012	100		7.98	8.03		C			1							
114088						1.395	0.015	G	1.66	0.04	I *	11.5409	0.0074	0.058	95	*	11.25	11.64		D	23064+1236	M 1	2 C	A	AC	285	0.414	0.020	0.68	0.12	G
114089	9.619	0.012	7.775	0.005		1.533	0.010	T	1.58	0.02	L	7.7435	0.0011	0.014	241		7.72	7.77					1							S
114090	11.043	0.055	10.338	0.048		0.632	0.015	G	0.70	0.01	H	10.4231	0.0034	0.032	90		10.34	10.49		D			1	S						
114091	10.933	0.036	10.219	0.031		0.643	0.036	T	0.71	0.03	L	10.2666	0.0032	0.041	182		10.19	10.33					1							
114092	7.344	0.007	6.823	0.005	A	0.477	0.002	G	0.55	0.00	H *	6.8551	0.0008	0.009	124	*	6.84	6.87		D	23065+6126	I 1	2 C	A	AB	353	1.885	0.011	3.37	0.08	S
114093	8.378	0.008	8.057	0.009		0.325	0.006	G	0.38	0.01	H	8.1032	0.0014	0.016	122		8.07	8.13					1							S
114094	11.042	0.044	9.126	0.016		1.625	0.039	T	2.09	0.18	O	8.9941	0.0274	0.189	111		8.64	9.08		U 2			1	S						P
114096	7.089	0.006	6.501	0.005		0.544	0.008	G	0.62	0.01	H	6.5568	0.0011	0.008	56		6.54	6.57		C			1							S
114097	7.260	0.004	7.406	0.005		−0.108	0.008	G	−0.09	0.01	H	7.3871	0.0014	0.013	148		7.37	7.41					1							S
114098	10.453	0.043	9.376	0.027		0.879	0.003	G	0.92	0.00	H	9.4605	0.0017	0.017	73		9.43	9.49		C			1							
114099	12.006	0.146	10.797	0.077		1.027	0.132	T	1.00	0.11	L	10.8622	0.0047	0.041	115		10.78	10.93					1							G
114100	7.766	0.006	7.762	0.007		0.008	0.008	T	0.03	0.01	L	7.7649	0.0025	0.041	209		7.70	7.85		U 2	23066+4656	I 2	1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
114101	23 06 33.71	+31 00 39.8	8.27	H	346.640 478 08	+31.011 046 09	2.04	−18.13	−15.88	0.72	0.58	1.11	0.84	0.72	− 1	+20	−10	+22	− 4	− 4	+ 9	−31	+42	+ 8	2	−0.24
114102	23 06 34.00	−08 38 43.6	8.59	H	346.641 674 57	−08.645 445 96	11.04	−84.94	−111.58	1.22	0.79	1.28	1.91	1.02	+ 3	+26	− 7	+ 8	+ 2	+19	+ 7	+ 6	+13	−25	0	−0.86
114103	23 06 34.13	+51 26 07.3	8.81	H	346.642 223 50	+51.435 359 11	2.75	1.10	7.13	0.60	0.70	0.94	0.70	0.75	−18	+ 3	+23	− 4	− 3	− 3	− 2	− 7	− 8	− 8	0	−1.47
114104	23 06 36.81	+59 25 11.2	4.84	H	346.653 374 33	+59.419 764 74	2.95	6.77	−1.97	0.43	0.46	0.53	0.50	0.51	−32	+20	+11	+11	+12	− 6	+15	−22	+20	−37	0	−0.88
114105	23 06 36.98	+46 56 33.6	8.57	H	346.654 070 05	+46.942 663 46	1.80	−2.18	−3.70	0.57	0.68	0.98	0.64	0.73	−46	+ 0	+10	+ 7	+18	−18	+32	−31	+ 1	−13	0	1.17
114106	23 06 37.05	+42 39 26.5	8.01	1 H	346.654 394 71	+42.657 371 19	4.57	−1.81	−4.54	0.46	0.48	0.87	0.51	0.59	−11	+18	+11	+27	− 5	− 4	+ 5	− 3	+ 5	+17	0	−0.86
114107	23 06 37.07	+61 28 42.7	9.77	H	346.654 468 67	+61.478 533 61	1.96	−2.59	−4.74	0.80	0.82	1.00	1.03	0.93	− 7	+ 9	+16	+20	− 5	− 6	− 2	+11	+ 3	+ 6	3	0.87
114108	23 06 37.54	−40 17 38.4	8.81	H	346.656 425 31	−40.294 007 31	12.33	41.62	−11.97	0.89	0.79	1.22	0.98	0.90	+18	−17	−25	+12	− 8	+17	− 9	− 9	+ 9	+32	+23	0	−0.10
114109	23 06 38.12	−47 54 37.1	9.12	H	346.658 818 32	−47.910 307 91	3.66	10.01	−0.74	1.11	0.85	1.20	1.15	0.92	+ 7	+17	+ 4	− 5	+20	+15	+22	+13	+10	+ 3	2	2.48
*114110	23 06 38.89	−14 52 20.6	12.24	H	346.662 032 19	−14.872 396 55	216.52	112.27	83.24	12.77	12.83	18.28	11.63	10.05	+44	+44	+43	+17	+28	+49	− 2	− 1	−28	− 5	18	4.20
*114111	23 06 38.76	−19 27 35.3	8.38	H	346.661 502 26	−19.459 800 93	9.38	97.34	−57.42	1.03	0.69	1.08	1.74	0.85	+16	+10	+ 3	−10	+33	+ 9	+24	−16	+ 4	−28	2	2.01
*114112	23 06 39.20	−43 30 13.2	7.67	G	346.663 324 38	−43.503 679 60	24.96	−49.97	−23.93	0.67	0.67	0.92	0.81	0.80	+26	−15	−24	+11	−18	+25	−14	−16	+21	+35	0	1.08
*114113	23 06 39.15	−14 51 50.0	9.15	G	346.663 104 38	−14.863 898 36	13.26	157.01	49.38	1.41	0.92	1.61	1.63	1.19	+23	+ 6	−17	−25	+ 7	+29	+18	−29	+30	+11	4	−2.10
*114114	23 06 39.16	+10 32 36.2	8.53	3 T	346.663 164 74	+10.543 381 73	2.86	11.44	−8.79	1.85	1.14	2.03	1.58	1.54	+55	−73	−51	+10	+20	− 9	+25	+35	−12	+20	0	−0.13
114115	23 06 39.97	−30 36 54.3	8.27	H	346.666 547 20	−30.615 077 95	3.33	12.14	−88.06	1.00	0.72	1.04	1.13	0.87	+ 3	+ 0	− 1	−42	+25	+17	+28	+49	− 2	− 1	−28	− 5	18	4.20
114116	23 06 40.30	+33 02 09.6	10.39	H	346.667 902 92	+33.036 008 31	−0.61	10.44	3.53	1.51	1.08	2.14	2.20	1.38	+ 1	+12	− 1	+28	−21	+ 7	− 3	−34	+35	+21	0	0.75
114117	23 06 40.73	+21 49 06.9	8.55	H	346.669 706 44	+21.818 597 12	3.30	26.61	8.64	1.03	0.86	1.26	1.18	0.95	+14	+20	− 5	− 7	− 7	−34	−10	+ 7	− 8	+ 9	0	−1.16
*114118	23 06 40.89	−04 11 58.3	10.61	H	346.670 383 26	−04.199 527 37 B	−3.78	115.86	−33.83	25.64	23.81	10.98	12.96	10.71	+37	+30	+11	+11	− 4	+28	−15	−21	−12	+18	1	0.67
*114119 H	23 06 40.81	−23 44 35.2	4.48	G	346.670 030 33	−23.743 116 80 *	17.32	59.90	0.53	1.46	1.42	0.88	1.10	0.82	+ 5	−18	−32	−10	+23	+ 6	+24	+ 7	+34	+33	4	0.56
114120	23 06 41.83	−04 12 03.2	9.13	H	346.674 298 96	−04.200 882 29 A	7.43	117.38	−31.81	4.17	3.40	3.60	4.21	3.72	+34	+25	+11	+ 5	+ 4	+28	− 3	− 9	−10	+18	1	0.67
114121 H	23 06 42.39	+33 01 46.6	10.15	G	346.676 635 63	+33.029 622 96 A	14.80	−12.95	−153.97	2.36	2.04	3.07	3.10	2.12	+15	− 3	− 1	+28	−24	−13	−21	−31	+27	+ 7	1	0.13
114123	23 06 42.62	+41 11 08.8	9.56	H	346.677 573 09	+41.185 765 84 A	2.93	13.27	−5.65	1.44	1.41	2.14	1.42	1.45	− 2	+16	− 7	+37	+ 2	+29	+23	−29	+36	+34	1	0.08
120306 H	23 06 44.99	−66 04 31.0	10.96	G	346.687 477 34	−66.075 284 37 A	10.13	−37.06	21.90	8.66	6.95	6.04	9.01	5.89	+ 3	−25	−21	−61	+ 6	+25	+13	−72	+ 1	−27	2	−0.38
114124	23 06 45.64	−27 44 30.2	10.65	H	346.690 157 14	−27.741 724 51	5.41	5.84	7.72	1.81	1.44	2.24	2.15	2.09	+30	+ 1	− 8	−25	+ 7	+ 9	+ 5	+ 0	+30	+48	0	0.42
114125	23 06 46.00	+34 35 03.1	9.89	H	346.691 670 16	+34.584 192 93	13.35	−13.74	−177.47	1.15	0.88	1.59	1.43	1.08	+ 5	+17	− 7	+31	− 7	−15	+14	−36	+31	+27	0	−2.10
114126	23 06 46.58	+05 02 09.2	7.56	H	346.694 075 79	+05.035 892 66	0.90	−12.93	−4.38	1.09	0.79	1.13	1.72	1.12	+35	+20	+ 3	+40	+20	+24	+20	+33	+ 9	+10	0	1.76
114127	23 06 48.01	−38 47 38.7	8.72	2 H	346.700 050 51	−38.794 092 53	7.08	−0.04	−7.10	0.78	0.77	1.12	0.97	0.95	+17	− 5	−26	+19	− 1	+25	+ 5	+15	+16	+30	0	0.04
114128	23 06 48.39	+67 50 50.7	8.80	H	346.701 626 56	+67.847 426 71	3.88	25.70	15.11	0.76	0.78	0.87	0.93	1.05	−18	− 7	− 2	+37	+ 0	−15	+ 1	+16	+ 9	−16	0	0.78
114129	23 06 51.46	−25 03 30.8	10.19	H	346.714 398 47	−25.058 553 19	2.03	−5.03	−0.43	1.71	1.49	2.45	2.27	2.01	+34	− 2	−34	−18	+28	−15	+21	− 7	+28	+43	0	0.84
114130	23 06 52.60	+07 30 50.1	10.15	H	346.719 173 75	+07.513 910 68	2.62	28.90	−14.44	1.57	1.27	1.98	1.96	1.90	+35	+18	−30	−16	+ 4	−24	− 2	−11	− 3	+40	0	0.53
114131 H	23 06 52.77	−43 31 13.2	4.28	G	346.719 868 58	−43.520 324 36 A	24.51	−48.35	−13.98	0.70	0.65	0.75	0.69	0.67	+29	− 3	−28	+ 4	−19	+21	−14	−21	+15	+38	1	−0.24
114132 H	23 06 53.60	−38 53 32.3	5.62	H	346.723 332 74	−38.892 306 72 A	11.09	33.56	5.78	0.63	0.61	0.79	0.67	0.65	+17	+21	−33	− 3	−10	+20	− 2	+17	−14	+22	1	0.80
114133	23 06 53.63	+38 14 36.6	8.19	H	346.723 477 78	+38.243 488 66	14.88	79.51	31.78	0.75	0.61	0.99	0.81	0.66	+11	+37	+ 0	+12	+ 4	+11	+22	−29	+30	+36	0	0.64
114134	23 06 53.95	+44 19 26.4	8.55	H	346.724 795 94	+44.324 000 79	2.58	0.92	−4.19	0.66	0.58	1.00	0.73	0.66	−11	+17	+24	+ 2	+ 9	+ 0	+15	−15	+ 0	+21	0	−1.83
114135	23 06 54.36	−21 27 24.8	8.98	H	346.726 490 04	−21.456 881 02	26.81	−14.82	−116.57	1.26	0.79	1.29	1.76	1.08	+13	+ 4	− 6	+ 0	+21	− 1	+21	+ 2	+17	+ 3	0	2.11
114136	23 06 55.39	+38 00 58.8	8.27	H	346.730 773 69	+38.016 327 53	13.08	96.95	20.74	0.84	0.59	1.11	0.85	0.64	+ 7	+44	+ 4	+17	+ 7	+12	+27	−26	+35	+27	0	−0.99
114137	23 06 56.27	−19 52 15.3	8.78	H	346.734 445 79	−19.870 904 80	8.27	57.91	−73.85	1.09	0.72	1.16	1.57	0.88	+28	+ 3	+17	+30	+25	+25	+13	+ 2	− 2	+ 1	0	0.60
114138	23 06 56.92	−52 46 50.1	8.53	H	346.737 152 51	−52.780 573 51	7.90	15.12	19.27	0.63	0.80	1.06	0.77	0.82	+32	−15	−31	+26	+16	+ 8	+21	+32	−16	+39	0	0.93
114139	23 06 57.95	−30 02 53.3	6.57	H	346.741 452 16	−30.048 141 13	14.60	38.28	−1.17	0.76	0.52	0.74	0.87	0.60	− 4	+ 7	+ 3	−44	+28	+ 6	+31	−11	+ 6	−10	0	−0.08
114140	23 06 58.29	+66 05 44.8	10.61	H	346.742 891 31	+66.095 771 27	9.72	185.24	56.06	1.55	1.34	1.76	2.13	1.83	− 3	−14	− 9	+ 0	+11	+ 7	+10	− 4	+11	+ 2	0	1.45
114141	23 06 58.90	+54 44 48.4	9.60	G	346.745 417 24	+54.746 784 88	0.45	−1.13	−2.42	0.74	0.87	1.04	0.87	0.94	− 7	+12	+23	+15	− 3	− 8	+ 1	− 7	− 1	− 1	0	−0.74
114142	23 06 59.02	−57 19 39.8	8.87	H	346.745 933 51	−57.327 727 94	2.33	8.71	−5.26	0.72	0.80	1.25	0.79	0.78	−14	−10	− 9	−19	− 1	+25	+ 2	−22	− 2	−10	0	0.97
114143	23 06 59.19	−12 43 48.6	8.29	H	346.746 618 34	−12.730 172 32	17.17	36.70	−113.99	1.08	0.71	1.08	1.72	0.86	− 3	+ 2	− 3	−13	+11	+22	+16	+ 6	+16	−31	0	1.44
114144	23 07 00.26	+09 24 34.3	4.54	1 H	346.751 066 02	+09.409 522 59	10.13	6.73	−12.76	0.95	0.52	0.87	1.41	0.74	− 3	+ 8	−24	−57	+25	−28	+35	− 2	−13	−31	2	1.08
114145	23 07 00.28	+31 59 32.5	8.47	H	346.751 170 24	+31.992 350 50	9.75	−52.32	−162.68	0.71	0.55	1.14	0.77	0.72	− 8	+34	−20	+ 1	− 3	+ 1	+16	−36	+46	+ 9	1	1.04
114146	23 07 01.27	−22 13 13.6	8.98	H	346.755 309 21	−22.220 435 65	9.82	−108.44	−74.13	1.40	0.96	1.72	1.91	1.36	+41	−16	−27	+29	+10	+25	+10	− 1	+42	+44	0	0.29
114147	23 07 02.47	+35 03 09.7	7.71	H	346.760 292 73	+35.052 686 71	2.38	−12.01	−13.33	0.66	0.56	0.90	0.75	0.65	+ 6	+11	+ 1	+23	− 9	− 8	+10	−34	+22	+33	0	0.28
114148	23 07 02.66	+03 03 07.9	6.98	H	346.761 066 33	+03.052 207 59	7.36	34.81	14.41	0.80	0.57	0.86	1.01	0.70	+18	+ 7	−14	−28	+ 3	+ 7	+ 9	−17	+19	− 5	0	−0.91
114149	23 07 04.12	+17 58 09.0	8.60	G	346.767 160 53	+17.969 160 44	10.60	23.37	−58.59	1.14	0.88	1.25	1.28	1.04	+11	+13	− 4	−21	+ 6	+16	+10	−13	+13	+ 6	0	0.13
114150	23 07 04.26	−55 57 08.2	8.10	H	346.767 731 48	−55.952 283 58	1.40	24.14	−14.09	0.66	0.64	1.05	0.72	0.65	−14	+ 8	−12	− 5	− 5	+17	− 3	−20	+ 1	−17	0	−0.45
114151	23 07 04.72	−55 32 55.3	8.97	H	346.769 657 84	−55.548 708 12	0.55	10.30	−34.23	0.75	0.74	1.31	0.86	0.80	−12	− 3	− 1	− 2	−10	+20	−10	− 6	− 5	−19	0	−0.17
114152	23 07 04.99	+35 38 11.3	6.38	H	346.770 799 24	+35.636 465 21	5.11	56.25	10.71	0.57	0.47	0.79	0.69	0.57	+ 6	+24	−10	+21	+ 0	+ 8	+18	−26	+31	+34	0	−2.77
114153	23 07 05.55	+46 07 46.6	10.17	H	346.773 144 98	+46.129 607 27	2.13	−0.22	−4.95	0.79	0.88	1.34	0.87	1.06	−21	+15	+ 5	−38	+ 6	−13	+ 4	−25	+ 2	− 2	0	1.34
114154	23 07 06.21	+50 11 32.5	7.02	2 H	346.775 877 77	+50.192 360 76	2.24	2.20	−1.09	0.39	0.47	0.62	0.40	0.46	−19	− 1	+22	+10	− 3	− 2	− 2	+ 4	+ 3	− 2	2	−1.70
114155	23 07 06.74	+25 28 06.0	4.76	1 H	346.778 079 97	+25.468 339 59	6.07	0.26	−33.31	0.44	0.48	0.67	0.49	0.49	+39	+11	+ 1	+ 9	−11	−19	−13	−32	+10	+29	1	−0.96
114156	23 07 06.96	−23 09 31.8	9.62	H	346.779 000 23	−23.158 831 63	47.36	154.14	−253.64	1.49	1.11	1.88	2.00	1.49	+45	−29	−37	+ 5	+20	+10	+12	− 1	+35	+40	0	2.31
114157	23 07 08.52	+42 55 11.1	9.26	H	346.785 496 61	+42.919 746 06	3.40	−2.81	0.41	0.66	0.69	1.24	0.71	0.83	−10	+15	+12	+14	+ 1	− 5	+11	−11	+ 8	+16	0	−1.95
114158	23 07 08.78	+56 00 21.2	10.21	2 G	346.786 585 93	+56.005 882 76	−0.33	−4.84	−4.80	1.05	0.98	1.40	1.21	1.11	−18	− 3	+11	+35	−10	− 6	− 7	+ 2	+33	−12	0	−1.26
114159	23 07 09.43	−49 36 22.1	6.33	H	346.789 302 62	−49.606 135 15	2.50	8.80	0.10	0.46	0.53	0.75	0.59	0.58	+ 5	−10	− 1	− 9	+23	+15	+21	+12	−16	+ 0	0	0.53
*114160	23 07 10.09	+58 33 15.2	9.77	3 H	346.792 026 34	+58.554 209 38	1.07	−5.89	−6.35	1.15	1.02	1.37	1.35	1.18	−26	+25	+17	− 4	+ 5	−14	+11	−26	+20	−38	3	1.70
*114161 H	23 07 09.99	+60 49 57.1	7.64	G	346.791 619 95	+60.832 529 71 A	2.48	−3.67	−15.57	1.18	1.15	1.20	1.40	1.21	−27	+ 9	+12	+16	+ 0	− 9	+ 3	− 6	+ 5	−12	0	0.55
*114162	23 07 10.05	+52 48 59.6	6.12	H	346.791 885 53	+52.816 569 40	7.70	2.32	12.88	0.44	0.51	0.67	0.49	0.50	−37	−14	+36	−23	+20	+27	+13	−17	− 9	−39	1	−1.01
114163	23 07 10.45	+59 43 38.6	6.41	H	346.793 521 12	+59.727 398 38	2.44	6.56	−1.78	0.46	0.49	0.57	0.57	0.56	−29	+ 7	+17	+ 9	+13	− 1	+10	−19	+ 8	−39	0	−0.41
114164	23 07 11.69	−07 41 40.1	7.39	H	346.798 724 02	−07.694 464 98	8.26	14.81	−48.54	0.83	0.60	0.93	1.08	0.68	+12	+13	− 7	+20	−12	+19	−11	− 7	+30	− 9	0	1.84
114165	23 07 11.97	−45 50 33.2	7.92	H	346.799 875 92	−45.842 562 49	8.12	35.71	−31.86	0.94	0.67	1.01	1.16	0.71	−11	+14	−23	+ 3	+ 3	− 1	+ 2	+12	+ 3	− 8	2	0.91
114166	23 07 13.17	+62 40 36.8	8.58	H	346.804 878 23	+62.676 887 53	1.32	4.80	2.01	0.67	0.71	0.84	0.76	0.77	−14	+14	+19	+ 2	+ 2	+ 2	+ 1	+ 3	−20	+12	−17	0	−1.73
114167 H	23 07 14.81	−50 41 11.8	5.81	1 H	346.811 694 15	−50.686 624 67 A	25.15	−37.53	−23.32	0.90	0.98	1.08	0.83	0.84	+13	− 6	−12	−32	+ 2	− 5	+ 3	+ 3	+ 2	+ 2	2	0.49
114168	23 07 14.91	+40 33 01.3	7.78	G	346.812 137 56	+40.550 369 11	8.91	−11.67	−5.68	0.69	0.58	0.92	0.76	0.67	+ 2	+26	+ 8	+12	+12	− 5	+26	−19	+20	+27	0	0.50
114169	23 07 16.09	+49 29 58.3	8.69	H	346.817 045 10	+49.499 521 76	1.21	5.15	−0.41	0.63	0.72	1.00	0.69	0.73	−29	+ 2	+20	+17	− 2	−12	+ 4	− 4	+ 3	−12	1	−0.59
114170	23 07 16.48	+66 17 21.4	8.67	H	346.818 684 10	+66.289 285 07	1.76	0.80	−4.46	0.73	0.68	0.86	0.95	0.92	+ 2	−14	+11	+13	+ 8	− 2	+ 8	+ 3	+12	+15	1	0.34
114171	23 07 16.75	+12 41 27.5	10.32	G	346.819 810 05	+12.690 985 69	17.86	440.54	−78.02	1.89	1.04	2.07	2.17	1.70	+43	−26	−16	−20	− 6	+14	− 8	−18	+25	+ 9	0	−0.95
114172	23 07 17.26	−08 48 56.0	8.03	H	346.821 915 19	−08.815 546 82	1.89	40.28	−60.55	1.14	0.78	1.28	1.48	0.85	+ 1	+30	−20	−12	− 3	+24	+12	−13	+22	−21	0	−1.26
114173	23 07 17.90	−34 51 56.4	8.01	H	346.824 592 16	−34.865 657 91	2.51	13.68	16.99	0.86	0.77	1.03	1.06	1.04	+20	− 8	− 4	−38	− 3	+20	− 2	−31	+ 9	+34	0	−2.08
114174	23 07 18.00	+46 04 05.4	6.66	H	346.824 999 66	+46.068 153 26	1.65	0.09	−1.64	0.39	0.44	0.71	0.39	0.50	−23	+24	+ 1	−41	+ 3	−20	+ 1	−14	+ 9	−12	0	0.86
114175	23 07 18.92	−60 52 34.8	8.51	2 H	346.828 819 33	−60.876 336 65	11.25	22.09	0.68	0.58	0.61	0.94	0.72	0.62	−20	− 7	−20	+15	− 9	+ 3	− 6	− 9	+ 9	−11	0	0.65
114176	23 07 19.53	−32 16 05.5	12.28	H	346.831 365 70	−32.268 198 91	147.95	−223.58	−30.45	14.40	24.81	13.76	10.66	20.19	+69	+26	+ 0	+26	+49	+ 5	+51	+87	− 3	+67	11	1.89
114177	23 07 19.82	−32 15 35.7	8.58	G	346.832 585 34	−32.259 906 28	13.01	−136.30	−42.67	1.04	0.79	1.16	1.28	0.96	+26	+ 6	+ 2	+14	+14	+13	+14	+21	+14	+29	0	1.93
114178	23 07 20.35	+80 38 15.2	7.88	H	346.834 793 44	+80.637 543 01	3.24	16.98	9.87	0.52	0.53	0.59	0.55	0.54	+ 7	+ 2	+ 4	+12	− 7	+ 7	− 9	−19	+ 8	+ 1	1	1.41
114179	23 07 20.55	−52 36 09.5	7.54	H	346.835 604 70	−52.602 644 88	3.75	2.13	18.09	0.63	0.62	0.91	0.72	0.66	+22	−17	−23	− 2	+14	+ 2	+14	+15	−12	+31	4	0.15
114180 H	23 07 22.27	+70 39 39.5	7.40	H	346.842 793 07	+70.660 966 40 A	3.66	40.69	−21.29	0.79	0.74	0.85	0.86	0.76	− 9	−10	+15	−11	+ 8	+25	+ 5	− 6	+ 2	− 7	1	1.05
114181	23 07 23.27	−36 17 14.8	9.77	G	346.846 975 76	−36.287 431 57	12.33	185.51	−136.09	1.02	1.07	1.41	1.17	1.28	+43	− 3	+ 2	+24	− 1	+15	+ 1	− 1	− 1	+47	0	−0.28
114182	23 07 24.35	−11 48 23.8	7.68	H	346.851 459 94	−11.806 616 70	6.66	−18.48	−10.84	1.05	0.68	1.18	1.30	0.87	+ 7	+ 3	− 8	+39	−10	+ 3	−10	+10	+47	− 5	0	0.66
114183	23 07 25.52	+20 34 54.2	6.73	H	346.856 318 21	+20.581 709 27	6.02	−17.32	−34.17	0.71	0.62	0.86	0.78	0.68	+13	+12	− 1	− 3	− 4	−15	− 1	+10	+17	+ 4	0	−0.56
114184	23 07 25.77	−34 12 35.0	7.62	H	346.857 384 39	−34.209 716 13	8.85	25.29	22.95	1.02	0.70	1.07	1.13	0.95	+ 0	+ 2	−15	−45	+13	+14	+15	−20	+21	+17	0	−1.37
114185	23 07 25.97	+43 23 27.6	8.29	H	346.858 199 77	+43.391 009 23	6.52	15.25	0.48	0.53	0.51	0.96	0.57	0.66	−18	+21	+11	+11	+ 0	− 7	+14	−18	+15	+ 8	1	0.15
114186	23 07 26.00	+58 59 23.1	7.26	H	346.858 318 66	+58.989 743 75	2.80	16.18	−0.96	0.55	0.56	0.67	0.66	0.59	−34	+19	+10	− 5	+17	− 8	+19	−29	+17	−40	0	0.52
*114187 H	23 07 27.74	+32 49 31.3	6.13	2 H	346.865 578 99	+32.825 373 06 A	6.64	−21.11	−11.52	0.79	0.70	1.08	0.98	0.75	− 2	+ 7	−17	+ 9	−18	+16	− 3	−38	+45	+25	3	2.17
*114188	23 07 27.52	−55 56 52.9	8.66	H	346.864 686 00	−55.948 020 88	12.99	19.86	10.76	0.66	0.67	1.04	0.80	0.74	− 1	− 8	−16	− 8	− 8	+21	− 5	−20	− 7	−11	0	−1.29
114189	23 07 28.65	+21 08 03.7	5.97	1 H	346.869 364 78	+21.134 372 31	25.04	107.88	−50.08	0.69	0.60	0.85	0.75	0.64	+18	+18	+ 5	− 6	− 9	−33	− 6	+ 8	+ 9	+ 8	0	0.71
114190	23 07 29.21	+11 48 24.2	8.88	H	346.871 708 46	+11.806 733 35	6.92	−26.14	3.64	1.08	0.76	1.21	1.34	1.29	+44	+ 4	−14	+ 4	+ 9	− 7	+11	+ 8	+32	0	0	−0.18
114191	23 07 29.51	−31 48 09.1	8.54	H	346.872 961 86	−31.802 517 35	2.99	10.87	4.31	0.85	0.69	1.01	1.02	0.79	+25	+ 4	− 6	− 5	+14	+ 9	+15	+25	+10	+24	0	−0.31
114192	23 07 30.61	+36 18 06.3	8.75	H	346.877 537 34	+36.301 739 80	5.03	1.36	−12.25	0.88	0.67	1.22	1.28	0.78	+ 0	+23	− 1	+14	+11	+33	+24	−25	+38	+40	0	0.39
114193	23 07 31.04	+41 55 13.4	9.95	H	346.879 336 02	+41.920 386 45	2.95	−12.16	−10.33	0.70	0.83	1.36	0.74	0.97	− 1	+10	+ 3	+40	− 2	+14	+14	−22	+17	+27	2	−0.65
*114194	23 07 35.18	+80 34 10.1	7.28	H	346.896 575 03	+80.569 470 63	6.59	−5.41	−18.74	0.49	0.48	0.55	0.53	0.53	− 1	− 3	− 1	+ 8	−10	+ 8	−11	−13	+ 9	− 5	3	2.39
*114195	23 07 34.94	−43 55 13.5	9.19	H	346.895 575 41	−43.920 416 04	14.11	−11.48	−0.52	0.96	0.94	1.35	1.19	1.21	+19	+ 4	−28	+ 2	−24	+22	−17	−28	+24	+32	0	−0.32
114196	23 07 35.32	−36 04 17.6	8.24	2 H	346.897 182 78	−36.071 554 44	0.59	−7.56	0.82	0.70	0.78	1.09	0.80	1.02	+41	− 4	− 3	+28	− 5	+14	− 5	+ 1	− 1	+52	2	−1.78
114197	23 07 35.97	−28 34 59.4	9.23	H	346.899 869 46	−28.583 173 35	5.76	60.34	36.08	1.25	0.87	1.32	1.52	1.05	+ 6	+ 5	−13	−37	+15	+ 5	+17	−18	+ 6	+ 1	0	0.35
114198	23 07 36.09	−59 38 01.2	8.33	1 H	346.900 360 66	−59.633 678 99	8.07	72.03	−4.67	0.56	0.62	1.00	0.68	0.70	−29	− 1	− 7	+11	− 1	+ 5	+ 0	− 4	− 2	−24	0	0.03
114199	23 07 37.02	−53 37 38.0	9.51	H	346.904 256 40	−53.627 217 68	1.01	16.71	−9.95

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
114101	9.567	0.016	8.353	0.011		1.031	0.015	T	1.00	0.01	L	8.4172	0.0015	0.014	133		8.39	8.44		C			1							
114102	9.196	0.020	8.639	0.019		0.521	0.025	T	0.59	0.03	L	8.7005	0.0013	0.012	56		8.68	8.72		D			1							S
114103	8.867	0.011	8.795	0.014		0.071	0.017	T	0.08	0.02	L	8.8376	0.0021	0.021	144		8.81	8.87					1							
114104	4.763	0.003	4.834	0.003		−0.060	0.004	T	−0.02	0.03	C	4.8322	0.0004	0.004	118		4.83	4.84					1							S
114105	8.634	0.008	8.574	0.009		0.060	0.011	T	0.07	0.01	L	8.5924	0.0014	0.019	212		8.56	8.62			23066+4656	I 2	1							
114106	7.943	0.005	7.992	0.007		−0.040	0.008	T	−0.02	0.01	L	8.0007	0.0021	0.026	238		7.96	8.04	1.38	P 1 A	23066+4240	I 1	1	S						S
114107	9.976	0.027	9.753	0.033		0.213	0.040	T	0.24	0.05	L	9.8298	0.0029	0.023	112		9.78	9.86					1							G
114108	9.472	0.017	8.858	0.015		0.569	0.017	T	0.64	0.02	L	8.9351	0.0017	0.018	97		8.91	8.96		C			1							S
114109	9.348	0.018	9.163	0.021		0.177	0.026	T	0.19	0.03	L	9.1819	0.0027	0.021	84		9.15	9.22		C			1							
114110											T	12.3750	0.2655	0.925	15		10.54	13.09			23067−1452	I 2	1							G
114111	9.073	0.014	8.462	0.013		0.567	0.014	T	0.64	0.01	L	8.5066	0.0014	0.013	89		8.49	8.53		C			1							S
114112	8.421	0.013	7.756	0.011		0.606	0.013	T	0.68	0.01	L	7.8021	0.0018	0.013	101		7.78	7.83			23068−4331	I 2	1							S
114113	9.944	0.020	9.211	0.016		0.639	0.002	G	0.70	0.00	H	9.2924	0.0027	0.027	115		9.23	9.33		D	23067−1452	I 2	1							
114114	9.819	0.036	8.641	0.024		1.010	0.034	T	0.99	0.03	L	9.1485	0.2956	1.615	81		6.69	10.89	380.00	P 1 B			1	S						G P
114115	9.599	0.019	8.402	0.012		1.025	0.018	T	1.00	0.01	L	8.4423	0.0021	0.014	92		8.41	8.47		C			1							S
114116	10.609	0.036	10.332	0.045		0.145	0.140	G	0.16	0.14	R	10.4403	0.0048	0.036	108		10.37	10.51			23067+3302	I 2	1							G
114117	10.150	0.044	8.688	0.023		1.232	0.039	T	1.19	0.04	L	8.7142	0.0033	0.018	47		8.69	8.74					1							
114118											T	10.7111	0.0777			B				D	23067−0412	I 2	1 C I A							
114119	5.610	0.003	4.579	0.003	*	0.892	0.002	G	0.92	0.02	A *	4.6304	0.0006	0.004	61	*	4.63	4.64		D	23067−2345	I 1	2 C	A	AC	119	0.255	0.008	1.97	0.05	S
114120	9.655	0.027	9.137	0.026	A	0.486	0.033	T	0.56	0.04	L	9.2422	0.0219	0.045	50	A	9.19	9.37		D	23067−0412	I 2	1 C P A							
114121	11.225	0.055	10.402	0.042	*	0.870	0.020	G	0.88	0.01	H *	10.3247	0.0045	0.036	120	*	10.26	10.39		D	23067+3302	I 2	2 C	A	AP	178	0.890	0.010	1.57	0.06	G
114123	9.867	0.024	9.603	0.028	A	0.251	0.035	T	0.28	0.04	L	9.6336	0.0119	0.025	121	A	9.59	9.69			23067+4111	H 1	2 C	A	AB	263	14.038	0.020	2.26	0.10	
120306						1.250	0.015	G	1.21	0.01	J *	11.1126	0.0042	0.046	88	*	10.92	11.17		D	23067−6605	H 1	2 C	A	AB	254	0.497	0.011	0.51	0.07	G
114124	11.164	0.069	10.701	0.071		0.494	0.072	G	0.57	0.08	R	10.7556	0.0049	0.039	92		10.67	10.84					1							G
114125	10.621	0.034	9.999	0.031		0.575	0.034	T	0.65	0.03	L	10.0108	0.0032	0.025	118		9.96	10.05		C			1							G
114126	9.765	0.028	7.750	0.011		1.669	0.024	T	1.69	0.03	L	7.6598	0.0020	0.018	68		7.64	7.69					1							S
114127	9.144	0.015	8.744	0.015		0.378	0.020	T	0.44	0.02	L	8.8097	0.0037	0.033	105		8.76	8.87	0.87	P 1 A			1							S
114128	10.370	0.033	8.934	0.017		1.212	0.029	T	1.17	0.03	L	8.9616	0.0018	0.020	121		8.92	8.99		C			1							
114129	11.981	0.133	10.364	0.045		1.354	0.111	T	1.32	0.13	L	10.3409	0.0038	0.035	115		10.27	10.39		C			1	S						
114130	10.897	0.064	10.212	0.053		0.633	0.069	T	0.70	0.06	L	10.2828	0.0045	0.033	73		10.22	10.33					1							
114131	4.843	0.004	4.374	0.004	A	0.423	0.009	G	0.44	0.02	A *	4.3881	0.0006	0.005	103	*	4.38	4.40		D	23068−4331	I 2	2 C	A	AB	100	1.358	0.011	2.33	0.02	S
114132	5.631	0.003	5.625	0.003	*	0.006	0.004	T	0.03	0.00	L *	5.6263	0.0006	0.005	103	*	5.62	5.64		D	23069−3854	I 1	2 C	A	AB	207	0.984	0.008	2.65	0.04	S
114133	9.035	0.013	8.261	0.011		0.704	0.013	T	0.76	0.01	L	8.3347	0.0016	0.016	94		8.31	8.36					1							S
114134	8.564	0.009	8.541	0.011		0.026	0.013	T	0.04	0.01	L	8.5706	0.0015	0.019	162		8.54	8.60					1							S
114135	10.211	0.034	9.092	0.022		0.915	0.015	G	0.96	0.02	I	9.1257	0.0013	0.014	68		9.09	9.15		D			1							
114136	9.006	0.014	8.331	0.012		0.625	0.015	T	0.69	0.01	L	8.3970	0.0014	0.015	93		8.38	8.43		C			1							S
114137	9.325	0.015	8.835	0.015		0.473	0.016	T	0.54	0.02	L	8.8833	0.0014	0.014	87		8.86	8.92		C			1							S
114138	9.653	0.017	8.625	0.012		0.895	0.016	T	0.90	0.01	L	8.6919	0.0017	0.018	141		8.65	8.72		C			1							
114139	7.079	0.006	6.625	0.005		0.435	0.010	G	0.50	0.01	H	6.6724	0.0006	0.007	94		6.66	6.68					1							S
114140	11.645	0.083	10.638	0.056		0.879	0.075	T	0.89	0.06	L	10.7687	0.0038	0.038	118		10.69	10.82					1							G
114141	9.723	0.022	9.599	0.027		0.200	0.015	G	0.22	0.02	H	9.6472	0.0022	0.022	132		9.61	9.68		C			1							G
114142	10.685	0.030	9.027	0.013		1.386	0.026	T	1.36	0.03	L	9.0158	0.0019	0.024	187		8.97	9.05		C			1							
114143	8.970	0.019	8.333	0.017		0.586	0.019	T	0.66	0.02	L	8.4163	0.0022	0.013	51		8.40	8.44					1							S
114144	6.572	0.005	4.718	0.003		1.559	0.033	G	1.79	0.02	A	4.6352	0.0009	0.008	76		4.61	4.65		U 2			1							S
114145	9.232	0.012	8.542	0.010		0.625	0.012	T	0.69	0.01	L	8.6040	0.0013	0.014	132		8.58	8.63		C			1							
114146	9.654	0.021	9.020	0.019		0.584	0.021	T	0.66	0.02	L	9.1087	0.0019	0.017	63		9.09	9.16					1							S
114147	7.720	0.006	7.696	0.007		0.012	0.002	G	0.03	0.00	H	7.7245	0.0012	0.012	115		7.70	7.74		C			1							S
114148	8.389	0.012	7.123	0.008		1.079	0.011	T	1.04	0.01	L	7.1504	0.0011	0.008	84		7.13	7.16		C			1							S
114149	9.208	0.025	8.647	0.024		0.505	0.015	G	0.58	0.02	H	8.7185	0.0012	0.012	44		8.69	8.75		D			1							
114150	9.881	0.018	8.245	0.009		1.369	0.016	T	1.34	0.02	L	8.2503	0.0017	0.018	165		8.22	8.28					1							S
114151	10.511	0.025	9.106	0.014		1.187	0.022	T	1.15	0.02	L	9.1375	0.0021	0.030	179		9.09	9.19					1	S						
114152	7.882	0.007	6.514	0.004		1.158	0.006	T	1.12	0.01	L	6.5472	0.0007	0.007	111		6.54	6.56					1							S
114153	10.317	0.021	10.125	0.028		0.184	0.033	T	0.20	0.04	L	10.2316	0.0026	0.027	188		10.18	10.29		C			1							G
114154	7.377	0.007	7.077	0.007		0.285	0.009	T	0.32	0.01	L	7.0932	0.0035	0.064	164		6.97	7.18		U 2			1							S
114155	6.434	0.004	4.905	0.002		1.285	0.004	T	1.30	0.02	G	4.9146	0.0011	0.011	142		4.90	4.94		U 2			1							S
114156	11.306	0.077	9.736	0.035		1.276	0.005	G	1.51	0.02	A	9.7268	0.0035	0.025	64		9.67	9.77					1							
114157	9.268	0.010	9.229	0.013		0.041	0.015	T	0.06	0.01	L	9.2760	0.0022	0.027	222		9.23	9.32					1	S						
114158	10.395	0.033	10.302	0.046		0.140	0.015	G	0.15	0.01	H	10.2532	0.0066	0.056	118		10.16	10.35		U 2			1							G
114159	8.215	0.008	6.490	0.004		1.452	0.002	G	1.45	0.00	H	6.4672	0.0009	0.009	138		6.45	6.48					1							S
114160	11.134	0.068	9.817	0.034		1.118	0.059	T	1.08	0.06	L	9.9414	0.0332	0.244	101		9.51	10.16	5.44	P 1 A			1							G
114161	7.979	0.008	7.707	0.007	*	0.327	0.015	G	0.38	0.02	H *	7.7253	0.0015	0.011	114	*	7.71	7.75		D	23072+6050	I 1	2 C	A	AB	143	0.573	0.003	1.01	0.02	S
114162	7.488	0.005	6.246	0.003		1.060	0.005	T	1.03	0.00	L	6.2928	0.0008	0.008	147		6.28	6.31					1							S
114163	6.377	0.004	6.415	0.004		−0.030	0.005	T	−0.01	0.01	L	6.4121	0.0008	0.008	125		6.40	6.43		C			1							S
114164	7.510	0.008	7.403	0.009		0.104	0.011	T	0.12	0.01	L	7.4279	0.0013	0.008	57		7.41	7.45		C			1							S
114165	9.183	0.018	8.017	0.011		1.000	0.016	T	0.98	0.01	L	8.0895	0.0015	0.012	80		8.06	8.12		C			1							S
114166	8.653	0.010	8.587	0.013		0.060	0.015	T	0.07	0.01	L	8.6060	0.0023	0.019	122		8.58	8.63					1							
114167	6.363	0.004	5.846	0.005	*	0.486	0.005	T	0.56	0.01	L *	5.9210	0.0009	0.009	115	*	5.91	5.95		U 2	23072−5041	I 1	2 C	A	AB	255	8.792	0.004	0.81	0.01	S
114168	8.166	0.009	7.839	0.011		0.358	0.007	G	0.42	0.01	H	7.8603	0.0014	0.014	91		7.84	7.89		C			1							S
114169	8.736	0.009	8.686	0.011		0.051	0.013	T	0.06	0.01	L	8.7182	0.0021	0.019	172		8.69	8.75		C			1							S
114170	10.509	0.032	8.821	0.014		1.410	0.028	T	1.39	0.03	L	8.8159	0.0017	0.016	121		8.79	8.84		C			1							
114171						0.985	0.003	G	1.03	0.00	I	10.4553	0.0029	0.026	101		10.41	10.50		C			1							
114172	9.713	0.028	8.167	0.015		1.298	0.025	T	1.26	0.03	L	8.1890	0.0025	0.014	49		8.17	8.21					1							S
114173	9.868	0.022	8.173	0.011		1.416	0.019	T	1.40	0.03	L	8.1544	0.0014	0.011	89		8.12	8.18					1							S
114174	6.579	0.003	6.648	0.004		−0.059	0.004	T	−0.04	0.00	L	6.6510	0.0008	0.011	213		6.63	6.67					1							S
114175	9.001	0.009	8.563	0.009		0.427	0.010	T	0.49	0.01	L	8.6059	0.0019	0.022	191		8.57	8.71		U 2			1							S P
114176											T	12.4153	0.4936	1.089	10		10.76	13.06			23073−3216	I 2	1							G
114177	9.144	0.016	8.599	0.015		0.536	0.015	G	0.61	0.02	H	8.6788	0.0024	0.018	80		8.65	8.71		D	23073−3216	I 2	1							S
114178	7.836	0.008	7.880	0.009		−0.036	0.011	T	−0.01	0.01	L	7.8808	0.0012	0.010	140		7.86	7.90					1							S
114179	8.833	0.012	7.648	0.008		1.015	0.011	T	0.99	0.01	L	7.7058	0.0015	0.014	113		7.68	7.73		C			1							S
114180	8.745	0.016	7.476	0.009	*	1.081	0.014	T	1.04	0.01	L *	7.5644	0.0011	0.010	122	*	7.54	7.58		D	23074+7040	I 1	2 C	A	AB	293	4.528	0.007	2.42	0.04	
114181	10.821	0.049	9.913	0.035		0.780	0.003	G	0.82	0.00	H	9.9202	0.0032	0.025	110		9.88	9.96					1 G							
114182	8.010	0.012	7.694	0.012		0.300	0.016	T	0.34	0.02	L	7.7580	0.0011	0.008	49		7.75	7.78		D			1							S
114183	8.022	0.010	6.840	0.006		1.013	0.009	T	0.99	0.01	L	6.8925	0.0012	0.007	58		6.88	6.91			23074+2035	I 1	1							S
114184	7.926	0.009	7.654	0.009		0.254	0.015	G	0.29	0.02	H	7.6959	0.0017	0.012	78		7.67	7.72					1							S
114185	8.514	0.006	8.303	0.007		0.202	0.009	T	0.22	0.01	L	8.3531	0.0010	0.016	218		8.33	8.38					1							S
114186	8.916	0.015	7.371	0.008		1.297	0.013	T	1.26	0.01	L	7.4192	0.0011	0.008	113		7.41	7.44		C			1							S
114187	6.255	0.005	6.113	0.004	*	0.137	0.006	T	0.15	0.01	L *	6.1845	0.0015	0.023	150	*	6.17	6.29		U 2 C	23075+3250	I 1	2 C	A	AB	145	8.370	0.004	1.61	0.02	S
114188	9.226	0.012	8.703	0.011		0.500	0.012	T	0.57	0.01	L	8.7680	0.0020	0.022	167		8.75	8.81					1							S
114189	6.264	0.007	5.989	0.006		0.259	0.010	T	0.29	0.01	L	6.0415	0.0049	0.028	54		5.99	6.07	0.52	P 1 A			1							S P
114190	9.294	0.016	8.928	0.017		0.347	0.022	T	0.41	0.03	L	8.9586	0.0021	0.017	100		8.93	8.99		C			1							
114191	8.609	0.013	8.541	0.016		0.040	0.000	G	0.06	0.00	H	8.5629	0.0022	0.013	78		8.54	8.59		C			1							S
114192	9.399	0.017	8.822	0.015		0.539	0.020	T	0.61	0.02	L	8.8715	0.0023	0.019	96		8.84	8.92					1							
114193	10.532	0.030	10.007	0.029		0.493	0.038	T	0.57	0.04	L	10.0659	0.0022	0.026	192		10.02	10.11					1							G
114194	7.415	0.007	7.296	0.007		0.115	0.009	T	0.13	0.01	L	7.3215	0.0013	0.010	139		7.30	7.34		C			1							S
114195	9.952	0.030	9.191	0.025		0.679	0.030	T	0.74	0.03	L	9.3274	0.0027	0.023	96		9.28	9.36					1							
114196	10.326	0.026	8.434	0.011		1.605	0.023	T	1.99	0.07	O	8.3194	0.0026	0.024	121		8.28	8.38		U 2			1							
114197	10.109	0.031	9.333	0.026		0.706	0.031	T	0.76	0.03	L	9.3683	0.0024	0.019	92		9.33	9.40		C			1							
114198	8.734	0.008	8.362	0.008		0.375	0.006	G	0.44	0.01	H	8.4154	0.0019	0.022	213		8.38	8.45		M			1							S
114199	11.120	0.040	9.657	0.018		1.233	0.034	T	1.19	0.03	L	9.6733	0.0019	0.029	225		9.62	9.72					1	S						
114200	7.150	0.004	5.460	0.002		1.409	0.003	G	1.38	0.03	C	5.4468	0.0006	0.007	216		5.44	5.46			23077+4624	I 1	1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
114201	23 07 40.19	+30 03 15.4	7.58	1 G	346.917 455 02	+30.054 282 33		3.79	−15.19	−18.08	0.64	0.58	0.94	0.70	0.67	+19	+18	+ 9	+12	+ 6	+10	+12	− 9	+31	+26	0	−0.26
114202	23 07 40.53	−02 06 19.4	9.38	H	346.918 888 37	−02.105 396 36		1.34	−12.25	−17.20	1.17	0.86	1.38	1.63	1.07	+40	− 2	− 8	− 2	+ 6	− 4	+ 2	−11	+13	− 3	2	0.47
*114203	23 07 42.13	+65 37 00.8	7.01	H	346.925 539 05	+65.616 882 78		2.06	−8.75	−9.91	0.58	0.52	0.67	0.75	0.67	+ 2	−12	+ 4	−12	−15	+ 3	−16	−11	+23	+ 2	0	0.86
*114204	23 07 42.12	−09 40 01.8	8.26	H	346.925 491 26	−09.667 166 12		9.63	−21.97	−31.86	1.23	0.81	1.38	2.10	1.17	+13	+ 7	− 4	+44	− 7	+35	−16	− 5	+34	− 6	6	2.18
114205	23 07 42.32	−66 39 07.9	8.66	H	346.926 335 39	−66.652 199 28		3.05	−32.48	−22.22	0.77	0.78	1.05	0.97	0.81	−14	+ 2	−24	− 7	− 4	+ 1	− 3	−14	+ 0	−17	0	0.64
114206	23 07 42.75	−30 13 59.7	8.91	2 H	346.928 136 90	−30.233 262 94		5.85	−2.46	−28.03	1.10	0.79	1.16	1.49	0.90	+ 0	+ 7	−10	−34	+31	− 2	+32	−10	+18	−18	0	−0.74
114207	23 07 42.75	+06 35 58.8	9.18	H	346.928 138 89	+06.599 677 38	C	−7.65	−9.31	0.97	10.74	8.13	9.49	12.53	9.56	+33	+ 5	− 9	−13	+ 8	−10	+13	+ 3	+ 6	+ 9	2	0.86
114208	23 07 42.78	−36 28 53.6	8.61	H	346.928 254 30	−36.481 545 34		8.05	−62.71	−6.14	0.74	0.78	1.13	0.85	0.97	+39	+ 7	− 6	+23	+ 0	+31	+ 3	+ 4	+10	+47	0	0.84
114209 T	23 07 43.34	+06 36 17.1	9.00	H	346.930 600 85	+06.604 760 50	A	−10.79	39.92	−7.33	15.71	11.61	8.29	11.11	8.97	+32	+ 2	− 3	−12	+ 8	−18	+15	+12	+12	+ 8	2	0.86
114210	23 07 45.25	+49 17 43.6	5.68	H	346.938 533 39	+49.295 454 91		29.33	152.15	132.08	0.38	0.44	0.62	0.40	0.45	−33	− 4	+20	− 3	+ 5	− 5	+ 7	− 8	+12	−19	1	−2.06
114211	23 07 45.68	−00 17 45.7	7.05	G	346.940 337 80	−00.296 040 27		−0.26	−9.10	−4.82	0.79	0.54	0.91	1.04	0.72	+22	− 1	− 6	−15	+ 4	+26	+ 5	−17	+23	+ 7	0	1.56
114212 H	23 07 47.74	+63 38 00.5	6.25	G	346.948 904 29	+63.633 470 90	*	2.67	6.87	−2.08	0.93	0.91	0.58	0.55	0.57	− 4	+ 1	+ 5	−10	+ 4	+ 2	+ 4	−23	+14	−22	4	−0.19
114213	23 07 47.84	+30 26 22.5	7.18	H	346.949 320 54	+30.439 581 58		1.87	0.09	6.80	0.60	0.57	0.88	0.68	0.66	+17	+ 5	−11	+16	+ 4	−14	+ 7	−28	+33	+19	0	0.72
114214 H	23 07 47.86	+39 47 46.7	7.70	H	346.949 424 28	+39.796 304 20	A	8.45	37.45	23.52	1.06	0.93	1.33	1.11	0.88	+11	+25	+24	+13	+17	+25	+27	−19	+28	+44	1	−0.16
114215 H	23 07 48.16	+12 40 23.5	7.60	G	346.950 649 79	+12.673 189 89	A	9.93	−19.82	−12.79	1.14	0.72	1.09	1.13	0.94	+42	−12	− 5	−15	− 5	− 7	− 2	− 8	− 3	+13	0	−0.81
114216	23 07 48.79	−58 18 30.3	8.83	H	346.953 304 87	−58.308 413 96		5.28	22.75	−33.84	0.61	0.66	1.11	0.69	0.71	−37	+ 2	− 1	+ 3	+ 9	+11	+10	−12	−13	−26	0	−0.81
114217	23 07 50.28	−56 08 35.7	7.87	2 H	346.959 486 84	−56.143 260 38		1.40	0.19	−8.47	0.56	0.63	0.97	0.65	0.66	−18	+ 5	−20	−23	+ 2	+ 7	+ 4	−24	+ 0	−17	0	0.00
114218	23 07 50.69	−05 41 51.5	8.52	H	346.961 200 84	−05.697 636 53		2.06	16.96	−2.66	1.30	0.77	1.58	2.07	1.20	+ 2	+30	− 9	+16	+ 1	+23	+16	− 1	+53	−13	0	−0.47
114219	23 07 50.78	−37 20 51.5	8.74	2 H	346.961 596 91	−37.347 636 09		1.43	5.21	−8.49	0.96	0.80	1.22	1.21	1.05	+26	−15	−15	+43	− 5	+20	− 1	+ 5	+24	+40	2	1.72
114220	23 07 52.87	−54 04 30.3	8.28	H	346.970 294 98	−54.075 088 43		4.72	18.40	6.72	0.51	0.56	1.02	0.57	0.53	− 6	+ 0	−15	+ 2	−17	+26	−14	−25	− 5	−15	0	1.94
114221	23 07 53.16	+29 41 32.5	8.13	H	346.971 491 81	+29.692 364 52		0.19	8.92	−11.32	0.68	0.69	1.04	0.73	0.69	+22	+ 0	+13	+ 9	− 3	+ 6	− 7	−17	+35	+12	0	−0.31
114222 H	23 07 53.84	+75 23 15.3	4.41	G	346.974 325 46	+75.387 581 50	A	14.83	5.74	−35.10	0.70	0.63	0.62	0.63	0.57	−20	−23	+25	−12	+ 2	− 1	+ 5	− 4	+ 1	− 7	12	2.97
114223	23 07 54.59	−04 46 36.3	8.88	H	346.977 442 10	−04.776 746 73		5.68	−9.94	−6.07	1.26	0.96	1.46	1.33	1.44	+25	+19	− 6	−15	+26	+27	+35	+28	+46	+42	0	1.50
114224	23 07 55.21	+31 27 32.0	7.44	H	346.980 025 19	+31.458 888 57		10.70	25.69	−24.39	0.56	0.53	0.89	0.59	0.65	+ 7	+30	−14	+18	− 4	−10	+ 8	−37	+33	+14	1	−0.63
114225	23 07 56.19	+62 39 33.3	9.55	G	346.984 123 29	+62.659 248 18		3.62	9.38	−2.87	0.86	0.89	1.08	0.96	0.95	−12	+22	+18	+ 6	+ 8	+ 7	+ 7	−16	+10	−21	0	−0.95
114226	23 07 56.36	−70 02 22.9	8.58	H	346.984 853 37	−70.039 698 52		10.27	−73.72	−27.69	0.61	0.69	0.86	0.71	0.77	+ 2	− 6	− 6	− 7	+ 6	+ 2	+ 6	− 5	− 7	+ 5	0	0.25
114227	23 07 57.20	+64 13 21.2	6.21	H	346.988 313 00	+64.222 543 54		3.06	8.90	−4.54	0.43	0.48	0.54	0.50	0.56	−16	+ 8	+ 3	+17	− 3	−10	− 4	−21	+16	−26	1	−0.73
114228	23 08 01.74	+03 34 23.1	7.75	H	347.007 241 37	+03.573 092 58		3.11	59.23	−28.92	0.88	0.68	0.99	1.06	0.82	+34	− 3	−14	−10	− 7	+15	−10	−26	+18	+ 8	0	−0.01
114229	23 08 02.80	−19 12 20.1	8.80	H	347.011 683 93	−19.205 591 06		3.45	12.18	−4.21	1.03	0.81	1.21	1.31	0.93	+32	+11	+16	+ 2	+22	+26	+17	− 7	+12	+ 8	0	−0.87
114230	23 08 03.24	+04 52 27.3	7.66	H	347.013 487 06	+04.874 259 72		−0.25	7.77	3.64	0.92	0.60	0.96	1.45	0.85	+18	−11	−16	+17	− 1	+15	− 4	+ 1	− 1	−17	0	0.61
114231	23 08 03.63	−20 35 36.8	9.52	H	347.015 131 74	−20.593 559 16		1.91	−0.27	−7.34	1.41	0.91	1.53	1.82	1.22	+34	− 7	− 8	+23	+17	− 6	+14	− 4	+15	+25	0	2.26
114232	23 08 05.20	−41 38 56.3	10.52	H	347.021 684 94	−41.648 985 12		1.82	15.34	−44.67	1.59	1.45	2.08	2.00	1.47	+10	+ 0	−33	+28	−29	+26	−21	−27	+24	+11	2	0.41
114233	23 08 06.68	+03 19 42.1	10.90	G	347.027 813 18	+03.328 367 89		63.85	492.52	254.78	1.88	1.38	2.04	2.21	1.66	+29	+ 3	−10	−32	− 3	+12	+ 1	−27	+14	+ 5	0	−0.01
114234	23 08 06.72	+09 09 24.3	11.28	G	347.028 009 05	+09.156 753 77		8.97	239.69	7.18	2.64	2.03	2.98	3.68	2.95	+36	−15	−24	−20	+ 3	−13	+ 8	− 2	−13	+ 5	9	1.20
114235	23 08 08.52	+16 50 07.2	8.56	H	347.035 499 96	+16.835 338 22		12.16	−60.67	−12.99	0.93	0.82	1.20	0.89	0.88	+ 4	+17	−36	− 2	+ 2	− 6	+ 5	−12	+27	+18	3	2.03
114236	23 08 12.23	−63 37 40.8	8.44	H	347.050 976 48	−63.628 005 67		17.61	103.44	−64.43	0.69	0.77	1.08	0.77	0.76	−17	+ 1	−28	− 1	+14	− 1	+17	−23	−15	− 4	0	−0.65
114237	23 08 12.39	+44 33 42.6	6.51	H	347.051 638 79	+44.561 842 15		5.76	28.75	2.51	0.43	0.39	0.68	0.47	0.45	−16	+17	+14	+17	− 1	− 5	+ 9	− 6	+ 8	+12	0	−0.04
114238	23 08 12.94	+41 01 40.0	8.73	H	347.053 926 75	+41.027 777 80		2.12	11.01	−5.82	0.87	0.79	1.30	0.97	0.92	+ 9	+26	− 1	+45	+12	+32	+34	−18	+24	+43	5	−0.63
114239	23 08 14.50	−38 04 06.9	9.98	H	347.060 402 97	−38.068 595 78		6.21	3.81	−25.07	1.03	0.98	1.49	1.23	1.17	+19	+ 9	−30	+17	−14	+36	− 3	+ 4	+10	+33	0	−0.29
114240	23 08 14.70	+22 06 57.9	11.15	H	347.061 240 70	+22.116 086 68	B	−1.93	−19.50	−9.81	47.90	31.57	4.02	4.08	3.57	−14	+ 1	+ 1	+ 0	+ 0	−12	+ 0	− 3	+ 3	+31	0	2.25
114241 H	23 08 15.20	−47 50 35.8	9.46	G	347.063 330 03	−47.843 264 90	A	8.04	−8.42	−50.77	3.31	2.74	3.08	2.98	2.63	+16	+ 7	+ 0	− 5	+15	+26	+12	+25	+ 4	+ 1	1	0.36
114242	23 08 15.21	−24 44 34.5	10.20	G	347.063 380 07	−24.742 919 73		50.30	−86.58	−166.50	8.42	7.33	10.82	11.05	9.39	+39	+ 5	−14	−16	+12	−22	+ 9	− 6	+ 3	+48	0	
114243	23 08 15.51	+22 07 12.5	8.87	H	347.064 613 72	+22.120 129 99	A	−1.93	−19.50	−9.81	4.20	4.17	4.02	4.08	3.57	+28	+13	+ 5	− 5	+ 2	−12	+ 2	−20	+ 3	+31	0	2.25
114244	23 08 15.92	−17 03 32.9	8.84	H	347.066 336 33	−17.059 129 84		10.73	−47.79	−101.50	1.42	0.80	1.65	1.45	1.16	+17	+31	−12	−23	+13	+23	+34	−24	+45	+15	0	−0.48
114245	23 08 17.22	+51 11 46.4	8.24	H	347.071 734 36	+51.196 228 03		0.71	−0.66	−3.02	0.51	0.60	0.80	0.62	0.71	−19	− 2	+13	+ 6	+ 4	− 1	+ 6	− 1	− 9	+ 1	0	0.44
114246	23 08 17.41	−21 36 26.1	9.38	H	347.072 538 66	−21.607 255 41		9.25	55.73	−104.69	1.46	0.96	1.65	2.04	1.45	+32	−10	−21	+12	+29	+17	+28	+19	+37	+36	0	1.72
*114247	23 08 18.11	+23 01 48.5	8.48	1 H	347.075 476 16	+23.030 149 33		1.74	−7.97	−7.01	0.78	0.78	1.08	0.75	0.75	+60	+27	+17	+ 9	+ 9	−23	+11	− 2	−10	+62	0	−0.45
*114248	23 08 18.07	−51 44 39.2	9.45	G	347.075 291 26	−51.744 225 17		0.25	16.92	−2.68	0.99	1.03	1.41	1.25	1.14	+ 4	− 1	− 9	+ 8	+25	+12	+23	+23	−11	+ 4	0	0.35
114249	23 08 18.67	+30 12 59.8	8.52	H	347.077 800 08	+30.216 608 76		2.69	33.80	−2.04	0.85	0.74	1.16	0.91	0.77	+23	+11	+ 1	+ 8	+ 6	+12	+ 7	−20	+32	+21	0	0.68
114250	23 08 18.73	+10 34 40.4	8.54	H	347.078 035 04	+10.577 879 73		3.35	14.95	1.58	0.98	0.68	1.10	1.20	1.06	+40	−21	−19	−14	+ 6	−11	+13	+ 5	− 4	+15	0	−0.04
114251	23 08 18.91	−16 45 01.1	8.09	H	347.078 773 32	−16.750 305 18		4.24	−6.50	−61.50	1.18	0.63	1.30	1.25	1.03	+24	+11	− 3	−28	+11	+21	+26	−23	+45	+24	0	0.46
114252	23 08 19.49	−15 24 35.6	10.87	G	347.081 193 29	−15.409 888 72		45.75	101.59	−24.15	2.24	1.51	2.60	2.96	2.56	+31	− 3	−30	−18	+11	+ 8	+19	−34	+36	+26	0	0.29
114253	23 08 20.11	+60 29 46.8	11.62	G	347.083 798 23	+60.496 334 23		1.85	6.48	5.98	1.63	1.59	1.97	2.27	1.88	−20	+ 3	+10	+ 8	+ 6	− 5	+ 6	+ 7	+ 6	− 8	3	−1.14
114254 H	23 08 21.10	−28 49 24.8	5.60	G	347.087 901 52	−28.823 568 53	*	11.42	−43.24	−52.69	0.69	0.47	0.70	0.76	0.54	+ 0	− 5	+ 9	−34	+16	+ 9	+17	+ 0	+ 3	− 2	0	−0.02
114255	23 08 21.12	−11 35 49.1	8.87	H	347.088 013 86	−11.596 971 34		11.72	56.87	32.16	1.40	0.84	1.43	1.47	0.93	−11	+28	−33	−35	+ 9	+ 3	+24	−27	+39	−19	0	0.91
114256	23 08 21.17	+72 08 12.7	11.28	H	347.088 188 73	+72.136 858 55		12.30	229.33	134.02	1.21	1.25	1.51	1.31	1.42	+ 2	+ 9	+13	− 8	+10	− 6	+11	+ 2	+ 6	+ 8	3	−0.49
114257	23 08 22.93	−07 16 01.2	8.33	H	347.095 548 46	−07.266 993 68		5.21	−1.18	−5.05	1.04	0.72	1.08	1.34	0.79	+ 5	− 5	− 3	−20	+ 2	+23	+ 2	−18	+15	−20	0	−0.32
114258	23 08 23.54	−79 28 50.2	6.11	H	347.098 098 53	−79.480 599 90		13.44	92.62	−36.52	0.41	0.41	0.49	0.49	0.44	− 3	− 5	−12	+14	+ 6	− 6	+ 6	−10	+ 2	+ 2	0	−0.23
114259	23 08 23.60	+57 10 47.2	7.79	G	347.098 337 67	+57.179 765 37		0.68	−1.91	−4.13	0.61	0.67	0.84	0.87	0.77	−28	+ 3	+ 9	+ 3	+15	+11	+13	−28	+11	−25	0	1.71
114260	23 08 26.05	−00 29 58.3	7.42	G	347.108 546 30	−00.499 535 27		6.08	90.72	−35.78	0.86	0.60	1.01	1.13	0.81	+31	+ 7	− 8	− 9	+11	+18	+17	+ 1	+21	+11	0	0.44
114261	23 08 26.73	−09 00 34.8	8.32	H	347.111 389 33	−09.009 656 40		3.74	−17.44	−30.16	1.04	0.81	1.22	1.62	0.99	+21	+13	+ 6	+23	+ 1	+42	−11	−11	− 7	−13	0	−0.45
114262	23 08 27.73	+13 43 46.2	7.90	H	347.115 551 56	+13.729 508 77		7.25	−18.70	−24.74	0.83	0.62	1.01	0.89	0.93	+29	+16	−11	+14	− 5	− 9	− 5	−13	+32	+21	0	−1.04
114263	23 08 28.49	+29 09 39.5	7.47	H	347.118 704 13	+29.160 978 27		5.03	22.68	−2.76	0.62	0.61	0.87	0.64	0.60	+29	+ 0	+ 6	+ 3	− 4	− 5	− 3	−17	+25	+29	0	1.29
114264	23 08 30.91	+47 52 28.7	8.49	H	347.128 792 14	+47.874 633 31		1.69	5.08	−5.26	0.53	0.63	0.95	0.61	0.71	−25	+12	+ 4	+13	+13	− 7	+15	+ 5	− 2	+ 7	1	0.26
114265	23 08 31.09	−39 22 32.2	10.08	G	347.129 545 90	−39.375 617 59		10.75	240.97	−108.58	1.19	1.13	1.70	1.34	1.32	+21	− 9	−27	+16	− 4	+26	+ 3	− 9	+26	+31	3	1.44
114266	23 08 34.81	+04 40 40.8	7.63	H	347.145 045 37	+04.678 006 85		4.70	18.81	0.46	0.87	0.61	0.93	1.34	0.79	+17	+ 1	−18	+27	−12	+26	−20	−14	+14	−19	0	2.64
*114267	23 08 35.84	−59 44 06.5	10.09	H	347.149 350 56	−59.735 134 61	B	17.06	43.51	−73.27	13.26	14.08	7.11	10.97	9.81	−38	+ 0	− 7	+ 2	+ 3	− 1	+ 3	−17	+ 3	−32	2	1.76
*114268	23 08 35.55	−73 35 10.0	6.18	H	347.148 119 16	−73.586 111 26		5.37	23.15	−2.10	0.47	0.42	0.58	0.54	0.41	− 2	− 1	−30	+ 0	+ 5	−14	+ 1	− 9	+ 6	− 2	1	0.62
114269	23 08 36.39	−63 52 16.0	7.22	G	347.151 624 72	−63.871 110 45		17.50	141.06	−195.33	0.51	0.56	0.78	0.57	0.56	−11	− 7	−24	− 7	+20	− 8	+19	−13	−20	− 3	0	−0.67
114270	23 08 37.53	−59 44 11.1	7.43	G	347.156 386 14	−59.736 403 35	A	16.72	60.15	−64.35	1.13	1.21	1.46	1.19	1.13	−36	+ 1	−11	+ 3	− 2	− 1	− 1	−12	+ 0	−29	2	1.76
114271	23 08 39.31	−15 03 09.4	8.25	G	347.163 787 44	−15.052 621 87		14.33	103.69	−285.94	1.29	0.74	1.20	1.36	1.16	+15	+ 0	−13	−37	+22	+18	+38	− 4	+19	+15	0	−0.07
114272	23 08 39.85	−48 59 41.8	9.24	H	347.166 042 51	−48.994 947 98		−0.08	19.79	−36.75	0.87	1.05	1.40	0.87	1.19	+ 8	−16	+ 2	−23	+ 9	+15	+12	+28	− 4	+ 4	0	0.28
114273	23 08 40.84	+02 07 39.4	5.42	G	347.170 171 74	+02.127 617 98	+	11.64	137.43	108.99	0.87	0.73	1.28	3.82	1.84	+39	−15	−46	+ 3	−11	+46	−33	−43	+22	−61	0	−1.13
114274	23 08 41.06	+48 46 31.0	8.31	G	347.171 076 69	+48.775 268 07		6.66	59.62	27.72	0.58	0.67	0.99	0.62	0.72	−30	− 6	+13	+ 4	+ 7	− 3	+10	− 9	+ 9	−10	1	−0.69
114275	23 08 41.07	+34 14 22.9	8.83	H	347.171 122 21	+34.239 680 95		4.41	8.28	−11.21	0.81	0.64	1.11	1.02	0.77	− 2	+ 2	+ 2	+32	−15	− 6	+ 3	−37	+23	+24	3	0.35
114276	23 08 42.96	−18 45 06.7	8.11	G	347.179 012 70	−18.751 855 33		16.20	−84.23	−37.05	0.92	0.63	1.01	1.06	0.80	+26	+14	+ 8	−10	+25	+14	+30	− 1	+22	+11	0	2.12
114277	23 08 45.76	+48 08 20.6	9.55	H	347.190 666 93	+48.139 059 60		1.79	13.05	−1.27	0.76	0.87	1.33	0.84	0.89	−31	+ 5	+19	− 1	+15	−10	+20	−12	+ 9	−10	1	0.06
114278	23 08 46.09	+39 10 04.0	7.40	H	347.192 056 81	+39.167 787 71		4.72	−12.67	−14.22	0.82	0.67	1.05	1.06	0.67	+17	+24	+11	−17	+ 2	+33	+ 6	−37	+35	+49	0	0.36
114279	23 08 46.30	+27 45 31.0	8.58	H	347.192 912 23	+27.758 598 87		6.13	−10.83	−23.67	0.62	0.70	1.00	0.64	0.67	+33	+ 7	+ 9	+11	− 3	+ 1	+ 0	−15	+34	+33	0	1.17
114280 H	23 08 47.77	+10 57 31.1	7.60	H	347.199 052 83	+10.958 642 95	*	9.25	37.05	−0.70	1.41	0.98	1.16	1.33	1.29	+48	+ 3	− 6	+ 4	+16	− 1	+20	+22	− 9	+40	0	−0.33
114281	23 08 48.39	−81 32 36.3	9.26	H	347.201 613 72	−81.543 414 66		2.89	−6.63	2.74	0.85	0.71	0.92	0.97	0.79	+ 3	+ 2	− 2	+21	+10	− 1	+14	− 7	+ 2	+16	0	−3.79
114282	23 08 49.30	+20 00 22.6	10.64	H	347.205 416 09	+20.006 268 76		15.95	219.12	−95.38	1.93	1.73	2.58	2.44	2.19	+13	+10	−19	+ 3	+ 3	−24	+ 0	+ 5	+15	− 5	3	−0.50
114283	23 08 49.34	+19 30 33.8	8.89	H	347.205 587 23	+19.509 392 02		4.20	23.18	11.29	1.11	0.92	1.45	1.30	1.20	+ 6	+12	−29	+18	+ 8	−25	+ 3	+ 8	+23	− 3	0	0.19
114284	23 08 49.39	−08 48 28.2	8.70	H	347.205 797 15	−08.807 825 15		2.31	25.51	8.07	1.21	0.90	1.43	1.38	1.03	+23	+35	+ 5	+25	− 1	+32	+ 5	+ 8	+25	+16	0	0.05
*114285	23 08 50.01	+64 50 46.3	8.31	H	347.208 356 19	+64.846 200 07		0.59	5.78	−1.44	0.59	0.66	0.75	0.73	0.91	−13	− 5	+ 6	+ 5	− 9	− 7	−12	−17	+ 9	−23	0	−1.07
*114286	23 08 50.00	−42 27 03.2	8.84	G	347.208 337 45	−42.450 893 31		25.03	112.36	−200.46	1.01	0.96	1.30	1.09	1.14	+36	−24	−25	−25	−28	+33	−23	−39	+19	+46	0	1.20
114287	23 08 50.08	−40 15 49.0	9.00	H	347.208 674 85	−40.263 618 68		2.41	−16.67	−23.29	0.89	0.88	1.25	1.07	1.03	+22	−13	−14	+13	−11	+21	−10	−18	+24	+25	0	2.91
114288	23 08 50.43	+05 20 15.2	8.46	H	347.210 142 48	+05.337 562 60		2.69	−10.85	−12.82	1.11	0.79	1.26	2.07	1.09	+23	+ 8	−11	+ 1	+ 7	+ 1	+ 5	− 5	+19	−31	2	1.52
114289	23 08 51.07	+25 04 07.4	8.98	H	347.212 783 71	+25.068 726 12		3.37	39.05	−19.89	0.73	0.75	1.11	0.77	0.74	+44	+ 0	− 3	− 1	− 3	−10	− 5	−15	+14	+32	2	0.28
114290	23 08 51.16	+17 12 56.2	10.27	2 H	347.213 153 53	+17.215 608 14		0.36	49.21	−24.51	2.04	1.40	2.02	2.15	1.47	−18	+13	−40	−59	+24	−22	+23	−38	+47	−28	0	−0.12
114291	23 08 51.64	−25 49 49.8	6.74	H	347.215 179 98	−25.830 513 83		26.76	−171.06	−42.67	0.69	0.58	0.89	0.87	0.69	+31	−10	−35	−26	+ 9	− 5	+ 5	−23	+18	+36	0	1.68
114292	23 08 51.75	−51 07 03.5	8.49	H	347.215 638 83	−51.117 630 56		2.74	6.33	−25.61	0.82	0.86	1.15	0.96	0.98	+ 8	− 6	− 3	−14	+21	−12	+19	+29	− 9	+14	0	−0.20
114293	23 08 51.89	+22 28 15.0	8.02	H	347.216 196 32	+22.470 842 55		2.98	0.20	−6.42	0.78	0.76	1.04	0.74	0.70	+33	+28	+ 1	−12	+ 8	−19	+11	−19	+ 9	+41	0	0.27
*114294	23 08 52.44	+06 33 40.4	10.90	G	347.218 481 41	+06.561 211 08		24.92	102.46	−39.76	2.10	1.51	2.24	2.67	2.39	+43	− 6	− 3	−31	+ 8	+ 3	+23	+12	+ 6	+20	0	0.54
*114295	23 08 52.37	−39 37 40.0	9.86	G	347.218 217 64	−39.627 769 48		6.94	18.90	3.13	1.17	1.00	1.52	1.36	1.10	+10	− 3	−21	+35	−12	+25	− 8	−16	+15	+13	0	1.63
*114296	23 08 53.68	−17 25 53.6	9.36	H	347.223 648 31	−17.431 548 35		8.27	35.22	6.24	1.32	0.90	1.41	1.89	1.14	+20	+ 4	+ 3	−17	+16	+25	+ 6	−42	+ 4	−14	4	0.68
*114297	23 08 53.55	+71 18 37.1	7.99	H	347.223 142 99	+71.310 311 10		3.34	−9.89	−12.15	0.55	0.54	0.68	0.60	0.61	−10	− 6	+ 7	− 6	− 4	+17	− 6	− 3	+17	−14	1	0.12
114298 H	23 08 54.62	+82 35 01.2	7.63	G	347.227 564 85

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
114201	7.541	0.009	7.561	0.011		−0.014	0.013	T	0.01	0.01	L	7.5594	0.0014	0.016	85		7.54	7.60		U			1							S
114202	10.885	0.057	9.498	0.027		1.173	0.049	T	1.13	0.04	L	9.5461	0.0024	0.017	83		9.50	9.57					1							
114203	7.181	0.006	7.029	0.006		0.146	0.008	T	0.16	0.01	L	7.0600	0.0010	0.009	113		7.04	7.08					1							S
114204	8.656	0.018	8.295	0.019		0.342	0.024	T	0.40	0.03	L	8.3392	0.0010	0.009	43		8.32	8.36		D	23077−0940	I 1	1 S							S
114205	9.981	0.021	8.782	0.013		1.026	0.019	T	1.00	0.02	L	8.8278	0.0018	0.021	140		8.79	8.87					1 S							
114206	9.526	0.020	9.000	0.019		0.502	0.021	T	0.57	0.02	L	9.0247	0.0030	0.026	102		8.98	9.25	3.65	P 1 A			1							S
114207	9.836	0.030	9.319	0.028	C	0.486	0.037	T	0.56	0.04	L	9.4282	0.0549			C				D	23077+0636	I 2	1 C I D							S D
114208	9.166	0.013	8.669	0.013		0.479	0.014	T	0.55	0.01	L	8.7131	0.0014	0.015	122		8.69	8.74					1							S
114209	10.313	0.038	9.077	0.023	A	1.055	0.034	T	1.02	0.03	L	9.1711	0.0460	0.061	63	A	8.96	9.25		D	23077+0636	I 2	1 C P D							D
114210	6.195	0.003	5.733	0.003		0.449	0.003	T	0.52	0.00	L	5.7821	0.0005	0.007	171		5.77	5.79		C			1							S
114211	8.531	0.012	7.164	0.007		1.150	0.006	G	1.11	0.01	H	7.2190	0.0011	0.009	74		7.21	7.23		C			1							S
114212	6.198	0.004	6.245	0.004	*	−0.025	0.002	G	−0.01	0.03	C *	6.2497	0.0009	0.008	123	*	6.24	6.27		D	23078+6338	I 1	2 C A	BA	312	0.220	0.003	0.29	0.08	S
114213	9.075	0.016	7.335	0.008		1.451	0.014	T	1.47	0.03	C	7.3113	0.0013	0.013	91		7.29	7.33					1							S
114214	8.047	0.009	7.665	0.012	*	0.362	0.014	T	0.42	0.01	L *	7.7844	0.0015	0.012	88	*	7.77	7.81		D	23078+3948	I 1	2 C A	AB	227	2.853	0.008	1.94	0.03	S
114215	7.991	0.007	7.626	0.008	*	0.355	0.015	G	0.42	0.02	H *	7.6539	0.0011	0.010	107	*	7.64	7.67		D	23078+1240	I 1	2 C A	AB	318	0.804	0.006	2.38	0.02	S
114216	10.272	0.017	8.945	0.010		1.126	0.015	T	1.09	0.02	L	8.9955	0.0016	0.026	271		8.96	9.04					1							
114217	9.985	0.017	8.081	0.007		1.615	0.015	T	2.22	0.04	O	7.9246	0.0044	0.055	179		7.83	8.01	40.03	P 1 A			1							S
114218	9.940	0.032	8.661	0.019		1.089	0.029	T	1.05	0.03	L	8.6865	0.0020	0.013	49		8.66	8.71					1							
114219	10.000	0.023	8.862	0.015		0.979	0.021	T	0.96	0.02	L	8.9038	0.0024	0.016	98		8.88	8.93		U	23078−3721	I 1	1 S							
114220	8.431	0.006	8.308	0.007		0.111	0.009	T	0.12	0.01	L	8.3238	0.0016	0.020	234		8.30	8.36					1							S
114221	9.736	0.022	8.271	0.012		1.234	0.020	T	1.19	0.02	L	8.2945	0.0017	0.011	85		8.28	8.31		C			1							
114222	5.407	0.004	4.505	0.003	*	0.802	0.001	G	0.84	0.03	C *	4.5417	0.0007	0.006	109	*	4.53	4.55		D	23078+7523	I 1	2 C A	AB	339	1.051	0.005	2.26	0.03	S
114223	9.453	0.022	8.885	0.021		0.531	0.027	T	0.60	0.03	L	8.9908	0.0019	0.018	54		8.96	9.02		C			1							
114224	7.627	0.006	7.463	0.007		0.157	0.009	T	0.17	0.01	L	7.4944	0.0013	0.012	127		7.47	7.52			23079+3128	I 1	1							S
114225	9.741	0.020	9.555	0.026		0.192	0.030	G	0.21	0.03	H	9.6202	0.0032	0.024	118		9.58	9.66					1							G
114226	9.331	0.013	8.657	0.011		0.613	0.013	T	0.68	0.01	L	8.7109	0.0018	0.019	155		8.68	8.75		C			1							S
114227	7.605	0.007	6.332	0.004		1.084	0.006	T	1.05	0.01	L	6.3816	0.0009	0.009	135		6.37	6.40					1							S
114228	9.453	0.022	7.903	0.011		1.301	0.019	T	1.26	0.02	L	7.9063	0.0014	0.010	76		7.89	7.92		C			1							S
114229	10.140	0.029	8.892	0.017		1.064	0.026	T	1.03	0.02	L	8.9677	0.0023	0.019	87		8.93	9.00		C			1							
114230	9.463	0.020	7.785	0.010		1.402	0.018	T	1.38	0.02	L	7.8022	0.0017	0.011	77		7.79	7.82					1							S
114231	11.054	0.058	9.646	0.028		1.190	0.051	T	1.15	0.05	L	9.6910	0.0030	0.022	80		9.65	9.73		C			1							
114232	11.217	0.064	10.528	0.056		0.636	0.070	T	0.70	0.06	L	10.6501	0.0033	0.032	84		10.60	10.72		D			1							G
114233						1.490	0.009	G	1.93	0.02	A	10.9833	0.0039	0.036	71		10.93	11.04		D			1							G
114234						0.760	0.015	G	0.80	0.01	H	11.4409	0.0085	0.052	76		11.31	11.52					1							G
114235	9.328	0.021	8.631	0.018		0.643	0.023	T	0.71	0.02	L	8.6947	0.0023	0.013	58		8.67	8.72					1							S
114236	9.198	0.012	8.515	0.011		0.620	0.012	T	0.69	0.01	L	8.5681	0.0020	0.024	155		8.54	8.61					1							S
114237	6.710	0.003	6.535	0.003		0.168	0.004	T	0.18	0.00	L	6.5727	0.0008	0.008	177		6.56	6.59					1							S
114238	10.151	0.028	8.863	0.017		1.096	0.026	T	1.06	0.03	L	8.9034	0.0025	0.018	91		8.86	8.93					1							
114239	11.050	0.049	10.028	0.032		0.880	0.046	T	0.89	0.03	L	10.1237	0.0029	0.025	101		10.07	10.17		C			1							
114240	11.228	0.097	10.471	0.088	B	0.676	0.099	T	0.74	0.08	L	10.8519	0.2009			B				D	23083+2207	I 2	1 C F D							D
114241	10.453	0.039	9.755	0.033	A	0.651	0.005	G	0.71	0.00	R *	9.5970	0.0031	0.027	82	*	9.55	9.64		D	23083−4751	I 1	2 C A	AB	250	1.520	0.014	0.50	0.04	
114242	11.723	0.110	10.270	0.045		1.120	0.015	G	1.20	0.02	I	10.2985	0.0036	0.029	104		10.25	10.35		C			1 X							G
114243	10.193	0.043	8.959	0.026	A	1.054	0.039	T	1.02	0.03	L	9.0375	0.0429	0.049	57	A	8.95	9.09		D	23083+2207	I 2	1 C P D							D
114244	9.689	0.019	8.892	0.015		0.706	0.018	T	0.76	0.01	L	8.9771	0.0024	0.020	94		8.96	9.01					1							S
114245	8.292	0.008	8.255	0.009		0.039	0.011	T	0.05	0.01	L	8.2617	0.0016	0.016	149		8.24	8.29					1							
114246	10.057	0.035	9.430	0.032		0.579	0.035	T	0.65	0.03	L	9.5008	0.0020	0.020	68		9.47	9.53		C			1							
114247	10.816	0.046	8.674	0.014		1.811	0.040	T	2.15	0.09	O	8.5555	0.0019	0.021	131		8.53	8.58		U			1							
114248	9.830	0.023	9.472	0.025		0.278	0.003	G	0.32	0.00	H	9.5294	0.0029	0.030	97		9.47	9.59					1							
114249	9.983	0.035	8.648	0.020		1.132	0.032	T	1.10	0.03	L	8.6843	0.0019	0.018	89		8.66	8.72		C			1							
114250	10.060	0.028	8.679	0.015		1.169	0.025	T	1.13	0.02	L	8.7041	0.0011	0.010	96		8.69	8.73		D			1							
114251	9.620	0.018	8.225	0.010		1.179	0.016	T	1.14	0.01	L	8.2575	0.0014	0.014	107		8.24	8.28					1							S
114252						1.397	0.020	G	1.85	0.01	A	10.9789	0.0050	0.045	85		10.89	11.06					1							G
114253						0.460	0.020	G	0.53	0.02	R	11.6906	0.0062	0.053	111		11.61	11.82					1							D
114254	6.731	0.004	5.709	0.003	*	0.882	0.000	G	0.89	0.00	H *	5.7612	0.0007	0.005	95	*	5.75	5.77		D	23084−2849	H 1	2 C S D	AB	293	0.160	0.035	2.28	0.39	S D
114255	9.474	0.025	8.881	0.023		0.554	0.025	T	0.63	0.02	L	8.9881	0.0017	0.013	46		8.97	9.01		C			1							S
114256						1.489	0.400	G	1.09	0.21	S	11.4436	0.0053	0.052	119		11.33	11.55		R			1							G
114257	8.736	0.015	8.343	0.015		0.372	0.020	T	0.43	0.02	L	8.4174	0.0023	0.014	57		8.39	8.44		C			1							S
114258	6.294	0.003	6.135	0.003		0.145	0.004	T	0.16	0.00	L	6.1653	0.0007	0.007	147		6.15	6.18		C			1							S
114259	8.992	0.012	7.913	0.008		0.934	0.011	T	0.93	0.01	L	7.9322	0.0013	0.012	123		7.91	7.96		C			1							S
114260	8.001	0.009	7.484	0.009		0.486	0.011	T	0.56	0.01	L	7.5322	0.0014	0.010	75		7.51	7.55					1							S
114261	9.883	0.033	8.434	0.018		1.222	0.030	T	1.18	0.03	L	8.4802	0.0028	0.013	51		8.45	8.50					1							
114262	8.135	0.011	7.921	0.010		0.213	0.015	G	0.24	0.02	H	7.9651	0.0011	0.012	86		7.94	7.99		C			1							S
114263	7.651	0.009	7.480	0.008		0.164	0.011	T	0.18	0.01	L	7.5310	0.0011	0.008	84		7.52	7.54		D			1							S
114264	8.605	0.007	8.489	0.009		0.112	0.011	T	0.13	0.01	L	8.5349	0.0015	0.019	211		8.51	8.57					1							
114265	11.116	0.057	10.131	0.038		0.773	0.003	G	0.82	0.00	H	10.2321	0.0026	0.025	102		10.19	10.27		C			1							
114266	7.670	0.008	7.626	0.009		0.045	0.011	T	0.06	0.01	L	7.6551	0.0013	0.010	75		7.64	7.67		C			1							S
114267	10.696	0.052	9.767	0.035	B	0.821	0.047	T	0.84	0.03	L	9.5535	0.0390			B				D	23086−5944	I 2	1 C I A							
114268	8.023	0.007	6.323	0.004		1.419	0.002	G	1.40	0.00	H	6.3147	0.0008	0.008	142		6.30	6.33		C			1							S
114269	8.005	0.008	7.301	0.006		0.634	0.003	G	0.70	0.00	H	7.3519	0.0010	0.011	168		7.33	7.37			23086−6352	I 1	1							S
114270	7.908	0.006	7.438	0.005	A	0.451	0.003	G	0.52	0.00	H	7.5521	0.0064	0.023	217	A	7.53	7.61		D	23086−5944	I 2	1 C P A							S
114271	8.753	0.013	8.295	0.013		0.411	0.002	G	0.48	0.00	H	8.3601	0.0021	0.015	84		8.33	8.40					1							S
114272	10.914	0.049	9.358	0.022		1.306	0.042	T	1.27	0.04	L	9.3969	0.0031	0.026	105		9.35	9.45		C			1							
114273	6.571	0.005	5.525	0.004		0.908	0.003	G	0.91	0.00	H	5.5778	0.0008	0.004	66		5.57	5.59		C			1 O							S
114274	8.855	0.010	8.357	0.010		0.468	0.013	T	0.54	0.01	L	8.4155	0.0015	0.018	182		8.39	8.45		C			1							
114275	10.149	0.021	8.931	0.013		1.041	0.019	T	1.01	0.02	L	8.9928	0.0017	0.017	135		8.96	9.02		C			1							
114276	8.769	0.011	8.180	0.010		0.576	0.015	G	0.65	0.01	H	8.2222	0.0017	0.013	101		8.20	8.25					1							S
114277	9.791	0.016	9.536	0.019		0.243	0.023	T	0.27	0.03	L	9.6163	0.0023	0.030	191		9.56	9.68					1							G
114278	9.478	0.018	7.581	0.008		1.580	0.015	G	1.59	0.09	H	7.5185	0.0016	0.012	81		7.49	7.54					1							S
114279	9.225	0.014	8.641	0.013		0.545	0.017	T	0.62	0.02	L	8.6973	0.0018	0.016	112		8.67	8.72		C			1							
114280	8.134	0.009	7.655	0.009	*	0.455	0.008	G	0.52	0.01	R *	7.7032	0.0016	0.012	102	*	7.69	7.72		D	23088+1058	I 1	2 C A	AB	169	0.278	0.002	0.58	0.04	S
114281	10.671	0.032	9.373	0.018		1.104	0.029	T	1.07	0.03	L	9.4293	0.0023	0.019	142		9.39	9.47		C			1							
114282	11.920	0.160	10.857	0.093		0.921	0.140	T	0.92	0.10	L	10.8017	0.0074	0.036	51		10.65	10.85					1							G
114283	9.362	0.024	8.908	0.024		0.428	0.031	T	0.50	0.03	L	8.9811	0.0021	0.014	53		8.94	9.00		C			1							
114284	9.825	0.030	8.786	0.021		0.903	0.028	T	0.90	0.02	L	8.8586	0.0028	0.016	55		8.83	8.89		C			1 S							S
114285	8.409	0.009	8.333	0.011		0.090	0.015	G	0.10	0.02	H	8.3507	0.0018	0.019	113		8.32	8.38					1							
114286	9.892	0.026	8.958	0.019		0.838	0.004	G	0.88	0.00	H	8.9907	0.0023	0.019	77		8.96	9.02					1							
114287	10.343	0.029	9.131	0.018		1.036	0.027	T	1.01	0.02	L	9.1665	0.0021	0.020	100		9.14	9.21					1							
114288	10.225	0.041	8.628	0.019		1.338	0.036	T	1.30	0.04	L	8.6122	0.0023	0.016	61		8.58	8.66					1							
114289	9.480	0.015	9.021	0.015		0.433	0.019	T	0.50	0.02	L	9.0797	0.0015	0.017	136		9.05	9.12					1							
114290	10.640	0.063	10.292	0.068		0.330	0.086	T	0.38	0.12	L	10.3496	0.0535	0.261	49		10.08	10.70	0.07	P 1 A			1 S							G P
114291	7.293	0.005	6.799	0.005		0.476	0.005	T	0.55	0.01	L	6.8507	0.0008	0.007	117		6.84	6.86		C			1							S
114292	9.912	0.022	8.601	0.013		1.114	0.020	T	1.08	0.02	L	8.6641	0.0023	0.020	112		8.63	8.70					1							
114293	8.424	0.011	8.037	0.012		0.352	0.005	G	0.41	0.01	H	8.1041	0.0013	0.010	81		8.08	8.12		C			1							S
114294						1.370	0.020	G	1.50	0.15	K	10.9886	0.0052	0.034	74		10.92	11.05		C			1							G
114295	10.301	0.031	9.897	0.034		0.468	0.008	G	0.54	0.01	H	9.9555	0.0030	0.024	102		9.92	10.01		C			1							
114296	9.979	0.022	9.391	0.020		0.550	0.022	T	0.62	0.02	L	9.4823	0.0021	0.019	100		9.45	9.51		C			1							
114297	10.001	0.021	8.148	0.009		1.541	0.018	T	1.60	0.04	L	8.1056	0.0013	0.013	133		8.08	8.13					1							
114298	8.999	0.011	7.659	0.007	A	1.206	0.197	G	1.10	0.02	L *	7.6869	0.0013	0.011	126	*	7.66	7.70			23089+8235	I 1	2 C C	AB	229	9.094	0.045	3.73	0.18	S
114299	9.634	0.013	9.202	0.013		0.408	0.017	T	0.47	0.02	L	9.2499	0.0021	0.024	187		9.21	9.29					1							
114300	9.940	0.030	9.357	0.028		0.545	0.036	T	0.62	0.03	L	9.4136	0.0020	0.017	62		9.37	9.43		C			1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ						F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas			mas/yr		α*	α*	δ	α*	δ	π	α*	δ	π	$\mu_{\alpha*}$					%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28					29	30
114301	23 08 55.69	−51 55 07.2	8.22	G		347.232 048 32	−51.918 666 50		4.21	−44.85	−23.94	0.76	0.78	1.12	0.99	0.88	+10	− 9	− 9	+ 5	+23	+22	+24	+10	−19	+ 7					2	−1.02
114302	23 08 56.81	+66 03 58.9	8.08	H		347.236 722 77	+66.066 349 79		3.35	−2.38	4.10	0.67	0.62	0.81	0.86	0.76	+ 1	−14	−10	+ 3	− 7	+ 4	− 7	−12	+22	+13					2	0.84
*114303	23 08 56.94	−42 32 02.7	10.46	G		347.237 259 24	−42.534 094 12		5.47	53.09	−26.16	1.43	1.51	2.05	1.61	1.87	+33	−22	−20	−19	−23	+39	−18	−36	+19	+44					4	1.43
*114304	23 08 56.88	−20 51 42.6	9.59	G		347.237 017 67	−20.861 835 72		15.31	158.67	−23.48	1.46	1.08	1.99	2.04	1.71	+37	+10	−25	+19	+16	+22	+25	− 3	+50	+47					0	1.32
114305	23 08 57.07	+38 54 54.7	7.35	2	G	347.237 810 32	+38.915 189 51		4.79	5.65	−5.49	0.67	0.60	0.90	0.75	0.59	+16	+35	+ 7	+ 2	+ 3	+21	+15	−38	+39	+39					0	0.72
114306	23 08 58.32	−84 52 47.4	8.86	H		347.242 981 48	−84.879 835 44		0.54	17.10	−12.93	0.66	0.64	0.81	0.83	0.71	+12	−12	−11	+ 0	+10	− 5	+10	+ 2	−13	+ 9					1	2.50
114307	23 08 58.74	+62 48 56.1	7.43	H		347.244 758 38	+62.815 590 43		3.39	− 7.85	−10.81	0.55	0.55	0.68	0.63	0.59	−10	+15	+16	− 6	+ 7	+ 5	+ 7	−21	+11	−18					0	−0.11
114308	23 09 00.76	+07 55 53.1	8.97	H		347.253 160 53	+07.931 412 19		1.76	9.96	− 0.98	1.19	0.94	1.48	1.39	1.29	+42	−12	−22	−12	−13	+18	− 8	−24	−21	+28					0	1.88
114309	23 09 01.41	+65 11 34.9	8.72	H		347.255 882 72	+65.193 036 88		1.25	6.19	− 4.08	0.73	0.70	0.87	0.92	0.96	− 4	+ 0	+ 7	−16	− 5	+ 2	− 6	−15	+23	−22					0	−0.12
114310	23 09 01.53	−05 20 30.6	8.59	H		347.256 369 80	−05.341 836 75		5.16	15.78	4.00	1.14	0.74	1.33	1.26	0.97	+ 4	+17	−24	−26	+ 2	+23	+17	−19	+46	+10					0	−0.36
114311	23 09 02.09	−13 42 59.6	9.53	H		347.258 688 78	−13.716 546 36		8.95	23.20	−16.09	1.42	1.30	1.87	1.99	1.25	+28	−16	−51	+ 0	− 3	+28	+13	+ 9	− 2	− 2					3	−0.88
114312	23 09 02.20	+26 18 56.5	8.83	G		347.259 159 52	+26.315 682 03		2.69	− 2.01	− 5.21	0.69	0.70	1.05	0.67	0.66	+38	+21	+ 2	+10	− 2	− 1	+ 3	−19	+30	+32					0	0.55
114313	23 09 03.91	−02 33 01.9	9.26	G		347.266 311 87	−02.550 540 58		16.81	235.50	29.13	1.31	1.27	1.72	2.68	2.93	+35	− 1	−17	− 8	+23	−44	+ 8	+35	−41	+53					0	1.16
114314	23 09 03.97	−45 30 42.0	7.42	H		347.266 530 79	−45.511 660 43		6.26	50.22	− 7.68	0.78	0.62	0.91	1.01	0.67	− 1	+ 8	−16	+ 0	+10	+ 9	+11	+ 2	+12	− 4					0	1.79
114315	23 09 04.16	−02 27 09.5	7.62	H		347.267 319 31	−02.452 645 73		5.89	25.30	2.64	0.79	0.64	0.93	1.04	0.87	+48	−10	− 6	+ 9	+17	− 2	+16	+12	+13	+22					0	0.76
114316	23 09 04.90	−46 43 32.8	9.25	H		347.270 411 91	−46.725 774 48		5.13	33.21	2.67	1.15	0.85	1.16	1.40	0.94	− 6	− 6	− 2	+28	+ 6	− 5	+ 5	+29	+ 1	− 5					0	1.02
114317	23 09 05.44	+52 37 11.3	9.36	H		347.272 671 46	+52.619 809 02		1.17	2.33	− 2.52	0.72	0.80	1.10	0.92	0.92	−23	−12	+33	−19	+13	+16	+10	−16	−18	−17					2	0.70
114318	23 09 05.56	−30 08 02.1	8.43	2	H	347.273 179 37	−30.133 915 12		5.24	− 3.45	− 5.73	1.12	0.81	1.18	1.55	0.89	− 5	+14	−26	−42	+33	−23	+31	−17	+13	−24					0	−1.79
114319	23 09 05.85	−32 47 34.3	9.70	H		347.274 358 20	−32.792 849 75		7.83	54.01	−20.01	1.12	0.98	1.42	1.46	1.30	+28	− 4	−20	− 8	− 4	+29	+ 0	+ 2	+22	+39					0	−0.44
114320	23 09 07.43	+18 24 36.9	8.83	H		347.280 972 64	+18.410 242 69		10.45	4.18	−30.71	0.97	0.98	1.24	0.96	0.94	+20	+24	−30	− 8	−15	+13	− 8	−24	+11	+38					0	−0.90
114321	23 09 09.67	+26 54 46.7	7.64	H		347.290 272 84	+26.912 980 15		2.63	− 5.97	0.94	0.60	0.64	0.91	0.67	0.67	+29	+ 4	+15	+ 4	+ 7	+17	+ 5	−10	+26	+33					0	−0.76
114322	23 09 10.36	−02 15 37.8	8.59	H		347.293 160 16	−02.260 507 92		33.40	632.15	−96.23	1.02	0.82	1.19	1.46	1.19	+46	+ 8	+23	+29	+25	+27	+19	+18	+16	+31					0	0.41
114323	H 23 09 11.49	−07 18 50.1	7.89	H		347.297 879 40	−07.313 906 86	A	4.93	−33.98	−42.08	1.52	1.16	1.52	1.84	1.20	+27	+29	− 8	+13	− 3	+ 0	− 2	−10	+23	−12					0	0.67
114324	23 09 12.03	−75 53 52.4	8.43	H		347.300 110 95	−75.897 879 37		1.94	22.43	−19.17	0.69	0.67	0.86	0.80	0.65	+ 4	+ 1	−31	+ 4	+ 6	−17	+ 2	−23	+ 6	+11					0	−1.45
114325	23 09 15.13	−03 56 18.9	9.56	H		347.313 056 52	−03.938 588 57		6.59	19.87	− 2.42	1.47	1.13	2.00	2.71	1.74	+43	+16	+10	+11	+21	+42	+23	+14	+43	+15					0	−0.42
114326	23 09 15.94	+11 58 44.8	9.05	H		347.316 428 44	+11.979 115 27		16.33	−35.58	−199.02	1.24	0.78	1.28	1.37	1.14	+39	+ 7	− 6	− 3	+22	−10	+33	+31	− 7	+21					0	2.68
114327	23 09 16.35	+65 12 41.1	6.67	H		347.318 104 51	+65.211 413 66		2.09	6.98	− 3.27	0.46	0.48	0.56	0.56	0.63	− 4	+ 1	+ 3	−18	− 8	− 2	−10	−24	+15	−23					1	−0.15
114328	23 09 16.53	−40 59 28.3	8.73	H		347.318 886 51	−40.991 200 45		14.69	115.45	− 0.07	0.78	0.76	1.07	0.99	0.90	+19	− 7	−15	+12	−17	+20	−14	−23	+23	+25					0	2.58
114329	H 23 09 16.74	+49 39 02.2	6.75	2	H	347.319 762 88	+49.650 613 33	*	1.54	2.35	− 0.23	0.57	0.77	0.73	0.49	0.56	−19	−11	+19	−18	+ 3	+ 3	+ 6	−15	+ 1	+ 5					1	0.52
114330	23 09 18.86	−09 11 13.9	9.23	H		347.328 577 61	−09.187 200 63		6.33	110.59	−14.52	1.71	1.26	2.09	2.44	2.18	+29	+42	+ 9	+22	+29	+41	+45	+43	+51	+40					0	0.14
114331	23 09 19.03	−32 09 52.1	8.50	H		347.329 282 12	−32.164 473 32		3.31	25.55	− 6.59	0.94	0.82	1.17	1.17	1.04	+33	−12	−14	−19	+ 1	+32	+ 4	− 1	+ 5	+40					0	2.46
114332	23 09 20.20	+61 39 23.1	8.06	H		347.334 178 42	+61.656 407 97		3.04	−14.38	−13.36	0.55	0.55	0.67	0.73	0.64	−15	+ 7	+14	+16	+ 0	+ 1	+ 1	− 6	− 6	− 6					0	2.03
114333	23 09 21.90	−59 00 28.5	8.69	H		347.341 236 78	−59.007 929 03		12.60	46.34	18.72	0.58	0.65	1.08	0.62	0.69	−23	− 6	− 5	− 1	+ 7	+10	+ 9	− 3	−15	− 8					0	−0.40
114334	23 09 22.28	+42 42 36.3	8.44	G		347.342 833 62	+42.710 084 39		7.12	7.38	− 4.03	0.52	0.62	1.00	0.60	0.74	− 3	+17	− 2	+18	− 3	− 5	+11	−20	+19	+24					2	−1.66
114335	23 09 22.51	+02 08 39.7	7.11	H		347.343 810 75	+02.144 351 99		1.89	23.30	13.65	0.83	0.61	1.11	1.35	0.91	+20	+25	−19	+ 7	− 2	+32	+15	− 9	+46	+ 5					0	−0.28
114336	23 09 22.68	+18 44 09.5	6.75	G		347.344 479 59	+18.735 961 24		4.13	9.15	−16.30	0.69	0.57	0.88	0.63	0.66	+11	+32	−25	+ 6	− 1	+ 2	+12	−12	+37	+28					0	2.34
114337	23 09 23.01	−27 05 53.8	9.35	H		347.345 856 30	−27.098 291 64		−0.26	7.32	1.16	1.25	0.88	1.37	1.49	1.09	+11	+ 7	−15	−28	+16	− 2	+18	−17	+23	+ 6					0	0.84
114338	23 09 25.16	−18 37 37.7	9.19	H		347.354 842 65	−18.627 142 23		4.81	20.20	− 6.40	1.13	0.76	1.28	1.28	0.95	+26	+14	+12	− 2	+22	+29	+24	− 4	+20	+13					0	1.75
114339	23 09 25.75	−47 45 39.0	8.48	G		347.357 293 79	−47.760 833 17		9.43	62.53	−25.66	0.89	0.79	1.04	0.94	0.85	+ 2	+10	− 3	+12	+12	+20	+15	+32	− 9	− 7					0	1.13
114340	23 09 26.75	−12 37 05.9	8.79	H		347.361 478 00	−12.618 305 14		19.53	−40.45	15.54	1.07	0.87	1.26	1.38	0.87	+19	− 8	−37	+11	−14	+12	−14	+14	+30	− 7					0	−0.52
114341	23 09 26.76	−21 10 20.9	3.68	H		347.361 508 79	−21.172 485 55		13.96	55.99	31.25	0.80	0.59	0.94	1.03	0.84	+33	−15	−18	+ 9	+16	+11	+13	+ 6	+33	+37					0	1.39
114342	23 09 26.84	+54 25 30.3	8.88	H		347.361 851 99	+54.425 081 20		3.92	2.43	10.29	0.63	0.66	0.86	0.73	0.66	−24	− 3	+27	+ 7	− 2	+ 0	− 1	−10	+ 4	−22					1	0.19
114343	23 09 27.72	+54 36 03.1	8.60	H		347.365 495 32	+54.600 859 89		1.27	− 4.54	− 6.70	0.63	0.63	0.84	0.68	0.59	−18	− 3	+25	+28	− 6	− 5	− 5	− 4	+ 8	−16					0	−0.42
114344	23 09 28.40	+68 25 42.4	8.13	1	H	347.368 344 49	+68.428 447 22		3.19	9.02	− 0.90	1.24	1.31	1.54	1.53	1.76	−14	+ 9	− 1	+ 4	+ 4	+ 2	+ 5	− 9	+17	−12					0		
114345	23 09 30.03	+53 02 39.8	9.40	H		347.375 145 09	+53.044 396 59		−0.58	4.46	0.69	0.89	0.91	1.21	1.04	0.90	−32	+ 0	+27	−30	+25	+25	+19	−36	− 8	−34					0	−1.78
114346	H 23 09 30.09	−66 30 57.1	9.44	H		347.375 354 46	−66.515 873 84	*	12.62	−30.49	−44.28	0.94	0.92	1.26	1.16	1.02	− 4	+ 3	−12	+ 0	− 7	− 1	− 6	+ 1	− 9	− 7					1	1.50
114347	23 09 31.45	+08 40 37.8	5.05	2	H	347.381 061 77	+08.677 171 65		4.28	3.71	− 4.52	0.81	0.55	0.88	1.04	0.75	+20	−15	−15	−30	+ 9	− 1	+20	+ 5	−22	− 8					0	2.79
114348	23 09 32.46	+29 40 10.6	6.59	H		347.385 244 64	+29.669 601 89		3.78	15.54	12.12	0.55	0.57	0.83	0.59	0.58	+25	+ 2	+10	+ 5	+ 2	− 6	+ 4	−14	+24	+29					0	−1.13
114349	23 09 33.66	+00 43 26.4	12.41	H																											
114350	23 09 33.72	+23 35 19.7	8.08	H		347.390 507 10	+23.588 811 57		3.02	10.89	− 1.29	0.63	0.67	0.95	0.70	0.71	+67	+ 5	+17	+18	+ 7	− 6	+ 7	− 2	− 4	+64					0	−0.27
114351	23 09 34.20	+24 15 35.8	8.64	H		347.392 483 10	+24.259 949 98		7.33	27.59	− 7.89	0.71	0.79	1.05	0.75	0.79	+65	+15	+24	+21	+14	−12	+15	+ 5	−14	+64					0	0.39
114352	23 09 34.71	+40 11 00.9	8.43	H		347.394 612 81	+40.183 586 25		2.76	4.85	− 6.53	0.73	0.70	1.03	0.83	0.79	+ 1	+28	+12	+10	+ 5	+ 1	+20	−28	+22	+21					0	−1.91
114353	23 09 34.78	+47 34 44.0	10.03	H		347.394 936 98	+47.578 885 02		4.47	14.72	− 5.03	0.78	0.89	1.47	0.94	1.01	−23	+ 4	+21	+25	+ 5	−13	+17	− 8	− 8	+10					1	−1.02
114354	23 09 35.02	+01 55 34.8	8.15	H		347.395 904 04	+01.926 320 65		11.81	130.39	−50.42	1.01	0.68	1.39	1.80	1.10	+14	+13	−23	− 8	− 2	+30	+11	−24	+54	− 2					0	−0.58
114355	H 23 09 36.74	−03 57 44.3	8.47	H		347.403 093 85	−03.962 292 61	A	10.72	−15.06	−17.28	1.62	1.26	1.96	2.56	1.63	+41	+11	+21	+ 2	+27	+54	+18	+20	+37	+19					4	0.39
114356	23 09 37.62	+64 53 42.0	9.17	H		347.406 730 35	+64.894 993 61		1.42	8.62	− 2.82	0.81	0.84	1.02	0.98	1.12	−14	−12	− 1	− 3	− 6	− 7	−12	−14	+30	−32					1	−1.79
114357	23 09 38.90	+03 47 18.5	9.15	H		347.412 096 98	+03.788 472 22		4.49	−15.63	−26.91	1.15	0.86	1.37	1.68	1.06	+26	− 3	−25	+ 8	−10	+32	− 8	−13	+17	− 4					0	−0.01
114358	23 09 39.67	−66 28 19.2	7.81	H		347.415 291 80	−66.472 007 21		6.95	48.72	20.41	0.56	0.56	0.75	0.71	0.63	− 9	+ 2	−18	− 5	+ 5	+ 0	+ 4	+ 0	− 7	−11					0	0.37
114359	23 09 39.77	−23 05 58.8	8.82	H		347.415 691 85	−23.099 673 24		3.93	7.99	8.59	1.15	0.88	1.39	1.50	1.33	+48	−34	−28	+ 6	− 1	+19	− 5	−16	+35	+56					2	2.38
114360	23 09 40.17	−30 54 36.8	9.37	H		347.417 373 95	−30.910 221 48		1.61	8.60	−34.51	1.08	0.92	1.25	1.23	1.10	+16	−14	− 4	−33	+22	+15	+27	− 1	−12	+10					0	0.05
114361	23 09 41.44	−67 43 56.3	8.29	H		347.422 669 00	−67.732 301 30		66.36	−316.98	−215.17	0.71	0.74	0.95	0.74	0.73	−15	+ 6	−27	−25	+ 7	− 4	+ 3	− 5	− 1	+ 5					0	−0.35
114362	23 09 41.62	−53 21 01.1	9.15	H		347.423 397 74	−53.350 292 43		5.40	41.25	10.36	0.59	0.75	1.23	0.67	0.62	− 5	+ 6	−26	+ 6	−22	+20	−17	−29	+ 1	−12					0	0.33
114363	H 23 09 42.77	+48 38 48.5	8.72	H		347.428 220 62	+48.646 805 41	*	6.59	58.81	−53.88	0.69	0.77	1.17	0.75	0.80	−32	−13	+26	−11	+13	+ 4	+12	− 7	+ 0	−13					0	−0.51
114364	23 09 43.87	−54 39 04.1	9.24	H		347.432 781 50	−54.651 126 99		4.50	−14.29	3.02	0.75	0.74	1.36	0.88	0.76	−12	− 4	+ 1	+ 6	−16	+17	−16	− 8	+ 4	−21					2	−1.53
114365	23 09 44.14	+59 19 57.7	5.68	H		347.433 910 42	+59.332 689 22		1.65	0.14	1.17	0.44	0.49	0.56	0.56	0.53	−31	+13	+18	− 4	+19	+ 4	+17	−23	+ 8	−41					1	−3.53
114366	23 09 44.62	−28 05 18.9	5.88	H		347.435 908 30	−28.088 576 09		4.76	18.93	1.74	0.64	0.48	0.70	0.74	0.54	+15	+ 4	+ 3	−18	+12	− 5	+13	+ 7	+15	+11					0	1.54
114367	23 09 44.73	−67 52 34.2	6.47	H		347.436 385 52	−67.876 159 66		18.93	0.13	−51.30	0.47	0.47	0.64	0.54	0.50	− 5	+ 9	−31	−15	+ 1	− 1	− 1	− 2	− 5	+14					0	−1.43
114368	23 09 46.91	+15 49 58.7	9.93	2	H	347.445 441 14	+15.832 979 66		1.52	2.09	−10.23	1.23	1.09	1.56	1.11	1.17	+ 4	+33	−26	+ 0	− 2	+ 7	+10	−20	+27	+26					0	−0.51
114369	23 09 48.87	+37 41 13.9	7.91	G		347.453 605 91	+37.687 202 01		10.70	71.25	−11.97	0.70	0.54	1.00	0.78	0.59	+ 2	+36	+ 0	+ 2	+ 6	+20	+21	−29	+33	+31					1	−0.52
114370	23 09 48.96	−07 05 24.4	8.61	H		347.454 006 76	−07.090 118 46		11.14	25.44	12.37	1.13	0.80	1.22	1.54	0.92	+10	−15	− 2	− 7	+ 4	+25	+ 2	− 4	+11	−17					0	−0.80
114371	23 09 49.53	−14 30 37.9	6.43	G		347.456 382 62	−14.510 536 30		9.45	30.15	− 6.30	0.80	0.77	1.00	0.86	0.90	+41	−29	−44	− 9	+ 9	+26	+23	+30	− 6	+39					0	1.49
114372	23 09 51.81	−17 32 28.0	9.48	H		347.465 890 48	−17.541 120 88		2.60	3.82	−11.96	1.47	0.97	1.69	2.05	1.21	+31	+27	+10	+ 1	+25	+19	+15	−30	+25	− 9					0	0.65
114373	23 09 52.44	+39 28 09.2	6.66	H		347.468 506 22	+39.469 208 75		10.08	−3.54	− 0.50	0.63	0.55	0.84	0.69	0.59	+13	+32	+13	+ 9	− 4	+ 7	+11	−36	+22	+32					0	0.74
114374	H 23 09 54.77	+44 51 51.5	8.38	H		347.478 206 79	+44.864 308 16	A	3.25	3.20	− 3.93	0.97	0.89	1.38	1.03	1.05	− 9	+21	+ 3	+13	− 3	− 2	+ 8	− 7	+13	+29					1	−1.13
114375	H 23 09 54.88	−22 27 27.3	4.71	G		347.478 653 79	−22.457 592 48	*	6.26	35.92	− 7.79	1.55	2.29	1.06	1.39	1.13	+ 4	−14	−28	+ 6	+ 2	+29	+13	−19	+40	+49					2	0.35
114376	23 09 55.09	+11 44 43.0	8.85	H		347.479 558 81	+11.745 266 12		3.93	23.59	− 4.23	1.07	0.73	1.14	1.16	1.09	+37	− 6	+ 0	− 9	+13	−13	+22	+17	−12	+29					0	0.55
114377	23 09 55.71	+67 14 31.3	6.66	H		347.482 115 37	+67.242 030 79		6.20	39.17	14.12	0.51	0.49	0.59	0.63	0.60	−17	+ 1	− 2	+36	+ 0	+ 0	+ 1	− 1	+16	−14					1	1.70
114378	23 09 57.17	+14 25 36.3	6.54	1	H	347.488 224 68	+14.426 760 87		38.67	−121.53	−86.43	0.69	0.61	0.83	0.70	0.70	+17	+ 9	−13	+16	+ 0	− 6	+ 1	+ 3	+21	+20					2	1.70
114379	23 09 57.23	+47 57 30.0	7.91	G		347.488 474 77	+47.958 343 19	B	39.56	147.06	12.42	7.89	9.49	7.67	5.75	6.72	−18	+ 6	+19	− 4	+20	− 9	+23	− 8	+ 2	+11					1	−1.54
114380	23 09 57.36	−10 31 00.3	8.26	H		347.489 005 04	−10.516 757 75		8.69	50.23	15.91	0.99	0.71	1.19	1.38	0.79	+ 8	+ 1	− 9	+14	− 4	+43	− 1	+ 6	+25	− 5					0	0.68
*114381	23 09 57.79	+68 37 54.6	8.15	H		347.490 803 61	+68.631 823 04		2.66	14.18	3.43	0.53	0.58	0.66	0.61	0.73	− 7	+ 9	+ 4	+26	+ 0	+ 1	+ 2	+10	+16	+ 0					0	−0.09
*114382	H 23 09 57.64	−42 51 40.2	5.83	H		347.490 169 85	−42.861 169 12	A	28.87	−348.82	−50.54	1.38	1.32	0.87	0.95	0.95	− 4	− 4	−22	− 9	−13	+14	−24	−26	+26	+35					0	0.57
114383	23 09 57.89	−28 43 12.8	10.42	G		347.491 228 09	−28.720 235 41		10.15	186.82	75.57	1.65	1.15	1.87	1.76	1.35	+14	+ 3	−15	−44	+ 7	+19	+13	−19	+29	+16					2	1.39
114384	23 09 57.98	+42 50 09.4	9.15	2	H	347.491 582 81	+42.835 946 03		1.93	− 8.65	−15.27	0.63	0.72	1.14	0.75	0.86	− 2	+10	+ 0	+11	− 2	+ 1	+ 7	−25	+18	+18					0	0.36
114385	23 09 58.74	+47 57 33.9	7.11	H		347.494 750 05	+47.959 414 93	A	34.06	154.23	− 1.11	1.62	1.92	2.31	1.78	2.01	−25	+ 6	+19	− 8	+20	− 6	+23	−14	+ 0	+10					1	−1.54
*114386	23 09 58.86	+36 51 44.2	8.13	H		347.495 247 14	+36.862 277 84		2.08	2.89	− 1.15	0.73	0.64	1.06	1.07	0.76	+ 6	+15	− 2	− 7	+ 0	+28	+ 8	−33	+27	+39					0	0.41
*114387	23 09 58.82	−23 06 17.5	8.45	H		347.495 078 96	−23.104 870 08		7.71	57.78	9.95	1.21	0.77	1.19	1.63	1.16	+31	−29	−11	+39	− 1	−11	+ 8	− 8	− 6	+48					0	0.75
114388	23 10 00.88	−39 59 58.1	9.65	H		347.503 666 69	−39.999 466 84		10.83	27.59	8.83	0.93	0.96	1.39	1.10	1.03	+24	− 2	−14	+ 9	−14	+35	−11	−40	+19	+27					0	1.54
114389	23 10 01.47	+09 49 19.6	5.39	H		347.506 129 55	+09.822 101 11		5.27	−17.77	− 7.75	0.81	0.77	0.91	0.98	0.89	+19	−19	−35	− 8	−16	− 5	−17	−45	+25	+12					0	−0.22
114390	23 10 02.57	+36 50 53.9	7.61	H		347.510 696 18	+36.848 297 75		3.01	14.68	− 2.77	0.66	0.57	0.94	0.93	0.66	+ 6	+12	+ 1	− 7	+ 0	+27	+ 8	−32	+27	+41					0	1.15
114391	23 10 03.08	−58 02 31.6	9.67	1	H	347.512 824 40	−58.042 120 56		4.21	7.17	8.98	0.74	0.85	1.42	0.82	0.92	−29	+ 1	− 7	+ 5	+14	+18	+16	− 7	−18	−21					0	0.69
114392	23 10 04.24	−33 28 26.9	10.14	H		347.517 653 80	−33.474 136 21		8.44	−44.88	−31.29	1.49	1.38	1.85	1.81	1.73	+28	+ 8	−20	−32	−15	− 1	−15	−22	+14	+39					0	0.12
114393	23 10 04.50	+12 55 06.5	10.52	H		347.518 751 90	+12.918 484 61		5.76	13.65	−25.51	1.91	1.24	1.88	2.46	1.66	+ 4	+ 3	−17	−33	+24	−32	+29	+19	+ 2	−12					2	1.59
114394	23 10 04.54	−16 11 18.8	8.68	H		347.518 901 50	−16.188 557 39		5.35	47.46	−28.70	1.28	0.71	1.39	1.99	1.04	+22	+ 2	− 9	− 2	+32	−27	+27	−10	+35	−11					2	−1.88
114395	23 10 05.74	+49 59 26.0	7.27	G		347.523 903 85	+49.990 557 77		5.54

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
114301	8.957	0.014	8.281	0.012		0.587	0.002	G	0.66	0.00	H	8.3533	0.0016	0.017	100		8.33	8.38		C			1								S
114302	8.238	0.009	8.102	0.010		0.131	0.013	T	0.15	0.01	L	8.1314	0.0016	0.014	115		8.11	8.16					1								S
114303	11.113	0.073	10.530	0.066		0.560	0.020	G	0.63	0.02	H	10.5782	0.0036	0.030	74		10.53	10.63		C			1								
114304	10.475	0.057	9.656	0.045		0.752	0.004	G	0.80	0.00	H	9.7483	0.0025	0.022	70		9.72	9.78		C			1								
114305	7.390	0.007	7.351	0.007		0.042	0.002	G	0.06	0.00	H	7.3695	0.0012	0.013	86		7.35	7.42		U 2 C			1								S P
114306	10.251	0.023	8.979	0.014		1.083	0.021	T	1.05	0.02	L	9.0282	0.0022	0.017	133		8.99	9.06		C			1								
114307	8.853	0.012	7.547	0.007		1.110	0.011	T	1.07	0.01	L	7.5976	0.0013	0.014	122		7.58	7.63					1								
114308	10.428	0.044	9.081	0.023		1.142	0.039	T	1.11	0.04	L	9.1291	0.0030	0.021	75		9.10	9.16					1								
114309	8.814	0.013	8.717	0.016		0.087	0.019	T	0.10	0.02	L	8.7590	0.0018	0.015	106		8.74	8.79		C			1								
114310	9.822	0.029	8.715	0.019		0.955	0.027	T	0.94	0.02	L	8.7526	0.0026	0.017	59		8.72	8.77		C			1								
114311	10.226	0.044	9.525	0.039		0.633	0.044	T	0.70	0.04	L	9.6599	0.0049	0.026	51		9.63	9.70		C			1								
114312	8.754	0.011	8.806	0.014		0.002	0.003	G	0.02	0.00	H	8.8267	0.0015	0.017	121		8.80	8.86					1								
114313	10.037	0.029	9.328	0.025		0.661	0.003	G	0.72	0.00	H	9.4011	0.0026	0.024	82		9.35	9.44		C			1 G								
114314	8.978	0.018	7.572	0.011		1.188	0.017	T	1.15	0.01	L	7.5895	0.0020	0.015	97		7.57	7.62					1								S
114315	8.127	0.009	7.654	0.011		0.427	0.015	G	0.49	0.02	H	7.7189	0.0011	0.009	87		7.70	7.74		C			1								S
114316	10.871	0.045	9.385	0.022		1.251	0.039	T	1.21	0.04	L	9.4150	0.0029	0.025	79		9.37	9.47		C			1								
114317	9.409	0.015	9.375	0.020		0.036	0.023	T	0.05	0.02	L	9.3812	0.0022	0.021	136		9.35	9.41					1								
114318	10.149	0.027	8.587	0.014		1.333	0.025	T	4.19	0.05	O	7.7533	0.0158	0.163	81		7.42	7.92		U 2 C			1 S								S
114319	10.209	0.034	9.746	0.034		0.450	0.038	T	0.52	0.04	L	9.8032	0.0026	0.021	81		9.76	9.84		C			1								
114320	9.516	0.023	8.874	0.020		0.596	0.026	T	0.67	0.02	L	8.9592	0.0031	0.020	56		8.93	9.00					1								
114321	9.419	0.016	7.779	0.008		1.372	0.014	T	1.34	0.02	L	7.7940	0.0011	0.011	110		7.77	7.81		C			1								S
114322	9.889	0.028	8.696	0.017		1.012	0.002	G	1.06	0.00	I	8.7269	0.0017	0.015	76		8.70	8.76		C			1								
114323	9.378	0.024	8.074	0.014	A	1.200	0.495	G	1.15	0.04	L *	8.0520	0.0022	0.014	57	*	8.03	8.07		D	23092−0719	I 1	2 C A	AB	108	4.622	0.014		2.27	0.06	S
114324	9.603	0.018	8.545	0.013		0.918	0.017	T	0.92	0.01	L	8.5951	0.0014	0.015	128		8.57	8.63		C			1								
114325	10.137	0.032	9.637	0.031		0.470	0.040	T	0.54	0.04	L	9.6629	0.0033	0.022	62		9.61	9.71		C			1								
114326	9.870	0.021	9.128	0.018		0.679	0.022	T	0.74	0.02	L	9.1854	0.0022	0.016	104		9.16	9.22					1								
114327	6.599	0.004	6.665	0.004		−0.040	0.000	G	−0.02	0.00	H	6.6618	0.0012	0.009	107		6.65	6.68					1								S
114328	9.561	0.018	8.803	0.015		0.676	0.018	T	0.74	0.01	L	8.8667	0.0015	0.013	92		8.84	8.90					1								
114329	6.701	0.003	6.753	0.004	*	−0.043	0.005	T	−0.02	0.01	L *	6.7479	0.0013	0.018	171	*	6.72	6.78		U 2	23093+4939	H 1	2 C A	AB	280	0.221	0.019		2.95	0.27	S
114330	9.826	0.031	9.268	0.028		0.522	0.037	T	0.59	0.04	L	9.3442	0.0028	0.016	47		9.30	9.37					1								S
114331	9.885	0.023	8.640	0.015		1.062	0.021	T	1.03	0.02	L	8.6636	0.0022	0.014	75		8.64	8.68		C			1								
114332	8.064	0.008	8.055	0.010		0.009	0.011	T	0.03	0.01	L	8.0664	0.0010	0.013	125		8.05	8.09					1								
114333	9.498	0.012	8.770	0.010		0.654	0.012	T	0.72	0.01	L	8.8250	0.0016	0.023	235		8.79	8.86					1								S
114334	8.920	0.010	8.472	0.010		0.436	0.015	G	0.50	0.02	H	8.5353	0.0015	0.018	195		8.50	8.57					1								
114335	8.745	0.014	7.238	0.008		1.267	0.013	T	1.23	0.01	L	7.2672	0.0007	0.009	70		7.26	7.28		D			1								S
114336	6.669	0.007	6.737	0.006		−0.057	0.002	G	−0.04	0.00	H	6.7385	0.0011	0.008	57		6.73	6.75		C	23094+1844	I 1	1								S
114337	10.694	0.045	9.475	0.026		1.042	0.041	T	1.01	0.03	L	9.5199	0.0026	0.021	98		9.48	9.58		C			1								
114338	9.760	0.020	9.259	0.020		0.482	0.022	T	0.55	0.02	L	9.2975	0.0020	0.019	101		9.27	9.35		C			1								S
114339	9.001	0.015	8.500	0.015		0.503	0.015	G	0.58	0.02	H	8.5755	0.0019	0.016	80		8.55	8.61					1								S
114340	9.619	0.023	8.888	0.020		0.656	0.023	T	0.72	0.02	L	8.9282	0.0018	0.016	58		8.90	8.96		C			1								S
114341	5.265	0.003	3.821	0.003		1.202	0.056	G	1.16	0.02	A	3.8484	0.0007	0.004	73		3.84	3.86					1								S
114342	9.295	0.015	8.926	0.016		0.399	0.015	G	0.46	0.02	H	8.9741	0.0014	0.016	133		8.95	9.00		C			1								
114343	8.696	0.010	8.611	0.012		0.083	0.015	T	0.10	0.02	L	8.6291	0.0015	0.018	140		8.61	8.66		C			1								
114344	8.415	0.009	8.211	0.010		0.195	0.013	T	0.21	0.01	L	8.1943	0.0023	0.021	131		8.17	8.23	1.26	P 1 A			1 X S								S
114345	10.854	0.047	9.551	0.024		1.107	0.041	T	1.07	0.04	L	9.5726	0.0025	0.023	132		9.53	9.61		C			1								G
114346	10.427	0.029	9.539	0.022	*	0.776	0.028	T	0.81	0.02	L *	9.5770	0.0025	0.026	140	*	9.54	9.63		D	23095−6631	H 1	2 C S A	AB	245	0.178	0.008		0.26	0.33	
114347	6.906	0.010	5.290	0.010		1.484	0.009	G	2.69	0.05	F	5.0336	0.0117	0.064	77		4.95	5.19		U 2	23095+0841	I 1	1 S								S
114348	8.085	0.008	6.721	0.006		1.155	0.008	T	1.12	0.01	L	6.7584	0.0012	0.009	93		6.74	6.77		C			1								S
114349						0.708	0.003	G	0.76	0.00	H	12.5491	0.2290	0.232	2		12.25	12.85			23096+0043	I 1									G
114350	8.356	0.006	8.106	0.007		0.238	0.009	T	0.27	0.01	L	8.1492	0.0007	0.011	201		8.12	8.17					1								S
114351	9.026	0.011	8.688	0.011		0.321	0.015	T	0.37	0.02	L	8.7185	0.0010	0.015	161		8.69	8.75		D	23096+2416	I 1	1								
114352	9.809	0.020	8.545	0.012		1.077	0.018	T	1.04	0.01	L	8.5990	0.0017	0.013	93		8.58	8.62		C			1								
114353	10.406	0.022	10.063	0.026		0.325	0.032	T	0.38	0.04	L	10.1068	0.0025	0.028	205		10.05	10.15					1								G
114354	8.796	0.015	8.210	0.014		0.563	0.015	G	0.64	0.01	H	8.2750	0.0015	0.009	63		8.26	8.29		C			1								S
114355	9.023	0.014	8.597	0.014	A	0.400	0.495	G	0.48	0.04	L *	8.5590	0.0017	0.014	69	*	8.54	8.59		D	23096−0358	I 1	2 C A	AB	141	1.456	0.010		2.18	0.06	S
114356	9.316	0.016	9.168	0.020		0.142	0.024	T	0.16	0.03	L	9.2183	0.0019	0.018	107		9.19	9.25		D			1								
114357	10.465	0.043	9.235	0.025		1.050	0.039	T	1.02	0.03	L	9.3215	0.0026	0.019	71		9.29	9.34					1								
114358	8.088	0.008	7.836	0.009		0.240	0.011	T	0.27	0.01	L	7.8772	0.0016	0.014	142		7.86	7.90		C			1								S
114359	10.131	0.032	8.918	0.019		1.037	0.029	T	1.01	0.02	L	8.9829	0.0019	0.012	63		8.96	9.01		C			1								
114360	10.646	0.038	9.469	0.023		1.009	0.035	T	0.98	0.03	L	9.5358	0.0027	0.019	93		9.49	9.58					1								
114361	9.882	0.021	8.447	0.011		1.201	0.000	G	1.34	0.00	I	8.4094	0.0018	0.019	140		8.38	8.44					1								
114362	9.690	0.012	9.186	0.012		0.484	0.013	T	0.56	0.01	L	9.2527	0.0016	0.026	244		9.21	9.30					1								
114363	9.468	0.014	8.805	0.012	*	0.615	0.015	T	0.68	0.01	L *	8.8504	0.0019	0.018	175	*	8.82	8.89		C	23097+4839	H 1	2 C S A	AB	355	0.133	0.007		0.54	0.47	
114364	9.985	0.017	9.329	0.016		0.609	0.020	T	0.68	0.02	L	9.3723	0.0022	0.030	181		9.32	9.42					1								
114365	6.050	0.003	5.718	0.003		0.315	0.004	T	0.36	0.01	L	5.7620	0.0007	0.006	133		5.75	5.77		C	23097+5920	I 1	1								S
114366	7.575	0.006	6.019	0.004		1.311	0.001	G	1.27	0.00	H	6.0329	0.0010	0.008	99		6.02	6.04					1								S
114367	6.922	0.004	6.505	0.004		0.394	0.005	T	0.46	0.01	L	6.5553	0.0007	0.009	134		6.54	6.57					1								S
114368	11.800	0.143	10.211	0.055		1.355	0.126	T	3.36	0.83	K	9.7049	0.0075	0.053	62		9.63	9.78		U 2			1 S								
114369	8.374	0.011	7.942	0.011		0.420	0.015	G	0.49	0.02	H	8.0078	0.0014	0.014	102		7.99	8.03					1								S
114370	9.349	0.023	8.672	0.020		0.626	0.025	T	0.69	0.02	L	8.7410	0.0020	0.011	54		8.71	8.77		C			1								S
114371	6.442	0.004	6.421	0.008		0.010	0.005	G	0.03	0.01	H	6.4438	0.0009	0.005	54		6.44	6.46					1								S
114372	10.629	0.036	9.524	0.022		0.953	0.033	T	0.94	0.02	L	9.6397	0.0037	0.027	120		9.60	9.68					1								
114373	6.941	0.005	6.680	0.005		0.227	0.002	G	0.25	0.00	H	6.7291	0.0009	0.008	77		6.72	6.75		C			1								S
114374	8.590	0.009	8.456	0.010	*	0.129	0.012	T	0.14	0.01	L *	8.4322	0.0015	0.016	191	*	8.40	8.46		D	23099+4452	M 1	2 C A	AB	22	0.910	0.008		2.34	0.05	S
114375	5.506	0.004	4.790	0.003	*	0.674	0.015	G	0.75	0.02	A *	4.8351	0.0006	0.005	57	*	4.83	4.85		D	23099−2227	I 1	2 C A	AS	285	0.205	0.005		0.77	0.08	S
114376	10.170	0.026	8.979	0.017		1.020	0.024	T	0.99	0.02	L	9.0221	0.0023	0.017	96		8.98	9.06					1								
114377	6.676	0.005	6.658	0.005		0.021	0.007	T	0.04	0.01	L	6.6737	0.0007	0.008	107		6.66	6.69					1								S
114378	7.269	0.007	6.603	0.006		0.607	0.007	T	0.68	0.01	L	6.6697	0.0025	0.012	64		6.65	6.69		M	23099+1426	I 1	1								S
114379	9.065	0.010	8.022	0.007	B	0.900	0.015	G	0.94	0.02	I	8.1513	0.0328			B				D	23100+4758	I 2	1 C I B								S
114380	9.005	0.015	8.313	0.013		0.626	0.015	G	0.69	0.01	H	8.3866	0.0016	0.013	60		8.36	8.41		C			1								S
114381	8.244	0.008	8.163	0.010		0.080	0.012	T	0.09	0.01	L	8.1791	0.0014	0.012	129		8.16	8.20		C			1								S
114382	6.388	0.004	5.883	0.004	*	0.475	0.005	T	0.55	0.01	L *	5.9361	0.0007	0.007	81	*	5.92	5.95		D	23100−4252	I 1	2 C A	AB	301	0.327	0.022		3.05	0.09	S
114383	11.633	0.101	10.466	0.054		0.943	0.005	G	0.99	0.01	I	10.5744	0.0036	0.033	96		10.53	10.63					1								
114384	9.320	0.015	9.151	0.017		0.162	0.021	T	0.18	0.02	L	9.2064	0.0036	0.049	173		9.15	9.38	1.48	P 1 A			1 S								
114385	7.918	0.006	7.202	0.006	A	0.658	0.006	T	0.72	0.01	L	7.2500	0.0168	0.084	192	A	7.17	7.40		D	23100+4758	I 2	1 C P B								S
114386	10.034	0.024	8.261	0.011		1.477	0.021	T	1.49	0.03	L	8.2585	0.0013	0.013	114		8.24	8.28			23100+3651	I 2	1								
114387	8.884	0.018	8.504	0.018		0.380	0.015	G	0.44	0.02	H	8.5353	0.0022	0.018	71		8.51	8.57					1								S
114388	10.531	0.035	9.693	0.028		0.737	0.034	T	0.78	0.03	L	9.7912	0.0026	0.022	96		9.77	9.83		C			1								
114389	5.297	0.003	5.377	0.003		−0.068	0.004	T	−0.05	0.00	L	5.3743	0.0007	0.006	94		5.37	5.38		C			1 G								S
114390	9.631	0.018	7.760	0.008		1.555	0.016	T	1.57	0.02	L	7.7298	0.0013	0.013	113		7.71	7.75			23100+3651	I 2	1								S
114391	10.769	0.026	9.726	0.017		0.906	0.023	T	0.91	0.02	L	9.8331	0.0025	0.036	254		9.78	9.90		U			1 S								
114392	10.953	0.054	10.200	0.044		0.673	0.053	T	0.73	0.04	L	10.2787	0.0041	0.031	77		10.24	10.32		C			1								
114393	11.286	0.095	10.589	0.080		0.506	0.072	G	0.58	0.08	R	10.6319	0.0045	0.034	69		10.58	10.68		C			1								G
114394	8.937	0.014	8.687	0.016		0.238	0.020	T	0.27	0.03	L	8.7452	0.0018	0.019	83		8.71	8.77		C			1								S
114395	8.708	0.009	7.403	0.006		1.109	0.008	T	1.07	0.01	L	7.4295	0.0008	0.011	163		7.41	7.45					1								S
114396	10.877	0.037	9.303	0.016	A	1.160	0.040	G	1.12	0.04	R *	9.3559	0.0018	0.015	114	*	9.33	9.38		C	23101−1727	H 1	2 C D	AB	307	1.023	0.066		3.58	0.23	D
114397	10.094	0.022	8.668	0.012		1.204	0.020	T	1.16	0.02	L	8.6929	0.0019	0.019	134		8.66	8.73					1 X								
114398	7.417	0.007	7.356	0.009		0.023	0.005	G	0.04	0.00	H	7.3941	0.0015	0.013	78		7.38	7.42					1								S
114399	9.104	0.015	7.891	0.010		1.037	0.014	T	1.01	0.01	L	7.9394	0.0016	0.013	98		7.92	7.97		C			1								S
114400	10.320	0.039	8.263	0.014		1.741	0.034	T	1.95	0.10	O	8.1650	0.0070	0.052	73		8.08	8.22		U 2			1								S

64976 | 15222

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
*114401	23 10 07.92	−34 24 28.3	9.55		H	347.532 983 14	−34.407 871 54		6.29	11.14	−25.07	1.50	1.05	1.54	1.68	1.36	+ 0	+27	− 7	−33	+27	− 4	+31	+13	+ 9	+ 1		0	0.45
*114402	23 10 07.86	−74 36 27.3	9.44		H	347.532 750 03	−74.607 590 64		11.64	64.60	40.14	0.83	0.86	1.08	0.93	0.80	− 3	−13	−29	−23	+ 6	+10	+ 5	−23	+15	+ 8		0	−1.20
114403	23 10 08.54	+68 49 31.7	7.91		H	347.535 603 02	+68.825 474 54		1.71	−2.02	−2.81	0.56	0.63	0.71	0.62	0.76	−16	+11	− 6	+19	−10	+ 6	− 9	− 3	+13	−17		0	−0.69
114404	23 10 08.86	+33 46 04.4	6.69	2	H	347.536 900 27	+33.767 902 63		5.26	24.69	−34.74	0.58	0.51	0.83	0.68	0.59	+ 9	+ 5	+ 2	+18	−11	−11	+ 0	−36	+33	+19		0	1.28
114405	23 10 08.89	−37 46 36.3	9.53		H	347.537 027 92	−37.776 742 40		0.74	36.60	6.16	0.94	0.94	1.34	1.18	1.11	+30	−10	−33	+30	− 5	+17	+ 3	+ 5	+ 6	+39		3	−0.11
114406	H 23 10 09.50	+57 26 54.3	6.94		G	347.539 600 40	+57.448 407 96	A	5.34	3.79	−27.78	0.83	0.93	1.01	1.03	0.94	−32	+20	+10	+16	+ 8	+19	+10	−20	+ 0	−26		1	1.13
114407	23 10 09.72	−40 35 29.2	5.90	2	H	347.540 495 59	−40.591 436 12		4.08	22.14	−45.65	0.53	0.56	0.78	0.60	0.64	+30	−19	−23	+ 5	−17	+24	−15	−19	+28	+37		2	2.21
114408	23 10 11.99	−66 51 27.8	6.47		H	347.549 939 96	−66.857 729 67		16.06	236.36	35.10	0.49	0.48	0.66	0.55	0.49	−13	− 1	−21	− 9	+ 0	+ 3	+ 0	+ 4	−12	− 6		0	0.17
114409	H 23 10 13.90	−39 19 41.5	9.51		H	347.557 902 19	−39.328 195 03	A	7.87	39.65	−0.63	1.86	1.87	2.24	2.02	1.85	+32	− 9	−11	− 4	−17	+17	−17	−28	+ 3	+30		1	−0.03
114410	23 10 14.92	−27 17 16.0	8.72		H	347.562 154 15	−27.287 774 08		2.29	11.51	−8.15	1.16	0.72	1.08	1.36	0.83	− 5	−12	−14	−42	+31	− 2	+33	−15	− 1	−15		0	−0.05
114411	23 10 15.28	−25 55 52.9	11.27		H	347.563 666 41	−25.931 365 97		63.73	716.81	19.43	2.45	1.97	3.17	3.25	2.59	+27	+ 8	−26	−23	+14	−17	+10	−14	+14	+42		0	−0.43
114412	23 10 15.68	−59 22 10.6	7.66		H	347.565 338 73	−59.369 619 69		4.97	40.31	−7.41	0.47	0.52	0.85	0.54	0.55	−23	− 1	− 8	+ 5	+ 1	+10	+ 4	− 9	− 9	−11		0	0.59
114413	H 23 10 16.02	−41 34 42.3	10.05		H	347.566 760 88	−41.578 409 98	A	6.61	5.82	−3.18	2.70	2.55	3.14	3.46	2.93	+44	−13	−30	+16	−11	+ 7	− 4	−23	+30	+67		1	0.15
114414	23 10 16.63	−35 23 55.8	8.00	2	H	347.569 292 20	−35.398 825 99		1.88	−1.68	−6.73	0.72	0.72	1.02	0.81	0.87	+35	− 6	+ 2	+17	+ 6	+14	+ 6	+ 6	+ 8	+41		0	−0.80
114415	H 23 10 17.13	+32 29 13.4	7.05		H	347.571 363 95	+32.487 054 79	A	3.91	13.43	−6.69	1.28	0.97	1.40	1.33	0.83	+25	+ 9	−11	+ 8	− 9	+ 8	− 4	−24	+27	+37		1	0.83
114416	23 10 20.46	−68 50 22.8	8.70		H	347.585 255 19	−68.839 672 61		48.05	67.28	318.97	0.76	0.80	1.05	0.91	0.96	+ 3	− 6	−15	+ 0	− 3	− 6	− 4	+17	− 5	+ 5		0	−0.50
114417	23 10 20.55	+50 37 41.8	10.91		G	347.585 639 84	+50.628 290 80		24.28	−251.55	−319.47	1.16	1.24	1.72	1.35	1.58	−24	− 2	+16	+19	−10	− 9	− 6	+ 0	+ 3	− 8		0	1.51
114418	23 10 20.74	−13 38 40.6	7.18		H	347.586 424 34	−13.644 609 60		1.96	50.18	24.94	0.95	0.75	1.05	1.33	1.06	+27	−22	−19	+ 1	+19	+24	+28	+27	−18	+18		0	−0.61
114419	23 10 20.95	−11 28 46.5	9.40		H	347.587 308 09	−11.479 577 47		5.60	14.49	−29.60	1.60	1.03	1.54	1.59	1.04	− 5	+10	−40	−49	+16	+ 1	+25	−12	+13	−12		0	−1.04
114420	H 23 10 21.08	+49 01 05.5	7.29		G	347.587 823 35	+49.018 196 08	A	21.61	236.48	51.96	0.62	0.68	0.89	0.61	0.70	−34	−14	+21	−10	+11	+ 4	+12	− 4	− 1	− 5		0	−0.23
114421	23 10 21.43	−45 14 47.9	3.88		H	347.589 283 08	−45.246 647 47	+	17.63	132.42	−26.27	0.75	0.93	0.92	0.85	0.49	+22	−14	−47	+36	+18	−31	− 6	+18	− 1	− 2		0	1.06
114422	23 10 22.71	−42 21 53.8	9.24		H	347.594 620 64	−42.364 948 11		13.26	118.91	−50.03	1.09	0.92	1.38	1.13	1.16	+22	−10	−18	−27	−20	+22	−18	−34	+27	+37		0	−0.75
114423	23 10 22.92	−24 15 02.3	8.93		H	347.595 488 29	−24.250 646 97		1.92	−7.48	10.18	1.11	0.75	1.21	1.49	1.14	+22	−28	−11	− 6	+12	+ 6	+ 8	− 3	+17	+33		0	0.08
114424	23 10 24.63	−07 48 42.0	7.33		G	347.602 639 44	−07.811 664 78		28.11	141.18	−136.27	0.99	0.70	1.09	1.34	0.96	+18	− 3	+ 3	− 4	+19	+15	+23	+30	+34	+ 1		0	−0.43
114425	23 10 25.15	+53 40 21.6	8.85		H	347.604 772 58	+53.672 668 09		3.04	2.77	−3.56	0.65	0.66	0.89	0.79	0.63	−21	+ 1	+37	+ 0	+21	+ 7	+18	−16	+ 1	−22		0	0.24
114426	23 10 25.39	−13 18 35.2	8.46	2	T	347.605 801 62	−13.309 788 94		1.23	0.38	−13.05	1.26	1.07	1.52	1.77	1.23	+16	+ 3	−43	−27	+ 3	+16	+16	− 3	+10	+ 0		0	−1.77
114427	23 10 25.75	−63 41 11.8	11.39	2	G	347.607 299 82	−63.686 618 19		30.87	500.02	−29.76	1.59	1.64	2.46	1.89	1.64	− 8	−13	−28	+ 5	+10	− 8	+ 9	− 9	− 9	− 8		2	0.81
114428	23 10 27.03	−60 33 51.6	6.72		H	347.612 635 86	−60.564 339 91		10.79	50.36	−23.85	0.41	0.43	0.67	0.49	0.46	−13	−10	− 8	− 1	− 9	+14	− 5	−14	+ 0	− 1		0	0.07
114429	23 10 27.25	+03 29 27.1	8.26		H	347.613 550 71	+03.490 868 29		4.41	41.32	−12.78	0.98	0.73	1.23	1.20	0.99	+21	− 5	−25	−11	− 7	+20	− 5	−23	+48	+12		2	1.36
114430	23 10 27.36	+43 32 41.1	5.91		H	347.614 014 87	+43.544 736 62		35.39	−202.18	−207.65	0.41	0.42	0.77	0.42	0.52	−17	+23	+16	+16	+ 6	+ 3	+ 5	−15	+ 8	− 4		1	0.36
114431	23 10 28.80	+10 48 58.7	7.71		H	347.619 979 19	+10.816 316 18		6.00	25.38	3.25	0.81	0.59	0.91	0.97	0.93	+38	+ 5	+ 0	−10	+ 3	−14	+ 6	− 2	−11	+28		0	1.60
114432	23 10 29.36	+41 19 19.5	7.74		G	347.622 340 89	+41.322 088 74		14.26	−97.58	−81.95	0.60	0.59	0.93	0.64	0.68	+ 9	+27	+ 3	+64	+ 3	+34	+26	−23	+28	+38		2	−0.91
114433	23 10 30.39	−28 25 42.8	8.43		H	347.626 634 02	−28.428 564 82		4.39	−9.68	−16.50	0.93	0.64	1.02	1.03	0.78	+19	+ 0	−11	−42	+ 7	+ 8	+ 9	−16	+26	+19		0	0.16
114434	23 10 31.95	−33 24 38.7	10.54		H	347.633 109 43	−33.410 756 32		6.08	29.96	−6.35	1.68	1.57	2.17	2.01	1.90	+31	− 9	−40	−26	− 7	+12	− 5	− 9	+16	+42		0	2.07
114435	23 10 33.56	+45 05 58.1	8.19		H	347.639 815 34	+45.099 462 35		2.25	−5.51	7.71	0.63	0.57	1.01	0.74	0.69	−22	+ 9	+19	+23	− 5	−13	+10	− 5	+10	+14		0	−0.20
114436	23 10 33.80	−26 21 46.2	10.38		H	347.640 820 52	−26.362 820 42		3.00	20.57	−8.44	1.36	1.04	1.57	1.60	1.18	+21	+ 6	−14	−32	+ 2	+ 2	+ 3	−27	+21	+19		4	2.37
114437	23 10 34.12	+31 10 28.4	9.01		H	347.642 156 67	+31.174 551 76		1.79	−0.52	5.87	0.83	0.88	1.29	0.88	0.84	+20	+30	+ 8	+13	+ 8	− 5	+16	−23	+29	+20		0	1.57
114438	23 10 34.37	+60 25 15.4	8.38		H	347.643 213 75	+60.420 957 15		2.58	−9.32	−8.51	0.72	0.69	0.88	0.92	0.74	−17	+ 4	+16	+ 6	+ 2	+ 8	+ 2	− 7	+10	−11		0	−0.57
114439	23 10 36.29	−36 45 50.4	9.15		H	347.651 206 03	−36.764 006 75		8.85	38.45	−7.16	0.82	0.82	1.22	0.98	1.08	+30	− 2	−16	+24	− 1	+33	+ 4	+ 8	+18	+43		3	1.08
114440	H 23 10 37.23	+07 46 01.1	12.09		G	347.655 131 95	+07.766 966 61	A	−6.21	21.76	23.76	10.20	7.00	10.15	10.95	9.91	+38	− 3	+ 0	− 2	+ 4	+39	+ 5	− 6	+17	+52		3	1.29
114441	23 10 37.68	+46 22 40.4	8.20		H	347.657 016 74	+46.377 881 43		2.22	0.27	−3.76	0.53	0.57	0.90	0.57	0.61	−26	+ 4	+20	−31	+10	− 7	+ 9	−16	+ 7	−12		3	−0.33
114442	23 10 38.29	+21 10 59.7	8.78		H	347.659 548 02	+21.183 236 36		1.71	15.66	−15.31	1.04	0.92	1.32	1.19	1.18	+16	− 3	−13	+ 1	+ 6	−29	− 1	+20	+14	+19		0	0.23
114443	23 10 38.33	−45 27 22.6	9.55		H	347.659 726 34	−45.456 275 52		21.47	244.84	−143.00	1.24	0.88	1.32	1.67	0.99	− 3	+ 6	− 5	− 1	+ 6	− 6	+ 5	− 4	+10	− 1		0	0.55
114444	H 23 10 39.59	+09 46 45.6	8.44		H	347.664 939 50	+09.779 330 39	A	14.36	−44.35	−47.09	1.69	1.33	1.61	2.10	1.55	+28	− 9	−10	+12	+ 5	−17	− 2	− 2	+16	− 8		1	−0.71
114445	23 10 39.62	−05 57 37.0	6.96		G	347.665 065 87	−05.960 277 30		1.36	8.82	1.14	0.80	0.59	0.90	1.03	0.67	+13	+13	−12	− 6	+ 2	+19	+ 8	− 5	+25	− 9		0	1.94
114446	23 10 40.47	−17 33 40.5	8.93		H	347.668 620 85	−17.561 244 53		8.96	−12.48	16.13	1.20	0.73	1.31	1.54	0.99	+23	+18	+17	− 7	+27	+25	+27	−12	+19	+ 3		0	−0.95
114447	23 10 41.00	−32 10 41.4	8.28		G	347.670 835 70	−32.178 160 54		9.18	71.26	10.39	0.87	0.78	1.15	1.26	1.04	+27	−16	−16	−15	− 9	+33	− 5	−25	+ 7	+26		0	0.36
114448	H 23 10 42.40	+26 31 23.0	7.11		H	347.676 649 36	+26.523 067 36	A	11.45	47.57	−12.81	0.70	0.74	0.92	0.66	0.63	+48	+24	+22	+ 0	+ 7	+ 4	+ 6	− 4	+ 6	+49		1	0.11
114449	23 10 42.62	+17 35 40.0	5.68		H	347.677 591 02	+17.594 438 02		6.45	24.37	−27.28	0.68	0.57	0.81	0.68	0.63	+11	+13	−21	−14	− 2	+ 6	+ 3	−13	+33	+19		0	0.96
114450	23 10 43.62	+18 54 34.2	8.56		G	347.681 739 07	+18.909 501 88		12.78	−207.06	−187.20	1.05	0.82	1.40	1.07	1.01	− 1	+27	−34	+14	− 1	−22	+ 4	−18	+47	− 4		0	0.75
114451	23 10 45.85	−76 27 47.7	7.89	2	H	347.691 022 65	−76.463 245 50		2.95	−23.30	−1.53	0.57	0.60	0.77	0.65	0.62	− 6	+12	−38	− 1	+ 8	+ 3	+11	−10	+12	+11		0	0.96
114452	23 10 46.18	+46 18 10.7	9.99		H	347.692 418 76	+46.302 980 16		0.29	−3.03	−7.95	0.92	0.93	1.42	0.99	0.97	−25	+ 6	+11	−38	+15	− 9	+15	−24	+13	−12		0	−0.68
114453	23 10 46.62	−29 31 30.0	6.53		H	347.694 260 36	−29.524 994 85		7.38	−42.19	−61.02	0.79	0.55	0.84	0.91	0.64	+10	+ 2	+ 5	−34	+21	+ 6	+25	+ 7	+ 9	− 1		0	−0.33
114454	23 10 47.89	+51 28 50.5	8.74		H	347.699 527 24	+51.480 684 74		3.79	10.42	−8.04	0.62	0.71	0.96	0.76	0.87	−32	− 5	+23	−12	+12	+ 5	+11	− 9	− 4	−21		2	−0.42
114455	23 10 48.51	−29 55 03.6	8.65		H	347.702 138 03	−29.917 653 70		34.90	449.39	−25.69	1.12	0.78	1.22	1.36	0.95	+ 8	+21	+ 2	−40	+24	−10	+27	− 5	+12	+ 1		0	−0.88
*114456	23 10 50.15	+45 30 46.7	6.98		H	347.708 960 34	+45.512 970 00		42.65	−86.84	−286.41	0.40	0.44	0.74	0.42	0.51	−28	+18	+ 8	−35	+ 7	−18	+ 8	−15	+17	−15		0	1.57
*114457	23 10 50.14	+26 21 49.7	8.30		H	347.708 909 99	+26.363 793 38		7.97	−9.84	−32.19	0.66	0.68	0.97	0.66	0.63	+34	+24	+19	+ 5	− 3	−14	+ 0	−14	+ 6	+27		0	1.36
114458	23 10 50.64	+00 24 37.4	9.01		G	347.711 014 43	+00.410 389 94		22.57	−22.77	−271.19	1.16	0.82	1.33	1.84	1.11	+31	+ 6	− 1	+11	+ 8	+10	+ 2	− 6	+14	−10		0	1.59
114459	23 10 51.43	−21 01 05.1	8.52		H	347.714 305 18	−21.018 070 32		6.14	17.37	−21.15	1.33	0.86	1.39	1.87	1.21	+39	−13	−15	+36	+21	+17	+19	− 1	+14	+33		7	0.48
114460	23 10 51.57	−69 01 54.4	8.69		G	347.714 874 49	−69.031 763 91		22.35	−224.73	−31.83	0.71	0.74	0.95	0.81	0.87	−12	+ 3	−25	− 8	− 5	+ 1	− 4	+19	− 4	−12		0	1.80
114461	23 10 51.82	−28 02 12.7	9.12		H	347.715 896 23	−28.036 869 34		8.53	73.99	−3.41	1.13	0.75	1.27	1.32	0.90	+11	+ 7	−24	−24	+ 8	− 9	+ 8	−15	+26	+10		0	−0.18
*114462	23 10 54.38	+74 12 53.7	8.68		H	347.726 589 87	+74.214 921 39		1.17	27.76	13.21	0.61	0.58	0.68	0.75	0.63	+ 0	+ 2	+12	− 1	− 9	− 3	− 8	+23	+ 2	+ 0		0	1.73
*114463	H 23 10 54.13	+81 49 00.7	8.29		H	347.725 556 01	+81.816 851 92	A	5.06	−0.21	−8.24	1.65	1.49	1.55	1.82	1.49	+ 0	−24	+ 7	+18	+ 7	+ 2	+ 4	−11	+13	+19		0	1.82
114464	23 10 54.74	−31 59 12.1	9.34		H	347.728 075 10	−31.986 700 35		7.29	−39.88	−20.79	1.18	0.98	1.45	1.58	1.38	+18	−17	− 9	−25	+10	+27	+16	− 8	−11	+12		0	0.13
114465	H 23 10 55.08	+58 06 30.1	9.09		H	347.729 504 00	+58.108 350 77	*	1.90	−1.31	−1.84	0.88	0.94	1.11	1.00	1.17	−32	+26	−13	− 9	+15	−15	+17	−50	+31	−39		0	2.52
114466	23 10 55.40	−33 37 26.9	7.76		H	347.730 843 28	−33.624 139 38		6.22	27.83	−10.58	0.88	0.68	1.05	1.06	0.85	+16	+ 7	−14	− 8	+12	− 2	+11	+12	+13	+27		0	2.73
114467	23 10 55.74	+24 17 57.8	8.80		H	347.732 251 84	+24.299 383 63		3.63	58.56	−9.31	0.73	0.81	1.13	0.77	0.83	+61	+18	+17	+18	+14	− 5	+14	+ 5	+ 1	+59		1	−0.06
114468	23 10 56.81	+16 48 22.8	9.11		G	347.736 720 89	+16.806 329 49		2.87	−5.46	−18.52	1.39	1.03	1.55	1.34	1.11	− 4	+19	−24	−33	+ 7	− 1	+13	−22	+39	+ 6		0	0.46
114469	23 10 57.26	+16 47 50.4	11.70		H	347.738 570 34	+16.797 330 09		−13.56	31.28	−34.81	7.95	5.16	7.89	8.98	6.65	−23	+16	−26	−40	+17	−15	+17	−19	+40	−15		6	3.98
114470	23 10 57.73	+06 01 51.3	10.44		H	347.740 520 95	+06.030 923 65		−4.23	13.63	−4.14	1.79	1.34	1.99	2.65	1.63	+36	−14	−14	+ 2	− 9	+11	−18	−18	+16	−21		2	0.69
114471	23 10 58.35	+31 09 03.1	7.29		H	347.743 121 59	+31.150 860 99		2.71	2.11	−10.73	0.58	0.59	0.86	0.61	0.57	+17	+20	−14	+ 9	+10	−13	+13	−29	+31	+17		0	−0.90
114472	23 10 59.02	−54 32 45.0	9.62		H	347.745 935 28	−54.545 829 98		10.70	31.11	−203.30	0.82	0.83	1.40	1.06	0.85	−23	− 9	− 2	+29	−27	+ 7	−27	− 1	+ 1	−38		2	0.68
114473	H 23 10 59.11	+62 51 00.1	9.34		H	347.746 301 93	+62.850 024 35	A	1.43	14.10	6.85	1.37	1.41	1.55	1.44	1.45	− 8	+11	+19	−15	+ 1	+10	+ 2	−22	+ 0	−13		2	0.14
114474	23 10 59.47	−35 59 57.3	10.53		H	347.747 807 62	−35.999 248 49		−0.69	4.55	−9.92	1.15	1.11	1.69	1.31	1.43	+37	−10	−10	+30	− 7	+15	− 3	− 8	+13	+50		0	−1.32
114475	23 10 59.60	−43 38 51.8	9.94		H	347.748 347 97	−43.647 735 08		6.81	−42.32	4.06	1.12	1.17	1.58	1.39	1.39	+16	−10	−12	+17	−11	+17	−11	−13	+22	+16		0	2.18
114476	23 11 01.38	+43 39 21.5	7.53		H	347.755 753 82	+43.655 960 82		4.50	−8.96	−16.49	0.52	0.50	0.90	0.55	0.60	−20	+14	+14	+18	+ 7	+ 4	+20	−21	+ 7	+ 7		1	−0.11
114477	23 11 01.53	−50 58 03.8	9.25		H	347.756 391 52	−50.967 708 34		18.45	−7.02	−302.08	0.90	1.12	1.50	1.10	1.28	+15	−13	−18	−14	+13	− 8	+12	+22	−20	+20		2	−0.68
114478	23 11 02.96	−18 38 50.6	8.76		H	347.762 346 67	−18.647 387 11		4.74	12.47	−1.63	1.15	0.74	1.27	1.28	1.06	+35	+15	+ 0	+ 3	+29	+13	+38	+ 2	+29	+26		0	−1.11
114479	23 11 05.18	+25 22 01.2	8.25		H	347.771 595 55	+25.367 008 76		1.94	−4.78	−23.93	0.70	0.74	1.08	0.80	0.75	+49	+ 6	+ 7	+13	+ 8	−22	+ 9	+ 2	− 7	+48		0	0.45
114480	23 11 05.70	+28 33 30.0	8.58		H	347.773 734 46	+28.558 341 37		3.56	9.73	−4.60	0.76	0.66	1.02	0.81	0.64	+22	+ 4	+ 4	+ 3	− 2	− 2	− 1	−24	+33	+19		0	1.02
114481	23 11 06.24	+49 19 38.8	9.03		H	347.775 997 64	+49.327 442 86		2.89	0.34	1.54	0.63	0.69	1.05	0.70	0.82	−26	+ 0	+19	+11	+ 0	−11	+ 4	+ 5	+ 4	− 7		0	−0.99
114482	23 11 06.95	+53 03 29.7	7.23		H	347.778 960 77	+53.058 250 11		0.48	−2.41	−6.17	0.51	0.55	0.75	0.58	0.58	−37	− 3	+36	−26	+23	+24	+16	−23	−13	−40		0	−1.05
114483	23 11 09.95	+30 32 40.0	7.62		H	347.791 456 55	+30.544 455 67		3.18	0.00	−3.33	0.61	0.61	0.89	0.67	0.59	+16	+18	−10	+ 5	+10	−10	+12	−32	+33	+15		0	0.77
114484	23 11 10.11	+53 01 33.2	8.97	3	H	347.792 107 95	+53.025 895 20		13.26	−6.88	−20.64	0.76	0.81	1.13	0.93	0.89	−26	− 4	+32	−28	+18	+22	+12	−21	−12	−23		0	−0.91
114485	23 11 10.46	−63 11 23.8	7.00		H	347.793 587 27	−63.189 952 64		4.32	69.44	−13.00	0.50	0.52	0.76	0.64	0.62	−10	− 7	−27	+ 1	+13	− 8	+11	−12	+ 5	−20		2	1.08
114486	23 11 10.78	+30 02 35.0	6.90		H	347.794 901 21	+30.043 067 12		3.25	16.80	17.70	0.63	0.58	0.86	0.65	0.61	+20	+25	+ 3	+ 4	+ 4	+ 3	+10	−22	+28	+18		0	−0.75
114487	23 11 11.65	−30 00 05.2	8.40		G	347.798 555 21	−30.001 445 51		11.96	72.58	14.57	0.99	0.76	1.12	1.26	0.95	+12	+ 8	− 3	−33	+28	− 9	+29	+ 7	+ 6	+ 8		0	−0.06
114488	23 11 13.37	+03 09 10.9	7.92		H	347.805 724 66	+03.153 024 51		6.24	6.74	1.25	0.91	0.66	1.10	1.17	1.00	+24	+ 6	− 8	−10	+ 8	+ 9	+15	+ 6	+43	+ 8		2	1.47
114489	23 11 14.07	+05 00 15.6	6.66	2	H	347.808 634 17	+05.004 328 00		4.94	3.71	−2.37	0.87	0.60	1.01	1.47	0.77	+21	− 4	−18	+17	−10	+25	−18	−13	+26	−28		0	1.43
114490	23 11 14.82	+60 34 21.7	9.62	2	H	347.811 750 50	+60.572 708 09		−0.68	−5.56	−2.35	0.95	0.88	1.15	1.20	0.98	− 8	+11	+14	+20	+ 0	− 3	+ 5	− 3	+11	+ 7		0	1.47
114491	23 11 15.06	−15 11 03.2	8.02		H	347.812 737 87	−15.184 235 55		1.87	2.47	−17.17	1.00	0.70	1.12	1.05	0.88	+13	+21	+ 0	−16	+16	+30	+24	+15	+29	+23		0	0.14
114492	23 11 16.72	+25 19 40.4	10.33		H	347.819 676 42	+25.327 883 71		1.27	5.51	3.65	1.15	1.22	1.68	1.39	1.23	+54	+10	+30	+25	+ 5	−13	+ 8	− 3	− 4	+51		0	−1.73
114493	23 11 17.16	−05 05 55.6	8.84		H	347.821 503 95	−05.098 763 97		2.69	14.72	4.23	1.15	0.84	1.23	1.19	0.92	+16	+19	− 2	−22	− 1	+ 7	+ 3	−15	+14	+ 7		0	0.44
114494	23 11 19.53	+37 53 45.0	8.32		H	347.831 395 11	+37.895 842 59		3.90	39.65	13.11	0.83	0.60	1.18	0.82	0.70	−10	+45	−10	+ 5	+10	+ 9	+28	−22	+31	+22		0	−0.58
114495	23 11 21.01	+35 03 53.6	9.32		H	347.837 521 78	+35.064 875 91		4.80	7.45	−2.41	0.90	0.74	1.30	0.97	0.82	−16	+ 8	− 6	+18	−13	−13	+ 7	−48	+31	+ 9		0	0.47
114496	23 11 21.01	+62 31 10.8	9.58		H	347.837 537 25	+62.519 657 12		2.44	−7.59	−6.94	0.83	0.88	1.04	1.01	1.01	− 8	+14

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
114401	10.117	0.031	9.587	0.030		0.506	0.032	T	0.58	0.03	L	9.6641	0.0040	0.027	73		9.62	9.70					1							
114402	10.193	0.024	9.503	0.020		0.625	0.024	T	0.69	0.02	L	9.5669	0.0029	0.022	145		9.53	9.61					1							
114403	10.013	0.023	8.067	0.009		1.614	0.020	T	1.64	0.02	L	8.0253	0.0012	0.013	123		8.00	8.05					1							
114404	8.446	0.013	6.917	0.016		1.306	0.017	T	3.42	0.04	O	6.4247	0.0059	0.129	115		6.22	6.59		U 2			1 S							S
114405	10.853	0.044	9.618	0.025		1.054	0.040	T	1.02	0.03	L	9.6984	0.0021	0.021	105		9.66	9.73		C			1							
114406	8.217	0.015	7.095	0.009	A	1.148	0.218	G	0.94	0.01	L *	7.1054	0.0010	0.009	119	*	7.09	7.12		D	23101+5727	I 1	2 C	A	AB	298	1.283	0.008	1.85	0.02	S
114407	7.977	0.010	6.133	0.007		1.565	0.010	T	2.49	0.04	O	5.9191	0.0069	0.037	83		5.86	5.98		U 2			1 S							S
114408	7.692	0.007	6.583	0.004		0.956	0.001	G	0.94	0.00	K	6.6287	0.0009	0.009	143		6.62	6.64		C			1							S
114409	10.126	0.025	9.606	0.024	A	0.400	0.495	G	0.51	0.08	L *	9.6133	0.0023	0.021	93	*	9.57	9.66		D	23102−3920	I 1	2 C	B	AB	315	5.395	0.039	3.11	0.21	
114410	9.945	0.024	8.821	0.016		0.968	0.022	T	0.95	0.02	L	8.8858	0.0019	0.018	95		8.85	8.92					1							
114411						1.566	0.015	G	2.22	0.02	A	11.3233	0.0053	0.049	111		11.23	11.40					1							G
114412	9.094	0.009	7.793	0.006		1.106	0.008	T	1.07	0.01	L	7.8337	0.0010	0.013	225		7.81	7.86		C			1							S
114413	10.775	0.046	10.201	0.046	*	0.574	0.005	G	0.65	0.01	R *	10.1773	0.0039	0.029	88	*	10.13	10.27		D	23103−4135	I 1	2 C	A	AB	337	1.078	0.011	1.38	0.06	
114414	10.010	0.026	8.176	0.012		1.526	0.023	T	1.57	0.03	L	8.1171	0.0033	0.031	97		8.07	8.19		U 2			1							S
114415	7.012	0.006	7.065	0.008	*	−0.038	0.003	G	−0.02	0.00	R *	7.0438	0.0010	0.009	107	*	7.03	7.06		D	23103+3229	I 1	2 C	A	AB	90	0.646	0.003	0.68	0.01	S
114416	10.045	0.023	8.846	0.014		1.004	0.009	G	1.05	0.01	I	8.8447	0.0024	0.021	124		8.81	8.89			23103−6850	I 1	1							
114417						1.250	0.020	G	1.41	0.03	I	11.0909	0.0043	0.047	160		10.99	11.15					1							G
114418	8.778	0.020	7.320	0.012		1.229	0.018	T	1.19	0.02	L	7.3471	0.0015	0.011	49		7.33	7.37					1							S
114419	10.678	0.059	9.569	0.036		0.956	0.054	T	0.94	0.04	L	9.5698	0.0024	0.016	50		9.54	9.61		D			1							
114420	8.134	0.007	7.415	0.006	A	0.674	0.015	G	0.69	0.01	L *	7.4300	0.0010	0.012	181	*	7.41	7.45		D	23104+4901	I 1	2 C	A	AB	152	4.130	0.011	2.91	0.04	S
114421	5.164	0.003	3.995	0.002		0.998	0.048	G	0.95	0.02	A	4.0494	0.0005	0.005	93		4.04	4.06		C			1 O							S
114422	9.985	0.023	9.303	0.020		0.619	0.023	T	0.69	0.02	L	9.3748	0.0027	0.019	86		9.34	9.40					1							
114423	10.407	0.036	9.076	0.020		1.129	0.032	T	1.09	0.03	L	9.1018	0.0019	0.015	76		9.08	9.13		C			1							
114424	8.061	0.010	7.392	0.011		0.604	0.000	G	0.67	0.00	H	7.4539	0.0012	0.010	53		7.43	7.48		C			1							S
114425	8.975	0.012	8.862	0.015		0.110	0.018	T	0.12	0.02	L	8.8916	0.0017	0.016	129		8.87	8.93		C			1							
114426	10.426	0.058	8.629	0.024		1.590	0.020	G	1.56	0.02	J	8.5326	0.0246	0.100	45		8.45	8.71		U 2			1							
114427						1.370	0.014	G	1.61	0.03	I	11.4991	0.0060	0.071	162		11.26	11.61		U 2			1 S							G
114428	6.995	0.003	6.745	0.004		0.214	0.002	G	0.24	0.00	H	6.7890	0.0007	0.009	199		6.77	6.81					1							S
114429	8.524	0.013	8.282	0.014		0.231	0.018	T	0.26	0.02	L	8.3286	0.0018	0.017	67		8.30	8.36					1							S
114430	6.432	0.003	5.954	0.003		0.450	0.004	T	0.52	0.00	L	6.0087	0.0006	0.006	179		6.00	6.02		C			1 G							S
114431	9.145	0.013	7.838	0.008		1.111	0.012	T	1.07	0.01	L	7.8805	0.0009	0.011	106		7.86	7.90		C			1							S
114432	8.276	0.009	7.775	0.007		0.496	0.015	G	0.57	0.02	H	7.8451	0.0008	0.011	128		7.83	7.86					1							S
114433	8.972	0.014	8.501	0.013		0.457	0.015	T	0.53	0.02	L	8.5335	0.0014	0.011	103		8.51	8.55		C			1							S
114434	11.460	0.089	10.592	0.061		0.776	0.081	T	0.81	0.06	L	10.6857	0.0050	0.036	76		10.63	10.75		C			1							G
114435	9.552	0.013	8.338	0.009		1.038	0.012	T	1.01	0.01	L	8.3618	0.0015	0.018	184		8.33	8.39					1							
114436	10.533	0.037	10.412	0.053		0.179	0.002	G	0.20	0.00	H	10.4437	0.0048	0.033	97		10.38	10.51					1							
114437	10.850	0.053	9.162	0.022		1.410	0.045	T	1.39	0.05	L	9.1554	0.0019	0.021	100		9.11	9.19					1							
114438	9.812	0.023	8.515	0.014		1.103	0.021	T	1.07	0.02	L	8.5505	0.0018	0.018	129		8.52	8.58					1							
114439	9.752	0.020	9.205	0.019		0.519	0.021	T	0.59	0.02	L	9.2644	0.0018	0.018	120		9.23	9.30		C			1							
114440						1.224	0.001	G	1.18	0.00	H *	12.2612	0.0088	0.081	71	*	12.03	12.35		D	23106+0746	H 1	2 C	D	AB	326	1.043	0.036	0.30	0.14	G D
114441	8.125	0.006	8.187	0.007		−0.052	0.008	T	−0.03	0.01	L	8.1922	0.0015	0.018	206		8.16	8.22					1							
114442	10.649	0.063	8.908	0.025		1.452	0.054	T	1.45	0.09	L	8.9140	0.0028	0.015	45		8.87	8.93		C			1							
114443	10.767	0.065	9.623	0.039		0.920	0.000	G	0.96	0.00	I	9.6964	0.0033	0.024	93		9.65	9.75		C			1							
114444	9.158	0.022	8.532	0.020	*	0.582	0.026	T	0.65	0.02	L *	8.5673	0.0024	0.018	97	*	8.54	8.59		C	23107+0947	H 1	2 C	A	AB	322	0.394	0.006	1.85	0.03	S
114445	6.833	0.005	6.951	0.007		−0.098	0.009	G	−0.08	0.01	H	6.9361	0.0009	0.008	55		6.92	6.95		D			1							S
114446	9.440	0.014	8.983	0.014		0.444	0.016	T	0.51	0.02	L	9.0327	0.0020	0.021	116		9.00	9.06					1							S
114447	8.712	0.012	8.319	0.012		0.394	0.015	G	0.46	0.02	H	8.3680	0.0014	0.012	86		8.35	8.40		C			1							S
114448	7.358	0.006	7.144	0.006	*	0.204	0.008	T	0.22	0.01	L *	7.1702	0.0009	0.008	115	*	7.16	7.19		C	23107+2631	I 1	2 C	A	AE	152	0.783	0.015	3.71	0.07	S
114449	7.418	0.009	5.831	0.005		1.330	0.008	T	1.29	0.01	L	5.8327	0.0009	0.007	65		5.82	5.86		C			1							S
114450	9.342	0.020	8.617	0.017		0.590	0.015	G	0.66	0.01	H	8.6913	0.0021	0.014	55		8.67	8.73		C			1							S
114451	9.923	0.021	8.138	0.009		1.517	0.019	T	2.66	0.03	O	7.8787	0.0039	0.047	134		7.81	7.95		U 2 C			1 S							S
114452	11.592	0.066	10.065	0.027		1.370	0.015	G	1.34	0.01	J	10.1381	0.0029	0.032	211		10.07	10.19		C			1							G
114453	6.858	0.005	6.552	0.005		0.282	0.006	G	0.32	0.01	H	6.5984	0.0010	0.008	80		6.58	6.61		C			1							S
114454	9.056	0.012	8.777	0.013		0.265	0.017	T	0.30	0.02	L	8.8124	0.0015	0.015	155		8.78	8.85		C			1							
114455	9.904	0.029	8.765	0.019		0.966	0.005	G	1.01	0.01	I	8.7896	0.0020	0.017	73		8.76	8.81		C			1							
114456	7.933	0.005	7.067	0.004		0.750	0.020	G	0.79	0.02	I	7.1223	0.0012	0.015	233		7.10	7.15		R	23108+4531	I 1	1							
114457	8.754	0.011	8.338	0.011		0.423	0.006	G	0.49	0.01	H	8.3940	0.0012	0.013	114		8.37	8.41					1							S
114458	10.080	0.030	9.123	0.021		0.854	0.002	G	0.90	0.00	H	9.1585	0.0030	0.018	67		9.12	9.19					1							
114459	9.872	0.038	8.677	0.024		1.023	0.035	T	1.00	0.03	L	8.6892	0.0022	0.019	73		8.65	8.72					1							
114460	9.652	0.017	8.763	0.013		0.753	0.002	G	0.80	0.00	H	8.8279	0.0019	0.019	127		8.80	8.86		C			1							
114461	9.882	0.025	9.182	0.021		0.633	0.025	T	0.70	0.02	L	9.2561	0.0021	0.022	100		9.21	9.29					1							
114462	8.847	0.013	8.716	0.015		0.126	0.019	T	0.14	0.02	L	8.7220	0.0015	0.014	120		8.70	8.74		C			1							
114463	8.684	0.015	8.283	0.016	*	0.379	0.020	T	0.44	0.02	L *	8.3783	0.0015	0.016	123	*	8.35	8.41		D	23109+8149	I 1	2 C	A	AB	106	4.916	0.005	0.23	0.01	S
114464	9.847	0.024	9.367	0.025		0.464	0.027	T	0.53	0.03	L	9.4380	0.0025	0.017	71		9.40	9.47					1							
114465	9.390	0.019	9.126	0.021	*	0.251	0.026	T	0.28	0.03	L *	9.1553	0.0023	0.017	98	*	9.13	9.20		C	23109+5807	I 1	2 C S	B	AC	66	0.164	0.032	0.68	0.60	
114466	9.119	0.016	7.885	0.010		1.054	0.015	T	1.02	0.01	L	7.9257	0.0020	0.014	86		7.91	7.95		C			1							S
114467	9.095	0.012	8.828	0.013		0.254	0.017	T	0.29	0.02	L	8.8661	0.0017	0.019	146		8.84	8.91					1							
114468	9.718	0.026	9.162	0.025		0.644	0.126	G	0.57	0.05	L	9.2471	0.0023	0.023	56		9.21	9.28		D	23110+1648	I 2	1							
114469											T	11.8354	0.0141	0.124	54		11.40	12.02		D	23110+1648	I 2	1 S							D
114470	12.019	0.214	10.576	0.084		1.217	0.180	T	1.18	0.18	L	10.6030	0.0051	0.033	71		10.55	10.68		C			1							
114471	8.813	0.013	7.414	0.008		1.183	0.012	T	1.14	0.01	L	7.4601	0.0013	0.010	96		7.44	7.48					1							S
114472	10.303	0.021	9.682	0.019		0.574	0.021	T	0.65	0.02	L	9.7459	0.0024	0.030	198		9.69	9.79					1							
114473	9.810	0.022	9.406	0.024	*	0.382	0.031	T	0.45	0.03	L *	9.4285	0.0026	0.021	114	*	9.39	9.46		D	23110+6251	H 1	2 C	A	AB	164	0.844	0.011	2.06	0.05	G
114474	12.024	0.128	10.710	0.062		1.112	0.115	T	1.19	0.16	L	10.6653	0.0025	0.029	123		10.62	10.71					1							G
114475	10.588	0.034	9.988	0.032		0.559	0.034	T	0.63	0.03	L	10.0525	0.0033	0.029	99		10.00	10.12		C			1							
114476	7.754	0.006	7.551	0.007		0.194	0.009	T	0.21	0.01	L	7.5880	0.0010	0.011	166		7.57	7.61		C			1							S
114477	10.316	0.028	9.341	0.020		0.880	0.004	G	0.92	0.00	H	9.3936	0.0029	0.022	102		9.35	9.46		C			1							
114478	10.264	0.025	8.900	0.014		1.155	0.022	T	1.12	0.02	L	8.9268	0.0018	0.016	100		8.89	8.96		C			1							
114479	10.046	0.022	8.404	0.011		1.374	0.019	T	1.34	0.02	L	8.3982	0.0016	0.015	123		8.37	8.43					1							
114480	8.733	0.011	8.606	0.013		0.147	0.015	G	0.16	0.01	H	8.6286	0.0014	0.015	86		8.61	8.67					1							
114481	9.074	0.016	9.030	0.020		0.045	0.024	T	0.06	0.02	L	9.0502	0.0013	0.017	170		9.02	9.09		C			1							
114482	7.187	0.006	7.220	0.007		−0.026	0.008	T	0.00	0.01	L	7.2321	0.0012	0.012	141		7.21	7.25					1							S
114483	9.473	0.019	7.752	0.009		1.447	0.018	T	1.45	0.03	L	7.7290	0.0014	0.010	97		7.71	7.75		C			1							
114484	9.662	0.018	9.080	0.017		0.546	0.018	T	0.62	0.02	L	9.0858	0.0066	0.114	138		9.03	9.51	0.63	P 1 A			1							
114485	8.731	0.009	7.138	0.005		1.335	0.008	T	1.30	0.01	L	7.1506	0.0008	0.012	169		7.13	7.17		D			1 G							S
114486	8.344	0.009	7.026	0.006		1.119	0.008	T	1.08	0.01	L	7.0723	0.0012	0.009	102		7.06	7.09		C			1							S
114487	8.869	0.016	8.465	0.017		0.388	0.002	G	0.45	0.00	H	8.5027	0.0018	0.014	74		8.48	8.52		C			1							S
114488	8.191	0.012	7.941	0.011		0.238	0.015	T	0.27	0.02	L	7.9902	0.0016	0.010	73		7.97	8.01		C			1 S							S
114489	8.613	0.014	6.928	0.007		1.434	0.013	T	3.62	0.03	O	6.3201	0.0090	0.229	67		6.12	6.65		U 2 C	23112+0500	I 1	1 S							S
114490	10.532	0.036	9.732	0.029		0.840	0.015	G	0.86	0.01	H	9.7766	0.0042	0.033	124		9.72	9.84		U			1 S							D
114491	9.679	0.024	8.166	0.013		1.272	0.021	T	1.23	0.02	L	8.1787	0.0017	0.011	65		8.15	8.20		C			1							S
114492	11.909	0.123	10.478	0.051		1.208	0.104	T	1.17	0.10	L	10.5029	0.0028	0.026	118		10.47	10.54		C			1							G
114493	10.230	0.038	8.966	0.022		1.077	0.034	T	1.04	0.03	L	9.0084	0.0028	0.015	63		8.98	9.03		C			1							
114494	9.832	0.022	8.452	0.012		1.168	0.020	T	1.13	0.02	L	8.4858	0.0013	0.016	101		8.45	8.51					1							
114495	9.864	0.020	9.365	0.020		0.469	0.026	T	0.54	0.03	L	9.4290	0.0016	0.019	119		9.39	9.46		C			1							
114496	9.910	0.022	9.623	0.026		0.273	0.032	T	0.31	0.04	L	9.6496	0.0022	0.022	119		9.62	9.69					1							G
114497	11.528	0.085	10.822	0.074		0.544	0.015	G	0.62	0.01	H	11.0464	0.0043	0.038	89		10.96	11.11					1							G
114498	11.874	0.119	10.441	0.050		1.060	0.015	G	1.03	0.01	H	10.5765	0.0031	0.030	102		10.53	10.63					1							G
114499	9.163	0.023	8.888	0.026		0.262	0.033	T	0.29	0.04	L	8.9226	0.0026	0.015	50		8.90	8.95		C			1							
114500	8.841	0.011	8.375	0.011		0.451	0.015	G	0.52	0.02	H	8.4303	0.0012	0.015	140		8.40	8.46					1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	13	mas 14	15	mas 16	mas/yr 17	18	19	20	21	22	23	24	25	26	27	28	% 29	30
114501	23 11 23.51	+50 46 16.8	6.81	H	347.847 965 76	+50.771 326 45	6.45	52.98	12.61	0.44	0.52	0.70	0.49	0.56	−29	+ 3	+21	+18	−15	− 9	−10	− 2	− 1	− 7	1	0.43
114502	23 11 24.63	−16 15 03.2	8.94	G	347.852 606 84	−16.250 886 60	3.51	−50.35	−95.11	1.33	0.81	1.42	2.32	1.11	+ 2	+22	− 7	−21	+21	−25	+25	−16	+42	−55	0	−0.93
114503	23 11 25.19	−65 42 03.7	10.58	2 H	347.854 976 64	−65.701 017 08	19.28	267.91	−6.21	1.12	1.13	1.54	1.29	1.19	−14	− 3	−17	− 9	+12	+ 5	+13	−17	− 6	− 9	0	1.34
114504 H	23 11 25.83	+38 13 11.3	7.90	G	347.857 625 99	+38.219 808 76 A	6.26	60.01	1.09	2.30	2.27	1.37	1.21	1.13	−47	+24	−20	+13	− 3	+11	+22	−37	+28	+49	0	0.08
114505	23 11 28.45	+20 33 43.4	10.64	H	347.868 541 72	+20.562 067 92	1.75	8.83	−0.12	1.85	1.67	2.52	2.09	1.95	+ 7	+14	−29	−16	+10	−27	+ 5	+16	+23	+ 7	0	−0.91
114506	23 11 28.81	−10 30 34.0	9.14	H	347.870 031 09	−10.509 432 72	6.86	−24.06	−41.79	1.39	0.89	1.31	2.34	1.03	− 4	− 4	−24	+24	−14	+11	−22	− 4	+10	−54	0	−0.42
114507	23 11 30.08	+52 53 12.5	9.10	2 H	347.875 317 88	+52.886 809 19	2.87	− 6.68	− 3.89	0.78	0.86	1.16	0.90	0.92	−30	−14	+32	−28	+21	+20	+16	−29	− 9	−22	0	−0.67
114508	23 11 32.01	+36 53 35.6	9.70	3 H	347.883 362 67	+36.893 216 39	8.34	109.02	−53.56	1.05	0.87	1.48	1.48	1.04	− 6	+12	− 5	−13	− 3	+23	+ 7	−39	+19	+33	2	1.01
114509	23 11 36.12	−21 00 10.9	9.30	H	347.900 479 96	−21.003 022 24	3.54	38.38	− 7.95	1.50	1.07	1.69	2.05	1.68	+52	−32	−24	+28	+14	+15	+13	−15	+19	+51	0	−0.01
114510	23 11 37.18	−03 06 02.4	8.20	H	347.904 901 83	−03.100 654 13	3.70	25.13	− 5.21	0.87	0.68	1.26	1.08	1.01	+39	−10	−16	− 6	+ 0	+ 3	− 6	−15	+61	+ 7	0	−0.54
114511	23 11 38.16	+32 05 11.4	9.32	H	347.909 004 86	+32.086 496 91	5.92	4.23	−12.30	0.96	0.79	1.34	1.06	0.79	+21	+32	+ 6	+18	+ 6	+ 6	+18	−15	+36	+28	2	1.73
114512	23 11 38.94	+47 05 56.8	7.21	H	347.912 266 57	+47.099 097 23	20.90	−249.51	−164.53	0.42	0.45	0.72	0.48	0.50	−28	+12	+11	+15	+ 2	−11	+ 7	+ 0	+ 1	− 6	4	−1.62
114513	23 11 39.55	+04 15 30.5	9.93	H	347.914 798 07	+04.258 482 45	7.39	6.07	−42.95	1.48	1.08	1.89	2.38	1.43	+26	−17	−36	+13	−24	+45	−27	−25	+36	− 3	2	−0.39
114514	23 11 39.59	+36 47 40.9	8.34	H	347.914 966 40	+36.794 707 50	0.15	2.57	−21.62	0.77	0.65	1.13	1.09	0.74	+ 2	+15	+ 2	−19	− 3	+25	+ 3	−41	+28	+29	2	0.59
114515	23 11 40.70	+59 41 59.0	8.76	3 H	347.919 585 63	+59.699 730 74	3.10	15.38	− 5.53	0.97	0.93	1.19	1.43	1.21	−28	+ 6	+ 6	+26	− 1	+22	−10	− 3	− 4	−50	0	2.27
114516	23 11 41.34	+56 09 14.8	8.28	H	347.922 230 17	+56.154 106 80	3.36	18.69	− 1.02	0.64	0.67	0.86	0.83	0.70	−29	− 3	+16	+10	+ 9	+ 9	+ 5	−20	+ 1	−36	0	0.20
114517	23 11 41.50	−01 08 04.4	9.50	H	347.922 914 16	−01.134 562 34	0.57	5.82	− 2.67	1.37	1.09	1.46	1.72	1.48	+40	+10	− 8	+ 4	+34	+ 3	+41	+40	+10	+29	0	−1.55
114518	23 11 42.11	−56 16 42.6	10.75	H	347.925 467 74	−56.278 496 77	3.09	16.48	7.88	1.99	2.31	3.29	2.32	2.35	− 8	− 2	−10	−19	−10	+ 4	− 8	−24	+ 9	−18	0	
114519	23 11 42.53	−16 54 05.2	8.90	H	347.927 226 13	−16.901 457 13	19.38	157.95	−12.33	1.39	0.74	1.36	1.53	0.98	+12	+22	− 2	−16	+22	− 9	+33	+ 5	+32	− 8	0	0.89
114520	23 11 44.19	+08 43 12.5	5.15	H	347.934 145 13	+08.720 127 85	12.89	− 8.93	− 5.05	0.75	0.53	0.80	0.98	0.75	+29	−13	−10	−22	+12	− 2	+25	+19	−17	− 3	0	1.52
114521	23 11 45.41	+00 13 24.5	8.60	H	347.939 202 63	+00.223 468 34	8.06	48.43	− 6.83	1.02	0.80	1.16	1.49	1.05	+40	− 7	− 8	+20	+12	+11	+ 9	+10	+ 1	+ 7	0	−0.02
114522	23 11 45.49	−13 41 42.9	10.87	G	347.939 555 50	−13.695 236 44	2.99	95.35	−129.60	2.41	1.89	2.73	3.27	2.64	+11	+ 0	−32	−27	+16	+19	+26	+17	+20	+15	3	−0.44
114523	23 11 45.93	+51 11 22.6	9.46	G	347.941 365 97	+51.189 611 75	1.26	− 5.29	− 1.02	0.74	0.80	1.11	0.88	1.04	−20	+ 2	+17	+ 4	+ 9	− 3	+12	−16	− 2	−10	6	0.79
114524	23 11 47.04	+27 57 32.6	9.01	H	347.946 010 34	+27.959 044 16	1.65	17.60	−15.19	0.74	0.73	1.08	0.74	0.68	+19	+25	+20	+ 5	+ 2	− 6	+ 8	−12	+23	+16	0	1.79
114525	23 11 48.71	+04 43 14.8	9.08	H	347.952 953 24	+04.720 783 31	6.01	64.37	− 9.33	1.19	0.85	1.49	2.11	1.21	+30	−15	−29	+13	−12	+27	−22	−21	+39	−17	0	−1.90
114526	23 11 49.31	+26 50 51.3	6.19	H	347.955 479 12	+26.847 578 38	13.48	−190.51	−111.14	0.51	0.53	0.73	0.53	0.51	+35	+10	+11	+14	+ 1	−14	+ 3	− 9	+ 2	+34	0	1.35
114527	23 11 51.16	+26 03 32.7	8.87	H	347.963 181 34	+26.059 078 99	1.73	− 1.34	− 5.85	0.74	0.77	1.08	0.80	0.78	+40	+17	+22	+18	− 4	−22	+ 1	−17	−15	+45	0	1.39
114528 H	23 11 51.19	−44 43 31.4	7.93	H	347.963 306 83	−44.725 399 35 A	8.93	53.97	−59.93	1.31	1.18	1.32	1.13	1.02	+10	−11	−15	+ 9	− 3	+17	− 2	− 7	+17	+16	0	−0.66
114529	23 11 51.86	−47 13 07.0	10.51	G	347.966 102 24	−47.218 622 37	3.16	−11.53	−36.64	1.67	1.36	1.83	1.94	1.40	+ 3	− 5	+ 5	+40	+ 1	+ 1	− 1	+30	+ 3	− 8	0	0.32
114530	23 11 51.98	−45 08 09.8	8.78	H	347.966 588 72	−45.136 058 43	19.78	87.00	−93.55	1.10	0.76	1.15	1.41	0.82	− 5	+ 2	−17	+41	− 9	+ 6	− 9	+ 4	+16	− 9	0	1.79
114531	23 11 52.39	+47 31 48.3	9.82	H	347.968 294 35	+47.530 083 51	1.58	− 1.37	− 6.31	0.75	0.87	1.32	0.93	0.98	−24	+11	+ 6	+20	+15	−15	+19	+ 3	+ 0	+ 3	2	1.63
114532	23 11 54.87	−09 01 19.2	8.58	H	347.978 608 14	−09.021 998 45	12.14	− 9.31	−91.35	1.10	0.80	1.35	1.31	0.89	+ 6	+35	−22	+14	− 6	+36	+16	+ 8	+32	+ 8	0	−1.13
114533	23 11 55.34	+32 39 57.6	7.40	H	347.980 566 56	+32.666 002 90	6.74	29.14	−16.94	0.66	0.60	0.91	0.85	0.61	+29	+ 9	+ 2	+11	+ 4	+ 0	+ 7	−15	+32	+34	0	0.42
*114534	23 11 57.96	+79 38 06.2	8.38	H	347.991 500 76	+79.635 051 34	6.26	48.58	9.21	0.65	0.61	0.71	0.81	0.66	+ 0	− 6	+10	+31	− 1	+ 1	+ 4	−11	+ 1	+12	0	0.18
*114535	23 11 57.73	+44 20 10.2	8.38	1 H	347.990 540 47	+44.336 178 84	2.23	6.68	− 6.24	0.66	0.57	1.05	0.71	0.69	−12	+23	+16	+14	−11	−11	+ 6	−16	+10	+23	1	1.24
114536 H	23 11 59.56	−11 56 00.6	7.00	H	347.998 149 43	−11.933 488 97 B	5.54	19.96	−32.22	3.50	2.43	2.37	2.58	1.67	+ 8	+ 9	−32	−27	+10	+ 2	+18	−17	+23	+ 6	3	0.75
114537	23 11 59.63	+49 12 49.1	7.65	1 H	347.998 468 15	+49.213 634 44	1.06	1.24	− 4.16	0.47	0.52	0.77	0.52	0.63	−28	+ 4	+ 9	+16	+ 0	− 4	+ 3	+ 9	+ 0	+ 0	0	−0.68
114538	23 11 59.71	+14 04 06.1	9.28	H	347.998 800 48	+14.068 364 28	2.92	−21.62	−18.51	1.14	1.03	1.28	1.27	1.25	+23	+12	−17	+26	+21	−10	+18	+37	−10	+36	0	0.27
114539	23 12 00.38	+35 42 12.8	9.18	H	348.001 593 65	+35.703 561 96	4.87	− 8.03	−12.65	0.90	0.64	1.32	1.08	0.73	−16	+13	−12	−19	− 8	+32	+ 9	−51	+32	+31	0	0.28
114540	23 12 01.57	+64 43 09.2	7.33	H	348.006 535 00	+64.719 235 98	1.22	7.74	− 0.62	0.48	0.55	0.62	0.59	0.71	−15	− 9	+10	+ 4	− 5	−11	−10	−21	+18	−30	1	−1.18
114541	23 12 03.02	−43 59 16.1	7.18	H	348.012 581 95	−43.987 815 96	4.94	5.97	17.29	0.64	0.62	0.83	0.76	0.69	+14	− 4	− 7	+15	+ 8	+10	+ 8	+15	+14	+14	3	0.36
114542	23 12 03.97	+15 18 50.2	8.74	H	348.016 547 33	+15.313 953 51	2.58	14.61	5.53	0.96	0.83	1.14	1.02	1.00	+10	+14	−28	+19	− 3	+ 3	− 1	− 1	+ 4	+21	0	2.07
114543 H	23 12 06.52	+26 55 46.9	9.55	G	348.027 174 16	+26.929 691 36 A	21.13	146.14	−122.52	1.73	1.98	2.14	1.61	1.51	+39	+ 2	+ 1	− 4	− 2	− 8	− 1	−11	− 9	+22	3	1.03
114544	23 12 08.04	−27 40 54.9	9.95	H	348.033 504 84	−27.681 911 43	2.01	51.28	−15.01	1.32	1.15	1.59	1.54	1.32	+24	− 7	−13	−24	+10	+21	+13	−18	+13	+19	0	1.05
114545	23 12 08.20	−72 25 24.6	8.66	H	348.034 174 54	−72.423 486 80	0.12	37.11	−29.07	0.68	0.65	0.88	0.77	0.64	−12	+ 8	−35	+ 0	+15	−18	+11	− 6	+ 2	+10	0	−0.98
114546	23 12 09.26	+82 23 39.9	7.53	G	348.038 565 06	+82.394 406 35	18.97	65.68	84.28	0.52	0.53	0.60	0.59	0.58	− 9	−12	+16	+17	− 2	−13	− 2	− 5	+ 3	−16	0	0.85
114547	23 12 09.35	−25 24 13.9	9.14	H	348.038 969 94	−25.403 858 11	7.46	21.36	− 1.23	1.01	0.75	1.26	1.24	0.88	+21	+ 9	−20	−21	+16	− 6	+16	−18	+33	+12	2	0.81
114548	23 12 11.23	+06 36 19.9	8.31	H	348.046 791 26	+06.605 540 57	2.23	5.05	−22.94	1.05	0.72	1.15	1.07	0.87	+18	+14	−22	−32	+ 2	−11	+ 8	−19	+30	+ 7	0	−0.67
114549	23 12 11.79	+54 32 32.1	8.61	H	348.049 130 29	+54.542 257 85	3.04	5.84	− 8.50	0.64	0.63	0.84	0.70	0.66	−13	+ 7	+11	+31	− 3	− 7	− 1	+16	+ 5	− 8	0	−1.52
114550	23 12 12.43	−80 54 45.6	6.43	H	348.051 794 88	−80.912 671 94	5.60	26.97	−11.45	0.45	0.43	0.52	0.52	0.47	+ 2	−10	− 8	+11	+ 3	− 5	+ 4	+ 1	+ 1	+12	0	0.95
114551	23 12 12.94	−02 02 48.8	9.04	H	348.053 930 51	−02.046 888 20	−0.52	34.97	−23.12	1.26	0.89	1.59	1.80	1.32	+33	−15	+ 4	−18	+19	+41	+21	+17	+38	+20	5	0.47
114552	23 12 12.99	+59 35 59.2	10.79	2 G	348.054 112 89	+59.599 765 27	−0.34	− 4.85	− 5.47	1.22	1.26	1.57	1.56	1.47	−20	+11	− 3	+ 7	+ 5	+ 5	+ 4	−28	+19	−28	0	0.38
114553	23 12 13.08	−03 56 13.6	8.58	H	348.054 495 26	−03.937 112 81	0.47	32.93	17.77	1.02	0.79	1.34	1.44	1.15	+48	−28	− 7	− 5	+ 3	+28	−15	−20	+40	+15	0	0.34
114554	23 12 15.05	+38 46 59.1	9.16	H	348.062 705 65	+38.783 082 09	4.17	− 2.40	− 5.09	1.00	0.84	1.46	1.06	0.87	−13	+34	−34	+ 7	+ 1	+24	+28	−44	+43	+28	0	1.32
114555	23 12 15.79	−61 29 14.2	8.32	G	348.065 782 96	−61.487 285 81	10.22	−65.50	− 3.94	0.60	0.60	0.94	0.69	0.58	−24	+ 8	−27	+14	− 3	− 4	+ 1	−16	+ 5	− 9	0	2.40
114556	23 12 16.54	−15 51 32.1	8.70	H	348.068 918 67	−15.858 915 39	6.25	95.43	−18.13	1.50	0.76	1.14	1.67	0.91	−23	+18	+ 2	−57	+32	+10	+40	−14	+ 8	−37	0	−0.15
114557	23 12 17.16	−61 19 58.2	8.38	H	348.071 514 44	−61.332 847 14	11.61	−80.45	−20.69	0.61	0.65	0.99	0.73	0.65	−16	− 5	−12	+14	− 6	− 1	− 4	−15	+ 1	−10	0	−0.78
114558	23 12 19.02	+02 00 34.6	8.66	H	348.079 260 09	+02.009 610 94	12.52	120.88	−103.66	1.16	0.78	1.23	1.38	0.97	+24	+20	− 7	−38	+ 7	− 3	+20	− 5	+21	− 4	0	1.38
114559	23 12 20.57	+52 13 46.6	7.40	G	348.085 688 76	+52.229 609 69	5.57	−19.07	−21.81	0.50	0.56	0.77	0.63	0.62	−32	−20	+31	−22	+21	+18	+16	−14	−13	−16	0	−0.77
114560	23 12 21.25	−55 29 22.2	10.18	H	348.088 528 12	−55.489 512 33	8.02	−64.95	−58.91	1.05	1.11	1.77	1.33	1.16	−14	+ 6	−22	+ 5	−13	+10	−11	−14	+ 5	−24	0	2.50
*114561	23 12 21.77	+52 05 34.0	9.42	H	348.090 721 23	+52.092 768 33	21.55	342.56	−47.51	0.75	0.79	1.12	1.04	1.07	−26	−10	+22	−24	+19	+15	+16	−16	−16	−15	0	−1.91
*114562	23 12 21.74	+09 01 45.7	8.08	H	348.090 596 62	+09.029 371 06	9.60	−10.20	−43.19	0.96	0.58	1.00	1.50	0.92	+30	−15	−12	−34	+ 6	+11	+25	+ 4	−10	−19	0	0.64
114563	23 12 22.00	+58 46 04.3	9.63	H	348.091 671 41	+58.767 848 42	2.22	9.37	− 0.55	0.99	0.93	1.17	1.20	1.05	−20	+29	− 6	+ 9	+ 1	− 5	+10	−43	+24	−17	0	1.97
114564	23 12 22.26	+63 07 54.2	8.94	H	348.092 740 93	+63.131 711 83	3.11	− 5.68	− 6.81	0.71	0.72	0.94	0.89	0.85	− 5	+14	+26	−14	+ 3	− 5	+ 4	−10	− 7	−12	0	−0.95
114565	23 12 24.98	+36 58 04.0	6.92	H	348.104 087 39	+36.967 781 75	5.30	45.79	3.52	0.63	0.53	0.89	0.83	0.60	+ 2	+20	− 4	−22	−10	+22	+ 2	−48	+27	+32	0	1.11
114566	23 12 25.62	+57 04 24.9	8.69	H	348.106 766 48	+57.073 573 89	1.15	−32.79	−16.23	0.76	0.81	1.04	1.13	0.90	−18	+16	+24	+23	+19	+23	+ 7	−13	−13	−27	0	−0.24
114567	23 12 27.94	−08 16 47.9	9.13	H	348.116 424 23	−08.279 966 81	5.35	− 0.58	− 2.58	1.51	1.08	1.45	2.30	1.58	+17	+ 4	+ 2	− 2	+28	+15	+34	+45	+22	+ 4	0	0.62
114568 H	23 12 30.01	−23 49 10.1	7.95	G	348.125 056 35	−23.819 484 54 *	7.80	58.65	−17.12	0.94	0.60	1.03	1.23	0.81	+23	−16	−26	− 1	+ 3	+10	+ 2	−10	+25	+25	0	0.76
114569	23 12 30.60	−21 06 43.7	9.74	G	348.127 502 87	−21.112 149 30	1.86	46.82	33.46	1.44	1.07	1.59	1.97	1.59	+48	−24	−17	+30	+16	+ 9	+14	−15	+14	+46	0	1.54
114570	23 12 32.92	+49 24 21.5	4.53	H	348.137 178 83	+49.405 974 89	40.82	89.78	95.57	0.34	0.40	0.57	0.33	0.41	−20	+ 2	+23	+ 2	+ 1	+ 3	− 2	+16	+ 5	− 5	1	0.09
114571	23 12 34.97	−58 40 07.7	9.81	H	348.145 728 39	−58.668 816 91	12.02	150.79	−121.57	0.82	0.92	1.56	0.89	0.97	−26	+12	−12	+ 3	+ 4	+16	+ 4	−11	−19	−20	0	−0.79
114572	23 12 35.13	−23 00 30.5	9.23	H	348.146 380 50	−23.008 460 84	7.66	31.36	−11.89	1.25	0.85	1.38	1.80	1.14	+23	−25	−23	+22	− 7	+27	− 6	−16	+14	+16	0	2.88
114573	23 12 36.18	+03 37 05.3	8.13	H	348.150 733 78	+03.618 133 47	14.21	93.64	−70.93	0.98	0.70	1.18	1.64	1.02	+27	−11	−17	+ 8	− 5	+36	− 6	+21	+ 1	0	−0.78
114574	23 12 36.24	+14 40 12.2	9.53	H	348.151 006 80	+14.670 052 26	2.47	20.74	14.64	1.34	0.98	1.39	1.50	1.19	+ 8	−12	−23	−23	+17	−13	+17	+10	− 6	+ 5	0	1.84
114575	23 12 36.52	+10 57 09.1	7.88	H	348.152 148 23	+10.952 519 31	5.84	−18.96	−23.45	0.86	0.67	1.04	0.95	0.91	+34	+19	− 5	− 8	+ 3	−29	+ 1	+ 1	−11	+37	0	0.01
114576	23 12 38.55	+02 41 11.7	7.71	G	348.160 644 92	+02.686 579 05	15.21	60.90	−147.11	0.87	0.62	0.95	0.99	0.78	+18	+ 5	−15	−23	− 2	+13	+ 3	−20	+30	+ 7	2	1.23
114577	23 12 38.82	+43 32 49.7	9.60	H	348.161 737 03	+43.547 139 00	3.75	3.91	− 1.30	0.71	1.00	1.38	0.77	0.98	−12	+13	+27	+ 6	+ 9	+ 4	+17	−39	+ 7	+ 3	0	0.01
114578	23 12 40.81	+51 53 09.3	8.11	H	348.170 061 44	+51.885 905 83	3.30	22.20	2.97	0.53	0.63	0.83	0.64	0.73	−22	− 8	+25	−16	+13	+ 7	+12	−17	+ 2	−14	0	−1.68
114579	23 12 41.08	+28 34 37.6	9.27	H	348.171 146 90	+28.577 097 30	0.02	10.99	− 2.13	0.89	0.78	1.16	1.07	0.78	+21	− 3	+21	+11	− 1	−16	+ 0	− 1	+17	+ 9	0	0.43
114580	23 12 42.67	−63 53 12.9	8.86	2 H	348.177 781 03	−63.886 910 85	1.55	18.81	−14.14	0.78	0.79	1.11	0.92	0.78	−16	− 2	−18	−12	+15	− 7	+13	−20	− 1	−15	0	0.16
114581	23 12 44.69	−45 28 07.4	8.72	H	348.186 224 90	−45.468 720 13	2.37	12.95	−15.34	1.00	0.83	1.19	1.46	0.92	+ 7	+ 7	− 7	+ 7	+14	− 8	+11	+13	+12	+ 6	2	−0.21
114582 H	23 12 45.92	−61 48 25.1	9.56	H	348.191 325 93	−61.806 976 21 A	7.45	45.12	−36.95	3.37	3.89	4.56	3.45	3.94	−38	− 3	− 5	− 3	+ 1	−17	+ 0	−11	− 9	−38	2	2.42
114583	23 12 46.14	−57 53 00.0	9.60	1 H	348.192 267 74	−57.883 339 82	3.04	23.25	−18.18	0.86	0.95	1.58	0.89	0.98	−45	− 2	+ 6	− 5	+24	+20	+26	−27	−17	−37	2	−0.70
114584 H	23 12 46.43	−21 56 18.5	8.77	H	348.193 446 72	−21.938 476 55 A	12.27	− 3.57	3.72	2.45	1.73	2.50	3.17	2.55	+31	+ 4	− 9	+16	+24	+ 9	+16	+14	+ 9	+16	1	−0.75
114585	23 12 47.21	−52 40 16.1	9.55	H	348.196 706 66	−52.671 144 43	14.04	80.00	−36.59	0.98	0.91	1.60	1.10	0.83	−12	−17	+ 9	−25	− 6	+26	− 4	−37	−21	−34	0	0.04
114586	23 12 48.36	−39 29 17.8	9.07	H	348.201 513 51	−39.488 268 45	0.87	−33.44	−12.10	0.88	1.00	1.28	1.08	1.21	+37	− 9	−19	+ 4	−22	+28	−18	−32	+26	+46	0	−0.64
114587	23 12 48.96	+47 26 55.0	8.77	H	348.203 990 11	+47.448 616 19	16.01	196.27	99.51	0.62	0.70	1.15	0.75	0.86	−32	+ 9	+ 3	+23	+ 2	− 7	+ 4	+12	− 7	− 7	3	−0.22
114588	23 12 49.47	+06 31 36.9	10.76	G	348.206 128 18	+06.526 930 19	19.36	−164.12	−225.33	1.91	1.32	2.08	2.18	1.55	+25	+ 9	−23	−39	+ 2	+ 3	+13	−14	+18	+ 1	0	−0.09
114589	23 12 50.25	+12 07 08.4	11.20	G	348.209 379 44	+12.119 013 23	16.63	−76.36	−280.58	2.27	2.02	2.68	2.87	2.73	+30	−15	−29	−12	−11	+ 3	−12	−24	+ 8	+27	0	−0.96
114590	23 12 51.36	−51 41 08.9	9.08	H	348.213 987 15	−51.685 804 86	10.25	− 2.79	−78.10	0.98	0.95	1.42	1.12	0.96	− 4	−12	−11	−16	− 2	+16	+ 1	− 5	+ 1	−13	0	0.20
114591	23 12 51.60	−39 46 40.1	9.25	H	348.214 981 84	−39.777 817 18	6.06	−14.88	13.68	0.97	1.07	1.42	1.15	1.19	+35	−17	−35	+18	−20	+28	−13	−42	+27	+41	0	1.14
114592	23 12 51.79	−46 02 54.2	10.31	H	348.215 773 91	−46.048 399 81	4.57	−20.06	−22.45	1.57	1.11	1.66	1.80	1.20	+ 1	+22	+ 0	−13	+19	+ 3	+18	+ 4	+ 6	+ 1	0	−1.44
114593	23 12 52.44	+48 17 01.3	9.73	2 H	348.218 515 69	+48.283 691 77	2.25	0.04	− 5.32	0.74	0.82	1.38	0.91	1.09	−29	− 9	+24	− 5	+12	− 2	+14	− 3	−13	− 3	0	0.90
114594	23 12 53.14	+56 32 11.9	7.61	H	348.221 412 44	+56.536 638 08	2.00	− 6.27	− 3.79	0.58	0.64	0.79	0.77	0.71	−29	+ 0	+19	− 1	+23	+20	+16	−21	−10	−38	0	−1.10
114595	23 12 53.60	−06 57 05.1	9.42	G	348.223 319 55	−06.951 406 41	2.78	− 7.63	3.09	1.52	0.98	1.86	2.56	1.62	+15	+13	+ 5	− 4	+25	+54	+33	+31	+41	+27	0	2.12
114596	23 12 54.70	+21 58 38.3	10.13	H	348.227 915 06	+21.977 317 41	4.45	−10.20	1.55	1.09	1.01	1.47	1.23	1.17	+43	+ 7	−21	+ 3	+28	−15	+25	+12	+ 3	+62	2	−0.47
114597	23 12 55.24	−36 53 40.4	10.92	H	348.230 171 30	−36.894 555 95	3.17	− 1.06	14.57	1.32	1.31	1.89	1.51	1.62	+28	+ 4	− 8	+32	− 7	+26	− 5	+ 1	− 3	+34	0	1.01
114598 H	23 12 55.95	−54 11 12.1	8.10	H	348.233 125 16	−54.186 695 70 A	4.57	20.13	1.12	0.63	0.74	1.07	0.69	0.66	+ 1	−11	− 6	+

No.	Tycho Magnitudes					Colour Indices					Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
114501	7.350	0.004	6.866	0.004		0.456	0.005	T	0.53	0.01	L	6.9138	0.0009	0.009	164		6.90	6.93		C			1 G							S
114502	9.786	0.028	9.019	0.023		0.718	0.029	G	0.77	0.02	H	9.0908	0.0023	0.015	66		9.06	9.13					1							
114503	11.819	0.099	10.680	0.055		0.983	0.005	G	1.03	0.01	I	10.7206	0.0031	0.043	151		10.60	10.78		U			1							G
114504	8.446	0.011	7.957	0.010	*	0.478	0.015	G	0.55	0.02	H	* 8.0078	0.0016	0.013	115	*	7.99	8.03		D	23114+3813	I 1	2 C A	AB	310	0.306	0.004	0.70	0.05	S
114505						1.241	0.197	G	1.20	0.19	R	10.8007	0.0080	0.033	45		10.72	10.85					1							G
114506	9.588	0.024	9.157	0.024		0.407	0.031	T	0.47	0.03	L	9.2293	0.0018	0.013	54		9.19	9.26		D			1							
114507	11.179	0.061	9.332	0.020		1.568	0.053	T	4.28	0.06	O	8.4102	0.0184	0.159	122		8.18	8.69		U 2 C			1 S							
114508	10.855	0.051	9.860	0.034		0.870	0.046	T	0.88	0.03	L	9.8627	0.0385	0.305	105		9.68	10.48	0.33	P 1 A			1 S							G
114509	10.909	0.065	9.448	0.030		1.150	0.015	G	1.11	0.01	I	9.4405	0.0034	0.018	74		9.41	9.48		C			1							
114510	9.668	0.023	8.332	0.014		1.133	0.021	T	1.10	0.02	L	8.3640	0.0015	0.012	82		8.34	8.40		C			1							S
114511	9.926	0.026	9.338	0.025		0.549	0.032	T	0.62	0.03	L	9.4403	0.0028	0.024	94		9.40	9.48					1							
114512	8.055	0.006	7.294	0.005		0.694	0.006	T	0.75	0.01	L	7.3483	0.0008	0.011	227		7.33	7.37					1							S
114513	10.508	0.048	10.091	0.054		0.394	0.067	T	0.46	0.07	L	10.0120	0.0037	0.026	67		9.96	10.06					1							
114514	9.601	0.018	8.438	0.012		0.998	0.017	T	0.98	0.01	L	8.4996	0.0019	0.018	109		8.48	8.53					1							
114515	10.398	0.047	8.890	0.020		1.289	0.042	T	2.38	0.90	O	8.7643	0.1981	1.387	128		7.39	10.54	225.75	P 1 B			1 S							G P
114516	8.796	0.011	8.320	0.011		0.436	0.015	G	0.50	0.02	H	8.3776	0.0013	0.012	123		8.34	8.41					1							
114517	11.028	0.077	9.628	0.037		1.183	0.067	T	1.14	0.06	L	9.6679	0.0035	0.021	70		9.62	9.71		C			1							
114518	11.011	0.038	10.791	0.050		0.210	0.059	T	0.23	0.07	L	10.8147	0.0035	0.046	185		10.73	10.90					1 X S							G
114519	9.657	0.022	8.971	0.019		0.622	0.022	T	0.69	0.02	L	9.0284	0.0019	0.017	87		9.00	9.06		C			1							S
114520	5.312	0.003	5.170	0.003		0.139	0.007	G	0.15	0.01	H	5.1992	0.0008	0.006	94		5.19	5.21		C			1							S
114521	9.322	0.019	8.671	0.017		0.604	0.022	T	0.67	0.02	L	8.7282	0.0025	0.018	67		8.70	8.75					1							S
114522						0.759	0.005	G	0.80	0.00	H	11.0064	0.0056	0.040	40		10.94	11.06					1							G
114523	9.674	0.017	9.512	0.021		0.140	0.015	G	0.15	0.01	H	9.5129	0.0025	0.027	146		9.47	9.56					1 S							G
114524	10.546	0.036	9.141	0.019		1.187	0.032	T	1.15	0.03	L	9.1716	0.0021	0.018	104		9.13	9.20		C			1							
114525	9.630	0.027	9.091	0.025		0.505	0.033	T	0.58	0.04	L	9.1867	0.0022	0.017	68		9.15	9.22		C			1							
114526	7.384	0.007	6.305	0.004		0.937	0.004	G	0.93	0.00	H	6.3557	0.0008	0.006	108		6.34	6.37		C	23117+2651	I 1	1							S
114527	8.848	0.012	8.864	0.015		−0.010	0.018	T	0.01	0.02	L	8.8798	0.0021	0.014	101		8.86	8.91		C			1							
114528	8.612	0.011	8.088	0.010	*	0.501	0.011	T	0.57	0.01	L	* 8.0431	0.0017	0.013	93	*	8.02	8.06		D	23119−4444	I 1	2 C A	AB	188	0.850	0.003	0.82	0.01	S
114529	11.357	0.074	10.646	0.067		0.660	0.020	G	0.72	0.02	H	10.6581	0.0044	0.039	75		10.59	10.72		C			1							G
114530	9.701	0.031	8.904	0.025		0.706	0.030	T	0.76	0.03	L	8.9210	0.0023	0.020	97		8.89	8.96		C			1							
114531	9.846	0.015	9.803	0.020		0.044	0.023	T	0.06	0.02	L	9.8375	0.0024	0.033	230		9.78	9.89					1 S							G
114532	9.152	0.019	8.655	0.018		0.467	0.024	T	0.54	0.03	L	8.6854	0.0032	0.015	57		8.65	8.70					1							S
114533	8.629	0.011	7.500	0.008		0.972	0.011	T	0.96	0.01	L	7.5609	0.0019	0.014	100		7.54	7.58					1							S
114534	8.943	0.012	8.422	0.012		0.489	0.015	T	0.56	0.02	L	8.4901	0.0015	0.013	119		8.46	8.52		C			1							
114535	8.531	0.008	8.403	0.010		0.124	0.012	T	0.14	0.01	L	8.4299	0.0017	0.023	173		8.39	8.46		U			1							S
114536	8.341	0.046	7.137	0.031	*	1.030	0.043	T	1.00	0.04	L	* 7.1674	0.0021	0.012	40	*	7.15	7.19		D	23120−1156	I 1	2 C B	BA	98	3.557	0.004	0.00	0.02	S
114537	7.617	0.006	7.646	0.007		−0.022	0.008	T	0.00	0.01	L	7.6508	0.0020	0.029	187		7.60	7.70	0.68	P 1 A			1							S
114538	10.539	0.046	9.373	0.027		1.000	0.042	T	0.98	0.03	L	9.4500	0.0026	0.018	64		9.41	9.48		C			1							
114539	9.558	0.016	9.210	0.017		0.330	0.022	T	0.38	0.03	L	9.2589	0.0017	0.017	131		9.23	9.29		C			1 S							
114540	7.260	0.005	7.314	0.007		−0.045	0.008	T	−0.02	0.01	L	7.3187	0.0012	0.009	119		7.30	7.34					1							S
114541	8.598	0.010	7.293	0.006		1.109	0.009	T	1.07	0.01	L	7.3435	0.0013	0.012	98		7.33	7.36		C			1							S
114542	10.011	0.030	8.861	0.020		0.988	0.028	T	0.97	0.02	L	8.9045	0.0016	0.014	68		8.88	8.93		C			1							
114543	10.672	0.041	9.540	0.025	A	1.050	0.020	G	1.10	0.03	I	* 9.5258	0.0029	0.021	91	*	9.48	9.56		D	23121+2656	H 1	2 C D	AB	181	1.145	0.024	2.22	0.08	D
114544	11.155	0.058	10.015	0.035		0.973	0.054	T	0.96	0.04	L	10.0979	0.0041	0.026	94		10.04	10.14					1							
114545	10.163	0.023	8.788	0.013		1.164	0.021	T	1.13	0.02	L	8.8278	0.0018	0.018	131		8.79	8.86					1							
114546	8.366	0.011	7.610	0.008		0.699	0.015	G	0.76	0.01	H	7.6664	0.0012	0.013	124		7.64	7.69					1							S
114547	9.606	0.020	9.181	0.020		0.401	0.026	T	0.47	0.03	L	9.2301	0.0025	0.021	106		9.19	9.28					1							
114548	10.066	0.031	8.446	0.014		1.356	0.027	T	1.32	0.03	L	8.4565	0.0024	0.017	91		8.43	8.49					1							
114549	8.628	0.010	8.609	0.013		0.022	0.015	T	0.04	0.01	L	8.6289	0.0017	0.018	146		8.60	8.66					1							
114550	8.401	0.012	6.605	0.005		1.498	0.008	G	1.52	0.01	H	6.5569	0.0009	0.011	143		6.54	6.57					1							S
114551	9.443	0.021	9.111	0.023		0.315	0.029	T	0.36	0.04	L	9.1147	0.0019	0.018	69		9.09	9.14		C	23122−0203	I 1	1 S							
114552	11.091	0.059	10.713	0.068		0.340	0.015	G	0.40	0.02	H	10.9501	0.0055	0.063	129		10.86	11.07	0.97	P 1 A			1							D
114553	9.946	0.024	8.682	0.014		1.077	0.022	T	1.04	0.02	L	8.7511	0.0012	0.016	94		8.72	8.79		D			1							
114554	9.436	0.018	9.179	0.020		0.245	0.025	T	0.27	0.03	L	9.2312	0.0031	0.028	97		9.18	9.27					1							
114555	8.795	0.009	8.360	0.009		0.445	0.015	G	0.51	0.02	H	8.4218	0.0013	0.016	172		8.39	8.45					1							S
114556	9.770	0.029	8.771	0.021		0.873	0.027	T	0.88	0.02	L	8.8587	0.0015	0.015	62		8.83	8.89		C			1							
114557	9.485	0.013	8.476	0.010		0.881	0.012	T	0.89	0.01	L	8.5393	0.0014	0.017	182		8.51	8.57		C			1							
114558	9.576	0.022	8.739	0.018		0.753	0.022	T	0.80	0.02	L	8.8074	0.0024	0.015	71		8.78	8.83					1							S
114559	7.744	0.006	7.417	0.007		0.333	0.015	G	0.39	0.02	H	7.4709	0.0008	0.010	147		7.45	7.49					1							S
114560	10.881	0.038	10.273	0.036		0.567	0.046	T	0.64	0.04	L	10.3021	0.0038	0.033	151		10.21	10.35					1							
114561	10.595	0.035	9.490	0.022		0.990	0.020	G	1.03	0.02	I	9.5626	0.0018	0.020	146		9.53	9.60					1							G
114562	8.456	0.013	8.107	0.014		0.362	0.015	G	0.42	0.02	H	8.1659	0.0012	0.010	101		8.15	8.18					1							S
114563	9.842	0.023	9.645	0.029		0.220	0.015	G	0.24	0.02	H	9.6931	0.0023	0.023	102		9.63	9.73					1							G
114564	9.013	0.012	8.947	0.015		0.066	0.018	T	0.08	0.02	L	8.9680	0.0028	0.021	117		8.93	9.00					1 G							
114565	8.196	0.008	7.020	0.007		1.008	0.008	T	0.98	0.01	L	7.0845	0.0007	0.009	116		7.07	7.10					1							S
114566	10.430	0.034	8.856	0.016		1.320	0.030	T	1.28	0.04	L	8.8444	0.0021	0.017	109		8.82	8.87		C			1							
114567	10.299	0.038	9.301	0.027		0.873	0.035	T	0.88	0.03	L	9.2891	0.0022	0.020	59		9.25	9.32		D	23125−0817	I 1	1 S							
114568	8.453	0.012	8.004	0.011	*	0.446	0.015	G	0.52	0.02	H	* 8.0437	0.0013	0.009	81	*	8.03	8.06		C	23125−2349	H 1	2 C S A	AB	70	0.176	0.014	0.87	0.55	S
114569	9.503	0.019	9.781	0.032		−0.185	0.014	G	−0.19	0.02	H	9.6807	0.0028	0.024	74		9.63	9.72					1							
114570	4.898	0.002	4.570	0.001		0.302	0.014	G	0.35	0.03	C	4.6066	0.0006	0.006	171		4.60	4.62					1							S
114571	10.589	0.025	9.855	0.020		0.658	0.024	T	0.72	0.02	L	9.9475	0.0026	0.036	226		9.88	10.01					1							
114572	9.746	0.024	9.285	0.025		0.448	0.027	T	0.52	0.03	L	9.3264	0.0020	0.024	73		9.29	9.37					1							
114573	9.025	0.015	8.218	0.012		0.730	0.015	T	0.78	0.01	L	8.2786	0.0022	0.014	73		8.25	8.30					1							S
114574	11.116	0.077	9.651	0.035		1.234	0.066	T	1.19	0.07	L	9.6908	0.0030	0.018	56		9.65	9.73		C			1							
114575	9.039	0.016	7.978	0.011		0.939	0.003	G	0.93	0.00	H	8.0419	0.0014	0.012	88		8.02	8.07		C			1							S
114576	8.465	0.012	7.792	0.011		0.622	0.002	G	0.75	0.02	A	7.8394	0.0013	0.011	72		7.82	7.86		C	23126+0241	I 1	1							S
114577	9.888	0.022	9.621	0.026		0.254	0.032	T	0.29	0.04	L	9.6702	0.0020	0.020	123		9.63	9.70		C			1							
114578	8.330	0.008	8.132	0.009		0.189	0.011	T	0.21	0.01	L	8.1735	0.0012	0.013	152		8.15	8.20		C			1							S
114579	11.459	0.080	9.465	0.024		1.689	0.069	T	1.91	0.16	O	9.3671	0.0022	0.019	85		9.34	9.40		C			1							
114580	10.884	0.041	9.099	0.015		1.517	0.036	T	2.58	0.06	O	8.8650	0.0059	0.051	155		8.80	8.96		U 2			1							
114581	10.216	0.036	8.840	0.020		1.165	0.032	T	1.13	0.03	L	8.8827	0.0025	0.018	88		8.86	8.92		C			1							
114582	10.325	0.024	9.705	0.022	*	0.574	0.024	T	0.65	0.02	L	* 9.6788	0.0025	0.033	165	*	9.62	9.73		D	23128−6148	I 1	2 C A	AB	330	0.724	0.004	0.17	0.02	
114583	11.176	0.038	9.700	0.017		1.243	0.033	T	1.20	0.03	L	9.7654	0.0019	0.036	246		9.70	9.84		U			1							
114584	9.691	0.021	9.018	0.018	*	0.612	0.021	T	0.68	0.02	L	* 8.9027	0.0023	0.024	87	*	8.87	8.96		D	23128−2156	I 1	2 C A	AB	314	0.976	0.005	0.83	0.03	S
114585	10.396	0.023	9.654	0.019		0.664	0.023	T	0.73	0.02	L	9.6873	0.0034	0.030	150		9.64	9.75					1							
114586	10.746	0.040	9.210	0.019		1.290	0.035	T	1.25	0.04	L	9.2236	0.0025	0.019	99		9.20	9.26		C			1							
114587	9.641	0.012	8.831	0.010		0.732	0.012	T	0.78	0.01	L	8.9155	0.0016	0.023	233		8.88	8.96					1							S
114588	12.379	0.263	11.129	0.156		1.182	0.001	G	1.30	0.00	I	10.8783	0.0028	0.028	90		10.82	10.93					1							G
114589						1.094	0.004	G	1.17	0.01	I	11.3618	0.0062	0.040	43		11.30	11.41		C			1							G
114590	9.884	0.023	9.138	0.020		0.667	0.023	T	0.73	0.02	L	9.2112	0.0031	0.024	105		9.16	9.25					1							
114591	9.906	0.024	9.286	0.022		0.574	0.024	T	0.65	0.02	L	9.3728	0.0019	0.017	91		9.34	9.40		C			1							S
114592	10.852	0.055	10.299	0.052		0.524	0.056	T	0.60	0.06	L	10.4252	0.0038	0.026	72		10.38	10.46		C			1							
114593	9.804	0.016	9.698	0.021		0.103	0.025	T	0.12	0.03	L	9.7725	0.0023	0.025	183		9.71	9.82		U			1							G
114594	8.892	0.013	7.736	0.008		0.993	0.012	T	0.97	0.01	L	7.7794	0.0017	0.013	117		7.76	7.80					1							S
114595	11.298	0.110	9.605	0.041		1.549	0.020	G	1.55	0.09	H	9.5163	0.0028	0.019	45		9.49	9.56		C			1							
114596	10.545	0.031	10.210	0.036		0.318	0.044	T	0.37	0.06	L	10.2050	0.0024	0.027	144		10.16	10.25		C			1							
114597	11.626	0.087	10.915	0.077		0.580	0.040	G	0.65	0.04	R	11.0453	0.0040	0.040	122		10.95	11.09					1							G
114598	8.117	0.006	8.125	0.007	A	−0.100	0.495	G	0.01	0.01	L	* 8.1084	0.0013	0.015	222	*	8.08	8.14			23129−5411	I 1	2 C B	AB	148	1.599	0.051	3.89	0.19	S
114599	10.425	0.035	9.663	0.028		0.679	0.034	T	0.74	0.03	L	9.7627	0.0029	0.022	110		9.72	9.79					1							
114600	8.482	0.013	7.119	0.007		1.154	0.012	T	1.12	0.01	L	7.1715	0.0011	0.006	58		7.16	7.19		C			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ μ_δ	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
114601 H	23 12 59.47	−32 19 00.5	7.51	H	348.247 779 06	−32.316 813 44	A	4.53	44.93	−41.66	1.06	0.86	1.17	1.40	1.06	+20	− 2	−23	−12	+16	+13	+20	+ 6	+25	+14	1	0.32
114602	23 12 59.51	−44 03 40.5	8.55	H	348.247 977 50	−44.061 246 59		3.93	15.76	10.16	0.78	0.78	1.09	0.89	0.87	+ 7	+ 2	−17	+ 9	− 3	+31	+ 2	+ 9	+18	+10	0	−0.19
114603	23 13 00.36	+00 01 50.9	7.63	G	348.251 485 18	+00.030 800 51		4.66	13.51	−5.20	0.86	0.68	0.96	1.27	0.90	+41	− 6	−11	+20	+20	+10	+22	+26	+10	+11	0	0.30
114604	23 13 01.54	+42 03 44.1	6.91	H	348.256 424 03	+42.062 236 43		5.06	−13.32	−17.17	0.39	0.50	0.78	0.41	0.54	+ 2	+10	+ 2	+23	− 3	+ 5	+ 8	−21	+33	+22	4	0.18
114605	23 13 02.11	+67 04 34.0	7.71	2 H	348.258 795 40	+67.076 104 03		2.61	22.33	−1.98	0.58	0.61	0.74	0.74	0.83	− 8	− 2	+ 8	+20	+ 3	− 3	+ 4	− 2	+24	− 3	0	2.09
114606	23 13 03.78	−24 06 20.6	7.97	H	348.265 729 82	−24.105 722 70		10.34	50.54	−3.78	0.92	0.66	1.08	1.20	0.87	+31	−20	−35	− 6	− 6	+19	− 6	−21	+32	+34	0	−1.08
114607	23 13 04.01	+29 26 29.8	6.34	H	348.266 692 68	+29.441 622 01		7.73	−30.41	−40.03	0.53	0.47	0.74	0.54	0.44	+18	+11	+14	+ 9	+14	+ 9	+14	−10	+23	+21	0	0.00
114608	23 13 05.02	+08 57 48.4	6.69	2 H	348.270 937 40	+08.963 448 79		3.39	−10.23	0.26	0.84	0.53	0.84	1.14	0.76	+29	+ 3	+12	−33	+10	−10	+35	+21	+10	−21	0	2.57
*114609	23 13 05.12	−00 26 04.1	8.80	H	348.271 337 20	−00.434 479 54		6.01	31.15	5.50	1.42	1.19	1.77	2.64	2.10	+59	+26	+20	+45	+44	+57	+50	+57	+50	+55	0	0.82
*114610	23 13 05.20	−54 17 13.4	8.33	H	348.271 681 88	−54.287 056 41		4.05	−1.42	−18.26	0.60	0.68	1.14	1.20	0.89	−16	+16	−26	+ 9	−22	+12	− 8	−13	+17	+20	0	−0.16
*114611	23 13 05.12	+40 00 13.8	9.57	H	348.271 330 91	+40.003 834 46	B	9.74	76.03	−4.66	13.78	13.62	7.05	9.14	8.92	+ 4	+14	−17	+11	+ 6	+14	+22	−34	+36	+40	3	1.73
114612	23 13 06.32	+40 00 10.1	7.60	G	348.276 314 38	+40.002 811 53	A	5.77	75.33	2.04	1.39	1.31	1.44	1.50	1.31	+ 6	+13	−14	+ 3	− 2	+14	+14	−41	+31	+43	3	1.73
114613	23 13 06.54	−55 06 22.6	7.80	H	348.277 230 08	−55.106 285 10		4.74	41.33	−35.22	0.56	0.53	0.90	0.72	0.55	− 7	+ 0	−20	+19	−13	+ 6	−13	−15	+15	−16	0	0.76
114614	23 13 09.05	−48 48 14.1	10.78	G	348.287 707 51	−48.803 919 39		17.39	163.98	−13.83	1.62	1.60	2.15	1.36	1.64	+15	−19	−12	−24	− 8	+ 3	− 3	+ 9	−12	+ 2	0	0.33
114615	23 13 09.81	−30 26 59.2	9.60	H	348.290 874 54	−30.449 771 84		8.02	8.52	−13.39	1.23	1.17	1.69	1.71	1.51	+24	+12	−28	−25	+15	− 1	+17	− 7	+31	+24	2	2.92
114616	23 13 10.92	+26 53 34.0	8.84	H	348.295 506 86	+26.892 765 08		16.55	186.25	−139.77	0.81	0.85	1.20	0.88	0.90	+35	+ 6	+ 4	+ 7	− 4	−29	− 3	− 4	−23	+42	0	2.47
114617	23 13 12.47	+41 28 58.2	7.73	H	348.301 975 16	+41.482 838 32		1.27	14.67	1.53	0.60	0.59	0.92	0.61	0.66	+13	+ 6	+ 4	+59	− 2	+14	+16	−23	+32	+38	2	−1.33
114618	23 13 12.50	−02 03 44.0	9.50	G	348.302 103 07	−02.062 227 00		7.49	−25.66	−2.92	1.15	0.99	1.45	1.52	1.35	+35	− 1	+ 4	−11	+ 7	+32	+ 6	− 2	+35	+29	0	0.67
*114619	23 13 13.25	+42 17 02.9	9.53	H	348.305 217 96	+42.284 137 53		2.22	−17.22	−10.35	0.76	0.84	1.38	0.76	0.86	+ 6	+31	+ 4	+28	+ 5	+16	+20	−12	+34	+24	2	0.73
*114620	23 13 13.25	−64 23 57.7	9.31	H	348.305 202 09	−64.399 352 55		2.70	−1.40	−9.56	0.78	0.85	1.10	0.84	0.80	− 9	− 4	−13	− 7	+16	+ 5	+16	−14	− 2	− 1	2	0.58
114621	23 13 13.54	−34 34 02.5	10.28	H	348.306 422 99	−34.567 350 51		3.93	19.55	−29.85	1.65	1.27	1.87	1.96	1.61	+ 0	+16	−29	−31	+12	− 5	+10	+ 9	+17	+13	0	−1.90
114622	23 13 14.74	+57 10 03.5	5.57	G	348.311 431 34	+57.167 638 44		153.24	2074.37	294.97	0.48	0.53	0.65	0.69	0.53	−28	+ 8	+25	+ 7	+23	+24	+14	−22	− 3	−33	0	−0.98
114623	23 13 14.78	+53 07 15.0	8.18	H	348.311 568 33	+53.120 820 71		2.85	10.99	3.75	0.66	0.74	1.06	0.75	0.74	−21	− 9	+36	−14	+ 6	+25	− 2	− 6	−10	−20	0	0.20
114624	23 13 14.86	+49 26 11.7	9.74	H	348.311 907 91	+49.436 577 96		0.58	−4.45	−4.31	0.77	0.84	1.31	0.89	1.08	−25	− 3	+ 5	+10	+ 7	−16	+11	+ 4	+11	+ 0	2	−0.37
114625	23 13 15.14	+45 50 25.1	10.42	H	348.313 097 69	+45.840 296 81		2.41	−1.81	−3.19	1.07	1.10	1.83	1.11	1.24	−33	+ 7	+13	−40	+18	−20	+21	−31	+13	− 4	3	2.41
*114626 H	23 13 15.28	−49 37 06.9	6.80	G	348.313 675 06	−49.618 589 17	A	5.02	28.65	−7.26	1.17	2.26	0.99	0.73	0.82	−21	− 9	+ 7	−23	+ 1	+ 6	+ 2	− 7	−14	+ 0	1	−0.10
*114627	23 13 15.26	+05 44 19.6	8.86	H	348.313 572 54	+05.738 784 80		14.00	−49.71	−12.78	1.20	0.81	1.47	1.71	1.23	+32	−18	−30	−18	+ 2	+ 4	+ 3	−10	+41	− 9	0	−0.12
*114628	23 13 16.08	−62 53 57.6	8.99	1 H	348.317 007 63	−62.899 345 42		0.38	18.49	−7.32	0.78	0.85	1.20	0.91	0.82	− 4	−11	−34	+ 6	− 4	+ 2	− 4	+ 3	+ 7	− 5	0	−0.90
*114629 H	23 13 15.99	−60 35 02.7	8.57	H	348.316 629 90	−60.584 070 94	A	3.64	39.72	−21.51	1.53	1.88	2.11	1.66	1.91	−16	− 9	−14	+ 3	+10	− 5	+ 2	−24	+ 6	−19	1	0.51
114630	23 13 16.45	−18 22 10.1	7.66	G	348.318 545 60	−18.369 486 04		6.73	28.55	2.27	0.96	0.64	1.16	1.32	1.05	+41	−13	− 6	+14	+23	+41	+26	+ 2	+31	+43	0	0.24
114631 H	23 13 17.75	+22 05 02.4	8.18	H	348.323 978 15	+22.084 011 56	B	5.04	−3.58	−44.39	2.22	2.04	2.16	1.83	1.69	+66	− 4	− 4	− 1	+ 4	−13	+ 4	− 2	+ 7	+66	2	1.65
114632	23 13 17.94	+23 20 20.5	8.73	H	348.324 766 87	+23.339 041 12		2.78	−24.60	−19.09	0.72	0.77	1.15	0.82	0.81	+64	−12	− 9	+20	+10	+14	+ 9	+ 1	+16	+63	0	0.73
114633	23 13 18.30	−28 24 53.2	7.92	H	348.326 229 85	−28.414 765 11		8.03	71.22	−46.64	0.80	0.68	0.97	0.90	0.80	+36	+10	+14	−16	+17	+ 3	+19	+ 5	+ 9	+33	0	0.60
114634	23 13 18.48	−30 03 15.1	7.75	H	348.327 012 41	−30.054 188 03		3.81	43.09	11.35	0.96	0.78	1.13	1.33	0.99	+20	+16	− 9	−24	+ 0	− 2	+ 0	−22	+ 2	+19	2	−0.58
114635	23 13 20.39	−34 07 46.1	9.90	H	348.334 951 71	−34.129 459 35		6.94	18.41	−22.95	1.55	1.07	1.73	1.54	1.24	− 5	+27	−28	−22	+13	− 7	+12	+14	+14	+12	0	−0.42
114636	23 13 21.99	−42 47 04.1	8.84	H	348.341 628 36	−42.784 460 20		2.17	3.02	−9.68	0.91	0.80	1.13	1.04	0.92	+14	− 7	−11	+ 8	−13	+20	−11	−14	+11	+17	2	0.33
114637	23 13 22.02	−07 59 29.1	8.38	H	348.341 737 73	−07.991 408 63		15.31	−59.82	67.96	1.13	0.79	1.20	1.27	0.85	+15	−16	−34	−18	+ 8	+ 8	+15	+ 8	+ 6	− 8	0	0.77
114638	23 13 22.37	−60 26 44.2	8.90	H	348.343 221 43	−60.445 601 36		12.12	−28.19	−33.41	0.70	0.79	1.10	0.85	0.84	−24	− 4	−18	− 8	+ 0	+ 4	+ 2	−18	− 4	−17	0	−1.26
114639	23 13 23.78	+02 40 31.4	7.40	2 H	348.349 062 84	+02.675 376 04		11.34	18.11	26.06	0.92	0.65	0.92	1.22	0.81	+ 6	+ 2	− 1	−31	+17	− 1	+15	−16	− 2	− 6	2	−0.14
114640 H	23 13 25.55	−78 20 46.3	8.62	H	348.356 455 01	−78.346 182 30	A	8.72	90.39	−46.93	1.46	1.33	1.43	1.58	1.13	−22	+ 7	− 3	+ 9	+ 8	+19	+11	−18	+14	+ 6	1	−0.05
114641	23 13 26.51	+11 03 54.1	5.85	G	348.360 451 84	+11.065 015 83		9.72	−9.12	−5.97	0.64	0.57	0.77	0.69	0.68	+22	+14	−22	− 2	+15	−28	+ 7	+18	−13	+38	0	1.26
114642	23 13 26.67	+35 45 43.3	8.65	G	348.361 109 75	+35.762 036 05		4.72	−1.06	−6.02	0.89	0.65	1.26	1.08	0.72	− 4	+24	− 8	−14	− 2	+33	+11	−39	+33	+28	2	−0.47
114643 H	23 13 27.55	−08 54 29.2	7.81	G	348.364 776 25	−08.908 104 92	A	5.71	−16.94	4.06	1.55	1.38	1.60	1.56	1.26	+20	− 2	−30	− 7	− 5	+17	− 1	−11	− 1	+13	1	−0.09
114644	23 13 28.40	+00 55 50.2	7.54	H	348.368 321 05	+00.930 621 70		11.04	−24.29	−19.93	0.93	0.67	1.05	1.56	0.90	+24	− 2	−16	+ 8	+12	−17	+ 9	+ 9	+19	−19	0	0.76
114645	23 13 29.12	+07 10 50.1	8.60	H	348.371 340 91	+07.180 578 65		0.42	−1.44	−6.24	1.11	0.74	1.23	1.48	0.95	+24	+ 1	−12	+13	− 5	+17	−10	−11	+22	− 8	0	−1.12
114646	23 13 29.60	−59 24 20.0	9.41	H	348.373 347 18	−59.405 561 34		3.99	10.45	−4.73	0.78	0.86	1.30	0.85	0.89	−27	+ 6	−20	+ 5	+ 2	+ 6	+ 7	−21	− 5	−11	1	0.13
114647	23 13 30.09	+45 14 11.1	9.87	H	348.375 366 51	+45.236 426 45		2.51	−0.58	0.43	0.98	0.86	1.54	1.12	1.05	−26	+22	+ 9	+11	− 1	− 4	+16	−27	+ 9	+13	1	3.41
114648	23 13 30.23	−17 22 08.7	9.24	G	348.375 950 52	−17.369 085 98		1.61	19.50	−1.02	1.70	1.49	1.77	1.83	2.09	+23	+27	−12	− 3	+43	+11	+44	+62	+29	+41	0	0.16
114649	23 13 30.72	+73 12 44.0	8.73	H	348.378 004 87	+73.212 228 38		7.15	92.03	−17.70	0.61	0.60	0.72	0.79	0.63	+ 0	+ 3	+25	+20	− 3	− 7	+ 0	+10	+14	+ 3	1	0.47
114650	23 13 31.19	−45 04 09.9	10.01	H	348.379 961 07	−45.069 420 34		4.43	−20.43	−12.31	1.33	1.04	1.57	1.69	1.13	+ 4	− 4	−10	+37	+ 2	− 2	+ 0	+ 4	+24	+ 1	0	−1.22
114651	23 13 31.35	−26 32 25.9	8.19	H	348.380 643 07	−26.540 539 03		4.21	4.10	15.66	0.83	0.67	1.00	0.99	0.77	+27	+10	− 5	−22	+26	− 7	+27	+ 7	+19	+22	0	−1.07
114652 H	23 13 31.89	−40 56 09.0	7.84	H	348.382 887 19	−40.935 823 17	A	5.06	25.04	−2.20	1.27	1.30	1.55	1.42	1.35	+36	−31	−35	+23	−21	− 2	−22	−23	+ 8	+29	2	0.26
114653	23 13 32.50	−46 48 14.4	9.73	2 H	348.385 399 01	−46.803 998 36		14.79	31.76	−21.35	1.45	1.24	1.68	1.70	1.32	+ 9	−25	−17	+ 9	+16	−19	+13	+ 3	+ 2	− 5	0	1.28
114654	23 13 32.71	−37 59 13.6	9.89	H	348.386 283 37	−37.987 115 51		6.47	−19.86	−9.44	1.03	1.09	1.47	1.22	1.23	+34	+ 4	−16	+16	−25	+28	−20	−37	+15	+39	0	−0.30
114655	23 13 33.83	−48 48 00.1	8.12	H	348.390 978 42	−48.800 018 98		3.01	22.00	16.85	0.87	0.77	1.11	0.72	0.83	+19	−24	+ 3	−27	− 9	+16	− 9	− 9	− 1	+16	0	−0.25
114656	23 13 35.76	−29 38 22.6	8.55	H	348.399 017 15	−29.639 617 92		2.15	53.56	4.00	0.93	0.81	1.16	1.13	1.10	+39	−18	−10	−29	−12	+26	−11	−24	+19	+51	0	0.05
114657	23 13 36.10	+39 15 06.8	8.35	H	348.400 413 73	+39.251 896 37		5.33	32.11	−3.19	0.88	0.62	1.13	1.05	0.70	−13	+11	−10	− 3	+ 5	+12	+13	−32	+29	+10	0	−1.32
114658	23 13 37.39	−56 04 49.0	8.53	H	348.405 779 37	−56.080 286 85		2.84	17.57	−17.90	0.66	0.73	1.14	0.79	0.74	− 4	− 5	−18	−18	−12	+18	− 7	−15	−10	−16	0	0.83
114659	23 13 37.43	−49 08 41.8	8.30	H	348.405 952 30	−49.144 939 65		2.98	49.66	−32.26	0.71	0.78	1.15	0.73	0.86	+ 8	−15	−11	−24	− 3	+ 1	− 3	+ 0	+ 1	+ 5	0	1.32
114660	23 13 37.57	+13 09 58.7	8.75	H	348.406 535 17	+13.166 308 35		3.41	16.68	4.38	1.02	0.99	1.16	1.12	1.16	+34	+ 6	−15	+29	+25	−19	+21	+41	−15	+42	0	0.12
114661	23 13 38.69	+39 25 05.3	11.02	G	348.411 202 85	+39.418 151 08		14.09	175.38	−313.55	1.66	1.27	2.20	1.86	1.38	− 4	+19	−14	+ 0	+ 8	− 1	+19	−35	+30	+20	2	0.08
114662	23 13 39.20	+75 14 09.6	8.51	H	348.413 342 73	+75.236 002 20		3.66	9.42	0.12	0.57	0.54	0.65	0.70	0.62	−12	− 8	+20	−10	− 3	− 1	− 4	+ 8	+ 2	− 5	0	−1.02
114663	23 13 39.76	+34 15 47.1	9.74	H	348.415 675 33	+34.263 077 29		5.08	−7.07	−10.81	1.03	0.93	1.45	1.17	0.88	+15	+20	+19	+33	+ 4	− 8	+18	−20	+25	+25	0	0.13
114664	23 13 40.86	+29 15 55.2	8.46	H	348.420 241 92	+29.265 321 41		3.37	8.57	2.02	0.72	0.66	1.00	0.77	0.60	+15	+ 0	+10	+ 7	+ 9	−10	+10	−20	+ 9	+19	0	−0.15
114665	23 13 41.04	+02 12 12.5	7.18	H	348.420 985 12	+02.203 484 75		14.49	11.51	37.53	0.81	0.60	0.91	0.99	0.76	+28	+24	− 6	+ 3	+ 8	+12	+13	+ 9	+10	+11	0	1.95
114666	23 13 41.71	−10 19 07.4	7.94	G	348.423 779 27	−10.318 718 76		13.97	13.31	−21.94	1.19	0.90	1.30	1.92	1.01	+21	− 6	−36	+41	−14	+24	−23	− 2	+10	−25	0	−0.02
114667	23 13 41.71	−39 42 38.6	9.34	G	348.423 791 50	−39.710 712 53		9.25	−27.25	−81.68	0.92	1.10	1.45	1.12	1.32	+35	− 6	−24	+13	− 9	+30	− 3	−14	+34	+45	2	2.49
114668	23 13 46.95	−85 00 34.0	9.26	H	348.445 614 11	−85.009 435 75		1.90	7.31	0.42	0.74	0.70	0.90	0.92	0.77	+15	+ 1	− 8	− 6	+ 6	− 5	+ 5	− 4	− 4	+11	1	2.23
*114669 H	23 13 48.24	−13 23 40.4	7.02	H	348.450 981 83	−13.394 546 73	A	2.25	3.57	−24.65	1.34	1.00	1.30	1.59	1.16	+ 4	+ 7	+ 9	+32	+ 7	+ 3	+ 7	+46	+27	+13	0	0.60
*114670	23 13 48.22	+15 22 04.1	7.37	H	348.450 910 39	+15.367 808 08		21.68	22.00	−72.63	0.73	0.64	0.84	0.72	0.75	+19	+24	−16	+28	+15	−10	+ 9	+30	−13	+35	3	0.66
114671	23 13 48.93	+07 55 03.2	10.31	H	348.453 872 87	+07.917 558 16		10.17	−91.82	−91.53	1.63	1.04	1.80	2.15	1.42	+41	−14	− 1	−17	− 4	+23	− 9	−19	+18	− 9	0	0.31
114672	23 13 49.14	+44 35 52.6	7.93	G	348.454 759 44	+44.597 930 87		9.04	7.01	−8.33	0.57	0.58	0.94	0.70	0.72	− 4	+19	+18	+ 6	−13	− 3	− 2	−15	+11	+28	2	0.34
114673	23 13 49.56	−47 11 39.6	7.97	H	348.456 513 71	−47.194 326 50		4.38	11.32	−11.12	0.95	0.81	1.06	1.15	0.87	+17	−16	− 5	+45	+12	− 3	+10	+25	− 5	+ 7	2	1.57
114674	23 13 49.75	−46 20 17.4	10.58	H	348.457 271 38	−46.338 154 36		5.24	45.13	−39.04	1.87	1.33	2.00	2.07	1.42	+ 5	+12	+ 5	−17	+16	+ 8	+17	+ 2	+ 9	− 3	0	−0.04
114675	23 13 50.47	+48 03 48.6	9.84	2 H	348.460 283 34	+48.063 487 27		1.10	15.57	−2.70	0.77	0.84	1.42	0.99	1.06	−28	− 3	+23	+ 7	+13	− 7	+19	− 6	+ 0	− 2	4	2.39
114676	23 13 52.23	+11 32 29.2	8.74	H	348.467 617 58	+11.541 438 32		2.68	58.81	−19.33	1.20	0.95	1.30	1.54	1.19	+24	+13	− 6	+12	+15	+11	+17	+26	+ 3	+18	0	−0.50
114677	23 13 52.30	−04 49 26.3	12.01	G	348.467 896 27	−04.823 973 66		13.22	231.93	−102.75	2.87	2.26	3.57	4.17	2.88	+44	+ 3	+18	− 7	+17	+36	+10	−11	+ 6	+ 5	0	0.04
114678	23 13 52.71	−68 17 28.7	7.67	1 H	348.469 623 31	−68.291 318 45		3.25	47.85	−8.81	0.59	0.62	0.81	0.67	0.71	− 1	− 3	−31	+ 2	+19	− 2	+19	+13	−10	+22	0	−0.32
114679	23 13 52.80	+44 33 12.1	9.47	H	348.469 985 33	+44.553 364 95		2.10	7.44	0.72	0.77	0.77	1.23	0.90	0.93	+ 3	+22	+18	+ 5	−14	− 3	− 5	−15	+ 9	+31	0	0.91
114680	23 13 54.18	+57 50 13.0	8.41	H	348.475 730 33	+57.836 948 94		3.12	−8.61	−8.17	0.66	0.69	0.83	0.80	0.78	−35	+24	+12	− 9	+19	− 2	+22	−30	+14	−37	3	0.11
114681	23 13 55.06	+40 47 55.8	7.71	H	348.479 397 55	+40.798 824 29		2.46	29.13	−30.42	0.67	0.67	0.91	0.77	0.71	+17	+21	− 1	+ 2	− 4	+18	+ 8	−41	+28	+39	2	3.26
114682	23 13 56.22	−36 12 45.1	9.31	H	348.484 234 41	−36.212 519 30		2.34	30.30	9.89	0.86	0.88	1.29	0.99	1.12	+37	−12	− 9	+20	−16	+16	−11	−23	+ 8	+48	0	−0.83
114683	23 13 57.03	+19 15 18.5	9.49	H	348.487 604 47	+19.255 134 76		15.42	223.92	−14.81	1.24	0.90	1.39	1.40	1.14	− 2	− 3	−11	+ 1	+ 0	−15	− 3	− 9	+29	−14	0	−2.38
114684	23 13 57.05	+71 54 32.3	8.53	H	348.487 697 01	+71.908 961 80		2.11	−4.60	1.06	0.62	0.63	0.80	0.63	0.68	− 4	− 1	+14	− 4	− 3	+11	− 5	− 1	+23	− 4	0	0.38
114685	23 13 58.47	+59 49 12.6	8.69	1 G	348.493 638 23	+59.820 169 34		2.04	−3.26	−0.47	0.69	0.76	0.90	0.83	0.83	−24	+ 9	+ 8	+17	− 5	− 1	− 4	−21	+15	−30	0	0.75
114686	23 13 59.34	+19 38 02.1	6.47	H	348.497 265 66	+19.633 916 36		4.10	27.18	−7.35	0.73	0.60	0.90	0.78	0.72	+12	− 2	−19	+23	−11	−20	−18	− 8	+39	− 3	2	0.05
114687	23 13 59.41	+10 58 34.2	9.03	H	348.497 542 57	+10.976 174 25		1.81	0.67	−30.51	1.17	1.02	1.36	1.32	1.25	+21	+22	−22	− 6	+15	− 2	+16	+14	+ 8	+34	0	−0.04
114688	23 13 59.77	+25 27 23.2	8.11	G	348.499 029 01	+25.456 454 32		1.17	0.99	−0.88	0.64	0.73	0.98	0.65	0.63	+49	+20	+14	+ 6	− 7	−10	− 4	−24	+15	+42	0	−0.15
114689 H	23 13 59.82	+24 13 59.2	7.84	H	348.499 239 40	+24.233 121 53	A	3.55	7.71	−3.76	0.86	0.85	1.17	0.88	0.84	+50	+ 6	+ 4	+24	+10	− 3	+12	− 5	+20	+49	0	−0.18
114690	23 14 00.51	+04 59 49.7	7.06	H	348.502 136 44	+04.997 132 32		0.94	5.90	−12.05	0.87	0.58	1.16	1.57	0.93	+25	+ 2	−12	+ 0	+ 0	+28	+ 3	− 8	+46	− 8	0	−1.57
114691	23 14 00.76	+72 50 46.2	8.81	H	348.503 154 07	+72.846 166 75		0.78	−2.05	−16.02	0.62	0.67	0.75	0.80	0.77	− 2	+10	+14	+19	+ 5	+ 2	+ 5	+ 4	+ 5	+ 0	0	0.56
114692	23 14 01.13	−53 56 58.4	9.10	G	348.504 717 71	−53.949 545 28		1.87	59.12	−16.58	0.62	0.74	1.13	0.75	0.74	−11	+ 7	−17	+ 9	− 4	+18	+ 1	−22	+ 4	− 4	1	−0.42
114693	23 14 01.90	−71 12 36.6	8.05	H	348.507 928 97	−71.210 166 59		4.85	10.18	7.80	0.57	0.55	0.73	0.64	0.55	+ 5	+ 2	−19	+11	+11	+ 1	+11	+ 9	− 6	+13	0	−1.52
114694	23 14 02.11	−36 19 21.3	9.80	H	348.508 786 04	−36.322 584 94		7.41	46.54	21.83	0.92	0.94	1.38	1.05	1.20	+35	−11	−13	+23	−16	+21	−13	−17	+12	+45	1	1.68
114695	23 14 03.53	+59 22 29.0	8.89	1 H	348.514 697 59	+59.374 732 46		0.07	−2.36	−5.13	0.73	0.87	0.94	1.02	1.02	−30	+15	− 4	−16	+17	− 1	+17	−50	+19	−38	0	−2.19
114696	23 14 04.12	+03 18 36.1	8.98	H	348.517 180 53	+03.310 033 42		1.73	19.62	−5.06	1.16	0.90	1.39	1.81	1.13	+34	+ 9	− 7	+22	− 4	+41	−15	−15	− 2	−10	0	0.20
114697	23 14 04.30	+84 14 32.6	7.83	H	348.517 935 77	+84.242 400 82		2.88	3.82	2.73	0.58	0.50	0.61	0.75	0.53	+ 1	−10	+ 6	−21

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
114601	8.786	0.026	7.665	0.018	A	1.048	0.120	G	0.92	0.02	L *	7.6756	0.0020	0.015	79	*	7.66	7.71		D	23130−3219	I 1	2 C A	AB	266	6.919	0.014	2.99	0.07	S
114602	10.320	0.029	8.729	0.014		1.334	0.025	T	1.30	0.03	L	8.7038	0.0021	0.021	101		8.66	8.74					1						
114603	8.969	0.015	7.761	0.010		1.033	0.014	T	1.01	0.01	L	7.7979	0.0015	0.010	65		7.78	7.82					1						S
114604	7.177	0.004	6.931	0.004		0.234	0.005	T	0.26	0.01	L	6.9818	0.0009	0.009	159		6.97	7.00					1						S
114605	10.130	0.029	7.943	0.010		1.848	0.025	T	2.76	0.04	O	7.6768	0.0026	0.025	89		7.63	7.71		U 2			1 S							
114606	8.432	0.011	8.023	0.011		0.400	0.013	T	0.47	0.01	L	8.0634	0.0013	0.011	76		8.05	8.08		C	23131−2406	I 1	1							S
114607	7.515	0.006	6.448	0.005		0.924	0.006	T	0.92	0.00	L	6.4983	0.0005	0.006	99		6.49	6.51					1							S
114608	8.825	0.016	6.910	0.007		1.624	0.014	T	2.33	0.05	O	6.7326	0.0071	0.047	107		6.65	6.78		U 2			1 S							S
114609	10.386	0.044	8.939	0.022		1.220	0.039	T	1.18	0.04	L	8.9678	0.0028	0.015	53		8.95	9.00		C			1							
114610	9.781	0.014	8.446	0.009		1.132	0.013	T	1.10	0.01	L	8.5033	0.0018	0.020	211		8.47	8.54					1 G							
114611	10.147	0.034	9.571	0.031	B	0.450	0.015	G	0.52	0.02	H	9.8009	0.0374			B				D	23131+4000	I 2	1 C I A							
114612	7.968	0.009	7.642	0.011	A	0.280	0.015	G	0.32	0.02	H	7.7055	0.0064	0.043	104	A	7.67	7.78		D	23131+4000	I 2	1 C P A							S
114613	7.940	0.006	7.811	0.008		0.117	0.009	T	0.13	0.01	L	7.8396	0.0014	0.014	174		7.81	7.87					1							S
114614	12.306	0.191	10.947	0.097		1.340	0.020	G	1.55	0.03	I	10.8881	0.0031	0.032	86		10.83	10.95		C			1							G
114615	10.356	0.039	9.625	0.031		0.656	0.038	T	0.72	0.03	L	9.7324	0.0038	0.023	72		9.69	9.77		C			1							
114616	9.674	0.020	8.924	0.017		0.685	0.021	T	0.74	0.02	L	8.9838	0.0024	0.019	95		8.95	9.02					1							
114617	9.906	0.019	7.927	0.008		1.641	0.016	T	1.66	0.02	L	7.8405	0.0013	0.015	139		7.81	7.87					1							S
114618	10.047	0.034	9.610	0.035		0.506	0.015	G	0.58	0.02	H	9.6102	0.0036	0.020	63		9.56	9.63					1							
114619	9.921	0.018	9.551	0.019		0.351	0.024	T	0.41	0.03	L	9.6120	0.0021	0.030	158		9.56	9.67					1							
114620	11.296	0.054	9.446	0.019		1.538	0.045	T	1.59	0.10	L	9.4356	0.0026	0.026	156		9.39	9.48		C			1							
114621	11.359	0.085	10.396	0.054		0.834	0.078	T	0.85	0.06	L	10.4239	0.0048	0.033	78		10.36	10.47					1							
114622						1.000	0.000	G	1.04	0.00	I	5.6989	0.0008	0.008	106		5.69	5.71			23132+5709	I 1	1							S
114623	10.185	0.027	8.333	0.011		1.540	0.023	T	1.59	0.05	L	8.2945	0.0018	0.018	128		8.26	8.32		C			1							
114624	9.935	0.038	9.806	0.049		0.125	0.058	T	0.14	0.06	L	9.7850	0.0021	0.026	178		9.74	9.83					1							G
114625	10.558	0.021	10.385	0.028		0.166	0.033	T	0.18	0.03	L	10.4720	0.0033	0.052	264		10.37	10.57		C			1 S							G
114626	7.977	0.007	6.911	0.004	*	0.922	0.003	G	0.92	0.00	H *	6.9691	0.0009	0.010	145	*	6.95	6.99		D	23133−4937	I 1	2 C A	AB	348	0.343	0.014	2.64	0.14	S
114627	9.414	0.021	8.914	0.020		0.470	0.026	T	0.54	0.03	L	8.9680	0.0024	0.016	73		8.94	9.00					1							S
114628	10.651	0.031	9.125	0.015		1.282	0.027	T	1.24	0.03	L	9.1499	0.0021	0.030	158		9.09	9.19		U			1							
114629	9.070	0.010	8.797	0.011	*	0.258	0.010	G	0.29	0.01	H *	8.6427	0.0019	0.021	195	*	8.61	8.69		D	23133−6035	I 1	2 C A	AB	75	1.094	0.005	0.54	0.02	S
114630	8.112	0.009	7.710	0.008		0.410	0.015	G	0.48	0.02	H	7.7518	0.0012	0.009	83		7.73	7.77					1							S
114631	8.503	0.013	8.078	0.010	*	0.401	0.015	T	0.47	0.02	L *	8.2731	0.0038	0.032	156	*	8.22	8.31		R	23133+2205	I 1	2 C A	BA	237	2.450	0.004	0.05	0.01	
114632	10.223	0.020	8.840	0.011		1.170	0.018	T	1.13	0.02	L	8.8865	0.0018	0.017	175		8.86	8.92					1							
114633	8.456	0.010	7.954	0.010		0.483	0.011	T	0.55	0.01	L	8.0317	0.0011	0.011	93		8.00	8.06					1							S
114634	9.119	0.019	7.846	0.012		1.084	0.018	T	1.05	0.01	L	7.9177	0.0022	0.015	72		7.89	7.95		C			1							S
114635	10.506	0.040	9.963	0.039		0.516	0.042	T	0.59	0.04	L	10.0168	0.0035	0.028	75		9.97	10.07		C			1							
114636	10.111	0.024	8.935	0.016		1.008	0.022	T	0.98	0.02	L	9.0012	0.0018	0.019	94		8.97	9.04		D			1							
114637	9.029	0.018	8.440	0.016		0.550	0.021	T	0.62	0.02	L	8.4988	0.0020	0.014	60		8.47	8.52		C			1							S
114638	9.791	0.015	8.993	0.012		0.727	0.015	G	0.78	0.01	H	9.0414	0.0013	0.017	189		9.00	9.08					1							
114639	8.401	0.019	7.517	0.017		0.788	0.019	T	0.82	0.01	L	7.5510	0.0123	0.068	68		7.41	7.76		P 1 A			1 G							S
114640	9.461	0.023	8.858	0.021	A	0.611	0.133	G	0.65	0.02	L *	8.7502	0.0022	0.022	140	*	8.72	8.80		D	23134−7821	I 1	2 C A	AC	355	1.294	0.012	1.64	0.04	
114641	7.119	0.006	5.964	0.005		1.004	0.003	G	0.98	0.00	H	6.0190	0.0008	0.006	66		6.01	6.03			23134+1104	I 1	1							S
114642	10.013	0.021	8.759	0.012		1.100	0.020	G	1.06	0.02	H	8.8310	0.0022	0.017	117		8.80	8.86					1							
114643	8.340	0.013	7.913	0.014	*	0.409	0.015	G	0.48	0.02	H *	7.9100	0.0016	0.009	58	*	7.90	7.93		D	23135−0854	I 1	2 C A	AB	35	0.702	0.007	1.44	0.02	S
114644	7.900	0.012	7.575	0.011		0.331	0.015	G	0.39	0.02	H	7.6189	0.0014	0.011	58		7.60	7.65		C			1							S
114645	10.785	0.057	8.776	0.019		1.665	0.048	T	1.69	0.05	L	8.7097	0.0030	0.022	92		8.66	8.75		R			1 S							
114646	9.849	0.015	9.433	0.015		0.407	0.017	T	0.47	0.02	L	9.5030	0.0021	0.027	200		9.46	9.55					1							
114647	10.001	0.017	9.894	0.022		0.104	0.026	T	0.12	0.03	L	9.9148	0.0022	0.031	184		9.85	9.97					1							G
114648	10.582	0.056	9.363	0.033		1.018	0.015	G	0.99	0.01	I	9.4597	0.0021	0.018	44		9.40	9.48		D			1							
114649	9.490	0.017	8.836	0.015		0.607	0.019	T	0.68	0.02	L	8.8616	0.0014	0.014	126		8.84	8.89					1							
114650	10.621	0.043	10.102	0.043		0.497	0.046	T	0.57	0.05	L	10.1215	0.0033	0.025	92		10.08	10.17		C			1							
114651	9.542	0.018	8.311	0.011		1.051	0.016	T	1.02	0.01	L	8.3624	0.0012	0.014	118		8.33	8.39		C			1							S
114652	8.230	0.011	7.817	0.011	*	0.390	0.015	T	0.46	0.02	L *	7.9320	0.0021	0.019	87	*	7.89	7.96		D	23135−4056	I 1	2 C A	AB	276	7.923	0.005	1.41	0.02	S
114653	10.748	0.048	9.777	0.033		0.840	0.045	T	0.86	0.03	L	9.8707	0.0046	0.034	65		9.82	9.93		U			1 G							
114654	10.415	0.033	9.908	0.031		0.476	0.041	T	0.55	0.04	L	9.9966	0.0030	0.030	92		9.95	10.05		C			1							
114655	9.783	0.020	8.262	0.011		1.288	0.020	G	1.31	0.02	A	8.2751	0.0022	0.017	96		8.24	8.30					1							S
114656	8.410	0.010	8.527	0.013		−0.105	0.006	G	−0.09	0.01	H	8.5136	0.0015	0.012	78		8.49	8.54					1							S
114657	8.761	0.013	8.372	0.013		0.360	0.015	G	0.42	0.02	H	8.4318	0.0017	0.012	88		8.41	8.46		C			1							
114658	9.917	0.018	8.634	0.011		1.092	0.016	T	1.05	0.02	L	8.6949	0.0020	0.020	176		8.66	8.74					1 S							
114659	9.978	0.020	8.448	0.010		1.285	0.018	T	1.24	0.02	L	8.4610	0.0016	0.019	122		8.44	8.50		C			1							
114660	10.185	0.040	8.855	0.022		1.129	0.036	T	1.09	0.04	L	8.9147	0.0026	0.018	63		8.87	8.96		C			1							
114661						0.689	0.056	G	0.75	0.05	H	11.1660	0.0042	0.032	88		11.11	11.22		C			1							G
114662	8.576	0.015	8.532	0.018		0.045	0.022	T	0.06	0.02	L	8.5267	0.0013	0.014	122		8.51	8.55		C			1							
114663	10.278	0.032	9.755	0.031		0.491	0.040	T	0.56	0.04	L	9.8529	0.0027	0.021	95		9.80	9.90		C			1							
114664	9.753	0.020	8.559	0.013		1.022	0.019	T	1.00	0.02	L	8.6276	0.0020	0.016	98		8.60	8.65		C			1							
114665	7.636	0.008	7.220	0.008		0.393	0.010	T	0.46	0.01	L	7.2705	0.0014	0.008	67		7.26	7.29			23136+0213	I 1	1							S
114666	8.548	0.016	7.967	0.015		0.519	0.015	G	0.59	0.02	H	8.0503	0.0016	0.011	45		8.03	8.07		C			1							S
114667	9.949	0.024	9.408	0.023		0.569	0.003	G	0.64	0.00	H	9.4634	0.0029	0.022	97		9.42	9.50					1							
114668	10.667	0.032	9.384	0.018		1.092	0.029	T	1.05	0.03	L	9.4319	0.0018	0.025	131		9.40	9.48		C			1							
114669	9.100	0.020	7.252	0.010	A	1.200	0.495	G	1.53	0.03	M *	7.1407	0.0021	0.013	54	*	7.11	7.16		D	23138−1324	I 1	2 C A	AB	308	1.463	0.010	2.13	0.05	S
114670	8.043	0.010	7.431	0.010		0.561	0.015	G	0.63	0.01	H	7.4938	0.0020	0.011	63		7.48	7.51					1							S
114671	11.260	0.078	10.331	0.054		0.821	0.070	T	0.84	0.05	L	10.4672	0.0037	0.027	81		10.42	10.52		C			1							
114672	8.424	0.009	7.957	0.008		0.468	0.015	G	0.54	0.02	H	8.0325	0.0011	0.013	154		8.01	8.05					1							S
114673	9.371	0.017	8.096	0.011		1.086	0.016	T	1.05	0.01	L	8.1398	0.0029	0.017	85		8.11	8.18					1							S
114674	11.249	0.084	10.622	0.078		0.494	0.072	G	0.57	0.08	R	10.6924	0.0082	0.033	67		10.64	10.75					1							G
114675	10.193	0.020	9.819	0.021		0.354	0.027	T	0.42	0.03	L	9.9327	0.0021	0.028	198		9.85	9.98		U 2			1 S							G
114676	10.145	0.034	8.869	0.021		1.086	0.031	T	1.05	0.03	L	8.9133	0.0033	0.023	61		8.88	8.94		C			1							
114677						1.308	0.017	G	1.51	0.03	I	12.1297	0.0110	0.078	80		12.00	12.31					1							G
114678	9.237	0.013	7.806	0.008		1.208	0.012	T	1.17	0.01	L	7.8345	0.0022	0.020	139		7.80	7.86		U			1							S
114679	9.961	0.021	9.492	0.021		0.442	0.027	T	0.51	0.03	L	9.5673	0.0018	0.025	152		9.53	9.61		C			1							
114680	8.679	0.011	8.435	0.012		0.250	0.015	G	0.28	0.02	H	8.4820	0.0013	0.012	111		8.47	8.50		C			1							
114681	9.617	0.021	7.867	0.010		1.459	0.018	T	1.47	0.03	L	7.8453	0.0013	0.010	95		7.83	7.86		C			1							
114682	10.652	0.033	9.416	0.019		1.055	0.030	T	1.02	0.03	L	9.4738	0.0021	0.021	125		9.44	9.50		C			1							
114683	10.496	0.044	9.620	0.033		0.767	0.042	T	0.81	0.04	L	9.6259	0.0035	0.025	62		9.59	9.67		C			1							
114684	10.487	0.032	8.711	0.013		1.480	0.027	T	1.50	0.04	L	8.6579	0.0019	0.018	128		8.63	8.69					1							
114685	9.426	0.017	8.836	0.016		0.630	0.013	G	0.70	0.01	H	8.8228	0.0024	0.025	128		8.79	8.86		U			1 S							
114686	7.966	0.011	6.607	0.006		1.151	0.010	T	1.11	0.01	L	6.6407	0.0012	0.007	71		6.63	6.66		C			1							S
114687	10.506	0.046	9.117	0.025		1.175	0.041	T	1.14	0.04	L	9.1981	0.0030	0.020	63		9.15	9.23					1							
114688	7.911	0.007	8.077	0.010		−0.147	0.003	G	−0.14	0.00	H	8.0688	0.0013	0.013	109		8.05	8.09					1							S
114689	7.894	0.009	7.880	0.010	A	−0.200	0.495	G	0.03	0.02	L *	7.8545	0.0013	0.012	136	*	7.83	7.87		D	23140+2414	I 1	2 C A	AB	72	1.108	0.008	2.33	0.03	S
114690	6.869	0.006	7.024	0.009		−0.135	0.010	T	−0.13	0.01	L	7.0129	0.0010	0.009	76		6.99	7.03					1							S
114691	10.521	0.031	8.962	0.015		1.308	0.027	T	1.27	0.03	L	8.9722	0.0019	0.016	121		8.94	9.00					1 S							
114692	10.156	0.019	9.209	0.014		0.835	0.018	T	0.85	0.01	L	9.2339	0.0018	0.027	205		9.18	9.29		R			1							
114693	9.243	0.014	8.157	0.009		0.939	0.013	T	0.93	0.01	L	8.2094	0.0014	0.014	135		8.18	8.24					1							
114694	10.458	0.031	9.926	0.031		0.507	0.033	T	0.58	0.04	L	9.9157	0.0019	0.021	130		9.88	9.96					1 S							
114695	10.016	0.026	9.048	0.018		0.850	0.023	T	0.89	0.02	L	9.0344	0.0029	0.026	123		8.99	9.07		U			1							
114696	10.424	0.043	9.163	0.024		1.075	0.038	T	1.04	0.03	L	9.1467	0.0028	0.017	77		9.11	9.20		C			1							
114697	7.777	0.008	7.823	0.008		−0.038	0.002	G	−0.02	0.00	H	7.8297	0.0013	0.013	123		7.81	7.85					1							S
114698	11.563	0.107	9.806	0.035	*	1.465	0.089	T	1.47	0.13	L *	9.5328	0.0079	0.062	79	*	9.46	9.67		U 2	23141+1010	H 1	2 C S B	AB	156	0.164	0.011	0.27	0.62	P
114699	7.097	0.004	6.214	0.003		0.787	0.004	T	0.82	0.00	L	6.2686	0.0005	0.008	174		6.26	6.28		C			1							S
114700	7.503	0.007	7.177	0.008	*	0.309	0.010	T	0.35	0.01	L *	7.2205	0.0011	0.008	72	*	7.21	7.24		D	23141−0238	I 1	2 C A	AB	111	0.352	0.007	1.79	0.03	S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\mu_{\alpha*}$	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
114701	23 14 06.86	−73 09 01.4	8.50	H	348.528 591 85	−73.150 396 51		0.97	−18.85	−10.10	0.71	0.68	0.90	0.76	0.63	− 8	+17	−33	+10	+10	− 4	+11	−21	+18	− 4	1	0.97
114702	23 14 07.15	−08 55 27.3	7.55	G	348.529 775 77	−08.924 239 66	A	26.52	551.26	−37.82	2.87	2.22	2.41	3.39	2.43	+23	−11	−20	− 4	+11	+14	+19	+22	−26	+ 2	4	0.76
114703	23 14 07.28	−08 55 52.3	8.20	G	348.530 317 10	−08.931 197 67	B	35.69	566.82	−55.24	9.57	7.71	5.65	7.94	5.07	+22	+ 4	−29	+16	− 3	+16	− 3	+ 2	− 8	− 4	4	0.76
114704	23 14 07.46	+53 47 17.7	8.31	H	348.531 078 93	+53.788 244 08		3.57	1.68	3.90	0.60	0.60	0.85	0.66	0.66	−16	− 2	+21	+16	− 5	− 1	− 5	+14	+ 5	−10	1	1.18
114705	23 14 07.54	−19 41 45.0	7.51	H	348.531 429 53	−19.695 837 77		9.06	31.77	1.16	0.93	0.65	1.05	1.32	1.06	+42	−11	− 3	+11	+20	+24	+22	−19	+15	+40	0	0.36
114706	23 14 07.71	+46 07 24.0	8.11	H	348.532 123 29	+46.123 330 52		8.66	69.77	−18.66	0.53	0.54	0.98	0.56	0.65	−26	+ 7	+12	−53	+ 8	− 1	+ 0	−19	+17	− 3	2	−1.28
114707	23 14 07.86	−08 23 13.6	8.47	H	348.532 730 19	−08.387 113 97		7.76	34.05	−61.15	1.07	0.86	1.22	1.50	0.86	+20	−13	−21	+ 0	− 9	+26	− 8	−11	+ 7	−21	0	2.12
114708	23 14 07.99	−70 03 30.2	6.90	G	348.533 306 38	−70.058 391 92		18.25	176.93	82.72	0.68	0.68	0.88	0.76	0.73	− 7	+ 1	−15	−11	+ 6	+ 4	+ 6	− 5	− 4	+ 3	0	
114709	23 14 08.59	−52 01 24.5	9.00	G	348.535 773 42	−52.023 479 69		13.14	254.19	17.64	0.92	0.81	1.37	1.11	0.79	−19	+ 0	−17	− 3	−17	+23	−15	−19	− 7	−48	1	−1.11
114710	23 14 09.17	−52 41 28.2	9.43	G	348.538 202 86	−52.691 172 29		9.15	−17.84	7.07	0.95	0.83	1.45	1.10	0.79	−20	− 3	+ 2	−24	− 6	+22	− 2	−30	−16	−41	0	0.00
*114711	23 14 10.36	−33 03 12.4	9.81	G	348.543 166 75	−33.053 452 08		12.44	214.94	−167.08	1.28	1.12	1.54	1.49	1.33	+16	+ 2	−23	−18	+ 7	+23	+14	+12	− 1	+13	0	1.17
*114712	23 14 10.33	−41 42 51.3	9.29	H	348.543 045 89	−41.714 255 09		3.86	−30.09	−23.10	1.01	1.02	1.50	1.36	1.11	+17	− 3	−38	+ 5	−26	+25	−15	−30	+27	+29	3	1.36
114713	23 14 10.73	−76 55 01.0	9.40	H	348.544 697 22	−76.916 939 56		0.24	−1.77	−0.77	0.84	0.86	1.07	1.05	0.87	− 1	+14	−27	+ 9	+ 3	+17	+11	−20	+11	+18	2	0.35
114714	23 14 14.34	+50 37 04.5	6.32	H	348.559 764 95	+50.617 908 45		7.94	45.38	−7.14	0.36	0.43	0.57	0.39	0.46	−22	+ 7	+24	+13	− 9	− 6	− 7	+15	+ 9	−14	0	0.47
114715	23 14 15.57	+23 09 50.9	8.94	H	348.564 858 63	+23.164 130 88		0.73	−6.27	−2.56	0.79	0.79	1.24	0.93	0.90	+63	−11	+ 1	+29	+27	+ 7	+26	+19	+14	+71	1	1.77
114716	23 14 15.82	−56 50 49.9	11.99	2 G	348.565 925 92	−56.847 198 08		39.09	−414.28	−256.42	1.52	1.75	2.81	1.91	2.01	−28	− 8	+ 3	− 9	−13	+ 5	−12	− 3	+ 4	−23	0	0.67
114717	23 14 15.89	+33 01 48.2	9.46	H	348.566 202 86	+33.030 052 53		8.14	−2.78	−2.88	1.07	0.93	1.44	1.34	0.96	+22	+ 4	+17	+25	+ 2	− 7	+ 6	+ 2	+32	+23	0	−0.88
114718	23 14 16.31	−70 20 17.9	8.84	H	348.567 938 40	−70.338 303 85		3.27	20.34	−3.69	0.71	0.80	0.99	0.85	0.88	− 2	− 6	−22	−15	− 1	−13	− 4	+11	+ 1	− 2	0	−0.66
114719	23 14 16.36	−19 38 39.9	10.46	G	348.568 146 81	−19.644 419 27		51.44	447.70	57.87	5.29	3.84	5.79	6.18	5.55	+39	+ 0	− 6	−11	+11	+ 4	+17	−15	+ 9	+35	6	
114720	23 14 17.46	−16 54 32.8	7.78	H	348.572 761 13	−16.909 116 90		3.52	9.58	−11.22	1.28	0.82	1.20	1.56	1.07	+ 0	+14	−27	−23	+30	− 1	+35	+28	+ 5	− 1	0	1.76
114721	23 14 18.41	−42 11 02.8	9.86	H	348.576 720 79	−42.184 098 88		7.46	−4.45	16.62	1.21	1.04	1.56	1.34	1.20	+15	+ 2	−17	+ 2	−13	+18	− 9	−15	+28	+27	0	2.12
114722	23 14 18.85	+77 56 58.0	8.27	H	348.578 524 03	+77.949 457 62		9.11	16.45	−0.74	0.64	0.62	0.72	0.82	0.74	+ 0	− 8	+14	+19	+ 7	− 8	+ 4	− 7	+ 4	−12	0	−1.51
114723	23 14 18.97	+16 19 39.7	8.58	H	348.579 035 75	+16.327 705 75		11.15	30.19	−16.35	1.10	0.78	1.23	1.23	1.00	− 3	+16	−20	−14	+22	−42	+16	+22	− 1	+10	0	1.36
114724	23 14 19.33	−06 02 54.7	4.22	1 H	348.580 552 19	−06.048 526 80		14.68	46.22	−195.85	0.74	0.56	0.92	1.14	0.92	+23	+ 6	−14	+ 3	+ 5	+32	+14	−11	+41	+43	0	−0.29
114725	23 14 21.72	+29 46 18.7	6.41	H	348.590 502 95	+29.771 850 00		8.87	−5.74	−7.61	0.53	0.49	0.74	0.58	0.47	+26	+21	+ 5	+ 7	+15	− 3	+17	− 4	+23	+21	0	−0.12
114726	23 14 22.63	−31 26 38.3	10.81	H	348.594 311 31	−31.443 971 28		3.23	6.96	−10.75	1.70	1.34	2.03	2.03	1.85	+17	−29	−18	−43	+ 5	+39	+10	− 8	+13	+21	0	−1.04
114727	23 14 23.21	+43 28 33.8	8.17	G	348.596 715 82	+43.476 051 02		8.60	53.69	−5.42	0.53	0.65	1.05	0.56	0.71	− 8	+10	− 6	+15	+ 4	+ 3	+13	−20	+31	+13	0	0.51
114728	23 14 24.36	−58 31 16.2	9.06	H	348.601 496 37	−58.521 158 20		3.31	21.41	1.45	0.66	0.77	1.19	0.76	0.87	−27	− 6	+ 3	− 1	+ 9	+18	+ 9	−16	−19	−28	0	−0.99
114729	23 14 25.97	+43 41 53.9	7.49	H	348.608 194 84	+43.698 305 64		16.30	46.50	−87.54	0.55	0.62	0.92	0.59	0.66	+ 0	+21	+ 7	+40	+ 6	+ 6	+21	−11	+25	+23	0	−0.11
114730	23 14 27.13	−41 10 53.5	9.33	G	348.613 024 49	−41.181 531 21		8.67	−50.30	−60.48	0.90	0.93	1.22	1.16	1.11	+21	−18	−10	+ 3	−18	+17	−15	−25	+ 7	+24	0	0.47
114731	23 14 28.91	−57 14 13.3	8.12	H	348.620 467 97	−57.237 033 16		3.79	4.68	−26.07	0.50	0.56	0.94	0.55	0.62	−35	− 6	− 1	+ 0	+ 5	+17	+ 8	− 9	−22	−25	0	−0.68
114732	23 14 29.58	+55 25 37.3	9.05	H	348.623 248 18	+55.427 033 75		1.85	−4.93	−6.79	0.67	0.67	0.88	0.91	0.76	−22	+13	+20	+12	+ 0	− 4	− 1	− 7	− 4	−29	0	−0.31
114733	23 14 30.32	−10 27 38.8	9.03	H	348.626 333 66	−10.460 774 89		7.52	46.44	1.86	1.48	1.18	1.69	2.33	1.34	+29	−21	−47	+36	−14	+23	−19	− 4	+ 7	−13	0	−1.49
114734	23 14 30.51	+20 26 32.2	7.03	H	348.627 144 22	+20.442 269 65		1.85	3.29	−6.98	0.79	0.59	0.98	0.74	0.65	+10	+10	−16	−14	− 3	−13	+ 0	−20	+42	+17	0	0.82
114735	23 14 31.39	−18 52 35.1	8.51	H	348.630 771 89	−18.876 414 64		11.54	−61.59	−76.81	1.10	0.77	1.28	1.20	1.20	+36	− 2	−13	− 5	+ 6	+21	+18	−24	+18	+37	0	−0.18
114736	23 14 31.60	−53 57 28.1	11.01	G	348.631 681 60	−53.957 799 37		20.77	49.21	−59.90	1.37	1.69	2.73	1.70	1.67	− 3	+ 6	−12	+19	−16	+27	−13	−22	+ 4	− 6	2	−0.30
114737	23 14 32.24	−28 27 31.1	8.06	2 H	348.634 331 48	−28.458 642 08		6.44	5.97	−18.85	0.81	0.71	0.97	1.02	0.85	+31	− 7	− 9	−11	+16	− 6	+16	+ 9	− 5	+30	0	1.26
114738	23 14 32.89	+35 00 57.7	7.78	H	348.637 042 24	+35.016 024 15		5.26	−20.17	−32.53	0.67	0.60	0.93	0.73	0.62	+13	+17	+ 0	+12	− 4	+11	+ 7	−35	+26	+31	0	−0.42
114739	23 14 33.30	+15 12 42.3	8.41	H	348.638 763 74	+15.211 738 09		7.68	4.83	−6.74	0.93	0.78	1.03	0.90	0.92	+23	+30	−12	+34	+17	− 6	+12	+32	−15	+38	3	−0.76
114740	23 14 35.15	−20 01 07.1	8.07	H	348.646 439 55	−20.018 628 97		4.30	21.63	−0.44	0.94	0.73	1.06	1.26	1.05	+42	−21	+ 0	+ 2	+ 9	+13	+ 5	−39	−11	+27	0	−0.58
114741	23 14 36.21	−33 31 39.8	10.69	H	348.650 864 00	−33.527 711 78		3.96	12.31	13.19	1.79	1.41	1.99	1.99	1.64	+10	+10	−18	−32	+24	+ 0	+25	+13	− 6	+14	0	1.13
114742	23 14 36.42	+24 06 10.4	6.36	H	348.651 746 53	+24.102 885 14		6.47	113.84	5.31	0.49	0.52	0.72	0.54	0.53	+50	+ 5	+ 5	+18	+ 2	− 3	+ 2	− 8	+13	+46	0	0.79
114743	23 14 36.54	−40 26 44.9	8.59	H	348.652 255 84	−40.445 798 75		14.77	114.88	−223.69	0.80	0.86	1.22	0.95	1.02	+25	− 8	−35	+14	−23	+27	−12	−35	+27	+39	0	−0.80
114744	23 14 36.55	+12 45 20.7	8.62	H	348.652 297 78	+12.755 737 44		6.08	27.55	−8.66	0.96	0.88	1.10	1.12	1.10	+24	− 2	−23	+26	+ 6	−13	+ 2	+21	+ 0	+27	3	0.73
114745	23 14 37.02	+74 13 52.5	5.89	H	348.654 235 92	+74.231 254 88		7.16	41.34	5.54	0.46	0.43	0.51	0.55	0.45	−12	− 5	+17	+ 9	−14	− 3	−12	+22	+ 5	−19	0	−0.70
114746	23 14 38.38	−29 42 08.7	9.42	H	348.659 915 26	−29.702 424 45		27.53	−66.93	−28.51	1.18	0.98	1.45	1.42	1.29	+34	−23	−18	−25	− 5	+25	− 5	−13	+19	+43	0	−0.54
114747	23 14 38.70	−21 35 46.4	9.20	H	348.661 233 11	−21.596 232 64		1.33	35.81	−5.44	1.20	0.84	1.43	1.71	1.17	+36	−16	−31	+ 2	+18	+11	+15	−15	+30	+26	0	1.31
114748	23 14 39.70	−31 08 25.7	9.28	H	348.665 434 81	−31.140 462 57		−0.03	−10.15	−8.99	1.09	1.02	1.45	1.37	1.39	+21	− 6	−31	−33	+ 0	+30	+ 7	−11	+29	+37	0	−0.43
114749	23 14 39.77	+19 15 48.5	8.79	H	348.665 718 23	+19.263 461 89		7.77	76.55	−8.29	1.05	0.88	1.25	1.16	1.03	+ 9	+ 7	−17	+21	−14	− 4	−15	−17	+38	− 5	0	0.44
114750	23 14 40.18	−10 41 19.1	6.13	H	348.667 403 68	−10.688 627 44		3.90	−6.67	−36.02	1.15	0.84	1.14	1.84	1.06	+26	−13	−43	+56	+ 4	+21	+12	+45	− 6	+ 3	0	−0.96
114751	23 14 41.13	+13 43 17.7	8.47	H	348.671 374 21	+13.721 580 09		7.84	40.39	−43.54	0.95	0.78	1.06	1.09	1.01	+14	− 9	−10	+13	− 5	−19	− 6	+ 2	−11	+21	0	−1.46
114752	23 14 41.90	−09 41 18.1	7.55	H	348.674 563 55	−09.688 360 24		9.25	99.07	−32.08	0.82	0.77	1.05	1.02	0.78	+30	+ 1	−32	+10	−19	+40	−10	−16	+12	+18	0	0.14
114753	23 14 42.08	−48 34 40.9	8.46	G	348.675 331 63	−48.578 021 05		5.70	33.31	−24.08	0.93	0.71	1.02	0.95	0.75	+15	−14	− 2	+ 9	+ 0	+ 8	− 1	+ 0	+ 3	+12	0	−1.48
114754	23 14 42.53	−14 26 46.7	8.95	H	348.677 219 50	−14.446 313 10		0.60	2.88	−19.29	1.17	0.95	1.45	1.53	1.04	+17	− 1	+ 0	+ 2	+11	+44	+13	+14	+11	+ 4	0	−0.08
114755	23 14 42.59	−43 44 40.7	9.34	G	348.677 452 13	−43.744 650 51		7.19	23.74	−46.97	1.00	0.90	1.25	1.19	0.98	+ 9	− 3	− 7	+31	+ 2	+ 7	+ 1	+ 8	+18	+ 4	0	0.74
114756	23 14 43.43	−60 15 58.0	11.50	G	348.680 957 61	−60.266 117 06		17.86	48.86	−34.40	1.45	1.60	2.44	1.72	1.75	−23	−10	−11	− 7	+ 4	+ 9	+ 7	−16	− 7	−17	1	2.77
114757	23 14 44.20	+40 47 39.4	9.24	3 H	348.684 167 16	+40.794 272 75	*	0.87	2.89	−9.67	0.93	0.91	1.32	1.19	1.19	+18	+19	− 8	+11	−13	+29	− 1	−25	+26	+34	0	−0.49
114758	23 14 44.45	−25 33 47.2	7.92	H	348.685 225 33	−25.563 112 25		2.43	−15.27	−21.87	0.80	0.57	0.89	1.00	0.66	+21	− 3	+ 6	+10	+17	+ 3	+15	+ 7	+14	+ 7	0	−1.26
114759	23 14 44.54	+20 53 14.2	8.73	H	348.685 565 35	+20.887 281 60		11.82	199.48	−31.23	1.04	0.67	1.14	1.00	0.72	+11	−13	−10	−37	+ 5	+ 7	+ 1	−27	+29	+26	0	0.26
114760	23 14 45.72	+53 55 59.0	9.05	G	348.690 511 15	+53.933 057 51		1.00	0.46	−1.17	0.72	0.72	1.05	0.81	0.80	−18	+ 5	+28	+14	− 6	− 2	− 5	+18	+12	−12	0	0.04
114761	23 14 47.31	−48 59 45.9	8.52	G	348.697 104 45	−48.996 087 15		6.74	−35.94	2.49	0.81	0.74	1.07	0.69	0.82	+11	−16	− 8	−26	− 5	+ 1	− 8	+12	+ 2	+13	0	0.89
114762	23 14 48.12	−65 34 49.6	8.44	H	348.700 509 52	−65.580 448 05		4.00	39.78	1.80	0.68	0.70	0.95	0.81	0.76	− 4	−11	+ 0	+ 4	+ 6	+ 8	+ 9	−20	−23	− 1	0	1.12
114763	23 14 49.68	−07 42 10.2	7.37	2 H	348.707 018 55	−07.702 825 26		3.03	1.73	−11.56	1.03	0.64	0.97	1.35	0.71	− 2	− 2	−15	−27	+11	+19	+20	− 3	− 1	−31	0	0.93
114764	23 14 50.64	+16 22 18.4	8.76	H	348.711 006 20	+16.371 764 01		5.47	14.71	−7.26	1.18	0.89	1.41	1.40	0.99	− 6	+17	−43	−12	+20	−34	+ 8	+14	− 3	− 4	3	1.50
114765	23 14 51.65	−34 02 05.3	9.23	H	348.715 213 48	−34.034 800 28		4.99	62.70	−21.23	1.16	0.96	1.38	1.52	1.17	+17	− 4	−28	− 4	+ 3	− 4	+ 2	− 5	+11	+21	0	0.53
114766 H	23 14 51.96	+43 19 52.8	10.09	H	348.716 492 62	+43.331 334 82	A	1.22	−0.68	−11.46	1.59	2.02	2.48	1.52	1.79	− 7	+14	+14	+ 6	+ 4	+ 3	+13	−34	+ 5	+14	1	−0.89
114767	23 14 53.15	−16 14 21.5	7.61	H	348.721 468 74	−16.239 295 65		3.53	26.64	−36.31	1.10	0.80	1.12	1.25	0.98	+ 9	+17	−28	−19	+32	− 6	+33	+34	+ 5	+15	0	0.74
114768	23 14 54.13	+83 26 47.3	9.85	H	348.725 521 38	+83.446 469 65	B	7.02	7.66	10.14	7.88	7.21	5.61	7.28	5.51	− 3	+ 0	+25	+ 4	− 1	+18	− 5	−14	− 4	− 8	16	2.91
114769	23 14 54.76	+65 25 27.3	7.23	H	348.728 173 30	+65.424 256 71		19.00	−32.94	−84.25	0.54	0.59	0.68	0.61	0.71	+ 5	+ 1	− 7	−14	−17	+ 0	−18	−33	+31	− 5	1	1.53
114770	23 14 54.95	−01 03 22.5	8.70	H	348.728 969 40	−01.056 249 73		2.69	35.87	−26.93	1.03	0.83	1.38	1.56	1.13	+42	− 9	+ 1	− 6	+ 4	+44	− 4	−12	+31	+21	0	−0.74
114771	23 14 55.48	−39 10 40.5	7.94	H	348.731 165 26	−39.177 930 39		2.16	1.36	−10.10	0.73	0.79	1.13	0.89	0.98	+28	+ 0	−30	− 1	−24	+35	−13	−24	+28	+45	0	0.23
114772	23 14 57.21	−42 44 00.9	8.90	H	348.738 386 39	−42.733 572 35		3.05	17.79	−2.17	0.91	0.75	1.09	0.95	0.82	+ 9	− 1	−11	+ 5	− 5	+12	− 3	− 2	+12	+14	2	0.67
114773	23 14 57.42	+35 55 42.9	10.69	H	348.739 264 41	+35.928 581 63	B	5.80	4.93	−22.92	38.45	21.56	16.82	16.05	10.79	− 5	+22	− 3	− 8	+ 2	+29	+14	−32	+30	+28	0	1.25
114774	23 14 57.89	+28 04 15.1	7.10	H	348.741 203 34	+28.070 866 16		7.48	23.02	−15.65	0.56	0.51	0.77	0.63	0.51	+25	+ 7	+16	+15	− 5	−27	+ 0	−12	+ 7	+20	2	0.99
114775	23 14 58.53	−41 06 18.5	5.77	G	348.743 895 20	−41.105 125 24		13.95	110.13	−111.80	0.55	0.52	0.72	0.65	0.60	+17	−20	−21	+ 8	−14	+ 8	−14	−26	+15	+16	0	−0.77
114776	23 14 58.60	−50 59 03.2	10.27	H	348.744 163 00	−50.984 225 71		1.04	5.87	−22.61	1.51	1.36	1.92	1.47	1.48	−15	− 5	−11	−44	+23	+ 2	+21	−11	+ 4	− 4	0	0.43
114777	23 14 58.87	+69 05 42.6	9.23	2 H	348.745 271 15	+69.095 164 50		−0.05	−1.06	−0.75	0.68	0.78	0.88	0.82	0.92	− 8	+13	− 3	+ 7	+ 1	+12	+ 2	+ 0	+ 2	− 8	0	0.10
114778	23 14 58.87	+35 55 54.5	8.49	H	348.745 302 22	+35.931 818 49	A	5.83	7.18	−30.96	1.96	1.52	2.16	2.18	1.51	+ 0	+13	− 5	−19	− 3	+28	+ 5	−35	+28	+30	0	1.25
114779	23 14 59.00	+41 08 32.8	7.32	H	348.745 829 05	+41.142 444 13		1.34	−6.32	−9.66	0.56	0.61	0.84	0.59	0.66	+22	+13	− 2	+50	− 7	+20	+12	−37	+29	+45	0	2.08
114780	23 15 00.59	−15 08 39.2	9.44	H	348.752 477 66	−15.144 228 35		11.39	119.34	−79.70	1.31	1.02	1.43	1.48	1.13	+17	+18	− 5	+ 4	+15	+18	+19	+27	+ 6	+ 9	0	1.32
114781	23 15 01.23	+46 31 27.6	7.21	H	348.755 109 05	+46.524 333 56		3.79	−5.71	−18.16	0.41	0.45	0.73	0.43	0.56	−23	+13	+14	−17	− 4	− 3	− 6	− 3	+ 7	− 9	3	−2.16
114782 H	23 15 04.27	+43 18 52.2	8.27	H	348.767 781 87	+43.314 499 52	A	0.65	0.28	−4.03	1.06	1.36	1.62	0.95	1.14	+ 3	+11	+ 7	+ 8	− 4	− 3	+10	−27	+14	+19	1	0.01
114783	23 15 05.89	+05 29 51.2	8.51	H	348.774 561 54	+05.497 550 01		6.63	−13.05	1.30	1.12	0.74	1.36	1.58	1.10	+33	−11	−15	−26	− 2	+23	+ 4	−12	+39	+ 0	0	−0.99
114784	23 15 05.93	+08 47 22.0	8.83	H	348.774 722 14	+08.789 450 31		2.68	62.12	14.89	1.14	0.76	1.28	1.62	1.08	+35	+ 0	− 1	−33	+ 2	− 7	+20	+ 4	+33	−21	0	1.48
114785	23 15 06.45	+67 48 40.4	8.54	H	348.776 873 74	+67.811 209 04		1.82	9.87	0.96	0.65	0.67	0.78	0.78	0.82	− 5	− 7	+ 2	+38	+ 1	− 9	+ 1	+13	+19	+ 0	0	1.53
114786	23 15 07.03	+83 26 48.7	9.75	H	348.779 289 78	+83.446 866 46	A	7.44	1.40	5.46	4.03	3.69	3.36	4.21	3.48	− 4	− 5	+23	−10	− 4	+16	− 8	−24	− 2	−11	16	2.91
114787	23 15 07.48	+74 53 26.4	9.01	1 H	348.781 167 71	+74.890 655 28		2.16	−4.80	−3.76	0.75	0.69	0.86	0.96	0.75	−10	−10	+28	− 4	− 6	− 4	− 6	+ 2	+ 8	− 4	1	0.40
114788	23 15 08.24	+56 17 42.1	8.86	H	348.784 336 46	+56.295 015 71		8.79	42.75	6.37	0.75	0.78	1.03	0.97	0.80	−29	+ 3	+31	+ 1	+15	+14	+ 9	−22	−11	−37	0	−0.44
114789	23 15 08.98	−50 51 18.7	10.27	H	348.787 421 29	−50.855 185 69		0.26	25.27	−11.69	1.34	1.75	2.13	1.53	1.85	+10	−13	−27	−23	+24	− 6	+17	+26	− 4	+20	0	−0.86
114790	23 15 09.42	−56 43 45.9	7.96	G	348.789 259 26	−56.729 419 83		32.78	243.19	84.26	0.51	0.62	0.99	0.61	0.67	−22	− 6	− 9	−16	− 8	+19	− 4	−17	−11	−17	0	0.54
114791 H	23 15 12.41	+60 27 01.9	9.58	2 H	348.801 696 82	+60.450 527 54	A	0.28	−7.30	−9.03	4.66	4.60	5.13	4.61	4.16	−21	+ 1	+ 7	+12	− 9	− 3	+ 1	−11	+14	+12	16	7.02
114792	23 15 12.53	+65 00 44.3	7.64	H	348.802 188 15	+65.012 294 91		10.26	50.13	4.17	0.52	0.55	0.65	0.61	0.64	−18	+ 9	+ 0	− 2	+ 0	− 6	− 1	−19	+16	−28	1	−0.82
114793	23 15 12.54	−41 57 19.1	8.71	H	348.802 242 50	−41.955 294 73		1.18	−2.02	−9.68	0.90	0.80	1.20	1.13	0.86	+11	+ 0	−29	+ 1	−11	+18	− 6	−18	+23	+15	2	0.93
114794	23 15 12.87	−64 37 57.9	9.50	H	348.803 612 31	−64.632 738 65		3.28	37.72	−5.62	0.87	0.86	1.17	0.92	0.86	− 9	+ 1	− 2	− 6	+21	+ 3	+19	− 9	−15	− 1	1	1.66
114795	23 15 12.96	−06 07 18.6	7.48	H	348.803 997 56	−06.121 843 55		3.34	3.79	−3.01	0.86	0.65	0.97	0.94	0.72	+29	− 1	−25	−18	+13	+10	+22	+ 8	+12	+12	0	−1.34
114796	23 15 13.21	+52 21 06.8	8.26	H	348.805 027 84	+52.351 891 99		16.47	178.58	16.74	0.63	0.66	0.96	0.75	0.74	−30	−20	+26	−24	+20	+19	+14	−15	+ 1	−16	0	−1.13
114797	23 15 14.14	+54 21 32.6	8.15	H	348.808 905 55	+54.359 057 93		2.15	8.41	0.56	0.61	0.64	0.87	0.73	0.71	−11	+ 5	+18	+26	− 4

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
114701	10.259	0.028	8.648	0.013		1.349	0.024	T	1.31	0.03	L	8.6522	0.0019	0.018	134		8.62	8.68					1								
114702						0.544	0.003	G	0.62	0.00	H	7.6904	0.0193	0.035	58	A	7.55	7.72		D	23142−0856	I 2	1 C P D							S D
114703						0.651	0.020	G	0.71	0.02	H	8.3084	0.0280			B				D	23142−0856	I 2	1 C I D							S D
114704	8.498	0.009	8.325	0.010		0.166	0.013	T	0.18	0.01	L	8.3674	0.0018	0.016	130		8.34	8.39		C			1								
114705	7.668	0.006	7.524	0.007		0.131	0.009	T	0.15	0.01	L	7.5641	0.0015	0.011	116		7.54	7.58		C			1							S	
114706	8.622	0.006	8.168	0.006		0.455	0.006	G	0.52	0.01	H	8.2118	0.0011	0.015	285		8.19	8.24		C			1							S	
114707	9.371	0.020	8.563	0.017		0.662	0.015	G	0.72	0.01	H	8.6072	0.0023	0.015	59		8.57	8.63		C			1							S	
114708	7.808	0.006	6.988	0.005		0.733	0.004	G	0.78	0.00	H	7.0421	0.0007	0.009	154		7.02	7.06					1 X							S	
114709	9.702	0.016	9.061	0.015		0.564	0.002	G	0.64	0.00	H	9.1186	0.0027	0.024	146		9.08	9.16					1								
114710	9.976	0.017	9.464	0.017		0.453	0.006	G	0.52	0.01	H	9.5442	0.0028	0.029	167		9.50	9.59					1								
114711	10.676	0.048	9.862	0.036		0.687	0.003	G	0.74	0.00	H	9.9521	0.0040	0.027	86		9.90	10.00		C			1								
114712	10.549	0.038	9.395	0.024		0.991	0.035	T	0.97	0.03	L	9.4550	0.0028	0.023	91		9.42	9.49		C			1								
114713	10.798	0.040	9.493	0.022		1.109	0.036	T	1.07	0.04	L	9.5633	0.0019	0.023	115		9.53	9.60					1								
114714	6.311	0.003	6.318	0.003		−0.005	0.004	T	0.02	0.00	L	6.3241	0.0005	0.007	170		6.31	6.33		C			1							S	
114715	10.790	0.035	9.107	0.015		1.406	0.030	T	1.38	0.04	L	9.0794	0.0022	0.019	173		9.06	9.12					1								
114716						1.480	0.015	G	1.95	0.09	I	12.0542	0.0050	0.066	191		11.86	12.18		U 2			1								G
114717	10.277	0.033	9.539	0.028		0.676	0.034	T	0.74	0.03	L	9.5961	0.0026	0.022	83		9.55	9.65		C			1								
114718	10.202	0.023	8.958	0.014		1.061	0.021	T	1.03	0.02	L	9.0113	0.0025	0.023	144		8.97	9.05					1								
114719						1.449	0.004	G	1.80	0.02	I	10.5301	0.0032	0.033	109		10.44	10.60		D			1 X S								
114720	9.115	0.023	7.879	0.015		1.055	0.021	T	1.02	0.02	L	7.9480	0.0025	0.016	47		7.92	7.97					1							S	
114721	10.349	0.028	9.892	0.029		0.444	0.032	T	0.51	0.03	L	9.9557	0.0037	0.028	92		9.92	10.01					1								
114722	9.021	0.013	8.321	0.011		0.645	0.014	T	0.71	0.01	L	8.4018	0.0016	0.014	111		8.37	8.42		C			1								
114723	9.264	0.022	8.637	0.020		0.579	0.022	T	0.65	0.02	L	8.7047	0.0028	0.014	52		8.68	8.75					1							S	
114724	6.267	0.006	4.411	0.003		1.545	0.037	G	1.89	0.02	A	4.3152	0.0017	0.010	58		4.30	4.33		U 2			1 G							S	
114725	6.945	0.005	6.458	0.004		0.448	0.005	G	0.52	0.01	H	6.5056	0.0009	0.007	92		6.49	6.52		C	23144+2946	I 1	1							S	
114726	11.058	0.053	10.878	0.075		0.172	0.086	T	0.19	0.09	L	10.8687	0.0047	0.034	82		10.82	10.92		C			1								G
114727	8.635	0.009	8.195	0.009		0.413	0.015	G	0.48	0.02	H	8.2660	0.0013	0.013	131		8.24	8.29		C			1							S	
114728	10.554	0.026	9.168	0.014		1.172	0.023	T	1.13	0.02	L	9.2267	0.0015	0.023	218		9.19	9.28					1 S								
114729	8.125	0.009	7.553	0.008		0.535	0.011	T	0.61	0.01	L	7.6116	0.0013	0.012	124		7.59	7.63					1							S	
114730	9.997	0.025	9.446	0.025		0.602	0.005	G	0.67	0.00	H	9.4619	0.0020	0.018	90		9.43	9.49		C			1								
114731	9.999	0.015	8.289	0.007		1.427	0.013	T	1.41	0.02	L	8.2634	0.0011	0.017	252		8.23	8.29					1							S	
114732	9.235	0.015	9.075	0.018		0.154	0.022	T	0.17	0.02	L	9.1039	0.0018	0.018	129		9.07	9.13		C			1								
114733	9.413	0.026	9.084	0.029		0.312	0.036	T	0.36	0.05	L	9.1088	0.0016	0.018	49		9.07	9.14		D			1							S	
114734	8.407	0.014	7.154	0.009		1.068	0.013	T	1.03	0.01	L	7.2013	0.0014	0.010	71		7.19	7.22			23145+2026	I 1	1							S	
114735	8.981	0.013	8.572	0.013		0.400	0.015	T	0.47	0.02	L	8.5961	0.0018	0.015	81		8.57	8.62					1							S	
114736						1.270	0.020	G	1.44	0.03	I	11.1720	0.0050	0.066	200		11.06	11.27		R 2			1 S								G
114737	9.170	0.016	8.173	0.012		0.872	0.015	T	0.88	0.01	L	8.2206	0.0025	0.026	85		8.18	8.28		U 2			1							S	
114738	9.267	0.016	7.905	0.009		1.154	0.014	T	1.12	0.01	L	7.9421	0.0016	0.012	103		7.92	7.96					1							S	
114739	8.800	0.014	8.427	0.014		0.353	0.018	T	0.41	0.02	L	8.4919	0.0020	0.012	61		8.47	8.51		C			1							S	
114740	9.544	0.016	8.197	0.009		1.142	0.014	T	1.11	0.01	L	8.2430	0.0014	0.015	123		8.22	8.27					1							S	
114741	11.244	0.078	10.674	0.074		0.574	0.072	G	0.65	0.07	R	10.8091	0.0039	0.031	92		10.75	10.87		C			1								G
114742	7.859	0.007	6.480	0.004		1.167	0.006	T	1.13	0.01	L	6.5273	0.0008	0.008	133		6.52	6.54					1							S	
114743	9.523	0.017	8.669	0.014		0.759	0.001	G	0.80	0.00	H	8.7341	0.0019	0.016	100		8.71	8.76		C			1								
114744	9.004	0.017	8.660	0.018		0.326	0.023	T	0.38	0.03	L	8.7011	0.0014	0.014	62		8.67	8.73		C			1							S	
114745	5.872	0.003	5.885	0.003		−0.010	0.004	T	0.01	0.00	L	5.8967	0.0006	0.006	124		5.89	5.91					1							S	
114746	10.603	0.040	9.507	0.026		0.938	0.038	T	0.93	0.03	L	9.5620	0.0030	0.025	80		9.52	9.60		C			1								
114747	10.701	0.040	9.355	0.021		1.141	0.035	T	1.10	0.04	L	9.3713	0.0026	0.019	89		9.34	9.40		C			1								
114748	10.977	0.049	9.407	0.021		1.000	0.040	G	0.98	0.03	R	9.4491	0.0027	0.022	80		9.41	9.48		C			1								
114749	9.368	0.023	8.845	0.022		0.506	0.015	G	0.58	0.02	H	8.9000	0.0028	0.019	67		8.87	8.94		C			1								
114750	8.115	0.015	6.302	0.008		1.504	0.003	G	1.52	0.04	L	6.2579	0.0018	0.010	44		6.23	6.28			23147−1042	I 1	1							S	
114751	9.065	0.018	8.533	0.017		0.499	0.022	T	0.57	0.02	L	8.5755	0.0025	0.013	62		8.56	8.62					1							S	
114752	7.853	0.013	7.560	0.011		0.279	0.016	T	0.32	0.02	L	7.6259	0.0027	0.014	52		7.61	7.65					1							S	
114753	9.172	0.016	8.530	0.014		0.575	0.006	G	0.65	0.01	H	8.5894	0.0027	0.018	83		8.56	8.62					1							S	
114754	10.331	0.037	9.088	0.022		1.061	0.034	T	1.03	0.03	L	9.1177	0.0033	0.021	59		9.09	9.15		C			1								
114755	9.924	0.022	9.357	0.020		0.558	0.005	G	0.63	0.01	H	9.4654	0.0027	0.024	99		9.42	9.51		C			1								
114756						1.250	0.015	G	1.34	0.02	A	11.6244	0.0056	0.060	181		11.51	11.73					1								G
114757	11.103	0.064	9.481	0.026		1.383	0.057	T	3.94	0.08	O	8.7445	0.0194	0.199	93		8.57	9.36		U 2 B			1 V								
114758	9.271	0.016	8.035	0.010		1.055	0.015	T	1.02	0.01	L	8.0916	0.0014	0.013	96		8.06	8.11		C			1							S	
114759	9.497	0.022	8.808	0.019		0.636	0.024	T	0.70	0.02	L	8.8632	0.0021	0.017	94		8.84	8.89		C			1								
114760	9.128	0.013	9.075	0.017		0.100	0.015	G	0.11	0.02	H	9.0885	0.0028	0.023	128		9.06	9.13					1								
114761	8.973	0.012	8.550	0.012		0.402	0.021	G	0.47	0.02	H	8.6121	0.0018	0.016	113		8.57	8.64		C			1							S	
114762	10.033	0.020	8.563	0.011		1.238	0.018	T	1.20	0.02	L	8.5993	0.0015	0.018	145		8.56	8.63		C			1								
114763	9.512	0.030	7.593	0.013		1.627	0.027	T	2.31	0.07	O	7.4205	0.0058	0.028	54		7.39	7.47		U 2			1 S							S	
114764	9.223	0.022	8.820	0.022		0.381	0.029	T	0.45	0.03	L	8.8499	0.0025	0.014	48		8.82	8.88		C			1 S							S	
114765	9.785	0.023	9.292	0.023		0.475	0.025	T	0.55	0.03	L	9.3391	0.0025	0.017	82		9.29	9.38					1 S								
114766	10.561	0.036	10.183	0.042	A	0.240	0.140	G	0.05	0.06	L *	10.1068	0.0031	0.025	131	*	10.07	10.15		D	23149+4320	H 1	2 C A	AB	229	3.104	0.014		1.94	0.08	G
114767	9.230	0.023	7.752	0.012		1.245	0.020	T	1.20	0.02	L	7.7736	0.0018	0.010	54		7.76	7.80		C			1							S	
114768	10.038	0.027	9.782	0.033	B	0.244	0.040	T	0.27	0.05	L	9.9265	0.0205			B				D	23150+8327	I 2	1 C I A								
114769	7.736	0.007	7.281	0.006		0.429	0.008	T	0.50	0.01	L	7.3247	0.0009	0.009	121		7.31	7.34		C			1							S	
114770	9.967	0.031	8.816	0.020		0.989	0.029	T	0.97	0.02	L	8.8649	0.0023	0.016	69		8.84	8.89		C			1							S	
114771	9.790	0.021	8.096	0.010		1.415	0.018	T	1.40	0.03	L	8.0782	0.0017	0.015	96		8.06	8.11		C			1							S	
114772	9.269	0.015	8.919	0.016		0.332	0.020	T	0.39	0.03	L	8.9817	0.0015	0.017	93		8.95	9.02		D			1								
114773	11.103	0.071	10.411	0.059	B	0.639	0.076	T	0.70	0.07	L	10.5849	0.0813			B				D	23150+3556	I 2	1 C I A								
114774	7.126	0.006	7.103	0.006		0.026	0.008	T	0.04	0.01	L	7.1199	0.0008	0.008	103		7.11	7.14		C			1							S	
114775	7.278	0.005	5.901	0.004		1.160	0.002	G	1.12	0.00	H	5.9410	0.0006	0.006	98		5.93	5.95		C			1							S	
114776	10.616	0.036	10.229	0.039		0.378	0.045	T	0.44	0.05	L	10.3603	0.0049	0.040	102		10.25	10.42					1								
114777	9.541	0.019	9.257	0.021		0.270	0.027	T	0.30	0.03	L	9.2986	0.0043	0.035	126		9.23	9.34		U			1								
114778	9.036	0.017	8.514	0.016	A	0.490	0.021	T	0.56	0.02	L	8.6031	0.0168	0.037	111	A	8.55	8.65		D	23150+3556	I 2	1 C P A								
114779	9.123	0.013	7.461	0.007		1.389	0.012	T	1.36	0.01	L	7.4624	0.0009	0.010	119		7.45	7.48		C			1							S	
114780	10.740	0.065	9.560	0.038		1.011	0.059	T	1.06	0.07	L	9.5838	0.0019	0.018	61		9.56	9.63					1								
114781	7.253	0.003	7.203	0.004		0.051	0.005	T	0.06	0.00	L	7.2319	0.0008	0.010	236		7.21	7.25		C			1							S	
114782	8.304	0.008	8.248	0.010	*	0.056	0.012	T	0.07	0.01	L *	8.2922	0.0018	0.016	136	*	8.24	8.32		D	23151+4319	I 1	2 C A	AB	24	0.533	0.005		1.59	0.03	
114783	9.025	0.016	8.551	0.016		0.446	0.021	T	0.52	0.02	L	8.6053	0.0015	0.014	77		8.57	8.64		C			1							S	
114784	10.301	0.036	8.968	0.020		1.131	0.032	T	1.09	0.03	L	8.9959	0.0017	0.016	101		8.97	9.04		C			1								
114785	8.956	0.013	8.577	0.013		0.359	0.017	T	0.42	0.02	L	8.6233	0.0018	0.018	122		8.59	8.66					1								
114786	10.923	0.055	9.682	0.029	A	1.059	0.048	T	1.03	0.04	L	9.9172	0.0205	0.140	111	A	9.52	10.02		D	23150+8327	I 2	1 C P A								
114787	11.658	0.094	9.249	0.019		1.985	0.077	T	2.02	0.08	L	9.0929	0.0024	0.022	115		9.05	9.13		U			1								
114788	9.404	0.017	8.884	0.016		0.488	0.021	T	0.56	0.02	L	8.9635	0.0019	0.019	125		8.93	9.00		C			1								
114789	10.771	0.040	10.333	0.043		0.427	0.047	T	0.49	0.05	L	10.3697	0.0043	0.051	103		10.26	10.45					1 S								
114790	8.808	0.008	8.030	0.007		0.695	0.006	G	0.75	0.01	H	8.0851	0.0013	0.018	216		8.06	8.12					1							S	
114791	10.792	0.053	10.191	0.051	A						T *	9.7058	0.0064	0.059	121	−	9.64	9.82		U 2	23152+6027	I 1	3 C D								D X
114792	8.178	0.009	7.690	0.008		0.476	0.015	G	0.55	0.02	H	7.7486	0.0011	0.011	123		7.73	7.77					1							S	
114793	10.289	0.032	8.812	0.017		1.244	0.028	T	1.20	0.03	L	8.8696	0.0021	0.017	99		8.84	8.90		C			1								
114794	9.888	0.019	9.538	0.020		0.332	0.026	T	0.39	0.04	L	9.5812	0.0026	0.031	149		9.53	9.64					1 S								
114795	8.662	0.015	7.577	0.011		0.938	0.014	T	0.93	0.01	L	7.6437	0.0013	0.010	69		7.63	7.67					1							S	
114796	8.993	0.011	8.322	0.010		0.609	0.016	G	0.68	0.01	H	8.3858	0.0016	0.017	146		8.36	8.41					1								
114797	10.116	0.022	8.319	0.009		1.496	0.019	T	1.52	0.03	L	8.2784	0.0018	0.017	134		8.25	8.30					1								
114798	8.844	0.011	8.650	0.013		0.186	0.016	T	0.20	0.02	L	8.6899	0.0017	0.013	119		8.67	8.72		C			1								
114799	11.039	0.040	9.962	0.025		0.858	0.003	G	0.87	0.00	H	10.0892	0.0023	0.022	118		10.04	10.13		C			1								
114800	8.027	0.010	7.698	0.011		0.352	0.014	G	0.41	0.01	H	7.7428	0.0012	0.009	62		7.73	7.76		C			1							S	

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28							29	30
*114801 H	23 15 19.38	−35 42 50.4	8.99	H	348.830 744 30	−35.714 008 83	A	5.13	10.99	−75.65	3.11	2.43	2.83	3.41	2.32	+13	+12	−22	−19	+ 3	− 8	+ 1	−21	+10	−17							0	−0.51
*114802	23 15 19.32	−24 51 06.5	7.28	H	348.830 483 37	−24.851 814 11		7.63	−6.60	1.36	0.76	0.52	0.80	0.90	0.58	+20	−11	+ 0	+ 7	+ 8	+ 5	+ 5	− 4	+ 5	+ 6							0	0.91
114803	23 15 20.03	−04 32 02.7	8.32	H	348.833 470 54	−04.534 082 46		4.27	−22.41	−39.02	0.92	0.68	1.17	1.62	0.88	+35	− 1	+19	+15	+24	+45	+13	+16	+21	− 2							0	−0.43
114804	23 15 20.89	−11 33 55.6	7.55	H	348.837 042 41	−11.565 433 71		7.70	−28.16	−22.75	0.87	0.70	1.06	1.02	0.83	+21	−11	−27	−16	− 2	+32	+ 6	− 7	+30	+18							0	1.26
114805	23 15 20.91	−14 00 55.3	7.93	G	348.837 134 44	−14.015 348 88		2.69	40.19	−0.28	1.11	0.72	1.10	1.28	0.82	− 4	+20	−14	+ 2	+ 3	+ 7	+ 9	+19	+14	−10							0	−0.11
114806	23 15 21.28	+23 52 05.8	7.97	G	348.838 662 69	+23.868 291 01		7.17	−20.74	−41.68	0.59	0.62	0.90	0.67	0.70	+50	+ 9	+ 8	+17	+ 8	− 3	+10	+ 1	+15	+52							0	−0.79
114807	23 15 22.48	+25 51 38.8	8.27	H	348.843 650 00	+25.860 786 69		3.32	3.67	−8.40	0.72	0.70	1.05	0.73	0.70	+43	+19	+16	+17	+ 6	− 2	+ 9	− 8	+18	+40							0	1.79
114808 H	23 15 22.92	−47 03 41.8	9.82	H	348.845 496 14	−47.061 600 75	A	9.52	60.63	16.72	4.04	3.22	3.59	4.46	3.37	+20	− 4	+11	+37	−13	+ 2	−26	−11	−12	−18							0	0.77
114809	23 15 23.04	+25 40 20.0	6.81	H	348.845 991 30	+25.672 210 89		5.58	0.26	13.47	0.53	0.55	0.76	0.58	0.54	+36	+16	+ 8	+20	+ 3	− 1	+ 5	− 8	+16	+34							0	1.38
114810	23 15 23.45	−56 41 30.5	6.57 1 G		348.847 728 42	−56.691 806 24		10.80	48.91	−30.88	0.38	0.48	0.72	0.45	0.52	−20	− 7	−12	−18	−10	+18	− 6	−16	−11	−18							0	1.82
114811	23 15 24.00	+36 17 51.6	8.91	H	348.850 015 15	+36.297 659 92		9.07	−0.32	−36.86	0.87	0.66	1.20	1.21	0.78	− 5	+16	− 5	−14	− 3	+25	+ 6	−40	+23	+19							0	−0.01
114812	23 15 25.29	+06 10 45.7	7.75	H	348.855 361 55	+06.179 348 52		4.95	96.71	55.17	0.92	0.68	1.14	1.05	1.15	+30	+20	−14	−19	+ 9	− 1	+21	+ 3	+45	+29							0	0.22
114813 H	23 15 25.54	−74 31 31.9	8.94	G	348.856 413 56	−74.525 530 09	A	6.67	140.16	−38.79	1.52	1.59	1.84	1.52	1.31	− 4	− 9	−33	− 6	− 4	+17	+ 4	−13	+ 1	+20							2	0.54
114814	23 15 27.74	−43 36 16.4	8.14	H	348.865 590 96	−43.604 549 67		9.56	−28.61	−97.88	0.74	0.68	0.93	0.87	0.73	+12	− 8	− 5	+42	+10	+ 4	+ 9	+21	+13	+13							0	1.20
114815	23 15 27.93	+62 04 44.6	9.66 2 H		348.866 354 34	+62.079 051 16		0.79	−3.67	−1.41	0.91	0.92	1.14	1.14	1.14	−18	+ 0	+16	+ 9	+ 8	− 4	+10	−15	−15	− 8							0	−0.16
114816	23 15 28.50	+64 16 00.2	7.17	H	348.868 747 50	+64.266 716 82		2.07	6.98	−1.31	0.48	0.51	0.60	0.56	0.60	−14	+ 7	+20	+19	+ 1	− 8	− 1	− 4	+ 5	−30							3	0.42
114817	23 15 29.23	+61 51 57.3	8.39 2 H		348.871 810 55	+61.865 910 37		4.65	−31.74	−7.56	0.69	0.72	0.85	0.86	0.78	−24	− 2	+ 8	+ 6	+11	+ 2	+13	−20	− 2	− 7							0	−0.37
114818 H	23 15 29.35	+41 35 04.8	10.14	H	348.872 279 25	+41.584 661 02	A	1.88	2.75	−4.64	2.23	2.17	2.71	1.84	1.96	+ 2	+12	+ 2	+49	+ 2	+25	+15	−16	+40	+40							1	−1.20
114819	23 15 29.78	−14 32 20.9	8.86	H	348.874 090 43	−14.539 138 49		1.87	24.59	12.69	1.26	0.91	1.33	1.70	1.15	+11	−11	− 8	+18	+ 8	+25	+13	+26	−28	−15							0	0.78
114820 H	23 15 30.30	−59 41 39.3	7.35 1 H		348.876 262 61	−59.694 236 29	A	2.22	−16.21	−16.32	0.80	0.87	1.21	0.87	0.80	−22	+10	−29	− 4	+ 4	− 1	+ 7	−20	+ 5	+ 1							1	0.77
114821	23 15 33.60	−35 12 23.5	8.50	G	348.890 010 88	−35.206 519 52		10.50	−24.77	3.42	0.97	0.88	1.20	1.05	1.01	+15	+ 5	−35	−41	− 2	+11	+ 0	− 2	+11	+26							0	0.61
114822	23 15 34.26	−03 29 46.9	5.56	H	348.892 770 51	−03.496 372 44		14.09	−12.43	−3.26	0.63	0.49	0.74	0.79	0.59	+33	−14	+ 8	+15	+ 7	+25	− 3	+ 2	+22	+ 9							0	0.16
114823	23 15 34.68	+01 47 28.8	11.21 G		348.894 509 03	+01.791 331 32		24.51	134.07	−11.76	2.52	1.91	2.74	2.83	2.65	+43	+ 6	−15	−11	+21	+16	+35	+34	+ 7	+33							5	2.20
114824	23 15 35.43	−48 32 52.5	8.75	H	348.897 611 14	−48.547 905 04		3.13	18.24	−32.15	1.07	0.88	1.23	1.09	0.92	+ 2	−13	−18	− 4	−10	+20	− 5	+ 5	−16	− 4							4	−0.67
*114825	23 15 35.88	+70 23 02.8	9.36	H	348.899 484 74	+70.384 106 20		3.13	−1.04	−2.41	0.81	0.78	1.00	0.98	1.00	−14	+ 6	+18	− 9	+ 8	+20	+ 5	+ 0	+18	− 5							0	0.54
*114826	23 15 35.81	−77 53 40.9	8.21	H	348.899 228 69	−77.894 682 66		5.14	−26.51	−38.67	0.64	0.61	0.76	0.82	0.65	+ 0	+ 0	− 9	+10	+ 8	+11	+10	− 8	+ 6	+15							0	−0.13
114827	23 15 36.16	−46 35 27.3	10.05 G		348.900 664 57	−46.590 913 78		2.85	−7.80	−16.32	1.55	1.30	1.81	1.94	1.41	+19	−10	− 4	+ 5	−11	+ 7	−11	−14	− 4	+12							0	−1.13
114828	23 15 36.48	+79 13 58.3	7.86	H	348.902 013 17	+79.232 870 08		2.62	−16.36	0.21	0.60	0.53	0.65	0.67	0.57	− 7	−11	+ 9	+13	− 7	+ 9	− 7	− 1	+ 1	− 3							0	0.42
114829	23 15 36.59	−11 37 55.9	7.55	H	348.902 438 89	−11.632 192 18		3.02	26.01	−6.44	0.97	0.71	1.08	1.16	0.94	+12	−15	− 8	−15	+12	+32	+13	+17	+23	+18							0	0.70
114830 H	23 15 37.58	−66 53 15.2	8.94	H	348.906 598 89	−66.887 564 87	A	11.10	42.37	23.91	1.26	1.29	1.49	1.51	1.48	− 8	+ 2	− 2	+ 8	+ 8	+11	+ 9	−11	−10	− 5							4	0.76
114831	23 15 37.71	+70 53 17.1	5.55 1 H		348.907 115 43	+70.888 085 38		9.15	17.04	−2.27	0.43	0.43	0.57	0.46	0.51	−10	+ 0	+ 5	−20	− 1	+16	− 2	− 8	+35	− 2							0	0.88
114832	23 15 40.02	−16 52 33.9	9.74	H	348.916 737 10	−16.876 087 07		−1.96	13.85	14.43	2.22	2.84	3.64	4.45	2.53	+62	−49	−77	+42	+71	−61	+40	+32	+ 0	+24							0	1.32
*114833	23 15 40.20	+76 47 14.1	7.26	H	348.917 483 22	+76.787 256 16		4.53	33.94	6.74	0.56	0.54	0.63	0.64	0.63	−17	− 8	+22	+ 6	− 6	+ 0	− 5	+ 7	− 8	−23							0	−1.45
*114834	23 15 40.16	+01 18 30.2	6.76	H	348.917 323 52	+01.308 377 37		22.51	188.89	−51.24	0.94	0.75	1.68	1.82	1.43	+46	+ 6	− 7	+ 9	+14	+72	+29	+23	+65	+64							14	2.48
114835	23 15 41.06	+24 25 20.8	7.79	H	348.921 064 53	+24.422 446 77		3.84	−6.93	−40.36	0.62	0.61	0.89	0.68	0.61	+42	+ 7	+ 5	+12	+ 2	− 5	+ 5	−11	+18	+45							0	0.86
114836	23 15 41.30	+50 44 15.1	8.60	H	348.922 086 27	+50.737 514 89		3.43	5.75	−3.37	0.58	0.71	0.91	0.69	0.78	−27	− 6	+25	+ 6	+10	+ 0	+10	− 2	+ 7	−18							0	0.98
114837	23 15 41.37	−42 41 25.9	9.89	H	348.922 390 58	−42.690 532 76		10.09	45.96	−5.75	1.17	0.98	1.48	1.17	1.10	+16	− 3	−18	− 7	− 5	+20	− 2	−11	+22	+25							0	−0.05
114838	23 15 41.57	+31 40 31.8	7.61	H	348.923 193 32	+31.675 508 59		10.83	144.95	38.12	0.61	0.59	0.89	0.61	0.53	+23	+33	+12	+15	− 2	−13	+ 8	−24	+26	+16							0	−1.31
114839 H	23 15 41.86	−67 10 19.7	8.15	H	348.924 424 99	−67.172 125 13	A	2.81	32.87	−30.39	1.10	1.06	1.26	1.22	1.16	−22	+13	−12	+12	+10	+11	+13	− 9	−15	−16							2	1.03
114840	23 15 42.22	+58 02 35.7	8.19	H	348.925 934 95	+58.043 252 80		0.67	−0.55	−5.16	0.68	0.69	0.86	0.82	0.84	−29	+29	+ 6	− 5	+20	+ 1	+21	−29	+ 9	−32							0	0.46
114841	23 15 42.82	−27 10 42.1	8.75	H	348.928 407 71	−27.178 351 91		5.14	−10.41	−2.70	0.83	0.71	1.01	1.01	0.89	+37	− 6	+ 5	− 3	+19	+ 5	+20	+ 2	− 7	+42							0	0.18
114842	23 15 44.63	−29 50 51.0	6.52	H	348.935 955 91	−29.847 494 76		9.68	145.32	−23.12	0.76	0.58	0.90	0.92	0.77	+28	−16	−27	−25	+ 3	+15	+ 2	− 6	+23	+39							0	−0.68
114843	23 15 44.84	+64 23 28.8	9.12	H	348.936 844 82	+64.391 334 94		3.05	3.04	−2.15	0.78	0.80	0.94	1.02	1.03	−24	+ 0	+11	+22	− 6	− 2	−14	−12	+ 9	−46							1	0.12
114844	23 15 46.28	+28 14 52.5	6.51	H	348.942 840 91	+28.247 904 61		3.41	14.55	−2.76	0.56	0.51	0.76	0.67	0.48	+25	− 4	+ 7	+ 9	+ 1	−19	+ 2	−23	− 4	+27							2	0.61
114845	23 15 46.76	−27 48 41.8	9.76	H	348.944 834 63	−27.811 622 17		6.92	−37.03	−42.19	1.17	0.91	1.36	1.37	1.11	+30	−13	− 7	− 3	+18	+ 7	+20	− 3	− 7	+21							0	0.20
114846	23 15 46.83	+27 37 46.8	8.25	H	348.945 125 40	+27.629 655 52		2.34	−27.49	−30.16	0.74	0.73	1.04	0.75	0.70	+42	+25	+30	+20	+ 0	−19	+ 8	− 4	+ 7	+37							4	0.78
114847	23 15 47.08	−42 35 15.5	9.27	H	348.946 147 36	−42.587 636 32		1.66	9.26	−22.82	1.08	0.86	1.30	1.11	0.97	+13	+ 1	−18	−18	− 6	+14	− 4	−11	+20	+21							0	0.09
114848	23 15 47.81	−37 13 48.5	11.64 G		348.949 213 27	−37.230 144 59		11.42	256.46	−54.73	1.85	2.08	2.79	2.16	2.35	+42	− 8	−18	+ 7	−24	+34	−23	−37	+30	+44							2	0.15
114849	23 15 48.77	+02 59 26.7	9.07	H	348.953 227 38	+02.990 763 27		2.91	17.47	−0.80	1.25	0.97	1.43	1.72	1.31	+38	− 5	−23	+15	+13	+18	+19	+21	+10	+15							0	0.49
114850	23 15 49.33	+42 34 44.4	8.31 2 H		348.955 562 12	+42.579 013 60		2.24	3.63	−4.88	0.58	0.77	1.18	0.64	0.75	− 5	+17	− 1	+ 2	+11	− 5	+18	−21	+39	+ 8							6	−0.20
114851	23 15 49.56	−58 04 57.2	7.97	G	348.956 518 66	−58.082 558 00		11.68	225.82	−73.59	0.50	0.57	0.94	0.57	0.64	−33	− 5	+ 5	+13	+ 5	+21	+ 6	−14	−21	−32							0	−0.24
114852	23 15 50.04	−00 02 26.4	10.03 H		348.958 503 97	−00.040 678 63		3.48	11.24	−32.08	1.45	1.10	1.67	2.18	1.56	+27	+ 9	+ 7	+22	+ 5	+17	+ 1	+ 1	+27	+ 4							0	−1.14
114853	23 15 51.62	+56 40 34.2	7.86	H	348.965 089 85	+56.676 155 60	A	3.56	17.87	1.52	0.93	1.03	1.18	1.14	1.02	−31	+ 9	+17	+ 2	+15	+20	+ 9	−15	− 6	−37							1	1.85
114854	23 15 52.57	−13 11 02.0	7.28	G	348.969 035 39	−13.183 892 95		14.17	75.62	−16.30	0.90	0.63	0.96	1.29	0.78	+ 4	+ 1	− 2	− 4	+ 7	+11	+ 9	+ 8	+27	−20							0	−0.84
114855	23 15 53.28	−09 05 15.7	4.24	H	348.971 987 28	−09.087 695 54		21.97	368.56	−17.02	0.81	0.58	0.89	1.44	0.74	+ 4	+ 6	−26	+13	−10	+36	+ 0	+17	+ 0	−27							0	0.04
114856	23 15 53.82	+34 41 16.6	7.98	H	348.974 260 73	+34.687 933 12		11.99	−13.89	−7.02	0.79	0.71	0.99	0.87	0.70	+34	+31	+ 8	+34	+17	+ 7	+26	− 8	+25	+46							2	2.14
114857 H	23 15 53.94	−73 52 33.0	8.69	H	348.974 739 61	−73.875 833 26	A	0.98	23.18	−3.37	1.14	1.11	1.30	1.19	0.97	−19	+ 4	−29	−18	+ 0	−13	− 3	−12	+ 0	−13							1	0.76
114858	23 15 54.94	−10 22 04.0	9.23	H	348.978 905 58	−10.367 772 69		3.25	21.50	−22.99	1.38	1.18	1.66	2.02	1.73	+40	− 8	−26	+31	+11	+29	+18	+20	+21	+42							0	−0.73
114859 H	23 15 55.41	−81 22 22.2	9.96	H	348.980 884 23	−81.372 844 02	A	45.21	504.34	116.72	2.09	1.74	2.04	2.31	1.80	− 2	− 2	−11	+19	+ 1	− 2	+ 3	−16	+13	+ 3							1	1.23
114860	23 15 56.75	−06 53 14.1	8.74	H	348.986 454 17	−06.887 239 34		4.03	−0.98	−0.03	1.29	0.92	1.41	2.01	0.97	− 1	+33	−32	+23	−14	+27	−16	+ 0	−13	−41							4	−0.11
114861 H	23 15 57.32	−68 30 11.1	9.60	H	348.988 852 78	−68.503 083 66	*	5.01	−59.89	−24.42	0.89	1.04	1.25	0.97	1.27	−11	+ 5	−22	− 4	+22	+ 3	+22	+13	− 6	+11							1	0.54
114862	23 15 57.56	+33 03 59.6	8.44	H	348.989 824 51	+33.066 554 49		9.03	11.39	−13.94	0.87	0.67	1.13	1.04	0.65	+ 9	+ 8	+16	+17	+15	− 1	+15	−15	+33	+11							0	0.86
114863	23 15 57.83	+24 46 15.4	6.57	H	348.990 943 64	+24.770 940 06		23.25	95.33	2.03	0.52	0.54	0.75	0.58	0.54	+39	+ 8	+ 7	+15	− 1	−13	+ 2	−11	+13	+38							0	0.60
114864	23 15 58.31	−01 25 26.0	6.93	G	348.992 963 94	−01.423 878 23		2.92	26.40	−4.84	0.76	0.63	0.89	0.98	0.74	+38	− 3	+ 3	−19	+ 0	+21	− 3	−22	+17	+ 6							0	0.44
114865	23 15 58.40	+00 40 11.5	9.51	G	348.993 319 42	+00.669 872 36		8.20	26.51	19.81	1.40	1.04	2.09	2.13	1.83	+31	+19	−10	− 6	+ 7	−10	+18	− 6	+65	−11							0	0.31
114866	23 15 58.89	−35 43 03.6	8.53	H	348.995 394 07	−35.717 671 84		7.32	18.29	25.94	1.00	0.88	1.23	1.09	0.91	+17	+ 8	−28	−38	− 8	+ 5	− 5	−26	+19	+17							0	0.41
114867 H	23 15 59.95	−33 08 52.4	8.82	H	348.999 799 41	−33.147 900 27	A	3.25	13.00	−11.75	2.11	1.67	2.10	2.30	2.05	+ 2	− 6	−12	−23	+12	+17	+14	+ 6	−11	+ 0							0	0.33
114868	23 16 00.75	+35 23 59.4	6.87	H	349.003 114 75	+35.399 825 72		13.62	−38.24	−57.33	0.66	0.54	0.87	0.73	0.56	+19	+32	+ 3	+21	+17	+27	+25	−13	+26	+37							0	0.27
114869	23 16 02.36	−49 50 53.8	10.04 G		349.009 834 40	−49.848 266 91		1.57	−5.14	−8.37	0.80	1.21	1.47	1.00	1.49	+14	− 7	− 6	−12	+ 1	+16	− 1	+37	+18	+20							0	0.57
114870	23 16 02.91	+11 49 27.0	9.07	H	349.012 114 12	+11.824 159 41		5.64	21.66	−19.91	1.17	0.94	1.23	1.49	1.25	+16	+ 2	−20	−29	+24	−16	+27	+27	+13	+ 5							0	0.77
114871	23 16 03.86	−39 16 05.8	8.37	H	349.016 086 11	−39.268 271 30		3.66	3.51	3.92	0.75	0.80	1.08	0.94	1.01	+32	−14	−28	+11	−12	+24	− 7	−10	+24	+43							0	0.15
114872	23 16 04.03	+28 13 38.4	7.96	H	349.016 811 98	+28.227 342 50		4.45	12.44	−1.91	0.73	0.63	0.95	0.88	0.59	+25	− 5	+10	+ 6	+ 3	−15	+ 3	−20	+ 2	+31							0	0.38
114873	23 16 04.21	−35 40 59.4	7.91	H	349.017 540 97	−35.683 152 97		2.76	13.05	−0.70	0.94	0.76	1.10	1.06	0.82	+11	+ 9	−25	−31	−14	+10	− 9	−31	+20	+12							0	1.15
114874	23 16 04.45	−51 52 19.4	7.07 2 H		349.018 546 25	−51.872 044 27		3.00	−16.67	−2.44	0.61	0.54	0.90	0.69	0.53	−14	− 6	− 9	−16	− 8	+ 6	− 8	−30	+11	−36							1	0.70
114875	23 16 05.96	+44 56 06.2	9.60	H	349.024 845 76	+44.935 043 19		3.45	0.52	−1.25	0.94	1.04	1.52	1.12	1.27	+ 0	+ 7	+ 6	+ 4	+ 3	− 6	+ 9	−11	+13	+28							2	−1.28
114876	23 16 06.91	−62 49 26.1	9.37	H	349.028 782 47	−62.823 915 21		3.85	−12.41	3.57	0.75	0.84	1.16	0.82	0.79	− 2	−10	−30	− 4	− 1	+ 4	+ 1	− 2	− 7	+ 2							0	2.32
114877	23 16 07.95	+18 15 27.7	7.56	H	349.033 110 00	+18.257 687 03		3.98	27.43	−37.57	0.87	0.72	1.08	0.90	0.86	+ 8	+10	−33	+17	−12	−16	−16	−28	+41	+ 1							0	0.42
114878	23 16 09.14	−37 07 20.8	8.02	G	349.038 069 14	−37.122 451 55		13.12	93.70	−77.87	0.73	0.83	1.25	0.87	0.95	+39	+ 0	−15	+18	−23	+47	−18	−29	+36	+49							2	1.76
114879	23 16 09.35	−69 54 16.4	8.24 1 H		349.038 957 20	−69.904 550 99		7.60	−11.03	−11.30	0.58	0.59	0.76	0.73	0.71	− 4	+ 2	−22	− 3	− 6	− 4	+ 6	+ 4	+ 4	− 6							0	0.72
114880	23 16 10.27	−59 46 50.4	7.88	H	349.042 773 71	−59.780 679 20		15.90	−96.29	−14.07	0.53	0.56	0.89	0.61	0.57	−20	+ 8	−30	− 9	+ 6	+ 2	+ 9	−24	+ 5	− 4							0	−0.27
114881	23 16 12.49	+21 03 20.9	8.19 1 H		349.052 034 54	+21.055 792 46		0.84	−1.49	−1.29	0.83	0.61	1.07	0.92	0.71	+39	− 6	− 5	−31	+ 4	+26	+ 1	−10	+29	+54							0	0.49
114882	23 16 12.94	−28 22 58.5	9.31	G	349.053 919 80	−28.382 907 96		10.45	90.90	−163.11	1.26	1.25	1.49	1.86	1.48	+33	−31	−30	−45	+ 2	+31	+ 1	−35	+22	+37							0	0.76
114883	23 16 13.98	+78 09 01.8	7.39	H	349.058 258 48	+78.150 487 93		10.00	−14.99	−9.62	0.51	0.52	0.59	0.61	0.62	− 4	− 8	+21	+ 3	+10	+ 2	+ 7	−13	+ 4	−20							0	1.01
114884	23 16 16.74	−80 30 45.9	8.24 G		349.069 740 63	−80.512 754 45		8.98	−16.78	62.25	0.64	0.57	0.72	0.76	0.67	− 3	− 4	− 5	+22	− 1	+ 5	+ 0	− 8	+ 7	− 0							0	2.05
*114885 H	23 16 17.64	−44 32 56.7	9.22	G	349.073 517 34	−44.549 089 22	A	31.26	493.66	137.42	1.78	1.69	1.98	1.80	1.63	+30	+ 4	− 3	+17	+ 3	+ 6	+ 3	+ 3	+17	+21							1	−0.54
*114886	23 16 17.91	+30 40 12.0	8.07	H	349.074 642 83	+30.669 988 99		41.33	359.24	89.82	0.66	0.61	0.97	0.76	0.57	+23	+21	+16	+25	+11	−18	+17	−10	+26	+16							0	−0.89
*114887	23 16 17.91	−40 39 44.5	8.48	H	349.074 628 51	−40.662 348 30		4.56	61.19	27.54	0.82	0.79	1.13	0.92	0.89	+21	−10	−30	+ 7	−22	+19	−18	−29	+24	+28							2	−0.74
*114888	23 16 18.09	+37 28 38.4	8.41	H	349.075 394 68	+37.477 337 25		2.01	−41.07	−61.26	0.97	0.59	1.23	0.97	0.69	−25	+42	−16	−17	+ 1	+18	+20	−44	+30	+11							0	−1.74
*114889	23 16 17.04	−87 57 37.9	8.24 2 H		349.070 994 52	−87.960 520 53		0.57	8.31	−4.02	0.68	0.58	0.74	0.80	0.62	− 1	−17	− 4	− 2	+16	+16	+18	+ 5	−22	− 3							1	0.99
114890	23 16 18.98	+50 01 40.6	9.17	H	349.079 092 81	+50.027 938 09		2.48	−0.73	−2.65	0.68	0.73	1.04	0.80	0.81	−30	− 6	+26	+24	− 4	− 6	+ 4	+27	+14	− 8							0	−0.04
114891	23 16 19.52	+06 35 20.4	9.36 2 H		349.081 341 75	+06.589 001 16		2.06	13.50	−9.55	1.36	0.93	1.69	1.56	1.33	+26	+ 6	−10	−12	− 4	+28	+ 3	−12	+50	+22							0	−0.68
114892	23 16 19.88	+50 29 16.5	7.56	H	349.082 813 53	+50.487 928 69		6.09	43.36	4.78	0.47	0.54	0.73	0.52	0.60	−33	− 6	+30	+ 0	+ 6	+ 5	+ 4	+ 9	− 1	−26							2	0.40
114893	23 16 19.98	+17 50 33.0	8.45	G	349.083 229 59	+17.842 498 31		11.75	18

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
114801	10.078	0.034	9.275	0.027	*	0.711	0.033	T	0.77	0.03	L *	9.1244	0.0024	0.020	84	*	9.09	9.18		D	23153−3543	I 1	2 C A	AB	282	0.932	0.006	0.16	0.03	S
114802	7.497	0.006	7.296	0.006		0.179	0.002	G	0.18	0.02	A	7.3389	0.0011	0.009	91		7.32	7.36		C			1							S
114803	8.784	0.013	8.362	0.013		0.399	0.017	T	0.46	0.02	L	8.4085	0.0018	0.013	84		8.38	8.44		C			1							S
114804	7.797	0.010	7.563	0.011		0.218	0.015	T	0.24	0.02	L	7.6144	0.0013	0.010	55		7.59	7.64					1							S
114805	9.345	0.021	8.024	0.013		1.093	0.013	G	1.05	0.01	H	8.0905	0.0019	0.012	56		8.07	8.12		C			1							S
114806	8.359	0.008	8.011	0.009		0.344	0.003	G	0.40	0.00	H	8.0619	0.0010	0.011	141		8.04	8.08		C			1							S
114807	9.455	0.016	8.376	0.011		0.934	0.015	T	0.93	0.01	L	8.4317	0.0014	0.016	112		8.40	8.45		C			1							S
114808	11.014	0.070	10.193	0.053	A						T *	9.9120	0.0030	0.025	68	*	9.86	9.97		D	23154−4704	I 1	2 C A	AB	218	1.400	0.012	0.12	0.03	
114809	7.858	0.007	6.899	0.006		0.850	0.015	G	0.86	0.01	H	6.9645	0.0007	0.007	107		6.95	6.98					1							S
114810	6.913	0.003	6.600	0.004		0.290	0.009	G	0.33	0.01	H	6.6455	0.0011	0.013	213		6.63	6.67		M			1							S
114811	9.602	0.017	8.982	0.015		0.577	0.020	T	0.65	0.02	L	9.0375	0.0017	0.020	108		9.01	9.06					1							
114812	9.191	0.016	7.876	0.010		1.117	0.015	T	1.08	0.02	L	7.9192	0.0012	0.011	87		7.90	7.94		C			1							S
114813	9.221	0.018	8.713	0.018	*	0.470	0.015	G	0.54	0.02	H *	9.0492	0.0016	0.020	135	*	9.01	9.09		D	23154−7432	I 1	2 C A	AB	194	3.192	0.004	0.84	0.02	
114814	8.806	0.012	8.211	0.011		0.555	0.012	T	0.63	0.01	L	8.2558	0.0016	0.015	103		8.23	8.28		C			1							S
114815	10.441	0.036	9.762	0.029		0.802	0.010	G	0.83	0.01	H	9.8113	0.0078	0.059	120		9.73	9.91	1.30	P 1 A			1							G
114816	7.138	0.004	7.167	0.006		−0.015	0.004	G	0.01	0.00	H	7.1737	0.0008	0.010	126		7.16	7.19					1							S
114817	9.919	0.023	8.519	0.013		1.181	0.022	T	1.14	0.02	L	8.5201	0.0039	0.029	122		8.47	8.57	15.86	P 1 A			1							
114818	10.515	0.033	10.249	0.040	*	0.253	0.049	T	0.28	0.06	L *	10.2131	0.0021	0.023	137	*	10.17	10.26		D	23155+4135	H 1	2 C A	AB	303	0.431	0.005	1.00	0.03	G
114819	9.119	0.017	8.896	0.020		0.213	0.025	T	0.24	0.03	L	8.9303	0.0020	0.019	56		8.90	8.97					1							S
114820	9.052	0.025	7.484	0.012	*	1.315	0.022	T	1.28	0.03	L *	7.5002	0.0012	0.014	194	*	7.48	7.53		U 2	23155−5942	I 1	2 C A	AB	7	3.096	0.025	3.36	0.11	S
114821	9.011	0.014	8.536	0.013		0.476	0.015	G	0.55	0.02	H	8.6007	0.0026	0.017	83		8.57	8.63					1							S
114822	5.634	0.003	5.565	0.003		0.062	0.004	T	0.07	0.00	L	5.5869	0.0008	0.006	80		5.58	5.60		C			1							S
114823						1.156	0.020	G	1.12	0.02	H	11.3454	0.0062	0.051	61		11.25	11.42					1							G
114824	10.034	0.025	8.859	0.016		1.008	0.023	T	0.98	0.02	L	8.9186	0.0028	0.020	82		8.89	8.95					1							
114825	9.725	0.023	9.399	0.026		0.309	0.032	T	0.35	0.04	L	9.4346	0.0021	0.016	98		9.40	9.46		C			1							
114826	9.687	0.017	8.344	0.010		1.139	0.015	T	1.10	0.02	L	8.3792	0.0011	0.015	136		8.36	8.41					1							
114827	11.310	0.077	10.077	0.042		1.000	0.020	G	0.98	0.02	H	10.2355	0.0044	0.028	68		10.20	10.28					1							
114828	7.909	0.007	7.868	0.009		0.043	0.011	T	0.06	0.01	L	7.8845	0.0012	0.014	121		7.87	7.92					1							S
114829	9.563	0.025	7.727	0.011		1.527	0.022	T	1.57	0.05	L	7.6754	0.0022	0.015	60		7.65	7.69					1							S
114830	9.564	0.015	9.016	0.014	A	0.584	0.100	G	0.59	0.03	L *	9.0508	0.0023	0.022	150	*	9.02	9.09			23156−6653	H 1	2 C D	AB	303	3.499	0.104	4.23	0.47	D
114831	5.854	0.004	5.578	0.003		0.263	0.005	T	0.30	0.01	L	5.6194	0.0017	0.016	103		5.59	5.65	0.28	P 1 A			1							S P
114832	10.268	0.045	9.798	0.047		0.456	0.051	T	0.53	0.05	L	9.8376	0.0038	0.023	37		9.78	9.88					1							S
114833	8.418	0.011	7.359	0.009		0.918	0.011	T	0.92	0.01	L	7.4216	0.0011	0.010	123		7.40	7.44		C			1							S
114834	7.399	0.008	6.816	0.007		0.537	0.004	G	0.58	0.03	C	6.8686	0.0006	0.006	66		6.86	6.88		D			1							S
114835	9.142	0.012	7.913	0.008		1.050	0.011	T	1.02	0.01	L	7.9602	0.0009	0.011	129		7.94	7.98		C			1							S
114836	8.804	0.010	8.612	0.011		0.184	0.014	T	0.20	0.02	L	8.6669	0.0016	0.020	157		8.64	8.71		C			1							
114837	10.444	0.031	9.960	0.031		0.581	0.005	G	0.65	0.01	H	10.0107	0.0038	0.023	93		9.98	10.05		C			1							
114838	8.239	0.010	7.664	0.010		0.537	0.013	T	0.61	0.01	L	7.7229	0.0011	0.011	93		7.70	7.74		C			1							S
114839	9.568	0.030	8.282	0.015	*	1.094	0.027	T	1.06	0.03	L *	8.3233	0.0021	0.021	145	*	8.30	8.36		D	23157−6710	I 1	2 C A	AB	250	8.545	0.021	2.95	0.10	
114840	10.406	0.035	8.375	0.012		1.682	0.029	T	1.71	0.03	L	8.2959	0.0016	0.016	115		8.27	8.32					1							
114841	9.016	0.013	8.773	0.015		0.211	0.001	G	0.23	0.00	H	8.8116	0.0018	0.014	101		8.79	8.83					1							S
114842	7.888	0.008	6.643	0.005		1.064	0.014	G	1.10	0.06	F	6.6893	0.0014	0.008	80		6.68	6.70					1							S
114843	9.231	0.014	9.119	0.017		0.109	0.021	T	0.12	0.02	L	9.1636	0.0025	0.019	116		9.13	9.19					1							
114844	7.545	0.006	6.601	0.005		0.833	0.006	T	0.85	0.00	L	6.6604	0.0009	0.006	86		6.65	6.67		C			1							S
114845	10.401	0.034	9.831	0.032		0.537	0.035	T	0.61	0.04	L	9.8709	0.0020	0.020	94		9.83	9.91		D	23158−2749	I 1	1							
114846	8.524	0.010	8.273	0.011		0.239	0.014	T	0.27	0.02	L	8.3212	0.0014	0.012	95		8.29	8.35		C			1							S
114847	10.477	0.032	9.376	0.021		0.950	0.030	T	0.94	0.02	L	9.4262	0.0024	0.019	91		9.40	9.46		C			1							
114848						1.213	0.008	G	1.36	0.01	I	11.7721	0.0045	0.044	113		11.69	11.86					1							G
114849	11.057	0.102	9.270	0.034		1.160	0.040	G	1.12	0.04	R	9.2346	0.0021	0.023	64		9.19	9.28					1							
114850	10.582	0.028	8.568	0.010		1.669	0.024	T	1.69	0.03	L	8.4121	0.0035	0.039	160		8.35	8.46		U 2			1 S							
114851	9.257	0.014	8.068	0.009		1.007	0.002	G	1.05	0.00	I	8.1184	0.0015	0.018	217		8.09	8.15					1							S
114852	10.722	0.062	10.116	0.057		0.664	0.020	G	0.73	0.02	H	10.1674	0.0038	0.025	58		10.11	10.20		C			1							
114853	7.857	0.007	7.849	0.010	A	0.012	0.011	T	0.03	0.01	L	7.8765	0.0069	0.016	124	A	7.85	7.90			23159+5641	I 1	2 C A	AB	247	12.871	0.023	3.16	0.13	S
114854	7.747	0.008	7.329	0.007		0.433	0.015	G	0.50	0.02	H	7.3717	0.0019	0.009	62		7.36	7.39		C			1							S
114855	5.658	0.004	4.362	0.003		1.107	0.005	G	1.06	0.02	A	4.4090	0.0009	0.005	49		4.40	4.42		C	23159−0905	I 1	1							S
114856	8.620	0.012	8.034	0.011		0.547	0.014	T	0.62	0.01	L	8.1020	0.0018	0.012	94		8.08	8.13					1							S
114857	9.887	0.019	8.859	0.013	A	0.800	0.495	G	0.86	0.03	L *	8.8454	0.0013	0.018	140	*	8.81	8.88		D	23159−7353	I 1	2 C A	AB	281	3.716	0.019	2.74	0.08	
114858	10.848	0.075	9.373	0.036		1.242	0.065	T	1.20	0.06	L	9.3909	0.0031	0.016	52		9.37	9.43					1							
114859	12.011	0.124	10.182	0.037	A	1.050	0.020	G	1.10	0.03	I *	10.0988	0.0034	0.026	129	*	10.04	10.14		C	23160−8122	H 1	2 C A	AB	329	2.014	0.020	2.22	0.10	
114860	9.851	0.032	8.873	0.023		0.858	0.029	T	0.87	0.02	L	8.8935	0.0048	0.022	47		8.86	8.93					1							
114861	10.216	0.024	9.638	0.022	*	0.543	0.024	T	0.62	0.02	L *	9.7154	0.0032	0.024	143	*	9.67	9.77		C	23160−6830	H 1	2 C S A	AB	314	0.188	0.010	0.37	0.31	
114862	8.932	0.015	8.480	0.014		0.453	0.015	G	0.52	0.02	H	8.5362	0.0015	0.013	77		8.52	8.56					1							
114863	7.042	0.005	6.617	0.004		0.415	0.005	T	0.48	0.01	L	6.6618	0.0007	0.006	116		6.65	6.67		C			1							S
114864	8.612	0.014	7.078	0.008		1.301	0.015	G	1.26	0.02	H	7.0868	0.0011	0.009	71		7.07	7.11		C			1							S
114865	10.040	0.040	9.508	0.039		0.513	0.002	G	0.59	0.00	H	9.6142	0.0028	0.020	66		9.55	9.65		C			1							
114866	9.132	0.015	8.604	0.014		0.504	0.015	T	0.58	0.02	L	8.6459	0.0018	0.014	76		8.62	8.67		C			1							S
114867	9.251	0.016	8.850	0.016	A	0.500	0.495	G	0.36	0.05	L *	8.8976	0.0035	0.025	79	*	8.86	8.96			23160−3309	I 1	2 C B	AB	19	1.727	0.076	3.72	0.31	S
114868	7.204	0.007	6.901	0.005		0.288	0.008	T	0.33	0.01	L	6.9453	0.0011	0.008	85		6.93	6.96		C			1							S
114869	10.230	0.022	10.009	0.027		0.136	0.006	G	0.15	0.01	H	10.0974	0.0025	0.030	157		10.04	10.15		C			1 S							
114870	9.456	0.022	9.108	0.024		0.330	0.030	T	0.38	0.04	L	9.1541	0.0012	0.014	54		9.12	9.18		D			1							
114871	8.471	0.009	8.391	0.011		0.100	0.015	G	0.11	0.02	H	8.4055	0.0017	0.017	101		8.37	8.43					1							S
114872	9.394	0.018	8.075	0.011		1.120	0.017	T	1.08	0.02	L	8.1324	0.0013	0.011	85		8.11	8.16		C			1 S							
114873	9.458	0.019	8.045	0.011		1.194	0.017	T	1.15	0.01	L	8.0720	0.0016	0.012	80		8.05	8.10		C			1							S
114874	9.191	0.012	7.242	0.005		1.652	0.011	T	1.72	0.04	O	7.1686	0.0020	0.022	172		7.13	7.21		U 2			1							S
114875	9.875	0.023	9.606	0.028		0.256	0.034	T	0.29	0.04	L	9.6711	0.0034	0.029	120		9.61	9.73		C			1 S							
114876	9.808	0.017	9.411	0.018		0.376	0.023	T	0.44	0.03	L	9.4563	0.0017	0.025	163		9.40	9.51					1							
114877	8.947	0.019	7.674	0.012		1.010	0.015	G	0.99	0.01	H	7.7249	0.0013	0.007	52		7.71	7.74					1							S
114878	8.659	0.010	8.059	0.009		0.551	0.015	G	0.62	0.01	H	8.1409	0.0013	0.013	112		8.12	8.16		C			1							S
114879	8.657	0.009	8.273	0.009		0.375	0.011	T	0.44	0.01	L	8.3335	0.0015	0.015	150		8.30	8.36		M			1							S
114880	8.458	0.009	7.936	0.008		0.513	0.007	G	0.59	0.01	H	7.9903	0.0012	0.015	196		7.96	8.02		C			1							S
114881	10.485	0.029	8.438	0.010		1.695	0.024	T	1.72	0.03	L	8.2967	0.0019	0.022	146		8.25	8.33		U			1 S							
114882	9.922	0.024	9.385	0.023		0.531	0.004	G	0.60	0.00	H	9.4275	0.0023	0.019	91		9.40	9.47		C			1 G							
114883	7.712	0.006	7.419	0.006		0.308	0.015	G	0.35	0.02	H	7.4650	0.0009	0.009	125		7.45	7.48		C			1							S
114884	8.750	0.011	8.273	0.010		0.485	0.015	G	0.56	0.02	H	8.3381	0.0014	0.015	134		8.31	8.36		C			1 G							S
114885	10.497	0.035	9.353	0.022	A	1.007	0.002	G	1.05	0.00	I *	9.3401	0.0030	0.024	86	*	9.31	9.38		D	23163−4433	I 1	2 C A	AB	236	1.376	0.029	2.00	0.09	
114886	9.210	0.016	8.164	0.011		0.871	0.016	G	0.88	0.01	H	8.2166	0.0017	0.013	83		8.20	8.24		C			1							
114887	9.815	0.019	8.618	0.012		1.025	0.018	T	1.00	0.01	L	8.6509	0.0015	0.014	104		8.62	8.68		C			1							
114888	9.874	0.021	8.530	0.012		1.140	0.019	T	1.10	0.02	L	8.5788	0.0015	0.015	119		8.55	8.61		C			1							
114889	10.501	0.030	8.462	0.011		1.726	0.026	T	2.41	0.06	O	8.2753	0.0055	0.049	136		8.20	8.34		U 2	23165−8758	I 1	1							P
114890	9.482	0.014	9.183	0.015		0.284	0.019	T	0.32	0.02	L	9.2423	0.0014	0.021	174		9.20	9.28					1							
114891	11.541	0.109	9.655	0.032		1.600	0.094	T	2.11	0.21	K	9.4292	0.0042	0.036	87		9.38	9.49		U			1							
114892	7.707	0.006	7.575	0.006		0.127	0.008	T	0.14	0.01	L	7.6062	0.0012	0.013	166		7.58	7.63					1							S
114893	9.113	0.018	8.514	0.016		0.579	0.015	G	0.65	0.01	H	8.5625	0.0015	0.013	63		8.53	8.59		D			1							S
114894	10.337	0.021	9.852	0.021		0.456	0.027	T	0.53	0.03	L	9.9277	0.0023	0.027	217		9.87	9.97					1							G
114895	10.130	0.030	9.221	0.022		0.807	0.028	T	0.83	0.02	L	9.3060	0.0022	0.017	89		9.28	9.34		C			1							
114896	10.944	0.054	9.615	0.028		1.124	0.049	T	1.09	0.05	L	9.7523	0.0030	0.025	86		9.70	9.80		C			1							
114897	9.779	0.022	8.323	0.012		1.227	0.020	T	1.19	0.02	L	8.3735	0.0018	0.015	93		8.35	8.40		C			1							
114898	7.929	0.007	7.442	0.008	*	0.473	0.006	G	0.54	0.01	H *	7.4912	0.0013	0.011	122	*	7.47	7.51		D	23164+6407	I 1	2 C A	AB	36	0.270	0.003	0.08	0.05	S
114899	7.442	0.005	6.975	0.005		0.446	0.004	G	0.52	0.00	H	7.0298	0.0009	0.010	155		7.01	7.05		C			1							S
114900	9.524	0.015	7.605	0.007		1.593	0.013	T	1.61	0.01	L	7.5255	0.0012	0.013	165		7.50	7.55					1							S

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA		Dec	V		α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ		α*		α*		δ		π		$\mu_{\alpha*}$		μ_δ										F1	F2
	h m s		±° ′ ″	mag		deg		deg	mas	mas/yr		mas		mas	mas/yr		α*		α*		δ		π		$\mu_{\alpha*}$		μ_δ										%	
1 2	3		4	5	6 7	8		9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28											29	30
114901	23 16 26.12	−59 01 07.6	10.38	H	349.108 828 30	−59.018 771 23		1.54	15.42	−3.83	1.01	1.28	1.85	1.29	1.29	−21	−	1	−	8	+	8	+10	+12	+11	−21	−	2	−18									1	1.28
114902	23 16 26.43	+08 02 13.9	8.81	H	349.110 133 62	+08.037 184 47		2.84	21.48	−9.17	1.24	0.76	1.35	1.78	1.19	+28	−10	−18	−43	+	0	−	8	+	9	−18	+41	−23									0	1.28
114903	23 16 26.78	−45 22 39.9	9.57	H	349.111 564 94	−45.377 755 80		6.49	13.23	−31.16	1.23	1.04	1.54	1.53	1.09	+16	−	3	−16	+40	+	5	+	2	+	3	+14	−25	+	7								0	0.93
114904 H	23 16 27.05	+61 57 46.6	6.53	2 H	349.112 710 50	+61.962 951 36	*	1.87	0.58	−1.41	0.48	0.49	0.59	0.61	0.57	−18	+	6	+12	+20	+	3	−	4	+	3	−	6	−11	−12								1	2.07
114905	23 16 27.27	−08 09 31.9	8.76	H	349.113 616 72	−08.158 862 97		6.92	5.53	−48.33	1.16	0.93	1.32	1.30	0.97	+24	−25	−20	−21	+	0	+32	+	4	−	9	+13	+	9									0	1.08
114906	23 16 28.07	−10 12 41.2	7.98	H	349.116 959 52	−10.211 440 38		13.56	99.77	−84.78	1.05	0.91	1.33	1.42	1.25	+28	+19	−30	+28	+11	+33	+26	+27	+21	+44													0	0.95
114907	23 16 29.48	−23 13 31.7	7.11	H	349.122 824 43	−23.225 480 09		13.18	−41.71	−27.66	0.80	0.52	0.84	0.93	0.63	+21	−23	−	4	+	9	+	8	+11	+	3	−	8	+15	+11								0	1.03
114908	23 16 30.40	−27 04 50.3	7.36	2 H	349.126 677 06	−27.080 650 31		1.13	20.18	0.91	0.74	0.61	0.91	0.91	0.74	+34	−	4	−15	−	8	+30	−	1	+29	+13	+	9	+35								0	1.04
114909	23 16 31.14	+36 50 12.9	9.67	H	349.129 761 95	+36.836 915 69		2.07	1.46	−3.79	0.96	0.72	1.42	1.27	0.86	−	8	+22	−	3	−	6	+	0	+25	+11	−35	+25	+23								0	−0.78
114910	23 16 31.19	+06 59 45.8	11.94	G	349.129 969 32	+06.996 062 18		11.47	22.37	−61.90	3.04	2.11	3.81	4.55	3.30	+45	−	1	−	1	−	4	+	1	+40	−	1	−11	+25	+21								4	1.41
114911	23 16 31.87	+55 11 26.9	8.07	H	349.132 778 36	+55.190 792 71		10.78	122.45	14.69	0.58	0.58	0.74	0.66	0.63	−26	+16	+11	+26	−	8	+	1	−	6	+	5	+	9	−25								1	0.53
114912	23 16 32.33	−14 29 26.3	9.15	H	349.134 694 23	−14.490 637 47		−0.45	16.53	−33.72	1.29	1.07	1.54	1.85	1.47	+29	+	3	−	3	+20	+16	+36	+19	+28	+13	+26											0	−0.54
114913	23 16 34.06	+07 34 49.4	8.08	H	349.141 934 41	+07.580 385 70		3.97	10.34	−4.65	1.09	0.65	1.37	1.85	1.05	+42	−10	−11	−30	−	7	+44	+	3	−15	+31	−	1											4	0.10
114914 H	23 16 35.14	−01 35 11.7	7.60	H	349.146 425 05	−01.586 570 79	A	18.30	163.28	20.97	2.08	1.41	1.97	2.12	1.52	+42	−	7	+20	−16	−	4	+	8	−	8	−16	+20	+22								3	1.90
114915	23 16 35.84	+33 53 14.8	8.41	H	349.149 353 37	+33.887 438 81		2.99	−10.69	−22.35	0.85	0.79	1.10	1.01	0.79	+28	+15	−	2	+34	+16	+	8	+23	−12	+22	+41											2	1.20
114916	23 16 36.85	−24 35 54.5	8.68	H	349.153 526 65	−24.598 465 00		3.72	27.83	−2.41	1.01	0.67	1.02	1.18	0.72	+13	+	0	−	8	+11	+	4	+	5	+	3	−	1	−	2	−	3					0	−0.09
114917	23 16 37.75	−70 15 03.7	7.61	3 H	349.157 298 44	−70.251 028 47		2.54	43.60	1.87	0.52	0.58	0.71	0.59	0.58	−	5	+	2	−28	−10	+	4	−	6	+	1	+11	−	9	+	2					0	−1.07
114918	23 16 38.29	−19 57 42.6	9.04	G	349.159 561 82	−19.961 826 01		4.16	16.46	1.74	1.08	0.80	1.28	1.56	1.11	+32	−17	−32	+	2	+17	+	4	+12	−14	+27	+15											0	−1.05
114919 H	23 16 39.23	−15 33 42.7	8.98	H	349.163 448 00	−15.561 849 62	*	1.14	37.29	−0.88	2.86	2.74	2.03	2.05	2.47	+47	−	6	−38	+16	+	4	+39	+18	+12	+30	+64										4	0.28
114920	23 16 39.60	−28 41 02.7	7.13	H	349.164 998 86	−28.684 091 59		3.56	20.25	−15.60	0.82	0.63	0.93	1.00	0.88	+17	−18	−16	−44	+	7	+25	+10	−24	+22	+23											0	−0.94
114921	23 16 39.79	−44 29 20.9	5.92	G	349.165 783 99	−44.489 141 71		11.32	3.44	−9.88	0.54	0.55	0.69	0.61	0.59	+16	+	5	+	3	+17	+14	+	5	+14	+32	+	1	+13									2	0.92
114922 H	23 16 39.83	+19 37 18.7	11.17	G	349.165 964 08	+19.621 850 61	*	31.50	−179.10	−181.39	9.66	5.89	3.85	3.62	3.29	−40	+	1	−	6	−	3	+	1	−22	−	2	−	1	+31	+29					0	−1.44
114923 H	23 16 41.70	−36 35 09.9	10.40	H	349.173 747 32	−36.586 077 71	A	13.65	124.98	−102.66	6.49	8.34	4.41	4.97	5.76	+42	−	9	−	3	−45	−31	+19	−37	−64	+24	+40											15	0.89
114924	23 16 42.19	+53 12 50.6	5.58	H	349.175 809 80	+53.214 049 95		49.31	111.70	−236.29	0.40	0.42	0.58	0.43	0.44	−22	−	9	+21	−22	+	3	+15	−	2	−	7	+12	−15									0	0.47
114925 H	23 16 43.54	−75 32 03.7	9.12	H	349.181 423 94	−75.534 352 73	*	6.91	71.13	−10.27	0.83	0.83	1.04	0.98	0.93	−11	+	9	−30	−21	+10	−	9	+	7	−15	−	6	+17								0	−0.45
114926	23 16 43.99	+47 31 56.0	9.48	H	349.183 294 07	+47.532 210 76		1.42	7.22	1.65	0.65	0.79	1.25	0.76	0.93	−39	+	1	+14	−10	+15	−15	+20	−19	+17	−20											2	0.48
114927 H	23 16 44.08	+34 40 48.6	10.56	H	349.183 659 28	+34.680 174 39	*	10.53	−14.80	−113.57	1.52	1.27	1.89	1.66	1.26	+26	+29	+	7	+25	+12	+	1	+17	−17	+11	+35											0	1.66
114928	23 16 45.84	+46 49 08.9	8.53	H	349.190 988 17	+46.819 128 97		0.98	−4.77	−3.85	0.53	0.54	0.92	0.61	0.69	−28	+	9	+15	−14	−	6	−	2	−	5	−13	+12	+	1								2	1.29
114929 H	23 16 47.09	+61 47 58.0	9.06	H	349.196 219 51	+61.799 437 46	A	4.26	−10.59	−0.78	4.49	4.25	2.33	2.56	2.25	−53	+	4	+	2	−12	+	6	+	2	+	6	−16	+	0	+23							3	5.72
114930	23 16 47.88	+10 35 56.7	8.39	2 H	349.199 494 58	+10.599 083 43		3.37	23.98	−11.53	1.09	0.84	1.30	1.06	1.02	+19	+40	−	9	+	7	+12	+	3	+25	+20	+37	+27										0	−0.14
114931	23 16 48.97	+34 57 09.3	8.49	H	349.204 022 00	+34.952 595 44		4.11	−22.51	−20.04	0.88	0.75	1.13	0.96	0.80	+21	+25	+	3	+16	+16	+22	+21	−11	+12	+37											0	−0.88
114932	23 16 49.27	−61 51 39.2	9.04	G	349.205 311 40	−61.860 891 34		5.66	82.36	−30.33	0.82	0.82	1.23	1.04	0.81	−	6	−14	−20	−	5	+	3	+	4	+	4	−21	+	0	−	1					0	0.26
114933	23 16 49.69	−21 12 10.7	7.25	H	349.207 050 88	−21.202 971 93		10.84	21.00	−50.23	0.93	0.59	1.05	1.43	0.84	+39	−23	−22	+	7	+25	+21	+16	−24	+27	+21											0	0.90
114934	23 16 49.76	−29 54 27.8	8.35	H	349.207 330 19	−29.907 722 67		5.22	10.95	−22.21	0.91	0.73	1.18	1.20	1.12	+32	−25	−18	−18	−	1	+30	−	7	−	4	+39	+50										0	−0.11
114935	23 16 49.78	−30 18 51.1	9.63	H	349.207 418 63	−30.314 188 13		7.86	9.21	−35.52	1.24	1.06	1.73	1.65	1.23	+15	+	6	−51	−19	+12	−	5	+	9	−	8	+24	+30									0	1.22
114936	23 16 49.80	+40 57 18.9	8.47	H	349.207 495 95	+40.955 255 60		2.44	−12.09	−26.54	0.63	0.67	1.05	0.70	0.78	+	8	+	7	−13	+32	−18	+15	+	6	−45	+36	+40									0	1.08
114937	23 16 49.85	−41 11 40.0	6.49	H	349.207 708 82	−41.194 432 78		6.67	−26.09	15.43	0.59	0.55	0.78	0.69	0.64	+20	−20	−17	+12	−	8	+	7	−10	−15	+22	+21											0	−1.64
114938	23 16 50.60	−17 16 58.9	8.43	H	349.210 825 54	−17.283 015 18		−1.20	22.26	−8.72	1.34	1.02	1.45	1.62	1.31	+	7	+11	−37	−35	+23	+	8	+32	+19	+10	+11										0	2.18
114939	23 16 50.95	−07 43 35.3	4.93	2 H	349.212 293 68	−07.726 466 19		5.09	−18.66	−15.43	0.79	0.62	0.96	1.05	0.63	+18	−19	−31	+	0	−18	+43	−10	−	7	+19	−	5										0	2.92
114940	23 16 51.49	+57 38 52.5	7.52	H	349.214 545 74	+57.647 929 22		5.78	−7.15	−21.97	0.60	0.59	0.74	0.82	0.64	−22	+11	+24	+26	+21	+	1	+14	−15	+	4	−33										1	0.72
114941	23 16 51.81	+05 41 45.8	10.51	H	349.215 888 33	+05.696 069 22		38.08	27.01	−26.92	1.66	1.22	1.81	1.85	1.59	+34	+	2	+	1	−37	−	4	+21	+	1	−21	+20	+24									0	0.68
114942	23 16 52.24	−65 43 12.0	8.77	H	349.217 662 49	−65.719 986 25		8.17	26.21	−56.86	0.68	0.72	0.99	0.79	0.80	−	8	−	2	−	1	−	3	+	6	+	0	+	6	−	7	−21	−	3			0	0.29
114943	23 16 52.45	+51 00 53.0	9.21	G	349.218 561 82	+51.014 719 66		0.66	2.15	−1.23	0.71	0.74	1.06	0.88	0.94	−23	−	1	+17	+14	+	8	−	9	+11	−	3	−	9	−16								1	1.02
114944	23 16 53.40	+25 43 10.1	9.49	2 H	349.222 481 01	+25.719 468 59		7.72	−72.24	9.05	0.87	0.84	1.29	0.89	0.89	+32	+14	−	3	+	9	+	5	+	5	+	9	−12	+19	+39								0	−1.62
114945	23 16 55.09	−47 12 08.6	9.12	G	349.229 522 87	−47.202 402 78		9.45	113.90	70.64	1.04	1.01	1.35	1.24	1.02	+	9	−22	−27	+21	−	2	−	3	−	6	−	2	+	4	−	7					2	0.12
114946	23 16 56.66	−51 51 43.8	8.31	2 H	349.236 084 78	−51.862 177 70		2.81	8.61	−12.58	0.80	0.73	1.21	0.84	0.66	−16	−	3	−	9	−27	+	0	+17	+	2	−41	+	0	−29								0	0.82
114947	23 16 57.00	−44 23 05.7	10.61	G	349.237 481 22	−44.384 928 99		3.18	21.15	−10.13	1.27	1.40	1.73	1.34	1.50	+25	+	1	−	7	+	3	+12	+17	+15	+31	−	5	+20										0	1.09
114948	23 16 57.47	−62 00 04.1	5.64	1 H	349.239 451 38	−62.001 134 47		48.60	176.00	−26.12	0.41	0.39	0.60	0.48	0.41	−	6	−	5	−11	+	3	+	8	−	1	+	8	+	1	−10	+	3			0	−0.43
114949	23 16 57.93	+30 22 26.0	7.69	H	349.241 376 11	+30.373 893 86		4.97	−14.83	−19.20	0.61	0.56	0.84	0.73	0.50	+23	+21	+12	+15	+10	−23	+11	−17	+13	+14											0	−1.05
114950	23 16 58.47	−51 19 08.7	8.08	G	349.243 611 52	−51.319 093 26		14.19	−71.95	−117.93	0.74	0.67	1.10	0.85	0.63	−22	−	4	−10	−38	+11	+	6	+12	−46	+	8	−40									3	1.07
114951	23 16 58.60	−18 52 23.4	6.93	H	349.244 153 69	−18.873 174 72		3.19	−13.31	−9.16	0.86	0.70	0.96	0.91	0.80	+	9	−	9	−43	−	9	−	2	+14	+	2	+17	−	5	+19					0	1.12
114952	23 16 59.07	−07 09 39.2	6.71	H	349.246 105 85	−07.160 888 77		26.37	128.14	45.10	1.43	0.76	1.00	1.45	0.95	−30	−20	−19	+26	−15	+32	−	2	+	3	−	5	+	8									0	2.42
114953	23 16 59.46	+21 24 21.1	9.57	H	349.247 735 49	+21.405 860 94	B	9.87	2.54	4.97	6.92	5.50	5.49	5.35	4.13	+61	−	1	−	1	−	6	+	5	+	3	+	5	−	2	+21	+61					14	1.94
114954	23 17 00.03	−23 23 44.5	10.86	G	349.250 111 53	−23.395 705 99		47.58	308.11	−243.27	1.72	1.29	1.99	2.31	1.55	+29	−12	−	5	−	3	+	9	+	5	−	2	−32	+14	+	3							0	−0.84
114955	23 17 00.65	+21 24 39.3	8.81	H	349.252 693 00	+21.410 922 90	A	5.90	3.73	1.41	2.50	2.10	2.61	2.32	2.02	+57	+	2	−	6	−	9	+	2	+	0	+	3	−12	+22	+57							14	1.94
114956	23 17 01.75	−29 18 13.6	9.34	H	349.257 305 63	−29.303 790 82		6.41	39.67	−0.44	1.15	0.95	1.47	1.41	1.33	+37	−33	−29	−26	−	1	+33	−	1	−12	+33	+45											0	0.92
114957	23 17 02.22	+39 37 36.6	9.59	H	349.259 265 72	+39.626 832 59		3.57	19.73	5.22	1.02	0.78	1.35	1.05	0.95	−	7	+37	−11	+	3	+	7	−	5	+28	−32	+28	+28									3	0.59
114958	23 17 03.72	+63 47 21.8	8.40	G	349.265 483 08	+63.789 402 60		1.87	−1.80	−1.60	0.70	0.65	0.84	0.84	0.77	−16	+23	+18	+	4	−	4	+	6	−	6	−	2	+	1	−42					0	−0.57
114959	23 17 04.19	−10 22 15.2	8.05	H	349.267 446 04	−10.370 875 98		3.68	−20.17	−15.25	1.01	0.76	1.36	1.37	1.01	+11	+24	−14	+23	−10	+50	+	8	+	0	+48	+30										0	−0.10
114960	23 17 04.27	−05 33 01.8	10.16	H	349.267 781 78	−05.550 499 43		14.68	−150.08	−281.42	1.35	1.00	1.54	1.68	1.17	+38	+	7	+	9	−10	+10	+17	+10	−	8	+	1	−	1							0	2.24
114961	23 17 04.60	−55 33 28.2	9.95	H	349.269 167 23	−55.557 836 12		5.65	44.33	−18.15	0.98	1.00	1.63	1.11	1.01	−	5	+	2	−	8	+	5	−12	+10	−10	−	5	+	7	−	7					0	0.78
114962 H	23 17 05.34	−13 50 53.2	8.16	G	349.272 269 12	−13.848 100 55	B	12.04	−502.28	−1190.23	2.78	2.46	2.41	2.66	2.43	−	3	+	3	−25	+	6	−	4	−	1	−	4	+	0	+	7	+18			10	1.33
114963	23 17 05.62	+43 55 41.5	8.87	H	349.273 435 03	+43.928 198 83		4.70	−5.96	−6.24	0.69	0.71	1.12	0.71	0.79	−	3	+12	−	7	+35	−	3	−	3	+	6	+	4	+29	+16					0	−0.34
114964	23 17 06.19	−23 58 38.1	9.02	H	349.275 797 96	−23.977 255 15		1.93	32.92	−11.77	1.18	0.80	1.33	1.70	0.97	+20	−16	+12	+13	+22	+29	+	8	−	7	+11	−	3									0	2.78
114965	23 17 06.71	+01 13 54.0	8.54	H	349.277 973 73	+01.231 669 20		3.64	27.95	−0.58	1.10	0.80	1.40	1.60	1.10	+34	+15	−	7	−23	−	1	+39	+11	−17	+34	+18											0	0.11
114966	23 17 07.33	−34 43 34.5	10.72	G	349.280 528 52	−34.726 260 50		1.88	32.24	17.27	1.87	1.45	2.12	1.98	1.57	+15	+17	−23	−43	−	8	−12	−	9	−36	+	9	+19										2	1.01
114967	23 17 08.04	−45 40 37.3	9.08	H	349.283 517 85	−45.677 034 41		17.19	117.52	−215.86	1.06	0.97	1.39	1.37	1.01	+19	+17	+10	+	7	+	2	−14	+	3	+	6	−	3	+22								0	0.37
114968	23 17 08.38	−20 41 05.7	7.72	H	349.284 903 47	−20.684 909 53		8.24	−36.56	−13.12	0.92	0.59	1.00	1.42	0.89	+34	−16	−14	+	4	+27	+14	+21	−14	+24	+22											0	1.00
114969	23 17 08.73	−28 26 16.9	6.24	2 H	349.286 380 88	−28.438 030 72		3.58	39.09	−99.84	0.74	0.60	0.90	0.88	0.84	+33	−19	−19	−21	+12	+25	+13	−	6	+29	+45											4	1.06
114970	23 17 09.06	−18 09 56.7	7.33	H	349.287 750 00	−18.165 746 37		5.53	66.13	−34.00	0.98	0.87	1.21	1.12	0.99	+	8	+23	−43	−12	+	9	−	5	+	5	+20	+	0	+30							0	1.11
114971	23 17 09.49	+03 16 56.1	3.70	G	349.289 556 77	+03.282 245 24		24.92	760.35	17.96	0.85	0.58	0.89	1.30	0.79	+26	+	3	−19	+37	+	2	+19	+	1	+23	+	0	−	7							0	−0.42
114972	23 17 09.79	+25 01 01.1	9.71	H	349.290 778 64	+25.016 962 38		5.65	17.00	−11.86	0.95	0.97	1.47	1.05	1.16	+35	−	5	+	0	+17	+	5	−	8	+	5	+	7	+16	+38					3	−0.92
114973 H	23 17 09.95	−32 29 09.6	9.82	H	349.291 442 23	−32.485 990 51	A	1.70	46.95	−31.62	4.88	4.30	4.06	4.62	5.22	−27	−13	−	1	−20	+14	−	4	+13	−16	−14	+26									1	−0.03
114974	23 17 12.55	−38 38 58.1	9.08	G	349.302 302 03	−38.649 460 53		3.19	−9.88	3.70	0.84	0.89	1.27	1.01	1.05	+32	−12	−39	+	1	−14	+28	−	4	−26	+23	+42											0	0.92
114975	23 17 12.89	+31 43 25.4	7.93	2 H	349.303 713 95	+31.723 712 49		0.95	−1.27	12.83	0.69	0.59	0.97	0.74	0.53	+13	+26	+11	+15	+	4	−14	+11	−10	+26	+	5											2	0.06
114976	23 17 14.43	+17 26 58.2	8.60	G	349.310 123 09	+17.449 508 43		1.36	−12.46	−13.59	1.01	0.81	1.13	1.07	0.99	+11	+21	−20	−	6	+14	−12	+	7	+24	−11	+28											0	−1.57
114977	23 17 15.07	−04 26 06.7	7.60	H	349.312 771 18	−04.435 200 46		2.31	−14.11	−27.08	0.82	0.62	0.95	1.04	0.78	+43	−26	−14	+	9	+12	+	7	+	9	+	9	+12	+	7							0	−0.51
114978	23 17 15.17	+22 21 42.1	9.32	H	349.313 192 10	+22.361 685 88		−1.57	−5.96	−30.64	0.75	0.71	1.17	0.79	0.75	+46	+10	−	4	+	9	−	4	+	0	−	1	−20	+21	+48							1	0.56
114979	23 17 16.33	−40 35 33.7	9.79	H	349.318 062 20	−40.592 686 49		7.55	95.50	−65.39	1.02	0.98	1.38	1.18	1.06	+13	−	8	−24	+17	−22	+14	−20	−29	+20	+13											0	−0.31
*114980	23 17 16.83	−66 56 12.9	9.02	G	349.320 116 95	−66.936 909 13		36.87	354.39	−407.45	0.81	0.79	1.10	0.91	0.94	−10	−	9	−21	−	7	−	3	−	3	−	2	−	7	−11	+	0					0	1.24
*114981	23 17 16.59	+45 09 51.5	6.44	G	349.319 125 92	+45.164 318 17		13.53	100.63	−62.20	0.51	0.58	0.82	0.57	0.65	−	5	+20	+	4	+	8	+10	−	2	+16	−16	+10	+11									0	2.40
114982	23 17 17.77	−54 56 04.5	8.44	H	349.324 054 53	−54.934 593 43		10.88	38.91	−64.06	0.70	0.70	1.17	0.93	0.70	−	7	+13	−26	+30	−	3	+	2	+	0	−	9	+10	−	3							0	0.85
114983	23 17 18.73	+04 27 06.1	8.97	H	349.328 033 23	+04.451 699 93		9.45	17.62	10.77	1.13	0.90	1.34	1.68	1.09	+48	−11	−18	+13	+11	+26	+19	+25	−	1	−	1											0	−0.05
114984	23 17 18.86	+75 17 56.5	6.35	H	349.328 567 40	+75.299 032 67		5.19	17.81	−3.06	0.49	0.46	0.55	0.59	0.52	−26	−19	+27	−28	+	8	+14	+	8	−	3	−	9	−31									0	0.59
114985	23 17 19.16	+29 52 24.2	7.17	2 H	349.329 827 55	+29.873 382 67		1.00	7.25	−4.86	0.60	0.57	0.82	0.64	0.46	+17	+20	+	8	−	6	+16	−16	+14	−23	+10	+18											0	1.95
*114986	23 17 20.26	−66 55 05.9	8.71	G	349.334 413 22	−66.918 292 85		36.68	364.43	−418.22	0.77	0.73	1.03	0.88	0.89	−	4	−	1	−17	−	4	−	3	+	3	−	2	−	7	−	9	+	2			0	0.65
*114987	23 17 20.32	+66 30 00.3	9.95	H	349.334 684 31	+66.500 089 45		1.10	−5.78	−7.39	0.89	0.82	1.02	1.12	1.13	−	9	−21	−	4	−17	−	3	−	1	−	5	−24	+10	−	9							0	1.73
*114988	23 17 20.23	+14 41 41.9	8.27	G	349.334 300 30	+14.694 971 49		3.60	17.28	6.86	0.83	0.74	1.01	0.86	0.88	+20	+	8	−23	+	6	+	4	−13	+	1	+	1	−17	+33							0	−0.69
114989	23 17 20.69	−62 46 52.5	7.50	H	349.336 201 79	−62.781 252 97		3.80	25.29	−7.26	0.50	0.53	0.76	0.57	0.53	−	2	−12	−17	+	1	+	4	+	2	+	4	+	5	−	7	+	6			0	−0.55
114990	23 17 21.57	+64 07 16.2	8.46	2 G	349.339 881 61	+64.121 159 13		0.00	−7.50	−1.66	0.66	0.68	0.81	0.80	0.82	−19	+10	+17	+14	+	1	−11	+	1	−	1	+	5	−13								1	−0.30
114991	23 17 24.07	−79 26 00.9

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
114901	10.856	0.031	10.458	0.034		0.389	0.039	T	0.45	0.04	L	10.4649	0.0032	0.043	202		10.39	10.55					1 S							
114902	10.306	0.033	8.924	0.018		1.169	0.029	T	1.13	0.03	L	8.9773	0.0019	0.018	89		8.94	9.00					1							
114903	10.068	0.030	9.596	0.031		0.457	0.034	T	0.53	0.04	L	9.6745	0.0023	0.027	71		9.63	9.74		C			1							
114904	6.746	0.005	6.567	0.004	*	0.164	0.006	T	0.18	0.01	L *	6.5911	0.0015	0.019	120	*	6.58	6.66	2.39	P 1 A	23165+6158	H 1	2 C S B	AB	357	0.119	0.030	2.59	0.89	S P
114905	9.350	0.030	8.857	0.029		0.464	0.038	T	0.53	0.04	L	8.8614	0.0026	0.017	44		8.83	8.90					1							S
114906	8.593	0.015	8.046	0.014		0.529	0.015	G	0.60	0.02	H	8.0934	0.0018	0.011	52		8.07	8.11		C			1							S
114907	7.481	0.006	7.131	0.006		0.312	0.015	G	0.36	0.02	H	7.1867	0.0010	0.012	86		7.18	7.21		C			1							S
114908	9.526	0.018	7.565	0.008		1.626	0.016	T	1.65	0.02	L	7.4678	0.0039	0.030	114		7.43	7.51		U 2			1							S
114909	10.036	0.022	9.684	0.024		0.334	0.030	T	0.39	0.04	L	9.7511	0.0023	0.026	120		9.72	9.80		C			1							
114910						1.148	0.020	G	1.11	0.02	K	12.0977	0.0064	0.064	97		11.65	12.18					1							G
114911	8.535	0.011	8.123	0.011		0.395	0.012	G	0.46	0.01	H	8.1610	0.0012	0.010	121		8.14	8.18		C			1							
114912	11.124	0.088	9.289	0.031		1.526	0.074	T	1.57	0.11	L	9.2714	0.0036	0.021	47		9.24	9.31					1 S							
114913	9.759	0.023	8.223	0.012		1.290	0.020	T	1.25	0.02	L	8.2403	0.0013	0.011	103		8.22	8.26					1							S
114914	8.348	0.019	7.609	0.016	*	0.654	0.006	G	0.72	0.01	R *	7.7318	0.0018	0.011	70	*	7.72	7.76		D	23166−0135	I 1	2 C A	AB	32	5.279	0.004	0.38	0.01	S
114915	10.319	0.032	8.555	0.014		1.470	0.028	T	1.48	0.04	L	8.5401	0.0019	0.013	89		8.51	8.57		C			1							
114916	8.956	0.014	8.683	0.015		0.257	0.021	T	0.29	0.03	L	8.7510	0.0025	0.016	85		8.72	8.78					1							S
114917	9.311	0.013	7.795	0.007		1.295	0.012	T	4.03	0.06	O	7.0466	0.0258	0.233	140		6.66	7.36		U 2			1 S							P
114918	9.244	0.015	9.065	0.018		0.162	0.003	G	0.18	0.00	H	9.1100	0.0025	0.020	106		9.07	9.14					1							
114919	9.838	0.030	9.048	0.024	*	0.701	0.029	T	0.76	0.02	L *	9.1192	0.0027	0.016	56	*	9.07	9.16			23167−1534	I 1	2 C A	AB	332	0.209	0.010	0.75	0.30	
114920	8.680	0.010	7.253	0.006		1.205	0.009	T	1.16	0.01	L	7.2939	0.0013	0.009	92		7.27	7.31		C			1							S
114921	7.269	0.005	6.035	0.004		1.053	0.003	G	1.02	0.00	H	6.0874	0.0009	0.008	91		6.08	6.10			23167−4429	I 1	1							S
114922						1.450	0.015	G	1.81	0.07	I *	11.2507	0.0060	0.046	65	*	11.14	11.35		D	23167+1937	H 1	2 C A	AB	210	0.256	0.018	0.15	0.22	G
114923	11.692	0.098	10.595	0.060	*	0.945	0.015	G	0.94	0.01	I *	10.5488	0.0033	0.032	105	*	10.50	10.63		C	23167−3635	H 1	2 C D	AB	116	2.551	0.022	0.02	0.18	D
114924	6.239	0.003	5.643	0.003		0.556	0.003	T	0.63	0.00	L	5.7005	0.0006	0.005	146		5.69	5.71			23167+5313	I 1	1							S
114925	9.727	0.019	9.174	0.018	*	0.524	0.019	T	0.60	0.02	L *	9.2377	0.0022	0.021	120	*	9.20	9.28		D	23167−7532	H 1	2 C S A	AB	153	0.165	0.013	0.77	0.36	
114926	9.635	0.013	9.475	0.015		0.154	0.019	T	0.17	0.02	L	9.5383	0.0021	0.022	214		9.50	9.57		C			1							
114927	11.806	0.111	10.810	0.075	*	0.871	0.100	T	0.88	0.07	L *	10.7186	0.0049	0.033	82	*	10.65	10.77		C	23167+3441	H 1	2 C S C	AB	12	0.139	0.040	0.51	1.60	G
114928	8.484	0.007	8.525	0.009		−0.033	0.010	T	−0.01	0.01	L	8.5301	0.0012	0.014	213		8.50	8.56		C			1							
114929	9.906	0.023	9.294	0.020	–	0.580	0.400	G	0.74	0.04	L *	9.1999	0.0020	0.020	118	–	9.17	9.23		D	23168+6148	I 1	3 C C							G
114930	9.752	0.028	8.465	0.016		1.106	0.027	T	4.14	0.08	O	7.7621	0.0316	0.167	59		7.51	7.97		U 2			1 S							
114931	9.842	0.026	8.601	0.016		1.059	0.024	T	1.03	0.02	L	8.6545	0.0016	0.014	82		8.63	8.68		C			1							
114932	10.369	0.029	9.130	0.017		1.031	0.002	G	1.00	0.00	I	9.1977	0.0021	0.027	146		9.15	9.24					1							
114933	8.575	0.009	7.366	0.006		1.034	0.008	T	1.01	0.01	L	7.4206	0.0012	0.012	121		7.40	7.44		C			1							S
114934	8.836	0.013	8.391	0.012		0.434	0.014	T	0.50	0.01	L	8.4434	0.0016	0.012	84		8.42	8.48					1							S
114935	10.339	0.040	9.738	0.035		0.560	0.039	T	0.63	0.04	L	9.7534	0.0023	0.021	90		9.70	9.80					1							
114936	9.753	0.022	8.579	0.014		1.007	0.020	T	0.98	0.02	L	8.6373	0.0016	0.012	113		8.61	8.66		C			1							
114937	7.857	0.008	6.598	0.004		1.070	0.001	G	1.03	0.00	H	6.6536	0.0011	0.010	104		6.64	6.67					1							S
114938	9.926	0.041	8.520	0.022		1.188	0.036	T	1.15	0.03	L	8.5932	0.0029	0.015	37		8.56	8.62					1							S
114939	6.993	0.013	5.174	0.012		1.613	0.016	G	2.56	0.05	F	4.9429	0.0153	0.056	45		4.85	5.06		U 2			1 S							S
114940	7.617	0.006	7.518	0.006		0.097	0.008	T	0.11	0.01	L	7.5560	0.0012	0.013	121		7.54	7.58		C			1							S
114941	12.358	0.221	10.615	0.072		1.500	0.103	G	1.56	0.18	K	10.6119	0.0046	0.039	88		10.50	10.67					1 S							G
114942	9.170	0.012	8.794	0.013		0.367	0.015	T	0.43	0.02	L	8.8574	0.0019	0.018	143		8.82	8.89		C			1							
114943	9.511	0.014	9.218	0.016		0.290	0.015	G	0.33	0.02	H	9.2753	0.0020	0.022	171		9.24	9.32		C			1							
114944	10.499	0.036	9.656	0.027		0.741	0.034	T	0.79	0.02	L	9.6331	0.0070	0.049	109		9.57	9.71		U 2			1							
114945	9.772	0.024	9.163	0.022		0.647	0.005	G	0.71	0.00	H	9.2502	0.0020	0.020	82		9.20	9.31		D			1							
114946	10.343	0.021	8.523	0.009		1.546	0.019	T	2.23	0.05	O	8.3684	0.0029	0.032	177		8.32	8.42		U 2			1							S
114947	11.278	0.065	10.829	0.073		0.630	0.020	G	0.70	0.02	H	10.7623	0.0036	0.029	89		10.71	10.82		C			1							G
114948	6.260	0.003	5.710	0.003		0.521	0.003	T	0.59	0.00	L	5.7592	0.0010	0.010	149		5.74	5.78		M			1							S
114949	7.903	0.009	7.709	0.008		0.186	0.011	T	0.20	0.01	L	7.7532	0.0013	0.009	84		7.73	7.78		C			1							S
114950	8.911	0.010	8.161	0.008		0.684	0.015	G	0.74	0.01	H	8.2170	0.0014	0.017	160		8.19	8.25					1							S
114951	8.609	0.014	7.067	0.008		1.295	0.013	T	1.25	0.01	L	7.0888	0.0008	0.005	43		7.08	7.11					1							S
114952	7.190	0.008	6.750	0.007		0.415	0.010	T	0.48	0.01	L	6.8037	0.0011	0.006	48		6.79	6.82		C			1 G							S
114953	9.913	0.021	9.454	0.023	B	0.433	0.028	T	0.50	0.03	L	9.5843	0.0138			B				D	23170+2125	I 2	1 C I B							
114954	12.555	0.213	11.009	0.092		1.395	0.005	G	1.66	0.01	I	10.9584	0.0032	0.025	85		10.91	11.00					1							G
114955	9.343	0.013	8.831	0.012	A	0.481	0.016	T	0.55	0.02	L	8.9197	0.0114	0.080	170	A	8.75	8.98		D	23170+2125	I 2	1 C P B							
114956	9.892	0.022	9.370	0.021		0.478	0.020	G	0.55	0.02	H	9.4417	0.0023	0.019	96		9.40	9.48		C			1							
114957	9.991	0.028	9.574	0.029		0.394	0.037	T	0.46	0.04	L	9.6802	0.0026	0.017	102		9.64	9.71		C			1							
114958	8.738	0.011	8.425	0.012		0.320	0.015	G	0.37	0.02	H	8.4905	0.0015	0.015	116		8.47	8.52					1							
114959	9.368	0.023	8.150	0.015		1.041	0.021	T	1.01	0.02	L	8.2146	0.0011	0.013	58		8.19	8.24		D			1							S
114960	11.389	0.094	10.258	0.052		0.874	0.004	G	0.88	0.00	H	10.3190	0.0040	0.031	92		10.22	10.36					1							
114961	10.974	0.041	10.062	0.029		0.794	0.039	T	0.83	0.03	L	10.0871	0.0036	0.031	147		10.00	10.14					1							
114962	8.810	0.018	8.297	0.018	*	0.481	0.033	G	0.62	0.01	A *	8.2677	0.0013	0.012	53	*	8.25	8.30		D	23171−1351	I 1	2 C A	BA	226	0.819	0.004	0.22	0.02	S
114963	9.197	0.012	8.911	0.013		0.272	0.017	T	0.31	0.02	L	8.9391	0.0017	0.020	125		8.91	8.98					1							
114964	10.556	0.037	9.132	0.019		1.202	0.033	T	1.16	0.03	L	9.1898	0.0036	0.018	79		9.16	9.23					1							
114965	10.213	0.040	8.674	0.018		1.293	0.035	T	1.25	0.04	L	8.6954	0.0018	0.012	63		8.68	8.72		C			1							
114966	11.282	0.076	10.744	0.077		0.470	0.015	G	0.54	0.02	H	10.8388	0.0049	0.033	70		10.77	10.90		C			1							G
114967	10.005	0.029	9.187	0.023		0.759	0.001	G	0.80	0.00	H	9.2233	0.0038	0.026	78		9.17	9.28					1							
114968	8.098	0.007	7.755	0.007		0.347	0.015	G	0.41	0.02	H	7.7979	0.0016	0.014	117		7.78	7.83		C			1							S
114969	8.269	0.009	6.436	0.004		1.556	0.008	T	2.00	0.03	O	6.3209	0.0031	0.024	88		6.29	6.37		U 2			1							S P
114970	8.607	0.016	7.447	0.011		0.996	0.015	T	0.97	0.01	L	7.4946	0.0020	0.011	49		7.47	7.51		C			1							S
114971						0.916	0.015	G	0.97	0.02	A	3.8482	0.0007	0.005	68		3.84	3.86					1							S
114972	10.126	0.025	9.766	0.029		0.341	0.036	T	0.40	0.05	L	9.7853	0.0028	0.024	105		9.73	9.83					1							
114973	11.200	0.104	10.176	0.064	A	0.700	0.495	G	0.79	0.07	B *	9.9646	0.0026	0.022	74	*	9.92	10.00		D	23172−3229	I 1	2 C A	AB	142	1.363	0.019	0.49	0.03	
114974	9.304	0.015	9.086	0.017		0.162	0.002	G	0.18	0.00	H	9.1443	0.0021	0.016	93		9.12	9.18		C			1							
114975	10.205	0.028	8.180	0.010		1.677	0.024	T	1.70	0.03	L	8.0313	0.0040	0.036	91		7.96	8.09		U 2			1							
114976	10.046	0.032	8.710	0.018		1.130	0.015	G	1.09	0.02	H	8.7607	0.0016	0.015	65		8.74	8.79		C			1							
114977	9.417	0.020	7.728	0.010		1.411	0.018	T	1.39	0.02	L	7.7430	0.0013	0.009	78		7.73	7.76		C			1							S
114978	10.715	0.032	9.433	0.017		1.091	0.028	T	1.05	0.03	L	9.4891	0.0015	0.018	164		9.46	9.52		C			1							
114979	10.537	0.032	9.898	0.029		0.587	0.032	T	0.66	0.03	L	9.9175	0.0026	0.024	104		9.87	9.96		D			1 S							
114980	10.548	0.030	9.129	0.016		1.130	0.012	G	1.22	0.02	I	9.1445	0.0019	0.023	152		9.11	9.19		C	23173−6656	I 2	1							
114981	7.822	0.009	6.582	0.005		1.077	0.009	G	1.04	0.01	H	6.6199	0.0008	0.008	106		6.61	6.63		C			1							S
114982	9.055	0.010	8.497	0.009		0.527	0.010	T	0.60	0.01	L	8.5556	0.0022	0.019	161		8.53	8.59					1							S
114983	9.605	0.024	9.035	0.023		0.533	0.030	T	0.61	0.03	L	9.0862	0.0024	0.017	68		9.05	9.13		C			1							
114984	6.408	0.004	6.354	0.004		0.049	0.005	T	0.06	0.00	L	6.3741	0.0006	0.006	115		6.37	6.39					1							S
114985	9.338	0.018	7.366	0.008		1.671	0.016	T	1.95	0.06	O	7.2603	0.0050	0.032	81		7.22	7.32		U 2 C			1							S P
114986	10.111	0.023	8.813	0.013		1.049	0.002	G	1.10	0.00	I	8.8431	0.0021	0.022	155		8.81	8.88			23173−6656	I 2	1							
114987	10.370	0.037	10.006	0.041		0.345	0.051	T	0.40	0.07	L	10.0334	0.0024	0.018	107		10.00	10.06		C			1 S							G
114988	9.727	0.024	8.361	0.014		1.110	0.015	G	1.07	0.02	I	8.4172	0.0023	0.011	62		8.40	8.44		C			1							
114989	9.270	0.012	7.647	0.006		1.359	0.011	T	1.33	0.01	L	7.6499	0.0011	0.012	167		7.63	7.67		C			1							S
114990	9.211	0.016	8.546	0.014		0.710	0.015	G	0.76	0.01	H	8.5908	0.0025	0.026	118		8.54	8.63		U 2			1							
114991	8.489	0.009	8.175	0.009		0.302	0.015	G	0.35	0.02	H	8.2187	0.0015	0.015	141		8.20	8.24					1							S
114992	10.136	0.020	8.141	0.008		1.653	0.017	T	1.68	0.02	L	7.9758	0.0020	0.019	175		7.94	8.02					1 S							
114993	10.517	0.034	8.977	0.017		1.293	0.030	T	1.25	0.03	L	8.9987	0.0015	0.016	129		8.97	9.03		C			1							
114994	10.832	0.037	10.281	0.038	A	1.540	0.020	G	1.59	0.04	I	10.2793	0.0353	0.027	120	A	10.24	10.36		U	23174+3813	M 1	2 C D	AC	311	14.715	0.033	1.36	0.15	G X
114995						1.197	0.015	G	1.16	0.01	I	11.5584	0.0174	0.127	104		11.31	11.70		U 2			1 S							D
114996	4.472	0.002	4.042	0.002		0.410	0.014	G	0.50	0.02	A	4.0856	0.0004	0.005	200		4.08	4.09					1 G							S
114997	8.990	0.013	8.641	0.014		0.339	0.017	T	0.40	0.02	L	8.6726	0.0019	0.019	103		8.64	8.71		U			1							S
114998	6.526	0.005	6.693	0.008		−0.137	0.006	G	−0.13	0.01	H	6.6701	0.0033	0.013	48		6.65	6.69		M			1							S
114999	8.636	0.012	8.145	0.011		0.486	0.015	G	0.56	0.02	H	8.1982	0.0019	0.013	95		8.18	8.22		C			1							S
115000	8.848	0.016	7.869	0.012		0.847	0.004	G	0.86	0.00	H	7.9141	0.0018	0.010	56		7.89	7.93					1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ $\alpha*$	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr																						%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28													29	30
115001 H	23 17 29.48	−45 13 56.5	7.76	G	349.372 818 59	−45.232 352 45	*	11.25	25.54	46.04	1.47	2.02	1.23	1.35	1.05	+26	+25	+	9	+32	+13	+16	+11	+13	−	3	+29												1	0.02
115002 H	23 17 31.11	+16 51 37.0	8.77	H	349.379 633 23	+16.860 289 33	A	8.14	11.45	−10.91	2.38	2.13	2.28	2.37	2.39	+35	+15	−	5	−	5	+	3	−15	+	9	+19	−13	+35												0	0.96
115003	23 17 31.31	+55 05 21.2	8.37	H	349.380 477 22	+55.089 213 85		2.28	7.47	−0.43	0.58	0.60	0.77	0.65	0.66	−29	+11	+10	+16	−	9	+	1	−	6	−	8	+13	−26												1	1.46
115004	23 17 32.23	+09 41 36.8	9.72	G	349.384 308 10	+09.693 558 18		26.96	129.69	−42.12	1.26	1.04	1.40	1.38	1.15	+18	+	1	−20	−27	+	8	+	4	+10	−	4	+15	+16												0	0.49
115005	23 17 32.48	−63 32 03.2	9.03	H	349.385 340 39	−63.534 226 07		2.94	27.68	5.39	0.73	0.76	1.07	0.87	0.79	−19	+	9	−16	+	4	+	3	−11	+	2	−	1	+	3	−17										0	−1.13
115006 H	23 17 34.60	+33 14 56.0	8.57	H	349.394 159 83	+33.248 888 49	A	−0.19	−7.14	−9.75	1.67	1.47	1.91	1.76	1.29	+11	+16	+19	+11	+12	+	4	+12	−11	+17	+25												2	−0.76
115007	23 17 34.74	+52 18 11.8	9.30	H	349.394 763 74	+52.303 273 07		1.95	1.49	1.24	0.78	0.83	1.26	0.97	0.92	−35	−19	+31	−10	+15	+25	+	7	−	7	+	7	−19												2	1.03
115008	23 17 35.78	+16 42 06.1	8.04	G	349.399 097 60	+16.701 693 83		4.76	69.91	10.98	0.92	0.78	1.00	1.00	0.98	+24	+	7	−	8	−16	+19	−18	+13	+19	−20	+42												0	0.90
*115009	23 17 36.69	−29 10 19.8	10.41	H	349.402 886 26	−29.172 162 77		8.25	45.37	8.60	2.09	1.40	2.15	2.49	2.09	+	3	−10	−24	−54	+17	+19	+22	−25	+32	+14												0	−0.34
*115010 H	23 17 36.64	−32 26 46.5	9.88	H	349.402 683 86	−32.446 246 69	A	4.04	13.35	−0.36	3.00	2.41	2.89	3.26	2.82	+11	−25	−10	−36	+	5	+	3	+	7	−36	−	3	+23										0	−0.27
115011 H	23 17 37.32	+18 18 17.5	6.73	H	349.405 510 32	+18.304 858 88	A	6.23	−56.09	−37.26	2.41	2.72	1.31	1.58	1.14	+14	−	5	−	8	−15	+	6	−40	+	9	+	3	+	8	−12								3	0.71
115012 H	23 17 37.47	−01 31 17.5	7.88	G	349.406 115 93	−01.521 517 56	A	18.10	260.35	−91.41	1.82	1.28	1.76	1.73	1.21	+32	+32	+	1	−24	+	3	−11	+22	−	6	+42	−21												1	0.76
115013	23 17 37.80	−42 11 29.6	10.39	G	349.407 484 06	−42.191 548 65		30.71	285.85	−39.97	1.26	1.17	1.67	1.58	1.45	+16	+	7	−	2	−	5	+	2	+22	+	4	−17	+12	+24										0	0.35
115014	23 17 39.18	+69 38 58.5	8.20	H	349.413 262 13	+69.649 572 89		4.22	38.75	22.17	0.67	0.68	0.85	0.83	0.84	−19	−20	+18	−	2	+	0	+21	−	9	−	3	+18	−33												0	−0.33
115015	23 17 40.06	−11 42 46.6	6.33	H	349.416 910 68	−11.712 954 83		8.37	41.21	5.11	0.81	0.55	0.85	0.93	0.65	+	4	−13	−	6	−10	+10	+31	+13	+16	+14	+	0												3	0.23
115016	23 17 40.21	+42 35 00.2	8.87	G	349.417 530 41	+42.583 397 95		3.32	−1.86	−7.62	0.61	0.89	1.30	0.69	0.98	−21	+25	−14	−11	+	8	−	3	+22	−51	+39	−	4												0	0.07
115017	23 17 41.85	+34 02 47.8	7.02	H	349.424 373 26	+34.046 597 27		7.70	−10.15	−20.75	0.61	0.56	0.79	0.68	0.55	+24	+19	+	6	+33	+	9	+	5	+15	−13	+15	+35												0	0.32
115018	23 17 42.22	+31 01 48.2	7.03	G	349.425 909 96	+31.030 042 14		9.37	40.70	−8.75	0.51	0.48	0.70	0.52	0.44	+18	+18	+15	+21	−	3	−22	+	3	−18	+13	+12		0	−0.99													
115019	23 17 43.33	+42 45 06.7	10.29	H	349.430 539 88	+42.751 870 50		2.28	6.97	−2.26	0.92	1.19	1.86	1.08	1.27	−11	+11	−	6	−	9	−	1	+13	+10	−41	+34	+16		0	0.36													
115020	23 17 43.95	−52 50 16.1	9.31	1 H	349.433 130 05	−52.837 811 72		−0.37	55.22	−31.87	0.77	0.85	1.23	1.05	0.87	−	9	+	6	−	5	+11	−10	+24	−	8	−32	+	9	−14										2	1.87
115021	23 17 44.48	−12 47 41.2	8.39	H	349.435 324 39	−12.794 786 69		3.30	33.02	−13.37	1.31	0.79	1.29	1.39	0.88	−	3	+28	−16	−32	+15	+	5	+24	−	8	+13	−15		0	0.22													
115022	23 17 44.62	+49 00 55.0	4.82	1 H	349.435 901 29	+49.015 283 36		4.98	34.48	6.74	0.37	0.44	0.65	0.39	0.43	−29	+10	+26	+	6	−	5	−	5	+	3	+	8	+	7	−13	0	0.50											
115023	23 17 44.89	+62 59 16.2	8.36	1 H	349.437 050 59	+62.987 829 86		2.97	−1.87	1.60	0.65	0.67	0.83	0.84	0.87	−	8	+	9	+18	+	0	−	1	+	3	−	2	+	6	−	8	−18	0	0.53									
115024	23 17 46.14	+16 32 53.2	7.71	H	349.442 252 59	+16.548 109 34		2.83	26.67	−28.45	0.93	0.68	1.04	0.97	0.80	+	5	+13	−28	−11	+13	−14	+	5	+14	−28	+25		0	1.03													
115025	23 17 47.54	−07 32 33.7	8.16	H	349.448 084 55	−07.542 696 75		4.19	22.38	−6.56	1.03	0.85	1.27	1.69	0.95	+17	+	9	−31	+17	−	5	+36	+	7	+12	+	9	−	9	0	0.21												
115026	23 17 47.71	−69 21 42.7	9.10	H	349.448 778 52	−69.361 865 13		2.18	−2.43	−0.02	0.83	0.81	1.07	0.98	0.94	−	6	+	1	−24	−	7	+	1	+	1	+	1	+	1	+	4	−	7	0	0.79						
115027	23 17 50.64	+43 33 12.2	8.06	H	349.461 011 02	+43.553 383 62		9.28	21.70	−26.86	0.55	0.64	1.03	0.55	0.70	−	8	+21	−	1	+25	−	5	+	7	+	6	−	1	+35	+	9	0	−0.99								
115028	23 17 52.98	−80 25 29.2	8.35	H	349.470 759 75	−80.424 791 19	A	2.69	8.81	10.01	1.10	1.01	1.16	1.17	1.03	+	0	−17	−	2	+25	−	5	+14	−	8	+	1	+	7	−	4	2	1.98								
115029	23 17 53.73	+30 27 30.9	6.99	H	349.473 893 36	+30.458 591 24		4.03	−48.86	−23.62	0.57	0.50	0.78	0.70	0.49	+19	+12	+12	+18	+	3	−30	+	5	−14	−	1	+14		0	0.85													
115030	23 17 53.74	−04 31 18.6	8.72	H	349.473 907 48	−04.521 824 77		3.65	9.20	4.29	1.00	0.86	1.21	1.19	0.96	+49	−16	−24	+10	+	7	+	5	+	2	−	3	+22	+16		0	−1.15												
115031	23 17 53.87	−11 15 49.9	8.28	G	349.474 450 17	−11.263 858 05	+	15.71	189.07	24.53	1.13	0.76	1.33	2.66	1.09	+	7	+	0	−	2	+30	−12	+	9	−16	+	9	+25	−48		3	2.63									
*115032	23 17 54.21	+18 42 08.7	8.81	H	349.475 875 12	+18.702 418 15		2.53	−15.12	−8.19	1.15	0.87	1.24	1.31	1.11	−	1	+	1	−12	+24	+	0	−21	−	3	+22	−	6	+	1	0	1.23										
*115033	23 17 54.20	−09 10 57.0	4.41	1 H	349.475 848 44	−09.182 489 90		10.13	19.63	−9.64	0.87	0.66	1.04	1.57	0.86	+10	−	6	−28	+	4	−	8	+44	+	5	+14	+	3	−10		0	2.11										
115034	23 17 54.48	−60 59 53.3	8.25	1 H	349.477 020 65	−60.998 136 99		7.67	−6.68	8.08	0.69	0.76	1.09	0.83	0.83	−17	−15	−13	−	2	+	1	+	4	+	3	−14	−	3	−15		0	0.64										
115035 H	23 17 55.56	−54 28 59.8	9.59	H	349.481 502 34	−54.483 268 27	*	2.28	40.45	−3.70	0.82	1.00	1.50	0.95	0.95	+	8	−	6	−18	+	4	−14	+27	−11	−24	+	6	+	0	2	1.60										
115036	23 17 55.99	+45 29 20.2	6.48	1 H	349.483 297 31	+45.488 948 28		5.98	23.93	−10.02	0.42	0.50	0.76	0.49	0.60	−12	+16	+	3	−23	+	3	−17	+	2	−12	+	8	+11		4	1.14										
115037	23 17 56.41	−03 01 33.5	8.85	H	349.485 045 54	−03.025 977 30		9.24	−28.06	−6.32	1.17	0.99	1.52	2.13	1.52	+54	−	2	+	2	+29	+34	+58	+40	+48	+31	+46			0	2.04										
115038	23 17 56.58	−13 47 42.5	6.59	H	349.485 758 59	−13.795 144 81		3.42	10.73	−11.54	0.87	0.74	0.98	1.15	0.91	+29	+	6	−25	+25	+18	+	8	+22	+38	+	7	+23		0	−1.39										
115039	23 17 56.98	+73 41 18.7	7.16	H	349.487 432 47	+73.688 541 06		6.59	−68.75	−13.50	0.50	0.48	0.58	0.63	0.50	−	3	+	5	+18	+	7	−12	+	7	−11	+18	+14	−	6	0	−0.34										
115040	23 17 58.37	+15 27 49.6	8.92	G	349.493 222 40	+15.463 767 37		1.95	22.85	1.90	1.04	0.87	1.27	1.04	1.09	+13	+13	−24	+12	+	5	−27	+	0	+	1	−	4	+34		0	−0.11										
115041	23 17 59.87	+09 30 12.4	7.63	H	349.499 447 85	+09.503 433 49		6.66	11.37	−11.07	0.85	0.73	1.06	0.94	0.84	+16	+	6	−36	−11	−	8	+18	+	1	−20	+33	+27		0	0.69										
115042	23 18 00.45	−48 06 46.9	7.33	1 G	349.501 864 15	−48.113 026 74		5.00	−13.59	−4.03	0.68	0.61	0.81	0.74	0.67	+	7	−10	−	6	+12	+	8	+16	+11	+21	−15	−	4	0	1.13										
115043	23 18 00.73	−61 00 12.4	6.74	H	349.503 058 63	−61.003 444 29		6.90	49.84	−90.35	0.48	0.53	0.76	0.56	0.59	−17	−12	−10	+	3	+	3	+	4	+	5	−17	−	4	−14	2	−2.29										
115044	23 18 01.38	+79 52 27.5	6.98	H	349.505 763 54	+79.874 316 06		1.68	22.88	5.58	0.50	0.45	0.54	0.62	0.51	+	3	+	1	+	6	+30	−	1	−	2	+	5	−11	+	1	+19	0	0.05								
115045 H	23 18 01.57	−16 20 45.3	9.56	H	349.506 537 96	−16.345 911 27	A	0.51	−1.73	11.81	3.82	4.44	4.06	4.30	4.88	+37	+	2	−31	+17	+12	+	0	+23	+	1	+	5	+62		1	0.44										
115046	23 18 02.35	+48 46 58.4	11.07	3 H	349.509 782 72	+48.782 877 90		−2.98	−2.75	−4.04	1.07	1.20	1.93	1.22	1.26	−30	−15	+32	−	3	+	2	−	3	+	4	−	8	+13	+	3	0	0.44										
115047	23 18 03.46	+64 08 13.2	8.66	H	349.514 433 56	+64.137 013 06		6.06	98.22	7.35	0.69	0.71	0.84	0.85	0.85	−19	+16	+14	+18	−	1	−	5	−	6	−	3	−38		3	−1.44										
115048	23 18 04.69	+59 51 33.1	8.78	G	349.519 544 41	+59.859 202 45		−0.02	−2.81	−2.20	0.67	0.78	0.91	0.84	0.94	−22	+	5	+	4	+27	−	4	−	5	−	3	+	0	+15	−23	0	0.81										
115049	23 18 04.85	−32 24 17.1	9.00	H	349.520 219 46	−32.404 748 54		2.77	69.83	−115.11	1.35	0.99	1.44	1.58	1.35	+12	−26	−13	−39	+	9	+16	+13	−23	+	1	+20		0	−0.51										
115050	23 18 06.76	+00 29 41.3	9.26	H	349.528 175 91	+00.494 793 83		2.03	−10.26	−1.09	1.33	1.05	1.65	1.97	1.32	+35	+	8	−	2	−17	−	6	+22	−	9	−34	+36	−	4	3	−0.91										
115051	23 18 07.51	+14 42 37.8	8.53	H	349.531 278 16	+14.710 492 64		6.42	−7.88	−43.14	0.86	0.74	1.04	0.88	0.84	+14	+13	−31	+16	+	3	−	5	+	0	+11	−17	+27		0	−0.48										
115052	23 18 08.41	+08 32 53.9	9.29	H	349.535 061 95	+08.548 311 66		3.26	−9.81	−9.80	1.48	1.02	1.62	2.40	1.54	+	3	+	9	−19	−23	+13	+12	+21	+	7	+31	−	7	0	−0.51										
115053	23 18 08.93	+15 36 12.8	8.23	G	349.537 222 76	+15.603 543 56		10.80	−69.08	4.52	1.03	0.84	1.20	1.12	0.99	+	4	+17	−23	−16	+	8	−36	+	7	−	4	+	3	+	9	0	−1.14										
115054	23 18 09.79	−40 49 26.6	5.54	H	349.540 775 54	−40.824 063 46		28.89	127.46	−122.41	0.49	0.49	0.66	0.53	0.53	+16	−10	−	7	+14	−	2	+	8	−	2	+	2	+	5	+16	0	−2.34										
115055	23 18 10.72	−32 04 03.1	8.82	H	349.544 670 24	−32.067 540 93		0.79	6.53	−19.69	1.15	0.88	1.31	1.23	1.11	+20	−24	−22	−40	+	1	+20	+	9	−18	−	7	+20		0	0.55										
115056	23 18 12.33	+13 10 31.3	9.84	H	349.551 371 46	+13.175 358 60		5.34	−21.45	−10.93	1.32	1.16	1.56	1.54	1.51	+16	+19	−22	+14	+23	−16	+19	+33	+	2	+29			0	−1.53										
115057	23 18 15.26	+27 36 01.4	7.28	G	349.563 590 21	+27.600 395 06		14.44	28.84	−30.74	0.59	0.64	0.86	0.62	0.64	+39	+10	−	9	+	6	−	7	−	5	−	3	−30	+31	+39	3	2.81										
115058	23 18 17.66	+46 17 20.3	10.92	G	349.573 578 28	+46.288 961 24		41.19	331.45	136.36	1.03	1.14	1.87	1.13	1.48	−15	+	9	+20	−48	−	4	−	6	−13	−16	+	2	+10		5	0.88										
115059	23 18 18.37	+07 50 06.1	8.31	G	349.576 533 58	+07.835 038 87		9.64	50.33	24.28	0.99	0.74	1.13	1.26	1.03	+33	−17	−	1	−26	−	6	+12	−10	−18	+34	+	4			0	0.37										
115060	23 18 18.70	−15 04 17.3	9.18	H	349.577 932 06	−15.071 464 86		5.32	95.30	−82.99	1.29	1.34	1.78	1.54	1.67	+49	−44	−43	−	8	+	2	+46	+31	+43	−15	+30			0	0.31										
115061	23 18 18.87	+44 34 22.2	9.65	H	349.578 609 06	+44.572 819 55		2.69	7.24	−0.44	0.94	0.95	1.45	0.97	0.93	+	1	+28	−	4	+22	+	4	+21	+11	−	4	+14	+16		0	1.48										
115062	23 18 19.99	−67 28 16.4	6.15	H	349.583 296 24	−67.471 220 23		5.19	22.57	17.74	0.48	0.46	0.63	0.57	0.55	−	8	−15	−22	−	5	+16	+	8	+20	−	6	−	4	+	6	0	0.19										
115063	23 18 20.33	+00 31 29.8	9.14	H	349.584 727 78	+00.524 955 25		4.27	13.29	5.44	1.24	0.92	1.56	1.89	1.25	+33	+	8	−10	−15	−	1	+11	−	1	−25	+39	−	9	0	−0.02										
115064	23 18 23.01	−24 59 54.5	11.57	H	349.595 888 72	−24.998 481 54	B	7.36	21.80	11.14	144.47	70.28	3.08	4.23	2.91	+30	+	0	+	0	+	0	+	2	+	0	−	1	+	6	+	8	10	3.70								
115065	23 18 23.33	+41 46 25.3	5.98	2 H	349.597 215 41	+41.773 702 55		6.90	−9.58	−11.03	0.43	0.49	0.75	0.43	0.55	−	4	+13	−11	+38	−13	+14	+	9	−38	+38	+26			0	1.84										
115066	23 18 23.48	+12 06 50.3	8.38	H	349.597 844 31	+12.113 969 42		19.58	−58.48	−208.99	0.93	0.81	1.04	1.00	0.96	+25	−13	−34	−	7	+23	−15	+18	+28	+	2	+30			0	0.05										
115067 H	23 18 23.59	+47 15 42.1	8.66	H	349.598 280 79	+47.261 684 93	A	3.77	−1.85	−2.62	0.95	1.03	1.52	1.04	1.12	−34	+	4	+24	−20	+	3	−	7	+	7	−17	+11	+	5	0	−0.02										
115068	23 18 24.01	−25 00 08.0	8.63	H	349.600 025 94	−25.002 230 02	A	7.36	21.80	11.14	3.79	2.92	3.08	4.23	2.91	+26	−	4	+12	−	7	−	9	+	2	−12	−24	+	6	+	8	10	3.70										
115069	23 18 24.33	+46 47 35.1	8.96	H	349.601 355 83	+46.793 093 07		0.64	−0.20	−0.67	0.64	0.76	1.18	0.70	0.87	−11	+19	+30	−14	−13	−15	−	8	−11	+	6	+	8		2	−1.06										
115070	23 18 24.53	+59 28 40.7	8.50	H	349.602 210 29	+59.477 958 90		0.84	3.07	0.88	0.69	0.72	0.90	0.96	0.87	−	7	+15	+17	+19	−13	−	6	−11	+13	−	2	−	3	0	−0.92										
115071	23 18 24.89	+18 59 46.6	8.18	H	349.603 703 47	+18.996 290 68		1.49	−4.83	−0.82	0.96	0.75	1.05	1.10	0.96	+	9	+	8	−	5	+23	+	5	−22	+	3	+30	−	3	+13	0	1.80										
115072	23 18 27.00	−74 30 58.2	7.97	H	349.612 518 46	−74.516 158 85		9.95	−17.76	−21.05	0.64	0.58	0.79	0.73	0.57	+	4	−	7	−39	−	1	+	2	+	2	+	3	−	6	+	8	+16	1	−0.28								
115073	23 18 27.26	−54 38 58.0	8.27	H	349.613 585 75	−54.649 454 61		−1.69	16.13	−8.48	0.64	0.71	1.21	0.73	0.73	−	7	+15	−20	+12	+	4	+20	+11	−11	+	0	+12		0	−0.44										
115074	23 18 27.64	−01 53 54.5	8.57	H	349.615 178 31	−01.898 479 63		12.58	102.08	−98.10	0.98	0.80	1.18	1.18	1.03	+43	−	1	+	3	−	6	+20	+19	+27	+27	+34	+22		0	−1.93										
115075	23 18 28.58	+27 27 11.0	8.97	H	349.619 085 52	+27.453 056 30		4.08	1.24	6.10	0.83	0.78	1.20	0.88	0.78	+34	+16	+	2	+14	+	3	+	3	+	7	−11	+29	+34		0	−0.06										
115076	23 18 28.82	+58 10 01.0	8.59	H	349.620 076 27	+58.166 933 98		3.06	14.99	0.29	0.67	0.69	0.90	0.80	0.78	−17	+21	+24	+	7	+13	−	4	+12	−	6	−	3	−26		0	0.67										
115077	23 18 28.91	+27 36 14.1	6.91	H	349.620 439 03	+27.603 919 80		6.83	−34.04	−51.26	0.58	0.58	0.83	0.61	0.58	+32	+11	−10	+13	−	4	−	4	+	1	−28	+31	+35		2	0.25										
115078	23 18 29.64	−18 50 29.7	6.75	1 H	349.623 515 51	−18.841 594 09		2.28	15.08	7.72	0.84	0.62	0.94	0.95	0.71	−	2	+	8	−41	+	3	−16	+30	−	5	+	0	+	8	+14	0	0.80										
115079	23 18 30.22	+24 16 43.2	8.13	H	349.625 935 15	+24.278 669 51		1.64	18.70	−7.71	0.62	0.58	0.93	0.66	0.62	+37	−	4	−	7	+13	+	3	−	4	+	3	−10	+26	+40	0	0.74										
115080	23 18 32.02	−58 57 38.7	10.57	H	349.633 434 08	−58.960 760 36		0.81	4.77	−0.69	1.11	1.38	2.03	1.58	1.96	−27	−	3	−20	−10	+14	−	4	+11	−20	+	8	−46		1	0.72										
115081	23 18 32.60	−18 23 27.3	9.25	H	349.635 846 44	−18.390 911 39		1.36	−6.73	−0.84	1.44	1.22	1.63	1.84	1.25	+20	−14	−56	−21	−	7	+	6	+	1	−	7	+	5	+21		0	2.40										
115082	23 18 32.91	+63 30 05.2	8.42	G	349.637 131 64	+63.501 434 53		0.62	−4.80	−0.10	0.70	0.66	0.86	0.88	0.84	−	5	+15	+19	+	1	+	2	+	2	+	1	+	1	−	8	−22	3	0.08										
115083	23 18 33.27	+46 45 18.4	8.75	H	349.638 609 25	+46.755 123 62		0.02	1.84	−0.07	0.57	0.60	1.02	0.61	0.76	−34	+19	+12	−22	+	3	−12	+	5	−15	+14	−	7		3	0.85										
115084	23 18 33.74	−53 27 54.3	9.42	H	349.640 568 59	−53.465 071 58		8.23	26.85	−62.69	0.71	0.93	1.28	0.97	0.91	−11	+	9	−21	+27	−	4	+26	−	6	−41	+	5	−22		0	0.57										
115085	23 18 35.37	−59 59 59.2	7.71	H	349.647 374 61	−59.999 766 02		3.61	−15.42	2.22	0.57	0.60	0.94	0.66	0.64	−25	+10	−27	−	4	+	1	+12	+	6	−14	+	2	−	7	1	1.20										
115086	23 18 35.54	−48 58 07.1	10.36	H	349.648 103 16	−48.968 643 65		1.51	14.98	5.93	1.54	1.49	2.08	1.26	1.70	+	7	−21	−12	−29	+	8	+	9	+	5	+16	+24	+10		0	2.11										
115087	23 18 36.44	−58 18 21.5	7.50	G	349.651 822 75	−58.305 970 86		25.33	214.56	−157.38	0.47	0.55	0.87	0.54	0.60	−28	+	1	−18	+	4	+	1	+	7	+	3	−18	+	4	−22	0	0.03										
*115088 H	23 18 37.41	+68 06 41.1	4.75	G	349.655 862 10	+68.111 418 07	A	15.48	54.88	10.91	0.54	0.57	0.55	0.55	0.56	−	3	+	0	−	2	+30	+	3	+	6	+	5	+	3	+	8	+	9	3

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
115001	8.622	0.013	7.841	0.010	*	0.694	0.015	G	0.75	0.01	H *	7.8925	0.0018	0.016	81	*	7.87	7.91		D	23175−4514	I 1	2 C A						S
115002	9.061	0.023	8.535	0.028	*	0.494	0.032	T	0.57	0.03	L *	8.8790	0.0036	0.017	59	*	8.85	8.92		D	23175+1652	I 1	2 C A	AB	26	2.205	0.010	1.19	0.06	S
115003	8.355	0.009	8.371	0.012		−0.010	0.014	T	0.01	0.01	L	8.3738	0.0010	0.013	125		8.36	8.40					1						
115004	11.149	0.071	9.868	0.039		1.130	0.015	G	1.22	0.02	I	9.8269	0.0026	0.021	65		9.78	9.88					1						
115005	9.550	0.017	9.067	0.017		0.455	0.022	T	0.52	0.02	L	9.1284	0.0016	0.023	151		9.08	9.17					1						
115006	8.841	0.015	8.655	0.017	A	0.300	0.495	G	0.20	0.04	L *	8.6342	0.0023	0.015	78	*	8.60	8.66		D	23176+3315	I 1	2 C B	AB	309	1.187	0.032	2.73	0.14	
115007	9.339	0.014	9.306	0.018		0.035	0.021	T	0.05	0.02	L	9.3186	0.0028	0.026	148		9.26	9.37					1						
115008	9.380	0.022	8.151	0.014		0.990	0.015	G	0.97	0.01	H	8.1993	0.0024	0.012	56		8.17	8.22		C			1						
115009	11.303	0.064	10.495	0.050		0.730	0.062	T	0.78	0.04	L	10.5592	0.0048	0.036	92		10.50	10.61		C			1						
115010	10.570	0.073	10.049	0.064	*	0.498	0.073	T	0.57	0.08	L *	9.9907	0.0045	0.030	76	*	9.93	10.04		D	23176−3227	I 1	2 C A	AB	163	0.590	0.007	1.26	0.03	
115011	7.178	0.007	6.763	0.007	*	0.392	0.009	T	0.46	0.01	L *	6.8199	0.0011	0.006	48	*	6.81	6.83		D	23176+1818	I 1	2 C A	AB	115	0.334	0.010	1.79	0.06	S
115012	8.862	0.017	8.086	0.014	A	0.676	0.002	G	0.74	0.00	H *	8.0190	0.0013	0.012	73	*	8.00	8.04		D	23176−0131	I 1	2 C A	AB	19	1.549	0.007	1.34	0.03	S
115013	12.186	0.178	10.591	0.064		1.316	0.009	G	1.55	0.01	A	10.4992	0.0038	0.026	87		10.46	10.55		C			1						
115014	10.307	0.028	8.402	0.011		1.582	0.024	T	1.60	0.03	L	8.3129	0.0018	0.021	120		8.28	8.35					1						
115015	6.398	0.005	6.340	0.005		0.058	0.007	T	0.07	0.01	L	6.3588	0.0010	0.006	52		6.35	6.37					1						S
115016	9.240	0.013	8.885	0.014		0.360	0.015	G	0.42	0.02	H	8.9534	0.0023	0.021	147		8.91	8.99					1						
115017	7.571	0.006	7.064	0.006		0.481	0.003	G	0.55	0.00	H	7.1242	0.0009	0.009	91		7.11	7.14		C			1						S
115018	7.388	0.007	7.053	0.008		0.330	0.015	G	0.38	0.02	H	7.1039	0.0009	0.008	98		7.09	7.12		C			1						S
115019	10.638	0.038	10.294	0.042		0.326	0.053	T	0.38	0.07	L	10.3760	0.0026	0.028	136		10.32	10.42		C			1						G
115020	10.571	0.027	9.425	0.017		0.985	0.025	T	0.97	0.02	L	9.4752	0.0029	0.033	172		9.42	9.53		U			1						
115021	9.769	0.032	8.561	0.020		1.033	0.029	T	1.01	0.02	L	8.5590	0.0030	0.015	48		8.54	8.59		C			1						
115022	6.989	0.005	5.021	0.003		1.668	0.005	T	2.14	0.02	O	4.8813	0.0020	0.020	185		4.86	4.91		U 2	23178+4901	I 1	1 S						S
115023	10.558	0.035	8.560	0.012		1.690	0.015	G	1.70	0.09	H	8.4683	0.0019	0.021	127		8.43	8.50		U			1						
115024	9.583	0.027	7.870	0.013		1.420	0.010	G	1.46	0.06	F	7.8395	0.0016	0.012	55		7.82	7.86		C			1						S
115025	9.700	0.034	8.239	0.018		1.231	0.030	T	1.19	0.03	L	8.3226	0.0027	0.021	50		8.29	8.35					1						S
115026	10.440	0.027	9.179	0.016		1.075	0.025	T	1.04	0.02	L	9.2703	0.0022	0.023	136		9.23	9.32					1						
115027	8.468	0.008	8.085	0.008		0.344	0.015	G	0.40	0.02	H	8.1391	0.0014	0.015	147		8.11	8.17					1						S
115028	8.608	0.011	8.385	0.012	A	0.207	0.016	T	0.23	0.02	L	8.4172	0.0093	0.023	135	A	8.39	8.45			23179−8025	I 1	2 C D	AB	117	13.723	0.045	3.49	0.23	S D
115029	8.553	0.011	7.125	0.006		1.205	0.010	T	1.16	0.01	L	7.1523	0.0014	0.009	85		7.14	7.17		C			1						S
115030	9.068	0.018	8.745	0.019		0.307	0.024	T	0.35	0.03	L	8.7988	0.0018	0.017	73		8.77	8.83		C			1						S
115031	8.839	0.015	8.351	0.015		0.468	0.002	G	0.54	0.00	H	8.3846	0.0016	0.012	53		8.36	8.41		C			1 O						S D
115032	10.203	0.037	8.939	0.022		1.077	0.034	T	1.04	0.03	L	8.9827	0.0031	0.015	61		8.95	9.00		C			1						
115033	4.221	0.004	4.382	0.003		−0.144	0.009	G	−0.14	0.02	A	4.3607	0.0011	0.008	54		4.35	4.38		M			1						S
115034	8.558	0.009	8.247	0.010		0.297	0.014	T	0.34	0.02	L	8.3256	0.0014	0.019	164		8.29	8.36		U	23180−6100	I 2	1						S
115035	10.133	0.020	9.625	0.020	*	0.488	0.021	T	0.56	0.02	L *	9.6952	0.0021	0.026	168	*	9.63	9.75		C	23179−5429	I 1	2 C S A	AS	72	0.182	0.020	0.76	0.48	
115036	6.440	0.004	6.486	0.005		−0.037	0.006	T	−0.01	0.01	L	6.4788	0.0009	0.011	166		6.46	6.50	1.62	P 1 A			1						S P
115037	9.532	0.026	8.907	0.023		0.581	0.030	T	0.65	0.03	L	8.9800	0.0024	0.016	58		8.95	9.01		C			1 S						
115038	8.244	0.012	6.736	0.007		1.264	0.003	G	1.22	0.00	H	6.7454	0.0010	0.006	53		6.74	6.76		C			1						S
115039	8.586	0.010	7.283	0.007		1.107	0.010	T	1.07	0.01	L	7.3254	0.0010	0.008	123		7.31	7.35		C			1						S
115040	10.160	0.036	8.982	0.023		0.980	0.015	G	0.96	0.01	H	9.0736	0.0021	0.015	50		9.05	9.09		C			1						
115041	8.921	0.016	7.724	0.010		1.025	0.015	T	1.00	0.01	L	7.7975	0.0017	0.012	59		7.77	7.81		C			1						S
115042	7.804	0.008	7.373	0.008		0.400	0.007	G	0.47	0.01	H	7.4274	0.0024	0.019	82		7.40	7.47		U			1						S
115043	8.154	0.006	6.862	0.004		1.099	0.006	T	1.06	0.01	L	6.9094	0.0010	0.011	166		6.89	6.92			23180−6100	I 2	1						S
115044	7.123	0.004	6.997	0.006		0.122	0.007	T	0.14	0.01	L	7.0274	0.0010	0.009	136		7.01	7.04		C			1						S
115045	10.495	0.064	10.079	0.070	A	0.600	0.495	G	0.44	0.07	B *	9.6455	0.0063	0.025	46	*	9.60	9.67		R	23180−1621	I 1	2 C A	AB	121	1.532	0.006	0.41	0.05	S
115046	11.428	0.071	10.896	0.073		0.499	0.092	T	0.57	0.10	L	11.1909	0.0141	0.240	196		10.72	11.43	0.71	P 1 A			1 S						G P
115047	9.016	0.014	8.725	0.015		0.277	0.019	T	0.31	0.02	L	8.7329	0.0021	0.019	115		8.69	8.77					1						
115048	9.503	0.018	8.882	0.017		0.641	0.024	G	0.71	0.02	H	8.9206	0.0021	0.018	124		8.89	8.95		C			1						
115049	10.189	0.052	9.084	0.033		0.953	0.048	T	0.94	0.04	L	9.1624	0.0030	0.020	71		9.13	9.19					1						
115050	10.848	0.070	9.291	0.028		1.307	0.059	T	1.27	0.06	L	9.4266	0.0029	0.019	69		9.39	9.46		C			1						
115051	9.023	0.015	8.553	0.015		0.443	0.019	T	0.51	0.02	L	8.6287	0.0021	0.013	67		8.61	8.65		C			1						S
115052	11.510	0.112	9.456	0.030		1.569	0.082	G	1.70	0.17	K	9.4000	0.0028	0.020	53		9.36	9.43		C			1						
115053	8.895	0.017	8.265	0.016		0.565	0.006	G	0.64	0.01	H	8.3522	0.0013	0.011	45		8.33	8.38		C			1 G						S
115054	6.045	0.003	5.587	0.003		0.445	0.003	T	0.51	0.00	L	5.6380	0.0008	0.006	103		5.63	5.65					1						S
115055	10.942	0.056	8.995	0.020		1.650	0.049	T	1.74	0.14	O	8.9192	0.0037	0.021	84		8.88	8.97					1						
115056	11.438	0.103	10.065	0.050		1.162	0.090	T	1.12	0.08	L	10.0015	0.0040	0.026	58		9.93	10.05					1						
115057	7.790	0.008	7.331	0.007		0.433	0.010	T	0.50	0.01	L	7.3829	0.0013	0.009	100		7.36	7.40					1						S
115058						1.434	0.015	G	1.76	0.04	I	10.9801	0.0025	0.038	247		10.92	11.05					1						G
115059	9.039	0.016	8.385	0.014		0.616	0.015	G	0.68	0.01	H	8.4410	0.0023	0.015	77		8.42	8.47					1						S
115060	10.037	0.040	9.277	0.034		0.678	0.040	T	0.74	0.03	L	9.3169	0.0023	0.016	45		9.29	9.35		C			1						S
115061	9.912	0.022	9.711	0.028		0.192	0.033	T	0.21	0.04	L	9.7159	0.0037	0.034	121		9.67	9.78					1						G
115062	7.902	0.006	6.295	0.003		1.356	0.004	G	1.32	0.01	H	6.2997	0.0008	0.008	140		6.29	6.32					1						S
115063	9.660	0.025	9.158	0.024		0.472	0.031	T	0.54	0.03	L	9.2427	0.0023	0.022	72		9.20	9.28		C			1						
115064											T	11.1328	0.2726			B				D	23184−2500	I 2	1 C F D						D
115065	6.260	0.006	6.016	0.005		0.215	0.002	G	0.24	0.00	H	6.0506	0.0032	0.040	122		6.01	6.16	3.22	P 1 A			1						S
115066	9.269	0.023	8.481	0.018		0.715	0.023	T	0.77	0.02	L	8.5269	0.0018	0.016	63		8.49	8.56					1						S
115067	8.633	0.009	8.498	0.011	*	0.130	0.013	T	0.14	0.01	L *	8.7062	0.0013	0.015	230	*	8.68	8.74		D	23184+4716	I 1	2 C A	AB	258	2.764	0.004	1.40	0.02	S
115068	9.304	0.018	8.683	0.016	A	0.574	0.018	T	0.65	0.02	L	8.7598	0.0357	0.027	77	A	8.71	8.80		D	23184−2500	I 2	1 C P D						D
115069	8.940	0.008	8.954	0.011		−0.008	0.012	T	0.01	0.01	L	8.9672	0.0018	0.023	220		8.93	9.01					1 S						
115070	9.172	0.014	8.568	0.013		0.563	0.017	T	0.64	0.02	L	8.6183	0.0020	0.017	121		8.59	8.65					1						
115071	9.370	0.020	8.292	0.014		0.933	0.019	T	0.93	0.01	L	8.3371	0.0014	0.012	64		8.33	8.36					1						S
115072	8.560	0.009	8.038	0.009		0.499	0.010	T	0.57	0.01	L	8.0796	0.0013	0.015	132		8.06	8.11					1						S
115073	10.186	0.022	8.461	0.010		1.439	0.019	T	1.43	0.03	L	8.4038	0.0018	0.021	160		8.37	8.44					1						
115074	9.257	0.022	8.631	0.020		0.582	0.026	T	0.65	0.02	L	8.6974	0.0023	0.015	77		8.68	8.72					1						S
115075	9.446	0.017	8.998	0.017		0.423	0.022	T	0.49	0.02	L	9.0658	0.0018	0.016	91		9.03	9.10					1						
115076	8.810	0.012	8.612	0.013		0.197	0.002	G	0.22	0.00	H	8.6530	0.0017	0.017	108		8.62	8.67					1						
115077	8.184	0.008	7.011	0.006		1.006	0.008	T	0.98	0.01	L	7.0716	0.0011	0.008	98		7.05	7.09					1						S
115078	8.904	0.020	6.943	0.009		1.662	0.018	T	1.96	0.06	O	6.8337	0.0022	0.016	58		6.81	6.87		U			1						S
115079	9.571	0.017	8.269	0.010		1.107	0.015	T	1.07	0.02	L	8.3026	0.0012	0.012	124		8.28	8.32					1						
115080	11.054	0.039	10.595	0.041		0.446	0.045	T	0.52	0.05	L	10.6705	0.0030	0.045	204		10.59	10.75					1 G						G
115081	9.909	0.028	9.317	0.026		0.553	0.028	T	0.63	0.03	L	9.3698	0.0027	0.020	55		9.33	9.39			23185−1823	I 1	1 G						S
115082	9.720	0.019	8.569	0.012		1.150	0.015	G	1.11	0.01	H	8.5576	0.0022	0.022	114		8.52	8.59					1						
115083	8.674	0.007	8.727	0.009		−0.044	0.010	T	−0.02	0.01	L	8.7408	0.0010	0.017	212		8.71	8.77					1						
115084	10.359	0.021	9.493	0.016		0.759	0.020	T	0.80	0.01	L	9.5616	0.0021	0.029	210		9.51	9.62		C			1						
115085	9.225	0.011	7.835	0.007		1.176	0.010	T	1.14	0.01	L	7.8760	0.0014	0.016	199		7.85	7.90		C			1						S
115086	10.760	0.045	10.418	0.051		0.436	0.005	G	0.50	0.01	R	10.4562	0.0038	0.033	83		10.37	10.49			23186−4858	I 1	1						
115087	8.271	0.007	7.568	0.006		0.632	0.003	G	0.70	0.00	H	7.6311	0.0011	0.013	212		7.61	7.65			23186−5818	I 1	1						S
115088	5.999	0.008	4.961	0.005	A	0.836	0.002	G	0.86	0.03	C *	4.9040	0.0006	0.005	119	*	4.90	4.91		D	23186+6807	I 1	2 C A	AB	218	3.278	0.004	2.25	0.02	S
115089	9.159	0.014	9.058	0.018		0.098	0.021	T	0.11	0.02	L	9.1116	0.0024	0.027	120		9.07	9.16					1						
115090	8.483	0.011	8.078	0.011		0.400	0.001	G	0.47	0.00	H	8.1263	0.0017	0.013	76		8.10	8.15					1						S
115091	9.552	0.025	9.413	0.030		0.134	0.037	T	0.15	0.04	L	9.3546	0.0022	0.021	75		9.31	9.40		D			1						
115092	8.956	0.014	7.326	0.008		1.364	0.013	T	1.33	0.01	L	7.3224	0.0016	0.011	78		7.30	7.34					1						S
115093	7.733	0.010	7.392	0.008		0.335	0.015	G	0.39	0.02	H	7.4504	0.0016	0.014	83		7.43	7.48		U 2			1						S
115094						0.985	0.015	G	1.03	0.01	I	10.9731	0.0063	0.039	71		10.92	11.04					1						G
115095	9.500	0.017	9.280	0.019		0.210	0.024	T	0.23	0.03	L	9.3519	0.0019	0.017	120		9.32	9.38		C			1						
115096	9.404	0.014	7.901	0.008		1.264	0.013	T	1.22	0.01	L	7.9213	0.0014	0.013	152		7.89	7.94		C			1						S
115097	10.303	0.032	8.992	0.018	*	1.114	0.029	T	1.08	0.03	L *	9.0254	0.0017	0.015	89	*	8.99	9.05		D	23188+7025	H 1	2 C A	AB	309	1.033	0.016	2.53	0.09	
115098	6.531	0.004	6.581	0.005		−0.042	0.006	T	−0.02	0.01	L	6.5865	0.0010	0.008	84		6.57	6.60		C			1						S
115099						1.633	0.082	G	2.28	0.31	K	11.3039	0.0048	0.055	153		11.17	11.39					1 X						G
115100	8.827	0.017	8.102	0.014		0.654	0.015	G	0.72	0.01	H	8.1795	0.0020	0.013	61		8.16	8.21		C			1						S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
115101	23 18 48.20	+03 14 48.5	7.50	H	349.700 819 15	+03.246 810 87	3.08	8.27	−75.81	1.08	0.82	1.33	1.84	1.50	+48	+38	+14	+50	+28	+52	+39	+40	+52	+47	0	0.40
115102	23 18 49.43	−32 31 54.6	4.41	G	349.705 945 01	−32.531 835 74	18.24	19.65	−78.57	0.69	0.55	0.80	0.79	0.72	+20	−30	−12	−35	+ 4	+32	+10	−18	− 2	+23	2	3.15
115103	23 18 49.96	−22 08 00.0	9.16	H	349.708 170 22	−22.133 321 74	11.18	63.36	−22.46	1.06	0.75	1.18	1.52	0.95	+32	− 4	+ 2	− 5	+33	− 1	+22	−25	+14	− 1	0	0.77
115104	23 18 50.27	+59 10 22.5	9.65	H	349.709 445 64	+59.172 918 38	6.48	−6.95	−6.91	2.28	2.11	2.85	2.73	2.40	−13	+16	+ 6	+ 2	− 6	− 2	− 5	−15	+ 5	−17	0	
115105	23 18 50.81	−05 05 58.7	8.86	H	349.711 719 56	−05.099 631 19	0.84	12.03	13.06	1.11	0.89	1.37	1.74	1.04	+43	−12	+ 0	+ 2	+ 7	+39	−12	−28	−10	−20	0	0.85
115106	23 18 51.33	+40 26 16.0	8.70	G	349.713 880 07	+40.437 785 85	8.90	65.92	5.44	0.84	0.70	1.13	0.98	0.77	− 9	+31	−12	+19	+ 8	− 3	+28	−32	+34	+22	2	0.30
115107	23 18 51.71	−25 56 34.3	8.05	H	349.715 446 03	−25.942 856 70	2.93	32.41	−7.83	0.94	0.66	0.97	1.28	0.80	+33	−12	− 9	+35	+27	− 5	+23	+25	+ 5	+19	0	0.49
115108	23 18 52.95	+47 22 18.4	8.59	H	349.720 634 33	+47.371 783 56	10.03	−6.25	−38.63	0.53	0.61	1.05	0.63	0.73	−40	+ 6	+24	− 4	+ 0	−15	+12	−16	+22	−10	0	1.04
115109	23 18 53.52	+86 03 23.8	8.56	H	349.722 983 55	+86.056 597 28	1.77	−1.37	12.71	0.67	0.62	0.75	0.74	0.68	− 7	− 4	+ 8	+ 9	−15	− 4	−16	+ 7	+22	−24	0	−0.88
115110	23 18 53.57	−28 44 27.1	7.73	H	349.723 224 77	−28.740 871 51	8.47	47.60	−8.92	0.92	0.70	1.08	1.14	0.94	+17	+ 6	−26	−32	+17	− 5	+16	− 6	+28	+28	0	2.48
115111	23 18 53.76	−46 09 45.4	8.91	H	349.723 998 72	−46.162 612 77	3.91	2.72	−1.61	1.04	0.86	1.21	1.34	0.95	+18	− 4	− 9	+ 1	−12	+ 2	−10	−10	− 4	+18	0	0.53
115112 H	23 18 54.19	+05 24 20.6	8.02	G	349.725 774 44	+05.405 734 19 A	30.76	435.35	−95.64	1.79	1.33	1.74	1.67	1.37	+60	+ 2	+16	− 9	+ 4	+33	+ 0	− 8	+16	+29	1	0.38
115113	23 18 54.82	−30 33 09.9	6.94	H	349.728 404 66	−30.552 759 23	6.13	20.45	−36.29	0.73	0.58	0.87	0.92	0.71	+21	+ 6	−12	−14	+14	−16	+12	+13	+ 2	+21	0	−0.87
115114 H	23 18 57.00	+48 29 45.3	7.64	G	349.737 500 94	+48.495 909 58 A	3.16	−10.22	−5.33	0.69	0.77	1.07	0.78	0.75	−32	−18	+24	+ 1	+ 2	−11	+ 8	− 9	+15	+ 2	1	0.66
115115	23 18 57.65	−09 36 38.6	4.99	G	349.740 212 18	−09.610 731 00	13.10	43.47	−7.80	0.80	0.63	1.00	1.25	0.76	+11	+ 5	−26	− 1	− 9	+42	+ 4	+ 1	+16	+ 0	3	0.06
115116	23 19 00.31	+53 13 59.1	8.04	H	349.751 271 79	+53.233 079 14	5.30	31.19	8.73	0.54	0.51	0.76	0.62	0.58	−21	+ 3	+20	− 3	− 2	+ 3	− 2	+ 1	+11	−15	0	1.63
115117	23 19 01.44	−09 03 35.0	10.00	G	349.755 993 11	−09.059 720 13	4.58	4.33	−7.40	1.65	1.05	1.82	2.59	1.43	+ 4	+ 9	− 8	− 8	+ 9	+39	+18	+ 8	+25	− 5	0	−1.21
*115118	23 19 02.16	+23 04 11.8	8.99	H	349.758 996 90	+23.069 943 28	2.83	−12.70	−0.11	0.74	0.72	1.23	0.85	0.76	+40	−10	− 7	+ 7	− 2	+16	− 2	−18	+26	+47	0	0.25
*115119	23 19 02.14	−12 10 13.5	7.23	H	349.758 925 70	−12.170 425 73	1.91	10.63	0.42	0.82	0.66	0.91	1.00	0.74	+15	−10	− 8	+ 3	+ 7	+20	+ 9	+16	+ 5	+ 0	0	1.88
115120	23 19 02.37	+45 08 12.4	6.51	H	349.759 857 83	+45.136 771 18	7.96	56.68	−8.45	0.49	0.52	0.76	0.56	0.59	− 1	+25	+ 5	− 2	+ 3	+ 0	+10	−16	+18	+18	3	0.94
115121	23 19 03.28	−28 23 16.3	6.49	H	349.763 686 00	−28.387 870 84	4.36	15.77	10.11	0.72	0.61	0.91	0.91	0.85	+30	−10	−25	−22	+ 6	+18	+ 7	− 7	+27	+44	0	−0.32
115122	23 19 04.71	−39 13 18.4	9.52	H	349.769 627 34	−39.221 782 22	−2.86	−2.99	−6.38	0.94	1.04	1.42	1.27	1.39	+26	− 0	−24	+ 1	−33	+33	−22	−40	+22	+45	2	2.77
115123	23 19 05.51	−60 31 14.0	8.93	H	349.772 957 18	−60.520 557 67	51.97	−95.04	−42.68	0.74	0.86	1.17	0.86	0.90	−23	+ 7	−23	− 7	+ 2	+ 6	+ 4	−18	− 7	−14	0	−0.06
115124	23 19 06.12	+43 07 55.8	7.70	H	349.775 511 83	+43.132 164 76	3.55	−14.58	−13.30	0.48	0.57	0.96	0.53	0.69	−10	+19	− 4	+16	− 5	+15	+ 6	− 8	+36	+12	0	0.18
115125	23 19 06.37	−13 27 17.0	5.19	H																						
*115126	23 19 06.51	−13 27 30.4	5.20	G	349.777 121 13	−13.458 442 56	48.22	265.64	−44.87	4.80	3.81	5.25	6.17	5.22	+20	+ 2	+ 5	−20	+15	−23	+19	+ 4	−20	+15	0	
*115127	23 19 06.38	+42 49 09.3	10.10	H	349.776 592 74	+42.819 244 80	−0.36	15.63	−5.54	0.85	1.08	1.76	0.98	1.29	− 5	+ 9	+ 1	− 4	−11	+ 8	− 2	−32	+32	+15	1	0.94
115128 H	23 19 07.65	+48 55 09.9	7.24	H	349.781 871 42	+48.919 419 21 A	7.32	77.40	7.06	1.17	1.10	1.26	0.85	0.95	−34	+ 3	+ 8	+11	− 2	− 1	+ 1	+ 0	+19	− 8	3	1.33
115129	23 19 08.55	−79 28 20.8	6.34	H	349.785 614 00	−79.472 436 16	6.66	27.68	10.95	0.42	0.42	0.50	0.51	0.47	− 5	−12	− 5	+11	+ 9	− 2	+ 9	−14	+ 0	− 1	0	1.53
115130	23 19 10.68	+49 14 00.0	8.78	H	349.794 497 14	+49.233 320 47	−1.88	−6.99	−4.45	0.65	0.73	1.16	0.77	0.86	−35	− 8	+24	+ 7	− 1	−16	+ 4	− 3	+25	−16	2	1.10
115131	23 19 12.51	+61 31 03.2	8.57	G	349.802 115 72	+61.517 566 89	3.01	−17.31	−14.72	0.79	0.85	1.02	1.02	0.96	−12	+14	+10	+ 0	+ 3	+ 1	+ 7	−36	− 3	+ 1	2	0.07
115132	23 19 13.11	+11 27 55.8	9.41	H	349.804 613 46	+11.465 493 62	2.92	16.91	− 4.15	1.27	1.02	1.45	1.71	1.19	+16	− 1	−24	− 9	+ 3	+ 1	+ 7	+ 8	+14	− 9	0	−0.10
115133	23 19 13.40	−36 51 36.4	8.88	H	349.805 815 75	−36.860 105 55	4.49	3.42	−22.56	0.76	0.90	1.30	0.89	1.22	+43	−13	−26	+13	−18	+32	−11	−19	+21	+58	0	0.20
115134	23 19 13.98	+40 07 16.5	8.15	2 H	349.808 250 05	+40.121 250 59	4.47	35.63	−1.70	0.68	0.60	0.94	0.72	0.65	− 6	+25	−13	+ 4	+ 0	+ 0	+16	−40	+33	+19	0	−0.49
115135	23 19 17.17	−24 12 58.7	11.23	3 H	349.821 547 25	−24.216 302 54	4.20	50.29	−12.83	1.82	1.34	2.08	2.68	1.64	+31	− 7	+ 8	+ 5	+22	+ 9	+13	−14	+ 1	+ 4	0	1.24
115136	23 19 17.92	−49 58 53.7	9.39	G	349.824 666 19	−49.981 590 27	5.14	−8.49	2.69	0.78	1.02	1.47	0.91	0.94	+ 6	− 5	−32	−15	−20	+16	−10	+ 8	+19	− 6	1	0.49
115137	23 19 20.30	+07 12 54.0	7.38	H	349.834 571 48	+07.214 987 91	11.64	72.03	−24.53	0.88	0.63	0.96	1.14	0.92	+34	−11	− 5	−10	+ 8	+17	+15	+10	− 3	+ 9	7	2.74
115138	23 19 21.20	+46 09 27.9	9.32	H	349.838 330 04	+46.157 761 35	3.45	−21.67	− 6.82	0.62	0.81	1.24	0.69	1.02	−11	+ 9	+22	−44	− 6	−18	−12	−11	− 6	+12	3	−0.42
115139	23 19 23.36	−53 25 11.4	7.74	H	349.847 334 16	−53.419 844 12	1.12	−7.54	− 3.11	0.48	0.66	0.96	0.62	0.65	−11	−11	−12	+24	− 4	+15	− 3	−35	+ 2	−15	0	0.98
115140	23 19 23.63	+26 28 52.4	8.05	H	349.848 445 63	+26.481 233 93	5.97	14.43	−10.63	0.68	0.65	1.06	0.78	1.00	+34	+ 3	−11	+32	+ 8	− 3	+ 5	+22	+ 9	+13	−14	+ 1	+ 4	0	0.91
115141	23 19 23.77	+62 44 23.2	6.66	2 T	349.849 061 05	+62.739 780 95	2.40	−1.55	− 2.37	0.48	0.51	0.61	0.65	0.64	−10	+ 3	+13	+16	+ 6	−11	+ 5	+ 0	− 8	−14	1	0.96
115142	23 19 23.86	−05 07 27.5	5.56	G	349.849 414 62	−05.124 302 43	28.72	200.98	−20.42	0.70	0.51	0.84	1.11	0.59	+32	− 7	− 5	+ 1	+ 5	+39	− 3	−16	− 5	−24	0	−1.03
115143	23 19 23.99	−36 07 47.7	7.79	H	349.849 949 43	−36.129 919 12	5.31	−26.68	−56.85	0.88	0.73	1.27	1.20	0.96	+21	+ 6	−31	−11	− 4	+14	+ 2	−13	+47	+35	0	0.37
115144	23 19 24.11	−18 04 31.4	5.96	H	349.850 439 68	−18.075 399 72	2.92	3.96	9.58	0.90	0.64	1.00	0.99	0.70	−13	+25	−50	−24	+ 7	+ 2	+11	− 5	+13	+ 6	0	−0.03
115145	23 19 24.47	+35 49 30.5	6.74	H	349.851 952 02	+35.825 149 68	6.89	29.02	− 8.78	0.63	0.54	0.90	0.79	0.51	+14	+29	+10	− 4	+12	+36	+12	−25	+25	+26	0	−0.83
115146 H	23 19 25.76	−39 09 30.2	7.05	G	349.857 323 51	−39.158 385 26 A	4.24	46.89	−31.33	1.18	1.23	1.05	0.86	0.90	+28	− 3	−17	+ 7	−21	+33	−11	−17	+13	+27	2	−0.30
115147	23 19 26.02	+79 00 12.0	7.53	2 H	349.858 401 21	+79.003 344 32	50.65	201.34	71.60	0.59	0.52	0.64	0.65	0.56	+ 3	− 2	+12	− 8	− 8	+ 4	− 9	+ 2	+ 8	+ 1	0	−0.19
115148	23 19 27.40	+34 47 35.5	6.32	1 H	349.864 175 65	+34.793 184 24	4.68	16.45	− 0.32	0.63	0.52	0.83	0.67	0.51	+25	+38	+13	+30	+17	+21	+23	−12	+24	+33	0	0.46
115149	23 19 28.53	+05 53 05.5	8.41	H	349.868 894 39	+05.884 874 09	3.67	− 4.05	−34.96	1.12	0.69	1.20	1.24	0.96	+41	+17	+ 0	−20	+ 6	+ 3	+21	+ 7	+23	+11	0	1.62
115150	23 19 28.67	−33 01 48.6	8.38	H	349.869 445 53	−33.030 178 09	5.86	11.02	−20.57	0.94	0.71	1.06	1.16	0.87	+ 6	−16	− 6	−33	+ 7	+33	+ 9	−30	+ 9	+ 5	0	1.40
115151	23 19 28.97	−70 19 23.1	8.77	H	349.870 709 11	−70.323 076 22	15.31	136.96	−42.46	0.68	0.82	0.93	0.78	0.83	− 8	−13	−15	− 9	− 3	− 8	− 2	+19	− 3	−16	2	−1.70
115152	23 19 29.79	+48 37 30.7	5.44	H	349.874 116 44	+48.625 196 01	9.95	22.98	51.91	0.35	0.41	0.63	0.39	0.42	−30	− 2	+26	+ 9	− 1	− 2	+ 1	+ 6	+10	− 7	0	0.86
115153	23 19 30.18	−71 00 17.0	8.76	H	349.875 770 11	−71.004 722 38	1.20	−11.56	− 4.94	0.72	0.77	0.99	0.86	0.77	−12	− 4	−30	+15	+ 1	−21	− 6	+16	− 3	−15	1	0.12
115154	23 19 31.05	−26 27 09.9	9.03	H	349.879 374 38	−26.452 754 23	−1.78	11.39	−14.54	1.08	1.00	1.57	1.56	1.21	+35	− 3	−39	− 5	+32	−26	+22	− 1	+24	+26	0	0.15
115155	23 19 32.72	+49 23 49.0	10.05	H	349.886 328 59	+49.396 951 88	4.64	2.54	0.79	0.92	1.03	1.62	1.09	1.12	−34	−15	+42	+21	− 9	−10	− 6	+15	+23	−12	2	0.37
115156	23 19 33.12	−20 42 13.8	8.85	H	349.888 001 61	−20.703 825 30	4.09	− 4.41	−20.99	1.10	0.86	1.27	1.61	1.08	+23	−12	+ 1	+21	+ 6	+22	− 4	− 1	+22	+ 1	2	0.20
115157	23 19 33.97	−58 07 27.2	8.44	H	349.891 531 35	−58.124 225 72	3.22	2.00	− 8.07	0.61	0.69	1.11	0.67	0.76	−29	− 3	−17	+ 3	− 1	+10	+ 3	−17	− 2	−19	0	0.34
115158	23 19 35.96	−14 03 59.5	8.01	H	349.899 824 49	−14.066 540 77	2.70	−19.91	−21.38	1.07	1.05	1.23	1.45	1.49	+39	+ 1	−23	+13	+32	+15	+34	+47	+ 5	+50	0	−0.44
115159	23 19 36.61	+27 29 26.5	7.64	G	349.902 524 63	+27.490 694 23	14.20	−30.15	−105.74	0.63	0.60	0.89	0.68	0.60	+29	+ 9	−11	+21	+ 3	− 1	+ 8	−25	+29	+36	2	0.80
115160	23 19 38.99	−09 40 36.1	8.73	H	349.912 440 52	−09.676 705 30	3.60	6.46	− 5.23	1.23	0.83	1.35	2.04	1.02	+ 5	+26	− 7	+ 6	− 1	+34	+ 2	− 7	+ 8	−27	0	−1.61
115161	23 19 39.00	+09 04 26.8	9.27	H	349.912 480 53	+09.074 102 71	2.52	−11.23	− 4.33	1.31	1.20	1.62	1.58	1.58	+32	+ 2	−26	−15	−10	+22	− 3	−23	+36	+37	0	−0.69
115162	23 19 39.50	+42 15 10.4	8.94	H	349.914 584 20	+42.252 892 36	20.26	78.53	−67.36	0.64	0.90	1.26	0.71	1.10	− 2	+13	− 8	− 7	− 7	+12	+ 4	−51	+26	+17	1	0.77
115163	23 19 39.71	+38 56 40.3	9.23	H	349.915 471 54	+38.944 518 92	2.84	8.48	− 2.41	0.96	0.76	1.32	1.17	0.90	−11	+19	− 9	−23	− 9	− 7	+ 4	−51	+28	+15	0	−1.48
115164	23 19 40.12	−68 40 46.8	9.52	H	349.917 165 99	−68.679 659 48	5.04	6.87	− 6.70	0.85	0.84	1.09	0.90	0.93	−18	+10	−26	− 8	+22	− 2	+22	− 5	− 8	− 2	0	−2.14
*115165	23 19 40.42	+73 55 27.9	7.59	H	349.918 436 49	+73.924 403 12	10.90	−18.73	−29.32	0.56	0.52	0.63	0.70	0.54	− 4	+ 6	+16	+ 7	−13	− 6	+10	+19	+10	−10	1	−1.03
*115166	23 19 40.23	−28 43 53.5	9.60	H	349.917 633 71	−28.731 517 47	8.21	115.70	0.46	1.02	0.90	1.29	1.32	1.28	+33	−24	−17	−15	+13	+26	+11	+ 4	+24	+46	0	−0.12
*115167	23 19 40.27	+03 22 17.9	10.21	G	349.917 802 45	+03.371 646 82	3.26	304.16	−142.13	1.60	1.36	2.20	2.50	1.91	+54	+ 3	+21	+ 7	+ 5	+51	−21	−24	+21	+22	0	1.39
*115168	23 19 40.35	−33 13 26.6	9.27	H	349.918 121 31	−33.224 056 77	4.25	−50.65	−62.76	1.12	0.96	1.35	1.39	1.16	+19	−23	−10	−24	+ 5	+28	+ 8	−13	+ 0	+ 9	0	0.30
115169	23 19 40.55	+51 41 05.2	9.24	H	349.918 965 02	+51.684 772 84	1.99	8.15	− 3.54	0.69	0.71	1.05	0.88	0.93	−25	+ 0	+12	+ 3	+ 9	+ 5	+ 9	+ 2	− 6	−22	0	−0.21
115170	23 19 40.63	−15 46 56.2	7.31	H	349.919 282 80	−15.782 270 98	4.02	33.11	−11.14	0.90	0.78	1.08	1.06	0.94	+25	−24	−40	−21	+ 5	+31	+21	+25	− 4	+20	0	0.89
115171	23 19 41.37	+48 22 51.1	6.29	H	349.922 394 05	+48.380 859 76	6.86	206.18	31.11	0.38	0.42	0.70	0.46	0.46	−34	− 8	+27	+25	− 4	−10	+ 4	+ 6	+15	− 2	0	2.02
115172	23 19 41.40	+23 49 31.2	7.28	H	349.922 496 31	+23.825 346 19	3.75	22.54	−35.98	0.52	0.49	0.74	0.59	0.53	+34	+ 7	+ 5	+18	− 7	− 4	− 4	−18	+27	+32	0	2.51
115173	23 19 41.57	−23 13 31.8	7.96	H	349.923 194 49	−23.225 505 86	3.97	17.30	−16.00	0.93	0.58	1.00	1.20	0.74	+29	− 3	− 7	+ 0	+23	− 2	+19	− 7	+24	+ 9	0	0.92
115174	23 19 41.91	+66 24 57.8	8.32	H	349.924 635 71	+66.416 065 33	2.74	3.94	2.11	0.66	0.68	0.80	0.90	0.83	− 9	− 1	− 7	+ 5	−17	− 1	−16	− 9	+13	−14	1	−0.69
115175	23 19 42.02	−41 04 59.6	7.21	G	349.925 090 17	−41.083 219 13	6.30	2.25	− 0.66	0.56	0.54	0.75	0.63	0.61	+15	− 2	+ 0	+21	+ 4	+13	+ 4	+11	+11	+18	0	−0.50
115176	23 19 42.27	−31 21 17.3	8.88	2 H	349.926 110 34	−31.354 817 67	−0.23	−10.27	−25.99	0.99	0.86	1.22	1.29	1.12	+20	− 4	−24	−26	+ 1	+14	+ 3	−13	+15	+24	0	−1.46
115177 H	23 19 42.49	−46 19 19.9	8.03	H	349.927 044 05	−46.322 196 47 A	2.76	11.21	− 8.91	1.37	1.21	1.47	1.45	1.10	+34	− 7	−22	−16	−22	+24	−17	−26	+ 9	+27	1	0.48
115178	23 19 43.12	−33 42 28.7	6.35	H	349.929 655 23	−33.707 960 23	5.70	42.71	−37.68	0.77	0.63	0.92	0.96	0.72	+ 6	−12	−21	−37	− 5	+40	+ 3	−31	+ 8	− 3	0	2.39
115179	23 19 44.42	+39 17 20.3	7.62	H	349.935 103 53	+39.288 969 27	4.63	3.06	−22.97	0.73	0.61	1.00	0.75	0.67	−11	+36	− 9	−12	− 6	− 9	+14	−55	+26	+15	3	−1.03
115180	23 19 45.88	−72 23 40.9	9.35	H	349.941 146 82	−72.394 705 32	3.82	1.32	−17.52	0.77	0.77	1.00	0.88	0.77	+ 1	− 7	−21	− 5	+ 7	− 8	+ 6	−23	+ 6	+11	0	1.05
115181	23 19 47.55	−54 43 00.9	8.89	H	349.948 141 26	−54.716 926 90 A	15.89	−207.87	−134.16	1.36	1.49	2.14	1.45	1.39	−13	+ 9	−16	+ 6	− 2	+14	− 1	−11	− 8	− 9	2	1.18
115182	23 19 48.08	+07 58 55.8	6.91	H	349.950 314 71	+07.982 170 21	4.89	−16.54	−32.36	0.88	0.66	0.94	1.18	0.84	+11	− 1	−10	−33	+ 7	+ 9	+12	− 5	+28	− 8	0	2.49
115183	23 19 48.16	−41 57 49.2	8.09	G	349.950 685 14	−41.963 673 19	11.76	150.99	−68.32	0.77	0.69	0.98	0.92	0.75	+12	− 2	+ 3	+40	+ 5	+19	+ 4	+ 8	+ 2	+10	0	0.83
115184	23 19 49.17	−38 26 35.5	8.14	H	349.954 895 80	−38.443 190 44	4.37	27.01	− 5.61	0.70	0.69	1.00	0.81	0.80	+19	− 4	−21	+18	−20	+26	−16	−16	+17	+24	2	−0.13
115185	23 19 49.35	+17 41 02.2	8.37	H	349.955 614 22	+17.683 931 93	9.97	64.27	0.27	1.09	0.79	1.19	1.29	1.02	+11	+22	−16	−29	+13	−36	+11	+10	+ 5	+ 9	0	2.00
115186	23 19 49.59	+59 38 00.1	7.90	G	349.956 620 90	+59.633 357 60	1.32	6.41	−1.52	0.56	0.62	0.74	0.74	0.75	−14	+14	+ 5	+26	−10	− 1	− 7	+ 8	+ 0	− 6	1	0.77
115187	23 19 49.86	+57 14 37.1	6.89	1 H	349.957 764 42	+57.243 634 34	3.74	11.09	− 1.77	0.53	0.56	0.71	0.74	0.62	−34	+ 1	+27	− 4	+24	+17	+17	−20	− 6	−43	0	1.04
115188	23 19 50.50	+26 16 43.7	9.50	3 H	349.960 411 12	+26.278 801 82 *	3.46	3.43	− 3.14	1.09	1.00	1.38	1.24	1.05	+24	+ 0	+ 2	−38	+ 4	+16	+ 0	−28	+24	+37	0	1.52
115189 H	23 19 51.55	+28 43 49.4	8.68	H	349.964 779 76	+28.730 398 48 *	7.17	10.54	−34.05	1.34	1.08	1.37	1.07	0.82	+27	+ 5	+ 5	−14	− 5	+19	− 6	−36	+23	+37	2	0.46
115190	23 19 51.98	−00 27 57.2	10.31	G	349.966 597 88	−00.465 899 73	10.32	−56.28	−234.84	1.55	1.13	1.85	2.18	1.43	+34	+ 5	+ 1	+ 3	+11	+ 3	+15	+14	+32	−10	0	1.25
115191	23 19 52.38	+42 04 40.9	5.81	H	349.968 254 85	+42.078 033 94	6.01	47.78	4.25	0.40	0.52	0.77	0.44	0.69	− 3	+11	− 9	− 2	− 7	+ 0	− 3	−41	+33	+ 9	1	1.72
115192	23 19 54.82	−56 57 55.5	9.75	H	349.978 419 96	−56.965 416 04	5.92	46.17	−43.81	0.76	0.89	1.50	0.87	0.92	−35	+ 3	−13	+ 9	− 8	+13	− 5	− 4	+ 9	−26	1	2.05
115193 H	23 19 55.54	−87 33 22.6	8.56	H	349.981 431 76	−87.556 290 96 A	6.57	30.92	29.71	1.10	0.97	1.10	1.15	0.95	− 4	− 8	− 8	+11	+10	+21	+12	−10	−17	− 6	1	−0.37
115194	23 19 57.78	+28 52 04.7	8.87	G	349.990 746 90	+28.867 973 86	31.50	741.79	−82.62	0.84	0.81	1.18	0.93	0.75	+32	+14	+ 7	+ 9	+15	− 2	+15	− 9	+20	+34	0	−0.67
115195	23 19 58.40	−05 09 56.2	11.86	G	349.993 351 53	−05.165 600 98	5.59	−11.45	− 4.93	2.71	2.29	3.34	4.38	2.97	+52	− 9	− 9	+ 8	+ 7	+34	− 4	−13	+ 8	+ 4	0	1.18
115196	23 19 59.64	+19 57 37.3	8.73	H	349.998 491 07	+19.960 350 45	0.81	14.19	6.53	0.95	0.65	1.16	1.05	0.74	+46	+ 4	+ 4	−10	+12	−24	+12	+ 1	− 3	+58	0	−0.36
115197	23 19 59.72	−47 32 24.6	6.82	H	349.998 842 18	−47.540 158 85	3.51	14.76	6.40	0.68	0.58	0.78	0.74	0.64	+ 1	−28	− 4	+31	+ 3	− 9	+ 4	+22	− 8	− 7	0	0.88
115198	23 20 00.65	+61 08 59.4	6.94	H	350.002 706 42	+61.149 841 84	2.29	−1.12	1.92	0.50	0.52	0.64	0.66	0.62	−21	+12	+ 1	+ 9	+ 9	+11	+ 9	−24	+ 1	−18	0	−1.50
115199	23 20 01.10	−66 08 02.1	9.11	H	350.004 580 49	−66.133 922 92	2.61	7.29	−11.85	0.80	0.85	1.11	0.99	0.98	−13	+ 2	−22	−15	+ 3	− 1	+ 2	−13	+ 0	+ 0	0	1.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags		AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61		62	63	64	65		66	67	68-70
115101	9.377	0.027	7.682	0.013		1.416	0.024	T	1.40	0.04	L	7.6352	0.0018	0.012	62		7.62	7.66		C			1								
115102	5.864	0.004	4.535	0.003		1.109	0.047	G	1.08	0.02	A	4.5777	0.0005	0.004	82		4.57	4.59		C			1								S
115103	9.820	0.018	9.207	0.016		0.569	0.018	T	0.64	0.02	L	9.2828	0.0016	0.019	124		9.23	9.32		C			1								
115104	9.857	0.023	9.666	0.029		0.210	0.015	G	0.23	0.02	H	9.7144	0.0024	0.021	118		9.68	9.75					1 X								G
115105	10.186	0.034	8.975	0.020		1.036	0.031	T	1.01	0.03	L	9.0230	0.0032	0.018	73		8.99	9.06					1								
115106	9.189	0.015	8.729	0.015		0.390	0.015	G	0.46	0.02	H	8.7993	0.0021	0.023	105		8.75	8.84					1								
115107	9.676	0.021	8.190	0.012		1.251	0.019	T	1.21	0.02	L	8.2137	0.0014	0.011	79		8.19	8.24		C			1								S
115108	9.147	0.010	8.640	0.009		0.476	0.012	T	0.55	0.01	L	8.6948	0.0013	0.016	238		8.67	8.72		C			1								
115109	10.018	0.020	8.706	0.012		1.114	0.018	T	1.08	0.02	L	8.7295	0.0017	0.018	136		8.70	8.76					1								
115110	8.013	0.009	7.750	0.010		0.240	0.000	G	0.27	0.00	H	7.8003	0.0013	0.013	88		7.78	7.82		C			1								S
115111	10.302	0.033	9.022	0.019		1.089	0.030	T	1.05	0.03	L	9.0796	0.0026	0.018	85		9.05	9.12		C			1								
115112	9.101	0.016	8.114	0.012	*	0.820	0.000	G	0.84	0.00	H	*	8.1464	0.0011	0.011	92	*	8.13	8.17		D	23189+0525	I 1	2 C	A	AB	332	0.647	0.002		1.12	0.01	S
115113	8.340	0.009	7.056	0.006		1.093	0.008	T	1.05	0.01	L		7.1076	0.0012	0.011	93		7.09	7.13		C			1								S
115114	7.952	0.007	7.603	0.007	*	0.340	0.015	G	0.40	0.02	H	*	7.6821	0.0011	0.011	205	*	7.67	7.70		C	23190+4830	I 1	2 C	A	AB	25	8.342	0.022		3.61	0.11	S
115115	4.978	0.003	4.999	0.003		−0.022	0.002	G	0.00	0.00	H		4.9983	0.0007	0.005	56		4.99	5.01		C	23189−0937	I 1	1	S							S
115116	8.289	0.008	8.057	0.008		0.221	0.011	T	0.24	0.01	L		8.1087	0.0013	0.014	150		8.09	8.14					1								S
115117	10.367	0.064	10.086	0.076		0.210	0.003	G	0.23	0.00	H		10.0693	0.0031	0.024	58		10.03	10.10		C			1								
115118	10.325	0.028	9.105	0.016		1.043	0.025	T	1.01	0.02	L		9.1623	0.0017	0.021	133		9.12	9.19					1								
115119	7.243	0.009	7.227	0.010		0.000	0.001	G	0.02	0.00	H		7.2411	0.0012	0.008	52		7.22	7.26					1								S
115120	6.720	0.004	6.530	0.005		0.174	0.003	G	0.19	0.00	H		6.5660	0.0008	0.007	113		6.55	6.58		C			1								S
115121	8.530	0.010	6.684	0.005		1.535	0.009	T	1.58	0.02	L		6.6040	0.0012	0.011	95		6.58	6.63					1								S
115122	10.867	0.042	9.636	0.025		1.051	0.038	T	1.02	0.03	L		9.6867	0.0025	0.024	103		9.64	9.72					1 G								
115123	10.457	0.024	9.056	0.013		1.154	0.002	G	1.25	0.00	I		9.0497	0.0027	0.028	188		9.00	9.10					1								
115124	7.893	0.008	7.712	0.009		0.173	0.011	T	0.19	0.01	L		7.7600	0.0013	0.013	141		7.74	7.78		C			1								S
115125						0.895	0.000	G	0.90	0.00	H		5.3471	0.0224	0.227	46		5.25	6.07		D	23191−1328	I 2		S							S G
115126						0.787	0.004	G	0.82	0.00	G		5.2453	0.0029	0.020	49		5.23	5.30		D	23191−1328	I 2	1 X	S							S
115127	10.269	0.030	10.086	0.039		0.175	0.046	T	0.19	0.05	L		10.1609	0.0031	0.031	138		10.11	10.21					1								G
115128	7.559	0.005	7.269	0.005	*	0.276	0.007	T	0.31	0.01	L	*	7.3179	0.0009	0.011	197	*	7.30	7.34		C	23191+4855	I 1	2 C	C	AC	107	0.545	0.041		3.85	0.16	S
115129	7.506	0.005	6.429	0.004		0.913	0.005	G	0.91	0.00	H		6.4973	0.0007	0.007	139		6.49	6.51					1								S
115130	9.879	0.017	8.884	0.012		0.870	0.015	T	0.88	0.01	L		8.9425	0.0013	0.019	185		8.91	8.98		C			1								S
115131	9.046	0.014	8.648	0.015		0.380	0.015	G	0.44	0.02	H		8.6444	0.0017	0.015	105		8.62	8.68		C	23192+6131	I 1	1	S							G
115132	10.872	0.065	9.568	0.035		1.108	0.058	T	1.07	0.06	L		9.5840	0.0031	0.022	58		9.53	9.62		C			1								
115133	9.442	0.014	8.909	0.014		0.500	0.018	T	0.57	0.02	L		8.9928	0.0018	0.016	109		8.97	9.02		C			1								S
115134	8.507	0.010	8.173	0.010		0.338	0.015	G	0.39	0.02	H		8.2261	0.0023	0.022	112		8.19	8.26		U 2			1								S
115135	11.697	0.111	11.073	0.101		0.581	0.131	T	0.65	0.12	L		11.3565	0.0422	0.240	83		10.90	11.59	0.63	P 1 A			1								G
115136	9.784	0.018	9.441	0.020		0.353	0.003	G	0.41	0.00	H		9.4615	0.0019	0.025	145		9.41	9.50		C			1								
115137	8.717	0.014	7.496	0.009		1.043	0.013	T	1.01	0.01	L		7.5504	0.0009	0.009	79		7.53	7.56					1								S
115138	9.908	0.014	9.342	0.013		0.529	0.017	T	0.60	0.02	L		9.4421	0.0015	0.022	237		9.40	9.48		C			1								
115139	9.847	0.014	7.930	0.006		1.626	0.013	T	1.91	0.04	O		7.8275	0.0016	0.016	210		7.80	7.86					1								S
115140	8.085	0.008	8.038	0.009		0.048	0.011	T	0.06	0.01	L		8.0713	0.0015	0.012	108		8.05	8.09		C			1 G								S
115141	9.675	0.017	6.978	0.005		2.288	0.020	G	2.31	0.09	H		6.6361	0.0060	0.045	129		6.58	6.71		U 2 C			1	S							S
115142	6.026	0.004	5.619	0.004		0.386	0.003	G	0.45	0.00	H		5.6554	0.0006	0.005	73		5.65	5.67		C	23194−0507	I 1	1								S
115143	9.083	0.015	7.911	0.010		1.005	0.014	T	0.98	0.01	L		7.9600	0.0017	0.013	74		7.94	7.98		C			1								S
115144	7.965	0.011	6.141	0.005		1.534	0.009	G	1.57	0.02	M		6.0829	0.0015	0.010	56		6.07	6.10					1								S
115145	6.701	0.005	6.738	0.006		−0.029	0.002	G	−0.01	0.00	H		6.7368	0.0011	0.007	88		6.72	6.75		C			1								S
115146	7.211	0.005	7.054	0.006	*	0.130	0.015	G	0.14	0.02	A	*	7.0870	0.0011	0.009	108	*	7.07	7.10		D	23194−3910	H 1	2 C	A	AB	84	0.379	0.012		2.71	0.06	S
115147	8.661	0.010	7.622	0.007		0.893	0.010	T	0.90	0.01	L		7.6748	0.0020	0.021	130		7.63	7.70		U 2	23194+7900	I 1	1								S P
115148	6.248	0.005	6.311	0.004		−0.053	0.006	T	−0.03	0.01	L		6.3127	0.0015	0.011	77		6.29	6.33		U 2			1								S
115149	9.905	0.023	8.559	0.014		1.141	0.021	T	1.10	0.02	L		8.5746	0.0027	0.020	100		8.54	8.61					1								
115150	8.692	0.014	8.397	0.015		0.260	0.001	G	0.29	0.00	H		8.4518	0.0021	0.015	88		8.43	8.49		C			1								S
115151	9.507	0.015	8.824	0.013		0.620	0.015	T	0.69	0.01	L		8.9019	0.0020	0.021	138		8.86	8.94					1								
115152	6.746	0.003	5.563	0.002		1.014	0.003	T	0.99	0.00	L		5.6074	0.0005	0.005	207		5.60	5.62		C			1								S
115153	10.290	0.026	8.881	0.014		1.190	0.023	T	1.15	0.02	L		8.9210	0.0017	0.016	121		8.89	8.95		C			1								
115154	10.579	0.044	9.195	0.023		1.168	0.040	T	1.13	0.04	L		9.1691	0.0023	0.017	87		9.14	9.20		C			1								
115155	10.128	0.020	10.036	0.029		0.090	0.033	T	0.10	0.04	L		10.0839	0.0035	0.038	176		10.03	10.15		R			1								G
115156	10.197	0.042	8.968	0.025		1.050	0.038	T	1.02	0.03	L		9.0127	0.0019	0.020	63		8.98	9.05					1								
115157	10.190	0.027	8.591	0.013		1.340	0.024	T	1.30	0.03	L		8.5923	0.0016	0.020	212		8.56	8.63					1	S							
115158	9.456	0.023	8.139	0.014		1.118	0.021	T	1.08	0.02	L		8.1781	0.0022	0.015	49		8.16	8.20		C			1								S
115159	8.220	0.009	7.700	0.010		0.508	0.015	G	0.58	0.02	H		7.7514	0.0011	0.010	109		7.73	7.78					1								S
115160	10.039	0.068	8.795	0.042		1.061	0.062	T	1.03	0.05	L		8.9028	0.0036	0.015	52		8.88	8.93					1								S
115161	10.708	0.057	9.404	0.031		1.108	0.051	T	1.07	0.05	L		9.4424	0.0029	0.021	53		9.39	9.47		C			1								
115162	9.846	0.017	9.014	0.014		0.749	0.017	T	0.79	0.01	L		9.0823	0.0030	0.021	126		9.05	9.11					1								
115163	10.518	0.033	9.355	0.020		0.998	0.030	T	0.98	0.02	L		9.4040	0.0019	0.020	120		9.36	9.43		C			1	S							
115164	10.104	0.021	9.565	0.021		0.513	0.022	T	0.59	0.02	L		9.6360	0.0021	0.026	145		9.59	9.68		C			1								
115165	7.933	0.008	7.645	0.008		0.321	0.007	G	0.37	0.01	H		7.6706	0.0013	0.012	113		7.65	7.69		C	23197+7355	I 1	1								S
115166	10.072	0.029	9.676	0.031		0.387	0.036	T	0.45	0.04	L		9.6834	0.0017	0.019	94		9.65	9.72		C			1								
115167	10.751	0.072	10.314	0.077		0.456	0.028	G	0.53	0.03	H		10.3247	0.0041	0.027	66		10.28	10.37					1								
115168	9.870	0.023	9.309	0.022		0.530	0.024	T	0.60	0.03	L		9.3839	0.0020	0.022	87		9.35	9.42					1								
115169	9.470	0.013	9.225	0.015		0.233	0.019	T	0.26	0.02	L		9.3056	0.0016	0.024	167		9.27	9.36					1								
115170	8.698	0.014	7.424	0.009		1.084	0.020	G	1.05	0.02	H		7.4781	0.0010	0.009	57		7.46	7.51		C			1								S
115171	7.734	0.005	6.416	0.003		1.123	0.004	G	1.09	0.00	H		6.4574	0.0005	0.007	225		6.45	6.47		C	23197+4823	I 1	1								S
115172	7.180	0.005	7.267	0.007		−0.075	0.008	T	−0.05	0.01	L		7.2645	0.0008	0.010	130		7.25	7.28					1								S
115173	9.620	0.016	8.104	0.009		1.274	0.014	T	1.23	0.01	L		8.1191	0.0014	0.014	107		8.10	8.14			23197−2314	I 1	1								S
115174	8.543	0.011	8.341	0.013		0.193	0.016	T	0.21	0.02	L		8.3862	0.0020	0.014	99		8.36	8.41					1								
115175	7.489	0.007	7.248	0.007		0.218	0.006	G	0.24	0.01	H		7.2804	0.0013	0.011	100		7.26	7.30					1								S
115176	10.919	0.051	9.029	0.017		1.570	0.043	T	1.59	0.04	L		8.9916	0.0090	0.050	99		8.93	9.08		U 2			1								
115177	9.277	0.016	8.184	0.011	*	0.944	0.015	T	0.93	0.01	L	*	8.1909	0.0022	0.015	86	*	8.16	8.22		D	23197−4619	I 1	2 C	A	AB	189	0.765	0.010		2.22	0.04	S
115178	8.051	0.008	6.493	0.005		1.308	0.007	T	1.27	0.01	L		6.5055	0.0008	0.006	76		6.49	6.52		C	23197−3342	I 1	1								S
115179	8.959	0.012	7.743	0.008		1.050	0.015	G	1.02	0.01	H		7.7907	0.0010	0.013	129		7.77	7.81					1								S
115180	9.931	0.022	9.351	0.020		0.544	0.022	T	0.62	0.02	L		9.4661	0.0019	0.019	124		9.43	9.50		C			1								
115181	9.973	0.019	8.977	0.013	A	0.871	0.002	G	0.88	0.00	H		9.0322	0.0124	0.042	149	A	8.98	9.12		D	23198−5443	I 1	2 C	A	AB	140	15.144	0.019		2.09	0.09	
115182	8.384	0.012	7.033	0.009		1.160	0.015	G	1.12	0.04	D		7.0738	0.0014	0.008	61		7.06	7.09		C			1								S
115183	8.783	0.013	8.151	0.012		0.584	0.002	G	0.66	0.00	H		8.2184	0.0017	0.013	92		8.19	8.24		C			1								S
115184	9.584	0.019	8.261	0.012		1.123	0.018	T	1.09	0.02	L		8.3121	0.0015	0.014	107		8.29	8.33		C			1								S
115185	8.957	0.022	8.409	0.020		0.513	0.027	T	0.59	0.03	L		8.4792	0.0021	0.014	45		8.45	8.51		C			1								S
115186	7.931	0.007	7.886	0.009		0.038	0.010	G	0.05	0.01	H		7.9209	0.0013	0.012	122		7.90	7.94		C			1								S
115187	9.306	0.014	7.139	0.006		1.791	0.012	T	1.82	0.01	L		6.9815	0.0023	0.017	112		6.95	7.01		U 2	23198+5715	I 1	1								S
115188	10.673	0.048	9.506	0.028		1.008	0.046	T	4.93	0.21	O		8.4476	0.1197	1.017	101		7.58	9.91	346.00	P 1 B			1 V								G P
115189	9.260	0.018	8.740	0.017	*	0.488	0.023	T	0.56	0.02	L	*	8.7830	0.0020	0.016	85	*	8.75	8.81		D	23199+2844	I 1	2 C	A	AB	231	0.218	0.008		0.70	0.21	
115190	11.500	0.112	10.446	0.071		0.898	0.001	G	0.90	0.00	H		10.4511	0.0041	0.038	67		10.32	10.51					1	S							
115191	7.787	0.008	5.970	0.003		1.512	0.007	T	1.54	0.01	L		5.9288	0.0009	0.008	118		5.91	5.95					1 G								S
115192	10.546	0.020	9.765	0.016		0.710	0.020	T	0.76	0.02	L		9.8954	0.0024	0.037	258		9.82	9.95			23199−5658	I 1	1								
115193	9.268	0.013	8.794	0.013	A	0.493	0.100	G	0.48	0.04	L	*	8.6515	0.0015	0.014	145	*	8.63	8.68		D	23199−8733	H 1	2 C	A	AB	159	2.066	0.005		1.48	0.02	
115194	9.860	0.025	8.974	0.019		0.811	0.012	G	0.84	0.01	H		8.9993	0.0020	0.015	87		8.97	9.03		C			1								
115195	11.601	0.147	11.397	0.196		−0.331	0.004	G	−0.34	0.02	A		11.7526	0.0075	0.059	60		11.64	11.85					1								G
115196	8.905	0.010	8.771	0.012		0.129	0.015	T	0.14	0.01	L		8.7771	0.0016	0.018	145		8.75	8.81					1								
115197	8.447	0.012	6.968	0.005		1.245	0.010	T	1.20	0.01	L		6.9839	0.0011	0.010	89		6.97	7.00		C			1								S
115198	6.957	0.004	6.946	0.005		0.033	0.001	G	0.05	0.00	H		6.9594	0.0009	0.009	107		6.95	6.97		C			1								S
115199	10.476	0.028	9.210	0.016		1.079	0.025	T	1.04	0.02	L		9.2813	0.0017	0.025	140		9.24	9.33					1								
115200	7.612	0.007	7.383	0.009		0.218	0.011	T	0.24	0.01	L		7.4151	0.0010	0.012	116		7.40	7.53		U 2			1								S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
115201	23 20 01.74	+13 52 15.3	10.15	H	350.007 255 33	+13.870 918 03	0.76	−0.82	−13.93	1.61	1.23	1.70	1.76	1.51	+ 3	+ 1	−27	−27	+25	−15	+20	+16	−19	+19	2	1.13
115202	23 20 02.59	+76 54 28.4	8.22	H	350.010 805 21	+76.907 899 59	4.58	9.71	−21.16	0.70	0.63	0.77	0.77	0.72	−18	−19	+29	+10	− 5	−11	− 3	− 3	+ 0	−17	0	1.61
115203	23 20 02.65	+64 50 54.7	7.26	H	350.011 038 29	+64.848 522 42	3.00	5.45	−7.90	0.47	0.49	0.59	0.57	0.55	−13	+ 4	+ 4	+19	+ 0	−18	− 1	+ 0	− 2	−17	0	1.13
115204	23 20 02.79	−22 49 17.7	7.63	H	350.011 634 55	−22.821 592 28	8.78	64.49	37.16	0.77	0.52	0.84	0.96	0.64	+37	−17	+ 8	+12	+26	+13	+17	−10	+ 9	+16	0	1.53
115205	23 20 03.07	−51 53 47.4	8.91	H	350.012 779 98	−51.896 513 62	2.87	34.48	−2.53	0.87	0.89	1.36	1.01	0.81	− 9	+ 8	−10	−22	− 3	+25	− 2	−47	− 6	−25	0	0.88
115206	23 20 03.64	+78 34 19.4	8.91	2 H	350.015 167 08	+78.572 061 94	2.91	6.20	8.35	0.72	0.64	0.78	0.84	0.72	+ 3	+ 2	+13	+14	+ 2	+ 0	+ 2	+ 1	+ 6	+ 1	0	0.41
115207	23 20 03.86	+19 18 42.6	7.89	H	350.016 100 88	+19.311 840 67	1.65	17.35	−25.22	0.84	0.64	1.08	0.98	0.69	+42	+ 1	− 8	+14	+23	−46	+22	+14	−17	+55	0	−1.39
115208	23 20 05.74	+40 45 41.9	9.15	H	350.023 897 55	+40.761 651 11	5.11	11.85	− 6.70	0.64	0.68	1.10	0.73	0.83	− 7	+ 7	− 6	+28	−23	+11	+ 4	−43	+28	+35	0	−0.98
115209	23 20 06.28	−67 19 22.5	8.37	H	350.026 150 24	−67.322 915 14	6.40	−3.53	20.85	0.68	0.67	0.89	0.87	0.83	− 6	−10	−27	+ 8	+ 6	− 1	+ 5	+10	+ 4	− 8	0	1.08
115210	23 20 06.66	+05 38 50.5	8.99	H	350.027 745 80	+05.647 356 27	0.26	3.21	− 5.17	1.34	0.84	1.35	1.36	1.27	+46	+12	− 5	−23	+13	+ 3	+33	+24	+21	+26	0	−1.68
115211	23 20 07.90	−60 03 53.5	11.03	G	350.032 909 61	−60.064 869 52	38.28	−317.42	−128.94	2.22	2.42	3.50	2.56	2.51	−17	− 1	−18	−15	+ 0	+ 5	+ 2	−19	− 6	− 9	0	
115212	23 20 08.86	+25 26 00.0	8.35	H	350.036 934 52	+25.433 332 94	2.64	11.91	− 1.69	0.63	0.63	0.92	0.66	0.65	+36	+13	+ 1	+16	+ 4	+ 2	+10	−13	+22	+45	0	−0.08
115213	23 20 11.57	+01 10 01.0	11.65	G	350.048 223 22	+01.166 956 29	17.84	43.85	−14.55	4.36	3.21	4.76	4.76	3.55	+29	+13	+ 4	−26	+ 2	+10	+ 7	−11	+11	+ 4	0	
115214	23 20 11.63	+23 05 28.3	6.63	H	350.048 443 40	+23.091 200 38	4.37	1.15	−19.65	0.50	0.48	0.80	0.56	0.51	+38	− 5	− 7	+14	+ 1	+10	+ 0	−11	+32	+40	0	1.03
115215	23 20 13.11	+45 56 44.3	9.47	H	350.054 628 02	+45.945 643 73	2.04	− 7.14	− 4.64	0.68	0.92	1.26	0.76	1.00	+ 5	+ 6	+23	−47	−13	−12	−15	−11	− 2	+17	2	−0.31
115216	23 20 13.52	−41 47 09.4	9.94	H	350.056 334 19	−41.785 944 16	3.98	6.81	7.84	1.22	1.13	1.51	1.50	1.23	+13	− 6	− 9	+41	− 3	+ 3	− 1	+15	−10	+ 9	2	−1.16
115217	23 20 14.20	+43 10 48.1	8.37	H	350.059 170 05	+43.180 034 59	0.38	0.85	− 3.63	0.54	0.67	1.12	0.58	0.78	− 1	+16	− 1	+11	−16	+12	− 1	−28	+35	+24	0	−0.04
115218	23 20 14.37	+61 58 12.5	6.39	1 H	350.059 875 70	+61.970 140 46	3.46	6.97	− 4.77	0.46	0.52	0.60	0.58	0.60	−17	+11	+14	+ 5	+ 4	+ 3	+ 3	−28	− 4	−17	1	−0.26
115219	23 20 14.95	+12 33 50.1	9.73	H	350.062 303 14	+12.563 919 92	2.45	9.26	19.02	1.32	1.23	1.46	1.50	1.43	+27	+16	−11	+36	+11	+ 2	+11	+33	+ 0	+28	0	0.59
115220	23 20 15.68	−03 55 07.9	6.64	H	350.065 339 95	−03.918 874 96	20.96	287.25	−109.96	0.72	0.54	0.85	1.04	0.60	+31	−18	−17	− 6	+ 0	+31	+ 0	−11	+ 5	−18	0	−0.38
115221	23 20 16.12	−51 37 29.9	9.45	H	350.067 176 92	−51.624 958 73	4.23	− 2.49	−44.21	0.93	0.87	1.40	1.07	0.87	−12	+ 3	+ 1	−26	− 2	+ 4	− 1	−39	+ 3	−26	0	0.33
115222	23 20 17.73	+54 29 14.6	11.46	G	350.073 875 57	+54.487 382 22	11.39	171.57	80.80	1.79	1.56	2.21	2.25	1.88	−30	+18	+ 3	+41	−14	+ 0	− 3	− 2	+16	−13	0	0.02
115223	23 20 18.29	+06 52 20.4	7.95	H	350.076 227 20	+06.872 346 76	11.51	−74.52	27.66	0.95	0.62	1.02	1.40	0.86	+30	− 2	− 1	+27	+ 6	+24	− 1	+10	+ 4	− 8	0	−0.03
115224	23 20 19.02	+55 48 28.1	8.58	2 G	350.079 247 00	+55.807 802 16	1.70	− 2.07	− 1.38	0.71	0.70	0.91	1.09	0.81	−28	+ 1	+19	− 3	+20	+14	+15	−22	− 5	−30	0	−0.73
115225	23 20 19.36	−14 23 44.0	8.21	H	350.080 680 91	−14.395 550 82	0.07	− 0.21	− 5.17	1.12	1.05	1.34	1.42	1.31	+30	+ 5	−37	+ 6	+30	+ 1	+31	+43	+ 7	+40	0	0.53
115226	23 20 19.70	+49 43 11.7	9.02	H	350.082 062 92	+49.719 919 66	2.12	8.51	− 1.80	0.70	0.80	1.18	0.87	0.96	−36	− 4	+25	+17	− 7	− 9	− 6	+18	+15	−22	0	0.97
115227	23 20 20.54	+05 22 53.2	5.05	G	350.085 571 17	+05.381 451 56	9.56	78.53	−59.35	0.86	0.60	0.95	0.85	0.91	+47	+23	+ 0	+ 7	+25	− 7	+37	+35	+26	+39	0	−1.08
115228	23 20 20.82	+60 16 29.2	6.62	H	350.086 759 04	+60.274 769 42	0.43	− 2.22	− 3.16	0.45	0.45	0.58	0.49	0.50	−21	+19	+12	+16	− 4	+ 8	− 6	− 4	− 3	−26	0	0.49
115229	23 20 20.88	+58 31 00.8	8.54	H	350.086 983 35	+58.516 889 42	3.67	25.12	9.88	0.76	0.74	1.02	0.92	0.90	−17	+30	+21	+ 7	+ 7	+ 0	+ 6	− 9	+ 9	−42	4	2.06
115230 H	23 20 20.92	−37 19 20.7	9.20	H	350.087 178 32	−37.322 419 81 A	6.10	−20.37	−55.31	4.08	2.73	2.02	1.50	1.65	+17	+ 2	− 9	+17	− 6	+23	− 6	+ 1	+ 0	+31	0	0.99
115231	23 20 21.21	−33 06 55.0	8.69	H	350.088 394 78	−33.115 271 08	1.46	− 8.20	−20.98	1.02	0.89	1.21	1.25	1.01	+20	−19	−19	−33	+ 1	+29	+ 6	−24	+ 5	+ 7	0	1.20
115232	23 20 23.12	+53 15 45.1	8.72	1 H	350.096 348 22	+53.262 541 01 A	0.25	−11.99	− 4.07	1.82	1.72	2.28	1.90	1.79	−26	+ 4	+13	+ 2	+ 9	+ 2	+10	−11	+21	−18	2	1.96
115233	23 20 25.00	−58 08 45.8	10.28	H	350.104 176 55	−58.146 068 37	3.60	−28.75	− 4.06	1.02	1.17	1.86	1.08	1.13	−32	+ 8	−41	+ 2	+ 2	+ 0	+ 5	−10	+ 0	−14	0	1.46
115234	23 20 25.10	−43 08 57.8	7.72	H	350.104 593 31	−43.149 385 74	3.00	57.70	−16.00	0.64	0.62	0.81	0.68	0.65	+11	− 6	+ 5	+26	+12	+ 5	+12	+33	− 3	+ 9	0	0.20
115235	23 20 25.32	−30 04 47.4	9.12	H	350.105 518 91	−30.079 829 86	2.11	−14.69	− 5.88	1.10	0.98	1.29	1.22	1.18	+29	−22	− 7	−23	+23	+14	+26	+17	− 6	+27	0	0.16
115236	23 20 26.13	+34 02 20.0	8.66	H	350.108 882 73	+34.038 899 40	2.22	−16.48	−13.58	0.83	0.69	1.11	0.81	0.60	+23	+44	+22	+28	+14	+ 1	+20	−15	+12	+27	0	−0.46
115237	23 20 28.27	+55 30 21.7	9.09	H	350.117 789 17	+55.506 026 02	1.97	5.02	0.28	0.66	0.70	0.90	0.94	0.94	−22	+ 4	+11	− 7	+10	+12	+ 9	−19	− 2	−19	0	0.40
115238	23 20 28.67	−39 59 32.0	8.25	H	350.119 470 19	−39.992 229 75	6.85	−16.70	12.50	0.70	0.69	0.99	0.80	0.78	+15	−10	−13	+23	−10	+20	− 8	− 9	+ 3	+14	0	0.17
115239	23 20 28.90	+22 09 25.1	8.66	H	350.120 403 79	+22.156 972 14	12.85	183.58	102.42	0.67	0.63	0.98	0.76	0.69	+44	− 3	− 4	+12	− 2	− 4	− 1	−19	+18	+48	1	1.36
115240	23 20 29.36	+74 02 26.3	8.02	H	350.122 338 05	+74.040 626 77	3.40	30.80	− 0.30	0.61	0.56	0.68	0.74	0.59	− 8	+ 0	+17	+ 3	−15	− 1	−13	+16	+12	−13	0	0.40
115241	23 20 32.31	−63 32 36.1	8.98	H	350.134 606 61	−63.543 361 51	1.63	22.93	10.07	0.74	0.75	1.07	0.85	0.75	−11	+ 9	−19	+12	− 2	−10	− 4	+ 1	−13	− 5	0	0.67
115242	23 20 32.63	+08 55 08.3	8.83	3 T	350.135 939 17	+08.918 976 26	3.08	−18.55	−19.56	1.67	1.25	2.05	2.29	1.81	+31	+33	− 3	− 3	+ 3	−29	+ 3	+10	+ 3	+17	0	1.97
115243	23 20 33.50	−65 53 50.5	9.75	H	350.139 573 91	−65.897 367 67	4.40	−33.20	0.86	0.92	0.97	1.25	1.15	1.12	−12	− 6	−16	+ 3	+ 6	− 4	+ 7	− 7	−10	− 4	2	−0.08
115244	23 20 34.31	+58 16 39.5	8.65	2 H	350.142 949 47	+58.277 627 79	1.87	1.23	− 2.84	0.74	0.71	0.99	0.83	0.76	−19	+22	+32	+ 9	+ 3	− 6	+ 5	− 3	+ 8	−36	0	0.20
115245	23 20 34.54	+62 12 47.8	6.41	H	350.143 907 47	+62.213 266 51	1.86	− 1.38	− 1.02	0.47	0.52	0.60	0.62	0.65	−18	+ 6	+15	+14	− 6	− 2	− 6	−17	+ 1	−22	1	0.19
115246	23 20 35.12	−50 25 29.4	9.34	H	350.146 331 99	−50.424 819 97	5.77	−25.45	−37.11	0.78	0.78	1.28	0.85	0.73	+ 1	−12	− 1	−14	−25	+ 1	−22	−19	+12	−21	0	0.04
115247	23 20 37.54	−75 37 58.3	7.30	H	350.156 429 88	−75.632 862 26	16.57	−41.85	27.70	0.54	0.50	0.66	0.62	0.51	+ 3	+14	−32	− 4	+ 5	− 5	+ 5	− 8	+11	+27	0	0.10
115248	23 20 37.67	−25 51 00.5	10.60	G	350.156 940 04	−25.850 147 18	−2.96	− 2.32	−10.27	1.73	1.30	2.08	2.60	1.62	+31	−11	−33	+ 9	+24	−25	+14	+ 9	+18	+25	5	−0.69
115249	23 20 38.11	+21 11 21.8	6.92	H	350.158 809 05	+21.189 388 70	7.43	− 8.81	−41.45	0.62	0.51	0.79	0.60	0.52	+42	+24	+ 1	− 3	+ 6	− 6	+11	−11	+20	+46	0	0.67
115250	23 20 38.22	+23 44 25.3	4.58	1 H	350.159 263 20	+23.740 359 20	19.50	30.48	− 9.14	0.49	0.50	0.73	0.53	0.52	+33	+11	+ 4	+10	− 3	+ 1	+ 2	−14	+30	+35	0	0.52
115251	23 20 38.42	−38 29 47.1	8.07	H	350.160 064 76	−38.496 426 79	8.93	84.63	−38.09	0.70	0.73	1.00	0.83	0.87	+26	+ 1	−17	+12	−20	+27	−15	−22	+20	+34	0	−0.24
115252	23 20 38.44	−06 27 04.8	8.58	H	350.160 186 11	−06.451 333 21	1.68	19.90	−15.21	1.20	0.84	1.25	1.35	1.48	+45	+19	+ 2	−10	+28	+12	+44	+32	+30	+43	0	2.12
115253	23 20 38.88	−08 55 10.5	7.90	H	350.161 982 54	−08.919 596 15	1.53	11.73	3.22	0.93	0.67	1.11	1.34	0.90	+15	− 4	−15	− 4	− 4	+39	+ 1	− 7	+25	+10	3	−0.53
115254	23 20 39.66	+04 29 48.6	9.89	H	350.165 242 24	+04.496 833 67	−1.37	12.66	− 4.10	2.09	1.55	2.31	3.12	3.13	+73	− 5	+ 5	+26	+45	+49	+57	+59	+29	+65	5	−0.27
115255	23 20 40.12	+19 50 26.9	7.34	H	350.167 171 51	+19.840 816 49	7.97	−25.36	− 9.12	0.67	0.50	0.82	0.74	0.55	+47	− 2	+ 6	− 2	+16	−20	+16	+ 6	− 7	+61	0	−0.54
*115256	23 20 40.99	−32 23 47.1	10.29	H	350.170 787 75	−32.396 413 70	5.81	16.94	16.42	1.54	1.03	1.55	1.70	1.26	+ 3	−17	−11	−55	+11	+23	+14	−31	+15	+ 1	0	−0.01
*115257	23 20 40.95	−05 54 28.2	6.17	H	350.170 614 68	−05.907 828 93	8.14	−102.57	−60.16	0.71	0.53	0.91	0.96	0.73	+35	−14	− 7	−16	+ 5	+42	+ 8	− 2	+32	+22	0	2.14
115258	23 20 42.19	+44 34 50.4	7.60	H	350.175 774 13	+44.580 676 63	2.43	−13.47	− 7.28	0.58	0.60	0.92	0.65	0.65	− 7	+12	+10	+ 8	+13	+15	+17	−15	+25	+10	0	−0.02
115259	23 20 42.67	+37 31 13.7	8.49	2 H	350.177 803 08	+37.520 475 69	−0.31	1.71	− 0.37	0.84	0.66	1.14	0.91	0.71	+10	+43	+ 6	+ 2	+12	+12	+24	−14	+37	+13	0	−1.81
115260	23 20 43.13	−06 37 26.7	8.12	1 H	350.179 706 91	−06.624 070 41	4.27	− 0.91	−11.60	0.95	0.74	1.07	1.12	1.24	+55	− 5	− 4	+ 6	+30	+25	+38	+34	+28	+53	0	1.56
115261	23 20 44.11	+44 06 58.5	6.25	H	350.183 775 90	+44.116 256 75 A	12.50	− 9.59	−36.84	0.72	0.76	1.05	0.70	0.76	− 1	+ 7	+ 0	+24	+ 1	+ 7	+ 7	− 9	+21	+16	2	1.16
115262	23 20 45.14	+77 03 45.5	7.65	1 G	350.188 079 64	+77.062 637 98	5.07	0.16	− 0.58	0.54	0.52	0.62	0.65	0.60	− 5	+ 0	+25	+ 4	+ 6	− 5	+ 7	− 4	+ 4	−12	0	−1.29
115263	23 20 45.17	+15 02 53.2	7.63	H	350.188 228 41	+15.048 104 89	8.73	29.08	−26.07	0.78	0.63	0.93	0.80	0.73	+ 4	+15	−32	+15	+ 9	−29	− 2	+17	− 5	+18	0	−1.09
115264	23 20 46.40	−25 09 17.0	9.35	G	350.193 322 57	−25.154 735 32	0.37	19.53	− 4.41	1.26	0.97	1.41	1.85	1.20	+34	−10	−20	− 5	+30	+11	+30	+16	+15	+18	0	0.40
115265	23 20 46.84	−33 54 02.0	8.64	H	350.195 150 06	−33.900 549 56	2.02	24.43	−28.83	0.93	0.83	1.19	1.09	0.97	+19	−15	−23	−33	− 2	+37	+ 7	−14	+14	+12	0	1.86
115266	23 20 47.94	−46 29 57.3	9.03	H	350.199 761 96	−46.499 249 77	3.94	9.09	− 4.50	1.13	0.89	1.23	1.27	1.00	+15	− 6	−16	−26	+ 1	− 1	+ 1	−18	+ 6	+13	0	−0.11
*115267	23 20 48.92	+62 24 45.2	8.11	1 H	350.203 815 37	+62.412 542 26	3.78	− 1.06	1.11	0.59	0.66	0.77	0.76	0.82	−15	+ 4	+16	+13	− 2	− 5	− 2	−17	− 1	−17	1	−0.27
*115268 H	23 20 48.88	+21 57 45.8	7.66	G	350.203 656 23	+21.962 717 98 A	4.19	1.08	− 5.89	1.15	1.10	1.50	1.18	1.20	+51	+14	+ 6	+15	− 4	+ 7	+ 2	− 9	+12	+65	0	0.14
*115269	23 20 49.16	−50 18 37.0	8.89	G																						
*115270	23 20 49.10	−59 04 42.4	10.44	H	350.204 590 33	−59.078 447 09	3.97	−55.21	−37.49	1.03	1.22	1.90	1.14	1.34	−26	+ 2	−15	+ 3	+ 6	+ 9	+10	−12	−15	− 9	2	−0.24
115271	23 20 49.50	+30 24 54.3	5.58	1 H	350.206 268 46	+30.415 088 40	7.49	77.44	−68.83	0.49	0.45	0.67	0.60	0.56	+21	− 1	− 6	+32	+ 4	−30	+ 3	+ 3	− 0	+10	0	1.30
115272	23 20 50.13	−50 18 23.0	6.04	G	350.208 890 77	−50.306 378 97	11.09	49.67	−74.02	1.44	1.34	2.11	1.80	1.33	− 9	−11	− 4	−18	− 5	+ 6	− 6	−34	+14	−28	2	
115273 H	23 20 50.45	+02 27 22.9	7.65	H	350.210 197 51	+02.456 366 03 A	9.40	−11.82	− 7.50	2.54	1.92	2.63	3.23	2.11	+67	−19	−16	+25	+ 3	+30	−31	−24	+26	− 8	0	1.25
*115274	23 20 52.12	−40 57 18.8	7.96	H	350.217 166 26	−40.955 234 23	3.99	16.52	− 2.85	0.64	0.69	0.91	0.72	0.80	+12	−15	+ 3	+20	+ 7	+ 3	+ 6	+20	+ 6	+17	0	−0.33
*115275	23 20 52.08	−48 25 10.6	9.68	G	350.217 002 36	−48.419 606 83	17.39	−86.50	−196.06	1.27	1.10	1.52	1.37	1.33	− 1	+10	− 8	+ 0	+14	+34	+21	+21	+10	+ 5	0	0.92
115276	23 20 52.57	−69 16 03.7	8.78	H	350.219 045 98	−69.267 698 16	5.14	55.33	27.23	0.74	0.77	0.99	0.77	0.81	−14	+12	−26	−19	+ 7	− 1	+ 5	−10	−10	− 4	0	0.98
115277	23 20 52.76	+39 44 46.9	9.38	H	350.219 825 29	+39.746 362 34	26.10	177.43	−44.49	0.96	0.86	1.38	1.08	1.06	−24	+37	−20	+ 1	−16	− 6	+11	−59	+20	+17	3	1.45
115278	23 20 52.76	−10 31 57.0	7.74	H	350.219 850 34	−10.532 495 45	3.81	45.09	− 9.78	0.93	0.68	1.02	1.11	0.76	+13	+22	−12	+18	+ 1	+16	+ 5	+16	+ 9	+ 1	0	−2.06
115279 H	23 20 52.91	+16 42 39.2	8.50	H	350.220 472 59	+16.710 896 93 *	13.07	30.97	−78.23	2.65	2.00	1.51	1.43	1.43	−14	+20	−25	− 7	− 1	−12	−12	+ 1	−11	+44	1	0.49
115280	23 20 53.17	+38 10 56.9	5.77	H	350.221 536 29	+38.182 474 97	23.59	129.56	−61.21	0.58	0.53	0.77	0.62	0.52	+ 8	+29	+ 4	+ 8	+ 6	− 5	+16	−32	+24	+16	0	−0.41
115281	23 20 54.04	−27 40 38.5	9.04	H	350.225 163 82	−27.677 368 00	2.14	0.79	−13.83	1.07	0.85	1.28	1.33	1.32	+33	− 9	−13	−29	+ 9	+16	+12	− 5	+23	+48	0	0.54
115282	23 20 54.24	+48 06 46.5	9.64	H	350.226 004 99	+48.112 921 63	5.87	8.18	−27.10	0.67	0.79	1.44	0.84	1.00	−40	− 9	+30	+ 5	+ 5	−13	+ 9	+ 6	+33	− 7	0	−0.83
115283	23 20 55.70	+68 44 19.7	10.13	H	350.232 076 89	+68.738 802 08	3.22	8.63	6.36	1.00	0.93	1.15	1.23	1.14	−15	+ 3	− 6	+23	− 1	+ 0	− 1	+ 6	− 5	−13	0	−0.45
115284 H	23 20 55.98	−18 32 36.2	6.99	H	350.233 235 02	−18.543 399 33 A	5.75	−35.94	−16.42	1.59	0.97	1.35	1.69	1.22	+19	+43	− 2	−14	+ 4	+ 1	+ 3	+ 0	+ 4	+35	0	0.82
115285	23 20 56.55	+10 20 21.8	8.62	H	350.235 606 52	+10.339 396 12	2.82	2.15	− 4.20	1.06	0.94	1.27	1.33	1.24	+26	+11	−19	− 2	− 9	+19	− 2	− 9	+28	+34	0	0.82
115286	23 20 56.75	−18 59 18.9	7.74	G	350.236 445 12	−18.988 589 23	13.47	131.07	6.11	0.97	0.86	1.19	1.50	1.06	+11	+17	−43	+41	−25	+41	− 3	− 3	+20	+28	0	1.01
115287	23 20 56.81	−17 35 08.9	9.25	H	350.236 707 28	−17.585 799 11	0.45	− 6.62	0.06	1.52	1.03	1.55	1.96	1.25	− 6	+ 0	−43	−38	+18	+ 2	+23	− 5	+14	−10	0	−0.39
115288	23 20 57.57	+17 15 09.3	6.67	1 G	350.239 880 03	+17.252 580 39	15.11	78.23	14.99	0.77	0.64	0.90	0.88	0.75	+14	+13	−18	+ 0	+ 2	−28	− 2	+18	+ 1	+16	0	0.57
115289	23 20 57.66	+14 18 51.5	8.53	H	350.240 249 53	+14.314 318 74	3.90	10.93	−17.76	0.93	0.77	1.06	0.99	0.98	+ 9	+15	−24	+14	+ 6	− 6	+ 4	+13	− 8	+31	0	1.13
115290 H	23 20 58.38	−37 41 14.4	8.99	G	350.243 232 63	−37.687 337 13 A	4.60	54.97	12.76	1.72	1.85	2.32	1.88	2.11	+36	− 6	−30	+18	−20	+26	−12	−20	+23	+51	1	1.08
115291	23 20 58.51	+52 33 52.3	9.35	G	350.243 808 96	+52.564 525 76	2.35	31.32	− 3.99	0.85	0.78	1.22	1.03	0.86	−30	−13	+28	+ 4	+ 4	+24	− 4	+12	+ 3	−22	1	−0.34
115292	23 20 58.58	+31 10 41.7	9.15	H	350.244 086 37	+31.178 260 76	2.40	25.74	− 9.58	0.78	0.76	1.16	0.86	0.74	+20	+15	− 9	+17	+16	−31	+15	+ 2	− 1	+29	0	2.21
115293	23 20 58.89	+09 38 53.1	8.96	H	350.245 359 53	+09.648 091 04	2.00	52.91	−18.18	1.15	1.01	1.42	1.25	1.23	+22	+24	−31	−13	+11	− 4	+15	+ 5	+25	+35	0	1.47
115294	23 20 59.78	−02 28 42.3	9.95	H	350.249 083 27	−02.478 415 38	10.27	83.61	−155.28	1.28	1.13	1.53	1.64	1.40	+48	− 4	−11	−13	+ 3	−20	+ 4	− 6	− 6	+22	0	1.86
115295	23 21 03.31	−56 18 10.2	9.80	H	350.263 784 38	−56.302 839 56	5.00	26.21	6.47	0.77	0.88	1.44	0.92	1.01	−30	− 5	− 7	−20	− 1	+ 3	− 7	+ 2	−13	− 8	1	1.79
115296	23 21 05.36	−25 15 11.1	8.26	H	350.272 336 08	−25.253 086 93	5.28	28.33	4.85	1.03	0.68	1.09	1.35	0.92	+30	− 1	− 1	−12	+31	+ 4	+33	+ 9	+20	+18	0	0.17
115297	23 21 07.36	+60 28 15.7	7.17	H	350.280 679 73	+60.471 026 47	6.62	−50.59	−17.18	0.51	0.53	0.67	0.57	0.59	−23	+15	+12	+ 8	+ 6	+15	+ 3	−11	− 3	−27	0	1.01
115298	23 21 07.83	−46 06 42.7	10.12	H	350.282 626 39	−46.111 847 61	10.19	57.90	33.70	1.46	1.12	1.63	1.97	1.20	+ 5	+ 7	−11	−18	+ 9	−11	+ 7	−11	+10	+ 3	4	−2.44
115299	23 21 07.95	−40 06 56.6	10.17	H	350.283 110 46	−40.115 720 40	6.33	−15.50	−136.93	1.13	1.17	1.57	1.38	1.42	+29	+ 3	− 5	+28	+ 3	+25	+ 7	− 8	+13	+35	4	1.47
115300

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
115201	11.394	0.108	10.156	0.057		1.057	0.095	T	1.02	0.08	L	10.3184	0.0030	0.023	56		10.29	10.37					1							
115202	9.656	0.018	8.355	0.011		1.106	0.016	T	1.07	0.02	L	8.3907	0.0016	0.014	123		8.37	8.42		C			1							
115203	7.568	0.005	7.285	0.006		0.269	0.007	T	0.30	0.01	L	7.3359	0.0008	0.009	129		7.32	7.35					1							S
115204	7.941	0.007	7.655	0.007		0.282	0.015	G	0.32	0.02	H	7.7021	0.0008	0.011	129		7.69	7.72					1							S
115205	10.717	0.030	9.055	0.013		1.389	0.026	T	1.36	0.03	L	9.0553	0.0027	0.031	163		9.00	9.11					1							
115206	10.319	0.025	9.039	0.015		1.089	0.023	T	1.05	0.02	L	9.0823	0.0020	0.016	125		9.06	9.11		U			1							
115207	9.538	0.019	8.022	0.010		1.274	0.017	T	1.23	0.02	L	8.0527	0.0016	0.012	105		8.03	8.08		C			1							S
115208	9.371	0.016	9.142	0.018		0.218	0.023	T	0.24	0.03	L	9.2233	0.0018	0.015	114		9.20	9.25		C			1							
115209	8.666	0.010	8.398	0.010		0.252	0.015	T	0.28	0.02	L	8.4422	0.0015	0.017	142		8.41	8.48		C			1							S
115210	11.099	0.065	9.167	0.021		1.560	0.040	G	1.69	0.16	K	9.0954	0.0018	0.019	98		9.07	9.13		C			1							
115211						1.450	0.020	G	1.81	0.09	I	11.1035	0.0043	0.055	180		11.02	11.19					1 X							G
115212	8.459	0.009	8.362	0.011		0.095	0.013	T	0.11	0.01	L	8.3852	0.0015	0.012	126		8.36	8.41		C			1							S
115213						1.209	0.020	G	1.35	0.04	I	11.7775	0.0077	0.049	65		11.65	11.85					1 X							G
115214	8.476	0.010	6.788	0.005		1.410	0.009	T	1.39	0.01	L	6.7682	0.0010	0.009	131		6.75	6.78		C			1							S
115215	9.736	0.014	9.509	0.016		0.217	0.020	T	0.24	0.02	L	9.5392	0.0021	0.024	177		9.50	9.59		C			1							
115216	10.214	0.031	9.948	0.037		0.250	0.050	T	0.28	0.06	L	10.0105	0.0039	0.031	85		9.96	10.08					1							
115217	8.333	0.008	8.358	0.010		−0.018	0.012	T	0.00	0.01	L	8.3731	0.0016	0.016	136		8.35	8.40		C			1							
115218	8.578	0.011	6.586	0.005		1.678	0.010	T	1.70	0.01	L	6.4886	0.0012	0.013	113		6.46	6.51		M			1							S
115219	10.801	0.054	9.886	0.038		0.811	0.049	T	0.84	0.04	L	9.8810	0.0030	0.022	68		9.83	9.93		C			1							
115220	7.250	0.006	6.695	0.006		0.520	0.008	T	0.59	0.01	L	6.7563	0.0013	0.007	66		6.75	6.78					1							S
115221	10.023	0.019	9.499	0.019		0.501	0.020	T	0.57	0.02	L	9.5585	0.0020	0.027	180		9.51	9.61		C			1							
115222						0.780	0.020	G	0.82	0.01	H	11.6241	0.0046	0.048	117		11.53	11.70					1							G
115223	8.765	0.015	8.038	0.013		0.670	0.015	G	0.73	0.01	H	8.0835	0.0016	0.011	74		8.07	8.10		C			1							S
115224	8.809	0.012	8.608	0.014		0.230	0.015	G	0.26	0.02	H	8.6230	0.0047	0.044	123		8.56	8.69		U 2 C			1							
115225	9.485	0.025	8.331	0.017		0.991	0.024	T	0.97	0.02	L	8.3728	0.0022	0.012	50		8.35	8.39		C			1							
115226	8.996	0.010	9.023	0.014		−0.020	0.016	T	0.00	0.01	L	9.0226	0.0019	0.024	171		8.98	9.06					1							
115227	6.625	0.005	5.205	0.003		1.204	0.002	G	1.16	0.00	H	5.2170	0.0009	0.007	102		5.21	5.23					1							S
115228	7.345	0.005	6.701	0.006		0.598	0.007	T	0.67	0.01	L	6.7469	0.0006	0.007	130		6.74	6.76					1							S
115229	9.627	0.018	8.629	0.013		0.873	0.017	T	0.88	0.01	L	8.6962	0.0019	0.018	106		8.67	8.73					1							
115230	9.833	0.018	9.243	0.017	*	0.552	0.018	T	0.62	0.02	L *	9.3204	0.0031	0.024	126	*	9.29	9.37			23203−3719	H 1	2 C	A	AB	287	0.314	0.013	2.00	0.15	
115231	10.406	0.032	8.827	0.015		1.324	0.028	T	1.29	0.03	L	8.8487	0.0017	0.017	86		8.83	8.88		D			1							
115232	10.061	0.022	8.805	0.013	A	1.071	0.020	T	1.04	0.02	L	8.8853	0.0166	0.028	152	A	8.84	8.94		U	23204+5316	I 1	2 C	B	AB	108	17.336	0.044	2.22	0.13	
115233	11.067	0.051	10.400	0.045		0.608	0.051	T	0.68	0.04	L	10.4064	0.0033	0.045	201		10.32	10.48					1 S							
115234	9.061	0.016	7.862	0.010		1.026	0.015	T	1.00	0.01	L	7.8878	0.0016	0.013	89		7.87	7.91		C			1							S
115235	10.835	0.048	9.246	0.021		1.332	0.041	T	1.30	0.05	L	9.2728	0.0022	0.026	97		9.22	9.32					1							
115236	9.166	0.018	8.705	0.017		0.435	0.023	T	0.50	0.02	L	8.7556	0.0020	0.015	84		8.73	8.79					1							S
115237	9.148	0.014	9.072	0.018		0.075	0.021	T	0.09	0.02	L	9.1212	0.0016	0.016	127		9.08	9.15			23205+5531	I 1	1							
115238	8.527	0.010	8.268	0.011		0.243	0.015	T	0.27	0.02	L	8.3160	0.0014	0.015	105		8.29	8.35		C			1							S
115239	9.415	0.013	8.720	0.011		0.641	0.014	T	0.71	0.01	L	8.7925	0.0015	0.016	156		8.76	8.82					1							
115240	9.359	0.016	8.153	0.010		1.032	0.015	T	1.00	0.01	L	8.1841	0.0015	0.014	110		8.16	8.20		C			1							
115241	10.161	0.024	9.089	0.016		0.928	0.022	T	0.92	0.02	L	9.1368	0.0024	0.023	147		9.10	9.18					1							
115242	10.513	0.071	8.974	0.035		1.293	0.062	T	1.25	0.06	L	9.3302	0.2595	1.395	49		7.51	11.02	328.60	P 1 A			1 S							G
115243	10.488	0.029	9.833	0.026		0.608	0.033	T	0.68	0.03	L	9.8809	0.0028	0.031	142		9.83	9.94		C			1							
115244	9.268	0.015	8.677	0.014		0.552	0.015	T	0.62	0.01	L	8.7718	0.0082	0.066	105		8.61	8.84	3.39	P 1 A			1							
115245	8.500	0.010	6.566	0.005		1.605	0.009	T	1.62	0.01	L	6.5295	0.0014	0.010	118		6.51	6.54			23205+6213	I 1	1							S
115246	10.176	0.020	9.399	0.016		0.715	0.003	G	0.77	0.00	H	9.4769	0.0019	0.022	184		9.44	9.52		C			1							
115247	7.778	0.006	7.342	0.006		0.458	0.006	G	0.48	0.02	A	7.3885	0.0008	0.010	136		7.37	7.41					1							S
115248	10.783	0.048	10.544	0.060		0.199	0.011	G	0.22	0.01	H	10.6922	0.0040	0.032	74		10.64	10.74		C			1							G
115249	8.460	0.010	7.051	0.005		1.190	0.009	T	1.15	0.01	L	7.0858	0.0009	0.008	146		7.07	7.10		C			1							S
115250	4.803	0.002	4.609	0.002		0.180	0.012	G	0.23	0.03	C	4.6423	0.0017	0.014	127		4.62	4.66	0.05	P 1 A			1							S P
115251	8.565	0.011	8.132	0.011		0.409	0.014	T	0.48	0.01	L	8.1641	0.0017	0.016	106		8.14	8.20					1							S
115252	10.673	0.054	8.731	0.018		1.611	0.045	T	1.63	0.05	L	8.6952	0.0019	0.015	81		8.67	8.72		C			1							
115253	7.846	0.011	7.886	0.014		−0.032	0.016	T	−0.01	0.02	L	7.8936	0.0016	0.010	55		7.88	7.91		C			1							S
115254	10.581	0.055	9.977	0.052		0.563	0.066	T	0.64	0.06	L	10.0167	0.0038	0.022	68		9.97	10.06		C			1							
115255	7.548	0.005	7.373	0.006		0.168	0.007	T	0.18	0.01	L	7.4008	0.0008	0.009	149		7.38	7.42		C			1							S
115256	10.725	0.065	10.404	0.074		0.305	0.092	T	0.35	0.12	L	10.3650	0.0035	0.027	85		10.31	10.40		C			1							
115257	7.562	0.008	6.283	0.005		1.089	0.007	T	1.05	0.01	L	6.3362	0.0012	0.007	70		6.33	6.35		C			1							S
115258	9.460	0.017	7.752	0.008		1.426	0.015	T	1.41	0.02	L	7.7346	0.0011	0.012	125		7.72	7.76					1							
115259	10.725	0.051	8.692	0.018		1.684	0.043	T	1.71	0.04	L	8.5960	0.0035	0.026	83		8.56	8.65		U 2			1							
115260	8.417	0.013	8.141	0.014		0.263	0.018	T	0.30	0.02	L	8.1956	0.0024	0.019	90		8.17	8.23		U			1							S P
115261	6.428	0.003	6.261	0.003	A	0.152	0.004	T	0.17	0.00	L	6.3009	0.0054	0.009	125	A	6.29	6.32		C	23207+4407	I 1	2 C	C	AB	178	13.513	0.056	3.97	0.21	S
115262	8.126	0.008	7.670	0.009		0.415	0.015	G	0.48	0.02	H	7.7434	0.0024	0.018	121		7.71	7.76	0.18	P 1 A			1							S
115263	7.809	0.010	7.662	0.013		0.141	0.015	T	0.16	0.01	L	7.6826	0.0021	0.009	51		7.67	7.70					1							S
115264	9.374	0.019	9.341	0.024		0.013	0.006	G	0.03	0.01	H	9.3709	0.0026	0.018	80		9.33	9.40		C			1							
115265	10.531	0.038	8.788	0.016		1.453	0.033	T	1.46	0.05	L	8.7736	0.0023	0.018	89		8.74	8.80					1							
115266	10.493	0.038	9.162	0.021		1.129	0.034	T	1.09	0.04	L	9.2015	0.0028	0.020	88		9.17	9.23		C			1							
115267	8.247	0.008	8.126	0.010		0.117	0.012	T	0.13	0.01	L	8.1517	0.0033	0.027	125		8.11	8.19	10.99	P 1 A	23209+6225	I 1	1							
115268	7.946	0.008	7.647	0.007	*	0.341	0.015	G	0.40	0.02	H *	7.7448	0.0010	0.013	154	*	7.72	7.77		D	23208+2158	I 1	2 C	A	AB	82	3.313	0.003	0.59	0.01	S
115269						0.610	0.015	G	0.67	0.04	L	6.5800	0.0513	0.427	116		6.15	7.60		D	23208−5018	I 2		S						G
115270	11.081	0.041	10.513	0.040		0.535	0.042	T	0.61	0.04	L	10.5536	0.0030	0.037	197		10.49	10.63					1	S						
115271	7.562	0.008	5.755	0.004		1.501	0.001	G	1.56	0.02	L	5.6994	0.0014	0.010	82		5.68	5.72		M			1 G							S
115272	6.585	0.003	6.105	0.003		0.423	0.008	G	0.42	0.03	C	6.1123	0.0016	0.017	192		6.08	6.15		D	23208−5018	I 2	1 X	S						S D
115273	8.361	0.013	7.826	0.009	A	0.524	0.400	G	0.62	0.02	L *	7.7696	0.0017	0.014	74	−	7.75	7.80		D	23208+0227	I 1	3 C	A						S G
115274	9.898	0.023	8.153	0.011		1.455	0.020	T	1.46	0.03	L	8.0968	0.0017	0.014	96		8.07	8.12					1							S
115275	10.679	0.050	9.763	0.036		0.849	0.001	G	0.86	0.00	H	9.8370	0.0037	0.027	74		9.80	9.88		C			1							
115276	10.107	0.022	8.876	0.013		1.051	0.020	T	1.02	0.02	L	8.9522	0.0020	0.020	141		8.91	8.98					1							
115277	10.504	0.030	9.433	0.019		0.918	0.028	T	0.96	0.03	L	9.5146	0.0023	0.024	112		9.47	9.54					1							
115278	8.997	0.017	7.837	0.012		0.996	0.016	T	0.97	0.01	L	7.9048	0.0012	0.010	56		7.89	7.92		C			1							S
115279	9.165	0.020	8.562	0.018	*	0.561	0.020	T	0.63	0.02	L *	8.6191	0.0020	0.014	68	*	8.59	8.65		D	23209+1643	M 1	2 C	A	AB	227	0.234	0.014	0.79	0.25	S
115280	6.310	0.004	5.826	0.004		0.468	0.004	T	0.54	0.00	L	5.8709	0.0006	0.006	97		5.86	5.88			23208+3810	I 1	1							S
115281	10.231	0.029	9.139	0.019		0.944	0.027	T	0.93	0.02	L	9.2003	0.0021	0.022	115		9.16	9.25					1							
115282	10.269	0.019	9.660	0.018		0.567	0.023	T	0.64	0.02	L	9.7621	0.0020	0.026	228		9.72	9.80		C			1							G
115283	10.632	0.040	10.211	0.042		0.398	0.054	T	0.46	0.06	L	10.2167	0.0028	0.032	131		10.16	10.27		C			1							G
115284	8.123	0.015	7.059	0.010	*	0.922	0.014	T	0.92	0.01	L *	7.1484	0.0015	0.009	51	*	7.13	7.18		D	23209−1833	I 1	2 C	A	AB	283	5.398	0.005	1.52	0.02	S
115285	9.866	0.034	8.752	0.023		0.960	0.032	T	0.95	0.03	L	8.7805	0.0021	0.014	51		8.75	8.83		C			1							
115286	8.538	0.021	7.826	0.018		0.649	0.015	G	0.71	0.01	H	7.8713	0.0013	0.010	48		7.86	7.90		C			1							S
115287	10.665	0.056	9.405	0.033		1.074	0.051	T	1.04	0.04	L	9.4173	0.0020	0.022	50		9.38	9.45		D			1							
115288	7.041	0.007	6.714	0.005		0.329	0.011	G	0.38	0.01	H	6.7440	0.0021	0.011	56		6.73	6.77		M			1 G							S
115289	10.080	0.037	8.633	0.019		1.190	0.015	G	1.15	0.01	H	8.7003	0.0016	0.011	59		8.68	8.72		C			1							
115290	9.612	0.024	9.010	0.023	*	0.568	0.015	G	0.64	0.01	H *	9.1117	0.0020	0.018	113	*	9.08	9.14		D	23210−3741	I 1	2 C	A	AB	225	3.414	0.005	0.83	0.02	S
115291	9.604	0.016	9.391	0.020		0.210	0.015	G	0.23	0.02	H	9.4131	0.0023	0.025	149		9.38	9.46					1							
115292	9.731	0.022	9.250	0.022		0.453	0.028	T	0.52	0.03	L	9.2507	0.0024	0.022	84		9.22	9.30					1							
115293	9.349	0.021	9.000	0.023		0.375	0.015	G	0.44	0.02	H	9.0483	0.0031	0.020	64		9.02	9.09		C			1							
115294	10.868	0.075	10.042	0.055		0.744	0.071	T	0.79	0.05	L	10.0940	0.0027	0.023	70		10.05	10.13		D			1 S							
115295	10.348	0.019	9.829	0.019		0.497	0.020	T	0.57	0.02	L	9.9075	0.0027	0.039	251		9.84	9.98					1							
115296	8.529	0.012	8.282	0.013		0.235	0.017	T	0.26	0.02	L	8.3330	0.0014	0.012	85		8.32	8.36		C			1							S
115297	8.670	0.010	7.301	0.006		1.159	0.009	T	1.12	0.01	L	7.3380	0.0009	0.010	130		7.32	7.36		C			1							S
115298	10.977	0.054	10.232	0.044		0.667	0.053	T	0.73	0.04	L	10.2599	0.0029	0.032	80		10.19	10.30		C			1							
115299	10.969	0.049	10.245	0.041		0.651	0.048	T	0.71	0.04	L	10.3021	0.0040	0.027	95		10.27	10.36		C			1							
115300	10.871	0.055	10.221	0.050		0.595	0.055	T	0.67	0.05	L	10.3145	0.0036	0.023	87		10.26	10.35					1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$											F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr																						%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28										29	30
115301	23 21 11.28	+02 11 50.5	7.42 H		350.296 980 39	+02.197 350 10		5.13	−11.78	−25.39	0.88	0.58	0.97	1.33	0.72	+19	− 3	− 2	+ 7	− 3	+12	− 9	− 6	+22	−31										5	1.39
115302	23 21 11.32	−01 35 42.0	11.76 G		350.297 165 94	−01.594 990 67		36.97	−138.61	−347.21	3.02	2.20	3.80	4.79	2.90	+37	−16	− 5	− 9	+ 8	+43	+12	− 1	−13	−12										5	0.38
115303	23 21 11.45	−45 00 35.0	10.16 H		350.297 699 71	−45.009 713 68		3.17	−11.33	−24.70	1.14	0.98	1.40	1.25	1.03	+11	+ 6	−13	+26	− 3	+18	− 2	+ 8	− 9	+ 4										0	−0.86
115304	23 21 11.98	+64 44 26.4	7.40 H		350.299 906 98	+64.740 674 22		2.77	8.01	−1.63	0.45	0.49	0.57	0.52	0.55	−16	+ 9	+ 4	+10	+ 2	−12	+ 2	− 6	+ 4	−21										0	0.58
115305	23 21 12.00	−08 40 27.0	7.50 H		350.299 983 06	−08.674 170 03		9.87	58.18	1.11	0.84	0.60	0.97	1.17	0.75	+21	− 9	− 1	−19	+11	+33	+13	+ 0	+18	− 2										0	2.68
115306	23 21 12.57	+33 01 40.6	8.32 G		350.302 378 44	+33.027 951 20		8.46	37.08	−44.21	0.88	0.60	0.99	0.95	0.59	+15	+17	+13	+13	+20	− 7	+22	− 3	+10	+22										0	−1.83
115307 H	23 21 13.22	+35 26 39.5	8.60 H		350.305 090 07	+35.444 309 61 A		2.46	0.16	4.96	2.50	2.63	3.40	2.04	1.68	+13	+16	+28	−10	+21	+36	+ 7	−15	+ 1	+17										2	1.36
115308	23 21 13.73	−12 49 47.5	8.38 H		350.307 215 14	−12.829 857 25		5.35	−14.78	−6.13	1.40	1.18	1.58	1.56	1.52	+22	+ 1	−43	−19	+31	− 2	+37	+39	+ 2	+28										0	1.07
115309	23 21 14.65	−07 01 23.1	7.87 G		350.311 024 23	−07.023 088 13		11.44	−16.54	−5.58	0.81	0.63	1.00	1.12	1.08	+49	+ 6	+ 2	+13	+26	+39	+33	+27	+40	+49										0	1.02
115310	23 21 15.15	−13 16 09.7	7.17 H		350.313 138 83	−13.269 371 50		0.65	24.98	1.40	1.14	0.97	1.31	1.36	1.18	+22	− 5	−44	−15	+21	+15	+34	+41	+ 0	+22										0	2.00
115311	23 21 15.35	−06 11 32.8	7.31 H		350.313 975 58	−06.192 457 01		5.49	15.03	−0.75	0.83	0.65	1.00	1.11	1.07	+48	− 9	−11	− 1	+21	+36	+30	+25	+31	+44										0	0.50
115312	23 21 15.51	−26 59 12.3	5.65 1 G		350.314 629 08	−26.986 741 62		9.92	−19.59	−11.20	0.66	0.58	0.87	0.89	0.82	+41	−15	−21	− 8	+16	+17	+15	+ 3	+27	+51										0	1.44
115313 H	23 21 17.40	+38 34 56.3	7.35 H		350.322 495 08	+38.582 298 67 *		3.63	−5.22	−11.47	1.50	1.32	1.11	0.88	0.77	−20	+ 3	− 9	−16	+ 6	+10	+11	−41	+28	+ 4										0	1.00
115314	23 21 19.17	−30 34 45.6	8.42 G		350.329 871 62	−30.579 321 30		15.20	19.78	−18.01	0.96	0.83	1.18	1.24	1.06	+31	−17	−22	−19	+ 2	+ 4	+ 3	−13	+ 1	+37										0	−0.62
115315	23 21 19.64	−20 50 56.9	9.02 H		350.331 850 40	−20.849 144 64		3.48	32.94	−32.71	1.25	0.86	1.21	1.91	1.05	− 7	+ 4	− 6	+ 5	+ 0	−10	+ 0	+ 6	+ 8	−34										0	0.08
115316	23 21 21.55	−04 40 21.7	6.79 G		350.339 810 67	−04.672 690 23		7.07	−22.33	−31.78	0.73	0.53	0.81	0.90	0.63	+28	−19	− 7	+10	− 5	+ 9	−15	−13	+21	− 5										0	−1.36
115317	23 21 23.13	+36 30 04.1	7.11 G		350.346 358 51	+36.501 131 37		5.19	59.00	4.92	0.74	0.61	1.00	1.06	0.63	+19	+31	+12	+10	+24	+35	+24	− 9	+33	+38										2	−2.45
115318	23 21 23.49	−30 31 29.1	10.86 H		350.347 881 61	−30.524 747 06		3.81	−10.99	−1.12	2.01	1.66	2.44	2.60	2.18	+29	−22	−18	−16	+ 8	+ 1	+ 9	−16	− 6	+31										0	−0.57
115319 H	23 21 23.83	−34 41 37.0	10.37 H		350.349 276 55	−34.693 624 33 A		8.31	−26.86	−6.02	4.31	3.48	5.14	4.56	4.45	+11	+28	−26	−21	+14	−17	+18	−38	+59	−15										1	0.31
115320	23 21 26.50	+64 09 46.4	8.73 H		350.360 414 11	+64.162 882 83		3.77	13.46	1.98	0.65	0.74	0.84	0.74	0.83	−17	+19	+12	+ 8	+ 6	−14	+ 8	−20	+ 5	−20										1	−0.22
115321 H	23 21 26.54	−13 39 30.2	8.66 G		350.360 588 52	−13.658 383 07 A		2.46	−7.48	−16.90	5.92	4.38	3.08	3.68	3.00	+70	+14	−22	− 2	+15	−17	+11	+13	+10	+17										2	0.25
115322	23 21 28.49	−44 54 37.3	7.63 H		350.368 705 75	−44.910 371 45		4.89	57.56	−48.61	0.66	0.65	0.86	0.78	0.73	+ 9	+ 3	+ 3	+12	+ 4	+ 9	+ 4	+19	− 2	+ 6										2	1.71
115323	23 21 28.61	−16 41 18.8	8.19 H		350.369 196 97	−16.688 557 51		5.31	4.95	10.63	0.89	0.78	1.09	1.11	0.96	+16	− 4	−33	− 2	− 3	+26	+ 5	+ 8	+17	+26										0	1.17
115324	23 21 30.92	+08 20 02.2	12.42 G		350.378 835 25	+08.333 947 06		−7.70	−0.61	−5.75	4.40	3.32	4.89	6.75	3.90	+14	+ 5	−10	+ 4	− 2	+25	+ 3	+ 9	+ 3	−23										0	−2.03
115325	23 21 31.43	−16 52 32.6	9.06 H		350.380 964 37	−16.875 727 11		3.00	18.53	3.36	1.24	1.09	1.60	1.63	1.27	+10	+ 2	−48	−13	+14	− 6	+11	+ 2	+25	+15										6	1.00
115326	23 21 32.17	+24 56 44.8	8.65 1 H		350.384 030 03	+24.945 770 56		6.56	0.69	−4.78	0.76	0.69	1.11	0.87	0.70	+31	+ 5	− 1	+ 1	− 1	+ 7	+ 0	−21	+29	+33										0	−0.10
*115327	23 21 33.37	−14 01 57.1	8.38 H		350.389 037 73	−14.032 532 33		1.61	2.86	−7.95	1.12	1.01	1.44	1.88	1.24	+21	− 2	−39	+ 4	− 6	+37	+11	+20	− 4	+ 1										0	−0.90
*115328	23 21 33.37	−53 10 37.5	9.71 G		350.389 033 89	−53.177 083 73		16.65	255.94	−125.14	0.79	1.04	1.61	1.08	1.11	−16	− 1	− 7	+25	−10	+ 8	−11	−23	− 5	−24										0	−2.10
115329 H	23 21 34.30	−20 17 43.5	8.96 H		350.392 905 39	−20.295 428 68 *		6.19	27.75	6.89	1.06	0.91	1.19	1.26	0.98	+10	+ 5	−10	− 3	− 1	+20	+ 2	− 1	+ 9	− 3										0	0.16
115330	23 21 34.77	−52 24 39.4	9.63 H		350.394 883 13	−52.410 936 29		4.49	6.49	−16.11	1.14	1.03	1.69	1.37	1.06	−19	+ 0	−11	−10	− 2	+16	+ 0	−39	+ 4	−23										0	−0.97
115331	23 21 36.00	+44 05 50.5	7.36 2 G		350.399 983 43	+44.097 350 13		45.63	636.25	219.20	0.51	0.53	0.83	0.53	0.59	− 6	+21	+ 1	+21	+ 4	+ 9	+17	−17	+33	+14										0	−0.35
115332	23 21 37.78	+17 17 37.5	11.70 G		350.407 401 64	+17.293 746 87		93.50	−536.53	−1385.25	3.05	2.30	3.58	3.81	2.56	− 9	+17	−52	−35	+24	−34	+ 8	− 1	− 5	− 3										0	−0.52
115333	23 21 38.49	−71 34 28.5	7.98 H		350.410 374 38	−71.574 574 09		3.14	39.05	−16.56	0.58	0.59	0.78	0.63	0.56	− 8	+16	−24	− 3	+ 5	−12	+ 1	+ 6	− 5	+ 1										0	−0.72
115334	23 21 38.71	+47 21 04.1	8.41 H		350.411 297 29	+47.351 140 61		3.28	−0.93	−5.50	0.50	0.54	0.90	0.62	0.70	−24	+ 5	+28	−22	− 2	−15	+ 1	−16	+ 5	+16										0	0.54
115335	23 21 38.81	+13 11 13.5	8.39 H		350.411 723 48	+13.187 086 46		3.02	−9.85	−13.86	0.94	0.70	1.02	1.03	0.86	+ 6	− 2	−18	− 4	+ 4	− 5	+ 3	− 3	+15	+ 8										0	1.09
*115336	23 21 40.88	+54 48 57.5	7.95 H		350.420 329 06	+54.815 984 81		4.47	27.42	1.96	0.61	0.64	0.83	0.73	0.77	−28	+13	+18	+27	+ 4	+ 0	+ 7	+ 2	+10	−28										0	−0.15
*115337	23 21 40.82	−41 08 36.5	8.48 H		350.420 078 37	−41.143 468 07		12.27	86.53	2.44	0.71	0.80	1.01	0.78	0.85	+23	−10	+ 7	+18	+13	− 1	+13	+16	− 5	+23										0	−0.46
115338	23 21 41.49	−61 48 38.9	9.28 H		350.422 875 88	−61.810 814 12		8.11	−71.31	−32.29	0.86	0.80	1.29	1.17	0.92	−10	−14	− 8	+ 4	− 4	+ 0	+ 1	+ 0	−31	−18										0	0.40
115339	23 21 42.06	+51 17 01.8	8.30 H		350.425 241 30	+51.283 835 87		2.21	4.57	3.34	0.58	0.63	0.90	0.71	0.79	−19	+ 2	+12	+ 3	+16	+ 1	+17	+ 5	+ 8	− 8										0	1.59
115340	23 21 43.40	−49 29 12.6	10.14 G		350.430 827 86	−49.486 828 99		4.43	210.53	−288.04	0.97	1.11	1.74	0.94	1.01	− 4	−18	− 5	−38	− 3	+ 3	− 4	−29	+21	−17										2	1.55
115341	23 21 44.29	+45 10 34.4	8.12 H		350.434 537 00	+45.176 231 02		47.66	197.05	−71.39	0.62	0.66	0.96	0.76	0.75	+ 2	+ 9	+11	+ 0	−12	+ 3	− 5	−23	+16	+22										5	1.58
115342	23 21 44.39	−10 51 42.4	8.71 H		350.434 969 69	−10.861 782 58		10.56	88.21	−48.27	1.09	0.93	1.38	1.46	1.17	+28	+19	−10	+33	+ 8	+45	+19	+28	+33	+32										0	−0.49
115343	23 21 47.42	+32 50 12.5	9.20 H		350.447 599 08	+32.836 799 67		6.17	−52.01	−81.59	0.97	0.75	1.26	1.13	0.74	+22	+ 8	+10	+19	+18	−17	+19	+ 4	− 6	+29										0	−1.18
115344	23 21 48.80	−36 54 03.9	10.17 H		350.453 331 42	−36.901 069 78		20.20	123.76	−147.23	1.04	1.09	1.65	1.15	1.35	+34	−12	−30	+13	−16	+17	−11	−15	+ 5	+44										0	−0.43
115345	23 21 49.27	+20 38 16.1	7.18 2 H		350.455 299 44	+20.637 810 50		3.40	−3.31	−20.14	0.72	0.56	0.87	0.76	0.57	+49	+19	+20	− 7	+17	− 6	+16	+ 6	+ 2	+59										3	1.44
115346 H	23 21 50.70	−12 16 04.7	9.78 G		350.461 234 08	−12.267 961 01 A		12.82	36.64	−5.41	3.27	3.31	3.31	3.43	3.37	+49	−34	−46	+25	+20	+19	+35	+42	− 4	+41										1	−0.10
115347	23 21 50.86	−09 45 40.9	7.67 G		350.461 913 57	−09.761 374 49		0.22	−5.81	−6.43	0.86	0.66	1.01	1.34	0.78	+14	+ 7	+12	+ 3	+15	+42	+ 8	− 2	−16	−22										0	−1.85
115348	23 21 51.23	−44 12 13.4	9.24 H		350.463 461 91	−44.203 725 78		9.30	36.46	1.17	0.88	0.96	1.18	1.00	0.99	+23	− 5	− 6	+12	+ 7	+ 0	+ 7	+24	− 5	+17										0	0.86
115349	23 21 51.35	−42 50 17.7	9.28 G		350.463 964 32	−42.838 257 02		3.39	10.47	2.24	0.89	0.81	1.19	0.89	0.92	+10	− 8	+ 1	− 9	+13	+21	+16	− 1	−11	+ 9										0	0.60
115350	23 21 51.39	+25 13 18.1	8.92 H		350.464 131 51	+25.221 687 63		1.88	4.18	−6.14	0.74	0.72	1.10	0.76	0.72	+33	+ 4	−12	+ 9	− 3	+ 4	− 1	−18	+24	+36										0	0.99
115351	23 21 51.61	−12 26 56.0	7.92 H		350.465 047 51	−12.448 892 79		3.32	15.23	−3.20	1.09	1.03	1.30	1.29	1.36	+46	−24	−36	+ 9	+23	+27	+38	+48	− 2	+43										0	1.60
115352	23 21 52.35	+43 21 15.2	10.22 H		350.468 141 70	+43.354 215 99		2.32	−21.29	−15.52	0.83	1.11	1.60	0.88	1.21	+ 6	+19	+ 7	+14	−10	+10	+ 0	−27	+26	+21										0	−0.55
115353	23 21 53.08	+75 47 17.2	7.62 H		350.471 184 48	+75.788 110 21		4.85	48.70	1.66	0.55	0.54	0.66	0.68	0.59	−15	− 9	+34	− 1	+ 9	+13	+ 5	+ 1	−11	−19										0	−0.04
115354	23 21 54.62	−73 42 26.5	8.89 H		350.477 573 26	−73.707 373 95		7.83	30.64	30.49	0.72	0.68	0.88	0.81	0.68	− 8	+ 6	−27	+ 0	+ 0	+ 0	+ 1	−27	+ 8	− 3										0	−1.18
115355 H	23 21 54.93	+31 48 44.9	5.35 H		350.478 858 50	+31.812 481 17 A		3.91	10.27	−6.81	0.83	0.73	0.84	0.85	0.56	+19	+19	+ 2	− 6	+13	− 9	+13	−14	+ 6	+42										1	0.61
115356	23 21 55.72	+07 35 35.1	8.41 H		350.482 187 46	+07.593 093 13		5.12	−9.90	−13.58	1.13	0.89	1.25	1.58	1.05	+23	+ 2	−30	−35	+ 7	+ 1	+19	+ 5	+ 5	− 9										0	−0.44
115357	23 21 56.90	+34 39 12.3	9.38 H		350.487 089 94	+34.653 429 93		6.46	3.93	−7.79	0.96	0.82	1.21	1.01	0.74	+19	+29	+ 6	+16	+10	− 6	+11	−24	+ 0	+26										0	0.02
115358 H	23 21 57.90	−40 10 27.5	9.93 H		350.491 244 09	−40.174 299 62 A		3.94	6.42	−5.04	2.59	2.77	2.56	2.40	2.52	− 2	+ 0	− 2	+33	− 3	+ 5	− 6	−13	+ 3	+16										2	−0.19
115359	23 21 58.04	+16 37 57.6	8.92 H		350.491 829 63	+16.632 656 60		14.97	405.37	−49.22	1.07	0.89	1.23	1.24	1.15	+16	+15	−27	+ 4	+ 1	−12	− 2	+ 6	+ 8	+25										0	−0.02
115360	23 21 58.31	+26 36 32.8	6.59 H		350.492 976 72	+26.609 104 95		15.36	−96.27	−83.70	0.51	0.45	0.75	0.57	0.68	+22	+12	−10	+ 8	+ 1	− 8	+ 3	− 4	+27	+22										0	0.05
115361	23 22 02.33	−46 53 01.4	8.13 H		350.509 692 04	−46.883 733 74		15.31	48.33	14.54	0.98	0.79	1.10	1.18	0.83	+ 7	−16	−16	+41	− 2	−13	− 3	+18	−10	− 1										0	−0.89
115362 H	23 22 02.86	+64 31 10.6	7.97 H		350.511 927 26	+64.519 603 48 *		1.96	5.62	−1.69	0.54	0.59	0.68	0.63	0.67	− 6	+12	+ 7	+20	+ 9	−14	+ 9	+ 2	+ 6	−10										0	1.32
115363	23 22 03.02	+48 47 42.5	7.39 H		350.512 590 28	+48.795 139 40		2.91	16.51	2.02	0.47	0.54	0.88	0.57	0.63	−36	+ 3	+21	+22	− 6	− 9	+ 2	+ 8	+27	−14										0	−0.37
115364	23 22 03.11	+05 30 22.1	8.69 H		350.512 956 38	+05.506 136 38		6.86	15.12	41.44	1.37	0.99	1.49	1.53	1.95	+59	+34	+17	−11	+ 9	+ 9	+27	+18	+31	+61										0	0.70
115365	23 22 04.28	+65 30 43.8	8.53 H		350.517 835 45	+65.512 158 02		1.82	−4.73	−1.01	0.64	0.67	0.81	0.78	0.75	−16	+ 6	+ 4	+ 0	− 7	+ 0	− 6	− 1	+ 1	−33										1	0.79
115366	23 22 04.94	+28 41 42.0	6.74 H		350.520 584 75	+28.694 998 05		13.45	101.98	−78.78	0.58	0.52	0.80	0.67	0.52	+18	+ 7	− 9	+ 7	+12	−13	+11	−13	+22	+18										0	0.42
115367	23 22 09.67	+11 12 48.8	9.53 H		350.540 305 66	+11.213 554 39		−0.80	−20.95	0.94	1.51	1.17	1.64	1.87	1.59	+18	−24	−18	−31	+ 3	+17	+ 4	− 2	+ 7	+21										0	−0.34
115368	23 22 10.47	+56 20 53.6	7.93 2 H		350.543 612 35	+56.348 229 39		2.48	−3.57	−1.94	0.61	0.65	0.83	0.87	0.78	−34	+11	+19	+ 1	+13	+19	+ 5	−20	−11	−51										0	−0.25
115369 H	23 22 12.16	+56 04 44.1	8.54 H		350.550 654 20	+56.078 909 33 A		2.43	15.77	−1.77	1.26	1.20	1.48	1.87	1.41	−23	+ 5	+14	+28	− 5	+14	− 8	+10	− 7	−31										2	0.62
115370	23 22 13.20	+19 24 02.2	7.76 G		350.555 005 04	+19.400 604 80		19.28	44.66	−207.93	0.71	0.55	0.89	0.82	0.62	+51	− 5	− 4	+ 3	+ 7	−28	+ 9	− 8	− 5	+65										0	−0.49
115371	23 22 14.01	+23 33 06.3	7.28 H		350.558 367 96	+23.551 752 94		3.50	31.04	−21.82	0.55	0.53	0.81	0.61	0.55	+35	+ 4	− 3	+17	− 3	+ 3	− 1	−17	+33	+34										2	0.13
115372	23 22 14.13	−43 11 12.9	7.27 H		350.558 888 57	−43.186 912 85		5.16	−0.82	16.45	0.62	0.61	0.80	0.64	0.65	+11	− 3	− 7	+23	+ 8	+ 9	+ 9	+35	− 5	+ 9										0	−0.65
115373	23 22 18.01	+12 09 33.6	10.83 H		350.575 044 87	+12.159 333 07		8.92	245.66	−0.72	1.57	1.46	1.95	1.78	1.76	+24	+ 3	−29	− 1	− 7	+ 8	− 4	−13	+27	+31										0	−1.06
115374	23 22 18.33	+44 44 45.6	9.91 H		350.576 369 26	+44.745 995 71		3.17	−20.72	−9.56	0.88	0.87	1.32	0.99	0.97	− 9	+ 8	+ 5	− 5	+ 2	+ 5	+ 9	−28	+24	+13										3	0.86
115375	23 22 18.33	+41 18 45.7	8.37 G		350.576 382 89	+41.312 685 27		4.37	−22.68	−40.21	1.06	1.09	1.75	1.12	1.23	− 1	+10	− 7	+52	−24	+20	+ 1	−41	+28	+33										0	
115376	23 22 18.73	+42 28 36.4	9.48 H		350.578 043 81	+42.476 783 68		−0.54	−0.04	−3.27	0.63	0.88	1.45	0.74	1.08	− 1	+ 3	−14	− 6	− 8	− 7	− 2	−39	+34	+16										1	0.71
115377 H	23 22 19.75	−24 15 01.8	8.26 H		350.582 286 92	−24.250 498 93 A		5.63	−14.74	−13.63	1.64	1.18	1.64	2.03	1.36	+46	−19	−19	−11	+23	− 9	+14	−23	+ 9	+19										2	−0.19
115378	23 22 21.42	−61 17 51.4	8.55 H		350.589 243 66	−61.297 600 29		3.27	−11.06	−16.29	0.70	0.74	1.09	0.76	0.82	−17	− 5	− 2	+ 4	+ 4	+ 4	+ 8	+ 7	−13	−17	− 8										0	0.28
115379	23 22 23.05	+29 26 00.1	8.50 H		350.596 052 73	+29.433 368 80		5.51	−28.63	−19.66	0.79	0.64	1.04	0.80	0.66	+28	+21	+ 1	+ 9	+10	+ 2	+14	− 2	+25	+24										0	1.12
115380	23 22 23.60	−58 57 03.9	10.32 H		350.598 346 13	−58.951 070 14		13.26	47.95	−74.12	0.98	1.15	1.67	1.25	1.37	−24	+ 1	− 9	+ 1	+ 3	+ 0	+ 4	−15	+ 1	−18										0	0.86
115381	23 22 23.66	−00 24 51.3	8.56 G		350.598 577 68	−00.414 259 58		26.95	213.80	−251.15	1.22	0.97	1.39	1.57	1.31	+46	−30	−28	+ 5	+20	− 2	+29	+28	−18	+17										0	0.11
115382	23 22 23.95	−35 39 27.2	10.49 H		350.599 779 77	−35.657 556 86		6.51	−3.57	−16.06	1.45	1.46	1.94	1.70	1.62	+14	+ 2	−50	−49	− 3	+ 3	− 1	−25	+20	+20										2	−0.34
115383	23 22 24.71	+03 36 22.1	8.61 H		350.602 939 11	+03.606 136 45		3.14	−9.21	−7.14	1.13	0.82	1.50	1.89	1.08	+38	+ 7	− 9	− 8	− 2	+31	+ 0	−16	+32	−11										0	2.08
115384	23 22 24.76	−36 48 22.2	8.62 H		350.603 187 35	−36.806 165 40		8.09	−10.56	17.13	0.73	0.93	1.31	0.82	0.98	+38	−13	−44	+ 7	−26	+30	−17	−17	+18	+45										0	2.05
115385 H	23 22 25.36	−65 15 42.5	8.01 G		350.605 671 08	−65.261 802 07 *		7.93	31.31	5.84	0.57	0.60	0.80	0.64	0.67	− 5	− 3	−17	− 1	+ 2	+ 6	+ 6	−10	−10	+12										1	0.79
115386	23 22 25.62	−46 35 33.0	9.31 H		350.606 770 09	−46.592 500 07		17.21	118.15	−98.89	1.25	0.93	1.34	1.42	1.05	+ 7	+ 3	−12	− 4	+11	− 5	+10	+12	+ 1	+ 8										0	−1.15
115387	23 22 25.94	+13 26 33.9	10.10 H		350.608 078 80	+13.442 738 65		4.92	−28.71	−22.36	1.50	1.12	1.58	1.42	1.14	+ 1	+28	−13	−35	+12	− 4	+17	−19	+24	+ 7										0	1.51
115388	23 22 27.57	+37 05 50.3	9.65 H		350.614 894 94	+37.097 296 69		1.96	−8.98	−11.30	1.16	0.88	1.53	1.42	0.86	+16	+30	+17	− 4	+18	+33	+16	−17	+26	+27										0	−0.68
*115389	23 22 28.58	+25 55 06.6	6.38 H		350.619 073 58	+25.918 509 98		3.02	2.24	−10.96	0.51	0.47	0.75	0.55	0.48	+30	+16	− 8	+11	− 1	+ 8	+ 7	−25	+39	+37										0	−0.82
*115390	23 22 28.44	+62 45 25.8	11.00 3 H		350.618 511 65	+62.757 155 20		0.21	−5.00	−3.33	1.29	1.48	1.68	1.73	1.82	− 5	+11	+ 8	+ 0	− 2	− 3	− 5	+29	− 4	−16										1	1.43
115391	23 22 28.85	−59 58 29.0	8.91 H		350.620 218 09	−59.974 712 54		2.08	57.95	−18.40	0.79	0.89	1.27	0.83	0.94	−22	−12	− 5	−27	+ 6	+ 5	+ 8	−31	−16	−14										0	−1.56
115392	23 22 31.27	−47 31 13.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
115301	8.623	0.014	7.530	0.010		0.944	0.013	T	0.93	0.01	L	7.5784	0.0022	0.014	75		7.56	7.61					1								S
115302						1.429	0.019	G	1.74	0.05	I	11.8267	0.0096	0.067	56		11.73	11.92					1								G
115303	10.732	0.039	10.147	0.038		0.546	0.048	T	0.62	0.04	L	10.2805	0.0027	0.024	95		10.22	10.32					1								
115304	7.384	0.006	7.402	0.006		−0.012	0.008	T	0.01	0.01	L	7.4014	0.0008	0.009	127		7.39	7.42					1								S
115305	7.809	0.012	7.532	0.010		0.264	0.015	T	0.30	0.02	L	7.5770	0.0017	0.011	66		7.56	7.59			23212−0840	I 1	1								S
115306	8.802	0.014	8.374	0.014		0.440	0.015	G	0.51	0.02	H	8.4151	0.0020	0.014	83		8.39	8.44					1								S
115307	10.099	0.041	8.645	0.019	*	1.226	0.035	T	1.18	0.03	L *	8.7558	0.0029	0.019	82	*	8.72	8.80		D	23212+3527	I 1	2 C	A	AB	154	6.900	0.006	0.77	0.02	
115308	9.647	0.031	8.487	0.020		0.996	0.029	T	0.97	0.02	L	8.5420	0.0017	0.010	42		8.52	8.56					1								S
115309	8.300	0.010	7.901	0.012		0.377	0.014	T	0.44	0.01	L	7.9561	0.0011	0.011	97		7.93	7.98					1								S
115310	9.224	0.027	7.337	0.013		1.477	0.015	G	1.49	0.02	H	7.2994	0.0024	0.011	40		7.28	7.32					1								S
115311	8.648	0.014	7.411	0.009		1.056	0.013	T	1.02	0.01	L	7.4793	0.0012	0.010	76		7.47	7.50					1								S
115312	6.676	0.004	5.747	0.003		0.817	0.004	G	0.84	0.00	H	5.8058	0.0012	0.010	109		5.79	5.82		U 2			1								S
115313	8.744	0.012	7.484	0.008	*	1.074	0.011	T	1.04	0.01	L *	7.5157	0.0013	0.012	110	*	7.50	7.54		C	23213+3835	H 1	2 C	A	AB	323	0.262	0.022	2.54	0.25	S
115314	9.139	0.017	8.458	0.014		0.579	0.015	G	0.65	0.01	H	8.5427	0.0024	0.014	86		8.52	8.57					1								S
115315	10.242	0.042	9.175	0.029		0.924	0.039	T	0.92	0.03	L	9.1775	0.0026	0.013	60		9.16	9.21		C			1								
115316	6.949	0.005	6.797	0.007		0.140	0.002	G	0.15	0.00	H	6.8402	0.0008	0.006	74		6.83	6.85		C			1								S
115317	9.023	0.014	7.273	0.007		1.440	0.015	G	1.44	0.02	H	7.2552	0.0017	0.010	75		7.24	7.27		C			1								S
115318	11.919	0.141	10.827	0.092		0.574	0.072	G	0.65	0.07	R	10.9877	0.0057	0.038	79		10.93	11.04		C			1								G
115319	11.999	0.195	10.878	0.112	*	0.957	0.178	T	0.94	0.13	L *	10.5120	0.0039	0.033	66	*	10.42	10.57		D	23214−3442	I 1	2 C	A	AB	66	1.314	0.011	0.24	0.04	
115320	8.787	0.013	8.704	0.016		0.082	0.019	T	0.09	0.02	L	8.7612	0.0020	0.016	111		8.73	8.79					1								
115321	9.284	0.024	8.794	0.023	*	0.476	0.015	G	0.55	0.02	H *	8.7910	0.0021	0.015	45	*	8.74	8.83		D	23214−1340	H 1	2 C	B	AB	55	0.375	0.078	2.87	0.51	S
115322	9.300	0.015	7.778	0.008		1.279	0.013	T	1.24	0.01	L	7.7901	0.0021	0.013	99		7.77	7.81					1								S
115323	8.782	0.015	8.254	0.014		0.496	0.015	G	0.57	0.02	H	8.2961	0.0014	0.014	59		8.27	8.32					1								S
115324						1.545	0.020	G	1.68	0.15	K	12.6276	0.0226	0.117	49		12.45	12.88					1								G
115325	9.436	0.024	9.102	0.026		0.317	0.033	T	0.37	0.04	L	9.1332	0.0031	0.024	59		9.08	9.18		C			1	S							S
115326	8.983	0.012	8.678	0.012		0.290	0.016	T	0.33	0.02	L	8.7232	0.0025	0.022	122		8.69	8.75		U	23215+2457	I 1	1	S							
115327	9.949	0.031	8.540	0.018		1.190	0.028	T	1.15	0.03	L	8.5485	0.0024	0.014	52		8.52	8.58		C			1								
115328	10.762	0.030	9.751	0.020		0.794	0.004	G	0.83	0.00	H	9.8567	0.0026	0.027	195		9.81	9.90					1								
115329	9.682	0.031	9.012	0.027	*	0.610	0.031	T	0.68	0.03	L *	9.0912	0.0026	0.020	56	*	9.06	9.13			23216−2018	I 1	2 C	S C	AB	253	0.186	0.046	1.76	1.54	S
115330	10.853	0.036	9.728	0.022		0.961	0.033	T	0.95	0.03	L	9.7800	0.0027	0.031	128		9.70	9.84					1								
115331	8.364	0.009	7.448	0.007		0.801	0.003	G	0.83	0.00	H	7.5031	0.0024	0.018	125		7.48	7.54		U 2			1								S
115332						1.524	0.015	G	2.25	0.11	I	11.6561	0.0092	0.053	56		11.56	11.73					1								G
115333	9.719	0.016	8.141	0.008		1.323	0.014	T	1.28	0.02	L	8.1382	0.0012	0.016	147		8.11	8.17		C			1								
115334	8.461	0.006	8.414	0.008		0.048	0.009	T	0.06	0.01	L	8.4309	0.0009	0.013	216		8.41	8.46		C			1								
115335	8.452	0.012	8.397	0.014		0.056	0.017	T	0.07	0.01	L	8.4151	0.0017	0.015	65		8.39	8.44					1								S
115336	8.274	0.010	7.983	0.008		0.293	0.003	G	0.33	0.00	H	8.0300	0.0010	0.012	133		8.01	8.06		D			1								S
115337	9.197	0.016	8.545	0.014		0.597	0.016	T	0.67	0.01	L	8.6128	0.0020	0.020	96		8.58	8.64					1								S
115338	10.256	0.026	9.373	0.020		0.772	0.025	T	0.81	0.02	L	9.4213	0.0024	0.023	136		9.37	9.47					1								
115339	9.962	0.017	8.453	0.009		1.269	0.015	T	1.23	0.02	L	8.4624	0.0016	0.018	178		8.43	8.49					1								
115340	10.978	0.041	10.186	0.032		0.692	0.027	G	0.75	0.02	H	10.2744	0.0029	0.033	165		10.20	10.34					1								
115341	9.491	0.016	8.254	0.011		1.056	0.015	T	1.02	0.01	L	8.2883	0.0016	0.013	126		8.26	8.31					1								
115342	9.454	0.025	8.752	0.022		0.647	0.027	T	0.71	0.02	L	8.8446	0.0018	0.012	53		8.82	8.87					1	S							S
115343	10.050	0.029	9.296	0.025		0.689	0.030	T	0.75	0.03	L	9.3461	0.0023	0.017	86		9.32	9.37					1								
115344	11.528	0.079	10.316	0.042		1.001	0.020	G	1.04	0.02	I	10.3148	0.0022	0.021	107		10.27	10.35		C			1								
115345	9.437	0.014	7.396	0.006		1.728	0.013	T	2.42	0.03	O	7.2054	0.0022	0.023	138		7.17	7.24		U 2			1								S
115346	10.919	0.084	10.000	0.054	*	0.740	0.015	G	0.79	0.01	H *	9.9335	0.0026	0.021	43	*	9.89	9.98		D	23218−1216	I 1	2 C	A	AB	312	0.459	0.007	1.14	0.04	
115347	7.406	0.010	7.621	0.011		−0.199	0.008	G	−0.21	0.01	H	7.6044	0.0016	0.009	49		7.59	7.62					1								S
115348	9.856	0.022	9.257	0.020		0.558	0.022	T	0.63	0.02	L	9.3600	0.0028	0.020	98		9.33	9.40					1								
115349	9.804	0.026	9.333	0.026		0.506	0.005	G	0.58	0.01	H	9.3932	0.0025	0.019	70		9.36	9.42		C			1								
115350	10.302	0.026	9.035	0.015		1.079	0.023	T	1.04	0.02	L	9.0895	0.0016	0.017	136		9.05	9.12		C			1								
115351	9.238	0.022	8.038	0.014		1.027	0.020	T	1.00	0.02	L	8.0859	0.0014	0.010	49		8.07	8.10		C			1								S
115352	10.330	0.029	10.247	0.041		0.082	0.047	T	0.09	0.05	L	10.2594	0.0023	0.028	135		10.20	10.31					1	S							G
115353	9.083	0.015	7.743	0.009		1.123	0.002	G	1.09	0.00	H	7.7921	0.0012	0.013	117		7.77	7.82		C	23218+7547	I 1	1								
115354	9.415	0.015	8.935	0.014		0.464	0.016	T	0.53	0.02	L	8.9930	0.0022	0.023	143		8.96	9.04		C			1								
115355	5.212	0.003	5.328	0.003	*	−0.101	0.004	T	−0.08	0.01	L *	5.3186	0.0004	0.004	84	*	5.31	5.33		D	23219+3148	I 1	2 C	A	AB	156	0.403	0.005	2.32	0.02	S
115356	9.740	0.028	8.542	0.018		1.025	0.026	T	1.00	0.02	L	8.5756	0.0026	0.013	58		8.56	8.60		C			1								
115357	9.988	0.026	9.405	0.023		0.545	0.031	T	0.62	0.03	L	9.4971	0.0029	0.023	82		9.45	9.53		C			1								
115358	10.647	0.043	10.070	0.040	*	0.542	0.044	T	0.62	0.05	L *	10.0415	0.0036	0.024	89	*	9.99	10.08		D	23220−4010	I 1	2 C	A	AB	130	0.414	0.007	0.97	0.05	
115359	9.637	0.028	8.979	0.025		0.610	0.015	G	0.68	0.01	H	9.0462	0.0027	0.015	63		9.02	9.07		C			1								
115360	7.055	0.005	6.646	0.006		0.400	0.006	T	0.47	0.01	L	6.6795	0.0007	0.008	98		6.67	6.70					1	G							S
115361	8.621	0.013	8.172	0.013		0.437	0.015	T	0.51	0.02	L	8.2268	0.0020	0.017	88		8.20	8.26		C			1								S
115362	8.008	0.007	7.977	0.010	*	0.033	0.011	T	0.05	0.01	L *	7.9858	0.0014	0.012	124	*	7.97	8.01			23220+6431	H 1	2 C	S A	AB	237	0.113	0.027	1.60	0.88	S
115363	8.770	0.008	7.510	0.005		1.074	0.007	T	1.04	0.01	L	7.5532	0.0010	0.012	206		7.54	7.58					1								S
115364	9.486	0.024	8.748	0.020		0.676	0.025	T	0.74	0.02	L	8.8263	0.0019	0.013	80		8.78	8.85					1								S
115365	10.525	0.035	8.689	0.014		1.527	0.030	T	1.57	0.07	L	8.6569	0.0015	0.015	119		8.64	8.68		C			1								
115366	7.203	0.006	6.788	0.006		0.392	0.008	T	0.46	0.01	L	6.8282	0.0010	0.008	93		6.81	6.84		C			1								S
115367	10.995	0.065	9.672	0.033		1.000	0.040	G	0.98	0.03	R	9.6949	0.0027	0.020	51		9.64	9.72		C			1	S							
115368	8.034	0.009	7.941	0.010		0.091	0.013	T	0.10	0.01	L	7.9657	0.0035	0.035	122		7.90	8.02		U 2			1								S
115369	8.642	0.015	8.509	0.020	*	0.128	0.023	T	0.14	0.02	L *	8.5901	0.0017	0.017	116	*	8.56	8.63		D	23222+5605	I 1	2 C	A	AB	47	6.702	0.017	2.75	0.07	
115370	8.499	0.009	7.843	0.008		0.619	0.015	G	0.69	0.01	H	7.8932	0.0012	0.011	145		7.88	7.91					1								S
115371	8.622	0.011	7.407	0.007		1.039	0.010	T	1.01	0.01	L	7.4511	0.0008	0.010	134		7.44	7.47		C			1								S
115372	8.772	0.014	7.398	0.008		1.163	0.013	T	1.11	0.02	A	7.4357	0.0014	0.010	84		7.42	7.46		C			1								S
115373	11.462	0.103	10.910	0.105		0.660	0.000	G	0.72	0.00	H	10.9644	0.0039	0.032	60		10.90	11.02		C			1								G
115374	10.216	0.028	9.902	0.033		0.298	0.041	T	0.34	0.06	L	9.9917	0.0019	0.024	120		9.95	10.03					1								G
115375	8.808	0.011	8.404	0.011		0.411	0.015	G	0.48	0.02	H	8.4639	0.0011	0.015	154		8.44	8.50		C			1	X							
115376	9.531	0.016	9.473	0.021		0.058	0.025	T	0.07	0.02	L	9.5073	0.0015	0.019	137		9.47	9.54		C			1								
115377	9.438	0.017	8.401	0.012	*	0.902	0.016	T	0.90	0.01	L *	8.4211	0.0014	0.011	103	*	8.40	8.45		D	23223−2415	I 1	2 C	A	AB	229	0.869	0.007	1.62	0.02	
115378	10.025	0.021	8.679	0.012		1.141	0.019	T	1.10	0.02	L	8.7210	0.0020	0.023	152		8.69	8.76					1								
115379	9.285	0.015	8.574	0.013		0.654	0.016	T	0.72	0.01	L	8.6402	0.0016	0.014	91		8.61	8.66		C			1								
115380	11.526	0.059	10.422	0.035		0.975	0.015	G	1.02	0.01	I	10.4642	0.0028	0.038	207		10.37	10.54					1	S							
115381	9.590	0.025	8.653	0.019		0.853	0.003	G	0.87	0.00	H	8.6967	0.0030	0.016	55		8.67	8.72		C			1								
115382	11.074	0.060	10.453	0.052		0.574	0.059	T	0.65	0.06	L	10.6112	0.0026	0.032	82		10.56	10.67					1								
115383	10.108	0.035	8.742	0.019		1.157	0.031	T	1.12	0.03	L	8.7759	0.0027	0.020	76		8.74	8.80					1								
115384	9.197	0.015	8.665	0.014		0.507	0.015	T	0.58	0.02	L	8.7303	0.0017	0.018	111		8.70	8.76		C			1								S
115385	8.470	0.008	8.066	0.008	*	0.393	0.003	G	0.46	0.00	H *	8.1071	0.0012	0.015	145	*	8.08	8.14			23224−6516	H 1	2 C	S C	AB	53	0.138	0.041	1.72	0.72	S
115386	10.241	0.031	9.426	0.024		0.720	0.030	T	0.77	0.02	L	9.4525	0.0020	0.020	82		9.42	9.48		C	23224−4636	I 1	1								
115387	10.612	0.050	10.163	0.051		0.424	0.066	T	0.49	0.07	L	10.1962	0.0046	0.028	61		10.15	10.23		C			1								
115388	11.871	0.127	9.752	0.033		1.792	0.108	T	1.74	0.21	K	9.7501	0.0022	0.021	71		9.72	9.79		C			1								
115389	8.413	0.009	6.552	0.005		1.540	0.015	G	1.59	0.03	H	6.4997	0.0010	0.009	116		6.48	6.51			23225+2555	I 1	1								S
115390						1.750	0.510	G	1.73	0.52	J	11.1033	0.0389	0.294	113		10.50	11.52	15.09	P 1 A			1								G
115391	10.430	0.026	9.028	0.014		1.185	0.023	T	1.15	0.02	L	9.0729	0.0025	0.027	170		9.03	9.12					1								
115392	10.361	0.034	8.523	0.014		1.561	0.030	T	1.93	0.09	O	8.4186	0.0037	0.042	84		8.33	8.47		U 2			1								
115393	10.681	0.068	9.340	0.037		1.137	0.061	T	1.10	0.06	L	9.3812	0.0024	0.020	55		9.35	9.42					1								
115394	9.119	0.018	8.850	0.020		0.284	0.015	G	0.32	0.02	H	8.8828	0.0018	0.014	73		8.86	8.90		C			1								
115395	7.741	0.007	5.729	0.003		1.679	0.019	G	1.59	0.03	C	5.6662	0.0011	0.011	127		5.65	5.68		U 2			1								S
115396	9.340	0.022	8.172	0.014		1.002	0.020	T	0.98	0.02	L	8.2147	0.0013	0.011	59		8.20	8.23		C			1								S
115397	10.091	0.021	8.809	0.012		1.091	0.019	T	1.05	0.02	L	8.8789	0.0020	0.020	166		8.84	8.92					1								
115398	10.922	0.067	9.349	0.028		1.319	0.057	T	1.28	0.07	L	9.3409	0.0041	0.025	57		9.28	9.38					1								
115399	10.778	0.040	9.151	0.018		1.368	0.037	T	1.34	0.04	L	9.1180	0.0020	0.018	95		9.09	9.15		C			1								
115400	8.617	0.008	8.576	0.010		0.043	0.012	T	0.06	0.01	L	8.5919	0.0015	0.017	185		8.56	8.63		C			1								

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
115401	23 22 37.71	−13 53 28.1	9.06	H	350.657 104 95	−13.891 152 70	6.58	5.43	−46.83	1.37	1.18	1.64	2.31	1.43	+12 + 3 −45 + 7 + 3 +10 +11 +22 + 6 − 7	0	1.05
115402 H	23 22 37.86	−48 05 46.5	9.39	H	350.657 735 81	−48.096 262 43 A	7.15	41.00	−166.90	3.24	2.64	2.94	2.98	2.69	+ 2 +21 + 2 + 1 +16 +18 +21 +34 +12 + 2	1	0.77
115403	23 22 39.04	−01 09 06.4	8.80	H	350.662 670 30	−01.151 783 41	1.65	−24.96	−29.36	1.19	0.97	1.38	1.63	1.22	+36 − 4 +10 +10 − 2 +12 −13 −21 −17 − 4	0	0.44
115404 H	23 22 39.10	−15 02 21.8	5.19	G	350.662 919 76	−15.039 380 12 *	13.75	119.67	17.49	3.58	7.21	1.04	1.20	0.85	−73 − 6 − 2 + 4 + 0 +15 + 1 + 3 + 3 + 9	2	2.70
115405	23 22 39.99	−57 09 34.2	9.00	H	350.666 628 24	−57.159 506 92	4.06	−3.79	−7.32	0.61	0.71	1.16	0.68	0.75	−31 − 2 −16 +15 − 3 +14 + 0 − 4 + 8 −26	1	−0.80
115406	23 22 40.41	−27 27 53.8	10.18	H	350.668 378 17	−27.464 946 12	4.72	5.19	−8.46	1.44	1.21	1.85	1.83	1.67	+29 +15 − 7 −25 +27 −15 +27 +11 +11 +39	0	1.44
115407	23 22 40.50	+20 49 43.5	6.28	H	350.668 751 48	+20.828 743 69	6.69	19.01	−11.28	0.65	0.51	0.78	0.69	0.52	+44 +22 +16 −10 +15 −15 +14 + 5 − 4 +54	2	−0.93
115408	23 22 41.04	+11 11 53.2	8.77	H	350.670 994 25	+11.198 100 21	7.56	94.39	−36.78	1.08	0.91	1.25	1.17	1.18	+27 + 1 −26 −27 + 1 + 3 + 3 −12 +33 +32	0	−0.70
115409	23 22 41.51	−61 25 31.3	8.08	H	350.672 945 88	−61.425 357 87	6.69	11.46	19.98	0.61	0.62	0.92	0.72	0.65	−13 + 0 − 8 +13 + 7 + 4 + 7 −10 −20 −11	0	−0.42
115410	23 22 41.57	+24 56 20.0	9.06	H	350.673 211 68	+24.938 898 32	4.96	0.51	5.54	0.77	0.66	1.09	0.82	0.71	+28 +10 − 6 +10 − 2 +14 + 3 −14 +32 +36	0	−2.17
115411	23 22 43.35	−19 41 24.4	8.68	G	350.680 626 86	−19.690 101 69	22.08	−227.47	−179.97	1.14	0.75	1.16	1.04	0.79	− 5 +25 −15 −11 − 4 +20 + 1 −11 +10 + 4	0	0.59
115412	23 22 44.15	+03 44 24.4	7.61	G	350.683 967 41	+03.740 117 67	7.83	−0.68	−19.69	0.97	0.64	1.11	1.63	0.86	+36 − 9 −16 +28 − 8 +28 −31 −19 +24 −27	0	1.35
115413	23 22 44.44	−49 21 05.1	9.12	H	350.685 183 92	−49.351 416 56	6.32	131.39	20.05	0.82	0.83	1.41	0.80	0.80	−20 −28 +11 −39 + 9 +14 + 5 −32 + 9 −28	0	1.21
115414	23 22 44.74	−04 20 53.3	9.67	G	350.686 428 22	−04.348 129 93	2.13	8.68	−11.97	1.43	1.10	1.64	1.93	1.75	+41 −19 −10 − 1 +24 +17 +27 +33 +30 +24	0	0.08
115415	23 22 47.18	+15 22 18.8	8.71	H	350.696 582 84	+15.371 892 30	13.42	−18.44	−46.68	1.03	0.74	1.14	1.02	0.81	− 3 +11 −35 −15 +12 −18 + 8 − 4 +16 + 3	0	−0.25
115416	23 22 47.39	+51 02 51.5	7.33	H	350.697 455 48	+51.047 637 42	2.10	5.75	−5.62	0.44	0.53	0.73	0.51	0.57	−18 + 9 +26 +15 +11 − 2 +13 + 8 + 6 −13	0	2.11
*115417 H	23 22 48.48	+20 33 32.3	6.62	G	350.701 985 90	+20.558 972 53 A	26.70	314.85	−10.91	0.85	0.67	0.93	0.84	0.66	+49 +15 + 0 −15 +11 −17 + 7 − 5 − 2 +59	0	0.01
*115418	23 22 48.46	−53 03 16.4	8.97	H	350.701 902 88	−53.054 560 40	10.22	54.34	−53.47	0.70	0.85	1.32	0.99	0.94	−15 + 7 −21 +19 − 3 +11 − 4 −30 +14 −23	0	0.12
115419	23 22 48.71	+22 08 00.0	9.71	H	350.702 975 96	+22.133 321 42	14.13	200.97	−69.28	1.40	1.43	2.10	1.48	1.37	+44 + 5 +14 + 3 − 7 − 2 − 6 −20 + 3 +45	1	
115420	23 22 49.58	−05 02 11.1	9.21	G	350.706 590 52	−05.036 411 00	4.78	65.19	8.88	1.19	0.97	1.38	1.61	1.64	+47 − 9 − 3 +17 +29 +11 +29 +35 +30 +43	0	−0.44
115421	23 22 49.59	+54 00 23.8	9.16	H	350.706 623 97	+54.006 598 17	3.31	12.77	0.61	0.79	0.70	1.01	0.79	0.82	−23 +31 + 6 + 9 −10 − 3 − 6 + 1 +12 −25	0	1.10
115422	23 22 50.19	+27 34 28.0	8.80	H	350.709 142 42	+27.574 453 03	11.54	94.06	−7.74	0.83	0.70	1.10	0.99	0.75	+21 +14 − 6 +27 +11 + 3 +18 −16 +25 +35	2	3.01
115423	23 22 50.65	+69 00 34.7	9.15	H	350.711 046 99	+69.009 635 84	−0.20	−1.29	−0.53	0.70	0.73	0.85	0.91	1.02	−15 + 6 + 1 + 7 + 0 − 2 + 0 + 0 − 1 −28	0	0.63
115424	23 22 50.74	+62 08 03.8	10.80	G	350.711 400 83	+62.134 383 88	1.54	−4.32	−2.94	1.51	1.76	1.90	2.33	2.41	−18 − 6 −11 −31 +14 + 3 +11 −58 +28 −24	0	−0.90
115425	23 22 50.92	−23 27 06.2	7.43	G	350.712 162 08	−23.451 726 50	11.49	124.23	−52.99	0.90	0.61	0.94	1.18	0.75	+43 − 7 − 8 + 9 +44 − 9 +43 +15 + 9 +20	0	−0.49
115427	23 22 52.36	−50 11 24.1	8.28	H	350.718 187 10	−50.190 021 87	2.82	14.67	−0.80	0.64	0.63	1.00	0.75	0.59	− 9 − 4 − 5 −14 −18 + 9 −15 −32 + 6 −27	0	−0.69
115428	23 22 53.21	+02 49 06.0	7.04	H	350.721 726 30	+02.818 343 36	7.54	21.08	−14.37	0.76	0.53	0.88	1.19	0.69	+28 + 0 + 0 +15 + 4 +26 + 0 + 8 +13 −15	0	0.37
115429	23 22 54.41	−57 37 29.9	7.73	H	350.726 695 06	−57.624 977 41	2.86	0.47	−12.52	0.47	0.51	0.79	0.53	0.56	−19 − 7 −21 +13 + 1 + 6 + 3 −15 + 6 −17	1	−0.81
115430	23 22 54.94	−24 02 06.5	10.03	H	350.728 901 06	−24.035 126 22	24.30	92.99	26.67	1.61	1.09	1.86	2.31	1.39	+52 −20 −22 +14 +43 −17 +29 − 7 +17 +23	0	2.21
115431	23 22 55.47	+51 01 53.0	9.46	1 H	350.731 137 03	+51.031 385 34	0.42	−0.92	−5.24	0.78	0.86	1.20	0.88	1.02	−17 +12 + 7 +25 +11 − 5 +14 + 9 +10 −12	1	1.64
115432	23 22 56.16	+18 36 35.0	8.23	H	350.733 991 07	+18.609 709 68	3.59	−5.42	3.45	0.81	0.62	1.09	0.96	0.67	+47 − 4 −23 +10 +23 −41 +18 + 1 − 5 +59	0	2.32
115433	23 22 56.68	−60 03 21.0	6.08	2 H	350.736 161 20	−60.055 829 88	3.83	82.77	−5.34	0.43	0.47	0.69	0.46	0.51	−21 −10 −12 −22 + 9 +21 +16 −31 −19 − 9	0	0.33
115434	23 22 57.29	+39 45 41.2	9.25	H	350.738 700 61	+39.761 445 13	1.96	−10.31	−11.76	0.80	0.71	1.09	0.89	0.81	−14 +24 + 2 + 3 − 8 −12 + 5 −40 +18 + 2	0	0.78
115435	23 22 57.47	+28 03 04.8	9.24	H	350.739 447 01	+28.051 336 63	2.26	−10.15	−0.09	0.97	0.82	1.36	1.15	0.85	+21 − 9 −15 + 6 +11 + 0 + 8 −13 +27 +29	2	0.58
115436	23 22 57.58	−21 32 06.6	9.07	H	350.739 895 99	−21.535 158 50	8.13	−31.83	−107.56	1.34	0.88	1.25	1.99	1.04	−13 +11 −28 +18 − 3 − 2 − 4 +17 + 3 −39	0	−0.74
115437	23 22 57.99	+16 12 12.4	9.44	H	350.741 639 62	+16.203 444 52	1.23	−23.14	−11.22	1.17	1.02	1.32	1.29	1.23	+22 −11 −18 + 1 +16 −23 +12 +31 −20 +31	0	−1.19
115438	23 22 58.30	−20 06 01.2	3.96	G	350.742 922 80	−20.100 345 05	20.14	−120.27	−96.70	0.67	0.52	0.72	0.73	0.57	+10 +14 − 4 + 5 + 4 +12 + 6 +13 + 7 + 6	0	−0.13
115439	23 22 58.46	+62 37 02.1	8.53	H	350.743 590 99	+62.617 256 07	2.74	1.10	−1.08	0.60	0.73	0.79	0.81	0.91	−17 + 8 + 4 +11 + 5 + 1 + 2 −27 + 2 −24	1	2.66
115440	23 22 59.40	−44 08 58.1	8.91	1 H	350.747 486 83	−44.149 471 44	1.72	13.34	−6.23	0.85	0.84	1.16	0.96	0.90	+ 8 +10 −23 − 1 + 4 + 3 + 5 + 9 + 2 + 9	0	0.07
115441	23 23 00.37	+38 59 57.0	9.00	H	350.751 531 43	+38.999 162 24	2.36	−0.89	−3.50	0.93	0.75	1.14	0.99	0.75	− 3 +22 + 3 − 3 +16 + 6 +20 −26 +16 + 9	0	1.81
115442	23 23 03.26	−30 21 19.9	9.38	H	350.763 598 65	−30.355 528 41	3.28	−10.64	7.39	1.27	0.94	1.35	1.60	1.19	+ 6 − 9 −22 −54 +15 + 2 +15 −34 + 6 + 4	0	0.31
115443	23 23 04.00	+16 04 08.8	8.66	H	350.766 662 19	+16.069 121 95	12.78	−67.61	−93.53	0.98	0.87	1.11	1.08	1.05	+24 − 1 −26 − 2 +13 −10 + 8 +22 −15 +37	0	−0.18
115444	23 23 04.56	+12 18 50.2	5.09	H	350.768 988 18	+12.313 951 90	9.88	18.98	−17.15	0.66	0.58	0.82	0.70	0.74	+19 + 0 −25 +18 − 6 − 1 − 7 − 6 +36 +21	0	−0.75
115445	23 23 04.63	−10 45 53.6	7.80	G	350.769 278 66	−10.764 876 39	51.37	451.02	260.28	1.04	0.99	1.25	1.32	1.23	+35 + 3 −37 +22 +26 +16 +36 +53 + 5 +40	0	−0.54
115446	23 23 05.06	+45 00 35.9	8.35	H	350.771 078 78	+45.009 984 37	4.42	−16.43	−0.82	0.56	0.62	0.95	0.65	0.65	− 6 +13 + 8 − 5 − 7 +10 + 0 −23 +27 +12	3	0.27
115447	23 23 05.26	−23 23 24.5	8.30	H	350.771 919 48	−23.390 141 79	3.52	60.93	31.40	1.09	0.70	1.07	1.61	0.90	+15 + 0 + 2 −20 +37 − 8 +37 − 4 − 6 −12	0	−0.92
115448	23 23 08.05	−39 55 09.0	8.41	H	350.783 555 69	−39.919 158 36	8.73	129.75	−48.19	0.70	0.82	1.04	0.80	0.96	+27 − 3 + 0 +19 + 8 +22 + 9 + 8 + 7 +33	0	−1.17
115449	23 23 08.53	−77 47 20.4	8.15	H	350.785 522 21	−77.789 013 33	4.40	57.10	−25.43	0.66	0.57	0.73	0.76	0.59	+ 1 + 5 −15 +14 +10 +12 +13 − 6 + 6 +14	0	0.15
115450	23 23 09.70	+39 09 37.2	8.61	H	350.790 429 07	+39.160 330 61	3.37	−6.45	−6.22	0.96	0.76	1.19	0.94	0.74	− 5 +30 + 6 − 1 +15 + 5 +21 −28 +15 + 7	0	−0.64
115451	23 23 10.58	−44 06 24.8	9.47	H	350.794 098 35	−44.106 879 74	6.65	39.32	22.96	0.94	0.95	1.30	1.09	1.00	+ 8 + 8 −25 − 3 − 2 + 0 − 1 + 6 + 2 + 7	0	−0.54
115452	23 23 10.97	−64 53 32.4	7.79	H	350.795 698 95	−64.892 322 89	4.78	0.54	−49.49	0.52	0.59	0.75	0.59	0.65	+ 0 −14 −19 − 4 − 1 + 3 + 2 −14 − 5 +11	0	−1.24
115453	23 23 11.90	+25 46 04.8	9.28	H	350.799 592 62	+25.767 992 17	4.48	37.87	−4.50	0.81	0.70	1.16	0.85	0.72	+26 +26 − 9 + 0 − 1 + 1 + 9 −23 +34 +35	0	−1.16
115454	23 23 13.05	−24 36 57.7	7.99	H	350.804 384 69	−24.616 039 04	4.62	−56.62	−62.72	0.93	0.67	1.19	1.41	1.08	+41 −16 + 1 +12 +20 +41 +13 + 1 +40 +49	0	−0.95
115455	23 23 14.05	−54 40 53.9	10.97	2 H	350.808 537 69	−54.681 647 15	18.74	2.75	124.13	1.38	1.55	2.51	1.59	1.53	− 8 + 9 −10 + 2 + 2 +20 + 2 −10 −18 −18	0	1.75
115456	23 23 16.51	−31 07 39.5	9.93	H	350.818 806 35	−31.127 651 52	2.89	−10.17	0.79	1.28	1.11	1.73	1.67	1.25	+15 + 7 −36 −30 + 5 −18 + 1 −30 +32 + 4	2	−0.48
115457	23 23 17.51	−09 23 05.8	7.88	G	350.822 964 18	−09.384 956 73	8.10	31.36	−6.92	0.91	0.65	1.00	1.23	0.84	+29 + 1 + 5 − 4 +21 +26 +26 +18 +10 + 2	0	−1.76
115458 H	23 23 18.22	−63 51 53.5	9.38	H	350.825 917 34	−63.864 872 64 A	7.11	44.98	6.57	1.73	1.87	2.23	1.87	1.73	−14 +15 −34 +15 +18 −14 +10 +21 −12 + 6	3	1.70
115459	23 23 18.50	−41 36 04.5	7.13	G	350.827 080 54	−41.601 238 76	10.05	−6.74	15.64	0.59	0.56	0.74	0.69	0.60	+17 −13 − 3 +27 +12 −10 +12 +26 − 8 +14	0	−1.41
115460	23 23 19.50	+52 06 09.2	7.70	H	350.831 242 37	+52.102 557 30	0.86	−2.60	−6.32	0.53	0.56	0.84	0.68	0.66	−26 −13 +25 − 7 + 5 +12 + 1 +10 − 6 −14	1	3.02
115461	23 23 20.01	+43 06 05.6	9.41	H	350.833 369 57	+43.101 561 49	3.08	−2.51	−11.65	0.63	0.79	1.25	0.73	0.91	+ 6 +11 + 6 + 9 −16 + 9 − 4 −32 +18 +33	1	0.18
115462	23 23 22.09	−55 33 12.1	6.57	H	350.842 026 13	−55.553 373 80	3.97	−20.76	−11.67	0.39	0.44	0.72	0.50	0.48	−25 +12 −14 − 7 −11 + 5 − 9 − 8 − 1 −17	0	−0.87
115463	23 23 22.70	−00 56 48.6	8.41	H	350.844 580 71	−00.946 824 86	0.33	21.07	−7.88	1.05	0.78	1.19	1.46	0.90	+32 −14 −20 +17 − 1 +14 − 7 − 1 + 4 −14	0	1.09
115464	23 23 23.09	−03 12 55.0	8.57	H	350.846 193 61	−03.215 271 32	2.08	5.87	−22.85	0.90	0.76	1.10	1.10	0.88	+46 −22 −21 − 6 − 5 +28 − 9 −16 +22 +16	0	−0.58
115465	23 23 23.32	−26 23 32.5	9.01	H	350.847 154 61	−26.392 366 90	7.06	153.64	−8.33	1.08	0.79	1.32	1.64	1.24	+28 − 3 −17 +16 +14 + 1 +13 − 1 +35 +33	0	−1.03
115466 H	23 23 23.73	−46 56 49.0	10.07	G	350.848 857 88	−46.946 945 57 A	5.22	14.27	12.13	3.06	2.66	3.15	3.47	3.04	+32 −12 − 2 +34 +22 + 3 +21 +34 +20 +42	2	0.82
115467	23 23 25.29	+67 36 20.9	9.35	1 H	350.855 379 09	+67.605 803 99 A	5.23	−13.64	−3.87	1.46	1.42	1.60	1.77	1.52	− 3 − 3 −10 +14 − 5 + 7 − 4 −20 + 5 + 0	1	1.27
115468	23 23 26.71	−08 52 56.8	8.93	G	350.861 306 48	−08.882 445 79	13.00	232.82	10.22	1.17	0.80	1.30	1.36	1.11	+35 − 1 +12 −15 +22 +26 +31 +19 +27 +13	0	−0.04
115469	23 23 28.58	−28 40 28.0	8.29	H	350.869 076 79	−28.674 452 49	9.16	52.23	−71.01	0.84	0.72	1.01	0.94	0.91	+26 −11 − 6 −16 +16 +12 +17 + 7 − 1 +34	0	1.33
115470	23 23 28.68	+45 47 35.7	8.61	G	350.869 492 92	+45.793 260 87 A	32.06	194.17	−4.71	1.18	1.39	1.54	1.16	1.41	+ 2 + 3 + 6 −33 − 9 − 6 −10 −19 +13 +15	10	2.65
115471	23 23 29.33	+34 19 04.3	8.73	H	350.872 195 02	+34.317 865 27	1.83	−40.31	−17.73	0.98	0.72	1.19	1.04	0.67	+28 +33 +17 +36 +24 + 2 +26 − 3 + 8 +32	0	−0.12
115472	23 23 29.64	−63 32 08.2	7.93	H	350.873 484 59	−63.535 624 53	2.61	6.30	−4.60	0.60	0.63	0.86	0.73	0.66	+ 6 − 9 −12 +10 +11 − 3 +10 + 6 −13 + 9	0	2.71
115473	23 23 30.54	+45 47 18.8	9.30	H	350.877 238 54	+45.788 543 86 B	23.39	178.41	−10.78	4.04	4.89	4.09	3.21	3.86	+ 1 + 4 +11 −20 − 9 − 5 − 9 −19 +11	10	2.65
115474	23 23 30.97	+01 06 04.0	10.33	H	350.879 054 27	+01.101 112 70	1.80	8.32	−10.23	2.03	1.53	2.12	2.33	2.43	+43 +17 − 3 −14 +30 +17 +47 +44 +33 +33	0	−0.69
115475	23 23 31.01	+35 22 28.5	9.64	H	350.879 214 10	+35.374 585 42	3.92	−32.73	−44.35	1.21	0.95	1.53	1.31	0.83	+12 +20 +11 −13 +13 +26 + 9 −31 + 5 +20	0	−0.55
115476	23 23 31.90	+00 17 28.7	6.33	1 H	350.882 937 00	+00.291 297 60	2.27	71.80	11.28	0.84	0.62	0.98	1.07	0.67	+23 + 5 −19 − 8 + 0 +27 + 9 + 1 + 4 − 5	0	−0.41
115477	23 23 33.21	+30 23 49.3	8.50	H	350.888 394 24	+30.397 025 81	3.77	4.07	−3.40	0.78	0.71	1.06	0.93	0.72	+25 +23 − 4 +29 + 5 − 9 + 7 −10 +21 +18	0	−1.11
115478	23 23 34.31	−29 00 00.1	9.10	H	350.892 953 72	−29.000 041 49	5.75	6.38	14.61	1.10	0.84	1.28	1.32	1.04	+21 + 3 −18 −19 +31 −18 +30 +17 − 3 +25	0	1.10
115479	23 23 35.14	+40 14 01.8	8.02	2 H	350.896 402 85	+40.233 830 29	3.06	−7.27	−4.63	0.72	0.61	1.00	0.80	0.68	−10 +33 + 0 +12 −15 −17 + 8 −37 +25 +13	0	2.30
115480	23 23 35.25	+49 17 04.9	9.19	H	350.896 856 38	+49.284 691 25	1.37	2.32	−5.25	0.73	0.84	1.33	0.83	0.92	−35 −14 +35 +15 − 3 −13 + 2 +10 +15 −13	0	1.70
*115481	23 23 35.77	+14 28 48.2	10.30	H	350.899 058 90	+14.480 059 26	6.16	−7.32	11.87	1.61	1.19	1.78	1.54	1.26	− 4 +24 −23 + 5 + 0 − 5 + 4 − 6 +22 − 1	5	0.76
*115482	23 23 35.77	+57 05 30.1	8.85	H	350.899 042 84	+57.091 696 81	3.25	−4.65	−2.30	0.68	0.74	1.00	0.88	0.81	−29 −11 +33 − 1 + 0 +17 − 5 − 7 − 7 −38	0	−1.21
115483	23 23 36.00	+52 03 43.1	8.52	H	350.900 001 31	+52.061 982 47	4.10	29.28	4.30	0.64	0.70	1.03	0.82	0.84	−27 −11 +22 + 0 +12 +12 + 9 +11 − 3 −20	1	0.76
115484	23 23 38.41	+54 01 51.5	6.84	H	350.910 029 62	+54.030 961 65	3.64	14.43	2.24	0.46	0.49	0.62	0.46	0.52	−30 +20 +14 +17 −16 + 1 −15 +18 + 8 −33	0	2.34
115485	23 23 38.58	+60 28 26.0	8.68	G	350.910 754 69	+60.473 881 49	1.82	7.24	8.10	0.71	0.72	0.94	0.85	0.85	−25 +16 + 0 +10 − 4 +18 − 6 − 8 −11 −32	0	2.09
115486	23 23 38.63	−56 05 37.5	8.89	H	350.910 945 54	−56.093 745 70	1.45	13.39	2.67	0.62	0.72	1.18	0.74	0.83	−32 + 5 −24 −13 −11 +11 −10 + 1 + 5 −17	1	−0.97
115487	23 23 39.88	+46 22 05.7	7.80	H	350.916 178 03	+46.368 242 78	0.86	4.38	−3.05	0.48	0.62	0.84	0.48	0.67	−13 +14 + 9 −44 + 6 − 7 + 9 −29 +22 − 9	0	1.41
115488	23 23 40.13	−61 01 02.3	8.37	H	350.917 194 68	−61.017 296 14	5.70	−12.96	−4.41	0.57	0.69	0.93	0.65	0.76	−18 − 2 − 1 + 6 +11 + 2 +14 −26 −24 − 8	2	−0.24
115489	23 23 40.28	+52 42 26.1	8.27	G	350.917 826 31	+52.707 258 91	15.63	−1.13	−78.78	0.59	0.58	0.86	0.68	0.66	−30 −13 +24 − 3 + 4 +11 − 2 +12 +17 −14	2	2.65
115490 H	23 23 43.13	−28 34 59.8	8.34	H	350.929 691 40	−28.583 280 18 *	5.74	16.05	−0.96	3.21	1.14	1.27	1.20	1.13	−18 + 4 + 3 −33 +11 − 2 +10 −17 +12 + 29	1	−0.40
115491	23 23 43.45	−00 53 04.5	8.82	H	350.931 055 64	−00.884 587 40	1.14	−64.27	−91.27	1.10	0.89	1.25	1.53	0.97	+31 − 2 − 9 +14 − 8 +10 −20 −19 +22 −20	0	1.70
115492	23 23 44.29	−22 36 35.8	8.44	H	350.934 548 63	−22.609 958 25	3.45	11.78	−21.60	1.10	0.79	1.15	1.73	0.94	+16 − 4 −19 +11 +27 −19 +21 +17 − 2 −15	0	−1.43
115493	23 23 44.52	−31 06 38.7	7.39	2 H	350.935 514 68	−31.110 758 90	1.37	11.66	3.58	0.75	0.65	0.96	0.93	0.83	+26 −10 −26 −32 + 2 +19 + 4 −13 +27 +30	0	0.05
115494	23 23 44.55	−19 06 34.6	7.92	H	350.935 611 36	−19.109 604 44	5.16	−2.32	−14.82	1.01	0.69	1.05	1.27	0.77	+ 0 +20 −14 − 3 + 4 +12 + 9 + 0 +14 −15	0	−0.04
115495 H	23 23 45.32	−08 27 36.3	6.69	H	350.938 815 29	−08.460 070 63 A	6.25	5.27	−17.62	1.83	1.45	1.79	2.39	1.49	+39 − 6 −17 −34 +15 − 1 +23 −16 +14 −28	16	2.72
115496	23 23 45.41	−43 07 28.0	6.12	H	350.939 201 75	−43.124 457 23	2.92	18.88	11.43	0.50	0.48	0.67	0.51	0.51	+10 − 3 − 7 +22 +10 + 8 +11 +23 −11 + 9	0	−0.45
115497	23 23 45.91	−34 36 13.4	8.76	H	350.941 273 69	−34.603 715 89	2.05	−6.81	−6.72	1.02	0.99	1.31	1.29	1.23	+24 −19 −28 −28 − 8 +31 + 1 −13 − 1 +17	0	0.62
115498	23 23 46.31	+72 48 17.0	11.47	G	350.942 965 48	+72.804 727 44	12.56	304.09	91.32	1.41	1.41	1.68	1.78	1.71	+ 3 + 5 +13 +13 − 4 + 1 − 3 + 7 +15 + 5	3	0.78
115499	23 23 47.04	−29 38 28.5	9.67	1 H	350.946 002 40	−29.641 244 13	3.41	−20.97	−61.52	1.31	1.09	1.55	1.57	1.44	+22 − 4 −23 −43 + 9 − 2 + 8 −16 +22 +30	0	−0.20
115500	23 23 47.38	+32 31 52.4	6.70	H	350.947 407 69	+32.531 218 01	13.91	234.65	35.46	0.61	0.49	0.74	0.75	0.48	+24 +12 + 1 +11 +13 − 3 +12 − 7 + 1 +33	0	1.53

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
115401	9.760	0.034	9.169	0.032		0.552	0.034	T	0.62	0.03	L	9.1770	0.0038	0.021	51		9.14	9.21		C	23226−1353	I 1	1 S							S
115402	10.219	0.034	9.518	0.029	*	0.646	0.037	T	0.71	0.03	L *	9.5279	0.0036	0.022	81	*	9.49	9.57		D	23226−4806	I 1	2 C A	AB	313	0.589	0.007	0.99	0.04	
115403	10.512	0.049	8.934	0.022		1.323	0.042	T	1.28	0.05	L	8.9527	0.0024	0.018	55		8.91	8.99					1							
115404	5.443	0.003	5.228	0.003	*	0.203	0.006	G	0.22	0.01	H *	5.2594	0.0010	0.006	54	*	5.25	5.27		D	23227−1502	I 1	2 C B	AB	122	0.139	0.025	1.13	0.43	S
115405	10.204	0.017	9.123	0.011		0.935	0.015	T	0.93	0.01	L	9.1600	0.0020	0.028	243		9.12	9.21			23227−5710	I 1	1							
115406	10.586	0.037	10.200	0.039		0.377	0.046	T	0.44	0.05	L	10.2731	0.0024	0.026	117		10.23	10.32		C			1							
115407	6.242	0.003	6.281	0.004		−0.033	0.004	T	−0.01	0.00	L	6.2809	0.0007	0.007	113		6.27	6.29		C			1							S
115408	9.254	0.023	8.769	0.022		0.456	0.029	T	0.53	0.03	L	8.8669	0.0027	0.020	55		8.84	8.90					1							
115409	9.244	0.013	8.170	0.009		0.930	0.012	T	0.92	0.01	L	8.2400	0.0015	0.017	156		8.21	8.27					1							S
115410	9.301	0.015	9.081	0.017		0.184	0.004	G	0.20	0.01	H	9.1251	0.0017	0.017	135		9.09	9.15		C			1							
115411	9.571	0.027	8.828	0.023		0.700	0.005	G	0.76	0.00	H	8.8297	0.0016	0.014	59		8.80	8.86					1							
115412	8.206	0.013	7.689	0.013		0.478	0.015	G	0.55	0.02	H	7.7288	0.0013	0.011	83		7.71	7.75		C			1 S							S
115413	9.699	0.015	9.172	0.014		0.503	0.015	T	0.58	0.02	L	9.2337	0.0018	0.023	161		9.19	9.28		C			1							
115414	11.328	0.106	9.804	0.044		1.277	0.020	G	1.28	0.09	H	9.8249	0.0022	0.018	67		9.79	9.86		C			1							
115415	9.331	0.022	8.762	0.021		0.536	0.023	T	0.61	0.02	L	8.8301	0.0020	0.018	63		8.80	8.86					1							S
115416	9.143	0.011	7.448	0.005		1.416	0.010	T	1.40	0.02	L	7.4701	0.0008	0.011	179		7.45	7.49					1							
115417	7.388	0.006	6.678	0.005	*	0.600	0.015	G	0.67	0.01	H *	6.7510	0.0009	0.008	117	*	6.74	6.76		D	23228+2034	I 1	2 C A	AB	91	5.827	0.016	3.21	0.05	S
115418	9.632	0.014	9.015	0.013		0.571	0.014	T	0.64	0.01	L	9.0942	0.0021	0.026	184		9.05	9.13					1							
115419	10.854	0.042	9.855	0.028		0.873	0.038	T	0.88	0.03	L	9.8687	0.0027	0.027	140		9.82	9.91			23227+2207	I 1	1 X S							
115420	9.698	0.026	9.250	0.027		0.456	0.007	G	0.53	0.01	H	9.3052	0.0020	0.016	76		9.28	9.34		C			1							
115421	9.413	0.018	9.212	0.022		0.192	0.027	T	0.21	0.03	L	9.2276	0.0014	0.016	120		9.20	9.26					1							
115422	9.345	0.016	8.815	0.015		0.497	0.020	T	0.57	0.02	L	8.9099	0.0021	0.017	95		8.88	8.96		C			1							
115423	9.684	0.019	9.213	0.019		0.444	0.025	T	0.51	0.03	L	9.2536	0.0020	0.018	117		9.22	9.28					1							
115424	11.624	0.110	10.802	0.088		0.750	0.015	G	0.79	0.01	H	10.9373	0.0047	0.036	100		10.87	11.01		C			1							G
115425	7.884	0.006	7.488	0.007		0.387	0.008	T	0.45	0.01	L	7.5249	0.0009	0.007	113		7.51	7.54					1							S
115427	9.978	0.016	8.421	0.008		1.307	0.014	T	1.27	0.01	L	8.4311	0.0013	0.018	208		8.40	8.47					1							
115428	7.072	0.006	7.041	0.007		0.033	0.009	T	0.05	0.01	L	7.0562	0.0011	0.009	80		7.04	7.07					1							S
115429	8.882	0.008	7.835	0.006		0.909	0.008	T	0.91	0.01	L	7.8944	0.0010	0.014	215		7.87	7.92					1							S
115430	11.291	0.053	10.094	0.031		0.950	0.015	G	1.00	0.01	I	10.1772	0.0021	0.022	114		10.14	10.22		C			1							
115431	9.453	0.013	9.427	0.017		0.029	0.020	T	0.05	0.02	L	9.4784	0.0022	0.029	174		9.43	9.53		U			1 S							G
115432	8.857	0.010	8.275	0.009		0.544	0.012	T	0.62	0.01	L	8.3438	0.0012	0.012	130		8.32	8.37		C			1							S
115433	8.191	0.009	6.301	0.005		1.603	0.008	T	2.28	0.03	O	6.1341	0.0039	0.034	177		6.08	6.20		U 2			1 S							S
115434	11.052	0.046	9.324	0.019		1.442	0.039	T	1.44	0.06	L	9.3889	0.0023	0.017	105		9.36	9.42		C			1							
115435	10.754	0.051	9.358	0.026		1.180	0.045	T	1.14	0.04	L	9.4034	0.0018	0.019	84		9.36	9.44					1							
115436	9.762	0.032	9.131	0.028		0.582	0.031	T	0.65	0.03	L	9.1975	0.0028	0.022	54		9.15	9.22					1							S
115437	10.913	0.072	9.503	0.035		1.000	0.040	G	0.98	0.03	R	9.6075	0.0033	0.021	65		9.56	9.65		C			1							
115438	5.367	0.005	4.083	0.003		1.082	0.042	G	1.10	0.02	A	4.1180	0.0009	0.005	65		4.11	4.13					1							S
115439	8.644	0.011	8.536	0.013		0.105	0.016	T	0.12	0.02	L	8.5682	0.0013	0.016	131		8.53	8.59					1							
115440	11.005	0.054	9.117	0.018		1.602	0.047	T	2.13	0.10	O	8.9783	0.0032	0.025	102		8.94	9.02		U			1							
115441	9.147	0.018	9.011	0.022		0.131	0.027	T	0.15	0.03	L	9.0517	0.0018	0.014	64		9.03	9.07		C			1							
115442	9.901	0.025	9.430	0.024		0.457	0.027	T	0.53	0.03	L	9.4835	0.0020	0.017	89		9.46	9.52		D			1							
115443	9.329	0.025	8.725	0.022		0.562	0.025	T	0.64	0.02	L	8.7790	0.0027	0.018	62		8.76	8.82		C			1							
115444	6.797	0.005	5.230	0.004		1.315	0.002	G	1.28	0.00	K	5.2460	0.0012	0.006	59		5.24	5.26			23231+1219	I 1	1							S
115445	8.956	0.019	7.905	0.014		0.881	0.010	G	0.95	0.02	A	7.9410	0.0018	0.013	55		7.92	7.96					1							S
115446	8.632	0.010	8.360	0.011		0.259	0.014	T	0.29	0.02	L	8.4184	0.0016	0.014	121		8.40	8.44		C			1							
115447	9.523	0.015	8.413	0.010		0.957	0.014	T	0.94	0.01	L	8.4647	0.0021	0.017	105		8.44	8.50		C			1							S
115448	9.584	0.018	8.521	0.013		0.921	0.017	T	0.92	0.01	L	8.5673	0.0019	0.017	96		8.54	8.61		C			1							
115449	8.721	0.010	8.207	0.009		0.483	0.012	T	0.55	0.01	L	8.2589	0.0015	0.016	157		8.23	8.29					1 S							S
115450	10.051	0.033	8.758	0.019		1.100	0.030	T	1.06	0.03	L	8.7755	0.0019	0.014	62		8.75	8.79		C			1							
115451	10.065	0.023	9.519	0.022		0.518	0.024	T	0.59	0.03	L	9.5862	0.0026	0.024	104		9.55	9.63		C			1							
115452	9.235	0.013	7.912	0.008		1.123	0.012	T	1.09	0.01	L	7.9614	0.0015	0.015	144		7.93	7.99					1							S
115453	9.752	0.019	9.359	0.020		0.372	0.026	T	0.43	0.03	L	9.3711	0.0018	0.016	123		9.35	9.40		C			1							
115454	9.054	0.014	8.087	0.010		0.848	0.016	G	0.86	0.01	H	8.1491	0.0012	0.014	100		8.12	8.17		C			1							S
115455						1.603	0.197	G	1.67	0.25	K	11.0787	0.0049	0.049	145		10.95	11.18		U			1 S							G
115456	10.698	0.047	9.930	0.036		0.684	0.045	T	0.74	0.04	L	10.0651	0.0020	0.023	101		10.03	10.11		C			1							
115457	8.402	0.012	7.929	0.012		0.475	0.015	G	0.55	0.02	H	7.9816	0.0016	0.009	68		7.96	8.00		C			1							S
115458	9.971	0.020	9.548	0.021	A	0.391	0.100	G	0.43	0.06	L *	9.4641	0.0036	0.034	144	*	9.41	9.51			23233−6352	I 1	2 C A	AB	51	7.880	0.021	2.34	0.08	
115459	7.481	0.006	7.158	0.006		0.283	0.009	G	0.32	0.01	H	7.2063	0.0011	0.010	100		7.19	7.23					1							S
115460	8.874	0.010	7.816	0.007		0.918	0.009	T	0.92	0.01	L	7.8558	0.0013	0.015	155		7.83	7.88					1							
115461	9.627	0.021	9.427	0.025		0.191	0.031	T	0.21	0.04	L	9.4757	0.0022	0.023	142		9.44	9.51		C			1							
115462	8.219	0.006	6.709	0.004		1.269	0.002	G	1.23	0.00	H	6.7240	0.0007	0.010	222		6.71	6.74					1							S
115463	9.677	0.031	8.538	0.020		0.979	0.029	T	0.96	0.02	L	8.5705	0.0018	0.017	65		8.54	8.62					1							
115464	9.880	0.027	8.703	0.016		1.009	0.024	T	0.98	0.02	L	8.7403	0.0015	0.015	76		8.71	8.77					1							
115465	9.803	0.022	9.078	0.018		0.651	0.021	T	0.71	0.02	L	9.1495	0.0026	0.016	86		9.12	9.19		C			1							
115466	10.784	0.049	10.250	0.049	A	0.528	0.005	G	0.60	0.01	R *	10.1782	0.0045	0.023	77	*	10.14	10.23		D	23234−4657	I 1	2 C A	AB	343	2.763	0.021	1.62	0.09	
115467	9.804	0.022	9.368	0.022	A	0.412	0.029	T	0.48	0.03	L	9.4412	0.0137	0.031	113	A	9.39	9.50		U	23234+6736	H 1	2 C A	AB	155	15.412	0.028	2.52	0.14	
115468	9.568	0.021	8.973	0.020		0.546	0.002	G	0.62	0.00	H	9.0502	0.0020	0.020	75		9.00	9.08					1							
115469	8.794	0.012	8.322	0.012		0.457	0.013	T	0.53	0.01	L	8.3885	0.0015	0.014	96		8.37	8.42		C			1							S
115470	9.757	0.016	8.663	0.011	A	0.939	0.005	G	0.99	0.01	I	8.7533	0.0058	0.026	188	A	8.69	8.79		D	23235+4548	I 2	1 C P B							
115471	10.217	0.030	8.841	0.016		1.165	0.027	T	1.13	0.02	L	8.8989	0.0021	0.016	84		8.87	8.93		C			1							
115472	9.589	0.016	8.087	0.009		1.263	0.014	T	1.22	0.01	L	8.0888	0.0016	0.016	144		8.06	8.12		C	23235−6332	I 1	1 S							S
115473	10.666	0.034	9.393	0.018	B	1.095	0.007	G	1.17	0.01	I	9.4442	0.0084			B				D	23235+4548	I 2	1 C I B							
115474	12.312	0.271	10.478	0.078		1.559	0.197	G	1.56	0.22	R	10.4489	0.0050	0.028	62		10.35	10.50		C			1							
115475	10.241	0.032	9.634	0.029		0.566	0.038	T	0.64	0.04	L	9.7603	0.0035	0.025	87		9.70	9.80					1							
115476	8.417	0.016	6.510	0.007		1.583	0.014	T	1.60	0.01	L	6.4428	0.0022	0.015	60		6.42	6.46		M	23235+0017	I 1	1							S
115477	9.845	0.023	8.626	0.015		1.042	0.021	T	1.01	0.02	L	8.6711	0.0018	0.013	84		8.65	8.70		C			1							
115478	9.549	0.017	9.139	0.017		0.401	0.020	T	0.47	0.02	L	9.1884	0.0019	0.019	94		9.16	9.23					1							
115479	10.157	0.022	8.231	0.009		1.633	0.020	T	2.19	0.05	O	8.0806	0.0029	0.027	121		8.04	8.12		U 2			1							
115480	9.214	0.010	9.155	0.013		0.059	0.015	T	0.07	0.01	L	9.2101	0.0016	0.021	184		9.17	9.25		C	23236+4917	I 1	1							
115481	11.037	0.065	10.469	0.066		0.589	0.072	G	0.66	0.07	R	10.4269	0.0038	0.022	63		10.39	10.46		D			1 S							
115482	9.252	0.014	8.865	0.014		0.366	0.018	T	0.43	0.02	L	8.9355	0.0018	0.019	127		8.90	8.97		C			1							
115483	9.906	0.019	8.621	0.011		1.093	0.017	T	1.05	0.02	L	8.6829	0.0016	0.017	153		8.65	8.71					1							
115484	6.938	0.005	6.858	0.006		0.079	0.007	T	0.09	0.01	L	6.8750	0.0009	0.009	134		6.86	6.89		C			1							S
115485	10.929	0.048	8.876	0.014		1.750	0.015	G	1.73	0.01	J	8.7485	0.0023	0.020	130		8.71	8.78					1							
115486	10.892	0.029	9.073	0.011		1.514	0.025	T	1.55	0.04	L	9.0127	0.0018	0.027	270		8.97	9.06					1							
115487	9.923	0.016	8.000	0.007		1.596	0.014	T	1.62	0.01	L	7.9188	0.0014	0.017	207		7.88	7.95					1							
115488	8.531	0.008	8.386	0.009		0.132	0.011	T	0.15	0.01	L	8.4150	0.0017	0.017	170		8.39	8.45					1							S
115489	8.919	0.012	8.341	0.011		0.540	0.014	T	0.61	0.01	L	8.3898	0.0015	0.016	151		8.36	8.42					1							
115490	8.596	0.011	8.354	0.012	*	0.231	0.015	T	0.26	0.02	L *	8.4087	0.0014	0.013	104	*	8.38	8.44		D	23237−2835	H 1	2 C A	AB	219	0.209	0.010	0.73	0.17	S
115491	10.146	0.039	8.910	0.023		1.055	0.035	T	1.02	0.03	L	8.9848	0.0024	0.023	64		8.94	9.02					1							S
115492	9.552	0.027	8.539	0.019		0.884	0.025	T	0.89	0.02	L	8.6024	0.0018	0.016	58		8.58	8.63		C			1							
115493	9.467	0.017	7.579	0.008		1.592	0.063	G	2.01	0.02	A	7.4727	0.0027	0.028	88		7.42	7.51		U 2			1 S							S
115494	9.317	0.018	8.035	0.011		1.091	0.016	T	1.05	0.02	L	8.0905	0.0016	0.013	60		8.07	8.11		C			1							S
115495	7.809	0.010	6.735	0.007	*	0.930	0.009	T	0.92	0.01	L *	6.8469	0.0010	0.008	87	*	6.83	6.86		D	23238−0828	I 1	2 C A	AB	157	5.454	0.002	0.60	0.01	S
115496	8.016	0.009	6.271	0.005		1.464	0.003	G	1.47	0.00	H	6.2474	0.0008	0.007	84		6.24	6.26					1							S
115497	10.799	0.049	8.951	0.018		1.569	0.043	T	1.95	0.12	O	8.8434	0.0041	0.025	74		8.81	8.89					1							
115498						1.204	0.020	G	1.34	0.04	I	11.6268	0.0052	0.048	121		11.57	11.72					1							G
115499	10.955	0.043	9.780	0.025		1.008	0.039	T	0.98	0.03	L	9.8383	0.0038	0.033	108		9.78	9.90		U			1							
115500	7.238	0.006	6.758	0.005		0.452	0.007	T	0.52	0.01	L	6.7964	0.0006	0.006	91		6.78	6.81					1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$					F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr															%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28					29	30
115501	23 23 47.91	−33 22 43.3	8.50	G	350.949 634 23	−33.378 702 91		13.31	−38.71	−82.19	1.04	0.77	1.15	1.23	1.00	+19	− 1	− 7	−48	+ 3	+27	+ 7	−32	+29	+23					0	1.47
115502	23 23 51.16	+20 05 20.7	8.42	H	350.963 174 85	+20.089 089 71		4.57	29.37	1.61	0.86	0.62	1.01	0.97	0.70	+41	− 4	−10	−17	+10	− 8	+ 6	− 5	+ 4	+58					0	−1.63
115503	23 23 51.56	+65 20 36.3	6.97	H	350.964 822 33	+65.343 404 28		10.87	50.38	−21.29	0.49	0.50	0.60	0.58	0.56	−17	+ 8	+ 5	+ 9	− 4	− 6	− 4	+ 6	+ 3	−29					0	1.27
115504	23 23 51.96	+49 04 07.7	9.25	2 H	350.966 496 28	+49.068 818 80		1.04	7.10	−0.40	0.79	0.91	1.45	0.95	1.08	−31	− 5	+28	+16	− 1	−10	+ 4	+10	+23	− 6					0	−0.11
115505	23 23 52.30	−17 47 22.1	7.51	G	350.967 900 78	−17.789 471 55		14.22	−6.85	7.32	1.02	0.69	1.10	1.26	0.83	− 4	+ 8	−35	−15	+ 1	− 1	+ 4	−15	+34	− 7					0	0.69
*115506	23 23 52.87	−53 48 53.6	7.16	H	350.970 276 29	−53.814 889 61	B	9.19	71.41	−33.20	2.32	2.94	2.44	2.01	1.94	− 9	−10	−12	+27	+ 6	+ 8	+ 3	−20	− 4	−14					4	2.13
*115507	23 23 52.58	−45 21 29.4	10.93	H	350.969 077 41	−45.358 169 97		5.93	−81.94	−56.50	1.90	1.53	2.21	2.39	1.63	+22	− 2	−20	+35	+11	−14	+12	+ 7	+ 2	+32					2	0.89
115508	23 23 53.88	+59 10 30.5	8.95	H	350.974 516 74	+59.175 142 08		2.55	11.65	0.78	0.77	0.73	1.02	0.83	0.75	+ 4	+35	+19	+13	− 4	− 1	− 3	− 4	+ 5	−12					0	0.02
115509	23 23 53.92	−42 33 39.6	9.45	G	350.974 665 30	−42.560 993 49		8.49	9.04	−47.26	0.95	0.91	1.21	1.08	1.05	+16	+ 0	− 4	+16	+11	+ 5	+11	+30	+10	+20					0	1.65
*115510	23 23 54.45	−53 48 31.2	6.13	G	350.976 867 37	−53.808 655 50	A	6.79	73.85	−34.77	1.08	1.30	1.43	1.19	1.20	− 8	−13	−13	+36	+ 5	+ 5	+ 2	−16	− 5	−14					4	2.13
*115511	23 23 54.24	+37 24 20.9	8.50	H	350.975 982 65	+37.405 795 08		6.33	−3.53	−20.17	0.95	0.73	1.28	0.99	0.76	+13	+46	+ 8	+14	+14	+14	+26	−17	+32	+26					0	−1.12
115512	23 23 55.41	+21 21 26.8	7.60	H	350.980 862 45	+21.357 444 73		3.87	21.69	17.33	0.58	0.57	0.81	0.64	0.60	+53	+ 7	+ 8	+20	+13	−15	+16	+ 5	− 3	+60					0	−1.31
115513	23 23 56.34	+77 30 42.3	7.50	H	350.984 731 47	+77.511 742 22		3.27	−8.60	1.13	0.55	0.53	0.61	0.66	0.63	−10	+ 2	+17	+17	+ 8	− 3	+ 8	− 4	+ 3	−18					0	−0.46
115514	23 23 58.92	+48 26 47.4	8.12	H	350.995 490 72	+48.446 505 23		1.36	1.86	−2.81	0.49	0.54	0.98	0.63	0.71	−43	− 6	+23	+30	− 7	−15	+ 5	+12	+25	− 6					0	−0.25
115515	23 23 59.06	−47 57 38.2	9.19	2 H	350.996 068 97	−47.960 603 02		1.87	6.08	−1.59	1.07	1.19	1.37	1.26	1.36	+22	−12	−15	+ 2	+14	+ 6	+15	+20	+ 6	+18					0	0.73
115516	23 23 59.50	+66 44 18.1	8.82	G	350.997 919 90	+66.738 373 86		2.90	−7.41	−2.82	0.64	0.65	0.79	0.79	0.73	− 3	+ 2	−11	− 6	−16	− 9	−16	−11	+11	− 6					0	−0.26
115517	23 24 00.87	−59 31 21.4	8.60	H	351.003 621 65	−59.522 615 87		1.91	27.17	4.62	0.69	0.75	1.17	0.81	0.86	−13	− 4	−12	−10	+ 2	+ 5	+ 3	−12	−14	− 2					1	1.32
115518 H	23 24 01.57	−27 16 51.1	7.75	G	351.006 554 39	−27.280 866 00	A	5.51	12.59	6.46	1.07	0.94	1.19	1.29	1.13	+42	+ 8	+ 5	− 6	+15	− 9	+11	+ 3	− 9	+49					1	0.55
*115519	23 24 03.33	−34 18 00.6	8.53	G	351.013 877 97	−34.300 160 30		18.69	243.22	−47.79	3.14	2.62	3.64	3.88	3.44	+15	− 7	−26	−45	− 1	+20	+ 6	−33	+ 6	+10					0	
*115520	23 24 03.32	+29 40 21.8	7.36	1 G	351.013 813 38	+29.672 730 57		2.61	−10.88	−6.92	0.61	0.58	0.84	0.74	0.62	+23	+ 2	−11	+ 6	+ 1	+ 5	+ 1	−15	+17	+19					0	−1.62
*115521	23 24 03.29	+61 35 50.1	10.60	G	351.013 712 58	+61.597 245 48		1.27	−4.30	−1.48	2.28	2.27	2.94	3.04	2.84	−10	+ 8	+18	+ 3	+ 7	− 1	+ 6	−11	− 4	− 9					0	
115522	23 24 04.02	−21 46 27.2	6.46	G	351.016 758 38	−21.774 223 17		15.99	−66.12	−77.43	0.90	0.63	0.85	1.28	0.77	+ 0	− 6	−17	+23	+ 2	+ 1	+ 3	+30	−10	−23					0	−1.14
115523	23 24 04.30	−38 23 16.6	9.17	H	351.017 930 38	−38.387 931 62		1.10	−29.36	−19.19	0.86	1.02	1.35	1.02	1.06	+28	+ 5	−17	+18	−25	+38	−22	−31	+10	+24					0	−2.30
115524	23 24 04.39	+04 55 53.1	7.67	H	351.018 283 43	+04.931 425 06		5.41	19.46	−13.39	0.92	0.63	1.07	0.94	0.86	+38	+16	−11	−27	+ 0	+ 2	+12	− 6	+32	+25					0	0.38
115525	23 24 04.67	−03 38 51.6	9.75	H	351.019 443 57	−03.647 670 94		9.46	62.89	11.18	1.29	1.00	1.70	1.81	1.36	+39	− 5	−12	+ 0	+ 2	+46	+ 7	− 2	+26	+27					0	−0.21
115526	23 24 05.08	−17 42 01.8	8.76	H	351.021 172 19	−17.700 496 91		−0.57	−5.77	−25.47	1.20	0.94	1.42	1.74	1.21	+10	+11	−31	−10	+ 1	− 7	+ 2	−11	+28	+ 4					0	0.02
115527	23 24 06.25	−07 33 02.7	7.62	1 H	351.026 051 35	−07.550 746 34		33.10	144.03	−4.93	0.76	0.59	0.91	0.95	0.71	+42	− 1	+ 4	+ 1	+14	+27	+12	+ 0	+12	+12					0	1.91
115528	23 24 07.76	−18 41 17.2	6.18	G	351.032 325 85	−18.688 124 55		8.89	165.19	48.60	1.00	0.59	0.90	1.14	0.66	−19	+28	−26	−41	+20	− 1	+27	−12	+ 9	−28					0	1.55
115529 H	23 24 07.91	+57 32 07.9	6.79	G	351.032 940 42	+57.535 515 07	A	1.92	5.95	−2.45	1.72	1.53	0.81	0.86	0.85	−57	+ 3	+ 4	− 1	+ 9	+14	+ 9	− 9	−12	−56					1	0.33
115530	23 24 08.88	+41 36 46.3	6.37	2 H	351.036 990 06	+41.612 868 00		2.61	−12.12	2.31	0.50	0.50	0.84	0.53	0.60	−19	+11	− 6	+44	−17	+10	+ 5	−42	+32	+10					2	0.75
115531	23 24 09.41	−52 19 13.4	8.44	H	351.039 192 82	−52.320 390 22		3.89	−8.04	−13.86	0.80	0.80	1.27	0.86	0.74	−18	+ 9	−34	−20	− 2	+16	+ 5	−26	+13	−13					0	0.04
115532	23 24 10.56	−32 55 01.0	9.23	H	351.043 981 79	−32.916 937 58		7.64	−4.61	−52.16	7.01	6.62	8.05	7.29	6.94	+35	+ 6	−21	−51	−19	+11	−14	−45	+24	+29					0	
115533	23 24 10.70	+28 20 36.3	8.45	G	351.044 564 90	+28.343 425 23		6.95	−16.14	−16.31	0.76	0.66	1.11	0.86	0.72	+17	+16	− 1	+ 5	+10	+ 0	+14	− 8	+31	+24					0	0.09
115534	23 24 10.87	−52 49 27.2	9.96	2 H	351.045 301 21	−52.824 234 24		9.87	−80.83	−13.01	0.95	1.21	1.81	1.42	1.20	−13	+ 9	−18	+33	− 9	+24	−12	−26	− 7	−28					1	1.57
115535	23 24 11.29	−31 19 29.7	8.96	H	351.047 032 16	−31.324 923 60		4.50	67.70	−42.01	1.02	0.90	1.33	1.23	0.99	+25	+ 3	−27	−31	− 4	+ 5	+ 0	−28	+35	+13					0	−0.48
*115536	23 24 13.26	−33 27 06.4	10.15	H	351.055 254 56	−33.451 787 61		6.65	100.66	−34.33	4.38	3.59	5.02	5.00	4.21	+20	− 2	−26	−42	− 6	+16	− 1	−38	+29	+17					0	
*115537	23 24 13.24	−51 53 27.9	5.75	1 H	351.055 161 42	−51.891 084 28		5.91	23.17	−37.03	0.50	0.45	0.74	0.55	0.43	− 9	− 7	−22	−10	−11	+ 7	−10	−20	+18	−13					1	−1.44
115538	23 24 13.46	+45 58 54.4	8.74	H	351.056 078 31	+45.981 785 20		1.73	2.21	−1.31	0.56	0.68	0.97	0.63	0.74	− 8	+ 5	+15	−40	− 1	− 2	− 1	−21	+12	+ 1					0	0.98
115539	23 24 14.70	+35 19 50.9	7.52	H	351.061 249 81	+35.330 794 66		2.46	13.85	−11.74	0.84	0.61	1.03	0.97	0.56	+14	+27	+29	+ 4	+24	+30	+16	−16	+ 8	+16					0	−0.10
115540	23 24 14.84	+50 02 37.1	8.10	1 H	351.061 830 48	+50.043 626 60		2.44	5.92	−3.33	0.50	0.59	0.85	0.60	0.63	−32	− 7	+27	+16	+ 0	+ 0	+ 3	− 5	+ 6	−12					0	−0.05
115541	23 24 14.93	+35 29 46.6	9.34	2 H	351.062 221 33	+35.496 274 94		1.18	−9.46	−7.27	1.11	0.83	1.42	1.18	0.72	+ 6	+25	+18	−19	+16	+22	+10	−26	+ 2	+11					0	0.73
115542	23 24 15.85	+61 35 17.6	8.26	H	351.066 031 30	+61.588 210 82		0.96	−1.15	−1.17	0.71	0.70	0.91	0.93	0.82	−16	+ 9	+19	+11	+ 2	+ 0	+ 2	−12	− 8	−17					0	2.20
115543	23 24 15.97	+55 11 06.2	8.61	H	351.066 535 60	+55.185 056 10		0.54	−3.43	−2.74	0.71	0.76	0.97	0.87	1.00	−18	+15	+11	+10	+12	+ 5	+13	+ 1	+ 7	−21					0	−0.52
115544 H	23 24 16.47	+03 42 56.1	6.62	H	351.068 617 56	+03.715 581 02	A	5.44	−2.72	−28.03	1.15	0.74	1.22	1.47	0.84	+50	+11	+15	− 1	+11	+39	+ 5	− 7	+18	− 3					1	0.22
115545	23 24 17.74	+30 45 05.4	8.07	H	351.073 910 37	+30.751 495 97		4.63	27.01	−9.55	0.73	0.64	0.95	0.73	0.69	+26	+27	+ 1	+22	+ 0	− 6	+ 6	−11	+19	+26					0	−1.39
115546	23 24 18.37	+18 58 56.8	7.94	H	351.076 542 98	+18.982 438 09		1.80	2.87	−2.79	0.76	0.55	0.98	0.86	0.60	+48	− 8	−13	− 2	+12	−29	+ 9	− 5	+ 0	+57					0	−0.71
115547	23 24 18.86	−72 09 54.3	6.88	H	351.078 569 79	−72.165 085 38		23.86	−17.08	−45.60	0.48	0.46	0.62	0.54	0.47	+ 7	+ 0	−30	− 1	+ 6	− 6	+ 4	+ 0	− 1	+19					0	1.68
115548	23 24 18.94	+21 24 47.3	7.44	H	351.078 913 63	+21.413 139 17		12.43	−129.08	−46.58	0.56	0.55	0.80	0.65	0.67	+52	+ 7	+ 9	+26	+13	−18	+12	+15	− 2	+40					0	−1.77
115549	23 24 19.10	+23 45 35.8	6.97	H	351.079 577 30	+23.759 944 08		4.23	−82.37	−13.22	0.55	0.47	0.74	0.60	0.47	+27	+12	+10	+20	+ 4	−10	+ 7	− 2	+21	+24					0	−0.03
115550 H	23 24 20.91	+86 25 03.9	6.61	1 H	351.087 136 78	+86.417 745 05	A	7.35	−20.73	17.69	0.61	0.57	0.61	0.62	0.53	−16	+ 0	− 3	+23	− 4	+ 3	− 7	− 8	− 1	−23					3	0.09
115551	23 24 21.78	+06 11 10.6	7.18	G	351.090 757 08	+06.186 276 83		4.65	27.40	4.78	1.32	0.78	1.13	1.61	1.03	−24	+ 3	−17	+40	−30	+35	−15	− 5	+28	+10					0	0.55
115552 H	23 24 23.87	+14 28 44.9	7.55	G	351.099 453 18	+14.479 131 43	A	8.26	17.06	−15.35	1.32	1.37	1.46	1.19	1.31	+20	+ 9	−36	− 8	−18	+ 3	−22	−42	+30	+22					1	−0.89
115553	23 24 24.30	−17 19 08.8	9.20	3 H	351.101 248 24	−17.319 099 46		0.03	11.82	1.75	1.33	0.99	1.57	1.58	1.38	+ 8	+11	−24	−25	+ 4	+11	+10	− 7	+39	+20					0	0.49
115554	23 24 25.48	−51 16 46.3	9.92	H	351.106 179 09	−51.279 524 44		6.26	−36.18	−19.62	0.97	0.90	1.68	1.10	0.95	−16	+ 0	−11	− 9	−22	−10	−20	−11	+30	−15					0	−3.04
115555	23 24 25.69	−45 09 14.1	9.11	2 H	351.107 034 98	−45.153 905 88		11.80	−47.97	−66.73	0.98	0.91	1.30	1.12	1.01	+ 6	+13	−17	+ 1	+ 0	+19	+ 4	+ 9	+ 8	+12					0	−0.35
115556	23 24 26.62	−37 12 03.3	7.35	G	351.110 901 41	−37.200 927 16		4.00	−10.10	−4.71	0.58	0.67	0.89	0.62	0.75	+44	− 3	−17	+ 2	−35	+31	−32	−44	+21	+51					0	0.24
115557	23 24 27.04	−06 57 43.5	9.05	H	351.112 656 14	−06.962 083 07		4.25	1.92	−4.90	1.15	0.83	1.35	1.33	1.09	+34	+ 7	− 7	−24	+ 3	+ 9	+10	−10	+30	+15					0	0.87
115558	23 24 27.34	+22 14 21.6	9.05	H	351.113 923 08	+22.239 324 60		3.12	25.34	−22.11	0.85	0.74	1.26	0.96	0.78	+47	+10	+20	+29	+11	−10	+15	+ 0	− 4	+53					0	0.15
115559	23 24 27.67	−27 28 05.2	10.67	G	351.115 293 75	−27.468 116 79		0.19	7.64	−34.22	1.69	1.36	2.03	2.13	1.76	+25	+ 6	− 5	−32	+16	− 8	+17	−17	− 4	+24					2	−1.37
115560	23 24 27.77	+18 07 00.5	10.29	H	351.115 697 67	+18.116 800 00		1.76	103.23	30.48	1.25	0.91	1.52	1.40	0.99	+48	−11	−14	+18	+17	−24	+19	− 5	+ 2	+61					0	0.60
115561	23 24 30.04	−49 20 51.4	9.08	H	351.125 151 75	−49.347 615 02		3.40	1.07	−6.39	0.77	0.79	1.39	0.76	0.73	−11	−25	+10	−31	− 6	+21	− 8	−34	+ 0	−24					0	1.56
115562	23 24 30.58	+57 51 18.0	10.03	G	351.127 425 31	+57.854 995 54		76.23	−62.51	−282.75	1.13	1.04	1.41	1.57	1.41	−30	+14	+14	+24	+ 4	− 2	− 1	− 3	+ 1	−50					3	−0.68
115563	23 24 30.89	+30 42 43.8	7.20	1 H	351.128 692 15	+30.712 175 64		6.96	40.08	22.94	0.61	0.55	0.82	0.61	0.57	+25	+19	− 1	+21	+ 5	−19	+ 9	−11	+20	+23					0	0.06
115564	23 24 31.69	−47 33 11.3	10.59	H	351.132 060 86	−47.553 134 97		6.02	−25.56	−13.15	1.70	1.63	2.07	2.01	1.90	+19	−24	− 1	+38	+10	− 8	+ 7	+21	+10	+17					0	2.74
115565	23 24 32.17	−25 22 04.5	9.78	2 H	351.134 038 68	−25.367 925 95		1.64	3.23	−1.36	1.34	1.07	1.62	2.02	1.78	+43	−18	− 6	+ 3	+16	+28	+15	− 3	+25	+53					0	0.23
115566	23 24 33.04	+61 09 28.2	8.97	G	351.137 651 97	+61.157 837 36		4.22	5.37	−2.18	0.81	0.80	1.04	0.95	0.95	−24	+ 8	+17	− 5	+15	+11	+14	−19	+ 0	−24					4	2.59
115567	23 24 34.91	+41 06 46.5	6.72	H	351.145 444 29	+41.112 913 25		1.28	3.55	−3.19	0.46	0.47	0.78	0.47	0.54	− 5	+ 6	− 2	+56	−25	+10	− 3	−34	+33	+24					0	0.93
115568	23 24 35.94	+02 36 35.5	8.66	H	351.149 742 12	+02.609 862 23		2.30	2.06	−8.18	1.05	0.81	1.27	1.62	0.99	+36	+12	−13	+18	+ 3	+31	+ 8	+13	+14	− 7					0	1.66
115569	23 24 35.96	+63 51 12.8	6.75	H	351.149 845 27	+63.853 543 60		7.29	−25.00	−56.97	0.47	0.55	0.62	0.53	0.65	−18	+23	+ 2	+ 7	− 2	− 8	− 2	−14	+ 5	−24					1	0.52
115570	23 24 37.48	−15 17 33.6	9.35	H	351.156 153 20	−15.292 665 14		5.34	0.54	9.06	1.22	1.06	1.47	1.54	1.35	+31	−17	−30	+16	− 6	+24	− 1	+ 2	+17	+37					5	0.54
115571	23 24 38.60	−33 26 25.6	8.99	H	351.160 821 15	−33.440 452 18		2.66	17.02	−16.65	1.08	0.96	1.38	1.39	1.25	+29	−22	−16	−35	+ 0	+38	+ 1	−19	+26	+37					0	0.90
115572	23 24 38.85	−01 44 28.6	7.54	G	351.161 891 33	−01.741 291 25		12.03	165.89	−41.36	0.84	0.61	0.96	1.30	0.75	+21	+ 1	−16	+20	− 7	+32	−10	− 4	+ 4	−16					2	0.89
115573	23 24 38.88	−21 58 48.7	8.49	H	351.162 016 72	−21.980 204 67		6.16	10.71	20.11	1.74	1.00	1.37	2.86	1.29	−32	+28	−30	+60	−33	+32	−36	+38	−20	−53					0	−1.25
115574	23 24 39.13	−42 15 05.1	9.38	H	351.163 045 16	−42.251 411 76		6.82	−7.42	−3.29	0.97	0.96	1.23	1.19	0.98	+27	−14	−23	+28	+14	− 8	+12	+22	− 6	+22					0	−0.01
115575	23 24 40.12	+33 36 31.0	8.64	H	351.167 176 39	+33.608 619 09		7.63	52.30	−6.07	0.84	0.70	1.05	0.99	0.65	+17	+19	+ 7	+22	+24	+ 9	+25	− 8	+15	+31					0	1.90
115576	23 24 40.39	+53 24 42.3	8.15	H	351.168 299 78	+53.411 763 86		1.59	1.70	−5.16	0.61	0.58	0.80	0.73	0.67	−29	− 2	+13	+ 0	− 2	− 5	− 3	+16	+ 9	−21					0	0.66
115577	23 24 42.13	−52 42 05.4	7.59	H	351.175 548 82	−52.701 494 73		23.01	−18.35	−157.36	0.63	0.62	0.93	0.85	0.62	− 9	− 3	−24	− 7	+ 1	+ 3	+ 1	−22	+ 6	−22					0	−0.93
115578	23 24 43.32	−57 30 21.0	9.69	H	351.180 509 11	−57.505 829 32		10.90	−49.12	−96.28	0.84	0.92	1.50	0.90	0.91	−18	− 6	−32	+24	+ 6	+ 3	+10	− 3	− 2	− 9					2	−1.02
115579	23 24 43.38	+36 21 43.8	7.01	H	351.180 767 11	+36.362 175 86		2.21	5.33	−1.37	0.65	0.52	0.82	0.86	0.48	+ 0	+20	+12	−10	+16	+22	+12	−21	+14	− 7					0	−1.46
115580	23 24 43.69	−53 44 45.9	9.03	H	351.182 023 19	−53.746 080 18		−1.35	11.60	−8.00	0.72	0.88	1.34	0.97	0.87	−17	+10	−26	+38	− 8	+16	− 5	−12	+ 0	−17					0	−1.59
115581 H	23 24 44.08	−59 38 04.5	9.13	H	351.183 668 76	−59.634 582 97	*	11.82	−18.58	18.68	2.32	2.50	1.60	1.20	1.30	+15	+ 2	− 5	− 8	−16	+14	−14	− 7	−14	+ 7					1	0.14
115582	23 24 45.14	−40 25 06.9	9.01	G	351.188 092 41	−40.418 590 75		11.40	99.57	−211.35	0.86	0.84	1.18	0.98	0.99	+18	− 3	− 6	+29	+17	+ 9	+18	+16	+ 8	+22					0	−0.49
115583	23 24 45.38	+25 29 47.0	7.38	H	351.189 100 52	+25.496 389 84		3.43	14.42	0.17	0.59	0.51	0.83	0.58	0.52	+29	+23	−11	+ 9	− 6	+ 2	+ 5	−29	+36	+36					2	−2.11
115584	23 24 45.85	−34 56 47.4	11.56	G	351.191 054 04	−34.946 498 12		17.19	215.79	84.16	2.68	2.21	3.18	3.25	2.70	+11	−14	−29	−41	+ 2	+15	+ 8	−36	− 9	+ 0					0	−0.19
115585	23 24 46.55	+23 28 48.9	8.24	G	351.193 961 13	+23.480 248 31		1.44	36.28	20.68	0.70	0.61	0.94	0.74	0.62	+35	+13	+18	+19	− 1	− 4	+ 3	−11	+13	+36					0	1.34
115586	23 24 46.56	+44 17 32.7	9.03	H	351.193 991 94	+44.292 403 67		3.57	15.84	−0.69	0.68	0.71	1.09	0.82	0.88	− 8	+13	+10	+ 9	+ 2	+ 0	+12	−25	+20	+13					4	−0.48
115587	23 24 47.40	−21 26 33.9	7.71	H	351.197 500 43	−21.442 747 51		4.23	27.56	1.32	0.95	0.82	1.03	1.56	0.98	+10	+ 0	−24	+15	+10	− 7	+12	+37	+ 2	−19					0	0.77
115588	23 24 49.00	−71 37 38.7	7.80	H	351.204 166 45	−71.627 415 83		4.03	14.01	−2.51	0.61	0.57	0.77	0.72	0.60	− 7	+ 9	−23	+14	−14	− 5	−15	+10	− 4	− 7					1	−1.17
115589	23 24 49.20	+07 52 51.5	8.96	H	351.204 983 13	+07.880 959 46		3.28	−5.18	−14.36	1.36	1.20	1.79	2.12	1.78	+41	+19	− 6	+10	+ 8	+39	+17	+16	+29	+41					0	−0.03
115590	23 24 50.25	+62 16 58.2	4.96	1 H	351.209 362 67	+62.282 838 77		4.23	12.24	−13.25	0.42	0.46	0.55	0.54	0.56	−16	+15	+16	+15	+ 1	− 1	− 1	−17	− 1	−25					1	1.02
115591	23 24 50.82	+32 23 05.5	5.56	H	351.211 753 78	+32.384 874 95		6.44	16.51	2.76	0.54	0.44	0.67	0.64	0.41	+16	+ 9	− 6	+ 8	+ 9	− 1	+ 9	−13	+ 5	+24					0	1.37
115592	23 24 52.01	+10 37 53.5	8.99	H	351.216 692 64	+10.631 540 86		7.50	−26.44	29.09	1.19	0.96	1.33	1.61	1.10	+15	− 2	− 6	− 9	+ 2	+13	+ 7	+14	+20	− 7					0	0.69
115593	23 24 53.18	−32 27 39.5	9.69	H	351.221 582 19	−32.460 960 15		8.16	−0.18	5.01	1.26	0.98	1.55	1.49	1.21	+18	+ 5	−10	−13	− 1	+23	+ 4	+ 4	+34	+21					0	0.12
115594 H	23 24 54.97	−38 09 38.4	9.43	H	351.229 041 51	−38.160 659 02	A	4.11	41.49	−21.32	2.02	2.03	2.78	2.23	2.27	+35	−11	−25	+47	− 1	+19	+ 3	− 5	+33	+45					0	−0.11
115595	23 24 55.01	−02 01 06.4	9.16	G	351.229 210 65	−02.018 448 00		0.53	−14.39	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
115501	9.187	0.016	8.551	0.014		0.581	0.015	G	0.65	0.01	H	8.6231	0.0019	0.014	81		8.60	8.65		C			1							S
115502	8.482	0.009	8.408	0.010		0.073	0.013	T	0.08	0.01	L	8.4486	0.0021	0.016	120		8.42	8.47					1							S
115503	7.435	0.005	7.010	0.006		0.401	0.007	T	0.47	0.01	L	7.0665	0.0010	0.011	117		7.05	7.08		C			1							S
115504	11.562	0.061	9.596	0.017		1.666	0.052	T	2.19	0.29	K	9.3089	0.0054	0.060	203		9.22	9.41		U 2			1							
115505	8.027	0.013	7.533	0.011		0.450	0.015	G	0.52	0.02	H	7.6033	0.0021	0.011	53		7.59	7.62		C			1							S
115506	7.383	0.005	7.107	0.006	B	0.263	0.008	T	0.30	0.01	L	7.2011	0.0064			B				D	23239−5349	I 2	1 C I B							S
115507	11.651	0.099	11.018	0.095		0.660	0.020	G	0.72	0.02	H	11.0635	0.0060	0.044	90		10.99	11.13		C			1							G
115508	9.409	0.017	8.997	0.017		0.444	0.005	G	0.51	0.01	H	9.0455	0.0028	0.019	119		9.01	9.08					1							
115509	10.134	0.026	9.531	0.024		0.602	0.003	G	0.67	0.00	H	9.5749	0.0020	0.015	93		9.53	9.60		C			1							
115510	6.442	0.003	6.154	0.003	A	0.258	0.003	G	0.29	0.00	H	6.2071	0.0036	0.020	180	A	6.16	6.24		D	23239−5349	I 2	1 C P B							S P
115511	9.193	0.018	8.548	0.016		0.599	0.021	T	0.67	0.02	L	8.6279	0.0021	0.018	73		8.60	8.66		C			1							
115512	8.730	0.009	7.696	0.006		0.900	0.008	T	0.90	0.01	L	7.7568	0.0010	0.011	156		7.74	7.78		C			1							S
115513	8.365	0.010	7.597	0.008		0.700	0.010	T	0.76	0.01	L	7.6444	0.0012	0.011	121		7.62	7.67		C			1							S
115514	8.176	0.005	8.121	0.006		0.056	0.007	T	0.07	0.01	L	8.1456	0.0009	0.014	257		8.12	8.17					1							S
115515	11.344	0.077	9.394	0.026		1.653	0.067	T	2.04	0.16	O	9.2712	0.0050	0.040	82		9.21	9.34		U			1							
115516	9.247	0.014	8.876	0.014		0.481	0.015	G	0.55	0.02	H	8.9314	0.0015	0.013	115		8.90	8.95		C			1							
115517	10.260	0.022	8.715	0.011		1.297	0.019	T	1.26	0.02	L	8.7568	0.0019	0.024	179		8.72	8.79					1							
115518	7.714	0.007	7.687	0.010	*	−0.013	0.008	G	0.01	0.01	H	*	7.7408	0.0017	0.014	107	*	7.72	7.76		D	23240−2717	I 1	2 C A	AB	268	6.689	0.030	3.47	0.14	S
115519	9.298	0.017	8.601	0.014		0.626	0.003	G	0.69	0.00	H		8.6609	0.0020	0.017	89		8.63	8.70		C			1 X							S
115520	7.291	0.006	7.341	0.007		−0.040	0.002	G	−0.02	0.00	H		7.3492	0.0023	0.015	87		7.33	7.38		U			1							S
115521	11.026	0.068	10.579	0.073		0.622	0.056	G	0.69	0.05	H		10.9406	0.0044	0.035	102		10.88	11.04					1 X							D
115522	6.976	0.010	6.509	0.006		0.433	0.003	G	0.50	0.00	H		6.5724	0.0017	0.008	45		6.56	6.58			23241−2146	I 1	1							S
115523	10.543	0.033	9.309	0.020		1.054	0.030	T	1.02	0.03	L		9.3370	0.0028	0.018	100		9.30	9.37					1							
115524	8.099	0.012	7.729	0.010		0.351	0.015	T	0.41	0.02	L		7.7540	0.0009	0.009	83		7.74	7.77		D			1							S
115525	10.603	0.055	9.839	0.043		0.696	0.055	T	0.75	0.05	L		9.8882	0.0030	0.021	69		9.84	9.93		C			1							
115526	10.118	0.036	8.852	0.022		1.079	0.033	T	1.04	0.03	L		8.9289	0.0027	0.016	55		8.90	8.95		C			1							
115527	8.465	0.012	7.693	0.010		0.682	0.002	G	0.74	0.00	H		7.7554	0.0022	0.017	82		7.72	7.79		U			1							S
115528	7.498	0.009	6.305	0.004		1.020	0.000	G	0.99	0.00	H		6.3489	0.0011	0.007	59		6.34	6.36					1							S
115529	7.069	0.005	6.828	0.005	*	0.254	0.005	G	0.29	0.01	H	*	6.8634	0.0009	0.010	122	*	6.85	6.88		D	23241+5732	I 1	2 C A	AB	121	0.321	0.002	0.26	0.03	S
115530	8.615	0.009	6.605	0.004		1.702	0.008	T	2.47	0.02	O		6.3991	0.0030	0.040	150		6.36	6.47		U 2			1							S
115531	9.881	0.021	8.542	0.012		1.136	0.019	T	1.10	0.02	L		8.6072	0.0017	0.021	126		8.57	8.66					1							
115532	10.360	0.037	9.344	0.025		0.886	0.033	T	0.93	0.03	L		9.3714	0.0026	0.020	77		9.34	9.41		C			1 X S							G
115533	8.835	0.014	8.493	0.014		0.358	0.015	G	0.42	0.02	H		8.5333	0.0018	0.012	80		8.51	8.56					1							S
115534	10.862	0.039	10.003	0.030		0.769	0.037	T	0.81	0.03	L		10.1119	0.0028	0.031	142		10.04	10.16		U 2			1							
115535	9.529	0.020	8.999	0.019		0.506	0.021	T	0.58	0.02	L		9.0713	0.0017	0.017	94		9.03	9.10					1							
115536	10.779	0.054	10.095	0.048		0.620	0.054	T	0.69	0.05	L		10.2827	0.0037	0.035	82		10.23	10.35					1 X							
115537	7.826	0.007	5.927	0.003		1.611	0.006	T	1.69	0.02	O		5.8568	0.0011	0.012	145		5.84	5.88		U 2			1							S
115538	8.789	0.008	8.730	0.010		0.059	0.012	T	0.07	0.01	L		8.7620	0.0015	0.022	196		8.73	8.80					1							
115539	8.841	0.014	7.625	0.009		1.039	0.013	T	1.01	0.01	L		7.6875	0.0012	0.011	89		7.67	7.71		C			1							S
115540	8.042	0.006	8.095	0.008		−0.044	0.009	T	−0.02	0.01	L		8.0918	0.0019	0.021	186		8.06	8.13		U			1							S
115541	11.533	0.090	9.624	0.027		1.619	0.077	T	1.74	0.21	K		9.4433	0.0083	0.063	85		9.32	9.53		U 2			1							P
115542	9.588	0.023	8.396	0.015		1.021	0.021	T	0.99	0.02	L		8.4282	0.0017	0.014	113		8.40	8.45			23243+6135	I 1	1							
115543	9.668	0.018	8.734	0.013		0.825	0.016	T	0.85	0.01	L		8.7656	0.0014	0.020	136		8.73	8.80					1							
115544	8.101	0.018	6.741	0.009	*	1.152	0.016	T	1.11	0.01	L	*	6.7911	0.0018	0.013	100	*	6.77	6.82		D	23243+0343	I 1	2 C A	AB	230	7.114	0.013	2.48	0.03	S
115545	9.442	0.017	8.180	0.011		1.075	0.016	T	1.04	0.01	L		8.2370	0.0016	0.011	86		8.22	8.27		C			1							
115546	9.781	0.016	8.089	0.008		1.413	0.014	T	1.39	0.02	L		8.0823	0.0014	0.015	157		8.06	8.11					1							S
115547	7.523	0.006	6.938	0.006		0.541	0.011	G	0.61	0.01	H		7.0004	0.0011	0.012	129		6.98	7.03					1							S
115548	7.993	0.006	7.495	0.006		0.468	0.008	T	0.54	0.01	L		7.5437	0.0007	0.010	154		7.53	7.56					1 G							S
115549	8.257	0.009	7.087	0.006		1.004	0.008	T	0.98	0.01	L		7.1400	0.0010	0.008	122		7.12	7.15					1							S
115550	6.963	0.005	6.643	0.006	A	0.550	0.600	G	0.32	0.03	L	*	6.6810	0.0015	0.012	120	*	6.66	6.70		U 2	23243+8625	I 1	2 C C	AB	152	2.423	0.028	3.97	0.13	S P
115551	7.046	0.008	7.159	0.010		−0.098	0.002	G	−0.08	0.00	H		7.1372	0.0023	0.010	47		7.13	7.16		C			1 G							S
115552	8.162	0.011	7.643	0.011	A	0.524	0.015	G	0.60	0.02	H	*	7.6643	0.0016	0.009	66	*	7.65	7.68		C	23244+1429	I 1	2 C B	AB	342	1.358	0.035	2.91	0.08	S
115553	10.812	0.074	9.406	0.035		1.205	0.067	T	3.62	0.20	O		8.8751	0.0671	0.327	53		8.37	9.13		U 2			1 S							P
115554	10.385	0.026	9.915	0.027		0.456	0.029	T	0.53	0.03	L		10.0247	0.0025	0.028	140		9.98	10.07		C			1							
115555	9.952	0.025	9.155	0.020		0.722	0.025	T	0.77	0.02	L		9.2506	0.0077	0.055	93		9.18	9.34		U 2			1							S
115556	7.471	0.006	7.353	0.006		0.096	0.004	G	0.11	0.00	H		7.3981	0.0009	0.008	111		7.39	7.41		C			1							S
115557	10.437	0.044	9.175	0.025		1.075	0.040	T	1.04	0.03	L		9.2183	0.0026	0.017	72		9.19	9.25		C			1							
115558	11.007	0.046	9.201	0.017		1.503	0.039	T	1.53	0.06	L		9.1777	0.0022	0.018	135		9.14	9.21					1							
115559	11.613	0.092	10.618	0.061		0.900	0.020	G	0.90	0.01	H		10.8142	0.0044	0.035	106		10.75	10.86		C			1							G
115560	10.868	0.042	10.361	0.044		0.476	0.055	T	0.55	0.06	L		10.3950	0.0026	0.026	136		10.35	10.44					1							G
115561	10.453	0.021	9.195	0.012		1.072	0.019	T	1.04	0.02	L		9.2478	0.0017	0.023	187		9.20	9.29					1							
115562	11.859	0.117	10.163	0.043		1.465	0.022	G	1.91	0.02	A		10.0708	0.0034	0.032	102		10.02	10.12					1							G
115563	7.656	0.009	7.233	0.009		0.378	0.015	G	0.44	0.02	H		7.2894	0.0031	0.034	88		7.24	7.35	0.20	P 1 A			1							S
115564	11.357	0.077	10.567	0.060		0.701	0.074	T	0.76	0.06	L		10.7260	0.0058	0.044	83		10.64	10.80					1							G
115565	11.871	0.102	9.997	0.033		1.590	0.088	T	2.24	0.55	K		9.8393	0.0065	0.053	94		9.74	9.92		U 2			1							
115566	9.115	0.015	9.001	0.018		0.111	0.009	G	0.12	0.01	H		9.0131	0.0021	0.019	115		8.99	9.04		C			1 S							D
115567	6.721	0.004	6.719	0.004		0.007	0.005	T	0.03	0.01	L		6.7270	0.0006	0.008	166		6.71	6.74					1							S
115568	9.892	0.028	8.782	0.018		0.957	0.026	T	0.94	0.02	L		8.8226	0.0019	0.017	77		8.79	8.86		C			1							S
115569	8.128	0.009	6.863	0.006		1.080	0.015	G	1.04	0.01	H		6.9190	0.0010	0.009	115		6.90	6.93		C			1							S
115570	10.047	0.037	9.400	0.032		0.593	0.036	T	0.66	0.03	L		9.4770	0.0029	0.019	52		9.42	9.52					1							
115571	10.725	0.045	9.137	0.020		1.331	0.039	T	1.29	0.04	L		9.1439	0.0021	0.016	76		9.12	9.17		C			1							
115572	8.572	0.015	7.640	0.012		0.822	0.000	G	0.84	0.00	H		7.6826	0.0015	0.010	59		7.67	7.70		C			1							S
115573	9.783	0.037	8.617	0.023		1.000	0.034	T	0.98	0.03	L		8.6586	0.0022	0.013	40		8.63	8.68					1							S
115574	9.991	0.023	9.478	0.023		0.492	0.025	T	0.56	0.03	L		9.4916	0.0036	0.030	102		9.45	9.54		R	23247−4215	I 1	1							
115575	9.268	0.017	8.679	0.015		0.550	0.020	T	0.62	0.02	L		8.7547	0.0021	0.017	87		8.72	8.78					1							
115576	8.198	0.008	8.144	0.010		0.055	0.012	T	0.07	0.01	L		8.1754	0.0013	0.013	141		8.15	8.20		C			1							
115577	8.406	0.011	7.663	0.007		0.692	0.001	G	0.75	0.00	H		7.7244	0.0015	0.013	128		7.71	7.75					1							S
115578	10.350	0.019	9.731	0.018		0.573	0.019	T	0.65	0.02	L		9.8116	0.0026	0.035	207		9.76	9.88					1							
115579	6.834	0.006	6.981	0.007		−0.135	0.006	G	−0.13	0.01	H		6.9700	0.0013	0.010	77		6.95	6.99					1							S
115580	10.875	0.036	9.164	0.015		1.439	0.033	T	1.43	0.05	L		9.1414	0.0023	0.024	180		9.11	9.19					1							
115581	9.943	0.018	9.205	0.015	*	0.661	0.017	T	0.72	0.01	L	*	9.2645	0.0025	0.026	168	*	9.22	9.31		D	23247−5938	H 1	2 C A	AB	230	0.259	0.017	1.47	0.24	
115582	9.688	0.020	9.073	0.018		0.574	0.008	G	0.65	0.01	H		9.1312	0.0016	0.017	93		9.10	9.16		C			1							
115583	7.285	0.006	7.370	0.006		−0.069	0.001	G	−0.05	0.00	H		7.3636	0.0010	0.009	119		7.35	7.38					1							S
115584						1.249	0.012	G	1.41	0.01	I		11.6921	0.0086	0.055	65		11.61	11.78					1							G
115585	9.607	0.020	8.389	0.013		1.040	0.020	G	1.01	0.02	H		8.4222	0.0011	0.014	125		8.40	8.45		C			1							
115586	9.262	0.016	9.057	0.019		0.196	0.023	T	0.21	0.03	L		9.0922	0.0024	0.018	123		9.06	9.12		C			1							
115587	8.984	0.020	7.827	0.013		0.993	0.019	T	0.97	0.01	L		7.8706	0.0014	0.009	48		7.86	7.90					1							S
115588	9.175	0.012	7.924	0.007		1.067	0.011	T	1.03	0.01	L		7.9729	0.0013	0.013	135		7.95	7.99		C			1							S
115589	10.390	0.052	9.062	0.028		1.127	0.046	T	1.09	0.05	L		9.1286	0.0027	0.019	49		9.09	9.17		C			1							S
115590	7.134	0.006	5.158	0.003		1.676	0.010	G	1.94	0.05	F		5.0493	0.0017	0.014	117		5.03	5.07		U 2	23246+6216	I 1	1							S
115591	5.459	0.003	5.546	0.003		−0.075	0.004	T	−0.05	0.01	L		5.5421	0.0005	0.005	101		5.53	5.55					1							S
115592	9.513	0.023	9.063	0.023		0.424	0.030	T	0.49	0.03	L		9.0904	0.0032	0.016	58		9.05	9.12		C			1							S
115593	10.144	0.028	9.717	0.029		0.417	0.033	T	0.48	0.04	L		9.7848	0.0039	0.024	80		9.73	9.82					1							
115594	10.131	0.024	9.547	0.022	*	0.547	0.024	T	0.62	0.02	L	*	9.5528	0.0022	0.020	107	*	9.52	9.58		D	23249−3810	I 1	2 C A	AB	142	0.746	0.006	1.38	0.02	
115595	11.173	0.091	9.366	0.031		1.503	0.020	G	1.53	0.03	I		9.2991	0.0024	0.017	66		9.27	9.33		C			1							
115596	9.095	0.014	7.542	0.008		1.304	0.013	T	1.26	0.01	L		7.5554	0.0010	0.010	116		7.53	7.58					1							
115597	9.115	0.022	7.799	0.013		1.118	0.020	T	1.08	0.02	L		7.8531	0.0019	0.009	41		7.84	7.87		C			1							S
115598	12.071	0.134	11.001	0.078		0.927	0.118	T	0.92	0.09	L		11.0840	0.0032	0.044	194		11.01	11.15		C			1							G
115599	10.160	0.031	8.943	0.019		1.040	0.028	T	1.01	0.02	L		8.9770	0.0022	0.015	69		8.95	9.01		C			1							
115600	10.478	0.048	8.443	0.018		1.685	0.041	T	1.71	0.04	L		8.3447	0.0034	0.025	59		8.30	8.40		U			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	mas/yr 13	mas 14	15	mas 16	mas/yr 17	18	19	20	21	22	23	24	25	26	27	28	% 29	30
115601	23 25 02.59	+42 13 31.3	7.95	H	351.260 801 38	+42.225 367 73	7.55	9.87	−17.21	0.54	0.66	1.17	0.59	0.73	−11	+10	− 6	+15	− 9	+ 1	+ 5	−34	+47	+ 8	1	−1.21
115602	23 25 02.78	+50 59 48.5	9.28	H	351.261 577 48	+50.996 804 62	4.46	11.78	−20.40	0.81	0.92	1.34	0.95	1.11	−25	+ 0	+23	+17	− 1	+ 3	− 2	+16	+15	−18	2	−0.40
115603 H	23 25 04.62	+26 57 26.7	10.36	H	351.269 240 48	+26.957 412 24 A	5.80	−14.04	−103.04	14.11	10.07	7.28	11.31	7.63	+ 0	−26	−31	−88	−12	+30	−22	−82	+41	+37	14	0.93
115604	23 25 05.68	+69 56 59.5	9.23	H	351.273 684 46	+69.949 871 86	11.53	196.92	−31.34	0.76	0.76	0.96	0.87	0.91	− 9	− 8	+ 8	−19	+ 3	+16	+ 2	−14	+ 2	− 1	1	0.88
115605	23 25 05.91	−73 16 25.0	7.45	H	351.274 609 89	−73.273 605 92	1.89	9.33	14.88	0.53	0.50	0.66	0.55	0.52	+ 1	+ 5	−22	− 9	+ 3	+ 6	+ 6	−14	+ 8	+19	0	0.28
115606	23 25 06.48	+23 03 34.6	8.77	G	351.277 010 25	+23.059 615 16	2.41	−6.98	8.28	0.84	0.73	1.09	1.01	0.69	+42	+14	+14	+37	+ 6	−18	+ 7	+ 0	+ 1	+34	4	0.93
115607	23 25 09.54	+11 16 54.9	9.79	H	351.289 751 08	+11.281 928 34	2.14	10.58	−11.80	1.27	0.96	1.32	1.45	1.10	+ 6	+ 4	− 8	− 3	+ 1	+ 1	+ 1	+ 4	+ 9	+ 3	0	0.46
115608	23 25 09.63	+47 11 40.2	9.28	G	351.290 122 90	+47.194 504 23	3.64	8.33	−10.46	0.63	0.72	1.04	0.68	0.80	+ 2	+15	+23	−11	−19	−19	−16	−12	− 1	+ 9	0	0.37
115609	23 25 10.98	−76 06 17.2	8.39	2 H	351.295 740 07	−76.104 786 63	2.03	−0.17	−5.21	0.69	0.64	0.85	0.85	0.75	− 3	+ 9	−25	+ 8	− 3	− 7	− 1	−12	+21	+13	1	−0.03
115610	23 25 11.52	+34 17 20.2	9.35	H	351.298 003 14	+34.288 956 76	25.02	−297.94	−695.00	1.15	0.81	1.34	1.19	0.77	+21	+37	+ 5	+34	+23	+ 0	+29	− 7	+15	+32	0	0.38
115611	23 25 11.73	+04 55 20.6	8.73	H	351.298 875 66	+04.922 399 60	5.10	12.92	3.30	1.28	0.77	1.33	1.33	0.85	+ 0	+29	−29	−36	+ 6	+ 0	+20	−19	+31	−12	0	−0.10
115612	23 25 11.88	−54 36 45.9	8.61	H	351.299 479 70	−54.612 762 76	0.24	7.15	−18.36	0.60	0.72	1.09	0.69	0.71	− 5	+13	− 6	+ 6	+ 3	+17	+ 0	− 2	−18	−11	0	−0.54
*115613	23 25 12.12	+56 50 35.4	8.68	H	351.300 514 13	+56.843 176 29	8.47	33.63	−4.30	0.73	0.74	1.02	1.02	1.03	−28	+ 5	+15	+13	+ 2	+18	− 4	− 4	− 9	−46	0	1.61
*115614	23 25 12.08	−18 05 44.1	8.55	H	351.300 350 71	−18.095 585 08	4.18	24.25	1.27	1.16	0.75	1.15	1.20	0.80	− 7	+31	−19	−22	+10	− 2	+17	+ 4	+17	−10	0	0.97
115615	23 25 14.29	−36 11 07.6	7.87	H	351.309 546 59	−36.185 449 77	4.64	26.00	−7.83	0.99	0.80	1.15	1.26	0.97	+ 7	+17	−16	−41	+ 0	− 8	+ 1	−34	+13	+ 5	0	0.25
115616	23 25 15.47	−43 51 27.4	8.41	H	351.314 439 19	−43.857 605 78	2.35	−13.29	−6.23	0.82	0.80	1.05	0.95	0.85	+18	−14	−16	+27	+ 4	+ 0	+ 4	+18	− 4	+ 9	0	−1.46
115617	23 25 15.72	−43 12 46.1	9.76	H	351.315 503 29	−43.212 800 15	7.52	121.96	−9.55	1.04	0.96	1.37	1.07	1.04	+ 6	− 5	−23	+10	− 4	+10	− 2	+ 9	+ 6	+ 8	0	0.28
115618	23 25 17.78	+03 08 29.7	11.47	G	351.324 092 58	+03.141 581 83	23.03	61.09	−359.94	5.37	3.82	6.42	8.53	4.95	+50	+ 6	+ 7	− 9	+ 5	+26	+ 6	− 4	− 7	−22	2	
115619	23 25 18.96	+32 28 09.0	8.50	H	351.329 000 33	+32.469 161 68	1.85	−17.86	−8.03	0.84	0.65	1.02	1.03	0.63	+18	+ 9	+ 0	+ 7	+17	+ 3	+16	−12	+10	+35	0	−0.29
115620	23 25 19.37	−56 50 56.2	5.60	H	351.330 728 11	−56.848 935 07	11.42	85.19	−20.73	0.31	0.38	0.60	0.34	0.41	−33	+ 1	−19	+12	+ 3	+10	+ 6	− 4	+ 2	−28	0	−0.42
115621	23 25 20.54	+36 09 52.0	7.69	1 H	351.335 600 15	+36.164 436 50	2.64	4.50	−1.16	0.72	0.62	0.94	1.00	0.56	+11	+25	+22	+ 1	+19	+21	+12	−13	+10	+ 6	0	−0.72
115622	23 25 20.71	−70 54 35.4	7.90	H	351.336 286 37	−70.909 835 64	5.23	−52.21	11.70	0.62	0.58	0.77	0.76	0.60	−15	− 5	−17	+25	−11	− 7	−12	+ 2	− 2	−21	0	0.53
115623	23 25 22.66	+23 24 14.4	4.42	H	351.344 422 50	+23.404 012 43	18.83	193.12	36.47	0.53	0.50	0.72	0.59	0.46	+42	+21	+24	+18	+ 1	−16	+ 5	− 9	+ 4	+37	2	0.05
115624	23 25 24.28	−00 12 54.8	9.42	H	351.351 177 55	−00.215 232 23	2.05	13.03	−2.16	1.14	0.91	1.32	1.45	0.99	+32	+ 4	−11	−10	+ 0	+13	+ 2	−10	+ 6	− 4	0	0.28
115625	23 25 24.38	+49 19 17.8	8.78	H	351.351 566 46	+49.321 602 10	4.24	−17.44	−10.78	0.67	0.75	1.20	0.76	0.89	−36	+ 0	+23	+10	+ 8	+ 1	+12	− 1	+21	−14	0	1.00
115626	23 25 25.04	−14 00 56.9	7.83	H	351.354 323 08	−14.015 810 58	2.81	51.41	−40.90	0.99	0.81	1.20	1.72	1.09	+16	− 8	−35	+ 8	− 5	+30	+ 5	+10	+ 6	− 3	3	1.36
115627	23 25 25.18	+15 41 19.3	8.03	2 T	351.354 907 15	+15.688 689 99	7.34	17.43	−16.33	0.83	0.64	0.92	0.86	0.73	+13	+ 5	−22	− 4	− 5	+ 2	− 5	− 5	+20	+21	0	1.00
115628	23 25 25.40	−48 53 37.7	10.15	G	351.355 827 40	−48.893 797 08	2.73	−12.73	2.11	1.07	0.89	1.59	1.00	0.86	−14	−16	− 1	−14	−13	+19	−15	−23	+ 4	−24	1	0.13
115629	23 25 25.41	−12 31 26.5	8.80	H	351.355 860 62	−12.524 015 66	4.22	−2.04	−6.84	1.09	1.05	1.54	1.42	1.14	+35	−22	−53	− 2	−16	+33	+ 3	− 5	+12	+15	0	0.78
115630	23 25 26.43	−48 12 11.2	9.35	H	351.360 131 76	−48.203 108 24	7.71	−36.17	−9.17	1.06	0.92	1.39	1.16	0.82	− 2	−12	− 8	− 3	−14	+23	−19	−34	+ 4	−30	0	0.77
115631	23 25 26.87	−30 00 27.5	7.76	H	351.361 972 59	−30.007 626 46	3.69	20.07	−33.31	0.86	0.69	1.08	1.00	0.85	+20	−13	−30	−37	+10	+16	+11	−10	+34	+23	0	0.43
115632	23 25 27.04	−39 26 11.6	9.32	H	351.362 662 60	−39.436 551 14	2.05	1.85	−4.07	0.83	1.10	1.27	0.92	1.18	+28	+10	− 3	+14	+ 4	+18	+ 5	+23	− 2	+27	0	1.30
115633	23 25 28.20	+13 30 14.5	9.33	H	351.367 480 54	+13.504 041 10	0.18	−11.73	−5.65	1.08	1.07	1.36	1.23	1.43	+31	− 9	−40	+ 2	+16	−13	+10	+19	−10	+53	0	0.09
115634	23 25 29.68	+31 03 12.2	10.07	H	351.373 683 36	+31.053 378 54	0.91	2.44	−2.31	1.12	0.94	1.43	1.18	0.93	+23	+10	− 7	+10	− 1	− 1	+ 1	−20	+23	+24	0	0.53
115635	23 25 30.57	+17 39 04.6	8.43	H	351.377 372 40	+17.651 282 39	5.26	−8.78	−2.56	0.92	0.61	1.06	0.99	0.67	+43	−21	−20	+12	+15	−17	+14	− 6	+ 5	+55	0	1.40
115636 H	23 25 30.86	−55 27 08.0	9.18	H	351.378 590 25	−55.452 211 72 A	6.06	3.29	11.43	1.29	1.38	2.08	1.51	1.34	−23	+ 8	−23	+ 7	−15	+18	− 8	− 9	− 8	−11	1	0.45
115637	23 25 32.72	−46 05 20.9	10.09	G	351.386 340 80	−46.089 127 26	1.16	6.20	13.61	1.46	1.21	1.67	1.95	1.40	+22	− 7	− 6	+10	+13	− 6	+12	+14	+ 1	+27	0	1.32
115638	23 25 33.97	+26 11 11.7	8.11	H	351.391 521 90	+26.186 592 83	4.53	22.29	−1.91	0.70	0.55	0.96	0.72	0.57	+22	+ 6	− 6	+ 3	+ 1	+10	+ 5	−20	+33	+32	0	0.51
115639	23 25 34.09	−06 00 35.6	9.62	H	351.392 024 51	−06.009 888 31	4.70	−0.45	8.65	1.19	0.97	1.46	1.70	1.24	+41	− 9	+ 0	+18	− 3	+40	−20	−25	+22	+16	0	−0.86
115640	23 25 34.12	+41 54 21.2	9.29	H	351.392 177 64	+41.905 897 92	0.12	0.94	−1.96	0.74	0.78	1.26	0.83	0.92	−17	+ 9	+ 4	+ 8	−14	− 2	+ 6	−46	+24	+15	1	2.03
115641 H	23 25 34.68	−83 33 03.1	9.23	H	351.394 510 41	−83.550 869 63 A	3.16	68.40	−15.04	2.15	1.59	1.91	2.42	1.62	+ 3	+ 3	+ 1	+22	+ 5	− 1	+10	− 7	+17	+17	2	0.94
115642 H	23 25 35.58	−25 56 07.8	9.79	G	351.398 231 37	−25.935 491 60 *	−1.64	11.50	−9.42	1.37	0.91	1.45	1.89	1.32	+22	−20	+ 2	−16	+18	− 1	+20	−24	−11	+16	0	0.26
115643	23 25 36.11	+52 58 46.2	6.76	2 H	351.400 448 84	+52.979 499 51	1.74	−6.85	−13.00	0.45	0.49	0.69	0.54	0.55	−28	− 6	+17	− 2	+ 0	+ 1	− 5	+20	+19	−11	0	1.51
115644	23 25 37.69	−29 33 00.7	9.03	H	351.407 059 87	−29.550 187 35	1.87	36.17	−18.41	1.15	0.92	1.37	1.30	1.14	+13	+11	−33	−44	+11	+ 1	+14	−10	+27	+23	0	−0.37
115645	23 25 38.82	+68 57 21.7	6.81	H	351.411 750 23	+68.956 038 45	4.02	−27.86	−2.90	0.50	0.55	0.61	0.66	0.73	−19	− 8	+12	+26	+ 4	− 4	+ 3	− 9	− 1	−24	1	−0.32
115646 H	23 25 39.44	+24 57 13.6	6.97	H	351.414 347 34	+24.953 770 90 A	6.52	21.67	−15.83	0.87	0.81	1.01	0.78	0.68	+28	+10	− 9	+ 3	+ 4	− 1	−19	+22	+37	1	−0.39
115647 H	23 25 40.56	−42 53 59.0	8.24	2 H	351.419 000 19	−42.899 714 05 A	2.87	10.50	−29.38	1.61	1.71	1.68	1.32	1.52	+13	− 9	−17	− 8	− 5	+21	− 4	+ 6	+10	+30	5	0.75
*115648	23 25 41.63	−45 36 35.0	11.27	G	351.423 447 78	−45.609 724 88	32.87	476.07	−31.14	2.54	2.12	2.90	3.30	2.33	+34	+ 9	+ 4	+ 5	−16	−15	−14	−19	− 3	+33	5	−0.19
*115649	23 25 41.62	−23 56 20.5	10.11	H	351.423 432 91	−23.939 029 19	−0.27	8.87	−21.94	1.64	1.22	1.87	2.38	1.84	+35	−24	− 4	+21	+24	+26	+22	+ 2	+11	+33	0	0.88
115650 H	23 25 41.82	+68 04 14.8	9.91	H	351.424 252 77	+68.070 771 61 *	2.73	−4.21	−3.74	0.91	0.87	1.07	1.16	1.05	− 7	− 6	+10	+26	+ 3	+ 4	+ 3	−14	− 3	− 5	0	0.54
115651	23 25 42.08	−37 08 29.2	10.44	H	351.425 320 87	−37.141 457 46	5.28	−5.06	−9.50	1.17	1.36	1.90	1.29	1.52	+43	− 9	−22	+ 1	−36	+37	−33	−46	+33	+49	2	−0.43
115652	23 25 42.72	+47 23 40.5	9.50	H	351.428 013 73	+47.394 570 11	0.69	13.85	−1.73	0.79	0.94	1.34	0.94	1.06	+10	+ 8	+33	−18	−18	−16	−16	+ 4	+14	+27	0	0.11
115653	23 25 42.84	−07 49 45.8	9.40	H	351.428 505 68	−07.829 402 70	3.48	−4.15	−8.98	1.13	0.86	1.48	1.44	1.13	+38	+ 6	−11	− 1	+12	+41	+24	+ 9	+40	+30	2	2.41
115654	23 25 43.56	+66 55 15.8	7.67	H	351.431 509 03	+66.921 047 88	3.92	−0.76	−7.69	0.51	0.51	0.62	0.61	0.57	− 3	+ 4	− 6	+ 1	−12	− 6	−12	− 6	+ 4	− 7	0	1.06
115655	23 25 45.65	+45 20 51.1	7.89	H	351.440 213 36	+45.347 520 61	17.00	47.45	−45.00	0.56	0.58	0.89	0.65	0.65	− 5	+ 8	+16	+ 4	− 5	+ 3	+ 2	−19	+20	+16	1	0.61
115656	23 25 45.96	+53 34 19.3	9.05	H	351.441 515 92	+53.572 041 25	2.35	4.96	−3.70	0.73	0.74	1.02	0.86	0.90	−31	+ 2	+24	+ 2	− 8	− 6	− 9	+25	+14	−24	0	0.76
115657	23 25 47.92	−11 09 20.3	8.14	2 H	351.449 663 28	−11.155 630 19	0.96	10.66	2.16	1.01	0.82	1.23	1.26	0.98	+16	+ 9	−45	+17	+ 1	+10	+ 6	+18	+ 0	+20	0	0.32
115658	23 25 48.86	+59 40 01.1	8.53	H	351.453 563 58	+59.666 984 43	1.60	−6.68	−9.58	0.66	0.66	0.89	0.82	0.77	− 9	+23	+ 7	+15	− 3	+ 7	− 4	− 5	− 5	− 8	0	−0.89
115659	23 25 49.08	−32 15 06.2	9.34	G	351.454 496 83	−32.251 720 33	12.47	117.76	56.58	1.20	1.00	1.57	1.37	1.35	+30	+18	− 5	−20	− 4	+23	+ 6	+ 3	+43	+36	2	0.23
*115660	23 25 50.54	−36 32 55.5	9.10	H	351.460 600 53	−36.548 748 68	4.38	31.21	−1.66	1.27	1.06	1.41	1.55	1.18	+20	+12	− 1	−40	−13	+ 0	−11	−43	+16	+ 9	0	−0.51
*115661	23 25 50.51	+61 26 05.3	7.82	1 H	351.460 453 16	+61.434 802 10	−0.23	−2.90	−2.30	0.61	0.62	0.79	0.83	0.76	−16	+ 0	+18	+ 6	+ 8	+ 8	+ 7	− 8	− 9	−15	0	−0.42
115662	23 25 53.00	−20 36 56.1	7.74	G	351.470 838 49	−20.615 595 73	22.11	−14.70	−178.42	0.81	0.75	0.92	0.94	0.85	+26	+ 2	−23	+ 9	+17	+ 8	+20	+35	− 4	+24	0	0.94
115663	23 25 53.07	−27 54 33.8	10.42	G	351.471 128 19	−27.909 386 53	4.69	53.17	−12.50	1.35	1.28	1.75	1.68	1.55	+39	− 9	−13	−10	+26	− 9	+25	+12	− 2	+37	0	−0.16
115664	23 25 55.26	+29 11 44.3	11.06	G	351.480 242 72	+29.195 632 39	13.55	495.58	−339.86	1.73	1.54	2.28	1.90	1.76	+30	+23	− 3	− 9	− 4	−14	− 3	−23	− 3	+42	6	−0.67
115665	23 25 58.52	+27 41 24.5	8.48	G	351.493 822 13	+27.690 140 55	2.67	−8.25	−15.59	0.85	0.62	1.13	0.98	0.68	+ 7	+10	−16	+24	+ 7	− 2	+10	−12	+34	+11	2	1.19
115666 H	23 25 59.72	+27 42 25.8	7.76	G	351.498 851 72	+27.707 171 90 A	7.28	−6.73	−13.54	1.88	1.72	2.14	1.74	1.45	+24	+17	− 4	− 6	− 7	+21	+ 3	−18	+45	+38	1	−0.03
115667	23 26 00.99	+39 20 22.4	7.02	G	351.504 105 08	+39.339 542 05	6.76	20.40	−18.26	0.60	0.55	0.81	0.65	0.58	+14	+27	− 2	+26	+11	−16	+22	− 6	+26	+25	0	1.94
115668	23 26 02.33	−16 08 32.3	9.45	H	351.509 708 51	−16.142 300 49	6.18	−24.69	−21.99	1.17	0.96	1.43	1.63	1.21	+17	− 5	−26	+13	−16	+38	− 8	+ 8	+26	+22	0	−0.84
115669	23 26 02.82	−20 38 30.7	4.38	1 H	351.511 738 97	−20.641 861 22	10.57	−50.13	−62.97	0.69	0.59	0.72	0.77	0.69	+20	+ 1	−12	+12	+22	+ 6	+23	+45	− 7	+21	0	0.85
115670	23 26 04.23	+43 04 52.1	9.09	H	351.517 639 47	+43.081 145 54	3.59	−2.49	−3.62	0.58	0.67	1.08	0.68	0.76	+ 0	+ 4	+ 8	+ 3	−10	+12	− 2	−32	+ 8	+26	1	−0.33
115671	23 26 05.13	+33 14 41.9	11.68	H	351.521 378 74	+33.244 968 40	−1.98	−83.69	−164.93	5.95	5.27	7.22	6.86	4.99	+23	+15	− 5	+12	+15	−16	+15	−21	− 4	+39	4	
115672	23 26 06.60	+25 40 00.3	8.35	G	351.527 491 78	+25.666 758 75	5.99	76.80	21.15	0.72	0.56	0.96	0.79	0.62	+27	+19	+ 2	+12	− 3	+ 6	+ 4	−16	+29	+33	0	1.48
115673	23 26 07.55	−15 13 36.1	9.15	H	351.531 467 85	−15.226 698 18	13.46	118.36	−113.97	1.29	0.92	1.45	1.74	1.46	+11	+12	− 8	− 8	+ 5	+32	+10	+ 2	+24	+26	6	1.68
115674	23 26 08.55	+08 55 46.8	7.56	H	351.535 642 32	+08.929 670 25	4.55	19.68	3.33	0.95	0.82	1.14	1.02	1.13	+28	+25	−14	+ 6	+18	+ 7	+21	+24	+27	+50	0	−0.52
115675	23 26 08.61	−19 22 23.7	8.71	2 H	351.535 858 67	−19.373 243 59	4.79	18.85	7.05	1.27	0.88	1.23	1.57	1.08	− 3	+ 6	−17	−21	+18	+14	+22	+24	+16	− 1	0	−0.69
115676	23 26 09.93	−31 52 21.9	9.19	H	351.541 357 65	−31.872 742 92	3.15	−6.41	−3.49	1.13	1.00	1.42	1.28	1.20	+30	+ 5	−19	−33	−10	+25	− 3	−20	+28	+33	0	1.53
115677	23 26 10.66	−00 27 47.7	8.98	H	351.544 412 51	−00.463 240 74	−0.01	1.10	1.51	1.16	0.87	1.38	1.44	0.95	+24	+ 9	−28	−32	− 4	+18	+ 9	−24	+33	− 3	0	−1.03
115678	23 26 11.78	+70 41 07.5	6.66	H	351.549 078 93	+70.685 408 77	10.02	27.02	29.40	0.49	0.48	0.63	0.58	0.57	+ 4	−17	+ 7	−14	− 5	+28	−11	− 5	+24	+19	1	1.27
115679	23 26 11.85	+72 37 06.2	8.67	H	351.549 358 91	+72.618 398 73	3.98	26.82	8.90	0.65	0.66	0.76	0.72	0.79	−10	+ 8	+ 2	+27	−19	+ 3	−19	+20	+16	−16	0	0.49
115680	23 26 12.06	+08 53 35.9	10.56	G	351.550 250 00	+08.893 316 51	42.25	519.20	211.67	1.77	1.55	2.13	2.22	2.15	+30	+ 7	−21	−22	+ 2	+10	+ 8	− 2	+30	+32	0	0.03
115681	23 26 12.26	−27 25 28.7	6.58	H	351.551 085 52	−27.424 629 67	6.35	94.41	15.25	0.67	0.60	0.81	0.89	0.72	+42	−12	−13	+ 8	+23	− 9	+22	+15	− 3	+35	0	−0.75
115682	23 26 12.51	−37 42 58.0	9.85	H	351.552 129 73	−37.716 114 16	2.88	−3.33	4.30	0.98	1.03	1.45	1.17	1.30	+32	− 6	−12	+42	−10	+25	− 5	− 3	+21	+43	0	1.12
*115683	23 26 18.54	−78 59 30.4	9.22	H	351.577 262 55	−78.991 786 17	2.67	9.29	11.25	0.85	0.72	0.94	1.04	0.83	− 4	− 1	−10	− 1	− 1	+ 1	+ 8	+ 1	−10	+ 2	+ 4	1	1.39
*115684	23 26 18.48	+33 11 20.8	9.58	G	351.576 983 85	+33.189 115 29	11.29	−120.16	−183.66	1.16	0.90	1.40	1.28	0.88	+18	+14	− 5	+12	+11	−11	+14	−17	+ 5	+33	0	0.72
115685	23 26 19.85	−12 57 01.6	7.78	H	351.582 726 37	−12.950 441 75	3.08	27.74	5.57	0.90	0.76	1.09	1.09	1.00	+24	−17	−32	−11	− 3	+28	+ 8	− 5	+ 3	+25	0	1.47
115686	23 26 19.98	+42 42 08.6	8.80	H	351.583 252 73	+42.702 384 70	1.77	−5.01	−1.02	0.59	0.72	1.24	0.71	0.80	− 5	− 1	+ 7	+ 1	−16	+ 6	− 6	−36	+13	+23	0	0.58
115687	23 26 20.03	−14 42 31.1	9.16	G	351.583 455 02	−14.708 639 66	19.21	288.55	−52.06	1.34	1.03	1.53	2.12	1.61	+16	− 1	−17	+12	+ 0	+27	+ 5	+13	+19	+12	0	0.27
115688	23 26 20.25	−23 04 19.2	8.28	H	351.584 354 65	−23.072 000 27	4.49	−22.16	−32.84	1.03	0.89	1.17	1.49	1.26	+15	−14	−10	+16	+ 4	+10	+ 4	+16	+12	+ 8	0	0.15
115689	23 26 20.57	+53 10 01.3	7.16	H	351.585 715 28	+53.167 018 72	1.63	−6.54	−8.00	0.53	0.54	0.75	0.63	0.62	−33	− 6	+13	+ 0	− 5	+ 4	−10	+23	+10	−16	1	0.42
115690	23 26 20.74	−46 55 59.3	10.42	G	351.586 424 84	−46.933 134 10	5.07	66.17	−7.33	1.55	1.46	1.95	1.95	1.79	+22	− 8	− 4	+15	+12	+ 8	+11	+ 8	+30	+ 8	−08	0	−0.08
115691	23 26 20.95	+61 05 12.7	6.60	G	351.587 292 43	+61.086 852 76	0.37	−2.07	−1.45	0.45	0.47	0.59	0.54	0.54	−24	+ 6	+22	+ 5	+ 2	+12	− 1	− 3	− 4	−36	0	−0.45
115692	23 26 21.01	+04 20 22.3	8.77	G	351.587 556 60	+04.339 519 37	4.05	−13.01	−4.95	1.05	0.84	1.19	1.18	0.91	+21	+19	−10	− 7	+ 9	+10	+15	+ 9	+16	+ 8	0	−0.97
115693	23 26 21.25	+80 10 06.0	8.32	H	351.588 559 01	+80.168 322 72	3.72	8.92	−14.28	0.66	0.64	0.74	0.79	0.71	− 2	+10	+12	+29	+ 0	+ 5	+ 1	− 4	+ 4	+ 3	0	1.31
115694	23 26 21.45	−68 01 59.4	9.07	1 H	351.589 368 84	−68.033 159 21	6.23	−54.58	21.81	0.69	0.78	1.00	0.79	0.76	−17	+12	−36	+ 8	+14	−12	+10	− 5	− 6	− 5	0	0.42
115695	23 26 22.11	+81 40 41.6	8.97	H	351.592 121 54	+81.678 211 42	6.01	10.92	−11.98	0.69	0.72	0.82	0.75	0.78	+ 3	− 5	+23	+23	− 3	−12	− 4	−10	+ 7	− 7	0	−0.84
115696	23 26 27.34	+40 23 13.0	6.81	H	351.613 898 34	+40.386 939 49	10.01	−18.24	−162.88	0.53	0.53	0.76	0.55	0.55	+12	+12	+ 3	+42	− 6	+ 0	+ 4	−19	+30	+20	0	−0.07
115697	23 26 27.43	+08 38 39.8	7.10	H	351.614 286 84	+08.644 385 84	20.65	26.95	−222.83	0.79	0.69	1.04	0.84	0.88	+26	+14	−32	+ 6	+10	− 2	+12	+ 9	+26	+38	0	0.97
115698 H	23 26 27.72	−63 14 12.9	7.72	H	351.615 502 79	−63.236 915 53 A	6.54	−4.05	11.57	0.79	0.83	0.97

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
115601	8.472	0.008	7.998	0.008		0.446	0.010	T	0.52	0.01	L	8.0491	0.0015	0.017	168		8.02	8.08					1							S
115602	10.564	0.029	9.361	0.017		1.029	0.026	T	1.00	0.02	L	9.4444	0.0024	0.025	170		9.40	9.49		C			1							
115603	11.258	0.062	10.581	0.055	A						T *	10.4938	0.0048	0.032	45	*	10.40	10.56		D	23251+2657	I 1	2 C C	AB	165	2.379	0.036	1.57	0.17	G
115604	10.048	0.028	9.332	0.024		0.658	0.030	T	0.72	0.03	L	9.3695	0.0020	0.018	106		9.34	9.40		C			1							
115605	9.038	0.013	7.588	0.007		1.223	0.012	T	1.18	0.01	L	7.6115	0.0013	0.011	136		7.59	7.63		C			1							S
115606	9.041	0.013	8.821	0.014		0.240	0.015	G	0.27	0.02	H	8.8445	0.0018	0.019	126		8.80	8.88					1							
115607	11.921	0.158	10.008	0.045		1.569	0.082	G	1.70	0.17	K	9.8973	0.0031	0.023	66		9.85	9.96		C			1							
115608	9.353	0.013	9.270	0.017		0.080	0.015	G	0.09	0.02	H	9.3195	0.0022	0.023	149		9.28	9.36					1							
115609	10.531	0.034	8.615	0.013		1.625	0.030	T	2.31	0.08	O	8.4411	0.0093	0.079	144		8.35	8.59		U 2			1							P
115610	10.570	0.040	9.437	0.026		0.967	0.038	T	1.01	0.03	L	9.4854	0.0040	0.028	83		9.45	9.53					1							
115611	10.242	0.043	8.794	0.022		1.220	0.040	T	1.18	0.04	L	8.8645	0.0024	0.016	57		8.84	8.89					1							S
115612	10.011	0.019	8.732	0.012		1.089	0.018	T	1.05	0.02	L	8.7794	0.0022	0.019	154		8.74	8.81					1							
115613	9.134	0.014	8.734	0.014		0.378	0.018	T	0.44	0.02	L	8.7700	0.0016	0.021	137		8.73	8.80					1							
115614	8.879	0.015	8.597	0.017		0.268	0.021	T	0.30	0.03	L	8.6226	0.0018	0.015	59		8.61	8.65		C			1							S
115615	8.053	0.011	7.852	0.011		0.185	0.015	T	0.20	0.02	L	7.9278	0.0018	0.016	80		7.90	7.96		C			1							S
115616	9.983	0.022	8.538	0.012		1.219	0.020	T	1.18	0.02	L	8.5788	0.0023	0.015	100		8.55	8.61		C			1							
115617	10.491	0.037	9.833	0.032		0.601	0.037	T	0.67	0.03	L	9.8821	0.0023	0.020	83		9.85	9.92		C			1							
115618						1.285	0.005	G	1.47	0.01	I	11.5713	0.0058	0.043	86		11.21	11.65					1 X S							G
115619	10.028	0.033	8.654	0.019		1.163	0.030	T	1.12	0.03	L	8.6659	0.0018	0.013	92		8.65	8.69					1							
115620	6.967	0.003	5.715	0.002		1.063	0.002	G	1.12	0.04	E	5.7631	0.0005	0.007	259		5.75	5.78					1							S
115621	7.629	0.007	7.673	0.011		−0.036	0.012	T	−0.01	0.01	L	7.6823	0.0026	0.016	75		7.66	7.71		M			1							S
115622	9.183	0.013	8.015	0.008		1.002	0.012	T	0.98	0.01	L	8.0636	0.0016	0.017	136		8.04	8.10					1							S
115623	5.160	0.002	4.495	0.002		0.617	0.010	G	0.67	0.00	G	4.5524	0.0005	0.004	121		4.54	4.56		C			1							S
115624	9.724	0.030	9.441	0.034		0.269	0.043	T	0.30	0.05	L	9.4910	0.0024	0.016	66		9.45	9.53		C			1							
115625	8.917	0.009	8.797	0.010		0.116	0.013	T	0.13	0.01	L	8.8247	0.0023	0.022	209		8.79	8.86					1 S							
115626	9.307	0.025	7.947	0.015		1.152	0.023	T	1.11	0.02	L	7.9997	0.0022	0.013	45		7.97	8.02					1							S
115627	8.388	0.013	8.063	0.013		0.344	0.015	G	0.40	0.02	H	8.0910	0.0222	0.132	64		8.00	8.30	0.30	P 1 A			1							S
115628	10.362	0.024	10.243	0.033		0.160	0.000	G	0.18	0.00	H	10.2174	0.0029	0.028	146		10.16	10.28					1 S							
115629	9.222	0.022	8.819	0.023		0.381	0.029	T	0.45	0.03	L	8.8887	0.0020	0.018	46		8.85	8.92		C			1							S
115630	10.111	0.029	9.413	0.025		0.661	0.005	G	0.72	0.00	H	9.4866	0.0019	0.019	99		9.45	9.52					1							
115631	9.683	0.017	7.940	0.008		1.453	0.015	T	1.46	0.02	L	7.8920	0.0018	0.014	107		7.87	7.92					1							S
115632	10.688	0.038	9.424	0.021		1.077	0.034	T	1.04	0.03	L	9.4911	0.0025	0.022	96		9.45	9.53		C			1							
115633	10.849	0.060	9.444	0.030		1.000	0.040	G	0.98	0.03	R	9.4996	0.0021	0.017	58		9.45	9.53		C			1 S							
115634	11.576	0.099	10.324	0.051		1.068	0.087	T	1.03	0.07	L	10.2364	0.0030	0.023	92		10.19	10.27		C			1							G
115635	9.715	0.019	8.548	0.012		0.950	0.015	G	0.94	0.01	H	8.5970	0.0017	0.013	126		8.57	8.62					1							
115636	9.646	0.013	9.246	0.013	A	0.500	0.495	G	0.46	0.03	L *	9.2674	0.0018	0.027	229	*	9.22	9.32		D	23255−5527	I 1	2 C A	AB	16	1.694	0.023	2.77	0.10	
115637	10.769	0.047	10.183	0.045		0.594	0.020	G	0.66	0.02	H	10.2241	0.0030	0.029	81		10.19	10.28		C			1							
115638	9.302	0.016	8.220	0.011		0.936	0.015	T	0.93	0.01	L	8.2721	0.0011	0.012	106		8.25	8.30					1							
115639	10.164	0.036	9.648	0.034		0.485	0.045	T	0.56	0.05	L	9.7248	0.0031	0.025	78		9.68	9.78		C			1							
115640	9.315	0.013	9.288	0.017		0.030	0.020	T	0.05	0.02	L	9.3042	0.0024	0.023	139		9.26	9.34					1							
115641	9.698	0.024	9.144	0.023	*	0.524	0.025	T	0.60	0.03	L *	9.3476	0.0018	0.019	142	*	9.31	9.38		D	23256−8333	H 1	2 C A	AB	75	2.908	0.005	0.63	0.02	
115642	11.652	0.086	9.826	0.030	*	1.000	0.040	G	0.98	0.03	R *	9.7940	0.0032	0.023	92	*	9.75	9.83		C	23256−2556	H 1	2 C S C	AB	358	0.162	0.083	2.03	1.46	
115643	8.865	0.010	6.986	0.005		1.594	0.009	T	2.32	0.03	O	6.8107	0.0038	0.031	142		6.76	6.87		U 2			1 S							S
115644	10.261	0.027	9.125	0.017		0.977	0.025	T	0.96	0.02	L	9.1976	0.0021	0.019	101		9.17	9.25		C			1							
115645	8.378	0.010	6.946	0.005		1.208	0.009	T	1.17	0.01	L	6.9709	0.0007	0.008	127		6.95	6.99		C			1							S
115646	7.244	0.005	6.998	0.005	*	0.234	0.007	T	0.26	0.01	L *	7.0355	0.0010	0.010	126	*	7.02	7.05		D	23257+2457	H 1	2 C C	AB	22	0.661	0.037	4.19	0.22	S
115647	8.839	0.012	8.340	0.012	*	0.480	0.013	T	0.55	0.01	L *	8.3518	0.0025	0.021	90	*	8.33	8.59	3.80	P 1 A	23257−4254	I 1	2 C A	AB	178	0.439	0.003	0.72	0.02	S P
115648						1.430	0.000	G	1.93	0.02	A	11.3408	0.0040	0.051	90		11.22	11.43					1 S							G
115649	11.432	0.062	10.147	0.034		1.033	0.030	G	1.01	0.03	I	10.2551	0.0054	0.031	86		10.19	10.31					1							
115650	10.406	0.033	9.975	0.036	*	0.407	0.045	T	0.47	0.05	L *	10.0103	0.0024	0.021	113	*	9.97	10.04		C	23257+6804	H 1	2 C S D	AB	279	0.108	0.021	0.25	1.25	G D
115651	10.880	0.053	10.460	0.057		0.397	0.072	T	0.46	0.08	L	10.5245	0.0023	0.026	101		10.47	10.57					1							
115652	10.980	0.044	9.608	0.022		1.161	0.039	T	1.12	0.04	L	9.6555	0.0027	0.031	163		9.61	9.71					1							
115653	11.172	0.075	9.583	0.030		1.332	0.064	T	1.30	0.07	L	9.5554	0.0026	0.019	77		9.50	9.61		C			1							
115654	7.735	0.006	7.670	0.008		0.065	0.009	T	0.07	0.01	L	7.6935	0.0011	0.011	126		7.68	7.71		C			1							S
115655	8.567	0.009	7.956	0.008		0.569	0.011	T	0.64	0.01	L	8.0118	0.0010	0.011	131		7.99	8.03		C			1							S
115656	9.143	0.014	9.040	0.018		0.100	0.015	G	0.11	0.02	H	9.0845	0.0021	0.018	125		9.05	9.11		C			1							
115657	10.066	0.044	8.410	0.021		1.411	0.040	T	2.93	0.06	O	8.0744	0.0042	0.037	52		7.96	8.13		U 2			1 S							S
115658	8.887	0.012	8.542	0.013		0.334	0.016	T	0.39	0.02	L	8.6145	0.0022	0.020	123		8.59	8.65					1							
115659	10.148	0.026	9.389	0.022		0.641	0.002	G	0.71	0.00	H	9.4758	0.0022	0.022	83		9.44	9.51		C			1							
115660	10.429	0.041	9.181	0.024		1.064	0.037	T	1.03	0.03	L	9.2684	0.0023	0.018	73		9.22	9.30		C			1							
115661	8.760	0.013	7.922	0.010		0.753	0.012	T	0.80	0.01	L	7.9624	0.0018	0.017	103		7.94	8.00		U			1							S
115662	8.497	0.013	7.830	0.012		0.603	0.002	G	0.67	0.00	H	7.8740	0.0009	0.008	58		7.86	7.89		D			1							S
115663	11.119	0.049	10.542	0.047		0.599	0.015	G	0.67	0.01	H	10.5552	0.0038	0.031	119		10.50	10.61					1							
115664						0.991	0.015	G	1.03	0.01	I	11.1735	0.0040	0.038	80		11.10	11.23					1							G
115665	8.856	0.014	8.485	0.014		0.375	0.007	G	0.44	0.01	H	8.5581	0.0017	0.012	80		8.53	8.58		C	23260+2742	I 2	1							
115666	8.612	0.012	7.872	0.010	*	0.699	0.015	G	0.76	0.01	H *	7.8945	0.0020	0.011	80	*	7.88	7.92		D	23260+2742	I 2	2 C A	AB	226	0.536	0.003	0.15	0.01	S
115667	7.008	0.006	7.015	0.007		−0.015	0.006	G	0.01	0.01	H	7.0198	0.0013	0.011	80		7.00	7.04					1							S
115668	10.007	0.035	9.527	0.035		0.464	0.038	T	0.53	0.04	L	9.5552	0.0027	0.023	59		9.52	9.58		C			1							
115669	6.308	0.005	4.546	0.004		1.460	0.037	G	1.52	0.02	A	4.5083	0.0011	0.009	59		4.50	4.52		M			1							S
115670	9.674	0.018	9.105	0.016		0.532	0.021	T	0.60	0.02	L	9.2040	0.0016	0.018	163		9.17	9.24					1							
115671											T	11.8259	0.0090	0.054	82		11.72	11.92					1 X							G
115672	8.413	0.009	8.351	0.011		0.060	0.015	G	0.07	0.01	H	8.3830	0.0014	0.013	101		8.36	8.41		C			1							S
115673	10.001	0.041	9.209	0.033		0.702	0.040	T	0.76	0.03	L	9.2826	0.0025	0.019	48		9.24	9.30		C			1							
115674	9.336	0.025	7.720	0.013		1.353	0.022	T	1.32	0.03	L	7.7140	0.0017	0.011	57		7.69	7.73		C			1							S
115675	9.246	0.019	8.757	0.019		0.472	0.021	T	0.54	0.02	L	8.8170	0.0022	0.018	57		8.76	8.92		U 2			1							S
115676	11.236	0.059	9.363	0.021		1.589	0.052	T	1.62	0.15	O	9.3032	0.0026	0.024	87		9.26	9.34					1							
115677	10.366	0.042	9.080	0.024		1.094	0.038	T	1.06	0.04	L	9.1448	0.0027	0.017	71		9.12	9.18		C			1							
115678	7.002	0.005	6.689	0.005		0.297	0.007	T	0.34	0.01	L	6.7352	0.0009	0.007	115		6.72	6.75		C	23262+7041	I 1	1							S
115679	8.913	0.011	8.680	0.012		0.222	0.015	T	0.24	0.02	L	8.7351	0.0021	0.020	130		8.70	8.77					1							
115680						1.461	0.016	G	1.86	0.07	I	10.6545	0.0027	0.030	57		10.59	10.70		C			1							G
115681	7.849	0.007	6.689	0.005		1.000	0.002	G	0.98	0.00	H	6.7442	0.0007	0.007	102		6.73	6.76					1							S
115682	10.398	0.028	9.892	0.027		0.476	0.035	T	0.55	0.04	L	9.9542	0.0025	0.025	125		9.92	10.00		C			1							
115683	10.537	0.031	9.318	0.019		1.042	0.028	T	1.01	0.02	L	9.3832	0.0020	0.021	123		9.34	9.42		C			1							
115684	10.508	0.038	9.703	0.031		0.735	0.005	G	0.78	0.00	H	9.7433	0.0030	0.020	84		9.71	9.78		C			1							
115685	7.969	0.011	7.806	0.015		0.156	0.017	T	0.17	0.02	L	7.8355	0.0025	0.013	58		7.82	7.86					1							S
115686	10.984	0.042	8.999	0.013		1.682	0.036	T	2.04	0.08	O	8.8789	0.0020	0.024	186		8.84	8.92					1							
115687	10.021	0.036	9.233	0.031		0.718	0.002	G	0.77	0.00	H	9.3035	0.0024	0.019	52		9.24	9.33		C			1							
115688	9.642	0.030	8.402	0.019		1.058	0.028	T	1.02	0.02	L	8.4456	0.0011	0.013	47		8.42	8.47		C			1							
115689	9.133	0.013	7.311	0.006		1.516	0.011	T	1.55	0.02	L	7.2778	0.0011	0.011	136		7.26	7.30					1							S
115690	10.892	0.056	10.374	0.059		0.490	0.015	G	0.56	0.02	H	10.5122	0.0035	0.036	75		10.46	10.57		C			1							
115691	6.999	0.005	6.643	0.005		0.336	0.001	G	0.43	0.03	C	6.6903	0.0008	0.007	122		6.68	6.70		C			1							S
115692	9.099	0.019	8.787	0.020		0.305	0.015	G	0.35	0.02	H	8.8416	0.0025	0.019	55		8.81	8.88		C			1							S
115693	9.455	0.014	8.401	0.010		0.915	0.013	T	0.91	0.01	L	8.4759	0.0014	0.015	136		8.45	8.50					1							
115694	9.663	0.016	9.105	0.015		0.527	0.016	T	0.60	0.02	L	9.1865	0.0016	0.019	144		9.15	9.23		U			1							
115695	9.569	0.016	9.005	0.015		0.528	0.020	T	0.60	0.02	L	9.0804	0.0014	0.018	117		9.05	9.12		C			1							
115696	8.026	0.009	6.925	0.008		0.950	0.009	T	0.94	0.01	L	6.9742	0.0008	0.008	109		6.96	6.99					1							S
115697	7.857	0.012	7.168	0.009		0.602	0.005	G	0.67	0.00	H	7.2306	0.0014	0.008	61		7.22	7.24		C			1							S
115698	7.967	0.007	7.759	0.007	A	0.200	0.495	G	0.16	0.01	L *	7.7740	0.0014	0.014	146	*	7.75	7.80		C	23265−6314	I 1	2 C D	AB	286	1.609	0.029	3.64	0.15	S D
115699	9.946	0.021	8.618	0.012		1.130	0.015	G	1.09	0.02	H	8.6604	0.0015	0.014	135		8.64	8.68		C			1							
115700	10.220	0.046	9.674	0.045	A	0.540	0.020	G	0.61	0.02	H *	9.6859	0.0031	0.019	60	*	9.65	9.72		D	23265−0438	H 1	2 C D	AB	131	2.869	0.046	3.08	0.27	D

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA		Dec		V	α (ICRS)		δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$		δ		π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ	μ_δ	F1	F2
	h	m s	± °	′ ″	mag	deg		deg	mas	mas/yr		mas		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	μ_δ	%	
1 2	3		4		5 6 7	8		9 10	11	12	13	14		15		16	17	18	19	20	21	22	23	24	25	26	27	28										29	30
115701	23 26 30.96		+31 44 49.5		7.84 H	351.628 980 34		+31.747 074 60	4.25	14.10	−1.81	0.68		0.59		0.86	0.86	0.55	+23	+ 3	+ 0	−15	+13	+20	+ 7	−21	+23	+36										0	−0.49
115702	23 26 31.24		−21 11 24.0		8.27 H	351.630 171 24		−21.189 988 45	2.13	25.29	14.75	0.97		0.99		1.15	1.27	1.15	+30	+ 3	−17	+ 9	+18	+19	+25	+37	− 7	+14										3	0.50
115703	23 26 31.67		−46 08 39.9		9.46 G	351.631 961 75		−46.144 412 04	8.19	163.42	42.08	1.34		1.10		1.56	1.58	1.32	+24	+12	−12	+10	+ 4	+17	+ 7	+ 6	+13	+36										0	1.05
115704	23 26 32.30		+60 37 42.4		10.49 G	351.634 571 46		+60.628 438 31	8.85	455.75	40.74	1.10		1.15		1.43	1.32	1.43	−19	+18	+ 4	+24	− 3	+ 9	− 6	+ 6	−13	−26										0	0.88
115705	23 26 34.30		−06 36 27.4		7.30 H	351.642 904 82		−06.607 604 27	5.18	45.00	−20.79	0.81		0.61		0.93	1.05	0.79	+36	−10	−	3	−	6	+21	+33	+29	+27	+13	+16										0	0.55
115706	23 26 35.15		−40 01 16.5		8.23 H	351.646 456 91		−40.021 260 16	1.65	−0.66	−23.87	0.68		0.73		0.96	0.76	0.84	+26	+ 2	−	2	+28	+15	+16	+16	+22	−	4	+24										0	0.51
115707	23 26 35.19		−16 16 44.0		9.00 H	351.646 605 77		−16.278 892 63	−0.09	1.12	−12.72	1.20		0.90		1.33	1.32	1.04	+12	+15	−21	−	9	+	1	+11	+	6	+	3	+13	+15										0	−0.57
115708	23 26 35.32		+41 25 59.5		8.75 H	351.647 154 25		+41.433 183 03	2.31	−10.77	−1.56	0.70		0.73		1.09	0.73	0.77	−	8	+11	+	0	+37	−25	+	1	−	1	−50	+20	+21										3	2.10
115709	23 26 35.44		−21 44 27.0		6.43 H	351.647 659 87		−21.740 832 08	8.24	57.58	−1.65	0.83		0.74		0.85	1.21	0.89	+18	−	2	−11	+28	+12	+	3	+15	+48	−12	−	8										0	−0.76
115710	23 26 35.64		+64 18 17.0		7.82 H	351.648 481 75		+64.304 735 65	5.37	−3.82	−4.77	0.53		0.58		0.70	0.55	0.67	−12	+30	+	5	+15	−	3	−	5	−	2	−	6	+	9	−20										0	−0.77
115711	23 26 35.74		+47 18 02.5		8.18 H	351.648 925 46		+47.300 692 40	7.38	22.38	4.07	0.54		0.65		0.97	0.57	0.71	−	3	+	9	+19	−	4	−13	−14	−	8	+	0	+27	+	0										0	−0.04
115712	23 26 36.28		−10 02 02.9		8.50 H	351.651 178 94		−10.034 129 51	3.88	19.62	−0.10	0.97		0.67		1.12	1.60	0.96	+38	−16	−22	−14	+13	+27	+22	+	2	+	1	+	0										2	−0.60
115713	23 26 36.54		−52 43 18.9		5.53 H	351.652 267 89		−52.721 919 00	31.28	33.16	130.07	0.44		0.45		0.70	0.53	0.44	−	5	−	2	−30	+	9	−	1	+	7	+	0	−	8	+10	−	8			1	0.66
115714	23 26 37.08		+56 53 10.3		7.98 H	351.654 512 02		+56.886 187 06	16.73	−89.45	140.63	0.59		0.62		0.84	0.88	0.94	−30	+	5	+10	+	6	+	4	+20	+	0	−	6	−15	−47								0	1.61
*115715	23 26 39.99		+45 20 16.4		7.36 H	351.666 644 21		+45.337 875 29	28.53	438.58	110.61	1.38		1.48		1.26	1.74	1.69	+	0	−21	−28	−86	−15	+30	−13	−88	+41	+29										2	1.35
*115716	23 26 38.23		+29 02 19.6		8.71 H	351.659 300 85		+29.038 779 60	14.08	135.85	1.77	0.79		0.68		1.08	0.86	0.73	+16	+	9	−10	+	8	+	6	−	3	+	8	−12	+22	+18							0	−0.83
*115717	23 26 39.56		+69 16 26.2		9.70 H	351.664 833 32		+69.273 954 75	6.77	181.52	9.01	0.83		0.94		1.05	1.09	1.19	−15	−	5	+13	+	7	+	0	+	7	−	3	−22	−11	−23							0	0.24
*115718	23 26 39.58		+15 08 46.3		9.56 H	351.664 934 67		+15.146 181 80	−3.15	14.94	4.89	5.54		4.95		6.67	5.63	5.50	+27	+	2	−29	−16	−15	+	7	−13	−29	+27	+32		0									
*115719	23 26 39.64		+09 44 59.4		8.83 H	351.665 180 61		+09.749 827 80	4.81	1.02	0.64	1.20		1.02		1.45	1.79	1.44	+27	−	3	−	8	+	9	−	2	+27	+	2	+21	+25	+18							0	−0.17
*115720	23 26 39.68		−05 13 55.8		8.20 H	351.665 340 71		−05.232 161 12	10.71	143.60	12.20	0.95		0.74		1.15	1.08	0.93	+43	−26	−19	+	0	−	6	+12	−20	−25	+39	+12										0	−1.25
115721	23 26 40.54		+58 45 26.2		9.08 H	351.668 929 82		+58.757 274 70	10.71	130.40	−110.47	0.80		0.76		1.05	0.87	0.91	−	6	+31	+	7	+26	−	3	−	5	+	1	+	2	+12	−10						0	−0.57
115722	23 26 41.72		−70 26 16.5		9.15 H	351.673 844 81		−70.437 923 64	1.49	55.67	−7.99	0.74		0.80		1.01	0.91	0.89	−	9	−13	−	9	+	7	+	2	−	4	+	2	−	1	−10	−14				0	−0.73
115723 H	23 26 43.33		+41 02 45.4		7.62 G	351.680 539 23		+41.045 943 85	A 10.05	33.75	−18.12	0.81		0.85		1.15	0.78	0.82	+	2	+24	+	0	+58	−13	+26	+	9	−39	+17	+27										1	0.04
115724	23 26 43.65		+02 28 42.0		6.72 H	351.681 877 18		+02.478 330 29	6.02	−8.25	17.37	0.78		0.53		0.92	1.19	0.67	+43	+	1	−	1	+15	+	3	+31	−12	−	1	−11	+	0	−21						0	0.46
*115725	23 26 43.85		+19 50 26.7		8.62 H	351.682 691 14		+19.840 748 53	2.54	32.74	4.74	0.95		0.65		1.06	1.00	0.72	+30	−	5	−13	−33	+	7	−	1	+	4	−11	+11	+45								0	−0.42
*115726	23 26 43.84		−48 11 49.2		8.66 H	351.682 655 10		−48.196 997 75	1.69	15.66	−2.19	0.83		0.66		1.19	0.95	0.64	−19	+	3	−13	+	4	−17	+28	−15	−21	+	4	−31								0	−0.56
115727	23 26 44.09		+36 54 09.9		9.56 H	351.683 706 93		+36.902 749 83	1.64	9.24	4.30	1.10		0.83		1.43	1.20	0.73	−	1	+35	+15	−13	+22	+28	+15	−24	+	1	−	5								0	0.84
115728	23 26 44.40		−40 27 01.9		9.31 H	351.685 005 61		−40.450 540 93	2.65	−3.92	3.90	0.90		1.00		1.23	1.02	1.09	+26	+	7	+	6	+33	+25	+11	+25	+43	+	8	+27								0	−1.15
115729	23 26 45.49		−11 01 57.3		8.32 H	351.689 547 21		−11.032 596 22	1.75	3.10	−1.16	0.85		0.76		1.13	1.16	1.01	+46	−20	−25	−	4	−12	+37	−	5	−22	−22	+14								0	−1.25
115730 H	23 26 45.79		+48 32 51.6		8.55 H	351.690 801 68		+48.547 655 68	* 1.59	−3.22	−2.73	0.57		0.66		1.17	0.76	0.83	−44	−12	+26	+21	−	3	−17	+	7	+	7	+16	−	1								0	0.91
115731	23 26 47.72		−51 21 32.1		9.76 H	351.698 839 38		−51.358 917 54	10.97	25.33	5.04	0.91		0.85		1.50	1.01	0.92	−	6	−25	−	8	−13	−18	+	2	−22	−10	+29	−12								0	0.62
115732	23 26 48.22		+42 11 29.9		9.30 H	351.700 897 69		+42.191 640 13	0.04	1.74	−3.84	0.70		0.76		1.30	0.79	0.83	−	6	+10	+	9	−	3	−18	−	1	−	7	−36	+14	+20							1	0.62
115733 H	23 26 48.53		+54 33 35.4		8.85 H	351.702 199 66		+54.559 844 59	A 5.48	2.66	−1.14	1.91		2.38		2.43	1.91	2.42	−14	+21	+12	+	3	+	7	+10	+	4	+20	−	4	−23								1	0.71
115734	23 26 49.63		+36 06 13.6		8.44 H	351.706 790 44		+36.103 768 34	10.84	83.82	18.80	0.82		0.66		1.05	1.12	0.67	+	4	+17	+16	−	7	+18	+20	+11	−	7	−	4	−	3							0	−1.10
115735 H	23 26 50.23		+67 52 00.5		8.00 G	351.709 308 83		+67.866 817 58	A 5.03	1.25	6.65	0.87		0.93		1.00	1.04	0.95	−	1	−	3	+14	−	7	−	8	+	7	−	9	−30	−14	−10						3	0.99
115736	23 26 51.02		−59 38 39.5		7.89 H	351.712 589 83		−59.644 307 26	10.98	72.64	−68.80	0.54		0.59		0.85	0.58	0.66	−19	−	4	−	5	−16	+	2	+11	+	4	−23	−11	−10								0	0.75
115737	23 26 51.47		+54 58 25.8		8.60 H	351.714 456 37		+54.973 820 64	1.16	−6.92	−5.41	0.79		0.78		1.02	1.01	0.92	−28	+10	+21	+32	−	6	+	0	−	9	+18	+	2	−42								0	1.74
*115738	23 26 55.91		+01 15 21.0		4.95 1 H	351.732 938 81		+01.255 837 58	20.12	85.60	−94.43	0.71		0.54		0.79	0.84	0.59	+28	−22	−	7	−	4	−	3	+	6	−	7	−	5	+17	−10						0	1.11
*115739	23 26 54.65		−73 50 11.4		7.46 H	351.727 718 87		−73.836 491 43	2.26	24.45	11.80	0.57		0.55		0.71	0.69	0.61	+	3	−	4	−29	−	6	+	0	+	2	+	0	−	1	+	1	+16			1	−2.44
*115740	23 26 54.85		−25 40 38.8		9.54 H	351.728 551 57		−25.677 449 73	0.90	72.21	−18.48	1.50		1.02		1.60	2.19	1.35	+27	−	2	−	6	−32	+24	−11	+21	−29	+	3	+	5								0	0.12
*115741	23 26 55.86		+25 24 09.7		7.51 H	351.732 750 97		+25.402 681 12	6.07	−6.94	−11.91	0.58		0.48		0.78	0.59	0.48	+29	+24	+	3	+11	+	6	−10	+	9	−	4	+11	+30								0	−0.53
115742 H	23 26 57.04		−15 14 51.7		6.91 H	351.737 679 94		−15.247 697 54	A 8.46	28.01	−10.92	1.89		1.82		1.25	1.49	1.01	−40	+19	−11	+	4	−	8	+17	+	6	−	9	+52	−	1							3	0.04
115743	23 26 57.37		+49 30 59.0		9.10 2 H	351.739 021 88		+49.516 387 24	−1.05	−3.38	−2.48	0.89		0.99		1.57	1.10	1.24	−36	−	8	+27	+	1	+10	+	5	+	9	+	1	+14	−15							0	0.44
115744	23 26 58.74		−58 25 25.2		7.13 H	351.744 770 76		−58.423 671 94	7.25	85.94	−57.72	0.43		0.49		0.74	0.48	0.55	−21	−	1	−13	+	0	+	2	+	4	+	5	−	9	−	3	−	1				0	−0.48
115745	23 26 59.52		+24 27 57.2		8.87 H	351.748 011 00		+24.465 898 38	8.17	44.85	−22.43	0.74		0.65		0.99	0.81	0.66	+34	+10	+	4	+	0	+	5	−	9	+	5	−10	+	0	+40						0	−1.12
115746	23 26 59.92		+87 18 26.8		5.56 H	351.749 662 74		+87.307 456 96	10.63	76.90	19.35	0.43		0.42		0.49	0.54	0.44	−15	+	4	+10	−	6	+	4	−22	+	6	−17	+	3	−19							0	−0.33
115747	23 27 00.06		+42 12 18.7		7.98 H	351.750 247 95		+42.205 190 84	3.09	66.86	25.55	0.51		0.58		0.98	0.59	0.64	−	6	+	8	+	7	+	2	−18	+	5	−	7	−35	+23	+18							0	−0.53
115748	23 27 01.24		−22 43 24.2		7.30 H	351.755 181 32		−22.723 400 33	4.26	35.10	−5.76	0.98		0.77		1.03	1.51	1.08	+	4	+	1	−	7	+40	−	7	+27	−	8	+21	−11	−12							0	1.01
115749	23 27 01.24		+32 31 14.9		7.55 H	351.755 184 56		+32.520 796 46	6.55	52.77	14.40	0.71		0.56		0.85	0.79	0.55	+27	+15	−	1	+	9	+	2	+	1	+	8	−25	+10	+42							2	2.17
115750	23 27 03.61		+37 58 47.5		8.76 H	351.765 058 38		+37.979 861 24	4.95	22.05	−14.40	0.74		0.74		1.00	0.84	0.68	+16	+32	+23	+	5	+16	−11	+15	−16	−	3	+20								0	0.45
115751 H	23 27 04.13		+13 06 39.3		8.64 H	351.767 218 19		+13.110 912 78	A 8.50	20.77	−51.68	6.72		3.04		1.53	1.47	1.31	+43	+16	−	4	−	3	+18	−	3	+10	+15	+	9	+38							2	−0.64
115752	23 27 04.62		−01 17 12.5		10.37 G	351.769 244 10		−01.286 797 62	30.30	374.48	215.75	1.59		1.32		1.88	2.27	1.93	+43	−	9	−	5	+19	+12	+18	+	8	+10	+23	+23								0	1.67
115753	23 27 04.92		+86 00 29.3		7.57 H	351.770 493 52		+86.008 144 29	3.31	−1.03	−6.77	0.51		0.52		0.60	0.56	0.55	−10	−	2	+11	−	4	−11	−	5	−10	+	6	+17	−18								0	−0.20
115754	23 27 05.44		−57 18 45.8		8.07 H	351.772 661 77		−57.312 716 92	2.30	−5.72	0.51	0.49		0.60		0.92	0.56	0.69	−20	−	2	−12	+	5	+	3	+13	+	7	−14	−	6	−10							0	0.02
115755	23 27 07.33		+42 54 43.1		5.75 1 H	351.780 544 98		+42.911 968 59	11.09	87.42	17.07	0.36		0.42		0.72	0.43	0.48	−	4	+	7	+	5	+	1	−17	+	7	−	8	−32	+18	+19							2	−0.21
115756 H	23 27 07.47		−66 34 51.1		6.47 H	351.781 122 96		−66.580 854 39	* 3.68	−27.38	−12.97	1.27		1.13		0.84	0.77	0.67	+11	−	2	−31	+15	+13	−11	+	5	+	1	−	6	−	1							2	1.07
115757	23 27 07.51		−72 52 53.8		8.11 G	351.781 297 94		−72.881 614 71	11.45	−75.08	−1.35	0.59		0.55		0.75	0.61	0.60	+11	+	1	−18	−	9	+	1	+	8	+	2	−	7	+	7	+30					1	−3.47
115758	23 27 08.36		+47 57 31.2		9.27 H	351.784 836 47		+47.958 658 65	−0.06	−7.51	−5.94	0.74		0.82		1.43	0.87	0.99	−13	+	6	+28	−	1	−15	−22	−	7	+	8	+29	+	8							0	1.45
115759	23 27 09.08		−50 09 26.2		6.22 H	351.787 838 27		−50.157 265 01	6.43	29.57	8.61	0.46		0.45		0.72	0.57	0.46	−	9	−21	−	3	−14	−10	+19	−10	−30	+	9	−19								1	−0.43
115760	23 27 09.57		−62 44 13.7		6.84 1 H	351.789 870 71		−62.737 127 04	3.41	1.72	0.27	0.44		0.45		0.63	0.50	0.48	−	5	−11	−	8	+	3	+15	−	2	+16	+	3	−22	−	2							0	0.41
115761	23 27 09.94		+54 51 58.3		7.60 H	351.791 414 08		+54.866 190 54	13.42	91.41	24.68	0.64		0.66		0.86	0.92	0.93	−25	+26	+23	+11	−11	−19	−	6	+13	+	1	−51										0	0.56
115762	23 27 10.95		−50 16 46.7		7.53 H	351.795 609 96		−50.279 625 44	A 3.43	113.20	−35.05	1.34		1.29		1.55	1.39	1.17	−12	−	1	−	4	−15	−	3	+	2	−	3	−29	+	3	−20						10	0.44
115763	23 27 13.24		+35 57 52.2		8.66 G	351.805 180 40		+35.964 513 56	3.41	6.86	−5.37	0.81		0.67		1.06	1.07	0.65	+	3	+14	+18	−	6	+21	+17	+13	−	8	−	1	+	3							0	−1.32
115764	23 27 13.72		+79 32 30.9		8.39 H	351.807 166 46		+79.541 927 39	5.61	20.83	5.19	0.67		0.59		0.73	0.77	0.65	+	1	+	1	+21	+16	−	7	+	7	−	8	+	7	+	9	+	5				1	0.73
115765	23 27 14.00		−50 16 43.3		8.44 H	351.808 323 39		−50.278 707 47	B 2.69	−7.55	−7.33	4.52		4.11		3.54	6.84	3.40	−27	+	4	−16	+10	+14	+	5	−	1	−	23	+	1	−66							10	0.44
115766	23 27 14.10		+19 12 51.2		8.43 H	351.808 769 30		+19.214 219 68	5.57	−36.44	−12.53	0.83		0.57		0.92	0.90	0.63	+29	−12	+	4	−15	+17	+	1	+13	+	4	+	8	+45								0	−0.73
115767	23 27 14.56		−02 38 12.2		7.60 H	351.810 681 88		−02.636 709 29	4.60	150.43	−86.33	0.93		0.70		1.07	1.45	1.02	+33	−12	−22	+14	+	2	+13	+	0	+	2	+17	+	5								0	2.00
115768	23 27 14.77		+01 07 21.7		6.26 H	351.811 521 85		+01.122 687 05	8.01	46.55	−31.92	0.79		0.56		0.89	0.99	0.64	+25	−	1	−17	−23	+	1	−16	+	4	−11	+28	−22								0	1.63
115769	23 27 14.93		−58 28 34.6		5.63 G	351.812 224 94		−58.476 278 54	10.93	52.45	69.25	0.35		0.41		0.61	0.39	0.45	−23	−	2	−16	+	5	+	2	+	3	+	5	−13	−10	−14							0	0.38
115770	23 27 16.42		+70 21 35.3		5.60 H	351.818 409 11		+70.359 793 23	15.81	120.97	−4.43	0.40		0.42		0.53	0.46	0.49	−13	−	9	+	9	−	6	−	3	+17	−	6	+	2	+14	−	1						2	−0.22
115771	23 27 16.48		−26 58 58.1		9.38 H	351.818 678 99		−26.982 794 16	−2.23	1.26	−12.43	1.23		0.99		1.38	1.65	1.17	+42	−21	−23	+35	+23	−20	+16	+12	−	1	+30										0	−0.05
115772	23 27 17.22		+65 37 15.8		6.84 G	351.821 743 10		+65.621 052 41	7.83	−1.97	−73.50	0.48		0.50		0.60	0.56	0.58	−20	−	2	+	3	+	0	−	9	−11	−	9	+	5	+	7	−30					0	−0.35
115773	23 27 18.34		+79 47 42.0		7.67 H	351.826 409 27		+79.795 002 12	5.25	33.47	16.17	0.54		0.50		0.61	0.64	0.55	−	1	+	6	+12	+21	−	5	+	9	−	5	+	2	+	5	+	2				0	0.91
115774	23 27 18.51		+08 04 00.9		7.01 H	351.827 109 65		+08.066 917 99	4.51	23.72	23.12	0.91		0.66		1.15	1.02	0.95	+12	+26	−32	+21	−	8	+22	+13	−18	+42	+36										0	0.59
115775	23 27 19.56		+43 51 49.2		8.16 H	351.831 481 53		+43.863 665 32	0.76	−7.57	−5.39	0.53		0.61		0.91	0.59	0.69	−16	+11	+	3	+	2	+	0	−	1	+	9	−41	+22	+	0						3	−0.95
115776	23 27 19.68		−28 02 42.8		8.46 H	351.831 994 77		−28.045 234 59	1.94	12.46	0.63	0.88		0.74		1.15	1.03	0.94	+34	+	8	−16	−31	+	5	+	3	+	9	−15	+36	+32								0	−0.38
115777	23 27 19.93		+76 42 47.0		9.60 H	351.833 059 75		+76.713 049 68	25.91	−194.44	−42.60	0.85		0.84		0.96	0.96	0.96	−23	−	3	+23	+	3	−	1	−	2	−	1	+	4	+	7	−29					0	−0.38
115778	23 27 20.70		+45 22 05.3		7.76 G	351.836 269 67		+45.368 133 38	2.51	−10.30	−13.44	0.54		0.56		0.84	0.62	0.63	+	3	+	2	+16	+	8	+	5	+	6	+	6	+	2	+21	+18				3	0.81
115779 H	23 27 20.95		+04 27 00.9		8.71 H	351.837 282 71		+04.450 256 34	A 17.44	−22.85	−94.39	2.06		1.96		2.12	1.88	1.79	+44	−	2	−22	−10	+	9	+	1	+11	+	9	−	4	+37							0	−0.10
115780	23 27 22.34		−52 18 10.8		8.64 H	351.843 086 11		−52.303 008 98	A 26.90	−59.33	−164.13	2.54		2.51		3.06	2.45	2.15	−	4	−	7	−25	−19	−	6	+	4	−	6	−27	+18	−	6						0	−0.20
115781	23 27 23.49		−52 18 11.1		13.25 H	351.847 877 74		−52.303 097 00	B 26.90	−59.33	−164.13	213.59		217.94		3.06	2.45	2.15	−	5	+	0	+	0	+	0	+	4	+	0	+	0	+18	−	6				0	−0.20
115782	23 27 23.80		+29 53 29.1		8.27 H	351.849 163 33		+29.891 425 14	2.28	−15.03	−12.59	0.78		0.63		1.02	0.91	0.63	+23	−	4	−14	+35	+11	−	9	+10	−11	+27	+24										0	0.21
115783	23 27 24.07		+19 59 50.7		9.56 H	351.850 300 10		+19.997 411 93	2.38	28.19	0.71	1.17		0.80		1.34	1.26	0.85	+21	+	1	−22	−20	+17	−16	+11	−	9	+	5	+41								0	−0.67
115784	23 27 24.69		+00 43 20.4		9.23 H	351.852 863 96		+00.722 320 00	4.76	−5.15	−12.63	1.28		0.89		1.54	1.86	1.06	+29	+11	−20	−23	−10	+20	+	2	−23	+33	−18										0	−1.03
115785	23 27 24.85		−60 41 32.4		8.74 H	351.853 540 83		−60.692 326 11	1.72	27.17	3.17	0.68		0.78		1.04	0.79	0.93	−25	+	2	−	5	−	3	+21	+	2	+21	−	8	−24	−12						0	−1.68
115786	23 27 25.31		−09 24 14.3		9.84 H	351.855 457 33		−09.403 961 58	2.06	31.83	−6.58	1.68		1.00		1.73	1.90	1.52	+32	−32	−13	−24	+12	+14	+26	+	2	−15	+10										2	−0.65
115787	23 27 25.33		+25 28 04.4		7.93 H	351.855 546 36		+25.467 897 13	7.82	55.36	−35.88	0.66		0.57		0.89	0.70	0.57	+28	+20	+12	+10	+	2	−12	+	4	−	9	−	4	+33							2	−2.51
115788	23 27 25.50		+63 55 45.6		7.32 H	351.856 265 19		+63.929 345 50	3.84	24.47	5.44	0.52		0.55		0.68	0.56	0.63	−	4	+25	+12	+	3	−	8	−	6	−	7	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
115701	7.896	0.009	7.846	0.011		0.051	0.013	T	0.06	0.01	L	7.8627	0.0012	0.012	91		7.84	7.89					1							S
115702	9.684	0.031	8.400	0.018		1.093	0.028	T	1.05	0.03	L	8.4395	0.0026	0.017	50		8.41	8.47		C			1							S
115703	10.153	0.031	9.568	0.030		0.651	0.002	G	0.71	0.00	H	9.6042	0.0025	0.030	84		9.57	9.65		D			1							
115704	11.090	0.051	10.460	0.044		0.469	0.034	G	0.54	0.04	H	10.5924	0.0026	0.027	128		10.54	10.66					1							G
115705	8.717	0.013	7.417	0.008		1.105	0.012	T	1.07	0.01	L	7.4630	0.0012	0.012	70		7.44	7.48					1							S
115706	10.170	0.024	8.404	0.011		1.472	0.021	T	1.49	0.03	L	8.3639	0.0012	0.015	106		8.33	8.39		D			1							S
115707	11.179	0.072	9.119	0.022		1.500	0.040	G	1.78	0.18	K	9.0959	0.0041	0.025	65		9.05	9.14					1							
115708	9.090	0.011	8.792	0.013		0.283	0.016	T	0.32	0.02	L	8.8279	0.0018	0.018	124		8.80	8.86					1							
115709	7.764	0.010	6.552	0.006		1.036	0.009	T	1.01	0.01	L	6.6015	0.0011	0.007	46		6.59	6.61		C	23266−2144	I 1	1							S
115710	8.134	0.008	7.842	0.010		0.278	0.012	T	0.32	0.01	L	7.8923	0.0012	0.013	131		7.87	7.91		C			1							S
115711	8.508	0.008	8.198	0.008		0.294	0.011	T	0.34	0.01	L	8.2571	0.0013	0.015	154		8.23	8.28		C			1							
115712	8.873	0.013	8.524	0.014		0.331	0.018	T	0.39	0.02	L	8.5783	0.0016	0.013	87		8.54	8.60		C			1							S
115713	5.993	0.003	5.574	0.003		0.409	0.003	T	0.48	0.00	L	5.6197	0.0005	0.006	135		5.61	5.63					1							S
115714	8.701	0.011	8.058	0.010		0.597	0.013	T	0.67	0.01	L	8.1117	0.0014	0.012	140		8.09	8.14					1							
115715	8.146	0.009	7.431	0.006		0.644	0.004	G	0.71	0.00	H	7.4992	0.0009	0.013	67		7.48	7.52		D	23267+4521	I 1	1 S							S
115716	9.521	0.018	8.777	0.015		0.681	0.019	T	0.74	0.02	L	8.8475	0.0019	0.019	93		8.81	8.87					1 S							
115717	10.656	0.042	9.724	0.028		0.824	0.037	T	0.85	0.03	L	9.8571	0.0022	0.020	119		9.82	9.89					1							G
115718	11.368	0.106	9.774	0.043		1.359	0.094	T	2.67	0.15	O	9.5458	0.0034	0.025	51		9.50	9.63		R	23267+1509	I 1	1 X S							G
115719	9.933	0.037	8.851	0.024		0.936	0.034	T	0.93	0.03	L	8.9964	0.0036	0.016	47		8.97	9.03		C			1							
115720	8.828	0.015	8.272	0.014		0.521	0.018	T	0.59	0.02	L	8.3164	0.0013	0.013	68		8.29	8.34		C			1							S
115721	9.853	0.024	9.139	0.021		0.630	0.015	G	0.70	0.01	H	9.2128	0.0023	0.023	124		9.17	9.26		C			1							
115722	10.157	0.023	9.241	0.017		0.812	0.021	T	0.84	0.01	L	9.3029	0.0019	0.024	138		9.26	9.35		C			1							
115723	8.023	0.008	7.674	0.010	*	0.374	0.015	G	0.44	0.02	H	*	7.7048	0.0009	0.011	139	*	7.69	7.73		D	23267+4103	M 1	2 C A	AB	354	0.762	0.006	2.49	0.03	S
115724	8.137	0.011	6.833	0.006		1.108	0.010	T	1.07	0.01	L	6.8877	0.0011	0.008	97		6.87	6.90					1							S
115725	10.009	0.022	8.740	0.014		1.081	0.020	T	1.04	0.02	L	8.7923	0.0024	0.017	111		8.76	8.82					1							
115726	9.279	0.015	8.731	0.014		0.520	0.015	T	0.59	0.02	L	8.7727	0.0021	0.019	127		8.74	8.81					1							S
115727	10.016	0.031	9.582	0.031		0.410	0.040	T	0.48	0.04	L	9.6528	0.0028	0.017	69		9.62	9.68		C			1							
115728	10.837	0.044	9.427	0.022		1.191	0.039	T	1.15	0.04	L	9.4795	0.0022	0.020	99		9.44	9.51		C			1							
115729	8.096	0.014	8.273	0.020		−0.179	0.006	G	−0.19	0.01	H	8.2567	0.0019	0.012	62		8.24	8.28		C			1							S
115730	8.611	0.006	8.537	0.008	*	0.073	0.009	T	0.08	0.01	L	*	8.5790	0.0012	0.018	252	*	8.55	8.61			23268+4833	H 1	2 C S A	AB	38	0.127	0.013	0.96	0.46	S
115731	10.596	0.030	9.868	0.025		0.654	0.030	T	0.72	0.03	L	9.8920	0.0021	0.024	141		9.85	9.94					1							
115732	9.300	0.012	9.280	0.016		0.023	0.018	T	0.04	0.01	L	9.3183	0.0021	0.024	163		9.28	9.36					1							
115733	8.939	0.012	8.927	0.015	*	0.016	0.018	T	0.04	0.02	L	*	8.8613	0.0024	0.021	138	*	8.83	8.89		D	23268+5434	I 1	2 C A	AB	211	0.567	0.003	0.58	0.02	
115734	9.264	0.018	8.505	0.015		0.692	0.018	T	0.75	0.01	L	8.5807	0.0016	0.013	81		8.56	8.60		C			1							S
115735	8.516	0.011	8.149	0.011	A	0.350	0.015	G	0.41	0.02	H	*	8.1817	0.0014	0.012	116	*	8.16	8.20		C	23268+6752	H 1	2 C B	AB	202	2.714	0.033	3.66	0.15	
115736	8.454	0.008	7.942	0.008		0.493	0.004	G	0.57	0.00	H	8.0014	0.0012	0.013	172		7.98	8.03		C			1							S
115737	10.617	0.035	8.746	0.013		1.555	0.030	T	1.57	0.03	L	8.7156	0.0023	0.022	141		8.68	8.75					1							
115738	4.987	0.004	4.932	0.005		0.036	0.006	G	0.01	0.02	A	4.9527	0.0009	0.007	64		4.94	4.97		M	23269+0116	I 1	1							S
115739	8.863	0.011	7.596	0.007		1.079	0.010	T	1.04	0.01	L	7.6317	0.0015	0.011	129		7.61	7.66					1							S
115740	10.570	0.032	9.551	0.022		0.877	0.030	T	0.89	0.02	L	9.6862	0.0026	0.020	102		9.65	9.72		C			1							
115741	7.734	0.008	7.536	0.008		0.189	0.011	T	0.21	0.01	L	7.5744	0.0010	0.011	119		7.56	7.59		C			1							S
115742	7.149	0.008	6.939	0.009	*	0.201	0.011	T	0.22	0.01	L	*	6.9699	0.0011	0.007	58	*	6.95	6.98		D	23269−1515	I 1	2 C A	AB	316	0.308	0.006	1.45	0.05	S
115743	12.998	0.264	9.435	0.016		2.791	0.193	T	2.86	0.20	L		9.0139	0.0084	0.087	200		8.91	9.20		U 2			1							G
115744	8.747	0.008	7.269	0.005		1.245	0.007	T	1.20	0.01	L	7.2930	0.0009	0.012	199		7.27	7.31					1							S
115745	9.446	0.015	8.927	0.015		0.487	0.019	T	0.56	0.02	L	8.9759	0.0017	0.014	120		8.95	9.02					1							
115746	5.850	0.003	5.587	0.003		0.250	0.004	T	0.28	0.01	L	5.6313	0.0005	0.005	127		5.62	5.64		C			1							S
115747	9.341	0.011	8.092	0.007		1.065	0.010	T	1.03	0.01	L	8.1452	0.0012	0.016	172		8.12	8.17					1							S
115748	8.653	0.015	7.420	0.010		1.053	0.014	T	1.02	0.01	L	7.4663	0.0014	0.008	50		7.45	7.48		C			1							S
115749	7.914	0.009	7.580	0.009		0.344	0.001	G	0.40	0.00	H	7.6281	0.0014	0.012	88		7.61	7.65					1							S
115750	9.280	0.018	8.796	0.018		0.456	0.023	T	0.53	0.02	L	8.8639	0.0014	0.016	77		8.84	8.89		C			1							
115751	9.473	0.021	8.734	0.018	*	0.677	0.022	T	0.74	0.02	L	*	8.7756	0.0015	0.017	70	*	8.75	8.81		D	23271+1307	H 1	2 C B	AB	258	0.300	0.049	2.55	0.46	S
115752						1.272	0.014	G	1.45	0.02	A		10.4807	0.0036	0.026	65		10.43	10.52		C			1							
115753	8.697	0.009	7.669	0.007		0.895	0.009	T	0.90	0.01	L		7.7342	0.0011	0.011	135		7.72	7.75		C			1							S
115754	9.533	0.012	8.190	0.007		1.139	0.011	T	1.10	0.01	L		8.2372	0.0012	0.016	215		8.21	8.26		C			1							S
115755	5.730	0.003	5.743	0.003		−0.007	0.004	T	0.01	0.00	L		5.7524	0.0018	0.016	182		5.73	5.78	1.48	P 1 A			1							S
115756	8.365	0.009	6.627	0.005	*	1.455	0.000	G	1.46	0.00	H	*	6.5993	0.0008	0.009	143	*	6.58	6.62		D	23271−6635	H 1	2 C A	AB	27	0.300	0.008	1.98	0.07	S
115757	8.890	0.012	8.185	0.010		0.651	0.015	G	0.71	0.01	H		8.2355	0.0012	0.012	125		8.22	8.25		C			1							S P
115758	11.409	0.062	9.438	0.018		1.634	0.051	T	1.66	0.05	L		9.3822	0.0020	0.025	191		9.34	9.43					1							
115759	6.116	0.003	6.202	0.003		−0.080	0.005	G	−0.06	0.01	H		6.1983	0.0007	0.008	181		6.19	6.21					1							S
115760	8.945	0.012	7.019	0.006		1.633	0.011	T	1.80	0.04	O		6.9341	0.0015	0.017	162		6.91	6.96		U 2			1							S
115761	8.241	0.008	7.663	0.007		0.566	0.004	G	0.64	0.00	H		7.7204	0.0009	0.011	144		7.70	7.73		C			1 G							S
115762	9.040	0.011	7.626	0.007	A	1.194	0.010	T	1.15	0.01	L		7.6981	0.0061	0.016	175	A	7.66	7.72		D	23272−5017	I 2	1 C P D							S D
115763	8.976	0.016	8.648	0.017		0.323	0.015	G	0.37	0.02	H		8.7183	0.0017	0.015	83		8.69	8.74		C			1							
115764	8.602	0.009	8.398	0.010		0.195	0.013	T	0.21	0.01	L		8.4534	0.0012	0.015	136		8.42	8.48		C			1							S
115765	10.398	0.026	8.569	0.011	B	1.277	0.197	G	1.24	0.20	K		8.6211	0.0109			B				D	23272−5017	I 2	1 C I D							D
115766	8.937	0.012	8.480	0.012		0.431	0.016	T	0.50	0.02	L		8.5320	0.0018	0.015	134		8.50	8.56					1 S							S
115767	8.873	0.017	7.706	0.011		1.013	0.002	G	1.06	0.00	I		7.7403	0.0013	0.014	66		7.72	7.76		C			1							S
115768	7.557	0.011	6.375	0.006		1.013	0.010	T	0.99	0.01	L		6.4276	0.0010	0.008	68		6.42	6.45			23272+0107	I 1	1 S							S
115769	6.888	0.003	5.744	0.003		0.983	0.004	G	0.96	0.00	I		5.7961	0.0005	0.007	198		5.79	5.81					1							S
115770	5.804	0.003	5.617	0.003		0.163	0.004	G	0.18	0.00	H		5.6535	0.0006	0.006	123		5.64	5.66					1							S
115771	10.808	0.046	9.507	0.024		1.161	0.030	G	1.12	0.03	I		9.5443	0.0020	0.019	97		9.51	9.58		C			1 S							
115772	8.160	0.009	6.966	0.005		1.030	0.015	G	1.00	0.01	H		7.0038	0.0010	0.008	117		6.99	7.02		C	23273+6537	I 1	1 S							S
115773	7.936	0.007	7.697	0.008		0.228	0.010	T	0.25	0.01	L		7.7338	0.0011	0.010	136		7.71	7.75		C			1							S
115774	8.615	0.016	7.169	0.009		1.219	0.014	T	1.18	0.01	L		7.1742	0.0013	0.010	55		7.16	7.20		C			1 G							S
115775	10.309	0.028	8.350	0.011		1.620	0.015	G	1.63	0.09	H		8.2720	0.0013	0.015	144		8.25	8.30					1							
115776	9.716	0.019	8.581	0.012		0.976	0.017	T	0.96	0.01	L		8.6287	0.0018	0.018	126		8.60	8.66		C			1							
115777	10.733	0.043	9.710	0.029		0.880	0.041	T	0.92	0.04	L		9.7447	0.0021	0.021	116		9.71	9.79					1							G
115778	7.907	0.007	7.767	0.009		0.144	0.003	G	0.16	0.00	H		7.8060	0.0012	0.012	132		7.79	7.83		C			1							S
115779	9.394	0.023	8.767	0.021	*	0.583	0.027	T	0.65	0.03	L	*	8.8380	0.0023	0.015	54	*	8.82	8.87		C	23273+0427	I 1	2 C C	AB	329	0.799	0.049	3.56	0.45	S
115780	9.759	0.018	8.703	0.012	A	0.906	0.017	T	0.91	0.01	L		8.7859	0.0111	0.026	122	A	8.74	8.82		D	23274−5218	I 2	1 C P C							
115781											T		13.4322	0.7693			B				D	23274−5218	I 2	1 C F C							
115782	10.408	0.037	8.437	0.014		1.634	0.031	T	1.66	0.03	L		8.3767	0.0018	0.018	87		8.35	8.40		C			1							
115783	9.908	0.025	9.538	0.027		0.351	0.034	T	0.41	0.04	L		9.6401	0.0018	0.023	115		9.59	9.68					1							
115784	10.669	0.060	9.431	0.032		1.057	0.053	T	1.02	0.04	L		9.3981	0.0023	0.015	66		9.38	9.43		C			1							
115785	10.639	0.029	8.871	0.012		1.473	0.025	T	1.49	0.04	L		8.8688	0.0018	0.025	158		8.83	8.91					1							
115786	11.190	0.090	10.013	0.048		1.009	0.080	T	0.98	0.06	L		10.0048	0.0032	0.030	75		9.91	10.06					1							
115787	8.518	0.010	7.976	0.009		0.508	0.012	T	0.58	0.01	L		8.0423	0.0012	0.014	105		8.02	8.07					1							S
115788	9.038	0.012	7.457	0.007		1.326	0.011	T	1.29	0.01	L		7.4704	0.0014	0.013	129		7.45	7.49					1							S
115789	9.447	0.027	7.444	0.011		1.696	0.024	T	2.01	0.07	O		7.3296	0.0044	0.024	45		7.28	7.36		U			1							S
115790	9.620	0.014	9.396	0.016		0.214	0.020	T	0.24	0.02	L		9.4215	0.0022	0.026	189		9.37	9.47		C			1							
115791	9.484	0.018	9.267	0.021		0.207	0.026	T	0.23	0.03	L		9.3052	0.0016	0.014	123		9.27	9.32					1							
115792	8.709	0.009	8.201	0.009		0.496	0.004	G	0.57	0.00	H		8.2456	0.0010	0.014	156		8.22	8.27		C			1							S
115793	10.007	0.033	8.800	0.020		1.032	0.030	T	1.00	0.03	L		8.8936	0.0021	0.012	67		8.87	8.92		C			1							
115794	9.508	0.018	9.045	0.018		0.450	0.020	T	0.52	0.02	L		9.1202	0.0026	0.017	90		9.09	9.16		C			1							
115795	9.889	0.023	8.645	0.015		1.061	0.021	T	1.03	0.02	L		8.7058	0.0021	0.017	85		8.68	8.73		C			1							
115796	7.784	0.008	7.477	0.007		0.286	0.012	G	0.33	0.01	H		7.5193	0.0013	0.012	96		7.50	7.54					1							S
115797	10.640	0.041	10.247	0.045		0.384	0.051	T	0.45	0.06	L		10.2960	0.0024	0.022	91		10.26	10.33		C			1							
115798	10.638	0.044	10.571	0.069	A						T	*	10.3648	0.0031	0.029	134	*	10.31	10.41		D	23276+5536	I 1	2 C A	AB	266	2.788	0.016	1.84	0.07	G
115799	8.971	0.012	8.275	0.011		0.630	0.012	T	0.70	0.01	L		8.3483	0.0019	0.015	104		8.33	8.38		C			1							S
115800	8.989	0.013	8.441	0.012	C						T	*	8.3441	0.0012	0.013	118	*	8.32	8.37		D	23276+1638	I 1	2 C D	CD	276	3.192	0.007	1.64	0.03	S D

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
*115801 H	23 27 36.49	−75 25 08.1	8.74	H	351.902 037 08	−75.418 920 13	A	5.70	64.93	24.65	1.96	1.90	1.68	1.60	1.65	+ 4	+ 1	−21	− 4	+ 6	+ 3	+ 7	+ 4	− 1	+23		3	0.70
115802	23 27 37.29	−60 23 52.5	9.73	G	351.905 358 15	−60.397 904 02		13.88	214.25	−33.34	0.87	1.03	1.37	0.99	1.11	−21	− 3	− 1	+ 3	+ 0	+ 7	+ 2	− 9	−15	−15		2	−0.03
115803	23 27 37.64	−33 37 39.9	7.51	H	351.906 852 96	−33.627 763 32		19.90	−219.42	−108.76	0.79	0.78	0.95	0.91	0.93	+41	−12	−26	−39	−29	+23	−25	−42	+12	+46		0	0.98
115804	23 27 38.70	+50 21 27.1	8.07	H	351.911 270 62	+50.357 533 30		1.29	−1.27	−5.29	0.57	0.66	0.99	0.70	0.77	−34	− 2	+16	+20	− 3	− 2	+ 0	+ 1	+12	−19		0	0.47
115805	23 27 40.02	−68 53 17.5	9.44	H	351.916 733 09	−68.888 206 92		0.47	12.86	5.32	0.77	0.90	1.08	0.85	0.89	+ 2	+ 1	−29	−14	+ 7	− 7	+ 5	−17	− 6	+ 2		1	−1.08
115806	23 27 40.37	+25 10 02.5	5.99	H	351.918 204 03	+25.167 368 70		8.89	27.28	−36.06	0.53	0.46	0.70	0.55	0.45	+37	+29	+16	+ 9	− 2	−16	+ 2	−13	+ 2	+35		0	−2.76
115807	23 27 40.45	+34 25 55.8	8.52	G	351.918 548 07	+34.432 164 61		5.72	−6.15	−24.39	0.79	0.72	1.00	0.86	0.67	+16	+34	−19	+32	+28	− 1	+32	− 4	+15	+37		0	1.34
115808	23 27 41.62	+44 47 07.2	7.43	H	351.923 435 73	+44.785 328 05		4.12	−1.22	−18.99	0.54	0.60	0.88	0.64	0.72	+15	+18	+20	+ 2	−15	− 6	− 6	−20	+ 9	+37		0	0.63
115809	23 27 42.37	−65 33 53.4	8.79	H	351.926 561 10	−65.564 835 46		4.66	19.74	3.93	0.68	0.74	1.01	0.90	0.91	− 1	+ 5	−22	+ 1	+ 2	−16	− 1	− 5	+11	− 1		0	2.48
115810 H	23 27 42.90	+74 07 09.5	7.23	G	351.928 739 04	+74.119 302 88	A	8.68	61.86	19.44	1.09	1.01	0.98	1.08	0.82	+ 0	− 8	+25	− 5	−13	− 3	− 8	+ 0	+ 9	− 9		1	0.95
*115811	23 27 43.45	+01 53 13.2	7.74	G	351.931 061 47	+01.886 987 90		8.57	76.49	11.43	0.84	0.57	0.98	1.28	0.70	+41	− 6	−12	+ 8	− 1	+28	−10	−12	− 1	−25		0	2.58
*115812	23 27 43.44	−19 53 15.1	9.90	H	351.931 007 08	−19.887 532 24		6.93	−0.81	7.28	1.27	1.12	1.59	1.55	1.28	+19	+ 7	−19	+ 9	− 4	+35	+ 2	+ 5	− 9	+ 9		0	−0.77
115813	23 27 44.03	+86 33 31.6	7.20	H	351.933 457 42	+86.558 766 18		13.86	−43.93	34.55	0.54	0.47	0.58	0.60	0.49	+ 0	+12	+ 7	+14	− 1	− 8	− 1	−11	+12	−11		1	0.69
115814	23 27 44.38	−77 11 41.2	9.48	H	351.934 921 63	−77.194 771 04		8.07	2.15	4.23	0.94	0.79	1.04	1.14	0.84	−11	+23	−27	+24	+ 6	+ 5	+ 8	−10	+15	−11		1	−1.08
*115815 H	23 27 45.26	−26 40 42.2	8.47	2 H	351.938 570 22	−26.678 379 05	A	6.63	47.33	−0.20	2.42	1.72	2.25	2.75	2.09	+51	−37	−21	+23	+28	−17	+25	+13	−11	+44		1	0.17
*115816	23 27 44.86	−29 31 07.8	8.76	H	351.936 901 22	−29.518 840 51		1.92	21.17	−1.14	1.06	0.80	1.30	1.13	1.01	+19	+11	− 8	−33	+ 8	+13	+14	− 3	+41	+23		0	−0.29
115817	23 27 45.97	+05 44 11.7	8.25	H	351.941 553 17	+05.736 577 27		7.14	−26.64	−40.30	1.05	0.80	1.18	1.26	0.85	+22	−21	−17	+ 0	− 5	+12	− 5	+ 1	+15	−12		0	0.39
115818	23 27 47.56	−35 37 16.5	9.11	H	351.948 168 96	−35.621 263 73		3.89	−44.32	−36.78	1.26	1.16	1.43	1.37	1.31	+13	+ 3	−25	−51	− 9	+24	+ 0	−42	+14	+ 8		0	0.71
115819	23 27 48.13	+04 51 22.4	10.32	2 H	351.950 550 97	+04.856 217 08		16.77	435.01	180.24	2.26	1.42	2.07	2.44	1.68	+ 6	+22	− 9	−54	+19	−26	+31	+ 7	+16	−12		3	0.37
115820	23 27 49.73	+32 57 32.1	7.56	G	351.957 217 57	+32.958 909 01		7.22	−43.62	−34.38	0.75	0.62	0.91	0.87	0.59	+17	+17	+ 2	+13	+ 6	+15	+12	−32	+21	+33		0	1.42
115821	23 27 50.42	−36 45 45.7	11.06	G	351.960 066 30	−36.762 696 74		17.97	396.36	14.38	2.22	1.66	2.44	2.95	2.12	− 2	+11	−13	−42	+21	+ 3	+27	−14	+25	−16		0	0.63
115822 H	23 27 50.58	−50 20 37.3	7.21	G	351.960 769 33	−50.343 680 99	A	5.82	−14.26	2.11	0.92	1.00	1.34	1.07	0.92	+ 6	− 4	−20	−17	− 2	+ 5	+ 4	−14	+ 8	−21		1	−0.02
115823	23 27 52.54	+65 21 56.3	8.59	H	351.968 904 10	+65.365 651 96		1.80	11.06	−6.13	0.63	0.64	0.80	0.75	0.75	−15	+12	+ 3	+ 8	− 2	− 6	− 3	− 4	+ 2	−29		0	−0.26
115824	23 27 54.30	+59 41 43.2	7.57	H	351.976 241 05	+59.695 324 86		5.54	−35.40	−14.55	0.55	0.56	0.73	0.68	0.65	−20	+20	+ 9	+15	+ 4	+15	+ 0	−17	− 3	−28		0	3.10
115825 H	23 27 56.09	+11 08 10.1	8.19	H	351.983 712 75	+11.136 144 41	A	11.53	33.17	−21.13	1.35	1.06	1.37	1.35	1.16	+15	+ 9	−15	+10	− 5	−19	− 7	− 5	+ 8	+21		2	0.27
115826	23 27 56.10	−41 34 34.8	9.36	G	351.983 733 85	−41.576 337 92		10.03	260.03	−69.28	0.88	1.04	1.23	1.04	1.15	+19	− 9	+ 3	+32	+12	+ 3	+12	+34	− 6	+10		0	0.66
115827	23 27 56.46	−15 17 57.1	6.73	H	351.985 238 43	−15.299 192 50		3.59	14.91	−10.66	0.85	0.65	0.98	1.22	0.73	+12	−14	−36	− 9	−13	+35	− 2	− 9	+ 6	− 9		5	0.97
115828	23 27 56.96	−26 27 15.6	8.27	G	351.987 338 12	−26.454 321 96		16.76	144.87	−45.17	0.98	0.69	1.09	1.29	0.93	+35	−33	+ 0	+10	+30	+ 9	+29	+ 0	−11	+22		0	1.02
115829	23 27 58.07	+23 35 12.0	7.86	H	351.991 977 46	+23.586 659 08		6.74	80.44	28.91	0.62	0.55	0.81	0.67	0.58	+40	+ 8	− 3	+18	+11	−13	+12	+ 4	− 4	+48		0	−0.14
115830	23 27 58.17	+06 22 44.8	4.27	H	351.992 365 89	+06.379 097 27		20.54	−123.83	−43.26	0.73	0.54	0.80	0.94	0.62	+19	− 5	−11	−19	+ 2	+10	+11	+11	+14	−14		0	−0.38
115831 H	23 27 59.11	+42 25 07.2	9.67	H	351.996 287 78	+42.418 666 60	A	0.79	−6.44	−10.57	1.31	1.51	2.34	1.27	1.49	− 7	+ 3	+ 2	+ 1	−14	− 2	− 5	−30	+ 5	+11		2	−0.43
115832	23 28 00.57	+63 00 50.6	8.16	H	352.002 363 03	+63.014 058 99		7.19	−7.37	−22.83	0.64	0.75	0.85	0.81	0.85	−19	+15	+ 6	+13	+ 7	+ 0	+ 4	−28	+ 3	−28		0	−2.13
115833	23 28 00.69	−35 32 40.2	6.34	H	352.002 860 76	−35.544 488 03		5.06	4.84	1.32	0.76	0.64	0.89	0.91	0.75	+12	− 9	−10	−37	− 4	+35	+ 0	−31	+ 7	+ 5		0	−0.65
115834	23 28 00.70	+21 21 43.8	7.98	H	352.002 914 31	+21.362 154 14		2.48	−14.55	−11.98	0.64	0.56	0.90	0.73	0.58	+42	−11	− 5	+32	+ 7	−21	+ 8	− 8	+ 3	+45		2	−0.14
115835	23 28 01.05	+22 28 28.9	10.56	H	352.004 392 08	+22.474 694 57		0.99	9.13	−4.00	1.25	1.13	1.70	1.55	1.15	+46	− 6	− 4	+28	+14	−11	+13	+ 6	+11	+47		0	−1.24
115836	23 28 03.57	−87 28 56.1	5.50	H	352.014 861 22	−87.482 241 82		6.24	16.29	11.48	0.47	0.42	0.52	0.54	0.44	− 2	−20	−16	− 2	+12	+12	+15	+ 6	−14	+ 0		3	1.05
115837	23 28 04.06	+13 26 01.1	8.44	H	352.016 909 55	+13.433 643 36		5.06	0.49	−4.14	0.89	0.74	1.02	0.92	0.83	+14	+ 8	−21	+10	− 5	− 7	− 6	− 1	+14	+15		0	0.93
115838	23 28 04.45	+08 37 53.3	7.86	H	352.018 550 72	+08.631 462 99		2.54	−6.49	−2.61	0.94	0.72	1.13	1.05	0.86	+17	+13	−28	−20	+ 0	+14	+ 8	− 4	+24	+24		0	−0.22
115839	23 28 05.14	−11 26 58.9	6.37	G	352.021 400 81	−11.449 698 84		8.83	99.58	−22.03	0.79	0.54	0.93	1.18	0.76	+26	−10	−24	−17	+ 3	+34	+12	−11	+ 7	+ 6		0	−0.06
115840	23 28 05.46	−76 57 55.4	9.21	H	352.022 765 48	−76.965 389 41		4.06	23.14	−18.89	0.83	0.71	0.95	1.02	0.79	−13	+14	−23	+17	+ 2	− 5	+ 3	− 1	+10	− 7		1	−0.61
115841	23 28 05.81	+61 55 13.2	8.12	H	352.024 197 65	+61.920 344 32		3.41	13.00	−0.52	0.57	0.66	0.76	0.79	0.79	−11	+ 6	+15	+15	+15	−11	+14	− 7	−14	− 9		0	0.49
115842	23 28 06.29	−66 54 32.0	8.33	H	352.026 187 70	−66.908 878 37		3.35	59.22	1.74	0.67	0.66	0.92	0.73	0.64	− 6	− 8	−29	− 7	+19	+12	+23	− 9	− 6	+ 8		0	1.13
115843	23 28 06.86	−30 50 11.9	8.74	H	352.028 590 31	−30.836 647 87		1.15	12.45	−6.68	0.99	0.83	1.24	1.16	1.02	+30	−29	− 3	−13	+ 9	+16	+ 0	− 5	+30	+33		0	−1.44
115844	23 28 07.26	−12 12 44.3	7.33	2 H	352.030 266 54	−12.212 295 04		0.74	1.79	−13.36	1.11	0.80	1.14	1.55	0.98	+17	−19	−44	+53	−16	+14	−17	+ 4	+18	+ 5		0	1.59
115845	23 28 08.44	−02 26 53.5	8.08	H	352.035 148 33	−02.448 190 79		8.84	69.05	12.18	0.90	0.66	1.09	1.38	0.93	+32	− 5	− 6	+20	− 6	+40	−16	−16	+21	+10		0	1.61
115846	23 28 09.10	−31 22 37.1	11.46	G	352.037 912 92	−31.376 963 46		11.12	91.24	−236.52	2.37	1.96	2.77	3.02	2.57	+19	−13	−14	−35	+ 6	+ 1	+ 6	−29	+ 9	+22		0	−2.17
115847	23 28 12.85	+18 32 17.8	7.42	H	352.053 533 86	+18.538 280 93		3.97	−18.20	−10.74	0.67	0.50	0.82	0.72	0.56	+37	+ 3	− 7	− 7	+ 3	−16	+ 4	−15	+10	+48		0	−1.11
115848 H	23 28 13.25	−56 26 11.2	7.28	H	352.055 197 35	−56.436 439 04	A	6.47	82.46	−66.17	0.76	0.93	1.15	0.64	0.79	−30	+ 8	−22	− 8	+ 3	+10	+ 7	− 9	+ 1	−23		2	0.56
115849	23 28 15.16	−44 27 36.8	8.99	G	352.063 153 80	−44.460 234 35		27.79	12.70	−313.52	0.83	1.01	1.27	0.95	1.09	+14	− 2	−24	+ 5	+ 1	+12	+ 4	+16	+ 0	+11		0	−0.58
115850	23 28 15.51	−25 41 59.4	11.13	G	352.064 623 97	−25.699 841 15		6.71	178.42	−23.28	2.07	1.55	2.43	2.86	2.05	+47	−25	−15	+ 3	+25	+ 6	+17	−18	+ 7	+27		0	0.16
115851	23 28 16.42	+06 04 28.4	7.38	H	352.068 421 62	+06.074 567 25		6.94	45.88	−22.15	0.88	0.67	0.97	1.09	0.72	+15	− 5	−11	−18	+ 1	+26	+ 8	+ 0	+ 9	−11		0	−0.43
115852	23 28 16.95	−05 49 04.2	8.10	H	352.070 629 56	−05.817 841 70		6.93	79.38	19.72	0.91	0.70	1.04	1.19	0.89	+38	− 3	− 4	+18	+18	+17	+21	+29	+25	+15		0	−0.44
115853	23 28 17.66	−35 53 25.4	9.52	H	352.073 566 44	−35.890 375 83		6.10	−53.76	−58.72	1.57	1.14	1.55	2.23	1.47	− 8	+ 3	−24	−53	+17	− 3	+19	−45	+20	−24		2	−0.40
115854	23 28 21.03	+47 16 27.2	8.52	H	352.087 637 00	+47.274 219 27		0.08	−3.05	8.46	0.65	0.74	1.17	0.69	0.84	+ 3	+ 7	+21	−15	−19	−15	−14	+ 0	+35	+ 5		0	0.80
115855	23 28 21.75	+14 21 46.7	9.17	H	352.090 619 50	+14.362 973 29		−1.06	22.57	−16.74	1.23	0.92	1.45	1.05	0.94	− 7	+37	−36	− 9	+ 6	−11	+ 9	−14	+18	+17		0	−0.67
115856	23 28 23.55	+19 53 08.2	6.67	1 H	352.098 129 56	+19.885 608 36		8.71	−18.83	−11.25	0.67	0.48	0.76	0.69	0.51	+24	+ 9	− 5	−17	+22	− 7	+18	+ 3	+12	+47		0	0.02
115857	23 28 25.03	−38 38 44.3	7.36	H	352.104 276 24	−38.645 633 03		3.90	20.26	11.81	0.59	0.61	0.82	0.65	0.68	+24	+15	− 3	+29	+ 7	+17	+ 8	+25	+ 3	+26		0	1.69
115858	23 28 25.25	−25 25 13.8	6.90	1 H	352.105 196 43	−25.420 499 80		8.29	−28.99	−17.71	0.76	0.50	0.81	1.04	0.67	+27	−17	− 8	−12	+20	+ 9	+20	−14	− 3	+10		0	−0.50
115859	23 28 25.62	+71 06 57.9	8.15	H	352.106 739 30	+71.116 086 96		11.72	9.91	−10.73	0.60	0.57	0.78	0.69	0.65	− 3	− 3	+18	−10	+ 1	+24	− 4	− 1	+24	+12		0	−0.25
115860	23 28 26.09	+16 04 00.9	9.81	G	352.108 699 78	+16.066 920 54		29.00	47.94	−97.64	1.43	1.10	1.69	1.58	1.02	+41	− 3	−30	−26	− 7	− 7	−12	−41	+22	+51		0	1.40
115861	23 28 26.79	−37 45 25.5	8.75	H	352.111 608 76	−37.757 075 67		17.36	112.22	−37.09	0.80	0.83	1.17	0.89	0.95	+30	− 7	−25	+47	− 3	+ 8	+ 1	+ 6	− 4	+34		2	−0.06
115862	23 28 27.03	−02 39 12.8	8.11	H	352.112 639 78	−02.653 544 92		2.30	−21.80	−32.76	0.99	0.71	1.21	1.39	1.07	+30	−16	−10	−17	+ 4	+10	+ 1	− 6	+43	+ 1		0	0.85
115863 H	23 28 27.15	−73 16 44.0	8.66	H	352.113 106 84	−73.278 898 44	A	3.69	13.49	2.36	1.15	1.13	1.32	1.20	1.21	+ 8	+ 7	− 9	−11	+ 6	+ 8	+ 5	− 5	+ 2	+35		0	0.47
115864	23 28 27.26	+45 41 35.5	7.69	H	352.113 591 84	+45.693 193 59		0.42	0.49	−5.89	0.51	0.57	0.85	0.60	0.66	−10	+ 4	+ 9	−42	+ 7	+ 2	+ 4	−16	+17	+ 2		1	−0.93
115865	23 28 28.62	+05 48 27.6	8.25	H	352.119 256 64	+05.807 673 06		2.52	19.17	−11.98	1.00	0.83	1.27	1.41	0.88	+21	+ 3	−26	+11	−10	+40	+ 0	+10	− 6	−10		0	−0.33
115866	23 28 30.13	−35 15 21.7	8.69	H	352.125 554 12	−35.256 014 42		3.12	−20.11	−30.80	1.11	0.92	1.32	1.33	1.10	+13	−17	− 7	−43	− 6	+35	− 7	−37	+21	+ 8		0	0.24
115867	23 28 30.65	+46 45 36.6	9.46	H	352.127 700 44	+46.760 160 68		0.95	4.71	−7.76	0.76	0.88	1.39	0.72	0.95	− 8	+24	+ 5	−12	− 6	−12	+ 3	− 8	+35	− 3		0	0.45
115868	23 28 30.77	+71 11 13.9	9.64	H	352.128 219 76	+71.187 186 34		0.81	−5.32	−3.37	0.80	0.76	0.99	0.95	0.95	+ 7	− 5	+ 5	−14	+ 7	+18	+ 4	− 1	+17	+26		0	−0.09
115869	23 28 30.95	−46 42 50.2	8.44	G	352.128 959 44	−46.713 944 79		8.27	−9.30	−6.54	0.91	0.87	1.23	1.03	0.76	+ 5	+ 1	−26	+10	−18	+15	−16	−24	+25	−12		0	−0.44
115870	23 28 31.41	−47 27 12.9	11.96	3 H	352.130 878 14	−47.453 589 39		2.48	50.26	−13.96	2.22	1.79	2.90	2.52	1.80	− 6	−19	− 7	+27	−13	+ 2	−21	−24	+12	−24		3	−1.33
115871	23 28 31.64	+09 25 37.8	7.40	G	352.131 841 22	+09.427 169 15		7.33	95.07	−8.57	0.93	0.69	1.05	1.26	0.89	+16	− 7	−11	− 8	− 6	+17	− 3	+ 1	+23	+ 1		0	0.32
115872 H	23 28 32.81	+55 24 12.3	9.14	H	352.136 726 90	+55.403 422 09	A	1.04	−2.42	−7.20	1.38	1.23	1.60	1.85	1.73	−15	+ 9	+ 0	+ 0	+ 1	+30	− 3	+16	−20	−25		0	−0.41
115873	23 28 33.32	+51 03 48.3	9.09	G	352.138 814 33	+51.063 404 54		13.20	2.13	−142.04	0.79	0.99	1.22	0.97	1.26	−11	+12	+20	−16	+ 4	− 6	+ 1	−31	− 1	−26		0	0.75
115874	23 28 33.37	+48 38 39.6	7.99	G	352.139 052 26	+48.644 328 15		8.08	1.80	9.64	0.53	0.65	1.08	0.60	0.81	−49	+ 2	+21	+ 2	+11	+ 2	+20	−18	+21	−17		1	−1.90
115875	23 28 34.34	−08 31 43.1	8.96	H	352.143 080 12	−08.528 647 88		2.26	57.39	−29.19	1.08	0.79	1.27	1.55	1.12	+42	−22	−24	− 3	+10	+21	+17	+ 6	− 5	+16		0	0.61
115876 H	23 28 34.60	−38 20 35.2	8.91	H	352.144 150 45	−38.343 098 58	*	6.69	9.29	−39.54	0.91	0.81	1.08	1.06	0.87	+19	+ 1	− 1	+58	+ 3	+ 0	+ 3	+26	+ 3	+18		0	1.66
115877	23 28 35.93	+27 13 11.1	9.77	H	352.149 723 14	+27.219 759 08		4.09	−4.89	−8.28	1.19	0.81	1.46	1.31	0.92	+ 3	+19	−11	+32	− 6	+ 7	+ 0	−17	+33	+ 4		4	0.07
115878	23 28 38.51	−66 05 08.4	9.06	H	352.160 466 01	−66.085 656 56		3.08	8.41	−7.81	0.76	0.86	1.14	0.88	0.81	− 2	− 3	−44	−11	+ 4	− 2	+ 3	− 6	+ 3	+ 7		1	−2.03
115879	23 28 39.40	−43 41 30.0	9.34	H	352.164 154 02	−43.691 671 31		10.80	52.23	−207.68	0.93	1.06	1.33	1.01	1.11	+15	−16	−26	+27	+ 0	+ 3	+ 1	+23	+ 0	+13		0	−0.06
115880	23 28 40.17	+39 37 08.6	7.67	H	352.167 392 08	+39.619 043 71		13.63	124.75	−6.42	0.66	0.61	0.86	0.72	0.62	+14	+28	+ 6	+29	+13	−10	+21	+ 5	+29	+16		0	1.19
115881	23 28 40.52	−21 28 05.6	8.93	H	352.168 836 07	−21.468 230 77		1.38	5.27	−0.46	1.24	1.18	1.36	1.87	1.64	+32	− 3	−17	+22	+26	+11	+28	+44	− 1	+30		0	0.41
115882	23 28 41.98	+50 59 12.5	9.32	H	352.174 915 15	+50.986 807 74		3.82	−21.00	−11.43	0.72	0.84	1.16	0.82	1.00	−24	+10	+18	+11	− 3	+ 4	− 3	+ 5	+ 8	−23		0	−0.24
115883	23 28 42.55	+07 22 03.7	8.64	H	352.177 299 76	+07.367 693 15		4.21	−32.29	−40.05	1.08	0.85	1.32	1.33	0.81	+18	+ 4	−21	−27	− 2	+35	+10	−13	+22	+ 1		3	1.67
115884	23 28 43.37	−29 07 03.4	10.47	G	352.180 710 27	−29.117 601 04		5.37	152.76	−5.35	1.59	1.25	1.95	1.80	1.46	+17	−15	−12	−41	+ 7	+21	+ 7	−27	+17	+31		3	1.11
115885	23 28 43.87	+74 17 10.7	8.31	H	352.182 781 49	+74.286 297 31		5.01	11.45	−1.82	0.66	0.61	0.76	0.84	0.65	−14	−14	+32	−10	+ 2	+12	− 2	−12	+ 1	−22		0	−0.09
115886	23 28 44.41	−14 02 08.0	9.07	H	352.185 025 06	−14.035 543 83		7.06	71.63	−22.85	1.29	0.92	1.47	1.61	1.17	+10	+ 8	−29	−22	+ 2	+22	+13	− 6	+28	+11		0	2.69
115887	23 28 45.52	+42 24 40.7	7.78	H	352.189 682 54	+42.411 316 89		3.65	−8.15	−4.34	0.42	0.53	0.85	0.47	0.55	+ 2	+ 5	+15	+ 9	−19	+ 4	−10	−32	+13	+22		0	−0.67
115888	23 28 45.85	−35 43 45.6	9.72	G	352.191 025 29	−35.729 332 64		15.04	−36.56	58.07	1.70	1.18	1.73	1.84	1.52	− 7	+ 9	−31	−59	+ 7	+14	+18	−41	+37	− 6		0	2.56
115889	23 28 45.98	+11 30 44.2	8.91	H	352.191 598 61	+11.512 279 03		2.21	32.95	0.12	1.13	1.02	1.25	1.28	1.20	+30	+10	− 3	+28	+11	+ 6	+11	+24	− 2	+33		0	0.22
115890	23 28 46.18	−55 51 00.9	9.48	H	352.192 424 44	−55.850 241 99		4.87	65.76	−16.26	0.76	0.85	1.43	0.94	0.97	−29	− 1	− 7	− 1	− 9	+12	− 6	−21	−11	−24		0	2.35
115891 H	23 28 46.26	−00 50 07.2	7.87	H	352.192 754 71	−00.835 328 22	A	12.27	−130.62	−111.20	1.40	1.03	1.44	1.66	1.29	+32	+ 3	+11	+ 3	+14	+21	+11	+ 7	+ 7	+27		0	−0.03
115892	23 28 46.70	−05 23 21.8	6.99	H	352.194 582 13	−05.389 376 96		2.43	−6.69	−18.23	0.87	0.59	0.93	1.15	0.75	+28	−19	− 4	+ 0	+16	+ 8	+20	+25	+20	− 8		0	−0.47
115893	23 28 49.16	−59 26 11.7	7.15	H	352.204 852 73	−59.436 589 79		2.42	12.34	−0.92	0.48	0.50	0.73	0.51	0.54	−14	+ 7	−16	−17	+ 0	+ 0	− 1	−11	− 5	+ 0		0	−0.35
115894	23 28 49.34	+72 13 47.9	7.74	H	352.205 582 36	+72.229 975 05		17.59	57.56	85.25	0.50	0.51	0.62	0.54	0.59	− 1	+ 6	+ 9	+ 6	− 6	+ 0	− 6	+ 3	+16	+ 2		0	−0.68
115895	23 28 49.35	−56 52 42.3	8.46	H	352.205 643 73	−56.878 407 70		12.98	−20.03	5.29	0.51	0.62	0.94	0.59	0.69	−10	− 5	−10	+12	+ 0	+18	+ 3	−10	− 9	−10		1	1.17
115896	23 28 49.75	+31 47 46.3	7.48	H	352.207 277 67	+31.796 207 20		3.99	16.92	−3.59	0.65	0.57	0.92	0.90	0.58	+28	+ 9	− 2	+ 1	+ 4	+28	+ 5	−15	+24	+42		0	−1.42
115897	23

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
115801	9.307	0.013	8.809	0.013	*	0.468	0.016	T	0.54	0.02	L *	8.8479	0.0017	0.023	140	*	8.82	8.89		D	23276−7525	H 1	2 C A	AB	357	0.407	0.003	0.62	0.02	
115802	10.730	0.030	9.855	0.023		0.809	0.002	G	0.84	0.00	H	9.8712	0.0026	0.034	157		9.81	9.92		C			1							
115803	8.156	0.009	7.569	0.010		0.530	0.011	G	0.60	0.01	H	7.6287	0.0014	0.009	88		7.61	7.65		C			1							S
115804	9.509	0.012	8.201	0.007		1.111	0.011	T	1.07	0.01	L	8.2351	0.0015	0.019	192		8.21	8.26		C			1							
115805	10.655	0.038	9.552	0.024		0.951	0.035	T	0.94	0.03	L	9.6037	0.0020	0.021	127		9.56	9.63					1							
115806	5.908	0.003	5.980	0.003		−0.066	0.003	G	−0.04	0.00	H	5.9721	0.0006	0.006	104		5.97	5.98					1							S
115807	8.890	0.014	8.560	0.015		0.342	0.015	G	0.40	0.02	H	8.5955	0.0015	0.013	84		8.57	8.62		C			1							
115808	8.730	0.011	7.546	0.007		1.015	0.010	T	0.99	0.01	L	7.6005	0.0009	0.012	122		7.59	7.63					1							S
115809	10.233	0.022	8.897	0.013		1.133	0.020	T	1.10	0.02	L	8.9625	0.0019	0.022	153		8.93	9.00					1 G							
115810	7.812	0.019	7.513	0.022	A	0.344	0.015	G	0.40	0.02	H *	7.2942	0.0012	0.009	105	*	7.28	7.31		D	23278+7407	I 1	2 C A	AB	23	1.394	0.005	0.89	0.02	S
115811	8.177	0.010	7.745	0.011		0.402	0.015	G	0.47	0.02	H	7.8205	0.0012	0.012	104		7.80	7.84					1							S
115812	10.613	0.063	10.019	0.057		0.555	0.063	T	0.63	0.06	L	10.0177	0.0039	0.019	41		9.99	10.05		C			1							
115813	7.768	0.007	7.255	0.007		0.482	0.009	T	0.55	0.01	L	7.3057	0.0009	0.009	118		7.29	7.32		C			1							S
115814	10.155	0.024	9.542	0.022		0.569	0.024	T	0.64	0.02	L	9.6041	0.0024	0.024	141		9.56	9.64		C			1							
115815	8.819	0.024	8.283	0.025	*	0.510	0.026	T	0.58	0.03	L *	8.5816	0.0017	0.022	97	*	8.55	8.66		U 2	23277−2641	I 1	2 C A	AB	212	1.542	0.006	0.57	0.02	S
115816	10.429	0.033	8.915	0.016		1.273	0.029	T	1.23	0.03	L	8.9178	0.0025	0.021	93		8.88	8.96					1							
115817	8.754	0.018	8.294	0.018		0.434	0.023	T	0.50	0.02	L	8.3476	0.0020	0.010	43		8.33	8.37		C			1							S
115818	9.792	0.024	9.203	0.023		0.551	0.025	T	0.62	0.02	L	9.2313	0.0025	0.026	73		9.19	9.28		D			1							
115819	11.805	0.169	10.296	0.068		1.270	0.150	T	1.23	0.15	L	10.4468	0.0167	0.092	42		10.33	10.59	0.26	P 1 A			1							P
115820	7.876	0.009	7.590	0.010		0.293	0.015	G	0.33	0.02	H	7.6364	0.0016	0.010	74		7.62	7.65		C			1							S
115821						1.089	0.003	G	1.16	0.00	I	11.2002	0.0045	0.036	73		11.13	11.25		C			1							G
115822	8.367	0.009	7.324	0.005	A	0.905	0.001	G	0.90	0.02	A *	7.3715	0.0010	0.011	160	*	7.35	7.39		C	23278−5021	I 1	2 C B	AB	181	1.331	0.039	3.53	0.19	S
115823	8.805	0.012	8.611	0.014		0.186	0.017	T	0.20	0.02	L	8.6513	0.0016	0.017	115		8.62	8.68					1							
115824	7.867	0.008	7.594	0.008		0.245	0.005	G	0.27	0.01	H	7.6406	0.0018	0.015	116		7.61	7.66					1							S
115825	8.830	0.019	8.226	0.019	*	0.563	0.024	T	0.64	0.02	L *	8.3105	0.0019	0.013	59	*	8.29	8.34		D	23279+1108	I 1	2 C A	AB	278	8.093	0.010	2.10	0.04	S
115826	10.004	0.028	9.446	0.026		0.540	0.003	G	0.61	0.00	H	9.4866	0.0022	0.017	87		9.46	9.53		C			1							
115827	8.718	0.015	6.899	0.008		1.514	0.013	T	1.55	0.02	L	6.8477	0.0015	0.010	53		6.83	6.86					1							S
115828	9.002	0.013	8.339	0.012		0.593	0.015	G	0.66	0.01	H	8.3861	0.0013	0.013	94		8.36	8.40		C			1							S
115829	9.050	0.014	7.960	0.010		0.942	0.013	T	0.93	0.01	L	8.0169	0.0012	0.011	109		8.00	8.04			23280+2335	I 1	1							
115830	5.647	0.005	4.393	0.003		1.062	0.043	G	1.03	0.02	A	4.4401	0.0007	0.004	47		4.43	4.44		C			1							S
115831	10.237	0.019	9.896	0.021	A	0.200	0.495	G	0.49	0.07	B *	9.7661	0.0021	0.025	171	*	9.72	9.81		R	23280+4225	I 1	2 C A	AB	146	2.068	0.009	1.72	0.05	
115832	9.515	0.016	8.271	0.010		1.061	0.015	T	1.03	0.01	L	8.3288	0.0015	0.017	124		8.30	8.36		C			1							
115833	7.882	0.010	6.460	0.005		1.201	0.002	G	1.16	0.00	H	6.5030	0.0010	0.007	74		6.49	6.52		C			1							S
115834	8.938	0.010	8.061	0.008		0.783	0.010	T	0.82	0.01	L	8.1317	0.0015	0.013	141		8.11	8.15					1							S
115835	11.902	0.115	10.600	0.054		1.107	0.099	T	1.07	0.10	L	10.7262	0.0042	0.039	135		10.66	10.79					1							G
115836	7.179	0.004	5.645	0.003		1.278	0.003	G	1.24	0.00	H	5.6572	0.0006	0.007	134		5.65	5.67					1							S
115837	9.665	0.021	8.548	0.014		0.962	0.020	T	0.95	0.02	L	8.6066	0.0014	0.013	67		8.59	8.63		C			1							
115838	9.895	0.025	8.024	0.011		1.555	0.022	T	1.57	0.02	L	7.9814	0.0015	0.013	69		7.96	8.00					1							S
115839	7.508	0.007	6.476	0.005		0.902	0.008	G	0.90	0.01	H	6.5243	0.0012	0.007	70		6.51	6.54					1							S
115840	10.128	0.023	9.282	0.018		0.759	0.022	T	0.80	0.02	L	9.3613	0.0024	0.023	131		9.33	9.40		C			1							
115841	8.078	0.008	8.100	0.010		−0.018	0.011	T	0.00	0.01	L	8.1279	0.0012	0.014	114		8.11	8.16					1							
115842	9.617	0.016	8.449	0.011		1.002	0.015	T	0.98	0.01	L	8.4974	0.0015	0.017	135		8.47	8.53					1							
115843	10.330	0.029	8.848	0.015		1.248	0.026	T	1.21	0.03	L	8.9004	0.0022	0.018	85		8.88	8.93					1							
115844	9.345	0.023	7.682	0.012		1.390	0.020	T	1.36	0.02	L	7.4756	0.0081	0.056	56		7.39	7.54		U 2			1 S							S P
115845	8.512	0.016	8.087	0.016		0.401	0.021	T	0.47	0.02	L	8.1736	0.0011	0.009	64		8.15	8.19		C			1							S
115846						1.032	0.003	G	1.08	0.00	I	11.6039	0.0058	0.049	85		11.51	11.68					1							G
115847	7.788	0.006	7.460	0.006		0.333	0.003	G	0.39	0.00	H	7.4981	0.0009	0.009	131		7.48	7.52		C			1							S
115848	7.759	0.005	7.348	0.006	*	0.389	0.007	T	0.45	0.01	L *	7.3675	0.0010	0.013	246	*	7.35	7.39		D	23282−5626	I 1	2 C A	AB	349	0.820	0.004	1.34	0.01	S
115849	10.123	0.025	9.125	0.018		0.934	0.007	G	0.98	0.01	I	9.1492	0.0015	0.018	85		9.11	9.20					1							
115850						0.980	0.020	G	1.02	0.02	I	11.3149	0.0031	0.033	119		11.26	11.37					1							G
115851	7.865	0.013	7.431	0.014		0.410	0.018	T	0.48	0.02	L	7.4705	0.0019	0.009	42		7.45	7.48			23283+0605	I 1	1							S
115852	8.729	0.015	8.175	0.014		0.519	0.018	T	0.59	0.02	L	8.2102	0.0016	0.011	76		8.18	8.23		C			1							S
115853	10.536	0.039	9.575	0.028		0.832	0.037	T	0.85	0.03	L	9.6616	0.0037	0.028	80		9.61	9.72					1							
115854	10.612	0.031	8.696	0.011		1.591	0.026	T	1.61	0.03	L	8.6295	0.0021	0.022	154		8.60	8.66					1							
115855	10.613	0.054	9.264	0.028		1.160	0.040	G	1.12	0.04	R	9.3388	0.0030	0.019	53		9.30	9.37					1							
115856	6.968	0.005	6.708	0.005		0.248	0.007	T	0.28	0.01	L	6.7375	0.0018	0.017	108		6.71	6.77		U 2			1							S
115857	8.550	0.011	7.458	0.007		0.944	0.010	T	0.95	0.02	A	7.5212	0.0012	0.011	112		7.50	7.54		C			1							S
115858	7.109	0.004	6.929	0.005		0.160	0.015	G	0.19	0.02	A	6.9618	0.0013	0.012	116		6.94	6.98	0.12	P 1 A			1							S
115859	9.005	0.012	8.229	0.010		0.706	0.012	T	0.76	0.01	L	8.2963	0.0014	0.016	124		8.27	8.32					1							
115860	11.202	0.075	9.873	0.034		1.130	0.015	G	1.22	0.02	I	9.9315	0.0019	0.024	107		9.89	9.97		D	23284+1604	I 1	1							
115861	9.656	0.017	8.814	0.013		0.740	0.016	T	0.79	0.01	L	8.8858	0.0018	0.015	122		8.85	8.92		C			1							S
115862	10.032	0.038	8.285	0.017		1.457	0.033	T	1.46	0.05	L	8.2396	0.0022	0.012	66		8.22	8.27		C			1							S
115863	8.817	0.015	8.501	0.018	*	0.303	0.025	T	0.35	0.03	L *	8.7396	0.0021	0.016	131	*	8.71	8.77		D	23285−7317	I 1	2 C A	AB	42	2.842	0.008	1.70	0.03	S P
115864	9.310	0.013	7.823	0.007		1.252	0.012	T	1.21	0.01	L	7.8499	0.0011	0.012	170		7.83	7.87		C			1							
115865	10.010	0.046	8.400	0.024		1.348	0.041	T	1.31	0.05	L	8.3997	0.0025	0.016	48		8.37	8.43		C			1							
115866	10.251	0.039	8.788	0.020		1.233	0.034	T	1.19	0.03	L	8.8545	0.0033	0.021	73		8.81	8.88					1							
115867	11.387	0.058	9.622	0.021		1.471	0.049	T	1.48	0.07	L	9.5894	0.0030	0.030	162		9.54	9.65					1							
115868	10.037	0.025	9.700	0.027		0.320	0.034	T	0.37	0.05	L	9.7200	0.0019	0.020	119		9.68	9.76		C			1							G
115869	8.873	0.014	8.462	0.014		0.369	0.004	G	0.43	0.00	H	8.5301	0.0027	0.020	92		8.49	8.57					1							S
115870											T	12.0466	0.0353	0.255	122		11.63	12.38	0.60	P 1 A			1							G
115871	7.976	0.010	7.449	0.010		0.495	0.013	T	0.57	0.01	L	7.5085	0.0014	0.011	55		7.50	7.53		C			1 S							S
115872	9.440	0.016	9.247	0.019	*	0.185	0.023	T	0.20	0.03	L *	9.2042	0.0019	0.020	133	*	9.17	9.23		D	23285+5524	I 1	2 C A	AB	261	0.834	0.005	1.33	0.02	
115873	10.011	0.020	9.163	0.016		0.740	0.015	G	0.79	0.01	H	9.2378	0.0019	0.021	169		9.20	9.28		C			1 G							
115874	8.445	0.006	8.033	0.006		0.402	0.006	G	0.47	0.01	H	8.0912	0.0013	0.015	235		8.07	8.12					1							S
115875	9.487	0.023	9.028	0.023		0.433	0.030	T	0.50	0.03	L	9.0542	0.0018	0.012	71		9.03	9.10		C			1							S
115876	9.467	0.016	8.956	0.015	*	0.490	0.017	T	0.56	0.02	L *	9.0163	0.0021	0.021	114	*	8.98	9.04		C	23286−3821	H 1	2 C S B	AB	140	0.152	0.037	1.70	0.74	
115877	10.126	0.030	9.767	0.032		0.340	0.041	T	0.40	0.06	L	9.8546	0.0027	0.026	82		9.81	9.90					1							
115878	10.597	0.032	9.199	0.016		1.182	0.028	T	1.14	0.03	L	9.2241	0.0019	0.023	143		9.18	9.27					1							
115879	10.122	0.026	9.408	0.023		0.654	0.002	G	0.72	0.00	H	9.4722	0.0028	0.020	88		9.44	9.50		C			1							
115880	8.235	0.010	7.726	0.011		0.500	0.015	G	0.57	0.02	H	7.7797	0.0011	0.010	87		7.76	7.81		C			1							S
115881	10.130	0.038	9.006	0.024		0.968	0.035	T	0.95	0.03	L	9.0966	0.0033	0.023	52		9.06	9.14					1							
115882	9.828	0.017	9.374	0.017		0.465	0.015	G	0.54	0.02	H	9.4201	0.0019	0.023	167		9.38	9.47		C			1							
115883	9.201	0.020	8.667	0.019		0.501	0.025	T	0.57	0.03	L	8.7506	0.0015	0.015	58		8.72	8.78					1							S
115884	11.213	0.059	10.515	0.050		0.669	0.015	G	0.73	0.01	H	10.6147	0.0033	0.037	105		10.56	10.68		C			1							
115885	8.509	0.011	8.329	0.013		0.172	0.016	T	0.19	0.02	L	8.3637	0.0013	0.012	107		8.34	8.39		C			1							S
115886	9.685	0.031	9.103	0.029		0.546	0.031	T	0.62	0.03	L	9.1923	0.0026	0.017	58		9.16	9.22		C			1							
115887	7.963	0.005	7.798	0.007		0.158	0.008	T	0.17	0.01	L	7.8335	0.0010	0.012	178		7.81	7.86					1							S
115888	10.668	0.046	9.845	0.037		0.771	0.005	G	0.81	0.00	H	9.8626	0.0033	0.027	81		9.81	9.92					1 S							
115889	10.399	0.047	9.038	0.026		1.153	0.042	T	1.12	0.04	L	9.0781	0.0020	0.016	54		9.04	9.12		C			1							
115890	10.524	0.021	9.580	0.015		0.833	0.019	T	0.85	0.01	L	9.6382	0.0023	0.036	279		9.58	9.70					1							
115891	8.441	0.015	7.925	0.014	A	1.000	0.495	G	0.56	0.03	L *	7.9728	0.0019	0.011	64	*	7.96	7.99		D	23288−0050	I 1	2 C A	AB	64	1.231	0.014	2.38	0.04	S
115892	8.954	0.017	7.150	0.008		1.502	0.015	T	1.53	0.02	L	7.1205	0.0007	0.008	67		7.10	7.13					1							S
115893	8.903	0.010	7.292	0.005		1.349	0.009	T	1.31	0.01	L	7.2970	0.0010	0.012	172		7.27	7.32					1							S
115894	8.313	0.008	7.781	0.009		0.499	0.011	T	0.57	0.01	L	7.8453	0.0013	0.014	144		7.82	7.87		C			1							S
115895	9.135	0.010	8.520	0.009		0.581	0.015	G	0.65	0.01	H	8.5820	0.0016	0.023	219		8.55	8.63					1							S
115896	8.092	0.009	7.542	0.008		0.541	0.015	G	0.61	0.02	H	7.5964	0.0012	0.011	85		7.58	7.61		C			1							S
115897	9.680	0.020	8.572	0.014		0.947	0.019	T	0.94	0.01	L	8.6057	0.0027	0.016	92		8.58	8.64					1							
115898	10.978	0.051	10.255	0.041		0.664	0.053	T	0.73	0.04	L	10.2777	0.0023	0.025	104		10.23	10.31					1							
115899	8.278	0.011	7.053	0.006		1.074	0.005	G	1.04	0.00	H	7.1061	0.0008	0.008	128		7.09	7.12					1							S
115900	9.620	0.020	9.110	0.019		0.474	0.015	G	0.55	0.02	H	9.1161	0.0036	0.026	86		9.07	9.16		R	23289−4346	I 1	1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
115901	23 28 56.78	−07 24 07.3	8.62	H	352.236 595 10	−07.402 035 19	6.02	30.47	−10.82	1.23	0.89	1.43	1.46	1.02	+34	−18	−54	−37	+17	−14	+24	+ 3	+ 2	+ 5	0	0.65
115902	23 28 57.67	+75 13 31.6	6.65	G	352.240 274 66	+75.225 431 26	3.07	−17.67	−2.94	0.51	0.49	0.61	0.60	0.51	−23	−16	+35	− 9	+ 3	+22	− 3	− 1	− 3	−33	0	1.01
115903	23 28 58.81	+73 58 46.8	8.84	H	352.245 041 57	+73.979 655 77	9.54	3.59	−58.73	0.76	0.68	0.85	1.04	0.76	− 3	+ 6	+21	− 4	− 5	− 4	− 3	+ 1	+14	+ 0	3	1.41
115904	23 28 59.52	+21 46 58.0	8.81	H	352.247 992 54	+21.782 783 94	5.84	18.15	−6.61	0.77	0.63	1.06	0.90	0.67	+43	−10	− 6	+32	+ 8	− 8	+ 9	− 4	+13	+46	0	1.11
115905	23 29 00.11	+61 25 43.7	8.47	H	352.250 452 10	+61.428 813 15	3.91	25.88	1.88	0.66	0.71	0.87	0.85	0.80	−27	+ 5	+23	+ 9	+13	+ 8	+10	−16	− 3	−31	1	1.05
115906	23 29 00.69	−09 15 57.7	6.20	H	352.252 873 20	−09.266 039 62	1.48	−43.49	−26.51	0.79	0.61	0.93	0.96	0.84	+49	−34	−24	− 8	+ 0	+21	+ 6	−12	− 7	+21	2	0.39
115907	23 29 00.80	−44 29 52.9	6.43	H	352.253 313 59	−44.498 035 75	6.12	37.63	−13.37	0.54	0.57	0.74	0.59	0.62	+15	− 2	+ 4	+17	+ 5	+ 7	+ 5	+15	−12	+13	0	−0.60
115908	23 29 00.93	−63 06 38.2	5.66	1 T	352.253 875 51	−63.110 622 74	8.58	39.18	−13.63	0.40	0.39	0.54	0.46	0.42	+ 5	− 7	− 5	+ 9	+13	+ 4	+13	− 1	−19	+ 8	0	−0.32
115909	23 29 02.12	−01 28 13.1	8.61	H	352.258 838 82	−01.470 303 74	3.05	−5.54	−11.88	1.08	0.81	1.29	1.82	1.31	+32	− 6	− 3	+20	+ 4	+31	− 1	+ 4	+29	+19	0	0.97
115910	23 29 02.22	+16 00 45.2	7.11	H	352.259 246 47	+16.012 545 78	5.52	−0.26	0.21	0.74	0.49	0.87	0.80	0.54	+36	+ 1	−12	−10	− 1	+ 8	+ 2	−25	+40	+50	0	1.58
*115911	23 29 04.14	+66 19 13.4	9.12	H	352.267 266 32	+66.320 397 00	1.72	−16.32	−8.64	0.72	0.69	0.85	0.82	0.78	+ 0	− 9	− 4	−21	−18	+ 6	−18	− 8	+14	− 3	0	0.21
*115912	23 29 04.05	+59 45 11.0	8.45	H	352.266 867 25	+59.753 054 42	1.47	8.50	−1.66	0.68	0.68	0.92	0.88	0.76	− 9	+22	+21	− 2	+10	+19	+ 4	−22	− 6	−16	1	0.41
115913	23 29 04.61	−46 43 22.6	9.08	H	352.269 222 11	−46.722 937 78	2.53	−21.69	−6.65	1.08	0.95	1.38	1.19	0.84	+14	− 6	−28	−10	−13	+10	−17	−40	+21	−14	0	1.02
115914	23 29 04.86	−32 10 30.9	10.48	H	352.270 246 09	−32.175 260 35	6.25	−8.14	−10.06	1.42	1.35	1.82	1.64	1.65	+25	+ 2	−30	−34	− 8	+11	− 4	−15	+ 3	+30	0	1.28
115915	23 29 05.70	+23 02 53.8	6.45	H	352.273 746 95	+23.048 290 00	6.27	−34.14	−84.94	0.50	0.46	0.69	0.58	0.49	+34	+ 1	−12	+16	+ 5	−20	+ 4	− 5	− 4	+41	0	1.06
115916 H	23 29 06.46	−28 15 50.0	7.66	G	352.276 921 25	−28.263 893 01 A	4.48	−26.22	−29.06	1.04	0.87	1.12	1.06	0.90	+36	− 1	− 1	−28	+ 3	+11	+ 3	−19	+27	+34	0	0.12
115917	23 29 08.19	−51 01 11.7	8.26	H	352.284 109 28	−51.019 912 29	16.76	74.48	58.71	0.70	0.64	1.12	0.76	0.67	−14	+ 1	−24	−26	− 3	+ 3	− 2	−15	+20	−14	0	0.51
115918	23 29 08.93	+49 54 41.5	10.62	H	352.287 200 41	+49.911 515 82	2.84	−14.31	−3.16	1.12	1.21	1.83	1.38	1.56	−33	+ 7	+18	+13	+ 5	− 2	+ 9	+ 2	+14	−22	1	1.33
115919	23 29 09.26	+12 45 37.8	4.54	H	352.288 584 56	+12.760 492 43	18.34	59.62	25.18	0.69	0.57	0.74	0.67	0.67	+15	+18	−11	+ 8	− 7	−12	− 3	− 8	+ 6	+30	0	2.12
115920	23 29 10.64	+75 34 28.2	9.61	H	352.294 339 99	+75.574 511 26	1.28	−2.88	−4.80	0.78	0.75	0.91	0.99	0.85	−18	−18	+28	− 8	+ 1	+ 0	+ 1	− 3	+ 0	−13	0	−0.98
115921	23 29 10.81	+31 42 17.5	7.92	H	352.295 051 67	+31.704 858 03	0.94	14.18	3.38	0.71	0.59	0.89	0.90	0.59	+26	− 3	− 6	−12	+ 1	+20	+ 0	−26	+22	+42	0	−0.52
115922 H	23 29 11.05	−23 14 39.9	9.23	H	352.296 030 60	−23.244 424 28 A	5.13	−22.86	−38.82	2.99	1.95	1.95	2.93	1.83	+15	+ 9	−39	+29	−29	+27	−11	+ 4	+11	+ 2	2	−0.07
115923	23 29 12.41	−49 39 59.4	10.25	2 H	352.301 703 51	−49.666 509 57	7.85	16.97	8.51	0.88	0.94	1.67	0.98	1.09	−11	−10	−11	−24	− 7	+11	− 7	−15	+ 8	− 9	0	−0.14
*115924	23 29 13.08	−22 08 51.0	8.08	G	352.304 514 84	−22.147 498 05	11.61	25.72	−3.37	1.05	0.80	1.16	1.54	1.13	+ 8	− 7	−23	+12	− 5	+28	+ 0	+ 3	+ 6	+ 7	0	−0.83
*115925	23 29 12.77	+63 22 27.5	11.63	3 H	352.303 192 92	+63.374 307 32	2.76	−0.73	−1.25	2.47	2.59	3.21	3.25	3.01	− 7	+ 3	+ 7	+ 8	− 1	− 4	+ 1	−16	− 3	+ 1	3	
115926	23 29 14.22	+14 23 19.7	8.82	H	352.309 231 80	+14.388 817 04	1.78	26.65	1.63	1.15	0.77	1.20	0.98	0.80	− 2	+28	−18	−12	+ 5	− 6	+ 9	−12	+13	+13	0	−0.94
115927	23 29 14.28	+32 39 56.4	8.31	G	352.309 498 36	+32.665 661 55	6.89	23.17	−17.23	0.86	0.66	1.07	1.00	0.65	+14	+10	−17	+17	+ 5	− 3	+ 9	−23	+21	+23	0	0.77
115928 H	23 29 16.32	−85 42 33.8	7.42	H	352.318 011 70	−85.709 400 10 A	1.40	4.99	−9.12	0.64	0.72	0.75	0.81	0.75	+11	− 5	−10	− 2	+18	+16	+16	−12	+ 9	+26	1	−0.95
115929	23 29 16.39	−51 35 17.2	8.97	H	352.318 307 31	−51.588 097 56	14.79	−5.29	36.52	0.81	0.75	1.28	1.08	0.81	−10	−12	−21	+ 8	−14	+ 5	−14	−13	+16	−22	0	0.58
115930	23 29 16.92	−54 30 05.2	6.53	H	352.320 490 93	−54.501 440 11	5.49	8.48	11.68	0.39	0.45	0.71	0.49	0.52	−17	+ 7	− 3	+ 2	− 4	+10	+ 0	−28	− 8	− 4	0	−0.88
115931	23 29 17.04	+42 21 36.3	7.68	G	352.320 992 69	+42.360 096 17	2.50	4.00	−0.49	4.88	6.23	8.51	5.27	5.73	+ 7	+15	+20	− 8	−12	− 4	− 5	−45	− 6	+24	0	
115932	23 29 18.61	−29 48 23.9	10.26	H	352.327 529 24	−29.806 635 49	7.03	47.75	8.00	1.35	1.19	1.69	1.51	1.46	+34	−25	−13	−33	+ 0	+28	− 1	−10	+22	+38	0	−0.19
115933	23 29 19.79	−72 39 47.7	8.76	H	352.332 442 23	−72.663 259 39	1.41	−6.82	3.02	0.71	0.72	0.94	0.75	0.75	+ 1	+ 9	−33	− 8	+ 4	+ 0	+ 7	−18	+ 9	+18	0	−1.21
115934	23 29 21.00	+25 48 43.5	7.92	H	352.337 492 79	+25.812 089 36	3.84	9.55	−0.77	0.68	0.57	0.88	0.73	0.64	+29	+ 1	+ 2	+ 3	+15	− 5	+15	+15	− 9	+36	0	−0.67
115935	23 29 21.68	−67 12 57.4	8.39	H	352.340 328 54	−67.215 941 78	3.64	37.84	19.54	0.71	0.69	0.94	0.78	0.67	−15	− 1	−26	− 5	+16	+ 7	+18	− 7	−18	− 4	0	1.04
115936	23 29 22.03	−03 35 43.2	9.01	H	352.341 789 28	−03.595 344 38	−1.78	4.06	2.98	0.98	0.78	1.16	1.23	1.03	+40	− 9	− 8	−11	+10	+15	+16	+12	+29	+15	0	0.20
115937	23 29 23.28	−45 37 20.2	11.15	G	352.346 998 62	−45.622 285 20	20.68	148.80	−181.98	2.03	1.86	2.57	2.81	2.08	+24	+ 8	−17	+19	+ 6	+ 5	+ 8	− 4	+13	+30	0	1.14
115938	23 29 24.32	−39 24 43.1	8.57	H	352.351 345 60	−39.411 964 96	1.22	1.62	−13.08	0.78	0.78	1.11	0.83	0.85	+14	+16	− 7	+17	+ 6	+13	+ 6	+11	− 5	+12	0	0.11
115939 H	23 29 25.46	+52 40 33.5	9.05	H	352.356 092 30	+52.675 973 61 A	1.90	1.68	−0.49	1.12	1.29	1.67	1.23	1.45	−31	− 6	+10	+23	−10	+ 8	−12	+31	+28	− 7	1	0.63
115940	23 29 25.70	−48 24 00.2	8.35	G	352.357 092 87	−48.400 044 33	4.15	16.45	−1.06	0.76	0.62	1.06	0.82	0.58	−16	− 1	−17	− 2	+14	+27	−15	−30	+ 3	−35	0	−1.92
115941	23 29 25.71	−24 02 19.2	7.71	H	352.357 108 97	−24.038 661 10	5.39	6.22	10.74	0.86	0.75	0.94	1.19	0.88	+16	−22	−23	+18	+ 0	+10	+ 5	+21	−16	− 6	0	0.82
115942	23 29 25.79	−52 40 42.8	6.80	H	352.357 475 94	−52.678 566 20	7.03	41.83	−4.56	0.52	0.55	0.80	0.64	0.52	+ 1	− 2	−33	+ 1	+ 0	+ 4	+ 1	−17	+ 9	+ 1	0	0.31
115943	23 29 26.16	+59 36 09.8	10.48	2 H	352.358 986 40	+59.602 732 24	−0.35	5.25	−2.71	2.47	2.54	3.28	2.83	2.94	−15	+27	+13	+ 0	+11	+ 4	+ 8	+28	− 4	−20	3	
115944	23 29 26.93	+46 27 53.8	6.88	H	352.362 224 32	+46.464 945 39	4.68	14.97	−12.15	0.36	0.47	0.69	0.36	0.52	+ 0	+17	+13	−38	− 9	−10	− 7	− 6	+22	+ 4	1	−0.38
115945	23 29 27.00	−01 47 28.2	6.35	G	352.362 480 95	−01.791 159 43	3.53	−14.39	−22.00	0.71	0.56	0.89	1.07	0.76	+31	− 6	−13	+16	− 3	+29	− 4	+ 3	+36	+10	0	0.12
115946	23 29 27.08	−39 31 09.3	9.72	H	352.362 823 51	−39.519 237 46	2.27	4.91	3.30	0.89	1.00	1.34	0.97	1.08	+25	+ 8	−11	+18	+ 6	+11	+ 6	+16	−15	+18	0	−0.67
115947	23 29 27.41	+49 14 00.9	8.95	H	352.364 193 98	+49.233 589 06	2.67	−12.74	−7.12	0.60	0.71	1.13	0.75	0.99	−43	− 2	+24	+16	− 3	− 7	+ 5	+ 2	+12	−12	1	0.79
115948	23 29 28.32	−60 44 55.1	8.01	H	352.368 007 49	−60.748 639 61	16.61	−1.94	8.44	0.54	0.60	0.82	0.64	0.70	−10	− 6	− 6	+16	+12	+ 6	+13	+10	−23	−14	0	0.46
115949	23 29 28.82	+30 25 58.3	7.67	H	352.370 083 05	+30.432 866 60	2.30	−15.91	−54.57	0.62	0.50	0.84	0.62	0.51	+15	+12	−12	+20	+10	− 7	+16	−16	+27	+29	0	1.09
115950	23 29 30.12	+59 36 12.8	8.26	H	352.375 497 36	+59.603 567 73	2.83	6.45	−1.57	0.70	0.69	0.93	0.81	0.86	− 9	+30	+12	+12	+ 8	+ 3	+ 5	−18	− 7	−15	3	0.01
115951	23 29 30.32	−01 02 09.0	6.88	H	352.376 353 63	−01.035 826 77	25.33	−12.54	−30.18	0.86	0.62	1.00	1.20	0.95	+29	− 1	−12	− 5	+11	+20	+16	+10	+28	+24	0	−0.02
115952	23 29 31.26	+51 41 06.8	7.68	2 H	352.380 257 53	+51.685 230 39	1.11	−2.18	−5.72	0.53	0.63	0.91	0.67	0.80	−37	+ 2	+21	− 1	+ 4	− 4	+ 5	− 3	+20	−35	0	0.47
115953	23 29 31.98	−04 31 55.9	6.26	H	352.383 233 84	−04.532 183 32	20.44	179.73	−231.95	0.73	0.55	0.86	1.04	0.64	+29	+11	− 7	+ 8	+10	+30	+17	+18	+17	− 3	0	0.13
115954	23 29 33.77	−13 18 56.8	10.08	G	352.390 701 85	−13.315 776 40	7.37	48.82	−86.91	1.75	1.23	1.94	2.44	1.63	+13	− 4	−29	−26	+ 7	− 3	+ 7	−11	+26	+ 0	0	0.65
115955	23 29 34.24	−47 02 09.0	10.19	G	352.392 659 49	−47.035 844 83	37.51	233.03	−74.14	1.35	1.06	1.80	1.57	1.04	− 5	−14	−12	+ 6	−12	+10	−17	−31	+18	−25	1	0.04
*115956	23 29 36.02	+38 38 36.1	7.35	2 H	352.400 100 75	+38.643 374 38	1.80	7.33	1.01	0.69	0.56	0.89	0.71	0.56	+13	+37	+17	+21	+ 9	−13	+23	+ 1	+32	+ 9	0	2.65
*115957 H	23 29 35.97	−40 01 04.8	8.54	H	352.399 872 80	−40.018 008 37 *	7.83	−22.39	1.63	0.72	0.87	1.08	0.80	0.96	+30	+ 2	− 3	+27	+11	+ 5	+10	+23	−16	+23	0	0.84
115958	23 29 36.34	−06 50 08.7	8.27	H	352.401 421 67	−06.835 744 30	9.25	6.43	−5.30	1.04	0.73	1.19	1.54	1.01	+42	−36	−31	− 9	+13	+22	+27	+18	−14	+ 3	0	−1.48
115959	23 29 36.73	+48 22 51.5	7.97	H	352.403 053 57	+48.380 961 74	0.95	−3.40	−5.43	0.51	0.65	1.07	0.60	0.73	−34	− 3	+37	− 9	+ 7	+ 4	+ 7	− 9	+12	−12	0	−1.64
115960	23 29 37.32	−16 44 44.9	9.91	H	352.405 510 42	−16.745 794 52	1.73	53.13	13.52	1.46	1.31	1.91	1.62	1.45	+21	+ 5	−30	− 9	− 4	+37	+10	+ 0	+21	+29	3	0.50
115961	23 29 38.62	−53 25 08.2	9.23	H	352.410 932 99	−53.418 934 89	2.18	5.60	−6.88	0.62	0.80	1.11	0.86	0.78	− 8	+ 6	−15	+31	− 4	+ 9	− 5	−21	+ 3	−15	0	0.40
115962	23 29 38.85	+23 08 55.7	8.87	H	352.411 862 71	+23.148 793 99	2.78	14.65	−15.55	0.79	0.61	0.97	0.88	0.68	+25	− 8	−15	+27	+ 4	−11	+ 6	− 6	+ 4	+35	0	−0.03
115963	23 29 39.29	+49 06 25.7	7.74	H	352.413 696 80	+49.107 145 29	2.59	−5.03	−0.60	0.48	0.60	0.94	0.60	0.79	−42	+ 2	+21	+27	− 2	+ 7	+ 5	+ 3	+ 3	−14	0	−0.98
115964	23 29 40.66	+03 59 03.1	11.24	H	352.419 403 33	+03.984 187 36	18.04	45.52	−47.38	2.40	2.24	2.92	2.81	2.51	+31	+ 4	−28	−17	+14	−10	+13	+14	−16	+27	8	−1.58
115965	23 29 43.08	+29 15 39.8	9.43	H	352.429 507 38	+29.261 063 63	1.72	−5.59	−7.54	0.97	0.76	1.26	1.11	0.77	+16	+ 6	−12	+16	− 1	+ 5	+ 3	−20	+28	+23	0	−1.02
115966	23 29 43.53	−38 23 19.3	9.53	H	352.431 383 54	−38.388 691 29	17.49	335.07	−82.68	1.06	0.96	1.34	1.24	1.11	+24	− 4	−19	+58	+ 3	+ 3	+ 6	+21	− 1	+28	2	1.52
115967 H	23 29 44.96	−76 19 30.1	8.33	H	352.437 345 65	−76.325 030 70 A	9.39	54.21	−10.57	1.00	1.03	0.95	0.95	0.79	+ 8	+ 1	−16	+16	+ 6	−10	+ 7	+ 0	+ 6	+ 7	2	0.44
115968	23 29 45.67	−18 30 58.6	9.03	H	352.440 286 05	−18.516 270 13	3.18	−5.69	−20.26	1.29	1.02	1.48	1.58	1.27	+13	+27	−18	− 8	+16	− 4	+18	+20	+ 5	+11	0	1.90
115969	23 29 46.35	+12 01 28.3	8.59	H	352.443 124 42	+12.024 527 21	10.48	98.19	−39.07	1.04	0.86	1.22	1.14	1.08	+15	+15	−21	+ 4	+13	+10	+18	+ 7	+25	+36	0	−0.66
115970	23 29 47.31	−81 55 31.8	9.27	H	352.447 117 58	−81.925 493 56	8.86	152.62	−22.66	0.80	0.69	0.88	0.94	0.74	+13	+ 8	− 1	+16	+ 4	+13	+ 6	− 6	− 3	+26	1	1.01
115971	23 29 47.78	+56 48 12.5	8.30	H	352.449 074 32	+56.803 479 04	4.43	16.61	−4.65	0.62	0.64	0.85	0.92	0.92	−33	+ 6	− 4	+ 3	+10	+ 4	+ 9	− 7	+ 5	−47	0	1.77
115972	23 29 49.05	+47 30 05.6	9.29	H	352.454 381 15	+47.501 553 30	2.07	15.05	3.24	0.83	1.00	1.54	0.90	1.02	+ 9	+17	+38	−15	−27	−25	−13	+ 5	+31	+ 2	1	0.77
115973	23 29 49.54	−71 39 47.4	9.02	H	352.456 397 09	−71.663 174 23	0.91	6.92	−11.97	0.83	0.77	1.03	0.98	0.85	− 5	+ 6	−29	+23	−12	− 2	−11	+ 2	+ 5	+ 1	1	−0.79
115974	23 29 49.54	+28 53 43.5	8.58	H	352.456 421 58	+28.895 402 87	2.07	20.03	−33.71	0.80	0.69	1.12	0.82	0.67	+18	+25	− 7	+ 6	− 3	+12	+ 7	−27	+38	+21	0	−0.04
115975	23 29 50.11	−45 53 37.6	7.88	H	352.458 801 97	−45.893 774 85	10.19	49.37	−80.31	0.95	0.74	1.13	1.26	0.82	+ 9	+ 7	−22	+24	− 9	+ 1	− 5	−13	+33	+ 8	0	−1.84
115976	23 29 50.55	−17 16 20.2	9.44	H	352.460 612 96	−17.272 264 65	12.23	−35.67	−124.63	1.30	1.03	1.48	1.55	1.34	+14	+ 1	−10	−19	+16	+29	+23	+17	+17	+18	0	0.26
115977	23 29 50.86	+43 56 26.4	8.29	H	352.461 937 35	+43.940 670 08	3.32	−9.94	−6.85	0.54	0.60	0.97	0.59	0.66	−13	+ 6	+13	+ 8	−11	−10	− 4	−26	+22	− 3	0	−0.69
115978	23 29 52.07	+11 40 44.4	8.45	H	352.466 971 29	+11.679 009 94	9.61	3.04	4.29	0.96	0.98	1.20	1.09	1.21	+41	− 1	−31	+10	+21	+ 4	+23	+25	+15	+50	0	0.47
115979	23 29 52.70	+35 00 50.5	7.53	H	352.469 596 47	+35.014 039 66	2.11	−4.48	−5.38	0.80	0.57	0.96	0.86	0.58	− 3	+26	− 9	+24	+17	+ 4	+23	− 9	+21	+11	0	0.01
115980	23 29 53.55	+50 46 38.9	8.43	H	352.473 124 88	+50.777 471 55	0.25	−3.02	−2.84	0.58	0.72	1.03	0.75	0.96	−30	+ 3	+18	+ 2	+ 8	+ 2	+ 9	− 6	+ 6	−21	0	−1.11
115981 H	23 29 54.20	−20 34 32.7	8.27	H	352.475 818 91	−20.575 761 07 *	3.83	1.16	5.08	5.30	14.50	2.25	2.32	2.52	+38	− 5	− 3	+ 6	+ 6	+23	+ 5	+ 6	+18	+58	1	3.32
115982	23 29 54.31	+24 46 20.6	7.22	H	352.476 308 52	+24.772 375 55	5.48	−18.89	−22.72	0.57	0.54	0.75	0.62	0.59	+33	+15	−13	+25	+19	−13	+20	+17	+ 4	+45	0	0.47
115983	23 29 54.67	−20 34 13.6	9.58	H	352.477 797 59	−20.570 443 13 C	3.83	1.16	5.08	79.75	77.73	2.25	2.32	2.52	+42	− 3	− 5	− 2	+ 1	+23	+ 0	+ 2	+18	+58	1	3.32
115984	23 29 55.90	+01 09 49.5	7.98	H	352.482 897 33	+01.163 752 97	5.46	16.57	0.00	0.95	0.60	1.10	1.51	0.89	+35	− 7	− 7	− 3	− 1	− 2	− 9	−16	+33	−26	0	0.98
115985	23 29 56.50	+45 29 15.0	8.75	H	352.485 429 81	+45.487 511 94	6.11	17.42	0.18	0.69	0.71	1.05	0.79	0.82	+ 7	+14	+ 7	+14	− 4	− 1	+ 0	− 5	+ 8	+25	0	2.05
115986	23 29 57.02	+13 32 31.4	10.29	3 H	352.487 589 05	+13.542 058 11	4.35	19.24	8.87	1.44	1.11	1.66	1.41	1.18	+13	+28	−22	+10	− 8	+ 8	− 6	−11	+ 1	+18	5	1.59
115987	23 29 57.91	−12 52 36.0	8.59	H	352.491 298 85	−12.876 665 48	1.30	25.91	−31.26	1.48	0.88	1.35	2.13	1.30	+ 5	+ 9	−18	+56	− 1	+21	+ 5	+33	+26	+14	0	−2.13
115988	23 29 58.19	−06 15 50.3	8.74	H	352.492 474 18	−06.263 968 17	1.86	−5.11	−30.17	1.16	0.87	1.37	1.65	1.13	+43	−24	−37	+19	+ 8	+ 7	+10	+10	− 7	+12	0	−0.51
115989	23 30 00.62	−41 47 16.9	9.65	H	352.502 582 53	−41.788 024 63	9.85	−7.38	−28.18	0.94	1.05	1.37	1.14	1.17	+19	− 8	+13	+34	+11	+14	+ 8	+15	+ 8	+17	0	−0.55
*115990	23 30 01.92	+58 32 56.1	4.89	2 H	352.507 997 82	+58.548 909 78	5.67	18.67	4.22	0.41	0.41	0.56	0.46	0.46	−24	+21	+ 4	+10	+ 3	+ 6	+ 4	+ 6	+ 4	−23	2	2.01
*115991	23 30 01.87	+21 32 58.5	7.14	1 G	352.507 789 47	+21.549 584 90	5.91	15.30	−14.35	0.53	0.47	0.76	0.62	0.59	+35	+ 6	−18	+26	+ 7	− 7	+ 3	+ 8	− 6	+25	1	1.78
115992	23 30 03.32	+35 27 28.1	9.68	H	352.513 845 56	+35.457 796 82	1.37	−0.60	−18.55	1.09	0.88	1.38	1.40	0.90	+ 2	+18	− 8	−10	+18	+ 7	+15	− 3	+ 6	+ 9	0	−0.67
115993	23 30 03.95	+49 03 04.3	10.16	H	352.516 464 74	+49.051 195 38	−0.37	8.13	−1.03	1.12	1.24	1.99	1.49	1.64	−44	− 8	+27	+48	−11	− 6	+ 7	+ 3	+ 0	− 8	2	1.30
115994 H	23 30 04.65	−22 39 32.1	8.13	H	352.519 390 13	−22.658 927 61 A	6.78	38.51	0.21	1.85	1.33	1.66	2.53	1.48	− 4	+ 7	−43	+66	−25	+24	−25	+ 8	+ 5	−16	0	0.31
115995	23 30 05.16	−20 10 16.7	8.99	H	352.521 501 62	−20.171 301 51	2.78	−7.51	0.03	1.42	1.14	1.73	1.84	1.68	+18	+ 9	−16	+ 5	+ 6	+39	+15	+19	− 1	+23	0	0.20
115996	23 30 07.39	+49 07 59.3	6.19	H	352.530 783 41	+49.133 137 52	3.81	29.41	2.99	0.36	0.45	0.72	0.44	0.61	−40	+ 3	+20	+16	+ 1	+ 5	+ 6	+ 1	+ 1	−14	0	−0.97
115997	23 30 09.29	+44 26 08.2	8.21	H	352.538 723 69	+44.435 613 61	9.77	6.96	−85.94	0.56	0.58	0.92	0.63	0.64	− 2	+ 3	+18	+ 8	−23	− 5	−13	−33	+16	+17	2	−0.99
115998	23 30 09.84	−40 18 09.1	8.92	G	352.540 997 76	−40.302 528 08	7.62	197.83	41.47	0.76	0.89	1.18	0.87	0.99	+26	+11	+ 3	+35	+11	+28	+ 9	+17	−11	+18	0	0.27
115999 H	23 30 10.74	−36 23 26.0	9.89	H	352.544 732 56	−36.390 551 65 A	2.59	18.66	−24.35	3.01	2.76

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
115901	9.470	0.022	8.718	0.018		0.687	0.022	T	0.74	0.02	L	8.7635	0.0022	0.015	65		8.74	8.79		C			1							S
115902	6.660	0.004	6.659	0.004		0.011	0.003	G	0.03	0.00	H	6.6632	0.0010	0.007	115		6.65	6.68		C			1							S
115903	9.525	0.019	8.909	0.017		0.574	0.022	T	0.65	0.02	L	8.9684	0.0020	0.017	108		8.94	9.00					1							
115904	9.041	0.012	8.843	0.014		0.189	0.017	T	0.21	0.02	L	8.8667	0.0019	0.016	134		8.84	8.89					1							
115905	8.620	0.012	8.488	0.014		0.110	0.017	G	0.12	0.02	H	8.5148	0.0018	0.017	129		8.49	8.55					1							
115906	8.052	0.009	6.344	0.006		1.438	0.003	G	1.43	0.01	H	6.3343	0.0008	0.007	68		6.32	6.35					1							S
115907	7.966	0.008	6.568	0.005		1.177	0.003	G	1.14	0.00	H	6.5944	0.0009	0.007	93		6.58	6.61		C			1							S
115908	5.469	0.004	5.632	0.003		−0.142	0.004	T	−0.14	0.01	L	5.6111	0.0023	0.018	152		5.58	5.63	2.32	P 1 A			1							S P
115909	10.122	0.038	8.760	0.021		1.154	0.034	T	1.12	0.03	L	8.7786	0.0021	0.014	67		8.76	8.81					1							
115910	7.211	0.005	7.113	0.006		0.080	0.015	G	0.09	0.02	H	7.1410	0.0008	0.008	124		7.12	7.16					1							S
115911	11.771	0.120	9.511	0.024		1.908	0.101	T	1.83	0.53	K	9.2148	0.0024	0.024	115		9.17	9.25					1	S						
115912	9.029	0.013	8.506	0.013		0.491	0.017	T	0.56	0.02	L	8.5585	0.0016	0.016	114		8.53	8.58		C			1							
115913	10.427	0.034	9.170	0.020		1.071	0.031	T	1.04	0.03	L	9.2489	0.0022	0.021	94		9.22	9.28		C			1							
115914	11.088	0.053	10.469	0.050		0.573	0.054	T	0.65	0.05	L	10.6002	0.0033	0.033	89		10.55	10.66					1							
115915	7.854	0.008	6.576	0.005		1.088	0.007	T	1.05	0.01	L	6.6205	0.0007	0.007	126		6.61	6.63					1							S
115916	8.211	0.008	7.712	0.007	*	0.465	0.015	G	0.54	0.02	H	* 7.7531	0.0010	0.010	127	*	7.73	7.78		D	23291−2816	H 1	2 C	A	AB	318	0.566	0.005	2.13	0.02	S
115917	8.857	0.010	8.315	0.010		0.508	0.013	T	0.58	0.01	L	8.3685	0.0019	0.020	143		8.34	8.41					1							S
115918	11.797	0.082	10.566	0.043		1.045	0.074	T	1.02	0.06	L	10.7566	0.0036	0.045	198		10.68	10.83					1							G
115919	5.733	0.003	4.647	0.003		0.939	0.000	G	0.93	0.03	C	4.7026	0.0008	0.005	56		4.69	4.71					1 G							S
115920	9.806	0.023	9.629	0.028		0.170	0.034	T	0.19	0.04	L	9.6695	0.0018	0.016	104		9.65	9.70		C			1							G
115921	9.564	0.021	8.030	0.011		1.289	0.019	T	1.25	0.02	L	8.0745	0.0012	0.012	88		8.05	8.10					1							
115922	9.828	0.032	9.303	0.031	*	0.502	0.034	T	0.57	0.04	L *	9.3429	0.0022	0.015	54	*	9.32	9.36		D	23292−2315	H 1	2 C	A	AB	262	0.398	0.021	2.25	0.12	
115923	11.217	0.044	10.321	0.032		0.797	0.041	T	0.83	0.03	L	10.4039	0.0048	0.046	190		10.33	10.49		U 2			1							
115924	8.560	0.016	8.106	0.016		0.430	0.015	G	0.50	0.02	H	8.1783	0.0018	0.013	50		8.15	8.20		D			1							S
115925						1.820	0.510	G	1.80	0.52	J	11.7225	0.0706	0.464	101		11.09	12.27	14.37	P 1 A			1 X							G
115926	10.470	0.044	8.987	0.022		1.249	0.039	T	1.21	0.04	L	8.9825	0.0029	0.013	62		8.96	9.01					1							
115927	8.589	0.013	8.347	0.015		0.206	0.015	G	0.23	0.02	H	8.3821	0.0016	0.011	68		8.36	8.40		C			1							S
115928	8.291	0.028	7.188	0.017	*	0.951	0.026	T	0.94	0.02	L *	7.5839	0.0011	0.011	140	*	7.56	7.60		D	23293−8543	I 1	2 C	A	AB	61	2.872	0.019	3.47	0.08	S
115929	9.730	0.016	9.031	0.014		0.632	0.016	T	0.70	0.01	L	9.1014	0.0018	0.018	131		9.06	9.13		C			1	S						
115930	7.900	0.006	6.646	0.004		1.072	0.003	G	1.04	0.00	H	6.6964	0.0005	0.008	198		6.68	6.71		D			1							S
115931	7.569	0.005	7.674	0.007		−0.078	0.004	G	−0.06	0.01	H	7.6549	0.0015	0.016	171		7.63	7.68					1 X							S G
115932	10.907	0.049	10.385	0.050		0.490	0.063	T	0.56	0.07	L	10.3671	0.0033	0.037	93		10.29	10.43					1							
115933	10.753	0.039	8.940	0.015		1.509	0.033	T	1.54	0.05	L	8.8872	0.0020	0.020	122		8.86	8.93					1							
115934	9.399	0.017	8.033	0.010		1.157	0.015	T	1.12	0.01	L	8.0900	0.0015	0.013	102		8.07	8.11		C			1							
115935	9.626	0.016	8.496	0.011		0.972	0.015	T	0.96	0.01	L	8.5510	0.0019	0.018	135		8.52	8.59					1							
115936	8.872	0.015	8.986	0.021		−0.099	0.023	T	−0.08	0.03	L	8.9853	0.0016	0.015	72		8.95	9.01		D			1							
115937						1.290	0.015	G	1.48	0.03	I	11.2708	0.0051	0.044	80		11.18	11.34					1							G
115938	10.182	0.026	8.696	0.014		1.251	0.023	T	1.21	0.02	L	8.7308	0.0022	0.018	102		8.71	8.77		C			1							
115939	9.062	0.012	9.051	0.016	A	0.097	0.140	G	0.02	0.02	L *	9.0623	0.0022	0.023	154	*	9.02	9.10			23294+5241	H 1	2 C	C	AB	261	3.195	0.043	3.64	0.19	
115940	8.769	0.008	8.384	0.008		0.356	0.001	G	0.42	0.00	H	8.4375	0.0013	0.018	175		8.41	8.47					1							S
115941	7.951	0.012	7.742	0.013		0.200	0.017	T	0.22	0.02	L	7.7769	0.0024	0.014	47		7.75	7.80					1							S
115942	8.011	0.009	6.904	0.006		0.955	0.008	T	0.94	0.01	L	6.9581	0.0012	0.010	125		6.94	6.98					1							S
115943	10.869	0.059	10.391	0.059		1.350	0.015	G	1.32	0.02	I	10.6000	0.0069	0.061	109		10.47	10.71		U 2			1 X							G P
115944	7.041	0.004	6.904	0.004		0.132	0.005	T	0.15	0.01	L	6.9298	0.0007	0.009	208		6.92	6.95		C			1							S
115945	7.803	0.011	6.462	0.006		1.125	0.001	G	1.09	0.00	H	6.5236	0.0010	0.007	71		6.51	6.54		C			1							S
115946	10.207	0.025	9.783	0.027		0.414	0.030	T	0.48	0.03	L	9.8159	0.0021	0.021	110		9.76	9.86		C			1							
115947	10.484	0.021	9.048	0.011		0.450	0.015	G	1.22	0.08	S	9.1112	0.0017	0.023	233		9.07	9.15		R			1	S						G
115948	8.560	0.008	8.066	0.008		0.498	0.001	G	0.57	0.00	H	8.1195	0.0012	0.014	159		8.10	8.14		C			1							S
115949	9.013	0.012	7.813	0.008		1.027	0.011	T	1.00	0.01	L	7.8373	0.0009	0.010	98		7.81	7.85					1							S
115950	8.709	0.012	8.309	0.012		0.464	0.005	G	0.53	0.01	H	8.3600	0.0017	0.014	113		8.34	8.38		C			1							
115951	7.646	0.008	6.955	0.007		0.620	0.000	G	0.69	0.00	H	7.0150	0.0008	0.007	66		7.00	7.04					1							S
115952	9.873	0.017	7.983	0.007		1.603	0.015	T	2.91	0.03	O	7.6305	0.0059	0.078	166		7.55	7.80		U 2 C	23295+5141	I 1	1	S						
115953	7.709	0.008	6.386	0.004		1.123	0.007	T	1.04	0.02	A	6.4294	0.0012	0.007	67		6.42	6.45		C			1							S
115954	10.695	0.057	10.177	0.062		0.540	0.002	G	0.61	0.00	H	10.2135	0.0046	0.024	51		10.17	10.25		C			1							
115955	11.863	0.116	10.378	0.043		1.316	0.014	G	1.52	0.02	A	10.3124	0.0037	0.030	127		10.24	10.37					1							
115956	9.654	0.025	7.578	0.010		1.757	0.022	T	2.48	0.05	O	7.3779	0.0046	0.026	77		7.34	7.42		U 2	23296+3839	I 1	1	S						
115957	9.442	0.016	8.614	0.013	*	0.730	0.016	T	0.78	0.01	L *	8.6807	0.0019	0.019	106	*	8.65	8.71		C	23296−4001	H 1	2 C S	C	AB	19	0.123	0.040	1.19	1.04	
115958	9.060	0.017	8.326	0.015		0.673	0.018	T	0.73	0.01	L	8.4045	0.0017	0.012	71		8.39	8.43					1							S
115959	7.907	0.006	7.956	0.008		−0.040	0.009	T	−0.02	0.01	L	7.9632	0.0011	0.014	190		7.94	7.99		C			1							S
115960	11.165	0.071	10.018	0.042		0.986	0.064	T	0.97	0.05	L	10.0788	0.0040	0.032	69		10.03	10.14		C			1							
115961	9.251	0.011	9.208	0.014		0.039	0.016	T	0.05	0.01	L	9.2463	0.0021	0.028	199		9.19	9.29					1							
115962	10.245	0.027	8.998	0.016		1.064	0.025	T	1.03	0.02	L	9.0395	0.0017	0.017	126		8.99	9.07		C			1							
115963	8.916	0.008	7.835	0.005		0.935	0.007	T	0.93	0.01	L	7.9002	0.0011	0.015	253		7.88	7.92					1							
115964											T	11.3560	0.0075	0.047	48		11.21	11.43		C			1							G
115965	11.716	0.098	9.631	0.026		1.764	0.084	T	1.72	0.17	K	9.5364	0.0031	0.029	103		9.49	9.58					1							
115966	10.739	0.036	9.624	0.023		0.894	0.002	G	0.90	0.00	H	9.6873	0.0023	0.020	118		9.65	9.73		C			1							
115967	8.793	0.010	8.363	0.010	*	0.420	0.011	T	0.49	0.01	L *	8.4252	0.0015	0.016	153	*	8.40	8.46		D	23298−7619	H 1	2 C	A	AB	35	0.545	0.016	3.16	0.09	S
115968	10.466	0.050	9.142	0.028		1.124	0.045	T	1.09	0.05	L	9.1942	0.0027	0.013	49		9.17	9.21		C			1							
115969	9.221	0.023	8.685	0.021		0.503	0.028	T	0.58	0.03	L	8.6997	0.0029	0.016	48		8.66	8.74					1							S
115970	10.401	0.026	9.395	0.018		0.879	0.024	T	0.92	0.02	L	9.4117	0.0020	0.023	130		9.37	9.45		C			1							
115971	8.428	0.009	8.302	0.010		0.122	0.013	T	0.14	0.01	L	8.3471	0.0014	0.015	132		8.32	8.37		C			1							
115972	10.992	0.044	9.408	0.019		1.328	0.038	T	1.29	0.04	L	9.4341	0.0032	0.030	146		9.38	9.48					1							
115973	10.305	0.026	9.120	0.016		1.015	0.024	T	0.99	0.02	L	9.1896	0.0018	0.018	129		9.16	9.23		C			1							
115974	10.079	0.025	8.710	0.014		1.159	0.022	T	1.12	0.02	L	8.7482	0.0017	0.015	103		8.72	8.77		C			1							
115975	8.389	0.012	7.927	0.010		0.425	0.014	G	0.49	0.01	H	7.9778	0.0019	0.014	87		7.95	8.01		C			1							S
115976	10.304	0.043	9.496	0.033		0.714	0.041	T	0.77	0.03	L	9.5737	0.0029	0.019	60		9.55	9.61		C			1							
115977	8.455	0.009	8.311	0.010		0.139	0.013	T	0.15	0.01	L	8.3430	0.0019	0.017	155		8.31	8.37					1							S
115978	8.912	0.017	8.497	0.018		0.392	0.023	T	0.46	0.03	L	8.5423	0.0014	0.012	52		8.52	8.56		D			1							S
115979	9.779	0.025	7.722	0.010		1.703	0.021	T	1.73	0.02	L	7.6275	0.0020	0.017	76		7.60	7.66					1							S
115980	9.538	0.013	8.533	0.010		0.878	0.012	T	0.89	0.01	L	8.5869	0.0013	0.017	185		8.56	8.61		C			1							
115981	8.963	0.032	8.344	0.029	*	0.300	0.495	G	0.65	0.03	L *	8.3910	0.0042	0.022	48	−	8.34	8.42		D	23299−2034	I 2	2 C P	C	AB	10	0.189	0.019	0.68	0.72	S G
115982	8.515	0.010	7.323	0.007		1.021	0.010	T	0.99	0.01	L	7.3837	0.0008	0.008	103		7.37	7.40					1							S
115983	11.241	0.131	10.630	0.129	C						T	9.7117	0.1426	0.783	45	−	8.49	10.78		D	23299−2034	I 2	1 C F	C						G
115984	9.171	0.018	8.089	0.012		0.936	0.017	T	0.93	0.01	L	8.1424	0.0014	0.012	99		8.12	8.17					1							S
115985	9.003	0.012	8.744	0.013		0.247	0.017	T	0.28	0.02	L	8.8229	0.0015	0.016	128		8.79	8.86					1							
115986	10.450	0.042	10.274	0.058		0.161	0.068	T	0.18	0.07	L	10.3466	0.0064	0.058	57		10.28	10.96		P 1 A			1							G
115987	9.071	0.018	8.635	0.018		0.412	0.023	T	0.48	0.03	L	8.6879	0.0014	0.012	59		8.66	8.72					1							S
115988	10.082	0.035	8.845	0.021		1.056	0.032	T	1.02	0.03	L	8.9090	0.0020	0.015	70		8.88	8.93		C			1	S						
115989	10.324	0.032	9.719	0.030		0.563	0.032	T	0.64	0.03	L	9.7769	0.0037	0.023	86		9.74	9.82					1							
115990	4.729	0.002	4.869	0.003		−0.122	0.003	T	−0.11	0.00	L	4.8479	0.0006	0.007	135		4.84	4.87	6.07	P 1 A	23300+5833	I 1	1	S						S P
115991	7.033	0.005	7.101	0.006		−0.096	0.005	G	−0.08	0.01	H	7.1078	0.0029	0.019	137		7.08	7.14	2.64	P 1 A			1 G							S
115992	11.475	0.094	9.808	0.034		1.393	0.079	T	1.37	0.10	L	9.8220	0.0021	0.019	77		9.79	9.86		C			1							
115993	10.791	0.029	10.250	0.028		1.230	0.015	G	1.19	0.01	H	10.3215	0.0030	0.043	239		10.26	10.41					1							G
115994	8.538	0.027	8.263	0.029	A	0.200	0.495	G	0.40	0.08	L *	8.2117	0.0013	0.014	48	*	8.19	8.24		D	23301−2240	I 1	2 C	A	AB	44	1.197	0.008	1.40	0.03	S
115995	11.133	0.083	9.174	0.027		1.500	0.040	G	1.53	0.06	R	9.1147	0.0040	0.020	40		9.08	9.15					1							
115996	8.093	0.006	6.337	0.003		1.464	0.005	T	1.47	0.01	L	6.3247	0.0006	0.008	249		6.31	6.34					1							S
115997	8.817	0.011	8.263	0.010		0.519	0.013	T	0.59	0.01	L	8.3200	0.0013	0.014	134		8.29	8.35		C			1							S
115998	9.677	0.019	8.983	0.016		0.615	0.003	G	0.68	0.00	H	9.0552	0.0017	0.020	106		9.02	9.08		C			1							S
115999	10.606	0.044	9.996	0.039	*	0.566	0.044	T	0.64	0.04	L *	10.0152	0.0034	0.025	76	*	9.96	10.05		D	23302−3623	I 1	2 C	A	AB	16	0.757	0.011	1.40	0.05	
116000	10.180	0.024	9.688	0.024		0.463	0.031	T	0.53	0.03	L	9.7683	0.0022	0.022	154		9.73	9.81		C			1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr											%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
116001	23 30 12.47	+31 22 41.6	7.54		G	352.551 975 00	+31.378 235 57		6.03	20.64	−2.42	0.67	0.53	0.89	0.81	0.54	+16	+11	− 6	− 3	+ 7	+19	+10	−14	+30	+31	2	0.47
116002	23 30 13.00	−30 06 15.0	8.83		H	352.554 151 97	−30.104 160 11		3.09	−2.64	−8.48	1.02	0.98	1.27	1.17	1.22	+43	− 4	−12	−37	−12	+10	−10	−30	+19	+47	0	0.68
116003	23 30 13.24	−20 23 25.7	11.09		G	352.555 176 17	−20.390 464 04		67.57	314.51	−208.13	6.60	5.15	7.83	7.28	6.18	+10	+19	−37	− 5	−18	+28	− 7	−23	+ 2	+25	0	
116004	23 30 13.48	+05 00 45.9	7.26		H	352.556 168 37	+05.012 746 73		2.28	−1.80	24.81	1.06	0.80	1.16	1.25	0.93	+19	−15	−45	−31	+20	− 8	+27	+28	−12	+ 2	0	−0.42
116005	23 30 13.61	+31 42 22.1	8.34		H	352.556 698 03	+31.706 142 72		38.98	190.52	−131.51	0.80	0.65	1.10	1.11	0.70	+19	+ 0	− 4	+ 6	+20	+21	+17	+ 0	+19	+43	0	−0.63
116006	23 30 14.45	−10 27 03.6	9.12		H	352.560 226 08	−10.450 996 35		5.06	−30.59	−41.35	1.14	0.77	1.35	1.96	1.22	+31	−18	−11	− 7	+ 9	+41	+12	− 6	+ 5	+ 2	2	−0.26
116007	23 30 15.05	−13 58 38.9	9.13		H	352.562 695 34	−13.977 465 99		6.60	12.60	−4.14	1.43	0.97	1.53	1.59	1.17	+10	+22	−21	−30	+15	+ 3	+26	+ 8	+23	+ 3	3	−0.12
116008	23 30 15.32	−35 20 13.9	9.06		H	352.563 823 20	−35.337 197 91		2.42	20.02	2.65	1.28	0.89	1.34	1.64	1.15	+ 0	−11	−24	−50	+15	+14	+19	−34	+22	− 8	0	1.54
116009	23 30 15.97	−21 52 58.3	7.51		G	352.566 530 10	−21.882 857 22		8.81	52.06	32.71	0.91	0.75	1.05	1.40	0.99	+19	−13	−30	− 1	+ 4	+18	+ 8	+ 3	+13	+ 8	0	0.20
116010	23 30 16.56	+68 14 33.3	8.47		H	352.569 006 47	+68.242 593 02		2.87	3.28	−2.73	0.67	0.72	0.83	0.90	0.88	− 7	+ 2	+15	+27	+ 3	+ 8	− 2	−10	+ 0	−19	0	−0.30
116011	23 30 18.90	+18 27 59.1	11.81	2	G	352.578 747 53	+18.466 429 58		16.17	556.06	−429.40	2.73	2.19	3.06	2.80	2.07	+53	−20	−11	−34	−21	+ 7	−24	−46	+12	+55	0	1.69
116012	23 30 20.25	+01 59 36.6	9.60		H	352.584 389 28	+01.993 486 13		8.27	−17.17	−38.76	1.36	0.95	1.63	2.17	1.23	+33	+ 8	−10	+19	− 5	+31	−15	−15	+26	−18	0	0.16
116013	23 30 20.36	−48 14 32.9	8.33		H	352.584 838 50	−48.242 474 45		2.33	−6.09	−14.98	0.81	0.57	1.09	0.86	0.60	−28	+ 8	−17	+ 5	−20	+22	−18	−15	+ 1	−34	1	−1.22
116014	23 30 21.00	−00 10 40.2	9.47	1	H	352.587 482 36	−00.177 833 85		1.91	15.81	−18.27	1.43	1.07	1.68	1.74	1.72	+36	+21	−17	−16	+ 8	+16	+21	+ 7	+22	+42	0	−0.19
116015	23 30 21.81	+06 25 31.3	8.51		H	352.590 882 65	+06.425 354 27		2.80	−16.34	−11.07	1.08	0.97	1.21	1.24	1.06	+38	−22	−32	−19	+15	− 2	+28	+36	− 7	+10	3	0.23
116016	23 30 25.72	+30 49 37.3	8.72		H	352.607 162 77	+30.827 023 92	C	9.68	77.63	−33.21	22.70	19.28	1.50	1.31	1.05	+26	+ 0	+ 1	+ 1	+ 3	+11	+ 3	− 9	+13	+56	1	1.10
116017	H 23 30 26.29	+30 49 54.6	7.36		G	352.609 530 65	+30.831 839 46	*	9.68	77.63	−33.21	6.20	2.89	1.50	1.31	1.05	+85	+ 4	+ 0	+ 8	+ 9	+11	+ 9	+ 2	+13	+56	1	1.10
116018	23 30 27.38	+57 58 33.7	8.91	3	H	352.614 070 69	+57.976 033 24	*	1.64	−2.56	0.00	0.88	0.83	1.05	1.50	1.30	−14	+25	− 1	−30	+ 2	−25	+ 6	−30	+14	−24	3	2.73
116019	23 30 28.57	−47 34 13.8	8.88		H	352.619 039 42	−47.570 487 39		1.75	13.25	11.18	0.95	0.69	1.28	1.10	0.73	−24	−16	− 8	+18	−17	−11	−26	−18	+30	−47	0	−1.04
116020	23 30 29.69	−07 16 42.6	9.91		G	352.623 724 52	−07.278 509 42		5.91	−47.96	−89.00	1.37	1.09	1.61	1.89	1.55	+42	−20	−23	+ 1	+ 8	+20	+13	+ 2	+ 1	+20	2	−1.55
116021	23 30 31.69	+16 33 47.7	7.45		H	352.632 024 67	+16.563 263 83		3.98	6.68	−18.85	0.86	0.52	0.93	0.89	0.53	+45	−19	− 9	−28	− 9	+10	−13	−31	+26	+45	2	−0.62
116022	23 30 32.05	+64 23 32.2	7.25		H	352.633 561 29	+64.392 269 62		7.90	35.28	2.73	0.51	0.53	0.67	0.53	0.65	− 8	+27	+18	+ 9	−10	− 3	−10	+ 0	+ 9	−30	0	−0.52
116023	23 30 34.07	+77 53 38.6	7.12		H	352.641 962 73	+77.894 060 33		3.76	−6.17	1.69	0.50	0.45	0.54	0.63	0.48	+ 5	− 3	+12	+19	+ 5	−10	+ 6	+ 8	− 3	+ 9	0	0.52
116024	H 23 30 34.20	−36 57 26.9	7.80		G	352.642 483 90	−36.957 464 24	A	4.74	21.23	5.03	2.23	1.70	1.80	2.21	1.65	+ 0	+14	−16	−46	+24	+ 5	+35	+ 2	+ 3	−28	1	0.98
116025	23 30 34.20	−41 59 19.0	6.78		H	352.642 487 52	−41.988 603 53		7.76	−61.69	−81.03	0.58	0.69	0.87	0.68	0.76	+25	−15	+ 8	+31	+15	+ 5	+14	+ 7	−15	+18	2	−2.00
116026	23 30 34.74	+81 00 15.3	8.31		H	352.644 738 54	+81.004 258 58		4.37	19.02	3.78	0.61	0.62	0.72	0.65	0.68	− 6	+ 2	+30	+16	− 9	+ 2	−13	− 2	+ 0	−21	1	0.06
116027	23 30 35.32	+49 51 37.0	8.80		H	352.647 159 31	+49.860 287 24		−0.08	3.64	0.68	0.64	0.76	1.16	0.76	1.10	−38	+13	+ 4	+17	+ 2	+ 8	+ 3	+23	− 2	−19	1	1.37
116028	23 30 37.68	−18 41 55.8	8.69		H	352.656 998 93	−18.698 822 82		9.56	92.11	−81.78	1.21	0.96	1.33	1.47	1.18	+ 8	+28	−15	− 4	+14	− 6	+15	+36	− 2	+ 4	0	2.02
116029	23 30 39.23	−38 19 39.8	8.44		H	352.663 449 14	−38.327 718 79		7.88	23.06	14.91	0.73	0.78	1.01	0.78	0.85	+27	+ 0	−15	+50	+11	+ 7	+11	+43	−22	+23	0	−1.86
116030	23 30 39.54	+38 39 44.0	6.07		H	352.664 742 66	+38.662 212 05		5.25	30.97	17.08	0.59	0.48	0.80	0.62	0.46	+ 1	+34	+ 3	+ 6	+ 7	−23	+16	− 7	+25	+ 1	2	0.74
116031	23 30 39.97	+43 58 32.8	8.31		H	352.666 543 72	+43.975 771 45		3.32	−2.69	−14.95	0.54	0.59	0.95	0.61	0.65	−14	+ 7	+14	+ 6	−13	− 6	− 5	−32	+17	− 2	0	−1.54
116032	23 30 40.05	+12 40 00.6	9.08		H	352.666 856 81	+12.666 830 58		1.76	−8.12	−13.71	1.06	0.99	1.34	1.16	1.29	+30	+11	−24	+ 0	+11	− 3	+12	+14	+25	+40	0	1.48
116033	23 30 40.11	−24 11 46.1	7.53		H	352.667 121 40	−24.196 140 56		24.16	57.64	28.64	0.89	0.70	0.94	1.28	0.86	+ 9	−20	−26	+11	+ 1	+ 4	+ 5	+18	−10	−13	0	1.61
116034	23 30 40.49	+00 52 39.2	7.16		H	352.668 718 32	+00.877 562 63		3.26	−18.14	−3.79	0.90	0.54	1.03	1.36	0.85	+37	−30	−17	+ 2	+ 4	−14	− 5	+ 0	+32	−20	0	0.86
*116035	T 23 30 40.77	+05 14 58.0	7.76		H	352.669 875 29	+05.249 446 78	A	8.35	1.07	−13.05	3.98	2.46	3.38	4.37	2.61	+36	−45	−38	− 1	+ 4	− 5	+ 4	+ 2	+11	+ 7	15	2.60
*116036	T 23 30 40.71	+05 14 47.3	8.33		H	352.669 633 20	+05.246 459 23	B	−2.84	35.06	−19.38	8.44	5.32	5.68	8.05	4.52	+30	−42	−35	− 3	+ 1	+ 1	− 4	+ 4	+11	+ 7	15	2.60
116037	23 30 41.96	+10 21 42.7	8.11		H	352.674 841 77	+10.361 854 78		3.81	18.42	11.57	1.12	0.78	1.36	1.15	0.99	+ 8	+21	−19	−22	+ 4	−13	+11	− 5	+46	+ 7	0	−0.81
116038	H 23 30 42.67	+64 19 18.5	8.33		H	352.677 798 77	+64.321 812 18	A	5.47	3.87	−6.46	1.15	1.27	1.34	1.16	1.41	− 6	+15	+12	+ 2	− 8	+ 6	−13	− 5	+ 7	−22	1	0.07
116039	23 30 43.49	+46 09 11.0	8.22		H	352.681 223 55	+46.153 041 71		2.63	7.21	−3.82	0.53	0.63	1.00	0.58	0.76	− 3	+12	+15	−39	+ 0	−15	+ 0	− 4	+19	+ 6	0	−0.58
116040	23 30 43.60	+22 02 50.6	7.59		H	352.681 677 28	+22.047 401 38		7.17	41.94	−0.94	0.58	0.50	0.78	0.68	0.56	+43	−13	− 8	+23	+13	− 8	+12	+13	+ 6	+47	0	0.81
116041	23 30 45.57	−13 18 14.2	9.28		H	352.689 885 39	−13.303 941 51		−0.94	−17.85	−16.10	1.34	1.07	1.69	1.81	1.29	+17	+10	−30	− 9	−10	+29	+ 1	−18	+25	+12	6	2.12
116042	23 30 47.07	+33 50 08.7	7.10		H	352.696 121 66	+33.835 741 79		5.47	24.22	−20.51	0.66	0.60	0.86	0.74	0.61	+11	+28	−14	+27	+ 8	+ 9	+17	−22	+27	+23	2	0.15
116043	23 30 49.02	−27 17 28.8	8.80		H	352.704 263 17	−27.291 341 10		11.43	68.59	75.06	0.99	0.78	1.21	1.32	0.93	+36	−23	− 9	+ 9	+11	+ 7	− 5	−25	+25	+ 8	0	0.80
116044	23 30 49.19	+62 17 19.1	7.66		H	352.704 965 46	+62.288 650 37		3.08	7.10	−2.32	0.57	0.57	0.72	0.73	0.68	−12	+ 6	+18	+26	+ 3	−12	+ 3	− 3	−15	−14	0	0.35
116045	23 30 49.34	−47 24 18.2	9.77	2	H	352.705 599 32	−47.405 062 03		15.84	0.55	−49.43	1.34	0.94	1.76	1.50	0.98	−30	− 6	−11	+ 5	− 8	− 9	−13	−24	+28	−46	0	−0.12
116046	H 23 30 49.58	+51 55 28.2	10.51		H	352.706 572 78	+51.924 512 26	A	5.99	−11.00	−4.65	2.14	2.29	3.09	2.38	2.56	−22	− 9	+14	+ 4	− 3	− 1	− 3	+11	+22	−12	2	0.88
116047	23 30 50.50	+17 33 10.8	9.43		H	352.710 396 08	+17.552 988 39		5.89	10.46	−34.56	1.14	0.90	1.60	1.17	0.89	+44	+ 3	−33	+ 4	+ 9	−24	+ 5	−25	+27	+47	0	1.12
116048	23 30 51.43	−10 09 20.8	9.20		H	352.714 307 68	−10.155 764 68		3.29	3.67	−2.97	1.17	0.77	1.35	1.70	1.25	+36	−26	−15	−12	+12	+28	+16	+ 9	+21	+17	4	−0.12
116049	23 30 53.81	−62 12 35.1	8.27		H	352.724 199 37	−62.209 749 94		1.42	−1.20	−6.33	0.60	0.59	0.85	0.80	0.68	−13	− 5	−10	+ 9	+10	− 8	+ 9	+ 7	−25	− 6	0	−0.16
116050	23 30 54.20	−35 06 23.4	8.12		H	352.725 846 33	−35.106 492 97		28.55	−203.05	−6.12	0.94	0.75	1.08	1.14	0.89	+ 7	+ 4	−24	−32	+10	+10	+14	−13	+29	+ 6	0	−0.17
116051	23 30 54.27	−15 58 56.2	7.90		G	352.726 106 94	−15.982 269 26		12.28	71.40	−29.33	0.98	0.67	0.97	1.22	0.81	+ 3	− 3	− 4	+ 2	+ 7	+13	+10	+26	+ 9	− 7	3	0.79
116052	23 30 54.47	+27 46 43.6	9.18		H	352.726 966 48	+27.778 775 45		19.13	−136.58	−132.64	0.95	0.70	1.21	1.04	0.65	+ 4	+ 4	+12	−10	+11	+ 4	+10	−13	+19	+ 5	0	−0.74
116053	23 30 54.83	+07 59 49.0	8.10		H	352.728 457 92	+07.996 938 11		3.51	30.47	−0.66	0.90	0.82	1.13	0.91	0.79	+24	+13	−30	− 7	+ 6	+ 4	+11	+ 6	+17	+23	0	−1.03
116054	23 30 55.21	+20 34 53.7	9.03		H	352.730 059 89	+20.581 569 56		2.16	17.50	34.12	0.82	0.78	1.19	0.95	0.83	+53	+ 1	+ 6	+18	+11	− 2	+12	+ 6	+ 6	+57	3	0.93
116055	H 23 30 55.87	+09 28 55.7	8.38		H	352.732 773 63	+09.482 135 84	A	5.40	67.07	−32.51	2.76	2.02	2.54	2.74	1.71	+21	+ 0	−20	−30	−14	+26	+13	−11	+ 0	−22	0	0.33
116056	H 23 30 56.50	−58 06 44.1	8.73		G	352.735 424 61	−58.112 247 93	A	11.16	−43.07	−8.71	1.70	1.76	2.06	1.39	1.52	−38	− 8	+ 0	−15	+11	+10	+ 9	−15	+ 8	−32	1	−0.45
116057	23 30 57.41	−05 03 38.6	8.04		H	352.739 217 54	−05.060 715 12		2.46	−17.97	−15.41	1.09	0.81	1.22	1.38	1.05	+52	−40	−38	+ 5	+19	+11	+37	+37	−21	+11	0	0.32
116058	23 30 57.80	+07 43 43.3	9.03		H	352.740 825 03	+07.728 686 87		13.67	170.09	−59.39	1.16	0.97	1.39	1.24	0.93	+23	+ 2	−10	−18	+ 1	+29	+ 5	−10	+14	+15	3	0.65
116060	23 31 01.15	−06 17 16.8	6.39		G	352.754 781 41	−06.288 009 44		1.34	−10.59	−29.68	0.81	0.64	0.97	1.16	0.87	+44	−13	−29	+24	+ 7	+30	+15	+17	+ 3	+26	0	−1.16
116061	23 31 01.51	−19 29 24.1	9.06	2	H	352.756 271 55	−19.490 016 97		4.84	26.41	10.62	1.45	1.18	1.59	1.66	1.68	+17	+22	−19	−18	+29	+10	+32	+31	+20	+37	0	1.28
116062	23 31 01.81	−00 35 45.6	8.37		H	352.757 546 71	−00.595 996 17		2.38	13.15	−6.07	1.06	0.74	1.46	1.49	1.08	+26	+ 9	−16	− 1	− 6	+52	+ 7	−11	+44	+35	0	−1.27
116063	23 31 02.55	−69 04 35.2	7.10	1	G	352.760 643 88	−69.076 440 72		33.07	182.41	−122.91	0.52	0.53	0.69	0.54	0.55	−17	+15	−31	−18	+18	− 5	+15	− 6	−10	− 5	1	−1.81
*116064	23 31 05.27	−33 17 13.6	10.87		H	352.771 978 36	−33.287 110 82	B	8.24	−0.09	−2.76	13.00	12.37	10.61	11.05	9.32	+33	− 6	−19	−23	−15	+24	−15	−31	+45	+27	16	1.27
*116065	H 23 31 05.15	+18 46 44.2	7.72		H	352.771 477 24	+18.778 955 21	A	7.37	−8.39	−10.08	1.26	0.85	1.23	1.25	0.84	+44	−20	− 1	−37	−15	+16	−19	−29	+28	+49	1	0.39
116066	H 23 31 05.63	−74 08 04.4	8.00		G	352.773 445 99	−74.134 564 57	A	11.88	42.34	19.87	1.13	1.09	1.28	1.17	1.13	+ 4	−14	−41	− 3	+13	+ 1	+15	− 3	+ 8	+19	0	1.02
116067	H 23 31 05.73	+18 17 57.0	9.07		H	352.773 866 97	+18.299 163 92	A	2.02	11.43	−9.49	2.09	1.54	2.26	2.11	1.52	+47	− 5	− 5	−12	− 2	−16	+ 0	−18	− 1	+58	1	0.02
116068	23 31 06.00	−33 17 18.2	9.31		H	352.774 988 51	−33.288 398 68	A	7.63	11.33	5.19	2.70	2.42	2.61	2.81	2.40	+35	− 6	−28	−28	−17	+21	−15	−41	+44	+29	16	1.27
116069	23 31 06.58	+02 21 48.6	7.17		G	352.777 429 42	+02.363 505 44		18.63	86.40	−54.18	0.91	0.62	1.04	1.53	0.78	+ 7	+ 8	−16	+ 1	− 7	+36	− 2	−10	+17	−20	0	1.11
116070	23 31 07.68	+55 44 52.0	9.08		H	352.782 019 14	+55.747 782 08		1.64	6.66	−4.13	0.78	0.79	1.05	1.16	1.13	−36	+ 7	+10	− 6	+16	+23	+15	+ 6	− 1	−47	3	0.68
116071	23 31 08.84	−51 41 30.7	9.05		H	352.786 851 67	−51.691 847 72		8.23	113.43	17.37	0.81	0.78	1.23	1.10	0.77	− 3	−16	−11	+ 9	−16	+10	−15	−14	+ 4	−22	0	−0.70
116072	23 31 12.27	+26 28 29.4	8.92		H	352.801 118 95	+26.474 820 01		13.14	−19.88	−20.38	0.85	0.69	1.08	0.94	0.67	+18	+12	+ 4	+20	+13	−19	+14	+ 1	+ 8	+17	0	−0.37
116073	23 31 13.35	−27 22 33.2	9.29		H	352.805 640 12	−27.375 884 72		5.09	60.51	−38.01	1.12	0.87	1.38	1.47	1.16	+33	−16	− 6	− 5	+11	+ 3	+ 0	−29	+30	+14	4	2.83
116074	23 31 13.53	−31 29 23.5	8.10		H	352.806 369 63	−31.489 873 02		16.18	−36.23	−125.46	0.83	0.81	1.04	0.97	0.94	+42	−23	−32	−32	− 9	+ 9	−10	−31	+19	+34	0	0.17
116075	H 23 31 16.84	−53 59 42.7	9.20		H	352.820 154 34	−53.995 192 49	A	4.02	34.68	−44.98	2.18	3.33	1.96	1.35	1.51	−34	+ 0	− 2	+26	− 7	+18	− 8	− 7	− 7	−12	0	−1.11
*116076	23 31 17.20	+39 14 11.0	5.22		G	352.821 656 45	+39.236 401 80		13.09	287.30	−83.78	0.54	0.47	0.71	0.56	0.45	+10	+36	+14	+14	+12	−12	+25	− 3	+34	+ 9	2	1.37
*116077	23 31 17.16	−33 04 33.3	9.90		G	352.821 518 25	−33.075 928 84		12.52	115.19	−143.01	1.41	1.18	1.79	1.60	1.39	+33	−13	−34	−40	−20	+24	−16	−34	+40	+32	6	1.90
116078	23 31 17.27	−12 11 41.0	8.32		H	352.821 974 75	−12.194 724 31		9.12	34.44	4.14	1.00	0.64	1.27	1.36	1.05	+38	− 2	−11	+15	+ 6	+23	+ 3	− 9	+46	+24	0	2.02
116079	23 31 18.41	−64 22 17.3	7.85		H	352.826 698 83	−64.371 479 61		7.41	100.21	−0.08	0.52	0.54	0.74	0.59	0.54	+ 2	−16	−30	− 7	− 5	+ 8	− 1	−11	− 1	+11	0	0.31
116080	23 31 19.00	+50 47 10.2	8.64		H	352.829 158 24	+50.786 166 89		3.29	−17.44	1.45	0.66	0.80	1.13	0.86	1.09	−34	+ 2	+11	+ 1	+ 7	+ 3	+ 8	− 5	+ 9	−23	0	−0.89
116081	H 23 31 19.53	+42 04 07.8	9.01		H	352.831 358 15	+42.068 820 25	A	3.80	−5.06	−5.38	1.03	1.26	1.53	0.96	1.06	+15	− 7	+20	− 9	− 6	− 2	− 2	−26	− 6	+22	2	0.36
116082	23 31 19.63	+52 24 38.8	7.56		H	352.831 787 49	+52.410 767 18		11.01	101.26	−30.17	0.55	0.62	0.91	0.67	0.76	−31	+ 8	+10	+ 5	+ 3	+ 7	+ 4	+ 1	+22	−22	0	4.45
116083	23 31 19.95	−31 05 47.0	8.70		H	352.833 114 58	−31.096 390 56		6.33	21.36	−50.48	0.96	0.88	1.20	1.17	1.12	+39	−18	−12	−21	− 2	− 5	− 3	−16	+ 5	+46	0	−0.27
116084	23 31 20.14	−58 12 35.0	7.82		H	352.833 908 52	−58.209 719 14		18.91	181.40	−5.59	0.49	0.55	0.82	0.54	0.63	−22	− 4	− 8	− 5	+ 5	+11	+ 7	−12	+ 7	−10	1	0.07
*116085	23 31 20.95	+59 09 54.9	6.76		H	352.837 291 45	+59.165 242 41		59.31	1106.10	112.97	0.49	0.50	0.67	0.59	0.65	−23	+32	+ 1	+ 6	+ 7	+ 7	+ 6	−10	− 1	−32	0	0.63
*116086	23 31 20.88	+09 45 42.1	7.78		H	352.837 003 44	+09.761 691 55		3.33	43.41	2.44	1.12	0.80	1.30	1.40	0.83	+ 7	− 6	−18	−28	− 4	+36	+ 3	−18	+28	+ 0	0	1.12
116087	23 31 21.40	+10 53 08.1	8.01		H	352.839 159 69	+10.885 575 05		1.14	17.85	−15.44	0.90	0.74	1.08	0.96	0.83	+19	+ 1	−18	− 3	− 7	+10	− 5	− 7	+35	+16	0	0.33
116088	23 31 23.32	+43 22 24.3	8.17		H	352.847 174 54	+43.373 423 98		6.96	−1.97	−5.62	0.56	0.63	0.94	0.65	0.66	− 8	+ 8	+20	+13	− 9	− 3	− 2	−29	+12	+ 1	1	0.14
116089	23 31 23.76	+59 27 44.8	7.31		H	352.849 020 58	+59.462 438 23		3.50	20.62	9.15	0.54	0.55	0.74	0.66	0.69	−15	+19	+15	+ 0	+ 9	+14	+ 6	−16	− 8	−19	0	0.47
116090	23 31 24.28	+61 27 43.1	8.87		H	352.851 153 53	+61.461 979 46		4.46	12.34	1.52	0.67	0.68	0.87	0.85	0.84	−23	+ 9	+12	− 9	+17	+12	+14	−24	− 8	−27	0	0.07
116091	H 23 31 24.65	+16 13 07.6	7.74		H	352.852 722 11	+16.218 769 40	A	4.49	57.37	−20.17	1.59	0.93	1.50	1.54	0.90	+41	− 5	− 5	−32	− 7	+19	− 6	−23	+33	+42	1	0.59
116092	23 31 24.96	−04 15 05.0	8.81		H	352.853 989 23	−04.251 389 53		2.95	−12.73	−17.96	1.15	0.99	1.20	1.44	1.41	+51	−26	−17	+13	+33	+13	+44	+52	−11	+32	0	−0.47
116093	23 31 25.17	+40 12 42.4	8.78		H	352.854 879 74	+40.211 783 67		3.28	−1.67	−7.29	0.72	0.74	1.03	0.79	0.74	+18	+24	+21	+47	+ 9	+18	+12	− 8	+12	+23	2	−0.66
116094	23 31 25.52	+49 30 28.4	7.30		H	352.856 353 00	+49.507 894 95		1.78	20.91	11.72	0.46	0.55	0.89	0.57	0.81	−43	+ 6	+19	+10	+ 0	+ 7	+ 2	+ 6	+ 5	−20	0	−1.01
*116095	23 31 25.86	+71 59 03.5	8.22		H	352.857 757 68	+71.984 300 32		10.67	83.24	0.55	0.59	0.58	0.71	0.62	0.65	+ 5	+ 1	+ 8	+11	− 5	+ 4	− 6	+ 4	+17	+10	4	2.09
*116096	H 23 31 25.84	−42 09 34.2	8.28		H	352.857 685 72	−42.159 512 10	A	10.16	26.56	24.73	1.50	2.07	1.55	1.31	1.44	− 2	+ 2	+12	+26	+ 9	+ 9	+ 9	+ 6	+ 0	+15	1	−0.15
116097	23 31 26.92	−44 50 36.7	6.02		H	352.862 173 74	−44.843 529 38		8.79	45.30	−20.42	0.54	0.52	0.72	0.60	0.58	+13	+ 6	−11	+21	+ 1	+20	+ 5	+12	+24	+17	0	−1.01
116098	23 31 28.37	+34 33 02.4	8.82		H	352.868 224 24	+34.550

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
116001	8.057	0.009	7.593	0.009		0.468	0.015	G	0.54	0.02	H	7.6331	0.0015	0.010	90		7.62	7.65		C			1								S
116002	10.265	0.026	8.927	0.015		1.135	0.023	T	1.10	0.02	L	8.9948	0.0025	0.022	95		8.96	9.03					1								
116003						1.500	0.008	G	2.07	0.06	I	11.0617	0.0063	0.037	41		11.00	11.15		C			1 X								G G
116004	8.735	0.019	7.386	0.012		1.143	0.018	T	1.11	0.02	L	7.4303	0.0016	0.010	44		7.42	7.46					1								S
116005	9.470	0.020	8.436	0.014		0.889	0.019	T	0.93	0.02	L	8.4811	0.0018	0.014	87		8.46	8.50		C			1								
116006	9.716	0.025	9.197	0.023		0.487	0.031	T	0.56	0.03	L	9.2308	0.0026	0.020	79		9.18	9.27		C			1								S
116007	9.751	0.030	9.195	0.029		0.526	0.031	T	0.60	0.03	L	9.2439	0.0021	0.018	61		9.22	9.27		C			1								S
116008	10.494	0.044	9.183	0.025		1.114	0.040	T	1.08	0.04	L	9.2233	0.0022	0.019	77		9.18	9.25		C			1								
116009	7.959	0.010	7.541	0.010		0.392	0.015	G	0.46	0.02	H	7.5978	0.0020	0.014	57		7.58	7.62		C			1								S
116010	9.879	0.024	8.593	0.014		1.094	0.022	T	1.06	0.02	L	8.6401	0.0014	0.011	99		8.62	8.67					1								
116011						1.150	0.015	G	1.25	0.03	I	11.9206	0.0064	0.059	108		11.75	12.04		U			1								G
116012	10.272	0.040	9.679	0.035		0.553	0.047	T	0.63	0.04	L	9.7166	0.0038	0.022	70		9.68	9.76		C			1								
116013	9.824	0.015	8.458	0.009		1.157	0.014	T	1.12	0.01	L	8.4997	0.0016	0.017	163		8.48	8.54					1								
116014	11.100	0.079	9.598	0.033		1.263	0.067	T	1.22	0.07	L	9.6305	0.0035	0.030	84		9.57	9.68		U			1								
116015	8.737	0.015	8.541	0.017		0.187	0.021	T	0.21	0.02	L	8.5714	0.0026	0.018	58		8.55	8.61		C			1								S
116016	10.556	0.041	9.754	0.032	C	0.610	0.015	G	0.68	0.01	H	8.8463	0.0662	0.594	88	–	7.68	9.68		D	23304+3050	I 2	1 C F B								G
116017	7.948	0.009	7.418	0.008	*	0.504	0.010	G	0.58	0.01	R *	7.4410	0.0042	0.030	98	–	7.40	7.48		D	23304+3050	I 2	2 C P B	BA	246	0.248	0.006	0.21	0.22	S G
116018	12.158	0.171	9.673	0.028		2.094	0.143	T	2.60	0.60	K	8.9104	0.0183	0.365	130		8.66	9.77		U 2 C			1 V								G
116019	10.206	0.019	9.007	0.012		1.026	0.018	T	1.00	0.01	L	9.0479	0.0016	0.021	161		9.02	9.08					1								
116020	10.467	0.048	9.887	0.043		0.515	0.015	G	0.59	0.02	H	10.0221	0.0023	0.017	69		9.98	10.05					1								
116021	8.676	0.009	7.557	0.006		0.964	0.008	T	0.95	0.01	L	7.6182	0.0011	0.013	153		7.60	7.64					1								S
116022	7.502	0.006	7.268	0.006		0.223	0.008	T	0.25	0.01	L	7.3144	0.0011	0.011	126		7.30	7.34					1								S
116023	7.165	0.005	7.116	0.006		0.050	0.007	T	0.06	0.01	L	7.1426	0.0009	0.009	125		7.13	7.16		C			1								S
116024	8.171	0.011	7.867	0.011	*	0.333	0.015	G	0.39	0.02	H *	7.8706	0.0021	0.013	80	*	7.84	7.89		D	23306–3657	H 1	2 C A	AB	292	0.529	0.006	1.47	0.03	S
116025	8.272	0.011	6.911	0.005		1.153	0.009	T	1.12	0.01	L	6.9432	0.0013	0.009	85		6.93	6.96					1								S
116026	8.548	0.009	8.346	0.011		0.214	0.015	G	0.24	0.02	H	8.3798	0.0015	0.018	128		8.36	8.42					1								
116027	8.752	0.008	8.795	0.010		−0.035	0.012	T	−0.01	0.01	L	8.8012	0.0020	0.023	213		8.77	8.84					1								
116028	9.708	0.033	8.759	0.023		0.823	0.031	T	0.85	0.02	L	8.8354	0.0019	0.015	49		8.81	8.85		C			1								
116029	9.134	0.012	8.514	0.011		0.574	0.012	T	0.65	0.01	L	8.5698	0.0015	0.015	119		8.55	8.60		C			1								S
116030	7.334	0.007	6.179	0.005		0.992	0.007	T	0.97	0.01	L	6.2343	0.0008	0.006	76		6.22	6.24		C			1								S
116031	9.530	0.014	8.412	0.010		0.963	0.013	T	0.95	0.01	L	8.4732	0.0012	0.015	170		8.45	8.49					1								
116032	10.810	0.063	9.223	0.028		1.330	0.054	T	1.29	0.06	L	9.2358	0.0028	0.019	51		9.20	9.27		C			1								
116033	8.303	0.011	7.600	0.010		0.636	0.015	G	0.70	0.01	H	7.6590	0.0015	0.010	47		7.64	7.67		C			1								S
116034	9.149	0.016	7.314	0.007		1.526	0.014	T	1.57	0.02	L	7.2833	0.0011	0.010	97		7.26	7.30					1								S
116035	7.997	0.014	7.764	0.019	A	0.222	0.023	T	0.24	0.03	L	7.8299	0.0093	0.035	40	A	7.81	7.97		D	23307+0515	I 2	1 C P A								S
116036	8.671	0.023	8.300	0.024	B	0.351	0.031	T	0.41	0.03	L	8.4331	0.0152			B				D	23307+0515	I 2	1 C I A								S
116037	9.619	0.026	8.219	0.015		1.183	0.024	T	1.14	0.02	L	8.2745	0.0020	0.012	50		8.25	8.31		C			1								
116038	8.557	0.010	8.375	0.012	*	0.174	0.015	T	0.19	0.02	L *	8.3924	0.0020	0.016	128	*	8.37	8.43		D	23307+6419	I 1	2 C A	AB	338	0.620	0.003	1.01	0.02	S
116039	10.311	0.021	8.377	0.008		1.605	0.018	T	1.62	0.02	L	8.3295	0.0015	0.018	192		8.30	8.36		C			1								
116040	7.900	0.008	7.622	0.008		0.288	0.001	G	0.33	0.00	H	7.6651	0.0013	0.012	141		7.64	7.69					1								S
116041	9.720	0.029	9.317	0.031		0.394	0.035	T	0.46	0.04	L	9.3680	0.0021	0.020	51		9.35	9.41		C			1								S
116042	8.729	0.013	7.239	0.007		1.254	0.012	T	1.21	0.01	L	7.2650	0.0010	0.009	86		7.25	7.28					1								S
116043	9.415	0.017	8.834	0.015		0.545	0.017	T	0.62	0.02	L	8.9150	0.0020	0.021	108		8.88	8.95					1								S
116044	7.682	0.006	7.669	0.007		0.023	0.005	G	0.04	0.00	H	7.6809	0.0013	0.013	125		7.66	7.71		C			1								S
116045	10.936	0.034	9.875	0.022		0.910	0.032	T	0.91	0.02	L	9.9161	0.0048	0.042	154		9.85	9.99		U			1 S								
116046	11.198	0.053	10.610	0.050	A	0.647	0.126	G	0.71	0.11	R *	10.6496	0.0033	0.045	168	*	10.58	10.73		D	23308+5155	H 1	2 C D	AB	35	4.068	0.072	3.04	0.33	G D
116047	9.951	0.021	9.454	0.021		0.467	0.027	T	0.54	0.03	L	9.5316	0.0024	0.025	123		9.48	9.57					1								S
116048	9.637	0.023	9.230	0.024		0.385	0.031	T	0.45	0.03	L	9.2931	0.0022	0.021	73		9.24	9.33		C			1								S
116049	9.810	0.019	8.396	0.011		1.194	0.017	T	1.15	0.01	L	8.4341	0.0012	0.018	152		8.41	8.47					1								
116050	9.136	0.017	8.220	0.013		0.799	0.001	G	0.83	0.00	H	8.2647	0.0021	0.018	87		8.23	8.31					1								S
116051	8.500	0.016	7.973	0.015		0.516	0.015	G	0.59	0.02	H	8.0073	0.0023	0.010	52		7.98	8.03		C			1								S
116052	10.174	0.029	9.279	0.022		0.796	0.027	T	0.83	0.02	L	9.3274	0.0029	0.023	88		9.28	9.36					1								
116053	9.287	0.021	8.226	0.015		0.920	0.020	T	0.92	0.01	L	8.2607	0.0017	0.009	60		8.24	8.27		C			1								S
116054	10.382	0.024	9.158	0.014		1.046	0.022	T	1.02	0.02	L	9.1989	0.0018	0.019	157		9.17	9.23		C			1								
116055	9.272	0.021	8.631	0.019	A	0.300	0.495	G	0.63	0.09	L *	8.5035	0.0032	0.015	49	*	8.47	8.53			23309+0929	I 1	2 C A	AB	215	1.431	0.011	0.88	0.06	S
116056	9.042	0.041	8.435	0.017	*	0.568	0.015	G	0.64	0.01	H *	8.8480	0.0024	0.023	187	*	8.82	8.89		D	23309–5807	I 1	2 C A	AB	118	1.346	0.008	0.70	0.02	S
116057	9.416	0.022	8.167	0.014		1.065	0.020	T	1.03	0.02	L	8.2113	0.0013	0.011	66		8.19	8.23					1								S
116058	9.830	0.032	9.096	0.026		0.673	0.033	T	0.73	0.03	L	9.1675	0.0026	0.015	52		9.13	9.20		C			1 S								S
116060	8.024	0.011	6.529	0.005		1.259	0.001	G	1.22	0.00	H	6.5630	0.0011	0.008	69		6.55	6.58		C			1								S
116061	9.503	0.024	9.070	0.024		0.423	0.027	T	0.49	0.03	L	9.1614	0.0089	0.045	46		9.07	9.22		U 2			1								S
116062	10.303	0.036	8.550	0.015		1.461	0.031	T	1.47	0.05	L	8.5008	0.0022	0.016	78		8.47	8.53					1								S
116063	7.816	0.011	7.158	0.011		0.595	0.003	G	0.67	0.00	H	7.2286	0.0018	0.016	125		7.20	7.26		U 2	23310–6905	I 1	1								S
116064	11.259	0.087	10.797	0.085	B	0.435	0.112	T	0.50	0.12	L	10.9872	0.0281			B				D	23311–3317	I 2	1 C I A								
116065	7.912	0.011	7.685	0.012	*	0.217	0.015	T	0.24	0.02	L *	7.7790	0.0016	0.015	113	*	7.76	7.81		D	23311+1847	I 1	2 C A	AB	101	2.233	0.008	2.30	0.04	S
116066	8.829	0.013	8.129	0.011	*	0.652	0.015	G	0.72	0.01	H *	8.1300	0.0016	0.013	122	*	8.11	8.15		D	23311–7408	I 1	2 C A	AB	253	1.038	0.007	1.82	0.04	S
116067	9.297	0.015	9.164	0.018	A	0.000	0.495	G	0.21	0.07	L *	9.1327	0.0020	0.019	117	*	9.10	9.17			23311+1818	I 1	2 C C	AB	81	2.097	0.101	3.73	0.29	
116068	9.767	0.025	9.296	0.024	A	0.457	0.027	T	0.53	0.03	L	9.4174	0.0074	0.023	69	A	9.37	9.45		D	23311–3317	I 2	1 C P A								
116069	7.695	0.011	7.206	0.010		0.448	0.015	G	0.52	0.02	H	7.2667	0.0011	0.007	49		7.25	7.28		C			1								S
116070	9.226	0.015	9.130	0.019		0.094	0.023	T	0.11	0.03	L	9.1201	0.0016	0.019	125		9.09	9.16					1								
116071	10.087	0.020	9.133	0.015		0.840	0.019	T	0.86	0.01	L	9.2031	0.0019	0.020	130		9.17	9.24		C			1								
116072	9.581	0.020	8.953	0.018		0.584	0.023	T	0.66	0.02	L	9.0499	0.0024	0.021	93		9.01	9.09		C			1								
116073	9.999	0.023	9.337	0.020		0.604	0.023	T	0.67	0.02	L	9.4178	0.0022	0.021	107		9.38	9.46		C			1								
116074	8.735	0.011	8.165	0.010		0.543	0.015	G	0.62	0.01	H	8.2232	0.0023	0.018	105		8.19	8.26					1								S
116075	10.047	0.020	9.282	0.017	*	0.697	0.020	T	0.75	0.02	L *	9.3437	0.0023	0.028	184	*	9.30	9.39		D	23313–5400	I 1	2 C A	AS	169	0.333	0.005	0.51	0.07	
116076	6.538	0.004	5.346	0.003		1.029	0.003	G	1.00	0.00	H	5.3841	0.0005	0.006	80		5.37	5.39					1								S
116077	10.951	0.052	9.978	0.036		0.925	0.003	G	0.97	0.00	I	10.0608	0.0037	0.022	75		10.02	10.10		C			1								
116078	8.700	0.012	8.342	0.012		0.348	0.015	T	0.41	0.02	L	8.4050	0.0015	0.014	89		8.38	8.43					1								S
116079	8.465	0.009	7.916	0.008		0.520	0.009	T	0.59	0.01	L	7.9682	0.0013	0.014	151		7.94	8.00					1								S
116080	10.576	0.028	8.808	0.011		1.503	0.025	T	1.65	0.08	O	8.7511	0.0016	0.022	186		8.71	8.79					1								
116081	9.060	0.013	9.017	0.017	A	0.500	0.495	G	0.02	0.02	L *	9.0176	0.0017	0.017	117	*	9.00	9.05		C	23313+4204	I 1	2 C D	AB	89	7.486	0.077	4.20	0.41	D
116082	8.057	0.007	7.620	0.007		0.426	0.008	T	0.49	0.01	L	7.6533	0.0015	0.016	159		7.63	7.68					1								S
116083	9.307	0.014	8.759	0.014		0.544	0.015	G	0.62	0.01	H	8.8166	0.0019	0.015	91		8.79	8.85		C			1								S
116084	8.413	0.008	7.874	0.007		0.513	0.008	T	0.59	0.01	L	7.9294	0.0013	0.016	193		7.90	7.96					1								S
116085	7.811	0.008	6.848	0.006		0.839	0.003	G	0.85	0.07	F	6.9008	0.0006	0.007	123		6.89	6.92					1								S
116086	9.492	0.024	7.926	0.013		1.314	0.021	T	1.28	0.02	L	7.9382	0.0016	0.009	54		7.92	7.96					1								S
116087	9.890	0.029	8.150	0.014		1.451	0.025	T	1.45	0.04	L	8.1465	0.0017	0.013	56		8.12	8.16		C			1								S
116088	8.442	0.008	8.216	0.008		0.216	0.011	T	0.24	0.01	L	8.2404	0.0013	0.015	162		8.21	8.27					1								S
116089	9.486	0.016	7.492	0.007		1.653	0.014	T	1.68	0.01	L	7.4154	0.0012	0.012	123		7.39	7.44					1								S
116090	8.948	0.013	8.847	0.016		0.053	0.015	G	0.07	0.01	H	8.8893	0.0017	0.016	123		8.87	8.92		C			1								G
116091	8.296	0.008	7.752	0.008	*	0.516	0.015	G	0.59	0.02	H *	7.8532	0.0014	0.015	148	*	7.83	7.88		D	23314+1614	I 1	2 C A	AB	308	8.621	0.005	1.34	0.02	S
116092	9.111	0.018	8.872	0.020		0.228	0.025	T	0.25	0.03	L	8.8800	0.0027	0.016	70		8.85	8.91					1								S
116093	10.073	0.029	8.890	0.019		1.014	0.027	T	0.99	0.02	L	8.9489	0.0016	0.014	87		8.93	8.98					1								
116094	8.905	0.007	7.445	0.004		1.230	0.006	T	1.19	0.01	L	7.4674	0.0009	0.013	225		7.45	7.49					1								S
116095	8.841	0.010	8.284	0.009		0.521	0.012	T	0.59	0.01	L	8.3351	0.0015	0.016	139		8.31	8.36					1								
116096	8.979	0.015	8.344	0.013	*	0.585	0.015	T	0.66	0.01	L *	8.4044	0.0022	0.015	88	*	8.39	8.43		D	23314–4210	I 1	2 C A	AB	349	0.372	0.006	1.37	0.05	S
116097	7.308	0.006	6.134	0.004		1.014	0.002	G	0.99	0.00	H	6.1842	0.0008	0.006	94		6.17	6.20					1								S
116098	10.936	0.067	9.025	0.024		1.621	0.059	T	2.08	0.14	O	8.8945	0.0021	0.014	62		8.87	8.92		C			1								
116099	8.574	0.007	7.353	0.004		1.043	0.006	T	1.01	0.01	L	7.4065	0.0010	0.014	252		7.39	7.43					1								S
116100	10.826	0.032	10.404	0.035		0.412	0.039	T	0.48	0.04	L	10.4344	0.0036	0.043	200		10.35	10.50					1 S								

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr													%	
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
116101	23 31 29.39	+65 38 47.7	8.71	H	352.872 462 96	+65.646 570 54		14.37	−3.02	23.85	0.70	0.68	0.88	0.81	0.76	−16	−12	+13	+18	− 6	−13	− 2	− 5	− 2	− 8		3	0.09
116102	23 31 30.12	+28 39 58.3	6.53	H	352.875 492 15	+28.666 201 34		7.82	20.73	−10.90	0.57	0.44	0.72	0.60	0.43	+18	+23	+ 6	+ 9	+ 9	− 6	+12	+ 0	+16	+17		2	−0.18
116103	23 31 30.22	−40 58 44.1	10.21	2 H	352.875 912 77	−40.978 912 15		7.90	−6.25	−28.54	1.03	1.19	1.60	1.10	1.28	+19	+ 5	+12	+23	+ 2	+17	− 1	+14	−12	+12		0	0.68
116104 H	23 31 30.89	+69 25 04.1	9.72	H	352.878 722 07	+69.417 814 29	A	1.54	22.45	−3.37	1.48	1.46	1.68	1.47	1.49	− 3	− 3	+13	+ 1	− 5	− 6	− 1	− 7	+ 0	+ 4		2	0.52
116105	23 31 31.07	−28 56 37.2	8.88	2 H	352.879 457 80	−28.943 671 95		−0.39	27.89	−13.60	1.07	0.94	1.34	1.20	1.13	+38	−16	−13	−41	− 9	+24	− 8	−33	+23	+37		0	0.41
116106	23 31 31.40	−04 05 13.0	6.50	G	352.880 827 08	−04.086 936 95		38.11	178.65	−192.79	0.79	0.70	0.87	0.88	0.85	+47	−33	−32	+ 4	+24	+ 4	+37	+44	−20	+25		0	−0.28
116107	23 31 32.21	−03 22 24.3	9.47	H	352.884 213 53	−03.373 421 88		7.67	108.10	−15.37	1.49	1.00	1.62	2.00	1.20	+24	+ 5	−18	−27	+13	−17	+23	+ 3	+19	−20		0	−0.66
116108	23 31 32.37	+33 41 54.5	7.42	2 H	352.884 893 18	+33.698 484 37		5.71	−47.63	−19.85	0.67	0.58	0.89	0.74	0.88	+13	+30	−11	+30	+ 7	+10	+ 8	− 8	+14	+ 9		2	1.97
116109	23 31 33.93	+86 10 41.1	7.09	1 H	352.891 367 02	+86.178 084 01		3.25	−7.09	−10.98	0.49	0.44	0.54	0.52	0.45	− 8	+ 7	+ 5	+ 1	− 8	+ 4	− 8	− 9	+10	−18		0	0.09
116110	23 31 35.06	−62 55 24.4	9.37	1 G	352.896 084 12	−62.923 432 78		19.51	391.70	210.23	0.78	0.87	1.12	1.04	1.09	+ 3	−11	− 4	+16	+ 2	+ 9	+ 4	+ 2	−11	+ 6		0	−0.85
116111	23 31 35.39	−36 17 27.6	8.08	H	352.897 465 86	−36.290 992 75		0.82	50.79	−102.44	1.12	0.80	1.09	1.24	0.94	−18	+20	−21	−58	+36	− 3	+41	+ 3	− 9	−26		2	0.45
116112	23 31 37.05	+50 39 55.7	8.85	1 H	352.904 380 09	+50.665 480 77		−0.08	−0.78	−4.24	0.61	0.72	1.02	0.77	0.99	−38	+ 9	+ 4	+17	− 6	+ 4	− 6	+11	− 7	−28		0	0.32
116113	23 31 37.49	+54 08 27.9	7.76	H	352.906 190 11	+54.141 091 42		2.88	5.51	−18.07	0.54	0.58	0.75	0.62	0.80	−36	+17	− 5	+10	− 8	+ 8	− 7	+13	− 2	−42		0	1.02
116114	23 31 39.57	+77 49 10.7	7.05	H	352.914 854 71	+77.819 645 00		5.17	42.90	15.14	0.47	0.42	0.52	0.60	0.47	+ 4	− 1	+12	+14	+ 6	− 8	+ 7	+11	+ 1	+ 6		0	0.40
116115	23 31 41.01	−31 20 10.4	8.48	H	352.920 886 07	−31.336 226 09		7.04	−20.71	−15.07	0.86	0.76	1.07	1.06	0.93	+40	−28	−32	−31	− 9	+ 8	−13	−38	+20	+36		0	0.29
116116	23 31 41.50	+09 19 15.2	8.76	H	352.922 909 96	+09.320 895 60		1.55	1.20	9.45	1.19	0.94	1.32	1.44	1.01	+17	−16	− 9	−23	+ 6	+22	+15	+16	− 9	− 4		0	0.71
116117	23 31 41.57	+24 06 40.1	7.55	H	352.923 198 82	+24.111 136 01		4.94	24.72	−26.48	0.61	0.54	0.80	0.66	0.61	+34	+ 7	− 8	+13	+12	−13	+12	+10	+ 2	+45		0	−1.29
116118	23 31 42.04	−21 22 10.0	6.24	H	352.925 174 50	−21.369 440 11		12.49	−1.02	−7.18	0.71	0.66	0.85	0.92	0.82	+27	−15	−36	+ 7	− 4	+18	+ 0	+ 3	+14	+31		0	−1.28
116119	23 31 43.05	+28 24 12.7	6.41	1 H	352.929 372 94	+28.403 522 27		6.78	−29.93	−13.78	0.52	0.44	0.68	0.59	0.43	+16	+17	+ 9	+ 4	+ 6	− 6	+ 6	− 7	+ 8	+ 8		0	−0.96
*116120	23 31 43.48	−44 49 32.4	10.15	G	352.931 182 42	−44.825 661 03		12.06	−106.03	−78.74	1.21	1.58	1.90	1.43	1.79	+23	− 4	−24	+10	+ 2	+17	+ 4	+18	+29	+30		2	−0.72
*116121	23 31 43.48	+60 31 46.4	8.93	H	352.931 163 74	+60.529 560 79		4.90	29.75	−4.18	0.71	0.76	0.95	0.90	0.91	−20	+ 7	+13	+10	− 3	− 1	− 4	−14	− 5	−27		0	−0.07
116122	23 31 44.16	−53 46 11.4	8.37	1 H	352.933 988 38	−53.769 822 66		19.06	104.93	−51.63	0.56	0.74	1.06	0.69	0.71	−18	+ 3	−15	+23	− 9	+10	− 3	−19	− 1	−10		0	−0.30
116123 H	23 31 45.03	−14 48 24.1	7.99	H	352.937 643 79	−14.806 705 61	A	7.27	−13.37	−0.40	1.55	1.16	1.57	2.32	1.21	+ 7	+17	−36	+ 5	− 4	+30	+ 0	−20	+ 3	−16		1	1.12
116124	23 31 46.36	−08 19 43.0	8.99	H	352.943 164 06	−08.328 600 72		7.21	37.77	−17.13	1.11	0.83	1.34	1.29	1.08	+38	−20	−40	−16	+ 7	+11	+13	+ 0	+18	+25		0	1.38
116125	23 31 48.42	−21 15 00.2	7.16	H	352.951 738 23	−21.250 042 42		13.72	−47.34	−28.92	1.17	1.10	0.99	2.34	3.18	+59	−24	−46	−65	−59	+30	−56	−57	+24	+87		0	0.03
116126	23 31 49.71	−10 51 52.9	8.86	2 H	352.957 111 96	−10.864 681 22		0.85	−11.11	−2.26	1.20	0.79	1.38	2.13	1.33	+31	− 3	+ 3	− 5	+17	+35	+17	+ 0	+16	+ 9		0	−0.70
116127	23 31 50.28	+44 04 22.2	6.78	H	352.959 519 22	+44.072 827 17		2.91	−21.23	19.57	0.42	0.45	0.75	0.46	0.52	− 7	+10	+21	+ 8	−16	− 6	− 9	−23	+ 9	+ 6		0	−1.24
116128	23 31 51.03	−11 56 53.0	7.69	H	352.962 644 83	−11.948 053 18		2.54	10.53	11.01	0.87	0.57	1.03	1.29	0.80	+37	−17	−23	−17	+ 1	+29	+ 1	−24	+19	+ 2		0	0.15
116129	23 31 51.23	−28 50 06.9	9.85	H	352.963 446 27	−28.835 251 12		8.99	39.97	−37.45	1.05	0.98	1.40	1.24	1.33	+47	−13	−12	−25	− 7	+26	− 4	−24	+27	+52		0	0.00
116130	23 31 51.46	+32 49 18.6	9.68	H	352.964 427 94	+32.821 830 92		1.12	−16.33	−15.48	1.22	0.85	1.48	1.26	0.87	+ 7	+33	−17	+14	+15	+10	+29	−22	+27	+40		2	0.65
116131	23 31 51.66	−41 45 08.6	6.57	H	352.965 244 27	−41.752 400 17		4.65	−2.14	6.15	0.60	0.64	0.79	0.71	0.70	+29	− 9	+ 8	+36	+20	+ 4	+18	+25	− 6	+22		2	0.91
116132 H	23 31 51.83	+19 56 14.7	10.05	H	352.965 979 10	+19.937 411 03	A	160.06	554.40	−62.61	2.52	2.22	2.81	2.03	1.60	+55	+11	+14	+10	− 4	− 6	− 3	− 9	+10	+47		0	−0.15
116133 H	23 31 51.93	+73 16 48.4	9.15	H	352.966 355 35	+73.280 115 28	*	4.25	39.24	−0.26	0.76	0.74	0.90	0.95	0.81	− 7	+ 2	+27	+18	− 9	+ 4	− 9	+ 3	+14	− 6		0	−0.07
116134	23 31 52.09	+58 46 11.0	9.14	H	352.967 062 49	+58.769 729 02		2.49	8.31	−2.26	0.75	0.73	0.99	0.83	0.87	−23	+33	− 1	− 1	+11	− 7	+16	−22	+10	−16		0	−0.65
116135 H	23 31 53.06	+47 32 51.9	9.79	H	352.971 068 41	+47.547 761 92	*	2.24	1.70	−2.58	0.81	0.96	1.48	0.95	1.27	−15	+11	+17	−21	− 5	−27	+ 2	−13	+23	− 7		0	−1.91
116136	23 31 53.18	−46 43 18.7	8.06	H	352.971 603 14	−46.721 853 44		6.88	93.92	6.26	0.75	0.53	0.97	0.96	0.74	−27	− 1	−17	+12	−19	+13	−17	−12	+14	+ 3		1	−0.25
116137	23 31 53.67	−47 58 16.3	8.87	H	352.973 634 62	−47.971 203 11		4.57	34.54	−14.89	0.93	0.66	1.26	1.05	0.74	−18	−22	+ 1	+ 2	−13	− 7	−18	−15	+22	−26		0	−1.28
116138	23 31 53.81	+03 25 49.9	9.01	G	352.974 211 79	+03.430 535 74		12.87	161.05	−29.31	1.06	0.96	1.34	1.20	0.94	+28	+ 3	−21	− 6	−13	+39	− 6	−24	+21	+26		0	0.03
116139 H	23 31 55.52	+54 01 10.0	8.77	H	352.981 320 36	+54.019 453 16	A	16.00	22.58	8.12	1.47	1.45	1.91	1.58	1.79	−27	+21	− 7	+10	+ 1	+ 7	+ 2	− 1	+ 5	−37		2	0.18
116140	23 31 55.90	+52 31 57.5	8.82	G	352.982 912 76	+52.532 631 14		1.06	−33.21	−13.55	0.77	0.81	1.21	0.88	0.97	−35	− 2	+22	+18	− 6	+ 2	− 7	+16	+25	−26		2	0.99
116141	23 31 55.99	−25 44 39.1	6.57	H	352.983 291 40	−25.744 189 15		7.67	−0.65	20.03	0.85	0.58	0.96	1.12	0.75	+12	−17	−13	−14	+ 9	+24	+ 7	− 8	+31	+ 9		0	−0.68
116142	23 31 56.22	−14 56 12.1	8.04	H	352.984 255 09	−14.936 694 69		3.42	47.32	−19.25	1.12	0.76	1.22	1.93	0.97	+ 3	+20	− 8	− 2	+ 8	+33	+15	+ 7	+ 5	−29		0	3.20
116143	23 31 56.29	−10 59 40.4	8.75	H	352.984 546 61	−10.994 565 26		3.51	7.27	−6.89	1.08	0.76	1.27	2.02	1.21	+37	− 6	− 7	− 4	+ 9	+26	+ 4	−16	+10	+ 2		0	0.68
116144	23 31 57.46	+38 18 23.8	7.40	H	352.989 412 59	+38.306 599 68		3.44	−1.10	−16.91	0.67	0.53	0.82	0.72	0.52	+ 9	+31	+ 7	+ 4	+ 8	−16	+17	−12	+25	+12		0	1.39
*116145	23 31 57.63	−80 49 40.4	7.34	H	352.990 120 03	−80.827 895 16		6.38	2.16	22.16	0.54	0.49	0.60	0.65	0.55	+ 7	− 8	−12	+19	+13	+ 6	+14	+ 7	− 3	+14		0	0.92
*116146	23 31 57.56	−01 05 09.3	6.39	G	352.989 838 17	−01.085 924 34		4.07	8.98	16.17	0.78	0.51	0.85	0.99	0.68	+24	+15	− 5	−16	+11	+12	+22	+11	+21	+ 2		2	−0.65
*116147	23 31 57.58	+46 47 04.6	8.37	H	352.989 935 67	+46.784 599 46		3.15	6.07	−8.51	0.55	0.67	1.04	0.55	0.85	− 7	+13	+12	− 2	−10	−17	− 9	+13	+20	+ 0		5	−1.75
116148	23 31 59.21	+53 22 26.2	9.56	H	352.996 724 26	+53.373 937 09		0.92	1.07	0.70	0.89	0.89	1.23	1.34	1.26	−39	− 3	+14	+ 4	− 4	+24	− 7	+ 9	+ 3	−46		0	0.08
116149	23 31 59.29	+54 55 15.0	8.96	H	352.997 048 96	+54.920 830 44		−0.09	−2.95	−6.85	0.72	0.82	1.02	0.89	1.09	−31	+22	+ 3	+29	−12	+ 8	−14	+32	−17	−42		0	0.34
116150	23 31 59.88	−56 14 59.0	8.99	H	352.999 518 21	−56.249 716 50		1.34	−17.50	−29.61	0.68	0.79	1.29	0.80	0.88	−28	+ 7	−22	+16	+ 7	+16	+ 9	− 6	− 9	−33		0	1.73
116151	23 32 00.21	+45 53 20.2	7.22	H	353.000 892 37	+45.888 951 28		2.77	0.57	−21.46	0.45	0.53	0.83	0.52	0.65	+ 7	+ 9	+13	−40	−18	−12	−19	−13	+16	+17		1	2.31
116152	23 32 00.53	−27 08 22.8	9.23	H	353.002 193 56	−27.139 674 79		1.64	−8.52	−1.98	1.90	1.57	2.28	2.42	1.81	+41	−13	− 2	−10	+ 5	−12	− 7	−42	+13	+12		0	
116153 H	23 32 01.32	+43 49 20.5	8.17	2 H	353.005 502 20	+43.822 374 10	A	3.38	−10.90	−6.05	1.22	1.40	1.79	1.17	1.25	−10	+ 9	+22	+ 0	−21	− 9	−16	−27	+ 8	+16		2	0.34
116154	23 32 04.39	−43 35 24.0	7.95	1 H	353.018 273 55	−43.590 010 26		19.07	91.00	6.33	0.68	0.72	0.97	0.70	0.75	+14	−12	− 9	+13	+ 7	+16	+ 9	+ 7	− 4	+12		0	−0.27
116155	23 32 04.95	−59 00 13.4	7.81	H	353.020 618 68	−59.003 722 04		3.08	−6.88	−15.99	0.51	0.57	0.82	0.56	0.60	−18	+ 1	−22	− 1	+ 0	+ 4	+ 1	− 1	− 4	− 9		0	−0.35
116156	23 32 07.76	+11 30 58.4	8.78	H	353.032 326 24	+11.516 213 45		4.19	−39.63	−23.50	1.10	0.88	1.33	1.17	1.03	+22	+12	−22	+ 9	+ 7	+22	+15	+ 7	+19	+38		0	−0.72
116157	23 32 08.06	+36 56 57.9	10.44	H	353.033 580 14	+36.949 407 69		4.67	−34.99	−24.10	1.28	0.99	1.54	1.59	1.01	− 8	+ 4	+ 3	−15	+23	+ 6	+19	− 2	+ 8	− 1		0	−1.02
116158	23 32 08.13	−21 48 05.6	8.15	H	353.033 888 03	−21.801 544 57		9.44	−96.31	49.58	0.97	0.90	1.25	1.47	1.04	+11	+ 6	−46	− 2	+ 8	− 4	+ 8	− 1	+21	+ 8		0	−1.48
116159	23 32 08.63	−03 01 42.1	8.80	H	353.035 976 08	−03.028 349 24		12.32	20.42	−15.98	1.06	0.81	1.22	1.50	0.97	+33	−11	− 7	+10	+ 9	+24	+ 9	+11	+ 3	− 4		0	1.18
116160	23 32 09.40	+16 37 43.4	8.44	H	353.039 147 12	+16.628 726 65		4.13	78.99	10.00	0.99	0.59	1.07	1.03	0.63	+35	− 8	−10	−21	+ 3	− 5	+ 0	−21	+23	+46		0	−0.77
116161	23 32 11.48	+65 44 20.9	6.65	H	353.047 834 98	+65.739 138 23		7.54	60.65	7.70	0.48	0.49	0.61	0.58	0.54	− 8	+ 0	+13	+ 7	−11	+ 5	−11	+ 7	+ 5	− 9		0	0.49
116162	23 32 12.47	+40 55 58.4	8.95	H	353.051 963 42	+40.932 886 89		1.84	0.28	−14.32	0.74	0.72	1.06	0.76	0.74	+12	+21	+10	+54	− 1	+11	+ 8	− 6	+14	+24		0	−1.42
116163	23 32 12.67	−11 32 40.3	6.64	H	353.052 801 24	−11.544 523 63		3.41	3.71	−12.61	0.78	0.51	0.95	1.21	0.72	+29	−20	−21	−15	+ 0	+40	+ 2	−19	+23	+ 3		0	0.96
116164 H	23 32 12.71	+07 05 06.1	6.80	H	353.052 966 46	+07.085 015 28	*	13.00	−23.08	−52.79	0.89	0.71	1.04	1.03	0.70	+21	+ 2	−24	−33	+ 1	+23	+11	− 1	+ 7	+11		0	0.24
116165	23 32 13.12	+25 35 04.7	8.97	H	353.054 677 71	+25.584 652 08		3.93	−36.41	−26.94	0.86	0.67	1.03	0.94	0.76	+28	− 2	− 6	−17	+ 9	+ 1	+ 7	− 2	+13	+42		0	−0.66
116166	23 32 14.13	+29 49 40.1	8.76	H	353.058 883 30	+29.827 815 75		2.79	26.22	−5.59	0.85	0.67	1.16	1.00	0.70	+13	+16	−13	+24	+ 1	− 9	+ 6	−18	+31	+15		3	1.26
116167 H	23 32 14.69	+14 58 08.8	9.48	3 H	353.061 215 29	+14.969 109 38	*	5.17	−38.42	−6.99	1.77	1.19	1.72	1.74	0.99	+52	− 5	− 6	+ 6	+16	−13	+14	− 4	+ 9	+61		3	−0.20
116168	23 32 16.26	+26 33 06.5	8.27	H	353.067 764 20	+26.551 792 95		11.76	−2.70	−57.14	0.85	0.71	1.00	1.06	0.80	− 2	+11	+ 0	+18	+ 8	−24	+ 4	− 6	− 1	+19		0	1.41
116169	23 32 16.41	+51 54 31.1	9.38	H	353.068 358 03	+51.908 641 88		1.98	2.81	−0.44	0.71	0.79	1.20	0.88	0.96	−25	+ 3	+11	− 6	+ 3	− 3	+ 5	− 6	+24	−12		0	0.91
116170	23 32 18.48	−33 40 33.0	8.50	G	353.076 982 07	−33.675 840 99		3.72	21.78	−12.03	0.99	0.88	1.37	1.10	0.99	+22	+ 5	−42	−34	−24	+35	− 7	−32	+43	+34		0	1.60
116171	23 32 18.96	−45 36 23.0	9.62	H	353.078 986 67	−45.606 381 19		8.28	6.36	12.48	1.36	1.06	1.72	1.76	0.98	−10	+19	−27	+16	−20	+ 3	−19	−28	+26	−37		2	1.08
116172	23 32 20.87	−43 36 47.5	8.87	H	353.086 970 88	−43.613 206 78		4.08	−23.33	−29.73	0.85	0.94	1.25	0.89	0.97	+16	−14	−13	+ 9	+ 4	+18	+ 6	− 4	+ 3	+14		0	−1.51
116173	23 32 21.35	−49 12 55.6	9.38	G	353.088 946 66	−49.215 446 09		4.39	49.00	−25.58	0.77	0.81	1.36	0.80	0.90	−14	− 8	−10	−32	+ 1	+ 3	+ 1	−18	+ 2	−16		0	0.10
116174	23 32 22.47	+35 19 50.3	7.96	H	353.093 619 72	+35.330 640 75		16.97	87.88	−73.81	0.76	0.61	0.98	1.01	0.63	+ 9	+12	+ 2	− 8	+16	+25	+13	− 5	+13	+16		0	0.47
116175 H	23 32 22.50	+21 59 09.1	10.25	H	353.093 741 83	+21.985 868 43	A	5.33	198.52	41.47	2.60	2.32	2.93	3.06	2.23	+57	+ 6	− 5	+29	+ 4	+ 6	+ 7	+ 4	+ 0	+52		0	−0.98
*116176	23 32 22.67	−74 12 05.7	7.90	2 H	353.094 474 76	−74.201 593 97		2.45	40.39	−29.56	0.63	0.62	0.80	0.74	0.64	+ 4	−15	−32	− 5	+ 2	− 3	+ 0	− 8	+ 9	+ 5		1	−0.54
*116177	23 32 22.60	+36 00 24.7	8.60	G	353.094 171 10	+36.006 857 58		6.08	12.88	−16.10	0.84	0.70	1.03	1.19	0.70	+ 1	+ 7	+ 3	−19	+18	+23	+12	−23	+ 2	+13		0	1.25
116178	23 32 22.91	−13 17 40.8	8.67	H	353.095 469 68	−13.294 679 61		2.24	11.91	−13.04	1.02	0.70	1.18	1.27	0.90	+30	− 5	+ 3	− 1	+ 5	+26	+ 0	−16	+15	+ 7		0	−0.35
116179	23 32 24.54	+04 02 51.1	8.64	H	353.102 268 02	+04.047 536 81		7.80	15.03	3.47	1.25	0.82	1.26	1.17	0.85	+ 2	+23	−28	−44	− 1	− 4	+ 8	−36	+36	− 2		0	1.00
116180 H	23 32 24.67	+17 24 15.2	7.05	H	353.102 775 14	+17.404 226 79	A	6.95	39.78	−19.37	1.01	0.68	1.02	0.95	0.65	+44	+ 9	−12	− 3	+ 3	− 6	+ 4	−14	+26	+46		3	0.25
116181	23 32 24.78	+34 57 08.5	6.66	G	353.103 230 72	+34.952 366 43		4.75	14.86	−9.64	0.66	0.59	0.85	0.74	0.56	+13	+22	−11	+ 9	− 4	+14	+ 4	−37	+22	+25		0	0.72
116182	23 32 24.81	+53 17 50.7	8.02	H	353.103 359 00	+53.297 412 81		2.19	−11.17	−9.02	0.67	0.69	1.03	0.97	0.96	−41	− 6	+16	+ 2	+ 0	+28	− 4	+ 5	− 6	−44		1	0.56
116183	23 32 25.89	−10 59 55.6	6.78	H	353.107 869 23	−10.998 770 18		3.83	4.29	5.48	0.79	0.53	0.93	1.31	0.77	+30	−18	−24	−15	+ 3	+34	+10	−11	+10	+ 0		0	−0.60
116184	23 32 28.19	−63 39 17.7	7.34	H	353.117 447 14	−63.654 926 33		3.34	8.93	−32.86	0.54	0.58	0.79	0.64	0.63	− 7	− 9	−19	− 4	+ 7	+11	+12	−18	−12	+ 3		0	−0.94
116185	23 32 28.39	+03 02 24.7	8.88	H	353.118 288 69	+03.040 204 92		7.23	−3.93	−17.42	1.14	0.84	1.42	1.41	1.01	+17	+20	− 4	− 6	+ 5	+47	+13	− 7	+26	+29		0	1.65
116186	23 32 28.67	+33 44 27.4	7.60	G	353.119 449 82	+33.740 934 41		14.32	−22.07	5.41	0.66	0.60	0.88	0.76	0.60	+14	+28	−15	+32	+ 8	+ 6	+17	−19	+27	+24		0	1.04
116187	23 32 29.03	+23 50 37.2	6.41	H	353.120 963 74	+23.843 675 17		4.70	−2.02	−27.06	0.52	0.44	0.69	0.56	0.48	+33	+ 4	− 7	+ 7	+10	− 5	+10	+ 5	+ 7	+42		0	−1.15
116188	23 32 29.30	+72 00 03.5	6.73	H	353.122 075 28	+72.000 980 82		4.15	−16.10	−17.26	0.44	0.44	0.54	0.46	0.49	+ 0	+ 6	+10	+ 4	−10	+ 2	−10	− 3	+18	− 1		0	−1.81
116189	23 32 29.60	−32 14 13.7	8.75	H	353.123 339 01	−32.237 127 24		0.11	8.05	−21.74	1.10	0.88	1.27	1.27	1.00	+ 9	+10	−32	−60	+ 4	+ 7	+16	−33	+38	− 1		0	0.35
116190	23 32 31.08	+43 12 23.7	7.82	H	353.129 480 87	+43.206 575 19		4.83	−32.86	−18.67	0.47	0.60	0.88	0.61	0.67	+ 0	+ 8	+30	+ 2	−17	−11	− 9	−34	− 3	+10		0	−0.37
*116191 H	23 32 46.46	−16 45 10.6	10.39	G	353.193 584 33	−16.752 931 85	B	−16.55	545.43	326.62	21.94	18.93	13.75	25.56	22.38	+61	−47	−29	−61	−41	+80	−59	−59	+62	+72		23	0.93
*116192	23 32 32.45	+48 22 20.3	8.55	H	353.135 213 11	+48.372 305 11		1.02	−0.29	−2.98	0.63	0.79	1.25	0.72	0.90	−23	+ 0	+35	−24	+ 6	+ 3	+ 4	−15	+12	−17		1	−1.09
*116193 H	23 32 33.04	−45 19 54.6	8.72	H	353.137 658 87	−45.331 820 67	*	6.82	−33.97	−29.74	0.90	0.86	1.30	1.02	0.74	+ 0	+23	−29	+ 1	−20	+22	− 8	−39	+28	− 6		0	−1.79
*116194	23 32 33.03	−50 06 56.0	7.94	H	353.137 636 36	−50.115 554 63		4.79	44.12	6.38	0.54	0.61	0.93	0.67	0.63	− 3	−18	−17	− 5	− 9	+ 7	− 7	−13	+ 4	−14		0	0.54
*116195	23 32 33.72	+50 29 26.2	8.68	H	353.140 491 70	+50.490 604 17		2.79	16.66	−3.36	0.71	0.83	1.21	0.94	1.33	−42	+ 5	+ 0	+14	+ 4	− 5	+10	− 3	+15	−22		0	1.21
*116196	23 32 34.99	+53 41 11.0	6.83	G	353.145 793 15	+53.686 386 28		2.40	3.89	−5.22	0.54	0.59	0.79	0.70	0.78	−40	+ 1	+ 7	+20	−10	+ 5	−11	+15	+ 7

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
116101	9.462	0.018	8.793	0.016		0.620	0.020	T	0.69	0.02	L	8.8408	0.0018	0.014	113		8.82	8.86					1							
116102	7.777	0.008	6.641	0.005		0.985	0.005	G	0.97	0.00	H	6.6993	0.0009	0.007	108		6.68	6.71					1							S
116103	10.993	0.050	10.278	0.043		0.657	0.053	T	0.72	0.05	L	10.3445	0.0221	0.163	101		10.21	10.59	0.19	P 1 A			1							P
116104	10.311	0.031	9.835	0.031	A	0.539	0.107	G	0.61	0.11	R *	9.8409	0.0033	0.028	115	*	9.79	9.89		D	23315+6925	H 1	2 C	A	AB	66	1.040	0.016	2.12	0.07	G
116105	10.940	0.041	9.077	0.015		1.581	0.036	T	2.28	0.08	O	8.9094	0.0036	0.034	133		8.87	8.98		U 2	23315−2857	I 1	1							S
116106	7.134	0.006	6.551	0.006		0.531	0.008	G	0.60	0.01	H	6.6127	0.0009	0.007	69		6.60	6.63					1							S
116107	10.030	0.042	9.581	0.043		0.424	0.055	T	0.49	0.06	L	9.5616	0.0030	0.020	59		9.51	9.59		C			1							S
116108	7.713	0.008	7.448	0.008		0.252	0.011	T	0.28	0.01	L	7.4956	0.0031	0.021	87		7.48	7.55	0.58	P 1 A			1 G							S
116109	7.309	0.005	7.130	0.005		0.171	0.007	T	0.19	0.01	L	7.1507	0.0016	0.014	128		7.13	7.17		M			1							S
116110	10.345	0.030	9.430	0.022		0.778	0.002	G	0.81	0.00	H	9.5099	0.0018	0.025	143		9.44	9.55		U			1							
116111	9.613	0.022	8.201	0.013		1.191	0.021	T	1.15	0.02	L	8.2077	0.0019	0.018	83		8.17	8.23					1							S
116112	8.862	0.009	8.830	0.011		0.034	0.013	T	0.05	0.01	L	8.8645	0.0019	0.019	198		8.83	8.90		U			1							
116113	7.843	0.007	7.764	0.009		0.078	0.011	T	0.09	0.01	L	7.7978	0.0014	0.014	145		7.78	7.82		C			1							S
116114	7.082	0.005	7.049	0.006		0.035	0.007	T	0.05	0.01	L	7.0667	0.0009	0.007	122		7.05	7.08		C			1							S
116115	8.832	0.012	8.501	0.012		0.319	0.019	T	0.37	0.03	L	8.5555	0.0020	0.015	95		8.53	8.58					1							S
116116	10.068	0.038	8.869	0.023		1.026	0.035	T	1.00	0.03	L	8.9266	0.0022	0.016	49		8.90	8.96		C			1							S
116117	9.090	0.013	7.679	0.008		1.192	0.012	T	1.15	0.01	L	7.7194	0.0017	0.015	122		7.70	7.74					1							S
116118	6.619	0.005	6.276	0.005		0.319	0.008	G	0.37	0.01	H	6.3219	0.0010	0.007	65		6.31	6.34		C			1							S
116119	6.441	0.004	6.408	0.005		0.035	0.006	T	0.05	0.01	L	6.4291	0.0023	0.020	107		6.39	6.45	2.86	P 1 A			1							S
116120	10.749	0.043	10.153	0.039		0.525	0.015	G	0.60	0.02	H	10.2645	0.0029	0.027	86		10.21	10.33					1							
116121	9.157	0.014	8.958	0.017		0.186	0.005	G	0.20	0.01	H	8.9892	0.0020	0.018	113		8.96	9.02					1							
116122	9.175	0.011	8.442	0.009		0.657	0.011	T	0.72	0.01	L	8.5012	0.0017	0.021	183		8.47	8.54		U			1							S
116123	9.350	0.022	8.146	0.015	*	1.030	0.021	T	1.00	0.02	L *	8.1596	0.0020	0.011	58	*	8.13	8.18		D	23318−1448	H 1	2 C	A	AB	328	0.860	0.015	2.87	0.08	S
116124	9.596	0.021	9.046	0.020		0.515	0.026	T	0.59	0.03	L	9.1064	0.0018	0.015	70		9.07	9.15		C			1							S
116125	7.653	0.009	7.215	0.008		0.438	0.015	G	0.51	0.02	H	7.2554	0.0012	0.012	65		7.24	7.27					1 G							S
116126	11.028	0.064	9.064	0.020		1.629	0.053	T	1.65	0.05	L	8.9732	0.0038	0.031	81		8.92	9.03		U			1							
116127	8.693	0.009	6.925	0.004		1.473	0.008	T	1.49	0.01	L	6.9111	0.0007	0.009	175		6.89	6.93					1							S
116128	8.962	0.015	7.785	0.010		1.011	0.020	G	0.99	0.02	H	7.8547	0.0011	0.010	94		7.83	7.87					1							S
116129	10.570	0.034	9.901	0.029		0.620	0.037	T	0.69	0.03	L	9.9792	0.0022	0.021	128		9.95	10.02		C			1							
116130	10.133	0.031	9.743	0.033		0.369	0.042	T	0.43	0.05	L	9.7681	0.0022	0.021	73		9.72	9.82		C			1							
116131	8.157	0.009	6.708	0.006		1.222	0.008	T	1.18	0.01	L	6.7376	0.0013	0.009	83		6.72	6.75		C			1							S
116132	12.131	0.121	10.471	0.044	A	1.190	0.510	G	2.19	0.08	B *	10.1155	0.0027	0.033	129	*	10.06	10.17		R	23319+1956	I 1	2 C	B	AB	101	5.029	0.028	2.14	0.10	
116133	9.757	0.019	9.202	0.019	*	0.520	0.024	T	0.59	0.03	L *	9.2677	0.0018	0.018	124	*	9.24	9.31		R	23319+7317	I 1	2 C S	A	AS	25	0.152	0.017	1.08	0.49	
116134	9.888	0.034	9.246	0.032		0.630	0.015	G	0.70	0.01	H	9.2767	0.0021	0.016	118		9.25	9.30		C			1							
116135	10.025	0.021	9.816	0.026	*	0.200	0.031	T	0.22	0.04	L *	9.8537	0.0021	0.025	141	*	9.80	9.90		C	23319+4733	H 1	2 C S	D	AB	149	0.146	0.012	0.17	0.46	G D
116136	8.504	0.008	8.095	0.008		0.386	0.013	G	0.45	0.01	H	8.1483	0.0010	0.012	154		8.13	8.17		C			1 G							S
116137	10.312	0.021	8.998	0.012		1.116	0.019	T	1.08	0.02	L	9.0346	0.0019	0.021	161		9.00	9.08					1							
116138	9.750	0.027	9.106	0.024		0.578	0.004	G	0.65	0.00	H	9.1433	0.0020	0.016	58		9.11	9.17		C			1							
116139	9.484	0.018	8.835	0.016	A	0.721	0.126	G	0.59	0.03	L *	8.8795	0.0022	0.023	136	*	8.84	8.91			23319+5401	I 1	2 C	B	AB	50	6.159	0.038	3.32	0.23	S
116140	10.269	0.025	8.964	0.014		1.140	0.015	G	1.10	0.02	H	8.9948	0.0023	0.025	153		8.95	9.03					1							
116141	7.859	0.011	6.688	0.007		1.004	0.010	T	0.98	0.01	L	6.7388	0.0012	0.008	66		6.73	6.76		C			1							S
116142	9.451	0.022	8.147	0.013		1.108	0.020	T	1.07	0.02	L	8.2110	0.0015	0.012	56		8.19	8.23		C			1							S
116143	9.888	0.025	8.852	0.017		0.901	0.023	T	0.90	0.02	L	8.9071	0.0027	0.017	78		8.88	8.93					1							S
116144	9.165	0.016	7.559	0.009		1.345	0.014	T	1.31	0.02	L	7.5538	0.0015	0.012	89		7.53	7.57			23320+3818	I 1	1							S
116145	8.777	0.010	7.463	0.006		1.116	0.009	T	1.08	0.01	L	7.5057	0.0012	0.012	142		7.49	7.53		C			1							S
116146	7.907	0.010	6.517	0.005		1.177	0.002	G	1.14	0.00	H	6.5577	0.0010	0.008	83		6.54	6.57		C			1							S
116147	8.601	0.008	8.407	0.009		0.186	0.011	T	0.20	0.01	L	8.4291	0.0019	0.019	169		8.40	8.47					1							S
116148	9.692	0.018	9.558	0.023		0.129	0.027	T	0.14	0.03	L	9.6077	0.0022	0.021	141		9.57	9.66		C			1							G
116149	9.061	0.013	8.970	0.016		0.089	0.019	T	0.10	0.02	L	9.0003	0.0024	0.023	133		8.96	9.04					1							
116150	10.569	0.024	9.122	0.012		1.260	0.015	G	1.22	0.02	H	9.1497	0.0021	0.028	225		9.10	9.19					1							
116151	9.342	0.012	7.423	0.005		1.593	0.010	T	1.61	0.01	L	7.3385	0.0011	0.011	181		7.32	7.37					1							
116152	10.412	0.026	9.316	0.016		0.947	0.023	T	0.94	0.02	L	9.3941	0.0022	0.021	127		9.36	9.44					1 X	S						
116153	8.370	0.012	8.135	0.013	*	0.224	0.017	T	0.25	0.02	L *	8.2423	0.0016	0.020	157	*	8.22	8.32		U 2 C	23320+4349	I 1	2 C	A	AB	309	4.847	0.006	0.92	0.02	S P
116154	8.679	0.012	8.021	0.011		0.617	0.015	G	0.69	0.01	H	8.0857	0.0026	0.023	84		8.05	8.12		U			1							S
116155	9.328	0.012	7.932	0.007		1.180	0.011	T	1.14	0.01	L	7.9735	0.0014	0.016	179		7.94	8.00		C			1							S
116156	10.173	0.032	8.870	0.018		1.107	0.029	T	1.07	0.03	L	8.9525	0.0037	0.016	58		8.92	8.99					1							
116157	11.153	0.071	10.536	0.066		0.574	0.085	T	0.65	0.08	L	10.5676	0.0021	0.020	74		10.53	10.60		C			1							G
116158	9.282	0.020	8.236	0.014		0.909	0.018	T	0.91	0.01	L	8.3061	0.0018	0.013	65		8.28	8.33		C			1							S
116159	9.382	0.024	8.870	0.023		0.481	0.030	T	0.55	0.03	L	8.9089	0.0019	0.015	59		8.89	8.93		C			1							S
116160	9.986	0.023	8.571	0.012		1.195	0.020	T	1.15	0.02	L	8.6043	0.0013	0.013	127		8.58	8.63		C			1							
116161	6.916	0.004	6.675	0.005		0.230	0.006	T	0.26	0.01	L	6.7159	0.0007	0.008	118		6.70	6.73		C			1							S
116162	10.322	0.032	9.085	0.019		1.056	0.029	T	1.02	0.02	L	9.1137	0.0016	0.019	108		9.09	9.14		C			1							
116163	8.774	0.013	6.843	0.006		1.603	0.011	T	1.62	0.01	L	6.7551	0.0013	0.011	87		6.73	6.77					1							S
116164	7.386	0.010	6.847	0.010	*	0.505	0.013	T	0.58	0.01	L *	6.9092	0.0016	0.008	45	*	6.89	6.92		C	23322+0705	I 1	2 C S	A	AB	261	0.157	0.012	0.46	0.43	S
116165	10.382	0.038	9.088	0.021		1.100	0.034	T	1.06	0.04	L	9.1348	0.0016	0.016	94		9.11	9.16		C			1							
116166	10.861	0.055	8.955	0.019		1.617	0.048	T	1.98	0.12	O	8.8423	0.0019	0.018	97		8.81	8.89					1							
116167	10.120	0.021	9.567	0.020	*	0.518	0.026	T	0.59	0.03	L *	9.5959	0.0085	0.091	144	*	9.54	9.99		P 1 A	23322+1458	H 1	2 C	D	AB	81	0.288	0.028	1.15	0.18	D
116168	9.008	0.015	8.311	0.013		0.643	0.016	T	0.71	0.01	L	8.4009	0.0017	0.015	85		8.38	8.42		C			1 G							S
116169	9.362	0.013	9.363	0.017		0.004	0.020	T	0.02	0.02	L	9.3882	0.0015	0.023	169		9.35	9.43					1							
116170	8.929	0.015	8.517	0.016		0.391	0.015	G	0.46	0.02	H	8.5894	0.0021	0.020	77		8.54	8.62					1							S
116171	10.293	0.032	9.661	0.028		0.582	0.031	T	0.65	0.03	L	9.7458	0.0034	0.027	95		9.70	9.79					1							
116172	10.350	0.033	8.966	0.018		1.171	0.029	T	1.13	0.03	L	9.0311	0.0027	0.018	87		9.00	9.06					1							
116173	9.743	0.016	9.394	0.017		0.359	0.004	G	0.42	0.00	H	9.4642	0.0022	0.023	153		9.40	9.51					1							
116174	8.692	0.014	8.045	0.012		0.593	0.014	T	0.66	0.01	L	8.0871	0.0019	0.013	82		8.07	8.11		C			1							S
116175	11.242	0.056	10.463	0.044	A						T *	10.3832	0.0023	0.029	122	*	10.33	10.45		D	23324+2159	H 1	2 C	A	AB	39	4.038	0.049	2.28	0.11	G
116176	9.915	0.023	8.126	0.010		1.520	0.021	T	2.48	0.04	O	7.9184	0.0033	0.029	118		7.88	7.96		U 2			1	S						S
116177	9.040	0.016	8.629	0.016		0.348	0.015	G	0.41	0.02	H	8.6931	0.0014	0.009	68		8.68	8.71					1							
116178	9.721	0.023	8.756	0.017		0.848	0.021	T	0.86	0.01	L	8.8267	0.0027	0.016	81		8.80	8.86		C			1							
116179	8.997	0.018	8.654	0.019		0.325	0.024	T	0.38	0.03	L	8.7186	0.0031	0.015	55		8.69	8.75					1							S
116180	7.400	0.010	6.981	0.008	*	0.390	0.020	G	0.38	0.02	H *	7.1265	0.0014	0.012	123	*	7.11	7.15		R	23324+1724	I 1	2 C	A	AB	281	1.782	0.005	1.89	0.02	S
116181	6.590	0.005	6.648	0.006		−0.045	0.007	G	−0.02	0.01	H	6.6528	0.0010	0.008	76		6.64	6.67		C			1							S
116182	8.189	0.008	8.018	0.009		0.164	0.011	T	0.18	0.01	L	8.0783	0.0014	0.012	142		8.05	8.11					1							S
116183	7.900	0.010	6.880	0.007		0.910	0.015	G	0.90	0.02	A	6.9357	0.0009	0.007	90		6.92	6.95		C			1							S
116184	9.283	0.013	7.521	0.006		1.469	0.011	T	1.48	0.02	L	7.4675	0.0014	0.015	144		7.44	7.50					1							S
116185	9.419	0.024	8.921	0.024		0.468	0.031	T	0.54	0.03	L	8.9841	0.0025	0.017	56		8.95	9.01		C			1							
116186	8.068	0.009	7.630	0.009		0.428	0.015	G	0.50	0.02	H	7.6985	0.0012	0.009	92		7.68	7.71		C			1							S
116187	8.367	0.010	6.575	0.005		1.492	0.009	T	1.52	0.01	L	6.5339	0.0010	0.009	127		6.52	6.55		C			1							S
116188	6.857	0.004	6.737	0.005		0.116	0.006	T	0.13	0.01	L	6.7753	0.0007	0.008	146		6.76	6.79					1							S
116189	10.181	0.026	8.862	0.016		1.120	0.024	T	1.08	0.03	L	8.9138	0.0016	0.018	97		8.88	8.94		C			1							
116190	9.120	0.012	7.931	0.008		1.018	0.011	T	0.99	0.01	L	7.9917	0.0010	0.010	142		7.97	8.01					1							
116191						1.480	0.020	G	1.95	0.03	I *	10.3997	0.0043	0.039	28	*	10.10	10.45		D	23328−1650	I 2	2 C	D	BC	358	0.899	0.017	0.03	0.18	D
116192	8.609	0.009	8.548	0.011		0.061	0.013	T	0.07	0.01	L	8.5782	0.0016	0.019	151		8.55	8.61					1							S
116193	9.160	0.015	8.772	0.016	*	0.379	0.019	T	0.44	0.02	L *	8.8084	0.0020	0.017	97	*	8.77	8.84			23326−4520	I 1	2 C S	D	AS	270	0.092	0.035	0.54	1.87	S D
116194	8.284	0.007	7.976	0.007		0.280	0.003	G	0.32	0.00	H	8.0159	0.0011	0.015	161		7.99	8.05					1							S
116195	10.434	0.023	8.817	0.011		1.354	0.020	T	1.32	0.02	L	8.8293	0.0023	0.024	200		8.80	8.87					1							
116196	8.178	0.010	6.952	0.005		1.070	0.015	G	1.03	0.01	H	6.9891	0.0009	0.010	144		6.97	7.01					1							S
116197	10.244	0.025	8.608	0.012		1.369	0.022	T	1.34	0.03	L	8.6072	0.0018	0.018	130		8.58	8.64		C			1							
116198	8.265	0.013	7.970	0.013		0.280	0.017	T	0.32	0.02	L	8.0208	0.0015	0.012	66		8.00	8.05		C			1							S
116199	10.316	0.022	8.602	0.010		1.431	0.019	T	1.42	0.03	L	8.5991	0.0015	0.021	184		8.57	8.63					1							
116200	9.581	0.025	8.414	0.016		1.001	0.023	T	0.98	0.02	L	8.4753	0.0024	0.013	61		8.45	8.51		C			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	δ	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	δ	π	$\mu_{\alpha*}$	δ	π	$\mu_{\alpha*}$	δ	π	$\mu_{\alpha*}$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28													29	30
*116201	23 32 37.50	+55 46 08.6	8.33	H	353.156 270 60	+55.769 067 97		1.12	0.70	−3.94	0.67	0.70	0.92	0.93	0.98	−34	+ 0	+12	− 2	+15	+24	+15	+ 9	− 8	−46													0	−0.61
*116202	23 32 39.23	+08 07 47.7	8.72	H	353.163 451 69	+08.129 929 36		1.18	6.16	2.25	1.17	1.05	1.35	1.27	1.20	+33	+12	+ 4	−15	+12	−15	+18	+31	+ 9	+22													0	1.27
*116203	23 32 39.32	+56 44 50.8	8.84	H	353.163 820 47	+56.747 437 21		−0.10	−0.92	−1.29	0.75	0.79	1.05	1.03	0.83	−28	+ 8	+ 4	+16	+11	+22	+ 8	+ 2	− 1	−24													0	2.57
*116204	23 32 40.60	−45 07 17.3	6.90	H	353.169 175 13	−45.121 461 08		6.51	25.81	8.75	0.56	0.55	0.82	0.66	0.52	+ 4	+ 5	−25	+ 8	−17	+28	−10	−25	+30	+ 0													0	−1.85
*116205	23 32 41.04	+44 39 26.2	8.40	H	353.170 984 40	+44.657 281 49		6.71	55.23	−8.23	0.68	0.61	1.05	0.78	0.73	−15	+21	+ 6	+26	−18	+ 2	−12	−20	+ 4	− 4													0	−0.29
*116206	23 32 43.71	−17 48 41.3	8.43	H	353.182 136 38	−17.811 463 62		8.88	56.15	−2.53	1.12	1.10	1.27	1.21	1.31	+31	− 1	− 7	− 9	+32	+31	+39	+51	− 6	+28													0	−0.39
*116207	23 32 44.76	+63 17 26.3	8.61	G	353.186 480 88	+63.290 630 44		11.50	10.13	−103.08	0.65	0.65	0.83	0.87	0.77	−14	+ 8	+11	+ 2	− 9	− 6	− 8	+ 6	+ 2	−11													0	−1.22
*116208	23 32 46.42	+14 20 15.8	9.82	H	353.193 399 83	+14.337 722 05		4.08	20.20	−5.95	1.23	0.86	1.46	1.31	0.87	+51	+ 0	+ 2	+ 1	+ 5	−16	+ 5	+55		0.17													0	0.17
116209	23 32 46.78	−00 50 33.8	9.07	H	353.194 898 62	−00.842 722 86		3.70	−0.30	0.13	1.24	0.78	1.41	1.54	1.03	+26	+24	+ 8	− 5	+12	+27	+21	+ 9	+26	+ 7													0	−1.17
116210	23 32 47.62	+57 54 20.1	7.57	1 H	353.198 428 81	+57.905 584 97		4.10	23.27	−0.05	0.48	0.50	0.67	0.60	0.59	−21	+15	+ 3	+ 1	− 2	− 7	− 2	+ 5	+ 0	−12													0	−0.51
116211 T	23 32 47.98	−39 06 56.4	9.56	H	353.199 925 65	−39.115 657 49	A	0.10	12.84	8.19	3.03	3.37	3.49	2.91	3.56	+33	+13	+ 1	+32	− 3	+16	− 2	+ 3	− 1	+29													4	1.62
116212	23 32 48.11	+58 04 18.9	8.20	H	353.200 444 00	+58.071 924 77		4.40	18.70	−0.02	0.66	0.69	0.91	0.88	0.80	−10	+14	+ 8	+23	+ 6	−15	+ 7	+21	+ 2	+ 1													1	−1.03
116213	23 32 48.15	+20 20 17.0	11.00	G	353.200 608 28	+20.338 048 26		28.13	490.71	0.23	1.49	1.41	2.09	1.65	1.50	+59	−14	− 8	−12	−19	+ 7	−22	−27	+15	+50													0	−0.43
116214 T	23 32 48.94	−39 06 49.9	10.99	H	353.203 917 24	−39.113 851 02	B	2.19	13.54	−0.26	20.75	18.61	8.59	14.47	12.69	+37	+13	+12	+26	− 2	+11	− 5	− 5	−11	+26													4	1.62
116215	23 32 49.19	−16 50 42.4	8.59	G	353.204 960 28	−16.845 111 94		71.70	343.55	−217.65	1.17	1.20	1.36	1.37	1.52	+39	+11	+ 5	+26	+29	+25	+27	+49	+ 0	+44													0	0.87
116216	23 32 50.27	−45 32 44.8	9.29	G	353.209 466 85	−45.545 781 10		5.12	31.07	2.74	1.00	0.80	1.43	1.14	0.74	−10	+24	−19	− 1	−17	+22	−10	−28	+14	−20													0	0.28
116217	23 32 50.65	−21 41 15.6	8.06	H	353.211 021 84	−21.687 666 56		8.79	24.87	−8.43	0.92	0.85	1.09	1.25	0.99	+23	+ 2	−32	+ 3	+16	−13	+13	+20	+ 5	+19													0	−1.01
116218	23 32 51.57	−15 35 06.9	10.24	G	353.214 888 58	−15.585 248 54		5.39	66.27	−4.55	1.72	1.66	2.00	2.57	2.31	+40	+ 1	+ 2	+ 9	+28	+13	+30	+35	+18	+27													0	0.33
116219	23 32 52.21	−43 49 56.3	9.84	G	353.217 535 19	−43.832 311 67		5.17	−18.50	−46.38	1.18	1.16	1.61	1.34	1.28	+18	−20	−17	+27	+ 6	− 4	+ 3	− 5	+16	+17													0	1.14
116220	23 32 52.27	−28 21 31.3	9.37	G	353.217 788 69	−28.358 690 83		9.01	−34.50	−190.63	1.31	1.07	1.63	1.87	1.51	+45	+ 2	−18	+ 6	+19	− 4	+16	−11	+29	+38													2	−0.52
116221	23 32 53.48	+63 09 19.5	7.47	H	353.222 830 28	+63.155 406 94		18.66	439.78	30.99	0.54	0.54	0.69	0.67	0.60	−13	+ 9	+11	+16	−10	−15	− 8	+ 4	+ 5	−16													1	0.93
116222	23 32 53.56	+47 00 44.4	7.84	H	353.223 175 93	+47.012 339 37		19.77	−28.22	−23.59	0.45	0.61	0.89	0.48	0.78	− 8	+10	+18	−11	− 5	−15	− 3	+16	+19	− 3													1	−0.50
116223	23 32 54.47	+03 22 54.0	8.00	2 H	353.226 974 45	+03.381 670 77		4.67	−4.42	−3.13	1.02	0.76	1.29	1.08	0.81	+ 4	+35	−34	− 4	−11	+26	+13	−24	+40	+17													0	0.33
116224	23 32 54.82	+61 53 00.9	8.33	H	353.228 428 90	+61.883 578 83		0.98	−0.35	0.01	0.66	0.70	0.87	0.87	0.79	−15	+ 7	+22	+15	+12	− 5	+11	−20	− 7	−17													0	0.01
116225	23 32 55.44	−03 01 00.0	7.09	H	353.230 981 78	−03.016 666 77		7.58	14.71	−16.01	0.89	0.64	0.94	1.30	0.82	+31	+ 1	−13	+39	+11	+29	+12	+31	− 3	+ 3													0	−0.43
116226	23 32 56.02	−09 09 34.3	7.97	H	353.233 404 92	−09.159 519 94		3.95	−5.67	−7.50	0.91	0.63	1.09	1.25	0.96	+32	− 8	−22	− 5	+ 6	+33	+16	+ 7	+14	+27													0	1.48
116227	23 32 56.08	−05 40 03.3	10.34	H	353.233 655 02	−05.667 592 84		3.14	11.48	−0.83	1.83	1.50	2.12	2.63	2.20	+41	−14	−20	− 7	+12	−17	+11	− 2	− 3	+20													6	−2.94
116228	23 32 56.44	+46 07 25.3	6.61	2 H	353.235 169 47	+46.123 684 02		3.59	49.05	−1.08	0.40	0.50	0.78	0.44	0.65	+ 6	+17	+13	−39	−17	−19	−22	+ 8	+ 6	+19													0	0.28
116229	23 32 56.81	+60 39 43.7	10.94	G	353.236 708 60	+60.662 135 24		2.57	−2.35	−3.97	1.46	1.56	2.03	1.79	1.87	−14	+13	+22	+ 4	− 3	− 4	− 3	−30	−12	−14													3	1.23
116230	23 32 57.00	+00 10 49.7	9.05	H	353.237 502 40	+00.180 464 77		2.03	25.50	−7.94	1.24	0.86	1.56	1.71	1.34	+42	+ 2	−17	−30	− 2	−15	+ 8	−10	+48	− 6													0	−0.32
116231	23 32 58.19	−37 49 06.1	4.38	H	353.242 450 60	−37.818 358 95		18.28	96.39	37.58	0.50	0.54	0.80	0.52	0.60	+25	+ 6	−10	+25	+13	+10	+12	+26	−28	+18													0	1.42
116232	23 32 58.87	−59 37 14.9	9.81	H	353.245 290 49	−59.620 794 77		10.94	51.75	−23.01	0.95	0.96	1.37	1.07	0.97	−18	− 4	− 8	−15	− 1	+ 0	+ 0	− 9	−14	−10													2	0.91
116233	23 32 59.00	−11 59 15.2	8.34	H	353.245 830 60	−11.987 560 13		8.83	27.08	−22.19	1.09	0.86	1.21	1.69	1.14	+14	−16	−24	−34	− 6	+41	+ 1	−44	+19	+26													0	1.11
116234	23 33 00.25	−78 56 07.8	9.29	H	353.251 054 50	−78.935 493 24		3.45	3.60	5.57	0.81	0.73	0.92	0.97	0.84	+13	−10	−23	− 4	− 6	− 6	− 9	− 4	+ 7	+18													0	−0.13
116235	23 33 01.56	−31 37 03.3	9.67	H	353.256 496 19	−31.617 574 65		6.24	128.62	34.75	1.25	1.14	1.67	1.56	1.36	+32	−10	−32	−44	+ 0	− 4	− 5	−25	+41	+21													0	−0.52
116236	23 33 05.42	−20 05 19.9	8.12	H	353.272 574 29	−20.088 849 88		7.55	−4.02	−51.12	1.02	0.85	1.26	1.38	1.11	+ 5	+ 6	−39	−24	+ 2	+25	+15	− 1	+27	+14													0	−0.01
116237	23 33 06.07	+63 07 21.8	8.94	H	353.275 308 49	+63.122 717 96		5.34	−60.46	−2.68	0.87	0.79	1.07	1.08	0.92	−12	+ 1	+21	+28	−12	−19	− 7	+ 6	+ 5	− 9													1	−1.07
116238	23 33 09.96	+35 33 02.4	8.18	H	353.291 516 91	+35.550 674 14		2.96	10.83	15.33	0.82	0.70	1.03	1.07	0.68	+ 3	+19	− 3	−22	+12	+11	+ 8	−28	+ 4	+11													0	0.82
116239	23 33 10.26	+06 51 16.9	10.33	H	353.292 764 80	+06.854 686 87		2.88	−14.75	−24.56	1.80	1.71	2.20	1.99	1.57	+38	−16	−29	−29	− 4	+28	+ 5	− 6	− 2	+25													0	0.25
116240	23 33 11.04	+04 20 32.3	7.69	H	353.295 989 08	+04.342 308 57		4.53	32.31	−12.29	2.69	0.91	1.17	3.24	1.17	−56	−10	− 9	−90	+60	+ 9	+56	−41	+12	−50													0	0.78
116241	23 33 11.90	−40 50 43.4	8.72	H	353.299 581 00	−40.845 375 70		4.63	7.11	−3.81	0.82	1.01	1.23	0.96	1.13	+24	− 1	+ 3	+27	+ 5	+15	+ 3	+19	+ 3	+21													2	2.38
116242	23 33 11.98	−06 24 02.2	8.06	H	353.299 910 93	−06.400 615 35		10.96	125.19	10.35	0.99	0.77	1.17	1.29	1.03	+44	−19	−34	+21	+10	+10	+13	+15	+ 7	+26													2	−1.41
*116243 H	23 33 12.31	+57 24 28.9	7.32	H	353.301 311 24	+57.408 033 73	A	10.42	−100.37	−35.69	0.88	0.85	1.06	0.96	0.89	−27	+16	− 9	+ 6	+ 3	+15	+ 4	+ 5	+ 1	−10													0	0.13
*116244	23 33 12.29	−03 08 08.7	9.24	H	353.301 202 72	−03.135 747 66		2.69	−18.15	−17.23	1.36	1.05	1.49	1.98	1.52	+41	−20	−20	+27	+17	+10	+21	+30	−15	+14													0	0.47
116245	23 33 13.94	−12 36 32.7	7.09	H	353.308 077 57	−12.609 095 29		8.55	−19.94	−23.76	0.81	0.52	0.88	1.06	0.67	+38	− 4	− 1	+22	+11	+13	− 3	−15	+15	+ 1													0	−0.93
116246	23 33 14.67	−28 40 37.1	9.17	H	353.311 119 63	−28.676 968 10		5.96	−36.02	−55.58	1.05	0.92	1.32	1.21	1.08	+37	− 1	−28	−32	− 2	+ 0	− 1	−20	+17	+33													0	−1.40
116247 H	23 33 16.63	−20 54 52.3	4.70	G	353.319 271 28	−20.914 525 06	A	10.18	−2.55	8.64	0.74	0.61	0.75	0.81	0.72	+19	+ 1	−30	−14	− 9	+30	+ 0	− 7	+ 9	+28													0	−0.05
116248	23 33 18.44	−63 17 07.9	8.84	H	353.326 825 85	−63.285 527 08		−1.34	14.45	0.53	0.70	0.75	0.99	0.86	0.85	− 5	−12	−16	− 8	+ 0	+ 9	+ 5	−24	−13	+ 5													0	0.13
116249	23 33 19.47	+70 05 39.2	9.85	H	353.331 130 13	+70.094 234 98		5.10	−2.42	−4.09	0.86	0.89	1.11	0.98	0.93	− 3	− 6	+21	−11	+ 8	+10	+ 5	− 6	+ 4	+ 3													0	−0.46
116250	23 33 19.55	−77 23 07.2	5.82	H	353.331 439 88	−77.385 331 73		31.49	15.66	1.79	0.44	0.39	0.49	0.51	0.43	+ 6	+ 5	− 9	+ 9	+ 9	+ 9	+ 4	+11	− 1	+ 3	+21													0	0.31
116251	23 33 20.62	+60 24 39.1	7.20	H	353.335 933 32	+60.410 852 35		14.58	102.12	32.70	0.59	0.57	0.75	0.75	0.67	−20	+15	+19	+33	− 7	− 3	− 6	−11	− 3	−22													0	−0.98
116252	23 33 22.54	−74 51 22.1	8.72	H	353.343 917 00	−74.856 131 19		7.55	−55.31	−29.39	0.73	0.63	0.82	0.90	0.77	−10	+10	−21	−15	+ 6	+ 0	+ 7	−16	+16	+ 5													0	−0.49
116253	23 33 22.55	+44 40 26.9	8.55	1 H	353.343 967 33	+44.674 134 34		0.62	5.29	−4.59	0.66	0.64	1.07	0.77	0.79	− 7	+11	+ 8	+ 6	− 8	− 9	− 5	−17	− 2	+ 4													0	−0.35
116254	23 33 22.56	+30 01 20.5	9.17	H	353.343 989 17	+30.022 371 76		7.19	−29.60	−70.07	0.86	0.71	1.15	0.90	0.70	+18	+12	− 6	+10	+ 9	+ 6	+12	− 7	+12	+ 6													0	−0.04
116255	23 33 23.00	+76 36 54.3	8.89	H	353.345 832 87	+76.615 069 64		15.05	−66.35	−112.46	0.68	0.70	0.81	0.74	0.76	−18	−10	+23	− 2	+11	+ 1	+10	− 9	+ 0	−23													3	−0.11
116256	23 33 23.07	+15 41 49.5	11.27	G	353.346 134 40	+15.697 085 99		4.96	311.21	−7.63	2.31	1.29	2.44	2.45	1.29	+43	+ 8	+11	−36	− 6	+ 0	− 5	−22	+15	+40													0	1.92
116257	23 33 23.09	+04 38 21.7	7.27	H	353.346 208 36	+04.639 359 29		3.28	2.43	−16.96	0.96	0.62	0.98	1.16	0.68	+ 4	−18	−14	−33	− 3	+24	+ 0	−18	+24	−15													0	1.68
116258	23 33 23.72	−12 39 52.8	8.81	G	353.348 812 96	−12.664 676 37		28.69	183.12	24.78	1.17	0.78	1.31	1.64	1.04	+47	− 9	− 2	+22	+14	+13	−12	−29	+18	− 2													0	−1.98
116259 H	23 33 23.87	+42 50 46.4	7.14	H	353.349 446 85	+42.846 222 06	*	30.24	243.62	167.32	1.09	1.11	1.12	0.71	0.82	+25	+11	+33	− 9	− 2	− 4	+ 1	−38	+ 4	+ 6													4	2.72
116260	23 33 25.51	+74 13 33.0	8.00	H	353.356 312 08	+74.225 841 31		1.04	2.37	0.84	0.66	0.58	0.72	0.87	0.65	− 7	− 5	+28	−22	+ 0	+ 5	− 1	−14	+ 0	−13													0	0.54
116261	23 33 25.77	−31 17 22.1	7.14	H	353.357 363 70	−31.289 464 73		6.47	−7.97	4.14	0.78	0.62	0.95	0.94	0.77	+27	− 8	−16	−36	− 5	+ 5	− 8	−33	+36	+24													0	1.47
116262	23 33 26.06	−35 46 27.5	9.38	H	353.358 581 78	−35.774 308 46		5.65	37.99	−32.25	1.41	0.93	1.35	1.65	1.20	−17	+15	−15	−55	+33	− 9	+37	−12	− 9	−26													0	−0.15
116263 H	23 33 26.56	−57 01 44.7	8.14	G	353.360 661 14	−57.029 084 48	A	12.67	39.08	6.32	1.14	1.55	1.99	1.15	1.52	−19	+ 0	−11	+ 4	+13	+21	+15	− 6	−10	− 8													1	0.80
*116264	23 33 28.09	+22 29 55.7	5.33	2 H	353.367 032 14	+22.498 817 21		5.67	9.54	−17.48	0.52	0.45	0.67	0.59	0.48	+40	− 2	−11	+13	− 2	− 9	− 1	−16	+ 1	+45													0	0.74
*116265	23 33 28.08	+24 20 32.7	6.91	H	353.366 995 78	+24.342 413 31		6.58	64.25	9.55	0.52	0.47	0.69	0.58	0.48	+29	+ 4	−13	+19	+13	−10	+13	+ 3	+ 3	+40													0	−0.67
116266	23 33 28.62	−04 24 04.5	6.92	H	353.369 256 81	−04.401 248 93		10.62	39.68	−15.76	0.78	0.67	0.93	0.93	0.79	+41	−32	−38	−14	+ 0	+16	+ 9	+ 2	− 4	+20													0	0.20
116267	23 33 29.10	+41 38 16.4	7.05	H	353.371 231 45	+41.637 901 80		6.68	65.53	46.26	7.39	7.48	10.05	7.57	6.42	+21	+ 6	+20	+17	− 4	− 6	+ 3	−35	− 9	+34													0	
116268	23 33 29.28	−51 02 26.3	8.82	H	353.371 997 60	−51.040 641 42		2.91	−15.86	−4.27	0.81	0.83	1.27	0.96	0.77	−13	−12	− 2	−27	− 1	+ 4	+ 3	−29	−10	−26													0	0.08
116269	23 33 30.19	−26 18 52.4	10.12	H	353.375 775 41	−26.314 558 61		8.80	101.35	−110.47	1.55	1.13	1.73	2.08	1.29	+11	+ 5	−16	+ 9	−13	+26	−11	−20	+21	+ 0													0	1.02
116270	23 33 30.21	−57 03 13.3	7.79	G	353.375 872 95	−57.053 685 42		9.60	40.68	9.46	0.49	0.55	0.78	0.54	0.67	−19	−11	−11	+11	+13	+15	+18	− 6	− 3	−11													1	−0.28
116271	23 33 30.86	−19 08 43.6	8.40	H	353.378 575 61	−19.145 458 04		3.17	21.25	−14.55	1.13	0.87	1.34	1.41	1.10	− 4	+14	−43	−25	+ 2	+14	+12	− 3	+30	+10													3	2.09
116272	23 33 30.93	+70 22 02.1	7.81	1 H	353.378 885 68	+70.367 248 81		2.83	13.90	14.99	0.60	0.60	0.76	0.67	0.64	− 1	− 2	+13	−11	+ 0	+11	− 2	− 8	+13	− 3													0	−0.99
116273	23 33 31.07	+05 21 23.4	9.13	H	353.379 452 71	+05.356 511 70		1.75	1.66	−0.62	1.44	0.93	1.42	2.06	1.04	− 9	+15	− 6	+37	−21	+40	−27	+ 5	−10	−37													0	−0.89
116274	23 33 31.51	+13 25 24.2	8.83	H	353.381 295 34	+13.423 400 47		4.45	17.99	−4.87	1.08	0.80	1.34	1.08	0.80	+27	+12	−24	+ 3	+11	−10	+18	−28	+26	+50													4	−0.31
116275	23 33 31.61	−59 55 08.8	8.51	H	353.381 700 93	−59.919 124 89		7.71	20.26	−0.30	0.59	0.69	0.93	0.68	0.75	−18	− 3	−11	− 4	+14	− 1	+11	+10	−14	− 5													1	−0.77
116276	23 33 33.92	−63 33 33.0	9.09	H	353.391 341 87	−63.559 170 44		4.68	−1.78	15.87	0.78	0.83	1.20	0.90	0.90	+ 0	− 7	−14	−10	+ 2	+ 9	+ 5	−14	−19	+11													0	−1.02
116277	23 33 34.64	+17 49 07.6	6.81	H	353.394 331 75	+17.818 771 04		20.74	255.89	24.28	0.67	0.52	0.80	0.68	0.53	+28	− 4	−17	−13	− 2	− 6	− 1	−34	+28	+39													0	1.19
116278	23 33 35.65	+60 28 07.0	7.36	H	353.398 562 00	+60.468 609 86		4.04	15.70	−1.35	0.60	0.60	0.79	0.76	0.68	−16	+14	+25	+22	+ 2	− 1	+ 4	−15	+ 4	−17													0	−0.28
116279	23 33 36.14	+60 03 02.6	7.61	G	353.400 576 15	+60.050 730 39		4.43	−2.25	−18.19	0.59	0.60	0.77	0.75	0.76	− 5	+11	+19	+27	+11	+ 0	+13	+ 0	+ 7	− 3													0	1.83
116280	23 33 36.32	+45 13 38.5	8.48	H	353.401 331 36	+45.227 365 89		1.63	2.24	−6.79	0.68	0.64	1.07	0.69	0.67	− 4	+ 7	+25	+ 4	−16	− 1	−13	−18	+11	+ 7													1	−0.91
*116281	23 33 36.70	+21 25 26.5	9.36	H	353.402 898 22	+21.424 025 93		1.70	9.92	−15.73	0.91	0.78	1.20	1.00	0.84	+47	− 7	− 1	+32	+ 9	−11	+ 7	+ 5	+ 4	+41													0	−0.28
*116282	23 33 36.66	+22 19 44.3	7.94	G	353.402 753 54	+22.328 976 75		2.12	22.02	0.23	0.66	0.55	0.86	0.77	0.63	+38	+ 5	− 4	+13	+ 5	− 3	+ 7	− 3	+ 5	+50													1	1.91
116283	23 33 37.05	−20 46 55.4	10.98	G	353.404 366 07	−20.782 049 96		1.70	−15.44	−0.28	2.12	1.70	2.66	2.43	2.00	+ 5	+ 1	−48	−20	−16	+38	+ 4	−15	+ 6	+14													0	−2.27
116284	23 33 37.69	−56 48 12.2	8.74	H	353.407 047 55	−56.803 397 58		2.49	3.80	−10.67	0.66	0.74	1.07	0.75	0.88	−22	− 1	−11	+ 7	+11	+17	+16	−12	− 8	−13													0	−1.32
*116285	23 33 40.04	−53 39 28.7	9.18	G	353.416 834 62	−53.657 965 22		1.49	113.91	−69.38	0.69	0.90	1.40	0.88	0.98	−25	+ 6	−29	+19	−10	+20	+ 2	−27	+16	− 7													0	−1.47
*116286	23 33 40.03	+29 52 29.1	7.22	H	353.416 771 98	+29.874 748 55		14.92	58.00	−39.15	0.61	0.48	0.78	0.62	0.44	+15	+19	+11	+18	+ 8	− 6	+11	− 8	+13	+18													2	1.55
*116287	23 33 39.96	+48 49 06.0	10.60	2 H	353.416 485 45	+48.818 333 60		2.34	−6.72	−6.21	1.58	1.84	2.91	2.22	2.14	−18	− 9	+42	+35	− 2	− 5	+ 5	+ 5	+ 5	+ 0													0	−1.13
116288	23 33 40.36	−59 05 11.7	10.28	G	353.418 151 90	−59.086 576 06		4.05	7.18	−14.35	0.99	1.05	1.49	1.09	1.03	−19	+10	−16	− 3	+ 7	+ 2	+ 7	− 2	+ 2	−12													0	1.35
116289	23 33 40.54	−51 43 38.7	8.48	H	353.418 907 31	−51.727 430 47		5.24	10.03	−41.24	0.76	0.69	1.11	1.03

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
116201	8.448	0.010	8.323	0.012		0.121	0.015	T	0.14	0.01	L	8.3773	0.0017	0.014	126		8.34	8.41		C			1								
116202	10.204	0.037	8.865	0.021		1.136	0.033	T	1.10	0.03	L	8.8837	0.0026	0.016	51		8.86	8.91		C			1								
116203	10.161	0.027	8.959	0.016		1.029	0.024	T	1.00	0.02	L	9.0008	0.0020	0.018	129		8.97	9.04		C			1								
116204	7.047	0.006	6.912	0.007		0.122	0.009	T	0.14	0.01	L	6.9469	0.0012	0.009	102		6.93	6.96			23327−4507	I 1	1								S
116205	8.793	0.010	8.433	0.010		0.331	0.001	G	0.39	0.00	H	8.4829	0.0020	0.018	158		8.45	8.52					1								
116206	9.220	0.020	8.493	0.016		0.653	0.019	T	0.72	0.02	L	8.5593	0.0016	0.018	52		8.54	8.59		D			1								S
116207	9.206	0.013	8.621	0.012		0.548	0.013	T	0.62	0.01	L	8.7117	0.0015	0.016	130		8.69	8.74					1								
116208	11.325	0.067	9.914	0.030		1.192	0.058	T	1.15	0.05	L	9.9914	0.0019	0.019	118		9.96	10.03		C			1								
116209	9.819	0.030	9.153	0.026		0.617	0.033	T	0.69	0.03	L	9.2000	0.0034	0.022	76		9.16	9.23					1								S
116210	7.767	0.009	7.568	0.008		0.183	0.012	T	0.20	0.01	L	7.6307	0.0019	0.022	125		7.59	7.66	79.50	P 1 A			1								S
116211	9.954	0.039	9.584	0.041	A	0.351	0.053	T	0.41	0.06	L	9.6429	0.0122	0.047	99	A	9.59	9.77		D	23328−3907	I 2	1 C P A								
116212	9.733	0.022	8.343	0.012		1.176	0.020	T	1.14	0.02	L	8.3614	0.0013	0.015	125		8.34	8.39					1								
116213						1.370	0.015	G	1.61	0.03	I	11.1110	0.0036	0.036	156		11.05	11.18		C			1								G
116214	11.579	0.113	10.823	0.091	B	0.355	0.072	G	0.42	0.08	R	11.1504	0.0435			B				D	23328−3907	I 2	1 C I A								
116215						1.290	0.010	G	1.47	0.02	A	8.7146	0.0021	0.023	58		8.68	8.75		D	23328−1650	I 2	1								
116216	9.709	0.019	9.374	0.021		0.391	0.020	G	0.46	0.02	H	9.3883	0.0022	0.019	110		9.35	9.42		C			1								
116217	9.138	0.018	8.159	0.013		0.859	0.016	T	0.87	0.01	L	8.2152	0.0016	0.015	70		8.19	8.25		C			1								S
116218	11.148	0.082	10.442	0.074		0.671	0.015	G	0.73	0.01	H	10.3806	0.0042	0.032	49		10.29	10.42		C			1								
116219	10.552	0.036	9.894	0.032		0.640	0.020	G	0.70	0.02	H	9.9983	0.0041	0.027	83		9.95	10.03					1								
116220	10.292	0.029	9.481	0.023		0.726	0.002	G	0.78	0.00	H	9.5209	0.0025	0.026	89		9.49	9.56					1								
116221	8.408	0.010	7.544	0.008		0.773	0.010	T	0.81	0.01	L	7.6174	0.0011	0.010	129		7.61	7.64					1								
116222	8.447	0.009	7.899	0.007		0.513	0.010	T	0.59	0.01	L	7.9544	0.0013	0.014	160		7.94	7.98					1								S
116223	10.192	0.036	8.217	0.014		1.673	0.032	T	2.39	0.07	O	8.0286	0.0086	0.045	59		7.96	8.10		U 2			1 S								S P
116224	10.158	0.026	8.505	0.012		1.382	0.023	T	1.35	0.03	L	8.4740	0.0017	0.017	131		8.45	8.51					1								
116225	7.224	0.007	7.099	0.009		0.121	0.011	T	0.14	0.01	L	7.1398	0.0016	0.008	63		7.13	7.16		C			1								S
116226	9.225	0.020	8.086	0.013		0.979	0.019	T	0.96	0.01	L	8.1391	0.0013	0.011	84		8.12	8.16		C			1								S
116227	10.999	0.073	10.335	0.065		0.574	0.072	G	0.65	0.07	R	10.4682	0.0032	0.032	54		10.39	10.54		C			1								
116228	8.807	0.008	6.836	0.004		1.670	0.007	T	2.32	0.05	O	6.6616	0.0098	0.078	176		6.56	6.75		U 2			1 S								S P
116229	11.564	0.093	11.016	0.097		0.728	0.029	G	0.78	0.02	H	11.0972	0.0048	0.043	111		11.00	11.16					1 G								G
116230	10.409	0.041	9.190	0.024		1.042	0.037	T	1.01	0.03	L	9.2199	0.0019	0.017	89		9.19	9.25		C			1								
116231	4.266	0.002	4.361	0.002		−0.095	0.004	G	−0.09	0.02	A	4.3517	0.0004	0.004	112		4.35	4.36					1								S
116232	10.625	0.029	9.838	0.023		0.698	0.028	T	0.75	0.02	L	9.9489	0.0033	0.032	161		9.89	10.00					1								
116233	8.849	0.015	8.396	0.015		0.432	0.010	G	0.50	0.01	H	8.4404	0.0019	0.013	86		8.41	8.46					1 G								S
116234	9.555	0.016	9.294	0.018		0.245	0.025	T	0.27	0.03	L	9.3583	0.0018	0.020	126		9.32	9.40		C			1								
116235	10.325	0.032	9.724	0.028		0.560	0.031	T	0.63	0.03	L	9.7888	0.0029	0.027	101		9.74	9.84		C			1								
116236	8.728	0.016	8.179	0.015		0.524	0.015	G	0.60	0.02	H	8.2327	0.0018	0.011	53		8.20	8.25					1								S
116237	9.537	0.016	8.953	0.015		0.545	0.019	T	0.62	0.02	L	9.0595	0.0022	0.023	134		9.01	9.09		C			1								S
116238	9.829	0.028	8.315	0.014		1.273	0.025	T	1.23	0.03	L	8.3419	0.0020	0.014	74		8.32	8.37					1								
116239	11.047	0.088	10.253	0.068		0.565	0.072	G	0.64	0.07	R	10.4534	0.0053	0.030	49		10.38	10.50		C			1								
116240	9.281	0.025	7.803	0.014		1.245	0.023	T	1.20	0.02	L	7.8482	0.0016	0.008	49		7.83	7.87		C			1 G								S
116241	9.950	0.023	8.817	0.015		0.975	0.021	T	0.96	0.02	L	8.8854	0.0023	0.020	96		8.84	8.92					1 G								
116242	8.696	0.013	8.116	0.012		0.536	0.015	G	0.61	0.02	H	8.1759	0.0015	0.012	67		8.15	8.20		C			1								S
116243	8.287	0.011	7.375	0.009	*	0.809	0.010	T	0.84	0.01	L	* 7.4683	0.0019	0.015	128	*	7.45	7.49		D	23332+5724	I 1	2 C A	AB	77	9.656	0.008		2.11	0.03	S
116244	10.913	0.077	9.383	0.034		1.285	0.066	T	1.24	0.07	L	9.3986	0.0026	0.019	61		9.36	9.43					1								
116245	7.292	0.006	7.115	0.006		0.153	0.003	G	0.17	0.00	H	7.1455	0.0011	0.008	97		7.13	7.16					1								S
116246	9.675	0.018	9.225	0.018		0.438	0.020	T	0.51	0.02	L	9.2722	0.0025	0.023	124		9.24	9.32					1								
116247	4.734	0.003	4.711	0.003	*	0.020	0.005	G	0.03	0.02	A *	4.7145	0.0009	0.005	57	*	4.70	4.72		D	23333−2055	I 1	2 C A	AB	125	0.840	0.007		2.62	0.03	S
116248	10.150	0.025	8.969	0.016		1.012	0.023	T	0.99	0.02	L	9.0025	0.0018	0.020	140		8.96	9.03					1								
116249	10.274	0.030	9.854	0.031		0.397	0.040	T	0.46	0.04	L	9.9426	0.0031	0.026	122		9.90	9.99					1								G
116250	6.652	0.004	5.891	0.003		0.681	0.002	G	0.74	0.00	H	5.9516	0.0006	0.006	146		5.94	5.96		C			1								S
116251	8.364	0.010	7.286	0.007		0.920	0.000	G	0.92	0.00	H	7.3487	0.0012	0.011	118		7.33	7.37			23335+6026	I 2	1								S
116252	9.222	0.015	8.767	0.015		0.443	0.017	T	0.51	0.02	L	8.8137	0.0015	0.016	124		8.79	8.84		C			1								
116253	10.775	0.036	8.764	0.012		1.703	0.031	T	2.23	0.07	O	8.6121	0.0026	0.026	148		8.56	8.65		U			1								
116254	9.853	0.025	9.218	0.021		0.590	0.028	T	0.66	0.03	L	9.2943	0.0025	0.018	100		9.26	9.34					1 S								
116255	9.585	0.019	8.922	0.017		0.615	0.021	T	0.68	0.02	L	9.0155	0.0017	0.018	118		8.99	9.06		C			1								
116256						0.920	0.015	G	0.96	0.02	I	11.3393	0.0054	0.044	130		11.27	11.40		C			1 S								G
116257	9.351	0.027	7.475	0.012		1.559	0.023	T	1.58	0.02	L	7.3836	0.0030	0.014	48		7.36	7.41					1								S
116258	9.945	0.026	8.880	0.017		0.890	0.003	G	0.90	0.00	H	8.9453	0.0020	0.019	91		8.91	8.98			23334−1240	I 1	1								
116259	7.860	0.007	7.231	0.006	*	0.585	0.008	T	0.66	0.01	L *	7.2652	0.0008	0.008	132	*	7.25	7.28		D	23334+4251	H 1	2 C B	AB	341	0.195	0.035		2.61	0.58	S
116260	9.857	0.021	8.158	0.010		1.419	0.018	T	1.40	0.03	L	8.1362	0.0013	0.012	122		8.12	8.16		C			1								
116261	8.605	0.011	7.280	0.007		1.125	0.010	T	1.09	0.01	L	7.3131	0.0014	0.012	99		7.30	7.34					1								S
116262	10.104	0.030	9.402	0.025		0.634	0.029	T	0.70	0.03	L	9.5180	0.0028	0.028	78		9.48	9.59			23335−3547	I 1	1								
116263	8.560	0.012	8.053	0.012	*	0.515	0.015	G	0.59	0.02	H *	8.2531	0.0015	0.018	212	*	8.22	8.29		D	23334−5702	I 1	2 C A	AB	193	1.916	0.003		0.63	0.01	S
116264	7.322	0.010	5.580	0.007		1.481	0.010	T	2.73	0.03	O	5.3007	0.0074	0.065	116		5.22	5.41		U 2			1 S								S
116265	7.151	0.005	6.942	0.005		0.200	0.007	T	0.22	0.01	L	6.9748	0.0008	0.008	113		6.96	6.99		C			1								S
116266	7.449	0.007	6.973	0.009		0.470	0.004	G	0.54	0.00	H	7.0211	0.0011	0.008	64		7.01	7.03					1								S
116267	8.449	0.010	7.180	0.007		1.081	0.010	T	1.04	0.01	L	7.2221	0.0009	0.010	106		7.21	7.24					1 X								S G
116268	10.114	0.022	8.923	0.014		1.020	0.020	T	0.99	0.02	L	8.9830	0.0018	0.023	132		8.94	9.04					1								
116269	10.986	0.066	10.277	0.055		0.653	0.070	T	0.72	0.06	L	10.2546	0.0054	0.027	71		10.19	10.31		C			1								
116270	8.236	0.006	7.823	0.007		0.422	0.004	G	0.49	0.00	H	7.8783	0.0011	0.015	210		7.86	7.90					1								S
116271	10.541	0.053	8.603	0.018		1.643	0.046	T	2.06	0.11	O	8.4772	0.0031	0.019	57		8.45	8.52					1								
116272	10.380	0.030	8.088	0.009		1.891	0.025	T	1.92	0.03	L	7.8932	0.0015	0.018	121		7.86	7.92		U			1								
116273	10.681	0.064	9.293	0.032		1.174	0.056	T	1.14	0.05	L	9.2960	0.0020	0.018	45		9.26	9.32		C			1								
116274	10.490	0.043	8.952	0.020		1.292	0.037	T	1.25	0.04	L	8.9852	0.0022	0.012	75		8.96	9.01		C			1								
116275	9.498	0.015	8.587	0.011		0.808	0.014	T	0.83	0.01	L	8.6615	0.0019	0.020	161		8.63	8.69		C			1								
116276	10.261	0.025	9.201	0.017		0.919	0.023	T	0.92	0.02	L	9.2522	0.0022	0.026	148		9.20	9.29		C			1								
116277	7.627	0.006	6.888	0.005		0.666	0.009	G	0.73	0.01	H	6.9465	0.0009	0.008	125		6.93	6.96		C	23336+1749	I 1	1								S
116278	8.594	0.011	7.460	0.007		0.976	0.010	T	0.96	0.01	L	7.5226	0.0010	0.011	119		7.50	7.55			23335+6026	I 2	1								
116279	7.723	0.007	7.643	0.008		0.081	0.002	G	0.09	0.00	H	7.6560	0.0015	0.012	106		7.63	7.67					1								S
116280	10.052	0.020	8.636	0.011		1.196	0.018	T	1.16	0.02	L	8.6494	0.0024	0.020	147		8.62	8.68					1								
116281	10.904	0.046	9.527	0.024		1.165	0.041	T	1.13	0.04	L	9.5296	0.0021	0.016	116		9.51	9.57					1								
116282	8.177	0.008	7.962	0.009		0.200	0.015	G	0.22	0.02	H	7.9997	0.0013	0.012	118		7.98	8.03					1								S
116283	11.766	0.229	10.995	0.189		0.474	0.054	G	0.55	0.06	H	11.0915	0.0063	0.031	50		11.03	11.13		C			1								G
116284	9.969	0.016	8.865	0.011		0.952	0.015	T	0.94	0.01	L	8.9047	0.0020	0.023	206		8.87	8.94					1								
116285	10.025	0.016	9.285	0.014		0.689	0.004	G	0.75	0.00	H	9.3248	0.0021	0.026	225		9.28	9.38					1 S								
116286	7.731	0.008	7.265	0.006		0.439	0.009	T	0.51	0.01	L	7.3188	0.0009	0.009	92		7.31	7.34					1								S
116287						1.120	0.510	G	1.54	0.56	K	10.7190	0.0198	0.190	147		10.48	11.03		U 2 B			1 S								G
116288	10.890	0.035	10.267	0.033		0.494	0.005	G	0.57	0.01	H	10.3768	0.0031	0.039	167		10.28	10.43					1 S								G
116289	9.752	0.017	8.599	0.012		0.990	0.016	T	0.97	0.01	L	8.6429	0.0016	0.020	132		8.61	8.68		C			1								
116290	8.108	0.011	7.788	0.015		0.304	0.017	T	0.35	0.02	L	7.8198	0.0011	0.009	72		7.81	7.84					1								S
116291	8.128	0.008	8.057	0.010		0.070	0.012	T	0.08	0.01	L	8.0892	0.0012	0.013	151		8.06	8.11					1								S
116292	7.520	0.005	6.359	0.003		0.986	0.008	G	0.97	0.01	H	6.4191	0.0007	0.009	170		6.41	6.43		C			1								S
116293	7.692	0.008	7.295	0.008		0.388	0.010	T	0.45	0.01	L	7.3248	0.0017	0.012	85		7.31	7.35			23338−3616	I 1	1 S								S
116294	9.859	0.033	9.102	0.027	*	0.691	0.034	T	0.75	0.03	L *	9.1547	0.0020	0.016	64	*	9.12	9.20		D	23338−0508	H 1	2 C A	AB	85	0.602	0.013		1.92	0.04	
116295	9.042	0.016	8.609	0.016		0.423	0.018	T	0.49	0.02	L	8.6515	0.0018	0.017	88		8.62	8.68					1								S
116296	9.438	0.017	8.337	0.012		0.950	0.016	T	0.94	0.01	L	8.3934	0.0014	0.012	95		8.37	8.42		C			1								
116297	8.272	0.008	6.925	0.004		1.142	0.007	T	1.11	0.01	L	6.9742	0.0009	0.009	164		6.96	6.99		C			1								S
116298	9.422	0.014	8.740	0.012		0.619	0.014	T	0.69	0.01	L	8.8151	0.0022	0.022	141		8.78	8.86					1								S
116299	8.463	0.009	8.330	0.010		0.122	0.013	G	0.14	0.01	H	8.3802	0.0015	0.015	132		8.36	8.41					1								
116300	8.941	0.014	8.487	0.014	A	0.456	0.015	G	0.53	0.02	H *	8.4862	0.0021	0.018	91	*	8.46	8.52		D	23339−3431	I 1	2 C B	AB	227	8.629	0.034		3.15	0.16	S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
116301	23 33 52.03	−73 44 12.8	8.05	H	353.466 796 44	−73.736 887 89	3.30	58.39	−33.01	0.64	0.64	0.83	0.71	0.68	+ 1 − 2 −28 −14 + 6 + 9 + 6 − 5 + 1 +31	3	1.29
116302	23 33 52.30	−16 18 47.2	8.80	H	353.467 935 82	−16.313 119 27	6.15	−7.83	12.51	1.07	0.96	1.28	1.43	1.15	+31 − 2 + 1 +10 +19 +32 +22 +30 −14 + 8	0	1.30
116303	23 33 52.68	−25 46 24.0	8.77	H	353.469 515 00	−25.773 336 30	7.58	−23.47	−13.84	1.19	0.86	1.24	1.58	1.01	− 9 −28 + 6 + 0 − 6 +33 −11 − 9 + 9 −13	0	0.06
116304	23 33 53.31	−72 05 43.6	9.26	H	353.472 139 22	−72.095 441 59	1.89	−4.54	−2.21	0.82	0.79	1.06	1.04	0.93	− 2 + 7 −41 + 3 − 5 − 1 − 6 + 2 +11 +10	4	0.42
116305 H	23 33 54.15	−61 39 13.8	8.50	G	353.475 625 27	−61.653 841 48 A	10.82	−18.98	−61.37	1.22	1.24	1.57	1.35	1.27	−23 + 4 −12 −11 +10 + 5 + 1 + 6 −13 + 7	1	0.88
116306	23 33 54.29	−33 39 47.9	8.10	H	353.476 193 34	−33.663 305 29	6.26	−11.50	−55.01	0.87	0.72	1.02	1.12	0.91	+18 − 6 − 8 − 7 + 0 +18 + 1 + 7 +14 +22	0	1.03
116307	23 33 55.50	+20 50 27.5	6.10	2 H	353.481 245 72	+20.840 970 45	3.13	−12.30	−15.15	0.55	0.48	0.75	0.60	0.56	+36 + 3 −15 +15 −11 +11 − 8 −21 +27 +41	0	0.50
116308	23 33 55.63	+67 38 04.1	8.53	G	353.481 789 81	+67.634 463 25	1.47	1.69	2.49	0.62	0.67	0.79	0.80	0.80	− 5 −15 +12 +18 + 3 −10 + 2 −14 − 6 −11	0	0.33
116309	23 33 56.26	−75 35 53.0	9.19	H	353.484 421 86	−75.598 048 18	1.70	17.66	12.99	0.84	0.78	0.98	0.92	0.82	+ 4 + 3 −17 −21 − 7 − 3 − 8 −19 + 6 +14	5	−1.58
116310 H	23 33 57.15	+31 19 31.2	4.97	G	353.488 138 81	+31.325 321 96 A	5.95	50.22	−18.45	0.96	0.74	0.94	0.96	0.58	+18 + 8 −10 −12 − 1 +12 − 2 −37 +27 +26	1	0.52
116311	23 33 57.96	−22 56 32.1	8.28	H	353.491 494 58	−22.942 237 23	3.29	−0.75	−21.61	1.06	0.85	1.10	1.51	1.02	+20 − 5 − 8 +33 +11 +19 + 9 +24 − 8 − 2	0	1.84
116312	23 33 58.19	+43 54 15.2	6.93	G	353.492 440 36	+43.904 213 22	4.08	32.83	9.52	0.43	0.48	0.76	0.46	0.50	+ 0 + 8 +20 +13 −11 − 1 − 8 −12 + 2 + 8	0	−0.65
116313	23 33 58.90	+51 35 00.3	9.67	H	353.495 404 03	+51.583 425 07	0.20	−47.00	−34.67	0.83	0.89	1.40	1.04	1.17	−22 + 5 +10 −10 − 2 −10 − 1 + 0 +19 − 3	0	1.88
116314	23 33 59.39	−48 31 18.6	8.76	H	353.497 441 47	−48.521 820 08	4.78	17.81	−32.22	0.91	0.73	1.24	1.06	0.79	− 5 −24 − 4 +15 −13 + 6 −13 −20 + 4 − 7	0	0.33
116315	23 34 00.23	−24 51 34.7	7.48	H	353.500 968 40	−24.859 649 85	16.54	69.57	25.01	0.87	0.66	0.94	1.14	0.82	+ 1 −26 − 4 + 8 − 8 +25 −12 − 5 +19 − 4	0	0.50
116316	23 34 03.62	+51 35 03.9	9.22	1 H	353.515 067 43	+51.584 405 88	2.81	16.74	−4.44	0.69	0.75	1.14	0.87	0.98	−32 + 8 + 7 + 9 −12 − 9 −11 +13 +13 −15	0	0.88
116317	23 34 03.91	+00 10 54.1	11.16	G	353.516 307 54	+00.181 688 71	71.56	−997.02	−936.24	4.12	2.93	4.77	5.62	4.00	+36 + 2 + 5 −12 − 1 −15 + 3 − 5 +26 −12	0	
116318	23 34 06.35	−25 05 43.0	9.44	H	353.526 451 83	−25.095 289 89	4.08	40.50	9.32	1.41	1.09	1.42	1.75	1.22	+ 5 −35 − 3 +20 −17 + 0 −26 −29 +16 −11	0	−0.09
116319	23 34 06.76	−14 13 45.7	7.86	H	353.528 176 39	−14.229 354 00	2.21	46.68	−13.06	1.17	0.66	1.36	1.45	1.36	+30 + 5 + 2 −31 +14 +26 +31 + 5 +48 +23	0	−1.27
116320	23 34 07.29	−00 25 25.3	8.75	H	353.530 371 56	−00.423 682 68	0.61	14.23	−4.97	1.15	0.75	1.18	1.47	1.03	+35 +13 + 8 −32 +10 − 4 +36 +22 +24 −17	0	−0.33
116321	23 34 07.84	+72 54 52.4	7.38	H	353.532 650 61	+72.914 564 01	8.10	52.79	2.94	0.48	0.48	0.57	0.53	0.57	−10 + 1 + 1 +19 −11 + 2 −11 + 4 +19 −11	0	0.33
116322	23 34 08.50	−17 53 32.3	9.20	H	353.535 436 84	−17.892 297 72	5.10	14.65	−5.26	1.22	1.23	1.65	1.42	1.27	+29 −11 −51 −10 + 2 +18 +14 +15 + 0 +28	0	−0.85
116323	23 34 08.95	−01 14 51.1	5.91	H	353.537 310 60	−01.247 534 98	14.17	107.44	−13.24	0.73	0.53	0.82	0.90	0.65	+37 + 5 −14 − 1 +11 +13 +21 +20 + 0 + 4	0	−1.52
116324	23 34 09.28	+55 29 19.7	7.53	H	353.538 650 36	+55.488 794 37	1.61	1.89	−8.71	0.56	0.57	0.76	0.67	0.80	−35 +22 + 2 + 3 + 3 + 1 + 3 − 1 + 0 −42	0	−0.38
116325	23 34 09.59	+11 10 51.0	8.63	H	353.539 943 87	+11.180 834 66	5.00	−16.02	−27.66	0.97	0.81	1.13	1.00	0.84	+18 +12 −17 + 7 +15 + 6 +18 +21 +11 +22	0	−1.02
116326	23 34 10.52	−13 35 14.7	8.20	H	353.543 825 37	−13.587 423 87	0.74	−7.70	−27.59	0.95	0.67	1.15	1.14	0.89	+40 + 1 − 6 +10 + 5 +31 + 2 −13 +22 +20	0	−0.57
116327	23 34 14.62	−50 33 12.0	9.31	H	353.560 902 77	−50.553 341 08	3.33	−4.39	−26.01	1.01	0.89	1.45	1.36	0.89	−21 − 5 −12 − 8 − 3 −12 − 3 −19 + 9 −37	0	−0.10
116328	23 34 15.85	+57 12 59.0	8.91	H	353.566 034 08	+57.216 375 14	1.57	−0.44	−0.44	0.67	0.67	0.92	0.80	0.75	−23 + 5 + 0 + 0 + 3 +15 + 0 +15 − 3 − 7	0	0.66
116329 H	23 34 19.32	−09 42 34.2	8.35	H	353.580 501 31	−09.709 505 99 A	6.29	39.69	−5.14	1.86	1.26	2.06	3.13	1.76	+28 − 5 − 8 + 1 − 2 +35 − 7 −25 +22 − 1	1	1.76
116330	23 34 19.41	+61 26 14.6	8.91	H	353.580 877 96	+61.437 387 11	0.47	15.64	−6.09	0.67	0.67	0.89	0.88	0.90	−21 + 9 + 5 − 2 + 7 +22 + 5 − 2 −17 −37	3	2.28
116331	23 34 19.54	+19 41 10.9	9.57	H	353.581 398 63	+19.686 357 55	0.39	12.69	−29.78	1.09	0.94	1.43	1.37	1.17	+55 −10 −11 − 6 −15 +16 −14 −21 +20 +60	1	0.82
116332	23 34 20.00	+08 42 47.3	8.44	H	353.583 349 49	+08.713 151 12	11.47	85.51	−11.57	1.16	0.93	1.38	1.48	1.17	+25 − 7 − 8 − 5 +13 +33 +16 +32 +20 +25	0	1.94
116333	23 34 20.18	+51 36 45.4	8.09	H	353.584 075 98	+51.612 623 48	5.26	−15.89	−15.72	0.52	0.59	0.90	0.64	0.76	−26 + 6 +10 + 3 − 7 −10 − 6 + 7 +19 − 7	0	0.77
116334	23 34 21.07	+09 32 04.3	11.23	G	353.587 777 94	+09.534 525 62	25.73	−253.66	−246.82	2.54	1.83	2.80	3.07	2.07	+13 +18 + 2 −16 + 4 − 4 +12 +13 +15 − 9	0	2.88
116335	23 34 21.24	−67 20 12.7	9.77	H	353.588 492 95	−67.336 870 56	5.84	39.19	10.84	0.90	0.81	1.09	1.13	0.94	−10 + 0 −21 −24 +20 − 1 +18 −16 − 3 + 6	0	−0.85
116336	23 34 21.53	+50 12 33.4	9.38	1 H	353.589 711 21	+50.209 287 91	3.39	1.73	−2.33	0.72	0.84	1.31	0.90	1.15	−50 +21 −10 +21 − 2 + 7 + 9 −15 +10 −28	0	−1.33
116337	23 34 23.01	−80 05 54.4	8.88	H	353.595 895 72	−80.098 444 65	2.67	9.52	2.66	0.75	0.65	0.81	0.90	0.72	+ 5 + 7 − 5 +31 +11 + 9 +12 + 5 − 7 +13	2	0.07
116338	23 34 25.10	+05 28 14.0	6.90	H	353.604 587 95	+05.470 544 21	12.03	116.69	0.87	0.80	0.59	0.90	1.05	0.66	+15 −17 −26 −25 − 6 +23 + 1 − 8 +21 − 9	0	−1.13
116339	23 34 25.38	+07 55 28.6	9.38	2 H	353.605 766 25	+07.924 608 90	0.18	1.53	−5.67	1.21	1.06	1.50	1.43	1.27	+28 − 7 −31 −15 +12 −23 + 9 +18 −23 +26	0	0.70
116340 H	23 34 26.49	+26 42 54.4	8.65	H	353.610 358 44	+26.715 124 81 A	2.75	11.75	−17.68	1.59	1.07	1.63	1.63	1.07	+12 + 4 − 7 +50 +20 −18 +30 + 6 +14 +31	1	0.76
116341	23 34 26.69	+17 30 01.9	9.60	H	353.611 191 17	+17.500 540 65	0.75	−7.57	−5.70	1.13	0.74	1.28	1.08	0.75	+17 +31 + 4 −11 +11 −12 +18 −16 +18 +28	0	1.82
116342	23 34 27.51	+19 43 28.6	10.05	H	353.614 632 09	+19.724 613 14	4.49	−15.39	−20.35	1.18	1.05	1.58	1.49	1.34	+57 −18 −11 −12 −11 +19 −12 −16 +25 +64	0	−1.33
116343	23 34 27.90	+27 58 07.1	8.36	H	353.616 239 72	+27.968 628 49	10.29	48.47	7.41	0.73	0.64	0.95	0.83	0.66	+20 + 6 − 6 + 2 +17 + 0 +15 + 6 + 4 +32	0	1.25
116344	23 34 28.42	+03 16 40.9	8.72	H	353.618 403 27	+03.278 017 33	8.30	65.57	36.72	1.10	0.89	1.32	1.35	1.17	+23 +21 −13 + 9 +10 +23 +17 +18 +26 +36	0	−0.63
116345	23 34 29.60	−60 50 45.1	8.73	H	353.623 333 57	−60.845 847 40	4.34	22.33	−23.28	0.71	0.82	1.09	0.78	0.79	−12 + 6 −12 +17 +15 − 1 +12 +10 −11 −11	1	−0.96
116346	23 34 30.63	−27 41 28.5	10.41	G	353.627 609 02	−27.691 239 03	8.95	18.00	−14.60	1.59	1.40	2.21	2.26	1.71	+51 −22 −41 − 6 +21 −14 − 2 −42 +35 +18	4	0.37
116347	23 34 32.78	−60 52 06.3	7.85	H	353.636 593 71	−60.868 417 54	3.82	−1.30	6.61	0.55	0.63	0.86	0.61	0.66	− 8 − 1 −11 +15 +15 − 1 +14 +13 −19 − 5	0	−0.02
116348	23 34 34.34	+34 21 22.0	7.29	H	353.643 076 97	+34.356 099 65	6.03	82.77	15.82	0.75	0.58	0.92	0.83	0.89	+12 +32 −10 +32 + 6 +13 + 7 − 7 +17 + 5	0	0.38
116349	23 34 34.36	−12 19 34.4	8.78	H	353.643 177 95	−12.326 214 25	2.20	−5.63	−4.73	1.11	0.74	1.27	1.56	0.98	+30 −11 + 0 − 2 +12 +35 + 9 −11 − 4 − 6	0	−0.24
116350	23 34 34.48	−70 57 47.9	7.55	G	353.643 664 06	−70.963 310 22	18.97	52.29	77.29	0.54	0.56	0.70	0.67	0.66	− 8 − 7 −20 +13 + 6 − 4 + 4 −10 +16 − 8	0	−0.51
116351	23 34 35.89	+34 02 20.7	9.05	G	353.649 545 16	+34.039 089 46	21.01	360.65	166.57	1.00	0.74	1.20	1.13	0.78	+ 7 +17 − 5 +34 + 3 −14 +10 −17 + 6 +21	0	0.35
116352	23 34 36.68	−16 59 36.8	8.28	G	353.652 814 91	−16.993 545 49	20.82	141.08	127.29	0.97	0.91	1.24	1.15	1.11	+23 + 8 −20 + 6 + 9 +31 +16 +32 +18 +34	0	1.69
116353	23 34 37.23	+49 29 32.0	9.72	H	353.655 126 01	+49.492 216 72	−0.20	−4.68	−3.72	0.83	1.06	1.68	1.03	1.26	−36 − 3 +29 +17 + 0 + 9 + 0 − 2 + 1 −21	2	2.23
116354	23 34 37.55	+40 14 11.6	5.55	H	353.656 461 46	+40.236 552 44	13.97	−17.71	−45.77	0.44	0.45	0.63	0.45	0.42	+20 +12 +19 +51 + 2 + 5 + 8 + 2 +18 +26	1	1.39
116355	23 34 38.21	+33 29 50.2	5.63	H	353.659 194 26	+33.497 275 90	10.68	−4.54	21.66	0.59	0.46	0.77	0.68	0.48	+ 3 +27 −10 +27 + 6 + 8 +14 −16 +32 + 9	0	0.66
116356	23 34 38.74	−38 16 03.3	8.59	H	353.661 433 36	−38.267 571 28	6.87	−30.60	−39.51	0.75	0.89	1.15	0.81	0.97	+34 + 3 + 7 +57 +16 +13 +14 +35 −14 +27	0	−0.21
116357	23 34 38.80	−46 40 48.7	8.84	H	353.661 659 45	−46.680 204 03	2.00	10.70	−5.45	0.89	0.71	1.23	1.02	0.69	−14 + 4 −14 +12 −18 + 4 −16 −22 +23 −22	1	−1.17
116358	23 34 39.81	+40 40 41.2	9.21	H	353.665 863 15	+40.678 113 50	1.33	−12.10	−3.04	0.81	0.77	1.16	0.79	0.69	+18 +26 +20 +58 + 0 +16 + 9 − 7 +20 +27	3	−0.69
116359	23 34 39.87	−01 30 21.0	10.26	H	353.666 134 88	−01.505 824 31	1.46	18.50	0.21	1.65	1.28	1.80	1.92	1.81	+53 − 7 −16 + 6 +26 + 3 +37 +37 − 3 +34	0	0.29
116360	23 34 41.15	+37 47 58.8	7.22	H	353.671 449 47	+37.799 669 63	19.56	115.11	94.34	0.58	0.52	0.79	0.67	0.54	+ 4 +28 − 3 + 3 + 8 −30 +12 − 6 +12 +13	3	2.05
116361	23 34 43.61	+12 33 02.7	8.18	H	353.681 700 65	+12.550 743 54	8.63	16.71	−26.40	0.87	0.69	1.07	0.88	0.64	+27 + 4 −25 + 6 + 7 + 1 +13 −28 +30 +49	0	−1.72
116362	23 34 44.22	+36 12 14.9	7.45	H	353.684 247 35	+36.204 143 48	2.90	28.24	−7.32	0.79	0.66	0.99	1.11	0.67	− 3 + 7 − 5 −25 + 5 +23 + 6 −34 + 9 − 5	0	0.47
116363	23 34 45.30	−70 04 11.4	8.50	G	353.688 764 50	−70.069 823 96	11.18	59.61	−67.13	0.64	0.72	0.85	0.70	0.81	−22 + 4 −17 −10 +12 + 0 +13 −12 − 2 −13	0	−1.05
116364	23 34 46.58	+52 36 37.2	8.01	H	353.694 075 78	+52.610 336 82	1.45	8.63	−1.99	0.58	0.64	0.92	0.75	0.82	−29 + 4 + 6 + 1 + 2 +10 + 2 + 1 +12 −30	0	1.04
116365	23 34 46.73	+38 01 26.3	6.18	H	353.694 727 03	+38.023 972 91	4.81	10.67	11.08	0.55	0.47	0.73	0.63	0.48	− 1 +19 − 5 + 7 +12 −32 +15 − 5 +13 +10	0	1.26
116366	23 34 47.40	+49 05 14.6	9.13	H	353.697 488 60	+49.087 382 49	3.30	0.22	−6.31	0.65	0.87	1.29	0.86	0.97	−30 − 3 +29 +38 −10 −11 − 3 − 2 + 1 −18	1	−0.94
116367	23 34 48.95	+72 42 30.8	8.41	H	353.703 976 04	+72.708 549 80	1.58	−1.53	4.88	0.60	0.61	0.72	0.68	0.71	− 8 +11 − 5 +18 − 6 + 4 − 3 − 5 +18 − 6	0	−0.02
116368	23 34 49.33	−15 14 44.9	5.95	G	353.705 544 20	−15.245 791 81	9.29	49.92	−87.88	0.86	0.62	0.90	1.38	0.80	+23 +16 −12 +13 +23 +26 +30 +37 − 7 −11	0	0.85
116369	23 34 50.19	+43 12 05.6	7.57	H	353.709 110 54	+43.201 560 46	5.95	25.80	−12.41	0.53	0.62	0.89	0.60	0.65	+13 +10 +18 +28 + 0 + 2 + 2 +10 +10 +17	0	−0.10
116370	23 34 50.34	−42 41 03.4	6.65	H	353.709 768 00	−42.684 290 61	13.64	43.83	−1.89	0.56	0.58	0.76	0.64	0.61	+22 −11 −14 + 3 +12 +10 +12 + 2 + 0 +11	2	−0.40
116371	23 34 50.76	−27 42 45.6	8.34	H	353.711 485 77	−27.712 669 75	7.53	−5.94	9.96	0.95	0.80	1.16	1.29	1.09	+55 −14 −11 + 9 +21 + 6 +16 − 7 +19 +45	0	−0.20
116372	23 34 51.59	+30 01 47.0	8.85	H	353.714 963 78	+30.029 725 91	4.75	3.31	−1.32	0.79	0.60	0.96	0.82	0.62	+13 +14 − 9 +13 +10 −13 +12 − 7 +10 +22	0	1.12
116373	23 34 51.83	−55 10 35.1	8.93	H	353.715 956 04	−55.176 415 13	3.07	9.50	−4.25	1.00	1.12	1.83	1.15	1.41	−40 + 6 −12 −17 + 4 + 3 + 4 −17 + 2 −35	0	
116374	23 34 52.14	−34 40 10.7	10.18	H	353.717 266 20	−34.669 640 20	27.68	458.55	−65.71	1.38	1.13	1.54	1.52	1.24	+10 +14 −15 −37 + 7 − 9 + 6 − 7 + 4 +11	0	−2.08
116375	23 34 54.32	−35 05 05.7	7.07	H	353.726 334 71	−35.084 903 34	5.81	40.53	−57.53	0.70	0.62	0.85	0.85	0.72	+23 −12 −11 − 1 +22 −11 +23 +14 −25 +19	0	0.59
116376	23 34 54.54	−26 55 18.0	9.20	H	353.727 268 84	−26.921 680 12	14.08	174.60	−74.82	1.20	0.84	1.34	1.62	1.08	+31 −26 −25 −21 +15 − 1 + 9 −14 +17 +18	0	0.67
116377	23 34 56.37	−48 37 53.8	9.07	H	353.734 861 47	−48.631 616 27	16.28	242.56	−69.33	0.93	0.79	1.29	1.06	0.82	− 7 + 4 −14 + 9 −18 +26 −16 −18 − 8 −14	0	2.74
116378	23 34 57.61	+12 40 44.4	8.81	H	353.740 031 96	+12.679 006 33	1.66	−3.90	−11.32	1.04	0.90	1.30	1.03	0.81	+37 + 3 −26 + 6 + 3 + 3 + 9 −31 +22 +56	2	−0.76
116379	23 34 57.71	+51 49 27.3	8.40	H	353.740 460 50	+51.824 261 06	4.26	−30.60	−10.16	0.60	0.67	1.04	0.75	0.86	−27 + 7 + 9 −11 + 4 − 3 + 4 − 5 +14 − 9	0	0.81
116380	23 34 59.03	+71 38 31.4	5.86	1 H	353.745 960 38	+71.642 049 06	1.14	5.26	−2.44	0.44	0.44	0.55	0.51	0.50	+ 2 − 7 +10 + 9 − 5 + 7 − 6 − 3 +23 +15	1	−0.38
116381	23 34 59.06	+31 50 07.8	7.28	H	353.746 068 22	+31.835 487 46	5.21	−12.50	−3.50	0.65	0.50	0.86	0.77	0.50	+16 +16 + 3 + 6 + 6 +18 +10 −21 +25 +30	0	−0.14
116382	23 34 59.11	+14 26 39.9	9.13	H	353.746 300 37	+14.444 409 38	3.11	14.06	−8.27	1.05	0.73	1.25	1.16	0.84	+53 + 2 + 2 +14 + 6 − 9 + 9 − 6 +16 +58	0	−0.02
116383	23 34 59.61	+24 25 33.1	6.67	H	353.748 384 51	+24.425 873 78	7.56	−52.02	−19.96	0.53	0.43	0.67	0.58	0.47	+26 +16 − 8 +18 +14 −10 +14 + 8 + 1 +36	1	1.85
116384	23 35 00.08	+01 36 19.2	9.59	G	353.750 321 17	+01.605 338 14	51.80	342.97	26.78	1.42	1.04	1.74	2.34	1.25	+14 −11 −19 − 1 −19 +50 −15 −15 +18 − 5	0	−0.59
116385 H	23 35 00.63	−50 59 47.2	9.16	H	353.752 641 99	−50.996 446 55 A	4.15	−12.76	−9.46	1.95	1.83	2.35	1.86	1.55	+ 3 − 4 + 8 −21 + 0 − 3 + 7 −18 − 2 −25	0	−0.25
116386	23 35 01.86	+25 23 56.4	10.88	G	353.757 750 43	+25.399 013 34	10.47	270.62	−196.34	1.53	1.14	1.89	1.77	1.29	+25 + 5 − 9 −20 + 7 − 4 + 5 − 7 + 7 +39	0	2.30
116387	23 35 02.17	−56 49 31.1	6.73	G	353.759 055 25	−56.825 316 76	9.74	−41.40	−13.26	0.39	0.45	0.66	0.45	0.53	−25 − 6 −13 + 3 + 9 +16 +14 −15 − 5 −18	0	2.20
116388	23 35 04.21	−07 40 38.8	7.37	H	353.767 551 99	−07.677 442 89	5.06	25.91	9.88	0.96	0.63	1.10	1.60	1.05	+24 − 3 −19 −19 +16 + 6 +21 + 2 +38 + 0	0	−2.85
116389	23 35 04.53	−42 36 54.4	4.69	G	353.768 877 42	−42.615 101 05	11.92	42.18	10.78	0.54	0.53	0.71	0.59	0.53	+17 − 1 − 6 − 3 +10 +14 +10 − 3 + 4 + 5	2	−1.94
116390	23 35 04.82	−56 00 30.5	8.21	H	353.770 063 81	−56.008 463 01	3.56	−9.54	−32.70	0.58	0.65	1.02	0.78	0.87	−32 + 5 −23 + 3 + 7 − 3 + 8 − 8 +12 −40	0	0.27
116391	23 35 05.62	+16 28 47.3	7.78	H	353.773 437 40	+16.479 806 57	3.01	33.70	−65.16	0.91	0.54	1.03	0.87	0.55	+29 +10 − 2 −11 + 6 −10 +10 −17 +24 +40	0	0.35
116392	23 35 06.92	−23 54 21.3	10.51	G	353.778 842 63	−23.905 926 99	7.38	20.67	16.91	1.67	1.39	1.93	2.81	1.70	+ 5 + 9 −24 +31 −21 +37 −17 − 3 + 6 −14	0	0.84
116393	23 35 08.82	+23 29 00.1	9.94	H	353.786 746 80	+23.483 363 14	11.82	165.40	−29.27	0.96	0.78	1.28	1.09	0.82	+31 − 7 −12 − 1 + 1 + 6 + 2 −12 + 1 +40	0	−1.17
116394	23 35 09.41	+67 29 30.7	7.19	H	353.789 207 72	+67.491 864 03	4.73	34.58	10.00	0.56	0.65	0.73	0.67	0.77	−26 − 7 +22 +14 −13 − 5 −12 −10 −10 −27	0	0.73
116395	23 35 09.63	−61 27 46.3	9.43	H	353.790 105 28	−61.462 854 52	26.94	66.94	14.80	0.86	0.90	1.33	1.02	1.04	− 6 −15 − 7 −22 − 1 +16 + 4 − 7 −20 − 2	0	0.27
116396	23 35 10.90	+12 39 43.6	6.95	1 H	353.795 404 54	+12.662 122 54	4.96	−10.49	−48.17	0.71	0.57	0.91	0.66	0.52	+37 +13 −22 +14 + 3 + 0 +12 −31 +32 +51	0	−2.98
116397 H	23 35 11.63	−18 34 18.4	8.26	H	353.798 476 66	−18.571 784 26 A	0.87	2.28	−17.64	2.02	1.28	1.76	3.32	1.56	− 1 −10 −41 −24 +20 −14 +17 − 2 + 5 −29	0	−0.55
116398 H	23 35 12.04	−11 34 39.5	8.03	H	353.800 164 89	−11.577 639 65 A	7.15	−2.72	−4.87	1.27	0.85	1.28	2.09	1.11	+31 −28 − 3 + 1 +14 +28 + 0 −25 −28	1	−0.99
*116399	23 35 12.95	−64 41 21.0	7.12	H	353.803 971 21	−64.689 159 31	11.57	33.22	15.33	0.44	0.48	0.65	0.48	0.51	+ 0 − 8 −23 − 1 + 5 + 5 +12 −20 −13 +19	0	0.25
*116400	23 35 12.73	+16 25 23.3	8.94	H	353.803 057 65	+16.423 129 76	2.55	32.51	18.96	1.03	0.60	1.17	1.00	0.61	+32 + 9 + 4 −12 + 5 −12 + 9 −15 +23 +39	0	−1.52

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
116301	9.411	0.015	8.184	0.010		1.048	0.014	T	1.02	0.01	L	8.2201	0.0013	0.013	126		8.19	8.25		C			1							
116302	9.155	0.021	8.808	0.022		0.329	0.028	T	0.38	0.04	L	8.8776	0.0019	0.020	47		8.83	8.92		D			1							S
116303	9.533	0.022	8.835	0.019		0.631	0.022	T	0.70	0.02	L	8.9056	0.0015	0.015	49		8.88	8.94		D			1							S
116304	9.644	0.018	9.293	0.019		0.333	0.024	T	0.39	0.03	L	9.3365	0.0017	0.019	119		9.31	9.39		C			1							
116305	9.174	0.013	8.581	0.012	A	0.574	0.015	G	0.65	0.01	H *	8.6100	0.0019	0.017	137	*	8.58	8.64		D	23339−6139	I 1	2 C	A	AB	147	1.368	0.030	2.90	0.11	S
116306	9.620	0.020	8.230	0.012		1.176	0.018	T	1.14	0.02	L	8.2630	0.0018	0.020	83		8.23	8.30			23339−3340	I 1	1							S
116307	8.280	0.010	6.329	0.006		1.654	0.010	T	2.46	0.03	O	6.1237	0.0023	0.028	122		6.08	6.15		U 2			1	S						S
116308	8.833	0.011	8.571	0.012		0.262	0.015	G	0.29	0.02	H	8.5850	0.0016	0.015	111		8.55	8.61		C			1							
116309	10.540	0.033	9.294	0.019		1.063	0.030	T	1.03	0.03	L	9.3565	0.0021	0.021	146		9.31	9.39					1	S						
116310	6.790	0.005	5.141	0.004	*	1.383	0.002	G	1.36	0.00	H *	5.1219	0.0007	0.006	103	*	5.11	5.13		D	23340+3120	I 1	2 C	A	AB	87	0.527	0.002	0.46	0.01	S
116311	10.199	0.041	8.436	0.018		1.469	0.035	T	1.48	0.05	L	8.4087	0.0023	0.017	56		8.38	8.44		C			1							
116312	6.912	0.004	6.920	0.005		−0.002	0.003	G	0.02	0.00	H	6.9316	0.0010	0.011	152		6.92	6.95					1							S
116313	10.858	0.041	9.713	0.023		0.984	0.037	T	0.96	0.03	L	9.8373	0.0031	0.033	182		9.78	9.89					1							G
116314	9.386	0.014	8.822	0.013		0.532	0.014	T	0.60	0.01	L	8.8732	0.0026	0.024	111		8.84	8.92					1							S
116315	8.106	0.010	7.541	0.010		0.546	0.015	G	0.62	0.01	H	7.5963	0.0011	0.008	55		7.59	7.61		C			1							S
116316	9.514	0.014	9.211	0.016		0.288	0.020	T	0.33	0.03	L	9.2903	0.0020	0.023	184		9.25	9.33		U			1							
116317						1.454	0.005	G	2.27	0.01	A	11.2013	0.0045	0.044	74		10.93	11.28					1 X							G
116318	10.108	0.033	9.463	0.029		0.592	0.033	T	0.66	0.03	L	9.5626	0.0028	0.020	53		9.53	9.61		C			1							
116319	9.181	0.018	7.964	0.012		1.040	0.017	T	1.01	0.01	L	8.0216	0.0018	0.011	71		8.01	8.05		C			1							S
116320	10.471	0.039	8.909	0.018		1.311	0.034	T	1.27	0.04	L	8.9096	0.0020	0.014	91		8.87	8.93		C			1							
116321	7.620	0.005	7.400	0.006		0.210	0.007	T	0.23	0.01	L	7.4416	0.0010	0.011	142		7.42	7.46					1							S
116322	10.534	0.044	9.304	0.026		1.050	0.040	T	1.02	0.03	L	9.3642	0.0042	0.022	59		9.33	9.42					1							
116323	6.277	0.004	5.926	0.004		0.299	0.001	G	0.27	0.03	C	5.9767	0.0009	0.007	83		5.97	5.99					1							S
116324	7.398	0.006	7.513	0.008		−0.088	0.002	G	−0.07	0.00	H	7.5001	0.0015	0.014	117		7.48	7.52					1							S
116325	9.015	0.018	8.670	0.018		0.359	0.015	G	0.42	0.02	H	8.7108	0.0026	0.014	61		8.69	8.75		C			1							S
116326	9.827	0.023	8.349	0.012		1.245	0.020	T	1.20	0.02	L	8.3628	0.0016	0.013	85		8.34	8.39					1							S
116327	10.412	0.026	9.420	0.018		0.868	0.024	T	0.88	0.02	L	9.4715	0.0025	0.028	147		9.42	9.53					1							
116328	9.056	0.013	8.935	0.016		0.160	0.015	G	0.18	0.01	H	8.9635	0.0019	0.017	124		8.93	8.99		C			1							
116329	9.004	0.039	8.608	0.042	A	0.404	0.072	G	0.47	0.08	R *	8.4468	0.0017	0.021	66	*	8.42	8.51		D	23343−0943	I 1	2 C	A	AB	71	5.882	0.013	1.69	0.04	S
116330	9.091	0.013	8.940	0.015		0.155	0.014	G	0.17	0.01	H	8.9671	0.0014	0.020	126		8.93	9.00		C			1							
116331	11.023	0.042	9.654	0.021		1.159	0.037	T	1.12	0.03	L	9.7375	0.0022	0.024	142		9.70	9.77					1							
116332	9.042	0.020	8.503	0.019		0.505	0.025	T	0.58	0.03	L	8.5557	0.0021	0.014	51		8.53	8.58		C			1							S
116333	8.160	0.007	8.087	0.008		0.072	0.010	T	0.08	0.01	L	8.1181	0.0011	0.013	178		8.10	8.14		C			1							
116334						1.348	0.071	G	1.57	0.13	I	11.3808	0.0101	0.046	48		11.30	11.47					1							G
116335	10.354	0.026	9.809	0.025		0.517	0.027	T	0.59	0.03	L	9.8798	0.0021	0.023	129		9.84	9.92					1							
116336	9.289	0.010	9.355	0.015		−0.056	0.016	T	−0.03	0.02	L	9.3644	0.0021	0.028	234		9.31	9.41		U			1							
116337	9.532	0.015	8.947	0.014		0.546	0.018	T	0.62	0.02	L	9.0021	0.0016	0.019	135		8.97	9.05		C			1							
116338	7.386	0.007	6.945	0.008		0.428	0.015	G	0.50	0.02	H	6.9949	0.0011	0.006	53		6.99	7.00		C			1							S
116339	9.669	0.027	9.390	0.032		0.265	0.039	T	0.30	0.05	L	9.4453	0.0059	0.027	44		9.40	9.49		P 1 A			1							
116340	9.025	0.018	8.718	0.019	A	0.000	0.495	G	0.29	0.05	L *	8.7204	0.0018	0.017	81	*	8.69	8.75			23344+2643	I 1	2 C	B	AB	302	4.625	0.036	3.45	0.19	
116341	11.634	0.086	9.785	0.025		1.570	0.074	T	1.72	0.17	K	9.7012	0.0018	0.021	119		9.66	9.73					1							
116342	11.261	0.053	10.172	0.033		0.941	0.048	T	0.93	0.04	L	10.2150	0.0022	0.025	144		10.16	10.25		C			1							
116343	8.992	0.014	8.426	0.013		0.529	0.017	T	0.60	0.02	L	8.4742	0.0017	0.015	99		8.45	8.51					1							S
116344	9.260	0.020	8.776	0.020		0.456	0.026	T	0.53	0.03	L	8.8205	0.0023	0.015	56		8.79	8.86		C			1							S
116345	10.138	0.022	8.848	0.013		1.097	0.020	T	1.06	0.02	L	8.8952	0.0020	0.019	142		8.86	8.93		C			1							
116346	11.017	0.038	10.507	0.038		0.491	0.015	G	0.56	0.02	H	10.5336	0.0027	0.023	109		10.49	10.58		C			1							
116347	9.282	0.013	7.973	0.008		1.112	0.012	T	1.07	0.01	L	8.0221	0.0015	0.014	147		7.99	8.04		C			1							S
116348	8.713	0.013	7.418	0.008		1.101	0.012	T	1.06	0.01	L	7.4570	0.0013	0.010	80		7.44	7.48		C			1 G							S
116349	10.052	0.031	8.896	0.020		0.993	0.029	T	0.97	0.02	L	8.9456	0.0014	0.016	83		8.92	8.98					1							
116350	8.125	0.008	7.616	0.007		0.511	0.006	G	0.58	0.01	H	7.6577	0.0013	0.013	130		7.63	7.68		C			1							S
116351	10.052	0.032	9.158	0.024		0.792	0.016	G	0.82	0.01	H	9.2244	0.0025	0.016	77		9.20	9.26		C			1							
116352	9.012	0.018	8.359	0.016		0.613	0.006	G	0.68	0.01	H	8.4029	0.0020	0.014	58		8.38	8.42		C			1							S
116353	11.175	0.041	9.800	0.019		1.164	0.035	T	1.13	0.03	L	9.8880	0.0029	0.033	212		9.83	9.95					1	S						G
116354	5.682	0.003	5.574	0.002		0.096	0.005	G	0.14	0.03	C	5.6017	0.0007	0.005	101		5.59	5.61					1							S
116355	6.964	0.005	5.745	0.003		1.042	0.005	T	1.01	0.00	L	5.7939	0.0008	0.006	94		5.78	5.81					1							S
116356	9.535	0.018	8.662	0.014		0.780	0.017	T	0.82	0.01	L	8.7354	0.0015	0.016	119		8.72	8.77					1							S
116357	10.151	0.019	8.941	0.012		1.035	0.018	T	1.01	0.01	L	9.0050	0.0017	0.021	158		8.96	9.05		C			1							
116358	11.164	0.066	9.353	0.023		1.507	0.055	T	1.54	0.08	L	9.3354	0.0019	0.018	114		9.31	9.37		C			1							
116359	10.807	0.076	10.360	0.086		0.396	0.072	G	0.46	0.08	R	10.3503	0.0054	0.031	77		10.29	10.41					1							
116360	7.903	0.009	7.281	0.007		0.579	0.010	T	0.65	0.01	L	7.3455	0.0010	0.007	82		7.33	7.36					1							S
116361	8.666	0.012	8.234	0.012		0.432	0.015	G	0.50	0.02	H	8.2800	0.0018	0.014	85		8.26	8.30		C			1							S
116362	8.747	0.015	7.565	0.010		1.013	0.014	T	0.99	0.01	L	7.6199	0.0010	0.008	72		7.61	7.63		C			1							S
116363	9.116	0.012	8.561	0.011		0.526	0.015	G	0.60	0.02	H	8.5972	0.0015	0.020	153		8.56	8.63					1							S
116364	7.973	0.007	7.998	0.009		−0.018	0.010	T	0.00	0.01	L	8.0098	0.0012	0.014	151		7.99	8.03					1							S
116365	8.280	0.012	6.370	0.006		1.586	0.005	G	1.59	0.09	H	6.2993	0.0011	0.008	75		6.29	6.31			23348+3801	I 1	1							S
116366	9.156	0.011	9.132	0.014		0.043	0.003	G	0.06	0.00	H	9.1495	0.0019	0.021	167		9.11	9.18		C			1							
116367	10.513	0.030	8.592	0.011		1.595	0.025	T	1.61	0.03	L	8.5243	0.0016	0.017	147		8.50	8.56					1							
116368	7.700	0.009	6.101	0.006		1.350	0.003	G	1.32	0.00	H	6.0979	0.0014	0.007	55		6.09	6.11					1							S
116369	7.765	0.008	7.596	0.007		0.162	0.010	T	0.18	0.01	L	7.6215	0.0014	0.011	128		7.60	7.64		C			1							S
116370	6.911	0.005	6.677	0.006		0.218	0.008	T	0.24	0.01	L	6.7209	0.0009	0.008	106		6.71	6.73		C			1							S
116371	8.912	0.010	8.396	0.009		0.494	0.010	T	0.57	0.01	L	8.4492	0.0016	0.012	116		8.43	8.47					1							S
116372	9.214	0.015	8.871	0.016		0.325	0.020	T	0.38	0.03	L	8.9291	0.0019	0.016	103		8.89	8.96					1							
116373	11.022	0.033	9.114	0.011		1.584	0.028	T	1.60	0.03	L	9.0503	0.0018	0.025	257		9.01	9.09					1 X							
116374	11.689	0.094	10.316	0.046		1.196	0.011	G	1.33	0.02	I	10.3018	0.0032	0.027	87		10.26	10.35		C			1							
116375	8.453	0.011	7.191	0.007		1.075	0.010	T	1.04	0.01	L	7.2422	0.0011	0.010	93		7.23	7.26		C			1							S
116376	10.076	0.030	9.284	0.025		0.702	0.030	T	0.76	0.03	L	9.3397	0.0026	0.015	76		9.32	9.37		C			1							
116377	9.953	0.021	9.144	0.017		0.723	0.003	G	0.77	0.00	H	9.2115	0.0029	0.023	112		9.17	9.26					1							
116378	10.557	0.050	8.929	0.022		1.363	0.043	T	1.33	0.05	L	8.9659	0.0022	0.017	86		8.93	8.99		C			1							
116379	8.999	0.010	8.460	0.009		0.505	0.012	T	0.58	0.01	L	8.5153	0.0013	0.016	172		8.48	8.55		C			1							
116380	8.079	0.008	6.049	0.004		1.681	0.007	T	1.71	0.01	L	5.9673	0.0011	0.010	122		5.95	5.98		M			1							S
116381	7.432	0.007	7.297	0.007		0.130	0.009	T	0.14	0.01	L	7.3332	0.0010	0.007	98		7.32	7.35					1							S
116382	9.540	0.014	9.147	0.014		0.372	0.018	T	0.43	0.02	L	9.2141	0.0016	0.019	151		9.18	9.24					1							S
116383	8.077	0.009	6.805	0.005		1.083	0.008	T	1.05	0.01	L	6.8408	0.0007	0.008	117		6.83	6.86					1							S
116384	11.474	0.125	9.759	0.046		1.329	0.017	G	1.65	0.00	A	9.6672	0.0044	0.021	43		9.63	9.69		C			1	S						
116385	9.416	0.035	8.801	0.030	*	0.697	0.003	G	0.75	0.00	R *	9.2962	0.0024	0.027	139	*	9.25	9.34		D	23350−5100	I 1	2 C	A	AB	184	1.439	0.007	0.57	0.03	
116386	11.901	0.135	11.121	0.108		0.810	0.015	G	0.84	0.01	H	11.0203	0.0036	0.033	94		10.96	11.07		C			1							G
116387	7.165	0.004	6.766	0.004		0.383	0.006	G	0.42	0.02	A	6.8174	0.0009	0.010	215		6.80	6.83					1							S
116388	9.065	0.016	7.521	0.009		1.297	0.014	T	1.24	0.02	A	7.5317	0.0012	0.010	72		7.52	7.55		C			1							S
116389	4.820	0.002	4.720	0.002		0.078	0.002	G	0.10	0.02	A	4.7331	0.0006	0.004	89		4.73	4.74		C	23351−4237	I 1	1							S
116390	9.716	0.013	8.344	0.007		1.161	0.012	T	1.12	0.01	L	8.3810	0.0015	0.018	229		8.35	8.41					1 G							S
116391	9.494	0.017	7.914	0.009		1.325	0.015	T	1.29	0.02	L	7.9295	0.0013	0.011	116		7.91	7.95		C			1							S
116392	11.248	0.079	10.718	0.081		0.599	0.015	G	0.67	0.01	H	10.6486	0.0037	0.028	60		10.59	10.71		C			1							G
116393	10.785	0.046	10.073	0.039		0.655	0.049	T	0.72	0.04	L	10.0758	0.0022	0.023	111		10.04	10.11		C			1							
116394	8.589	0.010	7.310	0.006		1.089	0.009	T	1.05	0.01	L	7.3615	0.0013	0.012	117		7.34	7.39					1 G							S
116395	10.622	0.034	9.502	0.021		0.945	0.015	G	0.99	0.02	I	9.5734	0.0021	0.026	141		9.51	9.61					1							
116396	7.082	0.006	6.964	0.007		0.114	0.009	T	0.13	0.01	L	6.9910	0.0013	0.013	101		6.97	7.01		M			1							S
116397	9.563	0.027	8.509	0.018	A	0.400	0.495	G	0.95	0.03	L *	8.4218	0.0027	0.013	55	*	8.40	8.48		D	23352−1834	I 1	2 C	A	AB	250	4.309	0.011	1.77	0.03	
116398	8.280	0.015	7.947	0.014	*	0.316	0.020	T	0.36	0.03	L *	8.1065	0.0018	0.014	80	*	8.09	8.15		D	23352−1135	I 1	2 C	A	AB	1	2.107	0.005	1.92	0.03	S
116399	7.516	0.005	7.169	0.005		0.366	0.001	G	0.43	0.00	H	7.2093	0.0009	0.011	147		7.19	7.23			23352−6441	I 1	1							S
116400	8.916	0.012	8.917	0.016		0.004	0.018	T	0.02	0.02	L	8.9477	0.0018	0.017	118		8.92	8.98		C			1							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	$\alpha*$	δ	δ	π	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	δ	π	$\mu_{\alpha*}$	μ_δ	%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28												29	30
116401	23 35 14.25	+25 17 08.2	8.78	H	353.809 354 96	+25.285 605 91		5.03	32.76	−8.17	0.82	0.63	1.05	0.90	0.68	+19	+14	−	8	−	3	+	6	+	3	+	8	−10	+11	+31								1	0.94
116402	23 35 14.64	−03 51 13.9	7.23	H	353.811 010 31	−03.853 849 09		17.20	48.78	31.15	0.84	0.65	0.98	1.12	0.83	+38	−28	−34	−	9	+	9	−12	+	9	+	5	+	3	+	7								0	1.18
116403	23 35 15.97	+10 57 30.8	7.16	H	353.816 559 29	+10.958 560 03		2.72	2.10	−13.89	0.83	0.69	0.97	0.95	0.86	+24	+	5	−18	+	1	+18	−	4	+20	+24	−	6	+19								0	0.53
116404	23 35 16.16	−09 41 23.4	7.84	2 H	353.817 343 14	−09.689 827 29		0.52	23.69	−49.08	0.92	0.65	1.10	1.58	0.95	+31	−18	−18	+14	−	1	+40	−	3	−	9	−	2	−	5								0	1.37
116405	23 35 18.37	+52 23 41.8	8.46	H	353.826 551 89	+52.394 953 76		2.00	9.45	−3.42	0.67	0.73	1.05	0.87	0.94	−28	+13	+	3	+15	−	1	+	8	+	0	+15	+11	−25								0	−0.40
116406	23 35 19.19	+50 18 42.4	7.23	H	353.829 962 11	+50.311 779 45		3.52	6.05	−2.53	0.42	0.49	0.76	0.52	0.66	−45	+12	+	2	+20	−	4	+	0	+	4	−	5	+12	−22								1	−1.00
116407 H	23 35 19.26	−57 29 42.1	7.68	G	353.830 238 55	−57.495 019 43	A	7.21	−26.68	−23.51	1.23	1.62	1.89	1.33	1.59	−	4	+	7	−	7	+	5	+	3	+25	+	5	+	1	−10	+	5					2	1.32
116408	23 35 21.63	−28 44 11.7	8.39	H	353.840 141 17	−28.736 580 15		4.06	9.35	−5.97	0.86	0.75	1.16	1.11	0.99	+43	−	8	−22	−16	−	1	+12	−	1	−17	+37	+40								0	0.24
116409	23 35 22.61	+44 07 23.2	8.01	H	353.844 192 24	+44.123 097 96		3.83	−20.48	−9.77	0.52	0.60	0.95	0.54	0.70	−	1	+	9	+25	+21	−	8	−	7	−	5	−	1	+	7								0	−0.01
116410	23 35 23.07	+02 13 28.4	8.42	G	353.846 145 31	+02.224 560 87		25.82	112.24	317.21	1.12	0.80	1.37	1.43	0.96	+17	−	1	−18	−17	−	2	+43	+	7	−	6	+16	+22								0	−0.51
116411	23 35 24.17	+36 44 54.0	9.19	2 H	353.850 698 81	+36.748 347 08		3.19	1.69	−2.50	0.94	0.83	1.19	1.20	0.82	+	2	+	8	+12	−25	+	8	+	4	+	6	−26	+	4	+	3						0	1.50
116412	23 35 24.30	+59 45 57.1	9.41	H	353.851 262 37	+59.765 869 62		8.51	−21.35	−12.48	0.86	0.85	1.17	1.02	1.04	−	8	+17	+13	+	4	+12	+13	+13	−	6	+11	−	5								0	0.08
116413	23 35 24.55	−44 14 50.6	10.05	G	353.852 304 01	−44.247 383 08		8.46	−82.18	−33.99	1.14	1.07	1.75	1.31	0.99	+	0	−	7	−23	+	4	−10	−12	−16	−30	+39	−23								0	−0.18
116414	23 35 24.70	−65 49 44.9	9.28	H	353.852 927 13	−65.829 143 67		1.87	32.86	−7.66	0.79	0.87	1.16	0.85	0.84	+	7	+	3	−34	−	7	+	5	−	2	+	4	+	3	+	7	+17					2	−1.34
116415	23 35 25.30	−47 43 27.0	9.31	H	353.855 400 05	−47.724 165 86		2.32	41.14	−7.63	1.01	0.90	1.38	1.21	0.93	−	7	−15	−10	+12	−18	−13	−23	−26	+22	−21												0	−1.15
116416	23 35 25.74	+31 09 43.2	7.90	G	353.857 269 49	+31.161 989 82		42.63	−196.69	−281.35	0.80	0.53	0.93	0.93	0.51	+	3	+17	+11	−	6	+15	+11	+13	−12	+10	+12												0	0.37
116417	23 35 26.82	+08 31 11.1	6.68	H	353.861 765 96	+08.519 740 47		1.89	−6.89	−13.43	0.90	0.68	0.95	1.00	0.69	+14	−12	−23	−33	+	5	+10	+11	−	3	−	2	−	2								0	2.09
116418	23 35 27.09	+52 17 27.5	6.90	H	353.862 874 15	+52.290 984 50		5.56	92.86	20.07	0.48	0.55	0.78	0.60	0.70	−33	+10	+	3	+	6	+	1	−	1	+	2	+	3	+13	−31								0	1.13
116419	23 35 27.71	−10 33 18.3	7.14	1 H	353.865 476 53	−10.555 078 34		1.65	21.95	−9.27	0.82	0.56	0.90	1.11	0.71	+23	−	6	+	4	−	9	+12	+25	+12	−	4	+	4	−	7								2	0.84
116420	23 35 28.04	−16 35 00.4	7.63	H	353.866 841 12	−16.583 456 17		2.38	5.05	−30.42	0.95	0.72	1.20	1.44	0.98	+17	−15	−22	−13	−	1	+41	+	7	+	7	+24	+11												0	0.59
116421	23 35 28.53	+31 00 59.6	6.86	H	353.868 860 83	+31.016 557 15		30.93	540.21	253.77	0.61	0.45	0.73	0.64	0.44	+10	+27	+	1	+19	+11	+	1	+14	−	5	+15	+13												0	0.79
116422	23 35 28.61	+01 18 47.5	6.47	H	353.869 191 75	+01.313 198 15		10.51	−47.76	−23.21	0.83	0.60	0.87	1.20	0.73	+11	+23	−	4	+28	+	3	+27	+	6	+28	+	6	−12												0	0.48
116423	23 35 28.74	−41 41 42.1	10.32	G	353.869 768 66	−41.695 041 61		2.02	14.14	−6.50	1.09	1.16	1.57	1.26	1.26	+24	−10	−15	+24	+	9	−	4	+	7	+	0	+	1	+19								2	0.62
116424	23 35 28.98	+28 01 14.9	9.21	1 H	353.870 740 04	+28.020 812 11		0.16	12.77	−2.27	0.88	0.77	1.16	1.06	0.78	+23	+	0	−18	+	4	+	8	+	6	+	9	−	8	+14	+38								0	1.33
116425 H	23 35 29.46	+54 00 57.2	8.27	G	353.872 747 20	+54.015 878 48	A	4.98	27.35	−1.26	1.24	1.27	1.53	1.33	1.53	−26	+25	−12	+	7	−	1	+15	+	4	+	5	+	9	−29								1	0.30
116426 H	23 35 31.04	−07 09 06.4	8.85	H	353.879 314 42	−07.151 764 83	A	3.38	0.70	−1.48	1.89	1.42	2.02	2.65	2.02	+43	−10	−25	+12	+	9	+20	+	9	+10	+22	+42												1	−0.14
116427	23 35 31.22	+32 11 52.3	6.53	H	353.880 086 82	+32.197 862 28		8.19	35.60	2.37	0.68	0.51	0.86	0.79	0.51	+15	+23	+	4	+15	+11	+19	+16	−15	+26	+26												0	0.06
116428	23 35 32.07	−07 27 52.1	6.40	H	353.883 633 33	−07.464 471 14		7.19	0.29	16.48	0.74	0.58	0.88	1.08	0.91	+35	−	6	−15	+	6	+11	+15	+12	+	7	+25	+29												0	−0.88
116429	23 35 34.79	−46 56 38.9	8.55	G	353.894 962 31	−46.944 147 35		27.69	193.41	−295.82	0.83	0.65	1.08	0.99	0.66	−14	−12	−	7	+31	−24	+	1	−27	−17	+18	−26												0	1.86
116430	23 35 35.71	−38 25 05.5	10.07	G	353.898 794 73	−38.418 196 40		3.83	35.21	−2.18	1.08	1.25	1.76	1.17	1.41	+33	+11	+	1	+54	+	6	+23	+	4	+16	+	4	+30												0	−0.33
116431	23 35 36.11	+08 22 57.8	7.35	H	353.900 477 13	+08.382 717 78		14.04	66.25	−41.01	0.94	0.69	0.97	1.04	0.67	+12	−10	−23	−38	+	1	+13	+	7	−15	+	9	−	7												0	1.90
116432	23 35 36.33	+61 22 06.5	8.75	H	353.901 362 20	+61.368 472 29		5.73	29.19	−12.30	0.68	0.70	0.94	0.87	0.88	−15	+	6	+17	−	4	+	6	+27	+	1	−	8	−	5	−34								0	2.25
116433	23 35 36.55	+04 02 18.5	8.68	H	353.902 294 41	+04.038 461 00		12.38	51.23	−144.79	3.04	1.01	1.41	3.71	1.34	−51	−14	−	2	−91	+54	+21	+42	−35	+28	−33												0	0.25
116434	23 35 37.49	+14 35 37.2	7.46	1 H	353.906 227 40	+14.593 658 34		8.45	53.92	−0.67	0.83	0.54	0.97	0.91	0.58	+53	−	6	−	9	+	5	+	5	−	6	+	5	−14	+24	+57								0	0.48
116435	23 35 39.41	+22 59 41.6	9.03	2 H	353.914 190 46	+22.994 888 91		0.40	−15.81	−8.88	0.83	0.67	1.11	0.91	0.68	+27	+	9	−12	+11	+	3	−	4	+	4	−14	+	8	+32								0	1.40
116436 H	23 35 39.99	−27 29 24.4	6.66	G	353.916 645 18	−27.490 097 84	A	25.96	87.09	−160.41	1.20	0.97	1.11	1.24	0.86	+26	−19	−21	+	0	+	0	−	8	−13	−32	+31	+	6								2	0.43
116437	23 35 40.25	−42 45 51.9	9.80	G	353.917 693 41	−42.764 419 37		9.34	80.71	55.93	1.01	1.04	1.35	1.28	1.19	+19	−	4	−21	−	6	+11	+	9	+12	+	0	+	5	+	8								0	0.96
116438	23 35 41.87	−15 17 56.3	7.29	H	353.924 460 34	−15.298 972 01		5.57	−7.32	−39.18	0.97	0.63	0.96	1.63	0.86	+28	+	0	+	0	+	3	+29	+20	+33	+23	−15	−20												0	0.69
116439	23 35 42.23	+53 42 58.4	9.04	H	353.925 955 54	+53.716 216 35		1.45	−0.70	−2.67	0.74	0.81	1.12	1.01	1.06	−38	+22	−	9	−	1	+	1	−	2	+	6	−	6	+25	−43								3	−1.29
116440	23 35 42.60	+51 15 50.1	6.87	1 H	353.927 512 21	+51.263 923 09		4.37	−18.68	14.55	0.43	0.53	0.79	0.49	0.70	−35	+11	+	2	+	8	−	5	−	9	+	0	+	1	+27	−17								1	1.06
116441	23 35 42.62	+20 34 51.4	9.10	G	353.927 592 17	+20.580 934 99		13.28	−131.09	−116.74	0.83	0.84	1.19	0.98	0.91	+49	+	1	−19	+	5	−15	+20	−	9	−31	+33	+56												0	−0.23
116442	23 35 43.06	−34 57 40.3	9.76	H	353.929 424 29	−34.961 201 97		3.39	46.97	−2.37	1.14	1.19	1.50	1.29	1.37	+27	+	7	−	6	−22	+	6	−	5	+	5	+	1	−20	+27								0	0.72
116443	23 35 43.92	+41 58 02.5	11.17	G	353.933 014 26	+41.967 358 15		36.65	701.28	151.61	1.38	1.55	2.30	1.59	1.49	+	7	+	8	+27	+11	−	4	+	7	−	5	−15	+	0	+	3						3	2.44
116444	23 35 44.63	−57 30 16.6	9.18	H	353.935 947 23	−57.504 611 86		9.93	−77.05	−108.40	0.70	0.75	1.10	0.76	0.77	−15	+	1	−12	+	6	+	6	+19	+	9	−12	+	9	−	9								1	0.53
116445	23 35 44.88	+32 09 59.7	8.44	H	353.937 003 21	+32.166 575 04		3.07	−7.08	−37.55	0.88	0.63	1.07	1.01	0.63	+	4	+14	−13	+	9	+	5	+13	+10	−25	+21	+17												0	0.11
116446	23 35 44.92	−13 27 18.7	8.64	H	353.937 169 13	−13.455 202 62		4.56	16.09	−3.71	1.16	0.73	1.38	1.81	1.29	+53	−10	−	9	+35	+	22	+28	+11	−	4	+38	+37												0	−0.82
116447	23 35 45.42	−21 43 47.6	9.57	H	353.939 245 06	−21.729 887 42		2.51	−11.19	−16.91	1.38	1.44	1.56	1.88	1.82	+38	+	5	+	2	+22	+20	+	7	+20	+31	−	5	+31												0	−0.14
116448	23 35 45.62	+67 01 12.2	8.51	H	353.940 091 81	+67.020 068 87		2.07	−1.86	−9.71	0.65	0.76	0.87	0.78	0.89	−	8	−13	+	9	+	0	−19	−15	−19	−	8	+10	−22												0	1.27
116449	23 35 45.94	+40 02 24.0	8.17	H	353.941 414 09	+40.039 989 34		2.17	6.35	−6.59	0.58	0.55	0.79	0.60	0.54	+16	+17	+15	+48	−	1	+	9	+	4	+	0	+13	+23												0	2.52
116450	23 35 46.24	+02 04 28.4	8.96	H	353.942 686 94	+02.074 557 32		−0.46	−10.88	−9.11	1.28	0.99	1.63	1.71	1.20	+14	+17	−13	+	0	−	2	+45	+10	−	6	+35	+28												0	−0.23
116451	23 35 46.97	−43 07 59.1	9.50	H	353.945 697 91	−43.133 096 84		5.50	73.16	−13.29	1.07	1.04	1.38	1.14	1.11	+	7	+	0	−	6	−23	+14	+26	+17	−22	+15	+	2												0	−0.74
116452	23 35 48.42	−38 57 13.6	7.69	H	353.951 752 59	−38.953 781 21		5.37	66.10	−10.64	0.60	0.75	0.91	0.65	0.79	+29	+	8	−	9	+34	+	8	+13	+	9	+37	−	8	+22												0	0.45
116453	23 35 49.00	−29 55 59.7	9.46	G	353.954 160 74	−29.933 262 11		0.50	44.06	−34.39	1.09	0.99	1.46	1.24	1.14	+42	−29	−30	−39	−	9	+22	−12	−28	+35	+36												0	−0.04
116454	23 35 49.42	+00 26 45.5	10.19	G	353.955 920 23	+00.445 968 16		18.10	−237.99	−185.91	1.64	1.31	1.72	2.16	1.50	+14	+	8	−	3	+	8	+	9	+	4	+12	+23	+	9	−	7								0	0.23
116455	23 35 49.91	−44 47 26.9	10.19	H	353.957 953 24	−44.790 816 99		2.98	38.27	5.61	1.06	0.88	1.62	1.14	0.86	−17	+13	−18	+	3	−13	+16	−	7	−25	+27	−21												1	−0.87
116456	23 35 50.62	+60 54 09.1	8.40	H	353.960 900 81	+60.902 537 04		1.77	−1.22	−2.33	0.63	0.68	0.86	0.77	0.79	−11	+15	+	0	+	8	+	7	+	8	+	6	−12	+	6	−17								0	1.14
116457	23 35 50.89	+47 25 38.6	8.73	H	353.962 050 64	+47.427 390 20		1.52	1.54	−2.04	0.63	0.73	1.11	0.73	1.01	−15	+	0	+15	−35	+	8	−	5	+	5	−	3	−	2	−	2								0	−1.00
116458	23 35 51.47	+36 34 40.9	9.00	H	353.964 441 43	+36.578 040 44		4.20	6.86	3.35	0.95	0.87	1.27	1.18	0.85	+	7	+11	+11	−19	+	3	+18	+	2	−27	+20	+12	+	0	−1.51										
116459	23 35 52.18	+05 01 19.9	11.95	G	353.967 396 67	+05.022 199 71		16.77	395.11	−370.53	3.94	2.30	4.01	5.81	2.96	−	7	+15	−12	+40	−22	+44	−21	+	4	+17	−16	+	0	−0.40										
116460	23 35 52.83	−46 09 47.2	9.70	G	353.970 136 45	−46.163 101 89		24.44	−215.82	−345.73	1.24	0.81	1.63	1.52	0.89	−29	+10	−	8	−	7	−	9	+10	−	6	−19	+12	−37												0	2.59
116461	23 35 53.88	+66 51 35.4	8.48	G	353.974 505 58	+66.859 842 71		7.69	47.80	−60.26	0.68	0.70	0.86	0.82	0.84	−10	+	3	+14	+	5	−11	−	8	−12	−11	+11	−23		0	1.33										
116462	23 35 54.55	−06 00 29.3	9.74	H	353.977 305 72	−06.008 143 58		4.50	−10.65	−16.70	1.44	1.02	1.60	2.37	1.73	+28	+	0	−	5	−11	+21	−	2	+26	+26	+30	+	9		0	−0.70										
116463 H	23 35 54.99	+02 26 44.0	8.58	H	353.979 111 58	+02.445 560 15	A	7.79	13.46	−2.31	2.00	1.37	2.08	2.29	1.53	+15	−	6	−28	−30	+	0	+28	+10	−	1	+	6	+17		2	−0.39										
116464	23 35 55.54	+27 51 53.8	7.37	H	353.981 408 85	+27.864 934 60		1.45	0.82	−0.49	0.61	0.52	0.77	0.70	0.55	+24	+	9	−	6	+	6	+12	+	2	+13	−	3	+11	+38		2	−0.05										
116465	23 35 55.94	+24 33 39.6	6.44	2 H	353.983 089 75	+24.560 987 41		2.60	0.95	10.17	0.55	0.49	0.75	0.64	0.52	+29	+10	−17	+16	+	6	−22	+	5	−	6	−	6	+42		0	0.13										
116466	23 35 56.24	+10 03 14.1	10.64	H	353.984 348 56	+10.053 903 25		8.44	−96.81	−138.23	1.70	1.52	2.03	1.84	1.84	+35	−	4	−23	−	5	+	5	+	1	+	5	+12	+	4	+40		0	0.91										
116467	23 35 56.91	−21 38 32.1	9.32	H	353.987 140 59	−21.642 254 58		1.29	26.08	4.66	1.26	1.11	1.40	1.65	1.30	+16	+	1	+	7	+12	+11	+22	+11	+23	+	4	+	5		0	0.71										
116468	23 35 57.41	−16 17 21.7	8.34	H	353.989 215 47	−16.289 350 24		1.04	23.60	−5.57	1.23	0.84	1.25	1.73	1.09	+	6	−	3	−18	−28	+18	+21	+27	+20	+	8	−	6		0	2.72										
116469	23 35 57.44	−10 41 15.7	7.50	H	353.989 346 67	−10.687 693 88		0.51	18.13	0.55	0.82	0.57	0.92	1.13	0.76	+24	+	1	+	9	−12	+12	+27	+11	−	8	+	1	−	3		0	3.08										
116470	23 36 00.27	−08 45 57.9	7.18	G	354.001 119 10	−08.766 079 01		6.49	−29.36	−40.12	0.71	0.54	0.85	0.91	0.75	+30	−10	−22	−13	−	1	+26	+	4	−13	+24	+23		0	−0.88										
116471	23 36 00.78	+15 41 38.3	8.07	H	354.003 236 47	+15.693 978 03		4.95	27.19	2.95	1.00	0.62	1.19	1.09	0.67	+39	+	7	−	7	−21	+	7	−	4	+	6	−14	+33	+47		0	−0.66										
116472	23 36 00.90	−30 38 48.2	7.57	G	354.003 743 32	−30.646 735 14		8.55	42.40	−42.80	0.89	0.69	0.99	0.98	0.83	+28	−	9	−21	−56	−	3	+12	+	0	−31	+34	+24		0	0.28										
116473	23 36 01.19	−43 26 52.4	9.02	H	354.004 950 02	−43.447 878 06		10.55	50.20	−10.62	0.85	0.93	1.24	0.94	0.91	+	8	−	9	−20	−11	+	3	+28	+	0	−44	+27	−	3		2	0.11										
116474	23 36 03.47	+35 06 48.9	9.47	H	354.014 470 05	+35.113 583 98		6.24	−18.04	−3.72	1.11	0.84	1.42	1.39	0.85	−	2	+10	+	2	−12	+19	+37	+19	−20	+29	+19		0	−0.07										
116475 H	23 36 03.57	−32 37 24.2	8.82	2 H	354.014 862 18	−32.623 401 94	A	3.36	54.77	−1.05	2.34	1.93	2.40	2.34	2.08	+17	+18	−22	−30	+10	−	3	+17	−	6	+35	+	3		1	0.36										
116476	23 36 04.11	−54 38 43.6	11.19	G	354.017 132 23	−54.645 446 10		5.81	197.03	−78.92	1.28	1.38	2.44	1.44	1.72	−32	+	8	−	9	−14	−	5	+19	−	3	−22	+	3	−	9		3	0.96										
116477	23 36 05.17	−50 32 10.9	10.41	H	354.021 534 39	−50.536 351 20		6.73	52.82	4.41	1.09	1.21	1.77	1.45	1.17	−12	−	5	−	5	−19	+	1	+	7	+	3	−20	−	9	−25		1	−1.39										
116478	23 36 05.58	+18 26 31.9	7.64	G	354.023 243 95	+18.442 201 90		27.91	682.07	217.47	0.75	0.63	0.86	0.88	0.72	+24	+	6	−	4	−23	−14	−	9	−	0	−16	+16	+27		0	−0.41										
116479	23 36 05.81	+03 09 04.4	7.90	G	354.024 224 96	+03.151 212 81		8.29	14.40	−55.53	0.85	0.70	1.01	0.98	0.85	+17	+	7	−25	+	4	−	4	+13	+	1	−	1	+29	+21		0	0.20										
116480	23 36 06.09	−40 54 47.7	9.08	H	354.025 364 85	−40.913 262 81		2.63	−10.73	−21.57	0.84	0.91	1.22	0.94	0.97	+18	−	6	−13	+17	+	7	−	3	+	7	+11	−	4	+13		0	1.00										
116481	23 36 09.06	+83 45 19.9	9.50	H	354.037 745 26	+83.755 529 36		12.54	157.46	21.19	0.84	0.74	0.89	1.01	0.82	+10	+	1	+19	−35	−12	+14	−11	−19	+13	−	5			0	−0.12										
116482	23 36 09.66	−26 52 34.7	6.57	H	354.040 242 23	−26.876 316 70		15.51	−23.56	1.11	0.98	0.63	0.92	1.28	0.78	−	2	−18	−26	+24	−16	+	7	−14	+	6	+	3	−	3		0	−0.06										
116483	23 36 10.13	+58 46 54.5	9.40	G	354.042 188 10	+58.781 806 20		3.70	12.36	1.76	0.76	0.79	1.00	0.99	1.02	−28	+20	+	2	+	6	+10	−	6	+	9	+	0	+	1	−32		1	1.05										
116484	23 36 11.23	−46 23 28.9	8.89	H	354.046 802 79	−46.391 357 08		4.44	42.00	−6.92	1.00	0.65	1.29	1.13	0.69	−30	+13	−17	+	6	−11	+	0	−	9	−20	+18	−33		0	0.80										
116485	23 36 12.44	+42 38 43.8	8.06	H	354.051 823 52	+42.645 491 41		3.25	22.05	7.02	0.47	0.63	0.93	0.57	0.65	+	9	+	8	+19	−11	+	1	+	0	+	2	+	5	+	5		0	2.02										
116486	23 36 15.07	+06 51 38.9	7.54	H	354.062 782 67	+06.860 817 36		3.81	−2.44	−14.93	0.88	0.69	1.05	0.98	0.71	+20	−	8	−26	−19	−	9	+25	−	4	−20	+24	+16			0	0.78										
116487	23 36 16.19	−40 30 57.0	10.18	H	354.067 477 96	−40.515 831 89		8.29	97.71	−6.39	1.04	1.22	1.61	1.16	1.30	+28	+	0	−20	+26	+	8	+	5	+	9	+16	+11	+29		2	−2.07										
116488 H	23 36 17.50	−07 07 01.8	7.85	H	354.072 927 76	−07.117 171 23	*	4.86	−18.08	−20.62	1.52	1.23	1.33	1.85	1.22	+27	+16	−	4	+23	−16	+36	−17	−24	+18	+21			1	−0.17										
116489	23 36 17.59	−47 27 57.7	8.75	H	354.073 301 51

No.	Tycho Magnitudes					Colour Indices							Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag			Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3		44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
116401	9.245	0.016	8.804	0.016		0.416	0.021	T	0.48	0.02	L		8.8787	0.0017	0.019	102		8.85	8.91					1							
116402	7.713	0.011	7.278	0.010		0.411	0.014	T	0.48	0.01	L		7.3202	0.0012	0.010	61		7.31	7.34		C			1							S
116403	8.708	0.015	7.289	0.009		1.198	0.014	T	1.16	0.01	L		7.3277	0.0010	0.009	61		7.32	7.35		C			1	G						S
116404	9.846	0.028	8.015	0.013		1.523	0.024	T	1.56	0.04	L		7.9620	0.0028	0.023	65		7.94	8.01		U 2			1							S
116405	8.469	0.008	8.465	0.010		0.008	0.012	T	0.03	0.01	L		8.4682	0.0017	0.018	161		8.44	8.50					1							
116406	7.216	0.004	7.223	0.004		−0.002	0.005	T	0.02	0.01	L		7.2362	0.0008	0.009	230		7.22	7.26					1							S
116407	8.202	0.008	7.791	0.008	*	0.405	0.001	G	0.47	0.00	H	*	7.7694	0.0011	0.015	206	*	7.74	7.80		D	23353−5730	I 1	2	C	A	AB	28	0.796	0.002	0.02	0.01	S
116408	9.629	0.017	8.482	0.012		0.986	0.016	T	0.97	0.01	L		8.5582	0.0018	0.014	114		8.53	8.58					1							
116409	8.322	0.008	8.029	0.008		0.279	0.011	T	0.32	0.01	L		8.0780	0.0015	0.016	140		8.05	8.10					1							S
116410	9.276	0.026	8.488	0.022		0.720	0.000	G	0.77	0.00	H		8.5693	0.0024	0.015	49		8.54	8.59		C			1							S
116411	11.360	0.083	9.440	0.028		1.628	0.072	T	2.56	0.11	O		9.2058	0.0116	0.102	75		9.05	9.42		U 2 C			1	S						
116412	9.994	0.024	9.431	0.022		0.490	0.015	G	0.56	0.02	H		9.5145	0.0019	0.018	120		9.48	9.55		C			1							G
116413	10.649	0.037	10.089	0.035		0.576	0.003	G	0.65	0.00	H		10.1796	0.0026	0.030	116		10.12	10.23		C			1							
116414	9.897	0.019	9.346	0.018		0.522	0.019	T	0.59	0.02	L		9.3952	0.0030	0.032	138		9.33	9.45					1							
116415	10.886	0.042	9.423	0.020		1.233	0.037	T	1.19	0.04	L		9.4694	0.0020	0.021	115		9.43	9.50					1							
116416	8.999	0.015	7.998	0.011		0.845	0.005	G	0.86	0.00	H		8.0532	0.0010	0.013	104		8.03	8.08					1							S
116417	8.897	0.018	6.908	0.008		1.649	0.016	T	1.67	0.02	L		6.7922	0.0029	0.014	45		6.77	6.82					1	S						S
116418	8.240	0.008	7.027	0.004		1.037	0.007	T	1.01	0.01	L		7.0685	0.0007	0.009	161		7.05	7.08		D			1							S
116419	9.099	0.018	7.329	0.009		1.475	0.016	T	1.49	0.02	L		7.2662	0.0022	0.019	78		7.23	7.29		U 2			1							S
116420	9.226	0.022	7.745	0.012		1.247	0.020	T	1.21	0.02	L		7.7889	0.0013	0.008	52		7.77	7.81					1							S
116421	7.588	0.006	6.926	0.005		0.604	0.006	T	0.67	0.01	L		6.9850	0.0008	0.006	105		6.97	7.00					1							S
116422	7.957	0.011	6.598	0.006		1.151	0.010	T	1.11	0.01	L		6.6365	0.0010	0.009	48		6.62	6.65		C			1							S
116423	10.764	0.043	10.312	0.045		0.350	0.020	G	0.41	0.03	H		10.4276	0.0045	0.036	93		10.37	10.48					1							
116424	9.590	0.018	9.208	0.019		0.362	0.024	T	0.42	0.03	L		9.2942	0.0030	0.025	105		9.25	9.34		U			1							
116425	8.679	0.010	8.332	0.011	*	0.300	0.015	G	0.34	0.02	H	*	8.3485	0.0014	0.015	139	*	8.32	8.38		D	23355+5401	M 1	2	C	A	AB	226	0.562	0.005	1.52	0.02	
116426	10.280	0.035	8.999	0.020	A						T	*	9.0126	0.0020	0.013	72	*	8.98	9.03		C	23355−0709	I 1	2	C	B	AB	279	1.092	0.040	3.13	0.19	
116427	7.709	0.007	6.640	0.005		0.926	0.007	T	0.92	0.01	L		6.6936	0.0011	0.008	91		6.68	6.71					1							S
116428	7.515	0.008	6.499	0.005		0.874	0.005	G	0.88	0.00	H		6.5608	0.0008	0.008	80		6.55	6.58		C			1							S
116429	9.521	0.014	8.641	0.011		0.783	0.010	G	0.83	0.02	A		8.6871	0.0020	0.024	139		8.66	8.73					1							
116430	11.537	0.077	10.254	0.039		1.031	0.005	G	1.00	0.00	H		10.2495	0.0025	0.023	109		10.22	10.29		C			1							G
116431	7.807	0.014	7.392	0.012		0.405	0.015	G	0.47	0.02	H		7.4438	0.0012	0.010	50		7.43	7.46		C			1							S
116432	9.223	0.015	8.783	0.015		0.395	0.005	G	0.46	0.01	H		8.8434	0.0022	0.018	126		8.81	8.87		C			1							
116433	9.312	0.024	8.749	0.022		0.527	0.029	T	0.60	0.03	L		8.7890	0.0027	0.013	49		8.76	8.82		C			1	G						
116434	7.781	0.007	7.480	0.007		0.286	0.009	T	0.33	0.01	L		7.5377	0.0024	0.023	144		7.50	7.56	1.14	P 1 A			1							S
116435	11.257	0.065	9.299	0.020		1.624	0.054	T	1.65	0.06	L		9.1385	0.0111	0.146	110		8.97	9.43	325.00	P 1 A			1	S						
116436	7.360	0.006	6.755	0.005	*	0.560	0.006	G	0.63	0.01	H	*	6.7957	0.0017	0.011	99	*	6.78	6.82		D	23357−2729	I 1	2	C	A	AB	320	0.506	0.005	1.84	0.02	S
116437	10.343	0.051	9.939	0.055		0.570	0.020	G	0.64	0.02	H		9.9258	0.0025	0.021	103		9.89	9.96		C			1							
116438	8.630	0.013	7.398	0.009		1.052	0.012	T	1.02	0.01	L		7.4570	0.0014	0.013	71		7.44	7.48		C			1							S
116439	9.034	0.012	9.023	0.016		0.015	0.018	T	0.03	0.02	L		9.0569	0.0020	0.020	129		9.02	9.09					1							
116440	8.991	0.009	7.058	0.004		1.639	0.008	T	1.93	0.03	O		6.9535	0.0013	0.014	188		6.93	6.98		U 2			1							S
116441	9.808	0.021	9.174	0.019		0.560	0.015	G	0.63	0.01	H		9.2223	0.0019	0.018	117		9.20	9.26		C			1							
116442	10.226	0.030	9.806	0.032		0.397	0.040	T	0.46	0.04	L		9.8534	0.0029	0.023	90		9.82	9.89		C			1							
116443						1.372	0.020	G	1.61	0.04	I		11.3001	0.0041	0.034	93		11.23	11.38		C			1							G
116444	9.962	0.016	9.225	0.014		0.660	0.016	T	0.72	0.01	L		9.3173	0.0020	0.026	201		9.27	9.36					1							
116445	9.828	0.023	8.554	0.014		1.085	0.021	T	1.05	0.02	L		8.6125	0.0017	0.014	92		8.59	8.64		C			1							
116446	9.778	0.024	8.722	0.017		0.916	0.022	T	0.91	0.02	L		8.8048	0.0009	0.012	89		8.78	8.83		D			1							
116447	10.254	0.046	9.685	0.043		0.536	0.047	T	0.61	0.05	L		9.6925	0.0031	0.026	64		9.63	9.74		D			1	S						S
116448	8.888	0.013	8.545	0.014		0.325	0.018	T	0.38	0.02	L		8.5870	0.0018	0.018	112		8.55	8.62		D			1							S
116449	8.121	0.009	8.165	0.011		−0.036	0.013	T	−0.01	0.01	L		8.1662	0.0008	0.011	104		8.15	8.18					1							
116450	10.605	0.069	9.098	0.033		1.267	0.060	T	1.23	0.06	L		9.1166	0.0028	0.015	44		9.08	9.14		C			1							
116451	10.096	0.029	9.584	0.028		0.491	0.031	T	0.56	0.03	L		9.6088	0.0022	0.020	85		9.58	9.65		C			1							
116452	8.906	0.013	7.810	0.009		0.947	0.012	T	0.94	0.01	L		7.8519	0.0013	0.011	104		7.84	7.87		C			1							S
116453	10.510	0.037	9.558	0.027		0.912	0.010	G	0.96	0.01	I		9.6438	0.0021	0.023	119		9.61	9.69		C			1							
116454	11.326	0.115	10.162	0.062		0.891	0.005	G	0.90	0.00	H		10.3374	0.0048	0.029	46		10.28	10.38		C			1							
116455	10.735	0.030	10.278	0.032		0.444	0.035	T	0.51	0.04	L		10.2930	0.0030	0.031	148		10.24	10.34					1							
116456	8.635	0.011	8.432	0.012		0.195	0.022	G	0.21	0.03	H		8.4675	0.0015	0.016	124		8.44	8.50					1							
116457	10.108	0.022	8.852	0.013		1.071	0.020	T	1.04	0.02	L		8.9007	0.0020	0.017	133		8.87	8.93		C			1							
116458	10.431	0.045	9.108	0.024		1.123	0.040	T	1.09	0.04	L		9.1721	0.0022	0.014	70		9.15	9.20		C			1							
116459						1.290	0.000	G	1.48	0.00	I		12.0726	0.0094	0.062	52		11.99	12.20					1							G
116460	11.215	0.049	9.869	0.024		1.160	0.015	G	1.26	0.03	I		9.8387	0.0030	0.029	153		9.78	9.89			23359−4610	I 1	1	S						
116461	9.139	0.015	8.558	0.014		0.593	0.015	G	0.66	0.01	H		8.6032	0.0020	0.017	112		8.58	8.63		C			1							
116462	10.471	0.049	9.803	0.041		0.619	0.054	T	0.69	0.05	L		9.8706	0.0032	0.018	56		9.83	9.91		C			1							
116463	8.894	0.019	8.627	0.021	A	0.000	0.495	G	0.23	0.07	L	*	8.6441	0.0023	0.017	49	*	8.62	8.68		C	23359+0227	I 1	2	C	C	AB	253	5.245	0.108	4.07	0.42	S
116464	7.268	0.006	7.356	0.008		−0.075	0.009	T	−0.05	0.01	L		7.3530	0.0015	0.011	104		7.34	7.37					1							S
116465	8.653	0.011	6.642	0.005		1.703	0.010	T	2.19	0.03	O		6.4978	0.0019	0.020	103		6.47	6.54		U 2			1	S						S
116466	11.520	0.114	10.646	0.085		0.780	0.106	T	0.82	0.08	L		10.7894	0.0055	0.037	51		10.74	10.86		C			1							G
116467	9.881	0.033	9.371	0.032		0.479	0.042	T	0.55	0.04	L		9.4233	0.0025	0.026	62		9.39	9.46		C			1							S
116468	10.357	0.048	8.455	0.019		1.579	0.041	T	1.60	0.04	L		8.4604	0.0028	0.017	55		8.43	8.48		C			1							S
116469	8.669	0.013	7.595	0.009		0.930	0.012	T	0.92	0.01	L		7.6613	0.0015	0.009	77		7.64	7.68		C			1							S
116470	7.758	0.009	7.224	0.008		0.483	0.015	G	0.55	0.02	H		7.2889	0.0008	0.008	77		7.28	7.30					1							S
116471	9.544	0.018	8.194	0.011		1.144	0.017	T	1.11	0.01	L		8.2401	0.0013	0.013	105		8.22	8.26		C			1							
116472	8.122	0.008	7.628	0.008		0.493	0.015	G	0.57	0.02	H		7.6680	0.0009	0.011	109		7.64	7.69					1							S
116473	9.725	0.021	9.052	0.018		0.612	0.021	T	0.68	0.02	L		9.1448	0.0020	0.018	97		9.11	9.17		C			1							
116474	9.924	0.027	9.504	0.029		0.380	0.020	G	0.44	0.02	H		9.5557	0.0030	0.017	82		9.52	9.59		C			1							
116475	9.627	0.020	8.969	0.017	*	0.601	0.019	T	0.67	0.02	L	*	8.9478	0.0026	0.026	96	*	8.90	9.02		U 2	23361−3237	I 1	2	C	A	AB	111	1.013	0.010	1.59	0.08	S
116476	11.799	0.085	11.091	0.072		0.600	0.006	G	0.67	0.01	H		11.3138	0.0037	0.055	230		11.17	11.40					1	S						G
116477	11.004	0.040	10.446	0.039		0.527	0.041	T	0.60	0.04	L		10.5332	0.0034	0.036	146		10.46	10.59		C			1							
116478	8.498	0.013	7.700	0.009		0.700	0.004	G	0.76	0.00	H		7.7757	0.0007	0.008	103		7.76	7.79					1	G						S
116479	8.303	0.015	7.924	0.014		0.356	0.007	G	0.42	0.01	H		7.9889	0.0012	0.008	52		7.97	8.01		C			1							S
116480	10.996	0.046	9.262	0.018		1.446	0.039	T	1.44	0.06	L		9.2171	0.0024	0.019	100		9.19	9.25					1							
116481	10.355	0.038	9.549	0.029		0.729	0.037	T	0.78	0.03	L		9.6423	0.0023	0.019	109		9.61	9.68		C			1							
116482	6.890	0.007	6.592	0.006		0.274	0.002	G	0.31	0.00	H		6.6391	0.0011	0.008	52		6.62	6.65		C			1							S
116483	9.873	0.022	9.445	0.022		0.405	0.025	G	0.47	0.03	H		9.5419	0.0018	0.018	122		9.51	9.57					1							G
116484	10.251	0.023	9.005	0.014		1.063	0.021	T	1.03	0.02	L		9.0595	0.0017	0.019	137		9.03	9.09					1							
116485	9.531	0.014	8.199	0.009		1.130	0.013	T	1.09	0.01	L		8.2280	0.0011	0.010	141		8.21	8.25		C			1							
116486	9.029	0.019	7.651	0.011		1.166	0.017	T	1.13	0.01	L		7.7038	0.0014	0.010	56		7.69	7.72		C			1							S
116487	10.813	0.041	10.245	0.039		0.610	0.020	G	0.68	0.02	H		10.3141	0.0025	0.025	97		10.27	10.36		C			1							
116488	8.206	0.013	7.867	0.013	*	0.322	0.017	T	0.37	0.02	L	*	7.9285	0.0010	0.009	73	*	7.91	7.95		D	23363−0707	I 1	2	C	A	AB	137	0.265	0.003	0.17	0.05	S
116489	10.379	0.028	8.883	0.014		1.259	0.025	T	1.22	0.03	L		8.9059	0.0017	0.021	123		8.87	8.95					1							
116490	9.279	0.025	8.813	0.025	*	0.439	0.032	T	0.51	0.03	L	*	8.9693	0.0027	0.017	94	*	8.94	9.01		D	23363+2854	I 1	2	C	A	AB	274	3.269	0.005	0.47	0.02	
116491	12.011	0.123	10.189	0.040		1.370	0.015	G	1.61	0.03	I		10.1823	0.0037	0.030	106		10.12	10.25					1							
116492	11.707	0.091	10.203	0.039		1.160	0.015	G	1.26	0.03	I		10.2228	0.0040	0.029	82		10.17	10.28			23364−3312	I 1	1	X						
116493	8.127	0.008	8.078	0.010		0.067	0.005	G	0.08	0.01	H		8.0946	0.0013	0.015	129		8.07	8.12		C			1	S						
116494	10.015	0.025	8.916	0.017	*	0.949	0.023	T	0.94	0.02	L	*	8.9483	0.0017	0.013	107	*	8.93	8.97		C	23364−4342	H 1	2	C	B	AB	328	0.374	0.066	3.29	0.33	
116495	6.207	0.005	5.743	0.006		0.449	0.016	G	0.57	0.07	F		5.7848	0.0009	0.005	47		5.78	5.80		C			1							S
116496	8.933	0.012	7.612	0.007		1.122	0.011	T	1.08	0.01	L		7.6691	0.0014	0.012	122		7.65	7.69					1							S
116497						1.461	0.020	G	1.86	0.09	I		11.7881	0.0065	0.055	106		11.70	11.88					1							D
116498	11.489	0.088	10.339	0.053		0.980	0.081	T	1.02	0.07	L		10.2653	0.0027	0.025	79		10.20	10.31					1							G
116499	8.697	0.012	8.467	0.014		0.233	0.015	G	0.26	0.02	H		8.5124	0.0014	0.014	89		8.49	8.54		C			1							S
116500						1.090	0.015	G	1.23	0.02	A		11.6647	0.0083	0.070	108		11.53	11.77		U			1							G

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
116501	23 36 27.47	−40 09 47.3	9.22	H	354.114 470 94	−40.163 130 20		3.39	−25.04	−10.91	0.86	1.03	1.29	0.94	1.13	+27	+ 9	−12	+19	+ 5	+12	+ 7	+20	+15	+29	0	0.88
116502	23 36 27.88	+20 39 55.5	7.63	G	354.116 164 59	+20.665 404 25		11.27	16.74	−57.00	0.65	0.54	0.85	0.67	0.58	+44	− 1	− 6	+15	−12	− 2	− 9	−32	+26	+48	0	0.57
116503	23 36 28.46	+67 50 56.1	7.25	H	354.118 594 08	+67.848 909 95		5.83	4.42	−12.59	0.49	0.53	0.63	0.64	0.62	− 5	− 6	+24	+17	− 4	− 7	− 4	−12	− 3	−12	0	0.71
116504	23 36 29.20	−40 44 20.6	9.92	G	354.121 663 48	−40.739 044 52		3.04	24.57	−19.13	1.01	1.15	1.46	1.16	1.13	+15	+ 6	−27	+32	− 9	+11	− 8	+19	−21	+ 5	0	0.16
116505	23 36 30.52	+32 54 15.1	6.35	H	354.127 151 15	+32.904 197 30		12.99	−5.58	7.12	0.63	0.49	0.79	0.70	0.49	− 2	+23	−14	+27	+ 0	− 3	+ 6	−22	+24	+ 1	2	0.61
116506	23 36 30.79	−33 22 58.4	10.32	H	354.128 291 72	−33.382 901 16		7.93	−2.89	3.16	4.41	3.98	5.13	5.00	4.54	+22	+ 3	+ 2	−41	+ 2	+ 1	+ 3	−32	+ 2	+13	4	
116507	23 36 31.43	+51 07 37.2	8.81	2 H	354.130 953 73	+51.126 997 07		0.73	−2.76	0.33	0.69	0.80	1.18	0.84	1.10	−29	+ 6	+ 6	+20	− 3	− 4	− 1	+21	+27	− 5	1	−0.16
116508	23 36 31.52	+45 30 54.8	8.45	H	354.131 347 31	+45.515 231 06		10.58	23.11	−96.81	0.75	0.64	1.06	0.85	0.78	−23	+ 9	+19	+28	−33	− 5	−31	+ 1	+11	−15	0	0.18
116509 H	23 36 31.61	−62 45 18.7	8.12	H	354.131 703 64	−62.755 206 53	*	3.74	24.27	−8.43	1.25	1.99	1.07	0.91	0.85	−10	− 5	− 8	+ 8	+ 4	+ 9	+11	−15	−14	− 3	2	−0.32
116510	23 36 33.96	−44 53 34.0	6.92	G	354.141 500 31	−44.892 775 75		11.75	92.87	−23.87	0.54	0.43	0.77	0.60	0.43	−15	+ 3	−17	+18	−19	+19	−16	−21	+21	−18	0	−0.54
116511	23 36 35.89	+06 35 29.6	9.19	H	354.149 521 67	+06.591 567 04		1.93	4.89	−7.82	1.40	1.00	1.70	1.82	1.26	+21	−16	− 4	− 7	− 3	+34	− 6	+ 8	+36	+17	0	0.84
116512 H	23 36 37.27	+53 57 11.1	8.60	H	354.155 286 52	+53.953 090 44	A	2.55	7.65	−7.25	1.08	1.17	1.45	1.23	1.45	−37	+16	− 7	− 3	− 1	+13	+ 4	− 1	+ 8	−36	1	0.13
116513	23 36 38.67	−35 21 17.4	8.63	H	354.161 129 35	−35.354 823 80		10.52	−36.15	−33.88	0.86	0.82	1.04	1.00	0.91	+26	+ 5	−11	− 6	+18	+ 1	+20	+25	+ 2	+21	0	−0.17
116514	23 36 40.50	+48 14 26.7	9.24	H	354.168 754 39	+48.240 753 03		3.85	−13.63	−7.38	0.88	0.90	1.50	0.97	1.10	−22	− 1	+28	−14	− 9	+ 5	−14	+17	− 2	−19	0	−0.96
116515	23 36 43.64	−31 15 00.7	9.97	H	354.181 827 70	−31.250 187 54		7.58	12.19	1.23	1.43	1.40	1.76	1.77	1.63	+38	−14	−12	−33	−10	+ 5	−13	−38	+15	+33	0	−0.15
*116516	23 36 44.59	−66 25 48.5	9.63	H	354.185 811 82	−66.430 137 28		1.95	−7.67	−39.76	0.91	0.98	1.30	1.15	1.05	− 2	− 3	−30	+ 6	+11	−18	+ 5	+ 8	+ 9	− 1	4	1.59
*116517	23 36 44.55	−42 21 43.9	8.72	H	354.185 644 98	−42.362 195 74		10.12	25.07	−44.84	0.89	0.90	1.19	1.14	0.92	+24	− 8	−21	+23	+12	− 4	+ 8	+10	+13	+11	0	2.42
116518	23 36 45.49	+19 10 59.8	8.86	H	354.189 527 00	+19.183 274 40		4.97	−30.79	−14.00	0.80	0.62	1.07	0.91	0.70	+41	+ 5	+ 8	+ 0	+ 0	+ 4	+17	+45			0	0.38
116519	23 36 45.51	−17 14 12.5	9.31	G	354.189 617 95	−17.236 814 65		20.61	446.84	4.65	1.14	1.14	1.53	1.50	1.43	+29	−19	−29	− 5	−14	+41	− 3	− 2	+ 4	+27	0	0.27
116520	23 36 45.64	−02 57 40.3	8.15	H	354.190 168 88	−02.961 189 28		5.50	135.49	15.49	0.95	0.78	1.22	1.41	0.91	+48	−21	−41	− 2	− 8	+15	− 5	− 8	− 7	+ 5	2	2.53
116521	23 36 48.52	+05 54 59.8	9.03	H	354.202 183 04	+05.916 615 98		3.63	9.93	−7.91	1.32	0.82	1.28	1.59	1.03	+12	−12	−10	−56	+ 9	+21	+11	− 1	+27	+10	0	0.61
116522	23 36 51.82	+43 18 32.1	7.81	H	354.215 914 55	+43.308 924 81		2.02	0.66	−5.07	0.56	0.63	0.88	0.59	0.62	+19	+ 4	+22	+12	+ 4	+ 2	+ 4	+12	+ 4	+21	0	1.52
116523	23 36 53.80	+14 32 15.0	9.19	H	354.224 155 38	+14.537 500 61		6.70	35.26	−7.43	1.24	0.81	1.42	1.30	0.81	+58	−16	− 9	−19	−12	+13	−17	−30	+28	+54	0	−1.84
*116524	23 36 55.83	+52 17 05.9	8.19	H	354.232 621 47	+52.284 971 99		3.46	21.92	−2.86	0.69	0.81	1.19	0.93	1.10	−36	+16	−17	+25	− 7	+ 6	− 6	+22	− 3	−27	0	0.08
*116525	23 36 55.81	−22 02 28.7	9.45	H	354.232 540 94	−22.041 310 43		1.37	7.42	−4.36	1.32	1.27	1.58	1.79	1.50	+25	+11	−22	+13	−12	+18	− 7	− 8	+11	+24	0	1.42
116526	23 36 56.00	−34 21 05.5	8.32	H	354.233 333 12	−34.351 539 07		4.82	−5.86	−84.06	0.90	0.72	1.06	0.98	0.85	+12	+ 6	−18	−13	+13	+ 5	+14	+17	−21	+10	0	1.54
116527	23 36 56.51	+21 43 23.2	7.54	H	354.235 470 06	+21.723 117 38		4.36	−4.67	−6.34	0.62	0.58	0.84	0.71	0.61	+45	− 8	−22	+ 4	−14	+17	−11	−29	+36	+49	0	1.18
116528 H	23 36 57.14	−36 48 04.4	7.68	G	354.238 067 39	−36.801 215 69	A	12.81	89.69	−52.15	2.04	1.56	1.84	2.36	1.81	−10	+23	+ 3	−37	+22	−14	+29	− 9	+15	−33	0	1.36
116529	23 36 58.33	+11 00 54.0	7.95	G	354.243 047 64	+11.014 990 25		4.63	41.53	8.05	0.95	0.67	1.11	0.93	0.59	+29	+29	− 6	+13	+20	+ 9	+27	−16	+30	+47	2	0.03
116530	23 36 59.99	+52 17 09.2	9.64	H	354.249 945 03	+52.285 899 17		−0.13	−7.50	−9.31	1.18	1.34	1.95	1.56	1.78	−34	+ 9	+ 3	+21	−14	+ 5	−14	+25	− 1	−25	1	1.71
*116531	23 37 01.91	−25 26 05.9	10.02	H	354.257 950 00	−25.434 976 28		1.03	−0.79	22.45	1.71	1.35	2.09	2.57	1.60	+16	−31	−49	+13	+ 9	−18	− 8	− 5	+28	−17	0	−0.94
*116532	23 37 01.90	−17 33 43.0	8.64	H	354.257 907 62	−17.561 955 20		8.01	21.01	−21.10	0.93	0.94	1.24	1.10	1.15	+26	−11	−36	− 5	−19	+38	− 8	− 5	+ 9	+40	0	−0.67
116533 H	23 37 02.64	−21 40 33.0	9.06	G	354.260 992 67	−21.675 830 50	A	10.08	36.77	30.84	3.75	3.03	3.77	4.85	3.41	+20	+ 3	−14	+19	−11	+23	− 6	+ 1	+ 6	+10	1	0.61
116534	23 37 02.78	+35 47 58.1	8.13	H	354.261 599 21	+35.799 474 27		6.41	−1.19	6.02	0.82	0.67	1.06	1.25	0.70	+ 0	+ 5	− 2	−10	+ 6	+28	+ 5	−20	+15	− 4	0	0.08
116535	23 37 03.11	+38 44 18.8	8.35	G	354.262 940 91	+38.738 562 11		1.83	−16.84	9.78	0.82	0.66	1.08	1.00	0.70	− 3	+21	− 1	− 5	+18	−37	+22	− 7	+17	+13	2	0.41
116536	23 37 03.14	−60 50 08.3	7.63	H	354.263 080 19	−60.835 627 67		7.35	57.36	−3.23	0.49	0.54	0.78	0.59	0.61	−13	+ 5	−15	+ 6	+11	−18	+ 8	+ 2	− 4	−16	1	1.14
116537	23 37 03.58	−13 33 46.2	8.11	H	354.264 935 11	−13.562 821 72		15.18	−10.68	27.89	1.10	0.66	1.06	1.54	0.88	+43	+ 0	− 6	+49	+28	+ 7	+19	+23	+11	+13	0	−2.11
116538 H	23 37 03.84	+57 58 52.3	9.19	H	354.265 996 77	+57.981 187 94	A	4.02	8.52	−5.47	1.26	1.24	1.50	1.50	1.42	−22	+15	+ 2	− 1	+ 4	− 5	+ 4	+ 6	− 2	−15	1	−0.57
116539 H	23 37 05.35	−31 52 16.1	6.51	G	354.272 297 95	−31.871 131 56	A	4.48	42.60	−1.99	0.85	0.90	0.94	0.95	0.99	+46	−19	−17	−24	−12	+ 8	−17	−29	+30	+49	1	−0.16
116540	23 37 05.86	+46 17 14.6	8.73	1 H	354.274 397 94	+46.287 389 36		2.17	1.06	−3.15	0.58	0.72	1.13	0.59	0.82	+ 2	+17	+20	−31	−15	−16	−15	+ 3	+ 3	+ 6	0	1.10
116541	23 37 06.40	+53 27 10.0	7.81	H	354.276 649 74	+53.452 787 37		1.60	6.44	−5.56	0.59	0.63	0.93	0.86	0.87	−37	+11	+ 4	+ 3	+ 4	+21	+ 4	+ 4	+ 8	−45	0	−0.36
116542	23 37 06.50	+30 40 40.2	7.21	H	354.277 093 60	+30.677 835 98		19.92	188.18	77.55	0.62	0.50	0.78	0.65	0.47	+12	+30	− 6	+15	+ 9	−11	+11	−13	+ 8	+20	0	0.92
116543	23 37 07.21	+14 27 01.0	8.28	H	354.280 024 39	+14.450 274 27		9.83	−127.06	−107.82	1.00	0.65	1.19	1.05	0.64	+51	− 7	−13	−13	− 8	+ 9	−10	−29	+32	+48	0	−0.31
116544	23 37 08.84	+14 46 48.0	7.98	H	354.286 828 41	+14.779 999 74		4.58	−17.51	15.98	1.00	0.63	1.14	1.01	0.62	+39	− 3	−11	−30	− 3	+ 1	− 6	−28	+35	+40	0	−1.70
116545	23 37 09.68	+19 02 07.8	8.84	H	354.290 325 61	+19.035 511 78		2.47	−23.52	−9.25	0.82	0.62	1.08	0.91	0.66	+41	+ 8	+ 4	− 5	− 3	+12	− 2	−11	+14	+42	0	−0.48
116546	23 37 09.85	−31 40 01.1	9.00	H	354.291 022 44	−31.666 974 86		7.17	3.69	−4.53	1.01	1.02	1.29	1.22	1.23	+32	−17	+ 6	−28	−11	+ 9	−14	−41	+15	+34	0	−0.10
116547	23 37 10.00	−25 51 53.0	8.97	H	354.291 660 77	−25.864 733 91		2.68	25.48	−4.31	1.25	0.98	1.42	1.78	1.10	+10	−26	−41	−29	− 3	+24	+ 8	− 5	+ 6	−14	0	1.06
116548	23 37 10.50	+39 27 09.8	8.39	H	354.293 757 50	+39.452 711 64		4.52	−18.18	−10.40	0.66	0.65	0.88	0.74	0.65	+ 4	+22	− 3	+11	+15	−15	+17	− 2	+15	+10	2	0.89
116549	23 37 12.25	+55 52 35.8	7.09	1 H	354.301 025 60	+55.876 622 80		2.77	13.71	−18.70	0.54	0.53	0.76	0.68	0.67	−29	+13	+16	− 3	+10	+16	+ 6	− 7	−12	−32	1	0.02
116550	23 37 12.31	+07 43 43.2	10.56	H	354.301 298 37	+07.728 674 34		2.65	−10.30	−8.82	1.99	1.47	2.10	2.20	1.61	+17	− 6	−13	−37	+ 0	+14	+ 3	−11	+17	+ 9	6	−1.60
116551	23 37 13.72	+79 15 07.3	9.85	2 H	354.307 160 89	+79.252 032 38		14.63	261.68	38.01	1.05	0.95	1.15	1.17	1.03	+13	+13	+24	−23	−13	+ 2	−12	− 2	+ 6	+ 6	1	2.85
116552	23 37 14.59	+30 01 47.5	8.83	H	354.310 808 52	+30.029 857 22		5.26	22.79	−37.72	0.84	0.62	1.03	0.81	0.62	+15	+30	+ 0	+19	+11	− 5	+15	+ 1	+11	+24	0	−0.43
116553	23 37 14.67	−56 05 49.2	9.54	H	354.311 136 55	−56.096 986 87		10.31	−18.11	9.66	0.92	0.95	1.39	1.21	1.09	−26	− 1	− 6	+38	− 5	+ 7	−10	+ 2	+11	−36	3	3.21
116554	23 37 15.31	−45 28 30.8	9.22	H	354.313 807 97	−45.475 222 45		17.29	96.12	−198.35	0.99	0.79	1.42	1.14	0.73	−18	+22	−22	+11	−20	+11	−14	−28	+19	−27	0	−0.31
116555	23 37 15.63	+26 11 31.7	9.88	H	354.315 133 58	+26.192 134 68		0.07	−6.76	−11.15	1.19	0.86	1.51	1.47	1.10	+10	− 1	−33	+30	+13	−27	− 1	− 6	− 7	− 1	0	0.82
116556	23 37 16.06	+62 25 44.4	10.01	3 H	354.316 927 84	+62.428 994 60		2.43	−2.92	−0.07	0.98	0.96	1.24	1.23	1.01	−19	+ 6	+30	+24	−17	−13	−11	− 1	+ 9	−21	0	0.18
116557	23 37 16.56	−59 29 25.3	9.37	H	354.319 019 72	−59.490 350 46		3.62	−22.32	−9.13	0.82	0.87	1.27	0.95	0.95	−18	− 8	−10	− 8	+18	+ 2	+17	+ 8	−18	− 9	0	0.41
116558	23 37 16.57	+54 34 56.8	9.41	H	354.319 029 58	+54.582 442 30		0.17	0.18	−2.23	0.76	0.86	1.15	0.94	1.08	−25	+ 9	+12	+10	− 1	+11	− 2	+ 1	+10	−35	0	1.76
116559	23 37 17.36	−01 31 11.3	8.41	H	354.322 347 79	−01.519 808 09		16.27	65.53	−29.32	1.02	0.78	1.24	1.25	0.97	+44	− 4	−34	−16	+10	− 6	+18	+14	− 8	+20	0	1.34
116560	23 37 17.68	−20 55 54.9	10.88	G	354.323 654 16	−20.931 920 40		−6.62	20.07	−25.83	1.94	1.64	2.31	2.15	1.88	+ 9	− 1	−10	− 9	+ 8	+37	+15	+17	+ 7	+ 9	6	2.49
116561	23 37 17.81	−70 02 17.9	8.45	H	354.324 220 50	−70.038 294 93		3.92	12.71	4.94	0.66	0.72	0.84	0.70	0.81	− 7	+ 5	−15	−12	+11	+ 2	+12	−11	+ 4	− 2	0	−1.06
116562	23 37 18.18	+48 28 55.4	8.51	H	354.325 757 07	+48.482 055 97		0.57	0.44	−2.24	0.65	0.71	1.07	0.75	0.91	−20	+ 6	+22	−10	+ 8	+11	+ 6	+ 3	− 2	−19	0	−1.35
116563	23 37 18.36	+28 43 08.6	11.12	H	354.326 518 71	+28.719 047 37		14.80	−30.21	−163.94	1.77	1.40	2.20	2.02	1.49	+32	+27	+ 0	+24	+16	+ 9	+22	+ 1	+14	+51	0	0.88
116564	23 37 18.79	+22 14 25.4	7.61	H	354.328 288 72	+22.240 392 08		3.82	−4.13	−34.58	0.63	0.58	0.86	0.69	0.59	+40	− 7	−13	+ 0	−10	+23	− 8	−28	+31	+47	0	2.07
116565	23 37 21.00	+22 29 22.1	7.70	H	354.337 486 04	+22.489 466 45		5.71	44.16	−26.99	0.62	0.59	0.87	0.67	0.63	+41	+ 7	−14	+ 6	−13	+16	− 6	−27	+35	+49	0	0.18
116566	23 37 21.11	−13 20 17.3	7.77	H	354.337 944 27	−13.338 130 98		6.18	18.80	−2.88	1.06	0.62	1.01	1.49	0.86	+37	− 7	− 5	+44	+26	+ 7	+20	+25	+ 5	+10	0	−2.63
116567	23 37 21.97	−36 28 19.1	10.91	H	354.341 556 47	−36.471 959 81		2.86	38.53	−21.02	1.71	1.53	2.01	1.96	1.76	+12	+ 6	− 7	−31	+15	+ 8	+20	+ 4	+ 1	+ 1	0	1.53
116568	23 37 22.26	−44 07 21.6	9.15	G	354.342 767 94	−44.122 660 05		3.36	25.07	−12.10	0.88	0.69	1.29	1.02	0.69	−28	−11	+ 2	− 3	− 1	+ 0	− 5	−25	+19	−42	1	0.01
116569	23 37 22.34	+45 43 42.7	8.64	H	354.343 092 47	+45.728 519 37		2.89	−7.02	−7.18	0.65	0.69	1.21	0.70	0.84	− 9	+15	− 1	−19	−15	−15	−16	− 8	+17	+ 5	2	−0.42
116570	23 37 22.51	−58 10 11.2	7.54	H	354.343 809 61	−58.169 769 12		4.65	51.10	−26.18	0.48	0.52	0.76	0.53	0.57	−18	+ 7	−13	− 8	+ 5	+ 8	+ 5	−12	− 8	−12	0	−1.67
116571 H	23 37 23.17	+07 37 26.2	8.32	H	354.346 535 03	+07.623 938 94	*	6.87	−14.30	12.31	2.18	1.74	1.45	1.61	1.04	+15	− 3	− 4	−25	− 1	+10	+ 0	− 9	+32	+ 2	0	0.55
116572	23 37 23.43	+50 57 45.5	9.26	H	354.347 632 32	+50.962 630 93		1.78	−4.32	−2.68	0.70	0.79	1.22	0.84	1.03	−31	+10	− 3	+20	− 8	− 7	− 3	+ 8	+28	−11	0	−0.63
116573	23 37 23.78	−51 43 57.9	8.01	H	354.349 065 10	−51.732 756 59		5.24	−29.58	−11.42	0.71	0.77	1.10	0.83	0.77	+ 3	−26	−13	−16	+ 2	+ 7	+ 3	−10	− 2	− 8	0	1.12
116574	23 37 24.65	+12 43 30.7	11.62	G	354.352 720 77	+12.725 207 27		14.68	179.87	−514.52	2.60	1.53	3.06	2.69	1.51	+55	+16	+16	+13	+12	+11	+ 9	− 7	+26	+42	0	0.41
116575	23 37 24.78	−78 09 15.3	8.87	H	354.353 268 72	−78.154 256 59		2.46	30.80	7.07	0.76	0.72	0.87	0.90	0.81	+ 3	− 8	−21	+ 3	+ 5	+ 0	+ 6	− 1	− 2	+21	0	−0.47
116576	23 37 25.33	+37 44 22.2	8.33	H	354.355 544 29	+37.739 487 99		4.57	16.86	−8.06	0.66	0.63	0.92	0.71	0.65	+ 5	+27	−10	− 4	+ 2	−22	+10	−26	+24	+16	0	2.55
*116577	23 37 27.44	+19 46 52.1	8.98	G	354.364 332 67	+19.781 128 29		2.52	17.44	−1.65	0.86	0.72	1.23	0.95	0.70	+43	− 8	− 1	+ 0	−11	+12	−14	−22	+25	+37	0	−0.15
*116578 H	23 37 27.41	+49 21 50.5	8.11	G	354.364 194 49	+49.364 025 27	A	12.40	−56.91	10.75	1.21	1.95	1.81	1.08	1.63	+10	− 4	+10	+20	+ 6	− 3	+ 9	+ 3	+ 2	+11	1	−0.35
116579	23 37 28.06	+35 48 53.7	7.18	H	354.366 932 42	+35.814 916 55		10.20	72.33	−31.94	0.71	0.59	0.94	1.14	0.63	+ 3	+ 9	+ 3	− 2	+ 7	+33	+ 5	+15	+16	+ 0	0	−0.22
116580	23 37 30.18	−30 05 11.0	9.10	H	354.375 765 45	−30.086 375 40		−0.79	−18.45	−30.96	1.11	0.97	1.36	1.14	1.08	+39	+ 5	−11	−50	−17	+13	−11	−38	+31	+36	0	−0.25
116581	23 37 30.75	−36 39 35.7	9.67	H	354.378 140 39	−36.659 903 22		1.80	24.06	11.62	1.43	1.14	1.64	1.80	1.35	− 4	+24	−17	−49	+29	− 2	+37	− 2	+13	−18	0	0.37
116582 H	23 37 32.03	+44 25 44.5	5.81	H	354.383 463 23	+44.429 035 32	A	3.96	15.16	−17.00	0.70	0.85	0.88	0.59	0.67	+ 2	+15	+24	+16	− 9	+ 3	−11	+10	− 2	− 7	1	−0.07
116583	23 37 32.19	+45 03 16.8	8.86	H	354.384 143 31	+45.054 669 97		0.49	−0.57	−3.48	0.79	0.73	1.17	0.85	0.83	−19	+ 9	+10	+34	−32	− 3	−31	+12	+ 9	−13	0	−1.20
116584	23 37 33.71	+46 27 33.0	3.81	2 H	354.390 448 70	+46.459 176 21		38.74	159.22	−421.46	0.34	0.44	0.68	0.33	0.51	+ 0	+11	+22	−42	−16	−11	−19	+ 0	+14	+ 6	0	−1.13
116585	23 37 34.16	+24 50 59.1	8.72	H	354.392 352 90	+24.849 747 51		3.90	28.15	−5.11	0.82	0.71	1.12	0.88	0.77	+26	− 7	−24	− 5	+11	−22	+ 7	+ 0	− 6	+35	0	0.44
116586	23 37 35.51	−54 11 14.1	9.08	H	354.397 939 74	−54.187 241 20		4.12	14.47	0.24	0.74	0.78	1.38	0.88	1.05	−29	+12	−15	− 3	−12	+16	− 2	−30	+ 5	+ 5	0	0.12
116587	23 37 37.04	−05 06 27.7	9.27	H	354.404 337 57	−05.107 696 97		2.88	89.63	−1.26	1.13	0.90	1.55	1.91	1.68	+37	−16	− 2	− 1	+14	+58	+17	+15	+25	+48	0	0.86
116588	23 37 37.81	−37 40 07.3	9.20	H	354.407 522 18	−37.668 696 42		3.59	16.17	−19.12	1.37	1.06	1.36	1.41	1.27	− 2	+12	−20	−57	+28	+ 6	+48	+34	+ 3	−21	0	−0.22
116589	23 37 38.02	+69 04 26.8	8.21	H	354.408 423 42	+69.074 105 30		2.99	−14.28	−23.07	0.66	0.64	0.82	0.73	0.67	+ 1	+ 9	+ 6	+23	+ 1	− 1	+ 3	+ 2	+14	+ 4	0	0.27
116590	23 37 38.12	−15 12 52.7	8.60	H	354.408 816 83	−15.214 647 54		7.60	73.67	−0.44	1.24	0.73	1.35	1.95	1.08	+33	− 5	−17	− 1	+24	+ 3	+20	+ 9	+20	−12	4	0.26
116591	23 37 39.54	−13 03 37.1	5.66	H	354.414 745 82	−13.060 305 96		11.50	34.83	25.77	0.90	0.59	0.89	1.28	0.77	+34	− 5	+ 5	+30	+27	+21	+29	+36	− 4	+ 1	0	−3.47
116592	23 37 39.66	+16 49 31.8	6.26	G	354.415 259 06	+16.825 503 99		8.97	132.08	−3.60	0.67	0.49	0.84	0.68	0.55	+34	+ 7	−10	− 4	+ 8	−30	+ 9	− 8	+ 6	+44	0	0.07
116593	23 37 41.15	−12 12 06.6	9.64	H	354.421 475 75	−12.201 829 81		2.68	30.72	−16.46	1.43	0.96	1.71	2.31	1.51	+34	− 8	− 4	− 7	+16	+32	+21	+16	+28	+11	0	−1.12
116594	23 37 41.80	−09 58 29.6	7.97	H	354.424 177 64	−09.974 894 88		2.31	−45.09	−19.33	0.96	0.69	1.12	1.51	0.86	+34	− 5	−14	+24	+ 2	+25	− 9	− 7	+18	−12	2	1.97
116595	23 37 42.12	−61 43 49.0	8.96	G	354.425 513 98	−61.730 276 90		0.35	43.23	1.74	0.83	0.89	1.25	1.06	1.01	+ 7	−15	−11	−14	−13	+23	− 7	−24	+14	+12	0	−0.07
116596	23 37 45.80	+46 04 44.7	8.55	H	354.440 814 69	+46.079 073 10		2.17	6.17	−5.83	0.58	0.58	1.08	0.70	0.74	−10	+17	+11	−39	−18	−24	−16	−25	+14	+ 1	0	2.15
116597	23 37 47.32	−58 46 07.7	8.80	H	354.447 161 72	−58.768 818 74		−0.27	25.35	−17.40	0.72	0.80	1.16	1.03	1.02	−26	+ 6	−23	−20	+16	− 3	+16	− 2	−27	−36	1	−0.76
116598 H	23 37 47.70	+66 00 32.3	9.72	H	354.448 742 91	+66.008 976 16	A	5.87	3.35	0.92	2.48	2.52	1.99	2.19	2.06	−30	− 1	− 1	− 4	− 1	+22	− 1	− 8	−10	−22	0	−1.30
116599	23 37 48.77	+31 42 57.6

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
116501	10.915	0.042	9.362	0.020		1.304	0.037	T	1.26	0.04	L	9.3776	0.0029	0.021	95		9.35	9.42					1							
116502	8.093	0.008	7.677	0.007		0.422	0.015	G	0.49	0.02	H	7.7248	0.0010	0.010	121		7.70	7.74		C			1							S
116503	7.395	0.007	7.259	0.007		0.131	0.009	T	0.15	0.01	L	7.2985	0.0010	0.009	118		7.29	7.32		C			1							S
116504	10.414	0.032	9.979	0.033		0.486	0.007	G	0.56	0.01	H	10.0239	0.0035	0.026	102		9.98	10.07					1							
116505	6.899	0.006	6.394	0.005		0.459	0.010	G	0.53	0.01	H	6.4489	0.0009	0.006	83		6.44	6.46		C			1							S
116506	10.815	0.046	10.388	0.050		0.403	0.063	T	0.47	0.07	L	10.4116	0.0036	0.027	79		10.37	10.46		C			1	X	S					
116507	11.165	0.046	9.014	0.012		1.818	0.039	T	2.45	0.07	O	8.8352	0.0027	0.033	198		8.78	8.88		U	2		1							
116508	9.290	0.011	8.526	0.009		0.696	0.011	T	0.75	0.01	L	8.5965	0.0017	0.019	165		8.55	8.63					1							
116509	8.194	0.008	8.132	0.009	*	0.056	0.011	T	0.07	0.01	L	* 8.1463	0.0013	0.014	140	*	8.11	8.17		D		23365−6245 H 1	2	C	A	AB	111	0.236	0.016	1.99	0.21	S
116510	7.152	0.004	6.938	0.004		0.200	0.002	G	0.20	0.02	A	6.9785	0.0009	0.009	168		6.96	6.99					1							S
116511	9.891	0.032	9.299	0.029		0.552	0.038	T	0.62	0.04	L	9.3144	0.0026	0.020	58		9.28	9.35		C			1							S
116512	8.864	0.011	8.670	0.012	A	0.200	0.495	G	0.12	0.03	L	* 8.6432	0.0019	0.018	143	*	8.61	8.67		D		23366+5357 I 1	2	C	A	AB	356	3.692	0.029	2.88	0.07	
116513	9.178	0.016	8.690	0.015		0.471	0.017	T	0.54	0.02	L	8.7325	0.0028	0.016	90		8.70	8.76		C			1							S
116514	9.623	0.016	9.265	0.017		0.370	0.015	G	0.43	0.02	H	9.3272	0.0026	0.027	135		9.28	9.38					1							
116515	10.473	0.035	9.985	0.035		0.471	0.038	T	0.54	0.04	L	10.0694	0.0037	0.033	92		10.01	10.14					1							
116516	10.736	0.033	9.709	0.022		0.894	0.030	T	0.90	0.02	L	9.7872	0.0028	0.030	133		9.73	9.85					1	G						
116517	9.676	0.023	8.822	0.018		0.750	0.022	T	0.79	0.02	L	8.8593	0.0019	0.015	96		8.83	8.89		C			1							S
116518	9.515	0.015	8.933	0.013		0.544	0.018	T	0.62	0.02	L	8.9824	0.0016	0.018	139		8.95	9.01		C			1							S
116519	10.493	0.048	9.447	0.032		0.904	0.022	G	0.95	0.02	I	9.4678	0.0027	0.019	54		9.43	9.51		C			1							
116520	8.755	0.015	8.204	0.014		0.531	0.015	G	0.60	0.02	H	8.2609	0.0016	0.011	74		8.24	8.28		C			1							S
116521	9.402	0.020	9.051	0.021		0.333	0.027	T	0.39	0.04	L	9.1164	0.0021	0.016	64		9.09	9.15					1							
116522	9.318	0.019	7.899	0.011		1.198	0.017	T	1.16	0.02	L	7.9716	0.0015	0.015	138		7.95	8.00					1							
116523	10.057	0.024	9.271	0.019		0.714	0.024	T	0.77	0.02	L	9.3387	0.0013	0.015	120		9.31	9.37					1							S
116524	8.464	0.008	8.203	0.009		0.249	0.011	T	0.28	0.01	L	8.2615	0.0020	0.020	161		8.23	8.29					1							
116525	10.628	0.047	9.524	0.030		0.952	0.043	T	0.94	0.03	L	9.6182	0.0025	0.024	67		9.56	9.67		C			1							
116526	9.450	0.018	8.422	0.012		0.895	0.016	T	0.90	0.01	L	8.4826	0.0017	0.017	89		8.46	8.52		C			1							S
116527	9.016	0.013	7.666	0.008		1.144	0.012	T	1.11	0.01	L	7.7110	0.0013	0.012	120		7.69	7.73					1							S
116528	8.343	0.017	7.862	0.017	A	0.500	0.015	G	0.57	0.02	H	* 7.7854	0.0026	0.015	72	*	7.76	7.81		D		23370−3648 I 1	2	C	A	AB	79	1.262	0.010	1.25	0.03	S
116529	8.248	0.011	7.985	0.010		0.248	0.015	G	0.28	0.02	H	8.0132	0.0013	0.010	73		8.00	8.04		C			1							S
116530	9.805	0.019	9.581	0.023		0.214	0.028	T	0.24	0.03	L	9.7115	0.0039	0.037	157		9.64	9.76					1	S						G
116531	10.556	0.051	10.060	0.051		0.478	0.055	T	0.55	0.06	L	10.1264	0.0019	0.018	50		10.09	10.17		D			1							
116532	9.145	0.019	8.680	0.019		0.451	0.021	T	0.52	0.02	L	8.7435	0.0020	0.014	59		8.73	8.77		D			1							S
116533	10.240	0.034	9.599	0.031	A	0.640	0.002	G	0.70	0.00	H	* 9.1596	0.0044	0.030	63	*	9.12	9.20		R		23370−2141 I 1	2	C	A	AB	347	3.206	0.006	0.55	0.02	S
116534	9.611	0.025	8.258	0.014		1.147	0.022	T	1.11	0.02	L	8.2977	0.0014	0.010	71		8.28	8.31		C			1							
116535	10.287	0.044	8.524	0.019		1.480	0.015	G	1.50	0.02	I	8.4837	0.0016	0.011	61		8.46	8.50					1							
116536	8.020	0.008	7.667	0.008		0.352	0.004	G	0.41	0.00	H	7.7104	0.0015	0.015	165		7.69	7.74					1	G						S
116537	8.735	0.014	8.164	0.013		0.531	0.015	G	0.60	0.02	H	8.2257	0.0013	0.010	82		8.21	8.25		C			1							S
116538	9.647	0.020	9.272	0.021	A	0.100	0.495	G	0.36	0.07	L	* 9.2660	0.0020	0.018	122	*	9.23	9.30		D		23371+5759 H 1	2	C	A	AB	128	1.200	0.020	2.39	0.06	
116539	8.064	0.016	6.637	0.008	*	1.253	0.001	G	1.21	0.00	I	* 6.6640	0.0010	0.010	94	*	6.64	6.68		D		23371−3152 I 1	2	C	A	AB	251	5.492	0.028	3.53	0.09	S
116540	8.702	0.012	8.736	0.016		−0.026	0.018	T	0.00	0.02	L	8.7307	0.0020	0.026	204		8.69	8.78		U			1	S						S
116541	7.856	0.007	7.792	0.008		0.064	0.010	T	0.07	0.01	L	7.8353	0.0013	0.014	139		7.82	7.86		C			1							S
116542	7.953	0.009	7.280	0.007		0.616	0.007	G	0.68	0.01	H	7.3371	0.0010	0.010	109		7.32	7.35					1							S
116543	9.220	0.014	8.346	0.011		0.780	0.013	T	0.82	0.01	L	8.4261	0.0012	0.012	121		8.41	8.45		C			1							S
116544	9.380	0.016	8.096	0.010		1.093	0.015	T	1.05	0.02	L	8.1453	0.0015	0.013	102		8.13	8.17					1							S
116545	10.706	0.036	8.951	0.014		1.463	0.031	T	1.47	0.05	L	8.9672	0.0018	0.017	141		8.94	9.00		C			1							
116546	9.458	0.018	9.050	0.018		0.399	0.021	T	0.46	0.02	L	9.0936	0.0019	0.020	93		9.06	9.14					1							
116547	9.085	0.019	8.958	0.023		0.074	0.008	G	0.09	0.01	H	8.9980	0.0022	0.013	50		8.97	9.02					1							S
116548	9.719	0.024	8.497	0.015		1.044	0.022	T	1.01	0.02	L	8.5513	0.0019	0.017	85		8.52	8.58		C			1							
116549	9.307	0.015	7.302	0.006		1.661	0.013	T	1.68	0.01	L	7.1990	0.0013	0.014	114		7.18	7.22		M			1							
116550	11.838	0.164	10.689	0.090		0.987	0.146	T	0.97	0.12	L	10.7258	0.0046	0.032	54		10.66	10.78		C			1							G
116551	10.818	0.051	9.932	0.037		0.837	0.046	T	0.83	0.05	L	9.9771	0.0060	0.049	111		9.91	10.06		R	2		1							G
116552	9.404	0.017	8.856	0.016		0.513	0.021	T	0.59	0.02	L	8.9406	0.0019	0.016	101		8.91	8.97		C			1							
116553	10.162	0.018	9.618	0.018		0.517	0.019	T	0.59	0.02	L	9.6565	0.0026	0.034	197		9.59	9.71					1	S						
116554	10.283	0.033	9.295	0.023		0.809	0.016	G	0.84	0.01	H	9.3579	0.0023	0.025	162		9.30	9.40					1							
116555	12.190	0.165	10.018	0.037		1.836	0.139	T	1.72	0.17	K	9.9858	0.0034	0.022	82		9.95	10.02		C			1	G						
116556	11.810	0.109	10.201	0.039		1.348	0.091	T	1.31	0.11	L	10.1535	0.0534	0.311	124		9.66	10.45	6.30	P	1 A		1							G
116557	10.366	0.023	9.465	0.018		0.812	0.004	G	0.84	0.00	H	9.5180	0.0028	0.029	159		9.46	9.58					1							
116558	9.521	0.017	9.445	0.021		0.075	0.025	T	0.09	0.03	L	9.4370	0.0023	0.024	145		9.40	9.48		C			1							G
116559	9.355	0.018	8.477	0.014		0.783	0.017	T	0.82	0.01	L	8.5586	0.0017	0.016	95		8.53	8.59					1							S
116560	10.929	0.075	11.462	0.202		0.093	0.010	G	0.11	0.01	H	10.9398	0.0051	0.029	51		10.88	11.00		C		23373−2056 I 1	1	S						G
116561	9.765	0.017	8.575	0.011		1.019	0.016	T	0.99	0.01	L	8.6151	0.0020	0.020	158		8.58	8.65					1							
116562	8.504	0.009	8.510	0.011		−0.001	0.013	T	0.02	0.01	L	8.5212	0.0019	0.020	136		8.49	8.57					1							
116563											T	11.2582	0.0046	0.042	98		11.18	11.33		C			1							G
116564	9.020	0.014	7.733	0.009		1.095	0.013	T	1.06	0.01	L	7.7805	0.0011	0.009	100		7.76	7.79					1							S
116565	8.966	0.012	7.810	0.008		0.993	0.011	T	0.97	0.01	L	7.8620	0.0011	0.009	105		7.85	7.88		C			1							S
116566	9.178	0.018	7.898	0.011		1.089	0.016	T	1.05	0.02	L	7.9382	0.0015	0.013	80		7.92	7.96					1							S
116567	11.493	0.087	10.913	0.085		0.574	0.072	G	2.14	0.26	S	10.9738	0.0085	0.054	76		10.91	11.05		R			1							G
116568	9.718	0.016	9.250	0.016		0.506	0.005	G	0.58	0.01	H	9.2687	0.0014	0.019	156		9.24	9.31		C			1							
116569	9.884	0.016	8.760	0.010		0.968	0.015	T	0.95	0.01	L	8.8048	0.0018	0.022	200		8.74	8.84					1							
116570	8.846	0.009	7.643	0.006		1.029	0.008	T	1.00	0.01	L	7.7037	0.0010	0.013	192		7.68	7.73					1							S
116571	8.862	0.016	8.365	0.016	*	0.467	0.021	T	0.54	0.02	L	* 8.4205	0.0017	0.010	56	*	8.40	8.44		D		23374+0737 I 1	2	C	A	AB	325	0.224	0.006	0.11	0.17	S
116572	9.206	0.011	9.241	0.014		−0.027	0.016	T	−0.01	0.02	L	9.2549	0.0017	0.022	210		9.21	9.30		C			1							
116573	9.421	0.017	8.131	0.010		1.095	0.020	G	1.06	0.02	A	8.1735	0.0017	0.016	112		8.15	8.20					1							S
116574						1.088	0.005	G	1.16	0.01	I	11.7312	0.0039	0.041	134		11.66	11.81					1							G
116575	10.181	0.023	8.982	0.014		1.026	0.021	T	1.00	0.02	L	9.0388	0.0020	0.018	136		9.00	9.08		C			1							
116576	9.674	0.021	8.461	0.013		1.037	0.019	T	1.01	0.02	L	8.4872	0.0020	0.020	79		8.46	8.53					1							
116577	10.792	0.036	9.148	0.016		1.380	0.020	G	1.35	0.02	I	9.1477	0.0018	0.017	137		9.11	9.18					1							
116578	8.668	0.008	8.178	0.008	*	0.503	0.015	G	0.58	0.02	H	* 8.2151	0.0011	0.015	187	*	8.19	8.25		D		23375+4922 M 1	2	C	A	AB	19	0.388	0.003	0.34	0.02	S
116579	8.413	0.013	7.285	0.009		0.970	0.015	G	0.95	0.01	H	7.3399	0.0010	0.007	70		7.32	7.35		C			1							S
116580	10.718	0.044	9.266	0.021		1.224	0.038	T	1.18	0.04	L	9.2646	0.0033	0.028	129		9.22	9.32					1							
116581	10.186	0.031	9.704	0.032		0.466	0.034	T	0.54	0.04	L	9.7731	0.0041	0.023	70		9.75	9.81		C			1							
116582	5.735	0.003	5.810	0.004	*	−0.064	0.004	T	−0.04	0.00	L	* 5.7926	0.0008	0.006	113	*	5.79	5.81		D		23375+4426 I 1	2	C	A	AB	1	0.490	0.002	0.96	0.01	S
116583	8.874	0.010	8.836	0.012		0.040	0.014	T	0.06	0.01	L	8.8786	0.0023	0.022	143		8.85	8.92					1							S
116584	5.120	0.008	3.975	0.007		0.984	0.008	T	0.96	0.01	L	3.9695	0.0142	0.083	207		3.90	4.11	54.33	P	1 A	23377+4627 I 1	1							S
116585	10.263	0.033	8.855	0.017		1.190	0.029	T	1.15	0.03	L	8.8836	0.0019	0.017	92		8.85	8.91		C			1							
116586	11.157	0.038	9.262	0.013		1.607	0.033	T	1.79	0.09	O	9.1778	0.0020	0.028	246		9.12	9.23					1							
116587	10.451	0.042	9.443	0.030		0.880	0.039	T	0.89	0.03	L	9.4269	0.0020	0.015	67		9.40	9.46		C			1							S
116588	9.722	0.024	9.245	0.024		0.462	0.026	T	0.53	0.03	L	9.3006	0.0025	0.017	63		9.28	9.33		C			1							
116589	9.734	0.019	8.327	0.011		1.189	0.017	T	1.15	0.01	L	8.3782	0.0016	0.016	124		8.35	8.40		C			1							
116590	9.196	0.016	8.657	0.015		0.513	0.016	T	0.59	0.02	L	8.7128	0.0016	0.016	89		8.69	8.74					1							S
116591	6.964	0.006	5.775	0.003		1.025	0.003	G	1.00	0.00	H	5.8226	0.0008	0.006	77		5.81	5.84		C		23377−1304 I 1	1							S
116592	6.288	0.004	6.259	0.004		0.025	0.003	G	0.04	0.00	H	6.2705	0.0006	0.005	96		6.26	6.28				23377+1650 I 1	1							S
116593	10.988	0.062	9.693	0.033		1.101	0.055	T	1.06	0.06	L	9.8060	0.0021	0.026	70		9.73	9.85					1							
116594	9.444	0.022	8.075	0.012		1.159	0.020	T	1.12	0.02	L	8.1391	0.0012	0.012	75		8.12	8.17					1							S
116595	10.503	0.030	9.093	0.016		1.228	0.005	G	1.19	0.01	I	9.1045	0.0026	0.026	127		9.06	9.16					1							
116596	8.535	0.009	8.533	0.011		0.007	0.013	T	0.03	0.01	L	8.5561	0.0012	0.019	203		8.52	8.59					1							S
116597	10.035	0.018	8.917	0.012		0.963	0.017	T	0.95	0.01	L	8.9672	0.0020	0.021	152		8.92	9.00		C			1	G						
116598	10.404	0.033	9.788	0.031	*	0.574	0.039	T	0.65	0.04	L	* 9.8366	0.0022	0.024	121	*	9.80	9.88		D		23378+6601 I 1	2	C	A	AB	339	0.362	0.005	0.65	0.04	G
116599	11.262	0.075	9.767	0.033		1.258	0.064	T	1.22	0.07	L	9.7462	0.0021	0.020	86		9.71	9.78					1							
116600	7.836	0.013	7.339	0.013		0.461	0.015	G	0.53	0.02	H	7.4014	0.0018	0.010	43		7.39	7.43		C			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	α*	δ	π	$\mu_{\alpha*}$	μ_δ	δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
116601	23 37 50.00	−45 34 07.5	7.84	2 H	354.458 353 22	−45.568 758 11	2.77	−23.89	−12.23	0.81	0.60	1.09	0.89	0.56	−17	+24	−21	− 4	−20	+ 5	−13	−25	+17	−26	0	−0.42
116602	23 37 50.94	−45 29 32.4	4.74	H	354.462 230 51	−45.492 321 34	16.26	71.36	−12.34	0.50	0.38	0.70	0.56	0.38	−18	+ 7	−19	+ 6	−15	+18	−11	−22	+23	−20	4	−0.98
116603	23 37 51.06	−24 52 42.6	7.66	G	354.462 760 45	−24.878 487 82	11.02	−19.39	−69.39	1.06	0.74	1.06	1.60	1.06	+ 4	−10	−17	+ 6	+11	+17	+13	+26	+10	+ 0	0	0.40
116604	23 37 51.42	−33 49 01.3	9.61	H	354.464 255 09	−33.817 020 61	1.71	−18.74	−31.23	1.20	1.20	1.56	1.49	1.40	+23	−18	−16	−18	+16	+15	+26	+18	−28	− 2	0	1.50
116605	23 37 51.56	+47 46 30.8	9.18	H	354.464 846 77	+47.775 218 90	0.16	0.46	−0.69	0.75	0.93	1.38	0.90	1.22	− 2	+ 1	+16	−11	+ 7	−10	+ 4	+26	−10	+13	3	−0.51
116606	23 37 51.60	+48 29 47.7	9.54	H	354.464 989 18	+48.496 570 86	−1.09	0.62	−1.68	0.81	0.89	1.43	0.93	1.12	−18	− 2	+18	−42	+ 5	− 1	+ 2	−16	− 7	−10	0	0.95
116607	23 37 52.15	+52 40 51.0	8.52	H	354.467 302 90	+52.680 825 52	0.74	6.91	−2.17	0.67	0.79	1.12	0.86	1.10	−38	− 7	+20	+10	− 3	+14	− 6	+18	+ 8	−40	0	0.62
116608	23 37 52.87	−05 58 41.6	8.38	H	354.470 291 50	−05.978 232 11	6.10	43.96	−55.36	1.01	0.76	1.15	1.41	1.21	+40	−34	−16	+18	− 4	+23	−12	−16	+13	+22	0	2.08
116609	23 37 53.13	−59 46 31.5	8.11	H	354.471 393 55	−59.775 412 72	2.62	23.63	−21.37	0.58	0.61	0.86	0.66	0.65	−15	− 1	− 9	+ 0	+20	− 6	+18	+ 2	−15	− 3	0	−1.53
116610 H	23 37 53.77	+58 05 43.4	8.55	H	354.474 028 70	+58.095 393 08 A	2.76	5.52	−3.88	1.09	1.14	1.31	1.38	1.34	−12	+13	+10	+23	− 2	− 2	− 4	+21	− 1	−27	1	0.06
116611	23 37 56.77	+18 24 02.2	5.49	2 T	354.486 553 42	+18.400 624 25	13.65	48.52	17.61	0.61	0.46	0.75	0.64	0.48	+35	+ 9	+ 1	−15	+ 1	+ 1	+ 2	−10	+18	+41	0	0.91
116612	23 37 57.93	−58 11 21.5	7.63	G	354.491 383 35	−58.189 306 81	12.69	120.72	68.42	0.47	0.51	0.74	0.51	0.53	−18	+ 6	−14	− 5	+ 6	+ 6	+ 6	− 2	−12	−14	0	−1.76
116613	23 37 58.19	+46 11 58.1	6.58	1 H	354.492 446 11	+46.199 463 57	43.26	357.33	−11.09	0.41	0.44	0.80	0.45	0.53	− 1	+19	+22	−45	−20	−24	−20	−17	+ 7	+10	0	0.65
116614	23 37 59.35	−35 52 41.8	8.72	H	354.497 271 80	−35.878 283 23	2.09	42.80	−11.08	1.10	0.82	1.13	1.07	0.94	+ 7	+15	− 1	−30	+28	+ 0	+33	+27	+16	+ 6	0	−0.02
*116615	23 38 00.79	+52 49 03.3	9.87	H	354.503 281 04	+52.817 587 33 B	2.11	9.77	−5.87	25.87	34.05	12.34	12.09	12.92	−39	−17	+16	+ 3	+ 5	+ 4	+ 2	+ 0	+17	−32	9	2.82
*116616	23 38 00.13	+48 59 48.5	7.11	G	354.500 557 27	+48.996 810 11	19.82	195.83	−119.06	0.43	0.55	0.82	0.51	0.70	−22	+15	+18	+11	+ 5	+ 1	+ 9	−15	+ 9	−18	0	−0.63
*116617	23 38 00.60	+69 24 00.1	8.58	H	354.502 488 17	+69.400 016 95	11.28	112.38	60.62	0.65	0.66	0.83	0.76	0.66	− 3	+ 1	+10	+16	+ 6	+ 2	+ 6	+ 7	+ 6	+ 5	0	0.56
*116618	23 37 59.48	+52 49 19.0	7.98	G	354.497 839 47	+52.821 947 12 A	0.40	−3.78	−3.18	2.15	2.47	2.67	2.47	2.86	−38	−17	+18	+11	+ 3	+ 6	− 1	+12	+18	−33	9	2.82
*116619	23 38 00.71	−30 33 30.1	9.02	H	354.502 961 37	−30.558 362 97	2.96	0.66	11.74	1.10	1.21	1.36	1.28	1.50	+57	−12	−12	−45	−31	+23	−31	−52	+24	+57	0	0.37
*116620	23 38 00.78	−67 02 55.5	9.05	H	354.503 238 83	−67.048 762 85	4.72	52.08	−17.68	0.77	0.73	0.97	0.95	0.83	+ 4	− 1	−14	+ 8	+17	− 5	+14	+19	− 1	+14	4	2.72
116621	23 38 01.28	+51 14 32.9	8.41	H	354.505 313 71	+51.242 461 02	0.62	0.98	−0.73	0.53	0.65	1.03	0.66	0.82	−44	+ 6	+ 3	+14	− 4	−14	+ 3	+ 0	+28	−17	2	0.28
116622	23 38 01.63	+65 26 02.2	8.32	2 T	354.506 786 55	+65.433 954 53	1.58	6.29	0.02	0.58	0.60	0.75	0.71	0.66	−10	+10	+13	+ 7	+ 1	+ 3	+ 1	− 6	+ 1	−10	0	1.19
116623	23 38 02.70	−41 33 52.3	7.78	H	354.511 252 52	−41.564 520 61	3.11	4.58	25.25	0.65	0.75	0.99	0.73	0.75	+20	−23	−23	+11	− 5	+11	− 6	− 8	+ 7	+ 6	0	1.15
116624	23 38 02.98	−15 05 41.4	6.38	H	354.512 420 43	−15.094 837 23	9.65	82.29	−111.43	0.88	0.49	0.89	1.08	0.74	+27	− 8	+ 6	−22	+19	+13	+30	+ 0	+ 3	− 4	4	−0.74
116625	23 38 03.40	−28 45 37.0	9.01	H	354.514 183 87	−28.760 271 39	4.31	27.43	−5.81	1.02	0.90	1.24	1.28	1.01	+43	−10	−22	−29	+ 3	+ 3	− 5	−43	+24	+13	0	0.64
116626	23 38 03.62	+43 04 40.4	6.96	H	354.515 071 71	+43.077 876 32	2.96	−36.90	−7.92	0.48	0.51	0.76	0.53	0.52	+ 9	+12	+11	+21	− 3	+ 8	− 4	+13	− 3	+ 5	1	1.05
116627	23 38 03.80	+11 22 21.7	9.34	H	354.515 846 80	+11.372 706 86	1.03	0.39	−2.12	1.33	0.85	1.56	1.39	0.78	+40	+ 4	− 2	− 1	+ 5	−23	+ 9	−29	+ 4	+56	0	−1.21
116628	23 38 04.52	−23 51 46.8	9.73	H	354.518 840 93	−23.863 010 31	2.94	14.21	−1.89	1.34	1.20	1.89	2.53	1.26	+ 5	+ 7	−53	+22	−29	+50	− 7	−13	+23	− 6	0	−1.71
116629	23 38 06.41	−01 20 08.2	7.70	G	354.526 727 98	−01.335 609 15	3.62	−1.88	5.32	0.88	0.65	1.07	1.20	0.83	+38	−12	−30	− 2	+ 3	+28	+19	+22	−13	+ 5	0	−0.51
116630	23 38 08.10	−70 54 12.3	7.47	G	354.533 734 26	−70.903 418 15	12.32	−85.55	24.72	0.56	0.59	0.74	0.70	0.68	+ 0	− 7	−26	+21	+11	− 1	+11	+ 4	+ 6	+ 2	0	0.08
116631	23 38 08.18	+43 16 05.1	4.29	H	354.534 079 69	+43.268 076 10	6.49	27.72	−1.21	0.39	0.46	0.65	0.45	0.47	+13	+ 4	+16	+23	+ 5	− 6	+ 6	+16	+ 5	+14	1	0.88
116632	23 38 08.81	+27 35 15.7	9.32	H	354.536 715 86	+27.587 683 85	2.24	−8.53	−9.46	0.98	0.74	1.22	1.11	0.79	+23	− 7	− 6	+ 1	+17	+ 0	+14	+ 3	+13	+43	0	0.78
116633	23 38 09.31	+34 05 27.7	9.88	H	354.538 810 73	+34.091 028 30	2.13	−51.45	−30.33	1.21	0.88	1.48	1.34	0.89	− 2	+29	− 7	+13	+ 4	+ 5	+10	−24	+13	+ 9	0	−1.00
116634 H	23 38 09.62	+55 13 54.7	8.64	H	354.540 100 28	+55.231 850 94 *	4.80	10.65	−4.13	0.69	0.71	0.96	0.79	0.86	−17	+22	+10	+17	+ 0	+15	− 3	+10	− 8	−25	1	0.92
116635	23 38 09.87	−25 13 15.8	8.90	H	354.541 139 06	−25.221 060 96	10.59	132.65	−32.24	1.09	0.93	1.37	1.55	1.13	+20	−27	−35	+ 5	−14	+35	− 9	−10	+21	+ 9	0	1.73
116636	23 38 10.04	+20 34 09.4	7.46	2 H	354.541 844 14	+20.569 268 77	4.79	6.82	−14.62	0.59	0.52	0.80	0.60	0.53	+39	+15	− 5	+14	+ 3	− 1	+ 7	− 8	+16	+45	0	0.76
116637	23 38 10.33	+40 30 45.9	8.71	H	354.543 031 50	+40.512 745 13	5.69	−33.66	−9.94	0.66	0.61	0.95	0.69	0.67	+13	+18	+ 8	+49	− 2	+14	+ 2	+ 7	+ 0	+23	1	0.22
116638	23 38 10.56	−03 45 33.2	9.24	H	354.543 983 34	−03.759 219 02	1.57	4.49	−1.91	1.16	1.01	1.36	1.68	1.69	+51	−23	−17	+17	+14	+14	+13	+19	+16	+37	0	3.20
116639	23 38 12.38	−08 37 39.0	6.89	H	354.551 601 48	−08.627 509 70	6.67	28.24	−16.13	0.81	0.53	0.84	1.00	0.67	+16	+ 0	− 3	−22	+12	+ 9	+18	+ 2	+13	− 4	2	0.96
116640	23 38 12.53	−56 27 04.1	7.41	2 H	354.552 211 02	−56.451 141 26	1.92	−5.00	−0.80	0.45	0.51	0.73	0.54	0.59	−23	−12	− 9	+13	+ 4	+12	+ 6	− 9	− 2	−23	0	−1.13
116641	23 38 14.15	−46 12 49.5	10.25	H	354.558 945 44	−46.213 752 47	3.80	−43.25	−21.94	1.31	1.00	1.62	1.57	1.02	− 2	− 1	− 1	+ 1	−24	− 1	−23	−31	+ 5	−11	0	−1.04
116642	23 38 15.45	−39 37 07.9	8.58	G	354.564 394 86	−39.618 874 80	3.45	0.08	0.65	0.65	0.75	0.98	0.69	0.77	+15	+ 9	−20	+13	− 2	+16	+ 1	+25	− 8	+ 9	0	1.49
116643	23 38 15.86	−00 52 07.0	8.83	G	354.566 095 01	−00.868 616 73	1.59	−1.86	16.80	1.28	0.89	1.40	1.66	1.08	+11	+14	−38	−26	+15	−15	+20	+15	+ 6	− 6	0	−0.51
116644	23 38 17.22	+17 03 47.9	8.05	H	354.571 729 75	+17.063 310 64	2.31	40.57	−15.45	0.93	0.65	1.10	0.97	0.76	+38	+17	+11	+13	+23	+ 9	+26	+17	+20	+48	2	−0.41
116645	23 38 17.26	−41 31 02.0	11.95	G	354.571 902 46	−41.517 222 14	54.15	210.07	−198.10	2.18	2.56	3.39	2.38	2.75	+24	−20	−19	+18	+ 0	+ 8	− 4	− 6	+24	+17	2	−0.69
116646	23 38 18.75	+00 46 51.6	9.12	H	354.578 127 81	+00.781 008 61	4.53	47.53	−14.96	1.18	0.97	1.38	1.73	1.20	+21	+ 0	−31	+17	+ 6	+27	+17	+38	−20	+ 2	0	−2.56
116647	23 38 19.67	−72 37 27.9	9.62	H	354.581 964 77	−72.624 403 95	13.30	3.95	−21.95	0.85	0.81	1.05	1.01	0.97	+ 8	+ 2	−23	+ 9	− 5	+ 1	− 5	−15	+ 9	+ 9	0	−0.90
116648	23 38 20.28	+64 20 02.8	9.19	3 H	354.584 509 96	+64.334 106 72	3.18	4.36	−9.83	0.79	0.72	0.94	0.89	0.86	−19	+19	+ 7	+ 9	−13	− 9	−14	+ 0	− 5	−22	0	0.22
116649	23 38 21.28	−29 21 35.5	8.87	H	354.588 660 53	−29.359 862 57	6.15	−7.49	3.83	0.96	1.02	1.31	1.10	1.18	+56	−19	−17	−30	−17	+27	−21	−40	+36	+49	0	0.11
116650	23 38 22.17	+58 39 14.7	6.99	H	354.592 362 68	+58.654 069 71	5.94	−26.85	−12.39	0.55	0.54	0.72	0.68	0.64	−24	+17	+15	+19	+ 1	−12	+ 1	+14	− 1	−34	4	1.45
116651	23 38 22.20	+08 39 26.0	10.14	H	354.592 498 30	+08.657 214 17	2.23	1.01	−6.77	1.70	1.14	1.76	2.41	1.40	+ 2	− 9	− 5	− 1	− 4	+10	− 3	+ 7	+15	−19	0	−1.09
116652	23 38 22.24	+17 35 38.3	8.79	H	354.592 655 16	+17.593 964 71	7.01	68.15	10.27	0.93	0.67	1.14	0.94	0.69	+24	+ 4	−16	− 9	+12	−22	+11	−12	+13	+38	0	−1.43
116653	23 38 23.69	−76 52 10.2	5.99	H	354.598 704 99	−76.869 507 42	5.22	78.48	−18.47	0.46	0.41	0.53	0.57	0.45	+ 3	+14	−10	+14	+ 8	− 4	+ 9	− 1	+ 0	+19	0	1.22
116654	23 38 24.94	−38 29 23.1	8.23	H	354.603 913 21	−38.489 742 85	2.51	8.53	−2.92	0.68	0.81	1.06	0.76	0.89	+32	− 3	− 9	+53	+11	+15	+12	+32	+ 4	+29	0	−1.86
116655	23 38 25.65	+01 56 09.3	8.93	H	354.606 891 37	+01.935 927 55	7.03	−34.10	−49.67	1.22	0.96	1.39	1.40	1.08	+27	− 1	−14	−17	+26	+26	+32	+34	− 8	+24	0	−0.57
116656	23 38 25.94	−39 00 08.9	9.06	H	354.608 085 72	−39.002 466 50	2.40	27.76	−0.65	0.80	0.92	1.25	0.94	1.02	+22	+ 7	−16	+44	− 1	+22	+ 2	+22	− 2	+16	0	−0.76
116657	23 38 26.44	+42 30 41.4	6.91	H	354.610 177 99	+42.511 512 18	3.17	8.84	−0.52	0.39	0.50	0.73	0.46	0.53	+11	+13	+13	− 1	+ 4	+ 3	+ 5	+24	+10	+ 7	0	1.40
116658	23 38 26.50	−46 29 03.0	10.24	H	354.610 404 62	−46.484 168 31	5.13	20.69	−3.75	3.00	3.01	4.10	3.36	2.49	+11	+42	−12	+ 3	−35	+ 1	−32	−47	− 4	+ 2	3	2.21
116659 H	23 38 26.60	−31 46 46.1	8.56	H	354.610 836 61	−31.779 473 72 A	4.76	4.69	−14.74	2.56	3.10	1.84	1.78	1.57	−17	+ 5	−20	−17	+16	−21	+12	− 8	+37	+10	2	−0.24
116660	23 38 27.14	+02 15 02.0	8.77	H	354.613 072 10	+02.250 562 73	10.01	5.88	−21.89	1.33	1.05	1.32	1.86	1.28	+20	+ 5	−15	+17	+25	+10	+28	+52	− 8	+10	4	0.10
116661	23 38 27.98	−21 40 21.5	8.50	H	354.616 590 42	−21.672 650 74	0.92	28.40	−18.30	1.04	0.82	1.20	1.27	0.97	+10	+ 6	−18	−17	− 6	+33	+ 1	−14	+15	+ 8	0	1.00
116662 H	23 38 30.52	+04 19 00.1	10.22	H	354.627 159 47	+04.316 681 98 A	7.18	24.93	−3.61	4.22	2.76	4.08	5.16	3.20	+19	−32	−10	+15	−12	− 2	−24	−12	+27	− 4	0	−0.04
116663 H	23 38 31.54	−48 00 38.9	9.61	H	354.631 399 28	−48.010 803 66 *	11.76	17.19	9.01	2.55	1.86	1.98	1.75	1.45	−14	+ 0	−10	+17	−16	+ 4	−16	−15	+12	+ 4	0	−0.16
116664	23 38 32.88	−09 19 07.4	11.45	3 H	354.637 020 12	−09.318 720 59	−4.01	5.57	−9.17	1.83	1.44	2.38	2.42	1.68	+34	−11	−15	− 4	− 7	+48	− 4	−14	+18	+17	0	0.19
116665	23 38 33.42	−13 42 44.2	8.14	G	354.639 236 53	−13.712 265 81	6.64	50.20	5.49	1.15	0.73	1.12	1.55	0.89	+48	−20	−29	+54	+29	−10	+15	+18	− 5	+15	0	−1.23
116666	23 38 33.68	+77 27 04.8	8.70	H	354.640 349 75	+77.451 324 94	4.86	−17.41	−1.84	0.62	0.58	0.70	0.73	0.65	− 2	+ 3	+16	− 1	− 1	+ 0	+ 0	+ 8	+ 5	−15	1	1.37
116667	23 38 34.15	+35 01 59.9	7.06	1 H	354.642 305 27	+35.033 305 34 A	5.94	8.99	−28.72	0.89	0.74	1.08	1.11	0.69	− 3	+ 2	+14	−18	+16	+30	+10	− 9	+ 6	+10	1	0.31
116668	23 38 34.72	+40 58 08.0	8.37	H	354.644 666 41	+40.968 882 93	4.99	19.27	−19.65	0.76	0.62	0.94	0.77	0.66	+ 6	+14	+ 7	+60	− 2	+ 9	− 1	+23	− 2	+10	1	1.95
116669	23 38 36.92	+41 37 27.2	9.19	H	354.653 852 94	+41.624 226 17	9.34	75.02	−37.44	0.79	0.74	1.03	0.81	0.80	+16	+ 5	+10	+40	+ 6	+ 9	+ 4	+18	+ 5	+11	0	0.44
116670	23 38 37.55	−36 38 46.2	9.25	H	354.656 478 95	−36.646 166 28	−0.30	−2.60	−0.23	1.16	1.17	1.42	1.32	1.25	+20	+ 8	−30	−24	+33	− 8	+36	+38	−18	+10	0	−1.59
116671	23 38 39.05	+35 32 06.9	8.12	H	354.662 691 09	+35.535 238 13	6.13	13.41	−9.88	0.79	0.61	1.07	1.13	0.65	−13	+ 8	+ 6	−14	+13	+32	+12	− 6	+13	−18	0	0.48
116672	23 38 39.76	−64 02 11.1	7.65	H	354.665 660 49	−64.036 410 25	1.33	19.27	−0.58	0.55	0.60	0.80	0.61	0.67	− 5	−11	−23	− 4	+ 5	+ 8	+11	−18	−10	+ 8	1	0.90
116673	23 38 40.32	−49 05 05.3	9.43	H	354.667 998 87	−49.084 802 02	3.18	−33.72	11.48	0.76	0.87	1.26	0.79	0.80	+ 2	− 6	−16	−24	−14	+ 7	−10	− 9	+ 0	−10	0	1.36
116674	23 38 40.79	+39 02 44.4	7.97	H	354.669 945 99	+39.045 662 63	4.84	4.12	−6.92	0.73	0.66	0.95	0.84	0.72	+ 4	+23	− 4	− 3	+16	−26	+17	− 8	+ 2	+24	2	1.46
116675	23 38 41.63	−20 52 02.6	7.71	G	354.673 469 85	−20.867 388 82	3.58	12.63	1.56	0.97	0.76	1.08	1.16	0.87	+ 5	+ 2	−28	+ 7	−15	+18	−10	− 6	+20	+ 5	0	0.06
116676	23 38 41.82	+25 15 36.5	9.18	H	354.674 263 68	+25.260 151 23	2.86	9.42	−15.62	1.00	0.75	1.28	1.18	0.81	+18	+ 1	−12	−18	+14	− 3	+10	− 2	+ 3	+30	0	0.46
116677	23 38 42.35	+15 28 28.2	9.30	H	354.676 463 60	+15.474 503 78	4.01	107.23	−8.03	1.18	0.80	1.44	1.22	0.89	+42	+13	+10	− 7	+ 7	+ 0	+10	− 2	+20	+53	0	−0.59
116678	23 38 43.41	+23 32 14.1	9.01	H	354.680 886 09	+23.537 246 50	2.80	−14.60	−5.50	0.82	0.75	1.12	0.93	0.77	+38	+ 7	−22	+ 3	−12	+20	− 5	−26	+33	+46	2	0.70
116679	23 38 43.65	−62 53 07.7	6.63	H	354.681 854 98	−62.885 482 14	6.13	52.51	−1.80	0.45	0.51	0.69	0.53	0.55	−12	−13	−13	− 1	+ 3	+ 5	+ 8	−17	−14	− 4	0	0.79
116680	23 38 44.03	−45 15 06.1	8.40	H	354.683 462 28	−45.251 689 82	3.15	17.13	−6.12	0.78	0.56	1.10	0.95	0.64	−18	+12	− 5	+ 8	−10	+29	−11	−22	− 7	−25	0	−1.91
116681	23 38 45.13	+35 46 21.3	9.74	3 H	354.688 057 51	+35.772 573 98 *	5.50	1.58	−3.66	2.11	1.74	2.83	2.29	1.50	+ 7	+36	+21	− 5	+35	+11	+34	− 3	+32	+18	0	−0.02
116682	23 38 46.07	−02 45 55.2	9.88	H	354.691 958 82	−02.765 335 01	2.75	5.57	−13.79	1.64	1.23	2.00	2.52	2.11	+49	+ 2	+15	+ 7	+25	+37	+29	+34	+26	+36	0	1.37
116683	23 38 46.24	+56 59 49.9	8.68	H	354.692 683 13	+56.997 183 33	3.00	−2.80	−2.71	0.67	0.71	0.97	0.90	0.79	−24	− 5	+15	+21	− 5	+11	− 6	+19	+ 4	+ 2	0	0.38
116684	23 38 48.40	+59 23 30.6	11.24	3 H	354.701 658 25	+59.391 831 44	1.19	−1.37	−1.11	1.47	1.40	1.95	1.78	1.77	−19	+15	+12	+ 1	− 1	+13	− 3	+19	− 8	+24	1	0.99
116685 H	23 38 48.71	+44 24 45.2	9.11	2 H	354.702 965 75	+44.412 569 00 A	1.74	27.27	8.32	1.48	1.54	1.94	1.43	1.62	+17	+11	+20	+31	+13	− 9	+18	+28	+ 8	+19	1	−0.31
116686	23 38 48.85	+42 40 25.0	9.05	H	354.703 551 08	+42.673 604 76	5.12	54.26	−14.05	0.61	0.78	1.13	0.76	0.86	+11	+ 7	+13	− 5	+ 1	− 1	+ 3	+26	+11	+ 7	0	0.30
116687	23 38 49.11	+62 08 05.9	6.59	H	354.704 623 90	+62.134 969 45	0.72	−3.55	−3.28	0.46	0.50	0.62	0.59	0.56	−16	+10	+25	+23	− 6	− 7	− 4	+ 6	+11	−24	1	−0.50
116688	23 38 49.48	+23 18 30.3	7.14	H	354.706 170 44	+23.308 425 76	9.11	31.59	−41.31	0.57	0.50	0.79	0.65	0.55	+32	+ 8	−14	− 2	− 7	+23	+ 0	−18	+31	+47	0	−0.89
116689	23 38 49.64	−02 57 35.7	8.21	H	354.706 823 50	−02.959 910 95	8.33	63.10	−5.67	1.04	0.88	1.23	1.70	1.60	+59	−11	− 7	+27	+30	+38	+35	+43	+26	+48	5	1.13
116690	23 38 50.45	−23 40 41.7	8.30	H	354.710 221 09	−23.678 256 45	7.32	19.55	9.02	1.05	0.78	1.26	1.69	1.02	+ 7	−11	−17	+ 2	− 2	+38	+ 0	+ 0	+ 1	+ 0	0	0.22
116691	23 38 50.56	−28 16 04.2	8.70	H	354.710 684 79	−28.267 843 75	10.81	75.07	−6.87	1.00	0.88	1.24	1.28	0.98	+46	−31	−37	− 9	+ 5	− 7	−14	−42	+32	+15	2	1.92
*116692	23 38 52.13	+54 26 33.3	7.51	H	354.717 200 82	+54.442 593 72	2.99	−3.83	14.52	0.54	0.59	0.85	0.65	0.81	−36	+ 3	+ 8	+ 0	− 1	+22	− 3	+ 2	+14	−40	0	0.73
*116693	23 38 52.10	−43 37 25.1	9.66	H	354.717 066 81	−43.623 639 51	5.46	−6.20	−27.46	0.90	0.80	1.40	1.06	0.77	−17	+ 4	− 7	+13	− 3	+35	− 6	−36	− 2	−29	1	0.98
116694	23 38 52.38	+08 18 46.4	8.57	H	354.718 250 58	+08.312 900 20	7.06	17.86	−30.31	1.16	0.83	1.24	1.47	1.09	+ 9	− 5	+ 2	−12	+13	+21	+14	+26	+27	+ 7	6	0.62
116695	23 38 53.50	+12 11 40.3	7.59	H	354.722 936 26	+12.194 517 16	6.69	−13.55	−9.44	0.81	0.49	0.93	0.80	0.50	+51	+ 9	+ 1	+ 8	+14	+ 1	+15	− 5	+23	+50	0	−0.12
116696	23 38 53.56	+30 03 34.8	8.56	H	354.723 175 07	+30.059 676 80	7.90	−32.47	−48.52	0.76	0.64	0.96	0.80	0.67	+26	+21	−10	+24	+13	−13	+17	− 4	+ 4	+42	0	−0.48
116697	23 38 53.97	+63 41 14.5	9.62	H	354.724 879 78	+63.687 360 78	0.61	2.46	−19.69	0.84	0.90	1.13	1.26	1.09	−12	+ 3	+17	− 2	+ 8	−11	+ 8	−13	− 8	−17	0	−0.45
116698	23 38 55.01	−33 10 24.3	9.81	H	354.729 190 77	−33.173 426 94	3.77	19.36	−15.17	1.28	1.01	1.42	1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
116601	9.642	0.031	8.056	0.016		1.353	0.029	T	2.73	0.05	O	7.8078	0.0042	0.064	164		7.72	7.94		U 2 C			1 S							S
116602	4.845	0.002	4.745	0.002		0.082	0.001	G	0.08	0.02	A	4.7715	0.0006	0.006	166		4.76	4.79					1						S
116603	8.134	0.012	7.693	0.011		0.435	0.015	G	0.50	0.02	H	7.7520	0.0020	0.014	53		7.73	7.80		C			1						S
116604	10.586	0.041	9.646	0.029		0.830	0.037	T	0.85	0.03	L	9.7691	0.0023	0.022	79		9.73	9.80		C			1						
116605	11.189	0.056	9.331	0.019		1.545	0.047	T	1.61	0.10	L	9.2982	0.0026	0.022	127		9.25	9.34		C			1						
116606	9.695	0.016	9.561	0.021		0.156	0.009	G	0.17	0.01	H	9.5916	0.0025	0.025	122		9.55	9.64					1						G
116607	8.544	0.008	8.519	0.011		0.028	0.013	T	0.04	0.01	L	8.5404	0.0022	0.020	157		8.51	8.57		C			1 S						
116608	9.722	0.026	8.502	0.016		1.043	0.024	T	1.01	0.02	L	8.5469	0.0018	0.016	72		8.52	8.57		C			1						S
116609	9.539	0.014	8.229	0.008		1.113	0.013	T	1.08	0.01	L	8.2790	0.0016	0.014	166		8.26	8.31		C	23379−5947	I 1	1						S
116610	8.951	0.013	8.620	0.014	*	0.314	0.018	T	0.36	0.02	L *	8.6310	0.0019	0.018	122	*	8.60	8.66		D	23379+5806	I 1	2 C A	AB	28	0.930	0.006	1.72	0.03	
116611	5.493	0.004	5.483	0.003		0.010	0.004	T	0.03	0.00	L	5.5030	0.0045	0.033	109		5.46	5.56	0.50	P 1 A	23379+1824	I 1	1						S P
116612	8.124	0.007	7.657	0.006		0.441	0.001	G	0.51	0.00	H	7.7210	0.0011	0.014	189		7.70	7.75		C			1						S
116613	7.391	0.004	6.667	0.004		0.665	0.005	T	0.73	0.00	L	6.7172	0.0007	0.011	215		6.70	6.74		M			1						S
116614	9.952	0.024	8.829	0.016		0.967	0.022	T	0.95	0.02	L	8.8871	0.0020	0.016	75		8.85	8.92		D			1						
116615	9.729	0.017	9.481	0.021	B	0.236	0.025	T	0.26	0.03	L	9.6261	0.0809			B				D	23380+5249	I 2	1 C I A						
116616	7.909	0.006	7.186	0.006		0.665	0.010	G	0.73	0.01	H	7.2445	0.0009	0.010	164		7.23	7.27		C			1						S
116617	9.212	0.015	8.622	0.013		0.551	0.018	T	0.62	0.02	L	8.6989	0.0013	0.015	128		8.67	8.73		C			1						
116618	10.076	0.024	8.064	0.009	A	1.612	0.218	G	1.86	0.12	N	7.9868	0.0216	0.054	146	A	7.89	8.05		D	23380+5249	I 2	1 C P A						
116619	10.190	0.029	9.138	0.019		0.913	0.026	T	0.91	0.02	L	9.1831	0.0016	0.018	115		9.14	9.22					1						
116620	9.554	0.016	9.073	0.015		0.465	0.017	T	0.54	0.02	L	9.1569	0.0024	0.021	132		9.13	9.20		C			1						
116621	8.392	0.007	8.398	0.009		−0.001	0.010	T	0.02	0.01	L	8.4186	0.0012	0.018	203		8.39	8.45					1						
116622	9.760	0.019	8.439	0.011		1.122	0.017	T	1.08	0.02	L	8.4291	0.0141	0.086	146		8.35	8.55		U 2 C			1						
116623	9.365	0.018	7.926	0.010		1.214	0.016	T	1.17	0.02	L	7.9445	0.0013	0.015	91		7.92	7.97					1						S
116624	7.754	0.008	6.499	0.004		1.078	0.003	G	1.04	0.00	H	6.5488	0.0007	0.006	93		6.54	6.56		C			1						S
116625	10.557	0.030	9.150	0.015		1.189	0.026	T	1.15	0.02	L	9.1746	0.0018	0.018	124		9.14	9.20		C			1						
116626	8.427	0.011	7.101	0.007		1.125	0.010	T	1.09	0.01	L	7.1310	0.0010	0.013	145		7.11	7.15					1						S
116627	10.761	0.045	9.427	0.023		1.132	0.040	T	1.10	0.04	L	9.5090	0.0022	0.018	106		9.46	9.54					1						
116628	10.108	0.036	9.792	0.041		0.345	0.016	G	0.40	0.02	H	9.8132	0.0035	0.022	62		9.79	9.86		C			1						
116629	8.174	0.011	7.727	0.011		0.422	0.014	T	0.49	0.01	L	7.7912	0.0011	0.013	86		7.77	7.81					1						S
116630	8.808	0.010	7.586	0.007		1.030	0.020	G	1.01	0.02	A	7.6351	0.0011	0.012	134		7.61	7.66		C			1						S
116631	4.176	0.002	4.273	0.002		−0.083	0.002	T	−0.06	0.00	L	4.2640	0.0003	0.004	133		4.26	4.27		C			1						S
116632	11.414	0.070	9.510	0.023		1.615	0.061	T	1.89	0.15	O	9.4103	0.0025	0.025	101		9.36	9.47					1						
116633	11.146	0.068	9.949	0.038		1.025	0.061	T	1.00	0.05	L	10.0408	0.0031	0.022	79		10.01	10.09					1						
116634	8.880	0.011	8.647	0.013	*	0.222	0.016	T	0.24	0.02	L *	8.7040	0.0020	0.019	133	*	8.67	8.74		D	23382+5514	I 1	2 C S A	AS	349	0.155	0.011	0.23	0.42	
116635	9.537	0.027	8.967	0.025		0.537	0.027	T	0.61	0.03	L	9.0207	0.0031	0.021	49		8.99	9.05			23382−2513	I 1	1						
116636	7.880	0.008	7.490	0.008		0.369	0.010	T	0.43	0.01	L	7.5451	0.0027	0.024	127		7.50	7.59		U 2			1						S
116637	9.281	0.018	8.746	0.017		0.502	0.022	T	0.57	0.02	L	8.8168	0.0019	0.015	117		8.79	8.84					1						
116638	9.758	0.025	9.280	0.025		0.450	0.032	T	0.52	0.03	L	9.3363	0.0033	0.019	69		9.30	9.38					1						
116639	8.018	0.009	6.996	0.009		0.891	0.010	T	0.90	0.01	L	7.0493	0.0017	0.010	71		7.03	7.07					1						S
116640	9.537	0.013	7.628	0.006		1.619	0.012	T	2.23	0.04	O	7.4705	0.0033	0.035	208		7.42	7.53		U 2			1 S						S
116641	10.822	0.037	10.140	0.032		0.619	0.037	T	0.69	0.03	L	10.3520	0.0032	0.030	119		10.29	10.40					1						
116642	8.962	0.012	8.610	0.013		0.349	0.015	G	0.41	0.02	H	8.6659	0.0015	0.013	98		8.64	8.69		C			1						S
116643	10.084	0.043	8.975	0.029		0.996	0.005	G	0.97	0.00	H	8.9794	0.0022	0.015	60		8.95	9.01		C			1						S
116644	9.578	0.021	8.197	0.012		1.169	0.019	T	1.13	0.02	L	8.2223	0.0014	0.013	93		8.20	8.24					1						S
116645						1.551	0.030	G	2.44	0.12	I	11.9991	0.0060	0.071	89		11.84	12.11					1						G
116646	10.509	0.052	9.222	0.030		1.095	0.047	T	1.06	0.05	L	9.2902	0.0034	0.018	53		9.26	9.31					1						
116647	10.478	0.034	9.760	0.028		0.660	0.036	T	0.72	0.03	L	9.7584	0.0019	0.023	112		9.72	9.79		C			1						
116648	9.541	0.017	9.236	0.019		0.291	0.027	T	0.33	0.04	L	9.2636	0.0027	0.029	126		9.22	9.62	2.34	P 1 A			1						G
116649	9.380	0.015	8.906	0.014		0.459	0.016	T	0.53	0.02	L	8.9734	0.0023	0.021	138		8.94	9.02			23384−2922	I 1	1						S
116650	8.273	0.009	7.097	0.006		1.008	0.008	T	0.98	0.01	L	7.1528	0.0011	0.011	130		7.13	7.17					1						S
116651	10.689	0.055	10.120	0.053		0.532	0.068	T	0.60	0.07	L	10.2541	0.0043	0.033	53		10.19	10.30					1						
116652	9.428	0.019	8.848	0.018		0.538	0.015	G	0.61	0.02	H	8.9072	0.0022	0.016	101		8.88	8.94					1						
116653	7.139	0.004	6.093	0.003		0.907	0.002	G	0.91	0.00	H	6.1534	0.0007	0.007	132		6.14	6.17					1						S
116654	9.616	0.015	8.339	0.010		1.087	0.014	T	1.05	0.01	L	8.3935	0.0012	0.014	127		8.37	8.42		C			1						
116655	9.393	0.022	8.977	0.022		0.393	0.029	T	0.46	0.03	L	9.0178	0.0017	0.013	51		8.99	9.06					1						S
116656	10.689	0.036	9.222	0.018		1.230	0.015	G	1.19	0.01	I	9.2175	0.0016	0.014	101		9.19	9.25					1						
116657	6.949	0.004	6.920	0.005		0.031	0.006	T	0.05	0.01	L	6.9312	0.0007	0.008	154		6.92	6.94			23384+4231	I 1	1						S
116658	11.359	0.065	10.332	0.041		1.180	0.040	G	1.14	0.04	R	10.3709	0.0068	0.056	107		10.25	10.49					1 S						
116659	9.214	0.014	8.621	0.013	*	0.553	0.017	T	0.63	0.02	L *	8.6770	0.0021	0.018	99	*	8.66	8.71		D	23384−3147	I 1	2 C A	AB	133	0.314	0.004	0.67	0.05	S
116660	9.373	0.024	8.834	0.023		0.505	0.030	T	0.58	0.03	L	8.8844	0.0023	0.020	49		8.83	8.94					1						S
116661	9.986	0.026	8.616	0.015		1.160	0.024	T	1.12	0.02	L	8.6700	0.0020	0.016	70		8.65	8.70		C			1						
116662	11.201	0.109	10.585	0.102	A	0.600	0.495	G	0.79	0.07	B *	10.3709	0.0058	0.028	35	*	10.32	10.41		R	23385+0419	I 1	2 C A	AB	202	3.050	0.013	1.52	0.08	
116663	10.437	0.030	9.676	0.024	*	0.695	0.005	G	0.75	0.00	R *	9.7473	0.0026	0.033	121	*	9.70	9.81		D	23385−4801	I 1	2 C A	AB	215	0.298	0.006	0.28	0.06	
116664											T	11.5505	0.0950	0.420	76		10.82	12.01	0.48	P 1 A			1						G
116665	8.560	0.014	8.170	0.014		0.380	0.015	G	0.44	0.02	H	8.2230	0.0012	0.012	76		8.21	8.25					1						S
116666	9.051	0.026	8.721	0.028		0.313	0.036	T	0.36	0.05	L	8.7773	0.0020	0.015	131		8.76	8.81					1						
116667	7.199	0.006	7.071	0.008	A	0.124	0.009	T	0.14	0.01	L	7.1043	0.0051	0.014	78	A	7.09	7.14		M	23386+3502	I 1	2 C A	AB	200	15.242	0.017	2.96	0.08	S
116668	8.959	0.013	8.420	0.012		0.505	0.016	T	0.58	0.02	L	8.4765	0.0014	0.012	112		8.46	8.51		C			1						
116669	9.858	0.022	9.242	0.020		0.574	0.026	T	0.65	0.02	L	9.3154	0.0018	0.016	96		9.28	9.35		C			1						
116670	10.553	0.040	9.357	0.024		1.024	0.036	T	1.00	0.03	L	9.4186	0.0037	0.020	69		9.39	9.46		C			1						
116671	8.418	0.014	8.160	0.015		0.246	0.019	T	0.28	0.02	L	8.1935	0.0015	0.011	73		8.17	8.21		C			1						S
116672	9.524	0.014	7.802	0.007		1.437	0.012	T	1.43	0.02	L	7.7895	0.0015	0.015	148		7.76	7.82		C			1						S
116673	10.025	0.019	9.473	0.018		0.523	0.019	T	0.60	0.02	L	9.5466	0.0020	0.024	147		9.50	9.59					1						
116674	9.531	0.022	8.117	0.013		1.194	0.020	T	1.15	0.02	L	8.1401	0.0015	0.010	69		8.12	8.16		C			1						
116675	8.725	0.014	7.786	0.011		0.807	0.015	G	0.83	0.01	H	7.8659	0.0013	0.009	59		7.85	7.89		C			1						S
116676	11.389	0.079	9.452	0.025		1.607	0.066	T	1.63	0.07	L	9.2935	0.0022	0.020	81		9.27	9.33		C			1						
116677	10.100	0.028	9.379	0.023		0.662	0.029	T	0.72	0.02	L	9.4412	0.0018	0.016	89		9.41	9.47		C			1						S
116678	10.406	0.031	9.124	0.018		1.091	0.028	T	1.05	0.03	L	9.1825	0.0018	0.018	110		9.15	9.21		C			1						
116679	7.789	0.007	6.729	0.004		0.926	0.004	G	0.92	0.00	H	6.7900	0.0007	0.008	137		6.78	6.81		C			1						S
116680	9.996	0.022	8.538	0.012		1.229	0.020	T	1.19	0.02	L	8.5627	0.0016	0.014	156		8.54	8.59		C			1						S
116681	13.663	0.814	9.862	0.049		2.100	0.510	G	2.09	0.52	J	9.8187	0.0998	0.608	71		8.61	10.27	330.00	P 1 B			1 V						G P
116682	11.500	0.116	10.038	0.050		1.232	0.099	T	1.19	0.10	L	10.0478	0.0033	0.025	75		10.01	10.09		D			1 S						
116683	8.719	0.010	8.666	0.012		0.054	0.015	T	0.07	0.01	L	8.7061	0.0018	0.017	129		8.68	8.74		C			1						
116684						1.490	0.500	G	1.51	0.75	R	11.3684	0.0291	0.225	127		11.00	11.60	5.00	P 1 A			1						D
116685	9.736	0.028	9.389	0.030	A	0.141	0.140	G	0.33	0.10	L *	9.1830	0.0028	0.025	113	*	9.14	9.29		U 2 C	23388+4425	M 1	2 C B	AB	75	2.280	0.016	2.19	0.07	
116686	10.032	0.025	9.127	0.019		0.804	0.023	T	0.83	0.02	L	9.1975	0.0023	0.024	152		9.16	9.23					1						
116687	7.230	0.004	6.678	0.004		0.517	0.005	T	0.59	0.01	L	6.7027	0.0008	0.009	136		6.69	6.72		C	23388+6208	I 1	1						S
116688	7.702	0.007	7.187	0.007		0.491	0.010	G	0.56	0.01	H	7.2497	0.0010	0.009	115		7.24	7.26		C			1						S
116689	8.938	0.018	8.291	0.016		0.600	0.021	T	0.67	0.02	L	8.3415	0.0017	0.015	79		8.32	8.37		C			1						S
116690	8.967	0.017	8.354	0.015		0.556	0.015	G	0.63	0.01	H	8.4207	0.0018	0.017	58		8.39	8.46		C			1						S
116691	9.366	0.017	8.753	0.015		0.569	0.017	T	0.64	0.02	L	8.8267	0.0019	0.015	99		8.80	8.85		C	23388−2816	I 1	1						S
116692	8.913	0.011	7.633	0.007		1.089	0.010	T	1.05	0.01	L	7.6812	0.0012	0.013	149		7.66	7.70		C			1						
116693	10.073	0.019	9.693	0.020		0.360	0.026	T	0.42	0.03	L	9.7464	0.0022	0.024	158		9.70	9.78					1						
116694	9.126	0.018	8.581	0.017		0.511	0.022	T	0.58	0.02	L	8.6872	0.0024	0.017	65		8.65	8.74		C			1						S
116695	7.791	0.005	7.604	0.008		0.179	0.009	T	0.20	0.01	L	7.6518	0.0009	0.009	147		7.64	7.67		C			1						S
116696	9.103	0.013	8.622	0.013		0.453	0.017	T	0.52	0.02	L	8.6599	0.0017	0.017	102		8.63	8.69					1						
116697	11.189	0.057	9.738	0.026		1.223	0.049	T	1.18	0.05	L	9.7822	0.0023	0.024	127		9.73	9.83					1						G
116698	10.361	0.037	9.883	0.038		0.450	0.048	T	0.52	0.05	L	9.9113	0.0030	0.023	82		9.87	9.94		C			1						
116699	7.376	0.005	7.061	0.005		0.300	0.009	G	0.34	0.01	H	7.1028	0.0014	0.013	139		7.08	7.12					1 X						S
116700	9.378	0.017	8.929	0.017		0.424	0.022	T	0.49	0.02	L	9.0077	0.0020	0.019	122		8.98	9.04		C			1						

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
116701	23 38 57.55	+22 33 08.6	8.96	H	354.739 797 25	+22.552 379 60		1.09	−18.31	−12.06	0.84	0.71	1.14	0.88	0.81	+32	+ 9	−18	+16	− 1	+ 4	+ 6	−14	+34	+45	2	−1.91
116702	23 39 00.32	+17 00 51.1	8.00	H	354.751 318 18	+17.014 205 44		1.25	6.26	−4.16	0.87	0.67	1.13	1.04	1.13	+36	+16	− 6	+ 9	+11	+ 4	+15	− 4	+23	+31	0	1.15
116703	23 39 00.65	+61 18 05.9	7.92	H	354.752 695 59	+61.301 648 31		2.81	5.02	−2.97	0.61	0.70	0.89	0.75	0.77	−18	− 1	+22	− 4	+13	+25	+ 8	−14	+ 7	−19	0	−2.47
116704	23 39 01.14	−67 54 42.3	9.66	H	354.754 766 86	−67.911 736 68		2.29	−6.29	−0.80	0.75	0.83	1.04	0.82	0.91	+ 0	− 1	− 4	− 1	+11	− 7	+10	+10	+ 2	+ 2	0	−0.39
116705	23 39 01.42	+52 15 44.9	8.20	3 H	354.755 931 82	+52.262 464 74		0.66	0.18	−0.07	0.69	0.75	1.16	0.93	0.97	−42	−11	+16	−11	− 4	+11	− 7	− 6	+10	−30	0	0.34
116706	23 39 02.95	−32 17 53.1	9.19	H	354.762 299 65	−32.298 090 42		5.33	50.26	−13.01	0.98	0.93	1.21	1.15	1.15	+31	−16	−18	−28	+ 7	− 3	+ 7	− 9	+ 0	+31	0	1.26
116707	23 39 03.27	+63 23 18.3	9.47	H	354.763 621 83	+63.388 424 36		3.51	−20.50	−16.05	0.80	0.93	1.11	1.12	1.12	−10	+12	+26	+ 4	+ 3	−12	+ 6	+ 1	+ 3	−10	4	2.50
116708	23 39 06.20	−63 02 45.4	8.94	H	354.775 835 48	−63.045 950 29		2.22	10.50	−1.53	0.72	0.87	1.13	0.89	0.97	− 5	−11	−16	− 4	− 2	+10	+ 2	− 6	−18	+ 0	0	0.28
116709	23 39 08.35	+50 28 18.3	5.35	G	354.784 780 65	+50.471 737 44		8.36	−16.69	−1.87	0.36	0.45	0.70	0.42	0.59	−38	+19	+ 4	+13	− 7	−10	+ 4	− 5	+28	−17	1	−0.86
116710	23 39 08.84	−60 17 58.7	9.61	H	354.786 827 00	−60.299 633 16		16.80	7.85	−78.97	0.83	0.89	1.32	0.86	0.89	− 6	+ 4	−11	+17	+15	− 6	+15	+ 0	−17	+ 4	0	1.05
116711	23 39 09.37	−34 54 29.0	9.25	H	354.789 025 50	−34.908 060 46		6.90	71.77	−30.84	1.00	0.98	1.25	1.19	1.08	+21	+14	−17	−13	+16	+ 8	+22	+34	+ 9	+14	0	−0.57
116712	23 39 09.37	+30 52 09.5	8.62	H	354.789 055 50	+30.869 301 30		4.07	40.46	−8.85	0.86	0.65	1.00	1.07	0.71	+ 3	+12	− 2	+ 0	+15	+ 5	+13	+ 3	+ 0	+17	0	−0.18
116713	23 39 10.02	−26 52 41.2	11.89	G	354.791 760 26	−26.878 120 97		−6.30	−1.59	−10.20	3.56	2.78	3.90	5.91	3.44	+ 1	−12	−21	−16	−12	+34	− 5	−21	+ 3	−22	0	1.56
116714	23 39 10.16	+75 17 34.3	5.95	H	354.792 332 54	+75.292 848 42		12.40	7.09	13.99	0.48	0.43	0.54	0.57	0.49	−26	−21	+22	−18	+ 7	+18	+ 3	−10	+ 3	−29	0	−1.01
116715	23 39 10.35	+06 12 04.4	7.84	G	354.793 104 85	+06.201 223 63		6.85	23.24	−15.38	1.14	0.70	1.20	1.21	0.86	+ 6	+ 7	−18	−13	+ 6	+27	+12	+ 5	+24	+24	0	0.94
116716 H	23 39 12.45	+50 32 41.7	10.17	2 H	354.801 862 39	+50.544 923 88	A	1.71	14.09	10.04	1.65	2.04	2.90	2.00	2.31	−47	− 2	+ 1	+31	−20	−14	−10	+ 8	+20	− 9	3	−0.24
116717	23 39 12.87	−86 23 56.2	7.93	G	354.803 635 44	−86.398 951 46		8.76	35.04	−33.26	0.57	0.54	0.66	0.70	0.58	+ 8	− 6	− 6	−20	+11	+18	+10	+10	− 4	+10	0	0.01
116718	23 39 15.19	+20 27 46.7	8.80	H	354.813 298 71	+20.462 981 29		1.46	−1.78	−5.57	0.84	0.65	1.08	0.88	0.65	+32	+15	+ 6	+27	− 8	− 1	− 4	−22	+10	+34	0	0.83
116719	23 39 15.26	−09 59 05.1	9.53	H	354.813 603 85	−09.984 742 67		4.17	40.53	−44.22	1.39	0.92	1.54	2.13	1.37	+21	+ 5	+ 2	−10	+15	+28	+21	+18	+17	+ 5	0	2.03
116720	23 39 15.40	+34 43 52.1	8.17	G	354.814 151 05	+34.731 149 21		11.57	33.05	−0.15	0.78	0.58	1.01	1.04	0.59	− 7	+ 9	+ 2	−13	+12	+34	+11	−15	+10	− 5	0	0.48
116721 H	23 39 15.86	−21 55 26.4	7.69	G	354.816 065 46	−21.924 007 60	A	4.00	16.48	9.06	1.47	1.19	1.22	1.41	1.04	+31	+ 4	−31	− 3	−13	+34	+ 0	−10	+17	+10	2	−0.10
116722	23 39 18.78	−30 43 14.5	10.04	H	354.828 252 15	−30.720 681 24		5.87	−24.76	−10.32	1.33	1.18	1.65	1.56	1.51	+30	− 3	−23	−38	+ 5	+ 8	+ 7	−10	+17	+36	2	−0.25
116723	23 39 19.55	+28 54 19.9	11.42	H	354.831 471 56	+28.905 529 00		9.25	135.93	108.82	2.26	1.53	2.57	2.82	1.67	+21	−15	− 4	+19	+21	− 2	+20	+ 6	+ 7	+43	0	1.27
116724	23 39 19.66	−17 47 28.6	9.05	H	354.831 901 97	−17.791 290 80		5.39	24.35	−12.00	1.02	1.01	1.25	1.27	1.25	+25	− 2	−13	+19	+ 3	+30	+ 7	+27	− 8	+21	0	−0.88
116725	23 39 20.47	+71 56 50.4	7.65	H	354.835 298 34	+71.947 330 93		1.66	4.28	−2.14	0.54	0.54	0.66	0.61	0.60	− 2	+ 8	+ 6	+18	−18	+ 4	−16	− 5	+26	− 7	0	0.35
116726 H	23 39 20.80	+45 43 11.8	7.62	H	354.836 682 55	+45.719 938 92	*	3.70	−5.82	−12.54	1.02	1.33	1.27	0.71	0.90	− 9	+12	+ 7	−30	+ 2	−14	+ 4	−15	+33	−23	2	0.56
116727	23 39 20.98	+77 37 55.1	3.21	G	354.837 425 16	+77.631 966 81		72.50	−48.85	127.18	0.42	0.41	0.52	0.48	0.44	+ 4	+ 6	+12	+23	+ 2	−11	+ 2	+14	− 2	− 1	0	0.36
116728	23 39 21.17	+74 00 09.4	5.98	H	354.838 196 74	+74.002 614 99		7.78	−8.53	5.56	0.62	0.54	0.60	1.36	0.79	−12	− 3	+32	−14	+ 9	+ 6	+ 7	−41	−23	−21	1	1.75
116729	23 39 22.54	−53 23 13.9	9.67	2 H	354.843 916 57	−53.387 186 70		1.68	16.42	−9.46	0.91	1.01	1.66	1.34	1.44	−36	+ 5	−11	+47	−23	+12	− 8	− 1	+21	− 8	1	3.29
116730	23 39 22.67	−27 09 24.9	8.98	H	354.844 454 57	−27.156 914 89		8.62	49.47	7.61	1.40	0.98	1.41	2.05	1.20	− 1	−28	−24	+12	−17	+ 8	−19	− 7	+17	−19	0	1.66
116731	23 39 22.99	+07 04 39.5	8.94	H	354.845 810 50	+07.077 652 71		−1.09	15.94	−2.37	1.06	0.86	1.25	1.16	1.10	+19	+ 4	−13	−12	− 5	+ 1	− 4	−10	+31	+22	0	0.24
116732	23 39 23.37	−02 09 16.5	8.66	H	354.847 368 95	−02.154 571 87		−0.57	4.25	−2.84	1.16	0.85	1.41	1.49	1.40	+51	− 5	− 6	− 6	+11	+27	+19	+16	+28	+41	0	1.86
116733	23 39 23.87	−33 29 36.0	8.07	H	354.849 451 43	−33.493 336 26		4.73	11.58	−13.97	0.94	0.75	1.11	1.16	0.87	+12	+12	−21	−23	+25	− 3	+28	+16	+19	+ 8	0	2.08
116734	23 39 24.20	−56 59 15.6	9.68	H	354.850 813 30	−56.987 678 98		4.54	−16.70	2.27	0.88	0.91	1.37	0.99	0.93	−21	− 7	+11	+ 5	+15	+30	+15	−17	−12	−17	0	0.59
116735	23 39 24.99	−03 08 24.3	9.52	G	354.854 137 29	−03.140 089 33		9.64	37.56	21.92	1.37	1.17	1.64	2.11	1.93	+57	−20	−16	+14	+ 9	+20	+ 7	+ 5	+14	+36	0	1.10
116736	23 39 26.48	+39 02 01.3	8.72	H	354.860 320 31	+39.033 680 82		8.52	−1.96	13.81	0.81	0.70	1.03	0.93	0.79	− 1	+22	− 8	− 5	+ 7	−25	+ 7	−13	+ 6	+ 6	2	0.40
116737 H	23 39 27.92	−46 38 16.4	6.07	G	354.866 353 83	−46.637 898 39	A	11.74	22.44	40.99	1.04	0.81	1.03	0.94	0.65	− 7	+ 0	− 9	+ 8	− 9	+ 6	− 8	−17	− 8	−15	6	1.83
116738	23 39 29.64	−53 31 30.2	10.45	2 H	354.873 503 01	−53.525 068 04		2.64	32.69	−0.85	1.00	1.06	1.83	1.53	1.55	−37	+ 6	− 8	+45	−24	+11	−10	−14	+18	−14	0	−0.53
116739	23 39 29.72	−19 04 30.8	9.12	H	354.873 814 05	−19.075 222 50		0.99	19.79	−1.25	1.34	1.13	1.49	1.86	1.41	+14	+21	− 9	−11	+21	−18	+27	+39	+25	+ 0	0	0.28
116740	23 39 30.77	+28 14 45.4	7.04	H	354.878 212 94	+28.245 953 59		20.27	303.04	227.05	0.63	0.47	0.76	0.66	0.47	+21	+19	− 6	+ 9	+12	− 5	+13	− 1	+ 2	+35	2	−0.10
116741	23 39 32.19	+34 04 05.4	8.24	H	354.884 129 43	+34.068 157 66		4.61	17.80	−0.91	0.80	0.62	1.03	0.84	0.62	+ 8	+42	+ 8	+14	+ 4	+18	+11	−24	+18	+14	0	−1.09
116742	23 39 33.00	−50 53 37.0	9.96	H	354.887 500 40	−50.893 602 30		9.01	30.13	−101.74	1.00	1.06	1.54	1.17	1.21	− 4	−11	−29	−32	+ 8	+ 6	+10	+ 5	− 8	− 5	0	−1.03
116743	23 39 34.98	+58 58 13.5	7.53	H	354.895 730 33	+58.970 418 16		14.38	13.10	17.73	0.57	0.55	0.75	0.70	0.64	−21	+20	+11	+12	+ 7	− 1	+ 5	+ 2	− 4	−28	0	0.16
116744	23 39 35.96	+30 59 55.5	11.78	H	354.899 829 74	+30.998 761 38		17.37	173.01	1.33	2.71	1.85	3.11	3.39	1.92	+11	+ 0	+ 2	− 8	+15	+20	+12	−12	+13	+32	4	0.92
116745	23 39 37.11	−72 43 13.3	7.09	G	354.904 625 18	−72.720 363 98		87.72	141.07	−736.86	0.51	0.49	0.64	0.57	0.53	− 1	+ 8	−15	+10	+ 2	− 5	+ 3	− 4	+ 4	+11	0	1.27
116746	23 39 37.62	+43 19 57.4	7.54	H	354.906 760 61	+43.332 605 86		4.32	23.28	0.21	0.53	0.58	0.80	0.61	0.61	+ 7	+ 3	+18	+27	+ 1	− 1	+ 2	+25	+ 4	+ 6	0	0.88
*116747	23 39 39.58	−28 42 26.1	9.80	H	354.914 928 85	−28.707 245 48		6.48	35.26	−1.49	1.20	1.19	1.42	1.65	1.54	+50	− 4	− 7	−17	−12	− 3	−19	−46	+18	+36	0	0.84
*116748 H	23 39 39.35	−69 11 44.1	8.17	2 H	354.913 957 12	−69.195 586 94	A	21.64	79.04	−67.11	1.15	1.18	1.32	1.15	1.20	− 9	+15	−23	+ 2	+ 0	+ 0	+ 2	− 8	+10	−13	3	0.90
116749	23 39 41.06	−66 15 13.1	6.92	H	354.921 090 69	−66.253 649 52		4.59	39.79	−36.20	0.49	0.48	0.65	0.55	0.53	+ 4	+ 3	−29	− 5	+ 9	+ 0	+ 8	+ 8	+ 0	+19	0	0.61
116750	23 39 41.55	−22 32 00.0	7.29	G	354.923 111 79	−22.533 327 37		4.47	27.97	−27.06	0.78	0.59	0.82	1.11	0.72	+ 7	− 2	−20	+12	− 7	+14	− 5	− 1	+16	− 1	0	0.49
116751	23 39 41.81	+79 49 16.2	8.02	H	354.924 191 14	+79.821 165 57		1.93	5.85	−1.08	0.57	0.63	0.69	0.69	0.70	− 8	− 4	+28	+15	+ 3	+ 5	+ 1	+10	+ 3	−16	0	1.02
116752	23 39 43.51	−50 45 16.3	8.20	H	354.931 275 23	−50.754 527 58		3.12	49.81	10.94	0.85	0.71	1.04	0.91	0.82	− 9	− 7	−19	−41	+12	+ 5	+14	− 2	− 2	−10	0	−0.73
116753	23 39 43.86	−04 39 57.9	9.39	H	354.932 735 92	−04.666 082 06		5.53	18.68	−29.63	1.25	0.98	1.48	1.73	1.56	+43	−29	−19	− 3	− 6	+17	−12	−16	+24	+26	0	0.76
116754	23 39 44.28	−17 02 25.2	10.10	H	354.934 510 80	−17.040 328 15		6.83	32.88	−6.58	1.48	1.04	1.78	2.14	1.74	+35	−23	− 2	+ 9	+ 7	+29	− 2	−15	+15	+19	0	−0.33
116755	23 39 44.51	−46 36 56.4	10.11	H	354.935 473 22	−46.615 658 27		4.42	47.27	−25.35	1.29	0.98	1.58	1.43	0.99	− 1	+ 2	−12	− 3	−13	− 1	−13	−30	+ 3	− 6	2	2.47
116756	23 39 44.85	−00 44 26.1	8.87	H	354.936 876 13	−00.740 594 48		12.65	31.95	−7.71	1.27	0.98	1.45	1.60	1.12	+15	− 4	−38	−20	+16	−27	+12	+15	− 5	+ 2	0	3.32
116757	23 39 46.54	+70 47 01.3	7.99	H	354.943 907 78	+70.783 697 82		3.01	17.73	0.98	0.58	0.60	0.76	0.61	0.59	+10	+10	+21	−16	+ 5	+ 7	+ 3	+ 6	+13	+17	0	1.23
116758	23 39 47.04	−14 13 19.4	4.97	H	354.945 986 76	−14.222 042 81		24.38	51.80	−55.58	0.76	0.53	0.85	0.95	0.74	+32	−10	−14	+13	+ 9	+20	+11	+11	+16	+28	5	3.44
116759	23 39 47.10	−29 31 49.1	8.84	G	354.946 263 44	−29.530 311 73		9.29	−42.11	−9.43	0.90	0.87	1.19	1.06	1.10	+53	−10	−12	−30	− 9	+14	−10	−32	+28	+46	0	−0.44
116760	23 39 48.82	+75 45 05.8	7.31	G	354.953 415 27	+75.751 616 28		8.94	−33.61	−28.93	0.54	0.52	0.63	0.63	0.56	−18	−18	+21	− 1	+ 8	+ 7	+ 5	−19	+ 2	−20	1	−1.11
116761	23 39 50.41	+34 57 19.8	7.11	H	354.960 059 80	+34.955 500 10		8.68	58.35	−40.02	1.34	0.86	1.01	2.06	1.14	−32	−20	−16	−76	+20	+44	+28	−61	+16	−18	0	−0.90
116762	23 39 50.59	−05 32 48.3	7.66	H	354.960 779 90	−05.546 740 04		1.38	−19.12	−18.87	0.84	0.62	1.03	1.23	0.94	+32	− 9	−11	− 8	− 5	+40	− 1	−13	+ 6	+23	2	1.08
116763	23 39 51.21	−32 44 33.6	7.18	G	354.963 388 90	−32.742 665 88		53.52	135.47	−304.59	0.76	0.64	0.86	0.84	0.70	+21	− 3	−24	−29	+30	−13	+32	+23	− 5	+16	0	0.18
116764	23 39 52.70	−66 17 36.2	9.10	H	354.969 572 40	−66.293 400 64		1.94	18.67	3.63	0.81	0.82	1.08	0.88	0.95	− 9	+11	−30	− 7	+13	− 7	+10	+12	+ 0	+12	0	0.15
116765 H	23 39 52.87	+63 43 31.6	6.85	G	354.970 273 73	+63.725 439 95	A	8.45	42.61	−3.39	0.60	0.66	0.73	0.69	0.60	+ 2	+13	+23	+11	+ 3	+ 2	+ 0	−22	− 6	+14	1	0.51
116766	23 39 52.99	+47 12 25.8	9.01	G	354.970 774 12	+47.207 174 31		3.47	−1.66	−13.47	0.64	0.82	1.30	0.69	1.05	−10	+ 5	+36	−31	− 9	−16	− 7	−29	−15	+ 3	0	0.26
116767 H	23 39 54.86	−47 35 18.8	8.94	H	354.978 599 53	−47.588 545 71	A	8.02	171.04	24.69	2.75	1.91	2.60	2.35	1.42	− 2	+16	− 9	+ 7	− 4	−15	− 6	−24	+ 7	− 7	0	1.89
116768	23 39 54.99	+09 40 38.4	5.99	H	354.979 115 05	+09.677 320 79		17.16	89.12	−11.16	0.69	0.52	0.84	0.75	0.49	+25	+ 8	−12	− 9	+ 7	+24	+11	−29	+47	+50	4	2.54
116769	23 39 55.34	−76 06 42.9	8.75	H	354.980 577 96	−76.111 905 44		0.03	32.29	−11.20	0.72	0.67	0.86	0.77	0.71	− 2	+ 1	− 8	+10	+ 6	−10	+ 7	−10	−11	+ 8	1	−0.69
116770	23 39 56.43	+43 48 22.4	8.35	H	354.985 139 62	+43.806 220 90		1.51	5.75	−5.96	0.63	0.68	0.97	0.65	0.74	+12	+14	+22	+ 8	+ 1	+ 3	+ 1	+24	+ 7	+ 6	0	−0.24
116771	23 39 56.82	+05 37 38.5	4.13	G	354.986 751 33	+05.627 353 74		72.51	376.32	−437.00	0.96	0.56	0.88	1.05	0.69	+ 1	−16	− 6	−52	+18	+26	+16	+ 4	+19	+10	0	0.18
116772	23 39 56.94	+21 15 27.9	10.56	2 H	354.987 232 74	+21.257 746 28		1.35	63.38	−15.31	1.15	0.96	1.51	1.34	1.02	+26	+ 5	− 3	+10	− 1	+11	+ 0	− 9	+14	+24	3	1.21
116773	23 39 59.29	−38 14 55.8	10.16	H	354.997 023 80	−38.248 825 34		4.06	−0.09	48.73	0.93	1.16	1.66	1.02	1.27	+25	+11	−26	+31	− 1	+29	+ 5	+21	−11	+17	2	0.92
116774 H	23 39 59.86	−47 19 35.4	6.94	H	354.999 411 22	−47.326 494 20	A	4.28	38.80	−4.63	0.80	0.67	0.92	0.87	0.62	− 8	+26	−14	+22	−11	−14	−12	− 5	− 2	− 3	1	0.21
*116775	23 40 00.14	−42 37 05.8	10.68	G	355.000 566 84	−42.618 268 18		4.45	18.37	14.76	1.22	1.00	1.90	1.49	1.04	−10	− 8	+ 5	+17	−12	+ 0	−16	−20	+22	−23	0	2.21
*116776	23 40 00.12	−51 37 00.2	7.79	H	355.000 487 81	−51.616 730 99		5.04	−37.94	−3.97	0.71	0.76	1.05	0.74	0.86	+10	−19	−18	−34	−10	+15	−10	−27	+14	+ 5	0	−1.86
*116777	23 40 01.06	+27 30 53.7	6.66	H	355.004 396 10	+27.514 924 39		6.39	58.56	20.70	0.57	0.48	0.72	0.64	0.47	+24	+ 8	− 6	+ 1	+ 7	−10	+ 6	− 9	− 6	+33	2	0.51
*116778	23 40 01.05	+27 01 15.9	8.84	H	355.004 360 27	+27.021 091 25		2.58	−19.64	−9.81	0.84	0.68	1.08	0.97	0.72	+27	− 3	−22	+12	+14	− 8	+12	+ 5	+ 5	+37	1	1.18
116779 H	23 40 01.28	+49 43 03.5	9.66	H	355.005 351 63	+49.717 625 14	A	4.20	27.91	1.02	1.18	1.51	2.13	1.27	1.63	−21	+23	+ 1	+27	− 6	+13	− 4	+12	+ 2	−17	2	−0.46
116780	23 40 02.21	+14 48 37.9	7.91	H	355.009 209 65	+14.810 514 84		3.63	−2.31	3.28	1.10	0.63	1.20	1.15	0.61	+30	+23	+22	−36	+ 6	+ 4	+12	− 9	+25	+13	0	0.02
116781	23 40 02.82	+37 39 10.2	6.49	H	355.011 762 65	+37.652 838 35		11.20	−7.18	−80.08	0.55	0.54	0.82	0.61	0.57	+ 1	+29	−19	+ 4	+ 4	−24	+10	−17	+27	+10	0	1.30
116782	23 40 02.85	−19 27 25.3	10.57	G	355.011 859 57	−19.457 023 30		5.24	275.00	−290.85	1.82	1.45	2.10	2.28	1.51	+ 6	+12	−37	−33	+18	− 1	+25	− 3	+18	−10	0	2.63
116783	23 40 03.32	+26 48 06.9	7.56	H	355.013 829 96	+26.801 912 22		12.35	147.55	31.73	0.61	0.48	0.74	0.68	0.53	+12	+ 1	− 6	+ 9	+ 7	−12	+10	−13	+12	+28	0	1.01
116784	23 40 04.08	+51 33 26.5	9.34	H	355.016 981 37	+51.557 359 45		2.77	22.77	4.53	0.80	0.93	1.46	0.99	1.21	−31	+ 5	− 1	−12	+ 9	+ 7	+ 9	− 4	−19	−16	0	−0.69
116785 H	23 40 04.88	−71 06 59.9	8.57	H	355.020 352 95	−71.116 636 44	A	11.17	14.91	−9.04	1.50	1.60	1.71	1.76	1.69	− 3	+ 0	−29	+10	+ 2	+ 1	+ 3	−14	+ 6	+ 4	5	1.45
116786	23 40 05.19	+02 52 06.5	9.71	H	355.021 623 32	+02.868 467 69		3.52	3.50	−5.22	1.29	1.03	1.41	1.52	1.13	+15	+ 5	−25	− 9	+13	− 7	+16	+27	+ 1	+ 2	0	−0.54
116787 H	23 40 06.05	+12 58 05.9	9.10	H	355.025 216 35	+12.968 296 64	A	15.45	−35.07	−142.63	2.42	1.52	2.46	1.70	1.17	+57	+ 1	+ 8	− 9	− 6	+25	− 4	−14	+11	+43	1	−0.53
116788	23 40 10.63	+82 51 01.8	10.10	H	355.044 299 25	+82.850 496 85		10.26	227.84	106.81	0.90	0.92	1.06	1.09	1.03	−11	− 9	+34	+19	− 1	+ 0	+ 1	−13	− 6	− 4	0	−0.96
116789	23 40 12.14	+45 04 25.2	7.73	H	355.050 583 79	+45.073 678 88		2.26	16.32	−10.17	0.57	0.62	0.87	0.65	0.68	+ 4	+ 6	+21	+20	−16	−18	−12	+22	− 4	+ 6	0	0.41
*116790	23 40 13.71	−01 41 03.1	10.06	H	355.057 104 84	−01.684 204 85		2.56	2.00	−14.43	1.84	1.30	2.31	2.78	2.17	+35	+ 9	− 4	−10	+10	+44	+20	+ 6	+26	+35	0	0.98
*116791	23 40 13.66	−28 21 32.3	7.63	G	355.056 936 29	−28.358 967 23		9.38	−76.31	−70.42	1.33	1.28	1.08	2.33	2.13	+70	−37	−32	−49	−62	+10	−68	−74	+39	+59	0	−1.69
116792	23 40 13.88	−15 25 16.2	8.29	H	355.057 819 40	−15.421 156 87		2.77	−7.12	−28.10	1.06	0.73	1.24	1.42	1.22	+36	− 6	−13	−14	+ 9	+24	+18	− 4	+15	+26	4	2.20
116793	23 40 13.92	−69 11 40.7	9.16	H	355.058 005 87	−69.194 648 73		9.01	13.89	−15.29	0.72	0.78	0.95	0.76	0.87	− 7	+ 7	−22	−17	+ 5	+ 6	+ 6	− 3	+ 4	+ 4	0	−1.17
116794	23 40 14.97	+33 49 25.2	8.70	H	355.062 366 70	+33.823 678 76		3.77	−8.46	−12.45	0.80	0.60	0.98	0.83	0.61	− 1	+43	+ 5	+10	+10	+ 4	+10	− 4	+ 6	− 2	2	1.34
116795	23 40 15.20	+19 42 45.4	9.07	H	355.063 342 38	+19.712 608 55		8.32	5.89	−37.49	0.87	0.74	1.22	1.04	0.81	+45	+ 4	+ 8	+18	+12	+ 5	+12	+ 8	+ 8	+50	0	−1.26
116796	23 40 15.76	−01 45 15.9	8.75	H	355.065 646 18	−01.754 427 23		0.66	39.54	9.24	1.18	0.89	1.39	1.56	1.31	+34	+ 0	−24	−11	+ 4	+20	+13	+ 5	+14	+27	0	1.43
116797	23 40 16.00	+19 45 15.9	8.83	H	355.066 662 14	+19.754 425 03		6.61	13.30	−14.07	0.80	0.65	1.12	0.89	0.65	+40	+ 1	+ 1	+12	+ 1	− 4	+ 1	− 9	+ 5	+40	0	0.24
116798	23 40 16.41	+18 12 51.5	7.13	H	355.068 375 82	+18.214 292 70		4.61	27.59	−9.02	0.63	0.53	0.88	0.71	0.57	+47	+ 0	−12	+ 2	+10	+ 3	+10	+ 8	+16	+54

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
116701	10.607	0.040	9.100	0.019		1.267	0.035	T	1.23	0.04	L	9.1233	0.0021	0.017	104		9.09	9.15		C			1							
116702	10.065	0.030	8.165	0.012		1.590	0.020	G	1.56	0.02	J	8.1191	0.0015	0.013	94		8.09	8.14					1 G							S
116703	9.793	0.021	8.065	0.010		1.442	0.018	T	1.44	0.03	L	8.0596	0.0021	0.019	124		8.03	8.09					1							
116704	10.189	0.023	9.715	0.023		0.446	0.030	T	0.52	0.03	L	9.7664	0.0021	0.025	141		9.72	9.81		C			1							
116705	10.207	0.023	8.430	0.010		1.510	0.021	T	3.50	0.06	O	7.8570	0.0221	0.477	128		6.95	8.10		U 2 B			1 S							G
116706	9.865	0.022	9.256	0.020		0.566	0.022	T	0.64	0.02	L	9.3083	0.0029	0.020	101		9.28	9.36					1							
116707	9.853	0.020	9.485	0.021		0.349	0.027	T	0.41	0.04	L	9.5536	0.0025	0.024	121		9.51	9.61		C			1							G
116708	10.656	0.035	9.072	0.016		1.328	0.030	T	1.29	0.04	L	9.0942	0.0019	0.020	131		9.04	9.13		C			1							
116709	5.276	0.002	5.335	0.002		−0.061	0.001	G	−0.04	0.00	H	5.3393	0.0003	0.004	215		5.33	5.35					1							S
116710	10.417	0.024	9.648	0.020		0.685	0.024	T	0.74	0.02	L	9.7444	0.0024	0.029	161		9.68	9.79		C			1							
116711	9.789	0.021	9.265	0.021		0.501	0.022	T	0.57	0.02	L	9.3558	0.0024	0.021	86		9.31	9.40		C			1							
116712	10.059	0.026	8.747	0.015		1.114	0.023	T	1.08	0.02	L	8.7857	0.0015	0.014	89		8.77	8.81					1							
116713											T	12.0447	0.0103	0.071	42		11.91	12.16					1 S							G
116714	6.092	0.003	5.970	0.004		0.124	0.006	G	0.14	0.01	H	5.9967	0.0005	0.007	114		5.99	6.01					1							S
116715	8.190	0.012	7.873	0.015		0.314	0.015	G	0.36	0.02	H	7.9039	0.0013	0.012	56		7.88	7.93		C			1							S
116716	11.561	0.122	10.224	0.058	*	1.134	0.106	T	1.10	0.11	L *	10.3389	0.0038	0.041	215	*	10.26	10.41	0.22	P 1 A	23392+5033	M 1	2 C A	AB	21	0.601	0.010	1.70	0.05	G
116717	8.320	0.009	7.963	0.010		0.342	0.015	G	0.40	0.02	H	8.0175	0.0018	0.014	122		7.99	8.04					1							S
116718	11.042	0.044	8.996	0.015		1.694	0.037	T	1.72	0.04	L	8.9101	0.0023	0.020	126		8.87	8.94		C			1							
116719	10.046	0.031	9.563	0.030		0.455	0.039	T	0.52	0.04	L	9.6335	0.0028	0.024	73		9.59	9.68					1							S
116720	8.730	0.014	8.242	0.014		0.485	0.015	G	0.56	0.02	H	8.2732	0.0014	0.012	80		8.25	8.29		C			1							S
116721	8.160	0.011	7.737	0.013	*	0.411	0.015	G	0.48	0.02	H *	7.7907	0.0012	0.010	70	*	7.77	7.81		D	23393−2155	H 1	2 C A	AB	258	0.472	0.023	2.96	0.09	S
116722	10.614	0.037	10.079	0.037		0.509	0.039	T	0.58	0.04	L	10.1506	0.0028	0.028	123		10.10	10.20					1							
116723	12.336	0.249	11.350	0.177		0.864	0.227	T	0.88	0.17	L	11.5778	0.0077	0.052	89		11.47	11.65					1							G
116724	9.541	0.023	9.072	0.023		0.455	0.025	T	0.52	0.03	L	9.1531	0.0026	0.016	56		9.13	9.18		C			1							
116725	8.011	0.007	7.699	0.008		0.296	0.010	T	0.34	0.01	L	7.7286	0.0014	0.010	128		7.71	7.75		C			1							S
116726	8.150	0.006	7.679	0.007	*	0.444	0.008	T	0.51	0.01	L *	7.7174	0.0011	0.014	184	*	7.69	7.74		D	23393+4543	I 1	2 C A	AB	158	0.226	0.005	0.03	0.11	S
116727	4.549	0.003	3.334	0.002		1.031	0.010	G	0.99	0.01	G	3.3767	0.0004	0.004	124		3.37	3.39					1 G							S
116728	7.100	0.005	6.080	0.003		0.889	0.004	T	0.89	0.00	L	6.1380	0.0006	0.006	120		6.13	6.15					1 G							S
116729	10.880	0.027	9.745	0.016		0.976	0.024	T	0.96	0.02	L	9.8358	0.0027	0.040	295		9.76	9.90		U			1 S							
116730	9.507	0.027	9.028	0.026		0.463	0.029	T	0.53	0.03	L	9.0844	0.0024	0.019	46		9.05	9.11		C			1							
116731	9.137	0.019	8.967	0.023		0.163	0.028	T	0.18	0.03	L	9.0005	0.0016	0.012	56		8.98	9.02		D			1 S							
116732	10.538	0.043	8.776	0.017		1.469	0.037	T	1.48	0.06	L	8.7925	0.0026	0.019	87		8.77	8.82					1							
116733	9.461	0.020	8.164	0.012		1.103	0.018	T	1.07	0.02	L	8.2369	0.0015	0.016	87		8.21	8.26		C			1							S
116734	10.342	0.023	9.689	0.020		0.597	0.023	T	0.67	0.02	L	9.8105	0.0026	0.032	197		9.75	9.87					1							
116735	10.176	0.035	9.543	0.031		0.549	0.015	G	0.62	0.01	H	9.6356	0.0029	0.018	70		9.60	9.67		C			1							
116736	9.406	0.020	8.770	0.018		0.591	0.023	T	0.66	0.02	L	8.8436	0.0020	0.015	74		8.83	8.87		C			1							
116737	6.296	0.015	6.028	0.016	*	0.240	0.007	G	0.27	0.01	H *	6.1486	0.0007	0.007	107	*	6.14	6.17		D	23395−4638	I 1	2 C A	AB	277	3.903	0.004	0.82	0.01	S
116738	10.930	0.030	10.445	0.031		0.469	0.033	T	0.54	0.04	L	10.5583	0.0032	0.044	269		10.48	10.64		U			1							
116739	10.708	0.059	9.197	0.029		1.271	0.052	T	1.23	0.05	L	9.2814	0.0035	0.021	53		9.24	9.34		C			1							
116740	7.857	0.009	7.115	0.006		0.658	0.005	G	0.72	0.00	H	7.1754	0.0012	0.013	108		7.16	7.20					1							S
116741	8.654	0.015	8.275	0.015		0.359	0.020	T	0.42	0.02	L	8.3247	0.0018	0.015	80		8.30	8.36		C			1							S
116742	10.643	0.034	9.990	0.030		0.597	0.034	T	0.67	0.03	L	10.0844	0.0029	0.028	130		10.03	10.13		C			1							
116743	8.618	0.010	7.614	0.008		0.864	0.004	G	0.88	0.00	H	7.6766	0.0013	0.011	129		7.66	7.70		C			1							
116744						1.613	0.143	G	2.63	0.35	I	11.7707	0.0077	0.056	88		11.66	11.90					1							G
116745	8.376	0.011	7.204	0.007		0.989	0.013	G	1.11	0.01	A	7.2148	0.0008	0.010	132		7.20	7.24					1							S
116746	8.251	0.010	7.627	0.008		0.581	0.011	T	0.65	0.01	L	7.6696	0.0010	0.012	132		7.65	7.69					1							S
116747	10.253	0.025	9.823	0.027		0.420	0.030	T	0.49	0.03	L	9.8944	0.0034	0.021	102		9.86	9.93		C	23397−2842	I 1	1							
116748	9.061	0.017	8.187	0.012	*	0.780	0.016	T	0.82	0.01	L *	8.3191	0.0033	0.034	158	*	8.27	8.39		U 2	23397−6912	I 1	2 C A	AB	348	5.307	0.006	1.30	0.03	S
116749	8.776	0.010	7.086	0.005		1.412	0.009	T	1.39	0.01	L	7.0645	0.0008	0.010	138		7.05	7.08					1							S
116750	7.434	0.007	7.317	0.008		0.115	0.006	G	0.13	0.01	H	7.3341	0.0021	0.013	68		7.32	7.36					1							S
116751	8.113	0.007	8.018	0.009		0.093	0.011	T	0.11	0.01	L	8.0597	0.0018	0.012	119		8.04	8.08					1							S
116752	9.591	0.016	8.320	0.010		1.082	0.015	T	1.04	0.01	L	8.3654	0.0019	0.018	126		8.33	8.40					1							S
116753	10.811	0.071	9.503	0.036		1.111	0.062	T	1.07	0.06	L	9.5583	0.0031	0.021	71		9.51	9.60		C	23397−0440	I 1	1							
116754	11.076	0.067	10.199	0.047		0.783	0.061	T	0.82	0.04	L	10.2464	0.0032	0.027	77		10.20	10.29		C			1							
116755	10.837	0.042	10.116	0.036		0.648	0.042	T	0.71	0.04	L	10.2400	0.0032	0.032	108		10.17	10.29					1 S							
116756	9.610	0.036	8.899	0.030		0.654	0.038	T	0.72	0.03	L	9.0038	0.0037	0.018	46		8.97	9.04		D			1 S							
116757	9.491	0.017	8.122	0.010		1.159	0.015	T	1.12	0.01	L	8.1522	0.0014	0.016	129		8.13	8.18					1							
116758	5.279	0.003	5.009	0.003		0.257	0.004	T	0.29	0.01	L	5.0456	0.0005	0.005	76		5.04	5.06					1							S
116759	9.293	0.013	8.869	0.013		0.418	0.015	G	0.48	0.02	H	8.9274	0.0018	0.018	154		8.90	8.96		C			1							S
116760	7.752	0.007	7.349	0.007		0.381	0.009	T	0.45	0.01	L	7.4021	0.0012	0.010	117		7.39	7.42		C			1							S
116761	7.297	0.007	7.141	0.008		0.150	0.010	T	0.17	0.01	L	7.1673	0.0009	0.008	80		7.15	7.18		C			1 G							S
116762	9.519	0.023	7.828	0.011		1.412	0.020	T	1.39	0.02	L	7.8050	0.0013	0.011	74		7.78	7.83		C			1							S
116763	8.201	0.008	7.265	0.006		0.802	0.012	G	0.85	0.02	A	7.3274	0.0011	0.011	104		7.31	7.34					1							S
116764	11.198	0.058	9.268	0.018		1.636	0.050	T	1.60	0.13	O	9.2110	0.0021	0.026	131		9.17	9.26					1							
116765	7.011	0.004	6.884	0.005	A	0.103	0.009	G	0.12	0.01	H *	6.8894	0.0009	0.010	134	*	6.88	6.91		D	23399+6344	I 1	2 C A	AB	227	3.675	0.023	3.71	0.11	S
116766	10.451	0.028	9.111	0.015		1.140	0.015	G	1.10	0.02	I	9.1738	0.0015	0.018	153		9.14	9.21					1							
116767	9.201	0.024	8.650	0.022	*	0.522	0.025	T	0.59	0.03	L *	9.0506	0.0018	0.020	118	*	9.02	9.09		D	23399−4735	I 1	2 C A	AB	283	1.876	0.005	0.74	0.02	
116768	6.248	0.004	6.010	0.004		0.212	0.004	G	0.20	0.03	C	6.0514	0.0009	0.007	93		6.04	6.07		C			1							S
116769	10.666	0.034	8.916	0.014		1.459	0.029	T	1.47	0.05	L	8.8835	0.0023	0.020	134		8.85	8.93					1							
116770	10.167	0.031	8.516	0.015		1.381	0.027	T	1.35	0.03	L	8.5008	0.0020	0.016	115		8.47	8.53					1							
116771	4.741	0.003	4.190	0.003		0.507	0.006	G	0.59	0.02	A	4.2373	0.0006	0.004	54		4.23	4.24		C	23399+0538	I 1	1							S
116772	11.472	0.076	10.587	0.057		0.773	0.073	T	0.81	0.07	L	10.6930	0.0062	0.047	112		10.61	10.75		U			1							G
116773	10.684	0.034	10.238	0.036		0.421	0.045	T	0.49	0.05	L	10.2585	0.0028	0.025	101		10.23	10.30		C			1							
116774	8.102	0.012	6.984	0.007	*	1.027	0.001	G	1.00	0.00	H *	7.1030	0.0013	0.012	125	*	7.08	7.13		R	23400−4720	I 1	2 C A	AB	66	2.021	0.005	2.17	0.02	S
116775	11.325	0.057	10.715	0.054		0.530	0.020	G	0.60	0.02	H	10.8052	0.0024	0.029	149		10.75	10.87					1							G
116776	9.073	0.013	7.892	0.009		1.012	0.012	T	0.99	0.01	L	7.9522	0.0014	0.015	117		7.93	7.98					1							S
116777	7.989	0.008	6.782	0.005		1.032	0.007	T	1.00	0.01	L	6.8286	0.0011	0.008	100		6.82	6.85					1							S
116778	10.202	0.028	8.948	0.017		1.069	0.026	T	1.03	0.02	L	9.0123	0.0016	0.014	97		8.99	9.04		C			1							
116779	10.072	0.020	9.711	0.022	*	0.342	0.028	T	0.40	0.04	L *	9.7412	0.0027	0.028	161	*	9.69	9.80			23400+4943	H 1	2 C B	AB	37	0.730	0.031	3.17	0.12	G
116780	8.229	0.011	7.945	0.011		0.270	0.015	T	0.30	0.02	L	7.9849	0.0015	0.013	89		7.96	8.02		C			1							S
116781	6.916	0.006	6.541	0.005		0.355	0.007	T	0.42	0.01	L	6.5783	0.0008	0.005	73		6.57	6.59		C	23400+3739	I 1	1							S
116782						0.446	0.004	G	0.52	0.00	H	10.6807	0.0041	0.030	54		10.62	10.78		C			1							G
116783	8.252	0.011	7.625	0.009		0.579	0.012	G	0.65	0.01	H	7.6820	0.0010	0.009	90		7.67	7.70		C			1							S
116784	10.577	0.028	9.459	0.017		0.963	0.025	T	0.95	0.02	L	9.4972	0.0025	0.027	185		9.44	9.54					1							
116785	9.108	0.017	8.581	0.016	*	0.495	0.021	T	0.57	0.02	L *	8.6758	0.0020	0.018	146	*	8.65	8.72		D	23401−7107	I 1	2 C A	AB	144	7.456	0.005	0.81	0.02	S
116786	10.333	0.046	9.742	0.042		0.460	0.015	G	0.53	0.02	H	9.8086	0.0039	0.020	53		9.78	9.84					1							
116787	10.176	0.028	9.236	0.020	*	0.830	0.025	T	0.85	0.02	L *	9.2491	0.0025	0.018	107	*	9.22	9.28		D	23401+1258	I 1	2 C A	AB	4	0.736	0.007	1.55	0.02	S
116788	10.773	0.042	10.137	0.039		0.591	0.050	T	0.66	0.05	L	10.2225	0.0023	0.028	122		10.17	10.27					1							G
116789	7.774	0.009	7.741	0.010		0.035	0.012	T	0.05	0.01	L	7.7531	0.0012	0.014	104		7.74	7.78					1 G							S
116790	10.471	0.050	10.059	0.053		0.389	0.067	T	0.45	0.07	L	10.1443	0.0038	0.035	69		10.02	10.21					1 S							
116791	8.193	0.013	7.691	0.011		0.483	0.015	G	0.55	0.02	H	7.7302	0.0016	0.013	77		7.71	7.76		C			1 G							S
116792	10.132	0.028	8.431	0.012		1.420	0.024	T	1.40	0.04	L	8.4308	0.0016	0.018	90		8.40	8.45					1							S
116793	9.745	0.016	9.214	0.015		0.506	0.016	T	0.58	0.02	L	9.2680	0.0027	0.024	157		9.22	9.33					1							
116794	9.027	0.018	8.720	0.020		0.292	0.025	T	0.33	0.03	L	8.7777	0.0017	0.012	82		8.75	8.80		C			1							
116795	9.737	0.020	9.111	0.018		0.582	0.023	T	0.65	0.02	L	9.1936	0.0018	0.018	129		9.16	9.23					1							S
116796	10.130	0.036	8.884	0.021		1.070	0.015	G	1.03	0.01	H	8.9181	0.0021	0.016	73		8.88	8.95		C			1							
116797	9.138	0.014	8.855	0.015		0.269	0.019	T	0.30	0.02	L	8.9007	0.0020	0.017	125		8.87	8.93		C	23403+1946	I 1	1							
116798	8.386	0.011	7.233	0.006		0.990	0.010	T	0.97	0.01	L	7.2944	0.0010	0.009	121		7.28	7.32		C			1							S
116799	9.562	0.023	7.628	0.010		1.605	0.020	T	1.62	0.02	L	7.5539	0.0040	0.024	57		7.53	7.59		U 2			1							S
116800	9.475	0.016	8.940	0.015		0.509	0.016	T	0.58	0.02	L	9.0348	0.0016	0.017	107		8.99	9.07		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%) δ α*	π α*	π δ	$\mu_{\alpha*}$ α*	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ α*	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
116801	23 40 19.54	−26 53 16.3	8.01	H	355.081 399 99	−26.887 855 08		3.82	1.97	25.20	1.10	0.95	1.35	1.55	1.20	+16	−38	−19	−14	−20	+46	−24	−36	+28	+11	0	−1.14
116802	23 40 22.69	+18 38 35.8	8.59	H	355.094 538 42	+18.643 271 68		3.64	−9.33	−11.04	0.80	0.64	1.07	0.89	0.71	+51	+ 0	− 5	+ 0	+ 9	+ 4	+ 8	+ 5	+15	+56	1	0.80
116803	23 40 22.89	−43 15 38.9	8.75	H	355.095 395 22	−43.260 797 49		5.80	32.92	−25.30	0.72	0.66	1.17	0.80	0.62	−11	−10	+ 1	− 1	− 2	+26	− 7	−39	+ 4	−24	0	1.13
116804	23 40 23.65	+51 43 58.7	9.51	H	355.098 525 68	+51.732 979 73		3.08	−16.47	−8.83	0.88	0.94	1.47	1.11	1.24	−41	+18	− 6	+11	− 6	+22	− 4	+ 5	+ 1	−38	0	−1.62
116805	23 40 24.44	+44 20 02.3	4.15	H	355.101 840 89	+44.333 977 76		19.22	81.33	−18.96	0.39	0.50	0.65	0.43	0.50	+11	+ 9	+20	+20	− 2	− 6	+ 1	+31	+16	+ 7	0	0.84
116806	23 40 24.67	−78 12 38.3	9.56	H	355.102 771 60	−78.210 651 28		6.73	7.28	−3.98	0.91	0.82	1.02	1.06	0.98	+ 7	−16	−17	+ 2	+ 5	+ 8	+ 6	− 2	+ 7	+22	2	−0.26
116807	23 40 26.18	−26 12 03.3	7.59	H	355.109 088 79	−26.200 921 77		14.84	87.02	−124.81	0.95	0.81	1.10	1.29	1.06	+ 9	−30	− 3	+ 0	−15	+36	−20	−24	+13	+ 8	3	1.11
116808	23 40 28.07	+11 55 19.9	9.54	H	355.116 965 23	+11.922 206 29		1.55	−4.85	−23.21	1.12	0.72	1.27	1.19	0.75	+41	+ 6	+ 4	−13	+ 1	+ 8	+ 0	−18	+ 2	+37	0	−0.87
116809	23 40 28.15	−41 44 51.7	9.18	H	355.117 285 26	−41.747 687 04		0.91	43.07	16.74	0.86	0.90	1.38	1.01	0.80	+ 4	+ 2	+ 4	+14	−11	+12	−17	−35	+18	−14	0	−0.11
116810 H	23 40 28.86	+29 59 11.9	10.99	H	355.120 230 31	+29.986 642 08	A	16.96	201.24	7.08	2.70	2.11	3.02	2.71	2.09	+32	+27	+15	+26	+18	+ 1	+21	+ 8	+ 6	+39	1	−0.68
116811	23 40 28.89	−10 13 39.9	9.33	H	355.120 360 23	−10.227 744 67		−1.39	−14.29	−23.21	1.30	1.00	1.74	1.82	1.61	+35	+22	−12	+ 1	+ 6	+36	+20	+ 7	+33	+41	0	1.06
116812	23 40 29.52	−12 56 57.3	9.56	G	355.122 995 85	−12.949 238 80		9.53	−77.55	−55.88	1.34	0.91	1.58	1.70	1.26	+45	−45	−21	+ 9	+15	+19	+25	+10	−28	− 1	0	1.54
116813	23 40 29.62	−49 11 43.6	8.83	1 H	355.123 411 58	−49.195 438 76		2.48	14.41	−3.80	0.71	0.73	1.12	0.72	0.72	−	4	+ 0	−14	−27	− 6	+ 1	−	4	−	7	+ 0	−12	1	1.23
116814 H	23 40 29.82	+67 33 11.8	8.57	H	355.124 258 27	+67.553 283 31	A	6.20	26.82	4.02	1.26	1.43	1.39	1.31	1.33	−16	−	3	+13	+12	−	2	+	1	−	6	−27	+15	−	8	1	0.25
116815	23 40 31.09	+24 41 41.5	7.90	G	355.129 534 43	+24.694 848 23		8.75	54.35	25.60	0.70	0.65	1.01	0.78	0.72	+27	+10	−21	+10	−	3	+20	+	8	−24	+36	+45	0	2.83
116816	23 40 31.35	+07 50 18.2	8.82	G	355.130 610 42	+07.838 377 79		4.64	33.46	−16.32	1.14	0.90	1.24	1.43	1.22	+23	−11	−	6	−25	−	3	+20	−	3	−10	+13	+28	3	2.66
116817	23 40 31.89	+10 24 01.2	8.02	G	355.132 855 19	+10.400 330 75		1.45	−9.14	−10.69	0.87	0.53	0.97	0.97	0.49	+36	+	5	+	0	−	5	+14	+	2	+10	−23	+20	+49	0	0.06
116818 H	23 40 36.94	+84 48 51.8	9.90	H	355.153 930 69	+84.814 391 18	A	2.96	1.95	−3.67	1.51	1.44	1.61	1.88	1.43	+	2	+	3	+	4	−	5	−	7	−27	−	8	−	1	+	7	+12	0	−0.59
116819	23 40 37.67	−18 59 19.7	7.59	G	355.156 941 22	−18.988 793 03		38.11	303.19	−42.47	1.02	0.66	1.00	1.07	0.73	−	6	+16	−25	−22	+10	−	9	+11	+10	+12	−	6	0	1.43
116820	23 40 38.21	−32 04 22.8	5.30	H	355.159 217 09	−32.072 994 89		11.22	−91.41	−53.47	0.57	0.50	0.67	0.65	0.56	+30	−	6	−	4	−14	+18	−	9	+20	+15	−	8	+25	0	0.35
116821	23 40 38.37	−31 54 50.1	8.60	H	355.159 886 71	−31.913 903 43		11.74	114.92	−8.72	1.01	0.80	1.18	1.33	0.95	+20	+	1	−13	−32	+21	−18	+20	−	7	−	1	+	9	0	1.26
116822	23 40 39.50	+77 22 03.6	8.51	H	355.164 586 23	+77.367 664 17		2.49	8.06	0.76	0.69	0.63	0.77	0.77	0.65	+	4	+11	+22	−	3	+	4	+	2	+	3	+	6	−	6	−	7	0	0.16
116823	23 40 40.28	+00 24 57.7	7.40	G	355.167 849 68	+00.416 026 06		11.81	−78.18	−20.80	0.89	0.76	1.16	1.25	0.87	+29	−10	−39	+11	−11	+35	+	4	+12	−19	+	2	3	1.41
116824	23 40 40.47	+36 43 14.6	6.24	H	355.168 608 35	+36.720 710 51		22.63	234.51	23.57	0.56	0.53	0.81	0.65	0.59	+	4	+30	−16	+	6	+16	−	4	+19	+	9	+22	+27	0	1.37
116825	23 40 41.51	−34 41 46.2	8.82	H	355.172 958 97	−34.696 155 52		0.06	−0.84	−45.25	1.07	0.92	1.27	1.18	1.13	+20	+10	−	9	−28	+21	+11	+32	+31	+24	+10	0	0.96
116826 H	23 40 42.57	−00 22 58.8	8.34	G	355.177 355 71	−00.383 007 93	A	7.11	−0.85	−11.05	2.38	1.76	2.38	3.22	1.84	+29	+	8	−22	+	3	−	5	−15	−	3	+	5	+	2	−14	1	0.24
116827	23 40 42.94	+25 47 18.2	8.32	H	355.178 920 20	+25.788 395 23		1.87	5.59	−11.98	0.84	0.63	1.04	0.98	0.61	+15	+	8	−13	+26	+	8	−	8	+11	−19	+25	+22	2	1.92
116828	23 40 43.27	+55 08 56.7	7.64	H	355.180 288 51	+55.149 091 08		1.95	3.63	−5.34	0.51	0.54	0.75	0.59	0.63	−21	+15	+16	+11	+	5	+10	+	5	−	6	+	4	−24	0	0.56
116829	23 40 45.42	+70 52 50.9	9.97	H	355.189 256 86	+70.880 797 56		2.42	−4.99	3.30	0.87	0.84	1.12	0.95	0.88	−	2	+	5	+13	−	3	−	6	+	4	−	5	+	8	+20	+	1	0	1.58
116830	23 40 46.21	+52 33 37.7	7.46	H	355.192 523 76	+52.560 485 04		2.25	18.20	2.17	0.54	0.64	0.91	0.77	0.92	−42	+	2	+14	+12	+	1	−	3	+	2	−	2	+	4	−44	0	−0.45
116831	23 40 46.30	−34 22 03.6	9.27	H	355.192 918 44	−34.367 667 99		−0.40	7.59	−1.76	1.08	1.00	1.42	1.39	1.27	+21	+	6	+10	−12	+19	+27	+23	+23	+27	+11	0	0.28
*116832	23 40 47.73	−65 16 35.5	8.86	H	355.198 885 18	−65.276 522 71		2.07	18.56	−4.67	0.63	0.73	0.93	0.68	0.82	+	8	−13	−18	−	3	+	6	−	1	+	7	+18	−13	+11	0	−1.25
*116833	23 40 47.72	+13 57 10.6	8.51	H	355.198 822 55	+13.952 952 89		5.37	21.26	−43.35	1.00	0.64	1.13	1.01	0.65	+35	+15	+20	−11	+	9	+	2	+12	+	4	+18	+32	0	−0.07
116834	23 40 48.68	−07 54 50.8	7.15	H	355.202 818 87	−07.914 112 24		14.20	69.20	−40.46	0.86	0.61	0.98	1.27	0.75	+25	+10	−	7	+21	+	5	+22	+	6	+12	+22	−	5	0	1.05
116835	23 40 50.85	−56 25 14.0	7.50	H	355.211 880 16	−56.420 545 31		6.49	−45.92	−46.85	0.46	0.50	0.72	0.61	0.66	−30	−12	−	2	+	8	+13	+	7	+13	−15	−	6	−47	1	−0.31
116836	23 40 50.90	+03 37 37.9	9.07	H	355.212 095 57	+03.627 198 61		1.73	−8.60	−6.28	1.32	0.84	1.27	1.60	1.00	+	5	−	9	−19	−18	+14	+	0	+22	+25	−	3	−15	0	0.01
116837	23 40 50.96	+08 20 02.4	8.09	H	355.212 334 88	+08.333 995 04		9.23	143.65	−22.13	1.02	0.80	1.22	1.18	0.75	+32	−	9	−20	−	8	−11	+19	−	9	−47	+39	+46	0	−0.96
116838 H	23 40 51.31	+20 21 56.6	8.27	G	355.213 776 51	+20.365 733 35	A	39.51	222.98	59.83	1.64	1.40	1.85	1.46	1.13	+66	+15	+	4	+29	+	6	+	1	+	4	−	1	−	5	+37	0	−0.45
116839	23 40 56.83	−44 46 15.1	10.10	H	355.236 773 00	−44.770 870 80		1.25	−6.06	2.43	1.04	0.92	1.62	1.27	0.97	−21	−	6	−	6	−	3	+	3	+15	+	2	−34	−	2	−31	0	0.32
116840	23 40 58.71	+71 50 54.0	8.82	2 H	355.244 640 32	+71.848 335 39		2.81	−31.16	−5.57	0.69	0.63	0.82	0.91	0.76	+	4	−	4	+11	+13	−	4	+	3	−	4	+	1	+22	+13	0	0.17
116841	23 40 59.54	−11 28 13.8	9.47	G	355.248 100 26	−11.470 489 76		3.38	6.66	2.45	1.16	0.98	1.40	1.59	1.27	+39	−	6	−12	−	9	+10	+12	+15	+	6	−18	+	8	0	−0.41
116842	23 41 00.49	+35 58 18.6	7.68	G	355.252 056 18	+35.971 835 61		5.69	20.37	−1.97	0.75	0.58	0.91	1.00	0.62	−21	+	8	+	0	−29	+26	+17	+24	−16	+15	−18	0	0.22
116843	23 41 00.81	+57 50 19.5	7.22	H	355.253 394 08	+57.838 744 28		7.14	−15.50	−9.48	0.50	0.53	0.71	0.64	0.66	−19	+16	+13	+12	+	3	+	1	+	3	+13	+	0	−26	0	1.29
116844	23 41 00.98	−37 52 04.2	7.66	H	355.254 064 70	−37.867 838 34		3.29	18.41	−45.47	1.07	0.77	1.07	1.22	0.87	−15	+20	−21	−57	+35	−	7	+43	+	3	−	1	−29	2	0.85
116845	23 41 04.13	+74 24 08.3	8.74	G	355.267 217 14	+74.402 301 54		28.78	−219.99	56.89	0.78	0.69	0.88	1.15	0.86	−	9	−11	+19	−15	−	1	+21	−	4	−	6	−	3	−	7	0	−0.40
116846	23 41 04.44	−17 31 38.3	9.44	H	355.268 496 38	−17.527 293 37		1.27	−10.99	−14.68	1.43	0.95	1.60	1.75	1.54	+39	−	8	+14	+	5	+33	+47	+40	+37	+10	+32	0	1.48
116847	23 41 04.56	+41 51 02.0	6.85	H	355.268 993 12	+41.850 550 43		6.31	67.06	4.84	0.50	0.50	0.74	0.55	0.52	+	9	+	5	+13	+24	−	4	+	8	−	4	+18	+	4	+	9	2	0.45
116848	23 41 05.46	+48 47 13.6	9.12	H	355.272 742 69	+48.787 103 15		6.13	25.64	−5.50	0.80	0.96	1.46	0.98	1.31	−17	+14	+	3	−10	+16	−20	+19	+	1	+	1	−13	0	−1.03
116849 H	23 41 05.55	+46 13 06.0	6.97	H	355.273 109 50	+46.218 345 06	*	14.37	−124.57	−34.32	0.42	0.49	0.84	0.48	0.58	−11	+	9	+18	−41	−	7	−17	−	7	−13	+	9	+	0	1	−0.70
116850	23 41 06.44	+33 21 47.4	8.75	1 H	355.276 845 28	+33.363 175 06		1.33	−9.91	−13.61	0.82	0.69	0.99	0.95	0.69	+	9	+18	+	6	+29	+	6	−	2	+	9	−14	−	2	+17	0	0.87
116851	23 41 06.98	−24 09 37.6	6.61	H	355.279 074 28	−24.160 452 67		3.92	8.84	−9.75	0.83	0.69	1.08	1.51	0.87	+	7	−	2	−38	+18	−21	+50	−	6	−	3	−	5	−10	0	0.07
116852	23 41 08.27	−32 04 16.8	7.11	H	355.284 465 70	−32.071 330 43		22.13	114.41	30.09	0.73	0.62	0.83	0.82	0.71	+25	−	8	−19	−27	+28	−	7	+31	+18	−	6	+17	0	1.05
116853 H	23 41 08.87	−11 40 50.4	5.89	G	355.286 962 91	−11.680 662 48	A	8.60	68.51	3.24	0.84	0.63	0.86	1.18	0.77	+62	−	1	−	2	+29	+20	+22	+13	+11	−	9	+15	3	−0.85
116854	23 41 10.09	−06 28 40.7	8.45	H	355.292 047 53	−06.477 960 28		6.40	−0.69	−26.38	0.99	0.69	1.17	1.35	0.90	+31	−18	−16	−10	+	1	+	3	−	4	−	9	+34	−	9	0	−0.70
116855	23 41 11.09	+66 50 48.0	8.83	H	355.296 201 00	+66.846 675 44		14.71	−186.58	5.64	0.72	0.76	0.91	0.88	0.91	−16	+	1	+10	−	5	−	4	−10	−	9	−24	+10	−43	1	−0.98
116856	23 41 11.12	+68 21 35.6	7.70	H	355.296 319 19	+68.359 885 14		1.65	−2.95	−0.67	0.53	0.58	0.69	0.64	0.62	−	5	−	4	+14	+23	−15	−12	−13	+	1	+13	−	8	0	1.02
116857	23 41 12.58	+39 10 56.8	8.67	H	355.302 417 25	+39.182 446 07		3.47	23.44	5.90	0.82	0.75	1.03	0.96	0.89	+24	+10	+	4	+27	+	5	+	1	+	9	+12	+17	+37	5	0.98
*116858	23 41 13.53	+75 34 57.4	7.33	H	355.306 365 02	+75.582 621 62		4.43	−22.20	−52.05	0.56	0.54	0.63	0.66	0.63	−24	−	6	+19	−17	+	3	+	5	+	1	−20	+	7	−29	0	−1.13
*116859	23 41 13.44	−02 51 33.5	8.65	H	355.305 981 01	−02.859 300 46		2.41	−18.39	−26.81	1.13	0.76	1.36	1.71	1.23	+42	−23	−12	−	8	−	1	+30	−	3	−	7	+20	+18	0	0.07
116860	23 41 13.56	+51 41 03.9	8.28	H	355.306 497 71	+51.684 419 66		8.19	8.59	−16.30	0.60	0.69	1.07	0.76	0.90	−45	+10	+	8	+10	+	1	+16	+	0	−	5	+	5	−41	0	−0.19
116861	23 41 14.11	−80 32 58.3	9.88	H	355.308 773 90	−80.549 528 80		4.75	−12.62	14.28	0.97	0.81	1.01	1.13	0.88	+	4	−	7	−	4	+27	+18	+	1	+19	+	1	+	1	+11	0	−0.66
116862	23 41 17.50	+05 13 05.3	8.39	H	355.322 919 89	+05.218 146 71		3.08	4.13	−49.51	1.14	0.84	1.18	1.34	0.98	+21	−28	−23	−39	+18	+26	+25	+29	+	4	+13	0	1.68
116863 H	23 41 17.56	+32 33 39.9	7.44	H	355.323 161 86	+32.561 091 97	A	2.38	13.12	0.56	1.55	1.08	1.62	1.61	1.03	+16	+39	+11	+19	+24	−	1	+20	+	7	−	6	+34	1	1.20
116864	23 41 17.93	−04 25 23.5	9.01	H	355.324 696 87	−04.423 194 45		5.04	53.51	2.42	1.10	0.89	1.38	1.75	1.22	+43	−12	−34	−	3	+	4	−	1	+	5	+	3	+16	+11	0	1.62
116865	23 41 18.16	+02 28 03.6	7.45	H	355.325 663 05	+02.467 671 99		4.00	44.33	−23.09	0.85	0.83	1.11	0.98	0.90	+29	+12	−44	+23	+13	−	3	+10	+31	−19	+35	0	−0.83
116866	23 41 18.34	+03 37 48.5	10.05	H	355.326 414 54	+03.630 133 61		0.49	18.20	−9.76	1.74	1.18	1.89	2.17	1.30	+19	−10	−30	−23	+	5	−	5	+14	+	9	+	9	−18	0	−0.36
116867	23 41 18.44	−13 28 28.5	8.75	H	355.326 820 91	−13.474 579 52		7.60	33.55	14.67	1.07	0.75	1.29	1.51	1.07	+42	−28	−32	+	2	+	7	+25	+14	+	2	+	6	+16	0	−0.77
116868	23 41 18.60	−20 27 52.8	9.55	H	355.327 485 34	−20.464 678 06		4.77	−0.43	−14.09	2.07	1.13	1.81	3.04	1.46	−17	+25	−20	−28	+12	+	8	+21	−10	+15	−32	0	−0.69
116869	23 41 19.94	+14 46 37.8	11.70	H	355.333 071 41	+14.777 161 27	B	44.81	−1.01	25.70	101.42	56.36	60.22	63.61	35.37	+35	+25	+24	−31	+	5	−16	+	7	−	4	+	0	+29	1	0.00
116870	23 41 20.23	+46 51 36.3	7.42	1 G	355.334 300 45	+46.860 075 48		2.45	5.39	−9.12	0.43	0.51	0.84	0.42	0.61	−15	+	7	+25	−25	−	7	−	4	−10	−11	+	7	−10	0	0.25
116871	23 41 20.43	+14 46 19.8	8.66	H	355.335 109 78	+14.772 168 38	A	5.55	46.45	3.17	2.78	1.68	2.45	2.49	1.55	+38	+31	+29	−31	+	7	−18	+11	+	2	−	4	+31	1	0.00
116872	23 41 20.82	−40 25 00.2	9.21	H	355.336 742 08	−40.416 713 03		5.45	−65.66	−42.24	0.73	0.94	1.20	0.79	0.92	+30	+12	−	7	+23	−	1	+22	+	1	−	3	+15	+24	0	1.25
116873	23 41 22.53	+52 26 02.4	8.22	H	355.343 861 81	+52.434 009 72		2.03	−3.71	−7.15	0.62	0.69	1.04	0.87	0.92	−42	−11	+25	+11	−	6	+	3	−	8	+	4	+10	−38	0	0.05
116874	23 41 22.93	−20 05 08.3	9.54	G	355.345 550 37	−20.085 625 50		14.62	−65.85	−210.75	1.75	1.07	1.56	2.00	1.17	−16	+17	−26	−51	+10	+14	+20	−33	+24	−19	0	1.92
116875	23 41 24.49	−52 08 13.8	9.88	H	355.352 046 09	−52.137 157 68		2.82	−28.96	−1.61	1.17	0.99	1.78	1.33	1.34	−31	−	5	−14	−24	−	5	+	7	−	9	−19	+21	−13	1	2.22
116876	23 41 26.80	+49 30 44.9	6.26	H	355.361 657 97	+49.512 460 55		4.19	−14.01	−19.50	0.37	0.48	0.73	0.41	0.61	−26	+25	+	0	+12	+	6	−	2	+11	+	7	+18	−16	0	−1.37
116877	23 41 27.10	+06 25 09.3	12.13	G	355.362 914 83	+06.419 251 13		17.57	221.67	−155.27	3.75	2.77	4.51	4.93	3.40	+18	−	1	−22	+	7	−	6	+30	+	2	+13	+19	+	8	0	2.62
116878 H	23 41 28.10	−11 57 30.8	9.74	H	355.367 072 66	−11.958 541 82	A	5.02	−25.56	−25.27	5.09	3.66	3.31	6.11	2.99	+30	+	5	−	5	+	1	+10	+	6	+11	+	6	−18	−41	1	−1.18
116879	23 41 28.29	−72 26 28.2	10.07	H	355.367 891 83	−72.441 169 82		8.75	29.69	−33.52	0.99	1.00	1.25	1.18	1.17	−	8	+11	−24	+	6	−	3	+	5	−	3	+15	−	2	−10	0	−0.83
116880 H	23 41 28.44	−41 34 49.0	7.81	G	355.368 485 51	−41.580 278 47	A	10.29	89.04	−2.59	1.40	1.76	2.09	1.36	1.37	+19	+	5	+	4	+	6	−	9	+24	−12	−31	−	6	−	1	1	−0.20
116881	23 41 28.78	+31 28 02.6	8.21	H	355.369 915 24	+31.467 379 72		4.12	−29.23	−18.96	0.85	0.63	0.99	1.19	0.70	+	1	+	4	−	6	−10	+18	+13	+14	−	3	+	2	+19	0	0.65
116882	23 41 29.62	+40 33 16.8	6.92	H	355.373 428 22	+40.554 667 53		9.27	−15.26	−73.04	0.59	0.55	0.81	0.63	0.67	+14	+15	+	6	+61	+	5	+	9	+	8	+32	+	2	+27	0	−1.14
116883	23 41 29.69	+47 35 44.0	8.96	3 H	355.373 693 98	+47.595 557 50		1.33	2.32	−20.87	0.84	0.87	1.46	1.00	1.18	−19	+10	+17	−34	−11	−18	−12	−37	+	0	−10	0	−0.03
116884 H	23 41 30.02	−25 40 14.2	9.30	H	355.375 077 49	−25.670 604 52	A	−0.32	14.87	−31.04	2.84	2.46	2.83	3.55	2.56	+22	−23	−37	+36	−14	+15	−17	−20	+22	+16	2	−0.26
116885	23 41 30.11	−34 11 34.4	8.88	H	355.375 438 43	−34.192 883 48		5.60	−22.00	−13.50	1.04	0.85	1.29	1.33	1.04	+21	+	6	+	3	−24	+30	+28	+36	+15	+20	+11	0	1.60
116886	23 41 33.51	+10 12 57.1	9.91	3 H	355.389 620 06	+10.215 871 70		−0.05	−3.08	−10.55	1.23	0.77	1.46	1.39	0.71	+36	+	4	+13	−16	+	3	+31	−	2	−32	+34	+51	0	0.25
116887	23 41 33.74	−73 46 49.9	8.90	H	355.390 581 74	−73.780 531 01		4.36	33.93	−3.41	0.77	0.73	0.94	0.78	0.74	+	8	+	6	−26	−26	+	9	+	4	+	6	−10	+	5	+35	0	−1.53
116888	23 41 34.01	+24 13 25.9	7.61	H	355.391 687 78	+24.223 848 20		4.27	52.55	−14.93	0.66	0.55	0.93	0.68	0.57	+24	+13	−19	+10	+	0	+	0	+	7	−27	+44	+27	0	1.27
116889	23 41 34.51	−18 01 36.8	5.36	1 H	355.393 807 54	−18.026 901 34		5.58	−40.82	−72.28	0.67	0.46	0.75	0.76	0.57	+24	+	1	−	3	+	8	+	3	+27	+	4	−	9	+	5	+	7	0	0.01
116890	23 41 34.86	−47 59 20.8	9.90	H	355.395 246 74	−47.989 122 79		15.30	−104.60	−146.97	1.19	0.95	1.49	1.28	0.94	−	9	−	4	−	4	+	1	−	7	−	9	−13	+21	−23	0	−0.46
116891	23 41 35.94	−08 49 29.9	8.60	H	355.399 746 41	−08.824 984 96		7.42	−50.80	−71.84	1.09	0.83	1.35	1.57	1.32	+32	−	4	−	9	−12	+	8	+15	+11	+	6	+34	+22	0	0.97
116892	23 41 36.79	−37 26 00.3	8.04	H	355.403 298 65	−37.433 418 57		5.05	30.61	−12.85	1.02	0.76	1.10	1.20	0.84	−	9	+22	−21	−47	+30	−13	+33	+	4	−	5	−23	3	−0.37
116893	23 41 37.35	−16 35 36.1	10.54	H	355.405 636 67	−16.593 359 61		10.57	145.14	−174.73	1.84	1.20	1.87	2.78	1.94	+46	−	8	+	2	+	2	+34	+	8	+43	+30	+14	+10	0	−0.16
116894	23 41 38.39	−50 25 26.2	8.06	H	355.409 945 19	−50.423 941 95		5.48	−5.95	−11.17	0.65	0.74	1.04	0.81	0.84	+	2	−17	−32	−	3	+	5	+	0	+	5	+	9	+	1	−	2	0	0.29
116895 H	23 41 40.29	+48 24 34.8	8.06	G	355.417 874 51	+48.409 663 39	*	3.82	−26.23	−18.79	0.68	0.69	1.17	0.76	0.78	−17	+	8	+29	−13	+	4	+17	+	0	+	2	+15	−21	0	1.53
116896	23 41 40.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
116801	9.379	0.027	8.132	0.017		1.064	0.025	T	1.03	0.02	L	8.1794	0.0023	0.011	47		8.15	8.20		C			1							S
116802	9.903	0.020	8.686	0.013		1.040	0.019	T	1.01	0.02	L	8.7546	0.0018	0.018	130		8.71	8.78					1							S
116803	10.032	0.017	8.846	0.011		1.016	0.016	T	0.99	0.01	L	8.9151	0.0019	0.021	167		8.88	8.95		C			1							
116804	9.573	0.015	9.545	0.020		0.031	0.023	T	0.05	0.02	L	9.5305	0.0025	0.034	170		9.47	9.58					1 S							G
116805	4.059	0.002	4.131	0.002		−0.071	0.006	G	−0.06	0.03	C	4.1257	0.0004	0.004	109		4.12	4.13		C	23404+4420	I 1	1 S							S
116806	10.187	0.023	9.619	0.021		0.535	0.023	T	0.61	0.02	L	9.6721	0.0023	0.023	125		9.63	9.71		C			1							
116807	8.135	0.015	7.630	0.016		0.445	0.011	G	0.51	0.01	H	7.6903	0.0017	0.013	50		7.68	7.72					1							S
116808	11.591	0.074	9.656	0.021		1.606	0.061	T	1.63	0.06	L	9.6506	0.0023	0.022	152		9.61	9.69		C			1							
116809	10.435	0.034	9.313	0.022		0.966	0.032	T	0.95	0.03	L	9.3481	0.0027	0.025	107		9.31	9.39					1							
116810	12.027	0.144	10.956	0.094	*	0.927	0.131	T	0.92	0.10	L *	11.1541	0.0066	0.047	99	*	11.03	11.24			23405+2959	H 1	2 C C	AB	246	0.840	0.046	2.70	0.17	G
116811	10.580	0.050	9.426	0.031		0.991	0.046	T	0.97	0.04	L	9.4955	0.0037	0.020	64		9.46	9.54		C			1							
116812	10.214	0.039	9.595	0.035		0.543	0.015	G	0.62	0.01	H	9.6812	0.0029	0.018	69		9.62	9.71		C			1							
116813	10.076	0.018	8.935	0.012		0.981	0.017	T	0.96	0.01	L	8.9944	0.0020	0.023	163		8.95	9.03		U			1							
116814	9.170	0.014	8.775	0.015	A	0.800	0.495	G	0.43	0.08	L *	8.6512	0.0016	0.015	122	*	8.62	8.68		D	23405+6733	I 1	2 C A	AB	300	1.288	0.006	0.85	0.02	S
116815	8.392	0.011	7.948	0.011		0.433	0.015	G	0.50	0.02	H	8.0073	0.0016	0.014	94		7.98	8.03			23405+2442	I 1	1							S
116816	9.322	0.026	8.848	0.026		0.465	0.015	G	0.54	0.02	H	8.9191	0.0030	0.015	53		8.91	8.99					1							
116817	8.530	0.008	8.076	0.008		0.438	0.015	G	0.51	0.02	H	8.1202	0.0013	0.011	151		8.10	8.14					1							S
116818	11.525	0.072	10.194	0.036	*	1.129	0.063	T	1.09	0.07	L *	10.0691	0.0027	0.024	118	*	10.03	10.11		R	23406+8449	H 1	2 C A	AB	146	1.002	0.013	2.00	0.06	G
116819	8.492	0.016	7.679	0.010		0.731	0.006	G	0.78	0.00	H	7.7236	0.0021	0.012	61		7.70	7.75					1							S
116820	6.534	0.004	5.413	0.003		0.965	0.004	T	0.95	0.00	L	5.4652	0.0006	0.005	109		5.46	5.48		C			1							S
116821	9.193	0.015	8.670	0.015		0.500	0.016	T	0.57	0.02	L	8.7141	0.0021	0.015	94		8.69	8.74					1							S
116822	10.225	0.032	8.688	0.016		1.291	0.028	T	1.25	0.03	L	8.6677	0.0022	0.018	133		8.64	8.71					1							
116823	8.970	0.024	7.563	0.014		1.170	0.015	G	1.11	0.06	F	7.5644	0.0020	0.009	47		7.55	7.58			23407+0025	I 1	1 S							S
116824	6.717	0.005	6.282	0.004		0.424	0.005	T	0.49	0.01	L	6.3308	0.0009	0.006	72		6.32	6.34		C			1							S
116825	10.140	0.030	8.917	0.019		1.080	0.037	G	1.04	0.03	H	8.9659	0.0021	0.017	79		8.93	8.99		C			1							S
116826	8.687	0.028	8.239	0.021	*	0.393	0.015	G	0.46	0.02	H *	8.4321	0.0027	0.012	49	*	8.41	8.46		D	23407−0023	I 1	2 C A	AB	222	2.454	0.006	0.43	0.02	S
116827	10.536	0.044	8.528	0.016		1.664	0.037	T	1.69	0.04	L	8.4243	0.0019	0.018	79		8.40	8.46					1							
116828	7.665	0.006	7.642	0.008		0.026	0.009	T	0.04	0.01	L	7.6524	0.0011	0.010	144		7.63	7.67					1							S
116829	11.597	0.100	10.082	0.041		1.274	0.085	T	1.23	0.09	L	10.1256	0.0024	0.021	122		10.09	10.16		C			1							G
116830	8.685	0.010	7.563	0.007		0.966	0.010	T	0.95	0.01	L	7.6233	0.0012	0.011	157		7.60	7.64					1							S
116831	11.423	0.088	9.443	0.025		1.641	0.073	T	1.66	0.07	L	9.3828	0.0025	0.026	75		9.35	9.43					1							
116832	8.915	0.010	8.856	0.013		0.059	0.015	T	0.07	0.01	L	8.8837	0.0018	0.023	139		8.85	8.92					1							
116833	9.844	0.025	8.603	0.015		1.059	0.023	T	1.03	0.02	L	8.6765	0.0020	0.014	98		8.65	8.70					1							
116834	7.728	0.008	7.199	0.008		0.483	0.010	G	0.55	0.01	H	7.2559	0.0011	0.009	70		7.24	7.27					1							S
116835	7.597	0.005	7.513	0.005		0.076	0.006	T	0.09	0.01	L	7.5343	0.0010	0.013	204		7.51	7.56		C			1 G							S
116836	8.991	0.018	9.056	0.024		−0.055	0.027	T	−0.03	0.03	L	9.0581	0.0029	0.016	50		9.04	9.10		C			1							
116837	8.576	0.014	8.142	0.014		0.410	0.018	T	0.48	0.02	L	8.1849	0.0024	0.015	65		8.17	8.21		C			1							S
116838	9.753	0.017	8.465	0.011	A	1.113	0.002	G	1.19	0.00	I *	8.4104	0.0011	0.012	125	*	8.39	8.43		D	23409+2022	I 1	2 C A	AB	184	1.309	0.023	2.28	0.04	
116839	10.648	0.031	10.169	0.033		0.463	0.035	T	0.53	0.04	L	10.2081	0.0025	0.028	142		10.15	10.25		C			1							
116840	9.238	0.014	8.859	0.014		0.359	0.018	T	0.42	0.02	L	8.9063	0.0021	0.023	121		8.86	8.94		U 2			1							
116841	10.614	0.046	9.562	0.030		0.908	0.020	G	0.91	0.01	H	9.6358	0.0018	0.017	77		9.61	9.67					1							
116842	7.723	0.009	7.686	0.009		0.020	0.003	G	0.04	0.00	H	7.7007	0.0013	0.007	75		7.69	7.71		C			1							S
116843	7.464	0.005	7.241	0.006		0.193	0.003	G	0.21	0.00	H	7.2807	0.0008	0.009	133		7.27	7.30					1							S
116844	9.471	0.019	7.821	0.010		1.380	0.017	T	1.35	0.02	L	7.8060	0.0015	0.012	76		7.78	7.83		C			1							S
116845	9.722	0.020	8.857	0.015		0.777	0.011	G	0.81	0.01	H	8.8746	0.0019	0.014	107		8.85	8.90		C	23411+7424	I 1	1 S							
116846	10.840	0.069	9.552	0.038		1.096	0.062	T	1.06	0.06	L	9.6128	0.0033	0.025	93		9.57	9.67					1							
116847	8.719	0.012	7.014	0.006		1.423	0.011	T	1.41	0.02	L	6.9903	0.0011	0.011	102		6.97	7.01					1							S
116848	9.685	0.016	9.174	0.016		0.480	0.020	T	0.55	0.02	L	9.2214	0.0031	0.025	130		9.18	9.28					1							
116849	7.540	0.004	7.032	0.004	*	0.477	0.005	T	0.55	0.01	L *	7.0789	0.0007	0.009	204	*	7.07	7.10		D	23411+4613	I 1	2 C S A	AB	103	0.124	0.004	0.36	0.24	S
116850	10.935	0.058	8.937	0.019		1.692	0.050	T	1.85	0.13	O	8.8472	0.0036	0.026	81		8.80	8.87		U			1							
116851	8.665	0.015	6.789	0.007		1.592	0.014	T	1.84	0.05	O	6.6979	0.0018	0.010	53		6.68	6.72					1							S
116852	7.932	0.009	7.186	0.007		0.667	0.005	G	0.73	0.00	H	7.2486	0.0009	0.010	107		7.23	7.27		C			1							S
116853	7.143	0.006	6.001	0.003	*	0.984	0.000	G	0.97	0.07	F *	6.0624	0.0009	0.007	80	*	6.05	6.07		C	23411−1141	H 1	2 C A	AB	183	0.913	0.029	3.96	0.11	S
116854	8.958	0.015	8.505	0.015		0.427	0.019	T	0.49	0.02	L	8.5505	0.0021	0.013	72		8.53	8.58		C			1							S
116855	9.609	0.020	8.897	0.016		0.657	0.015	G	0.72	0.01	H	8.9670	0.0014	0.016	123		8.93	9.00					1							
116856	8.117	0.009	7.741	0.009		0.356	0.012	T	0.42	0.01	L	7.7803	0.0012	0.011	115		7.76	7.80					1							S
116857	10.377	0.032	8.816	0.016		1.310	0.028	T	1.27	0.03	L	8.8227	0.0016	0.018	93		8.79	8.85		C			1							
116858	8.667	0.010	7.444	0.007		1.045	0.010	T	1.02	0.01	L	7.5004	0.0009	0.009	113		7.49	7.53		C			1							S
116859	10.207	0.035	8.801	0.017		1.188	0.031	T	1.15	0.03	L	8.8192	0.0023	0.015	88		8.78	8.85					1							
116860	8.671	0.008	8.318	0.009		0.342	0.015	G	0.40	0.02	H	8.3627	0.0016	0.017	183		8.34	8.39					1							
116861	10.411	0.027	9.935	0.027		0.448	0.035	T	0.52	0.04	L	9.9845	0.0021	0.029	141		9.93	10.06					1							
116862	10.067	0.034	8.561	0.017		1.267	0.030	T	1.23	0.03	L	8.5539	0.0019	0.011	63		8.53	8.57		C			1							
116863	7.576	0.010	7.495	0.013	*	0.080	0.015	T	0.09	0.02	L *	7.4751	0.0011	0.010	80	*	7.46	7.50		D	23413+3234	I 1	2 C A	AB	228	0.836	0.004	0.99	0.02	S
116864	10.238	0.038	9.133	0.026		0.953	0.036	T	0.94	0.03	L	9.1676	0.0026	0.018	77		9.13	9.20		C	23413−0425	I 1	1							
116865	9.198	0.023	7.614	0.012		1.328	0.020	T	1.29	0.02	L	7.6028	0.0012	0.011	52		7.58	7.62		D			1							S
116866	10.540	0.057	10.061	0.059		0.346	0.072	G	0.41	0.10	R	10.1339	0.0047	0.026	48		10.11	10.19		C			1							
116867	9.183	0.017	8.776	0.018		0.398	0.021	T	0.46	0.02	L	8.8399	0.0022	0.017	76		8.81	8.87					1							S
116868	10.017	0.031	9.599	0.034		0.409	0.038	T	0.48	0.04	L	9.6476	0.0027	0.024	65		9.60	9.69		C			1							S
116869	12.314	0.286	10.965	0.133	B	1.143	0.247	T	1.11	0.22	L	11.5466	0.2454			B				D	23413+1446	I 2	1 C I B							
116870	7.347	0.004	7.412	0.005		−0.052	0.002	G	−0.03	0.00	H	7.4096	0.0013	0.015	194		7.39	7.44	1.78	P 1 A			1							S
116871	9.118	0.022	8.683	0.022	A	0.411	0.029	T	0.48	0.03	L	8.7516	0.0220	0.018	91	A	8.72	8.79		D	23413+1446	I 2	1 C P B							S
116872	10.489	0.032	9.326	0.020		0.991	0.030	T	0.97	0.02	L	9.3561	0.0021	0.020	113		9.33	9.39					1 S							
116873	8.247	0.007	8.206	0.009		0.040	0.015	G	0.06	0.01	H	8.2423	0.0014	0.018	163		8.21	8.27					1							
116874	10.531	0.037	9.646	0.029		0.789	0.003	G	0.82	0.00	H	9.6797	0.0030	0.023	65		9.65	9.72		C			1							
116875	10.523	0.024	9.950	0.023		0.539	0.025	T	0.61	0.03	L	10.0014	0.0030	0.037	188		9.94	10.07					1							
116876	6.483	0.003	6.286	0.003		0.182	0.002	G	0.20	0.00	H	6.3238	0.0006	0.007	184		6.31	6.33		C			1							S
116877						1.329	0.015	G	1.54	0.02	I	12.2180	0.0168	0.094	42		12.07	12.38					1							G P
116878	10.478	0.041	9.920	0.040	*	0.527	0.042	T	0.60	0.04	L *	9.8522	0.0029	0.020	74	*	9.80	9.89		D	23415−1157	I 1	2 C A	AB	107	0.396	0.008	0.38	0.05	
116879	10.921	0.047	10.119	0.037		0.726	0.046	T	0.78	0.03	L	10.2176	0.0029	0.032	121		10.16	10.27					1							
116880	8.443	0.013	7.942	0.012	*	0.482	0.006	G	0.55	0.01	H *	7.9186	0.0012	0.013	138	*	7.90	7.94		D	23415−4135	I 1	2 C A	AB	192	0.813	0.003	0.24	0.01	S
116881	9.549	0.020	8.327	0.013		1.044	0.019	T	1.01	0.02	L	8.3774	0.0014	0.013	85		8.34	8.41					1							
116882	7.566	0.007	6.979	0.005		0.548	0.008	T	0.62	0.01	L	7.0364	0.0007	0.007	105		7.02	7.05					1							S
116883	11.169	0.053	9.147	0.016		1.675	0.044	T	1.70	0.04	L	9.0693	0.0493	0.298	136		8.77	9.54	110.80	P 1 A			1							
116884	10.294	0.042	9.510	0.033	A	1.600	0.495	G	0.83	0.07	B *	9.4461	0.0024	0.025	56	*	9.41	9.49		R	23415−2540	I 1	2 C A	AB	286	2.116	0.015	1.78	0.08	
116885	9.392	0.020	8.930	0.020		0.449	0.022	T	0.52	0.02	L	8.9815	0.0019	0.017	79		8.96	9.03					1							S
116886	10.144	0.021	9.959	0.028		0.170	0.034	T	0.19	0.04	L	9.9677	0.0027	0.039	154		9.92	10.45		P 1 A			1							
116887	10.351	0.030	9.015	0.016		1.133	0.027	T	1.10	0.03	L	9.0712	0.0022	0.022	125		9.03	9.11					1							P
116888	7.868	0.008	7.644	0.009		0.214	0.011	T	0.24	0.01	L	7.6790	0.0017	0.012	93		7.66	7.70					1 S							S
116889	7.425	0.007	5.532	0.003		1.580	0.006	G	1.64	0.03	C	5.4718	0.0011	0.009	90		5.46	5.48		M			1							S
116890	10.972	0.044	9.976	0.030		0.859	0.041	T	0.87	0.03	L	10.0390	0.0035	0.032	115		9.97	10.10					1							
116891	9.154	0.019	8.650	0.018		0.474	0.024	T	0.55	0.03	L	8.7017	0.0018	0.014	65		8.68	8.74		C			1							S
116892	9.168	0.016	8.140	0.012		0.895	0.015	T	0.90	0.01	L	8.2025	0.0010	0.012	66		8.18	8.23		D			1							S
116893	11.739	0.116	10.638	0.068		0.935	0.003	G	0.98	0.00	I	10.6871	0.0038	0.035	91		10.62	10.74		C			1							G
116894	9.300	0.014	8.163	0.009		0.978	0.013	T	0.96	0.01	L	8.2218	0.0022	0.017	127		8.19	8.25					1							S
116895	8.587	0.009	8.111	0.008	*	0.505	0.015	G	0.58	0.02	H *	8.1619	0.0017	0.020	144	*	8.13	8.19			23417+4825	H 1	2 C S A	AB	104	0.146	0.015	0.90	0.54	S
116896	11.207	0.047	10.581	0.043		0.582	0.055	T	0.65	0.05	L	10.7018	0.0053	0.038	118		10.65	10.77					1							G
116897	10.865	0.030	9.154	0.012		1.428	0.026	T	1.42	0.04	L	9.1197	0.0018	0.025	212		9.07	9.17					1							
116898											T	11.7349	0.0087	0.091	181		11.48	11.86		U			1 S							G
116899	10.144	0.027	8.865	0.016		1.089	0.025	T	1.05	0.03	L	8.8888	0.0024	0.024	123		8.85	8.94					1							
116900	10.003	0.027	8.467	0.014		1.290	0.024	T	1.25	0.03	L	8.4354	0.0021	0.014	72		8.42	8.47		C			1							S

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
116901	23 41 45.80	−17 48 59.5	4.82	H	355.440 822 63	−17.816 533 27		5.07	13.93	0.11	0.72	0.50	0.83	0.86	0.62	+22 − 1 + 6 −17 + 9 +35 +11 −10 − 3 − 2	0	−0.22
116902	23 41 46.35	+69 23 34.8	8.99	H	355.443 142 53	+69.392 986 75		3.43	−4.15	−1.82	0.67	0.66	0.87	0.77	0.70	+ 3 + 0 +13 + 1 + 5 +10 + 5 − 5 + 8 +14	0	−0.26
*116903	23 41 46.51	−35 13 01.9	9.09	H	355.443 790 87	−35.217 201 07		−0.73	−2.73	−5.13	1.00	1.04	1.28	1.22	1.20	+27 − 5 −23 −19 +18 +12 +27 +31 + 2 +14	0	−0.14
*116904	23 41 46.39	−17 47 00.5	8.52	2 G	355.443 310 34	−17.783 465 50		3.58	−27.07	−28.87	0.95	0.65	1.15	1.23	0.88	+30 − 7 − 3 −11 +10 +39 +14 − 4 +14 + 7	0	0.47
116905	23 41 50.92	−42 44 53.0	10.94	G	355.462 181 21	−42.748 066 86		26.69	−193.47	−322.81	1.28	1.10	1.89	1.49	1.06	− 4 − 1 − 6 − 6 − 5 +11 − 9 −37 +11 −23	1	1.97
116906	23 41 51.62	−05 59 07.8	7.68	G	355.465 063 34	−05.985 487 32		23.84	−145.41	−111.10	0.89	0.63	1.11	1.25	0.80	+32 − 2 −15 − 7 − 3 +35 + 2 − 9 +27 +10	0	−0.88
116907	23 41 51.96	+14 06 26.2	11.98	G	355.466 514 48	+14.107 274 08		21.63	180.87	−68.48	3.59	2.12	3.96	4.26	2.36	+35 − 1 +12 −31 + 4 + 9 + 5 − 5 +10 +27	4	0.17
116908	23 41 53.58	+68 40 18.8	7.88	H	355.473 229 92	+68.671 885 60		3.80	14.12	2.38	0.52	0.54	0.66	0.63	0.62	+ 2 + 5 +15 +12 −16 −10 −14 + 6 + 1 + 2	3	1.64
116909	23 41 54.14	−48 38 33.6	8.73	H	355.475 571 93	−48.642 676 88		3.22	−27.22	−19.36	0.88	0.69	1.05	0.84	0.71	−10 − 1 −12 −13 − 1 +18 + 2 − 5 + 4 −15	0	−0.45
116910	23 41 54.24	−35 58 39.2	9.39	2 H	355.476 003 73	−35.977 564 35		16.04	69.90	−68.05	0.98	0.94	1.17	1.10	0.97	+29 − 2 −18 − 7 +26 −13 +26 +31 − 6 +21	0	−0.54
116911	23 41 54.30	+48 21 41.3	10.87	H	355.476 253 73	+48.361 471 21		3.49	−13.34	−6.52	1.40	1.35	2.31	1.71	1.83	−13 + 7 +12 −42 − 1 + 0 − 5 −14 −12 − 7	1	1.32
116912	23 41 54.56	+57 15 35.9	6.24	H	355.477 312 87	+57.259 965 83		3.68	6.78	−5.01	0.45	0.47	0.64	0.60	0.60	−23 + 0 + 9 − 3 + 4 +15 + 2 + 5 + 2 −16	0	0.04
116913	23 41 54.79	−74 53 42.0	9.61	H	355.478 297 77	−74.894 999 18		5.89	64.40	−4.05	0.89	0.77	1.03	1.08	0.89	− 2 + 7 −10 −19 −10 −15 −13 − 8 −16 + 4	0	0.04
116914	23 41 55.25	+00 00 08.8	8.79	H	355.480 226 47	+00.002 431 93		19.84	242.77	−35.86	1.20	1.07	1.29	1.56	1.53	+31 − 3 − 1 +21 +24 +15 +25 +47 +11 +33	0	−0.32
116915	23 41 55.68	−01 05 53.0	9.48	H	355.482 002 67	−01.098 059 41		2.63	46.54	−42.80	1.79	1.26	1.84	2.31	2.09	+10 +16 −18 −42 +23 −23 +25 +21 +32 + 9	0	−1.67
116916	23 41 55.73	+24 47 33.7	8.50	H	355.482 206 08	+24.792 682 97		3.42	11.30	−15.10	0.86	0.66	1.12	0.91	0.72	+17 + 9 −18 −13 + 1 + 8 + 6 −25 +37 +29	3	1.07
116917	23 41 56.25	+04 57 55.5	9.24	H	355.484 376 99	+04.965 405 59		1.66	21.00	−2.38	3.06	2.39	3.17	3.43	2.52	+17 − 2 −10 −34 +15 +11 +19 + 8 + 0 + 7	0	
116918	23 41 56.71	+07 15 02.3	5.89	G	355.486 275 44	+07.250 645 91		9.64	−27.64	−40.94	0.93	0.58	0.95	1.07	0.71	+13 −24 −18 −42 + 4 +32 + 8 + 0 +20 +11	3	2.40
116919	23 41 56.72	−50 15 50.2	10.04	H	355.486 318 76	−50.263 947 40		1.38	36.23	−1.37	1.01	1.17	1.66	1.30	1.39	+ 3 − 3 −27 −12 + 6 + 2 + 5 + 6 +14 + 6	0	1.29
116920 H	23 41 57.20	−42 16 07.4	7.11	G	355.488 336 00	−42.268 722 03	A	6.17	32.81	−42.68	0.80	0.67	1.12	0.84	0.58	− 3 − 2 − 6 + 8 −10 + 5 −13 −38 +19 −17	0	0.53
116921	23 41 57.74	+34 31 46.6	9.03	H	355.490 563 45	+34.529 610 18		3.72	40.46	14.01	0.96	0.72	1.18	1.12	0.76	− 6 +33 + 5 +13 + 8 +20 + 6 − 9 + 2 − 8	4	1.55
116922	23 41 58.15	−15 27 47.9	8.18	G	355.492 308 72	−15.463 297 87		4.57	7.89	−9.30	1.14	0.67	1.14	1.52	1.03	+10 + 3 −12 −25 +16 +19 +26 +10 +17 − 1	0	0.69
116923	23 42 00.28	+12 44 37.7	8.38	G	355.501 185 56	+12.743 818 99		4.04	−21.04	−10.87	0.93	0.55	1.07	0.89	0.60	+37 +10 + 0 +22 + 8 −15 +12 − 5 +21 +37	0	0.09
116924	23 42 00.99	−67 46 14.1	7.99	H	355.504 105 82	−67.770 576 09		5.24	59.04	−18.43	0.57	0.57	0.76	0.59	0.58	− 5 +12 −21 − 7 + 7 −10 + 3 + 7 − 7 + 4	0	−2.73
116925	23 42 01.89	−29 37 27.0	7.81	H	355.507 863 00	−29.624 162 33		2.13	−22.06	−13.82	0.80	0.66	0.97	0.99	0.82	+36 −14 −17 −24 +19 + 4 +21 − 6 +13 +19	0	0.20
116926 H	23 42 02.13	+20 17 47.3	7.62	G	355.508 878 35	+20.296 468 42	A	8.15	−58.34	−81.86	2.06	1.90	2.12	1.89	1.68	+29 +21 +11 +22 + 1 +17 + 2 − 7 + 7 +64	2	1.25
116927	23 42 02.80	−69 26 13.2	7.76	H	355.511 672 00	−69.436 994 33		3.22	52.01	−1.02	0.56	0.58	0.74	0.59	0.65	−10 + 6 −24 −20 + 2 + 2 + 2 −14 − 8 + 4	0	0.34
116928	23 42 02.88	+01 46 49.5	4.49	H	355.512 007 41	+01.780 417 20		32.38	−129.55	−154.87	0.71	0.59	0.84	0.77	0.63	+22 + 3 −42 +28 +14 − 4 +13 +31 −13 +27	0	0.72
116929	23 42 03.57	+25 53 08.1	8.51	H	355.514 854 17	+25.885 591 56		3.32	2.07	−13.15	0.90	0.64	1.06	1.01	0.69	+13 + 2 −20 +26 + 0 − 1 + 7 −26 +32 +27	0	1.15
116930	23 42 06.65	−53 03 11.5	8.65	H	355.527 702 89	−53.053 202 00		4.37	−13.41	−31.47	0.65	0.74	1.20	0.89	0.99	−42 −23 + 3 +32 −13 − 4 − 2 −28 +12 −20	0	−0.02
116931	23 42 08.91	+47 03 48.3	8.14	H	355.537 135 89	+47.063 403 56		0.71	−30.85	−4.75	0.54	0.63	1.10	0.51	0.76	−19 + 6 +30 −17 − 7 + 0 −13 − 3 + 0 −13	3	−0.68
116932	23 42 09.19	+74 07 46.2	7.89	H	355.538 305 28	+74.129 487 94		2.20	16.20	9.98	0.66	0.60	0.75	0.99	0.71	−13 −23 +25 + 3 +15 + 7 +11 − 5 + 6 + 7	1	−0.24
116933	23 42 09.19	+23 59 34.8	8.49	H	355.538 307 55	+23.992 993 10		8.49	66.60	8.30	0.80	0.64	1.07	0.89	0.68	+20 + 7 −17 +20 − 4 + 6 + 2 −27 +35 +29	0	0.39
116934	23 42 09.35	−32 38 31.6	9.14	H	355.538 945 49	−32.642 102 36		1.43	8.03	3.17	1.05	0.91	1.27	1.20	1.14	+25 +11 − 2 −35 +24 − 3 +32 +15 +26 +16	0	−0.34
116935	23 42 09.89	−56 22 47.8	7.97	H	355.541 198 68	−56.379 940 04		5.68	−3.94	2.34	0.55	0.61	0.88	0.71	0.68	−28 −13 + 0 +27 − 3 + 7 − 5 + 2 − 8 −37	0	−0.66
116936	23 42 10.74	−02 34 34.4	10.30	H	355.544 736 74	−02.576 233 83		42.42	−192.64	−259.06	1.67	1.27	2.07	2.16	1.91	+45 +11 −16 −16 − 7 +15 + 1 −12 +24 +39	0	0.46
116937	23 42 12.48	−53 25 24.0	7.99	H	355.551 984 71	−53.423 341 05		28.89	188.38	10.64	0.58	0.66	1.00	0.85	0.73	−36 − 5 − 8 +45 −16 + 3 − 6 −31 +14 −23	0	0.04
116938	23 42 13.72	+32 28 35.0	9.11	H	355.557 175 55	+32.476 389 18		0.29	−10.11	−2.97	1.05	0.72	1.17	1.30	0.79	− 5 +25 − 7 + 5 + 9 +14 +11 −15 + 8 + 1	0	−1.01
*116939	23 42 14.66	−82 02 36.7	9.80	H	355.561 102 47	−82.043 539 85		19.27	260.68	−107.80	0.88	0.78	0.96	1.08	0.90	+ 5 + 7 −18 + 1 + 6 −11 + 6 − 8 + 3 +21	0	0.43
*116940	23 42 14.25	+44 45 19.7	6.99	H	355.559 363 11	+44.755 478 37		12.39	50.76	−25.56	0.52	0.54	0.75	0.57	0.56	+ 4 +13 +21 +41 − 3 − 3 + 0 +36 +14 + 4	2	1.24
116941	23 42 14.68	+44 59 30.3	6.43	H	355.561 178 91	+44.991 757 06		4.15	−19.19	−17.28	0.49	0.51	0.73	0.54	0.51	− 1 + 7 +19 +25 −12 − 6 − 9 +26 +15 − 4	2	0.08
116942	23 42 16.29	+24 54 58.6	11.84	2 H	355.567 875 16	+24.916 265 41		−1.61	19.02	−28.41	2.38	1.74	2.97	2.46	1.85	+19 + 3 −16 −31 + 2 + 6 + 3 −27 +40 +27	4	−1.83
116943	23 42 16.38	−27 38 19.1	8.16	H	355.568 265 28	−27.638 649 61		5.00	7.90	−17.90	1.19	0.85	1.18	1.69	0.97	+ 3 −28 −28 +18 −28 +18 −28 −15 +18 −15	0	0.12
116944	23 42 16.80	+61 29 28.0	8.80	1 H	355.570 008 97	+61.491 104 53		1.58	−1.97	−0.03	0.60	0.66	0.82	0.78	0.77	−21 + 1 +20 −16 +11 + 8 + 9 − 8 +13 −22	2	−1.17
116945 H	23 42 18.56	+85 28 06.9	7.70	G	355.577 329 41	+85.468 575 74	A	4.12	−21.30	−9.73	0.75	0.74	0.79	0.77	0.70	+ 6 + 1 + 4 + 8 − 2 −10 − 2 +10 +13 −11	1	0.12
116946	23 42 18.69	+28 18 49.8	8.46	H	355.577 858 92	+28.313 836 33		3.75	5.28	0.43	0.76	0.60	0.93	0.86	0.64	+22 + 9 − 8 +10 +13 − 2 +15 − 4 + 6 +39	0	0.57
116947	23 42 20.68	+37 56 53.6	8.75	H	355.586 150 82	+37.948 217 90		4.44	−15.88	−6.50	0.86	0.72	1.15	1.00	0.82	+13 +23 − 8 + 6 +17 −18 +19 + 7 +18 +28	0	0.24
116948	23 42 20.93	+64 30 55.4	6.52	2 H	355.587 224 66	+64.515 402 75		2.43	13.41	−4.64	0.50	0.49	0.64	0.52	0.49	− 9 +31 +17 + 4 −17 − 6 −14 − 3 + 1 −20	4	2.09
116949	23 42 21.78	−01 30 04.4	8.27	G	355.590 761 37	−01.501 235 93		10.93	51.27	−29.57	1.28	0.90	1.43	1.94	1.21	− 3 +24 −39 − 7 +16 −24 +14 +14 +22 −10	6	0.19
116950	23 42 22.15	−39 13 12.9	8.41	H	355.592 288 39	−39.220 236 87		6.00	52.65	−9.83	0.64	0.73	0.97	0.71	0.76	+29 + 9 − 3 +36 − 7 +22 −14 −20 − 7 +14	2	1.84
116951	23 42 22.32	−08 49 43.0	8.45	H	355.593 004 13	−08.828 606 78		10.26	−109.89	−72.72	1.11	0.86	1.25	1.45	1.32	+33 − 1 −16 − 5 +19 + 0 +23 +18 +13 +29	0	0.78
116952 H	23 42 24.43	+39 03 29.4	8.94	H	355.601 772 97	+39.058 178 88	*	3.57	21.88	−10.58	0.82	0.76	1.07	0.91	0.84	+19 + 9 − 7 +10 − 8 −11 − 7 − 7 + 6 +28	0	3.23
116953	23 42 25.00	+49 09 05.3	8.03	H	355.604 147 17	+49.151 462 71		1.85	5.46	−2.87	0.52	0.61	0.98	0.60	0.74	−32 +21 + 5 +25 − 6 + 5 + 0 + 3 +21 −26	0	1.00
116954	23 42 25.57	+47 45 18.0	8.80	H	355.606 547 10	+47.755 012 31		6.44	−27.46	−30.10	0.74	0.77	1.27	0.77	0.90	−10 +18 +20 −21 −10 − 3 −11 −16 + 1 −15	0	0.91
116955	23 42 25.67	−61 03 42.5	7.16	H	355.606 978 88	−61.061 816 22		5.06	44.47	−0.48	0.52	0.54	0.77	0.60	0.62	+ 6 − 4 −31 −20 −11 + 9 − 9 −18 + 6 +24	0	−0.86
116956 H	23 42 27.29	+54 36 03.0	8.65	H	355.613 696 18	+54.600 845 63	A	2.15	6.75	−3.71	1.48	1.98	1.84	1.30	2.03	−22 + 9 − 4 + 2 − 5 +23 − 3 + 4 + 6 −31	1	0.01
116957	23 42 27.81	−15 26 52.7	5.27	H	355.615 888 72	−15.447 975 81		11.65	16.19	−23.44	0.89	0.58	0.88	1.05	0.87	+23 +11 + 7 −22 +25 +16 +38 +33 +10 + 9	3	0.89
116958 H	23 42 30.84	+43 00 52.1	10.78	2 H	355.628 491 41	+43.014 472 18	*	−2.70	−7.05	−50.29	7.51	9.25	2.43	1.70	1.79	+13 − 2 − 4 + 3 − 4 + 1 − 4 + 2 +18 − 1	8	0.29
*116959	23 42 31.24	−58 30 57.8	9.36	H	355.630 179 88	−58.516 061 54		11.28	2.35	−33.04	0.78	0.91	1.42	0.88	0.96	−16 − 6 −19 − 4 +16 +12 +18 + 1 −34 −14	0	−1.28
*116960	23 42 31.22	+80 38 18.2	10.45	H	355.630 104 07	+80.638 378 78		20.11	158.75	37.30	1.03	1.00	1.16	1.24	1.17	−13 + 1 +19 + 6 + 9 + 7 + 9 −14 +11 −11	0	−0.22
116961 H	23 42 31.32	+18 39 59.6	7.23	H	355.630 507 70	+18.666 549 15	A	5.48	14.34	−28.41	0.96	0.85	1.26	1.08	0.86	+49 +18 +13 +13 +17 +23 +17 +14 +25 +60	0	−0.12
116962	23 42 31.41	+61 40 45.8	6.40	H	355.630 861 74	+61.679 395 75		7.10	39.50	−13.32	0.42	0.45	0.57	0.51	0.50	−19 + 3 +21 + 4 − 4 + 6 − 5 +12 + 5 −24	1	0.38
116963	23 42 33.96	−57 28 40.8	8.65	H	355.641 485 25	−57.477 993 98		3.22	12.92	−10.81	0.59	0.67	1.01	0.68	0.72	−18 + 0 + 8 − 3 +13 + 8 +11 −24 −28 −15	0	−0.63
116964	23 42 34.93	−28 10 52.1	8.27	G	355.645 552 52	−28.181 151 45		13.17	−94.73	4.09	1.10	1.00	1.31	1.50	1.06	+16 −22 −44 +15 −28 +14 −28 −25 +34 + 6	0	1.34
116965	23 42 35.82	+20 26 05.1	9.00	H	355.649 251 94	+20.434 763 83		0.35	−7.92	−4.34	0.90	0.74	1.20	1.06	0.84	+39 +19 − 9 +30 +11 + 3 +14 + 9 +10 +42	0	0.78
116966	23 42 35.97	−57 57 42.0	7.94	H	355.649 857 22	−57.961 668 99		3.54	−13.29	−5.19	0.52	0.58	0.89	0.58	0.63	−18 − 3 − 3 −11 +16 + 8 +15 −11 −33 −11	0	−1.04
116967	23 42 36.90	−03 33 09.5	9.31	H	355.653 760 69	−03.552 634 47		6.40	45.86	−40.87	1.26	0.84	1.57	2.43	1.32	+48 −23 −25 −17 − 3 +27 + 5 + 0 +19 + 1	0	1.66
116968	23 42 40.71	+51 25 39.7	7.55	H	355.669 612 18	+51.427 690 65		5.21	13.66	5.28	0.47	0.57	0.90	0.62	0.73	−47 + 3 +19 +11 − 4 + 8 − 2 − 8 + 7 −29	1	−0.39
116969	23 42 40.97	+56 25 57.3	8.01	H	355.670 713 02	+56.432 572 33		2.76	3.73	−0.81	0.64	0.64	0.91	0.76	0.76	−29 + 6 + 6 +19 − 9 + 7 − 7 + 9 +15 −19	0	0.24
116970	23 42 42.16	−41 14 50.2	9.57	H	355.675 654 24	−41.247 264 87		11.84	76.98	−124.96	0.83	0.82	1.43	0.92	0.74	+ 6 + 9 − 5 +26 −16 +17 −18 −33 +13 − 4	0	−1.91
116971	23 42 43.28	−14 32 41.1	4.49	H	355.680 353 57	−14.544 742 43		21.16	98.35	−66.78	0.73	0.53	0.87	0.95	0.77	+30 −16 −29 +12 + 3 +19 + 6 + 3 +20 +26	0	−1.97
116972	23 42 43.81	+16 20 08.5	6.30	H	355.682 530 25	+16.335 692 49		8.03	91.06	10.90	0.67	0.48	0.82	0.62	0.45	+33 +12 + 3 −15 +10 − 4 +12 −10 +22 +34	2	1.59
116973	23 42 43.97	−19 52 54.8	10.09	H	355.683 200 47	−19.881 901 79		23.75	−244.13	−281.43	1.78	1.45	2.00	2.63	1.66	+ 5 +14 −36 −19 − 8 + 7 − 5 −43 +23 −16	3	1.55
116974	23 42 45.99	+81 18 02.3	7.87	H	355.691 641 79	+81.300 627 03		5.02	17.22	4.94	0.53	0.58	0.63	0.60	0.65	− 7 − 9 +19 + 0 −12 +11 −15 −10 − 2 −14	1	−0.22
116975	23 42 47.83	−11 19 42.5	7.21	H	355.699 282 05	−11.328 474 66		3.31	−21.37	−23.82	0.85	0.57	0.89	1.15	0.73	+15 − 4 − 1 −12 +14 +16 +18 + 5 − 7 −10	0	1.90
116976	23 42 47.92	+13 19 24.2	9.56	H	355.699 649 64	+13.323 378 58		30.09	18.41	38.55	1.28	0.74	1.41	1.31	0.79	+30 +10 + 5 − 8 + 5 +11 + 6 − 9 +16 +35	0	0.02
116977	23 42 48.47	−26 29 03.7	9.97	G	355.701 969 58	−26.484 356 96		2.41	8.00	−2.06	1.55	1.37	1.84	1.99	1.43	+27 −39 −41 −16 −20 +33 −17 −30 +23 + 9	0	1.08
116978	23 42 49.07	+09 53 07.9	7.69	H	355.704 464 62	+09.885 516 67		2.49	15.39	−20.14	0.85	0.53	0.98	1.00	0.56	+48 − 9 + 3 −18 − 6 +24 −11 −28 +28 +56	0	0.28
116979	23 42 50.75	+10 28 54.9	8.11	H	355.711 460 90	+10.481 907 92		0.79	−8.97	−8.29	0.99	0.56	1.16	1.04	0.62	+50 +20 +12 + 7 − 4 − 2 − 1 −15 +34 +30	0	−1.04
116980	23 42 51.50	−31 14 13.9	10.23	H	355.714 563 18	−31.237 193 38		2.73	1.33	−15.03	3.93	3.49	4.91	4.39	3.72	+27 + 0 −24 −43 + 7 − 2 +10 −22 +15 +12	0	
116981	23 42 53.76	−53 03 24.0	9.55	H	355.724 001 88	−53.056 665 62		5.47	40.28	−28.15	0.83	1.00	1.45	1.13	1.16	−27 − 9 + 9 +33 − 9 +16 + 1 −30 + 2 − 8	2	1.36
116982	23 42 54.35	−83 07 55.3	8.77	H	355.726 446 04	−83.132 022 65		0.87	−13.24	10.48	0.75	0.65	0.80	0.88	0.65	+12 − 5 −11 − 7 +14 + 0 +11 −13 + 4 +18	1	1.07
116983	23 42 55.42	+44 53 36.2	8.34	H	355.730 931 22	+44.893 398 14		11.29	25.91	16.82	0.67	0.68	0.93	0.76	0.73	+ 5 + 8 +19 +40 + 1 − 3 + 2 +39 + 9 + 5	1	−0.05
116984	23 42 56.53	+00 14 22.8	8.65	H	355.735 545 82	+00.239 677 37		22.85	36.64	22.60	1.08	0.96	1.48	1.51	1.10	+34 −16 −47 + 0 −15 +40 + 5 + 6 − 3 +21	0	−1.38
116985	23 42 59.25	+22 07 22.6	9.17	H	355.746 888 65	+22.122 941 96		3.76	−14.93	−14.39	0.94	0.71	1.22	0.92	0.71	+29 +23 − 6 +17 + 1 − 4 + 6 −12 +13 +38	0	0.05
116986	23 42 59.87	+49 07 06.8	8.99	H	355.749 457 07	+49.118 566 02		8.98	6.00	−1.50	0.65	0.89	1.43	0.82	1.12	−21 + 0 + 9 +18 + 2 −20 + 4 +17 +14 −13	3	−0.07
116987	23 42 59.99	+43 14 12.5	8.63	H	355.749 939 02	+43.236 812 32		1.53	−8.22	−3.96	0.62	0.74	1.02	0.71	0.75	+ 9 +10 +23 +11 − 4 + 1 − 1 +25 +19 + 5	0	1.72
116988	23 43 02.24	−29 02 38.3	7.23	H	355.759 327 00	−29.043 959 69		2.41	5.75	−14.59	0.76	0.70	0.88	0.97	0.81	+28 − 8 −14 +17 + 6 +13 + 7 +14 + 9 +18	0	−1.22
116989	23 43 03.86	+53 20 19.7	9.17	H	355.766 102 91	+53.338 811 92		1.95	−4.42	−0.56	0.77	0.85	1.33	0.99	1.12	−35 +18 + 5 + 3 + 5 +14 + 5 + 0 + 6 −42	0	−0.61
116990	23 43 04.07	+56 23 26.9	10.36	H	355.766 955 15	+56.390 816 27		1.51	−2.62	1.11	1.14	1.03	1.53	1.40	1.24	−21 +17 −10 +26 − 2 +12 + 1 + 7 + 3 − 9	0	−0.38
116991	23 43 05.03	+51 56 21.6	6.44	H	355.770 948 88	+51.939 344 72		5.83	30.16	−4.15	0.44	0.53	0.80	0.58	0.68	−47 − 6 +24 − 4 + 7 +20 + 2 − 7 + 5 −38	0	−1.21
116993	23 43 05.66	+53 09 09.4	6.63	H	355.773 590 22	+53.152 599 50		1.25	3.43	−0.86	0.45	0.54	0.78	0.62	0.74	−36 +14 +21 +11 + 3 +19 − 1 − 1 − 2 −44	0	−0.95
116994	23 43 05.95	−46 18 43.8	6.63	G	355.774 779 98	−46.312 157 94		6.53	−19.15	10.80	0.64	0.50	0.79	0.73	0.49	− 3 +10 −26 +20 −15 + 2 −12 −14 +12 − 2	3	2.18
116995 H	23 43 06.03	+11 50 04.1	8.73	H	355.775 133 39	+11.834 474 78	A	13.34	94.08	−5.93	3.30	2.17	3.04	2.72	1.83	+28 +16 +23 −23 + 5 +15 + 5 −11 +20 +39	1	0.10
116996	23 43 06.36	−70 02 39.5	9.12	H	355.776 511 59	−70.044 294 44		1.64	0.85	−3.08	0.73	0.81	0.98	0.86	0.98	−16 +15 −32 −20 + 9 − 2 + 9 −11 + 5 − 8	0	0.14
*116997	23 43 07.17	−01 38 24.6	10.43	H	355.779 895 63	−01.640 155 75		1.79	19.27	−2.62	2.22	1.27	2.34	2.93	1.84	− 8 +39 −35 −22 + 4 − 3 +16 + 0 +29 − 2	0	−0.06
*116998	23 43 07.16	−36 47 06.0	7.45	H	355.779 833 33	−36.784 986 43		6.55	13.74	5.45	0.67	0.63	0.80	0.77	0.68	+26 − 5 − 9 − 6 +12 − 1 +14 +15 − 4 +16	0	−0.27
*116999	23 43 07.59	+40 57 47.0	8.59	H	355.781 630 52	+40.963 056 80		3.70	−0.03	−22.44	0.79	0.68	1.00	0.85	0.82	+11 + 6 − 1 +56 + 6 + 0 + 8 +31 − 3 +22	0	−0.91
*117000	23 43 07.60	+34 44 48.2	7.03	H	355.781 682 02	+34.746 726 49		8.94	54.81	−85.69	0.65	0.52	0.79	0.94	0.59	−12 +11 + 5 −10 +14 +28 +11 − 1 − 9 −22	0	1.51

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
116901	5.830	0.004	4.908	0.003		0.822	0.006	G	0.81	0.02	A	4.9696	0.0005	0.006	93		4.96	4.98		C			1								S
116902	9.262	0.016	8.983	0.018		0.265	0.023	T	0.30	0.03	L	9.0653	0.0022	0.022	118		9.03	9.10					1								
116903	11.031	0.060	9.222	0.022		1.506	0.051	T	1.54	0.08	L	9.2194	0.0027	0.022	79		9.18	9.25		C			1								
116904	8.750	0.016	8.571	0.019		0.147	0.020	G	0.16	0.02	H	8.5809	0.0019	0.018	94		8.56	8.64		U 2	23418−1748	I 2	1								S
116905	12.271	0.139	10.948	0.066		1.367	0.015	G	1.60	0.03	I	11.0386	0.0038	0.045	176		10.95	11.11					1								G
116906	8.474	0.014	7.761	0.012		0.648	0.002	G	0.71	0.00	H	7.8188	0.0017	0.013	71		7.80	7.84		C			1								S
116907						1.431	0.020	G	1.75	0.05	I	12.1430	0.0075	0.056	84		12.05	12.21					1								G
116908	7.853	0.008	7.861	0.009		−0.003	0.011	T	0.02	0.01	L	7.8841	0.0012	0.010	124		7.87	7.90		C			1								S
116909	10.447	0.028	8.860	0.013		1.330	0.024	T	1.29	0.03	L	8.8836	0.0021	0.019	123		8.84	8.91		C			1								
116910	10.183	0.032	9.448	0.028		0.659	0.032	T	0.72	0.03	L	9.5271	0.0071	0.061	79		9.44	9.60		U 2 C			1								
116911	11.150	0.051	10.846	0.064		0.289	0.077	T	0.33	0.10	L	10.9453	0.0054	0.042	116		10.86	11.00					1								G
116912	7.549	0.006	6.352	0.003		1.025	0.005	T	1.00	0.00	L	6.4116	0.0008	0.008	129		6.40	6.43		C			1								S
116913	10.111	0.025	9.626	0.025		0.469	0.027	T	0.54	0.03	L	9.7156	0.0024	0.020	119		9.67	9.76		C			1								
116914	9.667	0.030	8.870	0.025		0.731	0.000	G	0.78	0.00	H	8.9331	0.0026	0.022	48		8.91	8.97		C			1								S
116915	11.038	0.088	9.591	0.041		1.220	0.076	T	1.18	0.07	L	9.6483	0.0044	0.025	43		9.62	9.70					1 S								
116916	9.962	0.027	8.665	0.016		1.103	0.025	T	1.07	0.03	L	8.6673	0.0017	0.014	95		8.65	8.69		C			1 S								
116917	11.139	0.072	9.462	0.029		1.401	0.061	T	1.38	0.07	L	9.3844	0.0033	0.024	64		9.33	9.43					1 X								
116918	6.020	0.006	5.912	0.005		0.101	0.006	G	0.11	0.01	H	5.9373	0.0011	0.007	51		5.93	5.95		C			1								S
116919	11.255	0.055	10.101	0.031		0.984	0.050	T	0.96	0.04	L	10.1886	0.0032	0.032	134		10.10	10.26		C			1 S								
116920	8.394	0.008	7.221	0.005	A	1.020	0.015	G	0.97	0.01	L *	7.2687	0.0009	0.011	169	*	7.25	7.29			23420−4216	H 1	2 C D	AB	91	1.888	0.103		4.01	0.25	S D
116921	10.720	0.057	9.155	0.024		1.313	0.049	T	1.27	0.06	L	9.1865	0.0017	0.014	80		9.16	9.21		C			1								
116922	9.775	0.023	8.265	0.012		1.270	0.015	G	1.23	0.02	H	8.3204	0.0017	0.015	79		8.29	8.35		C			1								S
116923	8.797	0.013	8.397	0.013		0.352	0.015	G	0.41	0.02	H	8.4658	0.0011	0.011	102		8.45	8.49					1								S
116924	8.491	0.009	8.036	0.008		0.423	0.015	G	0.49	0.02	H	8.0841	0.0013	0.013	147		8.06	8.11		C			1								S
116925	9.659	0.015	7.965	0.007		1.415	0.013	T	1.40	0.02	L	7.9547	0.0012	0.013	130		7.94	7.98		C			1								S
116926	8.646	0.011	7.903	0.008	*	0.646	0.015	G	0.71	0.01	H *	7.7562	0.0012	0.012	117	*	7.74	7.78		D	23420+2018	I 1	2 C A	AB	133	1.153	0.006		0.39	0.01	S
116927	9.094	0.011	7.885	0.007		1.034	0.010	T	1.01	0.01	L	7.9221	0.0011	0.013	154		7.90	7.95					1								S
116928	4.744	0.004	4.521	0.003		0.200	0.006	G	0.22	0.02	A	4.5578	0.0006	0.005	47		4.55	4.58					1								S
116929	9.903	0.026	8.633	0.016		1.082	0.024	T	1.04	0.02	L	8.6720	0.0016	0.013	79		8.65	8.70		C			1								
116930	10.194	0.017	8.767	0.009		1.205	0.015	T	1.16	0.01	L	8.8148	0.0015	0.025	268		8.77	8.85					1								
116931	9.431	0.012	8.263	0.008		1.002	0.011	T	0.98	0.01	L	8.3066	0.0012	0.016	190		8.28	8.34		C			1								
116932	8.161	0.009	7.902	0.011		0.247	0.013	T	0.28	0.02	L	7.9613	0.0013	0.011	109		7.94	7.99		C			1								S
116933	9.192	0.018	8.575	0.016		0.574	0.021	T	0.65	0.02	L	8.6128	0.0016	0.015	97		8.59	8.64					1								S
116934	10.289	0.029	9.208	0.019		0.935	0.026	T	0.93	0.02	L	9.2994	0.0018	0.017	105		9.27	9.33		C			1								
116935	9.456	0.012	8.101	0.007		1.143	0.020	G	1.09	0.02	A	8.1406	0.0011	0.015	195		8.12	8.17		C			1								S
116936	11.712	0.145	10.579	0.086		1.343	0.013	G	1.63	0.02	A	10.4146	0.0043	0.030	80		10.35	10.46		C			1								
116937	8.856	0.008	8.069	0.007		0.704	0.002	G	0.76	0.00	H	8.1304	0.0012	0.017	251		8.10	8.17					1								S
116938	10.513	0.044	9.210	0.026		1.107	0.040	T	1.07	0.04	L	9.2738	0.0020	0.019	78		9.24	9.30					1								
116939	10.984	0.046	9.933	0.031		0.920	0.012	G	0.96	0.01	I	9.9451	0.0026	0.026	123		9.90	10.00					1								
116940	7.304	0.006	7.009	0.006		0.280	0.008	T	0.32	0.01	L	7.0633	0.0012	0.010	113		7.05	7.08					1								S
116941	8.388	0.010	6.586	0.005		1.500	0.009	T	1.53	0.01	L	6.5511	0.0010	0.008	103		6.54	6.57					1								S
116942											T	11.9229	0.0459	0.219	86		11.70	12.24	0.31	P 1 A			1								G
116943	9.525	0.025	8.275	0.016		1.066	0.023	T	1.03	0.02	L	8.3330	0.0017	0.011	43		8.31	8.35		C			1								S
116944	8.840	0.012	8.797	0.015		0.017	0.020	G	0.04	0.02	H	8.8157	0.0028	0.022	129		8.78	8.85		U			1								
116945	9.037	0.012	7.813	0.008	A	1.046	0.197	G	1.04	0.01	L *	7.8530	0.0016	0.014	137	*	7.83	7.88		D	23423+8528	H 1	2 C A	AB	31	1.072	0.017		3.21	0.09	S
116946	9.919	0.026	8.594	0.016		1.125	0.024	T	1.09	0.03	L	8.6276	0.0014	0.014	100		8.61	8.65		C			1								
116947	9.099	0.018	8.765	0.019		0.317	0.024	T	0.37	0.03	L	8.8308	0.0021	0.021	64		8.80	8.87		C			1								
116948	9.024	0.012	6.797	0.005		1.878	0.015	G	2.38	0.03	C	6.5580	0.0060	0.044	122		6.50	6.63		U 2	23423+6431	I 1	1								S
116949	8.799	0.021	8.295	0.020		0.465	0.015	G	0.54	0.02	H	8.3624	0.0021	0.018	51		8.34	8.40		C			1								S
116950	9.022	0.013	8.476	0.012		0.518	0.013	T	0.59	0.01	L	8.5227	0.0016	0.014	115		8.50	8.55					1								S
116951	9.189	0.023	8.529	0.020		0.612	0.026	T	0.68	0.02	L	8.5840	0.0020	0.012	64		8.56	8.61					1								S
116952	9.531	0.020	8.989	0.019	*	0.508	0.025	T	0.58	0.03	L *	9.0534	0.0021	0.014	88	*	9.03	9.08		C	23424+3903	I 1	2 C S C	AB	175	0.135	0.033		1.47	1.22	
116953	7.987	0.006	8.016	0.008		−0.022	0.009	T	0.00	0.01	L	8.0335	0.0015	0.014	175		8.01	8.06					1								S
116954	9.372	0.014	8.885	0.013		0.458	0.017	T	0.53	0.02	L	8.9063	0.0019	0.022	150		8.88	8.95					1								
116955	8.560	0.009	7.285	0.006		1.086	0.008	T	1.05	0.01	L	7.3227	0.0012	0.013	148		7.30	7.34					1								S
116956	8.737	0.011	8.673	0.013	*	0.064	0.016	T	0.07	0.02	L *	8.6749	0.0021	0.021	143	*	8.64	8.71		D	23425+5436	I 1	2 C A	AB	181	0.487	0.004		0.51	0.02	
116957	7.027	0.006	5.418	0.004		1.344	0.005	G	1.31	0.01	H	5.4193	0.0008	0.005	78		5.41	5.43					1								S
116958	11.291	0.062	10.819	0.068	*	0.445	0.084	T	0.51	0.09	L *	10.8776	0.0220	0.179	124	*	10.52	11.05	0.62	P 1 A	23425+4301	H 1	2 C C	AB	85	0.209	0.144		1.66	1.18	G
116959	10.127	0.019	9.397	0.016		0.655	0.019	T	0.72	0.02	L	9.4926	0.0029	0.032	164		9.43	9.54					1 S								
116960	11.955	0.122	10.493	0.050		1.232	0.104	T	1.19	0.10	L	10.6226	0.0037	0.029	119		10.58	10.67		C			1 S								G
116961	8.547	0.011	7.316	0.006	*	1.051	0.010	T	1.02	0.01	L *	7.3958	0.0012	0.010	126	*	7.38	7.42		D	23425+1840	I 1	2 C A	AB	176	7.714	0.019		3.25	0.07	S
116962	8.023	0.009	6.538	0.004		1.250	0.008	T	1.21	0.01	L	6.5647	0.0007	0.008	134		6.55	6.58		C	23425+6141	I 1	1								S
116963	8.737	0.009	8.643	0.010		0.092	0.013	T	0.10	0.01	L	8.6885	0.0015	0.022	181		8.66	8.73					1								S
116964	8.930	0.022	8.301	0.020		0.516	0.005	G	0.59	0.01	H	8.3963	0.0019	0.011	51		8.38	8.44		C			1								S
116965	11.326	0.072	9.250	0.020		1.718	0.060	T	1.74	0.06	L	9.1099	0.0027	0.023	106		9.07	9.15					1 S								
116966	7.989	0.006	7.946	0.008		0.039	0.009	T	0.05	0.01	L	7.9635	0.0012	0.018	179		7.94	8.00					1								S
116967	10.027	0.030	9.363	0.026		0.615	0.033	T	0.68	0.03	L	9.4370	0.0022	0.019	93		9.40	9.47					1								
116968	7.551	0.004	7.537	0.005		0.018	0.006	T	0.04	0.01	L	7.5611	0.0009	0.013	221		7.54	7.58					1								S
116969	9.353	0.018	8.117	0.011		1.055	0.016	T	1.02	0.01	L	8.1743	0.0015	0.014	125		8.15	8.20		C			1								S
116970	10.523	0.026	9.644	0.019		0.760	0.015	G	0.80	0.01	H	9.7094	0.0028	0.026	173		9.66	9.75					1								
116971	4.442	0.003	4.480	0.003		−0.032	0.004	T	−0.04	0.02	A	4.4801	0.0007	0.005	78		4.47	4.49		C	23427−1433	I 1	1								S
116972	7.525	0.008	6.398	0.005		0.970	0.007	T	0.95	0.01	L	6.4677	0.0009	0.007	93		6.46	6.48					1								S
116973	11.514	0.118	10.121	0.054		1.085	0.008	G	1.15	0.01	I	10.2268	0.0027	0.023	52		10.18	10.27		D			1								
116974	7.909	0.008	7.875	0.010		0.036	0.012	T	0.05	0.01	L	7.8917	0.0011	0.013	138		7.87	7.91					1								S
116975	8.509	0.013	7.347	0.009		0.997	0.012	T	0.98	0.01	L	7.3798	0.0012	0.011	70		7.35	7.39		C	23428−1120	I 1	1								S
116976	10.845	0.049	9.653	0.028		0.970	0.015	G	0.95	0.01	I	9.7037	0.0023	0.020	102		9.67	9.75					1								
116977	10.509	0.052	10.033	0.052		0.449	0.020	G	0.52	0.02	H	10.0916	0.0036	0.022	49		10.05	10.14		C			1								
116978	9.221	0.012	7.832	0.007		1.175	0.011	T	1.14	0.01	L	7.8523	0.0012	0.011	153		7.83	7.87		C			1								S
116979	9.699	0.017	8.249	0.009		1.223	0.015	T	1.18	0.01	L	8.2721	0.0013	0.014	152		8.25	8.30		C			1								
116980	11.729	0.085	10.369	0.039		1.152	0.073	T	1.11	0.07	L	10.4033	0.0031	0.031	110		10.34	10.45		C			1 X								
116981	10.771	0.027	9.680	0.017		0.943	0.024	T	0.93	0.02	L	9.7143	0.0025	0.035	246		9.64	9.78					1 S								
116982	10.222	0.024	8.895	0.014		1.126	0.022	T	1.09	0.02	L	8.9355	0.0020	0.021	139		8.90	8.97					1								
116983	8.779	0.011	8.362	0.011		0.394	0.014	T	0.46	0.01	L	8.4279	0.0015	0.015	113		8.40	8.45		C			1								
116984	9.649	0.028	8.735	0.021		0.810	0.026	T	0.84	0.02	L	8.8065	0.0031	0.020	53		8.78	8.84					1								S
116985	10.460	0.032	9.275	0.020		1.015	0.029	T	0.99	0.02	L	9.3326	0.0020	0.021	112		9.30	9.36					1								
116986	9.572	0.015	9.062	0.015		0.479	0.019	T	0.55	0.02	L	9.0976	0.0022	0.020	160		9.06	9.13		C	23430+4907	I 1	1								
116987	8.919	0.013	8.700	0.014		1.447	0.015	G	0.35	0.08	S	8.7073	0.0043	0.033	118		8.66	8.75		R			1								
116988	9.166	0.018	7.407	0.009		1.466	0.016	T	1.48	0.02	L	7.3580	0.0019	0.012	68		7.34	7.39		C			1								S
116989	9.273	0.014	9.196	0.017		0.076	0.021	T	0.09	0.02	L	9.2027	0.0028	0.027	145		9.16	9.24					1								
116990	10.556	0.040	10.394	0.058		0.156	0.066	T	0.17	0.07	L	10.4129	0.0027	0.028	123		10.35	10.45		C			1								G
116991	7.757	0.006	6.548	0.004		1.034	0.006	T	1.01	0.01	L	6.6076	0.0008	0.009	186		6.59	6.62					1								S
116993	6.606	0.003	6.630	0.004		−0.017	0.005	T	0.01	0.01	L	6.6379	0.0009	0.010	152		6.62	6.65					1								S
116994	7.786	0.007	6.740	0.005		0.901	0.003	G	0.90	0.00	H	6.7917	0.0009	0.009	107		6.78	6.81		C	23431−4619	I 1	1								S
116995	9.696	0.022	8.985	0.019	*	0.654	0.024	T	0.72	0.02	L *	8.8630	0.0017	0.013	108	*	8.84	8.88		D	23431+1150	I 1	2 C A	AB	329	0.944	0.003		0.33	0.02	S
116996	10.656	0.034	9.250	0.017		1.188	0.030	T	1.15	0.03	L	9.2861	0.0022	0.022	143		9.23	9.32		C			1								
116997	10.855	0.073	10.625	0.097		0.396	0.072	G	0.46	0.08	R	10.5218	0.0053	0.036	47		10.47	10.57					1								
116998	7.782	0.008	7.476	0.009		0.302	0.015	G	0.35	0.02	H	7.5214	0.0009	0.008	80		7.51	7.54		C			1								S
116999	10.198	0.028	8.735	0.015		1.233	0.025	T	1.19	0.03	L	8.7569	0.0017	0.016	104		8.73	8.79		C			1								
117000	8.543	0.012	7.157	0.007		1.172	0.011	T	1.13	0.01	L	7.1987	0.0010	0.008	90		7.18	7.22					1								S

$23^h\ 43^m\ 09^s$ - $23^h\ 44^m\ 22^s$ 2350

117001 - 117100

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
*117001	23 43 09.25	+14 57 28.9	8.21	1 H	355.788 545 38	+14.958 026 99		2.30	−9.97	−7.86	0.91	0.65	1.08	0.93	0.65	+36	+ 4	− 2	− 8	+ 5	+ 2	+ 5	− 9	+16	+41	0	−0.25
*117002	23 43 10.01	−12 13 06.7	9.01	G	355.791 699 00	−12.218 534 80		19.10	−151.92	−170.53	1.11	0.84	1.35	1.90	1.18	+33	−26	−27	−20	+ 7	+42	+24	+17	− 2	+ 7	0	−0.79
*117003	23 43 10.17	−38 42 15.5	9.28	H	355.792 379 74	−38.704 293 15		6.14	20.20	−5.08	0.77	0.94	1.36	0.82	0.87	+25	+25	+ 7	+45	− 9	+35	−20	−22	− 3	+ 8	0	−1.44
*117004	23 43 10.37	+59 56 36.3	9.22	G	355.793 225 00	+59.943 409 08		1.78	5.92	−3.20	0.82	0.80	1.08	0.93	0.86	−21	+14	+19	+ 7	+ 6	+ 1	+ 5	− 6	+ 4	−32	3	1.93
*117005	23 43 10.58	−23 40 31.9	7.68	G	355.794 103 91	−23.675 539 73		9.69	37.35	−24.40	0.91	0.72	1.02	1.10	0.87	+18	−19	−28	+15	− 8	+ 9	−11	−11	+30	+12	0	−0.99
*117006	23 43 10.86	−29 04 25.0	9.46	G	355.795 238 45	−29.073 621 79		12.56	146.05	−132.90	1.19	1.19	1.43	1.66	1.44	+34	−18	−27	+25	+13	− 1	+10	+18	+14	+26	0	1.00
*117007	23 43 11.29	+43 20 28.5	8.49	H	355.797 047 74	+43.341 256 27		2.98	33.54	6.18	0.65	0.76	1.05	0.77	0.77	+ 7	+10	+14	+16	+ 1	+ 0	+ 3	+19	+19	+ 4	0	−0.36
*117008	23 43 12.03	+88 20 31.3	9.02	H	355.800 106 97	+88.342 018 33		4.15	29.12	6.27	0.68	0.69	0.80	0.95	0.70	−11	−14	+32	+11	+ 3	−10	+ 2	−12	+ 4	−20	3	−0.76
*117009	23 43 13.32	+58 59 26.1	9.09	G	355.805 502 65	+58.990 575 13		1.77	−5.40	−2.60	0.77	0.74	1.03	0.95	0.82	−26	+15	+12	− 3	+10	+ 3	+ 9	−17	− 3	−22	0	0.23
*117010	23 43 13.45	+52 14 53.4	7.63	G	355.806 055 43	+52.248 154 73		4.72	39.57	16.25	0.52	0.61	0.92	0.73	0.76	−41	+ 4	+23	+10	− 1	+18	− 5	− 2	+ 7	−40	0	−1.13
*117011	23 43 06.37	−64 47 12.5	10.26	H	355.776 554 61	−64.786 793 29		27.10	−214.47	−111.26	1.85	2.26	1.83	2.22	2.66	+ 2	−21	− 8	−74	− 5	− 1	− 2	−82	− 9	+ 5	0	−0.60
117012	23 43 14.42	+01 06 47.1	8.86	G	355.810 079 08	+01.113 080 70		3.40	18.53	−9.22	1.30	0.99	1.46	1.54	1.27	+18	+15	−21	−11	+27	+19	+28	+29	+ 2	+38	0	0.02
117013	23 43 14.67	+00 54 16.7	8.60	G	355.811 111 56	+00.904 631 80		5.58	−13.32	4.11	1.21	0.87	1.39	1.66	1.12	+14	+14	−20	−16	+12	+31	+22	+16	+17	+18	0	1.25
117014	23 43 16.88	−70 49 05.8	7.35	H	355.820 325 57	−70.818 271 06		15.46	66.54	54.20	0.55	0.58	0.72	0.67	0.66	− 5	− 7	−31	+ 5	+15	−10	+12	− 2	+ 5	− 2	1	−1.70
117015	23 43 17.19	−45 09 28.2	8.77	H	355.821 630 80	−45.157 834 01		3.94	19.66	4.41	0.77	0.73	1.11	0.94	0.73	− 8	+ 3	− 2	−12	− 3	+19	− 3	−40	− 2	−15	0	1.69
117016	23 43 17.83	−00 09 20.0	8.19	H	355.824 288 05	−00.155 569 28		5.31	9.23	−3.11	0.99	0.75	1.10	1.41	1.03	+14	− 4	−25	+ 8	− 3	+ 2	+ 3	+ 9	+ 7	+12	0	−1.09
117017	23 43 18.40	−21 05 24.6	8.56	H	355.826 666 07	−21.090 155 04		0.55	11.84	−11.46	1.27	0.94	1.37	1.54	1.38	+11	+ 6	−23	+ 1	+ 8	+11	+12	+ 8	+15	+28	0	0.09
117018	23 43 18.69	−00 42 29.0	7.95	H	355.827 889 26	−00.708 051 16		4.27	−3.58	−4.11	1.05	0.80	1.21	1.40	1.00	+16	− 5	−41	− 7	+ 8	− 3	+ 8	+ 7	+12	+ 9	0	0.26
117019	23 43 21.09	−25 21 29.0	8.20	G	355.837 888 76	−25.358 055 29		11.48	−4.23	62.49	1.05	0.78	1.11	1.54	0.94	+ 7	−12	−31	− 2	− 8	+22	− 4	−21	+ 7	− 7	3	1.50
117020	23 43 22.36	+10 19 53.4	5.09	1 H	355.843 152 02	+10.331 508 51		3.99	4.93	11.40	0.69	0.42	0.80	0.68	0.47	+43	+12	+ 6	+ 5	− 7	+ 5	− 6	−23	+33	+33	0	0.48
117021	23 43 22.50	+50 04 20.8	9.19	H	355.843 738 23	+50.072 444 76		5.71	36.53	−12.51	0.71	0.84	1.36	0.80	1.03	−24	+23	− 3	+28	− 9	−10	− 4	+25	+14	− 2	0	2.43
117022	23 43 22.55	−33 04 57.7	7.16	H	355.843 978 58	−33.082 680 96		4.29	9.59	−23.74	0.69	0.68	0.84	0.77	0.75	+31	+10	− 6	−17	+25	− 1	+30	+30	+10	+21	0	−0.57
117023	23 43 23.20	+23 06 08.0	9.28	H	355.846 681 39	+23.102 230 86		2.37	−19.49	−8.16	0.88	0.69	1.12	0.99	0.70	+31	+ 8	− 3	+ 1	− 1	+ 9	+ 0	−12	+20	+36	2	1.27
117024	23 43 23.72	+50 54 30.3	8.15	H	355.848 835 86	+50.908 429 82		2.54	15.93	1.75	0.48	0.59	0.92	0.67	0.82	−29	+ 8	+14	+ 6	− 7	−13	+ 1	− 9	+ 9	+ 3	2	−1.35
*117025	23 43 24.31	−21 42 23.3	8.64	H	355.851 279 95	−21.706 481 87		4.97	84.31	11.81	1.19	0.98	1.38	1.51	1.18	+ 5	− 6	−28	+34	−19	+31	−13	+ 8	+16	+ 7	0	−0.14
*117026	23 43 24.19	−41 36 16.7	8.44	H	355.850 805 26	−41.604 650 10		8.92	106.49	61.27	0.61	0.53	0.98	0.66	0.52	− 4	− 2	− 7	+24	−18	+ 7	−19	−24	+15	−11	2	−1.02
117027	23 43 24.73	−09 02 29.1	8.80	H	355.853 051 32	−09.041 429 82		1.21	33.23	−4.04	1.19	0.82	1.25	1.50	1.08	+22	−13	+ 0	−19	+16	+ 8	+23	+17	− 1	+ 3	0	1.58
117028	23 43 25.95	+67 39 54.4	10.45	H	355.858 125 68	+67.665 122 84		0.93	−0.79	−0.67	1.07	1.11	1.33	1.32	1.36	−16	−10	+ 8	+ 7	−10	+ 3	− 9	−18	+ 7	−11	0	0.87
117029	23 43 26.61	+58 04 44.9	7.14	G	355.860 886 13	+58.079 127 95		22.01	390.05	481.19	0.48	0.49	0.65	0.59	0.62	−22	+17	+ 5	+ 7	+10	− 2	+ 0	−22			0	0.38
117030	23 43 27.12	+11 36 07.5	8.68	H	355.862 999 50	+11.602 073 56		3.00	−11.68	−14.98	1.07	0.62	1.20	1.14	0.73	+35	+11	+19	−13	+ 0	+13	+ 1	−11	+26	+30	0	1.16
117031	23 43 28.24	+17 13 32.9	8.93	H	355.867 685 65	+17.225 818 53		0.43	9.93	−20.35	0.94	0.78	1.21	0.90	0.72	+42	+21	− 4	−17	+ 2	−17	+ 3	−16	+12	+47	0	0.10
117032	23 43 29.94	+54 00 48.5	9.95	H	355.874 743 87	+54.013 476 75		2.59	3.17	−4.48	0.91	0.94	1.36	1.20	1.35	−31	+23	− 7	+ 7	+ 6	+16	+ 9	+ 3	+ 4	−21	0	0.47
117033	23 43 30.47	−59 46 44.5	8.69	H	355.876 967 12	−59.779 041 01		10.16	53.02	−5.95	0.66	0.80	1.17	0.79	0.99	−11	+ 3	−20	+13	+17	+ 0	+17	− 1	−28	− 8	0	−1.55
117034	23 43 30.60	+61 55 48.1	11.24	G	355.877 496 80	+61.930 041 26		−1.11	−3.63	−0.32	1.42	1.49	1.93	1.75	1.61	−12	+ 7	+17	+ 9	− 1	+ 2	+ 0	− 3	+20	−14	0	−0.75
117035	23 43 31.97	−74 12 54.0	7.83	H	355.883 199 08	−74.214 992 37		14.64	83.00	20.51	0.57	0.53	0.68	0.64	0.55	+ 7	+ 0	− 6	−11	− 7	+13	− 6	− 4	− 6	+19	0	−0.06
117036	23 43 32.03	−24 17 14.2	11.27	G	355.883 450 66	−24.287 265 16		21.73	−76.30	−221.36	2.21	2.14	2.69	3.14	2.33	+25	−18	−34	+12	−21	+22	−21	−29	+29	+11	0	0.14
117037	23 43 32.48	−51 20 55.9	8.51	H	355.885 349 52	−51.348 874 40		4.73	21.87	5.25	0.68	0.62	1.06	0.74	0.86	−18	−20	− 7	−33	− 5	+24	− 7	−37	+ 6	+ 0	0	0.07
117038	23 43 32.71	−22 54 07.7	7.81	H	355.886 284 36	−22.902 149 07		7.46	−88.92	−62.79	0.91	0.80	1.12	1.33	1.05	+15	−13	−25	+10	−10	+20	− 9	− 5	+31	+10	0	−1.17
117039	23 43 33.57	+76 01 16.8	8.25	H	355.889 857 82	+76.021 326 04		4.19	24.44	−11.88	0.61	0.58	0.70	0.70	0.62	−17	−15	+16	+ 9	+ 0	+ 7	+ 0	−15	− 5	−17	0	−0.18
117040	23 43 34.19	+59 57 07.0	8.08	H	355.892 455 11	+59.951 941 28		2.33	−2.31	−2.15	0.58	0.64	0.81	0.69	0.74	−22	+14	+17	+ 3	+ 8	+ 7	+ 6	− 3	+ 0	−34	1	0.27
117041	23 43 34.56	−07 55 22.6	10.11	G	355.893 993 71	−07.922 933 67		8.46	609.55	−163.94	1.43	1.14	1.76	2.41	1.76	+41	− 8	− 5	+ 8	+ 8	+34	+ 7	+ 4	+12	+23	0	1.09
117042	23 43 34.71	+19 07 47.7	9.11	H	355.894 635 78	+19.129 920 53		53.88	5.11	−20.38	25.51	22.23	32.40	28.16	20.72	+56	− 7	−11	−18	−23	+24	−23	−42	+25	+58	0	
117043	23 43 36.21	−03 18 46.9	8.81	H	355.900 858 65	−03.313 021 30		13.55	64.20	−33.22	1.11	0.82	1.37	1.57	1.01	+46	+ 1	−19	−21	−11	+22	− 5	−20	+24	+ 9	0	0.33
117044	23 43 36.52	−09 40 26.2	9.26	G	355.902 154 63	−09.673 952 68		3.73	1.91	−10.67	1.10	0.86	1.28	1.42	1.07	+31	−10	− 8	− 7	+10	+10	+13	+ 4	−13	+ 6	0	0.89
117045	23 43 37.83	−65 25 52.2	8.70	H	355.907 617 53	−65.431 152 94		7.56	−17.77	0.03	0.66	0.68	0.94	0.75	0.78	+ 3	− 9	−23	− 1	+ 9	+10	+13	+10	−17	+10	0	−0.73
117046	23 43 39.47	+73 22 13.4	8.77	H	355.914 474 70	+73.370 390 84		10.19	13.26	−25.41	0.69	0.70	0.84	0.82	0.82	−11	−13	+25	− 2	+ 2	+22	− 4	+ 1	+ 2	−14	0	1.12
117047	23 43 39.48	+52 58 48.7	9.46	H	355.914 505 58	+52.980 197 44		0.73	1.19	−0.05	0.84	0.91	1.37	1.25	1.29	−34	+14	+12	+18	− 6	+22	−11	+12	−16	−41	0	3.35
117048	23 43 39.58	−63 57 38.7	7.99	G	355.914 920 92	−63.960 755 29		11.07	177.65	−90.72	0.56	0.61	0.80	0.61	0.74	− 6	−10	−23	− 2	+12	+ 8	+15	+ 9	−13	+11	0	0.02
117049	23 43 42.25	+21 56 24.7	7.89	2 H	355.926 059 94	+21.940 194 59		3.20	2.93	−21.25	0.65	0.53	0.89	0.68	0.54	+35	+19	− 2	+14	+ 8	− 8	+12	+ 0	+18	+40	0	−0.40
117050	23 43 42.46	+23 23 07.1	9.66	H	355.926 935 08	+23.385 301 96		1.70	18.72	−6.64	1.00	0.77	1.31	1.12	0.76	+28	+ 3	+ 3	− 1	− 2	+10	− 2	−16	+21	+27	0	2.06
117051	23 43 42.52	−31 35 40.6	9.35	H	355.927 171 30	−31.594 605 91		0.44	3.48	−7.56	1.24	1.04	1.52	1.47	1.26	+30	+14	−13	−38	+26	−17	+30	+11	+22	+21	0	−0.67
117052	23 43 42.72	−07 20 12.1	8.80	H	355.927 998 80	−07.336 698 85		8.17	−2.85	−113.56	1.21	0.79	1.37	2.10	1.30	+28	− 6	−16	− 2	+11	+ 2	+13	+ 7	+24	− 5	0	0.43
117053	23 43 47.70	+87 21 17.9	9.52	H	355.948 730 98	+87.354 962 06		7.09	34.01	−28.24	0.80	0.76	0.92	1.00	0.77	−11	+ 1	+17	− 8	+ 4	−20	+ 7	−21	− 2	−13	0	−0.46
117054	23 43 49.44	−15 17 03.9	8.69	3 H	355.956 006 83	−15.284 421 26	*	5.07	32.98	−32.61	2.52	1.00	3.15	1.37	1.24	+47	−66	−39	−16	+ 7	+ 4	+38	+21	−36	+23	0	1.85
117055	23 43 49.63	−61 43 47.2	7.47	2 H	355.956 787 98	−61.729 769 40		0.40	21.65	−12.48	0.57	0.62	0.82	0.78	0.76	+ 5	− 5	−19	+11	− 4	+ 7	− 2	+ 2	+11	+19	0	−1.21
117056	23 43 50.62	−06 16 24.0	8.50	H	355.960 934 74	−06.273 334 18		7.65	55.66	−88.89	0.97	0.70	1.21	1.35	0.95	+29	−12	− 7	−13	+ 3	+46	+ 6	− 6	+15	+18	0	0.30
*117057	23 43 51.79	−33 25 39.9	6.95	G	355.965 794 46	−33.427 744 18		9.50	−33.62	−14.29	0.85	0.81	1.38	1.15	1.49	− 5	+43	−44	−43	+46	−48	− 4	+57	−38	+39	0	0.93
*117058	23 43 52.41	−68 25 46.0	9.34	H	355.968 365 70	−68.429 445 62		6.16	13.60	48.23	0.78	0.74	0.99	0.97	0.91	− 2	− 8	−10	−10	+ 0	+ 9	+ 0	− 7	+ 5	+ 1	0	−1.27
*117059	23 43 50.87	+32 32 47.3	13.11	H	355.961 965 46	+32.546 461 33		60.11	−218.02	−70.23	19.77	12.09	11.58	25.13	13.77	+ 9	−20	−62	−85	−36	+41	−37	−83	+56	+69	5	3.29
117060	23 43 53.97	−45 27 44.7	6.84	H	355.974 879 61	−45.462 410 97		8.03	54.72	−65.59	0.68	0.54	0.85	0.76	0.53	− 4	+18	− 4	−11	− 5	+12	− 6	−26	− 8	−10	0	−1.97
117061	23 43 54.10	−43 36 02.4	9.44	H	355.975 404 24	−43.600 677 14		4.79	11.22	−7.85	0.78	0.84	1.25	0.87	0.79	− 1	+ 3	−23	+ 5	− 8	+17	− 7	−34	+16	− 9	0	1.31
117062	23 43 55.36	+66 33 07.4	7.94	H	355.980 650 48	+66.552 064 48	A	2.67	2.01	−9.25	1.01	1.00	1.12	1.18	1.07	−28	−11	+27	− 7	+ 6	+ 3	+ 4	−24	− 5	−35	2	1.70
117063 H	23 43 56.80	+07 14 58.4	8.15	G	355.986 653 36	+07.249 550 50	A	7.95	29.22	−18.58	3.52	3.71	2.80	3.27	2.39	+15	−22	+ 0	−28	+19	+18	+ 1	−23	+10	+47	1	1.54
117064	23 43 57.11	−28 02 39.5	9.74	G	355.987 961 91	−28.044 299 57		14.09	173.42	−118.62	1.74	1.15	1.67	2.14	1.36	+ 5	−45	−22	+39	−24	+11	−30	− 5	+20	−12	0	0.42
117065	23 43 57.22	−65 29 26.1	9.13	H	355.988 428 79	−65.490 586 40		6.41	1.16	−23.78	0.75	0.82	1.07	0.86	0.91	− 1	− 5	−26	− 4	+ 9	+ 5	+11	+ 9	−21	+10	0	0.53
117066	23 43 57.94	−82 30 29.8	7.68	H	355.991 405 47	−82.508 278 22		25.18	−129.45	−91.76	0.58	0.53	0.65	0.66	0.57	+16	−20	−15	−13	+ 1	+17	+ 3	+ 3	− 3	+22	0	0.22
117067	23 43 58.03	−63 58 45.4	8.69	H	355.991 772 26	−63.979 267 13		2.08	11.03	−14.89	0.66	0.76	0.96	0.72	0.91	− 8	− 5	−17	− 4	+16	+10	+17	+12	− 9	+13	0	0.30
117068	23 43 58.15	−24 45 53.0	8.44	H	355.992 297 14	−24.764 713 51		3.64	14.80	−15.56	1.20	0.79	1.29	2.20	1.00	− 5	+ 5	−38	− 2	−17	+39	− 3	−13	+ 6	−28	0	−0.94
117069	23 43 58.75	+64 44 28.1	11.30	G	355.994 784 57	+64.741 147 76		34.63	542.99	90.72	1.56	1.52	1.97	1.83	1.68	− 9	+14	+26	+ 3	−18	− 5	−15	+12	+12	−18	0	0.86
117070	23 43 59.05	+17 30 42.1	7.72	H	355.996 032 34	+17.511 697 58		9.83	−18.45	−22.17	0.67	0.53	0.93	0.68	0.52	+47	+ 9	+ 5	+ 4	+ 0	+ 0	+ 1	− 2	+18	+41	0	1.21
117071	23 43 59.27	+58 44 47.5	8.28	H	355.996 964 32	+58.746 530 37		4.44	20.49	−1.16	0.63	0.58	0.82	0.80	0.72	−17	+23	+10	+21	+ 6	+ 0	+ 5	+ 2	− 8	−11	0	−0.40
117072	23 43 59.40	+70 06 21.7	9.51	H	355.997 514 40	+70.106 032 77		0.30	−8.71	−3.23	0.70	0.68	0.91	0.77	0.70	+ 2	+ 0	+22	−20	+ 5	+ 1	+ 3	+ 6	+10	+ 8	0	0.31
117073 H	23 43 59.44	+29 21 41.6	4.93	G	355.997 658 46	+29.361 552 78	A	13.91	71.44	−40.78	0.68	0.60	0.75	0.65	0.55	+21	+ 3	−12	+ 1	+14	−22	+10	+ 7	−17	+41	2	−0.04
117074	23 44 00.17	−78 07 11.4	8.47	H	356.000 710 28	−78.119 824 72		1.63	−3.51	−7.56	0.70	0.63	0.80	0.80	0.71	+10	−11	−16	− 3	+ 4	+17	+ 5	− 6	+18	+33	0	−2.69
117075	23 44 01.05	−45 04 59.3	6.08	G	356.004 382 62	−45.083 127 86		13.68	325.70	1.93	0.55	0.50	0.76	0.61	0.50	− 9	− 1	− 6	−22	+ 6	+16	+ 6	−36	+ 2	−15	0	−0.85
117076	23 44 01.88	−08 16 18.4	9.12	H	356.007 830 88	−08.271 788 13		2.76	−2.45	−11.48	1.16	0.84	1.29	1.76	1.18	+31	− 4	+ 5	+20	+14	+24	+11	+15	− 2	+ 3	0	0.63
117077 H	23 44 02.33	+62 43 46.9	8.69	G	356.009 727 36	+62.729 707 53	*	3.95	10.87	9.48	3.28	8.45	1.94	1.92	1.69	−36	+11	+16	+15	− 5	− 8	+ 2	−10	+16	− 8	2	−0.15
117078	23 44 03.29	+61 47 22.2	8.22	3 H	356.013 692 70	+61.789 503 69		−0.18	−3.52	−3.55	1.06	1.07	1.42	1.29	1.23	−15	+ 9	+18	− 9	− 1	+ 7	+ 0	− 5	+19	−13	0	
117079 H	23 44 05.35	−54 12 25.3	8.80	H	356.022 274 23	−54.207 017 44	*	3.39	29.28	−3.66	1.51	2.12	1.51	0.91	0.90	−37	+ 9	−19	+ 8	+ 2	+14	+ 6	−21	− 3	−34	1	−0.68
117080	23 44 05.44	+42 27 47.8	7.64	H	356.022 686 23	+42.463 269 91		3.66	−39.90	−17.74	0.45	0.59	0.86	0.55	0.66	+12	+ 9	+15	+ 0	− 1	−10	+ 1	+21	+ 6	+10	0	−0.14
117081 T	23 44 07.31	−27 11 46.7	9.01	H	356.030 474 73	−27.196 316 28		58.45	74.76	102.35	45.14	36.29	47.16	58.91	39.45	+11	−27	−22	−18	−12	+17	−15	−37	+21	− 8	0	
117082	23 44 08.17	+59 36 53.8	8.87	G	356.034 061 30	+59.614 949 16		6.92	19.53	−4.60	0.69	0.71	0.92	0.91	0.87	−30	+ 8	+16	− 6	+13	+ 7	+12	−10	− 1	−36	0	0.95
117083	23 44 09.13	+53 41 50.8	9.40	H	356.038 047 73	+53.697 446 40		2.77	6.47	−3.71	0.84	0.89	1.27	1.09	1.24	−28	+23	− 6	+ 6	+11	+11	+11	− 4	− 3	−28	0	0.09
117084	23 44 09.49	+02 08 45.8	8.52	H	356.039 541 16	+02.146 050 74		2.02	21.75	2.75	1.15	0.93	1.24	1.56	1.27	+21	+18	−21	+37	+ 9	+12	+13	+39	+ 5	+22	0	1.03
117085	23 44 10.84	−13 11 24.9	8.53	H	356.045 186 89	−13.190 257 81		3.87	32.76	−49.44	1.34	1.19	1.42	1.96	1.22	+28	−20	−40	−45	− 0	+31	+11	− 8	+20	+18	2	2.61
117086	23 44 11.10	−54 41 24.5	9.01	1 H	356.046 229 94	−54.690 147 62		3.65	−43.03	1.17	0.64	0.77	1.31	0.69	0.77	−35	+16	−16	+ 6	− 1	+ 9	+ 2	− 7	+ 3	−28	0	0.76
117087	23 44 11.25	−40 41 09.2	7.48	H	356.046 859 40	−40.685 891 38		2.71	33.40	−4.87	0.54	0.52	0.90	0.61	0.45	+ 2	+10	−12	+29	−21	+30	−22	−37	+18	− 8	0	0.58
117088	23 44 12.03	−64 24 16.3	5.73	H	356.050 108 77	−64.404 535 15		3.71	14.42	34.60	0.42	0.44	0.58	0.47	0.51	− 7	−14	−17	+ 4	+10	+ 2	+12	+11	−11	− 7	0	−0.61
117089	23 44 12.06	−18 16 36.9	5.24	H	356.050 259 14	−18.276 928 62		9.84	27.60	−3.76	0.71	0.47	0.87	0.92	0.63	+24	−21	−19	−23	− 2	+45	+ 3	−23	+20	+ 6	0	−0.03
117090	23 44 13.11	−37 06 56.5	9.26	H	356.054 624 09	−37.115 700 27		1.80	−3.13	−17.15	0.97	0.95	1.22	1.18	0.95	+12	+ 8	+13	−29	+15	− 1	+18	+ 4	− 6	+ 2	2	−1.03
117091	23 44 14.85	−32 21 51.4	11.69	G	356.061 866 85	−32.364 282 57		17.23	202.54	−341.66	2.11	2.07	2.79	2.54	2.31	+32	− 1	+ 0	−24	+24	− 1	+24	+ 1	+11	+19	0	0.95
*117092	23 44 15.66	−43 01 27.9	7.77	H	356.065 241 56	−43.024 430 54		7.35	11.48	46.32	0.59	0.50	0.87	0.72	0.81	− 7	− 6	−15	+16	−11	+26	− 3	−19	+18	+16	0	2.19
*117093	23 44 15.65	−10 59 05.9	9.75	G	356.065 222 03	−10.984 981 64		−0.26	−3.36	−50.39	1.50	1.23	1.75	2.17	1.62	+42	−21	−32	+ 1	+20	+ 8	+26	+29	+ 2	+22	0	−0.57
117094 H	23 44 16.54	+36 20 19.9	7.47	G	356.068 901 90	+36.338 860 52	A	10.75	106.55	30.51	1.17	0.83	1.09	1.02	0.70	+10	+21	− 5	−16	+14	+ 5	+11	−16	+17	+10	2	0.68
117095	23 44 17.36	+27 34 31.3	8.59	H	356.072 318 81	+27.575 367 32		1.90	7.05	−12.39	0.76	0.65	0.97	0.93	0.76	+18	+12	−25	+12	+ 3	+17	+13	−10	+18	+48	0	−1.93
117096	23 44 17.48	−64 20 22.8	7.09	H	356.072 822 04	−64.339 659 25		5.50	31.10	−2.44	0.48	0.52	0.68	0.53	0.61	− 9	−12	−23	+ 3	+ 6	+ 3	+ 9	+15	−13	− 7	0	−0.22
117097	23 44 18.22	+00 42 44.7	8.00	H	356.075 905 12	+00.712 426 98		9.92	−9.49	−31.82	1.11	0.76	1.26	1.43	0.99	+ 7	+ 4	−33	−28	+11	+30	+21	+11	+ 5	+21	0	−0.91
117098	23 44 18.59	+08 30 16.6	9.79	G	356.077 450 67	+08.504 622 04		6.02	−6.90	−9.79	1.45	0.85	1.68	1.54	0.82	+45	+13	−11	−13	+ 5	+ 7	+ 6	−25	+35	+59	1	1.30
117099	23 44 19.19	−54 26 09.7	7.42	2 H	356.079 946 60	−

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
117001	10.408	0.034	8.400	0.013		1.701	0.030	T	1.94	0.09	O	8.2977	0.0027	0.021	91		8.27	8.33		U			1							
117002	9.952	0.028	9.117	0.022		0.730	0.005	G	0.78	0.00	H	9.1513	0.0019	0.017	69		9.11	9.19		C			1							
117003	10.040	0.021	9.345	0.018		0.629	0.021	T	0.70	0.02	L	9.4084	0.0021	0.017	107		9.38	9.45					1							
117004	9.717	0.020	9.320	0.020		0.470	0.015	G	0.54	0.02	H	9.3382	0.0019	0.022	130		9.30	9.38					1 S							
117005	8.181	0.013	7.712	0.012		0.432	0.015	G	0.50	0.02	H	7.7742	0.0017	0.011	53		7.75	7.79		C			1							S
117006	10.344	0.038	9.531	0.030		0.775	0.015	G	0.81	0.01	H	9.6126	0.0036	0.025	67		9.56	9.67					1							
117007	10.378	0.031	8.621	0.013		0.205	0.015	G	1.39	0.09	S	8.6329	0.0048	0.036	114		8.58	8.68		R			1 S							
117008	9.208	0.015	9.034	0.018		0.138	0.015	G	0.15	0.01	H	9.0661	0.0017	0.016	118		9.03	9.10					1							
117009	10.068	0.024	9.217	0.020		0.763	0.024	T	0.80	0.02	L	9.2284	0.0025	0.019	137		9.19	9.26					1							
117010	7.999	0.006	7.637	0.006		0.302	0.003	G	0.35	0.00	H	7.7030	0.0010	0.014	160		7.68	7.72		C			1							S
117011	11.879	0.109	10.441	0.047		1.664	0.029	T	0.98	0.01	L	10.4250	0.0047	0.031	66		10.38	10.48		C			1							
117012	10.403	0.044	9.034	0.024		1.169	0.015	G	1.17	0.02	A	9.0227	0.0037	0.021	49		8.97	9.07					1							
117013	9.946	0.034	8.708	0.020		1.065	0.015	G	1.06	0.02	A	8.7723	0.0021	0.019	57		8.74	8.81					1							S
117014	8.398	0.009	7.451	0.008		0.835	0.009	T	0.85	0.01	L	7.5079	0.0007	0.012	151		7.48	7.53		D	23433−7049	I 1	1							S
117015	8.812	0.010	8.779	0.013		0.061	0.001	G	0.07	0.00	H	8.7926	0.0016	0.014	122		8.76	8.82					1							S
117016	8.255	0.013	8.181	0.016		0.074	0.015	G	0.06	0.01	L	8.2172	0.0012	0.013	48		8.20	8.23		D			1							S
117017	10.170	0.036	8.727	0.019		1.217	0.032	T	1.18	0.03	L	8.7282	0.0022	0.017	51		8.71	8.76					1							
117018	9.236	0.020	8.055	0.013		1.012	0.019	T	0.99	0.01	L	8.1169	0.0011	0.009	58		8.10	8.14					1							S
117019	8.727	0.015	8.247	0.014		0.427	0.022	G	0.49	0.02	H	8.3051	0.0027	0.014	58		8.29	8.33		C			1							S
117020	7.289	0.006	5.291	0.003		1.692	0.006	T	2.01	0.02	O	5.1768	0.0018	0.016	141		5.15	5.20		U 2			1 S							S P
117021	9.776	0.016	9.225	0.015		0.516	0.020	T	0.59	0.02	L	9.3076	0.0022	0.026	173		9.26	9.35		C			1							
117022	8.552	0.016	7.278	0.010		1.085	0.015	T	1.05	0.01	L	7.3308	0.0012	0.011	104		7.31	7.35		C			1							S
117023	11.501	0.079	9.462	0.021		1.688	0.065	T	1.71	0.07	L	9.3860	0.0022	0.019	118		9.35	9.42		C			1							
117024	8.201	0.006	8.150	0.007		0.052	0.009	T	0.06	0.01	L	8.1690	0.0012	0.014	202		8.15	8.19		C			1							
117025	10.113	0.038	8.757	0.021		1.149	0.034	T	1.11	0.03	L	8.8088	0.0034	0.021	49		8.77	8.85		C	23434−2142	I 1	1							S
117026	8.990	0.009	8.481	0.009		0.480	0.015	G	0.55	0.02	H	8.5457	0.0011	0.017	196		8.52	8.57					1							S
117027	9.994	0.034	8.871	0.023		0.967	0.032	T	0.95	0.03	L	8.9606	0.0030	0.018	62		8.93	9.00		C			1							S
117028	11.244	0.070	10.657	0.066		0.548	0.085	T	0.62	0.08	L	10.5680	0.0033	0.031	121		10.51	10.62		C			1 S							G
117029	7.907	0.006	7.218	0.005		0.645	0.011	G	0.71	0.01	H	7.2709	0.0009	0.010	142		7.25	7.29			23434+5804	I 1	1							S
117030	10.691	0.045	8.803	0.016		1.568	0.038	T	1.59	0.04	L	8.7935	0.0014	0.016	113		8.77	8.83		C			1							
117031	10.177	0.031	9.051	0.020		0.969	0.029	T	0.95	0.02	L	9.0885	0.0021	0.013	87		9.07	9.12		C			1							
117032	10.196	0.026	10.025	0.034		0.164	0.040	T	0.18	0.04	L	10.0080	0.0034	0.031	144		9.93	10.06					1							G
117033	9.378	0.013	8.751	0.012		0.579	0.013	T	0.65	0.01	L	8.8173	0.0021	0.020	151		8.77	8.85					1 S							S
117034						0.960	0.015	G	0.95	0.01	H	11.3532	0.0050	0.050	122		11.26	11.46					1							G
117035	8.350	0.008	7.871	0.008		0.441	0.015	G	0.51	0.02	H	7.9253	0.0015	0.015	131		7.91	7.95					1							S
117036						1.190	0.020	G	1.32	0.04	I	11.3874	0.0053	0.035	57		11.34	11.47					1							G
117037	8.732	0.008	8.526	0.009		0.197	0.011	T	0.22	0.01	L	8.5714	0.0015	0.018	192		8.54	8.60		C			1							S
117038	9.184	0.019	7.933	0.012		1.067	0.018	T	1.03	0.01	L	7.9734	0.0013	0.009	54		7.95	8.00		D			1							S
117039	8.319	0.008	8.264	0.010		0.056	0.012	T	0.07	0.01	L	8.2768	0.0015	0.014	125		8.25	8.31					1							
117040	10.536	0.035	8.274	0.011		1.910	0.030	T	2.54	0.06	O	8.1007	0.0013	0.016	123		8.07	8.12					1							
117041	10.984	0.070	10.140	0.051		0.671	0.019	G	0.73	0.02	H	10.2487	0.0038	0.024	63		10.19	10.28		C			1							
117042	9.603	0.019	9.165	0.020		0.413	0.025	T	0.48	0.03	L	9.2036	0.0013	0.015	115		9.17	9.24		C			1 X							S G
117043	9.521	0.024	8.892	0.021		0.585	0.028	T	0.66	0.03	L	8.9380	0.0024	0.016	81		8.91	8.97		C			1							S
117044	9.860	0.027	9.355	0.027		0.551	0.015	G	0.62	0.01	H	9.3774	0.0020	0.017	68		9.34	9.41		C			1							
117045	9.245	0.012	8.747	0.012		0.480	0.013	T	0.55	0.01	L	8.8098	0.0017	0.019	149		8.77	8.85					1							S
117046	9.406	0.015	8.826	0.014		0.542	0.018	T	0.62	0.02	L	8.8863	0.0018	0.020	124		8.85	8.92		C			1							
117047	9.507	0.015	9.415	0.020		0.090	0.023	T	0.10	0.03	L	9.4931	0.0029	0.027	145		9.44	9.53					1							G
117048	8.654	0.010	8.057	0.009		0.559	0.011	G	0.63	0.01	H	8.1129	0.0012	0.013	141		8.09	8.14					1							S
117049	10.084	0.024	8.098	0.010		1.682	0.021	T	2.25	0.05	O	7.9402	0.0024	0.025	116		7.89	7.98		U 2			1							S
117050	11.217	0.066	9.844	0.030		1.162	0.057	T	1.12	0.05	L	9.8213	0.0026	0.022	113		9.79	9.86		C			1							
117051	11.345	0.061	9.510	0.022		1.526	0.051	T	1.57	0.08	L	9.4719	0.0017	0.018	100		9.45	9.51		C			1							
117052	9.793	0.026	8.915	0.020		0.783	0.025	T	0.82	0.02	L	8.9536	0.0020	0.017	67		8.92	8.98		C			1							S
117053	10.245	0.027	9.543	0.023		0.647	0.029	T	0.71	0.03	L	9.6498	0.0018	0.020	126		9.62	9.69		C			1							
117054	9.146	0.024	7.810	0.013		1.500	0.600	G	2.50	0.79	K	8.7124	0.1523	1.635	78		5.40	9.59	383.90	P 1 B			1 V							P
117055	9.556	0.015	7.663	0.007		1.606	0.014	T	1.96	0.05	O	7.5527	0.0030	0.029	143		7.50	7.59		U 2			1							S
117056	9.305	0.020	8.597	0.017		0.652	0.021	T	0.72	0.02	L	8.6402	0.0011	0.010	72		8.62	8.67					1							S
117057	7.522	0.006	7.005	0.005		0.488	0.015	G	0.56	0.02	H	7.0574	0.0012	0.009	97		7.04	7.08					1 G							S
117058	9.942	0.019	9.366	0.018		0.541	0.019	T	0.61	0.02	L	9.4589	0.0017	0.022	142		9.42	9.52					1							
117059						1.550	0.020	G	2.44	0.12	I	13.1385	0.0544	0.170	23		12.64	13.46			23438+3233	I 1	1 S							G
117060	8.404	0.009	6.973	0.005		1.220	0.015	G	1.10	0.06	F	7.0106	0.0011	0.009	115		7.00	7.03		C			1							S
117061	9.607	0.015	9.453	0.018		0.129	0.002	G	0.14	0.00	H	9.4864	0.0022	0.022	147		9.45	9.53		C			1							
117062	8.053	0.008	7.928	0.009	A	0.121	0.011	T	0.14	0.01	L	7.9835	0.0099	0.033	125	A	7.95	8.05		D	23439+6633	H 1	2 C A	AB	1	15.111	0.015	2.15	0.07	S
117063	8.676	0.024	8.190	0.024	*	0.500	0.015	G	0.57	0.02	H *	8.2580	0.0012	0.010	105	*	8.24	8.28		D	23439+0715	I 1	2 C A	AB	4	3.080	0.003	0.21	0.01	S
117064	10.661	0.058	9.840	0.047		0.758	0.004	G	0.80	0.00	H	9.8868	0.0035	0.019	46		9.85	9.93		C			1							
117065	10.418	0.026	9.246	0.016		1.005	0.024	T	0.98	0.02	L	9.2915	0.0018	0.022	139		9.25	9.33					1							
117066	8.436	0.008	7.768	0.008		0.608	0.008	T	0.68	0.01	L	7.8144	0.0010	0.012	137		7.79	7.84		C			1							S
117067	10.182	0.024	8.826	0.014		1.149	0.022	T	1.11	0.02	L	8.8576	0.0016	0.019	144		8.82	8.89		C			1							
117068	8.925	0.019	8.472	0.019		0.408	0.015	G	0.47	0.02	H	8.5294	0.0029	0.018	57		8.48	8.56					1							S
117069						1.400	0.020	G	1.67	0.05	I	11.4416	0.0055	0.043	118		11.35	11.51					1							G
117070	8.221	0.009	7.756	0.008		0.438	0.011	T	0.51	0.01	L	7.8131	0.0011	0.010	119		7.80	7.84					1							S
117071	8.351	0.011	8.289	0.013		0.035	0.005	G	0.05	0.00	H	8.3033	0.0018	0.014	128		8.28	8.33					1							
117072	9.538	0.017	9.502	0.024		0.038	0.027	T	0.05	0.02	L	9.5244	0.0017	0.017	128		9.48	9.56					1							G
117073	6.120	0.003	5.038	0.002	*	0.935	0.001	G	0.93	0.03	C *	5.0892	0.0005	0.005	92	*	5.08	5.10		D	23440+2922	I 1	2 C A	AB	259	0.839	0.008	2.95	0.03	S
117074	9.838	0.019	8.584	0.011		1.069	0.017	T	1.03	0.01	L	8.6378	0.0016	0.015	136		8.61	8.66		C			1							
117075	7.334	0.006	6.201	0.004		0.978	0.015	G	1.02	0.01	I	6.2451	0.0007	0.007	121		6.23	6.26					1							S
117076	10.443	0.043	9.193	0.024		1.066	0.038	T	1.03	0.03	L	9.2938	0.0021	0.019	69		9.26	9.32					1							
117077	10.181	0.027	8.820	0.014	*	1.140	0.015	G	1.10	0.02	I *	8.8642	0.0018	0.021	126	*	8.83	8.90			23440+6244	H 1	2 C C	AB	142	0.237	0.089	2.50	1.02	
117078	12.180	0.186	9.079	0.017		2.601	0.154	T	2.15	0.60	K	8.2839	0.0361	0.192	120		8.03	8.64		U 2 C			1 X S							
117079	9.487	0.011	8.878	0.010	*	0.566	0.011	T	0.64	0.01	L *	8.9243	0.0019	0.026	234	*	8.88	8.98		D	23441−5412	H 1	2 C A	AB	272	0.244	0.007	1.00	0.12	
117080	9.045	0.011	7.751	0.007		1.100	0.010	T	1.06	0.01	L	7.8051	0.0010	0.010	136		7.78	7.82					1							S
117081	10.255	0.043	9.683	0.039		0.535	0.052	T	0.61	0.06	L	9.1386	0.0028	0.019	49		9.11	9.17		D	23441−2712	I 1	1 X S							S G
117082	9.349	0.016	8.892	0.016		0.410	0.015	G	0.48	0.02	H	8.9583	0.0019	0.018	131		8.92	8.99					1							
117083	9.517	0.016	9.408	0.020		0.106	0.024	T	0.12	0.03	L	9.4394	0.0021	0.028	146		9.39	9.51					1							
117084	10.156	0.040	8.653	0.020		1.264	0.035	T	1.22	0.04	L	8.6757	0.0030	0.014	49		8.65	8.70		C			1							
117085	9.217	0.020	8.619	0.018		0.558	0.020	T	0.63	0.02	L	8.6504	0.0017	0.012	70		8.63	8.68		C	23442−1311	I 1	1 G							S
117086	9.456	0.011	9.049	0.011		0.398	0.013	T	0.46	0.01	L	9.1048	0.0023	0.028	238		9.05	9.16		U			1							
117087	9.346	0.012	7.626	0.006		1.435	0.011	T	1.46	0.02	A	7.6108	0.0013	0.013	180		7.59	7.63					1							S
117088	7.544	0.006	5.878	0.003		1.393	0.033	G	1.41	0.03	C	5.8698	0.0007	0.009	146		5.86	5.88					1							S
117089	5.137	0.003	5.227	0.003		−0.084	0.003	G	−0.06	0.00	H	5.2227	0.0006	0.005	115		5.21	5.23		C			1							S
117090	10.725	0.046	9.349	0.024		1.165	0.041	T	1.13	0.04	L	9.4289	0.0021	0.014	74		9.40	9.46		C			1							
117091						1.205	0.017	G	1.34	0.03	I	11.8282	0.0066	0.054	100		11.72	11.91					1							G
117092	8.030	0.007	7.792	0.007		0.207	0.003	G	0.23	0.00	H	7.8371	0.0011	0.012	155		7.81	7.86		C			1 G							S
117093	11.245	0.090	9.961	0.044		1.008	0.020	G	0.98	0.02	I	9.9046	0.0039	0.023	57		9.86	9.95					1							
117094	8.061	0.009	7.529	0.008	*	0.551	0.015	G	0.62	0.01	H *	7.5869	0.0010	0.008	77	*	7.57	7.60		D	23443+3620	H 1	2 C A	AB	255	0.492	0.021	3.48	0.13	S
117095	10.026	0.024	8.719	0.014		1.111	0.022	T	1.07	0.02	L	8.7555	0.0015	0.014	106		8.73	8.79					1							
117096	8.555	0.009	7.201	0.006		1.147	0.008	T	1.11	0.01	L	7.2525	0.0009	0.010	147		7.23	7.27					1							S
117097	8.659	0.015	8.048	0.013		0.550	0.015	G	0.62	0.01	H	8.1172	0.0022	0.013	52		8.10	8.14					1							S
117098	10.336	0.025	9.793	0.025		0.432	0.007	G	0.50	0.01	H	9.8809	0.0022	0.026	159		9.84	9.92					1							
117099	9.328	0.010	7.663	0.005		1.418	0.009	T	2.70	0.04	O	7.4098	0.0127	0.256	244		7.22	7.81		U 2 C			1 X S							S
117100	10.595	0.038	10.795	0.068		−0.324	0.015	G	−0.35	0.02	H	10.8807	0.0039	0.030	81		10.83	10.95		C			1 X							G

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)											Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	$\mu_{\alpha*}$	μ_δ	π	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ	$\mu_{\alpha*}$	μ_δ	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
117101	23 44 22.26	+58 45 58.2	8.38		G	356.092 757 18	+58.766 173 09		2.67	2.30	−4.95	0.63	0.63	0.84	0.79	0.77	−21	+27	+ 4	+13	+14	− 2	+14	− 7	− 1	−16		0	0.12
117102	23 44 22.72	+04 21 17.1	10.88		H	356.094 685 22	+04.354 758 07		1.20	−3.81	−23.93	2.05	1.71	2.55	2.40	2.11	+23	−10	−31	−27	+ 6	+15	+14	+ 7	−35	+16		0	−0.14
117103	23 44 22.86	+55 12 23.1	7.17		H	356.095 249 19	+55.206 417 58		3.05	−8.40	−12.47	0.49	0.51	0.74	0.53	0.58	−28	+16	− 2	+ 9	− 3	+18	− 1	+ 1	+ 9	−19		0	−1.86
117104	23 44 24.55	+57 45 32.5	7.81		H	356.102 311 79	+57.759 034 11		4.35	−0.64	−0.37	0.56	0.59	0.79	0.70	0.71	−26	+11	+ 9	+10	+ 9	+ 8	+ 8	+ 4	+ 4	−23		0	−1.35
117105	23 44 25.00	−70 29 25.4	6.06		G	356.104 179 71	−70.490 375 56		21.77	245.19	61.31	0.44	0.45	0.57	0.55	0.54	− 8	− 8	−23	− 2	+10	− 7	+ 9	− 7	+ 2	− 4		1	−0.91
117106	23 44 28.69	−14 25 11.8	7.99		G	356.119 522 54	−14.419 946 40		8.45	3.78	−33.37	1.03	0.66	1.05	1.82	0.94	+36	− 5	− 7	+30	+25	+10	+17	+18	+ 6	− 7		0	−0.99
117107	H 23 44 29.10	−26 14 47.7	6.23		G	356.121 243 78	−26.246 581 54	A	14.70	−54.25	−20.58	1.01	0.85	1.04	1.24	0.92	+34	−21	−37	+ 7	+ 7	− 7	− 2	− 4	+30	+21		3	−0.02
117108	23 44 29.18	−61 08 23.7	8.72	1	H	356.121 587 32	−61.139 919 39		0.51	−0.55	−12.64	0.82	0.86	1.18	0.94	0.96	+ 5	+ 1	−40	−10	− 7	+ 3	− 6	−13	+ 7	+21		0	0.00
117109	23 44 29.22	+55 29 27.8	7.75		H	356.121 767 23	+55.491 063 34		2.67	6.21	−4.51	0.57	0.55	0.81	0.62	0.62	−27	+24	− 3	+18	+ 0	+ 7	+ 5	− 1	+15	−18		0	−1.03
117110	H 23 44 31.19	+08 30 15.0	8.60		G	356.129 971 85	+08.504 156 08	A	10.90	65.20	−45.60	1.66	1.04	1.56	1.62	0.89	+42	− 9	+ 5	− 7	+12	+ 3	+12	− 6	+16	+57		1	1.18
117111	H 23 44 32.14	+46 22 48.6	7.57	1	G	356.133 928 51	+46.380 166 64	A	0.98	0.44	−1.42	0.72	0.78	1.12	0.71	0.87	+ 1	− 7	+28	−45	+ 9	− 3	+ 7	+34	+21	+ 4		1	0.05
117112	23 44 32.50	−03 10 31.3	7.26		H	356.135 424 28	−03.175 361 10		12.13	5.87	−18.24	0.89	0.62	1.03	1.19	0.79	+29	− 7	−23	−24	− 9	+24	− 4	−22	+24	+11		0	−1.23
*117113	23 44 33.36	+29 46 15.4	8.51		H	356.138 991 16	+29.770 936 33		3.35	−13.83	−4.62	0.81	0.68	1.04	0.88	0.80	+13	+13	−24	+19	+17	−16	+17	+ 5	− 9	+38		0	1.17
*117114	23 44 33.35	−62 13 25.6	9.85		G	356.138 975 36	−62.223 785 26		11.65	3.32	123.27	0.83	0.90	1.18	1.03	1.21	+ 0	− 6	−21	+ 9	+ 0	+ 6	+ 3	− 6	− 5	+ 8		0	−0.34
117115	23 44 33.56	+47 49 05.7	9.62		H	356.139 835 56	+47.818 248 86		2.52	9.89	−14.49	1.02	0.87	1.65	1.20	1.19	−22	+ 8	+12	−42	+ 9	− 4	+ 5	− 9	+ 3	−13		1	0.25
117116	23 44 34.09	−26 28 34.1	8.63		H	356.142 052 84	−26.476 151 85		5.71	68.40	−49.25	1.17	1.06	1.46	1.72	1.10	+27	−27	−45	− 5	−28	+42	−17	−28	+12	+ 6		0	0.28
*117117	23 44 34.74	+15 55 21.3	10.55		H	356.144 759 15	+15.922 580 70		0.47	8.92	−0.52	1.61	1.09	1.95	1.58	1.15	+37	− 3	− 8	−19	+ 5	− 2	+ 5	−14	+ 5	+46		0	0.15
*117118	23 44 34.73	−18 47 04.3	9.36		H	356.144 698 22	−18.784 523 46		6.32	56.75	3.27	1.12	0.99	1.35	1.31	1.33	+47	−11	−10	−34	−21	+37	−25	−58	+15	+31		0	0.21
117119	23 44 34.94	−05 00 25.4	9.07		H	356.145 599 59	−05.007 067 66		3.32	32.14	4.02	1.17	0.93	1.47	1.74	1.24	+46	−14	−27	−23	+ 2	−13	− 2	−22	+40	−10		2	−0.46
117120	23 44 38.05	+16 28 54.9	8.59		H	356.158 561 89	+16.481 929 41		2.30	16.33	−15.85	0.90	0.65	1.11	0.86	0.59	+29	+20	+ 7	−11	+ 3	−19	+ 6	−17	+11	+28		0	−0.16
*117121	23 44 39.02	−20 58 02.4	11.60		G	356.162 569 01	−20.967 340 63		19.92	338.76	118.46	2.55	1.97	2.85	3.47	2.31	+ 1	+11	−40	−38	+14	+ 0	+21	− 8	+13	− 8		0	1.67
*117122	23 44 38.83	−08 50 55.6	8.07		H	356.161 780 37	−08.848 788 20		9.87	49.54	−0.51	0.92	0.68	1.06	1.29	0.84	+30	+ 1	−21	+ 6	+11	− 8	+ 8	+ 8	− 8	+ 1		0	3.48
117123	23 44 39.81	−39 30 32.4	8.94		H	356.165 874 09	−39.508 993 06		4.44	18.64	−31.91	0.72	0.72	1.25	0.80	0.64	+ 6	+14	−15	+33	−23	+36	−23	−40	+20	− 1		2	1.45
117124	23 44 39.95	−06 07 50.0	9.08		G	356.166 478 24	−06.130 558 85		9.95	11.44	−12.44	1.13	0.81	1.38	1.60	1.08	+31	−16	−13	−11	− 1	+37	+ 1	− 3	+22	+11		0	0.93
117125	23 44 40.68	−78 47 29.2	5.74		G	356.169 508 77	−78.791 444 67		5.73	54.95	1.16	0.44	0.41	0.52	0.55	0.46	+ 4	− 5	−17	− 6	+ 5	−15	+ 2	− 4	+10	+ 6		1	1.26
117126	23 44 41.33	+14 06 14.5	9.42		H	356.172 212 06	+14.104 038 50		2.03	−5.48	−10.26	1.40	0.82	1.43	1.46	0.85	+14	+ 7	+ 5	−37	+12	− 6	+10	−16	+19	+25		0	1.36
117127	23 44 42.00	−08 27 45.6	8.24		H	356.175 000 12	−08.462 674 49		7.24	10.83	−8.00	0.92	0.67	1.04	1.30	0.90	+36	− 2	− 7	+19	+13	+15	+12	+12	−20	+ 5		0	1.29
117128	23 44 44.14	−19 55 18.1	9.51		H	356.183 910 29	−19.921 680 86		10.53	−57.46	−182.77	1.42	0.96	1.88	1.88	1.88	+43	+11	−20	+ 9	+22	− 1	+31	+ 0	+47	+32		0	0.68
117129	23 44 45.40	+43 44 46.5	6.93		H	356.189 159 52	+43.746 238 51		6.56	54.92	10.80	0.45	0.52	0.72	0.46	0.51	+14	+19	+26	+ 6	− 4	− 2	+ 0	+25	+19	+12		0	1.94
117130	H 23 44 47.20	−45 14 49.5	8.92		H	356.196 685 65	−45.247 080 23	A	6.22	25.39	−26.36	2.30	2.06	2.65	2.50	2.17	+ 1	+ 8	−10	−13	+ 7	+11	+ 9	−21	− 3	+ 9		1	0.37
117131	23 44 47.35	−06 56 12.2	8.74		H	356.197 272 92	−06.936 719 53		4.69	−31.16	−24.33	1.09	0.83	1.33	1.44	1.26	+44	−23	−16	− 8	− 4	+22	− 5	−14	+17	+31		0	0.71
117132	23 44 47.50	+36 19 45.1	8.46		H	356.197 915 50	+36.329 201 30		1.93	−8.90	−8.48	0.76	0.60	0.96	0.91	0.62	−11	+22	− 9	−14	+ 7	− 4	+11	− 5	+23	−12		0	2.16
117133	23 44 48.37	+55 47 58.9	6.46		H	356.201 529 41	+55.799 693 08		6.89	28.88	−2.64	0.48	0.49	0.72	0.58	0.54	−24	+17	+ 5	+ 6	+ 3	+14	+ 6	− 9	+16	−15		0	0.20
117134	23 44 48.38	+50 54 50.8	8.64		H	356.201 595 11	+50.914 109 66		6.11	68.46	3.37	0.60	0.78	1.14	0.74	1.06	−32	+ 7	+17	+14	− 7	− 1	− 5	− 7	−13	−18		2	0.25
117135	23 44 48.54	−23 10 42.1	8.80		H	356.202 247 74	−23.178 373 77		1.00	−8.29	−2.96	1.12	1.05	1.36	1.66	1.21	+23	−15	−35	+ 4	−13	+14	−13	−19	+27	+ 8		0	−0.01
117136	23 44 48.58	−32 52 51.3	9.04		H	356.202 405 49	−32.880 906 80		0.38	−10.39	−4.21	1.03	1.08	1.26	1.15	1.29	+40	−15	− 3	−13	+31	+18	+36	+29	+ 6	+31		2	−0.59
117137	23 44 48.93	+07 11 30.6	6.88		H	356.203 889 78	+07.191 833 43		6.87	21.51	−11.34	0.93	0.48	0.89	0.92	0.40	+21	− 9	− 3	−35	+19	+ 6	+ 8	−24	+17	+36		2	1.69
117138	23 44 49.09	+34 43 32.6	8.15		G	356.204 550 05	+34.725 724 97		12.48	70.52	20.24	0.78	0.61	0.92	1.05	0.63	−17	+11	+ 3	−13	+13	+23	+11	−11	− 4	−28		0	0.80
117139	23 44 50.76	−25 39 26.9	8.52		H	356.211 497 41	−25.657 467 83		1.42	47.27	−24.72	1.23	1.02	1.44	1.89	1.07	+15	− 7	−49	+ 0	−16	+23	−11	−26	+14	− 7		0	0.59
117140	H 23 44 51.76	+13 27 04.0	9.58		G	356.215 647 15	+13.451 097 80	A	3.99	19.06	−6.64	2.33	1.38	2.21	2.24	1.35	+26	+10	+20	−36	+ 9	+ 5	+11	− 7	+17	+20		0	0.00
117141	H 23 44 52.79	−38 19 57.4	7.96		G	356.219 978 37	−38.332 598 96	*	5.71	8.07	−1.50	0.68	0.65	1.00	0.76	0.60	+ 8	+14	− 4	+29	− 5	+21	−11	−14	+ 0	−10		0	1.10
117142	23 44 53.07	−23 30 14.8	7.88		H	356.221 137 57	−23.504 098 35		3.02	15.94	0.34	1.09	0.79	1.21	1.44	0.97	+ 6	+11	−28	+ 3	−11	+10	− 5	−22	+39	+ 2		0	−0.04
117143	23 44 53.54	+45 41 11.5	10.92	2	H	356.223 094 34	+45.686 529 57		−0.15	1.77	−4.78	1.48	1.57	2.45	1.65	1.80	+ 1	+ 3	+21	−27	+ 4	− 6	+ 7	+36	+ 8	− 2		0	−0.61
117144	23 44 54.25	−47 20 40.5	9.24		H	356.226 026 22	−47.344 576 70		7.60	−50.83	−61.91	0.91	0.83	1.22	1.03	0.84	−11	− 8	−13	+22	−16	−14	−18	+13	+13	−21		5	1.39
117145	23 44 55.26	+50 35 14.9	7.72		H	356.230 242 56	+50.587 472 25		6.32	−9.79	−28.48	0.51	0.64	0.93	0.63	0.82	−16	+12	+18	+19	− 5	− 4	− 3	+ 9	+ 1	− 4		0	0.54
117146	23 44 56.67	+69 45 17.5	7.15		H	356.236 108 77	+69.754 870 35		2.78	−3.43	−6.31	0.48	0.49	0.63	0.57	0.51	− 6	− 8	+23	+ 5	− 3	+ 3	− 5	+14	+ 7	+ 3		0	1.53
117147	23 44 58.17	−59 25 06.9	8.99		H	356.242 378 56	−59.418 571 54		33.89	401.93	−81.39	0.77	0.88	1.32	0.83	0.99	−14	+ 7	−33	+ 5	+18	− 4	+18	+ 5	−18	+ 2		0	−0.81
*117148	23 44 58.73	+03 46 15.6	10.18		H	356.244 725 53	+03.770 998 11		7.34	−50.61	−27.08	2.77	1.87	3.52	3.84	2.66	+27	−10	−22	+12	− 4	+45	+ 8	+20	−11	+20		0	−0.91
*117149	23 44 58.71	−47 54 10.9	8.62		H	356.244 644 69	−47.903 020 63		2.16	14.62	−2.83	0.86	0.73	1.08	1.04	0.81	− 9	−16	− 6	+27	−12	−11	−16	+ 4	+12	−24		0	−0.41
117150	23 44 59.91	+30 20 12.0	11.73		G	356.249 614 61	+30.336 660 95		6.14	214.33	−179.36	2.07	1.71	2.74	2.62	1.99	+17	+ 0	− 9	+16	+13	−17	+12	+ 7	−14	+32		0	−0.52
117151	23 45 00.05	−00 39 37.2	7.07		H	356.250 195 72	−00.660 339 20		2.94	1.19	6.25	0.92	0.65	1.06	1.16	0.96	+16	+ 2	−26	−22	+ 5	−19	+ 2	− 8	+32	+ 9		0	−0.92
117152	23 45 01.76	−59 10 30.9	8.90		G	356.257 324 24	−59.175 243 35		5.02	71.86	−9.70	0.72	0.82	1.23	0.82	0.91	− 8	+ 0	−35	+ 3	+11	+ 3	+12	+19	−19	+ 0		1	0.28
*117153	23 45 03.23	+03 46 29.8	10.47		H	356.263 437 58	+03.774 933 59		2.61	189.55	75.49	4.52	2.06	5.14	4.63	3.86	+44	+69	+32	−60	−28	−42	−54	−45	−64	+52		0	0.19
*117154	23 45 02.63	+63 00 13.9	10.58	3	H	356.260 958 55	+63.003 857 23		1.91	0.38	−2.41	1.18	1.19	1.58	1.64	1.34	+ 1	+15	+35	+ 8	+10	−16	+15	+ 0	− 1	+ 2		4	0.75
117155	23 45 04.00	+21 23 23.7	6.76		H	356.266 655 65	+21.389 916 24		4.19	−21.33	−28.89	0.61	0.53	0.84	0.69	0.55	+46	− 4	−12	+ 1	+ 6	+ 5	+ 6	− 1	+ 5	+58		0	−0.47
117156	23 45 04.29	+02 05 29.1	7.64		H	356.267 877 08	+02.091 402 98		6.90	24.39	2.12	0.89	0.66	1.02	1.09	0.90	+13	+28	−20	+15	+ 5	+10	+12	+19	+18	+21		0	1.13
117157	23 45 04.81	+76 40 11.0	8.15		H	356.270 037 56	+76.669 716 51		5.09	1.30	−7.16	0.56	0.55	0.65	0.63	0.56	− 1	+ 2	+ 7	− 5	− 9	− 4	− 8	− 8	+ 5	− 5		2	0.98
117158	23 45 07.33	+33 47 07.3	8.33		H	356.280 524 41	+33.785 356 86		3.31	13.98	−20.09	0.72	0.56	0.85	0.88	0.64	− 7	+31	− 5	+18	− 3	+ 8	− 3	+ 2	+ 1	−14		0	1.08
117159	23 45 09.30	+29 33 42.8	8.40		G	356.288 747 73	+29.561 881 21		34.85	948.85	−3.41	0.78	0.65	1.02	0.82	0.74	+13	+17	−27	+18	+17	−19	+13	+14	− 8	+35		0	0.94
117160	23 45 09.31	−56 27 22.5	10.74		H	356.288 791 76	−56.456 245 54		2.16	−23.09	−40.95	1.11	1.21	1.81	1.43	1.37	−34	− 9	− 3	+21	+ 1	−10	+ 0	− 6	− 8	−37		0	1.00
117161	23 45 11.14	+31 41 21.8	9.22	2	H	356.296 435 94	+31.689 384 96		1.72	−3.45	−4.54	0.97	0.78	1.24	1.33	0.87	− 6	+17	−19	− 7	+26	+ 7	+19	+ 4	−13	+10		0	−0.63
117162	23 45 12.11	+15 02 36.7	7.70		H	356.300 472 60	+15.043 535 35		5.65	−28.63	−13.63	0.82	0.56	0.97	0.79	0.57	+30	+20	− 5	− 8	+ 7	+ 1	+10	−11	+15	+47		0	1.24
117163	23 45 12.46	+08 14 07.0	11.40		H	356.301 901 13	+08.235 271 11	B	−5.23	171.92	−5.05	38.56	21.71	22.81	23.46	12.83	+54	+25	+19	+ 3	+12	+11	+13	− 4	+22	+55		1	0.88
*117164	23 45 13.88	+08 13 51.1	8.66		H	356.307 824 60	+08.230 859 78	A	21.52	178.53	−8.55	2.94	1.68	2.51	2.92	1.49	+47	+21	+19	+ 4	+16	+ 2	+17	− 1	+19	+52		1	0.88
*117165	23 45 13.81	−74 38 20.0	8.49		H	356.307 542 21	−74.638 889 32		3.03	34.63	−25.71	0.73	0.62	0.81	0.78	0.61	−14	+ 4	−16	−15	+ 0	+ 1	+ 0	− 8	+ 0	+ 0		0	−0.20
117166	23 45 14.06	+82 48 24.2	7.80		H	356.308 579 60	+82.806 712 73		3.55	−9.47	6.50	0.58	0.58	0.67	0.68	0.59	− 5	−12	+22	+22	− 1	+ 3	− 2	−11	+ 7	− 1		0	0.32
117167	23 45 16.23	+44 17 52.7	8.81		H	356.317 632 58	+44.297 958 89		6.79	1.79	0.40	0.66	0.76	1.05	0.71	0.81	+ 6	+12	+12	+26	+ 2	− 9	+ 3	+38	+ 7	+ 9		0	−0.10
117168	23 45 17.42	−61 54 42.0	9.02		G	356.322 564 40	−61.911 658 03		3.66	156.04	−98.48	0.64	0.70	0.91	0.87	0.96	− 1	+ 1	−26	− 8	− 3	+ 4	− 1	−13	+ 4	+13		0	−0.80
117169	H 23 45 18.24	+05 06 58.6	7.93		H	356.325 981 37	+05.116 284 58	A	5.08	7.14	−30.91	1.46	0.94	1.25	1.38	0.79	+16	−50	−25	−31	+ 7	+ 8	+14	−30	−11	+24		0	1.16
117170	23 45 20.58	−30 31 58.7	9.20		H	356.335 769 97	−30.532 980 33		8.05	−43.75	−1.63	0.90	0.83	1.15	1.02	0.98	+41	−16	+ 5	−20	+28	+14	+35	+ 9	− 5	+22		0	−0.75
117171	23 45 20.82	−31 14 04.6	10.32		H	356.336 769 14	−31.234 601 22		4.20	9.13	−26.75	1.22	1.13	1.57	1.38	1.32	+43	−11	+ 3	−20	+22	+ 9	+27	+ 9	+ 5	+28		0	−1.28
117172	23 45 20.95	+78 33 28.3	8.90	2	H	356.337 283 57	+78.557 861 24		5.87	35.50	28.14	0.70	0.66	0.81	0.85	0.70	− 4	−18	+21	+10	− 3	−20	+ 1	+18	+ 0	− 1		0	2.43
117173	23 45 21.77	+10 10 47.5	6.54		G	356.340 696 42	+10.179 853 86		13.24	32.46	−6.82	0.77	0.46	0.89	0.78	0.56	+37	+25	+ 0	+15	+ 2	+ 3	+ 8	− 5	+28	+37		2	3.54
117174	23 45 21.94	−13 40 55.2	7.93		G	356.341 408 68	−13.682 000 88		5.54	30.87	1.40	1.02	0.68	1.08	1.63	1.02	+26	− 9	+ 8	− 3	+22	+14	+26	+24	+ 7	− 3		0	−1.65
117175	23 45 22.40	+32 11 29.7	8.93		H	356.343 337 05	+32.191 596 92		6.67	−1.07	−2.14	1.12	0.81	1.30	1.40	0.88	+ 3	+13	−26	+19	+29	−12	+23	+17	−18	+25		2	1.19
117176	23 45 24.27	−01 56 43.5	9.42		G	356.351 116 30	−01.945 412 58		9.94	−2.48	−16.36	1.74	1.16	2.00	2.39	1.43	− 4	+46	−42	−16	−14	+11	+ 4	−34	+27	− 6		0	−0.29
117177	23 45 24.44	+39 07 25.0	10.15		H	356.351 841 78	+39.123 614 84		20.08	267.80	−94.89	0.99	1.01	1.43	1.07	1.11	+18	+ 4	− 1	+28	−12	+ 1	− 9	− 6	+17	+25		2	2.27
117178	23 45 24.77	+57 22 20.6	8.29		H	356.353 222 41	+57.372 398 76		4.46	16.62	−1.62	0.61	0.63	0.89	0.85	0.74	−26	− 6	+15	+ 2	+13	+26	+ 9	− 6	+ 2	−20		0	−1.54
117179	23 45 25.65	+05 48 55.7	9.53		G	356.356 885 92	+05.815 475 67		9.10	−22.68	7.82	1.29	0.90	1.46	1.51	0.79	+31	− 5	−18	+22	+16	− 8	+21	−27	+11	+55		2	−0.53
117180	23 45 26.07	−34 58 52.3	9.31		H	356.358 618 42	−34.981 187 99		6.61	50.65	−6.53	0.98	1.01	1.30	1.19	1.19	+22	+ 0	− 8	−25	+12	+16	+19	+ 7	−14	− 1		0	−0.92
117181	23 45 26.30	+14 40 30.2	8.07		H	356.359 586 68	+14.675 054 20		1.48	3.39	−37.16	0.89	0.60	1.02	0.89	0.60	+34	+10	+ 8	− 1	− 2	+ 7	+ 1	−18	+18	+42		0	−0.40
117182	H 23 45 29.31	+20 24 55.7	6.56		H	356.372 128 19	+20.415 466 33	A	6.68	26.46	−11.03	0.80	0.74	0.97	0.83	0.74	+46	− 7	−15	+25	+15	−13	+15	+ 0	+ 6	+54		1	−0.05
117183	H 23 45 34.00	−58 16 44.2	7.53		H	356.391 674 67	−58.278 934 29	*	6.77	−34.62	−40.11	0.91	0.86	0.90	0.61	0.69	− 9	−14	−13	−12	+17	+16	+17	+ 3	−15	+ 4		1	−0.77
117184	23 45 34.92	+40 26 36.4	8.81		H	356.395 484 26	+40.443 431 99		13.88	135.84	28.66	0.65	0.69	0.98	0.70	0.72	+25	+12	+11	+26	−12	+ 8	−12	− 7	− 5	+27		2	0.29
117185	23 45 35.05	+25 28 19.0	9.06	2	T	356.396 052 39	+25.471 936 78		3.13	18.52	−3.58	1.04	0.73	1.21	1.18	0.78	+13	− 8	−17	+27	−12	− 1	−13	−28	+27	+12		0	0.85
117186	23 45 37.22	+13 09 09.8	7.12		H	356.405 068 18	+13.152 710 60		7.46	−30.05	−22.50	0.77	0.48	0.88	0.77	0.51	+25	+ 5	− 1	−16	− 7	+14	− 4	−21	+34	+30		2	2.24
117187	H 23 45 37.33	−48 40 37.6	9.48		H	356.405 545 35	−48.677 107 34	*	16.25	−154.14	−39.97	1.03	0.99	1.36	1.06	0.95	+ 6	− 9	−21	− 8	− 5	+ 2	− 6	−23	+ 8	− 2		0	−0.39
117188	23 45 37.99	−50 33 06.7	10.15		H	356.408 299 45	−50.551 851 38		4.41	86.57	−33.84	1.69	1.58	2.48	2.04	1.82	− 6	+ 6	−24	−23	−17	+ 2	−15	−36	+12	+ 3		0		
117189	H 23 45 38.72	−27 31 10.5	8.59		H	356.411 329 69	−27.519 574 72	A	6.63	7.17	14.20	2.28	1.76	2.27	3.18	2.08	+12	−15	−42	−35	+10	− 6	+ 7	−21	+21	− 8		2	0.80
117190	23 45 39.15	+42 14 05.4	8.92		H	356.413 126 49	+42.234 846 27		4.65	2.83	−6.20	0.72	0.80	1.14	0.84	0.96	+ 2	− 4	+13	+33	− 2	+ 2	− 4	+46	+ 5	+ 7		0	0.97
117191	23 45 42.46	−52 14 03.7	8.13		H	356.426 926 74	−52.234 372 83		2.14	11.40	−1.19	0.77	0.69	1.17	0.95	0.89	−23	− 1	−14	−30	− 7	+ 3	− 4	−40	+14	+ 9		0	0.30
117192	23 45 43.41	−29 49 16.0	10.14		H	356.430 862 59	−29.821 122 52		0.62	12.72	−13.34	1.26	1.33	1.58	1.51	1.54	+45	− 2	−14	− 2	+10	+ 6	+12	+ 4	+ 6	+32		0	0.74
117193	H 23 45 44.76	−44 39 00.7	9.38		H	356.436 482 72	−44.650 189 49	A	7.99	17.80	−36.98	1.78	1.64	2.24	1.82	1.51	+ 3	−11	−27	− 5	−19	+15	−19	−30	+ 6	− 9		5	0.29
117194	23 45 46.23	+26 20 08.0	7.75		H	356.442 620 45	+26.335 564 95		4.46	−25.96	−34.64	0.64	0.57	0.87	0.71	0.65	+26	+11	−17	+12	+ 5	+15	+10	+ 3	+24	+39		2	1.56
117195	23 45 47.51	+01 40 19.5	8.30		H	356.447 939 23	+01.672 075 90		6.73	−19.56	−25.80	1.05	0.79	1.16	1.31	1.02	+10	+10	−30	+37	− 4	− 1	− 3	+17	+17	+16		0	0.63
117196	23 45 48.78	+28 10 37.9	8.10		H	356.453 264

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
117101	8.608	0.012	8.413	0.013		0.220	0.015	G	0.24	0.02	H	8.4454	0.0016	0.013	121		8.42	8.46		C			1							
117102	11.555	0.125	10.918	0.110		0.592	0.144	T	0.66	0.13	L	11.0086	0.0059	0.038	57		10.94	11.10					1							G
117103	9.009	0.013	7.321	0.006		1.410	0.011	T	1.39	0.01	L	7.3140	0.0012	0.010	146		7.30	7.34		C			1							S
117104	9.079	0.014	7.929	0.009		0.988	0.013	T	0.97	0.01	L	7.9719	0.0011	0.014	144		7.95	7.99					1							
117105	7.229	0.004	6.170	0.003		0.910	0.001	G	0.91	0.00	H	6.2234	0.0007	0.008	147		6.21	6.24					1							S
117106	8.470	0.013	8.042	0.013		0.432	0.005	G	0.50	0.01	H	8.0800	0.0020	0.012	75		8.06	8.10		C			1							S
117107	6.760	0.006	6.226	0.006	*	0.495	0.015	G	0.57	0.02	H *	6.2889	0.0009	0.008	55	*	6.28	6.30		D	23445−2615	I 1	2 C	B	AB	319	8.244	0.020	3.34	0.12	S
117108	10.795	0.040	8.915	0.014		1.562	0.034	T	1.58	0.04	L	8.8370	0.0032	0.031	127		8.80	8.88		U			1							
117109	7.820	0.007	7.745	0.009		0.074	0.011	T	0.09	0.01	L	7.7791	0.0009	0.012	148		7.75	7.80		C			1							S
117110	9.205	0.012	8.670	0.011	*	0.513	0.015	G	0.59	0.02	H *	8.7128	0.0016	0.015	165	*	8.69	8.74		C	23445+0830	H 1	2 C	A	AB	38	0.582	0.033	3.20	0.10	S
117111	7.537	0.005	7.535	0.007	*	0.006	0.002	G	0.03	0.00	H *	7.5883	0.0020	0.020	172	*	7.56	7.62	0.34	P 1 A	23445+4623	I 1	2 C	A	AB	103	5.642	0.005	2.50	0.03	S
117112	7.950	0.008	7.328	0.008		0.561	0.009	G	0.63	0.01	H	7.3841	0.0012	0.011	75		7.37	7.41		C			1							S
117113	9.746	0.024	8.614	0.016		0.974	0.022	T	0.96	0.02	L	8.6728	0.0016	0.015	98		8.64	8.70					1							
117114	10.548	0.026	9.898	0.023		0.538	0.003	G	0.61	0.00	H	9.9816	0.0031	0.030	162		9.91	10.03					1							
117115	10.929	0.036	9.688	0.020		1.059	0.032	T	1.03	0.03	L	9.7787	0.0030	0.033	152		9.71	9.84					1							G
117116	9.110	0.020	8.678	0.020		0.422	0.023	T	0.49	0.02	L	8.7215	0.0026	0.016	48		8.70	8.74		C			1							S
117117	11.060	0.061	10.597	0.070		0.589	0.072	G	0.66	0.07	R	10.6730	0.0044	0.024	89		10.61	10.72		C			1							G
117118	10.494	0.040	9.475	0.025		0.877	0.037	T	0.89	0.03	L	9.5077	0.0019	0.020	104		9.48	9.55		C			1							
117119	10.953	0.063	9.211	0.025		1.453	0.054	T	1.46	0.09	L	9.2060	0.0014	0.015	77		9.18	9.25		C			1							
117120	10.011	0.028	8.727	0.017		1.093	0.026	T	1.05	0.03	L	8.7628	0.0014	0.015	93		8.73	8.80		C			1							
117121						0.583	0.020	G	0.65	0.02	H	11.2903	0.0070	0.032	48		11.25	11.34		C			1							G
117122	8.636	0.014	8.119	0.013		0.486	0.017	T	0.56	0.02	L	8.1800	0.0015	0.013	69		8.16	8.21		C			1							S
117123	9.570	0.016	9.018	0.015		0.523	0.016	T	0.60	0.02	L	9.0567	0.0016	0.017	146		9.02	9.09			23447−3931	I 1	1							
117124	9.612	0.025	9.120	0.024		0.416	0.020	G	0.48	0.02	H	9.1852	0.0023	0.015	73		9.16	9.22		C			1							
117125	7.164	0.004	5.864	0.003		1.108	0.003	G	1.07	0.00	H	5.9113	0.0006	0.006	138		5.90	5.92					1 G							S
117126	11.171	0.076	9.513	0.027		1.386	0.064	T	1.36	0.08	L	9.5743	0.0026	0.024	84		9.53	9.61		C			1 S							
117127	8.573	0.013	8.263	0.013		0.282	0.002	G	0.32	0.00	H	8.3134	0.0014	0.010	67		8.30	8.33					1							S
117128	10.340	0.039	9.569	0.031		0.694	0.003	G	0.75	0.00	H	9.6478	0.0034	0.017	74		9.61	9.68		C			1							
117129	7.021	0.004	6.939	0.006		0.081	0.007	T	0.09	0.01	L	6.9666	0.0006	0.007	116		6.95	6.98		C			1							S
117130	9.452	0.022	8.907	0.021	*	0.528	0.005	G	0.60	0.01	R *	9.0381	0.0021	0.022	114	*	9.00	9.07		D	23448−4515	I 1	2 C	A	AB	306	4.094	0.006	0.72	0.02	
117131	9.917	0.033	8.856	0.022		0.920	0.030	T	0.92	0.02	L	8.8970	0.0017	0.011	68		8.87	8.92					1							S
117132	10.011	0.032	8.573	0.017		1.213	0.028	T	1.17	0.03	L	8.6208	0.0019	0.012	82		8.60	8.64		C			1							
117133	7.718	0.006	6.563	0.004		0.992	0.006	T	0.97	0.01	L	6.6215	0.0006	0.007	141		6.61	6.63					1							S
117134	9.463	0.012	8.707	0.010		0.690	0.012	T	0.75	0.01	L	8.7771	0.0017	0.020	191		8.74	8.81					1							
117135	10.427	0.042	8.950	0.021		1.244	0.037	T	1.20	0.04	L	8.9604	0.0022	0.015	57		8.93	8.99		C			1							
117136	10.374	0.029	9.130	0.017		1.061	0.026	T	1.03	0.02	L	9.2063	0.0016	0.016	95		9.18	9.24		C			1							
117137	8.267	0.009	7.007	0.006		1.074	0.008	T	1.04	0.01	L	7.0425	0.0007	0.008	143		7.03	7.06					1							S
117138	8.716	0.015	8.189	0.015		0.470	0.015	G	0.54	0.02	H	8.2540	0.0012	0.012	83		8.23	8.27		C			1							S
117139	9.972	0.029	8.669	0.018		1.107	0.027	T	1.07	0.03	L	8.6919	0.0024	0.014	56		8.67	8.73		C			1							S
117140	10.049	0.031	9.574	0.031	A	0.251	0.150	G	0.26	0.12	L *	9.6445	0.0020	0.014	88	*	9.60	9.67		C	23449+1327	H 1	2 C	C	AB	306	2.970	0.062	3.69	0.33	
117141	8.316	0.010	7.998	0.009	*	0.347	0.015	G	0.41	0.02	H *	8.0438	0.0012	0.012	107	*	8.02	8.06		D	23449−3820	I 1	2 C S	A	AB	126	0.129	0.018	0.22	0.35	S
117142	9.504	0.022	7.999	0.012		1.266	0.020	T	1.22	0.02	L	8.0376	0.0019	0.013	60		8.01	8.06		C			1							S
117143	11.523	0.072	11.005	0.073		0.486	0.093	T	0.56	0.10	L	11.0275	0.0065	0.062	142		10.93	11.15		P 1 A			1 S							G
117144	10.190	0.025	9.336	0.019		0.765	0.024	T	0.80	0.02	L	9.3907	0.0021	0.019	107		9.35	9.44					1							
117145	9.056	0.010	7.839	0.007		1.040	0.010	T	1.01	0.01	L	7.8824	0.0014	0.013	165		7.86	7.90					1							
117146	7.194	0.005	7.154	0.006		0.042	0.007	T	0.06	0.01	L	7.1744	0.0009	0.008	120		7.16	7.19					1							S
117147	10.254	0.023	9.105	0.015		0.997	0.002	G	1.04	0.00	I	9.1374	0.0017	0.025	144		9.10	9.18		D			1							
117148	10.795	0.075	10.189	0.064		0.565	0.072	G	0.64	0.07	R	10.3040	0.0030	0.032	44		10.27	10.36		D	23450+0346	I 2	1							
117149	10.115	0.026	8.747	0.015		1.158	0.024	T	1.12	0.02	L	8.7923	0.0017	0.016	97		8.76	8.83		C			1							S
117150						0.710	0.015	G	0.76	0.01	H	11.9087	0.0078	0.060	84		11.81	11.98					1							G
117151	9.113	0.021	7.249	0.010		1.549	0.018	T	1.61	0.04	L	7.1898	0.0014	0.013	56		7.17	7.21		C			1							S
117152	9.770	0.017	8.971	0.014		0.724	0.002	G	0.78	0.00	H	9.0502	0.0021	0.027	139		9.01	9.10					1							
117153	11.510	0.124	10.509	0.082							T	10.6016	0.0079	0.034	29		10.53	10.68			23450+0346	I 2	1							
117154	12.105	0.166	10.595	0.064		1.270	0.140	T	1.23	0.14	L	10.7364	0.0225	0.293	125		10.50	11.28	7.80	P 1 A			1 S							G P
117155	8.642	0.010	6.896	0.005		1.456	0.009	T	1.46	0.01	L	6.8884	0.0009	0.008	112		6.88	6.90					1							S
117156	8.786	0.016	7.741	0.012		0.908	0.015	T	0.91	0.01	L	7.8006	0.0014	0.009	54		7.79	7.82		C			1							S
117157	8.399	0.008	8.163	0.009		0.225	0.011	T	0.25	0.01	L	8.2183	0.0017	0.015	140		8.19	8.25					1							S
117158	8.374	0.011	8.324	0.013		0.051	0.016	T	0.06	0.01	L	8.3493	0.0012	0.010	83		8.33	8.36		C			1							
117159	9.484	0.022	8.507	0.016		0.859	0.006	G	0.87	0.00	H	8.5364	0.0013	0.012	97		8.52	8.56					1							
117160	11.628	0.065	10.875	0.057		0.688	0.068	T	0.75	0.06	L	10.8915	0.0036	0.039	177		10.81	10.96					1 S							G
117161	11.503	0.088	9.458	0.024		1.731	0.075	T	1.74	0.21	K	9.3224	0.0046	0.039	74		9.25	9.38		U 2			1							
117162	8.028	0.008	7.741	0.009		0.273	0.011	T	0.31	0.01	L	7.7725	0.0012	0.011	98		7.75	7.79		C			1							S
117163											T	11.5553	0.0847			B				D	23452+0814	I 2	1 C I	D						D
117164	9.600	0.017	8.752	0.013	A	0.761	0.016	T	0.80	0.01	L	8.8106	0.0094	0.020	166	A	8.78	8.84		D	23452+0814	I 2	1 C P	D						S D
117165	9.997	0.021	8.620	0.012		1.165	0.019	T	1.13	0.02	L	8.6599	0.0014	0.016	138		8.64	8.70					1							
117166	9.040	0.012	7.900	0.008		0.980	0.011	T	0.96	0.01	L	7.9680	0.0014	0.012	122		7.95	7.99					1							S
117167	9.320	0.015	8.842	0.015		0.450	0.019	T	0.52	0.02	L	8.9093	0.0027	0.019	115		8.88	8.94					1							
117168	9.705	0.015	9.086	0.013		0.571	0.011	G	0.64	0.01	H	9.1359	0.0016	0.017	140		9.10	9.17		C			1							
117169	8.498	0.015	8.037	0.015	A	0.486	0.072	G	0.43	0.05	L *	8.0191	0.0010	0.009	66	*	8.00	8.04		D	23453+0507	I 1	2 C	A	AB	298	1.579	0.011	2.61	0.05	
117170	9.750	0.017	9.232	0.016		0.496	0.018	T	0.57	0.02	L	9.3131	0.0014	0.015	137		9.29	9.34		C			1							
117171	10.847	0.040	10.334	0.040		0.482	0.051	T	0.55	0.05	L	10.4201	0.0026	0.030	138		10.37	10.47					1							
117172	9.271	0.014	8.931	0.015		0.323	0.019	T	0.37	0.03	L	8.9841	0.0035	0.031	128		8.94	9.03		U 2			1							
117173	6.735	0.005	6.567	0.004		0.168	0.015	G	0.18	0.01	H	6.5957	0.0008	0.008	112		6.58	6.61		C			1							S
117174	8.324	0.017	7.954	0.013		0.380	0.015	G	0.44	0.02	H	8.0163	0.0020	0.012	66		8.00	8.04		C			1							S
117175	9.469	0.029	8.976	0.028		0.464	0.037	T	0.53	0.04	L	9.0352	0.0019	0.015	61		9.01	9.05		C			1 S							
117176	10.097	0.040	9.434	0.035		0.585	0.020	G	0.66	0.02	H	9.5587	0.0028	0.015	43		9.53	9.58		C			1							
117177	11.535	0.082	10.317	0.046		1.041	0.073	T	1.01	0.06	L	10.3066	0.0043	0.039	89		10.25	10.38		R			1							G
117178	8.263	0.008	8.278	0.010		−0.010	0.015	G	0.01	0.01	H	8.2956	0.0014	0.014	136		8.27	8.32					1							
117179	10.309	0.038	9.562	0.031		0.676	0.005	G	0.74	0.00	H	9.6611	0.0027	0.020	80		9.63	9.70					1							
117180	9.836	0.021	9.318	0.021		0.496	0.022	T	0.57	0.02	L	9.4182	0.0025	0.022	81		9.38	9.46		C			1							
117181	9.493	0.019	8.195	0.012		1.104	0.018	T	1.07	0.02	L	8.2371	0.0013	0.010	96		8.22	8.26		C			1							S
117182	7.994	0.009	6.717	0.006	A	0.500	0.495	G	1.04	0.02	L *	6.7323	0.0008	0.009	102	*	6.72	6.76		D	23455+2025	I 1	2 C	A	AB	60	2.345	0.013	2.94	0.04	S
117183	7.920	0.006	7.572	0.006	*	0.330	0.007	T	0.38	0.01	L *	7.6096	0.0014	0.013	166	*	7.59	7.63		D	23456−5817	I 1	2 C	A	AB	216	0.213	0.007	1.28	0.13	S
117184	9.613	0.019	8.865	0.016		0.684	0.020	T	0.74	0.02	L	8.9455	0.0022	0.019	102		8.91	8.99					1							
117185	9.478	0.022	9.099	0.022		0.359	0.029	T	0.42	0.03	L	9.1538	0.0327	0.205	84		8.99	9.48	0.58	P 1 A			1							
117186	7.555	0.007	7.171	0.007		0.393	0.015	G	0.46	0.02	H	7.2155	0.0009	0.008	97		7.20	7.23		C			1							S
117187	10.673	0.038	9.552	0.024	*	0.957	0.036	T	1.00	0.03	L *	9.6218	0.0026	0.024	108	*	9.57	9.67		C	23456−4841	H 1	2 C S	D	AB	233	0.135	0.080	1.35	1.46	D
117188	11.063	0.046	10.177	0.033		0.774	0.044	T	0.81	0.03	L	10.2916	0.0028	0.044	171		10.22	10.36					1 X							
117189	9.194	0.020	8.809	0.021	A						T *	8.6734	0.0041	0.015	44	*	8.64	8.70		D	23456−2731	I 1	2 C	A	AB	303	1.885	0.005	1.18	0.02	S
117190	9.209	0.013	8.957	0.014		0.240	0.018	T	0.27	0.02	L	8.9916	0.0016	0.019	127		8.96	9.03		C			1							S
117191	9.691	0.015	8.271	0.008		1.199	0.013	T	1.16	0.01	L	8.2922	0.0016	0.019	188		8.27	8.33					1							S
117192	10.774	0.059	10.139	0.055		0.580	0.040	G	0.65	0.04	R	10.2693	0.0024	0.021	71		10.23	10.30					1							
117193	10.072	0.022	9.496	0.021	A	1.200	0.495	G	0.46	0.13	S *	9.4732	0.0037	0.034	111	*	9.42	9.52		R	23457−4439	I 1	2 C	A	AB	134	8.108	0.026	2.57	0.11	
117194	9.323	0.017	7.889	0.009		1.210	0.015	T	1.17	0.01	L	7.9155	0.0014	0.011	101		7.90	7.94					1							S
117195	8.586	0.015	8.315	0.017		0.230	0.001	G	0.26	0.00	H	8.3652	0.0021	0.013	55		8.35	8.39		C			1							S
117196	8.604	0.012	8.151	0.011		0.443	0.015	G	0.51	0.02	H	8.1997	0.0011	0.014	98		8.18	8.23					1							S
117197	11.601	0.110	10.028	0.046		1.338	0.012	G	1.55	0.02	I	9.9959	0.0037	0.021	82		9.96	10.04		C			1							
117198	9.753	0.018	8.639	0.012		0.960	0.017	T	0.95	0.01	L	8.6867	0.0020	0.021	110		8.65	8.73					1							
117199	9.178	0.010	8.925	0.011		0.240	0.015	G	0.27	0.02	H	8.9498	0.0013	0.014	196		8.92	8.98					1							S
117200	9.308	0.020	8.714	0.018		0.554	0.024	T	0.63	0.02	L	8.7731	0.0015	0.013	89		8.74	8.80		C			1 G							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
117201	23 45 51.70	+33 17 25.9	7.51		H	356.465 396 24	+33.290 515 24		3.48	12.68	−5.32	0.76	0.57	0.81	0.91	0.69	+ 8	+23	− 4	+39	+16	+ 4	+12	+14	− 6	+ 5	0	1.11
117202	23 45 52.39	−14 45 17.3	7.36		G	356.468 279 70	−14.754 812 67		1.69	3.37	−4.89	0.87	0.57	0.88	1.22	0.68	+25	− 8	−10	+35	+ 1	+ 5	−15	−15	+ 1	−14	0	−2.67
117203	23 45 52.60	−42 20 28.2	8.25		H	356.469 174 94	−42.341 165 23		0.07	17.54	−7.13	0.67	0.56	1.00	0.80	0.56	− 1	− 8	−19	+28	−14	+11	−14	−18	+18	− 7	0	0.19
117204	23 45 52.72	−32 55 37.8	8.19		H	356.469 682 04	−32.927 170 78		3.07	4.42	2.74	0.83	0.79	1.01	0.90	0.88	+30	+ 9	− 4	−29	+25	+ 6	+30	+12	− 1	+20	0	0.88
117205	23 45 55.06	+54 44 07.5	8.50	2	G	356.479 420 02	+54.735 407 69		1.28	−0.57	−2.67	0.61	0.68	0.99	0.67	0.80	−23	+19	+ 2	+ 6	− 2	+23	+ 0	+ 2	+13	− 8	0	−0.51
117206	23 45 55.11	−58 22 11.5	9.07		H	356.479 617 15	−58.369 861 83		−0.07	5.60	0.19	0.79	0.83	1.30	0.88	0.98	− 5	−11	−26	+ 0	+15	+12	+22	+ 8	−21	− 1	0	−1.02
117207	23 45 55.34	+50 09 42.3	8.45		H	356.480 578 98	+50.161 737 41		6.25	1.80	−11.16	0.54	0.71	1.11	0.62	0.82	−29	+12	+ 9	+28	− 8	−13	− 2	+13	+26	−21	2	−1.03
117208	23 45 57.61	+33 03 30.2	8.38		H	356.490 044 02	+33.058 390 77		7.21	21.28	−24.17	0.75	0.65	0.90	0.99	0.76	+ 7	+13	− 4	+31	+13	+ 2	+13	+13	− 4	+16	2	1.97
117209	23 45 59.28	−13 27 15.3	7.79		H	356.496 991 64	−13.454 237 12		2.14	−41.05	−9.69	0.90	0.71	1.09	1.29	0.97	+33	−15	− 3	+ 4	+15	+28	+19	+11	−17	+ 7	0	−0.79
117210	23 45 59.38	+47 16 07.6	9.83		G	356.497 427 41	+47.268 764 20		1.20	−0.02	−3.35	0.91	1.01	1.69	0.89	1.22	−18	+13	+19	−18	+ 2	− 3	+ 5	+16	+12	−21	0	−0.18
117211	23 45 59.50	−39 44 53.0	9.28		G	356.497 923 96	−39.748 044 75		6.90	−25.90	−2.13	0.72	0.66	1.25	0.77	0.57	− 1	+22	− 7	+22	−17	+35	−18	−36	+ 8	−10	0	−0.12
117212	23 45 59.51	−10 31 29.5	9.15		H	356.497 941 12	−10.524 864 86		4.19	0.36	−0.32	1.10	0.89	1.38	1.48	1.36	+39	− 1	−21	− 5	+14	+34	+26	+24	+19	+41	0	−1.92
117213	23 45 59.69	−37 58 33.1	8.39		G	356.498 697 59	−37.975 865 13		0.42	18.44	3.99	0.98	0.70	1.07	1.03	0.62	−11	+26	− 5	−50	+13	− 4	+20	−22	+ 7	−32	0	1.28
117214	23 45 59.85	+19 32 56.7	8.69		H	356.499 375 98	+19.549 096 75		7.23	40.07	11.86	0.73	0.60	0.96	0.81	0.60	+38	+17	+10	+20	+ 6	− 1	+ 8	+ 4	+12	+37	0	−0.43
117215	H 23 46 00.10	+00 15 43.5	7.95		H	356.500 431 32	+00.262 082 83	A	14.19	−5.11	−54.45	1.57	1.11	1.60	1.98	1.37	+25	−10	− 4	−32	+ 6	+45	+10	− 2	+ 4	+20	1	0.36
117216	23 46 00.52	−66 51 10.8	8.19		H	356.502 171 31	−66.853 013 21		6.16	−1.16	−27.77	0.64	0.59	0.81	0.73	0.63	+ 1	+13	−12	− 2	+ 5	− 9	+ 4	+ 4	+ 9	+11	0	−0.35
117217	23 46 00.67	+62 40 11.9	7.72		H	356.502 797 67	+62.669 971 31		3.16	−4.61	−8.36	0.56	0.56	0.72	0.67	0.56	− 6	+13	+25	+29	+ 5	−10	+ 7	+ 6	+ 8	−10	1	1.26
117218	H 23 46 00.84	−18 40 42.1	5.28	1	H	356.503 509 24	−18.678 369 13	A	15.37	131.86	11.97	1.14	0.83	1.18	1.17	1.13	+40	−14	−13	−12	+ 0	+42	+10	−11	+16	+37	5	0.66
117219	23 46 01.18	−40 10 56.9	6.32		H	356.504 909 18	−40.182 477 63		15.32	103.11	−36.01	0.48	0.40	0.77	0.54	0.38	− 7	+ 9	− 7	+12	−11	+29	−14	−32	+ 4	−20	0	−0.45
117220	23 46 01.47	+63 19 01.1	7.77		H	356.506 122 44	+63.316 960 39		2.18	−2.37	−7.87	0.53	0.56	0.72	0.70	0.57	− 4	+ 5	+27	+17	+ 2	− 6	+ 3	+ 3	+12	−11	1	1.72
117221	H 23 46 02.04	+46 25 13.0	4.97		H	356.508 495 55	+46.420 290 95	*	2.49	9.05	−6.25	0.74	1.31	0.92	0.56	0.71	−10	− 3	+20	−49	+10	− 6	+10	+24	+14	+ 0	2	−0.61
117222	23 46 02.64	−15 08 02.8	7.99		H	356.510 994 22	−15.134 117 86		1.85	27.22	−25.86	0.97	0.70	1.12	1.15	0.86	+24	+10	−16	−15	+ 5	+ 0	+ 6	−18	+10	+ 5	0	−1.73
117223	23 46 03.12	−26 49 04.3	8.58		H	356.512 981 83	−26.817 850 50		8.54	68.55	−17.58	1.16	0.99	1.37	1.63	1.22	+16	−31	−28	+ 1	− 6	+34	+ 2	+11	+ 4	+ 6	0	−0.01
117224	H 23 46 04.08	+50 39 47.2	7.34	1	H	356.517 008 02	+50.663 120 29	A	4.88	40.07	12.12	0.78	1.28	1.02	0.68	0.85	+33	+ 4	+19	+10	+ 9	+ 5	+ 9	− 3	− 7	+ 0	3	0.77
117225	23 46 04.64	−17 08 09.8	8.39		H	356.519 320 49	−17.136 045 47		1.55	−4.27	−20.85	0.94	0.70	1.13	1.43	0.93	+25	−24	−20	+10	− 7	+36	−13	−22	+10	− 3	0	0.83
117226	23 46 07.54	+60 27 55.4	9.75		G	356.531 431 16	+60.465 376 33	C	3.39	13.72	−2.24	11.59	11.10	1.16	1.02	0.98	−58	+ 3	+ 0	− 2	+ 2	− 1	+ 4	− 4	+13	− 3	22	5.46
117227	H 23 46 08.04	+60 28 23.4	7.02		G	356.533 489 79	+60.473 174 84	A	3.39	13.72	−2.24	1.03	1.01	1.16	1.02	0.98	− 8	+ 5	+22	+24	+ 5	− 1	+ 8	+ 2	+13	− 3	22	5.46
117228	23 46 08.51	−49 56 19.5	9.50		H	356.535 438 24	−49.938 751 03		−0.38	25.02	0.59	0.89	1.01	1.51	0.93	1.08	+ 1	− 1	−27	−29	−17	+19	−13	−29	+10	+ 3	0	0.99
117229	23 46 09.24	+35 14 40.1	9.15		H	356.538 507 06	+35.244 473 41		18.38	185.79	−233.34	1.03	0.66	1.05	1.46	0.82	−23	+14	− 8	−46	+24	− 8	+26	−14	+ 4	−31	0	0.31
117230	23 46 09.48	+42 56 35.4	10.12		H	356.539 485 34	+42.943 160 27		4.75	9.85	−8.50	0.84	0.96	1.36	0.96	1.13	+ 9	+ 7	+ 0	+18	+ 4	− 5	+ 4	+31	+11	+15	0	2.00
117231	23 46 12.27	+50 47 11.9	7.98		H	356.551 132 35	+50.786 639 20		8.12	33.37	−22.09	0.52	0.62	0.94	0.67	0.84	−20	+ 6	+21	+23	+ 0	− 8	+ 5	− 3	− 8	− 8	1	−0.32
117232	23 46 13.19	−55 00 08.8	9.03		H	356.554 948 41	−55.002 455 85		0.65	14.99	−10.38	0.74	0.88	1.36	0.81	0.88	−21	+12	−17	+ 4	+ 7	+ 5	+ 7	− 2	− 7	−11	0	0.32
117233	23 46 13.75	+84 03 12.5	9.19		H	356.557 287 31	+84.053 477 62		4.11	21.82	3.38	0.87	0.75	0.92	1.06	0.86	+12	+ 5	+ 8	−22	−19	+ 5	−14	− 3	+19	− 3	0	−1.91
117234	23 46 15.63	−77 34 09.0	8.90		H	356.565 138 46	−77.569 160 97		2.05	26.27	9.05	0.78	0.69	0.86	0.95	0.82	+10	−14	−14	+ 9	+ 0	+ 1	+ 0	+ 7	+ 2	+23	1	−0.14
117235	23 46 18.01	+10 16 44.0	11.78		H	356.575 039 39	+10.278 883 95		21.67	−88.55	−252.44	2.76	1.67	3.17	3.18	2.01	+45	+19	+ 4	+13	+12	+16	+15	+ 4	+26	+46	0	1.28
117236	23 46 18.38	+09 47 07.9	7.48		G	356.576 583 09	+09.785 516 48		22.20	−51.55	−183.74	0.82	0.52	0.94	0.92	0.59	+43	−14	−11	+ 1	+ 7	+ 4	+ 4	− 3	+22	+38	0	−0.16
117237	23 46 18.73	−13 21 51.6	7.74		H	356.578 060 51	−13.364 329 55		4.59	32.62	1.82	1.06	0.83	1.11	1.46	1.02	+11	−13	− 4	−26	+31	+23	+30	+15	−22	− 2	0	0.44
117238	23 46 18.82	+11 07 54.6	8.19		G	356.578 419 08	+11.131 842 45		10.41	82.66	13.10	1.66	1.14	1.83	1.69	1.12	+28	+11	− 5	−24	− 4	+ 9	− 1	−34	+24	+37	0	
117239	23 46 18.95	+24 51 21.3	10.30	2	H	356.578 960 89	+24.855 917 12		−0.26	−7.53	−7.87	1.22	0.90	1.58	1.35	0.93	+20	+19	− 3	− 7	+ 6	−12	+ 7	− 9	+ 9	+25	0	1.18
117240	H 23 46 21.58	−53 16 30.8	10.32	2	H	356.589 927 96	−53.275 235 07	A	3.28	6.40	0.15	2.01	2.79	3.17	2.44	2.68	−21	+ 1	−10	+18	− 1	+12	+ 5	−49	+10	−13	1	1.69
117241	23 46 22.00	+34 11 48.5	7.64		H	356.591 660 31	+34.196 800 17		4.28	−1.59	−30.05	0.71	0.56	0.84	0.83	0.63	− 3	+28	− 8	+ 3	+ 7	+12	+ 7	− 6	+ 1	− 1	0	0.38
117242	23 46 22.49	+53 36 45.6	8.80		G	356.593 717 85	+53.612 669 49		10.82	0.10	−18.24	0.73	0.74	1.19	0.88	0.91	−27	+17	+12	− 3	+ 7	+15	+ 5	− 1	+ 4	−21	0	1.19
117243	23 46 22.75	−54 13 16.8	9.88		H	356.594 784 87	−54.221 343 63		4.34	98.16	−4.09	0.94	1.11	1.87	1.09	1.18	−40	+18	−31	+12	+ 7	+10	+ 8	− 1	−14	−33	1	1.31
117244	23 46 23.46	+23 27 00.1	7.97	2	H	356.597 754 63	+23.450 024 87		1.60	5.32	−2.51	0.75	0.60	0.97	0.89	0.64	+27	+10	− 6	+22	+16	−10	+17	+ 4	+ 6	+35	0	0.58
117245	23 46 23.54	+03 29 12.7	4.95	2	H	356.598 070 48	+03.486 871 64		4.29	−35.00	−25.00	0.89	0.56	0.93	1.01	0.66	+ 8	−14	−20	− 5	− 2	+25	+ 5	+ 1	−13	+ 5	0	1.12
117246	23 46 25.52	+28 42 13.1	6.97		H	356.606 338 00	+28.703 637 98		1.01	−15.86	−10.86	0.67	0.55	0.80	0.80	0.68	+21	+ 2	−19	+30	+11	− 9	+17	− 1	+15	+42	0	−0.37
117247	23 46 26.81	−23 01 40.0	8.93		H	356.611 704 29	−23.027 778 68		28.18	−152.76	−40.83	1.14	1.06	1.40	1.81	1.06	+18	−15	−46	+ 3	−17	+19	−18	−33	+31	−15	0	1.02
117248	23 46 27.92	−71 04 27.7	8.30		H	356.616 320 02	−71.074 365 38		2.63	27.37	−10.84	0.63	0.64	0.79	0.75	0.72	− 8	+ 7	−20	+ 8	+13	− 5	+13	−10	+ 9	+ 0	0	−0.35
117249	23 46 29.29	+81 22 41.0	7.97		H	356.622 044 17	+81.378 067 12		5.23	−9.21	−2.52	0.53	0.58	0.63	0.63	0.65	− 8	− 4	+23	+ 0	−11	+10	−14	−11	− 2	−14	0	−0.39
117250	23 46 31.06	−48 57 29.5	8.88		H	356.629 398 47	−48.958 203 94		9.91	−83.65	29.56	0.82	0.84	1.19	0.76	0.84	+ 1	−10	−23	−39	− 4	+ 6	− 4	−20	+ 5	+ 2	0	1.42
117251	H 23 46 31.38	+17 05 13.1	8.81		H	356.630 730 37	+17.086 967 65	A	7.88	−15.10	−20.00	2.00	1.81	2.42	1.95	1.57	+50	−11	+ 5	+ 5	− 4	−26	− 1	− 4	+ 5	+46	0	0.47
117252	23 46 31.76	−77 15 44.2	9.17		H	356.632 316 45	−77.262 273 49		5.52	−25.42	13.55	0.83	0.71	0.90	0.99	0.80	− 6	+ 7	−14	+12	+ 6	+ 5	+ 7	+ 6	+ 3	+ 6	4	0.02
117253	23 46 31.83	−64 34 25.0	8.70		G	356.632 636 04	−64.573 605 48		5.40	26.30	−16.58	0.67	0.67	0.90	0.76	0.79	−10	−14	−21	+ 8	+ 2	−10	+ 1	− 1	− 5	−13	0	−0.30
117254	23 46 32.69	−41 34 47.3	7.33	2	T	356.636 223 04	−41.579 797 42		12.91	255.64	−856.78	0.51	0.43	0.78	0.56	0.44	− 8	+ 0	−15	+29	−17	+12	−15	−11	+16	− 6	0	−0.20
117255	23 46 32.73	−44 49 42.9	7.49		H	356.636 390 32	−44.828 575 46		5.07	−23.55	−26.72	0.67	0.59	0.90	0.75	0.66	− 8	− 5	+ 0	−10	+ 4	+ 5	+ 5	−18	+ 0	− 4	1	−1.18
117256	23 46 33.43	−23 51 48.2	9.24		H	356.639 284 18	−23.863 387 92		5.87	55.85	39.34	1.22	1.26	1.65	1.55	1.21	+34	−22	−62	− 5	+11	−25	−10	−29	+16	+16	0	1.82
117257	23 46 33.69	+64 18 04.5	7.28		H	356.640 363 73	+64.301 262 67		1.61	8.71	−1.51	0.52	0.55	0.69	0.63	0.58	−17	+ 9	+27	+26	−21	−19	−14	+18	+19	−23	1	2.80
117258	23 46 34.00	−08 59 48.3	7.23		G	356.641 677 96	−08.996 740 47		25.92	188.59	−54.02	0.83	0.62	0.92	1.15	0.86	+34	− 4	−10	+ 7	+17	+ 1	+21	+25	+ 4	+13	0	1.74
117259	23 46 34.54	+55 09 08.2	7.86		H	356.643 917 94	+55.152 291 67		10.55	−87.82	−19.56	0.57	0.57	0.84	0.65	0.67	−16	+18	+ 5	+12	− 1	+12	+ 3	− 3	+16	− 5	0	1.33
117260	23 46 34.65	+00 31 48.4	7.18		H	356.644 365 15	+00.530 115 62		7.95	−18.72	−28.77	0.87	0.64	1.10	1.17	0.83	+22	−10	−31	−22	−14	+47	+ 0	−13	+10	+30	0	0.42
117261	23 46 34.74	−01 31 22.2	9.75		H	356.644 739 40	−01.522 831 44		11.53	30.84	−8.12	1.51	1.16	1.78	2.13	1.46	+17	+ 3	−31	−15	− 1	−24	− 7	−20	+30	− 7	0	−0.81
117262	H 23 46 34.84	−12 45 27.7	8.48		H	356.645 159 82	−12.757 697 64	A	12.12	105.56	−101.65	1.82	1.44	1.91	2.58	1.79	+42	+11	+ 5	+26	+15	+30	+ 7	+ 8	+10	+ 9	0	0.97
117263	23 46 35.00	−68 03 22.2	8.86		H	356.645 829 15	−68.056 158 48		0.88	−12.81	5.65	0.68	0.67	0.87	0.76	0.78	−11	+ 6	−19	−20	+ 7	− 6	+ 5	−12	+ 4	+ 7	0	−0.36
117264	23 46 35.29	−60 45 27.2	8.67		H	356.647 050 12	−60.757 556 49		9.83	16.49	−14.61	0.71	0.74	1.06	0.81	1.01	−10	− 4	−23	−21	+ 0	+17	+ 1	− 4	+ 6	+10	0	−0.85
117265	23 46 36.73	+66 46 56.1	5.95		H	356.653 021 68	+66.782 251 28		1.88	7.50	−2.76	0.47	0.48	0.60	0.53	0.52	−19	+11	+27	+ 3	−20	−11	−16	+15	+ 2	−34	0	1.72
117266	23 46 41.62	−35 52 31.9	9.48		H	356.673 418 28	−35.875 523 30		11.49	62.76	15.36	1.06	0.94	1.30	1.19	1.04	+18	+16	+ 0	−17	+ 5	− 2	+13	+20	+ 9	+ 0	0	−0.04
117267	23 46 41.96	−05 27 35.5	8.98		H	356.674 817 78	−05.459 859 27		3.69	−20.29	−20.19	1.19	0.87	1.44	1.68	1.28	+51	−32	−22	− 4	+ 0	+10	− 5	− 4	+22	+14	0	0.96
117268	23 46 43.89	+37 30 28.3	7.91		H	356.682 875 59	+37.507 849 31		4.16	30.52	−40.94	0.68	0.53	0.87	0.71	0.55	− 3	+28	− 7	+ 5	+ 6	−21	+ 6	+11	+ 4	+ 5	0	1.49
117269	H 23 46 44.34	−45 03 25.7	8.69		H	356.684 769 44	−45.057 148 17	A	5.34	37.46	−6.90	2.94	1.92	2.44	3.60	2.20	+ 2	− 7	−10	−42	+11	+12	+15	−21	− 5	+ 2	3	1.20
117270	23 46 44.67	−32 00 03.1	9.31		H	356.686 104 89	−32.000 863 44		2.24	−10.76	−8.39	1.17	1.20	1.58	1.42	1.34	+49	−11	−19	− 2	+26	−14	+25	+13	− 5	+38	0	0.10
117271	23 46 46.80	+72 53 38.6	10.99		H	356.695 017 33	+72.894 053 63		3.32	−4.67	−7.92	1.38	1.45	1.70	1.53	1.81	−20	− 9	+25	+11	−12	+21	−20	+15	− 3	−29	0	1.24
117272	23 46 47.79	−28 47 10.7	9.04		H	356.699 120 52	−28.786 305 88		4.10	29.41	4.04	1.10	1.03	1.24	1.57	1.26	+ 9	−15	+ 1	+29	− 8	+ 3	− 9	+16	+14	+ 0	0	0.39
117273	23 46 48.91	+43 53 58.3	8.71		H	356.703 779 90	+43.899 516 08		4.21	−24.34	−13.64	0.76	0.75	1.12	0.77	0.81	+ 4	+20	+15	+24	− 6	+ 2	− 4	+38	+13	+ 2	0	0.58
117274	23 46 50.78	−08 53 48.6	7.31		H	356.711 581 57	−08.896 846 75		5.09	46.89	−34.96	0.87	0.68	1.04	1.24	0.99	+39	− 6	−17	+ 2	+11	+ 6	+14	+16	+21	+21	0	1.06
117275	H 23 46 51.18	−59 55 58.5	8.97		H	356.713 259 95	−59.932 909 23	A	3.09	18.20	5.83	1.26	1.47	1.83	1.33	1.81	−10	+ 3	−21	+18	+ 9	− 9	+ 9	+ 7	− 8	− 7	3	−1.11
117276	23 46 51.20	−55 48 34.2	7.30	2	H	356.713 322 75	−55.809 489 17		4.82	14.19	12.83	0.45	0.51	0.79	0.47	0.52	−26	+ 8	− 9	− 9	+12	+ 5	+11	− 4	− 9	−15	2	−0.15
117277	23 46 51.80	−24 17 37.1	8.25		H	356.715 834 60	−24.293 627 82		4.78	20.57	3.99	0.97	0.90	1.19	1.35	1.05	+21	−11	−42	+16	−26	+25	−21	−27	+33	+19	0	−0.12
117278	H 23 46 52.03	+43 40 46.5	9.07		H	356.716 784 90	+43.679 584 70	A	1.34	−4.80	−5.34	1.13	1.18	1.59	1.09	1.14	+ 2	+13	+ 1	+25	− 4	− 5	− 6	+36	− 5	+ 4	0	−0.19
117279	23 46 52.34	+17 31 44.9	7.77		G	356.718 093 49	+17.529 135 03		2.86	−1.35	−14.09	0.69	0.56	0.98	0.80	0.59	+49	+ 4	− 1	+ 3	+ 0	+16	+ 0	− 1	+ 5	+48	0	0.26
117280	23 46 52.41	+28 25 11.1	7.45		G	356.718 385 85	+28.419 737 22		0.88	1.82	−24.00	0.69	0.58	0.92	0.83	0.60	+21	+ 8	−24	+12	+10	+10	+13	− 4	+24	+34	0	−0.90
*117281	23 46 52.69	+58 11 47.6	8.01		H	356.719 522 35	+58.196 559 78		8.75	−35.60	31.29	0.54	0.56	0.74	0.70	0.67	−22	+19	+12	− 3	+ 9	+ 5	+ 7	−17	− 4	−26	0	1.42
*117282	23 46 52.67	+54 51 40.5	7.44		H	356.719 463 07	+54.861 250 86		2.35	5.44	−3.28	0.49	0.55	0.78	0.53	0.66	−26	+10	+ 7	+ 6	− 5	+16	− 3	− 2	+19	−12	0	−2.64
117283	23 46 53.03	−41 51 56.3	8.70		H	356.720 969 62	−41.865 637 12		7.15	−16.64	−51.27	0.68	0.57	0.98	0.76	0.57	− 2	− 7	−17	+28	−15	+ 1	−16	−11	+18	− 6	0	−1.90
117284	23 46 53.07	+21 37 21.1	8.63		H	356.721 128 24	+21.622 528 31		8.10	78.47	−54.33	0.78	0.64	1.08	0.85	0.70	+37	+11	−19	+16	+14	−12	+16	+ 5	+ 8	+55	0	−1.90
117285	23 46 53.73	+28 25 41.3	10.06		H	356.723 862 54	+28.428 132 19		1.72	−3.10	11.06	2.07	1.42	2.52	2.46	1.62	+12	+ 1	−11	+11	+ 5	+16	+ 7	+ 5	+20	+25	0	−1.35
117286	23 46 54.50	+48 48 06.0	7.56		H	356.727 090 37	+48.801 660 68		5.43	26.57	−4.28	0.55	0.56	0.93	0.61	0.67	− 1	+21	+26	−24	−27	−13	−28	− 8	+ 1	+ 4	0	−0.47
117287	H 23 46 55.08	+68 24 29.7	11.05		G	356.729 513 52	+68.408 240 95	A	−0.63	0.34	−2.06	6.06	7.41	2.72	2.61	2.73	−38	− 9	+10	− 7	− 9	+ 2	− 6	− 9	+ 6	+12	1	0.26
117288	23 46 55.71	−31 58 54.0	9.37		H	356.732 116 14	−31.981 676 06		24.25	128.52	−55.41	1.13	1.11	1.46	1.36	1.22	+49	−11	−18	+ 1	+30	−14	+30	+21	− 6	+36	0	−1.60
117289	23 46 55.83	−40 42 49.0	9.93		H	356.732 607 00	−40.713 599 50		3.15	18.06	−13.51	0.90	0.79	1.54	1.05	0.75	−13	+12	− 3	+28	−14	+31	−16	−25	+ 3	−22	0	−1.08
117290	23 46 56.29	+51 13 44.4	7.49		G	356.734 543 11	+51.228 999 86		2.40	9.41	−1.65	0.47	0.60	0.90	0.60	0.83	−39	+ 8	+24	+ 0	+ 3	+ 5	+ 5	−13	+ 6	+ 9	1	1.11
117291	23 46 57.60	+31 10 48.9	9.54		H	356.740 009 01	+31.180 263 35		4.05	−7.04	−5.44	0.97	0.77	1.26	1.40	0.86	− 1	+ 2	−15	−20	+16	+20	+13	− 3	−18	+10	0	0.86
117292	23 46 57.62	−29 52 13.3	9.31		H	356.740 064 55	−29.870 371 27		5.68	18.68	−16.74	1.12	1.21	1.33	1.27	1.25	+23	+11	+ 1	+ 4	+ 8	+ 6	+11	+32	− 9	+ 9	3	−2.17
117293	H 23 46 58.34	+51 57 21.6	10.21		H	356.743 063 15	+51.955 997 25	A	3.50	4.33	5.60	2.03	2.73	3.54	2.71	3.27	−69	+ 0	− 2	−15	+13	+ 1	+21	−29	+21	−40	2	0.49
117294	23 46 58.85	+27 11 13.8	8.50		H	356.745 220 11	+27.187 155 20		6.58	−7.34	−47.39	0.79	0.65	1.06	0.95	0.71	+23	+11	−18	+ 6	− 1	+28	+ 7	− 5	+28	+39	0	0.02
117295	23 46 59.56	+25 52 43.9	9.23		H	356.748 159 76	+25.878 861 10		3.40	23.01	5.73	0.93	0.72	1.15	0.99	0.82	+16	+21	− 9	+15	+ 9	+ 5	+13	+ 6	+ 9	+31	0	2.17
117296	23 46 59.75	−43 26 59.9	9.14		H	356.748 972 33	−43.449 969 94		4.90	−16.96	−27.41	0.73	0.81	1.10	0.79	0.84	+13	− 2	−11	− 4	−13	+24	−15	−35

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
117201	7.466	0.008	7.514	0.010		−0.039	0.012	T	−0.02	0.01	L	7.5103	0.0008	0.008	74		7.50	7.52					1 G							S
117202	9.310	0.020	7.517	0.009		1.520	0.015	G	1.56	0.02	H	7.4843	0.0021	0.012	77		7.47	7.50					1							S
117203	9.887	0.017	8.378	0.009		1.269	0.015	T	1.23	0.02	L	8.4066	0.0012	0.017	152		8.38	8.44					1 S							S
117204	8.401	0.010	8.209	0.011		0.184	0.014	T	0.20	0.02	L	8.2518	0.0012	0.013	99		8.23	8.28		C			1							S
117205	8.513	0.010	8.499	0.012		0.030	0.015	G	0.05	0.01	H	8.5666	0.0037	0.054	152		8.26	8.61		U 2 C			1							
117206	10.616	0.029	9.133	0.014		1.249	0.025	T	1.21	0.03	L	9.2347	0.0028	0.029	154		9.18	9.28					1							
117207	8.611	0.008	8.461	0.009		0.144	0.011	T	0.16	0.01	L	8.4985	0.0017	0.018	191		8.47	8.53					1							
117208	8.590	0.012	8.394	0.014		0.187	0.017	T	0.21	0.02	L	8.4469	0.0022	0.015	69		8.42	8.47					1 S							
117209	9.089	0.020	7.898	0.013		1.020	0.019	T	0.99	0.01	L	7.9602	0.0013	0.009	59		7.95	7.99					1							S
117210	9.974	0.019	9.834	0.025		0.110	0.015	G	0.12	0.01	H	9.8833	0.0025	0.033	165		9.81	9.94					1 S							G
117211	10.158	0.019	9.355	0.015		0.734	0.005	G	0.78	0.00	H	9.4362	0.0014	0.018	176		9.40	9.47					1							
117212	9.571	0.019	9.185	0.020		0.377	0.024	T	0.44	0.03	L	9.2375	0.0018	0.013	74		9.21	9.27		C			1							
117213	8.809	0.013	8.423	0.014		0.400	0.015	G	0.47	0.02	H	8.4860	0.0021	0.017	97		8.45	8.52					1							S
117214	9.146	0.015	8.725	0.015		0.403	0.015	G	0.47	0.02	H	8.7787	0.0024	0.019	115		8.75	8.82					1							
117215	8.444	0.014	7.918	0.015	*	0.547	0.021	G	0.62	0.02	H	*	8.0731	0.0011	0.010	61	*	8.06	8.10		D	23460+0016	I 1	2 C A	AB	222	2.652	0.012	1.86	0.03	S
117216	8.659	0.009	8.239	0.009		0.410	0.010	T	0.48	0.01	L	8.2888	0.0015	0.015	123		8.26	8.32					1							S
117217	7.749	0.007	7.716	0.009		0.040	0.015	G	0.06	0.01	H	7.7353	0.0011	0.011	135		7.71	7.76					1 S							S
117218	5.600	0.003	5.287	0.005	*	0.299	0.006	T	0.34	0.01	L	*	5.3591	0.0009	0.008	97	*	5.35	5.38		U 2	23460−1841	I 1	2 C A	AB	136	6.787	0.003	1.00	0.01	S
117219	6.567	0.003	6.345	0.003		0.210	0.000	G	0.23	0.00	H	6.3803	0.0006	0.007	187		6.37	6.39		C			1							S
117220	7.888	0.006	7.772	0.008		0.112	0.009	T	0.13	0.01	L	7.8107	0.0016	0.014	134		7.79	7.83					1							S
117221	6.373	0.004	5.097	0.002	*	1.086	0.003	T	1.05	0.00	L	*	5.1394	0.0005	0.007	163	*	5.13	5.15		D	23461+4624	I 1	2 C A	AE	287	0.292	0.012	2.90	0.08	S
117222	10.013	0.028	8.183	0.013		1.550	0.015	G	1.56	0.09	H	8.1126	0.0017	0.016	80		8.08	8.14		C	23460−1508	I 1	1							S
117223	9.787	0.031	8.672	0.021		0.953	0.030	T	0.94	0.02	L	8.7261	0.0027	0.013	45		8.70	8.75		C			1							
117224	8.569	0.008	7.455	0.006	*	0.960	0.008	T	0.95	0.01	L	*	7.5087	0.0013	0.012	157	*	7.49	7.53		M	23461+5040	I 1	2 C A	AD	198	0.388	0.028	3.55	0.16	
117225	10.388	0.037	8.575	0.016		1.509	0.032	T	1.54	0.05	L	8.5144	0.0018	0.015	87		8.49	8.54		C			1							
117226	11.600	0.111	9.961	0.043	C	2.108	0.010	G	2.10	0.01	J	9.3559	0.0170	0.137	126	−	9.09	9.54		D	23461+6028	I 2	1 C F D							X
117227	8.228	0.010	7.111	0.007	*	1.040	0.015	G	1.06	0.03	C	*	7.1846	0.0009	0.011	141	−	7.16	7.20		D	23461+6028	I 2	2 C P D	AB	212	2.641	0.006	1.69	0.05	S X
117228	10.784	0.043	9.612	0.026		1.005	0.039	T	0.98	0.03	L	9.6703	0.0027	0.030	169		9.62	9.72					1							
117229	10.049	0.037	9.227	0.029		0.780	0.015	G	0.82	0.01	H	9.3026	0.0022	0.015	79		9.28	9.33					1 G							
117230	10.553	0.033	10.092	0.035		0.435	0.044	T	0.50	0.05	L	10.2125	0.0029	0.032	128		10.15	10.26					1							G
117231	8.258	0.007	8.011	0.008		0.251	0.001	G	0.28	0.00	H	8.0528	0.0013	0.014	166		8.03	8.08					1							S
117232	10.594	0.026	9.162	0.013		1.208	0.023	T	1.17	0.02	L	9.1931	0.0024	0.028	197		9.15	9.24					1 S							
117233	9.493	0.016	9.198	0.019		0.280	0.023	T	0.32	0.03	L	9.2658	0.0030	0.025	118		9.22	9.30					1							
117234	10.217	0.024	8.996	0.014		1.043	0.022	T	1.01	0.02	L	9.0666	0.0020	0.020	133		9.03	9.10		C			1							
117235						1.376	0.133	G	1.62	0.25	I	11.8842	0.0063	0.063	102		11.75	11.98					1							G
117236	8.177	0.008	7.541	0.006		0.582	0.012	G	0.65	0.01	H	7.6016	0.0014	0.011	116		7.59	7.62					1							S
117237	8.847	0.019	7.849	0.014		0.873	0.018	T	0.88	0.01	L	7.8993	0.0013	0.013	60		7.88	7.92		C	23463−1322	I 1	1 G							S
117238	8.719	0.013	8.243	0.012		0.461	0.015	G	0.53	0.02	H	8.2983	0.0014	0.012	106		8.28	8.32					1 X							S
117239	12.186	0.174	10.645	0.069		1.316	0.154	T	1.72	0.17	K	10.4074	0.0084	0.094	87		10.33	10.69		U 2			1							G P
117240	10.957	0.035	10.563	0.041	A	0.504	0.100	G	0.58	0.10	R	*	10.4290	0.0038	0.059	212	*	10.32	10.53		U 2	23464−5316	I 1	2 C A	AB	42	9.556	0.020	1.81	0.09	
117241	8.992	0.018	7.760	0.012		1.052	0.017	T	1.02	0.01	L	7.8054	0.0014	0.009	77		7.79	7.82					1							S
117242	9.280	0.012	8.843	0.012		0.400	0.015	G	0.47	0.02	H	8.9030	0.0019	0.018	156		8.87	8.94		C			1							
117243	10.557	0.022	9.943	0.020		0.569	0.022	T	0.64	0.02	L	10.0055	0.0030	0.038	229		9.93	10.07					1							
117244	10.247	0.038	8.178	0.013		1.751	0.033	T	2.26	0.08	O	8.0255	0.0080	0.054	86		7.94	8.09		U 2			1 S							S P
117245	8.499	0.034	5.323	0.017		2.508	0.028	T	2.57	0.03	L	4.9586	0.0158	0.089	46		4.86	5.09		U 2			1 S							S P
117246	9.066	0.014	7.145	0.006		1.626	0.000	G	1.63	0.09	H	7.0818	0.0015	0.011	94		7.07	7.11					1							S
117247	10.166	0.038	9.028	0.023		0.882	0.005	G	0.89	0.00	H	9.0739	0.0028	0.017	62		9.05	9.10		C			1							
117248	8.341	0.008	8.302	0.009		0.035	0.011	T	0.05	0.01	L	8.3195	0.0020	0.017	148		8.29	8.35					1							S
117249	8.271	0.010	7.994	0.009		0.264	0.013	T	0.30	0.02	L	8.0377	0.0010	0.010	134		8.01	8.06					1							S
117250	9.595	0.018	8.954	0.016		0.589	0.018	T	0.66	0.02	L	9.0082	0.0025	0.025	128		8.98	9.05					1							
117251	9.600	0.019	9.025	0.017	*	0.537	0.022	T	0.61	0.02	L	*	8.9319	0.0013	0.017	137	*	8.91	8.97		D	23465+1705	I 1	2 C A	AB	86	1.167	0.004	0.23	0.02	S
117252	9.655	0.016	9.203	0.016		0.440	0.018	T	0.51	0.02	L	9.2649	0.0018	0.019	131		9.22	9.30					1							
117253	9.282	0.014	8.732	0.013		0.519	0.001	G	0.59	0.00	H	8.8022	0.0017	0.017	145		8.77	8.83		C			1							S
117254	7.602	0.017	7.354	0.014		0.232	0.022	T	0.26	0.03	L	7.4057	0.0216	0.160	168		6.94	7.53	0.05	P 1 A			1 S							S P
117255	8.975	0.013	7.618	0.008		1.150	0.012	T	1.11	0.01	L	7.6619	0.0012	0.011	112		7.64	7.68		C			1							S
117256	9.852	0.033	9.215	0.029		0.586	0.033	T	0.66	0.03	L	9.3655	0.0020	0.015	56		9.33	9.39					1							
117257	8.664	0.010	7.409	0.007		1.070	0.010	T	1.03	0.01	L	7.4504	0.0011	0.011	122		7.43	7.47		C			1							S
117258	7.887	0.010	7.294	0.007		0.551	0.009	G	0.62	0.01	H	7.3440	0.0009	0.010	63		7.33	7.37					1							S
117259	8.393	0.011	7.910	0.010		0.464	0.019	G	0.53	0.02	H	7.9612	0.0011	0.014	139		7.94	7.99		C			1							S
117260	8.382	0.013	7.285	0.011		0.947	0.013	T	0.94	0.01	L	7.3466	0.0011	0.008	54		7.34	7.37		C			1							S
117261	10.445	0.052	9.768	0.046		0.626	0.058	T	0.69	0.05	L	9.8805	0.0030	0.021	52		9.86	9.94		C			1							
117262	9.336	0.023	8.572	0.019	*	0.681	0.023	T	0.74	0.02	L	*	8.6108	0.0023	0.013	58	*	8.58	8.63		D	23466−1245	I 1	2 C A	AB	301	0.732	0.006	1.43	0.02	S
117263	10.551	0.032	8.984	0.015		1.300	0.006	G	1.26	0.01	J		9.0194	0.0013	0.014	126		8.99	9.05					1							
117264	9.246	0.013	8.708	0.013		0.512	0.014	T	0.58	0.01	L		8.7792	0.0017	0.020	137		8.75	8.82					1							S
117265	5.874	0.003	5.933	0.003		−0.049	0.004	T	−0.03	0.00	L		5.9363	0.0006	0.007	131		5.93	5.95					1							S
117266	10.141	0.033	9.532	0.029		0.566	0.032	T	0.64	0.03	L		9.5982	0.0029	0.021	75		9.57	9.64					1							
117267	10.410	0.046	9.095	0.024		1.117	0.041	T	1.08	0.04	L		9.1552	0.0016	0.018	89		9.12	9.20					1 S							S
117268	9.656	0.023	8.050	0.012		1.345	0.020	T	1.31	0.02	L		8.0675	0.0014	0.012	92		8.05	8.09		C			1							
117269	8.984	0.018	8.536	0.017	*	0.436	0.020	T	0.50	0.02	L	*	8.7884	0.0015	0.016	103	*	8.76	8.81		D	23467−4503	I 1	2 C A	AB	163	2.340	0.004	0.09	0.01	
117270	10.615	0.031	9.362	0.018		1.068	0.028	T	1.03	0.02	L		9.4812	0.0020	0.018	105		9.45	9.53					1							
117271						1.500	0.490	G	1.53	0.73	R		11.1194	0.0057	0.049	128		11.04	11.21		C			1							G
117272	10.714	0.069	9.162	0.031		1.303	0.060	T	1.26	0.06	L		9.1939	0.0023	0.016	44		9.17	9.22		C			1							
117273	10.185	0.026	8.838	0.015		1.142	0.024	T	1.11	0.03	L		8.8717	0.0022	0.026	116		8.84	8.93					1							
117274	8.598	0.014	7.418	0.009		1.011	0.013	T	0.99	0.01	L		7.4738	0.0017	0.010	69		7.46	7.50		C			1							S
117275	10.099	0.032	8.936	0.019	*	0.998	0.029	T	0.98	0.02	L	*	9.1343	0.0023	0.029	139	*	9.10	9.18		D	23469−5956	I 1	2 C A	AB	56	6.261	0.025	2.78	0.13	
117276	9.424	0.011	7.510	0.005		1.623	0.010	T	2.21	0.03	O		7.3569	0.0035	0.041	208		7.24	7.41		U 2			1							S
117277	8.284	0.011	8.252	0.014		0.021	0.001	G	0.04	0.00	H		8.2629	0.0021	0.013	60		8.24	8.28		C			1							S
117278	9.181	0.017	8.993	0.023	*	0.180	0.027	T	0.20	0.03	L	*	9.1287	0.0021	0.016	122	*	9.10	9.15		D	23469+4341	I 1	2 C A	AB	303	5.555	0.009	2.19	0.04	
117279	9.927	0.019	7.963	0.008		1.672	0.005	G	1.68	0.09	H		7.8408	0.0013	0.014	145		7.82	7.87					1							S
117280	9.188	0.019	7.389	0.009		1.590	0.082	G	1.72	0.17	K		7.1241	0.0077	0.059	92		7.04	7.20		D	23470+2825	I 3	1 S							S
117281	8.721	0.012	8.080	0.011		0.617	0.015	G	0.69	0.01	H		8.1436	0.0014	0.014	134		8.12	8.17					1							
117282	7.598	0.006	7.456	0.008		0.137	0.009	T	0.15	0.01	L		7.4885	0.0010	0.010	143		7.47	7.51		C			1							S
117283	9.505	0.014	8.783	0.012		0.649	0.014	T	0.71	0.01	L		8.8388	0.0016	0.017	151		8.82	8.87		C			1							S
117284	9.139	0.015	8.678	0.015		0.471	0.015	G	0.54	0.02	H		8.7379	0.0015	0.014	101		8.71	8.77		C			1							
117285	10.553	0.044	10.149	0.047							T		10.2004	0.0050	0.042	92		10.11	10.28		D	23470+2825	I 3	1							
117286	7.726	0.006	7.580	0.007		0.140	0.009	T	0.15	0.01	L		7.6143	0.0012	0.013	162		7.59	7.64		C			1							S
117287						0.690	0.020	G	0.75	0.02	R	*	11.2867	0.0056	0.049	117	*	11.19	11.36			23469+6824	H 1	2 C B	AB	155	0.323	0.066	2.00	0.45	G
117288	10.518	0.032	9.419	0.021		0.940	0.030	T	0.99	0.03	L		9.5140	0.0027	0.020	107		9.48	9.54		C			1							
117289	10.603	0.027	9.990	0.025		0.569	0.027	T	0.64	0.03	L		10.0581	0.0027	0.034	181		10.00	10.11					1 S							
117290	7.445	0.004	7.490	0.006		−0.030	0.003	G	−0.01	0.00	H		7.4862	0.0011	0.013	190		7.47	7.51					1							S
117291	9.893	0.027	9.547	0.029		0.328	0.037	T	0.38	0.05	L		9.6185	0.0016	0.015	74		9.59	9.64					1							
117292	10.355	0.041	9.327	0.028		0.884	0.039	T	0.89	0.03	L		9.4536	0.0025	0.014	54		9.43	9.48		C			1							
117293	11.838	0.093	10.518	0.044	A	1.310	0.218	G	1.27	0.23	R	*	10.3691	0.0033	0.037	191	*	10.30	10.42		D	23470+5157	H 1	2 C A	AB	253	9.476	0.015	1.90	0.08	G
117294	9.653	0.021	8.583	0.014		0.910	0.015	G	0.91	0.01	H		8.6561	0.0024	0.020	96		8.63	8.70					1							S
117295	10.555	0.039	9.357	0.022		1.025	0.035	T	1.00	0.03	L		9.3997	0.0023	0.017	98		9.37	9.44					1							
117296	10.325	0.024	9.235	0.016		0.942	0.022	T	0.93	0.02	L		9.3066	0.0023	0.020	135		9.27	9.35		C			1							
117297	8.268	0.006	7.700	0.006		0.536	0.006	G	0.61	0.01	H		7.7590	0.0010	0.013	210		7.73	7.78					1							S
117298	9.474	0.020	8.861	0.018	*	0.571	0.024	T	0.64	0.02	L	*	8.5956	0.0017	0.013	107	*	8.58	8.62		D	23470+0515	I 1	2 C A	AB	1	1.075	0.004	0.24	0.02	S
117299	7.683	0.007	5.718	0.003		1.630	0.006	T	1.65	0.01	L		5.6564	0.0006	0.009	145		5.64	5.67		M			1							S
117300	10.769	0.039	9.929	0.030		0.739	0.038	T	0.79	0.03	L		10.0500	0.0031	0.029	104		10.01	10.09					1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)														Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5 6 7			8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
117301	23 47 03.39	+58 39 06.7	4.88	H		356.764 111 16	+58.651 851 64		18.88	60.70	56.69	0.43	0.44	0.59	0.50	0.52	−27	+18	+10	+ 7	+ 4	+ 3	+ 3	+ 3	− 9	−22		1	0.43
117302	23 47 04.47	+51 33 24.8	8.93	H		356.768 610 80	+51.556 881 12		3.05	3.80	−2.85	0.69	0.84	1.31	0.90	1.08	−44	− 2	+28	− 1	+ 3	− 3	+ 4	− 3	+ 1	−19		0	−0.30
117303	23 47 05.98	−73 05 57.4	7.82	H		356.774 929 61	−73.099 285 96		7.84	86.49	6.48	0.57	0.55	0.71	0.67	0.60	+ 7	+13	−10	+ 5	+ 1	−12	+ 1	− 8	− 4	+18		1	−0.03
117304	23 47 06.41	−31 54 33.8	10.10	H		356.776 701 16	−31.909 395 45		2.71	11.38	−0.74	1.50	1.41	2.00	1.85	1.59	+44	− 6	−17	−13	+29	−18	+29	+10	+ 0	+29		0	−1.77
117305	23 47 07.40	−17 05 58.0	9.43	H		356.780 836 38	−17.099 432 53		−1.83	13.78	−6.12	1.35	0.96	1.67	2.36	1.56	+24	+ 6	−12	− 6	+ 0	+20	+ 2	−17	+35	+ 6		0	−0.15
117306	23 47 08.48	+15 39 03.3	8.66	H		356.785 347 97	+15.650 914 92		−3.18	−8.96	−1.76	0.93	0.62	1.09	0.90	0.64	+32	+14	+ 7	− 3	+13	− 6	+16	− 2	+14	+38		0	0.95
117307	23 47 09.79	−21 30 35.4	9.53	H		356.790 809 73	−21.509 833 41		4.77	16.12	−16.16	1.48	0.89	1.62	1.75	1.26	+32	−32	−21	−24	− 1	+32	− 2	−29	+24	+ 9		0	−0.26
117308	23 47 11.01	−26 23 22.7	11.29	G		356.795 857 65	−26.389 626 79		19.11	−210.65	−212.64	2.43	2.33	2.93	3.40	2.97	+23	−16	−25	+ 8	+ 2	+13	+ 3	− 8	+10	+21		0	0.49
117309	23 47 12.27	+43 33 40.5	9.47	H		356.801 133 62	+43.561 246 43		3.11	−8.98	−5.32	0.83	0.88	1.26	0.93	1.04	+10	+11	+10	+20	− 1	+ 1	− 2	+40	+ 7	+18		0	−1.04
117310	23 47 13.21	+60 18 52.8	8.51	H		356.805 042 54	+60.314 679 17		2.25	−0.47	−2.71	0.65	0.68	0.87	0.76	0.78	−21	+15	+ 8	+20	+ 3	+ 0	+ 3	+ 3	+ 0	−24		0	−0.64
117311	23 47 13.80	+07 05 13.3	10.63	2 H		356.807 506 04	+07.087 027 07		−0.73	6.30	1.81	2.09	1.10	2.29	2.29	1.18	+45	−29	+ 2	−13	+ 2	+ 7	+ 2	−17	− 3	+54		0	−1.45
117312	23 47 14.24	+23 55 54.9	8.30	H		356.809 330 60	+23.931 929 00		1.35	11.02	0.28	0.83	0.65	1.14	0.80	0.71	+23	+29	−10	+ 7	+16	−10	+18	+ 5	+ 9	+37		2	1.28
117313	23 47 15.62	−77 14 06.6	8.63	H		356.815 092 29	−77.235 156 27		5.70	0.13	10.75	0.68	0.61	0.77	0.83	0.68	− 7	+ 8	−20	+14	+10	+ 1	+11	+ 4	− 1	+ 8		0	1.20
117314	23 47 15.94	−11 54 39.2	5.74	H		356.816 422 11	−11.910 898 98		9.42	−48.26	−93.56	0.75	0.53	0.83	1.01	0.75	+21	− 7	−11	− 8	+13	+25	+21	+13	−11	+ 4		2	0.19
117315	23 47 15.99	−50 13 35.1	5.18	H		356.816 614 87	−50.226 404 16		5.51	8.99	−23.28	0.43	0.41	0.65	0.54	0.48	− 9	− 6	−18	−16	−13	+11	−10	−39	+19	+ 1		1	−0.81
117316	23 47 16.60	−46 42 45.3	9.81	H		356.819 166 00	−46.712 572 00		0.83	21.38	2.31	1.29	0.88	1.48	1.52	0.95	− 7	− 1	− 4	− 5	+ 5	− 4	+ 4	+16	+ 2	−12		3	2.82
117317	23 47 18.35	−08 05 12.1	10.53	2 H		356.826 464 99	−08.086 693 35		4.71	−7.23	1.00	1.65	1.34	1.89	2.53	1.65	+44	−23	−28	+14	+16	+ 6	+25	+32	−20	− 4		8	1.60
117318	23 47 19.57	−09 48 31.5	8.94	H		356.831 553 93	−09.808 738 25		9.30	−85.83	−91.90	1.33	0.89	1.38	1.60	1.43	+28	+ 0	−12	−20	+22	+17	+32	+30	+13	+29		0	−0.88
117319	23 47 19.77	+02 53 21.0	8.09	H		356.832 367 69	+02.889 165 20		3.33	1.98	1.86	1.00	0.78	1.14	1.27	1.05	+30	−21	−26	−31	− 3	+24	+ 2	+ 2	+17	+25		0	−0.50
117320	23 47 21.16	−48 16 30.2	6.89	G		356.838 181 06	−48.275 068 47		24.21	−383.98	−212.97	0.62	0.50	0.76	0.66	0.51	+ 1	−10	−18	+ 8	−12	+ 3	−12	− 8	+ 1	− 4		0	0.55
117321	23 47 22.11	+44 56 58.1	9.55	H		356.842 110 00	+44.949 469 62		2.40	−15.96	−8.45	0.94	0.88	1.34	1.03	0.97	−12	+ 0	+22	+42	−12	− 7	−11	+39	+20	−19		0	1.82
117322	23 47 22.50	−57 01 25.5	9.96	G		356.843 740 24	−57.023 740 88		11.60	147.16	−157.78	0.93	1.15	1.55	1.15	1.46	− 9	− 9	−16	+ 2	+ 5	+ 0	+ 7	+17	−12	−18		0	2.00
117323	23 47 22.55	−01 30 31.7	9.26	H		356.843 959 24	−01.508 801 43		2.92	12.93	−1.89	1.56	0.97	1.52	2.01	1.25	− 1	+ 9	−24	−46	+15	− 5	+24	−12	+36	−18		0	−0.08
*117324	23 47 23.28	−68 23 38.0	6.89	H		356.847 006 78	−68.393 886 32		8.84	48.05	−33.40	0.48	0.49	0.64	0.56	0.58	+ 1	+ 7	−22	− 8	+ 4	+ 3	+ 5	− 6	+ 4	+25		0	−1.79
*117325	23 47 23.52	−03 54 10.9	9.06	H		356.847 982 92	−03.903 039 17		7.82	−16.99	15.70	1.11	0.85	1.30	1.36	0.97	+22	− 4	−22	− 7	+ 0	+30	+ 8	+ 4	+14	+15		0	−0.04
*117326 H	23 47 23.22	−71 18 24.4	7.08	H		356.846 767 40	−71.306 775 60	*	5.46	63.81	−50.98	0.60	0.59	0.74	0.69	0.68	− 3	+11	−16	− 9	+ 4	− 6	+ 3	−29	− 1	− 1		1	0.18
117327	23 47 23.89	−49 36 24.3	9.81	G		356.849 553 01	−49.606 744 41		5.82	32.17	−4.83	0.75	0.93	1.46	0.82	1.10	+ 4	−26	−20	−25	−18	+21	−17	−41	+12	+ 5		0	−0.24
117328 H	23 47 25.72	−22 16 31.2	8.02	H		356.857 187 21	−22.275 328 50	A	10.81	−40.38	−97.97	1.48	1.26	1.57	1.65	1.31	+51	−31	−37	−23	−27	+42	−29	−43	+25	+28		1	−0.95
117329	23 47 26.05	+64 08 41.4	7.87	H		356.858 538 61	+64.144 819 47		2.03	20.40	−0.50	0.55	0.59	0.76	0.71	0.60	−19	− 5	+36	+29	−23	−31	−12	+24	+23	−23		1	1.57
117330	23 47 26.10	−24 28 41.3	9.06	H		356.858 751 61	−24.478 129 69		5.40	45.93	15.25	1.15	1.24	1.47	1.61	1.36	+33	− 9	−43	+ 7	−29	+25	−24	−38	+33	+27		3	1.85
117331	23 47 29.18	−67 43 12.6	8.31	H		356.871 589 25	−67.720 162 91		4.24	16.46	15.39	0.60	0.62	0.82	0.66	0.67	− 4	+12	−21	+ 3	+10	−18	+ 5	+13	+ 4	+12		0	−2.27
117332	23 47 29.38	+25 34 46.5	6.78	H		356.872 397 58	+25.579 573 47		4.30	−15.96	−11.71	0.61	0.52	0.76	0.66	0.56	+25	+12	− 7	+21	+10	− 4	+12	+ 8	+11	+32		2	2.25
117333	23 47 29.49	−02 08 58.2	9.59	H		356.872 862 50	−02.149 509 03		15.92	74.34	21.03	1.61	1.05	1.72	2.09	1.28	− 6	+38	−33	−33	+ 5	− 7	+21	−22	+37	−20		0	0.39
117334	23 47 29.88	+49 17 36.0	7.83	H		356.874 484 58	+49.293 341 00		3.78	9.33	−3.93	0.48	0.55	0.95	0.53	0.64	−18	+26	+11	+ 7	− 9	− 1	− 1	+ 1	+27	−11		0	−1.65
117335	23 47 30.46	+53 13 50.7	9.19	1 H		356.876 904 45	+53.230 745 71		2.80	15.52	−3.72	0.84	0.91	1.52	1.16	1.08	−22	+10	+16	− 7	+11	+18	+ 8	− 6	+ 6	− 9		0	−0.96
117336	23 47 30.62	+18 13 24.5	11.83	G		356.877 595 82	+18.223 466 20		24.90	269.03	−28.26	2.18	1.66	3.00	2.25	1.61	+45	+14	+14	− 4	+ 1	+ 5	+ 0	− 4	+ 2	+38		3	0.16
117337	23 47 31.49	−38 09 23.0	8.04	H		356.881 195 85	−38.156 396 68		1.65	64.50	−7.21	0.96	0.59	1.10	1.04	0.54	−20	+21	−24	−45	+ 7	+ 2	+17	−41	+26	−34		2	1.08
117338	23 47 31.73	−17 56 33.2	8.95	H		356.882 203 67	−17.942 555 71		6.50	29.22	−3.53	1.18	0.84	1.50	1.82	1.23	+38	−37	−36	− 6	+ 3	+28	+ 5	− 3	+21	+13		0	−0.31
117339	23 47 32.14	+16 56 15.3	7.95	H		356.883 928 71	+16.937 595 40		3.71	−23.12	−19.76	0.70	0.54	0.93	0.79	0.61	+43	+ 6	+ 1	+ 4	+ 4	−12	+ 5	+ 4	+ 0	+50		0	0.31
117340 H	23 47 33.05	+46 49 57.3	6.08	H		356.887 702 52	+46.832 576 54	A	2.47	1.21	−5.01	0.51	0.61	0.78	0.46	0.62	+ 3	+ 7	+25	−17	+ 7	−14	+13	+30	+12	− 3		2	0.19
117341	23 47 33.50	−35 37 15.5	9.72	H		356.889 568 95	−35.620 981 84		3.66	5.86	−1.30	1.18	1.03	1.47	1.57	1.12	+11	+ 9	+10	−34	+16	+ 8	+22	+ 3	+14	−15		0	1.37
117342	23 47 35.52	+46 01 05.0	8.00	H		356.897 995 33	+46.018 068 20		2.30	5.45	−2.60	0.54	0.64	0.98	0.59	0.73	+ 1	+10	+24	−37	+ 5	−15	+12	+27	+17	− 4		0	−1.24
117343	23 47 35.76	−28 18 38.6	10.13	G		356.898 986 59	−28.310 728 00		8.59	−2.89	−3.47	1.90	1.62	2.12	2.67	2.03	+10	−35	−13	+36	−10	+ 1	−18	− 2	+14	− 8		0	1.20
117344	23 47 35.97	−15 58 53.9	8.31	H		356.899 879 67	−15.981 638 82		8.52	63.94	61.64	0.96	0.66	1.06	1.21	0.90	+21	−10	−23	− 8	+ 3	+ 9	+ 6	− 1	+12	+ 8		0	−1.11
117345	23 47 36.03	+34 31 17.8	7.51	H		356.900 136 16	+34.521 604 93		7.45	26.89	−12.86	0.74	0.59	0.86	1.02	0.66	− 6	+10	− 2	−12	+32	+ 7	+24	+12	− 2	+ 5		2	1.13
117346	23 47 36.07	−45 19 45.6	8.58	H		356.900 296 24	−45.329 328 54		6.34	37.17	−30.54	0.83	0.68	1.08	1.00	0.75	−13	+ 5	+ 9	− 7	+ 6	+15	+ 3	−19	−25	−24		0	−0.27
117347	23 47 37.44	−83 51 42.8	7.80	H		356.905 979 24	−83.861 883 17		5.13	16.00	25.63	0.59	0.52	0.65	0.68	0.56	+ 5	− 9	− 6	+ 3	+10	− 2	+10	+ 1	− 9	+15		0	−1.51
*117348	23 47 38.04	+27 10 47.0	7.98	H		356.908 496 51	+27.179 714 39		1.97	−14.86	−14.02	0.68	0.60	0.90	0.80	0.63	+24	+ 3	−19	− 4	− 7	+16	− 4	−16	+20	+33		0	−0.45
*117349	23 47 38.42	−05 49 31.6	7.64	G		356.910 096 85	−05.825 445 99		9.09	40.28	−1.00	0.78	0.57	0.87	1.06	0.76	+40	−19	−11	+10	+11	+ 0	+17	+23	− 8	+ 1		0	0.41
*117350	23 47 37.96	+85 04 42.2	7.77	H		356.908 158 41	+85.078 396 05		4.05	−14.68	1.26	0.55	0.52	0.63	0.63	0.54	+ 0	+ 5	+ 3	− 6	− 8	− 2	− 6	− 9	+19	− 6		0	0.47
117351	23 47 38.88	−09 55 49.7	8.49	H		356.911 987 45	−09.930 482 90		7.99	40.14	35.19	0.91	0.81	1.32	1.46	1.45	+42	+ 3	− 5	+ 6	+ 4	+53	+10	+ 5	+43	+53		0	0.65
117352	23 47 39.19	−04 27 42.1	7.56	H		356.913 306 29	−04.461 683 26		8.04	46.13	7.22	0.83	0.61	0.99	1.42	0.82	+39	− 5	−19	+22	+ 4	+30	+ 6	+16	− 3	− 3		0	−0.06
117353	23 47 39.90	−65 14 26.2	7.38	G		356.916 247 82	−65.240 605 53		6.61	5.40	8.52	0.51	0.54	0.70	0.58	0.58	− 1	− 8	−14	− 4	+ 1	− 2	+ 2	− 5	−12	+ 2		0	−3.40
117354	23 47 41.99	−00 45 43.6	7.11	H		356.924 961 96	−00.762 106 97		5.11	−23.01	−26.07	0.83	0.65	0.98	1.08	0.76	+22	− 8	−31	− 6	− 9	+23	− 4	− 9	+22	+10		0	−0.53
117355	23 47 42.76	+71 29 46.1	7.46	H		356.928 146 30	+71.496 126 15		3.84	11.10	15.39	0.54	0.53	0.65	0.62	0.57	− 1	+ 4	+20	+23	− 2	− 3	− 2	+14	+ 7	− 8		1	1.44
117356	23 47 43.02	+11 24 45.3	9.32	H		356.929 229 29	+11.412 578 13		6.79	7.58	−15.90	1.20	0.71	1.33	1.25	0.86	+26	+17	+ 4	+24	+ 3	− 7	+11	− 8	+28	+33		0	−1.43
117357	23 47 44.34	−36 40 35.1	10.36	H		356.934 767 41	−36.676 409 21		7.34	26.48	−9.70	1.34	1.10	1.67	1.46	0.98	+ 5	− 1	− 7	−32	− 4	+ 6	− 2	−31	+28	−14		0	−2.14
117358	23 47 44.79	−26 11 09.8	9.69	H		356.936 626 78	−26.186 046 12		2.27	35.39	3.69	1.61	1.50	1.92	2.48	2.01	+19	−26	−24	+19	−10	+20	−11	−20	+19	+13		0	−0.74
117359	23 47 44.83	+04 13 47.9	7.44	H		356.936 785 91	+04.229 971 68		2.15	−15.97	−8.50	0.90	0.66	1.04	1.22	0.59	+20	−13	− 7	−27	+16	+31	− 1	−33	+37	+56		0	−0.18
117360	23 47 46.49	+28 24 27.2	8.16	G		356.943 722 54	+28.407 568 83		6.87	48.79	8.34	0.76	0.58	0.94	0.91	0.68	+16	− 3	−21	+ 7	+ 5	+ 7	+ 6	− 5	+24	+30		0	0.83
117361	23 47 47.77	−52 12 15.9	7.36	H		356.949 029 34	−52.204 427 88		2.28	−9.54	21.14	0.60	0.62	1.00	0.84	0.74	−17	−11	−17	− 6	−17	+17	− 9	−37	+17	+ 0		0	0.03
117362	23 47 49.00	−46 28 05.2	10.67	H		356.954 168 73	−46.468 116 74		2.14	9.00	−4.24	1.66	1.27	1.92	1.85	1.20	− 8	+ 5	− 8	−10	− 1	+ 6	− 2	−17	−11	−26		0	1.36
117363	23 47 50.64	−23 01 33.6	8.29	H		356.961 009 16	−23.026 007 45		1.12	9.58	−4.18	0.96	0.98	1.25	1.39	1.08	+33	−24	−41	− 1	−18	+30	−16	−25	+26	+11		0	−0.46
117364	23 47 51.01	−05 14 37.7	8.39	H		356.962 551 46	−05.243 795 60		17.08	−175.79	−165.85	0.96	0.65	1.07	1.56	0.94	+42	−13	−11	−17	+12	− 2	+25	+17	+ 9	−12		0	0.01
117365 H	23 47 51.52	+17 04 23.0	8.27	G		356.964 651 06	+17.073 045 65	C	8.33	82.93	−78.17	2.29	2.12	2.69	2.23	1.96	+52	− 6	− 1	+ 6	− 3	−15	− 3	− 1	−18	+65		12	1.60
117366	23 47 51.79	+17 03 21.6	8.34	H		356.965 771 49	+17.055 986 60		5.24	15.08	−11.57	0.73	0.60	0.99	0.82	0.66	+48	− 6	− 4	+ 7	+ 4	− 7	+ 4	+ 3	− 4	+53		0	0.36
117367	23 47 52.20	+04 10 32.0	7.69	H		356.967 497 18	+04.175 553 21		21.43	349.47	−32.58	0.94	0.67	1.05	1.16	0.58	+22	−16	− 8	−36	+ 6	+31	− 7	−43	+29	+53		0	−1.11
117368	23 47 52.25	+51 53 48.9	9.50	2 H		356.967 724 34	+51.896 913 81		−1.75	−1.70	−1.46	0.95	1.09	1.66	1.22	1.27	−48	− 6	+19	− 3	+ 7	+ 2	+ 7	−14	+12	−41		6	2.60
117369	23 47 52.51	−55 16 52.6	9.57	G		356.968 785 46	−55.281 288 90		1.35	67.72	−8.57	0.77	0.83	1.32	0.85	0.98	−20	+22	−28	− 3	+ 6	+ 0	+ 7	− 3	+ 2	− 7		0	0.07
117370	23 47 53.13	−22 36 32.3	8.57	H		356.971 364 29	−22.608 977 90		10.28	44.16	−5.25	1.02	0.76	1.27	1.29	0.98	+26	−14	−39	−12	−18	+35	−12	−35	+37	+20		0	−1.55
117371	23 47 54.75	+67 48 24.5	5.05	H		356.978 115 33	+67.806 812 63		10.96	14.55	−1.89	0.41	0.45	0.53	0.45	0.49	−16	+ 5	+23	+ 8	−24	−12	−21	+11	+ 9	−31		0	0.89
117372	23 47 56.10	−34 18 30.7	8.57	H		356.983 752 96	−34.308 527 24		2.94	17.02	13.10	0.95	0.83	1.20	1.23	0.85	+19	+ 6	−25	−28	+20	−22	+18	+ 0	+12	− 1		2	1.03
117373	23 47 56.27	−13 54 59.9	7.48	H		356.984 461 74	−13.916 650 04		6.01	−51.36	−86.35	0.85	0.60	0.93	1.21	0.67	+14	−16	− 7	− 3	+ 3	+25	− 1	−16	− 3	−22		0	−1.35
117374	23 47 56.35	−66 34 02.9	6.73	H		356.984 796 11	−66.567 478 16		20.71	−67.49	25.19	0.48	0.45	0.61	0.51	0.50	− 3	+ 8	−21	− 5	+ 9	+ 6	+ 9	+ 6	− 3	+19		0	−1.67
117375	23 47 56.49	−02 45 41.8	5.49	G		356.985 361 10	−02.761 611 03		11.19	96.45	5.50	0.86	0.57	0.85	1.18	0.69	+ 7	+15	−11	+17	+ 0	+ 8	+ 2	+22	− 2	−17		0	0.16
117376	23 47 58.00	+78 22 33.9	9.87	H		356.991 653 47	+78.376 082 82		7.58	21.92	2.47	0.80	0.74	0.90	1.10	0.88	− 4	−11	+17	+21	+ 1	−14	+ 4	+15	− 4	− 2		1	0.06
117377 H	23 47 58.45	−19 30 21.1	10.19	G		356.993 545 96	−19.505 860 64	*	10.04	73.09	−104.39	5.34	6.09	2.16	2.57	1.66	+40	− 1	−14	−22	+ 1	− 4	+ 2	−19	+34	+ 3		3	−0.18
117378	23 47 58.65	−57 11 27.0	8.95	H		356.994 387 73	−57.190 846 06		2.87	20.00	−3.22	0.73	0.81	1.15	0.94	0.99	−15	− 4	−23	− 1	+ 9	− 2	+10	+ 9	−15	−24		2	−0.50
117379	23 47 58.80	+51 50 11.6	8.86	H		356.994 999 38	+51.836 568 89		4.94	9.15	−2.94	0.72	0.84	1.33	0.94	1.05	−40	− 1	+23	− 2	+ 1	+18	− 3	+ 3	+ 2	−29		0	1.48
117380	23 47 59.54	+80 33 53.8	8.34	H		356.998 069 86	+80.564 939 24		3.81	21.99	1.79	0.67	0.63	0.74	0.84	0.68	− 5	−12	+32	+36	+ 3	− 9	+ 9	+ 1	− 9	+ 7		1	0.16
*117381 H	23 48 00.32	−82 24 42.1	8.48	H		357.001 353 00	−82.411 696 10	A	2.35	21.42	−6.43	0.92	0.88	0.96	0.97	0.85	+16	−12	−27	+ 2	+ 6	+14	+ 8	− 4	+ 8	+26		2	−0.33
*117382	23 48 00.27	+49 47 25.9	8.79	H		357.001 130 09	+49.790 536 32		3.91	15.11	−0.23	0.62	0.74	1.25	0.77	0.91	−32	+18	+ 9	+37	−11	− 5	− 3	+20	+24	−23		0	1.89
117383	23 48 02.58	+49 00 56.7	12.06	G		357.010 754 18	+49.015 748 52		60.56	626.93	69.67	1.86	1.89	3.24	2.12	2.12	− 7	+19	+15	−14	−23	−20	−17	− 8	+14	+ 0		1	1.22
117384	23 48 03.03	+50 18 10.5	8.57	H		357.012 605 14	+50.302 905 27		3.06	1.60	−0.50	0.58	0.75	1.15	0.71	0.94	−26	+12	+20	+16	+ 6	+ 2	+ 8	− 7	+16	−28		2	0.38
117385	23 48 03.33	−33 12 31.2	10.66	H		357.013 858 64	−33.208 670 14		2.73	74.51	−17.40	1.41	1.53	1.79	1.56	1.68	+35	− 9	−16	−35	+13	+ 3	+18	+ 2	+ 4	+23		2	0.50
117386	23 48 04.39	+32 36 23.6	9.81	H		357.018 290 41	+32.606 543 24		12.24	−12.15	−41.24	1.16	1.00	1.49	1.54	1.17	− 9	+10	−27	+18	+ 1	+ 2	+ 0	+ 7	−13	− 5		2	2.11
117387	23 48 06.26	+63 49 02.6	7.39	H		357.026 093 29	+63.817 395 01		7.25	27.39	−9.29	0.52	0.58	0.71	0.64	0.59	−21	+11	+34	+28	−21	−15	−14	+23	+19	−30		3	1.33
117388	23 48 06.78	+41 06 07.0	10.33	H		357.028 267 22	+41.101 935 74	B	3.51	−2.99	−7.89	9.34	8.83	6.43	5.87	5.84	+19	+ 7	+12	+11	−24	− 3	−25	−19	+ 9	+13		4	0.45
117389 H	23 48 06.97	−50 53 27.1	6.88	H		357.029 032 00	−50.890 869 65	A	5.40	−43.15	−33.90	0.80	0.74	1.08	0.84	0.79	−25	− 5	− 8	−18	− 8	− 9	− 5	−34	+11	− 2		0	0.22
117390	23 48 08.40	+41 06 28.8	8.27	H		357.035 001 26	+41.108 003 75	A	16.77	19.97	−19.07	1.89	1.63	1.69	1.73	1.70	+ 5	+11	+26	+58	− 6	− 2	− 4	+36	+14	+14		4	0.45
117391	23 48 09.42	−16 41 56.5	7.55	G		357.039 260 49	−16.699 026 85		16.19	−103.59	−49.33	0.95	0.61	1.12	1.73	0.88	+15	+ 0	−23	− 1	− 6	+32	− 2	−18	+32	−12		0	−0.22
117392	23 48 10.68	+29 51 56.1	9.62	H		357.044 508 10	+29.865 573 35		7.54	13.02	−10.94	0.97	0.80	1.28	1.04	0.89	+ 2	+26	−15	+13	+ 2	+ 3	+11	−11	+23	+20		0	−0.27
117393	23 48 11.83	+27 42 56.7	7.85	G		357.049 287 61	+27.715 762 94		12.94	−50.25	−106.50	0.83	0.86	0.89	0.92	1.15	+22	+14	−11	− 1	−36	− 1	−23	−54	+ 9	+50		0	−1.21
117394	23 48 12.11	+08 14 44.4	6.66	G		357.050 456 24	+08.245 660 02		17.54	30.43	−26.67	0.74	0.44	0.81	0.82	0.48	+34	+ 1	+ 3	− 4	+ 6	− 8	+ 7	+ 1	+ 2	+25		0	−1.32
117395	23 48 12.70	−00 46 29.5	8.54	H		357.052 915 98	−00.774 848 09		5.89	65.59	−12.12	1.17	0.84	1.27	1.36	1.14	+15	− 1	−22	−20	+16	− 7	+14	+17	+24	+18		0	0.61
117396	23 48 12.81	+15 56 14.4	8.90	H		357

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
117301	6.322	0.003	5.000	0.002		1.122	0.003	T	1.08	0.00	L	5.0475	0.0006	0.006	116		5.04	5.06					1							S
117302	8.963	0.008	8.914	0.011		0.050	0.013	T	0.06	0.01	L	8.9475	0.0017	0.024	193		8.90	8.99					1							
117303	8.412	0.009	7.878	0.008		0.501	0.011	T	0.57	0.01	L	7.9244	0.0015	0.015	147		7.90	7.96					1							S
117304	10.667	0.037	10.065	0.034		0.561	0.044	T	0.63	0.04	L	10.2242	0.0028	0.032	114		10.18	10.28		C			1							
117305	10.751	0.050	9.514	0.028		1.056	0.045	T	1.02	0.04	L	9.5951	0.0023	0.019	75		9.56	9.64		C			1							
117306	8.556	0.013	8.654	0.017		−0.084	0.019	T	−0.06	0.02	L	8.6371	0.0017	0.015	96		8.61	8.66		C			1							S
117307	10.147	0.029	9.583	0.028		0.532	0.030	T	0.60	0.03	L	9.6472	0.0026	0.017	80		9.59	9.69		C			1							
117308						1.297	0.015	G	1.49	0.03	I	11.4028	0.0082	0.045	47		11.34	11.47		C			1							G
117309	9.617	0.017	9.484	0.021		0.128	0.025	T	0.14	0.03	L	9.5161	0.0029	0.028	121		9.48	9.56					1							
117310	8.913	0.011	8.534	0.012		0.410	0.010	G	0.48	0.01	H	8.6030	0.0014	0.018	140		8.57	8.64					1							
117311						1.900	0.490	G	2.34	0.54	K	10.6706	0.0053	0.058	145		10.57	10.77		U 2			1							G
117312	9.875	0.024	8.465	0.014		1.191	0.022	T	1.15	0.02	L	8.4657	0.0015	0.012	81		8.44	8.49		C			1							
117313	9.083	0.011	8.683	0.012		0.378	0.015	T	0.44	0.02	L	8.7194	0.0017	0.020	135		8.69	8.75					1							
117314	7.117	0.007	5.853	0.004		1.068	0.003	G	1.03	0.00	H	5.9068	0.0006	0.006	71		5.89	5.92					1							S
117315	4.954	0.002	5.144	0.002		−0.164	0.002	T	−0.17	0.00	L	5.1190	0.0007	0.007	202		5.11	5.14					1							S
117316	10.049	0.022	9.822	0.026		0.217	0.032	T	0.24	0.04	L	9.8811	0.0029	0.025	95		9.84	9.93		C	23473−4643	I 1	1	S						
117317	11.104	0.070	10.577	0.066		0.495	0.087	T	0.57	0.09	L	10.6406	0.0192	0.128	71		10.43	10.81	0.48	P 1 A			1							G
117318	9.557	0.024	9.003	0.022		0.519	0.029	T	0.59	0.03	L	9.0547	0.0023	0.018	63		9.02	9.11		C			1							S
117319	9.658	0.033	8.200	0.018		1.229	0.030	T	1.19	0.03	L	8.2507	0.0017	0.012	43		8.23	8.27		C			1							S
117320	7.706	0.007	6.957	0.006		0.659	0.003	G	0.72	0.00	H	7.0211	0.0010	0.009	103		7.00	7.04		C			1							S
117321	9.950	0.023	9.600	0.026		0.332	0.032	T	0.39	0.04	L	9.6274	0.0016	0.019	113		9.59	9.67		C			1	S						
117322	10.814	0.031	10.031	0.025		0.769	0.003	G	0.81	0.00	H	10.1049	0.0029	0.036	169		10.04	10.17		C			1							
117323	9.695	0.031	9.332	0.033		0.344	0.042	T	0.40	0.06	L	9.3440	0.0022	0.020	51		9.31	9.37		C			1							
117324	7.432	0.005	6.947	0.005		0.462	0.007	G	0.53	0.01	H	6.9946	0.0007	0.008	137		6.98	7.01					1							S
117325	9.676	0.025	9.118	0.023		0.522	0.030	T	0.59	0.03	L	9.1728	0.0026	0.018	56		9.13	9.20		C			1							
117326	8.464	0.010	7.225	0.007	*	1.057	0.009	T	1.02	0.01	L	* 7.2517	0.0010	0.012	130	*	7.23	7.27		D	23474−7118	I 1	2 C S	A	AB	174	0.131	0.009	1.28	0.35	S
117327	10.200	0.021	9.820	0.023		0.399	0.004	G	0.46	0.00	H	9.9181	0.0023	0.030	197		9.87	9.96		C			1							
117328	8.812	0.015	8.169	0.013	A	0.600	0.495	G	0.65	0.02	L	* 8.1470	0.0016	0.011	81	*	8.12	8.16		D	23474−2217	I 1	2 C	A	AB	182	1.366	0.019	2.32	0.05	S
117329	7.902	0.007	7.867	0.008		0.037	0.010	T	0.05	0.01	L	7.8897	0.0009	0.013	122		7.87	7.92		D			1							S
117330	9.549	0.025	9.087	0.024		0.449	0.027	T	0.52	0.03	L	9.1595	0.0037	0.020	55		9.13	9.20					1							
117331	8.586	0.010	8.336	0.010		0.234	0.014	T	0.26	0.02	L	8.3757	0.0018	0.018	147		8.34	8.40		C			1	S						S
117332	8.386	0.009	6.924	0.005		1.232	0.008	T	1.19	0.01	L	6.9480	0.0010	0.009	93		6.93	6.97			23475+2535	I 1	1							S
117333	10.503	0.052	9.636	0.040		0.775	0.049	T	0.81	0.04	L	9.7404	0.0039	0.022	50		9.72	9.78					1							
117334	7.732	0.006	7.821	0.008		−0.076	0.009	T	−0.06	0.01	L	7.8127	0.0011	0.014	168		7.79	7.84			23475+4918	I 1	1							S
117335	10.536	0.031	9.343	0.018		1.022	0.028	T	1.00	0.02	L	9.3486	0.0021	0.030	158		9.30	9.40		U			1							
117336						1.410	0.015	G	1.70	0.04	I	11.9521	0.0054	0.052	111		11.87	12.03					1							G
117337	9.311	0.013	8.157	0.008		0.991	0.012	T	0.97	0.01	L	8.2009	0.0015	0.016	143		8.18	8.24					1							S
117338	9.412	0.019	9.002	0.019		0.401	0.022	T	0.47	0.02	L	9.0442	0.0017	0.015	73		9.01	9.08		C			1							S
117339	8.268	0.008	7.977	0.010		0.270	0.001	G	0.30	0.00	H	8.0204	0.0011	0.012	135		7.99	8.04		C			1							S
117340	5.915	0.003	6.070	0.003	*	−0.135	0.004	T	−0.13	0.01	L	* 6.0391	0.0008	0.008	151	*	6.03	6.05		D	23476+4650	I 1	2 C	A	AB	245	0.790	0.005	2.42	0.02	S
117341	11.188	0.060	9.857	0.031		1.129	0.053	T	1.09	0.06	L	9.8876	0.0020	0.020	89		9.85	9.93		C			1							
117342	9.471	0.012	8.123	0.007		1.143	0.011	T	1.11	0.01	L	8.1715	0.0013	0.014	174		8.14	8.20					1							
117343	11.237	0.121	10.156	0.077		0.610	0.020	G	0.68	0.02	H	10.2781	0.0036	0.024	37		10.25	10.46					1							
117344	8.932	0.016	8.359	0.015		0.504	0.008	G	0.58	0.01	H	8.4212	0.0012	0.014	91		8.40	8.45					1							S
117345	7.602	0.009	7.519	0.008		0.082	0.011	T	0.09	0.01	L	7.5474	0.0012	0.010	76		7.53	7.56		C			1							S
117346	8.834	0.012	8.630	0.013		0.195	0.017	T	0.21	0.02	L	8.6415	0.0017	0.017	104		8.61	8.67		C			1							S
117347	9.009	0.012	7.923	0.008		0.939	0.011	T	0.93	0.01	L	7.9638	0.0013	0.012	138		7.94	7.99		C			1							S
117348	9.624	0.020	8.100	0.011		1.281	0.018	T	1.24	0.02	L	8.1426	0.0015	0.010	93		8.12	8.17		C			1							
117349	8.171	0.011	7.681	0.010		0.465	0.015	G	0.54	0.02	H	7.7444	0.0009	0.009	95		7.73	7.76		C			1							S
117350	8.901	0.011	7.880	0.008		0.890	0.010	T	0.90	0.01	L	7.9311	0.0011	0.012	136		7.91	7.95		C			1							S
117351	8.987	0.016	8.553	0.016		0.410	0.021	T	0.48	0.02	L	8.5814	0.0016	0.011	64		8.56	8.60		C			1							S
117352	7.838	0.009	7.581	0.010		0.245	0.013	T	0.27	0.02	L	7.6311	0.0010	0.010	88		7.61	7.65					1							S
117353	7.695	0.006	7.396	0.006		0.308	0.001	G	0.35	0.00	H	7.4461	0.0011	0.011	136		7.43	7.46		C			1							S
117354	8.559	0.016	7.221	0.010		1.135	0.015	T	1.10	0.02	L	7.2746	0.0009	0.008	51		7.26	7.29		C	23477−0046	I 1	1							S
117355	8.712	0.010	7.560	0.007		0.990	0.010	T	0.97	0.01	L	7.6213	0.0012	0.010	120		7.60	7.65		C			1							
117356	9.814	0.028	9.358	0.028		0.430	0.036	T	0.50	0.04	L	9.4165	0.0019	0.014	83		9.40	9.44					1							S
117357	11.226	0.056	10.511	0.048		0.657	0.060	T	0.72	0.05	L	10.5001	0.0030	0.028	111		10.43	10.54					1							
117358	10.787	0.056	9.764	0.037		0.880	0.052	T	0.89	0.04	L	9.8371	0.0024	0.017	46		9.81	9.88					1							
117359	9.329	0.018	7.599	0.009		1.443	0.016	T	1.44	0.03	L	7.5711	0.0011	0.011	94		7.56	7.59					1							S
117360	8.511	0.010	8.158	0.011		0.318	0.010	G	0.37	0.01	H	8.2265	0.0009	0.009	90		8.21	8.25			23470+2825	I 3	1							S
117361	8.623	0.009	7.477	0.006		0.985	0.008	T	0.97	0.01	L	7.5288	0.0012	0.014	157		7.51	7.56					1							S
117362	11.001	0.049	10.725	0.061		0.260	0.081	T	0.29	0.10	L	10.7428	0.0026	0.043	99		10.64	10.82		D			1							G
117363	9.620	0.031	8.390	0.019		1.050	0.028	T	1.02	0.02	L	8.4606	0.0018	0.013	61		8.44	8.49		C			1							S
117364	9.189	0.018	8.452	0.015		0.622	0.002	G	0.69	0.00	H	8.5181	0.0017	0.014	96		8.49	8.55					1							S
117365	9.515	0.096	8.905	0.091	C						T *	8.3940	0.0021	0.019	140	*	8.36	8.44		D	23479+1704	I 2	2 C	A	CB	177	3.446	0.004	0.24	0.02	S
117366	8.560	0.010	8.346	0.011		0.106	0.150	G	0.15	0.02	L	8.3888	0.0013	0.013	141		8.37	8.41		D	23479+1704	I 2	1							S
117367	8.437	0.012	7.757	0.010		0.627	0.007	G	0.69	0.01	H	7.8215	0.0011	0.008	92		7.81	7.84		C			1							S
117368	9.543	0.012	9.502	0.016		0.043	0.019	T	0.06	0.01	L	9.5157	0.0034	0.034	203		9.45	9.57		U			1	S						
117369	10.414	0.023	9.630	0.019		0.760	0.006	G	0.80	0.00	H	9.7162	0.0023	0.027	200		9.65	9.78					1							
117370	9.125	0.020	8.634	0.019		0.474	0.021	T	0.55	0.02	L	8.6757	0.0021	0.015	86		8.65	8.72		C			1							S
117371	5.056	0.002	5.049	0.002		0.007	0.002	T	0.03	0.00	L	5.0602	0.0006	0.005	122		5.05	5.07		C			1							S
117372	9.715	0.020	8.645	0.014		0.927	0.019	T	0.92	0.01	L	8.7354	0.0019	0.018	92		8.71	8.76		C			1							
117373	8.930	0.017	7.602	0.010		1.127	0.015	T	1.09	0.02	L	7.6524	0.0012	0.012	77		7.64	7.68					1							S
117374	7.230	0.004	6.776	0.004		0.446	0.004	G	0.52	0.00	H	6.8277	0.0008	0.009	136		6.82	6.85		C			1							S
117375	6.694	0.005	5.607	0.005		0.941	0.007	G	0.96	0.07	F	5.6538	0.0007	0.005	55		5.65	5.66			23479−0245	I 1	1							S
117376	10.442	0.029	9.932	0.030		0.479	0.038	T	0.55	0.04	L	9.9739	0.0023	0.031	137		9.93	10.02					1							G
117377	10.921	0.060	10.246	0.052	*	0.603	0.003	G	0.67	0.00	H	* 10.3244	0.0034	0.038	93	*	10.18	10.37			23480−1930	H 1	2 C	C	AB	285	0.233	0.091	2.05	0.96	
117378	10.716	0.029	9.089	0.013		1.362	0.025	T	1.33	0.03	L	9.1033	0.0025	0.027	166		9.06	9.14					1							
117379	9.256	0.010	8.901	0.011		0.364	0.015	G	0.43	0.02	H	8.9483	0.0016	0.022	190		8.91	8.99					1							
117380	8.569	0.010	8.354	0.011		0.205	0.014	T	0.23	0.02	L	8.4003	0.0016	0.017	123		8.37	8.43					1							
117381	9.136	0.012	8.575	0.011	A	0.448	0.071	G	0.61	0.04	L	* 8.5920	0.0017	0.016	135	*	8.57	8.62		D	23480−8225	H 1	2 C	A	AB	79	1.827	0.015	3.03	0.06	S
117382	8.834	0.009	8.779	0.011		0.056	0.013	T	0.07	0.01	L	8.8110	0.0020	0.021	185		8.78	8.85					1							S
117383						1.630	0.020	G	2.68	0.05	I	12.1861	0.0071	0.065	155		12.07	12.30					1							G
117384	8.595	0.008	8.590	0.010		0.009	0.012	T	0.03	0.01	L	8.5823	0.0017	0.021	187		8.55	8.61		C			1							S
117385	11.135	0.053	10.709	0.060		0.574	0.072	G	0.65	0.07	R	10.7867	0.0036	0.031	93		10.73	10.83		C			1							G
117386	10.657	0.050	9.903	0.041		0.689	0.051	T	0.75	0.04	L	9.9493	0.0030	0.022	61		9.82	9.98					1							
117387	7.500	0.006	7.394	0.007		0.103	0.009	T	0.12	0.01	L	7.4318	0.0010	0.010	128		7.41	7.45		C	23482+6349	I 1	1							S
117388	10.790	0.065	10.291	0.064	B	0.469	0.083	T	0.54	0.09	L	10.4181	0.0302			B				D	23481+4106	I 2	1 C I	D						D
117389	8.050	0.013	6.990	0.009	*	0.919	0.012	T	0.92	0.01	L	* 7.0376	0.0008	0.010	222	*	7.02	7.05		D	23481−5053	I 1	2 C	B	AB	123	3.137	0.034	3.80	0.14	S
117390	9.066	0.017	8.323	0.014	A	0.680	0.017	T	0.74	0.01	L	8.4113	0.0068	0.018	104	A	8.39	8.44		D	23481+4106	I 2	1 C P	D						D
117391	8.158	0.010	7.593	0.009		0.518	0.015	G	0.59	0.02	H	7.6653	0.0010	0.010	79		7.64	7.69					1							S
117392	10.413	0.040	9.755	0.036		0.610	0.045	T	0.68	0.04	L	9.7536	0.0027	0.019	82		9.72	9.78		C			1							
117393	8.338	0.012	7.879	0.009		0.451	0.015	G	0.52	0.02	H	7.9464	0.0017	0.013	100		7.92	7.97					1 G							S
117394	7.035	0.005	6.693	0.005		0.324	0.007	T	0.38	0.01	L	6.7375	0.0007	0.007	120		6.73	6.75					1							S
117395	9.251	0.023	8.592	0.020		0.611	0.026	T	0.68	0.02	L	8.6702	0.0019	0.016	51		8.65	8.71		C			1							S
117396	9.500	0.019	8.953	0.018		0.512	0.023	T	0.58	0.02	L	9.0131	0.0018	0.016	96		8.97	9.06					1							
117397	11.186	0.053	9.996	0.029		1.019	0.047	T	1.07	0.06	L	9.9753	0.0034	0.035	143		9.91	10.03					1 X							G
117398	8.167	0.008	7.010	0.005		0.993	0.007	T	0.97	0.01	L	7.0551	0.0009	0.011	147		7.04	7.08					1							S
117399	10.974	0.063	9.717	0.032		0.920	0.004	G	0.96	0.00	I	9.7920	0.0034	0.024	91		9.75	9.84					1							
117400	11.149	0.054	10.779	0.063		0.351	0.077	T	0.41	0.08	L	10.9773	0.0067	0.065	130		10.86	11.09		R			1 X							G G

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
117401	23 48 18.56	+08 11 19.5	8.01	H	357.077 352 41	+08.188 740 62		3.22	20.61	−1.10	0.92	0.55	1.02	0.98	0.57	+37	+ 3	−11	−17	+ 3	−16	+ 2	− 8	+ 1	+29	0	−0.84
117402	23 48 18.80	+49 51 53.5	8.41	H	357.078 340 25	+49.864 872 48		5.27	7.83	−44.35	0.57	0.72	1.21	0.71	0.85	−28	+19	+13	+21	+ 0	+ 5	+ 4	+ 3	+23	−22	0	−0.65
117403	23 48 20.43	+33 50 46.1	9.14	H	357.085 115 26	+33.846 142 51		14.51	125.62	105.38	1.14	0.85	1.53	1.32	0.92	−14	+39	−43	+13	+28	−19	+17	+18	−14	+27	0	2.15
117404	23 48 21.22	−27 53 50.3	8.65	H	357.088 422 83	−27.897 310 81		26.02	156.93	−73.40	1.23	1.19	1.46	1.59	1.41	+22	−32	−15	+ 3	− 4	+15	− 1	−23	− 9	+11	0	1.52
117405	23 48 23.29	+54 41 55.2	8.05	H	357.097 046 08	+54.698 658 83		3.89	24.95	0.90	0.58	0.63	0.91	0.67	0.72	−25	+15	+ 0	+15	− 9	+13	− 6	+ 1	+13	−10	0	−0.70
117406	23 48 23.77	−62 00 29.1	8.51	H	357.099 060 10	−62.008 071 05		7.65	−3.41	1.37	0.61	0.73	0.93	0.73	0.81	− 1	− 3	−25	+12	− 1	+ 1	+ 1	− 4	− 7	+ 6	0	−1.78
117407	23 48 24.32	+45 26 18.4	9.06	H	357.101 342 75	+45.438 446 23		1.56	3.35	−3.07	0.77	0.71	1.15	0.83	0.80	−11	− 1	+16	+11	+ 0	+ 0	+ 1	+27	+15	−18	1	0.29
117408	23 48 24.38	+55 57 17.2	9.73	H	357.101 562 50	+55.954 782 25		2.08	2.67	−0.82	0.91	0.94	1.34	1.19	1.08	−25	+25	+ 3	+18	+ 5	+18	+ 8	− 4	+19	−21	0	1.05
117409	23 48 25.31	+15 04 18.0	8.72	H	357.105 467 92	+15.071 678 46		7.44	26.77	5.59	1.20	0.63	1.30	1.61	1.04	+22	+10	− 2	−15	+ 0	+ 9	+ 4	−21	+23	+12	0	1.86
117410 H	23 48 25.55	−12 59 15.0	9.59	G	357.106 472 09	−12.987 511 69	A	36.96	233.61	22.11	2.15	1.59	2.28	3.25	1.90	+28	+ 2	+ 2	−22	+10	+27	− 1	−37	−23	+24	0	0.24
117411	23 48 28.19	−11 30 31.4	7.60	H	357.117 476 97	−11.508 724 20		10.03	16.86	0.66	0.89	0.67	0.98	1.26	0.92	+29	+ 0	+ 1	+ 2	+12	+ 1	+16	+17	+ 2	+ 5	2	0.57
117412	23 48 28.89	+34 12 06.2	8.78	H	357.120 389 87	+34.201 735 52		3.25	17.25	−20.59	0.95	0.78	1.27	1.11	0.83	− 5	+19	−31	+10	+27	−11	+21	+17	−11	+20	0	0.45
117413	23 48 30.37	+30 31 39.0	8.19	2 H	357.126 521 64	+30.527 486 87		1.49	−13.08	−8.79	0.78	0.64	0.93	1.16	0.75	+ 5	− 2	− 8	−15	+ 9	+14	+ 7	− 8	− 4	+23	0	1.12
117414	23 48 30.62	−18 53 04.6	7.37	G	357.127 601 59	−18.884 621 67		3.35	6.38	−27.25	0.88	0.64	1.19	1.07	0.81	+28	−26	−37	−31	−17	+53	+ 1	−16	+22	+21	0	−0.55
*117415	23 48 31.54	+25 39 14.0	7.08	H	357.131 412 96	+25.653 896 03		14.99	−118.24	−26.43	0.60	0.50	0.75	0.66	0.52	+22	+ 9	−13	+16	+ 8	− 5	+ 9	− 3	+ 6	+31	2	1.50
*117416 H	23 48 31.51	+36 08 01.0	8.39	H	357.131 275 85	+36.133 619 45	*	3.17	−4.11	−14.51	1.17	1.73	1.20	1.18	0.79	+ 3	+16	+ 3	−22	+ 9	+ 9	+11	− 9	+17	+11	1	−0.07
117417	23 48 31.67	+15 04 14.2	10.15	H	357.131 962 13	+15.070 610 13		−4.75	−8.65	−10.30	1.73	1.02	1.90	1.64	1.06	+27	+ 5	+ 0	−37	− 2	+ 8	− 1	−24	+29	+36	2	2.61
117418	23 48 31.77	−45 50 12.9	10.02	H	357.132 391 65	−45.836 926 89		5.04	73.85	−55.40	1.49	1.25	1.83	1.70	1.24	− 2	+24	+ 8	−14	+14	+ 3	+10	−17	− 8	−11	0	−0.50
117419	23 48 31.78	+55 38 57.2	7.68	H	357.132 395 88	+55.649 227 28		2.27	4.89	0.12	0.50	0.53	0.79	0.68	0.64	−29	+ 4	+15	+ 7	+ 4	+26	+ 1	− 6	+14	−23	0	0.30
117420	23 48 32.48	−06 22 49.4	6.09	H	357.135 330 84	−06.380 376 99		4.51	1.42	−20.20	0.77	0.58	0.85	1.00	0.76	+40	−17	−10	+ 5	+16	+ 5	+26	+29	−17	+ 5	2	1.84
117421	23 48 33.55	+42 11 36.7	8.01	H	357.139 811 60	+42.193 525 29		0.21	−19.98	−10.70	0.56	0.66	1.02	0.69	0.80	+ 5	− 2	+ 3	+13	− 3	− 8	− 4	+36	+ 7	+ 9	0	1.94
117422	23 48 34.86	−39 05 54.1	8.78	H	357.145 241 18	−39.098 374 73		4.32	59.97	−26.38	0.76	0.58	1.14	0.88	0.54	− 9	+11	+ 5	+58	−21	+21	−32	−29	+ 1	−26	0	0.05
117423	23 48 35.04	+28 22 15.8	7.03	G	357.145 980 04	+28.371 044 51		1.96	−2.38	−5.67	0.65	0.53	0.85	0.78	0.57	+15	+13	−17	+ 8	+ 7	+15	+13	− 9	+23	+34	0	0.35
*117424	23 48 35.38	−67 20 34.8	9.18	H	357.147 420 03	−67.342 991 08		6.66	80.34	13.57	0.76	0.70	0.99	0.93	0.86	− 4	+13	−25	+ 3	+ 1	−12	− 2	+ 2	+ 7	− 7	0	−0.45
*117425	23 48 35.36	−14 51 30.5	9.32	H	357.147 336 25	−14.858 459 73		2.35	18.50	−5.16	1.63	0.94	1.60	3.19	1.33	+11	−16	−23	+34	−11	+ 1	−35	−21	+31	−48	3	0.85
117426 H	23 48 35.39	+36 16 28.4	6.95	H	357.147 455 28	+36.274 558 15	*	4.64	−6.72	−8.66	1.64	0.83	0.94	0.95	0.65	+ 4	+ 3	+18	−16	+13	+18	+ 6	−11	+ 5	+ 8	2	0.62
117427	23 48 36.80	−15 12 37.4	8.78	G	357.153 333 63	−15.210 393 45		18.65	210.93	−97.97	1.03	0.78	1.29	1.33	0.94	+30	− 4	−24	−13	− 8	+12	− 7	−23	+32	+ 9	0	−0.88
117428	23 48 38.36	+18 30 31.3	8.42	H	357.159 835 38	+18.508 692 78		7.76	−36.07	−26.96	0.85	0.60	1.12	0.88	0.64	+37	+12	− 2	−10	− 3	+ 4	− 2	− 7	+ 5	+47	0	−0.49
117429	23 48 38.67	−32 09 50.8	8.77	H	357.161 143 58	−32.164 103 89		2.41	−2.23	−53.92	1.01	1.00	1.34	1.23	1.30	+49	−10	−14	− 3	+29	+ 5	+29	+25	+21	+47	0	1.06
117430 H	23 48 39.03	+64 52 35.3	6.41	H	357.162 627 79	+64.876 484 81	A	4.54	17.13	−14.26	0.83	0.84	0.87	0.79	0.78	− 5	+10	+12	− 9	−11	+ 4	−10	− 5	+ 7	−27	2	0.49
117431	23 48 39.26	−59 03 27.3	9.15	2 H	357.163 579 37	−59.057 585 03		2.08	31.10	9.93	0.87	0.84	1.28	0.99	1.15	−14	− 4	−27	− 3	+15	+ 5	+22	− 8	− 7	+ 0	0	−0.30
117432	23 48 39.35	−13 53 12.2	8.88	H	357.163 946 76	−13.886 729 84		5.83	2.14	−3.91	1.14	0.73	1.26	1.84	0.98	+23	−36	−17	− 7	− 2	+30	− 5	−23	+ 1	−15	0	−0.02
117433	23 48 41.00	−34 38 24.3	10.90	H	357.170 819 79	−34.640 087 29		5.58	23.63	−23.14	1.61	1.33	1.94	1.82	1.40	+17	+18	+ 6	−28	+ 9	+ 8	+16	+ 2	+14	− 1	2	−0.41
117434	23 48 41.29	+74 47 29.3	8.47	G	357.172 024 16	+74.791 481 59		5.51	−17.14	1.02	0.75	0.66	0.84	1.04	0.79	−15	−20	+18	−16	+14	+23	+ 9	−20	− 1	− 4	2	1.08
117435	23 48 43.29	+48 34 03.2	8.59	H	357.180 378 79	+48.567 543 53		5.03	−4.27	4.73	0.70	0.63	1.09	0.78	0.72	−10	+10	+20	−29	− 9	+ 1	−11	+ 7	+12	− 3	0	−1.08
117436	23 48 44.53	+82 58 57.2	8.62	H	357.185 528 26	+82.982 561 97		2.85	1.00	2.03	0.69	0.67	0.78	0.83	0.67	− 9	+ 2	+23	+26	−10	+ 7	−10	−12	+ 6	− 8	0	2.01
117437	23 48 45.00	+50 45 09.2	8.31	H	357.187 501 50	+50.752 543 13		1.48	3.40	0.20	0.55	0.69	1.05	0.68	0.86	−28	+ 7	+14	+15	+ 9	− 8	+12	−12	+24	−31	0	0.03
117438	23 48 45.14	−04 26 06.8	8.08	H	357.188 071 03	−04.435 234 12		4.49	−0.77	9.33	0.89	0.75	1.15	1.36	0.96	+34	−10	−28	+ 7	− 3	+43	+10	+13	+11	+23	0	−0.30
117439	23 48 46.00	−08 08 44.5	9.38	2 T	357.191 649 24	−08.145 684 85		0.81	28.10	−13.12	1.26	1.06	1.59	1.97	1.76	+52	−27	−21	+23	+13	+34	+ 9	+16	+29	+35	0	−0.19
*117440	23 48 46.21	−27 32 56.2	9.86	H	357.192 529 65	−27.548 952 56		5.23	−4.64	9.97	1.59	1.61	1.91	2.16	1.88	+23	−21	−19	−12	+ 7	+22	− 5	−30	+ 0	+12	0	0.97
*117441	23 48 46.13	−51 29 19.9	9.22	H	357.192 214 30	−51.488 861 44		7.92	71.83	45.51	0.84	0.91	1.40	0.99	1.12	+ 0	−30	−12	−20	−12	+16	−14	−36	+23	+14	2	1.18
117442	23 48 47.28	+44 23 49.9	8.21	G	357.196 982 29	+44.397 182 99		7.29	55.12	−6.01	0.61	0.67	1.01	0.66	0.76	− 3	+15	+24	+33	− 7	− 1	− 3	+39	+24	−10	0	−2.00
117443	23 48 47.72	+49 29 45.5	8.98	H	357.198 852 86	+49.495 964 32		2.70	−10.65	−5.35	0.67	0.79	1.49	0.89	0.95	−20	+ 7	+17	+10	− 3	−21	+ 4	− 3	+30	−18	1	0.73
117444	23 48 48.10	−47 39 00.0	6.65	H	357.200 423 19	−47.650 009 73		4.02	48.55	−4.98	0.59	0.53	0.78	0.66	0.51	+ 5	−14	−20	+20	− 9	−12	−11	−15	− 2	− 5	0	−0.63
117445	23 48 49.36	+02 12 52.2	6.47	H	357.205 668 96	+02.214 498 65		18.09	8.81	−35.15	1.25	0.64	1.09	1.67	0.60	− 9	+12	−32	−58	+22	− 4	+ 4	−37	+31	+26	0	0.36
117446	23 48 49.37	−07 24 46.6	9.84	H	357.205 701 30	−07.412 953 99		1.87	25.02	−3.84	1.52	1.32	1.78	1.87	1.77	+56	−23	−32	+ 9	+21	+ 7	+30	+29	− 7	+36	0	1.02
117447 H	23 48 50.17	+62 12 52.3	5.43	2 G	357.209 062 01	+62.214 519 96	A	0.20	−2.80	−1.45	0.54	0.60	0.67	0.58	0.59	−12	+ 0	+ 8	+11	+ 8	+ 7	+ 9	− 5	+10	+ 2	4	0.99
117448	23 48 50.84	+31 43 40.6	8.04	H	357.211 819 79	+31.727 945 27		5.81	15.24	−2.89	0.85	0.63	1.01	1.04	0.67	−16	+31	−29	+ 7	+15	+ 5	+16	+ 0	+ 3	+10	0	1.24
117449	23 48 50.90	−11 27 30.1	9.21	H	357.212 067 60	−11.458 353 45		2.16	32.15	−17.22	1.14	0.89	1.38	1.61	1.16	+34	− 7	−21	−10	+ 4	+12	+ 6	− 8	−13	+ 7	0	−0.55
117450	23 48 53.91	+59 58 44.2	6.33	H	357.224 617 21	+59.978 933 33		9.49	50.47	15.16	0.47	0.48	0.63	0.54	0.59	−14	+24	+10	+ 0	− 2	− 9	− 2	− 3	− 1	−26	0	0.03
117451	23 48 54.48	+12 37 59.2	8.77	H	357.226 980 23	+12.633 103 86		1.99	6.26	8.91	1.06	0.65	1.23	1.12	0.74	+37	+10	+ 4	− 7	+ 9	+14	+10	− 1	+28	+48	0	2.40
117452	23 48 55.48	−28 07 48.1	4.59	H	357.231 166 31	−28.130 014 80		22.73	100.03	−104.04	0.83	0.77	1.12	1.17	0.91	+30	−37	−48	+ 1	− 9	+36	+ 1	+ 2	+20	+19	0	0.23
117453	23 48 55.81	−46 50 31.8	6.97	H	357.232 560 59	−46.842 154 84		4.38	12.68	7.61	0.68	0.57	0.88	0.73	0.55	− 6	− 4	−19	+21	− 2	+12	− 2	−17	− 5	−13	0	0.59
117454	23 48 56.94	−25 08 40.6	9.80	H	357.237 245 56	−25.144 599 28		11.17	−13.93	−44.70	1.35	1.34	1.72	2.19	1.71	+18	+ 9	−33	+20	−22	−38	−14	−22	+ 1	+12	0	0.82
117455	23 48 57.31	−50 48 31.8	8.27	H	357.238 805 01	−50.808 836 84		1.71	−15.76	14.15	0.71	0.63	1.11	0.90	0.77	−21	− 2	−21	−15	−14	+ 0	− 9	−44	+31	− 4	1	2.26
117456	23 48 57.41	+53 51 30.3	8.85	H	357.239 218 29	+53.858 417 94		8.98	97.37	2.66	0.76	0.78	1.22	0.83	0.82	−34	+26	− 1	+11	− 1	+ 7	+ 5	−14	+14	−25	0	−0.66
117457	23 48 57.89	+00 26 16.9	8.93	H	357.241 206 78	+00.438 029 41		22.40	24.41	−203.61	1.49	0.83	1.57	1.66	0.98	+ 1	+11	−28	−38	− 1	+33	+13	−16	+30	+16	0	−0.82
117458	23 48 58.02	+32 02 32.1	8.50	H	357.241 770 68	+32.042 241 26		2.98	23.69	1.35	0.96	0.69	1.08	1.28	0.79	−11	+15	−26	+15	+ 4	+ 1	+ 4	+11	− 4	− 6	0	0.54
117459	23 48 58.44	+06 26 53.2	12.30	2 G	357.243 486 83	+06.448 111 62		1.10	283.88	−53.45	4.22	1.94	4.24	5.03	2.35	+42	−17	+ 8	−19	+11	+10	+10	+ 7	+ 7	+42	5	1.00
117460	23 48 58.65	+53 12 08.0	9.08	H	357.244 371 35	+53.202 229 80		−0.84	−4.48	−0.71	0.77	0.82	1.37	1.02	0.90	−29	+18	+10	+ 7	+ 9	+26	+ 7	−15	+ 0	−22	0	−0.45
117461	23 48 58.73	+09 51 54.7	12.14	2 G	357.244 709 47	+09.865 183 27		20.46	156.88	−52.02	3.79	2.50	4.20	4.14	2.55	+34	+16	− 1	+11	+ 6	+ 6	+ 7	−18	+13	+34	5	1.12
117462	23 49 01.05	−16 10 56.2	9.94	G	357.254 363 09	−16.182 274 55		14.05	173.62	−11.39	1.41	1.12	1.82	1.98	1.74	+30	+ 0	−25	+ 0	+ 3	+15	+ 8	+ 2	+34	+26	0	−0.36
117463	23 49 01.12	+03 10 52.2	8.38	H	357.254 669 27	+03.181 171 61		37.50	64.47	−1.83	1.09	0.68	1.25	1.32	0.66	+16	−18	− 8	−12	− 4	+45	+ 5	−48	+34	+59	0	0.95
117464	23 49 02.04	−30 34 11.9	10.31	H	357.258 506 85	−30.569 969 36		5.23	−5.61	−6.26	1.47	1.33	1.89	1.78	1.52	+29	+ 8	−17	−17	+28	−17	+31	+20	+ 8	+13	0	−0.09
117465	23 49 03.09	+21 07 09.6	8.51	H	357.262 858 24	+21.119 337 94		4.93	4.27	−7.09	0.78	0.69	1.09	0.85	0.67	+43	+10	− 7	+ 1	+ 4	− 2	+ 5	+ 3	+10	+45	0	0.07
117466	23 49 05.10	+56 43 38.5	9.67	H	357.271 244 82	+56.727 372 42		0.96	−2.65	−3.14	0.91	0.88	1.36	1.17	0.94	−20	+ 4	+33	+20	+ 5	+22	− 2	− 5	−15	−17	1	−0.54
117467	23 49 05.48	+06 22 56.7	8.52	H	357.272 816 49	+06.382 408 83		2.10	18.11	−3.92	1.28	0.63	1.36	1.50	0.74	+47	−16	+ 9	−29	+ 2	+22	− 1	− 5	+11	+49	0	0.97
117468	23 49 08.86	+10 12 48.4	8.84	H	357.286 912 88	+10.213 451 98		2.52	1.54	−4.42	0.99	0.63	1.08	0.98	0.64	+25	+19	+ 1	−11	+14	+ 0	+16	− 2	+18	+34	0	1.81
117469	23 49 09.12	+68 40 06.7	8.29	2 H	357.288 017 76	+68.668 515 82		2.32	5.70	21.56	0.64	0.67	0.85	0.80	0.84	+ 9	+ 1	+ 9	+ 3	−10	+ 3	− 7	−18	+ 9	+24	0	−0.66
117470 H	23 49 10.42	−60 45 47.0	8.62	H	357.293 433 24	−60.763 041 67	A	5.11	18.56	2.71	1.15	1.22	1.56	1.33	1.47	− 3	+ 1	−27	− 4	+ 2	+11	+ 6	+10	+ 0	+ 3	1	−0.18
117471	23 49 11.00	−41 54 22.9	8.95	1 G	357.295 824 46	−41.906 354 59	A	13.34	47.77	−0.12	1.35	1.29	1.79	1.33	1.19	+ 3	+ 0	−16	+15	−20	+ 4	−20	−23	+14	+ 0	1	0.61
117472	23 49 11.89	+58 57 47.6	6.36	H	357.299 529 97	+58.963 222 42		13.05	33.26	−8.39	0.43	0.46	0.61	0.57	0.57	−25	+16	+ 6	+ 7	+14	− 6	+14	− 9	+ 0	−20	0	0.55
117473	23 49 11.95	+02 24 12.9	8.98	G	357.299 774 33	+02.403 576 51		167.51	995.12	−968.25	1.82	0.91	1.49	2.31	0.82	+ 0	+ 2	−27	−64	+15	− 9	− 7	−45	+23	+31	0	0.28
117474 H	23 49 12.97	+03 31 43.1	8.74	H	357.304 035 79	+03.528 649 98	A	0.99	24.15	−25.15	3.58	2.11	3.55	4.52	1.93	+34	+21	− 4	−30	+ 4	+23	− 3	−33	+35	+65	1	0.25
117475	23 49 14.50	+04 58 56.9	8.42	H	357.310 420 17	+04.982 467 30		13.14	−50.04	−31.66	1.07	0.56	1.17	1.18	0.56	+46	−13	− 2	− 2	+ 4	+ 1	+ 3	−23	+15	+60	0	−1.90
117476	23 49 15.76	−13 18 15.1	9.22	H	357.315 656 86	−13.304 190 00		5.80	−0.93	−2.86	1.18	0.80	1.38	2.09	1.00	+13	−11	−12	− 4	− 6	+47	− 7	−17	+ 9	−17	0	−1.20
117477 H	23 49 15.79	+51 00 27.8	9.32	H	357.315 810 72	+51.007 735 15	*	2.86	−6.92	−0.04	0.91	1.02	1.67	1.12	1.20	−24	− 6	+33	+34	− 2	−19	+ 8	+ 1	+13	−14	0	1.23
117478 H	23 49 16.01	−47 07 35.6	8.83	H	357.316 692 18	−47.126 555 38	A	6.13	27.40	−3.50	1.73	1.76	2.19	1.83	1.47	+ 3	+11	−24	+26	−14	+ 2	−16	−29	+ 5	+ 2	1	0.86
117479	23 49 18.32	+22 51 16.6	7.07	H	357.326 337 42	+22.854 599 77		8.88	−32.49	−27.08	0.64	0.57	0.92	0.79	0.66	+38	+ 3	−26	+21	+27	−17	+23	+25	+ 3	+46	0	−0.53
117480	23 49 18.77	+25 20 46.2	8.20	H	357.328 228 46	+25.346 165 54		0.76	−22.36	−18.91	0.79	0.64	0.97	0.87	0.67	+27	+ 8	− 1	+18	+ 9	− 9	+10	− 2	− 3	+37	0	0.83
117481	23 49 19.58	−27 51 14.9	6.95	H	357.331 563 47	−27.854 132 64		27.88	−74.29	−49.76	1.10	0.89	1.33	1.52	1.01	+19	−31	−54	−33	+ 5	+20	+ 9	−12	+26	+ 5	0	−0.71
117482	23 49 20.14	+27 02 02.1	7.84	H	357.333 921 19	+27.033 919 99		2.62	−13.62	−23.77	0.69	0.55	0.88	0.80	0.59	+19	+ 8	− 8	− 1	+12	+11	+11	+ 5	+ 0	+28	2	0.94
*117483	23 49 21.36	−12 37 35.6	10.75	G	357.338 986 56	−12.626 555 19		3.85	−18.36	−14.08	1.57	1.15	1.85	2.22	1.35	+23	− 8	−11	− 5	+ 3	+35	+ 7	− 1	− 8	−10	0	−1.09
*117484	23 49 21.35	+23 52 28.4	8.15	G	357.338 972 99	+23.874 552 57		10.82	−96.85	−88.70	0.78	0.69	1.14	0.85	0.80	+29	+ 9	−27	+12	+26	−17	+23	+20	+ 5	+43	0	0.65
117485	23 49 21.49	−30 39 29.1	10.23	H	357.339 530 78	−30.658 069 92		5.81	−22.70	−38.40	1.42	1.49	1.84	1.57	1.70	+35	− 8	−14	−13	+22	+11	+27	+26	+ 8	+28	0	−0.39
117486	23 49 21.72	−60 04 23.0	7.89	H	357.340 479 95	−60.073 066 22		10.45	7.38	93.48	0.52	0.64	0.84	0.58	0.79	−14	+ 4	−17	+ 7	+ 8	− 2	+ 9	− 7	−11	− 7	0	−2.32
117487	23 49 25.69	−58 08 40.3	10.13	H	357.357 047 15	−58.144 520 52		3.40	38.67	3.16	1.08	1.20	1.72	1.12	1.33	−18	− 6	−32	−17	+20	+11	+27	− 2	−10	− 8	0	2.08
117488	23 49 25.97	−21 36 50.4	7.01	H	357.358 187 75	−21.613 992 26		4.25	−7.06	8.45	0.88	0.60	1.02	1.14	0.91	+40	−29	−27	−15	− 6	+27	−16	−48	+27	+11	0	0.93
117489	23 49 26.25	−20 26 34.0	9.40	H	357.359 393 55	−20.442 790 82		4.22	26.49	13.90	1.37	1.01	1.69	1.59	1.44	+35	+ 1	−24	−33	−15	+ 3	−15	−50	+47	+15	0	−1.22
117490	23 49 26.37	+75 45 46.0	8.54	H	357.359 859 75	+75.762 789 74		1.45	−3.31	−1.89	0.67	0.63	0.75	0.77	0.70	−14	−16	+17	−19	+ 4	+15	+ 1	− 3	+ 2	−11	0	1.36
117491	23 49 27.48	+01 04 34.3	5.77	H	357.364 482 04	+01.076 195 47		12.19	−0.25	−26.32	0.82	0.58	0.95	0.96	0.67	+17	+18	−31	+33	−16	+18	− 1	−25	+36	+31	3	−0.18
117492	23 49 28.78	+35 39 51.8	9.38	G	357.369 911 90	+35.664 399 00		35.74	236.42	−88.90	1.25	0.84	1.50	1.37	0.85	−22	+40	−33	−13	+ 6	+ 4	+10	−10	+12	− 1	0	0.04
*117493	23 49 31.59	−66 15 26.7	7.21	H	357.381 636 44	−66.257 406 48		15.87	352.80	−79.37	0.51	0.50	0.67	0.71	0.61	− 0	+ 0	−17	− 8	+12	− 2	+11	− 8	− 6	− 9	0	−1.10
*117494	23 49 31.58	−15 51 40.3	6.21	H	357.381 574 30	−15.861 202 58		7.68	51.67	−30.78	0.79	0.58	0.96	0.98	0.82	+24	− 1	−36	−17	+ 5	+ 4	+ 8	− 6	+27	+24	0	−1.38
117495	23 49 32.59	−05 33 10.7	7.75	H	357.385 806 84	−05.552 969 80		4.55	3.40	−12.82	0.92	0.72	1.06	1.24	0.95	+49	−22	−16	+ 4	+20	−17	+31	+29	+20	+10	0	0.77
117496	23 49 32.61	−31 24 10.4	8.11	H	357.385 857 41	−31.402 893 51		2.65	4.25	0.50	1.04	0.88	1.22	1.03	1.04	+44	−22	−23	−43	+18	+ 4	+33	+14	+ 0	+25	0	−0.18
117497	23 49 33.32	+52 39 09.0	8.93	H	357.388 832 58	+52.652 512 03		5.36	75.44	0.10	0.71	0.82	1.42	1.07	0.92	−37	− 1	+15	+ 5	+11	+25	+10	−12	+ 7	−16	0	−0.59
117498	23 49 34.26	+04 53 37.1	7.99	H	357.392 750 77	+04.893 634 65		1.64	54.51	22.87	0.94	0.49	1.03	1.07	0.51	+40	−13	+ 4	+ 0	+ 9	+ 5	+ 8	−16	+15	+56	0	−1.16
117499	23 49 37

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
117401	9.713	0.019	8.176	0.010		1.291	0.017	T	1.25	0.02	L	8.1687	0.0009	0.012	118		8.14	8.19		D			1							S
117402	9.630	0.014	8.524	0.009		0.954	0.013	T	0.94	0.01	L	8.5787	0.0011	0.017	192		8.54	8.61		C			1							
117403	10.039	0.035	9.269	0.029		0.701	0.035	T	0.76	0.03	L	9.2854	0.0027	0.017	67		9.26	9.31					1 S							
117404	9.567	0.039	8.692	0.030		0.766	0.038	T	0.81	0.03	L	8.7886	0.0038	0.013	33		8.76	9.09					1							
117405	9.623	0.018	8.174	0.010		1.222	0.016	T	1.18	0.02	L	8.2128	0.0013	0.014	158		8.19	8.24					1							
117406	9.036	0.010	8.549	0.010		0.458	0.013	T	0.53	0.01	L	8.6077	0.0017	0.021	158		8.57	8.64		C			1							S
117407	9.132	0.013	9.081	0.017		0.052	0.020	T	0.06	0.02	L	9.0869	0.0028	0.023	128		9.05	9.12					1							
117408	9.889	0.024	9.779	0.033		0.107	0.038	T	0.12	0.04	L	9.7678	0.0019	0.022	122		9.73	9.81		C			1							G
117409	9.246	0.017	8.742	0.016		0.474	0.021	T	0.55	0.02	L	8.8250	0.0018	0.013	89		8.80	8.85		C			1 G							
117410	11.488	0.097	9.838	0.035	*	1.244	0.014	G	1.55	0.02	A *	9.7249	0.0026	0.023	73	*	9.68	9.76		D	23484−1259	I 1	2 C	A	AB	229	1.011	0.017	2.07	0.05	
117411	9.012	0.020	7.740	0.012		1.083	0.018	T	1.05	0.01	L	7.7676	0.0015	0.012	73		7.75	7.79					1							S
117412	10.916	0.073	8.956	0.023		1.500	0.040	G	1.50	0.10	R	8.9037	0.0019	0.015	70		8.88	8.93					1							
117413	10.310	0.040	8.443	0.016		1.584	0.035	T	2.64	0.06	O	8.1876	0.0135	0.093	74		8.05	8.43		U 2			1 S							P
117414	8.734	0.012	7.470	0.008		1.054	0.020	G	1.02	0.02	H	7.5310	0.0016	0.012	88		7.51	7.56		C			1							S
117415	7.584	0.008	7.114	0.006		0.443	0.009	T	0.51	0.01	L	7.1770	0.0009	0.008	95		7.16	7.19					1							S
117416	9.398	0.019	8.485	0.015	*	0.810	0.018	T	0.84	0.01	L *	8.5423	0.0013	0.013	90	*	8.51	8.56		D	23485+3608	I 1	2 C	A	AB	93	0.187	0.009	0.90	0.25	
117417	11.437	0.089	10.128	0.043		1.112	0.077	T	1.07	0.08	L	10.3183	0.0036	0.027	86		10.28	10.36		C			1							
117418	10.838	0.042	10.021	0.033		0.721	0.041	T	0.77	0.03	L	10.1580	0.0041	0.039	101		10.07	10.21					1							
117419	7.744	0.008	7.687	0.009		0.057	0.011	T	0.07	0.01	L	7.6994	0.0010	0.009	128		7.68	7.72					1							S
117420	7.983	0.010	6.241	0.005		1.452	0.004	G	1.45	0.01	H	6.2212	0.0012	0.009	77		6.21	6.24					1							S
117421	10.018	0.020	8.169	0.009		1.537	0.017	T	1.59	0.04	L	8.1242	0.0015	0.016	133		8.10	8.16					1							
117422	10.318	0.018	8.905	0.010		1.194	0.016	T	1.15	0.01	L	8.9482	0.0015	0.016	207		8.92	8.98					1							
117423	9.102	0.015	7.198	0.007		1.581	0.013	T	1.60	0.01	L	7.1522	0.0012	0.009	83		7.14	7.17					1							S
117424	9.762	0.018	9.225	0.017		0.511	0.019	T	0.58	0.02	L	9.2878	0.0020	0.019	119		9.25	9.32		C			1							
117425	9.952	0.027	9.438	0.027		0.493	0.029	T	0.57	0.03	L	9.4291	0.0048	0.030	73		9.38	9.48					1 S							S
117426	7.954	0.012	7.056	0.007	*	0.798	0.010	T	0.83	0.01	L *	7.0989	0.0012	0.009	97	*	7.08	7.11		D	23486+3616	I 1	2 C	A	AB	5	0.217	0.005	1.38	0.10	S
117427	9.688	0.026	8.865	0.020		0.742	0.009	G	0.79	0.01	H	8.9086	0.0019	0.017	73		8.88	8.94		C			1							S
117428	9.939	0.022	8.559	0.013		1.168	0.020	T	1.13	0.02	L	8.5859	0.0015	0.014	116		8.56	8.61		C			1							
117429	10.337	0.029	8.885	0.015		1.224	0.026	T	1.18	0.03	L	8.9325	0.0020	0.017	117		8.90	8.97		C			1							
117430	6.506	0.004	6.433	0.005	*	0.062	0.004	G	0.07	0.00	R *	6.4349	0.0007	0.009	125	*	6.42	6.45		D	23487+6453	I 1	2 C	A	AB	311	0.727	0.003	0.95	0.01	S
117431	11.175	0.055	9.364	0.019		1.538	0.048	T	2.34	0.09	O	9.1872	0.0038	0.043	134		9.09	9.24		U 2			1							
117432	9.330	0.019	8.916	0.019		0.405	0.022	T	0.47	0.02	L	8.9733	0.0021	0.012	71		8.95	8.99					1							S
117433	11.681	0.087	10.911	0.075		0.701	0.090	T	0.76	0.07	L	11.0381	0.0049	0.037	95		10.97	11.10		C			1							G
117434	9.020	0.014	8.525	0.014		0.481	0.015	G	0.55	0.02	H	8.5675	0.0014	0.015	111		8.53	8.60		C			1							
117435	9.922	0.017	8.690	0.010		1.052	0.015	T	1.02	0.01	L	8.7569	0.0017	0.023	172		8.72	8.80					1							
117436	8.921	0.011	8.624	0.012		0.282	0.015	T	0.32	0.02	L	8.6928	0.0017	0.020	127		8.66	8.73		C			1							
117437	8.341	0.007	8.308	0.009		0.035	0.011	T	0.05	0.01	L	8.3280	0.0015	0.017	158		8.30	8.37					1							
117438	9.413	0.024	8.194	0.015		1.042	0.022	T	1.01	0.02	L	8.2433	0.0024	0.014	64		8.23	8.28					1							S
117439	9.695	0.026	9.407	0.030		0.274	0.037	T	0.31	0.05	L	9.4697	0.0366	0.191	66		9.22	9.68	0.20	P 1 A			1							P
117440	10.618	0.058	9.922	0.050		0.630	0.058	T	0.70	0.05	L	9.9974	0.0041	0.026	39		9.96	10.05					1							
117441	10.268	0.021	9.295	0.015		0.854	0.019	T	0.87	0.01	L	9.3734	0.0020	0.030	161		9.32	9.43					1							
117442	8.520	0.010	8.250	0.011		0.257	0.014	T	0.29	0.02	L	8.2842	0.0015	0.016	120		8.26	8.31		C			1							S
117443	9.271	0.012	8.995	0.013		0.263	0.017	T	0.30	0.02	L	9.0508	0.0027	0.027	168		9.01	9.09					1							S
117444	7.910	0.008	6.759	0.005		0.989	0.007	T	0.97	0.01	L	6.8108	0.0009	0.008	116		6.80	6.83		C			1							S
117445	7.003	0.005	6.513	0.007		0.461	0.008	T	0.53	0.01	L	6.5702	0.0010	0.007	71		6.56	6.58		C			1							S
117446	11.154	0.079	9.987	0.045		1.001	0.071	T	0.98	0.06	L	10.0058	0.0032	0.023	66		9.92	10.05		C			1							
117447	6.270	0.007	5.609	0.006	A	0.670	0.040	G	0.67	0.01	L *	5.5888	0.0035	0.028	138	*	5.55	5.64		U 2	23488+6213	I 1	2 C	A	AB	196	1.505	0.006	2.37	0.03	S
117448	8.141	0.010	8.056	0.012		0.083	0.015	T	0.10	0.02	L	8.0716	0.0013	0.009	67		8.05	8.09					1							S
117449	10.783	0.066	9.356	0.030		1.155	0.020	G	1.12	0.02	I	9.3475	0.0023	0.015	68		9.30	9.37					1							
117450	6.318	0.003	6.327	0.003		−0.007	0.004	T	0.01	0.00	L	6.3371	0.0005	0.006	140		6.32	6.35					1 G							S
117451	10.001	0.029	8.884	0.018		0.962	0.027	T	0.95	0.02	L	8.9365	0.0014	0.017	94		8.91	8.97		R			1							
117452	4.589	0.005	4.578	0.006		0.001	0.003	G	−0.01	0.02	A	4.5866	0.0014	0.006	36		4.58	4.67			23489−2808	I 1	1	S						S
117453	9.020	0.013	7.159	0.006		1.579	0.012	T	1.88	0.04	O	7.0616	0.0015	0.013	97		7.04	7.08					1							S
117454	10.507	0.051	9.809	0.043		0.631	0.050	T	0.70	0.04	L	9.9303	0.0024	0.017	48		9.89	9.96					1							
117455	9.537	0.012	8.388	0.008		0.987	0.011	T	0.97	0.01	L	8.4395	0.0015	0.017	218		8.41	8.48		C			1							S
117456	9.478	0.015	8.889	0.014		0.550	0.018	T	0.62	0.02	L	8.9640	0.0019	0.022	157		8.92	9.00					1							
117457	9.867	0.034	9.030	0.027		0.753	0.033	T	0.80	0.02	L	9.0734	0.0039	0.022	47		9.03	9.10		C			1							S
117458	9.854	0.030	8.625	0.019		1.050	0.028	T	1.02	0.02	L	8.6695	0.0017	0.011	58		8.65	8.69		C			1							
117459						1.267	0.034	G	1.44	0.06	I	12.4302	0.0098	0.100	137		12.25	12.58		U 2			1							G
117460	9.115	0.012	9.098	0.015		0.020	0.018	T	0.04	0.02	L	9.0937	0.0020	0.025	160		9.04	9.14					1 S							
117461						1.500	0.020	G	1.78	0.17	K	12.2615	0.0088	0.097	86		12.06	12.38		U			1 S							G
117462	10.940	0.060	9.970	0.040		0.826	0.002	G	0.85	0.00	H	10.0907	0.0032	0.029	81		10.03	10.17		C			1							
117463	9.565	0.022	8.492	0.015		0.929	0.020	T	0.92	0.01	L	8.5450	0.0011	0.011	89		8.53	8.56		D			1							S
117464	10.911	0.062	10.305	0.060		0.565	0.076	T	0.64	0.07	L	10.4346	0.0040	0.035	84		10.38	10.50					1							
117465	9.759	0.020	8.623	0.013		0.977	0.019	T	0.96	0.01	L	8.6768	0.0018	0.015	97		8.66	8.71		C			1							
117466	9.739	0.021	9.701	0.029		0.040	0.033	T	0.06	0.03	L	9.6907	0.0022	0.025	118		9.65	9.73		C			1							G
117467	10.253	0.026	8.642	0.012		1.349	0.023	T	1.31	0.03	L	8.6675	0.0015	0.019	148		8.64	8.70					1							
117468	8.746	0.013	8.806	0.018		−0.050	0.020	T	−0.03	0.02	L	8.8304	0.0017	0.016	98		8.80	8.86					1							
117469	10.886	0.045	8.496	0.012		2.015	0.038	T	3.19	0.06	O	8.1354	0.0024	0.030	121		8.06	8.18		U 2			1 S							
117470	8.988	0.012	8.694	0.013	A	0.300	0.495	G	0.35	0.05	L *	8.7004	0.0018	0.020	133	*	8.67	8.74			23492−6046	I 1	2 C	B	AB	124	8.248	0.050	3.84	0.30	S
117471	9.683	0.017	8.969	0.015	A	0.549	0.015	G	0.62	0.01	H	9.0591	0.0104	0.025	134	A	9.02	9.11		U	23492−4154	I 1	2 C	A	AB	277	16.116	0.029	2.35	0.09	
117472	6.835	0.005	6.403	0.004		0.408	0.006	T	0.47	0.01	L	6.4548	0.0007	0.007	144		6.44	6.47					1							S
117473	10.916	0.066	9.215	0.025		1.460	0.017	G	2.04	0.01	A	9.0506	0.0021	0.014	80		9.03	9.08		C			1							
117474	10.188	0.030	8.861	0.016	A	1.000	0.495	G	1.06	0.06	L *	8.9093	0.0021	0.020	117	*	8.88	8.94			23492+0332	I 1	2 C	C	AB	182	1.508	0.064	3.66	0.47	S
117475	9.030	0.011	8.467	0.011		0.527	0.014	T	0.60	0.01	L	8.5343	0.0012	0.012	156		8.51	8.55					1							S
117476	9.615	0.024	9.219	0.024		0.387	0.029	T	0.45	0.03	L	9.3136	0.0025	0.023	76		9.26	9.34		C			1							S
117477	9.539	0.014	9.343	0.017	*	0.187	0.021	T	0.21	0.02	L *	9.3860	0.0021	0.025	136	*	9.33	9.44		D	23493+5100	H 1	2 C	S A	AB	180	0.191	0.009	0.62	0.29	
117478	9.477	0.017	8.966	0.016	A	1.000	0.495	G	0.65	0.03	L *	8.9505	0.0028	0.026	107	*	8.91	8.98		D	23493−4708	I 1	2 C	A	AB	143	1.186	0.011	1.56	0.04	
117479	7.180	0.006	7.076	0.007		0.086	0.002	G	0.10	0.00	H	7.1069	0.0014	0.010	85		7.09	7.14		C			1							S
117480	9.752	0.025	8.321	0.014		1.208	0.022	T	1.17	0.02	L	8.3668	0.0016	0.012	77		8.35	8.39		C	23493+2521	I 1	1							
117481	7.545	0.014	7.008	0.009		0.511	0.015	G	0.58	0.02	H	7.0623	0.0015	0.011	43		7.05	7.11					1							S
117482	9.065	0.015	7.942	0.010		0.967	0.014	T	0.95	0.01	L	8.0046	0.0013	0.015	97		7.97	8.03					1							S
117483	10.895	0.057	10.694	0.074		0.206	0.015	G	0.23	0.02	H	10.7882	0.0046	0.037	87		10.73	10.85					1							G
117484	8.747	0.013	8.208	0.013		0.534	0.015	G	0.61	0.02	H	8.2586	0.0019	0.011	78		8.23	8.28		C			1							S
117485	11.389	0.085	10.343	0.054		0.909	0.076	T	0.91	0.06	L	10.3945	0.0039	0.034	86		10.34	10.45		C			1							
117486	8.918	0.010	7.975	0.008		0.823	0.015	G	0.85	0.01	H	8.0405	0.0014	0.015	155		8.02	8.07					1							S
117487	10.569	0.027	10.117	0.028		0.426	0.036	T	0.49	0.04	L	10.2285	0.0032	0.040	154		10.16	10.30		C			1							
117488	8.582	0.012	7.131	0.007		1.230	0.015	G	1.19	0.02	A	7.1702	0.0011	0.010	112		7.16	7.19					1							S
117489	10.746	0.047	9.507	0.026		1.057	0.042	T	1.02	0.03	L	9.5652	0.0022	0.020	89		9.52	9.60		C			1							
117490	9.894	0.021	8.647	0.013		1.064	0.019	T	1.03	0.02	L	8.7077	0.0015	0.014	125		8.69	8.73		C			1							
117491	5.968	0.004	5.786	0.004		0.167	0.005	T	0.18	0.01	L	5.8254	0.0007	0.005	57		5.81	5.83					1							S
117492	10.804	0.053	9.505	0.028		1.120	0.006	G	1.20	0.01	I	9.4971	0.0023	0.016	79		9.47	9.53					1							
117493	7.838	0.006	7.283	0.005		0.525	0.006	T	0.60	0.01	L	7.3240	0.0009	0.010	151		7.31	7.34		C			1 G							S
117494	7.768	0.009	6.345	0.005		1.212	0.006	G	1.17	0.01	H	6.3718	0.0013	0.007	73		6.36	6.39					1							S
117495	9.142	0.018	7.899	0.011		1.061	0.016	T	1.03	0.01	L	7.9209	0.0010	0.010	95		7.91	7.94					1 S							S
117496	9.538	0.015	8.216	0.009		1.122	0.014	T	1.08	0.01	L	8.2763	0.0015	0.017	150		8.25	8.30					1							S
117497	9.421	0.013	8.983	0.013		0.413	0.017	T	0.48	0.02	L	9.0280	0.0017	0.021	182		8.99	9.08		C			1							
117498	9.250	0.013	8.099	0.009		0.989	0.012	T	0.97	0.01	L	8.1552	0.0011	0.011	154		8.14	8.17		C			1							S
117499	9.612	0.016	8.913	0.014		0.618	0.003	G	0.69	0.00	H	8.9761	0.0018	0.020	134		8.94	9.01					1							
117500	6.196	0.004	5.981	0.005		0.187	0.002	G	0.21	0.00	H	6.0162	0.0008	0.005	69		6.01	6.02		C			1							S

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA	Dec	V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	μ_δ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$	F1	F2
1 2	h m s 3	±° ′ ″ 4	mag 5 6 7		deg 8	deg 9 10	mas 11	mas/yr 12	mas/yr 13	mas 14	mas 15	mas 16	mas/yr 17	mas/yr 18	19	20	21	22	23	24	25	26	27	28	% 29	30
117501	23 49 40.63	+29 14 14.4	8.78	H	357.419 287 42	+29.237 334 70	−0.30	8.96	−2.31	0.84	0.71	1.12	0.90	0.77	+ 3	+19	−15	+22	− 4	− 3	+ 3	−13	+28	+11	0	0.21
*117502	23 49 40.98	−39 08 37.8	9.59	H	357.420 734 44	−39.143 844 67	4.56	40.76	−27.60	0.97	0.70	1.44	1.13	0.74	−13	+16	− 8	+64	−24	+25	−31	−19	− 4	−25	0	−1.23
*117503	23 49 40.96	+36 25 31.4	5.86	1 H	357.420 666 99	+36.425 397 12	7.41	0.20	−47.81	0.55	0.48	0.70	0.62	0.51	+ 8	+23	+ 1	− 7	+ 5	− 7	+ 5	+ 2	+ 6	+16	3	0.68
117504 H	23 49 41.49	−48 04 49.3	8.57	H	357.422 892 02	−48.080 354 15 A	8.70	5.43	16.24	2.13	1.99	1.95	1.68	1.47	+18	− 7	−28	+20	−13	− 4	−11	−17	+ 9	+15	0	0.59
117505	23 49 42.19	−31 28 45.1	11.16	G	357.425 786 68	−31.479 195 83	19.84	180.80	−68.05	2.13	1.83	2.54	2.39	2.41	+42	− 8	−13	−37	+21	+11	+35	+18	+17	+25	1	1.39
117506	23 49 42.93	+11 10 27.2	9.45	H	357.428 889 57	+11.174 231 72	5.41	10.05	−0.97	1.10	0.70	1.31	1.10	0.78	+25	+20	− 2	− 1	+ 7	−23	+11	− 6	+13	+30	2	1.26
117507	23 49 44.69	−62 50 21.9	6.59	H	357.436 217 56	−62.839 402 98	5.13	35.60	−35.55	0.42	0.46	0.60	0.49	0.50	− 7	+ 4	−28	+ 1	+14	+ 1	+13	+11	− 8	+ 4	1	−0.26
117508	23 49 45.63	−56 23 28.5	8.74	H	357.440 128 63	−56.391 255 02	0.81	27.35	− 6.75	0.69	0.76	1.10	0.82	0.85	− 9	−14	−27	+17	+ 6	−13	+ 5	+10	−16	− 9	0	0.60
117509	23 49 47.27	−42 16 41.6	8.39	H	357.446 971 81	−42.278 211 05	3.74	4.11	− 9.39	0.72	0.68	1.04	0.82	0.65	+10	− 4	−10	+23	−18	+ 3	−19	−30	+14	+ 3	0	−0.61
117510	23 49 49.61	−25 19 52.6	6.44	H	357.456 705 37	−25.331 289 70	8.24	−24.29	−18.90	0.82	0.76	0.92	1.20	0.91	+14	+ 9	−23	+39	− 1	+23	+ 5	+36	+ 3	+ 9	0	0.34
117511 H	23 49 50.48	+27 40 50.7	7.01	G	357.460 317 35	+27.680 751 47 *	4.77	57.76	− 5.19	0.65	0.48	0.82	0.65	0.49	+ 5	+27	−22	+ 0	+11	− 4	+14	− 1	+16	+23	0	1.34
117512	23 49 51.69	+26 09 15.1	8.56	H	357.465 380 41	+26.154 205 99	6.42	30.06	−16.85	0.74	0.62	0.98	0.78	0.66	+23	+10	− 9	+ 9	+ 6	+ 6	+ 7	+ 6	+ 2	+33	3	1.27
117513	23 49 52.21	−38 58 52.7	8.54	H	357.467 545 13	−38.981 317 16	15.43	−150.10	−223.84	0.72	0.78	1.09	1.01	0.89	+24	+ 9	− 2	+ 2	−13	+22	− 5	−22	+11	+ 5	0	1.53
117514	23 49 53.13	+62 12 50.8	7.74	2 H	357.471 358 82	+62.214 099 35	0.87	− 4.53	− 2.90	0.49	0.54	0.68	0.58	0.59	−17	+ 5	+11	+19	− 5	− 2	− 4	+12	+10	−14	0	−0.80
117515	23 49 54.67	−42 18 02.5	7.43	G	357.477 781 77	−42.300 684 63	10.30	−16.85	−14.02	0.59	0.53	0.85	0.66	0.51	+ 0	−10	− 6	+38	−23	− 1	−25	−21	+13	− 7	0	0.10
117516	23 49 54.99	−65 38 28.1	7.02	G	357.479 127 47	−65.641 146 25	6.85	17.60	−13.25	0.48	0.47	0.63	0.54	0.53	− 1	−14	− 8	− 8	+11	+ 8	+11	+ 4	− 8	+ 8	0	−2.08
117517	23 49 55.49	+67 38 14.8	9.78	G	357.481 200 54	+67.637 445 26	0.67	− 3.63	0.01	0.90	0.92	1.14	1.05	1.09	−14	+ 1	+19	+ 3	−17	− 1	−17	+ 9	+ 8	−21	0	0.21
117518	23 49 56.91	−14 20 10.0	8.10	G	357.487 117 95	−14.336 108 65	5.00	19.38	−14.35	0.98	0.70	1.22	1.53	0.91	+29	−32	−25	−10	− 5	+32	− 8	−11	+29	+ 2	0	−1.45
117519	23 49 57.65	−24 09 56.6	8.71	H	357.490 222 63	−24.165 734 57	10.25	− 8.83	−13.18	1.27	1.25	1.37	1.70	2.00	+50	−18	−16	− 1	−27	+11	−38	−67	+20	+38	0	−1.08
117520	23 49 58.19	−61 08 07.3	7.47	2 H	357.492 474 24	−61.135 363 29	1.74	14.94	8.89	0.57	0.63	0.85	0.66	0.78	− 6	− 5	−21	−18	+ 7	+11	+ 5	+ 2	− 7	+19	0	0.10
117521 H	23 50 00.80	−56 16 40.1	9.72	2 H	357.503 319 92	−56.277 795 98 A	2.33	3.15	− 7.51	1.57	1.80	2.29	1.76	1.83	− 6	−14	−28	+16	+ 4	−18	− 3	+16	−14	−13	1	1.15
117522	23 50 01.14	+08 43 23.8	11.34	G	357.504 767 44	+08.723 269 57	4.48	368.61	−50.47	2.20	1.28	2.41	2.59	1.45	+36	− 9	− 7	−18	+ 6	− 2	+ 6	+ 0	+ 6	+28	0	0.16
117523	23 50 02.74	−29 48 37.0	8.86	H	357.511 419 34	−29.810 273 75	4.10	5.73	−14.32	1.07	1.05	1.19	1.30	1.13	+14	− 2	− 9	+ 9	+ 4	+ 8	+ 7	+32	− 5	+ 5	0	−1.03
117524	23 50 03.06	−37 59 09.1	9.99	G	357.512 768 51	−37.985 870 48	8.52	− 5.22	−275.90	1.37	0.68	1.51	1.41	0.70	−26	+31	− 9	−46	+11	− 8	+17	−28	+16	−32	1	−0.32
117525 H	23 50 04.28	−37 19 43.7	8.30	G	357.517 843 89	−37.328 792 69 A	8.52	−17.51	−22.39	3.41	2.12	1.21	1.14	0.66	+25	+ 1	− 2	+ 1	− 3	+ 5	− 5	−13	+12	−16	1	−0.13
117526	23 50 05.48	+02 52 36.2	8.34	H	357.522 826 05	+02.876 721 10	20.55	458.52	185.16	1.16	0.59	1.23	1.35	0.60	+30	−21	− 6	−23	− 4	+31	− 5	−40	+28	+61	0	0.85
117527	23 50 05.98	+35 46 16.6	7.76	G	357.524 908 43	+35.771 291 02	11.76	−13.36	−34.45	0.74	0.58	0.89	0.91	0.67	+ 4	+19	−10	− 9	+23	−10	+16	+22	+ 2	+26	0	0.56
117528	23 50 06.06	−11 06 11.2	6.78	H	357.525 239 64	−11.103 100 15	14.84	−93.54	−26.52	0.69	0.54	0.82	0.88	0.61	+28	− 7	−15	− 1	− 1	+29	+ 2	− 5	− 2	+ 3	0	−1.56
117529	23 50 07.92	+01 58 12.9	8.56	H	357.532 979 46	+01.970 238 26	2.49	1.38	−20.13	1.56	0.78	1.46	1.87	0.70	− 3	+31	−24	−48	+13	− 5	+10	−48	+40	+32	0	0.23
117530	23 50 08.69	+04 28 01.0	9.00	H	357.536 223 03	+04.466 946 20	7.41	49.45	−46.00	1.34	0.60	1.31	1.50	0.68	+39	−34	− 6	−44	− 9	+21	−18	−30	+19	+55	0	−1.61
117531 H	23 50 09.26	+19 40 00.3	9.32	H	357.538 593 93	+19.666 748 86 *	4.69	−43.03	−88.30	1.06	0.93	1.46	1.06	0.97	+46	+24	+ 2	+24	+19	− 5	+19	+14	− 2	+51	0	0.48
117532	23 50 09.28	−27 07 45.5	9.29	H	357.538 683 60	−27.129 313 41	1.98	− 4.37	5.16	1.32	1.26	1.64	1.88	1.50	+33	−31	−45	−30	−21	+38	−12	−37	+24	+25	0	0.91
117533	23 50 10.30	−09 33 36.9	9.58	G	357.542 896 25	−09.560 237 85	3.71	− 5.48	− 6.74	1.23	0.98	1.53	1.81	1.66	+35	− 7	−21	− 7	+ 6	− 6	+ 4	− 1	+34	+23	0	1.37
117534	23 50 10.31	+23 47 48.7	8.23	G	357.542 957 52	+23.796 862 46	9.81	59.10	− 4.39	0.85	0.68	1.27	0.91	0.76	+24	+14	−33	+14	+32	−23	+27	+21	+ 7	+44	0	−0.73
117535	23 50 10.73	+24 51 28.7	7.55	H	357.544 724 22	+24.857 973 57	6.93	−50.86	3.35	0.76	0.61	1.00	0.92	0.62	+23	+ 8	−26	+12	+22	− 7	+18	+15	− 3	+39	2	1.93
117536	23 50 10.87	+13 18 55.3	9.27	H	357.545 275 67	+13.315 351 75	4.08	1.23	− 3.68	1.27	0.78	1.42	1.40	0.90	+34	+10	+ 4	− 5	+16	+10	+16	+ 6	+19	+50	0	1.12
117537 H	23 50 12.69	−17 22 35.6	9.38	H	357.552 871 89	−17.376 542 95 A	5.10	97.03	−23.87	4.03	2.85	4.29	6.40	3.20	+30	−13	−40	−14	+ 5	+14	+ 8	−12	+19	− 7	1	1.66
117538	23 50 12.74	−34 27 06.1	8.91	H	357.553 096 50	−34.451 704 51	1.99	5.10	7.84	1.04	0.74	1.17	1.20	0.65	+ 5	− 1	− 1	−47	+ 8	+ 0	+11	−35	+17	−25	0	−0.48
117539	23 50 13.94	+52 54 18.1	8.92	H	357.558 070 95	+52.905 020 86	4.03	15.46	− 0.08	0.68	0.83	1.28	0.93	0.88	−36	+ 5	+13	+ 9	+11	+18	+11	−17	+ 3	−23	0	−0.68
117540	23 50 14.35	+17 38 46.3	7.80	G	357.559 784 79	+17.646 204 52	9.87	−50.41	− 7.17	0.76	0.58	1.01	0.81	0.65	+45	+11	+ 2	− 5	+12	+10	+11	+12	+ 7	+55	0	0.36
117541	23 50 14.65	−09 58 27.6	5.93	H	357.561 034 29	−09.974 326 90	10.63	139.84	78.32	0.71	0.54	0.80	0.88	0.69	+29	− 5	−19	+ 2	+10	+ 8	+14	+16	− 9	+14	0	−1.32
117542	23 50 14.78	−29 24 06.4	7.88	G	357.561 571 79	−29.401 770 67	39.53	185.01	17.68	1.08	0.99	1.13	1.59	1.07	+10	+ 7	−32	+42	+ 5	+ 6	+ 5	+52	−21	−12	0	−2.16
117543	23 50 15.33	−69 57 46.9	9.08	H	357.563 870 73	−69.963 027 02	9.22	112.38	15.12	0.67	0.73	0.90	0.75	0.86	− 6	−12	−16	−13	+ 0	+21	+ 4	− 4	+ 7	+ 7	0	−0.23
117544	23 50 15.60	−20 52 53.7	8.74	H	357.564 985 75	−20.881 593 89	7.08	31.07	−17.17	1.18	0.92	1.47	1.34	1.14	+24	+ 6	−42	−35	−13	+15	− 3	−42	+37	+15	0	0.96
117545	23 50 15.82	−55 52 33.6	9.94	H	357.565 917 92	−55.875 999 59 A	6.48	11.21	− 1.26	1.54	1.65	2.21	1.58	1.70	−15	+11	−25	+ 7	+ 3	− 2	+ 3	+14	− 4	− 3	2	0.33
*117546	23 50 18.49	+69 30 14.5	8.28	G	357.577 038 67	+69.504 016 66	5.60	−26.61	− 0.43	0.59	0.61	0.77	0.71	0.71	+11	+ 0	+13	+ 3	−12	+ 5	−11	− 5	+16	+24	0	2.10
*117547	23 50 18.47	−47 27 13.6	8.87	H	357.576 959 43	−47.453 768 62	4.98	18.02	− 2.09	0.95	0.86	1.29	1.08	0.82	+ 1	−19	−25	+19	− 6	−10	−10	−23	+12	− 8	0	0.03
117548	23 50 19.61	−26 38 33.1	9.76	H	357.581 723 38	−26.642 538 64	16.20	113.67	35.82	1.44	1.38	1.79	1.89	1.50	+35	−34	−50	− 7	− 5	+13	− 6	−22	+16	+14	0	0.78
117549	23 50 21.60	−35 58 34.0	8.64	H	357.589 999 15	−35.976 120 84	3.34	16.82	− 3.48	0.93	0.63	1.10	1.14	0.58	− 3	+11	+ 0	−39	+ 6	+11	+ 8	−42	+ 8	−31	0	1.23
117550	23 50 21.96	+67 34 09.9	8.44	G	357.591 495 86	+67.569 403 79	3.49	−36.61	− 6.75	0.68	0.71	0.86	0.78	0.82	−17	+ 1	+17	+10	−19	− 6	−19	+ 9	+ 8	−29	0	−0.57
117551	23 50 22.12	+51 37 18.1	6.47	H	357.592 165 79	+51.621 706 63	24.68	121.19	−18.10	0.44	0.55	0.85	0.56	0.68	−46	+ 0	+19	− 7	+12	+20	+10	−14	− 5	−26	2	−1.24
117552	23 50 22.20	−54 31 00.4	9.75	H	357.592 517 26	−54.516 772 91	−0.49	20.55	−21.93	1.82	1.98	3.18	2.08	2.23	−28	+17	−21	− 2	+ 7	+ 6	+ 8	− 4	− 6	−26	0	
117553	23 50 24.44	+63 44 37.1	6.95	H	357.601 844 90	+63.743 632 88	1.31	−10.16	− 2.31	0.55	0.54	0.69	0.68	0.56	−25	+ 9	+35	+36	−21	−18	−14	+29	+20	−35	1	2.22
117554	23 50 24.91	+57 09 39.8	7.94	H	357.603 775 90	+57.161 066 60 A	0.64	6.67	0.61	0.96	1.10	1.37	1.29	1.09	−17	+ 1	+25	+ 2	+13	+24	+ 5	−13	−15	−25	2	2.99
117555	23 50 25.11	−22 53 55.3	9.99	H	357.604 609 14	−22.898 700 60	2.66	15.87	−12.90	1.40	1.44	1.67	1.93	2.54	+64	+ 1	− 5	− 7	−30	+39	−41	−69	+19	+53	0	−1.73
117556	23 50 26.07	−22 14 34.8	8.16	1 H	357.608 645 19	−22.242 998 47	1.97	18.78	−12.40	1.07	0.79	1.24	1.17	1.28	+51	−25	−17	−16	−17	+30	−27	−59	+25	+34	0	1.64
117557	23 50 26.90	−14 34 44.8	6.68	G	357.612 066 82	−14.579 121 55	4.08	− 7.93	21.42	0.88	0.57	0.99	1.31	0.73	+21	−29	−24	− 5	− 6	+33	− 7	−16	+16	− 7	0	0.14
117558	23 50 27.67	−14 59 01.3	7.49	G	357.615 286 97	−14.983 691 72	10.03	21.69	− 7.02	1.00	0.69	1.10	1.82	0.91	+25	−24	−37	+34	− 8	+13	−17	− 9	+16	−13	0	0.22
117559	23 50 27.69	+30 21 11.6	9.35	G	357.615 371 50	+30.353 232 72	40.24	253.66	9.00	1.05	0.82	1.36	1.47	0.83	+ 1	+ 6	− 4	−22	+12	+32	+11	−18	+15	+ 8	0	0.27
117560	23 50 28.03	−53 41 17.9	9.40	H	357.616 784 38	−53.688 314 98	1.03	11.69	− 1.19	1.35	1.54	2.36	1.81	1.85	−35	+ 0	−16	+ 2	+14	− 2	+12	− 7	+ 1	−41	0	
117561 H	23 50 28.59	+59 36 36.8	8.27	H	357.619 132 92	+59.610 212 10 A	3.36	1.38	− 7.37	5.73	7.02	2.01	1.82	1.86	+84	+ 4	+ 4	− 2	+ 2	+ 8	+ 2	− 2	+ 2	−24	0	0.39
117562	23 50 30.23	+17 36 40.5	7.46	G	357.625 945 29	+17.611 262 16	5.76	8.66	− 2.70	0.69	0.50	0.91	0.71	0.51	+35	+18	− 2	−18	− 4	+19	− 1	−12	+15	+42	0	0.29
117563	23 50 30.74	−13 06 38.2	7.09	H	357.628 071 27	−13.110 597 30	11.56	10.28	− 7.99	0.79	0.58	0.99	1.32	0.72	+27	−16	−26	−17	−12	+42	− 6	−22	+18	− 2	0	−0.85
117564	23 50 30.79	+09 30 35.2	8.49	H	357.628 272 61	+09.509 777 97	8.33	−13.86	−27.50	1.00	0.63	1.21	0.98	0.68	+28	+32	− 8	− 9	+ 8	−22	+ 6	− 9	− 8	+47	4	0.14
117565 H	23 50 30.89	+43 25 09.4	7.93	H	357.628 711 85	+43.419 278 27 A	3.57	−13.13	− 6.26	0.91	0.84	1.18	0.95	0.86	+15	+ 2	+11	+19	− 1	− 9	+ 2	+19	+16	+22	0	0.55
117566 H	23 50 31.26	−29 21 47.4	10.26	G	357.630 254 83	−29.363 175 86 *	1.83	2.62	− 0.76	7.38	14.74	3.66	5.40	3.37	− 3	+ 5	− 5	+12	− 4	− 2	− 4	+13	+17	−28	0	0.03
117567	23 50 33.26	−14 24 05.2	5.70	G	357.638 596 26	−14.401 438 43	7.09	38.04	−21.27	0.78	0.51	0.92	1.19	0.64	+23	−34	−32	− 8	− 7	+35	− 7	−17	+21	− 8	0	−0.02
117568	23 50 33.31	−69 05 33.7	7.35	H	357.638 793 71	−69.092 686 23	5.84	51.87	−43.61	0.51	0.51	0.65	0.55	0.60	− 4	+ 7	−13	−14	+ 2	+ 1	+ 2	−14	−10	+12	0	1.21
117569	23 50 34.21	−20 13 59.4	7.20	H	357.642 521 54	−20.233 177 89	10.90	42.49	−24.65	0.91	0.64	1.08	1.22	0.86	+35	−14	−43	− 6	− 4	−13	−22	−50	+42	+ 1	0	0.57
117570 H	23 50 34.33	−51 42 18.5	7.62	H	357.643 054 06	−51.705 147 97 A	24.45	55.03	−109.53	2.11	1.99	2.38	2.51	2.04	−22	− 5	− 4	+ 5	−19	+ 8	−10	−22	+18	+10	7	1.36
117571	23 50 35.63	−47 22 37.3	6.49	H	357.648 465 31	−47.377 014 73	7.52	7.84	29.73	0.61	0.61	0.85	0.66	0.57	+14	−26	−37	+22	−15	+ 5	−18	−29	+14	+ 1	0	−0.90
117572 H	23 50 35.95	+47 05 13.8	9.01	G	357.649 786 51	+47.087 154 19 *	3.42	8.84	− 5.69	0.69	0.79	1.17	0.74	0.85	− 6	+16	+24	−15	− 1	− 7	+ 4	+24	+14	−15	0	0.17
117573	23 50 37.98	+54 11 53.9	7.15	H	357.658 251 69	+54.198 308 31	18.13	− 2.18	−34.03	0.47	0.52	0.76	0.54	0.55	−27	+16	+12	+26	− 9	+ 0	− 3	− 3	+13	−18	2	−0.27
117574	23 50 38.12	−40 47 51.4	10.01	G	357.658 814 06	−40.797 619 51	8.41	36.64	− 2.16	1.00	1.12	1.63	1.29	1.88	+ 6	− 6	−15	+33	−27	+26	−10	−53	+22	+34	0	−1.11
117575	23 50 38.49	−35 34 53.5	9.57	H	357.660 371 73	−35.581 527 10	5.61	− 1.12	−78.00	0.96	0.72	1.22	1.22	0.64	+ 3	+ 6	+ 6	−33	+ 6	+ 8	+ 5	−40	+ 4	−25	0	1.20
117576	23 50 39.52	+60 54 39.2	9.76	2 H	357.664 678 34	+60.910 877 75	−1.84	− 2.27	− 2.42	0.79	0.75	1.07	1.05	0.88	−13	+16	+25	+ 5	− 2	−12	+ 3	+ 5	+ 7	−12	2	2.28
117577	23 50 40.29	+17 20 39.3	10.49	H	357.667 891 86	+17.344 258 60	18.47	207.15	167.20	1.40	1.04	1.88	1.52	1.14	+42	+18	+15	−21	+ 4	+22	+ 3	+ 0	+20	+46	0	−1.74
117578	23 50 41.70	+25 17 59.8	8.38	H	357.673 737 27	+25.299 957 56	4.69	−17.74	−22.14	0.83	0.66	1.08	0.87	0.67	+23	+12	−22	+14	+14	−10	+13	+ 9	+ 3	+37	0	0.70
117579	23 50 42.03	−11 36 33.3	8.82	H	357.675 107 71	−11.609 250 56	6.99	46.41	−41.77	1.11	0.72	1.20	1.54	0.87	+21	− 8	−26	−15	+ 3	+15	+10	− 3	− 7	−11	0	−0.15
117580	23 50 42.48	−24 11 39.1	10.35	H	357.677 012 24	−24.194 190 45	6.35	−32.64	− 3.44	1.88	1.49	2.57	2.57	3.19	+45	−29	−25	+ 9	− 7	+16	−19	−40	+54	+40	0	0.05
117581 H	23 50 42.58	−25 54 30.2	8.86	H	357.677 427 35	−25.908 379 54 A	4.88	14.97	−35.21	2.02	1.68	1.95	2.43	1.66	+ 3	+ 4	−36	+ 5	−14	+25	− 7	−20	+35	+ 1	2	0.20
117582	23 50 44.03	+41 49 39.2	8.27	H	357.683 441 52	+41.827 566 89	13.76	180.87	68.61	0.59	0.61	0.96	0.70	0.66	+13	+ 2	+10	+21	− 7	−11	− 4	+14	+10	+15	0	0.79
117583	23 50 45.26	−21 20 05.7	9.96	G	357.688 600 47	−21.334 920 00	2.95	68.87	16.45	1.69	1.27	1.96	2.10	1.61	+29	+ 3	−30	−42	− 6	+17	− 5	−55	+14	− 2	0	1.61
117584	23 50 45.78	−50 36 48.8	9.07	H	357.690 759 03	−50.613 542 57	3.26	24.02	−10.81	0.81	0.77	1.26	1.14	1.00	−19	+ 7	−25	−18	−14	− 4	−10	−36	+26	− 6	2	1.03
117585	23 50 46.58	−18 17 32.5	7.07	H	357.694 065 24	−18.292 348 69	7.08	−10.67	−31.61	0.87	0.65	1.13	1.29	0.79	+28	−34	−36	−13	−18	+44	−15	−26	+25	+ 3	0	−0.30
117586	23 50 47.68	+21 34 36.1	10.77	G	357.698 648 81	+21.576 680 84	16.90	352.44	15.96	1.46	1.19	2.05	1.43	1.10	+39	+28	+19	+ 0	+ 2	+ 4	+ 1	−11	+ 0	+35	0	1.46
117587	23 50 49.77	−16 07 26.2	9.01	H	357.707 360 84	−16.123 948 76	3.62	− 1.41	− 6.76	1.22	0.91	1.41	1.46	1.25	+28	−15	−32	−33	+ 8	+12	+14	− 2	+16	+23	0	−0.20
117588	23 50 49.89	+41 45 29.2	8.44	H	357.707 875 08	+41.758 117 44	4.39	−25.79	−22.14	0.61	0.63	0.98	0.71	0.66	+16	− 1	+15	+14	− 9	−11	− 6	+ 5	+ 6	+18	0	1.83
117589	23 50 50.16	−39 24 22.1	9.15	H	357.708 988 80	−39.406 151 97	6.07	64.78	0.30	0.75	0.66	1.27	0.85	0.67	+ 2	+19	− 3	+55	−16	+30	−23	−28	− 9	− 9	1	−1.72
117590	23 50 50.52	+59 39 44.5	8.22	H	357.710 512 97	+59.662 371 29	4.52	34.27	−34.57	0.68	0.66	0.93	0.85	0.79	−31	− 1	+15	+12	− 4	+ 7	− 5	+11	− 3	+31	2	−0.95
117591	23 50 51.79	+47 30 28.4	8.75	3 H	357.715 795 99	+47.507 895 70	−0.15	4.62	2.95	0.72	0.75	1.12	0.75	0.74	+ 4	+13	+33	−18	− 1	+ 0	+ 4	+19	+17	− 7	1	−0.87
117592	23 50 53.39	+31 37 02.4	8.87	H	357.722 477 57	+31.617 338 02	3.15	10.37	−15.92	0.96	0.67	1.12	1.22	0.82	− 8	+31	−23	+23	+ 2	+13	+ 4	+18	− 3	+ 2	0	0.27
117593	23 50 54.25	−43 05 29.4	10.18	H	357.726 041 85	−43.091 486 73	7.18	88.27	27.20	0.93	0.97	1.41	1.03	1.07	+17	− 5	− 1	−12	− 9	+ 9	− 9	−31	−11	+14	1	−0.39
*117594	23 50 55.34	−52 44 58.7	10.83	G	357.730 577 72	−52.749 651 09	18.06	78.16	−18.29	3.57	4.05	6.32	4.58	4.26	−23	+ 3	−18	+22	+ 3	+ 2	+ 6	−28	+ 6	−16	1	
*117595	23 50 55.26	−12 49 14.7	8.89	G	357.730 267 11	−12.820 761 75	6.04	12.41	11.08	1.03	0.81	1.36	1.60	1.06	+29	− 8	−27	−17	−11	+43	+ 0	−15	+22	+14	0	1.05
117596	23 50 55.45	−79 53 54.9	8.03	1 H	357.731 047 16	−79.898 583 66	18.64	−84.59	4.50	0.57	0.53	0.64	0.64	0.52	+ 8	− 5	−14	+19	+10	− 8	+ 8	− 5	+ 7	+11	1	−0.16
117597	23 50 56.18	−36 53 20.7	8.73	H	357.734 087 72	−36.889 082 43	8.62	64.20	4.58	0.82	0.56	1.07	0.94	0.52	−11	− 6	+ 7	−37	+ 5	+21	+ 5	−37	+10	−25	0	−0.03
117598 H	23 50 56.32	−33 33 44.9	8.88	G	357.734 687 19	−33.562 483 76 A	9.25	−31.36	−21.01	1.38	1.

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
117501	10.898	0.058	8.981	0.019		1.626	0.050	T	2.05	0.11	O	8.8554	0.0030	0.022	78		8.82	8.89				1							
117502	10.128	0.017	9.638	0.017		0.461	0.022	T	0.53	0.02	L	9.6943	0.0019	0.022	194		9.66	9.74		C		1							
117503	6.868	0.005	5.960	0.004		0.806	0.005	T	0.83	0.00	L	6.0107	0.0014	0.011	100		6.00	6.03		U 2		1							S
117504	9.265	0.014	8.650	0.013	*	0.570	0.014	T	0.64	0.01	L *	8.6955	0.0019	0.020	101	*	8.66	8.73		D	23497−4805	H 1	2 C A	AB	18	0.414	0.005	1.07	0.03	S
117505						1.157	0.005	G	1.26	0.01	I	11.3177	0.0045	0.047	147		11.23	11.42		C			1							G
117506	9.732	0.025	9.494	0.030		0.227	0.037	T	0.25	0.04	L	9.5222	0.0021	0.016	81		9.49	9.55		C			1							
117507	8.549	0.014	6.747	0.007		1.471	0.004	G	1.48	0.02	L	6.7192	0.0011	0.010	152		6.70	6.74					1							S
117508	9.944	0.017	8.831	0.012		0.959	0.016	T	0.95	0.01	L	8.9026	0.0018	0.019	166		8.87	8.94					1							
117509	9.854	0.019	8.488	0.011		1.157	0.017	T	1.12	0.01	L	8.5584	0.0018	0.016	123		8.53	8.59					1							S
117510	6.589	0.006	6.445	0.007		0.097	0.001	G	0.11	0.00	H	6.4771	0.0012	0.005	52		6.47	6.50		C	23498−2520	I 1	1							S
117511	7.402	0.006	7.049	0.006	*	0.355	0.015	G	0.42	0.02	H *	7.0955	0.0008	0.009	103	*	7.08	7.11		D	23498+2741	I 1	2 C S A	AB	121	0.156	0.005	0.61	0.23	S
117512	9.425	0.018	8.638	0.014		0.714	0.018	T	0.77	0.01	L	8.6988	0.0024	0.019	103		8.67	8.73					1							
117513	9.228	0.010	8.598	0.009		0.565	0.002	G	0.64	0.00	H	8.6595	0.0013	0.015	202		8.63	8.69					1 G							S
117514	7.735	0.008	7.735	0.010		0.001	0.011	T	0.02	0.01	L	7.7457	0.0049	0.041	139		7.67	7.81		U 2			1							S
117515	7.759	0.007	7.446	0.007		0.282	0.006	G	0.32	0.01	H	7.4997	0.0011	0.012	125		7.48	7.52					1							S P
117516	7.501	0.006	7.062	0.005		0.400	0.006	G	0.47	0.01	H	7.1170	0.0009	0.010	135		7.10	7.14		C			1							S
117517	10.512	0.054	9.824	0.046		0.590	0.015	G	0.66	0.01	H	9.9365	0.0027	0.024	134		9.90	9.97		C			1							G
117518	8.486	0.012	8.155	0.013		0.330	0.015	G	0.38	0.02	H	8.1811	0.0014	0.010	72		8.16	8.20		C			1							S
117519	9.225	0.023	8.728	0.023		0.479	0.025	T	0.55	0.03	L	8.8196	0.0026	0.016	55		8.80	8.85		C			1							S
117520	9.487	0.015	7.729	0.007		1.495	0.014	T	2.78	0.04	O	7.4320	0.0119	0.112	129		7.19	7.58		U 2			1 S							S P
117521	10.760	0.031	9.822	0.022	A						T *	9.8706	0.0026	0.036	165	*	9.81	9.93		U 2	23500−5617	I 1	2 C A	AB	83	4.577	0.026	2.62	0.11	
117522						0.532	0.001	G	0.60	0.00	H	11.4567	0.0037	0.036	107		11.40	11.54					1							G
117523	10.925	0.057	9.059	0.022		1.584	0.050	T	2.00	0.14	O	8.9430	0.0033	0.017	57		8.91	8.98					1							
117524	10.708	0.028	10.037	0.025		0.619	0.002	G	0.69	0.00	H	10.1239	0.0021	0.026	164		10.08	10.16		C			1							
117525	8.837	0.008	8.358	0.008	*	0.448	0.015	G	0.52	0.02	H *	8.4106	0.0014	0.017	176	*	8.38	8.44		D	23501−3720	H 1	2 C A	AB	240	0.324	0.004	0.15	0.05	S
117526	9.261	0.015	8.405	0.012		0.744	0.008	G	0.79	0.01	H	8.4739	0.0014	0.012	130		8.45	8.50		C	23501+0253	I 1	1							
117527	8.454	0.010	7.834	0.011		0.596	0.015	G	0.67	0.01	H	7.8887	0.0013	0.009	91		7.87	7.90		C			1							S
117528	7.261	0.006	6.821	0.005		0.413	0.012	G	0.48	0.01	H	6.8723	0.0009	0.008	80		6.86	6.89					1							S
117529	10.388	0.036	8.689	0.015		1.419	0.031	T	1.40	0.05	L	8.7027	0.0016	0.014	83		8.68	8.73		C			1							
117530	10.080	0.021	9.102	0.015		0.858	0.019	T	0.87	0.01	L	9.1592	0.0017	0.017	156		9.13	9.18		C			1							S
117531	10.115	0.025	9.394	0.022	*	0.662	0.027	T	0.72	0.02	L *	9.4591	0.0029	0.022	105	*	9.43	9.51		D	23502+1940	I 1	2 C S A	AS	0	0.197	0.006	0.39	0.20	
117532	10.769	0.069	9.409	0.032		1.152	0.060	T	1.11	0.05	L	9.4538	0.0019	0.020	51		9.42	9.48		D			1							
117533	10.085	0.034	9.566	0.034		0.420	0.006	G	0.49	0.01	H	9.6737	0.0037	0.017	66		9.64	9.71					1							
117534	8.812	0.015	8.275	0.014		0.506	0.015	G	0.58	0.02	H	8.3382	0.0025	0.014	73		8.32	8.36					1							S
117535	7.727	0.007	7.565	0.009		0.137	0.002	G	0.15	0.00	H	7.6030	0.0012	0.010	67		7.59	7.63		C			1							S
117536	10.600	0.041	9.364	0.024		1.055	0.037	T	1.02	0.03	L	9.4430	0.0016	0.016	92		9.41	9.47					1							
117537	10.156	0.032	9.559	0.031	*	0.576	0.005	G	0.65	0.01	R *	9.5000	0.0027	0.023	67	*	9.43	9.53		D	23502−1723	I 1	2 C A	AB	326	0.721	0.004	0.50	0.02	
117538	10.341	0.029	9.029	0.017		1.114	0.026	T	1.08	0.03	L	9.0806	0.0020	0.020	110		9.05	9.11					1							
117539	9.101	0.011	8.951	0.014		0.144	0.017	T	0.16	0.02	L	8.9735	0.0019	0.022	182		8.94	9.01					1							
117540	8.275	0.009	7.832	0.009		0.435	0.015	G	0.50	0.02	H	7.8991	0.0009	0.010	116		7.88	7.92		C			1							S
117541	7.400	0.007	6.057	0.005		1.133	0.004	G	1.10	0.00	H	6.1000	0.0005	0.006	77		6.09	6.12		C			1							S
117542	8.934	0.019	7.940	0.014		0.839	0.002	G	0.86	0.00	H	8.0204	0.0014	0.013	57		8.00	8.05		C	23502−2924	I 1	1							S
117543	9.599	0.016	9.110	0.016		0.472	0.017	T	0.54	0.02	L	9.1832	0.0018	0.024	150		9.15	9.23		C			1							
117544	9.156	0.015	8.756	0.015		0.378	0.020	T	0.44	0.02	L	8.8322	0.0021	0.016	89		8.80	8.87		C			1							S
117545	10.416	0.026	9.933	0.026	A	0.467	0.029	T	0.54	0.03	L	10.0460	0.0110	0.039	201	A	9.98	10.12			23503−5553	I 1	2 C A	AB	56	11.503	0.016	2.05	0.08	
117546	8.821	0.012	8.336	0.012		0.456	0.015	T	0.53	0.02	L	8.3753	0.0013	0.015	125		8.35	8.40		C			1							
117547	9.999	0.022	8.955	0.016		0.907	0.020	T	0.91	0.01	L	9.0338	0.0024	0.024	98		9.00	9.07					1							
117548	10.554	0.048	9.711	0.038		0.741	0.047	T	0.79	0.03	L	9.8998	0.0028	0.017	48		9.87	9.93		C			1							
117549	10.526	0.029	8.805	0.012		1.436	0.025	T	1.43	0.04	L	8.7815	0.0015	0.019	154		8.75	8.81					1							
117550	9.734	0.026	8.606	0.017		1.010	0.015	G	0.99	0.01	H	8.6150	0.0017	0.016	133		8.59	8.64		C			1							
117551	6.929	0.003	6.517	0.003		0.403	0.004	T	0.47	0.00	L	6.5660	0.0007	0.009	197		6.55	6.58			23503+5137	I 1	1							S
117552	10.396	0.022	9.785	0.020		0.567	0.022	T	0.64	0.02	L	9.8693	0.0028	0.033	193		9.80	9.93					1 X							
117553	8.996	0.012	7.112	0.006		1.565	0.011	T	1.58	0.01	L	7.0719	0.0010	0.010	130		7.06	7.09					1							S
117554	8.030	0.008	7.937	0.009	A	0.091	0.011	T	0.10	0.01	L	7.9771	0.0095	0.014	127	A	7.95	8.01			23504+5710	I 1	2 C B	AB	218	13.735	0.038	3.55	0.25	S
117555	11.484	0.087	10.152	0.042		1.130	0.076	T	1.09	0.08	L	10.1607	0.0029	0.021	96		10.12	10.19					1							
117556	10.153	0.027	8.363	0.011		1.491	0.023	T	1.51	0.03	L	8.2861	0.0027	0.019	105		8.26	8.32		U			1							S
117557	8.446	0.016	6.811	0.006		1.370	0.015	G	1.34	0.02	H	6.8201	0.0010	0.009	69		6.80	6.83					1							S
117558	7.729	0.009	7.519	0.012		0.202	0.001	G	0.22	0.00	H	7.5484	0.0018	0.011	56		7.52	7.57		C			1							S
117559	10.999	0.055	9.518	0.025		1.226	0.024	G	1.38	0.04	I	9.4475	0.0017	0.019	73		9.41	9.47					1							
117560	10.842	0.027	9.505	0.014		1.134	0.024	T	1.10	0.03	L	9.5683	0.0022	0.030	226		9.52	9.63					1 X							
117561	8.654	0.009	8.313	0.010	*	0.323	0.012	T	0.37	0.02	L *	8.3535	0.0016	0.017	144	*	8.33	8.38			23505+5937	H 1	2 C D	AB	219	0.334	0.022	2.71	0.43	S D
117562	7.418	0.005	7.456	0.007		−0.028	0.002	G	−0.01	0.00	H	7.4583	0.0009	0.009	119		7.45	7.47		C			1							S
117563	8.248	0.010	7.204	0.007		0.907	0.009	T	0.91	0.01	L	7.2500	0.0012	0.009	89		7.23	7.26		C			1							S
117564	8.897	0.014	8.547	0.015		0.332	0.019	T	0.39	0.03	L	8.5746	0.0021	0.018	94		8.54	8.60					1							S
117565	7.932	0.008	7.873	0.011	*	0.059	0.013	T	0.07	0.01	L *	7.9584	0.0013	0.014	115	*	7.93	7.98		D	23505+4325	I 1	2 C A	AB	105	5.476	0.006	2.07	0.03	S
117566	10.842	0.067	10.431	0.070	*	0.490	0.015	G	0.56	0.02	H *	10.3799	0.0044	0.025	50	*	10.31	10.42		D	23505−2922	H 1	2 C A	AB	134	0.203	0.075	0.59	0.72	
117567	7.664	0.009	5.872	0.004		1.488	0.004	G	1.51	0.01	H	5.8249	0.0012	0.008	72		5.81	5.84					1							S
117568	8.920	0.012	7.482	0.007		1.205	0.003	G	1.16	0.00	H	7.5122	0.0011	0.012	148		7.49	7.54					1							S
117569	7.475	0.007	7.240	0.009		0.219	0.011	T	0.24	0.01	L	7.2699	0.0011	0.008	91		7.25	7.28		C			1							S
117570	8.616	0.008	7.725	0.007	*	0.764	0.002	G	0.80	0.00	H *	7.7565	0.0020	0.017	150	*	7.73	7.78		D	23506−5142	I 1	2 C A	AB	135	0.608	0.002	0.29	0.01	S
117571	7.826	0.008	6.608	0.005		1.025	0.003	G	1.00	0.00	H	6.6613	0.0009	0.009	105		6.65	6.68					1							S
117572	9.476	0.013	9.018	0.013	*	0.405	0.015	G	0.47	0.02	H *	9.0929	0.0018	0.017	157	*	9.06	9.13		C	23506+4705	I 1	2 C S A	AB	126	0.132	0.019	0.87	0.90	
117573	7.673	0.005	7.207	0.006		0.466	0.006	G	0.54	0.01	H	7.2526	0.0011	0.013	157		7.23	7.28			23506+5412	I 1	1							S
117574	10.803	0.035	9.993	0.027		0.650	0.020	G	0.71	0.02	H	10.1628	0.0024	0.029	132		10.10	10.21					1 G							
117575	9.961	0.019	9.592	0.020		0.360	0.024	T	0.42	0.03	L	9.6525	0.0018	0.020	161		9.62	9.71					1							
117576	10.562	0.037	9.882	0.034		0.629	0.042	T	0.70	0.04	L	9.9038	0.0187	0.139	135		9.76	10.12	8.52	P 1 A			1 S							G P
117577	11.741	0.093	10.644	0.059		0.880	0.040	G	0.89	0.03	R	10.6488	0.0030	0.025	118		10.60	10.69		C			1							G
117578	9.520	0.022	8.491	0.015		0.896	0.020	T	0.90	0.01	L	8.5411	0.0014	0.013	82		8.52	8.56		C			1							S
117579	9.387	0.020	8.885	0.020		0.483	0.022	T	0.55	0.02	L	8.9230	0.0020	0.014	80		8.88	8.95					1							S
117580	10.854	0.061	10.359	0.059		0.544	0.072	G	0.62	0.07	R	10.4632	0.0054	0.039	77		10.41	10.52		C			1							
117581	9.658	0.026	8.935	0.022	A	0.600	0.495	G	0.66	0.05	L *	8.9914	0.0030	0.012	43	*	8.96	9.03		D	23507−2554	I 1	2 C D	AB	133	1.164	0.033	2.75	0.13	S D
117582	8.928	0.013	8.341	0.012		0.578	0.015	G	0.65	0.01	H	8.3953	0.0014	0.015	122		8.38	8.42					1							
117583	10.342	0.036	9.886	0.035		0.320	0.001	G	0.37	0.00	H	10.0571	0.0036	0.027	78		9.99	10.10					1							
117584	9.338	0.011	9.091	0.013		0.231	0.017	T	0.26	0.02	L	9.1433	0.0021	0.025	193		9.10	9.19					1							S
117585	8.540	0.014	7.191	0.009		1.145	0.012	G	1.11	0.06	F	7.2378	0.0013	0.009	73		7.22	7.26					1							S
117586	11.808	0.148	10.877	0.095		1.070	0.020	G	1.13	0.03	I	10.9135	0.0050	0.038	88		10.86	10.98		C			1							G
117587	10.320	0.036	9.122	0.022		1.025	0.033	T	1.00	0.03	L	9.1765	0.0022	0.015	70		9.14	9.21		C			1							
117588	8.999	0.015	8.496	0.014		0.506	0.015	G	0.58	0.02	H	8.5514	0.0014	0.011	109		8.53	8.57		C			1							
117589	9.765	0.015	9.220	0.014		0.517	0.015	T	0.59	0.02	L	9.2645	0.0015	0.017	181		9.23	9.30		C			1							
117590	9.618	0.016	8.345	0.010		1.084	0.015	T	1.05	0.01	L	8.3859	0.0015	0.015	149		8.35	8.41		C			1							
117591	10.651	0.034	9.015	0.015		1.394	0.031	T	3.60	0.09	O	8.4236	0.0319	0.278	139		8.09	8.77		U 2	23508+4730	I 1	1 S							
117592	9.101	0.016	8.903	0.018		0.196	0.015	G	0.21	0.02	H	8.9309	0.0011	0.013	75		8.91	8.95		C			1							
117593	10.878	0.045	10.242	0.042		0.591	0.053	T	0.66	0.05	L	10.3085	0.0029	0.025	107		10.26	10.35					1							
117594						1.171	0.020	G	1.13	0.02	R	10.9239	0.0037	0.047	210		10.82	11.00					1 X S							G
117595	9.330	0.019	8.965	0.020		0.375	0.009	G	0.44	0.01	H	8.9925	0.0023	0.021	90		8.95	9.03		C			1							S
117596	8.824	0.010	8.102	0.009		0.666	0.015	G	0.73	0.01	H	8.1621	0.0021	0.018	143		8.14	8.19		M			1							S
117597	9.135	0.010	8.772	0.010		0.354	0.012	T	0.42	0.01	L	8.8197	0.0015	0.017	178		8.79	8.85					1							S
117598	9.438	0.016	8.879	0.015	A	0.504	0.100	G	0.63	0.03	L *	8.8753	0.0018	0.015	130	*	8.84	8.91		D	23509−3334	I 1	2 C A	AB	15	2.915	0.011	2.62	0.05	S
117599	9.421	0.011	8.955	0.011		0.439	0.014	T	0.51	0.01	L	9.0253	0.0015	0.021	214		9.00	9.07					1							
117600	10.238	0.026	8.575	0.012		1.387	0.004	G	1.36	0.01	H	8.5595	0.0022	0.019	137		8.52	8.59					1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors $\alpha*$ mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)										Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
117601	23 50 58.08	+41 09 49.6	7.68	H	357.741 981 91	+41.163 770 03	2.51	21.49	5.47	0.62	0.54	0.85	0.66	0.58	+ 6	− 9	+10	+25	− 9	−11	− 9	+ 6	+18	+ 7	2	1.35
117602	23 50 59.26	+63 59 05.5	6.81	H	357.746 916 23	+63.984 862 18	4.54	−18.06	−3.35	0.49	0.48	0.62	0.61	0.53	−13	+13	+26	+33	− 9	−18	− 5	+28	+13	−26	0	0.78
117603	23 50 59.33	+51 23 53.7	7.87	H	357.747 224 76	+51.398 236 47	2.81	24.77	2.05	0.59	0.69	1.06	0.71	0.73	−35	+ 7	+27	+18	− 4	+ 8	− 2	−13	+ 2	−27	0	0.15
117604	23 51 00.73	−43 20 12.1	9.79	H	357.753 050 44	−43.336 693 41	4.31	13.15	3.85	1.04	1.13	1.70	1.17	1.26	+16	+15	− 9	+20	− 2	+11	− 3	− 6	−18	+16	2	1.18
117605	23 51 01.01	−48 39 33.7	6.85	G	357.754 188 56	−48.659 354 66	3.55	13.08	−14.38	0.60	0.50	0.85	0.61	0.60	+ 0	− 8	−36	−12	−25	+22	−22	−39	+26	+12	0	0.33
117606	23 51 02.85	−41 35 59.8	7.75	H	357.761 862 40	−41.599 930 77	2.57	−8.83	−2.61	0.57	0.62	0.93	0.63	0.60	+ 5	− 8	+ 0	+20	−14	+13	−20	−35	− 1	− 9	0	−1.18
117607	23 51 06.80	+02 14 16.3	6.96	H	357.778 322 79	+02.237 864 88	4.61	2.88	3.32	1.03	0.51	0.95	1.29	0.92	+25	−15	−13	−54	− 6	+20	+ 1	−45	+23	+15	0	−1.03
117608 H	23 51 07.27	−24 50 44.2	10.23	H	357.780 281 69	−24.845 620 60 A	5.54	−17.60	−27.47	3.84	2.53	3.77	4.82	3.63	+38	−16	−28	+ 4	+ 7	+ 0	−10	−32	+35	− 3	2	−0.85
117609	23 51 08.78	+52 05 32.0	8.57	H	357.786 578 58	+52.092 223 65	3.05	17.51	−2.56	0.62	0.79	1.22	0.90	0.86	−43	+ 1	+28	− 7	+10	+19	+11	−27	− 9	−22	0	0.79
117610	23 51 09.13	−19 02 48.2	10.68	H	357.788 028 33	−19.046 730 96 B	21.53	52.35	13.57	21.31	19.00	16.62	20.17	16.43	+50	+ 4	−20	−19	−27	+41	−35	−63	+15	+26	5	2.71
117611	23 51 09.33	−19 02 58.3	8.47	G	357.788 887 02	−19.049 516 76 A	10.57	26.88	0.78	2.50	2.31	2.55	3.44	2.38	+45	+ 1	−28	−19	−26	+42	−29	−60	+23	+25	5	2.71
117612	23 51 09.46	−01 56 10.1	9.71	H	357.789 418 76	−01.936 129 28	2.47	−9.30	−30.10	1.55	1.04	1.53	2.05	1.37	+ 9	+ 6	−20	−38	+13	−16	+15	− 1	+ 7	− 4	0	1.30
117613	23 51 09.61	−65 18 54.9	8.18	H	357.790 025 41	−65.315 247 23	3.81	43.18	−11.86	0.60	0.56	0.78	0.69	0.66	+ 0	− 9	− 3	+12	+ 4	+10	+ 6	+ 7	−13	+ 2	0	−1.78
117614	23 51 09.84	−02 31 13.3	7.86	H	357.791 003 84	−02.520 364 89	2.09	19.20	−39.28	1.09	0.76	1.18	1.53	0.99	+ 2	+23	−35	−28	+13	−11	+17	+ 2	+19	− 4	0	0.89
117615	23 51 10.66	+44 32 52.1	8.20	H	357.794 410 29	+44.547 796 53	7.24	25.76	−38.36	0.62	0.63	1.00	0.70	0.74	− 5	+ 3	+20	+12	+ 3	−11	+ 6	+17	+19	−10	0	2.35
117616	23 51 13.27	+36 00 01.8	8.58	H	357.805 275 56	+36.000 509 63	0.26	1.58	−9.06	0.85	0.68	1.03	1.12	0.75	+ 6	+ 4	+ 2	−13	+25	+ 0	+17	+14	− 3	+27	2	−0.06
117617	23 51 13.90	+62 35 34.3	8.34	G	357.807 914 20	+62.592 851 82	13.03	69.67	−93.64	0.63	0.69	0.85	0.77	0.78	− 6	+ 6	+17	+24	− 8	−10	− 6	+24	+13	− 9	0	−0.02
117618	23 51 14.43	+16 08 26.9	9.04	2 H	357.810 138 33	+16.140 804 42	0.42	−6.45	−14.92	0.90	0.74	1.28	0.96	0.86	+47	+18	+15	+ 4	− 5	+ 5	− 2	+ 2	+22	+47	0	0.29
117619	23 51 14.53	+18 21 32.7	9.41	H	357.810 529 10	+18.359 094 78	10.25	195.88	−55.35	0.99	0.78	1.31	1.14	0.87	+42	− 1	+ 0	+ 7	+ 6	+ 7	+ 6	+ 8	+14	+51	2	1.50
117620	23 51 17.52	+43 29 53.2	8.33	H	357.823 009 43	+43.498 106 07	4.32	−35.93	−18.43	0.64	0.63	1.00	0.72	0.71	+ 4	+12	+10	+17	− 8	− 5	− 6	+19	+12	+ 8	1	0.06
117621	23 51 18.03	+14 06 54.5	10.46	H	357.825 125 39	+14.115 139 43	4.66	28.46	14.78	1.71	1.14	1.98	1.84	1.38	+38	+21	+ 5	− 3	+22	+ 4	+21	+15	+11	+57	2	−0.25
117622	23 51 18.53	+40 11 55.3	6.78	H	357.827 222 67	+40.198 683 05	17.97	202.40	−73.79	1.52	1.34	2.00	1.66	1.38	+14	+16	+ 1	+30	−12	+12	− 9	− 5	+ 9	+17	0	
117623	23 51 19.01	−43 35 02.3	8.62	H	357.829 193 45	−43.583 963 33	4.31	5.47	−24.31	0.71	0.80	1.13	0.73	0.80	+10	+24	− 6	+14	−10	+ 9	−12	− 6	−13	+12	0	0.01
117624	23 51 19.40	+59 07 04.7	8.76	G	357.830 836 68	+59.117 965 46	6.72	1.88	−27.22	0.67	0.66	0.92	0.92	0.82	−27	+11	+20	− 4	+ 6	+ 1	+ 6	− 2	+ 4	−22	1	−0.64
117625	23 51 19.41	−29 58 06.0	8.97	H	357.830 871 06	−29.968 331 37	4.38	−35.51	−51.18	1.26	1.28	1.42	1.37	1.47	+17	+10	−15	−12	+20	− 1	+20	+45	+13	+22	0	−0.96
117626	23 51 19.90	+54 01 15.6	8.88	H	357.832 909 57	+54.021 008 57	1.42	−5.16	−2.28	0.61	0.70	1.05	0.81	0.86	−24	+18	+20	+ 8	−12	− 9	− 9	+ 3	− 3	−13	0	−0.19
117627	23 51 20.98	−36 02 02.5	7.85	G	357.837 400 38	−36.034 031 65	16.11	−217.76	−116.87	0.80	0.53	0.92	0.89	0.49	− 7	+ 1	− 7	−49	+ 6	+11	+10	−42	+ 9	−25	1	0.43
117628	23 51 21.25	+09 18 48.6	5.77	2 H	357.838 560 42	+09.313 509 96	4.04	−9.84	−65.52	0.67	0.51	0.80	0.69	0.57	+35	+ 0	−24	+13	+25	−27	+22	+15	− 2	+52	0	−2.12
117629	23 51 21.32	−18 54 33.0	5.17	1 H	357.838 840 91	−18.909 154 59	10.16	26.60	−3.56	0.70	0.60	1.04	0.97	0.68	+27	−25	−48	−24	−28	+56	−10	−35	+28	+18	0	1.27
117630	23 51 21.62	−42 22 18.3	7.55	H	357.840 063 66	−42.371 751 88	15.24	16.84	−106.29	0.61	0.57	0.84	0.68	0.55	+13	− 1	+ 0	+34	−12	+ 5	−18	−32	−10	− 1	0	0.12
117631	23 51 21.96	−40 29 06.7	8.49	H	357.841 517 20	−40.485 198 23	2.47	40.16	−19.11	0.64	0.73	1.11	0.71	0.72	+11	+10	−12	+ 2	−12	+31	−11	−37	+10	+ 7	0	−2.35
117632	23 51 22.31	+23 17 48.3	8.96	2 H	357.842 974 05	+23.296 762 72	0.15	13.82	−5.92	0.94	0.75	1.35	0.96	0.82	+18	+28	−15	+ 6	+14	− 9	+14	+ 4	+ 0	+34	0	0.95
117633	23 51 22.38	+57 48 50.6	8.95	H	357.843 267 31	+57.814 044 49	4.08	−21.80	−15.94	0.75	0.78	1.10	0.98	0.88	−18	+17	+12	+17	+ 9	+13	+ 5	− 2	− 6	−20	0	1.13
117634	23 51 22.60	+22 19 14.9	8.48	H	357.844 175 09	+22.320 817 87	5.21	92.09	5.71	0.77	0.63	1.04	0.89	0.60	+28	+ 6	− 4	−12	+ 3	− 3	+ 2	−10	+ 5	+23	0	0.32
117635	23 51 23.20	−31 37 05.1	10.29	H	357.846 651 93	−31.618 073 24	5.50	51.65	−0.99	1.55	1.25	1.90	1.74	1.42	+30	+10	+ 5	−50	+12	+ 4	+24	− 5	+28	+ 5	0	0.34
117636	23 51 26.15	+07 31 07.4	9.66	H	357.858 949 76	+07.518 718 21	4.15	−0.99	−17.46	1.32	0.83	1.48	1.61	0.91	+41	+21	+14	+ 1	+ 7	− 2	+ 9	+ 2	+15	+32	0	1.28
*117637 H	23 51 26.93	+47 45 15.7	8.07	H	357.862 203 94	+47.754 372 39 A	2.57	5.15	−1.43	0.93	0.94	1.28	0.89	0.90	+ 4	+ 2	+29	−32	+13	+ 1	+13	+18	+20	+ 3	2	0.47
*117638	23 51 26.93	−41 46 21.3	8.00	H	357.862 197 05	−41.772 575 12	3.11	57.96	−7.07	0.62	0.67	1.00	0.72	0.67	+ 7	+ 3	+ 3	+26	−13	+23	−22	−37	−15	−13	0	−0.74
117639	23 51 27.71	+27 20 10.0	8.09	H	357.865 444 19	+27.336 114 27	4.48	−14.54	−18.48	0.71	0.59	0.91	0.74	0.60	+12	+19	−13	+ 5	+ 9	− 6	+10	− 3	+ 6	+27	0	−0.39
117640	23 51 28.12	−32 25 49.1	7.72	G	357.867 166 37	−32.430 293 35	6.70	28.85	13.63	0.66	0.60	0.85	0.80	0.60	+39	+ 0	+ 2	−19	+17	− 6	+17	− 2	+11	+13	3	−0.29
117641	23 51 28.88	−03 24 13.9	7.91	H	357.870 343 16	−03.403 850 07	1.44	4.84	6.66	1.07	0.75	1.10	1.46	0.93	+13	+12	−15	+ 8	+ 8	− 4	+10	+30	− 5	− 5	0	0.32
117642 H	23 51 31.15	−76 21 10.4	8.56	H	357.879 801 29	−76.352 895 54 A	2.87	6.04	−5.34	1.01	1.07	1.09	0.98	0.91	− 1	+13	−29	+ 4	+ 2	+10	+ 6	+ 0	− 2	+ 6	2	0.53
117643	23 51 32.52	+42 05 17.8	9.24	H																						
117644	23 51 32.56	−03 30 30.5	8.62	H	357.885 684 01	−03.508 472 55	1.96	27.60	−10.33	1.16	0.81	1.20	1.55	1.06	+19	− 3	−10	+29	+ 1	+ 2	+ 0	+22	− 3	+ 0	0	−0.35
117645	23 51 32.71	−20 46 55.7	8.99	H	357.886 303 61	−20.782 152 69	1.18	13.93	−19.28	1.20	1.05	1.62	1.48	1.31	+40	−10	−50	−20	− 8	+ 0	−13	−41	+32	+23	0	0.03
117646 H	23 51 33.03	+42 04 57.8	7.34	G	357.887 633 75	+42.082 720 32 B	4.22	−0.80	−7.83	1.86	1.73	2.22	1.91	1.37	+35	+11	+ 6	+ 4	− 2	−15	− 2	+ 9	+11	−13	1	0.72
117647	23 51 33.43	+47 29 16.0	7.86	1 H	357.889 273 13	+47.487 789 15	3.49	19.69	−10.89	0.52	0.61	0.90	0.52	0.65	− 2	+21	+25	−16	− 3	− 5	+ 2	+29	+15	−10	0	1.56
117648	23 51 35.27	−55 13 59.3	9.60	H	357.896 964 72	−55.233 141 88	3.69	28.44	−3.99	0.77	0.99	1.49	0.88	1.01	−28	+18	−20	+ 3	+ 2	− 9	− 1	+18	− 4	−19	0	0.17
117649	23 51 36.66	−54 04 52.5	9.45	H	357.902 739 08	−54.081 239 87	0.59	−1.35	8.67	0.78	0.83	1.27	0.92	0.98	−30	+17	−11	+ 2	+13	+11	+14	− 4	+ 3	−31	0	0.52
117650	23 51 36.83	+68 13 54.5	11.43	G	357.903 439 26	+68.231 812 13	1.95	−2.38	−3.97	1.52	1.54	1.99	1.82	1.69	+ 0	− 3	+16	+ 9	− 1	−10	+ 1	− 8	+ 6	+ 7	0	1.84
117651	23 51 37.18	+55 02 32.1	9.00	H	357.904 898 50	+55.042 247 03	2.86	2.59	0.61	0.67	0.76	1.04	0.74	0.87	−20	+17	+15	+ 7	− 8	+17	− 9	+ 1	+ 7	−17	0	−0.69
117652	23 51 38.10	−13 59 06.5	8.52	G	357.908 764 52	−13.985 136 54	5.47	5.53	−4.43	1.05	0.76	1.37	1.67	1.20	+32	−21	−23	−19	− 2	+47	+ 8	− 1	+19	+25	3	−0.24
117653	23 51 38.51	+57 12 26.7	8.02	G	357.910 462 65	+57.207 411 26	9.41	8.70	43.77	0.61	0.72	0.93	0.92	0.86	−24	+ 9	+16	+ 7	+13	+16	+ 8	−29	+ 2	−31	3	−0.25
117654	23 51 39.06	−53 53 34.9	8.93	H	357.912 750 90	−53.893 023 17	1.71	9.15	−6.74	0.73	0.77	1.23	0.97	0.96	−36	+ 1	−11	+17	+ 9	+ 7	+ 7	+ 4	− 5	−44	0	2.43
117655	23 51 39.33	−34 41 29.5	6.70	H	357.913 863 21	−34.691 527 41	4.91	76.00	−26.78	0.68	0.46	0.80	0.76	0.42	+ 4	+ 6	− 5	−39	+ 5	+ 7	+ 7	−37	+16	−17	1	1.53
117656	23 51 40.20	+04 41 52.2	6.82	H	357.917 511 23	+04.697 838 45	4.13	−31.73	25.77	0.84	0.44	0.90	0.90	0.54	+41	−18	− 5	−12	− 7	+ 4	− 7	−22	+16	+50	0	−0.40
117657	23 51 40.94	−70 52 13.9	9.01	H	357.920 576 76	−70.870 532 52	−0.54	11.63	−3.10	0.74	0.74	0.92	0.93	0.88	− 4	+ 2	−19	+ 1	− 4	− 5	− 5	−21	− 1	− 3	0	−0.33
117658	23 51 42.62	−73 11 21.8	8.95	H	357.927 579 47	−73.189 402 19	2.66	−5.78	−3.63	0.80	0.74	0.96	1.06	0.85	+ 0	+ 0	− 7	+11	+ 5	−20	+ 3	− 2	+12	− 8	0	−1.23
117659	23 51 43.05	−40 49 39.1	6.65	G	357.929 379 84	−40.827 528 49	10.46	−5.49	−61.58	0.51	0.50	0.82	0.60	0.51	+ 4	+ 3	+ 3	+30	− 5	+25	−14	−34	− 8	−12	0	−0.47
117660	23 51 43.28	−44 44 50.1	10.28	H	357.930 319 44	−44.747 256 37	3.96	29.12	−0.67	1.17	1.12	1.71	1.38	1.16	− 7	−11	+ 8	+17	− 4	+ 8	− 3	−14	−19	−11	0	0.42
117661	23 51 45.23	−64 48 14.0	8.36	G	357.938 452 56	−64.803 885 42	2.66	9.37	5.82	0.55	0.56	0.75	0.60	0.65	− 6	−13	−11	+ 5	+ 5	+ 3	+ 8	− 4	−16	+ 2	1	−0.02
117662	23 51 45.44	−05 40 49.6	8.63	H	357.939 320 17	−05.680 444 96	3.98	36.33	−44.20	1.35	1.27	1.40	1.77	2.17	+68	− 2	− 9	+23	+45	+ 2	+56	+64	+23	+51	0	0.20
117663	23 51 45.97	+39 49 57.7	9.81	H	357.941 543 59	+39.832 704 29	3.03	10.88	−1.38	1.04	0.79	1.26	1.09	0.84	+ 2	+ 9	+10	+59	−11	+ 9	− 9	+25	+10	+ 8	0	0.34
117664	23 51 46.17	+30 36 50.2	8.75	H	357.942 366 15	+30.613 949 26	0.21	−7.94	−10.40	0.90	0.72	1.21	1.42	0.77	+ 3	+ 2	−15	−21	+ 0	+39	+ 5	−19	+16	+ 6	0	0.75
117665	23 51 46.53	−42 40 22.5	7.20	H	357.943 870 45	−42.672 909 68	6.55	14.90	4.52	0.58	0.59	0.87	0.68	0.61	+15	− 2	+ 5	+28	−11	− 3	−11	−21	−12	+12	0	1.37
117666 H	23 51 46.78	−06 36 47.0	8.75	H	357.944 899 38	−06.613 045 57 *	16.93	91.71	−14.38	2.84	2.32	1.53	1.95	1.65	+41	−22	−10	+12	+10	+19	+19	+13	+17	+39	2	1.54
117667	23 51 48.63	+46 01 42.0	9.93	H	357.952 605 39	+46.028 329 47	4.04	18.17	12.92	0.79	0.93	1.50	0.84	0.94	− 3	+ 5	+37	−55	+10	− 6	+16	+13	+31	−10	2	1.10
117668	23 51 48.69	−33 27 09.5	7.86	H	357.952 883 64	−33.452 647 40	14.45	−15.63	63.97	0.68	0.56	0.85	0.77	0.47	+18	+10	+ 0	−35	+ 5	+ 2	+ 5	−32	+15	−10	0	−0.43
117669	23 51 49.36	−46 19 09.6	9.60	2 H	357.955 665 45	−46.319 325 05	25.45	157.34	17.24	5.27	4.53	6.79	6.71	4.65	− 4	+ 3	−25	− 5	+ 4	+ 8	+ 2	−28	+ 4	−18	0	
117670	23 51 49.63	+81 50 12.6	8.63	2 H	357.956 780 98	+81.836 844 14	0.25	6.67	1.30	0.62	0.67	0.76	0.72	0.68	− 8	−10	+32	+ 4	− 3	− 2	− 2	− 8	− 3	− 6	2	2.30
117671	23 51 50.41	−24 04 58.5	9.07	H	357.960 043 19	−24.082 930 29	8.47	100.67	19.86	1.24	0.85	1.51	1.84	1.55	+36	−15	−24	− 5	+ 4	+12	− 3	−39	+40	+16	0	−2.05
117672	23 51 50.86	+42 54 35.4	6.82	H	357.961 931 32	+42.909 839 96	3.77	−12.54	−6.94	0.45	0.48	0.74	0.48	0.50	+ 9	+ 4	+ 4	+ 7	−15	− 4	−14	+ 5	+10	+12	1	0.98
117673 H	23 51 52.45	+37 53 29.1	6.95	H	357.968 555 01	+37.891 410 41 A	16.17	−71.47	−74.44	1.71	1.11	1.63	1.59	0.90	+ 9	+27	+17	+38	− 5	+12	+ 1	+14	+ 6	− 2	5	2.99
117674	23 51 53.56	+04 44 43.3	6.79	H	357.973 182 76	+04.745 348 04	5.36	20.07	6.30	0.82	0.44	0.90	0.88	0.53	+41	−11	− 5	− 7	− 6	+ 3	− 5	−21	+18	+50	0	1.25
117675	23 51 53.84	−79 09 43.2	9.23	H	357.974 330 28	−79.161 989 18	1.15	11.00	8.17	0.74	0.77	0.90	0.87	0.79	− 2	−14	−15	+ 2	+ 5	−21	+ 0	+ 3	+ 8	− 3	0	−1.06
*117676 H	23 51 54.25	−28 19 36.6	8.14	H	357.976 058 08	−28.326 825 03 A	2.67	23.73	−3.76	1.66	1.22	1.52	2.17	1.29	+26	−31	−39	+13	+ 8	+ 9	+ 4	+ 0	− 1	−12	2	0.46
*117677	23 51 54.19	+07 27 20.2	8.31	H	357.975 777 46	+07.455 618 45	2.51	30.99	−6.38	0.94	0.60	1.02	1.12	0.76	+36	+11	− 3	+13	+12	+ 2	+14	+19	+ 9	+32	2	0.58
117678	23 51 55.07	−33 07 19.3	7.06	H	357.979 443 17	−33.122 026 23	8.03	66.68	0.80	0.62	0.51	0.77	0.69	0.43	+22	+ 6	+ 6	−35	+ 6	+ 4	+ 5	−27	+10	− 7	0	−0.50
117679	23 51 55.88	+40 44 42.4	7.54	G	357.982 839 89	+40.745 097 75	2.37	5.20	−3.14	0.63	0.52	0.85	0.66	0.59	+ 2	+ 6	+13	+50	− 7	− 6	− 2	+24	+30	+ 7	0	2.34
117680 H	23 51 56.59	−32 29 36.3	9.32	H	357.985 800 80	−32.493 404 26 A	10.06	−33.88	−18.10	3.21	2.94	3.86	3.38	2.33	+23	+ 7	+ 8	−23	+ 8	− 8	+ 2	−24	+16	+ 1	1	0.70
117681	23 51 56.92	+77 35 58.6	6.56	H	357.987 148 02	+77.599 599 53	25.48	264.77	−91.69	0.45	0.43	0.52	0.51	0.45	− 3	+13	+12	− 1	− 7	− 4	− 5	− 4	+11	−19	2	−0.32
117682	23 51 57.53	−48 50 40.7	9.39	H	357.989 707 19	−48.844 649 91	10.65	31.76	83.81	0.86	0.78	1.51	0.94	1.09	− 6	− 5	−34	−17	−15	+ 6	−17	−39	+39	+ 2	0	−0.20
117683	23 51 57.83	+02 55 49.5	5.59	H	357.990 959 35	+02.930 419 43	2.76	14.69	−14.42	0.83	0.39	0.89	0.95	0.42	+32	−21	− 2	−26	− 3	+42	− 8	−32	+32	+53	0	−0.35
117684	23 51 58.88	+63 18 10.8	8.88	H	357.995 349 02	+63.303 000 56	−0.43	−2.67	−2.64	0.82	0.73	1.00	1.04	0.81	−19	+ 5	+26	+28	−16	−17	−10	+20	+14	−23	3	−0.19
117685	23 52 00.12	−38 51 27.8	9.46	H	358.000 498 46	−38.857 733 40	5.26	16.56	9.58	0.80	0.79	1.44	0.93	0.77	− 1	+16	−16	+26	−16	+23	−12	−23	+12	− 4	0	0.05
117686	23 52 01.01	−31 22 32.6	9.63	H	358.004 228 10	−31.375 724 78	4.04	44.51	−69.56	1.16	1.20	1.62	1.23	1.21	+31	−19	+15	−41	+16	+28	+15	+ 2	+11	+24	2	−0.44
117687 H	23 52 02.37	−45 32 46.2	9.55	H	358.009 882 77	−45.546 159 00 A	3.20	4.51	9.59	3.57	2.21	2.86	3.09	1.75	+24	+ 5	−35	−16	− 2	+ 3	+ 1	−10	− 2	−10	2	−0.98
117688	23 52 02.72	−59 12 05.5	7.47	H	358.011 335 96	−59.201 531 56	4.34	41.96	−40.75	0.55	0.59	0.85	0.63	0.74	− 8	+ 2	−13	+ 4	+ 6	+11	+11	−10	− 2	+10	0	−1.10
117689	23 52 06.69	−82 01 07.6	5.10	G	358.027 891 02	−82.018 767 65	12.20	−49.07	−20.91	0.40	0.41	0.48	0.48	0.43	+ 4	− 5	−15	− 5	+ 6	−13	+ 4	−12	− 8	+ 6	0	0.73
117690	23 52 07.04	+58 44 30.2	9.94	3 H	358.029 316 31	+58.741 726 60	0.02	−1.05	−3.12	1.02	0.93	1.38	1.22	1.17	−27	+21	+ 7	+ 7	+ 2	− 2	+ 3	− 3	+ 25		1	0.65
117691	23 52 07.51	+37 51 00.9	8.73	2 H	358.031 309 59	+37.850 256 34	0.56	10.78	−2.41	0.91	0.66	1.04	1.07	0.74	+ 0	+21	+ 9	+25	− 5	− 4	− 2	+27	+10	− 4	2	−1.33
117692	23 52 07.69	+50 06 52.8	7.59	H	358.032 038 32	+50.114 674 56	4.52	83.97	30.93	0.42	0.54	0.86	0.53	0.64	−30	+ 5	+24	+13	+ 3	+ 1	+ 4	− 4	+10	−29	0	−1.07
117693	23 52 07.73	+36 21 21.4	7.82	H	358.032 210 65	+36.355 936 19	2.82	−8.99	−5.50	0.62	0.53	0.78	0.75	0.61	+14	+15	+10	− 1	+13	− 5	+10	+26	+ 4	+25	2	−1.44
117694	23 52 07.97	+22 56 48.4	10.01	H	358.033 203 56	+22.946 776 23	2.21	26.02	−3.94	1.27	0.96	1.72	1.33	0.92	+22	+17	+ 9	− 9	+ 5	−13	+ 8	− 5	+12	+15	0	−0.53
117695 H	23 52 09.55	+43 30 31.1	8.04	G	358.039 783 71	+43.508 647 47 A	8.16	88.65	−0.69	1.78	1.83	2.16	1.70	1.55	+46	+ 8	+ 6	+11	− 1	− 6	+ 2	+ 3	+26	−10	1	−0.78
117696	23 52 10.20	−11 43 14.2	8.66	H	358.042 520 44	−11.720 607 33	12.77	67.00	−38.64	1.14	0.73	1.32	1.41	0.91	+18	−10	−23	−20	−10	+36	− 5	−24	+32	+ 8	0	1.71
117697	23 52 10.67	−19 39 16.5	11.69	G	358.044 457 48	−19.654 595 61	39.40	−202.14	56.65	2.82	2.20	3.40	3.42	2.79	+36	−23	−44	−43	−18	+32	− 8	−45	+21	+16	0	0.60
117698	23 52 11.01	+39 52 49.1	8.72	G	358.045 868 50	+39.880 293 19	3.49	4.18	5.45	0.80	0.62	1.02	0.85	0.67	+ 2	+ 6	+ 8	+51	− 9	+ 9	− 7	+28	+16	+ 9	0	0.79
117699 H	23 52 11.14	+49 48 19.9	9.04	H	358.046 405 74	+49.805 523 51 *	0.13	7.30	−2.11	1.82	2.45	1.67	1.14	1.14	−42	+13	+ 4	+ 5	+ 0	− 7	+ 3	−10	+33	−37	2	0.03
117700	23 52 12.14

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
117601	9.710	0.024	7.848	0.011		1.548	0.021	T	1.61	0.05	L	7.7994	0.0013	0.010	92		7.78	7.82		C			1							S
117602	6.875	0.004	6.809	0.005		0.066	0.006	T	0.08	0.01	L	6.8404	0.0006	0.008	129		6.83	6.85		C			1							S
117603	9.192	0.014	7.964	0.009		1.049	0.013	T	1.02	0.01	L	8.0358	0.0013	0.016	162		8.01	8.06					1							
117604	11.117	0.057	9.895	0.032		1.044	0.051	T	1.01	0.04	L	9.9587	0.0024	0.025	101		9.89	10.00		C			1							
117605	8.402	0.008	6.968	0.005		1.210	0.015	G	1.14	0.02	A	7.0200	0.0009	0.010	158		7.01	7.04					1							S
117606	9.716	0.016	7.920	0.007		1.495	0.014	T	1.52	0.02	L	7.8739	0.0014	0.015	144		7.85	7.90					1							S
117607	8.443	0.009	7.075	0.005		1.157	0.002	G	1.11	0.06	F	7.1248	0.0007	0.009	141		7.11	7.14		C			1 G							S
117608	10.996	0.061	10.448	0.056	A	0.522	0.400	G	0.87	0.07	B *	10.3859	0.0034	0.029	95	*	10.29	10.43		R	23511−2451	I 1	2 C A	AB	45	2.551	0.030	1.68	0.16	
117609	8.600	0.007	8.579	0.009		0.024	0.011	T	0.04	0.01	L	8.5915	0.0016	0.017	205		8.56	8.62					1							
117610	11.194	0.105	10.672	0.099	B	0.490	0.130	T	0.56	0.14	L	10.8271	0.0408			B				D	23512−1903	I 2	1 C I A							
117611	9.031	0.032	8.540	0.031	A	0.505	0.015	G	0.58	0.02	H	8.5769	0.0057	0.017	81	A	8.56	8.62		D	23512−1903	I 2	1 C P A							S
117612	11.209	0.086	9.813	0.039		1.000	0.040	G	1.04	0.05	I	9.8558	0.0031	0.023	53		9.82	9.90		C			1							
117613	9.509	0.016	8.296	0.010		1.037	0.015	T	1.01	0.01	L	8.3472	0.0017	0.016	134		8.32	8.37					1							S
117614	9.715	0.029	8.043	0.014		1.397	0.025	T	1.37	0.03	L	8.0058	0.0027	0.011	49		7.99	8.03					1							
117615	9.503	0.017	8.315	0.011		1.018	0.016	T	0.99	0.01	L	8.3641	0.0015	0.014	109		8.33	8.38					1 S							
117616	10.644	0.045	8.795	0.017		1.537	0.038	T	1.59	0.08	L	8.7016	0.0017	0.016	94		8.67	8.72		C			1							
117617	9.060	0.013	8.397	0.011		0.569	0.004	G	0.64	0.00	H	8.4592	0.0014	0.017	135		8.43	8.49		C			1							
117618	11.210	0.054	9.288	0.018		1.630	0.047	T	2.57	0.07	O	9.0524	0.0089	0.056	120		8.93	9.12		U 2			1							
117619	10.171	0.027	9.496	0.023		0.625	0.030	T	0.69	0.03	L	9.5440	0.0024	0.021	108		9.50	9.60		C			1							
117620	8.883	0.012	8.383	0.012		0.491	0.015	G	0.56	0.02	H	8.4414	0.0017	0.015	108		8.42	8.47					1							
117621	11.243	0.069	10.474	0.058		0.700	0.070	T	0.76	0.06	L	10.5985	0.0051	0.030	82		10.55	10.65		C			1							G
117622	7.271	0.005	6.827	0.005		0.419	0.006	T	0.49	0.01	L	6.8721	0.0007	0.007	119		6.86	6.89		C			1 X							S
117623	9.883	0.022	8.731	0.014		0.990	0.020	T	0.97	0.02	L	8.7874	0.0021	0.019	103		8.75	8.82					1							
117624	9.299	0.013	8.768	0.012		0.450	0.015	G	0.52	0.02	H	8.8477	0.0011	0.016	133		8.82	8.88		C			1							
117625	10.258	0.034	9.120	0.022		0.979	0.032	T	0.96	0.03	L	9.1324	0.0020	0.020	57		9.10	9.17		D			1							
117626	8.944	0.011	8.892	0.014		0.053	0.017	T	0.07	0.01	L	8.8985	0.0016	0.016	146		8.87	8.94		C			1							
117627	8.772	0.009	7.923	0.007		0.735	0.003	G	0.78	0.00	H	7.9914	0.0009	0.012	164		7.97	8.02					1							S
117628	7.925	0.010	5.992	0.006		1.661	0.005	G	2.02	0.05	F	5.8504	0.0021	0.016	82		5.83	5.89		U 2			1 S							S
117629	5.021	0.004	5.163	0.004		−0.122	0.005	T	−0.11	0.01	L	5.1307	0.0029	0.017	79		5.12	5.16	3.74	P 1 A			1							S P
117630	8.069	0.008	7.600	0.008		0.457	0.012	G	0.53	0.01	H	7.6501	0.0010	0.009	117		7.63	7.67					1							S
117631	9.901	0.019	8.636	0.011		1.078	0.017	T	1.04	0.01	L	8.6590	0.0015	0.014	131		8.64	8.70					1							
117632	11.259	0.088	9.185	0.023		1.755	0.075	T	2.46	0.11	O	8.9890	0.0040	0.031	72		8.93	9.03		U 2			1 S							
117633	9.575	0.018	9.007	0.017		0.531	0.022	T	0.60	0.02	L	9.0714	0.0019	0.021	139		9.03	9.12					1							
117634	9.130	0.018	8.522	0.016		0.567	0.021	T	0.64	0.02	L	8.6047	0.0012	0.012	83		8.59	8.63		C			1							
117635	11.019	0.042	10.305	0.036		0.657	0.045	T	0.72	0.04	L	10.4273	0.0028	0.039	146		10.36	10.48					1							
117636	9.989	0.026	9.727	0.032		0.249	0.039	T	0.28	0.05	L	9.7311	0.0024	0.021	101		9.69	9.77					1							
117637	8.052	0.007	8.091	0.009	*	−0.031	0.010	T	−0.01	0.01	L *	8.0652	0.0023	0.019	138	*	8.04	8.10		D	23514+4745	I 1	2 C A	AB	12	0.686	0.004	1.82	0.02	S
117638	9.495	0.014	8.151	0.009		1.140	0.013	T	1.10	0.01	L	8.1643	0.0015	0.015	130		8.13	8.19					1							S
117639	9.304	0.015	8.169	0.010		0.976	0.014	T	0.96	0.01	L	8.2539	0.0014	0.012	103		8.23	8.28					1							
117640	8.129	0.007	7.765	0.008		0.364	0.006	G	0.43	0.01	H	7.8033	0.0011	0.013	155		7.78	7.82		C	23515−3226	I 1	1							S
117641	9.860	0.033	8.119	0.016		1.452	0.029	T	1.45	0.05	L	8.0492	0.0021	0.011	49		8.02	8.07		C			1							S
117642	10.087	0.023	8.689	0.013	*	1.182	0.020	T	1.14	0.02	L *	8.7250	0.0015	0.016	135	*	8.69	8.75			23515−7621	H 1	2 C D	AB	184	0.428	0.037	3.53	0.19	D
117643											T	9.3818	0.0944	0.992	129		7.83	10.78		D	23515+4205	I 2	S							G
117644	10.063	0.043	8.747	0.023		1.190	0.020	G	1.15	0.02	H	8.7857	0.0021	0.012	50		8.77	8.81		C			1							S
117645	10.835	0.053	9.127	0.022		1.426	0.045	T	1.41	0.07	L	9.1386	0.0028	0.020	76		9.10	9.17		C			1 S							
117646	7.605	0.006	7.381	0.007	*	0.218	0.015	G	0.24	0.02	H *	7.3887	0.0011	0.011	134	*	7.37	7.41		D	23515+4205	I 2	2 C A	BA	125	0.553	0.002	0.07	0.01	S
117647	8.244	0.007	7.897	0.009		0.329	0.011	T	0.38	0.01	L	7.9341	0.0021	0.019	141		7.91	7.96	0.10	P 1 A			1							S
117648	10.180	0.020	9.661	0.019		0.497	0.021	T	0.57	0.02	L	9.7038	0.0022	0.030	193		9.65	9.76					1							
117649	10.029	0.015	9.525	0.015		0.484	0.016	T	0.56	0.02	L	9.5563	0.0024	0.030	227		9.51	9.60					1 S							
117650						0.660	0.020	G	0.72	0.02	R	11.6139	0.0043	0.050	134		11.54	11.70					1							G
117651	9.039	0.013	9.021	0.017		0.021	0.020	T	0.04	0.02	L	9.0155	0.0023	0.021	140		8.98	9.06		C			1							
117652	8.688	0.015	8.560	0.018		0.131	0.001	G	0.15	0.00	H	8.5782	0.0017	0.012	62		8.56	8.60					1							S
117653	8.547	0.012	8.090	0.012		0.460	0.010	G	0.53	0.01	H	8.1274	0.0014	0.015	135		8.10	8.16		C			1							
117654	10.313	0.018	9.038	0.011		1.086	0.016	T	1.05	0.01	L	9.1014	0.0017	0.025	233		9.06	9.15					1							
117655	7.941	0.006	6.812	0.005		0.970	0.015	G	1.00	0.02	A	6.8624	0.0008	0.008	153		6.85	6.88					1							S
117656	8.769	0.010	6.995	0.005		1.478	0.009	T	1.49	0.01	L	6.9526	0.0006	0.009	147		6.94	6.97					1							S
117657	11.037	0.045	9.180	0.017		1.576	0.040	T	1.68	0.12	O	9.1128	0.0021	0.021	137		9.07	9.15					1							
117658	10.944	0.048	9.083	0.017		1.547	0.040	T	1.61	0.09	L	9.0645	0.0024	0.021	133		9.03	9.10		C			1							
117659	8.076	0.008	6.786	0.004		1.096	0.003	G	1.06	0.00	H	6.8181	0.0009	0.008	140		6.80	6.83		C			1							S
117660	10.744	0.034	10.266	0.036		0.463	0.038	T	0.53	0.04	L	10.3819	0.0033	0.031	110		10.33	10.44		C			1							
117661	8.282	0.008	8.341	0.011		−0.068	0.007	G	−0.05	0.01	H	8.3409	0.0015	0.014	133		8.32	8.37		C			1							S
117662	9.886	0.035	8.728	0.023		0.994	0.033	T	0.97	0.03	L	8.7986	0.0023	0.016	66		8.78	8.83		C			1							S
117663	10.038	0.024	9.807	0.030		0.220	0.036	T	0.24	0.04	L	9.8715	0.0018	0.020	118		9.83	9.90					1							G
117664	10.926	0.062	8.902	0.020		1.677	0.052	T	1.70	0.05	L	8.8530	0.0028	0.018	75		8.83	8.88		C			1							
117665	8.732	0.010	7.337	0.006		1.179	0.009	T	1.14	0.01	L	7.3702	0.0009	0.010	114		7.35	7.39					1							S
117666	9.571	0.025	8.804	0.021	*	0.660	0.015	G	0.72	0.01	H *	8.8872	0.0025	0.018	100	*	8.85	8.92			23518−0637	I 1	2 C A	AS	180	0.150	0.012	0.14	0.55	S
117667	10.598	0.028	9.963	0.026		0.590	0.033	T	0.66	0.03	L	10.0595	0.0020	0.023	178		10.01	10.09					1							G
117668	8.749	0.009	7.937	0.007		0.719	0.002	G	0.77	0.00	H	7.9947	0.0013	0.013	154		7.97	8.02					1							S
117669	10.771	0.039	9.761	0.026		0.907	0.003	G	0.95	0.00	I	9.7490	0.0061	0.041	90		9.70	9.83		U 2			1 X							G
117670	8.898	0.011	8.673	0.013		0.215	0.016	T	0.24	0.02	L	8.7010	0.0052	0.046	141		8.64	8.77	1.81	P 1 A			1 S							
117671	9.710	0.020	9.099	0.018		0.567	0.020	T	0.64	0.02	L	9.1923	0.0023	0.022	98		9.15	9.23					1							
117672	8.126	0.008	6.946	0.005		1.011	0.007	T	0.99	0.01	L	6.9895	0.0009	0.009	135		6.98	7.01		C			1							S
117673	7.402	0.007	6.942	0.008	*	0.434	0.010	T	0.50	0.01	L *	7.0467	0.0010	0.009	95	*	7.03	7.06		D	23519+3753	I 1	2 C A	AB	87	5.566	0.003	0.13	0.01	S
117674	6.934	0.004	6.799	0.004		0.130	0.005	T	0.14	0.01	L	6.8354	0.0008	0.007	136		6.83	6.85					1							S
117675	10.731	0.035	9.336	0.019		1.179	0.031	T	1.14	0.03	L	9.3973	0.0021	0.021	126		9.36	9.43		C			1							
117676	9.412	0.021	8.290	0.014	A	1.400	0.495	G	0.99	0.04	L *	8.3049	0.0022	0.015	54	*	8.28	8.33		D	23519−2820	I 1	2 C B	AB	69	5.262	0.029	2.95	0.09	S
117677	8.479	0.010	8.334	0.012		0.140	0.015	T	0.15	0.01	L	8.3591	0.0019	0.017	99		8.34	8.39					1							S
117678	8.290	0.008	7.160	0.005		0.972	0.007	T	0.96	0.01	L	7.2281	0.0009	0.010	160		7.21	7.25					1							S
117679	7.528	0.007	7.542	0.007		0.010	0.002	G	0.03	0.00	H	7.5474	0.0009	0.009	119		7.53	7.57		C			1							S
117680	10.052	0.022	9.419	0.019	A	0.700	0.495	G	0.69	0.05	L *	9.4527	0.0023	0.022	166	*	9.41	9.49			23519−3230	I 1	2 C C	AB	289	1.259	0.105	3.43	0.67	
117681	7.054	0.005	6.613	0.004		0.430	0.005	T	0.50	0.01	L	6.6590	0.0007	0.008	136		6.65	6.67		C			1							S
117682	10.226	0.020	9.457	0.016		0.685	0.019	T	0.74	0.02	L	9.5293	0.0020	0.028	188		9.47	9.58					1							
117683	7.607	0.006	5.761	0.003		1.527	0.037	G	1.57	0.03	C	5.7087	0.0006	0.006	153		5.70	5.72					1							S
117684	9.444	0.019	8.951	0.018		0.511	0.072	G	0.58	0.08	H	8.9953	0.0021	0.020	112		8.95	9.03		C			1							
117685	9.909	0.017	9.494	0.018		0.406	0.020	T	0.47	0.02	L	9.5534	0.0021	0.024	151		9.50	9.59		C			1							
117686	10.576	0.039	9.714	0.029		0.771	0.037	T	0.81	0.03	L	9.7796	0.0024	0.024	110		9.75	9.82		C			1							
117687	10.061	0.024	9.646	0.025	*	0.413	0.005	G	0.48	0.01	R *	9.6460	0.0024	0.024	99	*	9.60	9.70		D	23520−4533	I 1	2 C A	AB	248	0.417	0.007	0.62	0.04	
117688	8.864	0.011	7.581	0.007		1.092	0.010	T	1.05	0.01	L	7.6363	0.0015	0.017	141		7.61	7.66					1							S
117689	6.290	0.003	5.214	0.002		0.934	0.000	G	0.93	0.00	H	5.2657	0.0005	0.004	120		5.26	5.27		C			1							S
117690	11.447	0.084	10.103	0.039		1.140	0.073	T	1.10	0.08	L	10.1043	0.0456	0.336	123		9.59	10.49	12.14	P 1 A	23521+5845	I 1	1 S							G
117691	10.796	0.051	8.992	0.019		1.532	0.045	T	2.83	0.06	O	8.6725	0.0040	0.037	97		8.60	8.72		U 2			1 S							
117692	8.908	0.008	7.718	0.005		1.019	0.007	T	0.99	0.01	L	7.7622	0.0011	0.012	224		7.74	7.78		C			1							
117693	7.935	0.009	7.827	0.013		0.105	0.015	T	0.12	0.02	L	7.8620	0.0016	0.010	99		7.84	7.88					1							S
117694	11.695	0.122	10.179	0.049		1.274	0.103	T	1.23	0.11	L	10.1709	0.0029	0.028	80		10.13	10.23					1							
117695	8.856	0.014	8.310	0.013	*	0.531	0.015	G	0.60	0.02	H *	8.1557	0.0015	0.011	104	*	8.14	8.18		D	23522+4331	I 1	2 C A	AB	7	1.235	0.007	0.28	0.02	S
117696	9.391	0.021	8.711	0.018		0.617	0.021	T	0.69	0.02	L	8.7941	0.0029	0.020	79		8.75	8.82					1 S							S
117697						1.474	0.011	G	1.92	0.06	I	11.8038	0.0063	0.037	76		11.74	11.87					1							G
117698	8.932	0.013	8.811	0.015		0.200	0.015	G	0.22	0.02	H	8.8076	0.0016	0.015	120		8.79	8.84		C			1							
117699	10.831	0.031	9.182	0.013	*	1.379	0.027	T	1.35	0.03	L *	9.1914	0.0025	0.025	197	*	9.13	9.23			23522+4948	H 1	2 C B	AB	56	0.142	0.042	1.44	0.89	
117700	10.465	0.031	9.970	0.031		0.466	0.040	T	0.54	0.04	L	10.0763	0.0036	0.029	136		10.03	10.12					1							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																						Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$								F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$											%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28										29	30
117701	23 52 12.69	−52 19 56.9	7.92	H	358.052 872 30	−52.332 471 97		3.26	26.95	9.37	0.57	0.65	1.03	0.77	0.83	−29	−13	− 3	+19	+ 0	+16	+ 3	−19	+ 3	−20										0	−0.07
117702	23 52 14.21	−61 25 23.4	9.43	G	358.059 213 53	−61.423 168 03		20.70	178.75	−815.82	0.84	0.79	1.20	1.06	1.08	− 2	−16	−18	−15	+ 1	+23	+ 9	−21	−12	− 1										0	−1.32
117703	23 52 14.61	−15 51 16.5	9.05	3 H	358.060 895 42	−15.854 586 19		0.31	12.92	−16.21	1.27	0.99	1.64	1.60	1.12	+35	−19	−37	−14	− 6	+ 0	−20	−43	+49	− 7										0	0.17
117704 H	23 52 16.82	+01 29 54.8	8.11	H	358.070 102 25	+01.498 545 64	A	8.20	24.92	2.77	1.87	0.86	1.62	2.17	0.75	+17	+10	+ 4	−45	+ 6	+36	− 5	−36	+47	+53										0	−0.16
117705	23 52 16.87	+61 52 39.2	7.24	H	358.070 273 73	+61.877 567 91		−0.07	−3.51	−0.92	0.49	0.53	0.68	0.58	0.62	−17	+10	+16	+16	− 2	+ 7	− 1	+ 5	+15	−11										1	0.55
117706	23 52 18.82	−46 07 42.9	9.17	H	358.078 404 72	−46.128 569 89		22.52	−63.71	−32.08	1.22	0.99	1.55	1.58	1.00	−18	+22	−30	− 7	− 3	+ 0	− 5	−24	− 3	−33										0	−0.53
117707	23 52 19.54	+62 07 06.6	9.30	G	358.081 428 64	+62.118 501 76		−0.33	−3.22	−1.25	0.73	0.77	0.99	0.86	0.88	−10	+ 7	+20	+16	+ 3	+ 2	+ 3	+16	+11	− 6										0	−0.20
117708	23 52 19.94	−18 01 33.2	8.17	H	358.083 086 48	−18.025 893 11		13.88	78.46	−20.29	0.90	0.79	1.18	1.40	0.97	+34	−28	−40	− 5	−18	+37	−21	−42	+23	+ 5										0	0.29
117709	23 52 20.00	+19 51 18.0	8.80	H	358.083 335 93	+19.855 004 80		6.29	1.79	14.96	0.87	0.66	1.10	0.93	0.74	+39	+17	− 8	+26	+14	−14	+17	+ 9	+ 1	+55										0	2.13
117710	23 52 23.42	+21 40 16.0	6.13	1 H	358.097 591 94	+21.671 113 67		5.96	−50.39	−5.88	0.58	0.45	0.76	0.60	0.45	+24	+21	− 2	+ 8	+ 1	− 1	+ 4	− 8	+14	+24										0	1.28
117711	23 52 23.81	+65 16 09.3	9.47	H	358.099 205 44	+65.269 250 35		1.23	6.90	−3.52	0.81	0.83	1.07	1.05	1.02	−12	+ 9	+27	− 6	+ 4	+ 8	+ 4	+ 2	+ 0	−30										0	−0.42
*117712	23 52 24.52	+75 32 40.2	6.36	H	358.102 170 80	+75.544 486 46		92.68	341.82	41.88	0.49	0.46	0.55	0.53	0.47	−15	−14	+16	−15	+ 4	+11	+ 1	−24	+ 8	−14										0	1.30
*117713	23 52 24.29	−09 33 14.9	8.75	G	358.101 191 74	−09.554 135 79		11.34	157.64	−65.33	1.17	0.73	1.21	1.74	0.94	+19	−15	−17	−15	+ 6	− 2	+ 6	−10	+ 6	−21										0	0.28
117714 H	23 52 26.77	−28 22 22.1	9.64	H	358.111 537 42	−28.372 816 39	A	3.02	30.91	6.77	2.59	1.99	2.57	4.64	2.47	+11	−30	−14	− 1	+ 8	+ 6	+ 5	+20	+23	−17										9	0.48
117715	23 52 27.73	−56 38 34.2	8.41	H	358.115 557 17	−56.642 828 40		4.65	4.99	10.50	0.63	0.65	1.00	0.75	0.75	−14	− 7	−28	+18	+ 7	−13	+ 4	+ 6	+ 3	− 6										0	1.14
117716	23 52 28.45	−58 33 00.6	7.20	H	358.118 531 39	−58.550 174 32		10.46	−7.94	7.91	0.49	0.56	0.79	0.56	0.71	−11	−12	−20	−11	+10	+15	+14	− 5	− 3	+ 7										0	2.29
117717 H	23 52 29.24	+12 52 22.2	9.08	H	358.121 817 55	+12.872 839 34	A	13.08	24.51	−34.60	3.44	2.65	3.21	3.59	2.87	+47	− 7	−11	−10	+ 1	+14	− 1	− 5	+13	+65										2	2.08
117718	23 52 29.29	+19 07 13.3	5.06	1 H	358.122 050 65	+19.120 370 02		7.46	−6.42	−34.22	0.53	0.45	0.69	0.54	0.45	+35	+14	− 4	+ 5	− 7	+ 1	− 6	−15	+ 9	+36										0	0.59
117719	23 52 29.32	−09 24 25.1	10.10	G	358.122 175 81	−09.406 979 16		12.49	203.36	10.00	1.50	1.14	1.77	2.25	1.37	+36	−17	−26	− 7	+ 1	− 1	− 1	−12	− 2	−10										0	2.23
117720	23 52 29.77	−24 09 55.8	10.13	G	358.124 027 50	−24.165 510 72		11.51	−15.58	−38.64	1.86	1.02	2.03	2.71	1.93	+24	−10	−34	−36	+16	−11	+13	−43	+44	−10										0	−0.87
117721	23 52 29.83	−61 53 53.3	9.05	H	358.124 282 72	−61.898 125 79		3.05	33.42	−7.71	0.73	0.72	1.01	0.95	0.93	− 7	− 7	−23	+14	+ 6	− 5	+ 5	+ 1	− 7	−15										0	−1.49
117722	23 52 30.05	−14 15 04.3	5.85	G	358.125 201 05	−14.251 207 00		11.38	−95.97	−4.18	0.82	0.62	1.05	1.23	0.76	+34	−36	−46	− 7	−13	+33	− 6	−19	+12	+ 1										0	−0.06
117723	23 52 32.38	−34 06 01.2	8.19	H	358.134 909 58	−34.100 335 58		3.32	−4.01	−39.39	0.92	0.59	1.15	1.14	0.56	− 2	+12	−10	−48	+12	−24	+14	−43	+26	−29										0	−0.79
117724	23 52 32.92	+68 56 01.7	9.97	3 H	358.137 184 68	+68.933 808 79		2.96	3.27	−8.70	0.95	0.93	1.25	1.17	1.15	+11	+ 3	+ 8	+ 1	− 6	+ 8	− 3	−14	+20	+31										0	1.85
117725	23 52 33.44	+28 57 08.2	8.42	H	358.139 340 27	+28.952 267 04		4.32	−7.26	−10.16	0.78	0.61	0.96	0.79	0.61	+ 4	+24	− 5	+ 7	+ 6	−10	+ 8	−13	+ 8	+13										0	2.32
117726	23 52 34.11	−57 00 31.9	9.68	H	358.142 125 73	−57.008 854 83		8.07	−28.29	−19.04	0.89	1.04	1.59	0.99	1.18	−21	+ 6	−31	− 3	+10	−11	+ 4	+19	− 3	− 5										2	1.56
117727	23 52 35.07	+35 20 11.6	8.03	H	358.146 121 08	+35.336 557 02		14.69	55.34	−51.85	0.84	0.62	0.95	0.99	0.72	+16	+20	− 8	− 6	+ 7	− 3	+ 0	+10	− 1	+31										0	0.01
117728	23 52 36.07	−30 10 09.0	12.09	G	358.150 300 16	−30.169 167 56		−0.52	30.40	−13.19	2.76	3.05	3.44	3.12	3.50	+24	+ 5	+ 8	+ 5	+14	+15	+15	+46	+36	+25										0	1.09
117729	23 52 36.54	−44 30 00.0	10.14	H	358.152 249 32	−44.500 007 52	A	15.95	0.38	−67.31	2.98	2.82	4.08	3.36	2.63	− 1	+ 2	−21	+12	+ 2	+ 6	+ 1	−15	−12	− 9										7	2.42
117730	23 52 37.12	+10 56 50.4	5.30	G	358.154 657 52	+10.947 328 37		17.31	−22.23	−3.51	1.05	0.81	1.29	1.08	0.93	+38	+15	−19	+19	+27	−19	+24	+26	− 3	+52										0	
117731	23 52 37.95	+25 46 53.6	9.09	H	358.158 140 52	+25.781 548 86		5.63	1.14	−8.53	0.87	0.76	1.15	0.99	0.90	+34	+14	−17	+14	+17	+ 4	+17	+20	+ 1	+51										0	1.36
117732	23 52 38.17	−68 01 25.4	7.45	H	358.159 022 06	−68.023 716 23		4.51	45.26	4.62	0.54	0.56	0.73	0.59	0.61	− 2	+13	−27	− 8	+ 3	− 8	+ 0	+ 7	+ 2	+10										0	−1.90
117733	23 52 39.67	+54 16 08.1	7.57	G	358.165 302 13	+54.268 926 91		19.33	−5.13	−39.66	0.51	0.59	0.85	0.64	0.67	−22	+19	+24	+16	−11	− 2	− 6	+ 5	+13	−17										0	−1.60
117734	23 52 39.87	−18 33 42.7	6.83	H	358.166 104 37	−18.561 868 26		12.09	27.13	−1.74	0.84	0.70	1.11	1.20	0.81	+34	−33	−43	−21	−29	+52	−23	−45	+24	+14										0	−0.47
117735	23 52 40.21	+21 44 33.4	6.68	H	358.167 548 99	+21.742 600 42		7.20	−18.38	−23.52	0.63	0.48	0.83	0.65	0.49	+26	+13	− 7	+ 9	+ 7	− 7	+ 7	− 4	+ 6	+29										0	1.42
117736	23 52 40.49	−05 59 37.1	9.55	G	358.168 721 10	−05.993 641 20		28.47	431.15	−38.33	1.40	1.13	1.73	2.16	1.51	+49	−27	−41	− 5	+14	− 9	+15	+14	+11	+12										0	1.19
117737	23 52 40.88	−24 59 06.7	6.77	H	358.170 339 14	−24.985 199 35		2.64	−6.37	11.93	0.87	0.54	0.93	1.07	0.80	+35	−27	−22	+19	+14	− 5	+ 7	− 1	+19	+17										0	−1.15
117738	23 52 41.42	−16 22 28.9	7.61	2 H	358.172 570 55	−16.374 687 73		1.31	−25.48	−18.47	0.88	0.86	1.10	1.09	0.95	+32	− 7	−39	−30	−19	+16	−19	−54	+31	+20										0	2.17
117739	23 52 42.82	−00 48 29.7	10.22	H	358.178 432 40	−00.808 249 55		2.71	16.61	−3.37	1.47	1.07	1.72	1.85	0.90	+27	− 4	− 7	−12	+ 6	+28	+ 2	−41	+16	+43										0	1.68
117740	23 52 42.84	+08 43 13.8	8.50	H	358.178 496 65	+08.720 491 29		10.27	79.35	1.36	1.04	0.70	1.07	1.12	0.88	+32	+13	− 2	−15	+36	−11	+30	+37	−10	+48										0	−0.04
117741	23 52 44.00	+53 28 23.3	9.55	H	358.183 317 34	+53.473 144 48		0.20	−1.98	1.72	0.79	0.89	1.35	1.00	1.14	−24	+20	+23	+ 3	+ 1	+ 9	− 2	+ 9	+ 0	−20										1	0.73
*117742 H	23 52 44.86	+65 11 54.2	9.22	H	358.186 928 31	+65.198 394 91	*	2.76	9.13	1.42	3.37	2.31	1.31	1.34	1.19	+ 7	+ 8	+21	−13	+ 5	+ 3	+ 5	− 2	+ 7	−14										0	−0.94
*117743	23 52 44.85	−08 53 41.5	7.73	H	358.186 873 61	−08.894 873 73		1.35	−3.89	−5.93	0.87	0.65	1.02	1.39	0.82	+31	−14	−16	+11	− 4	+30	− 7	− 8	− 9	−13										0	1.76
117744	23 52 45.07	+34 58 18.4	8.26	2 H	358.187 780 61	+34.971 777 41		1.44	16.12	8.53	0.80	0.56	0.90	0.92	0.59	− 3	+13	− 8	−12	+13	− 9	+ 8	+ 7	+ 0	+17										0	−0.13
117745	23 52 45.72	−09 33 41.3	8.52	H	358.190 485 68	−09.561 480 52		0.93	17.91	−14.42	1.08	0.72	1.15	1.57	0.90	+20	−13	− 5	−11	+ 3	+ 7	+ 1	−12	+11	−18										0	1.08
117746	23 52 46.25	+79 50 05.3	8.01	H	358.192 698 33	+79.834 805 67		7.87	59.99	2.14	0.58	0.58	0.69	0.65	0.59	− 8	− 4	+28	+ 6	+ 7	+19	+ 0	− 8	− 3	−19										1	1.64
117747	23 52 47.57	−12 01 00.7	7.37	2 H	358.198 190 82	−12.016 853 26		2.81	−10.97	−25.56	0.86	0.64	0.99	1.14	0.82	+30	−18	−24	−16	− 7	+21	− 6	−21	+14	+10										2	1.86
117748	23 52 48.30	+38 41 10.8	10.03	H	358.201 235 11	+38.686 338 15	C	29.59	−3.78	−3.22	14.21	13.05	10.68	8.43	7.15	+20	+12	+31	+28	−14	+ 0	−14	+ 0	+ 1	+20										17	3.14
117749	23 52 48.47	−72 23 58.0	7.54	H	358.201 948 45	−72.399 454 04		9.45	30.67	2.67	0.60	0.54	0.68	0.68	0.58	− 4	+14	− 4	+16	+15	+ 1	+17	−15	+ 3	+ 3										0	0.96
117750	23 52 48.78	+46 28 22.7	9.48	H	358.203 229 95	+46.472 982 70		−0.99	−6.72	−3.73	0.77	0.78	1.23	0.87	0.83	− 6	+ 4	+29	−17	+ 4	− 5	+ 8	+24	+23	−14										0	0.37
117751	23 52 48.89	−85 53 44.0	7.96	H	358.203 721 97	−85.895 544 81		5.92	−0.07	18.44	0.48	0.52	0.61	0.64	0.54	+10	− 8	− 9	− 9	+10	− 4	+ 8	+ 0	+ 3	+ 9										0	0.79
117752	23 52 49.55	+38 41 16.2	9.49	H	358.206 447 35	+38.687 840 61	A	4.56	−14.29	−19.87	8.27	8.98	9.67	7.79	7.74	+25	+13	+26	+38	−12	+ 2	−11	− 1	− 3	+26										17	3.14
117753	23 52 49.95	−14 05 05.8	8.52	H	358.208 132 93	−14.084 941 53		11.06	74.00	30.76	1.01	0.86	1.40	1.44	1.03	+38	−35	−44	− 9	−16	+44	− 1	−13	+ 4	+12										3	−1.60
117754	23 52 50.01	+48 28 54.5	7.42	H	358.208 376 71	+48.481 805 73		7.53	23.14	2.18	0.50	0.52	0.81	0.57	0.55	+ 0	+14	+24	−11	− 5	−15	+ 1	+24	+21	− 6										1	−1.50
117755	23 52 50.37	−16 42 55.0	9.16	H	358.209 864 78	−16.715 271 93		6.20	47.73	4.13	1.10	1.06	1.41	1.37	1.16	+42	−14	−38	−14	−15	+10	−24	−51	+38	+14										0	1.59
117756	23 52 50.49	−08 59 48.1	5.76	H	358.210 384 58	−08.996 698 56		5.33	61.73	−23.61	0.71	0.52	0.81	1.10	0.62	+28	−19	−10	+ 5	− 1	+25	− 4	− 8	− 8	−18										0	−0.16
117757	23 52 51.54	−56 46 25.4	8.68	G	358.214 732 33	−56.773 708 75		9.61	−5.44	7.10	0.62	0.79	1.19	0.78	0.87	−11	− 2	−36	+14	+ 7	− 9	+ 4	+14	− 8	− 6										1	0.49
117758	23 52 51.97	+45 03 06.3	9.00	H	358.216 532 83	+45.051 756 66		2.02	−10.70	−10.04	0.84	0.83	1.35	0.97	0.91	− 8	+ 2	+29	+39	− 4	− 7	− 2	+28	+32	−14										0	−0.09
117759	23 52 52.78	+42 54 09.8	9.69	H	358.219 916 58	+42.902 718 20		5.22	−18.39	−12.88	0.85	0.87	1.31	0.90	0.88	+ 3	+15	+16	+23	−20	− 7	−16	+ 7	+14	− 3										0	0.43
117760	23 52 53.57	−58 50 18.0	7.40	H	358.223 222 54	−58.838 331 38		11.20	45.53	20.44	0.53	0.59	0.85	0.58	0.76	−17	+12	−24	−16	+15	− 4	+14	− 5	− 3	+10										2	0.88
117761	23 52 55.52	−03 09 19.4	5.93	G	358.231 333 86	−03.155 378 13		6.53	77.52	−42.58	0.86	0.58	0.85	1.11	0.71	+ 8	+18	−15	+15	+ 8	+ 2	+ 8	+35	−14	− 8										0	1.42
*117762	23 52 56.31	+36 57 16.1	6.52	H	358.234 636 61	+36.954 474 75		20.07	−124.14	−90.29	0.59	0.48	0.75	0.63	0.55	+10	+33	+ 3	+ 4	+ 7	−23	+ 8	+32	+ 5	+16										0	0.69
*117763	23 52 56.24	+61 00 08.4	8.80	2 H	358.234 336 53	+61.002 335 02		−0.43	−3.05	−3.56	0.69	0.68	0.91	0.90	0.82	−13	+ 1	+19	+17	+ 2	−14	+ 5	+ 8	+ 0	−10										0	0.77
*117764	23 52 58.63	+11 55 31.8	8.08	H	358.244 302 39	+11.925 508 56	B	11.42	47.85	−33.02	14.24	10.99	6.68	9.56	7.40	+39	+13	− 7	−11	+12	−15	+10	+ 9	− 9	+44										18	1.97
*117765	23 52 58.54	+32 03 55.0	8.51	G	358.243 920 12	+32.065 281 92		4.09	−43.56	−30.18	0.87	0.60	0.98	0.99	0.68	− 7	+20	−16	+15	+ 3	+ 5	+10	−13	+26	+ 6										0	0.84
117766	23 52 58.93	−46 30 47.1	8.83	H	358.245 543 19	−46.513 074 77		3.24	−8.10	−16.59	0.99	0.88	1.30	1.14	0.92	+ 4	−18	−26	+ 3	−19	+24	−19	−39	+ 9	−10										0	0.96
117767	23 52 59.60	−28 21 15.0	8.81	H	358.248 344 88	−28.354 174 91		2.01	8.76	3.38	1.45	1.00	1.28	1.89	1.22	+14	−13	− 2	− 4	+30	− 2	+37	+38	−15	− 7										0	−0.78
117768	23 52 59.91	+11 55 27.7	7.28	G	358.249 633 34	+11.924 370 31	A	9.58	52.69	−34.41	3.55	2.56	3.28	3.06	2.33	+39	+12	− 1	−16	+ 8	−17	+ 8	+ 2	−12	+46										18	1.97
117769	23 53 00.07	+41 20 44.5	6.94	2 H	358.250 296 51	+41.345 697 23		1.76	14.86	−0.66	0.63	0.48	0.78	0.62	0.52	+ 5	+13	+11	+46	− 7	+ 5	− 4	+22	+26	+10										0	2.04
117770	23 53 00.88	+17 53 59.3	6.57	H	358.253 668 86	+17.899 817 61		6.94	68.28	−19.05	0.63	0.48	0.86	0.69	0.53	+39	+ 6	− 1	−11	− 8	+21	− 6	− 6	+28	+45										0	−0.77
117771	23 53 01.85	−40 00 50.0	8.90	H	358.257 718 35	−40.013 889 11		1.21	23.83	2.86	0.69	0.80	1.25	0.79	0.81	+11	+14	− 5	+30	−17	+32	−19	−36	− 5	+ 4										0	−0.45
117772	23 53 02.33	+59 25 17.8	7.86	G	358.259 706 91	+59.421 611 32		3.91	62.54	−0.47	0.60	0.61	0.83	0.86	0.78	−15	+12	+ 9	+14	+ 7	+ 3	+ 6	+16	+ 2	−10										4	0.03
117773	23 53 02.52	−73 55 46.7	8.46	H	358.260 496 13	−73.929 631 42		3.51	22.18	15.66	0.66	0.60	0.78	0.68	0.62	− 1	− 2	−19	−25	+ 4	+ 0	+ 1	− 8	+ 6	+15										0	−0.19
117774	23 53 04.75	+02 05 26.3	6.29	H	358.269 787 30	+02.090 651 53		7.06	14.02	−10.90	0.87	0.42	0.85	1.14	0.84	+25	−16	− 6	−45	− 4	+29	+ 1	−46	+27	+19										0	0.75
117775	23 53 04.84	+60 42 16.2	6.71	H	358.270 146 99	+60.704 502 15		3.72	6.96	−2.93	0.48	0.49	0.65	0.55	0.54	−17	+ 7	+14	+18	− 3	− 4	− 2	+ 4	+ 9	−17										2	1.77
117776	23 53 06.87	+02 19 51.6	8.03	G	358.278 637 37	+02.331 002 17		10.03	34.78	46.46	1.02	0.48	1.10	1.15	0.54	+29	−25	+ 7	−32	+ 0	+41	−10	−26	+29	+49										0	−0.03
117777	23 53 07.03	−06 38 59.6	8.38	H	358.279 303 85	−06.649 886 10		2.32	−0.62	−14.97	1.00	0.78	1.19	1.46	1.07	+51	−26	−29	−22	− 6	+16	+ 2	− 1	+11	+17										0	0.84
117778	23 53 07.26	+25 59 55.7	7.51	H	358.280 265 53	+25.998 793 08		11.00	99.56	−39.62	0.68	0.63	0.91	0.76	0.68	+33	+12	−20	+15	+17	+ 1	+18	+17	+ 7	+46										0	1.45
*117779	23 53 08.64	+29 01 04.9	9.75	2 G	358.286 016 75	+29.018 018 15		44.62	−71.08	22.90	3.18	2.55	3.88	3.29	2.44	+15	+ 4	+12	− 6	+ 7	+ 9	+ 6	+18	+ 5	+26										0	
*117780 H	23 53 07.94	−05 20 05.1	9.55	H	358.283 085 05	−05.334 747 00	A	−0.41	14.28	−0.38	2.46	2.03	2.68	3.41	2.53	+31	−23	−32	+15	+ 4	+34	+18	+32	+ 7	+26										1	0.49
*117781	23 53 08.16	+06 41 56.4	8.24	H	358.283 983 46	+06.699 002 01		0.19	7.64	−10.71	0.99	0.67	1.14	1.09	0.92	+39	−12	−21	− 7	+ 2	+ 9	+ 2	+ 8	+10	+45										2	−2.12
*117782	23 53 08.54	−54 22 01.5	7.70	1 H	358.285 578 10	−54.367 080 74		3.67	41.63	−20.28	0.53	0.60	0.94	0.59	0.69	−33	+13	−18	+ 1	+ 6	+ 5	+ 6	+ 9	− 9	−31										1	0.96
117783	23 53 09.88	−66 38 49.7	9.08	H	358.291 170 40	−66.647 147 99		14.10	−17.73	−104.52	0.71	0.69	0.91	0.86	0.91	+ 5	+ 0	− 6	−12	+ 1	+ 5	+ 2	−13	−12	+19										0	0.14
117784	23 53 10.95	+32 24 30.7	8.39	G	358.295 616 85	+32.408 525 54		3.06	8.37	0.14	0.82	0.59	0.96	0.96	0.67	− 4	+17	−19	+24	+ 5	+ 7	+12	− 7	+22	+11										0	0.85
117785	23 53 10.97	+31 54 36.3	7.36	H	358.295 704 93	+31.910 085 37		10.98	16.57	−1.09	0.81	0.52	0.91	1.06	0.59	− 3	+18	−12	+19	+ 3	+17	+ 9	− 5	+24	+ 8										0	−0.48
117786	23 53 11.11	−26 03 37.4	9.36	H	358.296 283 90	−26.060 380 41		6.89	0.85	−16.56	1.55	0.89	1.54	2.17	1.28	+38	+ 5	− 3	+42	+23	+ 8	+16	+10	+21	+17										0	1.18
117787	23 53 12.07	+05 09 27.2	8.08	H	358.300 310 60	+05.157 569 32		2.69	−14.83	−11.45	1.04	0.56	1.13	1.22	0.75	+33	+15	− 7	−11	− 8	+11	− 4	−18	+17	+42										0	−0.74
117788	23 53 12.14	+35 03 08.7	7.70	H	358.300 599 59	+35.052 429 67		4.35	−39.86	−43.45	0.69	0.50	0.79	0.80	0.54	+ 1	+11	−10	−15	+12	− 7	+ 7	+ 5	+ 5	+21										0	1.43
117789	23 53 13.59	−11 00 52.6	7.66	H	358.306 642 82	−11.014 620 34		7.06	153.19	−110.68	0.91	0.68	1.15	1.20	0.77	+27	−12	−27	−26	−16	+44	− 8	−31	+17	+ 9										0	−1.10
117790	23 53 13.79	+66 24 11.7	8.89	H	358.307 460 63	+66.403 260 01		2.45	12.89	−5.63	0.84	0.74	1.01	1.09	0.81	−18	+ 1	+32	+29	−10	− 5	− 9	+11	+ 3	−21										0	−0.80
117791	23 53 13.81	+19 24 01.9	11.58	H	358.307 532 61	+19.400 520 37		6.10	−172.10	−125.97	2.14	1.63	2.72	2.17	1.81	+41	+20	+ 0	+ 7	+ 0	+ 1	+ 4	−10	+ 6	+54										0	−0.22

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
117701	9.305	0.011	8.052	0.007		1.068	0.010	T	1.03	0.01	L	8.0850	0.0016	0.017	192		8.06	8.12				1							S
117702	10.392	0.029	9.525	0.022		0.794	0.009	G	0.83	0.01	H	9.5736	0.0024	0.022	129		9.54	9.63		C		1							
117703	11.038	0.076	9.298	0.029		1.480	0.067	T	2.61	0.23	O	9.0590	0.0661	0.543	58		8.40	9.87	133.10	P 1 A		1 S							
117704	8.548	0.009	8.166	0.009	A	0.000	0.495	G	0.44	0.04	L *	8.1989	0.0013	0.014	156	*	8.18	8.22			23523+0130	I 1	2 C C	AB	150	1.884	0.034	3.79	0.13	S
117705	7.954	0.008	7.319	0.006		0.590	0.009	T	0.66	0.01	L	7.3624	0.0013	0.013	150		7.35	7.38				1							S
117706	10.072	0.024	9.238	0.019		0.734	0.023	T	0.78	0.02	L	9.3059	0.0028	0.023	91		9.26	9.35		C		1							
117707	9.650	0.017	9.369	0.019		0.313	0.009	G	0.36	0.01	H	9.3900	0.0023	0.023	145		9.35	9.43				1							G
117708	8.763	0.014	8.229	0.013		0.509	0.014	T	0.58	0.01	L	8.2796	0.0017	0.011	69		8.26	8.30		C		1							S
117709	9.224	0.015	8.841	0.015		0.404	0.015	G	0.47	0.02	H	8.8885	0.0016	0.019	105		8.86	8.93				1							
117710	8.220	0.009	6.315	0.004		1.616	0.008	T	1.87	0.03	O	6.2189	0.0014	0.010	90		6.20	6.23		M		1							S P
117711	9.743	0.020	9.494	0.024		0.237	0.029	T	0.26	0.04	L	9.5392	0.0027	0.022	120		9.50	9.59		C		1							G
117712	7.629	0.006	6.483	0.005		0.977	0.006	G	1.10	0.06	F	6.4992	0.0008	0.007	121		6.49	6.52			23526+7532	I 1	1						S
117713	9.502	0.024	8.823	0.020		0.630	0.003	G	0.70	0.00	H	8.8772	0.0023	0.016	74		8.84	8.90				1							S
117714	10.463	0.044	9.796	0.040	A	0.524	0.100	G	0.63	0.07	B *	9.7585	0.0034	0.022	53	*	9.71	9.80		D	23525−2822	I 1	2 C A	AB	175	4.408	0.013	2.00	0.07	
117715	8.619	0.008	8.423	0.009		0.180	0.012	T	0.20	0.01	L	8.4669	0.0020	0.020	179		8.43	8.50				1							S
117716	7.559	0.005	7.240	0.005		0.306	0.008	T	0.35	0.01	L	7.2765	0.0010	0.011	151		7.26	7.30		C		1							S
117717	9.408	0.039	8.699	0.030	*	0.653	0.040	T	0.72	0.04	L *	9.2116	0.0031	0.025	85	*	9.16	9.25		D	23525+1252	I 1	2 C A	AB	32	1.874	0.004	0.36	0.02	S
117718	7.134	0.006	5.264	0.003		1.587	0.006	T	2.09	0.02	O	5.1330	0.0019	0.016	106		5.11	5.17		U 2			1 S						S P
117719	11.108	0.072	10.221	0.053		0.766	0.002	G	0.81	0.00	H	10.2447	0.0023	0.017	77		10.19	10.30				1							
117720	10.927	0.054	10.246	0.042		0.649	0.015	G	0.71	0.01	H	10.2615	0.0037	0.026	106		10.20	10.31				1							
117721	10.116	0.023	9.140	0.016		0.840	0.005	G	0.86	0.00	H	9.2031	0.0021	0.021	143		9.18	9.24		C		1							
117722	7.485	0.007	5.986	0.004		1.252	0.002	G	1.21	0.00	H	6.0077	0.0008	0.006	66		6.00	6.02				1							S
117723	9.935	0.016	8.335	0.008		1.341	0.014	T	1.31	0.02	L	8.3472	0.0014	0.015	160		8.32	8.37		C		1							S
117724	10.476	0.034	9.971	0.034		0.475	0.044	T	0.55	0.05	L	10.0738	0.0051	0.034	115		10.02	10.17		P 1 A		1							G
117725	8.492	0.011	8.417	0.013		0.074	0.016	T	0.09	0.02	L	8.4516	0.0013	0.014	86		8.43	8.47		C		1							S
117726	10.187	0.019	9.672	0.019		0.493	0.020	T	0.57	0.02	L	9.7841	0.0026	0.036	168		9.71	9.84				1							
117727	8.671	0.014	8.084	0.013		0.548	0.017	T	0.62	0.02	L	8.1543	0.0016	0.011	82		8.14	8.17		C		1 G							S
117728						−0.291	0.015	G	−0.32	0.02	H	12.0460	0.0100	0.065	52		11.93	12.15				1							D
117729	10.917	0.041	10.197	0.033	A	0.648	0.040	T	0.71	0.04	L	10.2754	0.0254	0.075	119	A	10.21	10.42		D	23526−4430	I 1	2 C A	AB	349	16.819	0.021	1.18	0.09	
117730	5.530	0.004	5.332	0.003		0.186	0.003	G	0.20	0.00	H	5.3638	0.0005	0.004	81		5.36	5.37		D			1 X S						S P
117731	9.387	0.017	9.122	0.019		0.252	0.024	T	0.28	0.03	L	9.1637	0.0020	0.020	92		9.13	9.20		C		1							
117732	8.658	0.009	7.554	0.006		0.952	0.008	T	0.94	0.01	L	7.6167	0.0012	0.013	148		7.59	7.64				1							S
117733	8.168	0.008	7.649	0.008		0.487	0.010	T	0.56	0.01	L	7.6884	0.0010	0.013	150		7.67	7.72				1							S
117734	6.940	0.006	6.838	0.006		0.090	0.001	G	0.10	0.00	H	6.8637	0.0009	0.007	78		6.85	6.88				1							S
117735	7.872	0.008	6.776	0.005		0.947	0.007	T	0.94	0.01	L	6.8393	0.0007	0.008	97		6.82	6.85		C		1							S
117736	11.097	0.078	9.732	0.035		1.076	0.001	G	1.16	0.00	A	9.6947	0.0017	0.018	75		9.65	9.74				1							
117737	8.451	0.010	6.901	0.005		1.301	0.009	T	1.26	0.01	L	6.9235	0.0009	0.010	110		6.91	6.94				1							S
117738	9.710	0.026	7.836	0.011		1.645	0.015	G	2.46	0.05	F	7.6375	0.0073	0.075	66		7.51	7.73	34.32	P 1 A		1 S							S
117739	10.807	0.056	10.255	0.052		0.517	0.068	T	0.59	0.07	L	10.3365	0.0026	0.028	92		10.27	10.38				1							
117740	9.062	0.016	8.548	0.015		0.483	0.020	T	0.55	0.02	L	8.6039	0.0015	0.010	83		8.59	8.62		C		1							S
117741	9.580	0.016	9.555	0.021		0.028	0.024	T	0.04	0.02	L	9.5675	0.0025	0.029	156		9.52	9.62				1							G
117742	9.581	0.019	9.265	0.021	*	0.300	0.026	T	0.34	0.04	L *	9.3011	0.0021	0.022	114	*	9.26	9.34		D	23527+6512	H 1	2 C A	AB	41	0.238	0.032	2.10	0.35	
117743	9.271	0.018	7.861	0.011		1.191	0.017	T	1.15	0.01	L	7.8978	0.0011	0.010	82		7.88	7.93		C		1							S
117744	10.420	0.036	8.502	0.014		1.626	0.032	T	2.54	0.05	O	8.2736	0.0039	0.033	87		8.23	8.33		U 2		1 S							
117745	10.393	0.044	8.677	0.019		1.432	0.038	T	1.42	0.06	L	8.6633	0.0022	0.015	73		8.63	8.69				1							
117746	8.449	0.009	8.057	0.009		0.371	0.012	T	0.43	0.01	L	8.0991	0.0012	0.013	124		8.07	8.13			23527+7950	I 1	1						
117747	9.349	0.023	7.628	0.011		1.464	0.021	T	2.85	0.04	O	7.3108	0.0053	0.049	79		7.24	7.46		U 2			1 S						S
117748	10.340	0.032	9.933	0.035	C	0.385	0.043	T	0.45	0.05	L	9.8758	0.0401			C				D	23528+3841	I 2	1 C I A						
117749	8.102	0.008	7.601	0.007		0.485	0.004	G	0.56	0.00	H	7.6481	0.0011	0.012	137		7.63	7.67		C	23528−7224	I 1	1						S
117750	9.289	0.012	9.455	0.018		−0.100	0.015	G	−0.08	0.02	H	9.4453	0.0019	0.023	158		9.40	9.48				1							
117751	8.207	0.008	7.979	0.010		0.212	0.013	T	0.23	0.01	L	8.0266	0.0013	0.014	147		8.00	8.05		C		1							S
117752	9.902	0.023	9.429	0.023	A	0.446	0.030	T	0.52	0.03	L	9.5898	0.0321	0.124	118	A	9.51	9.85		D	23528+3841	I 2	1 C P A						
117753	9.006	0.019	8.570	0.019		0.425	0.022	T	0.49	0.02	L	8.6190	0.0027	0.014	69		8.59	8.65		C		1							S
117754	7.584	0.005	7.431	0.006		0.147	0.007	T	0.16	0.01	L	7.4721	0.0012	0.011	144		7.45	7.50				1							S
117755	9.571	0.023	9.176	0.024		0.386	0.028	T	0.45	0.03	L	9.2533	0.0023	0.021	62		9.22	9.29		C		1							S
117756	7.263	0.006	5.884	0.003		1.171	0.003	G	1.12	0.02	A	5.9224	0.0005	0.006	81		5.91	5.93				1							S
117757	9.103	0.010	8.716	0.011		0.382	0.015	G	0.45	0.02	H	8.7689	0.0018	0.021	175		8.74	8.80		C		1							S
117758	10.695	0.038	9.122	0.017		1.319	0.033	T	1.28	0.04	L	9.1581	0.0019	0.019	101		9.13	9.19				1							
117759	10.160	0.025	9.706	0.026		0.428	0.033	T	0.50	0.04	L	9.7902	0.0028	0.021	119		9.76	9.84				1							
117760	7.801	0.007	7.446	0.006		0.345	0.008	T	0.40	0.01	L	7.4824	0.0010	0.012	143		7.46	7.50		C		1							S
117761	7.315	0.007	6.051	0.005		1.069	0.004	G	1.02	0.02	A	6.0994	0.0009	0.005	46		6.09	6.11		C	23529−0309	I 1	1						S
117762	7.173	0.005	6.596	0.005		0.571	0.004	G	0.64	0.00	H	6.6449	0.0008	0.006	95		6.63	6.66		C			1						S
117763	11.997	0.139	9.282	0.019		2.283	0.116	T	2.99	0.56	K	8.7129	0.0201	0.184	129		8.47	8.94		U 2 C			1 S						
117764	8.286	0.010	7.926	0.011	B	0.387	0.003	G	0.45	0.00	H	7.9415	0.0411			B				D	23530+1155	I 2	1 C I A						S
117765	9.006	0.015	8.565	0.015		0.450	0.015	G	0.52	0.02	H	8.6104	0.0015	0.012	87		8.59	8.64		C			1						
117766	10.366	0.028	8.966	0.015		1.183	0.025	T	1.14	0.02	L	8.9996	0.0025	0.019	116		8.96	9.04				1							
117767	10.516	0.047	8.996	0.023		1.278	0.041	T	1.24	0.04	L	8.9728	0.0024	0.012	50		8.96	9.00		C		1							
117768	7.615	0.008	7.269	0.008	A	0.308	0.006	G	0.35	0.01	H	7.3611	0.0308	0.126	84	A	7.16	7.51		D	23530+1155	I 2	1 C P A						S
117769	9.120	0.015	7.146	0.007		1.673	0.014	T	2.15	0.04	O	7.0059	0.0033	0.029	96		6.95	7.05		U 2 C	23530+4120	I 1	1						S
117770	8.425	0.010	6.734	0.004		1.412	0.009	T	1.39	0.01	L	6.7115	0.0011	0.009	112		6.69	6.73					1						S
117771	10.131	0.022	9.016	0.014		0.961	0.020	T	0.95	0.02	L	9.0650	0.0017	0.018	134		9.03	9.10		C		1							
117772	9.194	0.012	7.962	0.007		1.050	0.015	G	1.02	0.01	H	8.0259	0.0013	0.014	143		8.00	8.05				1							
117773	9.760	0.017	8.565	0.011		1.023	0.016	T	1.00	0.01	L	8.6240	0.0016	0.017	147		8.59	8.66		C		1							S
117774	6.287	0.003	6.292	0.003		−0.003	0.004	T	0.02	0.00	L	6.2993	0.0007	0.005	146		6.29	6.31				1 G							
117775	8.772	0.011	6.882	0.005		1.560	0.015	G	1.57	0.09	H	6.8271	0.0010	0.009	148		6.81	6.84		C	23530+6042	I 1	1						S
117776	8.664	0.009	8.122	0.008		0.519	0.026	G	0.59	0.03	H	8.1615	0.0008	0.011	145		8.14	8.18		D			1						S
117777	10.035	0.028	8.508	0.014		1.283	0.025	T	1.24	0.03	L	8.5389	0.0012	0.013	102		8.51	8.57					1						
117778	8.769	0.013	7.612	0.009		0.968	0.004	G	0.95	0.00	H	7.6758	0.0011	0.009	90		7.66	7.70		C			1						S
117779	11.588	0.094	9.924	0.033		1.357	0.033	G	1.32	0.04	J	9.7789	0.0062	0.066	87		9.63	9.82		U			1 X S						
117780	11.819	0.169	9.810	0.044	A	1.567	0.197	G	1.57	0.22	R *	9.6691	0.0050	0.025	54	*	9.62	9.71			23531−0520	H 1	2 C C	AB	262	1.137	0.065	3.07	0.22	
117781	10.138	0.027	8.398	0.012		1.451	0.023	T	1.45	0.04	L	8.3690	0.0017	0.015	101		8.35	8.40		C			1						
117782	9.594	0.013	7.863	0.006		1.444	0.011	T	1.44	0.02	L	7.8412	0.0014	0.017	194		7.81	7.87		M			1						S
117783	9.804	0.018	9.131	0.015		0.612	0.018	T	0.68	0.02	L	9.2115	0.0028	0.025	135		9.17	9.25					1						
117784	8.898	0.015	8.460	0.015		0.402	0.015	G	0.47	0.02	H	8.4847	0.0013	0.013	95		8.46	8.51		C			1						S
117785	7.864	0.009	7.407	0.010		0.438	0.015	G	0.51	0.02	H	7.4589	0.0013	0.008	77		7.44	7.47		C			1						S
117786	10.094	0.030	9.444	0.026		0.595	0.030	T	0.67	0.03	L	9.4855	0.0021	0.021	89		9.43	9.52					1						
117787	9.392	0.018	8.189	0.011		1.029	0.016	T	1.00	0.01	L	8.2435	0.0013	0.010	99		8.23	8.27					1						S
117788	9.385	0.017	7.845	0.009		1.293	0.015	T	1.25	0.02	L	7.8580	0.0011	0.009	92		7.84	7.87					1						
117789	8.953	0.017	7.764	0.011		1.014	0.002	G	1.06	0.00	I	7.8063	0.0016	0.009	76		7.79	7.83		C			1						S
117790	10.379	0.032	9.018	0.017		1.153	0.028	T	1.12	0.03	L	9.0501	0.0022	0.017	116		9.03	9.09		C			1						
117791											T	11.7211	0.0047	0.051	103		11.64	11.81					1						G
117792	10.935	0.042	9.664	0.024		1.082	0.038	T	1.04	0.03	L	9.7019	0.0024	0.022	123		9.66	9.74					1						
117793	8.985	0.016	7.671	0.010		1.116	0.015	T	1.08	0.02	L	7.7011	0.0010	0.010	95		7.69	7.72					1						S
117794	9.703	0.017	8.296	0.010		1.189	0.015	T	1.15	0.01	L	8.3502	0.0018	0.019	137		8.32	8.38					1						S
117795	11.998	0.115	10.700	0.058		1.210	0.015	G	1.35	0.03	I	10.5885	0.0034	0.037	152		10.52	10.65					1 G						G
117796	10.407	0.038	9.915	0.037		0.474	0.041	T	0.55	0.04	L	9.9747	0.0029	0.025	96		9.93	10.02					1						
117797	6.455	0.004	6.253	0.004		0.188	0.006	G	0.21	0.01	H	6.2887	0.0009	0.009	122		6.27	6.31		C			1						S
117798	8.342	0.009	8.392	0.012		−0.050	0.003	G	−0.03	0.00	H	8.3973	0.0014	0.013	107		8.38	8.42					1						
117799	9.000	0.008	8.448	0.008	*	0.523	0.008	T	0.60	0.01	L *	8.5147	0.0013	0.018	233	*	8.48	8.55			23534−4856	H 1	2 C C	AB	35	0.221	0.054	2.75	0.65	S
117800	9.657	0.015	8.335	0.009		1.122	0.014	T	1.08	0.01	L	8.3907	0.0015	0.017	176		8.36	8.42		C			1						

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)											Soln	
HIP	RA	Dec	V			α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ $\alpha*$	π $\alpha*$	π δ	$\mu_{\alpha*}$ δ	$\mu_{\alpha*}$ π	$\mu_{\alpha*}$ $\alpha*$	μ_δ δ	μ_δ π	μ_δ $\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag			deg	deg		mas	mas/yr		mas		mas	mas/yr												%	
1 2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
117801	23 53 24.61	+13 33 42.1	8.61		H	358.352 558 09	+13.561 685 10		1.36	14.87	−6.05	0.97	0.67	1.14	1.03	0.76	+28	+10	−15	− 4	+11	−11	+ 9	+ 3	+ 2	+46		0	−0.25
117802	23 53 25.58	−44 38 59.2	9.78	2	H	358.356 582 11	−44.649 777 98		5.65	14.67	−2.60	1.03	0.99	1.51	1.21	1.01	− 4	− 8	−17	+15	−10	+13	−10	− 6	+ 2	−16		0	0.72
117803	23 53 27.07	+52 26 56.1	9.89		H	358.362 785 53	+52.448 908 09		0.69	−32.95	−11.57	0.91	1.14	1.94	1.54	1.58	−30	+16	+18	+10	+ 4	+21	− 8	+10	−32	−12		1	0.54
117804	23 53 32.23	+04 48 46.8	8.29		H	358.384 305 36	+04.813 011 20		1.69	−15.59	−16.49	1.01	0.61	1.14	1.18	0.81	+34	+ 2	− 8	− 1	− 7	+21	− 4	−16	+20	+43		0	−0.08
117805	H 23 53 32.78	+01 42 11.9	8.54		G	358.386 568 85	+01.703 302 80	A	12.21	138.35	17.62	2.13	0.83	1.62	2.34	0.82	+28	+ 1	+ 9	−46	+ 1	+ 7	− 7	−14	+ 4	+44		1	−0.76
117806	23 53 33.39	+51 56 16.2	8.13		H	358.389 128 39	+51.937 832 88		1.96	3.44	−1.31	0.53	0.65	1.02	0.75	0.75	−37	− 3	+23	+ 0	+ 4	+15	+ 3	−12	−12	−21		3	0.08
117807	23 53 34.25	+51 31 21.2	6.78		H	358.392 721 69	+51.522 567 54		6.73	52.77	5.52	0.48	0.56	0.84	0.59	0.63	−34	+ 7	+17	+13	+ 5	+13	+ 4	− 8	+ 4	−29		1	0.70
117808	23 53 35.09	−40 43 12.8	9.73		H	358.396 189 74	−40.720 219 51		4.31	−5.63	2.84	0.82	0.93	1.48	0.92	0.93	+ 9	+12	− 6	+27	−15	+35	−21	−33	− 8	− 5		0	−0.28
117809	H 23 53 35.52	+12 06 23.2	10.72		H	358.397 982 00	+12.106 454 31	A	22.33	43.49	−111.89	5.09	2.75	4.61	4.37	2.62	+27	+12	+ 9	−41	+ 9	− 1	+10	− 5	−17	+19		1	−0.84
117810	23 53 36.54	+56 49 11.7	8.23		H	358.402 265 26	+56.819 903 92		0.65	−1.97	−0.96	0.63	0.71	1.04	0.86	0.86	−15	+10	+12	+11	+19	+30	+12	−15	−18	−21		0	−1.63
117811	23 53 36.95	+70 30 59.4	9.08		H	358.403 957 62	+70.516 486 50		11.13	18.48	3.08	0.71	0.71	0.93	0.82	0.77	− 7	+ 1	+14	+ 3	− 8	+10	− 8	+ 0	+15	+ 3		0	−0.09
117812	23 53 38.18	+71 29 26.1	8.69		H	358.409 100 99	+71.490 579 46		3.83	−9.86	−10.48	0.66	0.63	0.80	0.79	0.75	−12	+ 3	+24	+ 6	− 3	+14	− 8	− 3	−12	−33		0	1.00
117813	23 53 38.48	−20 31 03.0	7.35		H	358.410 343 68	−20.517 503 51		5.15	0.80	−45.21	1.00	0.79	1.50	1.32	1.19	+38	−16	−41	−10	+ 5	−16	− 9	−26	+54	+12		0	0.60
117814	23 53 39.64	−49 01 32.0	9.78		H	358.415 178 41	−49.025 567 56		10.52	−152.92	−63.16	0.79	0.85	1.61	0.91	1.15	−14	− 4	−34	−16	−14	+ 3	−17	−29	+37	− 7		0	−1.56
117815	23 53 39.94	−65 56 50.4	6.64		H	358.416 418 09	−65.947 341 64		38.66	−42.03	85.46	0.45	0.48	0.62	0.53	0.55	+ 6	−17	−10	− 5	+ 7	+13	+11	+ 0	−19	+15		0	−0.66
117816	23 53 39.97	−47 35 20.8	9.06		H	358.416 555 46	−47.589 124 19		5.12	13.62	−0.79	1.03	0.80	1.45	1.31	1.08	− 8	− 8	−29	−18	+ 3	−19	− 5	−36	+28	−11		1	0.66
117817	23 53 40.02	−49 25 57.0	8.06		H	358.416 746 18	−49.432 506 88		7.91	89.70	8.23	0.50	0.56	0.97	0.59	0.72	−13	− 1	−32	−16	−13	+ 8	−11	−35	+28	− 2		1	−0.60
117818	23 53 40.27	+02 43 52.5	8.90		H	358.417 773 17	+02.731 256 00		3.81	−30.35	−44.33	1.23	0.56	1.41	1.44	0.68	+28	−12	+15	−25	+ 7	+54	− 3	−16	+34	+50		0	−1.10
117819	23 53 41.05	+76 34 57.4	8.41		H	358.421 051 22	+76.582 613 35		1.37	−2.75	−1.65	0.63	0.56	0.69	0.70	0.55	+ 3	− 3	+10	+12	−10	+ 2	−10	−16	+10	+ 3		1	−0.02
117820	23 53 41.35	−01 39 38.7	8.62		H	358.422 293 09	−01.660 745 12		3.10	13.61	−9.84	1.07	0.65	1.11	1.28	0.52	+15	+12	+ 0	− 3	+21	− 5	+17	−34	+10	+34		0	−0.32
117821	23 53 43.65	−21 37 17.9	9.81		H	358.431 877 10	−21.621 631 37		9.75	−12.56	−58.52	2.04	1.29	2.99	2.31	2.82	+26	+39	−22	−21	−18	+28	+20	−38	+63	+43		0	−0.98
117822	23 53 44.17	−29 23 47.7	7.42		H	358.434 060 09	−29.396 587 51		1.01	40.87	1.02	1.04	0.71	1.03	1.51	0.85	+ 2	−12	−14	+ 5	+ 3	+25	+ 6	+12	+ 0	−17		0	0.33
117823	23 53 44.46	−44 56 04.3	9.33		G	358.435 234 33	−44.934 524 01		10.96	−40.54	89.37	0.89	0.91	1.31	1.09	0.98	− 7	+ 8	−21	+ 8	− 4	+15	− 1	−11	− 1	− 7		1	1.64
117824	23 53 45.95	−18 21 53.3	7.36		H	358.441 473 81	−18.364 805 93		2.31	12.80	−0.29	0.91	0.71	1.15	1.30	0.88	+33	−37	−38	−12	−21	+42	−26	−44	+32	+10		0	1.78
117825	23 53 48.58	−83 00 25.1	6.79		H	358.452 411 90	−83.006 965 49		4.75	146.87	31.14	0.49	0.45	0.55	0.57	0.48	+11	−10	−13	− 9	+ 7	+ 5	+ 5	+ 7	− 5	+22		0	−0.20
117826	23 53 49.04	+15 28 49.1	8.03		H	358.454 345 44	+15.480 301 02		10.16	−7.65	−61.11	0.75	0.65	1.01	0.82	0.75	+50	− 2	−17	+20	+18	−12	+15	+19	+ 5	+58		0	0.51
117827	23 53 49.42	−70 40 44.8	8.12		G	358.455 922 75	−70.679 099 66		6.63	63.82	−7.41	0.58	0.57	0.72	0.71	0.66	− 7	+ 5	−27	− 8	+ 8	− 5	+ 7	−10	+ 6	+ 5		1	0.39
117828	23 53 49.54	−75 37 53.8	9.99		G	358.456 411 20	−75.631 610 24		98.43	242.96	−378.18	0.99	0.87	1.15	1.03	0.97	−12	+17	−26	+ 1	+ 6	−13	+ 0	+14	− 8	+ 8		3	−0.15
117829	23 53 49.83	−49 59 58.2	8.62		H	358.457 637 51	−49.999 501 41		4.42	63.48	29.60	0.72	0.73	1.21	0.81	0.89	−18	− 2	−23	−22	− 8	− 1	− 9	−31	+32	−10		5	−1.82
117830	23 53 49.99	+60 51 12.3	6.92	2	H	358.458 278 20	+60.853 406 47		0.85	−2.57	−2.67	0.48	0.50	0.65	0.55	0.53	−19	+ 5	+15	+19	+ 0	− 8	+ 2	+ 0	+11	−21		0	0.52
117831	23 53 51.65	−45 07 23.9	9.28		G	358.465 196 38	−45.123 316 96		12.81	−12.55	−44.27	0.95	0.85	1.29	1.07	0.93	− 1	− 6	−10	−16	+ 1	+14	+ 2	−15	+15	− 3		0	−1.37
117832	23 53 52.14	+00 35 46.3	7.61	2	H	358.467 246 03	+00.596 200 14		1.32	0.86	−14.06	0.87	0.49	0.93	1.03	0.45	+40	+10	+ 3	+22	+ 3	+10	+11	−36	+20	+56		0	−1.50
117833	23 53 52.39	−46 49 50.3	9.07		H	358.468 288 00	−46.830 626 30		2.24	−6.59	−16.98	1.06	0.79	1.47	1.22	1.11	−14	−16	−26	+ 7	− 6	+18	− 1	−35	+26	+ 0		0	0.85
117834	23 53 52.52	+44 33 20.9	7.42		H	358.468 846 44	+44.555 801 63		1.73	5.23	10.39	0.56	0.60	0.94	0.66	0.69	− 5	+ 3	+24	+26	− 4	− 8	− 2	+28	+20	−10		0	1.23
117835	23 53 53.01	+30 46 12.6	8.02		G	358.470 868 13	+30.770 169 37		12.32	−47.22	−30.25	0.81	0.56	1.09	1.33	0.64	− 2	+ 7	− 1	+10	+ 2	+41	+ 3	+10	+25	+ 0		0	0.30
117836	23 53 54.22	+17 59 30.7	7.18		H	358.475 923 67	+17.991 867 93		6.82	19.88	−43.51	0.63	0.51	0.89	0.74	0.56	+41	+ 4	− 7	− 4	− 7	+27	− 4	− 8	+29	+49		0	−0.39
117837	H 23 53 55.81	−35 33 52.9	10.45		H	358.482 529 11	−35.564 686 65	A	3.78	28.01	−12.89	2.34	1.82	2.57	2.41	1.37	+ 6	+ 8	+ 2	−30	+ 8	− 1	+13	−21	+ 3	−20		2	0.15
117838	23 53 56.00	−37 24 28.8	8.71		G	358.483 321 17	−37.408 002 62		7.68	22.17	−13.07	0.80	0.66	1.11	0.95	0.66	+ 1	+ 1	+13	−25	− 2	+10	− 3	−31	+ 2	−12		0	1.63
117839	23 53 56.21	+12 00 03.2	7.82		H	358.484 212 77	+12.000 879 41		−0.41	41.14	−8.39	1.16	0.71	1.17	1.27	0.88	+32	+11	+13	−26	+35	+ 9	+28	+37	+ 8	+48		4	−0.16
117840	23 53 57.19	−30 21 25.0	7.83		H	358.488 280 12	−30.356 950 63		9.21	−52.48	−33.18	0.94	0.77	1.09	1.06	0.62	+11	+ 4	− 3	− 3	− 9	+ 3	−12	−36	+14	−13		0	2.90
117841	23 53 58.28	+39 15 19.6	9.37		H	358.492 829 44	+39.255 443 51		12.35	−116.69	−106.75	0.85	0.76	1.16	0.87	0.75	+ 9	+22	+21	+45	−13	+14	−12	+19	+12	+ 8		0	1.34
117842	23 54 02.02	+56 29 21.9	7.19	1	H	358.508 404 96	+56.489 410 00		0.37	3.17	−1.76	0.54	0.59	0.85	0.70	0.75	−25	+ 9	+14	+ 0	+16	+20	+13	−22	− 4	−30		0	−0.45
117843	23 54 02.95	−09 17 23.6	7.21		H	358.512 302 05	−09.289 898 50		1.61	43.96	−7.23	0.82	0.61	0.99	1.36	0.74	+29	−19	− 4	− 2	+ 2	+39	− 5	−18	−13	−24		0	0.80
117844	23 54 04.00	+39 16 56.9	6.62		H	358.516 653 61	+39.282 463 47		6.83	53.02	18.20	0.56	0.48	0.72	0.56	0.49	+10	+18	+25	+54	− 8	+ 6	− 6	+27	+14	+12		0	3.61
117845	23 54 04.37	+09 13 39.5	8.61		H	358.518 216 12	+09.227 651 67		4.43	21.45	−2.14	1.07	0.74	1.12	1.17	0.92	+34	+26	− 5	+35	+34	− 1	+35	+36	+ 8	+55		0	−0.10
117846	23 54 04.71	+17 32 59.6	10.08		H	358.519 640 29	+17.549 900 79		21.93	186.69	63.06	1.24	0.92	1.62	1.31	0.95	+40	+11	− 4	−14	−16	+21	−13	−23	+19	+46		0	−0.47
117847	23 54 05.26	+04 52 16.4	7.71		H	358.521 901 10	+04.871 213 84		3.80	11.99	−34.66	0.91	0.56	1.04	1.07	0.74	+36	+ 7	− 5	− 4	− 8	+18	− 5	−14	+17	+41		0	0.06
117848	23 54 05.30	+23 30 06.1	9.53		H	358.522 067 75	+23.501 692 78		4.96	−25.50	−46.05	1.09	0.71	1.38	0.92	0.68	+18	+37	+ 6	− 6	+ 4	− 4	+ 7	−11	+ 7	+23		0	0.77
*117849	23 54 06.89	+15 54 07.6	8.39		G	358.528 723 95	+15.902 104 25		8.04	69.88	4.98	0.76	0.65	1.07	0.79	0.68	+55	−20	−26	+ 8	+ 9	− 8	+ 7	+ 6	+ 3	+58		0	−0.12
*117850	23 54 06.89	+52 46 11.4	9.48		H	358.528 718 23	+52.769 842 32		0.06	2.78	2.77	0.83	1.07	1.91	1.32	1.39	−31	+14	+17	+15	+ 7	+19	− 5	+14	−32	−12		0	1.69
117851	23 54 11.07	+65 47 01.7	8.38		H	358.546 115 85	+65.783 800 12		2.65	−13.65	−2.99	0.64	0.64	0.82	0.77	0.72	−25	−11	+23	− 8	+ 1	+ 9	+ 0	+ 6	+ 8	−33		1	−0.10
117852	23 54 11.38	+44 52 01.9	8.42		H	358.547 418 70	+44.867 193 97		3.13	−9.29	−5.76	0.71	0.67	1.07	0.85	0.77	− 9	− 6	+21	+45	− 6	−17	− 5	+26	+21	−16		0	1.05
117853	23 54 12.76	−59 32 31.4	7.05	1	H	358.553 179 76	−59.542 060 75		5.41	21.98	7.36	0.44	0.50	0.71	0.47	0.61	−12	+ 7	−17	+ 5	+12	+ 6	+15	− 9	−14	+ 1		0	−1.90
117854	23 54 13.42	+12 38 59.2	9.34		H	358.555 915 22	+12.649 777 74		12.97	−12.15	−24.34	1.34	0.96	1.61	1.28	0.90	+48	−15	−23	−21	+ 4	− 8	+ 3	− 6	−12	+49		4	1.33
117855	23 54 16.59	+55 59 32.1	8.44		H	358.569 113 12	+55.992 261 39		1.32	0.02	−21.65	0.73	0.76	1.20	1.09	0.90	−19	+ 7	+26	+15	+14	+38	+ 3	+ 9	−11	−11		0	0.24
117856	23 54 18.95	+25 08 00.5	7.99		G	358.578 955 90	+25.133 476 96		6.47	18.44	−23.75	0.71	0.57	0.86	0.80	0.62	+33	+17	− 2	+29	+19	+ 0	+20	+18	+ 1	+45		0	1.51
117857	23 54 19.17	−74 37 24.4	8.45		H	358.579 883 42	−74.623 432 43		1.95	−27.24	−8.58	0.71	0.63	0.80	0.74	0.64	− 4	+ 0	−18	−17	+ 9	− 1	+ 2	+18	− 4	+17		0	0.75
117858	23 54 19.44	+03 40 40.8	7.30		H	358.581 013 50	+03.677 994 04		6.27	58.86	−55.33	0.83	0.48	0.88	1.00	0.59	+21	− 7	− 5	−26	+ 7	+ 7	+ 3	− 4	+30	+27		0	−0.79
117859	23 54 19.55	−15 38 19.4	9.31		G	358.581 452 00	−15.638 712 60		1.41	20.12	−16.70	1.37	1.03	1.65	3.23	1.34	+30	−25	−46	+21	− 3	−11	−34	−39	+41	−47		0	0.73
117860	H 23 54 21.39	−27 02 34.5	6.34		G	358.589 119 89	−27.042 909 47	A	10.82	29.36	0.84	1.36	0.89	1.26	1.70	1.09	+24	− 1	+20	+ 6	+21	+40	+15	− 1	+16	+ 3		7	1.78
117861	23 54 21.83	+33 35 36.2	7.90		H	358.590 940 53	+33.593 375 79		3.93	23.92	−16.84	0.77	0.55	0.93	0.87	0.63	−15	+40	−18	+ 5	+11	−16	+16	+ 9	+22	− 1		2	0.35
117862	23 54 22.41	−31 00 21.2	8.91		H	358.593 393 22	−31.005 895 11		2.04	22.94	7.02	1.24	0.82	1.27	1.28	0.65	− 4	+ 9	+ 4	+ 9	−12	+ 9	−14	−33	+ 8	−20		0	0.97
117863	23 54 23.04	+57 29 57.8	4.51	2	T	358.595 988 88	+57.499 390 52		0.28	−4.54	−3.45	0.37	0.44	0.58	0.50	0.51	−22	+ 9	+12	+16	+ 4	− 2	+ 2	−13	+ 1	−31		1	0.21
117864	23 54 23.25	+48 55 45.0	8.39		H	358.596 892 61	+48.929 168 88		0.46	6.72	−6.88	0.62	0.60	0.99	0.65	0.70	−16	+20	+11	−16	+ 1	−12	+ 6	+19	+18	−19		1	2.37
117865	23 54 23.99	−31 18 01.5	9.93		G	358.599 939 66	−31.300 412 78		22.82	458.90	−73.17	1.39	0.95	1.55	1.44	0.77	− 4	+11	+16	−50	+ 9	+ 0	+11	−43	+ 5	−21		0	0.28
117866	H 23 54 25.45	+02 27 50.4	7.71		H	358.606 054 69	+02.464 013 19	A	2.76	−0.12	−44.60	1.63	0.72	1.40	1.47	0.76	+32	− 7	+ 0	−47	− 4	+30	+ 1	− 7	+ 8	+36		1	−0.38
117867	23 54 25.82	+48 37 50.6	7.91		H	358.607 572 97	+48.630 724 18		1.51	−1.32	−5.84	0.55	0.59	0.89	0.61	0.63	− 1	+15	+22	− 2	− 7	−12	+ 0	+27	+22	−13		1	0.92
117868	23 54 26.14	+54 32 18.4	8.48		H	358.608 928 14	+54.538 432 88		3.86	7.84	−0.87	0.61	0.68	0.99	0.73	0.79	−20	+11	+16	+23	− 9	− 4	− 6	+ 9	+ 3	−10		0	−0.94
117869	23 54 28.92	−32 28 18.3	8.90		H	358.620 493 43	−32.471 759 46		12.23	62.44	−23.55	0.80	0.63	1.18	1.03	0.54	+11	− 8	+23	−41	+12	+ 2	+ 7	−44	− 3	−18		1	−0.12
117870	23 54 29.69	+29 38 19.3	8.51		H	358.623 707 46	+29.638 705 32		16.35	0.54	−190.35	0.78	0.62	0.97	0.92	0.67	+ 8	+17	− 4	+26	+ 3	− 3	+ 5	− 2	+ 8	+13		0	1.23
117871	23 54 32.98	−62 52 03.6	9.03	2	H	358.637 425 89	−62.867 653 59		1.85	3.67	5.07	0.77	0.73	1.05	0.90	0.84	+ 2	− 3	−14	+ 4	+ 1	− 6	+ 0	+12	−10	+ 3		0	−1.77
117872	23 54 33.63	+27 51 56.5	8.99		H	358.640 142 42	+27.865 694 56		2.16	10.25	−30.05	0.84	0.68	1.05	1.03	0.69	+14	+12	− 6	+ 6	+ 8	+ 1	+ 7	− 6	+ 7	+16		0	0.05
117873	23 54 34.16	+14 35 59.2	9.12		H	358.642 348 98	+14.599 769 95		6.21	21.60	5.71	1.06	0.70	1.22	0.99	0.71	+25	−13	−14	−18	+ 5	+ 2	+ 4	−10	+ 7	+36		2	0.23
117874	23 54 34.45	+55 07 48.5	8.04		H	358.643 553 84	+55.130 151 85		0.50	− 7.73	− 4.66	0.59	0.66	0.94	0.67	0.74	−23	+12	+15	− 1	− 2	+14	− 2	−15	+ 8	−17		0	0.48
117875	23 54 34.78	−02 58 46.6	8.40		H	358.644 932 70	−02.979 608 16		8.34	−13.45	−35.74	1.19	0.65	1.21	1.56	0.50	+ 6	+37	− 9	−12	+38	− 8	+27	−26	+28	+24		0	−0.30
117876	23 54 35.90	−33 08 07.9	9.43		H	358.649 594 48	−33.135 515 53		1.40	2.81	−4.84	0.88	0.80	1.26	1.00	0.67	+26	− 2	+ 7	−42	+ 0	+ 4	− 6	−50	+ 9	− 4		0	0.69
117877	23 54 36.30	+05 03 24.2	8.24		H	358.651 260 14	+05.056 725 46		8.20	118.46	−55.82	1.08	0.62	1.20	1.40	0.94	+30	+ 5	− 8	−13	−12	+27	− 9	− 2	+10	+18		0	−0.66
117878	23 54 36.51	−60 20 57.5	8.94		G	358.652 134 84	−60.349 299 05		10.59	131.62	−20.33	0.75	0.85	1.14	0.88	1.08	− 5	− 5	−18	− 9	− 4	+ 9	− 2	− 7	−11	+10		1	−0.13
117879	H 23 54 38.31	−23 01 26.5	11.34		H	358.659 627 83	−23.024 017 68	*	8.62	3.91	12.08	10.04	5.11	5.51	6.36	4.92	+19	−15	−18	−12	− 5	+31	− 3	−15	+17	+ 8		7	−0.20
117880	23 54 38.34	−40 18 00.5	6.03		H	358.659 751 86	−40.300 136 54		35.86	367.44	30.51	0.45	0.50	0.80	0.49	0.47	+12	+10	−12	+17	−13	+26	−16	−34	− 2	− 1		0	−1.84
117881	23 54 38.66	−01 56 46.3	7.58		H	358.661 089 13	−01.946 202 75		2.98	−6.22	−12.43	0.93	0.50	0.97	1.09	0.43	+20	− 2	− 5	−13	+24	−14	+15	−22	+10	+35		0	−0.22
117882	23 54 38.98	−23 01 56.3	9.24		H	358.662 415 40	−23.032 309 83		11.88	−1.60	13.60	1.26	0.86	1.45	1.66	1.23	+26	−15	−30	+ 8	+ 1	+16	+ 1	−13	+16	+13		0	1.48
117883	23 54 40.02	−37 37 39.9	9.79		G	358.666 769 88	−37.627 753 73		11.38	248.75	−70.19	1.07	0.86	1.45	1.32	0.91	+ 0	− 4	− 1	−28	+ 3	+15	+ 4	−21	+11	−10		0	−0.58
117884	23 54 42.12	+61 50 20.0	7.22	2	H	358.675 499 52	+61.838 902 66		−0.53	−3.22	−1.99	0.51	0.50	0.68	0.57	0.56	−15	+15	+21	+15	− 5	− 1	− 2	+ 8	+15	−15		0	0.42
117885	23 54 43.37	−33 38 34.4	8.98		H	358.680 718 34	−33.642 876 48		10.07	−83.56	−96.44	0.77	0.56	1.06	0.87	0.53	+12	+ 4	+ 8	−37	+ 0	+ 5	− 2	−41	− 3	− 6		0	−0.85
117886	23 54 46.33	−21 46 29.4	10.80		G	358.693 046 07	−21.774 820 15		40.44	−42.92	128.48	2.06	1.41	2.41	2.74	2.10	+20	+16	−25	−17	+ 4	+ 1	+11	−14	+29	+ 9		0	0.89
117887	23 54 46.65	+00 06 33.6	5.78	2	H	358.694 363 50	+00.109 344 29		5.07	−40.93	−14.63	0.84	0.41	0.86	1.02	0.45	+40	+ 4	− 8	+37	+12	+ 0	+21	−15	+21	+55		0	−1.94
117888	23 54 47.56	+18 44 48.5	6.92		H	358.698 170 53	+18.746 792 81		3.17	27.79	−0.25	0.58	0.49	0.79	0.65	0.52	+41	+ 9	− 1	+ 0	− 5	+22	− 2	−19	+23	+48		0	−0.28
117889	23 54 47.60	−38 05 34.7	9.18		H	358.698 339 37	−38.092 958 44		3.59	45.98	−15.37	1.06	0.76	1.35	1.16	0.78	− 3	+19	−11	−45	+ 4	− 2	+ 8	−29	+19	− 8		0	0.47
117890	23 54 48.10	+37 35 39.9	8.93		H	358.700 416 48	+37.594 412 41		2.71	− 5.04	− 0.06	0.86	0.67	1.03	1.00	0.82	+13	+20	− 1	+13	+19	− 8	+17	+43	+ 0	+23		0	−0.62
117891	23 54 48.56	−18 35 30.1	10.25		G	358.702 347 57	−18.591 686 05		8.49	−173.63	−146.85	2.13	1.46	2.64	2.51	1.78	+44	−56	−47	−41	−12	+37	− 9	−32	+26	+13		3	0.36
117892	23 54 49.12	+53 29 50.2	8.14		H	358.704 686 33	+53.497 280 43		8.18	38.60	−23.48	0.57	0.68	1.02	0.69	0.85	−30	+14	+18	− 1	− 2	+ 0	− 2	+10	+14	−16		0	−1.13
117893	23 54 49.28	+74 24 36.4	6.59		H	358.705 331 94	+74.410 109 50		4.27	− 2.85	− 5.79	0.55	0.47	0.61	0.85	0.54	− 8	−10	+14	+ 2	+13	+20	+11	−19	+ 5	+ 9		0	−0.10
117894	23 54 49.35	−30 08 37.1	11.84		G	358.705 628 07	−30.143 643 04		21.06	−263.67	−203.69	2.68	2.10	3.04	3.26	1.68	+ 5	+ 8	+ 9	− 7	− 4	+21	−11	−47	− 7	−22		2	−0.85
117895	23 54 50.07	−47 48 29.0	9.48		H	358.708 629 65	−47.808 062 61		18.57	20.54	54.99	1.14	0.92	1.61	1.36	1.22	− 1	− 8	−34	−10	− 5	−12	−11	−47	+38	− 2		0	−0.52
117896	23 54 50.61	+45 45 56.4	9.64		H	358.710 864 32	+45.765 679 77		0.63	−1.80	1.98	0.71

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data										Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
117801	9.913	0.027	8.748	0.018		1.000	0.025	T	0.98	0.02	L	8.7797	0.0012	0.014	85		8.75	8.80		C			1							
117802	10.391	0.027	9.763	0.024		0.579	0.027	T	0.65	0.03	L	9.9106	0.0054	0.043	115		9.86	9.98		U			1							
117803	10.637	0.025	9.930	0.021		0.651	0.027	T	0.71	0.02	L	10.0203	0.0026	0.035	207		9.94	10.08					1							G
117804	9.691	0.020	8.407	0.012		1.093	0.018	T	1.05	0.02	L	8.4593	0.0011	0.015	104		8.43	8.48					1							S
117805	9.392	0.013	8.641	0.011	A	0.630	0.126	G	0.76	0.04	L *	8.6780	0.0012	0.015	150	*	8.65	8.70		D	23535+0142	I 1	2 C	A	AB	61	1.484	0.045	3.17	0.09	S
117806	8.173	0.006	8.132	0.007		0.043	0.009	T	0.06	0.01	L	8.1539	0.0014	0.015	192		8.13	8.18					1							
117807	8.022	0.009	6.876	0.005		0.985	0.008	T	0.97	0.01	L	6.9474	0.0009	0.010	149		6.93	6.96		C	23536+5131	I 1	1							S
117808	10.269	0.025	9.805	0.026		0.450	0.028	T	0.52	0.03	L	9.8309	0.0024	0.028	128		9.79	9.88					1							
117809						1.439	0.197	G	1.77	0.50	I *	10.8025	0.0039	0.032	86	*	10.75	10.85		D	23536+1206	M 1	2 C	A	AB	166	5.828	0.013	1.19	0.08	G
117810	8.211	0.009	8.199	0.011		0.012	0.012	T	0.03	0.01	L	8.2389	0.0021	0.022	129		8.21	8.27					1							
117811	9.675	0.018	9.133	0.017		0.508	0.022	T	0.58	0.02	L	9.1922	0.0015	0.019	129		9.16	9.23		C			1							
117812	8.990	0.013	8.701	0.014		0.275	0.018	T	0.31	0.02	L	8.7584	0.0018	0.018	132		8.73	8.79		C			1							
117813	8.930	0.017	7.486	0.010		1.218	0.015	T	1.18	0.01	L	7.5131	0.0018	0.012	63		7.48	7.53		C			1							S
117814	10.498	0.022	9.845	0.019		0.597	0.022	T	0.67	0.02	L	9.9074	0.0024	0.036	234		9.83	9.97					1							
117815	7.358	0.005	6.713	0.004		0.589	0.001	G	0.66	0.00	H	6.7634	0.0011	0.011	138		6.75	6.78			23537−6557	I 1	1							S
117816	9.594	0.015	9.087	0.015		0.487	0.016	T	0.56	0.02	L	9.1669	0.0022	0.026	144		9.13	9.23					1							S
117817	8.509	0.006	8.098	0.006		0.406	0.015	G	0.47	0.02	H	8.1526	0.0011	0.017	247		8.13	8.18			23537−4926	I 1	1							S
117818	9.538	0.017	8.980	0.016		0.522	0.021	T	0.59	0.02	L	9.0159	0.0020	0.018	135		8.99	9.04					1							
117819	8.506	0.008	8.420	0.010		0.084	0.012	T	0.10	0.01	L	8.4454	0.0014	0.019	146		8.42	8.49					1							
117820	10.536	0.051	8.770	0.019		1.472	0.043	T	1.49	0.06	L	8.7502	0.0020	0.014	87		8.72	8.77		C	23537−0139	I 1	1							
117821	10.382	0.034	9.866	0.034		0.494	0.036	T	0.57	0.04	L	9.9150	0.0033	0.024	77		9.86	9.95		C			1							S
117822	9.472	0.028	7.608	0.013		1.549	0.024	T	1.61	0.05	L	7.5335	0.0020	0.016	50		7.50	7.56			23537−2924	I 1	1							S
117823	9.924	0.022	9.423	0.021		0.498	0.003	G	0.57	0.00	H	9.4531	0.0021	0.020	110		9.41	9.49		C			1							
117824	8.449	0.014	7.449	0.011		0.863	0.014	T	0.88	0.01	L	7.5069	0.0012	0.011	62		7.49	7.53					1							S
117825	8.799	0.010	6.993	0.005		1.503	0.009	T	1.53	0.01	L	6.9091	0.0011	0.011	144		6.89	6.93					1							S
117826	9.157	0.014	8.117	0.010		0.904	0.013	T	0.91	0.01	L	8.1871	0.0011	0.012	119		8.16	8.21					1							S
117827	8.656	0.010	8.178	0.009		0.470	0.015	G	0.54	0.02	H	8.2213	0.0011	0.013	142		8.20	8.25					1							S
117828	12.043	0.130	10.206	0.038		1.466	0.004	G	1.88	0.02	I	10.0367	0.0027	0.030	124		9.97	10.08					1							
117829	9.755	0.015	8.714	0.010		0.905	0.014	T	0.91	0.01	L	8.7772	0.0016	0.022	185		8.74	8.82					1							
117830	7.695	0.007	7.018	0.006		0.626	0.008	T	0.69	0.01	L	7.0526	0.0030	0.028	148		7.01	7.09		U 2			1							S
117831	9.916	0.022	9.331	0.020		0.569	0.005	G	0.64	0.01	H	9.4026	0.0024	0.023	109		9.37	9.45		C			1							
117832	9.721	0.016	7.833	0.007		1.602	0.014	T	2.42	0.03	O	7.6356	0.0022	0.022	169		7.58	7.67		U 2			1	S						S
117833	10.479	0.026	9.183	0.015		1.102	0.023	T	1.06	0.02	L	9.2363	0.0020	0.023	136		9.20	9.28		C			1							
117834	9.313	0.017	7.570	0.008		1.453	0.015	T	1.46	0.02	L	7.5515	0.0010	0.011	112		7.53	7.56					1							S
117835	8.502	0.011	8.046	0.011		0.436	0.001	G	0.50	0.00	H	8.1128	0.0010	0.009	86		8.10	8.14		C			1							S
117836	8.700	0.011	7.320	0.006		1.170	0.015	G	1.13	0.01	H	7.3511	0.0010	0.009	116		7.34	7.37		C			1							S
117837	11.237	0.044	10.539	0.039	*	0.644	0.048	T	0.71	0.04	L *	10.5847	0.0034	0.034	176	*	10.52	10.63		D	23539−3534	H 1	2 C	D	AB	102	0.744	0.023	2.04	0.10	D
117838	8.936	0.010	8.760	0.012		0.180	0.015	G	0.20	0.02	H	8.7708	0.0020	0.019	134		8.74	8.80			23539−3724	I 1	1							S
117839	9.793	0.025	7.960	0.011		1.525	0.022	T	1.56	0.03	L	7.9359	0.0016	0.013	93		7.92	7.96		C			1							S
117840	8.557	0.012	7.903	0.011		0.607	0.015	G	0.68	0.01	H	7.9574	0.0019	0.014	78		7.94	7.98					1							S
117841	10.140	0.026	9.406	0.021		0.673	0.027	T	0.73	0.02	L	9.5128	0.0022	0.019	130		9.48	9.55		C	23540+3916	I 2	1							
117842	9.297	0.015	7.352	0.007		1.614	0.013	T	1.64	0.01	L	7.3019	0.0013	0.015	135		7.27	7.33		U			1							S
117843	9.266	0.019	7.384	0.009		1.584	0.003	G	1.85	0.02	A	7.3009	0.0011	0.011	76		7.28	7.32					1							S
117844	7.474	0.007	6.717	0.005		0.680	0.014	G	0.74	0.01	L	6.7610	0.0015	0.018	135		6.74	6.81		D	23540+3916	I 2	1							S P
117845	10.186	0.037	8.749	0.020		1.212	0.033	T	1.17	0.03	L	8.7694	0.0020	0.014	74		8.74	8.80		C			1							
117846	11.245	0.059	10.200	0.036		0.960	0.015	G	1.01	0.01	I	10.2209	0.0029	0.020	105		10.19	10.26		C			1							
117847	9.254	0.017	7.844	0.010		1.191	0.015	T	1.15	0.01	L	7.8794	0.0011	0.012	95		7.86	7.90					1							S
117848	10.310	0.032	9.561	0.026		0.685	0.033	T	0.74	0.03	L	9.6662	0.0019	0.018	95		9.63	9.70		C			1							
117849	8.764	0.011	8.450	0.011		0.298	0.015	T	0.34	0.02	L	8.4726	0.0015	0.015	135		8.44	8.49					1							S
117850	10.874	0.038	9.592	0.021		1.091	0.034	T	1.05	0.04	L	9.6520	0.0026	0.031	206		9.59	9.70					1	S						G
117851	8.535	0.010	8.394	0.011		0.136	0.014	T	0.15	0.01	L	8.4320	0.0014	0.016	138		8.40	8.46					1							
117852	8.412	0.010	8.414	0.013		0.003	0.015	T	0.02	0.01	L	8.4281	0.0013	0.016	119		8.41	8.46		C			1							S
117853	6.991	0.004	7.046	0.005		−0.046	0.006	T	−0.02	0.01	L	7.0467	0.0011	0.015	151		7.02	7.07	1.28	P 1 A			1							S
117854	10.001	0.028	9.377	0.025		0.581	0.033	T	0.65	0.03	L	9.4674	0.0029	0.020	89		9.43	9.52		C			1							S
117855	9.892	0.023	8.565	0.013		1.160	0.015	G	1.12	0.01	H	8.6049	0.0017	0.016	124		8.57	8.64					1							
117856	8.344	0.011	7.990	0.011		0.308	0.003	G	0.35	0.00	H	8.0580	0.0018	0.012	89		8.04	8.10		C			1							S
117857	10.578	0.030	8.639	0.011		1.644	0.026	T	1.87	0.07	O	8.5434	0.0023	0.020	147		8.50	8.58					1							
117858	8.753	0.011	7.413	0.007		1.136	0.010	T	1.10	0.01	L	7.4671	0.0011	0.012	108		7.45	7.48		C			1							S
117859	10.712	0.053	9.433	0.029		1.079	0.020	G	1.04	0.02	I	9.4805	0.0027	0.015	54		9.45	9.51					1							
117860	6.519	0.005	6.314	0.006	*	0.197	0.006	G	0.24	0.03	C *	6.3958	0.0013	0.013	98	*	6.38	6.42		D	23544−2703	I 1	2 C	A	AB	271	6.526	0.005	0.72	0.01	S
117861	8.076	0.010	7.900	0.010		0.169	0.013	T	0.18	0.01	L	7.9546	0.0017	0.011	78		7.94	7.97		C			1							S
117862	10.231	0.030	9.000	0.017		1.051	0.027	T	1.02	0.02	L	9.0813	0.0026	0.019	102		9.04	9.12					1							
117863	6.052	0.013	4.644	0.006		1.190	0.011	T	1.15	0.01	L	4.6682	0.0109	0.068	134		4.57	4.75		U 2 C			1							S
117864	8.436	0.008	8.396	0.010		0.042	0.012	T	0.06	0.01	L	8.4126	0.0017	0.018	133		8.39	8.44		C			1							S
117865	11.523	0.086	10.044	0.034		1.098	0.009	G	1.17	0.01	I	10.0651	0.0023	0.025	131		10.02	10.10		C			1							
117866	7.905	0.012	7.834	0.015	A	−0.100	0.495	G	0.09	0.04	L *	7.7402	0.0012	0.010	120	*	7.72	7.76		D	23544+0228	I 1	2 C	A	AB	271	1.723	0.007	1.59	0.02	S
117867	7.907	0.006	7.896	0.010		0.015	0.011	T	0.03	0.01	L	7.9225	0.0014	0.014	124		7.90	7.95		C			1							S
117868	8.561	0.009	8.499	0.012		0.062	0.014	T	0.07	0.01	L	8.5116	0.0019	0.014	141		8.48	8.54		C			1							
117869	9.512	0.013	8.950	0.012		0.530	0.013	T	0.60	0.01	L	9.0137	0.0018	0.019	199		8.98	9.05					1							S
117870	9.513	0.020	8.608	0.015		0.804	0.019	T	0.83	0.01	L	8.6652	0.0022	0.013	86		8.64	8.69					1							
117871	11.282	0.055	9.241	0.017		1.728	0.047	T	2.23	0.10	O	9.0923	0.0039	0.038	151		9.04	9.15		U 2			1							
117872	10.752	0.058	9.132	0.024		1.356	0.049	T	1.32	0.06	L	9.1416	0.0019	0.014	82		9.11	9.16					1							
117873	9.658	0.026	9.113	0.024		0.511	0.032	T	0.58	0.03	L	9.2286	0.0026	0.016	69		9.20	9.26		C			1							
117874	9.696	0.018	8.173	0.010		1.280	0.016	T	1.24	0.02	L	8.1981	0.0015	0.016	142		8.17	8.23					1							
117875	9.118	0.017	8.483	0.015		0.590	0.020	T	0.66	0.02	L	8.5282	0.0012	0.012	71		8.50	8.55					1							S
117876	10.712	0.026	9.526	0.015		1.016	0.023	T	0.99	0.02	L	9.6024	0.0015	0.024	213		9.56	9.65					1	S						
117877	9.088	0.017	8.287	0.014		0.725	0.017	T	0.78	0.01	L	8.3844	0.0017	0.012	87		8.37	8.41		C			1							S
117878	9.729	0.017	9.003	0.014		0.628	0.003	G	0.70	0.00	H	9.0789	0.0024	0.023	137		9.04	9.13		C			1							
117879	12.294	0.221	11.351	0.145	*	0.832	0.196	T	0.85	0.14	L *	11.4910	0.0077	0.069	91	*	11.33	11.61		D	23546−2302	I 2	2 C	B	AC	359	0.263	0.022	0.48	0.28	G
117880	6.727	0.003	6.086	0.003		0.572	0.002	G	0.64	0.07	F	6.1488	0.0006	0.007	136		6.14	6.16					1							S
117881	9.739	0.025	7.780	0.010		1.625	0.021	T	1.65	0.02	L	7.6926	0.0016	0.012	114		7.67	7.71					1							S
117882	9.778	0.023	9.269	0.022		0.454	0.100	G	0.52	0.06	L	9.3440	0.0025	0.023	92		9.30	9.40		D	23546−2302	I 2	1							
117883	10.849	0.040	9.842	0.026		0.815	0.002	G	0.84	0.00	H	9.9438	0.0028	0.028	128		9.90	9.98		C			1							
117884	7.992	0.008	7.311	0.006		0.630	0.008	T	0.70	0.01	L	7.3490	0.0024	0.029	148		7.30	7.39		U 2			1							S
117885	9.612	0.013	9.044	0.013		0.535	0.014	T	0.61	0.01	L	9.0990	0.0013	0.018	201		9.07	9.13		C			1							
117886						1.431	0.013	G	1.83	0.01	A	10.9078	0.0059	0.038	89		10.80	10.97					1							G
117887	7.753	0.007	6.030	0.006		1.466	0.008	T	2.77	0.02	O	5.7395	0.0031	0.064	145		5.61	5.81		U 2			1	S						S P
117888	8.774	0.011	7.062	0.006		1.429	0.010	T	1.42	0.02	L	7.0596	0.0009	0.008	112		7.04	7.07					1							S
117889	10.507	0.028	9.286	0.017		1.043	0.026	T	1.01	0.02	L	9.3521	0.0019	0.021	123		9.31	9.39		C			1							
117890	9.401	0.018	8.981	0.018		0.397	0.024	T	0.46	0.03	L	9.0246	0.0019	0.018	102		9.00	9.06		C			1							
117891	11.251	0.080	10.546	0.072		0.822	0.006	G	0.84	0.00	H	10.4009	0.0026	0.029	57		10.34	10.44		C			1							
117892	8.509	0.008	8.173	0.008		0.319	0.011	T	0.37	0.01	L	8.2212	0.0016	0.016	168		8.19	8.25					1							S
117893	6.614	0.005	6.600	0.005		0.018	0.007	T	0.04	0.01	L	6.6011	0.0009	0.008	114		6.58	6.61		C	23548+7425	I 1	1							S
117894						1.358	0.015	G	1.59	0.03	I	11.9445	0.0064	0.059	88		11.85	12.04					1							G
117895	10.502	0.026	9.550	0.019		0.825	0.025	T	0.85	0.02	L	9.6259	0.0031	0.029	148		9.58	9.71					1							
117896	9.729	0.015	9.693	0.021		0.046	0.009	G	0.06	0.01	H	9.6609	0.0025	0.023	173		9.63	9.71			23548+4546	I 1	1							G
117897	7.905	0.009	7.806	0.011		0.097	0.013	T	0.11	0.01	L	7.8214	0.0014	0.010	96		7.80	7.85		C			1							S
117898	9.590	0.021	9.285	0.023		0.290	0.029	T	0.33	0.04	L	9.2822	0.0017	0.017	95		9.25	9.31		C			1							
117899	9.052	0.015	8.521	0.014		0.498	0.018	T	0.57	0.02	L	8.5801	0.0020	0.013	84		8.56	8.60		C			1							S
117900	8.808	0.012	7.469	0.008		1.136	0.011	T	1.10	0.01	L	7.5159	0.0010	0.009	97		7.50	7.54		C			1							

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg		Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)											Soln F1 %	F2
1 2	3	4	5	6 7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
117901	23 54 52.81	−62 08 03.9	9.01	H	358.720 060 59	−62.134 410 91		3.26	19.67	−24.15	0.78	0.83	1.07	0.93	0.91	– 9	+ 2	– 1	+ 5	+ 6	– 7	+ 4	– 5	– 8	–15	0	−0.49
117902	23 54 52.93	−00 17 08.2	8.36	G	358.720 547 56	−00.285 622 63		18.83	172.60	−140.97	1.15	0.52	1.18	1.37	0.51	+33	+14	+11	–16	+12	+15	+ 7	–20	+20	+52	0	0.32
117903	23 54 52.94	−41 59 51.8	8.66	H	358.720 572 10	−41.997 721 63		11.64	76.93	−64.30	0.72	0.82	1.24	0.84	0.88	+20	– 1	–20	+26	+ 5	+ 0	+ 2	– 4	–19	+11	0	0.33
117904	23 54 53.37	−29 13 11.9	11.54	H	358.722 391 09	−29.219 967 88		1.89	−1.28	−20.51	2.77	2.37	3.51	4.20	2.01	+18	–15	–20	+13	+ 6	+ 3	–18	–51	+27	–26	0	0.38
117905	23 54 54.46	−19 07 49.9	8.86	H	358.726 908 25	−19.130 519 31		20.13	4.22	12.30	1.15	0.94	1.76	1.60	1.21	+33	–30	–41	–42	–23	+62	– 5	–22	+37	+35	0	0.78
117906	23 54 56.38	+29 28 32.2	6.77	H	358.734 927 03	+29.475 620 32		4.39	21.18	−3.52	0.70	0.56	0.87	0.78	0.76	+15	+29	– 3	+38	+14	– 4	+13	+32	+ 3	+17	2	1.36
117907	23 54 56.55	−78 30 18.4	7.49	G	358.735 611 28	−78.505 119 33		3.10	81.36	−36.64	0.52	0.52	0.61	0.58	0.52	+10	–13	–12	–13	+ 2	+14	+ 1	+ 2	+ 3	+21	0	0.65
117908	23 54 57.66	−69 44 10.1	8.78	H	358.740 243 35	−69.736 132 59		4.95	92.24	19.96	0.67	0.69	0.85	0.70	0.74	–13	+ 5	–15	–14	+ 5	+18	+ 8	– 6	+ 4	+ 3	0	0.37
117909	23 54 57.73	+10 26 14.4	8.90	H	358.740 547 41	+10.437 331 85		5.86	−1.62	−6.30	1.11	0.81	1.29	1.19	0.99	+45	+20	– 1	+13	+29	– 8	+30	+29	+ 6	+58	0	−0.30
117910	23 54 58.18	−20 02 44.5	8.36	H	358.742 402 73	−20.045 693 97		9.91	−2.10	−46.87	1.10	0.83	1.61	1.49	1.22	+24	–13	–39	–29	–18	+53	+ 0	–20	+41	+36	0	−0.46
117911	23 54 59.33	−12 57 35.9	10.05	G	358.747 223 39	−12.959 972 41		18.94	243.00	57.26	1.42	1.31	1.93	1.88	1.52	+47	–38	–51	–30	–18	+37	– 2	–24	+ 6	+18	0	1.19
117912	23 55 00.04	+08 23 22.1	7.80	H	358.750 162 43	+08.389 469 65		2.05	10.28	−1.02	0.84	0.58	0.91	0.95	0.79	+25	– 1	–12	–20	+ 8	+10	+ 7	– 4	+11	+58	0	1.54
117913	23 55 01.34	+29 27 01.9	8.25	H	358.755 593 51	+29.450 518 16		0.42	0.03	−10.65	0.84	0.63	1.05	0.98	0.67	+ 5	+27	+ 1	+30	+ 1	– 2	+ 3	+ 9	+11	+ 0	0	0.91
117914	23 55 01.54	+05 55 42.1	8.17	H	358.756 432 13	+05.928 347 70		3.05	18.37	13.29	0.95	0.57	1.00	1.13	0.93	+33	–18	– 9	–25	–10	+14	–10	– 3	+ 4	+30	0	0.61
117915	23 55 03.67	+28 38 00.9	7.51	2 T	358.765 292 12	+28.633 593 92		23.62	576.15	34.35	0.72	0.54	0.89	0.79	0.56	+ 8	+11	+ 2	+18	+ 5	–13	+ 6	+10	+ 5	+12	0	−0.72
117916	23 55 03.69	+38 04 11.4	8.34	H	358.765 392 86	+38.069 836 39		3.81	−16.15	−10.98	0.74	0.59	0.96	0.80	0.67	+13	– 2	+13	+48	+ 4	– 7	+ 6	+35	– 5	+24	2	−0.23
117917	23 55 03.86	−09 27 38.2	6.73	H	358.766 074 84	−09.460 600 16		13.30	80.94	6.70	0.79	0.60	1.00	1.36	0.77	+35	–22	–23	+ 2	–13	+45	–20	–25	+18	– 4	0	−0.20
117918	23 55 04.01	+20 23 05.3	8.94	G	358.766 696 76	+20.384 801 28		22.08	263.96	10.00	0.89	0.65	1.13	0.93	0.69	+34	+12	– 2	+ 3	+ 3	+ 7	+ 5	+ 3	+18	+42	0	0.41
117919 H	23 55 04.86	−37 21 53.3	7.86	G	358.770 234 68	−37.364 795 82	A	7.58	−30.50	−32.67	1.21	1.00	1.48	1.39	0.93	+ 2	+ 9	+ 4	–27	+ 6	+16	+ 2	–35	+ 3	– 8	2	−0.33
117920	23 55 04.93	+54 35 26.1	8.03	H	358.770 531 99	+54.590 593 36		2.64	6.37	−2.36	0.53	0.60	0.86	0.64	0.66	–21	+17	+15	+21	– 6	+ 3	+ 0	– 2	+ 9	–10	0	−2.93
*117921 H	23 55 05.15	+70 45 16.8	9.01	H	358.771 475 11	+70.754 664 02	A	−0.59	−3.85	−2.14	1.28	1.29	1.39	1.38	1.27	+ 8	+ 1	+ 6	–23	+ 5	+ 3	+ 5	–20	+ 9	+11	1	0.37
*117922	23 55 05.08	−41 24 05.6	8.98	H	358.771 186 73	−41.401 549 33		10.48	−2.74	−17.11	0.73	0.83	1.21	0.84	0.87	+ 8	– 7	– 4	+28	–10	+12	–15	–25	– 8	– 6	0	−0.15
117923	23 55 05.64	+57 05 06.8	8.95	H	358.773 480 31	+57.085 216 40		6.82	−30.18	−7.06	0.79	0.85	1.22	1.09	1.03	–11	+ 6	+14	– 3	+10	+20	+ 6	+ 3	– 9	–19	3	−0.25
117924	23 55 06.99	−08 26 29.3	9.29	H	358.779 112 57	−08.441 469 03		4.46	−14.13	2.01	1.06	0.86	1.22	1.24	0.94	+39	–15	–12	–13	+ 1	+ 5	– 1	–14	+ 8	+ 5	0	1.27
117925	23 55 07.33	+47 43 42.8	6.97	H	358.780 532 68	+47.728 553 82		2.77	36.16	−8.92	0.49	0.51	0.81	0.49	0.57	– 1	+21	+21	–22	+ 1	– 3	+ 8	+31	+21	–10	0	2.66
117926	23 55 07.72	−04 40 05.0	7.83	G	358.782 185 65	−04.668 046 45		1.67	−2.21	−10.54	1.03	0.64	1.12	1.33	0.60	+10	+ 7	–26	–15	+ 3	+19	+ 7	–40	+33	+32	0	0.09
117927	23 55 07.78	+07 04 15.7	6.22	H	358.782 413 35	+07.071 016 44		8.08	21.77	−18.26	0.77	0.51	0.88	0.94	0.79	+34	+ 1	– 7	– 1	– 2	+12	– 2	+ 0	+ 4	+51	0	0.39
117928	23 55 10.38	+72 27 37.0	8.95	H	358.793 230 10	+72.460 291 27		0.64	−0.76	−3.83	0.67	0.67	0.80	0.77	0.69	– 5	+ 5	+23	+24	– 3	+ 2	– 7	– 4	+ 3	–18	0	−0.08
*117929	23 55 14.96	−21 37 57.6	9.85	G	358.812 349 47	−21.632 671 49		12.82	187.55	−149.14	1.51	1.16	1.88	1.74	1.54	+11	+24	–37	–24	– 3	+10	+ 9	–16	+22	+20	7	2.78
*117930	23 55 14.95	+58 05 20.1	7.38	H	358.812 292 53	+58.088 911 73		12.29	22.94	75.46	0.52	0.54	0.76	0.65	0.66	–21	+18	+13	+ 6	+ 2	+ 2	+ 3	–10	+11	–29	0	0.79
117931	23 55 16.57	−31 55 17.3	6.09	2 H	358.819 060 97	−31.921 469 22		3.16	17.66	0.84	0.61	0.46	0.83	0.67	0.39	– 3	– 8	+32	–50	+17	+14	+14	–41	–13	–19	1	−1.77
117932	23 55 16.68	−31 53 03.4	6.84	H	358.819 488 38	−31.884 274 07		3.21	17.81	1.58	0.63	0.48	0.86	0.68	0.39	– 3	–12	+31	–50	+17	+19	+13	–43	–11	–18	1	−1.64
117933	23 55 21.16	+03 14 23.0	8.30	H	358.838 179 61	+03.239 730 48		2.61	−4.74	−18.53	1.03	0.60	1.07	1.27	0.73	+22	–18	– 4	–33	+ 4	+26	+ 5	– 6	+ 7	+21	0	0.45
117934	23 55 21.70	+50 52 37.5	9.39	H	358.840 435 96	+50.877 095 52		4.23	−8.04	10.45	0.88	0.93	1.44	1.07	0.95	–35	+ 7	+28	+30	– 3	+14	– 5	–13	– 6	–33	0	2.44
117935	23 55 21.86	+47 10 46.5	9.49	H	358.841 085 84	+47.179 588 73		4.27	5.40	−4.92	0.81	0.80	1.30	0.77	0.86	– 7	+23	+19	– 3	–11	+ 0	– 3	+34	+25	–17	1	1.92
117936	23 55 22.03	+50 14 31.9	8.31	1 H	358.841 796 20	+50.242 189 64		1.33	5.76	−1.81	0.50	0.61	0.95	0.65	0.76	–37	+ 2	+19	+27	– 4	– 6	+ 0	– 7	+ 4	–31	1	0.56
117937	23 55 22.52	−01 04 45.5	9.64	H	358.843 814 55	−01.079 299 39		3.52	−7.86	−14.45	1.45	0.71	1.57	1.64	0.67	+27	+16	+17	–15	+23	+31	+16	–13	+24	+46	3	0.70
117938	23 55 22.67	+32 53 31.4	7.38	H	358.844 444 50	+32.892 042 89		2.29	−12.12	−9.00	0.72	0.55	0.90	0.87	0.63	–10	+34	–21	+19	+ 3	+ 4	+14	–16	+31	– 1	0	0.36
117939	23 55 23.02	+25 57 18.1	6.52	H	358.845 906 11	+25.955 018 66		5.40	1.47	−10.48	0.61	0.50	0.80	0.63	0.51	+26	+24	+ 5	+ 8	+11	+ 9	+13	+ 4	+10	+37	0	−0.32
117940	23 55 23.50	−04 54 05.7	7.99	H	358.847 926 15	−04.901 580 77		3.23	0.89	12.83	0.90	0.70	1.24	1.35	0.67	+27	+ 4	–32	+ 6	–21	+53	– 2	–50	+42	+52	0	0.29
117941	23 55 23.64	−50 06 50.1	7.71	H	358.848 500 87	−50.113 908 80		6.54	−10.43	−3.13	0.60	0.64	1.04	0.76	0.84	– 7	+ 5	–43	–18	–11	+ 4	– 9	–30	+24	+16	0	1.41
117942	23 55 24.10	+39 21 35.2	9.54	H	358.850 429 57	+39.359 780 48		7.31	68.13	3.23	1.05	0.85	1.29	1.07	0.87	–10	+20	+14	+60	–26	+ 9	–24	+34	+10	–11	0	0.42
117943	23 55 24.58	−39 45 50.2	8.96	H	358.852 418 99	−39.763 951 39		6.10	34.24	8.05	0.61	0.72	1.14	0.67	0.70	+10	+16	–18	+38	–22	+29	–20	–28	+ 9	+ 6	1	0.63
117944	23 55 25.58	−17 49 34.3	7.76	G	358.856 589 29	−17.826 186 73		16.01	10.59	76.34	1.02	0.76	1.30	1.81	0.98	+26	–27	–44	–21	– 9	+29	– 5	–23	+35	– 5	0	0.23
117945	23 55 25.89	+35 57 19.3	8.23	2 H	358.857 868 37	+35.955 351 58		2.87	−19.46	−10.51	0.74	0.55	0.86	1.00	0.68	+ 4	+ 2	– 4	– 2	+ 1	+ 3	– 1	+20	+ 8	+14	0	0.55
117946	23 55 26.47	+22 11 37.1	8.77	G	358.860 277 50	+22.193 643 66		39.35	204.81	−148.28	0.97	0.69	1.16	1.12	0.70	+16	+13	+ 9	–26	+14	– 7	+13	– 2	+20	+18	3	0.28
117947	23 55 26.51	+58 04 45.0	9.23	H	358.860 476 92	+58.079 163 93		2.14	−14.26	−3.86	0.73	0.79	1.09	0.87	0.90	–19	+12	+13	– 3	+ 2	– 1	+ 3	– 8	+ 8	–27	0	0.06
117948	23 55 27.78	−11 57 14.3	9.08	H	358.865 758 67	−11.953 963 62		7.82	80.31	1.66	1.10	0.89	1.45	1.42	1.04	+37	–29	–52	–29	–20	+33	– 9	–28	+19	+20	0	0.08
117949	23 55 30.32	−14 50 42.5	9.52	H	358.876 353 78	−14.845 152 70		2.62	35.67	−0.15	1.20	0.93	1.67	1.83	1.12	+41	–41	–42	–17	–16	+45	–15	–22	+36	+12	0	1.11
117950	23 55 30.80	−13 45 10.1	8.71	H	358.878 351 56	−13.752 807 64		12.83	186.52	−56.47	1.03	0.83	1.42	1.72	0.91	+30	–17	–47	–29	–21	+44	– 6	–35	+22	+ 0	0	0.64
117951	23 55 31.57	−27 26 15.9	9.40	H	358.881 549 97	−27.437 737 40		3.13	−0.68	−18.48	1.35	0.77	1.54	1.87	0.89	+11	–24	+17	+ 9	+20	+32	– 1	–26	+ 5	–15	2	1.03
117952	23 55 32.11	+48 56 04.9	8.00	H	358.883 773 76	+48.934 708 13		4.84	36.18	14.58	0.61	0.61	0.95	0.66	0.67	–10	+18	+21	–24	+ 8	– 3	+15	+ 4	+25	–23	3	0.33
117953	23 55 32.54	+03 30 07.8	7.72	G	358.885 588 03	+03.502 160 62		34.09	−208.10	−293.61	0.87	0.54	0.94	1.06	0.68	+29	–15	– 6	– 9	+ 2	+11	+ 3	+ 1	+ 3	+23	0	−1.08
117954	23 55 32.56	+52 44 07.9	6.61	H	358.885 668 76	+52.735 534 12		6.71	64.16	19.31	0.39	0.51	0.78	0.56	0.57	–43	+ 9	+17	+ 6	– 6	+ 4	+ 3	–14	+12	–19	0	−0.44
117955	23 55 32.65	+59 24 55.9	7.28	H	358.886 043 25	+59.415 525 15		4.46	28.75	−1.29	0.54	0.51	0.73	0.66	0.58	–18	+21	+ 4	+28	+ 1	+ 2	+ 8	– 6	+22	–10	2	1.14
117956	23 55 33.48	+47 21 21.0	6.01	G	358.889 520 16	+47.355 821 63		2.02	−10.83	−7.40	0.41	0.44	0.67	0.37	0.45	+ 3	+21	+19	–25	– 4	+ 0	+ 1	+24	+19	– 4	0	0.52
117957	23 55 33.84	+57 24 43.8	6.03	2 H	358.891 013 10	+57.412 168 74		−0.72	−3.13	−0.44	0.43	0.46	0.65	0.60	0.55	–16	+13	+15	+14	+10	+ 2	+ 7	–10	+ 5	–26	0	0.75
117958	23 55 34.97	−20 57 11.8	7.88	H	358.895 689 59	−20.953 283 68		25.49	8.17	19.76	0.99	0.78	1.19	1.21	1.01	+18	+23	–13	–10	+ 7	–16	+12	+16	+28	+14	0	2.82
117959	23 55 35.18	−26 36 08.5	8.77	H	358.896 567 94	−26.602 365 61		4.89	23.16	17.77	1.29	0.67	1.24	1.74	1.06	+34	+12	+19	+35	+29	+11	+28	+17	+23	+14	2	−0.72
117960	23 55 35.90	+00 41 45.0	9.23	H	358.899 577 40	+00.695 839 72		23.50	233.83	−2.61	3.47	1.81	3.76	4.46	2.28	+36	+17	+ 3	+13	+10	+18	+15	– 8	+22	+54	0	
117961	23 55 37.37	−51 22 26.6	8.52	H	358.905 698 17	−51.374 052 66		10.94	158.05	−85.33	0.73	0.72	1.16	0.74	0.83	– 8	–10	–29	–25	– 3	+ 4	– 7	–13	+17	+ 2	2	−2.08
117962	23 55 37.70	+08 13 23.9	6.84	H	358.907 092 45	+08.223 297 82		7.51	15.48	−8.60	0.72	0.53	0.81	0.83	0.66	+34	–12	–13	–22	+ 0	+15	+ 0	–14	+13	+58	2	0.98
117963	23 55 37.93	+46 21 30.0	6.94	1 H	358.908 061 03	+46.358 324 87		3.44	9.32	−13.32	0.42	0.49	0.76	0.46	0.52	+ 7	+19	+16	–23	+ 1	–20	+ 6	+27	+14	+ 1	0	−0.16
117964	23 55 37.97	−10 47 27.2	8.47	H	358.908 188 28	−10.790 900 16		6.73	16.89	−14.71	0.94	0.85	1.27	1.34	1.25	+37	–14	–38	+ 5	– 7	+36	+ 5	– 2	+24	+37	0	0.68
117965 H	23 55 39.54	−33 10 10.9	10.48	G	358.914 747 30	−33.169 695 57	*	16.68	293.76	30.17	3.09	2.29	2.40	1.98	1.33	+29	+ 6	+ 2	–28	+ 3	–10	+ 0	–31	+ 8	– 2	1	−0.37
117966	23 55 40.06	−06 08 29.8	11.14	G	358.916 910 17	−06.141 622 19		57.97	−476.09	−391.03	11.62	7.62	11.80	15.00	6.71	+13	– 1	–16	–22	+ 6	– 6	+ 1	–38	+13	+ 1	2	
117967	23 55 40.39	−38 03 58.9	8.36	H	358.918 293 60	−38.066 350 69		4.27	−12.88	8.81	0.82	0.71	1.20	0.91	0.69	+ 5	+10	–26	–29	– 8	+ 7	– 2	–39	+32	+ 4	0	−0.18
117968	23 55 40.44	−60 58 46.8	8.86	H	358.918 496 95	−60.979 658 26		−0.77	18.07	−7.76	0.81	0.75	1.06	1.01	0.90	– 9	– 5	– 6	–10	– 7	+ 1	– 6	–17	– 1	– 8	0	−1.49
117969	23 55 40.47	+16 34 50.4	11.10	H	358.918 644 43	+16.580 679 79		−0.63	23.66	−31.61	1.61	1.22	2.12	1.84	1.33	+43	+ 6	– 5	– 1	+ 9	+20	+ 9	+ 5	+16	+54	1	0.62
117970	23 55 40.61	−36 04 03.4	9.78	H	358.919 211 32	−36.067 613 44		0.75	13.24	−18.29	1.13	0.81	1.50	1.20	0.80	– 2	+15	+ 1	–40	+ 4	+11	+ 8	–28	+12	–14	0	−0.31
117971 H	23 55 40.64	+43 18 10.5	8.62	H	358.919 337 17	+43.302 905 61	*	4.71	−4.57	−7.47	0.76	0.70	1.14	0.86	0.80	– 7	+ 4	+14	+21	–11	– 6	–10	+18	+13	–10	0	2.65
117972	23 55 41.39	+25 08 39.6	9.01	2 H	358.922 442 61	+25.144 346 36		20.22	217.92	−32.75	0.98	0.77	1.29	1.02	0.99	+26	+17	+12	+18	+ 0	–14	– 2	+10	–13	+25	2	−0.11
117973	23 55 41.48	+77 55 10.7	7.78	H	358.922 815 56	+77.919 640 45		5.73	7.32	−7.65	0.53	0.53	0.62	0.66	0.58	– 7	– 7	+19	+ 1	– 6	+ 6	– 8	– 6	+ 8	–17	0	2.63
117974	23 55 42.75	+31 16 08.9	10.55	H	358.928 113 85	+31.269 150 72		5.66	119.24	28.94	3.54	2.39	4.18	3.84	2.24	+ 5	+25	– 2	+ 8	+ 3	+14	+ 8	–25	+ 8	+19	4	
117975	23 55 43.41	−31 05 53.7	10.59	G	358.930 880 46	−31.098 237 02		15.16	288.79	−83.59	1.55	1.01	1.79	1.67	0.88	– 3	+11	+ 9	+ 4	– 7	+15	–10	–35	+ 8	–17	0	0.75
117976	23 55 43.71	−53 49 07.7	7.35	H	358.932 107 73	−53.818 805 44		3.31	29.35	−7.06	0.47	0.52	0.81	0.63	0.65	–41	+ 1	– 1	+ 2	+13	+ 9	+11	– 2	–14	–54	0	0.55
117977	23 55 44.41	−09 03 42.6	7.27	H	358.935 039 37	−09.061 819 64		3.19	61.19	−61.39	1.23	0.74	1.08	1.38	0.95	–14	–20	–16	– 7	–11	+41	–10	–17	+18	+16	0	−1.79
117978	23 55 45.71	−13 09 08.7	6.60	H	358.940 463 44	−13.152 407 62		7.24	−27.87	−70.76	0.76	0.62	0.99	1.05	0.77	+36	–26	–38	–27	–18	+39	–12	–30	+34	+18	0	−0.44
117979	23 55 47.64	+48 13 13.4	6.69	H	358.948 507 57	+48.220 396 66		5.85	−4.84	−56.31	0.50	0.49	0.82	0.55	0.52	+ 0	+19	+23	– 4	– 6	–16	+ 4	+23	+30	–14	0	1.74
117980	23 55 48.72	−13 57 59.9	7.30	G	358.952 988 01	−13.966 626 01		17.00	162.00	22.96	0.82	0.69	1.18	1.28	0.73	+33	–30	–52	–26	–27	+53	– 9	–29	+25	+10	0	−0.66
117981	23 55 49.88	−23 36 18.6	9.53	H	358.957 834 89	−23.605 157 67		2.61	27.72	16.66	1.26	1.03	1.54	1.99	1.47	+34	– 3	–32	+25	– 5	+21	– 2	–13	+18	+28	0	−1.32
117982	23 55 52.41	+27 10 26.9	10.15	H	358.968 381 57	+27.174 152 60		1.76	13.29	−14.18	1.17	0.95	1.59	1.24	1.04	+22	+29	– 9	+ 2	+16	–14	+17	+ 8	+13	+38	0	0.49
117983	23 55 52.85	−51 11 28.1	9.87	H	358.970 213 58	−51.191 130 99		4.46	−34.10	−28.56	1.09	1.07	1.72	1.24	1.35	–13	+ 2	–24	–11	– 6	+ 0	– 6	– 8	+25	– 4	0	1.06
117984	23 55 53.93	+49 54 00.1	9.46	H	358.974 696 44	+49.900 025 15		2.37	6.46	−2.95	0.66	0.78	1.22	0.85	0.95	–33	+ 6	+24	– 3	+10	–10	+14	–21	+10	–32	0	0.50
117985	23 55 54.15	−24 22 50.4	8.61	H	358.975 633 48	−24.380 660 33		0.77	14.19	−8.74	1.17	0.82	1.29	1.56	1.21	+41	+ 6	+ 2	+12	+23	–19	+25	+16	–13	+27	0	−1.41
117986	23 55 54.63	+15 13 49.1	6.45	2 H	358.977 633 28	+15.230 308 39		4.37	80.67	−7.22	0.60	0.47	0.82	0.62	0.48	+43	– 1	– 9	+ 9	+ 2	–17	+ 0	+ 0	+ 0	+45	0	−0.32
117987	23 55 55.66	+67 06 50.6	11.04	G	358.981 935 50	+67.114 057 99		−1.35	19.97	−0.86	1.62	1.53	2.06	1.87	1.70	– 9	+16	+25	+ 2	–10	–11	– 7	– 2	+ 8	–26	0	0.23
117988	23 55 56.48	−10 51 56.7	8.60	H	358.985 330 41	−10.865 752 84		1.73	36.52	−16.32	1.00	0.84	1.20	1.46	1.07	+43	–23	–35	–17	– 4	+ 9	– 6	–23	+14	+15	5	0.27
117989	23 55 57.99	−20 27 58.5	9.59	H	358.991 645 52	−20.466 257 66		6.90	9.57	−17.26	1.49	1.07	1.60	2.22	1.48	+17	+ 1	–24	–44	+ 8	+ 4	+13	–21	+16	+ 1	0	0.31
117990	23 55 58.38	+21 09 57.3	6.75	H	358.993 233 14	+21.165 914 25		12.44	17.77	14.66	0.61	0.46	0.78	0.62	0.46	+24	+22	+ 1	+ 5	+ 5	+ 1	+10	– 5	+22	+24	0	0.92
117991	23 55 59.96	−42 50 53.2	8.66	H	358.999 838 74	−42.848 108 22		12.47	115.88	−22.26	0.80	0.68	1.09	0.94	0.77	+ 1	– 1	–10	+33	– 9	– 3	–10	+ 2	+ 0	+ 0	2	−1.04
117992	23 56 00.44	−47 56 36.9	9.05	H	359.001 846 36	−47.943 595 86		4.68	−6.28	−6.78	1.93	1.58	2.55	2.35	1.93	– 6	– 5	–20	– 5	–11	– 1	–11	–48	+14	– 2	2	
117993	23 56 01.05	+24 29 31.1	8.72	H	359.004 374 07	+24.491 975 34		2.85	17.67	−24.15	0.89	0.66	1.07	0.99	0.61	+16	+11	+19	– 1	– 4	+ 2	– 4	–13	+ 4	+11	2	−0.15
117994	23 56 01.42	−12 29 14.7	8.06	G	359.005 936 39	−12.487 428 18		8.30	61.66	−43.58	1.07	0.82	1.35	1.36	0.91	+48	–48	–55	+11	– 5	+14	–17	–20	+29	+ 4	5	0.17
117995	23 56 02.57	+16 18 25.1	9.05	H	359.010 699 21	+16.306 977 94		0.42	25.71	−12.17	0.94	0.69	1.21	1.07	0.78	+37	+ 3	– 5	–13	+13	+ 5	+10	+ 9	+ 5	+49	3	−0.88
117996 H	23 56 04.32	+23 26 48.7	8.69	H	359.017 990 82	+23.446 870 93	*	9.21	−44.35	−40.77	0.94	0.64	1.13	0.91	0.68	+14	+28	+10	– 1	+ 1	– 1	+ 8	– 5	+23	+15	0	1.05
117997	23 56 04.81	+31 04 41.0	7.47	G	359.020 031 27	+31.078 062 42		10.19	−2.21	−65.73	0.73	0.53	0.89	0.91	0.55	– 2	+21	– 9	+11	+ 3	+ 9	+ 4	+ 4	+ 3	– 2	0	−0.44
117998	23 56 04.86	+14 50 32.2	8.30	H	359.020 251 81	+14.842 277 08		7.32	70.44	38.33	0.80	0.61	1.06	0.90	0.78	+42	– 1	–12	+22	+ 9	–26	+ 5	+19	– 7	+34	2	0.86
117999	23 56 04.95	+64 59 00.1	8.13	H	359.020

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data								Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
117901	10.546	0.030	9.160	0.016		1.172	0.027	T	1.13	0.02	L	9.1771	0.0021	0.026	143		9.14	9.23					1						
117902	9.272	0.014	8.440	0.011		0.734	0.003	G	0.78	0.00	H	8.4977	0.0015	0.014	145		8.47	8.53		C			1						S
117903	9.342	0.015	8.722	0.013		0.574	0.015	T	0.65	0.01	L	8.7805	0.0013	0.015	105		8.76	8.80		D			1						S
117904											T	11.6787	0.0066	0.048	60		11.62	11.76					1						G
117905	9.705	0.026	8.932	0.021		0.680	0.015	G	0.74	0.01	H	8.9917	0.0022	0.017	70		8.96	9.02		C			1						
117906	6.732	0.005	6.776	0.005		−0.036	0.006	T	−0.01	0.01	L	6.7690	0.0008	0.006	89		6.76	6.78		C	23550+2928	I 2	1 G						S
117907	9.082	0.012	7.635	0.007		1.216	0.003	G	1.18	0.00	H	7.6394	0.0011	0.012	134		7.62	7.66					1						S
117908	9.082	0.012	8.808	0.013		0.261	0.017	T	0.29	0.02	L	8.8558	0.0019	0.023	159		8.82	8.89					1						
117909	10.939	0.052	9.085	0.020		1.500	0.040	G	1.50	0.10	R	9.0288	0.0025	0.015	76		9.00	9.05		C			1						
117910	8.910	0.016	8.413	0.015		0.498	0.015	G	0.57	0.02	H	8.4668	0.0015	0.014	63		8.43	8.50		C			1						S
117911	11.222	0.072	10.287	0.051		0.896	0.005	G	0.90	0.00	H	10.1872	0.0030	0.022	77		10.12	10.22		C			1						
117912	9.601	0.023	7.947	0.011		1.383	0.020	T	1.36	0.02	L	7.9420	0.0013	0.009	77		7.92	7.96					1						S
117913	9.859	0.022	8.374	0.012		1.250	0.020	T	1.21	0.02	L	8.4133	0.0014	0.012	90		8.39	8.44		C	23550+2928	I 2	1						S
117914	9.781	0.022	8.307	0.012		1.241	0.020	T	1.20	0.02	L	8.3313	0.0010	0.011	96		8.31	8.35		C			1						
117915	8.806	0.013	7.622	0.009		1.007	0.013	T	0.98	0.01	L	7.6068	0.0126	0.082	86		7.52	7.87	6.73	P 1 A			1 S						S P
117916	8.473	0.010	8.346	0.011		0.123	0.014	T	0.14	0.01	L	8.3845	0.0013	0.014	121		8.36	8.42					1						S
117917	7.120	0.007	6.764	0.007		0.337	0.009	T	0.39	0.01	L	6.8128	0.0012	0.008	75		6.80	6.83					1						S
117918	10.003	0.025	9.022	0.018		0.805	0.005	G	0.83	0.00	H	9.0902	0.0017	0.015	101		9.06	9.11		C			1						
117919	8.477	0.013	7.975	0.013	*	0.501	0.015	G	0.57	0.02	H	* 7.9744	0.0012	0.014	127	*	7.95	8.00		D	23551−3722	I 1	2 C A	AB	222	0.909	0.004	1.32	0.02	S
117920	7.987	0.007	8.020	0.009		−0.026	0.010	T	0.00	0.01	L	8.0333	0.0012	0.014	151		8.01	8.06					1						S
117921	9.307	0.014	9.067	0.016	*	0.229	0.020	T	0.25	0.03	L	* 9.0794	0.0021	0.018	137	*	9.03	9.11		D	23551+7045	I 1	2 C A	AB	20	0.600	0.006	1.73	0.03	
117922	9.781	0.019	9.040	0.016		0.678	0.020	T	0.74	0.02	L	9.1205	0.0019	0.020	120		9.09	9.16					1						S
117923	9.408	0.019	9.007	0.019		0.415	0.015	G	0.48	0.02	H	9.0438	0.0021	0.020	131		9.01	9.08					1						
117924	9.912	0.029	9.334	0.027		0.540	0.035	T	0.61	0.04	L	9.4126	0.0022	0.019	78		9.37	9.44					1						
117925	8.697	0.009	7.112	0.005		1.329	0.008	T	1.29	0.01	L	7.1216	0.0010	0.012	146		7.10	7.14					1						S
117926	9.682	0.026	8.026	0.012		1.443	0.020	G	1.44	0.03	H	7.9770	0.0019	0.013	79		7.95	8.00					1						S
117927	6.155	0.003	6.203	0.004		−0.066	0.005	G	−0.04	0.01	H	6.2087	0.0007	0.005	82		6.20	6.22		C			1						S
117928	9.066	0.014	8.937	0.017		0.125	0.021	T	0.14	0.02	L	8.9934	0.0027	0.024	122		8.96	9.05					1						
117929	10.726	0.055	9.882	0.040		0.746	0.006	G	0.79	0.00	H	9.9969	0.0036	0.030	83		9.93	10.04					1						
117930	8.816	0.012	7.503	0.007		1.115	0.011	T	1.08	0.01	L	7.5475	0.0010	0.012	151		7.52	7.57					1						
117931	5.969	0.003	6.077	0.004		−0.093	0.004	T	−0.07	0.01	L	6.0637	0.0010	0.032	173		6.05	6.15	2.45	P 1 A			1						S
117932	6.732	0.003	6.820	0.004		−0.080	0.001	G	−0.06	0.00	H	6.8157	0.0006	0.009	180		6.80	6.83					1						S
117933	10.017	0.025	8.451	0.013		1.314	0.022	T	1.28	0.03	L	8.4516	0.0014	0.013	103		8.43	8.48		C			1						
117934	9.904	0.018	9.438	0.018		0.439	0.023	T	0.51	0.02	L	9.4866	0.0022	0.028	163		9.43	9.53		C			1 S						
117935	9.650	0.016	9.534	0.020		0.112	0.024	T	0.13	0.03	L	9.5316	0.0020	0.021	148		9.49	9.58			23554+4711	I 1	1 S						
117936	8.346	0.006	8.314	0.007		0.034	0.009	T	0.05	0.01	L	8.3244	0.0016	0.020	224		8.29	8.36	3.61	P 1 A			1						S
117937	10.151	0.023	9.683	0.024		0.441	0.030	T	0.51	0.03	L	9.7392	0.0025	0.028	160		9.70	9.79					1						
117938	9.077	0.015	7.520	0.008		1.307	0.013	T	1.27	0.01	L	7.5340	0.0007	0.008	77		7.52	7.56					1						S
117939	8.461	0.012	6.674	0.005		1.488	0.010	T	1.51	0.01	L	6.6459	0.0013	0.010	80		6.63	6.66					1						S
117940	9.349	0.022	8.107	0.013		1.060	0.020	T	1.03	0.02	L	8.1573	0.0011	0.010	76		8.14	8.18		D			1						S
117941	9.005	0.011	7.825	0.007		1.011	0.010	T	0.99	0.01	L	7.8762	0.0014	0.016	159		7.85	7.90					1						S
117942	10.237	0.026	9.624	0.024		0.571	0.031	T	0.64	0.03	L	9.6624	0.0027	0.026	123		9.62	9.70		C			1						
117943	9.465	0.013	8.993	0.013		0.457	0.014	T	0.53	0.01	L	9.0591	0.0017	0.015	152		9.04	9.09					1						S
117944	8.379	0.012	7.840	0.014		0.513	0.014	T	0.59	0.01	L	7.8701	0.0019	0.014	69		7.85	7.89		C	23554−1749	I 1	1						S
117945	10.309	0.030	8.422	0.012		1.601	0.027	T	1.89	0.08	O	8.3234	0.0026	0.025	105		8.28	8.36		U 2			1						
117946	10.149	0.033	8.903	0.019		1.020	0.020	G	1.07	0.02	I	8.8944	0.0022	0.015	96		8.87	8.92					1						
117947	9.562	0.019	9.229	0.021		0.316	0.026	T	0.36	0.04	L	9.3111	0.0017	0.024	144		9.27	9.35		C			1						
117948	9.821	0.032	9.175	0.027		0.592	0.031	T	0.66	0.03	L	9.2069	0.0028	0.020	63		9.16	9.24		C			1						S
117949	10.207	0.033	9.572	0.031		0.585	0.034	T	0.66	0.03	L	9.6503	0.0019	0.017	66		9.61	9.68		C			1						
117950	9.374	0.022	8.763	0.019		0.534	0.003	G	0.61	0.00	H	8.8227	0.0012	0.015	68		8.79	8.85		C			1						S
117951	10.846	0.041	9.531	0.023		1.117	0.037	T	1.08	0.04	L	9.5641	0.0022	0.026	114		9.50	9.61					1 S						
117952	9.592	0.016	8.145	0.009		1.220	0.014	T	1.18	0.01	L	8.1655	0.0013	0.012	129		8.15	8.19		C			1						
117953	8.657	0.012	7.813	0.009		0.751	0.001	G	0.79	0.00	H	7.8686	0.0012	0.009	106		7.85	7.88					1						S
117954	8.166	0.006	6.742	0.003		1.202	0.005	T	1.16	0.01	L	6.7745	0.0007	0.009	225		6.76	6.79		C			1						S
117955	8.728	0.009	7.391	0.006		1.134	0.008	T	1.10	0.01	L	7.4473	0.0012	0.013	152		7.42	7.47		C			1						S
117956	7.511	0.005	6.127	0.003		1.170	0.003	G	1.13	0.00	H	6.1761	0.0007	0.006	152		6.16	6.19		C			1						S
117957	6.220	0.004	6.059	0.004		0.155	0.005	T	0.17	0.01	L	6.0886	0.0020	0.019	133		6.04	6.12		P 1 A			1						S P
117958	8.676	0.014	7.970	0.012		0.640	0.000	G	0.70	0.00	H	8.0167	0.0017	0.012	70		8.00	8.04		C			1 G						S
117959	10.017	0.022	8.865	0.014		0.990	0.020	T	0.97	0.02	L	8.9300	0.0017	0.017	119		8.89	8.95					1						
117960	10.370	0.029	9.341	0.020		0.861	0.015	G	0.87	0.01	H	9.3819	0.0024	0.020	143		9.35	9.42					1 X						
117961	9.381	0.013	8.596	0.010		0.697	0.012	T	0.75	0.01	L	8.6552	0.0021	0.022	165		8.61	8.69					1						S
117962	6.827	0.007	6.822	0.006		−0.015	0.020	G	−0.03	0.02	A	6.8337	0.0006	0.006	80		6.82	6.85					1						S
117963	6.850	0.004	6.929	0.005		−0.065	0.004	G	−0.04	0.00	H	6.9211	0.0012	0.012	164		6.90	6.94		M			1						S
117964	9.626	0.024	8.566	0.017		0.919	0.022	T	0.92	0.02	L	8.6326	0.0015	0.012	70		8.61	8.65					1						S
117965	11.935	0.079	10.616	0.038	*	1.136	0.004	G	1.23	0.01	I	* 10.6133	0.0033	0.033	218	*	10.55	10.67			23557−3310	H 1	2 C B	AB	165	0.220	0.023	0.96	0.34	
117966						1.465	0.005	G	2.29	0.00	A	11.1611	0.0052	0.040	67		11.10	11.24					1 X						G
117967	9.681	0.017	8.481	0.011		1.040	0.004	G	1.01	0.00	H	8.5249	0.0017	0.018	126		8.50	8.56		C			1						S
117968	10.506	0.032	9.014	0.016		1.256	0.028	T	1.21	0.03	L	9.0251	0.0021	0.022	132		8.99	9.06					1						
117969	11.231	0.058	11.186	0.097		0.046	0.105	T	0.06	0.08	L	11.1179	0.0035	0.035	113		11.04	11.18		C			1						G
117970	11.591	0.065	9.952	0.026		1.371	0.055	T	1.34	0.07	L	9.9299	0.0025	0.028	143		9.89	9.97		C			1						
117971	8.831	0.011	8.635	0.013	*	0.187	0.016	T	0.21	0.02	L	* 8.6849	0.0018	0.013	109	*	8.66	8.71		C	23557+4318	M 1	2 C S A	BA	222	0.184	0.015	1.11	0.29	S
117972	10.239	0.038	9.173	0.026		0.924	0.035	T	0.92	0.03	L	9.1750	0.0038	0.035	90		9.11	9.23		U 2			1 G						
117973	9.126	0.012	7.896	0.008		1.050	0.011	T	1.02	0.01	L	7.9471	0.0011	0.012	134		7.93	7.97					1						
117974	11.469	0.096	10.568	0.064		0.801	0.086	T	0.83	0.06	L	10.7012	0.0030	0.023	77		10.64	10.74		D			1 X						G
117975	11.853	0.093	10.670	0.048		1.008	0.009	G	1.05	0.01	I	10.7446	0.0029	0.034	130		10.69	10.81					1						G
117976	7.708	0.006	7.389	0.006		0.330	0.001	G	0.38	0.00	H	7.4344	0.0012	0.015	216		7.41	7.46					1						S
117977	8.304	0.010	7.371	0.008		0.824	0.010	T	0.85	0.01	L	7.4272	0.0014	0.011	75		7.41	7.45					1 G						S
117978	8.121	0.012	6.735	0.006		1.172	0.011	T	1.13	0.01	L	6.7644	0.0013	0.008	82		6.75	6.77					1						S
117979	8.088	0.008	6.802	0.004		1.094	0.007	T	1.06	0.01	L	6.8556	0.0009	0.009	135		6.84	6.87					1						S
117980	7.869	0.010	7.360	0.010		0.498	0.015	G	0.57	0.02	H	7.4039	0.0011	0.007	69		7.39	7.42		C			1						S
117981	10.077	0.030	9.514	0.028		0.531	0.030	T	0.60	0.03	L	9.6471	0.0029	0.023	84		9.61	9.71		C			1						
117982	10.431	0.041	10.204	0.053		0.217	0.063	T	0.24	0.07	L	10.2218	0.0033	0.023	85		10.18	10.27					1						G
117983	10.425	0.026	9.946	0.026		0.463	0.028	T	0.53	0.03	L	9.9771	0.0035	0.039	152		9.90	10.05					1						
117984	9.891	0.016	9.484	0.017		0.385	0.022	T	0.45	0.02	L	9.5447	0.0017	0.025	186		9.50	9.58					1						
117985	9.737	0.022	8.731	0.016		0.867	0.021	T	0.88	0.01	L	8.7499	0.0022	0.017	84		8.72	8.78		C			1						S
117986	8.423	0.010	6.673	0.007		1.560	0.015	G	2.48	0.05	F	6.4658	0.0061	0.054	126		6.37	6.51		U 2			1 S						S P
117987						1.310	0.020	G	1.27	0.02	R	11.2693	0.0049	0.042	123		11.19	11.35		C			1						G
117988	10.127	0.035	8.732	0.019		1.179	0.031	T	1.14	0.03	L	8.7638	0.0015	0.010	59		8.75	8.78		C			1						
117989	10.002	0.029	9.596	0.031		0.397	0.035	T	0.46	0.04	L	9.6764	0.0037	0.023	69		9.64	9.71					1						S
117990	7.116	0.006	6.778	0.005		0.321	0.007	T	0.37	0.01	L	6.8253	0.0008	0.007	97		6.82	6.84					1						S
117991	9.276	0.013	8.731	0.012		0.517	0.013	T	0.59	0.01	L	8.7701	0.0020	0.018	121		8.73	8.79					1						S
117992	10.399	0.026	9.183	0.016		1.039	0.024	T	1.01	0.02	L	9.2181	0.0017	0.018	154		9.18	9.25					1 X						
117993	10.098	0.030	8.851	0.018		1.064	0.027	T	1.03	0.02	L	8.8836	0.0016	0.013	85		8.86	8.91		C			1						
117994	8.588	0.013	8.095	0.013		0.456	0.015	G	0.53	0.02	H	8.1591	0.0016	0.014	71		8.14	8.19					1						S
117995	10.948	0.045	9.215	0.018		1.446	0.038	T	1.44	0.06	L	9.1799	0.0018	0.016	119		9.16	9.22		C			1						
117996	9.256	0.016	8.733	0.016	*	0.491	0.021	T	0.56	0.02	L	* 8.7935	0.0017	0.014	97	*	8.76	8.81		D	23561+2327	I 1	2 C S A	AB	109	0.161	0.007	0.11	0.26	S
117997	7.920	0.007	7.512	0.008		0.409	0.001	G	0.48	0.00	H	7.5673	0.0010	0.008	90		7.55	7.58		C			1						S
117998	8.624	0.011	8.326	0.012		0.283	0.015	T	0.32	0.02	L	8.3716	0.0019	0.013	103		8.34	8.39					1 G						S
117999	9.295	0.015	8.243	0.011		0.913	0.014	T	0.91	0.01	L	8.2899	0.0017	0.015	134		8.27	8.32		C			1						
118000	9.961	0.024	9.414	0.023		0.519	0.025	T	0.59	0.03	L	9.4931	0.0029	0.023	88		9.45	9.53		C			1						

Number HIP	Descriptor: epoch J1991.25 RA h m s	Dec ±° ′ ″	V mag		Position: epoch J1991.25 α (ICRS) deg	δ deg	Par. π mas	Proper Motion $\mu_{\alpha*}$ mas/yr	μ_δ	Standard Errors α* mas	δ	π mas	$\mu_{\alpha*}$ mas/yr	μ_δ	Astrometric Correlations (%)	Soln F1 %	F2
1 2	3	4	5	6 7	8	9 10	11	12	13	14	15	16	17	18	19 20 21 22 23 24 25 26 27 28	29	30
118001	23 56 07.06	−25 54 28.8	8.88	H	359.029 436 56	−25.907 986 15	1.30	35.06	4.72	1.13	0.68	1.24	1.45	0.89	+28 + 5 +21 +18 +17 − 3 +13 − 1 +10 + 1	0	0.76
118002	23 56 07.18	−21 59 31.5	7.24	2 H	359.029 898 98	−21.992 090 91	2.16	14.11	12.07	1.10	0.66	1.10	1.22	0.93	+10 +16 −20 −18 +12 − 1 +20 +14 +16 + 7	2	3.49
118003	23 56 07.27	−52 47 16.9	7.03	H	359.030 274 57	−52.788 036 05	7.14	16.51	−18.89	0.41	0.47	0.76	0.53	0.56	−32 −13 − 3 +28 +17 + 6 +14 − 1 −19 −37	0	1.38
118004	23 56 07.55	+33 29 15.1	7.08	G	359.031 450 96	+33.487 516 72	6.31	15.06	−13.62	0.69	0.50	0.87	0.76	0.58	− 8 +28 −19 +24 − 2 − 8 +10 − 1 +38 + 6	8	−0.15
118005 H	23 56 07.61	+25 20 26.4	8.68	H	359.031 710 13	+25.340 666 35 A	8.13	78.49	59.07	2.11	1.97	2.05	1.61	1.17	− 1 +22 +17 − 2 + 6 + 6 + 6 + 0 + 6 +15	1	0.07
118006	23 56 07.94	−18 00 24.5	9.15	H	359.033 080 07	−18.006 796 40	1.32	6.04	−10.97	1.29	1.02	1.65	2.24	1.25	+35 −23 −42 −19 − 3 +28 + 7 − 8 +14 + 1	0	0.88
118007	23 56 08.68	−62 52 20.7	7.07	G	359.036 153 36	−62.872 415 52	6.86	8.03	8.83	0.48	0.48	0.67	0.62	0.49	− 7 + 4 −23 − 6 + 9 −20 + 5 +11 − 6 − 7	0	−1.21
118008	23 56 10.52	−39 03 06.8	8.24	G	359.043 825 89	−39.051 884 19	45.28	205.90	−185.07	0.60	0.63	1.11	0.67	0.64	+ 8 + 9 −24 +24 −13 +17 −11 −23 +18 + 5	0	1.01
118009	23 56 10.76	−72 00 07.0	9.97	G	359.044 835 28	−72.001 937 94	20.43	−259.09	−99.40	1.05	0.93	1.22	1.16	0.98	− 9 +16 −12 − 9 + 7 +14 +10 −25 +14 − 6	0	−0.80
118010	23 56 11.21	+59 46 00.9	7.67	G	359.046 709 33	+59.766 920 08	20.01	195.30	282.18	0.54	0.53	0.74	0.67	0.60	− 9 +18 + 6 +21 + 8 − 1 +14 − 7 +20 + 0	0	1.78
118011	23 56 15.42	−13 30 40.3	8.95	H	359.064 241 37	−13.511 183 16	3.68	7.72	−13.62	1.08	0.94	1.51	1.47	0.98	+44 −32 −51 −30 −22 +45 − 5 −24 +17 +13	0	0.68
118012	23 56 15.45	+60 17 33.2	8.72	H	359.064 362 04	+60.292 548 88	2.70	5.05	−5.58	0.65	0.65	0.86	0.79	0.78	− 9 + 7 + 9 +26 + 6 − 4 + 8 + 7 +11 − 7	0	−0.95
118013	23 56 17.98	+04 37 35.6	9.05	H	359.074 925 48	+04.626 567 06	9.36	63.83	−31.53	1.20	0.69	1.35	1.32	0.93	+23 +13 −13 − 6 − 6 +18 + 0 + 1 +23 +21	0	0.39
118014	23 56 19.30	+74 08 16.0	7.83	H	359.080 406 99	+74.137 785 80	5.06	−13.00	−3.46	0.65	0.62	0.76	0.86	0.64	− 7 − 3 +24 −22 +11 +26 + 4 −27 + 7 − 9	0	0.05
*118015	23 56 19.58	+10 00 44.0	7.36	H	359.081 603 84	+10.012 233 22	4.90	1.57	−5.72	0.82	0.54	0.94	0.84	0.60	+30 +22 − 8 + 4 +22 −19 +20 +12 − 1 +46	0	0.68
*118016	23 56 19.88	+20 12 32.4	8.46	H	359.082 836 56	+20.209 013 74	2.92	19.62	4.82	0.85	0.74	1.17	0.92	0.75	+45 + 7 + 2 − 3 −13 +19 −10 −21 +30 +48	0	−0.59
*118017	23 56 20.61	−46 34 11.4	9.26	H	359.085 874 89	−46.569 835 68	6.03	−1.03	4.63	1.02	0.67	1.31	1.23	1.00	−21 −13 −22 −17 − 1 +12 + 6 −49 +20 + 1	0	0.10
*118018	23 56 19.36	−70 52 07.6	9.56	2 H	359.080 672 30	−70.868 783 67 A	5.13	9.08	−2.20	2.38	2.28	2.55	2.65	2.22	−13 + 7 −23 + 5 + 4 −20 − 1 − 8 + 9 −17	4	1.17
118019	23 56 21.21	+10 55 10.1	8.39	H	359.088 393 44	+10.919 467 28	11.37	−107.19	−87.81	0.94	0.62	1.06	0.89	0.70	+39 +23 + 1 +32 +22 −14 +27 +19 + 9 +53	2	−0.81
118020 H	23 56 21.50	−09 29 56.4	8.20	G	359.089 581 22	−09.498 996 72 A	19.52	−269.71	−66.52	2.08	1.91	2.17	2.62	1.96	+54 −12 −23 −17 −13 +26 −15 −29 + 8 +11	4	1.02
118021	23 56 24.06	−71 17 38.7	10.28	H	359.100 261 30	−71.294 089 42	3.32	−22.46	−13.71	1.08	0.98	1.28	1.31	1.04	− 4 +15 −24 −10 − 2 − 1 + 0 −19 +14 −11	0	−0.14
118022	23 56 24.29	+56 01 57.4	8.27	H	359.101 203 63	+56.032 603 17	9.05	203.12	63.83	0.66	0.70	1.04	0.95	0.79	−32 + 6 +19 − 7 +22 +28 +19 −33 + 3 −21	3	−1.72
118023	23 56 24.97	+55 59 25.3	7.99	G	359.104 034 23	+55.990 353 65	−0.53	−3.18	−0.50	0.56	0.60	0.90	0.73	0.70	−30 + 8 +20 − 9 +21 +29 +17 −24 + 5 −24	1	−0.94
118024	23 56 25.15	+46 00 15.1	8.44	H	359.104 807 85	+46.004 185 83	2.09	6.21	−0.01	0.55	0.61	0.96	0.62	0.70	+ 2 + 8 +21 −41 + 8 −11 + 8 +21 + 8 + 5	1	0.68
118025	23 56 26.61	+00 28 52.8	8.61	H	359.110 856 15	+00.481 320 36	4.65	−0.85	−13.97	1.11	0.64	1.18	1.43	0.78	+39 +31 +13 +17 +29 +11 +29 +19 +15 +51	2	0.93
118026	23 56 27.06	−05 58 40.9	9.05	H	359.112 765 10	−05.978 018 64	1.87	2.68	−26.66	1.27	0.88	1.32	1.67	0.72	+18 −14 − 9 + 2 + 6 + 3 + 0 −45 + 9 +18	0	−0.22
118027	23 56 27.56	+83 11 28.0	6.57	H	359.114 824 70	+83.191 100 73	10.84	49.22	6.48	0.46	0.46	0.54	0.50	0.50	+ 1 +10 +10 + 7 −11 + 8 −11 − 7 +21 −10	0	0.61
118028	23 56 27.76	−00 55 56.3	9.10	H	359.115 679 10	−00.932 294 28	3.85	10.61	−10.37	1.15	0.68	1.37	1.46	0.77	+41 − 3 + 9 + 6 +26 +40 +23 +10 +13 +51	0	1.15
118029	23 56 29.94	−24 44 14.1	6.31	H	359.124 765 49	−24.737 242 04	6.49	5.55	9.90	0.78	0.47	0.78	1.10	0.57	+18 − 8 − 1 +12 +25 + 0 +18 − 1 + 1 −13	0	−2.52
118030	23 56 30.65	+01 55 07.0	8.97	H	359.127 727 85	+01.918 619 67	7.20	16.69	−28.99	1.31	0.62	1.22	1.39	0.80	+23 − 9 + 1 −44 + 6 + 9 + 4 − 1 + 0 +37	0	−0.22
118031 H	23 56 30.86	−43 17 25.3	9.37	H	359.128 585 62	−43.290 365 88 A	9.35	−4.46	−29.71	2.06	2.11	2.72	2.02	1.91	− 3 + 0 −29 +19 − 9 +22 − 2 − 6 + 5 + 4	0	−0.85
118032	23 56 31.07	+53 42 45.4	7.62	H	359.129 467 49	+53.712 604 14	6.21	12.42	0.71	0.53	0.60	0.90	0.63	0.71	−25 +23 +15 + 9 − 3 + 4 − 4 +13 + 5 − 9	1	−0.77
118033	23 56 31.18	+42 31 07.4	8.47	H	359.129 897 33	+42.518 730 76	3.30	14.58	−2.00	0.56	0.59	0.94	0.64	0.69	+ 9 + 3 +13 +22 + 4 − 3 + 5 +33 +27 +10	0	0.65
118034	23 56 32.28	−29 30 36.5	7.77	H	359.134 489 10	−29.510 135 25	3.22	89.54	−32.79	1.16	0.63	1.09	1.40	0.78	−23 −10 +26 + 6 +18 +30 +10 −40 −19 −20	0	0.49
118035	23 56 32.79	+01 15 03.7	8.60	H	359.136 632 43	+01.251 017 99	4.20	61.21	27.04	1.38	0.62	1.26	1.78	0.83	+12 + 8 + 2 −39 +23 +20 +13 +10 +28 +39	0	−0.08
118036	23 56 33.62	+53 57 36.6	7.69	1 H	359.140 078 76	+53.960 170 89	3.99	1.08	−0.13	0.51	0.58	0.89	0.64	0.67	−19 +16 +17 + 5 + 2 − 2 + 4 + 1 + 8 + 0	0	0.76
118037	23 56 34.30	+72 05 15.0	9.58	H	359.142 905 83	+72.087 506 04	3.70	7.05	−1.42	0.89	0.87	1.06	1.01	0.90	− 5 +11 +28 +25 + 1 + 2 − 3 − 9 − 3 −18	0	−0.55
118038	23 56 34.54	−55 41 45.0	8.15	H	359.143 918 49	−55.695 828 84	2.03	7.49	0.08	0.54	0.67	0.98	0.60	0.75	−22 + 1 −33 + 4 + 7 + 7 +11 − 4 + 5 −10	1	−0.72
118039	23 56 35.32	−55 29 00.6	8.01	2 G	359.147 176 38	−55.483 512 73	9.69	1.12	27.33	0.51	0.60	0.89	0.57	0.64	−29 + 4 −24 + 1 + 8 − 2 + 7 + 8 − 4 −21	0	2.58
118040	23 56 35.55	−50 18 12.3	9.34	H	359.148 142 62	−50.303 407 14	19.65	−63.80	−136.78	1.00	0.98	1.51	1.17	1.17	−17 +16 −32 −33 − 6 + 8 − 6 −21 +10 + 5	1	−0.15
118041	23 56 35.96	−56 10 38.3	9.00	H	359.149 812 52	−56.177 316 16	9.90	−34.04	−12.03	0.68	0.79	1.16	0.72	0.90	− 9 −15 −18 + 8 +10 + 9 +16 − 1 − 8 − 2	0	2.37
118042	23 56 36.34	−27 48 34.4	10.40	G	359.151 412 63	−27.809 555 14	5.72	−60.57	−61.04	1.65	1.04	2.03	2.17	1.05	+13 −21 +16 −18 +13 +15 − 6 −48 +12 −20	0	−0.33
118043	23 56 36.92	−59 31 57.9	8.93	H	359.153 824 63	−59.532 758 72	3.69	0.93	7.80	0.81	0.89	1.21	0.81	1.08	−29 − 7 − 4 −12 +18 +11 +26 −31 −31 −14	0	−1.58
118044	23 56 37.15	+51 29 33.4	8.86	H	359.154 809 91	+51.492 603 80	3.42	18.44	3.22	0.78	0.81	1.29	0.94	0.84	−30 − 2 +30 + 7 +15 +18 +10 + 0 + 6 −23	1	−0.47
118045	23 56 38.63	−44 43 08.0	9.37	H	359.160 950 46	−44.718 895 37	13.22	163.14	−75.04	0.84	0.80	1.32	0.96	0.95	− 1 + 3 −32 +10 −23 +21 −18 −33 +30 + 5	0	2.30
118046 H	23 56 39.55	−22 53 45.7	10.80	H	359.164 802 97	−22.896 022 46 A	1.91	−4.56	15.72	4.40	2.62	3.73	4.18	3.42	+16 −16 − 5 −15 − 3 +29 + 2 −14 − 7 +11	1	−1.02
118047	23 56 40.85	+12 49 14.1	8.48	H	359.170 194 57	+12.820 575 59	2.41	−14.59	−6.39	1.01	0.71	1.14	1.17	0.90	+39 + 7 − 1 +13 +27 − 6 +25 +31 + 1 +54	0	−0.37
118048	23 56 41.52	+22 38 53.2	6.18	1 H	359.172 981 82	+22.648 106 99	5.41	−22.89	−6.47	0.61	0.47	0.77	0.61	0.47	+18 +11 − 4 − 5 + 6 + 2 + 8 −10 +20 +25	0	0.24
118049	23 56 42.67	−42 11 42.8	7.88	G	359.177 789 25	−42.195 220 39	9.94	121.55	−46.93	0.66	0.62	0.98	0.82	0.68	+ 8 − 8 −16 +44 − 1 + 5 − 6 − 4 −16 − 8	0	0.04
118050	23 56 43.69	−57 08 54.1	7.41	H	359.182 060 98	−57.148 350 78	6.12	69.69	−8.72	0.52	0.59	0.90	0.61	0.67	−13 + 4 −23 + 6 + 4 − 1 + 5 − 3 −13 + 2	0	1.61
118051	23 56 44.27	−82 59 02.8	7.91	H	359.184 455 13	−82.984 103 83	2.06	3.13	5.60	0.60	0.55	0.67	0.68	0.56	+ 9 − 6 −16 −11 + 2 + 6 + 2 − 1 − 7 +20	0	−1.22
118052	23 56 44.44	−47 10 35.7	10.22	H	359.185 163 81	−47.176 595 66	6.31	15.30	1.36	1.35	1.06	1.82	1.63	1.50	−11 −11 −23 + 6 −11 +11 − 6 −45 +17 + 0	1	1.40
118053	23 56 45.88	+03 44 29.8	8.74	H	359.191 176 89	+03.741 622 68	8.66	48.86	26.06	1.09	0.63	1.19	1.20	0.80	+33 − 5 − 9 −19 − 4 + 8 − 3 − 1 +12 +28	0	−0.34
118054	23 56 47.29	+04 43 30.4	6.87	H	359.197 047 81	+04.725 110 81	9.16	52.82	0.43	0.86	0.50	0.96	0.99	0.67	+21 +12 −17 + 1 −11 +18 − 6 − 1 +21 +13	0	−1.38
118055	23 56 53.12	−43 20 14.7	8.35	H	359.221 328 03	−43.337 405 74	11.81	68.34	−97.46	0.59	0.56	0.89	0.68	0.66	+ 3 − 4 −17 +22 − 7 +17 − 5 −16 + 8 + 4	0	−0.51
118056	23 56 55.40	+62 00 59.5	8.81	1 H	359.230 844 63	+62.016 518 40	6.46	76.95	−11.60	0.70	0.72	0.95	0.83	0.80	−10 +17 +16 +18 − 7 + 1 − 4 +11 +15 −12	1	0.02
118057	23 56 55.63	+55 50 25.3	6.56	H	359.231 807 85	+55.840 353 64	1.32	−4.08	−5.89	0.47	0.50	0.75	0.60	0.55	−33 − 3 +18 −28 +17 +32 +13 −30 + 4 −24	1	−1.59
118058	23 56 58.05	+52 09 46.9	8.23	H	359.241 864 70	+52.163 026 55	4.23	6.68	−8.59	0.53	0.62	1.00	0.71	0.70	−36 + 6 +12 − 1 + 7 +17 + 6 − 8 + 6 −21	4	0.56
118059	23 56 58.48	+56 55 09.1	10.98	G	359.243 670 84	+56.919 205 31	−1.27	3.09	−3.72	1.36	1.49	2.10	1.88	1.68	−19 + 9 + 4 + 5 +14 +14 +10 −28 + 5 −26	1	0.28
118060 H	23 56 58.96	+46 37 03.8	7.54	H	359.245 647 98	+46.617 714 62 *	3.99	54.45	8.69	0.51	0.57	0.87	0.56	0.63	+ 8 +15 +23 −13 − 3 −17 + 0 +34 +17 +11	0	2.31
118061 H	23 56 59.37	−63 27 35.5	9.81	H	359.247 364 28	−63.459 851 85 A	16.23	236.49	42.24	1.53	1.66	1.87	1.78	1.53	− 7 +11 −11 +20 − 5 + 6 − 4 − 4 −16 + 4	0	−0.43
118062	23 57 01.05	−67 35 40.1	8.51	G	359.254 390 29	−67.594 480 13	15.59	154.90	43.87	0.69	0.65	0.86	0.79	0.74	− 7 + 7 −20 + 6 + 6 −16 + 4 + 8 + 8 − 7	0	−1.19
118063	23 57 01.05	+07 27 38.1	9.19	H	359.254 394 25	+07.460 590 96	2.96	−5.66	3.30	1.23	0.75	1.30	1.37	1.05	+23 −30 − 2 −34 + 0 +25 − 1 −15 + 1 +53	2	−0.45
118064	23 57 01.41	−07 21 15.2	8.30	H	359.255 880 82	−07.354 208 49	3.40	−24.87	−37.53	0.87	0.67	1.06	1.31	0.57	+39 −14 −13 + 4 +10 +26 − 4 −28 +11 +13	0	1.85
118065	23 57 01.45	+39 22 11.2	9.36	H	359.256 024 51	+39.369 781 74	4.82	10.61	−13.36	0.89	0.71	1.13	0.96	0.81	+ 9 +13 +11 +47 − 6 + 3 − 6 +28 + 0 +14	0	−0.33
118066	23 57 01.76	+61 25 07.3	10.96	G	359.257 345 30	+61.418 695 51	0.40	−3.07	−1.71	1.56	1.40	2.01	2.03	1.58	−11 +12 +18 +16 − 9 − 8 − 4 + 5 +12 − 4	0	2.42
118067	23 57 01.98	+27 34 25.5	7.66	H	359.258 260 06	+27.573 736 92	4.82	32.22	−0.30	0.75	0.57	0.96	0.92	0.63	+19 +27 − 4 +10 +17 − 4 +19 + 7 +12 +30	0	−0.31
118068	23 57 02.15	+79 45 25.1	7.75	H	359.258 967 02	+79.756 984 33	5.23	8.37	−22.68	0.58	0.59	0.71	0.65	0.55	+ 3 + 8 +37 +11 +12 +21 + 3 − 3 − 7 −13	1	1.28
118069	23 57 03.18	−60 24 12.4	8.93	H	359.263 260 30	−60.403 441 23	0.77	11.74	−3.65	0.69	0.78	1.05	0.81	0.90	+ 2 − 6 −18 −11 − 6 +13 − 2 −11 −18 +16	0	0.25
118070	23 57 03.38	−06 15 25.8	8.97	H	359.264 072 06	−06.257 176 00	2.86	−17.38	−17.92	1.31	0.83	1.41	1.71	0.70	+15 − 4 −28 −33 +17 −21 + 1 −43 +30 +10	0	0.13
118071	23 57 03.63	+42 39 29.7	6.01	H	359.265 116 35	+42.658 237 73	2.26	5.21	−2.38	0.42	0.45	0.73	0.47	0.50	+ 4 + 8 + 8 + 9 + 0 + 3 + 2 +24 +30 + 6	0	1.25
118072	23 57 04.09	−58 07 55.7	8.01	H	359.267 052 59	−58.132 140 76	2.83	37.89	9.83	0.57	0.72	0.95	0.67	0.91	− 7 − 2 −14 + 6 + 1 +14 + 6 − 5 −12 + 9	0	−0.12
118073	23 57 04.31	−02 36 51.6	9.07	H	359.267 938 72	−02.614 343 80	12.85	32.21	−40.63	1.29	0.61	1.33	1.65	0.65	+32 + 6 − 8 −26 + 7 −17 + 0 −21 + 4 +47	0	−1.10
118074 H	23 57 06.56	−41 26 19.6	8.77	H	359.277 339 78	−41.438 786 87 A	7.36	79.75	−6.77	1.56	2.03	1.70	1.19	1.24	−26 + 1 −11 +25 − 2 +12 − 3 − 3 −11 + 6	0	−0.43
118075	23 57 07.85	+27 46 47.0	9.66	H	359.282 711 92	+27.779 717 32	10.81	5.70	−44.13	1.25	0.90	1.53	1.64	1.03	+20 + 4 − 4 + 5 +20 −17 +17 +13 + 8 +32	4	0.39
118076	23 57 08.12	−26 37 24.6	6.26	H	359.283 846 15	−26.623 497 62	2.66	54.18	21.09	0.78	0.42	0.80	1.00	0.43	+18 + 1 +16 +26 +12 + 5 −10 −31 + 6 −23	5	1.81
118077	23 57 08.49	+55 42 20.6	5.57	1 G	359.285 391 05	+55.705 735 18	14.97	−20.44	−12.22	0.42	0.45	0.69	0.50	0.49	−32 −11 +22 −33 +17 +43 + 8 −25 + 3 −26	1	−1.18
118078	23 57 09.22	+62 04 39.9	9.02	G	359.288 416 68	+62.077 744 78	4.13	26.81	−16.34	0.76	0.73	1.02	0.87	0.81	−12 +16 +13 +14 − 9 + 6 − 6 + 6 +21 −11	0	−0.63
118079	23 57 09.47	−74 18 05.2	8.35	H	359.289 448 73	−74.301 433 28	12.07	16.32	15.93	0.63	0.54	0.72	0.79	0.62	+ 8 − 1 − 6 −10 − 1 − 2 + 1 + 9 + 8 +14	1	0.46
118080	23 57 10.09	−05 27 35.1	8.50	H	359.292 045 97	−05.459 738 23	13.26	120.40	−104.86	0.97	0.60	1.09	1.18	0.51	+23 − 5 + 3 + 0 + 4 +35 + 2 −40 +12 +33	3	−1.25
118081	23 57 10.14	−20 50 01.0	6.45	H	359.292 229 47	−20.833 608 70	7.15	−34.96	−14.00	0.84	0.58	0.91	1.16	0.75	+12 + 7 −16 −10 +13 −22 +12 + 8 + 7 + 4	0	2.42
118082	23 57 10.49	+28 34 54.7	9.81	H	359.293 699 25	+28.581 854 34	6.11	57.70	7.39	1.19	0.84	1.49	1.29	0.90	+10 +19 − 4 + 1 + 8 −15 + 8 + 4 + 5 +15	0	1.48
118083	23 57 11.31	+41 55 17.4	8.28	H	359.297 115 60	+41.921 490 06	4.66	−20.40	−28.45	0.48	0.54	0.85	0.64	0.61	+11 + 5 + 9 + 1 + 4 − 9 + 6 +25 +17 +10	0	1.19
118084	23 57 13.13	+69 09 42.0	10.40	H	359.304 687 55	+69.161 653 38	1.69	−2.68	0.80	1.09	1.04	1.42	1.27	1.14	+ 7 − 5 +16 −10 − 2 +10 − 3 −18 +18 +20	1	2.01
118085	23 57 13.39	+43 44 36.6	10.67	H	359.305 807 41	+43.743 508 22	0.07	−18.17	−19.09	1.25	1.03	1.72	1.37	1.16	− 5 + 0 +17 +19 −11 + 2 −12 +20 + 5 −11	0	2.18
118086	23 57 14.14	−16 30 29.7	10.76	G	359.308 914 01	−16.508 248 62	30.95	396.66	260.67	3.62	2.06	3.14	6.35	2.76	−19 +16 −45 −80 +33 −18 +35 −38 +41 −27	6	3.14
118087	23 57 14.47	+15 36 35.8	7.44	H	359.310 276 77	+15.609 937 42	2.99	−38.32	−9.15	0.65	0.52	0.87	0.73	0.54	+48 + 4 − 1 + 4 + 3 −12 + 2 + 2 − 9 +44	0	−1.13
118088	23 57 14.68	+22 00 37.1	8.30	G	359.311 170 63	+22.010 316 68	7.03	22.24	−71.97	0.88	0.67	1.14	1.17	1.01	+22 +16 + 6 −16 + 5 + 3 +13 + 4 +20 + 4	0	−1.78
118089	23 57 16.67	+13 12 45.0	8.29	G	359.319 471 32	+13.212 494 06	10.79	−50.62	−68.30	1.00	0.69	1.12	1.04	0.83	+38 +13 + 7 − 5 +30 − 2 +26 +31 + 6 +55	0	−1.37
118090 T	23 57 19.52	+61 01 34.4	6.63	2 H	359.331 325 07	+61.026 210 11	3.49	−11.35	−3.13	0.49	0.48	0.67	0.58	0.54	−20 + 1 +26 +17 − 8 −18 − 2 + 9 +19 + 1	1	1.21
118091	23 57 19.55	−46 06 37.2	7.73	H	359.331 437 58	−46.110 331 03	17.70	115.02	25.80	0.79	0.51	0.97	1.05	0.72	−24 − 8 −15 − 5 − 2 +19 + 8 −49 +18 − 3	0	0.29
118092	23 57 19.78	−62 57 23.8	5.95	H	359.332 417 21	−62.956 611 91	15.91	86.18	11.60	0.41	0.41	0.54	0.48	0.42	− 6 + 2 −18 − 1 + 9 − 1 + 7 + 5 − 7 − 3	0	0.14
118093 H	23 57 20.00	+72 51 33.0	7.84	G	359.333 349 74	+72.859 171 65 A	−0.28	−0.49	−1.43	1.99	1.85	0.79	0.74	0.72	−50 + 3 +15 + 6 + 4 + 8 − 1 − 6 −11 −29	1	1.25
118094	23 57 20.10	+22 22 05.2	7.84	G	359.333 738 84	+22.368 111 03	9.59	119.24	−44.75	0.81	0.57	0.94	0.86	0.55	+20 +10 + 8 −24 + 3 + 6 + 3 −19 +22 +25	0	0.89
118095	23 57 20.12	+09 44 20.8	11.71	G	359.333 848 07	+09.739 098 76	−0.72	−7.97	−8.24	2.90	1.95	3.24	3.46	2.58	+33 + 6 − 7 −26 − 1 + 7 − 2 −10 + 6 +51	3	−1.55
118096	23 57 21.51	−64 14 35.2	9.62	2 H	359.339 613 33	−64.243 121 96	7.40	11.78	−42.74	0.82	0.80	1.12	0.89	0.91	+ 0 −14 −10 − 4 +16 + 9 +20 + 8 −32 + 0	0	−0.74
*118097	23 57 22.05	+48 16 51.7	7.53	H	359.341 857 37	+48.281 017 83	0.07	4.41	−1.89	0.52	0.51	0.81	0.60	0.54	− 5 +12 +19 +10 + 0 − 7 + 4 +13 +27 −13	3	1.56
*118098	23 57 22.04	−42 26 39.4	8.92	H	359.341 815 39	−42.444 288 47	3.26	30.49	9.72	0.84	0.68	1.15	1.06	0.79	− 5 + 8 −14 +44 −10 +15 −14 −13 + 5 −10	0	−0.25
118099	23 57 22.56	+41 36 27.0	8.09	H	359.344 000 94	+41.607 502 73	2.61	−10.01	−14.74	0.62	0.53	0.86	0.68	0.56	+ 1 + 6 +12 +27 −10 −10 − 7 +19 +26 + 0	0	1.09
118100	23 57 23.13	−16 05 44.5	9.38	H	359.346 393 32	−16.095 696 71 A	6.97	51.33	1.36	6.86	3.35	5.14	10.44	4.01	+11 −27 −41 −38 − 3 +32 +10 −27 +18 −31	33	1.87

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
118001	10.065	0.028	9.010	0.018		0.915	0.025	T	0.91	0.02	L	9.0437	0.0030	0.025	100		9.01	9.08					1							
118002	9.393	0.017	7.441	0.008		1.623	0.009	G	1.90	0.05	F	7.3308	0.0052	0.034	82		7.27	7.38	312.00	P 1 A			1 S							S
118003	8.312	0.006	7.154	0.004		0.994	0.006	T	0.97	0.01	L	7.1961	0.0007	0.011	276		7.18	7.22		C			1							S
118004	7.041	0.006	7.069	0.008		−0.022	0.003	G	0.00	0.00	H	7.0725	0.0011	0.007	82		7.06	7.09		C			1							S
118005	9.321	0.018	8.782	0.017	*	0.505	0.022	T	0.58	0.02	L *	8.7918	0.0019	0.013	95	*	8.77	8.81		D	23561+2520	I 1	2 C A	AB	313	0.376	0.003	0.66	0.03	
118006	9.454	0.023	9.224	0.026		0.214	0.035	T	0.24	0.04	L	9.2225	0.0029	0.021	63		9.19	9.26		C			1							
118007	7.376	0.005	7.108	0.005		0.279	0.007	G	0.32	0.01	H	7.1432	0.0010	0.010	157		7.13	7.16			23561−6252	I 1	1 G							S
118008	9.506	0.015	8.356	0.010		0.973	0.002	G	1.02	0.00	I	8.3726	0.0017	0.015	144		8.35	8.40					1							S
118009	11.022	0.047	9.998	0.030		0.967	0.005	G	1.01	0.01	I	10.1024	0.0024	0.029	141		10.05	10.16					1							
118010	8.451	0.009	7.742	0.007		0.638	0.014	G	0.70	0.01	H	7.8015	0.0012	0.010	148		7.78	7.82					1							S
118011	9.437	0.021	9.033	0.021		0.395	0.025	T	0.46	0.03	L	9.0377	0.0014	0.014	76		9.01	9.07		D			1							S
118012	9.011	0.012	8.745	0.013		0.260	0.015	G	0.29	0.02	H	8.7880	0.0021	0.019	157		8.76	8.82					1							
118013	9.861	0.025	9.152	0.021		0.653	0.027	T	0.72	0.02	L	9.1832	0.0021	0.017	81		9.16	9.21		C			1							
118014	9.281	0.015	7.945	0.009		1.133	0.014	T	1.10	0.01	L	7.9964	0.0016	0.014	117		7.98	8.03		C			1							
118015	7.614	0.007	7.384	0.008		0.219	0.010	T	0.24	0.01	L	7.4286	0.0010	0.008	84		7.41	7.45		C			1 S							S
118016	10.074	0.028	8.592	0.014		1.248	0.025	T	1.21	0.03	L	8.6207	0.0017	0.015	98		8.60	8.66		C			1							S
118017	9.615	0.014	9.260	0.015		0.345	0.018	T	0.40	0.02	L	9.3374	0.0022	0.021	148		9.30	9.37					1							
118018	9.999	0.031	9.531	0.032	A	0.454	0.035	T	0.52	0.04	L	9.6613	0.0348	0.076	131	A	9.58	9.90		U 2	23564−7052	I 1	2 C B	AB	53	20.206	0.049	1.58	0.15	
118019	8.948	0.015	8.402	0.015		0.512	0.019	T	0.58	0.02	L	8.5045	0.0012	0.013	87		8.49	8.53		C			1							S
118020	9.164	0.030	8.240	0.021	*	0.778	0.002	G	0.81	0.00	H *	8.3364	0.0016	0.013	72	*	8.32	8.35		D	23563−0930	I 1	2 C A	AB	265	3.790	0.005	0.47	0.02	S
118021	10.673	0.034	10.332	0.040		0.330	0.058	T	0.38	0.08	L	10.3579	0.0037	0.034	129		10.28	10.42					1							
118022	8.912	0.015	8.327	0.014		0.546	0.018	T	0.62	0.02	L	8.3892	0.0017	0.016	131		8.37	8.42					1							S
118023	7.882	0.009	7.982	0.011		−0.063	0.004	G	−0.04	0.00	H	7.9693	0.0010	0.012	134		7.95	7.99					1							S
118024	9.767	0.015	8.559	0.009		1.033	0.014	T	1.01	0.01	L	8.6070	0.0011	0.014	194		8.58	8.63		C			1							
118025	8.981	0.013	8.658	0.014		0.307	0.018	T	0.35	0.02	L	8.6931	0.0015	0.018	112		8.67	8.72			23564+0029	I 1	1 S							
118026	10.854	0.064	9.191	0.024		1.390	0.054	T	1.36	0.07	L	9.1998	0.0026	0.021	78		9.16	9.24					1 S							
118027	6.643	0.004	6.572	0.005		0.064	0.006	T	0.07	0.01	L	6.5947	0.0006	0.007	122		6.58	6.61		C			1							S
118028	10.719	0.037	9.187	0.016		1.287	0.032	T	1.25	0.03	L	9.2605	0.0017	0.018	145		9.23	9.30		C			1							
118029	7.479	0.006	6.416	0.004		0.921	0.005	T	0.95	0.02	A	6.4702	0.0011	0.008	91		6.46	6.49					1							S
118030	9.738	0.022	9.020	0.019		0.660	0.023	T	0.72	0.02	L	9.1069	0.0019	0.014	93		9.08	9.13		C			1							
118031	10.400	0.030	9.633	0.024	*	0.692	0.005	G	0.75	0.00	R *	9.5083	0.0023	0.022	136	*	9.47	9.55		D	23565−4317	I 1	2 C A	AB	273	1.136	0.007	0.23	0.02	
118032	8.850	0.011	7.731	0.007		0.970	0.015	G	0.95	0.01	H	7.7840	0.0009	0.013	174		7.76	7.80					1							S
118033	8.480	0.008	8.482	0.010		0.003	0.012	T	0.02	0.01	L	8.4838	0.0014	0.014	139		8.46	8.52					1							
118034	9.528	0.014	7.931	0.008		1.338	0.013	T	1.30	0.01	L	7.9243	0.0012	0.013	155		7.90	7.95		C			1 G							S
118035	10.003	0.027	8.729	0.016		1.085	0.025	T	1.05	0.02	L	8.7708	0.0017	0.016	91		8.74	8.80		C			1							
118036	9.510	0.017	7.852	0.008		1.386	0.015	T	1.36	0.02	L	7.8335	0.0017	0.017	158		7.81	7.86		U 2			1 S							
118037	9.778	0.021	9.589	0.026		0.181	0.031	T	0.20	0.04	L	9.6396	0.0024	0.023	117		9.60	9.68		C			1							G
118038	9.692	0.015	8.281	0.009		1.192	0.014	T	1.15	0.01	L	8.3109	0.0014	0.018	178		8.28	8.35		C			1							S
118039	8.416	0.008	8.073	0.008		0.382	0.004	G	0.45	0.00	H	8.1004	0.0022	0.024	181		8.05	8.14		U 2	23566−5529	I 1	1 S							S
118040	10.281	0.024	9.420	0.018		0.755	0.023	T	0.80	0.02	L	9.4753	0.0025	0.030	157		9.42	9.52					1							
118041	9.748	0.015	9.039	0.013		0.639	0.015	T	0.70	0.01	L	9.1366	0.0021	0.026	170		9.10	9.18		C			1							
118042	11.116	0.046	10.394	0.038		0.616	0.015	G	0.68	0.01	H	10.5361	0.0033	0.030	135		10.47	10.58		C			1							
118043	10.335	0.025	9.047	0.014		1.096	0.022	T	1.06	0.02	L	9.0994	0.0026	0.020	134		9.05	9.14					1							
118044	9.239	0.012	8.860	0.012		0.359	0.016	T	0.42	0.02	L	8.9408	0.0020	0.025	161		8.90	9.00					1							
118045	10.190	0.020	9.431	0.017		0.692	0.021	T	0.75	0.02	L	9.5061	0.0026	0.024	149		9.48	9.55					1							
118046	11.743	0.114	10.893	0.085	*	0.762	0.107	T	0.80	0.08	L *	10.9457	0.0050	0.037	71	*	10.86	11.01		D	23567−2254	H 1	2 C A	AB	295	0.478	0.014	1.17	0.07	G
118047	10.247	0.033	8.630	0.016		1.354	0.029	T	1.32	0.03	L	8.6295	0.0020	0.017	86		8.61	8.66		C			1							
118048	8.291	0.010	6.363	0.005		1.635	0.009	T	1.87	0.03	O	6.2666	0.0017	0.013	97		6.25	6.29		U 2			1							S
118049	8.385	0.010	7.917	0.011		0.436	0.010	G	0.50	0.01	H	7.9849	0.0014	0.013	117		7.96	8.01					1							S
118050	8.650	0.009	7.523	0.006		0.970	0.008	T	0.95	0.01	L	7.5756	0.0013	0.013	160		7.55	7.60					1							S
118051	9.731	0.017	8.065	0.008		1.393	0.015	T	1.37	0.02	L	8.0598	0.0015	0.015	148		8.04	8.08					1							S
118052	10.638	0.027	10.207	0.028		0.421	0.031	T	0.49	0.03	L	10.3182	0.0035	0.041	161		10.24	10.39					1 S							
118053	9.241	0.017	8.810	0.017		0.407	0.022	T	0.47	0.02	L	8.8387	0.0017	0.015	98		8.81	8.87		C			1							S
118054	7.255	0.006	6.906	0.006		0.331	0.008	T	0.39	0.01	L	6.9525	0.0009	0.007	78		6.94	6.96		C	23568+0443	I 1	1 S							S
118055	9.075	0.012	8.405	0.010		0.610	0.012	T	0.68	0.01	L	8.4845	0.0015	0.014	146		8.46	8.52		C			1							S
118056	9.539	0.016	8.873	0.014		0.540	0.015	G	0.61	0.02	H	8.9278	0.0024	0.021	146		8.89	8.96		U			1							
118057	8.052	0.010	6.696	0.005		1.149	0.009	T	1.11	0.01	L	6.7307	0.0008	0.008	139		6.72	6.75		C	23569+5551	I 1	1							S
118058	8.338	0.007	8.241	0.008		0.095	0.010	T	0.11	0.01	L	8.2697	0.0013	0.015	188		8.25	8.30					1							
118059	11.246	0.076	10.946	0.092		0.278	0.015	G	0.32	0.02	H	11.0283	0.0043	0.045	133		10.95	11.10					1							D
118060	9.569	0.015	7.710	0.007	*	0.139	0.140	G	1.54	0.06	S *	7.6673	0.0050	0.039	157	*	7.62	7.72		R	23570+4637	H 1	2 C S D	AB	325	0.158	0.029	1.92	0.47	S D
118061	11.024	0.046	10.013	0.030	*	0.847	0.003	G	0.86	0.00	H *	9.9620	0.0033	0.033	162	*	9.87	10.03		D	23570−6328	H 1	2 C A	AB	159	0.693	0.012	2.00	0.06	
118062	9.290	0.012	8.581	0.011		0.635	0.004	G	0.70	0.00	H	8.6473	0.0019	0.018	147		8.62	8.68					1							S
118063	10.756	0.050	9.305	0.025		1.223	0.044	T	1.18	0.04	L	9.3563	0.0016	0.012	73		9.33	9.38		C			1							
118064	9.613	0.022	8.401	0.014		1.036	0.020	T	1.01	0.02	L	8.4679	0.0016	0.013	98		8.45	8.50					1							S
118065	9.630	0.019	9.378	0.022		0.240	0.027	T	0.27	0.03	L	9.4343	0.0019	0.018	127		9.40	9.46		C			1							
118066	11.066	0.056	10.965	0.088		0.270	0.015	G	0.30	0.02	H	11.0380	0.0056	0.053	133		10.95	11.11					1							D
118067	7.828	0.009	7.677	0.010		0.145	0.013	T	0.16	0.01	L	7.7119	0.0011	0.008	89		7.70	7.73					1							S
118068	8.184	0.009	7.778	0.008		0.392	0.010	G	0.46	0.01	H	7.8362	0.0011	0.013	128		7.81	7.86					1							S
118069	10.220	0.022	9.042	0.014		1.010	0.020	T	0.99	0.02	L	9.0976	0.0020	0.021	140		9.06	9.14		C			1							
118070	10.214	0.040	9.081	0.025		0.975	0.037	T	0.96	0.03	L	9.1303	0.0038	0.024	84		9.09	9.17					1							S
118071	6.885	0.004	6.101	0.004		0.712	0.004	T	0.77	0.00	L	6.1480	0.0006	0.007	141		6.14	6.16		C			1							S
118072	9.540	0.014	8.114	0.008		1.204	0.013	T	1.16	0.01	L	8.1706	0.0017	0.017	152		8.14	8.20					1							S
118073	9.802	0.020	9.146	0.017		0.609	0.022	T	0.68	0.02	L	9.1993	0.0016	0.019	133		9.17	9.23					1							
118074	9.400	0.015	8.813	0.014	*	0.548	0.019	T	0.62	0.02	L *	8.8850	0.0015	0.015	120	*	8.86	8.92			23571−4126	H 1	2 C C	AB	338	0.398	0.071	3.68	0.28	S
118075	10.567	0.044	9.774	0.037		0.719	0.044	T	0.77	0.03	L	9.8061	0.0022	0.019	83		9.77	9.85		C			1							
118076	8.141	0.009	6.417	0.004		1.452	0.002	G	1.45	0.00	H	6.3956	0.0009	0.008	123		6.38	6.41					1							S
118077	6.136	0.003	5.620	0.003		0.478	0.007	G	0.55	0.01	H	5.6774	0.0006	0.006	143		5.67	5.70		U			1							S
118078	9.698	0.018	9.111	0.016		0.530	0.015	G	0.60	0.02	H	9.1498	0.0018	0.020	148		9.12	9.18		C			1							
118079	9.109	0.012	8.412	0.010		0.630	0.012	T	0.70	0.01	L	8.4806	0.0013	0.013	142		8.46	8.51					1 G							S P
118080	9.106	0.016	8.561	0.015		0.546	0.015	G	0.62	0.01	H	8.6185	0.0013	0.013	121		8.59	8.64		C			1							S
118081	7.697	0.008	6.551	0.005		0.979	0.003	G	0.96	0.00	H	6.6123	0.0011	0.006	70		6.60	6.62		C			1							S
118082	10.480	0.046	9.946	0.043		0.501	0.057	T	0.57	0.06	L	9.9204	0.0029	0.019	78		9.87	9.95					1							
118083	8.868	0.009	8.335	0.009		0.500	0.011	T	0.57	0.01	L	8.3890	0.0011	0.011	149		8.37	8.41					1							
118084	11.352	0.066	10.435	0.049		0.570	0.020	G	0.64	0.02	R	10.5261	0.0041	0.029	120		10.48	10.56		C			1							G
118085	11.545	0.086	10.753	0.065		0.718	0.083	T	0.77	0.06	L	10.8150	0.0039	0.033	106		10.76	10.87		C			1							G
118086						1.300	0.015	G	1.62	0.02	A	11.0583	0.0057	0.038	59		10.99	11.12		C	23572−1630	I 1	1 G							G
118087	9.224	0.024	7.595	0.013		1.363	0.022	T	1.33	0.03	L	7.5905	0.0009	0.011	148		7.57	7.62		C			1							S
118088	8.854	0.014	8.364	0.013		0.490	0.015	G	0.56	0.02	H	8.4069	0.0018	0.014	89		8.39	8.43		C			1 G							S
118089	8.895	0.015	8.373	0.014		0.531	0.015	G	0.60	0.02	H	8.4102	0.0015	0.012	84		8.39	8.43		C			1							S
118090	8.792	0.010	6.858	0.004		1.640	0.009	T	2.33	0.02	O	6.6814	0.0022	0.024	149		6.65	6.73		U 2	23574+6102	I 1	1 S							S
118091	8.244	0.008	7.768	0.006		0.451	0.007	G	0.52	0.01	H	7.8313	0.0010	0.011	162		7.81	7.85		C			1							S
118092	6.079	0.003	5.967	0.003		0.101	0.004	T	0.11	0.00	L	5.9925	0.0007	0.007	158		5.98	6.00		C			1							S
118093	7.999	0.007	7.876	0.008	*	0.130	0.015	G	0.14	0.01	H *	7.8989	0.0010	0.013	136	*	7.88	7.92		D	23573+7252	I 1	2 C A	AB	130	0.338	0.003	0.59	0.04	S
118094	8.352	0.011	7.878	0.010		0.446	0.014	T	0.52	0.01	L	7.9441	0.0016	0.014	95		7.93	7.97					1							S
118095						1.660	0.015	G	2.09	0.21	K	11.8034	0.0077	0.061	82		11.63	11.92					1							G
118096	10.257	0.054	9.680	0.051		0.539	0.066	T	0.61	0.07	L	9.7408	0.0173	0.127	146		9.59	9.92	0.38	P 1 A			1							P
118097	7.467	0.005	7.518	0.007		−0.042	0.008	T	−0.02	0.01	L	7.5230	0.0012	0.012	133		7.51	7.54		C			1							S
118098	9.394	0.014	8.948	0.014		0.434	0.016	T	0.50	0.02	L	9.0136	0.0016	0.019	123		8.99	9.05		C			1							
118099	9.363	0.015	8.200	0.010		0.998	0.014	T	0.98	0.01	L	8.2530	0.0013	0.013	130		8.23	8.28					1							S
118100	10.198	0.042	9.495	0.035	A	0.648	0.045	T	0.71	0.04	L	9.5141	0.0058	0.037	57	A	9.44	9.61		D	23574−1606	I 2	1 C P C							

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)												Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\mu_{\alpha*}$		F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$		%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28		29	30
*118101	23 57 23.27	−16 05 29.9	10.79	H	359.346 937 97	−16.091 646 53	B	15.05	79.11	−0.36	24.58	10.53	15.82	63.15	18.79	+ 1	−36	−32	−20	− 2	− 5	+ 1	−17	+29	−78		33	1.87
*118102	23 57 23.21	+76 18 52.1	7.80	H	359.346 694 68	+76.314 465 06		3.15	23.10	3.33	0.49	0.51	0.58	0.61	0.55	− 8	− 4	+ 6	+ 7	−12	− 4	−10	− 8	+ 5	− 3		1	0.27
*118103	23 57 23.16	+34 05 49.2	8.87	H	359.346 495 15	+34.097 011 13		3.07	10.30	−3.07	0.93	0.62	1.12	1.19	0.72	+ 4	+ 6	− 9	+ 3	− 3	+18	− 1	+11	+21	+21		2	−1.24
118104	23 57 24.36	+03 00 36.0	7.64	H	359.351 519 68	+03.009 989 14		10.20	−77.31	−29.46	1.05	0.54	1.01	1.37	0.73	+23	− 5	+ 0	−36	+ 8	+ 7	+13	+12	+ 2	+15		0	−1.00
118105	23 57 27.43	−61 45 42.9	8.21	H	359.364 305 16	−61.761 904 11		5.60	21.49	11.83	0.57	0.59	0.80	0.69	0.64	−13	−11	−17	+ 0	+ 8	− 2	+ 8	+ 4	− 9	−19		1	−0.74
118106	23 57 27.71	−58 57 52.2	7.92	H	359.365 467 00	−58.964 496 31		13.83	139.04	5.27	0.56	0.61	0.88	0.59	0.73	− 8	+ 0	− 2	− 7	+ 9	+13	+13	−22	−27	+ 3		1	0.99
118107	23 57 28.81	−36 42 20.1	7.39	H	359.370 038 89	−36.705 574 22		2.86	24.03	−17.31	0.68	0.53	0.94	0.79	0.57	+ 6	− 6	−15	−30	− 2	+21	+ 1	−24	+13	+ 1		0	0.43
118108	23 57 28.85	−21 38 52.2	8.48	G	359.370 192 00	−21.647 842 83		6.57	−16.63	−49.42	1.18	0.86	1.35	1.29	1.06	+15	+18	−18	−24	+ 6	+ 7	+11	− 1	+11	+18		0	3.20
118109	23 57 30.71	−41 20 34.9	8.38	H	359.377 970 22	−41.343 023 09		3.92	2.37	−10.68	0.69	0.66	1.06	0.82	0.76	+13	− 2	− 1	+34	+ 1	+ 1	− 1	−13	−14	+ 7		0	0.22
118110	23 57 30.75	−47 40 52.8	9.59	H	359.378 107 28	−47.681 322 82		4.35	55.55	12.34	1.13	0.86	1.56	1.38	1.26	−15	−19	−15	−23	− 2	− 4	− 7	−50	+27	− 9		0	1.53
118111	23 57 31.66	+18 15 00.0	7.89	H	359.381 921 45	+18.249 995 12		2.00	−4.42	−5.71	0.71	0.57	0.92	0.81	0.59	+41	+ 5	−12	+17	+15	+14	+18	+ 5	+13	+53		0	1.14
118112	23 57 32.52	+61 59 28.7	7.72	H	359.385 507 40	+61.991 311 79		1.91	−9.30	−1.18	0.52	0.54	0.71	0.62	0.61	−15	+ 9	+10	+23	− 5	− 2	− 1	− 1	+25	−13		1	0.30
118113	23 57 32.61	+67 33 15.3	8.72	G	359.385 858 41	+67.554 252 22		0.86	−2.41	−2.14	0.69	0.72	0.93	0.76	0.75	−10	+ 7	+30	−14	− 3	− 3	− 1	− 3	+ 8	−18		2	1.15
118114	23 57 32.99	−82 10 11.1	5.72	G	359.387 454 13	−82.169 743 35		10.38	−26.62	−25.15	0.46	0.43	0.51	0.52	0.45	+11	−11	−17	+ 8	+ 9	− 6	+ 9	+ 2	− 8	+10		0	1.05
118115	23 57 33.25	−09 38 49.8	7.89	H	359.388 532 99	−09.647 163 59		20.98	455.25	−146.26	0.92	0.72	1.24	1.63	0.63	+48	−37	−51	− 4	+ 4	+21	−10	−34	+32	+18		0	0.92
118116	23 57 33.52	+60 01 25.0	6.47	H	359.389 658 58	+60.023 609 03		2.85	12.62	−3.82	0.41	0.43	0.57	0.49	0.49	−15	+13	+10	+12	+ 0	− 1	+ 4	−12	+19	−12		0	−1.06
118117	23 57 34.07	+73 51 57.1	7.58	G	359.391 942 31	+73.865 873 07		17.44	119.91	−14.20	0.54	0.56	0.67	0.70	0.57	−14	−14	+30	−14	+15	+26	+ 6	−22	− 3	−21		1	0.14
118118 H	23 57 34.10	+66 25 53.9	10.26	H	359.392 083 15	+66.431 628 90	A	−0.25	−1.73	−1.58	2.56	1.87	1.94	2.22	1.55	−15	+ 4	+ 9	+21	−11	− 6	− 6	+16	+ 8	− 7		1	−0.22
118119	23 57 34.54	−84 19 55.8	9.08	H	359.393 936 59	−84.332 175 40		2.33	−3.51	−1.07	0.81	0.74	0.94	0.93	0.79	+18	−34	−25	−15	− 8	+ 3	− 6	−20	+ 1	+21		0	0.70
118120	23 57 34.56	−58 49 31.9	9.35	H	359.394 014 31	−58.825 538 49		4.40	−6.25	7.06	0.79	0.87	1.16	0.92	1.11	−10	−10	− 5	− 3	+ 0	+ 0	+ 2	−11	−13	+ 0		0	−0.18
*118121	23 57 34.97	−64 17 53.1	5.00	H	359.395 715 57	−64.298 082 59		20.53	78.86	−61.10	0.38	0.37	0.51	0.47	0.43	− 2	− 7	−14	+ 2	+11	−10	+12	+ 3	−14	− 3		1	1.68
*118122	23 57 34.96	+62 43 05.7	9.77	3 H	359.395 676 85	+62.718 249 09		0.57	−1.05	−1.79	0.87	0.84	1.14	1.09	0.99	−15	+ 2	+20	+ 9	+ 0	− 6	+ 1	+ 2	+14	−13		0	−0.52
118123	23 57 35.07	−65 46 31.8	8.21	G	359.396 142 58	−65.775 499 61		25.18	261.21	−24.99	0.61	0.62	0.80	0.77	0.70	− 5	−13	−12	+ 4	+ 5	+11	+ 8	+ 9	−16	+ 0		1	0.97
118124	23 57 35.87	+58 37 56.2	9.28	H	359.399 440 85	+58.632 266 07		4.23	2.17	−19.68	0.79	0.76	1.15	0.90	0.81	−20	+12	− 9	+ 7	− 4	− 4	+ 3	−21	+35	−10		0	2.33
118125	23 57 36.57	+20 19 49.3	7.88	H	359.402 380 93	+20.330 362 55		3.55	12.25	3.11	0.74	0.60	1.00	0.81	0.60	+35	− 2	− 2	−19	−12	+28	−12	−27	+31	+45		0	0.55
118126	23 57 36.65	+67 50 40.8	10.15	2 H	359.402 706 28	+67.844 678 02		1.19	−1.43	−2.59	0.89	0.94	1.21	0.97	0.96	− 8	+ 7	+22	− 8	+ 3	− 3	+ 5	− 7	+10	−11		0	−1.35
118127	23 57 38.30	−33 11 20.9	7.01	H	359.409 566 21	−33.189 152 02		14.75	81.65	17.04	0.54	0.45	0.82	0.61	0.45	+29	− 8	−11	−38	− 5	+ 7	− 7	−39	+18	+11		3	1.32
118128	23 57 39.58	−52 11 44.9	9.59	H	359.414 901 64	−52.195 794 58		2.47	12.89	22.25	0.81	0.83	1.29	1.14	1.00	−26	+ 4	−14	+30	+13	+ 0	+11	− 8	− 1	−24		0	−0.55
118129	23 57 41.22	+23 09 03.8	10.31	H	359.421 767 47	+23.151 056 82		2.34	6.69	−8.02	1.40	0.99	1.74	1.38	1.05	+28	+22	+ 7	+ 2	+ 9	+ 1	+13	+ 1	+12	+42		2	0.79
118130 H	23 57 45.26	−45 48 53.8	11.23	H	359.438 588 48	−45.814 940 30	A	23.47	365.94	−177.98	4.56	4.35	5.24	4.78	3.75	−23	+19	−22	−20	− 3	+16	+ 4	−27	+10	+ 2		3	0.60
118131	23 57 45.55	+25 08 29.3	4.63	2 H	359.439 790 02	+25.141 479 36		7.54	−36.06	−32.25	0.55	0.44	0.69	0.56	0.41	+21	+24	+ 8	+ 4	+ 5	+ 8	+ 8	−11	+16	+23		0	−0.25
118132	23 57 45.95	−07 22 30.5	8.52	H	359.441 477 76	−07.375 151 18		2.41	−42.07	−11.30	0.97	0.67	1.19	1.38	0.62	+40	−30	−21	−23	− 8	+37	−18	−45	+31	+29		2	1.24
118133	23 57 46.20	+11 28 27.8	6.65	H	359.442 502 16	+11.474 400 38		10.24	15.89	−9.37	0.76	0.50	0.84	0.75	0.54	+28	+16	− 4	+ 0	+24	− 7	+23	+16	+ 1	+38		2	−0.23
118134	23 57 46.80	−49 24 00.7	8.48	H	359.444 991 43	−49.400 182 92		5.40	21.79	0.57	0.53	0.71	1.10	0.61	0.86	− 7	− 6	−33	−13	−12	+ 9	−11	−17	+17	+ 6		0	−0.59
118135	23 57 47.23	+57 08 23.1	7.31	H	359.446 808 23	+57.139 747 29		2.98	−13.00	−9.79	0.54	0.54	0.81	0.73	0.63	−18	+ 6	+19	+ 2	+11	+18	+ 6	−15	+ 7	−26		1	−0.27
118136	23 57 47.47	−61 32 12.8	9.85	G	359.447 798 85	−61.536 885 15		17.26	161.24	46.65	0.89	0.89	1.27	1.08	0.99	− 5	−13	−22	+ 7	+ 4	+12	+ 7	− 4	−17	−13		2	−0.13
118137	23 57 47.60	+05 24 15.8	8.89	H	359.448 344 27	+05.404 376 50		5.50	−8.10	−13.40	1.27	0.69	1.29	1.49	0.87	+39	−26	−23	−47	−14	+20	− 4	− 3	+ 8	+21		2	0.48
118138	23 57 47.63	+22 52 57.8	9.11	H	359.448 477 87	+22.882 709 21		1.87	8.13	8.61	0.89	0.76	1.16	0.95	0.76	+25	+ 5	+ 9	− 6	− 5	− 7	− 4	−24	+ 5	+28		3	0.16
118139	23 57 47.70	+59 43 12.4	8.09	2 H	359.448 743 01	+59.720 122 08		1.26	−0.24	−3.31	0.60	0.56	0.79	0.77	0.63	−16	+ 5	+10	+26	− 1	− 8	+ 3	− 1	+19	− 8		0	0.40
118140	23 57 48.36	+18 42 48.9	8.43	H	359.451 512 44	+18.713 577 61		4.02	21.74	−0.28	0.73	0.56	0.95	0.75	0.58	+36	+13	−14	+20	+ 4	− 1	+ 8	− 4	+20	+43		0	1.31
118141	23 57 48.58	−05 27 23.4	8.13	H	359.452 415 40	−05.456 486 17		5.87	140.08	59.68	0.92	0.53	1.05	1.12	0.47	+27	+12	− 7	+ 0	+ 1	+34	+ 3	−40	+24	+38		0	−0.14
118142	23 57 49.75	+68 28 28.5	10.84	H	359.457 299 74	+68.474 579 75		−0.85	−1.05	−2.13	1.23	1.14	1.56	1.42	1.15	− 4	+11	+18	+ 3	+ 0	−14	+ 4	− 2	+14	− 3		5	0.66
118143	23 57 50.20	−30 26 50.9	8.84	G	359.459 164 90	−30.447 460 94		17.52	−88.29	−197.68	1.07	0.51	1.17	1.37	0.57	−15	− 4	+23	−20	+20	+12	+15	−31	− 2	−35		0	−0.19
118144	23 57 52.79	−67 00 21.7	7.42	G	359.469 969 66	−67.006 031 70		8.10	−43.94	−21.13	0.55	0.53	0.71	0.55	0.53	+ 1	+15	−27	−12	+ 3	+10	+ 7	−12	+ 6	+15		0	0.17
118145	23 57 54.39	−68 04 35.6	9.34	H	359.476 640 74	−68.076 556 03		11.01	−62.82	−11.14	0.81	0.75	0.99	0.98	0.88	− 6	+ 9	−26	− 8	+ 2	+ 0	+ 3	− 9	+ 4	+ 7		0	−1.93
118146	23 57 55.01	−07 05 33.4	9.97	G	359.479 206 49	−07.092 615 36		21.19	280.03	−23.57	1.55	0.87	1.58	1.91	0.75	+18	+ 0	−12	−30	+ 9	− 4	+ 1	−39	+19	+16		0	3.08
118147	23 57 55.07	−37 05 55.5	8.47	H	359.479 472 03	−37.098 753 16		12.94	81.01	33.93	0.92	0.65	1.19	1.00	0.70	− 8	+10	−25	−38	+ 3	+14	+ 9	−38	+26	− 6		0	0.98
118148	23 57 56.65	+62 12 39.6	8.81	G	359.486 040 45	+62.211 001 93		2.61	−3.54	−9.01	0.71	0.71	0.98	0.83	0.80	−11	+12	+16	+ 9	− 6	+ 3	− 3	− 2	+23	−13		1	1.02
118149	23 57 58.50	+15 57 10.5	9.59	2 H	359.493 765 44	+15.952 929 97		7.18	−46.50	−53.88	1.05	0.80	1.43	1.11	0.77	+47	− 4	− 2	−11	− 5	+12	− 6	−13	+ 2	+46		0	−1.51
118150	23 57 59.16	+35 19 46.0	10.61	H	359.496 510 94	+35.329 450 55		4.09	−11.32	−32.40	1.37	0.92	1.56	1.79	1.14	+ 5	+ 5	− 2	− 8	+ 9	− 3	+ 5	+19	+ 7	+20		0	0.44
118151	23 57 59.28	−38 57 14.2	7.13	G	359.497 002 15	−38.953 934 20		3.45	50.00	18.02	0.61	0.54	0.92	0.66	0.52	+ 5	+18	−22	−11	− 5	− 1	− 4	−22	+11	− 1		0	0.77
118152	23 57 59.30	+13 10 58.9	9.06	H	359.497 084 88	+13.183 024 09		6.63	−2.00	1.00	1.16	0.74	1.34	1.16	0.74	+30	+15	+ 5	−17	+19	+ 2	+16	+ 4	+ 6	+43		0	−0.93
118153	23 58 00.98	−48 06 44.3	10.04	H	359.504 072 67	−48.112 304 28		3.51	48.10	6.61	1.25	1.02	1.72	1.54	1.23	−15	− 4	−25	+15	−14	+12	−15	−34	+26	−22		2	2.54
118154	23 58 01.50	+17 31 34.4	12.14	H	359.506 244 14	+17.526 228 99		16.17	184.22	112.87	3.14	2.20	3.92	3.61	2.31	+43	− 3	+ 0	+12	+ 3	+ 9	+ 3	− 1	+10	+47		0	−0.25
118155 H	23 58 02.45	−28 00 00.6	9.02	H	359.510 199 37	−28.000 156 94	A	4.31	15.23	−25.07	3.58	2.03	1.75	2.67	0.86	−50	+ 2	+ 8	−25	+10	+12	+11	−22	− 1	−37		2	−0.82
118156	23 58 02.84	−01 58 48.1	8.95	H	359.511 813 51	−01.980 036 03		16.19	−6.09	4.85	1.11	0.55	1.23	1.38	0.72	+41	−17	− 3	−16	+ 0	+26	+ 1	−10	+10	+50		2	0.97
118157	23 58 02.87	+32 01 48.0	8.20	H	359.511 973 27	+32.030 012 42		4.79	−24.50	−11.76	0.79	0.56	0.91	1.04	0.61	− 9	+21	−13	+ 4	+ 3	+ 5	+ 5	− 8	+12	−19		2	−1.04
118158	23 58 04.38	+50 50 12.5	9.12	2 H	359.518 265 42	+50.836 794 41	A	2.90	5.78	−4.42	1.24	1.29	1.86	1.42	1.28	−27	+ 4	+22	+35	− 8	+ 5	− 7	+ 1	− 7	−19		2	1.07
118159	23 58 04.56	−00 07 41.3	9.02	H	359.519 011 50	−00.128 148 30		14.91	−45.19	−19.05	1.31	0.74	1.31	1.68	0.82	+45	+ 5	+ 4	+40	+33	+ 9	+33	+19	+ 7	+52		0	0.95
118160	23 58 05.21	−17 23 38.7	11.88	G	359.521 718 96	−17.394 071 44		30.17	381.87	−82.09	2.70	2.27	3.26	3.47	2.93	+41	−12	−21	−10	− 2	+ 9	− 2	−12	+20	+23		2	0.65
118161	23 58 06.17	+29 58 36.3	8.25	H	359.525 706 64	+29.976 752 38		2.29	119.53	−46.33	0.82	0.57	0.99	1.24	0.61	− 3	+ 6	− 3	−25	+16	+23	+14	+ 5	− 1	− 5		0	1.64
118162	23 58 06.86	+50 26 49.5	6.72	1 H	359.528 570 69	+50.447 079 65		41.35	−45.77	245.68	0.41	0.52	0.76	0.49	0.54	−34	+11	+23	+20	+ 2	+ 7	+ 3	−11	+ 4	−29		1	0.17
118163	23 58 07.38	+61 11 44.8	11.08	G	359.530 730 43	+61.195 791 06		3.23	−2.44	−1.15	1.62	1.36	2.00	1.96	1.51	− 8	+10	+25	+22	− 4	− 9	− 6	+10	+ 5	− 8		2	2.61
118164 H	23 58 08.35	−21 54 05.4	8.82	G	359.534 786 69	−21.901 510 21	*	2.33	11.32	−12.97	1.23	0.95	1.63	1.32	0.88	+16	+31	−27	−24	−14	+10	− 2	−55	+35	+19		0	0.72
118165	23 58 08.52	−33 07 55.9	9.14	H	359.535 495 15	−33.132 207 84		9.24	43.77	23.98	0.90	0.61	1.30	1.08	0.67	+10	+ 8	− 6	−50	+ 8	− 3	+11	−40	+23	−11		1	−1.48
118166	23 58 09.20	−03 58 44.9	8.65	H	359.538 318 23	−03.979 132 66		1.29	3.69	16.90	1.27	0.60	1.26	1.54	0.64	+32	+ 3	+ 2	+11	− 5	− 3	+ 5	−36	+ 7	+51		0	0.22
118167	23 58 11.77	+20 50 04.8	8.57	H	359.549 057 87	+20.834 656 74		14.88	116.47	−16.26	0.89	0.65	1.18	0.90	0.66	+27	+23	+ 1	+ 5	− 7	+ 9	+ 1	−23	+31	+29		0	−1.20
118168 H	23 58 12.08	+64 13 40.1	9.55	H	359.550 332 89	+64.227 809 23	*	0.06	6.21	−5.77	2.99	3.00	1.40	1.49	1.22	+10	+16	+17	+32	+18	+ 2	+10	+ 7	+ 2	− 6		2	0.56
118169	23 58 12.99	−57 11 48.6	7.64	G	359.554 128 56	−57.196 822 02	+	15.82	154.32	15.16	2.69	2.00	1.00	0.65	0.77	− 3	+ 3	− 6	+ 7	+ 2	−11	+ 4	−31	− 8	+ 9		0	−0.80
118170	23 58 16.02	−50 07 51.2	8.24	H	359.566 739 56	−50.130 902 09		11.69	98.43	−30.27	0.67	0.63	1.02	0.82	0.72	− 9	+14	−28	− 8	−10	− 3	− 8	−19	+ 7	+ 5		1	0.40
118171	23 58 16.14	−11 27 30.5	8.02	H	359.567 255 52	−11.458 473 31		2.86	−64.13	−48.98	0.88	0.82	1.32	1.22	0.67	+42	−25	−48	−25	−26	+51	−20	−54	+42	+34		0	−0.61
118172	23 58 16.76	+56 28 15.8	10.77	G	359.569 854 10	+56.471 066 79		1.09	−0.69	−1.90	1.39	1.35	2.12	1.86	1.50	−16	+15	+24	+10	+11	+19	+ 6	−12	+ 2	−23		0	1.42
118173	23 58 16.99	−58 01 05.1	9.85	H	359.570 782 27	−58.018 086 93		5.28	−30.68	−65.71	0.89	1.13	1.48	1.04	1.28	− 8	+ 5	−21	+ 4	− 5	+11	− 2	− 5	+ 5	+ 2		0	0.97
118174	23 58 17.98	+61 13 15.8	11.09	2 H	359.574 917 37	+61.221 065 17		−3.20	−0.73	−2.14	1.68	1.51	2.16	2.13	1.58	−17	− 4	+29	+11	+ 0	−14	+ 3	+ 8	+ 8	−13		0	2.74
118175	23 58 18.97	−37 33 28.2	8.47	H	359.579 054 08	−37.557 829 19		2.56	−23.51	−15.88	0.86	0.73	1.19	1.13	0.73	+ 3	+ 2	−24	−21	+ 1	+26	+ 6	−22	+ 2	− 5		0	−1.46
118176	23 58 19.01	+19 41 36.8	7.13	2 H	359.579 202 30	+19.693 545 66		1.70	82.39	1.37	0.65	0.50	0.87	0.67	0.53	+35	+16	− 6	+14	+ 2	− 1	+ 8	− 4	+29	+40		0	0.68
118177 H	23 58 21.14	+35 00 46.9	6.70	H	359.588 075 85	+35.013 023 04	A	7.55	24.57	8.29	1.04	0.72	1.13	1.17	0.78	+ 4	+ 7	+ 4	−10	+ 3	+11	+ 1	+15	+14	+16		0	1.09
118178	23 58 21.17	−15 50 50.9	6.28	H	359.588 226 29	−15.847 464 38		6.71	82.77	−8.13	0.89	0.60	1.08	1.55	0.63	+28	−24	−31	+16	−12	+37	−21	−38	+30	+ 3		2	0.85
118179	23 58 21.65	−63 00 11.2	6.86	G	359.590 226 63	−63.003 123 43		12.56	−9.22	54.54	0.49	0.47	0.64	0.57	0.48	−12	+ 8	−21	+10	+ 4	− 5	+ 3	+ 7	− 7	+ 4		0	0.34
118180	23 58 21.97	−53 48 34.8	10.78	2 H	359.591 521 94	−53.809 676 54		29.73	104.39	115.36	1.67	1.94	2.94	2.20	2.27	−25	+10	−17	− 1	+ 8	+11	+ 7	−10	−15	−32		0	
118181	23 58 22.27	−20 19 07.1	8.86	G	359.592 804 05	−20.318 652 55		6.06	66.59	−30.73	1.08	0.80	1.31	1.25	0.73	+ 7	−15	+ 5	−30	+ 7	+42	+ 3	−42	+ 2	+ 4		0	2.14
118182	23 58 22.73	+51 23 42.9	11.10	G	359.594 710 12	+51.395 263 08		31.04	7.28	7.81	12.27	12.23	18.71	16.52	12.81	−26	+ 0	+23	−19	+17	+28	+11	−21	+ 3	−20		6	
118183	23 58 23.05	+38 57 48.1	7.89	H	359.596 040 57	+38.963 361 31		2.78	26.40	−28.00	0.67	0.53	0.82	0.71	0.63	+16	+13	+13	+45	+ 4	− 3	+ 5	+33	+ 5	+28		0	−0.06
118184	23 58 23.36	+28 50 19.2	8.08	H	359.597 337 13	+28.838 667 53		2.75	−1.23	−21.50	0.77	0.63	1.02	0.81	0.71	+22	+33	− 9	+22	+15	− 8	+18	+16	+13	+32		0	0.29
118185	23 58 23.59	+03 34 14.6	8.65	H	359.598 309 17	+03.570 713 90		2.51	27.07	33.07	1.09	0.68	1.20	1.22	0.88	+29	−20	+ 1	−12	− 4	+ 0	− 5	+ 1	+12	+27		0	−1.32
118186	23 58 23.60	−03 21 16.5	8.40	H	359.598 343 20	−03.354 588 92		13.92	18.13	−67.89	1.05	0.52	1.12	1.41	0.63	+34	+ 0	− 4	− 5	− 1	+15	+ 1	−23	+19	+51		2	−0.71
118187	23 58 24.05	−43 55 58.2	8.88	H	359.600 187 96	−43.932 837 77		3.58	46.37	−41.51	0.72	0.63	1.14	0.79	0.80	+ 0	+ 1	−26	+12	−16	+18	− 9	−33	+37	+14		0	−0.01
118188	23 58 24.79	+51 23 19.5	9.97	3 H	359.603 306 55	+51.388 762 54	*	9.37	84.39	18.07	0.98	1.09	1.10	0.95	0.88	−42	+13	+ 7	−10	− 7	+ 7	+ 8	−35	+ 4	+ 1		0	2.53
118189	23 58 24.93	−50 54 32.3	9.09	H	359.603 895 59	−50.908 980 33		0.78	65.75	−33.30	0.95	0.88	1.35	1.46	1.07	−19	+ 2	−17	− 1	− 6	+ 5	− 4	−24	+13	−22		0	0.20
118190	23 58 25.44	−73 11 18.8	9.01	H	359.605 989 09	−73.188 545 22		8.29	25.03	24.18	0.75	0.73	0.89	0.95	0.74	−13	− 9	− 3	− 1	+13	+ 2	+12	−18	−13	+ 0		0	−0.51
118191	23 58 26.72	+13 49 21.0	8.10	H	359.611 342 53	+13.822 493 11		3.68	22.48	0.45	0.93	0.59	1.02	0.93	0.60	+28	+ 1	+ 0	− 2	+20	+ 3	+18	+ 6	+14	+44		0	−1.19
118192	23 58 27.49	+65 54 48.1	10.54	H	359.614 533 99	+65.913 371 61		2.34	27.88	7.74	1.19	1.11	1.54	1.41	1.23	−18	+ 1	+23	− 3	−11	+ 4	−10	+ 9	+27	−25		1	0.09
*118193	23 58 28.05	+24 23 43.8	8.38	H	359.616 858 69	+24.395 495 90		16.28	22.54	−110.30	0.81	0.57	0.94	0.82	0.57	+22	+25	+ 3	+ 2	+ 0	− 1	+ 4	−12	+ 9	+30		2	−0.23
*118194	23 58 28.03	+69 14 00.1	10.82	H	359.616 802 65	+69.233 373 62		4.01	1.49	1.25	1.28	1.21	1.68	1.48	1.30	+ 8	− 7	+11	−16	− 5	+16	− 8	−21	+25	+22		0	1.84
118195	23 58 29.25	−34 17 09.2	8.38	H	359.621 868 98	−34.285 891 25		3.11	−13.29	−37.71	0.76	0.53	1.01	0.82	0.58	+16	+ 7	− 7	−39	− 1	+ 2	+ 2	−28	+17	+ 4		0	0.61
118196	23 58 30.25	+24 12 06.0	11.66	G	359.626 023 48	+24.201 675 05		15.62	−49.42	−190.71	2.63	1.82	2.98	2.89	1.86	+27	+ 8	+ 1	+ 1

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
118101											T	10.7951	0.0061			B				D	23574−1606	I 2	1 C I C							
118102	7.883	0.007	7.806	0.008		0.076	0.010	T	0.09	0.01	L	7.8294	0.0011	0.011	148		7.81	7.85		C			1							S
118103	10.530	0.041	9.044	0.021		1.251	0.036	T	1.21	0.04	L	9.0364	0.0020	0.016	95		9.00	9.07					1							
118104	8.091	0.009	7.665	0.010		0.405	0.015	G	0.47	0.02	H	7.7281	0.0011	0.010	89		7.72	7.75		C			1							S
118105	8.208	0.007	8.210	0.009		−0.001	0.010	T	0.02	0.01	L	8.2152	0.0014	0.014	152		8.19	8.24					1							S
118106	8.491	0.010	7.985	0.009		0.486	0.010	T	0.56	0.01	L	8.0305	0.0016	0.016	148		8.00	8.06		C			1							S
118107	9.021	0.011	7.534	0.006		1.252	0.010	T	1.25	0.02	A	7.5519	0.0013	0.011	130		7.53	7.57					1							S
118108	9.785	0.023	8.612	0.015		1.029	0.015	G	1.00	0.01	H	8.6571	0.0021	0.015	76		8.63	8.69		C			1							S
118109	9.854	0.019	8.488	0.011		1.157	0.017	T	1.12	0.01	L	8.5487	0.0013	0.014	116		8.52	8.57		C			1							
118110	10.221	0.025	9.665	0.024		0.526	0.026	T	0.60	0.03	L	9.7073	0.0027	0.027	137		9.65	9.75					1							
118111	9.132	0.015	7.992	0.010		0.980	0.014	T	0.96	0.01	L	8.0551	0.0015	0.013	120		8.03	8.07					1							S
118112	7.884	0.006	7.741	0.008		0.138	0.009	T	0.15	0.01	L	7.7700	0.0015	0.014	145		7.75	7.79					1							S
118113	9.597	0.017	8.833	0.014		0.681	0.017	T	0.74	0.01	L	8.8661	0.0016	0.016	141		8.84	8.90					1							G
118114	7.085	0.005	5.846	0.003		1.055	0.002	G	1.02	0.00	H	5.8895	0.0008	0.007	125		5.88	5.91		C			1							S
118115	8.684	0.014	7.967	0.012		0.643	0.002	G	0.71	0.00	H	8.0244	0.0016	0.013	85		8.00	8.04		C			1							S
118116	6.487	0.003	6.461	0.004		0.029	0.005	T	0.05	0.00	L	6.4830	0.0007	0.007	156		6.47	6.50					1							S
118117	8.185	0.009	7.643	0.008		0.508	0.011	T	0.58	0.01	L	7.6911	0.0010	0.010	120		7.67	7.71					1							S
118118	11.097	0.055	10.275	0.041	*	0.741	0.053	T	0.79	0.04	L	*	10.4133	0.0034	0.031	119	*	10.34	10.46		D	23576+6626	H 1	2 C A	AB	271	0.416	0.009	1.19	0.06	G
118119	10.564	0.033	9.227	0.018		1.134	0.029	T	1.10	0.03	L	9.2456	0.0018	0.018	129		9.21	9.28		C			1							
118120	9.828	0.018	9.391	0.019		0.426	0.021	T	0.49	0.02	L	9.4493	0.0027	0.025	142		9.40	9.51		C			1							
118121	5.074	0.002	5.008	0.002		0.060	0.003	T	0.07	0.00	L	5.0241	0.0004	0.005	146		5.02	5.03					1 G							S
118122	11.277	0.058	9.965	0.029		1.114	0.051	T	1.08	0.05	L	9.9338	0.0339	0.245	141		9.73	10.33	9.81	P 1 A			1							G
118123	8.939	0.016	8.283	0.014		0.613	0.009	G	0.68	0.01	H	8.3139	0.0013	0.015	135		8.29	8.34		C			1							S
118124	9.756	0.018	9.310	0.018		0.421	0.023	T	0.49	0.02	L	9.3708	0.0018	0.020	128		9.33	9.42					1							
118125	9.542	0.021	8.015	0.011		1.270	0.020	G	1.23	0.02	H	8.0405	0.0013	0.012	108		8.02	8.06		C			1							S
118126	10.825	0.046	10.220	0.042		0.575	0.003	G	0.65	0.00	H	10.2733	0.0032	0.032	153		10.22	10.34		U 2			1							G
118127	7.602	0.004	7.073	0.004		0.505	0.004	T	0.58	0.00	L	7.1262	0.0007	0.009	218		7.11	7.15					1							S
118128	9.844	0.013	9.630	0.016		0.204	0.019	T	0.22	0.02	L	9.6507	0.0023	0.029	211		9.59	9.70		C			1							
118129	11.970	0.147	10.386	0.054		1.328	0.123	T	1.29	0.14	L	10.4658	0.0030	0.023	91		10.42	10.50		C			1							G
118130						1.617	0.082	G	2.64	0.20	I	*	11.2222	0.0049	0.048	162	*	11.14	11.29			23578−4549	H 1	2 C C	AB	348	0.530	0.034	1.94	0.15	G
118131	6.681	0.006	4.837	0.004		1.584	0.003	G	2.21	0.03	C		4.6918	0.0033	0.025	95		4.65	4.73		U 2			1 S							S
118132	9.906	0.028	8.622	0.016		1.093	0.025	T	1.05	0.03	L	8.6917	0.0009	0.012	110		8.67	8.71		C			1							S
118133	6.698	0.004	6.654	0.006		0.040	0.006	T	0.06	0.01	L	6.6732	0.0008	0.007	85		6.66	6.69		C	23578+1128	I 1	1							S
118134	8.919	0.008	8.512	0.009		0.380	0.015	G	0.44	0.02	H	8.5637	0.0015	0.020	212		8.54	8.60					1							S
118135	7.555	0.006	7.333	0.006		0.220	0.015	G	0.24	0.02	H	7.3749	0.0009	0.012	145		7.35	7.40		C			1							S
118136	10.997	0.042	9.898	0.025		0.895	0.015	G	0.90	0.01	H	9.9803	0.0028	0.027	147		9.91	10.02					1							
118137	10.155	0.029	9.028	0.018		0.970	0.027	T	0.95	0.02	L	9.0548	0.0016	0.012	87		9.04	9.07		C			1							
118138	10.366	0.038	9.221	0.024		0.984	0.035	T	0.96	0.03	L	9.2703	0.0017	0.015	94		9.24	9.30		C			1							
118139	8.935	0.011	8.215	0.010		0.661	0.012	T	0.72	0.01	L	8.2316	0.0021	0.025	158		8.19	8.27		U 2			1							
118140	8.748	0.011	8.463	0.012		0.281	0.015	G	0.32	0.02	H	8.5024	0.0012	0.013	121		8.48	8.53					1							S
118141	8.752	0.011	8.190	0.010		0.553	0.015	G	0.63	0.01	H	8.2508	0.0011	0.012	132		8.23	8.27		C			1							S
118142	11.504	0.078	10.856	0.068		0.630	0.020	G	0.70	0.02	R	10.9735	0.0055	0.046	132		10.89	11.07					1							G
118143	9.764	0.014	8.910	0.011		0.748	0.003	G	0.79	0.00	H	8.9945	0.0013	0.016	190		8.97	9.03					1							
118144	7.960	0.008	7.488	0.007		0.470	0.004	G	0.54	0.00	H	7.5239	0.0011	0.013	146		7.51	7.55					1							S
118145	10.086	0.020	9.397	0.018		0.624	0.020	T	0.69	0.02	L	9.4708	0.0026	0.025	139		9.43	9.51		C			1							
118146	11.261	0.081	10.040	0.043		1.000	0.005	G	1.04	0.01	I	10.0896	0.0028	0.029	106		10.06	10.14		C			1							
118147	9.109	0.012	8.535	0.011		0.540	0.012	T	0.61	0.01	L	8.5904	0.0015	0.016	121		8.56	8.62					1							S
118148	10.316	0.027	8.941	0.014		1.100	0.015	G	1.06	0.02	H	8.9719	0.0019	0.022	148		8.94	9.01					1							
118149	10.443	0.033	9.722	0.028		0.648	0.033	T	0.71	0.03	L	9.7241	0.0260	0.228	119		9.60	10.13	0.37	P 1 A			1							
118150	11.239	0.070	10.645	0.063		0.554	0.083	T	0.63	0.08	L	10.7337	0.0046	0.029	98		10.69	10.79		C			1							G
118151	9.230	0.013	7.332	0.006		1.570	0.015	G	1.58	0.09	H	7.2539	0.0014	0.013	132		7.23	7.27					1							S
118152	9.545	0.023	9.058	0.022		0.458	0.029	T	0.53	0.03	L	9.1646	0.0016	0.015	83		9.14	9.19		C			1							
118153	10.527	0.030	10.036	0.031		0.474	0.033	T	0.55	0.04	L	10.1428	0.0034	0.037	125		10.07	10.19					1							
118154											T	12.2794	0.0097	0.095	105		12.06	12.41					1							G
118155	9.602	0.014	9.072	0.013	*	0.506	0.014	T	0.58	0.01	L	*	9.1336	0.0013	0.017	188	*	9.10	9.16		D	23580−2800	I 1	2 C A	AB	306	0.310	0.005	0.48	0.06	S
118156	9.835	0.018	9.037	0.015		0.723	0.018	T	0.77	0.01	L	9.0920	0.0014	0.016	143		9.07	9.12		C			1							
118157	8.504	0.012	8.230	0.012		0.262	0.015	G	0.29	0.02	H	8.2675	0.0014	0.010	82		8.25	8.28		C			1							S
118158	9.190	0.010	9.107	0.013	A	0.082	0.015	T	0.09	0.02	L	9.1589	0.0076	0.032	202	A	9.10	9.23		U 2	23581+5050	H 1	2 C A	AB	315	12.662	0.015	2.05	0.05	
118159	9.782	0.024	9.073	0.021		0.653	0.026	T	0.72	0.02	L	9.1559	0.0032	0.021	101		9.12	9.20					1							S
118160						1.378	0.015	G	1.62	0.03	I	12.0193	0.0089	0.055	70		11.87	12.11					1							G
118161	9.585	0.022	8.366	0.014		1.028	0.007	G	1.00	0.01	H	8.4156	0.0017	0.013	78		8.40	8.44					1							
118162	7.561	0.005	6.800	0.004		0.694	0.005	T	0.75	0.00	L	6.8654	0.0009	0.010	210		6.85	6.88		M			1							S
118163	11.387	0.082	10.997	0.093		0.242	0.004	G	0.27	0.01	H	11.1354	0.0042	0.052	141		11.05	11.21					1 G							D
118164	9.015	0.015	8.808	0.017	*	0.170	0.015	G	0.19	0.01	H	*	8.8438	0.0017	0.015	78	*	8.82	8.87		C	23581−2154	H 1	2 C S B	AB	92	0.120	0.022	1.07	0.87	S
118165	9.627	0.012	9.192	0.012		0.424	0.014	T	0.49	0.01	L	9.2385	0.0016	0.021	206		9.21	9.28					1							
118166	10.093	0.025	8.796	0.014		1.103	0.022	T	1.07	0.02	L	8.8223	0.0018	0.016	138		8.80	8.85		C			1							
118167	9.317	0.018	8.637	0.015		0.629	0.019	T	0.70	0.02	L	8.7066	0.0019	0.016	101		8.68	8.73		C			1							S
118168	9.778	0.017	9.553	0.021	*	0.215	0.025	T	0.24	0.03	L	*	9.6205	0.0028	0.027	148	*	9.57	9.66			23582+6414	H 1	2 C C	AB	199	0.258	0.052	2.59	0.55	G
118169	8.213	0.007	7.703	0.007		0.465	0.015	G	0.54	0.02	H	7.7475	0.0011	0.013	155		7.73	7.77		C			1 O							S
118170	8.831	0.010	8.292	0.009		0.505	0.012	T	0.58	0.01	L	8.3538	0.0014	0.017	171		8.33	8.38		C			1							S
118171	9.358	0.022	8.132	0.014		1.047	0.020	T	1.02	0.02	L	8.1867	0.0019	0.014	87		8.17	8.21					1							S
118172	11.124	0.056	10.673	0.058		0.376	0.015	G	0.44	0.02	H	10.8379	0.0048	0.045	138		10.77	10.91					1							D
118173	10.429	0.026	9.892	0.025		0.504	0.032	T	0.58	0.03	L	9.9653	0.0034	0.034	163		9.87	10.02					1							
118174											T	11.2522	0.0306	0.241	138		10.96	11.54	4.88	P 1 A			1 S							D
118175	10.178	0.024	8.626	0.012		1.303	0.021	T	1.26	0.02	L	8.6241	0.0024	0.020	118		8.59	8.65		R			1 S							
118176	9.088	0.014	7.284	0.007		1.502	0.012	T	1.53	0.02	L	7.2540	0.0032	0.024	106		7.21	7.28		U 2			1							S
118177	6.975	0.009	6.711	0.008	*	0.251	0.011	T	0.28	0.01	L	*	6.7753	0.0007	0.007	97	*	6.76	6.79		D	23584+3501	I 1	2 C A	AB	17	3.452	0.011	2.94	0.08	S
118178	7.663	0.009	6.397	0.005		1.079	0.002	G	1.04	0.00	H	6.4486	0.0008	0.007	74		6.44	6.46					1							S
118179	7.882	0.007	6.955	0.005		0.825	0.002	G	0.85	0.00	H	7.0106	0.0009	0.010	164		6.99	7.03		C			1							S
118180	12.363	0.159	10.906	0.069		1.350	0.020	G	1.57	0.04	I	10.8793	0.0042	0.044	191		10.77	10.95		U			1 X							G
118181	9.324	0.018	8.877	0.018		0.383	0.007	G	0.45	0.01	H	8.9606	0.0022	0.015	87		8.92	8.99		C			1							S
118182	11.760	0.095	11.079	0.080		0.540	0.040	G	0.61	0.04	R	10.9953	0.0316	0.416	165		9.61	11.28		D	23584+5123	I 2	1 X S							G
118183	10.011	0.023	8.089	0.010		1.630	0.015	G	1.61	0.01	J	8.0106	0.0013	0.014	131		7.99	8.03					1							
118184	8.286	0.011	8.112	0.012		0.167	0.015	T	0.18	0.01	L	8.1410	0.0017	0.012	78		8.12	8.16		C			1							S
118185	9.940	0.026	8.773	0.016		1.001	0.024	T	0.98	0.02	L	8.8168	0.0020	0.016	93		8.79	8.84		C			1							
118186	9.008	0.016	8.473	0.015		0.502	0.020	T	0.57	0.02	L	8.5049	0.0015	0.016	153		8.48	8.54					1							S
118187	10.057	0.019	8.985	0.013		0.928	0.017	T	0.92	0.01	L	9.0429	0.0017	0.022	178		9.01	9.08					1							
118188	9.347	0.017	8.315	0.010		1.500	0.510	G	5.34	0.96	K	8.6759	0.1229	1.415	174		5.11	9.25	431.30	P 1 B	23584+5123	I 2	1 V							D P
118189	10.332	0.023	9.188	0.015		0.983	0.021	T	0.96	0.02	L	9.2531	0.0031	0.028	151		9.21	9.31					1							
118190	9.470	0.016	9.047	0.016		0.411	0.019	G	0.48	0.02	H	9.1019	0.0018	0.020	140		9.07	9.14					1							
118191	8.327	0.012	8.123	0.014		0.195	0.017	T	0.21	0.02	L	8.1690	0.0019	0.013	85		8.15	8.20		C			1							S
118192	11.042	0.049	10.594	0.055		0.600	0.040	G	0.67	0.04	R	10.6688	0.0035	0.033	123		10.60	10.72		C			1							G
118193	9.110	0.014	8.436	0.012		0.624	0.015	T	0.69	0.01	L	8.5143	0.0014	0.014	102		8.49	8.54		C			1							
118194	11.508	0.079	10.921	0.081		0.610	0.020	G	0.68	0.02	R	10.9540	0.0040	0.035	114		10.90	11.01		C			1							G
118195	9.786	0.015	8.490	0.009		1.102	0.014	T	1.06	0.01	L	8.5487	0.0013	0.017	184		8.51	8.58					1							
118196						1.340	0.020	G	1.55	0.03	I	11.7246	0.0061	0.061	89		11.63	11.82			23585+2412	I 1	1 S							D
118197	7.665	0.006	6.782	0.004		0.789	0.005	G	0.82	0.02	A	6.8419	0.0007	0.009	154		6.83	6.86					1							S
118198	8.324	0.009	7.996	0.008		0.316	0.013	T	0.36	0.02	L	8.0520	0.0010	0.010	111		8.03	8.07		C			1							S
118199	9.787	0.019	9.050	0.016	A	0.900	0.495	G	0.77	0.07	L	*	9.0795	0.0017	0.016	130	*	9.05	9.11		D	23585−0141	I 1	2 C B	AB	314	1.915	0.034	3.35	0.18	S
118200						1.500	0.015	G	2.07	0.12	I	11.7993	0.0074	0.048	78		11.71	11.89					1							G

Number	Descriptor: epoch J1991.25				Position: epoch J1991.25			Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)																Soln	
HIP	RA	Dec	V		α (ICRS)	δ		π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	F1	F2
	h m s	±° ′ ″	mag		deg	deg		mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	δ	π	$\mu_{\alpha*}$	%	
1 2	3	4	5 6 7		8	9 10		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28					29	30
118201	23 58 33.48	+69 20 38.3	8.01 G		359.639 519 14	+69.343 961 83		4.53	−10.00	−11.75	0.56	0.56	0.75	0.67	0.58	+ 9	− 1	+18	− 7	− 4	+15	− 6	−14	+24	+19					0	1.11
118202	23 58 33.65	−29 12 37.3	8.41 H		359.640 200 20	−29.210 351 67		−0.15	39.31	7.55	0.98	0.49	1.13	1.42	0.54	+ 3	− 7	+31	+ 6	+21	+28	− 5	−43	−12	−36					0	0.34
118203	23 58 33.82	−12 28 01.2	8.99 H		359.640 912 89	−12.466 989 95		2.66	−4.12	5.59	1.17	0.83	1.57	1.61	0.79	+23	−14	−33	−20	−14	+47	− 9	−47	+45	+27					0	−0.93
118204 H	23 58 34.20	−38 41 09.3	9.76 H		359.642 517 42	−38.685 927 47 A		2.41	16.39	11.75	3.27	2.21	3.30	2.98	1.83	− 3	+28	−13	−35	+ 8	−19	+ 9	−18	+14	−20					1	−0.03
118205 H	23 58 34.40	−14 07 30.3	7.22 G		359.643 336 39	−14.125 094 40 *		8.07	−20.78	10.44	3.04	1.10	1.37	1.70	0.80	+21	−19	−32	−21	−15	+35	−25	−48	+40	+19					1	−0.28
118206	23 58 36.30	−36 52 35.8	8.63 H		359.651 242 54	−36.876 613 06		5.59	9.19	20.88	0.74	0.64	1.07	0.85	0.65	+ 8	− 8	−22	−27	− 5	+27	+ 0	−24	+11	+ 4					0	1.03
118207	23 58 38.94	+77 15 43.6	8.38 H		359.662 247 52	+77.262 113 38		23.37	18.87	−44.04	0.62	0.58	0.70	0.73	0.61	+ 2	− 3	+12	−11	−16	+ 6	−16	− 9	+18	−10					1	1.50
118208	23 58 40.38	−11 41 19.7	8.68 H		359.668 263 45	−11.688 811 94		6.55	64.48	5.77	0.95	0.80	1.41	1.32	0.70	+31	−15	−43	−24	−25	+54	−14	−56	+46	+35					0	−0.99
118209	23 58 40.41	−03 33 20.9	4.88 H		359.668 377 36	−03.555 807 38		14.58	−56.52	−72.34	0.83	0.40	0.83	1.05	0.41	+23	+12	+ 0	+ 1	+ 6	+22	+ 6	−24	+17	+28					0	0.94
118210	23 58 42.08	−38 13 32.9	7.97 H		359.675 326 90	−38.225 812 83		13.55	47.88	−6.70	0.78	0.67	1.03	0.83	0.66	+17	+ 6	−15	−34	− 8	+10	− 6	−35	+15	+ 7					0	1.09
118211	23 58 42.63	−53 49 11.1	9.04 H		359.677 628 98	−53.819 757 48		−0.35	7.59	−3.93	0.74	0.88	1.33	0.96	1.00	−18	−10	+ 6	+ 9	+16	+ 6	+15	−16	−23	−22					0	0.66
118212	23 58 42.94	+46 43 45.0	9.57 H		359.678 921 08	+46.729 173 38		57.62	668.84	−7.64	1.79	1.79	2.82	2.01	1.88	+ 8	+ 9	+12	−25	− 3	−12	− 3	+ 4	+ 8	+12	3						
118213	23 58 45.78	+31 56 23.4	8.28 H		359.690 763 24	+31.939 823 11		20.33	76.66	−134.59	0.84	0.57	0.94	1.05	0.62	− 4	+20	−11	+15	+10	− 6	+ 9	− 2	+13	− 9	0	−1.17				
118214	23 58 46.43	+46 24 47.4	6.55 1 H		359.693 443 26	+46.413 177 36		2.40	15.47	0.89	0.39	0.46	0.72	0.45	0.48	+12	+17	+26	−21	− 2	−18	+ 4	+24	+19	+12	0	0.39				
118215	23 58 47.16	−28 09 58.6	9.72 G		359.696 518 33	−28.166 264 27		12.63	138.97	−66.38	1.31	0.68	1.57	1.89	0.69	+ 5	− 2	+ 9	+ 8	+ 3	+36	−16	−47	+ 0	−29	1	0.52				
118216	23 58 47.63	+48 10 10.6	8.98 H		359.698 453 83	+48.169 618 65		1.31	−9.30	−1.06	0.74	0.67	1.10	0.82	0.71	− 8	+19	+18	−10	+10	− 5	+15	+ 3	+23	−24	1	−0.56				
118217	23 58 47.69	+30 49 14.8	8.26 H		359.698 702 66	+30.820 787 52		1.71	13.54	0.58	0.90	0.56	0.99	1.20	0.60	−10	+29	− 6	− 3	+13	− 2	+13	− 3	+13	−13	0	−0.07				
118218 H	23 58 47.94	+44 53 45.4	9.01 H		359.699 737 15	+44.895 945 13 A		6.87	3.85	21.33	1.21	1.06	1.57	1.25	0.97	− 6	− 1	+28	+26	−15	− 5	−18	+ 3	+ 1	−15	3	−0.16				
118219	23 58 48.36	−08 49 28.0	9.16 H		359.701 484 89	−08.824 435 98		6.79	37.35	4.85	1.02	0.70	1.28	1.45	0.64	+46	−24	−26	−14	− 5	+16	−19	−46	+30	+28	0	0.23				
118220	23 58 48.73	−31 28 47.2	8.47 H		359.703 061 07	−31.479 770 78		4.22	−16.40	−17.44	0.93	0.54	1.20	1.06	0.62	+10	+ 7	− 1	−15	− 4	+ 2	− 8	−41	+12	− 7	0	1.06				
118221	23 58 48.82	+02 49 50.2	12.46 G		359.703 412 48	+02.830 608 78		27.89	−38.46	−29.81	7.32	3.84	7.52	11.23	5.51	+36	+10	− 5	−42	− 2	+15	+ 7	+ 8	+14	+25	8	1.39				
118222 H	23 58 49.06	+09 33 00.5	8.25 2 H		359.704 404 00	+09.550 143 05 *		0.42	0.86	−30.13	1.10	0.63	1.28	1.10	0.78	+35	+40	+ 9	−19	+ 1	+ 0	+10	− 8	+25	+53	0	0.45				
118223	23 58 49.18	+53 40 19.9	8.26 2 G		359.704 904 41	+53.672 185 34		5.38	−3.35	−5.53	0.55	0.59	0.91	0.64	0.68	−25	+21	+13	+ 4	+ 2	+ 7	+ 3	+ 1	+10	−11	0	0.19				
118224	23 58 49.24	+32 22 54.2	6.53 1 H		359.705 146 90	+32.381 710 73		1.75	1.30	−2.35	0.66	0.47	0.80	0.74	0.48	− 3	+28	−14	+29	− 3	− 2	+ 2	− 4	+20	− 2	4	−0.36				
118225	23 58 50.01	+33 44 33.8	7.83 G		359.708 379 92	+33.742 730 19		16.86	272.57	−130.84	0.69	0.48	0.82	0.77	0.55	+ 5	+15	− 8	+ 9	− 1	+ 2	+ 4	+ 3	+28	+20	5	−0.11				
118226	23 58 51.23	−19 39 07.9	8.03 H		359.713 469 49	−19.652 201 95		0.66	26.01	3.40	0.87	0.69	1.14	1.19	0.64	+23	−20	−10	− 8	− 5	+44	− 9	−43	+ 7	+ 8	0	0.29				
118227	23 58 51.66	−28 51 12.8	10.82 G		359.715 239 64	−28.853 547 54		7.86	−68.10	−274.33	1.98	0.88	2.15	2.78	1.02	+ 1	−12	+23	− 1	+15	+ 6	− 4	−43	+ 1	−39	2	−0.91				
118228	23 58 51.66	−61 35 12.2	8.06 G		359.715 258 64	−61.586 720 23		12.83	83.05	−21.32	0.58	0.61	0.83	0.66	0.64	−10	− 1	−17	+12	+ 7	− 1	+ 6	+ 1	−10	−10	0	0.22				
118229	23 58 52.51	+15 50 13.2	9.01 H		359.718 799 31	+15.837 005 09		1.99	−2.59	−9.82	0.92	0.68	1.25	0.94	0.68	+51	+15	+12	− 6	+ 0	+11	− 1	− 5	− 1	+53	0	0.36				
118230	23 58 53.15	+39 06 40.2	7.26 H		359.721 463 07	+39.111 155 13		9.81	8.00	−39.72	0.58	0.47	0.73	0.61	0.54	+20	+16	+13	+49	+ 8	+ 1	+11	+29	+ 8	+31	0	0.11				
118231	23 58 54.58	+26 37 41.0	8.94 H		359.727 434 88	+26.628 058 25		1.57	23.95	−9.63	0.96	0.70	1.27	1.03	0.67	+ 9	+10	+13	− 3	+ 3	+18	+ 1	−12	+ 5	+ 7	0	0.47				
118232	23 58 54.78	+26 06 51.3	8.86 H		359.728 268 55	+26.114 244 00		3.20	2.91	−0.08	0.98	0.66	1.17	1.15	0.69	+ 6	+26	+ 4	− 8	+ 9	− 8	+11	+ 5	+10	+ 5	0	0.78				
118233	23 58 55.41	−35 14 12.0	9.95 H		359.730 868 44	−35.236 674 56		8.90	41.90	−9.37	1.10	0.76	1.47	1.28	0.82	+ 6	+ 9	−10	−40	+ 3	+ 4	+ 6	−35	+23	− 9	0	0.94				
118234	23 58 55.72	−52 44 45.4	5.13 H		359.732 181 18	−52.745 956 29		12.70	57.93	61.46	0.35	0.40	0.65	0.42	0.43	−40	−15	+ 4	+18	+16	+ 4	+14	− 1	−22	−41	0	0.33				
118235	23 58 56.22	+04 16 24.7	7.92 H		359.734 254 73	+04.273 516 65		2.11	6.40	−3.97	1.08	0.60	1.22	1.26	0.74	+33	+15	− 5	+ 7	− 8	+13	− 7	−10	+14	+25	2	0.94				
118236	23 58 56.55	−23 01 00.3	9.77 H		359.735 625 15	−23.016 744 67		6.05	−10.57	−6.50	1.51	0.85	1.79	1.59	0.80	+11	+13	+17	−29	+ 9	+11	+ 5	−40	+ 2	− 7	0	0.20				
118237	23 58 57.13	−57 46 59.8	9.51 H		359.738 051 89	−57.783 291 51		10.13	77.90	23.08	0.91	0.97	1.36	1.06	1.18	− 9	− 8	+ 6	+ 3	+ 5	+ 8	+ 8	−13	− 1	+10	1	−1.30				
118238	23 58 57.80	+40 47 31.9	8.51 2 H		359.740 825 36	+40.792 197 77		3.91	15.31	−3.91	0.69	0.54	0.87	0.76	0.57	+ 6	+13	+24	+39	− 6	− 7	+ 0	+27	+16	+12	0	0.67				
118239	23 58 57.87	−23 39 55.6	10.38 H		359.741 115 48	−23.665 442 22		7.08	32.64	0.44	1.58	1.03	1.95	2.72	0.98	+16	+ 4	+21	+ 4	+21	+30	− 3	−39	− 8	−26	0	0.99				
118240	23 58 58.48	+64 53 18.0	11.41 2 G		359.743 670 00	+64.888 334 50		7.24	−4.11	3.78	3.06	2.95	3.91	3.86	3.26	− 9	+14	+21	+ 7	− 5	− 3	− 2	+ 1	+15	−18	0					
118241	23 58 59.18	−29 54 57.5	9.44 G		359.746 582 08	−29.915 969 01		9.44	180.16	−114.48	1.13	0.58	1.36	1.47	0.72	− 5	−10	+17	− 9	+15	+27	+ 8	−28	− 5	−21	2	−0.25				
118242	23 58 59.45	+06 24 48.7	8.97 H		359.747 702 88	+06.413 519 14		1.85	−12.55	−12.92	1.19	0.66	1.24	1.24	0.74	+18	− 4	− 7	−25	− 2	+14	− 3	−17	+26	+29	2	0.16				
118243 H	23 59 00.53	+55 45 17.8	4.88 G		359.752 207 29	+55.754 940 69 A		2.14	9.26	−5.09	0.54	0.57	0.75	0.57	0.55	−36	− 4	+15	−33	+21	+32	+16	−31	− 1	−30	4	−0.72				
118244	23 59 01.56	−69 39 15.6	8.19 H		359.756 512 75	−69.654 321 24		2.12	3.61	0.80	0.63	0.59	0.76	0.64	0.61	− 7	+ 5	−23	−14	+ 0	+16	+ 4	−16	+ 6	+ 7	1	0.65				
118245	23 59 02.31	−74 03 20.6	8.85 H		359.759 605 07	−74.055 723 54		4.16	14.09	0.48	0.78	0.68	0.88	0.85	0.69	− 8	− 4	−11	−19	+12	+ 1	+ 9	− 4	− 6	+ 8	0	0.85				
118246	23 59 02.74	−59 31 48.5	7.77 G		359.761 434 63	−59.530 151 47		1.85	39.80	−93.30	0.57	0.59	0.80	0.63	0.66	−12	− 6	−14	− 2	+11	+13	+15	−20	+ 6	− 2	0	−0.41				
118247	23 59 02.86	−11 56 17.3	8.05 G		359.761 905 00	−11.938 147 08		18.95	67.26	−62.31	0.93	0.74	1.30	1.27	0.65	+36	−22	−42	−35	−23	+50	−17	−54	+37	+31	0	−0.15				
118248	23 59 03.19	−54 38 46.8	9.05 1 H		359.763 295 66	−54.646 334 78		1.59	21.99	−0.76	0.78	0.98	1.45	0.88	1.10	−31	+11	− 4	− 2	+ 7	+14	+ 6	−10	−17	−25	1	−0.66				
118249	23 59 04.56	−56 34 32.2	7.51 3 H		359.769 013 80	−56.575 609 99		3.93	5.86	−11.65	0.52	0.59	0.87	0.60	0.67	−14	−16	−19	+14	+11	− 4	+12	− 7	− 8	−15	0	0.05				
118250	23 59 05.72	+55 57 22.0	8.37 2 G		359.773 830 29	+55.956 111 75		2.43	7.85	−2.68	0.62	0.65	1.03	0.86	0.74	−34	− 2	+20	−18	+15	+34	+ 9	−20	+ 2	−30	0	−0.16				
118251	23 59 06.80	+41 10 14.0	8.16 G		359.778 317 69	+41.170 546 65		22.91	82.20	3.56	0.69	0.51	0.82	0.70	0.52	+ 3	+18	+17	+31	−13	− 4	− 7	+19	+20	+ 3	2	0.34				
*118252	23 59 07.92	+56 58 28.0	9.71 2 H		359.783 011 58	+56.974 439 04		10.88	46.20	25.34	2.17	2.30	3.31	2.88	2.56	−13	+ 9	+22	−16	+19	+23	+15	−27	+10	−11	2					
*118253	23 59 07.92	−08 29 15.4	8.46 G		359.782 985 99	−08.487 603 76		7.85	42.77	−27.73	0.90	0.55	1.10	1.23	0.51	+38	−20	−23	−18	+ 0	+15	−11	−41	+30	+31	0	1.41				
118254	23 59 08.97	+41 12 06.2	7.72 H		359.787 380 56	+41.201 736 10		22.19	80.21	4.40	0.66	0.51	0.80	0.68	0.51	+ 3	+16	+16	+38	−13	− 2	− 8	+18	+19	+ 2	2	2.44				
118255	23 59 09.11	−46 07 44.6	8.69 H		359.787 969 98	−46.129 049 40		3.26	−22.46	−32.18	0.98	0.67	1.28	1.35	0.97	−20	−10	−19	−25	− 2	+13	+ 5	−52	+15	+ 3	2	1.30				
118256	23 59 09.64	−42 14 13.0	6.78 H		359.790 166 25	−42.236 943 30		11.46	40.42	24.59	0.56	0.42	0.79	0.67	0.49	− 3	+ 3	−10	+39	− 4	+14	− 7	−29	+ 4	−10	0	−2.54				
118257 H	23 59 10.64	+74 48 26.1	7.87 G		359.794 345 07	+74.807 249 41 A		7.36	23.25	−1.55	1.55	1.30	1.43	2.08	1.13	−19	+ 9	+ 9	−18	− 3	−17	− 6	− 3	+ 8	+20	3	0.23				
118258	23 59 11.06	−18 32 22.2	8.24 H		359.796 091 27	−18.539 500 42		2.38	13.91	−1.81	0.94	0.70	1.09	1.36	0.62	+24	−12	− 5	+ 2	+ 1	+26	−11	−45	+ 2	− 2	0	0.04				
118259	23 59 11.94	+53 33 47.5	7.07 H		359.799 747 02	+53.563 204 89		11.26	−29.91	−13.60	0.44	0.51	0.78	0.56	0.55	−29	+13	+15	+ 1	+ 0	+ 7	+ 3	− 8	+13	−10	1	−0.70				
*118260	23 59 13.87	+09 22 19.5	9.36 H		359.807 795 97	+09.372 073 05		4.30	1.20	1.91	1.27	0.86	1.53	1.35	1.09	+34	+27	− 5	+ 9	+10	+ 7	+19	+ 2	+29	+55	4	0.66				
*118261	23 59 13.85	−26 02 55.6	8.69 H		359.807 701 83	−26.048 776 98		40.90	−232.18	12.89	1.01	0.58	1.26	1.64	0.57	+11	− 2	+ 5	+ 1	+ 5	+42	−12	−47	+10	−19	0	0.12				
118262	23 59 13.91	+63 49 10.4	9.19 H		359.807 973 91	+63.819 544 60		0.29	−3.41	−1.17	0.84	0.79	1.01	1.05	0.89	−14	+17	+12	+37	− 1	− 2	− 4	−10	+ 8	−25	0	2.28				
118263	23 59 14.45	+43 51 48.9	8.66 H		359.810 213 03	+43.863 595 33		9.56	−31.36	−38.90	0.66	0.57	1.01	0.77	0.62	− 7	−13	+19	+ 3	− 9	−12	− 7	+15	+14	−12	0	−0.16				
118264	23 59 14.74	+50 31 45.4	7.23 H		359.811 424 66	+50.529 270 83		4.42	3.58	−11.85	0.45	0.53	0.80	0.51	0.56	−35	+18	+15	+26	− 7	+ 4	− 1	− 3	+10	−26	0	−0.84				
118265	23 59 17.24	−39 30 07.8	9.65 H		359.821 850 92	−39.502 155 35		11.93	−17.86	−70.37	0.82	0.81	1.43	0.90	0.85	+11	+15	−12	+46	−15	+14	−20	−28	− 6	+ 2	0	0.37				
118266	23 59 17.33	−36 02 35.4	9.59 G		359.822 204 54	−36.043 173 43		6.95	−30.31	−121.84	1.07	0.76	1.45	1.37	0.86	+ 0	− 8	−18	−38	+ 7	+12	+ 7	−39	+19	−10	1	0.19				
118267	23 59 17.69	+27 16 12.1	7.89 H		359.823 692 87	+27.270 031 08		0.49	−22.25	−13.73	0.77	0.56	0.95	0.85	0.55	+19	+24	+12	+ 6	+ 8	− 4	+ 9	− 1	+10	+11	0	−0.57				
118268	23 59 18.60	+06 51 48.9	4.03 H		359.827 509 94	+06.863 593 73		30.78	148.49	−112.16	0.92	0.48	0.87	0.96	0.50	− 1	−29	+ 5	−54	+13	+42	+ 0	−23	+23	+32	0	−0.34				
118269	23 59 19.31	+41 07 44.4	8.20 H		359.830 455 72	+41.128 998 23		0.85	9.87	−8.13	0.71	0.55	0.89	0.74	0.57	+ 9	+18	+15	+24	− 4	− 5	+ 1	+21	+22	+13	2	−0.07				
118270	23 59 19.72	−65 31 20.7	8.92 H		359.832 156 75	−65.522 412 48		2.04	8.74	−3.31	0.74	0.70	0.99	0.94	0.79	− 6	− 7	−19	+ 5	− 1	+14	+ 5	−10	−12	+ 5	0	−0.66				
118271	23 59 19.88	−42 03 22.7	8.67 G		359.832 816 60	−42.056 304 13		2.51	18.94	12.32	0.75	0.58	1.07	0.89	0.69	− 2	− 1	− 9	+35	− 3	+ 9	− 6	−31	+ 4	− 6	0	−1.19				
118272	23 59 21.62	+50 30 29.4	8.05 H		359.840 090 77	+50.508 161 71		3.82	−5.03	−1.54	0.53	0.59	0.96	0.62	0.62	−42	+11	+13	+30	−10	+ 4	+ 0	−16	+ 7	−25	0	−0.56				
118273	23 59 24.59	+75 30 32.1	9.36 H		359.852 459 72	+75.508 923 10		5.65	−0.94	2.86	0.79	0.73	0.89	0.91	0.75	− 1	− 9	+11	−20	− 5	+13	− 6	−16	+ 3	+ 4	0	0.82				
118274	23 59 26.72	−28 51 13.8	10.11 H		359.861 314 83	−28.853 834 18		3.09	21.07	−6.11	1.62	0.74	1.77	2.45	0.89	− 7	−10	+20	−15	+20	+ 9	+ 8	−39	− 2	−39	1	0.79				
118275	23 59 27.02	+20 24 50.5	7.79 G		359.862 603 78	+20.414 027 01		8.11	14.49	−15.33	0.72	0.53	0.96	0.76	0.55	+28	+20	+ 2	− 4	+ 0	+ 9	+ 5	−13	+26	+31	0	−1.06				
118276	23 59 27.88	+57 40 15.4	7.20 G		359.866 156 35	+57.670 946 12		8.99	21.60	−33.47	0.50	0.57	0.80	0.66	0.66	−21	+23	+ 2	+14	+13	−15	+14	−17	+17	−26	4	2.63				
118277	23 59 27.90	−29 29 06.6	5.59 1 H		359.866 257 00	−29.485 153 14		3.71	−7.86	−5.98	0.70	0.36	0.81	1.01	0.42	+ 1	−16	+27	+ 8	+19	+19	+ 2	−33	−10	−28	0	−0.93				
118278	23 59 28.12	−20 02 02.5	7.47 G		359.867 153 08	−20.034 023 21		38.76	506.57	−284.12	0.87	0.55	1.04	1.15	0.52	+ 8	− 7	− 4	−19	+ 6	+37	+ 4	−32	+ 7	− 2	0	1.97				
118279	23 59 28.53	−66 58 51.5	9.64 H		359.868 882 67	−66.980 984 52		8.53	9.74	9.58	0.92	0.83	1.13	0.94	0.92	− 2	+ 9	−17	−10	+ 0	+ 9	+ 1	− 9	− 7	+ 3	0	−0.68				
118280	23 59 29.13	+55 07 06.7	8.69 H		359.871 362 51	+55.118 526 07		2.59	5.13	−3.74	0.66	0.67	1.01	0.73	0.72	−16	+21	+22	− 1	+ 5	+16	+ 2	− 7	+ 0	−11	0	−1.00				
118281 H	23 59 29.33	+33 43 26.9	5.81 H		359.872 224 32	+33.724 132 97 A		34.47	−59.03	−104.99	1.27	0.92	1.21	1.27	0.92	+20	+ 9	− 2	+21	+26	+ 4	+ 4	+66	+ 1	+51	26	1.35				
118282 H	23 59 29.63	+44 36 05.7	9.97 H		359.873 451 42	+44.601 587 94 A		19.33	380.89	160.81	1.80	1.72	2.50	1.90	1.65	− 7	+ 3	+33	+24	−14	−16	−13	+21	+ 8	−10	1	0.54				
*118283	23 59 30.46	−26 31 35.9	8.26 H		359.876 929 22	−26.526 632 68 B		−0.27	79.50	14.84	7.60	4.39	5.23	8.70	3.26	− 1	− 5	+ 6	+58	−11	+ 2	−30	−36	+16	−27	18	2.88				
*118284	23 59 30.32	−26 31 25.5	8.01 H		359.876 347 24	−26.523 738 54 A		4.72	65.89	16.91	4.71	2.52	4.22	5.62	2.03	+ 6	+ 4	+ 5	+43	− 9	+13	−28	−44	+14	−25	18	2.88				
*118285	23 59 30.37	+86 42 23.1	6.75 H		359.876 556 85	+86.706 407 08		5.16	36.25	−1.48	0.47	0.46	0.53	0.50	0.47	− 6	+11	+ 9	+ 3	+ 1	− 5	− 1	−22	+11	−22	0	−2.16				
118286	23 59 31.30	−02 50 37.7	7.12 2 H		359.880 431 73	−02.843 800 29		6.59	25.61	3.86	0.98	0.50	0.89	1.29	0.78	+19	+17	− 6	−54	+ 4	− 6	+15	−35	+ 9	− 8	0	1.53				
118287 H	23 59 31.78	+54 41 18.6	7.73 H		359.882 423 01	+54.688 496 61 A		3.14	−4.61	−5.55	1.66	1.60	1.67	1.36	1.15	−13	+ 7	+ 9	+14	+ 6	+ 6	+ 6	−10	+ 6	− 2	1	−0.85				
118288	23 59 32.07	−52 50 36.6	7.82 H		359.883 625 52	−52.843 513 74		9.50	70.20	−12.66	0.48	0.55	0.88	0.57	0.58	−30	−22	+ 2	+16	+19	+ 4	+20	+ 1	−26	−31	0	0.96				
118289	23 59 32.88	+50 49 57.3	7.19 H		359.886 986 94	+50.832 579 94		3.33	11.19	−2.63	0.44	0.50	0.75	0.50	0.51	−36	+14	+18	+22	− 4	+ 6	− 1	− 7	+11	−32	0	0.33				
118290	23 59 33.96	−19 31 48.5	9.42 H		359.891 502 99	−19.530 138 16		7.70	8.19	−11.25	1.23	0.91	1.55	1.54	0.85	+17	− 8	−13	−31	− 5	+32	− 6	+10	+ 0	+ 6	0	0.66				
118291	23 59 34.19	−42 16 59.6	8.01 H		359.892 454 22	−42.283 218 06		2.95	3.44	−7.24	0.67	0.61	1.03	0.83	0.72	+ 3	−11	− 5	+27	− 5	+ 1	− 8	−40	+ 4	− 3	0	−1.93				
118292	23 59 34.60	−31 41 18.1	7.54 H		359.894 150 60	−31.688 366 56		8.45	24.96	37.95	0.75	0.43	0.94	0.80	0.53	+ 7	− 5	− 1	−38	+ 0	+ 9	+ 0	−34	+19	+ 1	0	0.57				
118293	23 59 34.95	−01 51 00.0	7.49 G		359.895 638 87	−01.849 991 58		12.56	150.73	29.99	0.79	0.53	0.94	1.00	0.56	+40	−12	−15	−22	−12	+33	−11	−36	+27	+53	0	1.31				
118294 H	23 59 35.10	−07 48 37.8	8.69 2 H		359.896 244 86	−07.810 509 16 A		8.09	−17.82	−158.38	3.87	2.24	3.78	6.23	1.97	+43	−14	−27	− 5	− 3	+23	− 8	−35

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM	Flags	AB	θ °	ρ ″	σ_ρ ″	ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65	66	67	68-70
118201	8.464	0.010	8.041	0.010		0.389	0.015	G	0.45	0.02	H	8.1038	0.0012	0.011	119		8.08	8.12		C			1							S
118202	9.836	0.015	8.528	0.009		1.111	0.014	T	1.07	0.01	L	8.5771	0.0012	0.014	206		8.55	8.60		C			1							
118203	9.438	0.025	9.059	0.025		0.370	0.030	T	0.43	0.03	L	9.0723	0.0016	0.016	78		9.04	9.10		D			1							S
118204	10.476	0.031	10.013	0.031	*	0.450	0.035	T	0.52	0.04	L *	9.8627	0.0029	0.024	111	*	9.82	9.91		D	23586−3841	I 1	2 C	A	AB	282	0.956	0.007	0.13	0.03	
118205	7.652	0.008	7.267	0.008	*	0.409	0.015	G	0.48	0.02	H *	7.3066	0.0011	0.007	81	*	7.29	7.32		D	23586−1408	I 1	2 C	A	AB	15	0.203	0.006	0.82	0.12	S
118206	8.970	0.012	8.671	0.012		0.284	0.018	T	0.32	0.02	L	8.7009	0.0015	0.017	135		8.67	8.73					1							S
118207	9.162	0.013	8.455	0.011		0.651	0.014	T	0.71	0.01	L	8.5104	0.0017	0.016	128		8.48	8.54					1							
118208	9.390	0.020	8.767	0.018		0.576	0.020	T	0.65	0.02	L	8.8017	0.0018	0.017	96		8.77	8.82					1							S
118209	6.067	0.003	4.987	0.002		0.930	0.000	G	0.92	0.00	H	5.0432	0.0005	0.005	144		5.03	5.05			23587−0333	I 1	1	S						S
118210	8.529	0.009	8.031	0.009		0.490	0.015	G	0.56	0.02	H	8.0781	0.0018	0.016	123		8.06	8.11					1							S
118211	11.017	0.040	9.189	0.014		1.521	0.034	T	1.56	0.05	L	9.1638	0.0025	0.026	198		9.11	9.21					1							
118212	11.443	0.064	9.825	0.024		1.355	0.054	T	1.32	0.06	L	9.6916	0.0027	0.028	152		9.63	9.74					1	X	S					
118213	9.172	0.016	8.360	0.013		0.734	0.016	T	0.78	0.01	L	8.4222	0.0017	0.012	82		8.41	8.44		C			1							S
118214	6.424	0.003	6.532	0.003		−0.093	0.004	T	−0.07	0.01	L	6.5264	0.0012	0.013	162		6.51	6.55	0.31	P 1 A			1							S
118215	10.573	0.027	9.774	0.020		0.715	0.002	G	0.77	0.00	H	9.8734	0.0021	0.023	182		9.84	9.90		C			1							
118216	9.172	0.013	9.010	0.015		0.156	0.019	T	0.17	0.02	L	9.0357	0.0017	0.021	133		8.99	9.08					1							
118217	9.880	0.025	8.404	0.013		1.243	0.022	T	1.20	0.02	L	8.4255	0.0014	0.013	87		8.40	8.45					1							
118218	9.453	0.018	9.035	0.019	A	0.361	0.107	G	0.42	0.05	L *	9.0906	0.0023	0.017	116	*	9.06	9.12		C	23588+4454	H 1	2 C	D	AB	316	1.586	0.041	3.53	0.18	D
118219	9.812	0.021	9.222	0.019		0.551	0.025	T	0.62	0.02	L	9.2841	0.0015	0.018	151		9.25	9.32					1							S
118220	9.793	0.016	8.589	0.010		1.030	0.015	T	1.00	0.01	L	8.6318	0.0013	0.019	180		8.60	8.67					1							
118221						1.218	0.020	G	1.18	0.02	H	12.6067	0.0131	0.098	73		12.43	12.85					1	S						G
118222	10.372	0.034	8.534	0.014	*	1.559	0.197	G	1.56	0.22	R *	8.3702	0.0108	0.070	96	*	8.25	8.45		U 2	23588+0933	H 1	2 C	S D	AB	327	0.135	0.016	0.90	0.60	W
118223	8.427	0.008	8.317	0.009		0.110	0.015	G	0.12	0.01	H	8.2911	0.0032	0.087	192		8.25	8.58	1.77	P 1 A			1							
118224	6.366	0.004	6.511	0.005		−0.126	0.006	T	−0.12	0.01	L	6.4923	0.0018	0.011	93		6.47	6.51		M			1							S
118225	8.653	0.013	7.930	0.011		0.654	0.014	G	0.72	0.01	H	7.9711	0.0011	0.011	100		7.95	7.99		C			1							S
118226	9.561	0.022	8.155	0.012		1.188	0.020	T	1.15	0.02	L	8.1908	0.0022	0.016	98		8.16	8.22					1							S
118227	11.274	0.048	10.907	0.055		0.460	0.033	G	0.53	0.04	H	10.9264	0.0025	0.036	190		10.83	10.98					1							G
118228	8.769	0.010	8.128	0.009		0.581	0.006	G	0.65	0.01	H	8.1840	0.0016	0.017	163		8.15	8.21					1							S
118229	10.208	0.028	9.100	0.018		0.955	0.026	T	0.94	0.02	L	9.1731	0.0016	0.018	127		9.14	9.21					1							
118230	7.670	0.006	7.297	0.007		0.353	0.009	T	0.41	0.01	L	7.3480	0.0010	0.009	131		7.33	7.36		C			1							S
118231	10.404	0.034	9.055	0.018		1.143	0.030	T	1.11	0.03	L	9.1076	0.0013	0.019	102		9.07	9.14					1							
118232	10.238	0.029	9.018	0.018		1.043	0.027	T	1.01	0.02	L	9.0328	0.0020	0.018	94		9.00	9.06		C			1							
118233	10.647	0.032	9.999	0.029		0.601	0.037	T	0.67	0.03	L	10.0774	0.0028	0.028	161		10.00	10.13					1							
118234	6.578	0.002	5.258	0.002		1.121	0.002	T	1.08	0.00	L	5.2972	0.0004	0.007	278		5.29	5.31					1							S
118235	9.987	0.030	8.122	0.012		1.550	0.026	T	1.62	0.04	L	8.0380	0.0018	0.015	88		8.01	8.06					1	S						S
118236	10.344	0.034	9.809	0.033		0.509	0.035	T	0.58	0.04	L	9.8770	0.0026	0.018	94		9.83	9.91		C			1							
118237	10.368	0.024	9.566	0.019		0.710	0.023	T	0.76	0.02	L	9.6491	0.0030	0.031	154		9.59	9.70		C			1							
118238	8.850	0.012	8.562	0.013		0.293	0.015	G	0.33	0.02	H	8.5870	0.0014	0.015	116		8.57	8.66		U 2 C			1							
118239	11.119	0.055	10.472	0.050		0.600	0.064	T	0.67	0.06	L	10.5122	0.0037	0.031	117		10.47	10.57					1							
118240						0.770	0.020	G	0.81	0.01	R	11.7991	0.0126	0.105	127		11.59	11.92		U 2			1	X						G
118241	10.077	0.017	9.541	0.016		0.542	0.002	G	0.62	0.00	H	9.5735	0.0017	0.021	197		9.53	9.61					1							
118242	10.280	0.041	9.108	0.024		1.005	0.037	T	0.98	0.03	L	9.1347	0.0020	0.013	81		9.12	9.16		C			1							
118243	4.717	0.006	4.833	0.006	*	−0.071	0.019	G	−0.05	0.03	C *	4.8696	0.0006	0.005	146	*	4.86	4.88		D	23591+5546	I 1	2 C	A	AB	326	3.143	0.004	2.34	0.02	S
118244	10.020	0.019	8.330	0.009		1.412	0.017	T	1.39	0.02	L	8.3293	0.0014	0.016	158		8.30	8.36		C			1							
118245	10.109	0.022	8.966	0.014		0.983	0.020	T	0.96	0.02	L	9.0120	0.0019	0.021	136		8.97	9.05		C			1							
118246	9.522	0.015	7.926	0.008		1.336	0.003	G	1.30	0.00	H	7.9111	0.0015	0.016	142		7.89	7.94					1							S
118247	8.747	0.014	8.107	0.012		0.579	0.015	G	0.65	0.01	H	8.1735	0.0008	0.011	91		8.15	8.19					1							S
118248	10.990	0.037	9.196	0.014		1.494	0.031	T	1.52	0.05	L	9.1748	0.0023	0.032	192		9.12	9.23		U			1							
118249	9.376	0.012	7.737	0.006		1.397	0.011	T	2.71	0.12	O	7.4832	0.0420	0.426	174		6.94	7.95	157.90	P 1 A			1	S						
118250	8.388	0.015	8.364	0.018		0.010	0.015	G	0.03	0.01	H	8.3813	0.0022	0.022	151		8.34	8.42		U 2			1							
118251	8.941	0.014	8.210	0.012		0.652	0.015	G	0.72	0.01	H	8.2925	0.0012	0.012	120		8.27	8.31		C			1							S
118252	10.422	0.032	9.777	0.029		0.661	0.032	T	0.64	0.03	L	9.8013	0.0065	0.066	151		9.55	9.90		U 2			1	X	S					G Y
118253	8.847	0.010	8.472	0.011		0.367	0.015	G	0.43	0.02	H	8.5383	0.0013	0.015	160		8.52	8.57					1							S
118254	8.393	0.010	7.789	0.009		0.563	0.012	T	0.64	0.01	L	7.8374	0.0014	0.011	122		7.82	7.86					1							S
118255	10.055	0.020	8.769	0.012		1.094	0.018	T	1.06	0.02	L	8.8550	0.0017	0.018	153		8.83	8.89					1							
118256	7.035	0.004	6.804	0.004		0.215	0.006	T	0.24	0.01	L	6.8464	0.0009	0.008	164		6.83	6.86		C			1							S
118257	8.321	0.017	7.993	0.018	*	0.302	0.002	G	0.35	0.00	H *	7.9410	0.0009	0.011	98	*	7.93	7.96		D	23592+7448	I 1	2 C	A	AB	328	1.197	0.004	0.13	0.01	S
118258	9.520	0.020	8.350	0.013		1.004	0.019	T	0.98	0.01	L	8.4101	0.0016	0.016	98		8.38	8.44					1							S
118259	7.275	0.004	7.089	0.005		0.178	0.006	T	0.20	0.01	L	7.1355	0.0010	0.012	207		7.12	7.16					1							S
118260	9.947	0.026	9.442	0.025		0.475	0.033	T	0.55	0.04	L	9.4610	0.0024	0.020	105		9.43	9.50		C			1							
118261	10.033	0.020	8.816	0.012		1.042	0.004	G	1.09	0.01	I	8.8273	0.0017	0.016	149		8.80	8.85					1							
118262	9.495	0.017	9.228	0.019		0.310	0.015	G	0.36	0.02	H	9.2702	0.0029	0.025	127		9.22	9.32					1							
118263	9.309	0.017	8.718	0.015		0.541	0.015	G	0.61	0.02	H	8.7828	0.0016	0.015	120		8.76	8.81		C			1							
118264	8.353	0.008	7.321	0.005		0.898	0.007	T	0.90	0.01	L	7.3880	0.0008	0.011	206		7.37	7.41		C			1							S
118265	10.374	0.022	9.738	0.020		0.585	0.022	T	0.66	0.02	L	9.7721	0.0018	0.022	160		9.73	9.82		C			1							
118266	10.405	0.028	9.629	0.023		0.578	0.015	G	0.65	0.01	H	9.7426	0.0019	0.023	156		9.69	9.78		C			1							
118267	10.035	0.026	8.092	0.011		1.612	0.022	T	1.63	0.02	L	8.0037	0.0022	0.016	89		7.97	8.03					1							
118268	4.515	0.003	4.076	0.002		0.419	0.005	G	0.49	0.02	A	4.1219	0.0006	0.004	76		4.12	4.13		C			1							S
118269	9.930	0.026	8.328	0.013		1.342	0.023	T	1.31	0.03	L	8.3556	0.0013	0.014	112		8.33	8.38		C			1							
118270	10.314	0.051	8.998	0.030		1.118	0.046	T	1.08	0.05	L	9.0900	0.0019	0.022	138		9.05	9.12					1							
118271	8.685	0.008	8.684	0.010		−0.001	0.007	G	0.02	0.01	H	8.6878	0.0015	0.016	166		8.66	8.71		C			1							S
118272	9.347	0.011	8.143	0.007		1.030	0.010	T	1.00	0.01	L	8.2135	0.0012	0.013	196		8.19	8.24					1							
118273	9.869	0.024	9.397	0.024		0.445	0.031	T	0.51	0.03	L	9.4601	0.0019	0.018	112		9.43	9.49		C			1							
118274	10.636	0.029	10.170	0.030		0.439	0.038	T	0.51	0.04	L	10.2104	0.0024	0.027	181		10.17	10.26					1							
118275	8.025	0.009	7.814	0.011		0.189	0.015	G	0.21	0.02	H	7.8541	0.0011	0.011	107		7.83	7.88		C			1							S
118276	7.363	0.005	7.231	0.006		0.140	0.015	G	0.15	0.01	H	7.2349	0.0016	0.014	147		7.21	7.26			23595+5740	I 1	1							S
118277	7.694	0.006	5.779	0.003		1.599	0.013	G	1.61	0.09	H	5.7064	0.0009	0.010	204		5.69	5.72	7.75	P 1 A			1							S
118278	8.384	0.011	7.565	0.007		0.741	0.006	G	0.79	0.00	H	7.6160	0.0010	0.010	108		7.60	7.63					1							S
118279	10.188	0.023	9.693	0.023		0.477	0.025	T	0.55	0.03	L	9.7502	0.0024	0.026	130		9.71	9.79		C			1							
118280	8.731	0.011	8.692	0.014		0.041	0.016	T	0.06	0.01	L	8.7103	0.0018	0.018	144		8.68	8.74		C			1							
118281						0.539	0.007	G	0.61	0.01	R *	5.9232	0.0005	0.005	95	*	5.91	5.93		D	23594+3343	I 1	2 C	A	AB	321	1.847	0.002	0.21	0.01	S
118282	11.096	0.056	10.153	0.039	A	1.100	0.495	G	0.92	0.07	B *	10.1279	0.0029	0.022	120	*	10.09	10.18		R	23595+4436	I 1	2 C	A	AB	114	2.438	0.028	2.43	0.13	G
118283	8.745	0.029	8.265	0.028	B	0.452	0.036	T	0.52	0.04	L	8.3497	0.0063			B				D	23595−2632	I 2	1 C	I A						S
118284	8.502	0.019	8.032	0.019	A	0.443	0.025	T	0.51	0.03	L	8.1104	0.0053	0.043	152	A	8.08	8.28		D	23595−2632	I 2	1 C	P A						S
118285	6.837	0.005	6.755	0.006		0.081	0.007	T	0.09	0.01	L	6.7823	0.0009	0.007	121		6.77	6.80					1							S
118286	7.509	0.006	7.167	0.006		0.324	0.008	T	0.38	0.01	L	7.1985	0.0029	0.019	116		7.17	7.23		U 2			1	G						S P
118287	8.370	0.009	7.809	0.009	*	0.525	0.012	T	0.60	0.01	L *	7.8441	0.0012	0.014	164	*	7.82	7.87		D	23595+5441	I 1	2 C	A	AB	85	0.381	0.002	0.04	0.02	S
118288	8.314	0.007	7.862	0.006		0.446	0.004	G	0.52	0.00	H	7.9183	0.0009	0.014	253		7.89	7.94					1							S
118289	7.126	0.004	7.178	0.005		−0.043	0.006	T	−0.02	0.01	L	7.1846	0.0010	0.011	202		7.17	7.20		C			1							S
118290	10.112	0.028	9.455	0.024		0.600	0.028	T	0.67	0.03	L	9.5508	0.0029	0.021	101		9.51	9.59		C			1							
118291	9.762	0.016	8.157	0.008		1.345	0.014	T	1.31	0.02	L	8.1597	0.0017	0.016	170		8.13	8.19		C			1							S
118292	7.964	0.006	7.585	0.006		0.370	0.007	T	0.43	0.01	L	7.6226	0.0009	0.010	192		7.61	7.64		C			1							S
118293	7.845	0.007	7.514	0.007		0.342	0.015	G	0.40	0.02	H	7.5646	0.0016	0.014	125		7.54	7.58					1							S
118294	8.883	0.016	8.293	0.017	*	0.551	0.020	T	0.62	0.02	L *	8.8038	0.0183	0.241	147	*	8.65	9.69		U	23596−0748	I 1	2 C	A	AB	292	1.660	0.008	0.59	0.03	S
118295	10.087	0.029	8.576	0.015		1.271	0.026	T	1.23	0.03	L	8.5902	0.0019	0.012	79		8.56	8.61		C			1							
118296	9.973	0.018	9.298	0.016		0.642	0.005	G	0.71	0.00	H	9.3600	0.0025	0.030	185		9.31	9.42					1	S						
118297	7.858	0.006	7.876	0.008		−0.012	0.009	T	0.01	0.01	L	7.8807	0.0011	0.010	139		7.86	7.90			23596+3748	I 1	1							S
118298	7.891	0.006	6.670	0.004		1.043	0.006	T	1.01	0.01	L	6.7210	0.0006	0.008	154		6.71	6.73		C			1							S
118299	10.266	0.021	9.140	0.013		0.969	0.019	T	0.95	0.01	L	9.2282	0.0018	0.019	186		9.20	9.26		C			1							
118300	9.786	0.017	9.565	0.020		0.211	0.025	T	0.23	0.03	L	9.5877	0.0028	0.034	160		9.53	9.64					1							

Number	Descriptor: epoch J1991.25					Position: epoch J1991.25		Par.	Proper Motion		Standard Errors					Astrometric Correlations (%)										Soln	
HIP	RA			Dec		V		α (ICRS)	δ	π	$\mu_{\alpha*}$	μ_δ	$\alpha*$	δ	π	$\mu_{\alpha*}$	μ_δ	δ	π	π	$\mu_{\alpha*}$	$\mu_{\alpha*}$	μ_δ	μ_δ	μ_δ	μ_δ	F1	F2
	h	m	s	±°	′ ″	mag		deg	deg	mas	mas/yr		mas		mas	mas/yr		$\alpha*$	$\alpha*$	δ	$\alpha*$	δ	π	$\alpha*$	δ	π	$\mu_{\alpha*}$	%	
1 2	3			4		5	6 7	8	9 10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
118301	23	59	43.22	+21	17 21.1	7.67	H	359.930 069 20	+21.289 202 56	5.54	55.58	−63.96	0.74	0.60	1.01	0.80	0.57	+26	+22	+ 5	+ 5	− 4	+ 4	+ 2	−26	+30	+23	0	0.26
118302	23	59	43.78	−24	38 42.7	7.78	G	359.932 399 65	−24.645 198 26	2.35	−23.63	−12.42	0.93	0.50	1.08	1.24	0.47	+ 8	+14	+11	−12	+ 7	−18	+ 2	−38	+18	−22	0	1.36
118303	23	59	44.22	+62	59 30.1	7.94	2 H	359.934 255 93	+62.991 690 87	2.41	4.88	−5.53	0.63	0.60	0.83	0.81	0.65	−22	− 1	+15	+29	− 7	−14	− 5	− 7	+28	−27	0	1.10
118304	23	59	44.66	−32	12 38.3	8.27	H	359.936 089 71	−32.210 642 41	3.88	5.16	−32.64	0.83	0.49	1.10	0.89	0.57	+ 3	− 6	− 3	−54	+ 6	+ 4	+ 8	−35	+18	− 5	0	−0.69
118305	23	59	44.74	+08	41 21.0	11.94	G	359.936 425 83	+08.689 171 69	10.07	94.36	9.52	2.94	1.82	3.46	3.64	2.18	+30	+17	+ 3	+ 1	+ 5	+20	+ 9	− 3	+28	+37	4	1.69
118306	23	59	46.08	−50	59 56.9	7.28	H	359.942 016 91	−50.999 148 67	5.78	15.90	−43.70	0.57	0.56	0.84	0.64	0.59	−11	− 8	− 2	−12	− 1	+ 0	+ 1	−19	−18	− 8	0	0.50
118307	23	59	46.49	−00	16 48.2	6.83	2 H	359.943 727 64	−00.280 052 55	2.67	−5.14	−25.43	0.84	0.49	0.93	1.04	0.55	+29	+12	− 7	+19	− 1	+16	+ 5	−21	+26	+39	0	−1.14
118308	23	59	47.73	+50	06 45.0	9.93	H	359.948 880 04	+50.112 498 97	19.39	434.10	9.56	1.02	1.06	1.63	1.16	1.03	−20	+22	+15	+26	+ 9	− 1	+13	−18	+12	−16	0	3.65
118309	23	59	47.81	+11	16 24.3	6.74	H	359.949 220 17	+11.273 424 46	5.87	10.39	1.62	0.72	0.49	0.85	0.75	0.58	+31	+11	− 3	− 5	+ 6	+16	+10	− 5	+19	+50	0	0.06
118310	23	59	47.82	+06	39 52.4	8.85	H	359.949 256 71	+06.664 565 39	39.43	−60.87	−169.17	1.41	0.77	1.36	1.40	0.76	+ 6	−20	+11	−51	+11	+31	+ 1	−28	+11	+33	4	1.36
*118311	23	59	49.12	−38	15 09.4	11.85	G	359.954 685 46	−38.252 602 53	24.63	337.76	−112.81	2.46	1.60	2.96	2.78	2.05	+ 4	+ 6	− 1	−49	+ 4	+20	+ 7	−44	+ 1	− 5	1	−0.66
*118312	23	59	49.06	−02	06 45.2	8.35	H	359.954 433 74	−02.112 552 41	7.22	80.82	−21.41	0.98	0.63	1.11	1.15	0.64	+35	+ 2	−23	−29	−10	+13	− 9	−38	+28	+48	2	1.03
118313	23	59	49.40	+21	08 59.1	8.94	H	359.955 817 26	+21.149 739 73	2.32	0.28	−15.77	0.89	0.70	1.15	0.90	0.70	+28	+21	+ 3	+ 2	− 3	+ 6	+ 3	−25	+30	+27	0	1.21
118314	23	59	49.64	−37	51 28.6	9.27	H	359.956 824 20	−37.857 956 17	0.93	−6.60	−4.60	1.03	0.76	1.32	1.35	0.85	+11	−10	− 5	−21	− 3	+23	− 6	−38	+ 0	−13	0	0.26
118315	23	59	50.18	−18	30 26.2	8.47	H	359.959 080 83	−18.507 287 80	3.00	6.81	−1.29	1.00	0.64	1.13	1.72	0.61	+16	− 1	−14	− 1	+ 4	+18	− 5	−38	+10	−10	0	−1.69
118316	23	59	50.62	+32	32 13.0	9.51	H	359.960 898 63	+32.536 932 55	3.10	40.44	−1.43	1.01	0.69	1.14	1.14	0.71	+ 2	+11	− 9	+36	+ 1	−12	+ 4	+ 0	+17	+ 8	3	−0.45
118317	23	59	50.81	−36	25 10.1	10.01	H	359.961 700 60	−36.419 480 90	3.42	31.41	−5.41	1.20	0.74	1.55	1.51	0.95	− 1	+ 4	− 4	−33	+10	+14	+12	−30	+14	− 9	0	1.64
118318	23	59	51.30	+11	40 25.4	6.99	1 H	359.963 743 83	+11.673 708 66	1.92	−2.16	2.09	0.78	0.50	0.91	0.88	0.60	+33	− 2	− 9	−19	− 3	+21	− 2	−11	+27	+49	0	2.00
118319	23	59	53.74	−22	25 41.4	8.23	G	359.973 912 52	−22.428 180 30	10.63	148.74	27.53	0.97	0.58	1.17	1.10	0.52	+ 4	+17	+ 4	−11	+10	+17	+ 7	−31	+12	− 5	0	1.19
118320	23	59	54.25	+05	57 23.9	7.59	H	359.976 057 47	+05.956 637 86	5.00	20.92	−35.26	0.95	0.53	1.01	0.89	0.54	+21	+ 0	− 5	−18	+ 1	− 4	+ 1	−14	+22	+27	4	−1.12
118321	23	59	54.78	−64	22 21.3	9.20	G	359.978 238 91	−64.372 572 20	19.22	216.99	106.46	0.74	0.76	1.00	0.84	0.81	+ 1	− 7	−24	− 3	+15	− 4	+15	+ 1	−14	+12	0	0.05
118322	23	59	54.91	−65	34 37.5	4.49	H	359.978 791 95	−65.577 077 74	8.71	48.63	−22.33	0.44	0.42	0.57	0.48	0.47	+ 3	−12	−18	−17	+ 2	+17	+ 7	−12	− 8	+22	0	−1.72

No.	Tycho Magnitudes					Colour Indices						Magnitude (Hp)					Variability (Hp)				Multiplicity Data									Misc
HIP	B_T mag	σ mag	V_T mag	σ mag		B–V mag	σ mag		V–I mag	σ mag		Hp mag	σ mag	s mag	N		Max mag	Min mag	P days		CCDM		Flags	AB	θ °	ρ ″	σ_ρ ″		ΔHp mag	σ mag	Flags
31	32	33	34	35	36	37	38	39	40	41	42-3	44	45	46	47	48	49	50	51	52-4	55	56-7	58-61	62	63	64	65		66	67	68-70
118301	8.070	0.009	7.705	0.009		0.337	0.005	G	0.39	0.01	H	7.7548	0.0015	0.012	90		7.74	7.78		C			1								S
118302	9.353	0.013	7.894	0.007		1.211	0.020	G	1.17	0.02	H	7.9433	0.0011	0.013	156		7.92	7.97					1								S
118303	10.188	0.026	8.144	0.009		1.656	0.004	G	1.63	0.00	J	8.0522	0.0024	0.022	129		8.01	8.08		U 2			1								
118304	9.355	0.011	8.357	0.008		0.873	0.010	T	0.88	0.01	L	8.4269	0.0012	0.015	201		8.40	8.45		C			1								S
118305						1.281	0.020	G	1.34	0.14	K	12.1093	0.0083	0.069	87		11.98	12.24					1								G
118306	8.609	0.008	7.387	0.005		1.044	0.007	T	1.01	0.01	L	7.4445	0.0014	0.013	152		7.42	7.47		C			1								S
118307	8.907	0.014	7.015	0.007		1.614	0.013	G	2.03	0.05	F	6.9066	0.0046	0.052	92		6.82	6.94		U 2			1								S P
118308	11.173	0.052	10.021	0.030		0.890	0.020	G	0.90	0.01	H	10.0926	0.0031	0.039	164		10.02	10.15					1								G
118309	6.919	0.006	6.767	0.006		0.146	0.008	T	0.16	0.01	L	6.7929	0.0008	0.006	98		6.78	6.81			23598+1116	I 1	1								S
118310	10.502	0.059	9.097	0.030		1.187	0.052	T	1.15	0.05	L	8.9930	0.0015	0.018	86		8.97	9.02		R	23598+0640	I 1	1	S							
118311						1.391	0.014	G	1.65	0.04	I	11.9884	0.0058	0.051	134		11.89	12.07					1								G
118312	9.218	0.014	8.418	0.012		0.724	0.014	T	0.78	0.01	L	8.4901	0.0019	0.016	129		8.46	8.52		C			1								S
118313	9.400	0.019	8.989	0.019		0.423	0.015	G	0.49	0.02	H	9.0336	0.0021	0.013	92		9.01	9.06		C			1								
118314	10.731	0.034	9.378	0.018		1.147	0.030	T	1.11	0.03	L	9.4350	0.0020	0.022	148		9.38	9.47		C			1								
118315	9.741	0.020	8.561	0.013		1.011	0.019	T	0.99	0.01	L	8.6313	0.0017	0.014	109		8.60	8.66					1								
118316	10.039	0.024	9.541	0.024		0.468	0.031	T	0.54	0.03	L	9.6177	0.0024	0.017	105		9.60	9.65					1								
118317	10.615	0.030	10.027	0.029		0.549	0.037	T	0.62	0.03	L	10.1330	0.0030	0.029	156		10.08	10.18					1								
118318	9.107	0.015	7.186	0.007		1.595	0.013	T	1.61	0.01	L	7.1043	0.0018	0.014	92		7.08	7.12		M			1								S
118319	9.019	0.013	8.295	0.011		0.639	0.015	G	0.70	0.01	H	8.3699	0.0014	0.016	118		8.34	8.39		C			1								S
118320	8.868	0.013	7.704	0.009		0.999	0.012	T	0.98	0.01	L	7.7604	0.0010	0.010	86		7.74	7.77		C			1								S
118321	10.077	0.031	9.318	0.026		0.698	0.003	G	0.75	0.00	H	9.3312	0.0019	0.022	145		9.28	9.36					1								
118322	4.396	0.002	4.482	0.002		−0.075	0.011	G	−0.04	0.02	A	4.4758	0.0003	0.004	136		4.47	4.48					1								S

Notes

93538 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 8374-2988-1 at α = 285°.767 996, δ = −45°.716 101.

93563 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

94000 Triple system with a single catalogue entry, HIP 94000. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 94000 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

94185 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): α = 287°.616 449 47 (1.28), δ = 68°.582 670 93 (1.21), π = 3.26 (1.30), μ_α = −2.76 (1.43), μ_δ = −8.01 (1.42), with F1 = 5 and F2 = 0.28, and processed as single star.

94223 D Triple system with two catalogue entries, HIP 94223 and HIP 94227. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 94223 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

94227 Triple system with two catalogue entries, HIP 94223 and HIP 94227. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 94227 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

94252 Triple system with a single catalogue entry, HIP 94252. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 94252 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

94595 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): α = 288°.755 174 74 (4.02), δ = −32°.416 403 80 (1.65), π = 32.55 (3.92), μ_α = 379.58 (4.52), μ_δ = −78.64 (2.19), with F1 = 4 and F2 = 0.23, and processed as single star.

94930 Inconsistency with the Hipparcos Input Catalogue: probably not the proper-motion star L 8-7.

95024 P Faint anonymous star measured instead of the Carbon star C*2724, U Lyr, which is at 1.1 arcmin E.
This star is no longer in the CCDM. (J. Dommanget, O. Nys, Bull. Inf. CDS 46, 13, 1995)

95301 Triple system with a single catalogue entry, HIP 95301. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 95301 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

95459 Inconsistency with the Hipparcos Input Catalogue: this star is not IRC +40346, a variable M giant.

95493 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
Investigations carried out after the main catalogue was finalised led to a probable solution for this entry (standard errors in parentheses): α = 291°.358 288 39 (3.61), δ = −67°.300 712 70 (3.54), π = −3.33 (4.93), μ_α = 2.82 (3.90), μ_δ = −15.33 (4.94). Astrometric parameters refer to the primary component with F1 = 3 and F2 = 3.97, and double star parameters: θ = 14.9, ϱ = 4.059 (0.004), ΔHp = 0.10 (0.01).
This entry may correspond to the Tycho Catalogue entry TYC 9083-1821-1 at α = 291°.358 352, δ = −67°.300 719.

95646 Triple system with a single catalogue entry, HIP 95646. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 95646 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

95672 P Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

95723 No astrometric solution obtained.
This entry may correspond to the Tycho Catalogue entry TYC 1067-1248-1 at α = 292°.053 821, δ = +13°.998 284.

95801 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): α = 292°.295 974 04 (2.11), δ = −53°.096 243 01 (1.74), π = 5.47 (2.63), μ_α = 16.83 (2.90), μ_δ = −90.82 (2.37). Astrometric parameters refer to the primary component with F1 = 0 and F2 = 0.00, and double star parameters: θ = 133.5, ϱ = 3.190 (0.006), ΔHp = 1.30 (0.01).

95811 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

96005 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 5148-3285-1 at α = 292°.809 599, δ = −2°.107 042.

96073 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
Investigations carried out after the main catalogue was finalised led to a probable solution for this entry (standard errors in parentheses): $\alpha = 293\overset{\circ}{.}004\,557\,59$ (4.27), $\delta = 38\overset{\circ}{.}809\,501\,02$ (3.69), $\pi = 3.63$ (4.71), $\mu_\alpha = -14.99$ (5.42), $\mu_\delta = 10.54$ (4.77). Astrometric parameters refer to the primary component with F1 = 0 and F2 = 1.88, and double star parameters: $\theta = 277.4$, $\varrho = 2.020$ (0.004), $\Delta Hp = 0.17$ (0.01).
This entry may correspond to the Tycho Catalogue entries TYC 3135-56-1 at $\alpha = 293\overset{\circ}{.}004\,549$, $\delta = +38\overset{\circ}{.}809\,496$ and TYC 3135-56-2 at $\alpha = 293\overset{\circ}{.}003\,852$, $\delta = +38\overset{\circ}{.}809\,572$.

96108 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

96410 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

96569 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

97162 Triple system with a single catalogue entry, HIP 97162. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 97162 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.
The position in Fields H8–9 is for the photocentre of components A+B.

97202 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
Investigations carried out after the main catalogue was finalised led to a probable solution for this entry (standard errors in parentheses): $\alpha = 296\overset{\circ}{.}323\,318\,69$ (5.56), $\delta = -51\overset{\circ}{.}415\,236\,96$ (3.25), $\pi = -18.81$ (6.84), $\mu_\alpha = 7.52$ (8.86), $\mu_\delta = 18.88$ (5.83), with F1 = 11 and F2 = 2.05, and processed as single star.

97237 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

97496 Triple system with a single catalogue entry, HIP 97496. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 97496 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.
The position in Fields H8–9 is for the photocentre of components A+B.

97508 Triple system with a single catalogue entry, HIP 97508. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 97508 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.
The position in Fields H8–9 is for the photocentre of components A+B.

97570 Missed target. The bright double is located 2.0 arcsec E of the given coordinates.
Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

98147 P Incorrectly identified with V724 Aql in the Hipparcos Input Catalogue.

98216 Triple system with a single catalogue entry, HIP 98216. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 98216 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

98369 Triple system with a single catalogue entry, HIP 98369. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 98369 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

98457 Triple system with a single catalogue entry, HIP 98457. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 98457 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

98625 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

98713 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 9460-1297-1 at $\alpha = 300\overset{\circ}{.}756\,406$, $\delta = -76\overset{\circ}{.}133\,103$.

98790 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

98811 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

98909 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 1629-1033-1 at $\alpha = 301\overset{\circ}{.}270\,487$, $\delta = +20\overset{\circ}{.}648\,160$.

99261 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

99362 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 302\overset{\circ}{.}517\,770\,80$ (0.80), $\delta = 26\overset{\circ}{.}285\,421\,63$ (0.89), $\pi = 0.07$ (1.22), $\mu_\alpha = 0.93$ (0.86), $\mu_\delta = -11.28$ (0.91), with F1 = 0 and F2 = 3.64, and processed as single star.

99402 P Inconsistency with the Hipparcos Input Catalogue: this star is not IRC +30416, a C4 variable.

99411 The components quoted in HIP are BC. They are AB in the errata (J. Dommanget, O. Nys, Bull. Inf. CDS 48, 19, 1996) and in the updated Hipparcos Input Catalogue included in *Celestia 2000*.

99521 Triple system with a single catalogue entry, HIP 99521. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 99521 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.
The position in Fields H8–9 is for the photocentre of components A+B.

99749 Triple system with a single catalogue entry, HIP 99749. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 99749 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

99861 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 3163-1614-1 at α = 303°.910 266, δ = +43°.648 124.

100006 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

100058 Triple system with a single catalogue entry, HIP 100058. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 100058 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

100086 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 2159-1323-1 at α = 304°.570 504, δ = +25°.654 205.

100109 Missed target. The proper-motion star G 186-20 is located 3.8 arcmin at W.
Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
Investigations carried out after the main catalogue was finalised led to a probable solution for this entry (standard errors in parentheses): α = 304°.624 632 84 (1.25), δ = 23°.297 784 74 (1.21), π = −2.03 (1.95), μ_α = 2.67 (1.29), μ_δ = −2.76 (1.44), with F1 = 0 and F2 = −0.08, and processed as single star.
This entry may correspond to the Tycho Catalogue entry TYC 2155-460-1 at α = 304°.624 631, δ = +23°.297 788.

100245 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 5166-2702-1 at α = 304°.967 204, δ = −2°.241 119.

100268 Triple system with a single catalogue entry, HIP 100268. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 100268 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

100286 D Triple system with two catalogue entries, HIP 100286 and HIP 100288. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 100286 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

100288 D Triple system with two catalogue entries, HIP 100286 and HIP 100288. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 100288 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

100304 No acceptable astrometric solution obtained.

100364 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 3164-1492-1 at α = 305°.314 428, δ = +43°.587 498.

100923 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): α = 306°.924 125 46 (2.57), δ = −27°.745 576 05 (1.81), π = 66.58 (2.99), μ_α = −198.97 (3.53), μ_δ = −872.12 (2.64), with F1 = 4 and F2 = 1.02, and processed as single star.

101319 Triple system with a single catalogue entry, HIP 101319. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 101319 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.
The position in Fields H8–9 is for the photocentre of components A+B.

101491 Inconsistency with the Hipparcos Input Catalogue: BD +35 4167 is possibly not identical to L 1575-64, LTT 16003.

101521 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): α = 308°.596 051 07 (5.85), δ = −0°.470 452 57 (4.75), π = 5.51 (7.11), μ_α = −12.25 (8.41), μ_δ = −11.38 (6.84). Astrometric parameters refer to the photocentre with F1 = 4 and F2 = 0.72, and double star parameters: θ = 202.1, ϱ = 0.230 (0.036), ΔHp = 0.76 (0.13).

101540 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 308\overset{\circ}{.}678\,594\,35$ (6.87), $\delta = 3\overset{\circ}{.}348\,774\,87$ (7.05), $\pi = 35.58$ (8.41), $\mu_\alpha = 308.50$ (8.44), $\mu_\delta = -426.62$ (9.33). Astrometric parameters refer to the primary component with F1 = 16 and F2 = 3.57, and double star parameters: $\theta = 173.9$, $\varrho = 0.411$ (0.008), $\Delta Hp = 0.81$ (0.02).

101778 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 309\overset{\circ}{.}409\,980\,76$ (1.41), $\delta = -36\overset{\circ}{.}538\,989\,46$ (0.85), $\pi = 12.00$ (1.70), $\mu_\alpha = 146.42$ (1.83), $\mu_\delta = 15.74$ (1.05), with F1 = 0 and F2 = −0.20, and processed as single star.

102235 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 310\overset{\circ}{.}736\,582\,37$ (2.25), $\delta = -18\overset{\circ}{.}916\,270\,02$ (1.25), $\pi = 54.22$ (2.46), $\mu_\alpha = 600.46$ (2.69), $\mu_\delta = -860.55$ (1.99), with F1 = 0 and F2 = 1.00, and processed as single star.

102782 Triple system with two catalogue entries, HIP 102782 and HIP 102784. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 102782 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

102784 Triple system with two catalogue entries, HIP 102782 and HIP 102784. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 102784 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

103180 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
Investigations carried out after the main catalogue was finalised led to a probable solution for this entry (standard errors in parentheses): $\alpha = 313\overset{\circ}{.}576\,439\,25$ (4.28), $\delta = -53\overset{\circ}{.}501\,556\,57$ (3.10), $\pi = 0.72$ (4.86), $\mu_\alpha = 12.60$ (6.25), $\mu_\delta = -17.75$ (4.54), with F1 = 4 and F2 = 0.83, and processed as single star.

103388 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 314\overset{\circ}{.}194\,247\,70$ (2.90), $\delta = -10\overset{\circ}{.}445\,806\,80$ (2.15), $\pi = 66.56$ (3.46), $\mu_\alpha = -38.03$ (4.53), $\mu_\delta = -1122.89$ (3.18), with F1 = 4 and F2 = 0.82, and processed as single star.

103542 Triple system with a single catalogue entry, HIP 103542. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 103542 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

103569 Triple system with two catalogue entries, HIP 103569 and HIP 103571. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 103569 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

103571 Triple system with two catalogue entries, HIP 103569 and HIP 103571. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 103571 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

103992 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 5779-1804-1 at $\alpha = 316\overset{\circ}{.}045\,228$, $\delta = -11\overset{\circ}{.}363\,399$.

103995 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 8796-1499-1 at $\alpha = 316\overset{\circ}{.}052\,150$, $\delta = -55\overset{\circ}{.}335\,758$.

103996 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 8796-1496-1 at $\alpha = 316\overset{\circ}{.}055\,386$, $\delta = -55\overset{\circ}{.}332\,736$.

104066 Triple system with two catalogue entries, HIP 104066 and HIP 104067. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 104066 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

104067 Triple system with two catalogue entries, HIP 104066 and HIP 104067. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 104067 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

104093 D Inconsistency with the Hipparcos Input Catalogue: not the high-proper-motion star LP 340-555.

104110 Triple system with a single catalogue entry, HIP 104110. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 104110 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

104214 61 Cyg A. Due to incorrect instrument pointing during the observations of this target, a special procedure was used to correct individual field transits for the disturbing light from 61 Cyg B. In this procedure the astrometric standard errors were derived from the statistics of the post-fit residuals, resulting in a unit weight error of exactly 1. For this reason, no goodness-of-fit statistic is given in Field H30.

104240 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

104243 Position found in stochastic solution coincides with that of HIP 104245.

104399 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): α = 317°.248 476 74 (1.27), δ = 6°.723 460 85 (1.14), π = 8.60 (1.58), μ_α = −10.85 (1.76), μ_δ = 5.28 (1.14), with F1 = 0 and F2 = −0.54, and processed as single star.

104645 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
Investigations carried out after the main catalogue was finalised led to a probable solution for this entry (standard errors in parentheses): α = 317°.974 107 58 (3.30), δ = −45°.332 562 62 (2.40), π = 19.43 (3.75), μ_α = 273.70 (4.32), μ_δ = −182.06 (2.34), with F1 = 4 and F2 = 3.35, and processed as single star.

104833 Triple system with two catalogue entries, HIP 104833 and HIP 104835. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 104833 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

104835 Triple system with two catalogue entries, HIP 104833 and HIP 104835. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 104835 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

104987 An orbital solution based on elements by J. T. Armstrong, Astron. J., 104, 241, 1992, gives no significant (< 1 mas) semi-major axis for the photocentre.

105230 Mispointed star. Optical double and spurious variable.
Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

105296 No acceptable astrometric solution obtained.
This entry may correspond to the Tycho Catalogue entry TYC 7477-33-1 at α = 319°.908 834, δ = −32°.439 213.

105601 Inconsistency with the Hipparcos Input Catalogue: CoD −35 14747 observed instead of the proper-motion star CoD −35 14745, L 497-1 located 1.5 arcmin at NW.

105743 Triple system with two catalogue entries, HIP 105743 and HIP 105747. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 105743 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

105747 Triple system with two catalogue entries, HIP 105743 and HIP 105747. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 105747 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.
The position in Fields H8–9 is for the photocentre of components A+B.

105792 Triple system with a single catalogue entry, HIP 105792. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 105792 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.
The position in Fields H8–9 is for the photocentre of components A+B.

105862 Triple system with a single catalogue entry, HIP 105862. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 105862 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

106124 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 3966-352-1 at α = 322°.459 268, δ = +52°.935 697.

106255 D Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): α = 322°.824 677 31 (4.24), δ = −9°.790 531 57 (2.73), π = 137.72 (4.57), μ_α = 1144.39 (6.51), μ_δ = −57.98 (3.18), with F1 = 14 and F2 = 2.84, and processed as single star.

106599 P Faint anonymous star measured instead of the Carbon star C*3045, LU Cep., which is located 1.0 arcmin at W.

106672 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): α = 324°.090 939 03 (1.73), δ = −29°.285 533 63 (1.02), π = 6.29 (2.02), μ_α = 26.99 (1.85), μ_δ = −41.25 (1.07), with F1 = 8 and F2 = 0.73, and processed as single star.

106774 Triple system with a single catalogue entry, HIP 106774. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 106774 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

106884 Triple system with three catalogue entries, HIP 106884, HIP 106886 and HIP 106890. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 106884 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

106886 Triple system with three catalogue entries, HIP 106884, HIP 106886 and HIP 106890. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 106886 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

106890 P Triple system with three catalogue entries, HIP 106884, HIP 106886 and HIP 106890. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 106890 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

106998 This star is not LHS 3700 (G 213-9). Error in Hipparcos Input Catalogue identification.

107156 P Incorrectly identified with SS Cyg in the Hipparcos Input Catalogue.

107207 P The Hipparcos target is BD +65 1636, 1.5 arcmin SSW of the variable star V0361 Cep, BD +65 1637.
Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 325\overset{\circ}{.}691\,730\,28$ (3.10), $\delta = 66\overset{\circ}{.}087\,149\,71$ (3.95), $\pi = 1.25$ (2.63), $\mu_\alpha = 8.74$ (4.45), $\mu_\delta = 3.95$ (3.91), with F1 = 0 and F2 = 0.77, and processed as single star.

107427 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 326\overset{\circ}{.}373\,519\,65$ (2.17), $\delta = -21\overset{\circ}{.}557\,908\,73$ (1.51), $\pi = 14.96$ (2.43), $\mu_\alpha = 15.56$ (2.75), $\mu_\delta = 0.76$ (1.58), with F1 = 0 and F2 = 3.35, and processed as single star.

107588 Triple system with a single catalogue entry, HIP 107588. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 107588 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

107612 Inconsistency with the Hipparcos Input Catalogue: proper motion of LTT 8696 smaller than in NLTT.

107696 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 327\overset{\circ}{.}236\,260\,57$ (3.11), $\delta = -1\overset{\circ}{.}335\,572\,38$ (2.02), $\pi = 0.45$ (3.52), $\mu_\alpha = -5.70$ (3.94), $\mu_\delta = -1.33$ (2.12), with F1 = 0 and F2 = 0.21, and processed as single star.

108067 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 328\overset{\circ}{.}426\,547\,66$ (1.24), $\delta = -9\overset{\circ}{.}776\,114\,03$ (0.82), $\pi = 7.56$ (1.43), $\mu_\alpha = 64.02$ (1.35), $\mu_\delta = 0.20$ (0.88), with F1 = 0 and F2 = 0.45, and processed as single star.

108072 Triple system with a single catalogue entry, HIP 108072. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 108072 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

108163 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 328\overset{\circ}{.}713\,298\,22$ (3.18), $\delta = 45\overset{\circ}{.}783\,243\,60$ (3.14), $\pi = 1.70$ (4.37), $\mu_\alpha = -9.48$ (3.85), $\mu_\delta = 1.90$ (4.01). Astrometric parameters refer to the photocentre with F1 = 3 and F2 = 1.25, and double star parameters: $\theta = 65.4$, $\varrho = 0.251$ (0.019), $\Delta Hp = 0.54$ (0.07).

108227 Triple system with two catalogue entries, HIP 108227 and HIP 108230. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 108227 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

108230 Triple system with two catalogue entries, HIP 108227 and HIP 108230. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 108230 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

108291 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 8820-967-1 at $\alpha = 329\overset{\circ}{.}091\,397$, $\delta = -59\overset{\circ}{.}344\,962$.

108519 Quadruple system with a single catalogue entry, HIP 108519. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 108519 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.
The position in Fields H8–9 is for the photocentre of components A+B.

108802 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

108890 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 330\overset{\circ}{.}861\,716\,76$ (2.65), $\delta = -50\overset{\circ}{.}642\,778\,29$ (2.52), $\pi = 50.15$ (4.27), $\mu_\alpha = 349.12$ (3.05), $\mu_\delta = -486.17$ (2.79), with F1 = 3 and F2 = 0.60, and processed as single star.

108943 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 331\overset{\circ}{.}075\,523\,57$ (1.67), $\delta = 21\overset{\circ}{.}795\,101\,47$ (1.49), $\pi = 0.91$ (1.86), $\mu_\alpha = -17.99$ (2.11), $\mu_\delta = -16.45$ (1.77), with F1 = 4 and F2 = −2.80, and processed as single star.

108983 Triple system with a single catalogue entry, HIP 108983. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 108983 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

109180 Triple system with a single catalogue entry, HIP 109180. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 109180 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

109670 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 333\overset{\circ}{.}248\,404\,59$ (2.00), $\delta = -47\overset{\circ}{.}386\,181\,52$ (2.28), $\pi = 8.43$ (3.36), $\mu_\alpha = 109.75$ (2.07), $\mu_\delta = -82.18$ (2.35), with F1 = 2 and F2 = 0.57, and processed as single star.

110113 D Inconsistency with the Hipparcos Input Catalogue: probably not the proper-motion star LP 639-56.

110172 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 334\overset{\circ}{.}740\,305\,51$ (1.42), $\delta = -30\overset{\circ}{.}865\,254\,43$ (1.21), $\pi = 7.34$ (1.76), $\mu_\alpha = 95.42$ (1.67), $\mu_\delta = -25.41$ (1.34), with F1 = 0 and F2 = 0.42, and processed as single star.

110173 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 334\overset{\circ}{.}738\,610\,14$ (4.95), $\delta = 37\overset{\circ}{.}706\,758\,11$ (3.82), $\pi = 4.38$ (5.74), $\mu_\alpha = -7.63$ (6.25), $\mu_\delta = -8.54$ (5.30). Astrometric parameters refer to the photocentre with F1 = 0 and F2 = −1.07, and double star parameters: $\theta = 243.7$, $\varrho = 0.308$ (0.041), $\Delta Hp = 0.48$ (0.06).

110750 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 336\overset{\circ}{.}555\,763\,35$ (1.35), $\delta = -19\overset{\circ}{.}188\,365\,14$ (1.09), $\pi = 37.93$ (1.60), $\mu_\alpha = 237.92$ (1.75), $\mu_\delta = -23.49$ (1.21), with F1 = 0 and F2 = 0.40, and processed as single star.

110879 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 336\overset{\circ}{.}960\,081\,35$ (1.50), $\delta = -30\overset{\circ}{.}602\,395\,19$ (1.32), $\pi = 10.88$ (1.93), $\mu_\alpha = -1.55$ (1.64), $\mu_\delta = -69.07$ (1.14), with F1 = 0 and F2 = −0.32, and processed as single star.

111277 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 2743-1624-1 at $\alpha = 338\overset{\circ}{.}144\,694$, $\delta = +34\overset{\circ}{.}224\,057$.

111293 Error in Hipparcos Input Catalogue position: target is 80 arcsec from LHS 525 ($\alpha = 338\overset{\circ}{.}225\,92$, $\delta = +53\overset{\circ}{.}794\,22$).
Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

111432 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

111580 Triple system with three catalogue entries, HIP 111580, HIP 111582 and HIP 111584. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 111580 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

111582 Triple system with three catalogue entries, HIP 111580, HIP 111582 and HIP 111584. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 111582 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

111584 Triple system with three catalogue entries, HIP 111580, HIP 111582 and HIP 111584. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 111584 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

111606 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

111618 Triple system with a single catalogue entry, HIP 111618. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 111618 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

111680 Triple system with a single catalogue entry, HIP 111680. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 111680 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

111858 P Identification error. BD +39 4907 is located 25 arcsec N. Spurious variability.
Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

112273 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 341\overset{\circ}{.}120\,835\,81$ (1.65), $\delta = 40\overset{\circ}{.}771\,961\,82$ (1.21), $\pi = 2.67$ (2.10), $\mu_\alpha = -13.87$ (1.86), $\mu_\delta = 25.40$ (1.68), with F1 = 2 and F2 = 0.61, and processed as single star.

112316 P Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 3629-198-1 at $\alpha = 341\overset{\circ}{.}243\,758$, $\delta = +49\overset{\circ}{.}481\,234$.

112325 Triple system with two catalogue entries, HIP 112325 and HIP 112326. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 112325 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

112326 Triple system with two catalogue entries, HIP 112325 and HIP 112326. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 112326 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

112400 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 341\overset{\circ}{.}500\,019\,10$ (2.61), $\delta = -19\overset{\circ}{.}696\,358\,29$ (1.57), $\pi = 22.14$ (2.99), $\mu_\alpha = 118.74$ (2.92), $\mu_\delta = -306.96$ (1.99), with F1 = 3 and F2 = −2.08, and processed as single star.

112465 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

112469 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

112856 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

112892 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 342\overset{\circ}{.}925\,219\,13$ (1.49), $\delta = -56\overset{\circ}{.}490\,928\,47$ (1.57), $\pi = 10.38$ (2.50), $\mu_\alpha = 217.36$ (1.66), $\mu_\delta = 51.88$ (1.58), with F1 = 7 and F2 = −0.45, and processed as single star.

113030 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 343\overset{\circ}{.}370\,654\,39$ (1.43), $\delta = -30\overset{\circ}{.}895\,874\,80$ (1.05), $\pi = 18.19$ (1.57), $\mu_\alpha = -5.79$ (1.70), $\mu_\delta = -180.84$ (1.43), with F1 = 0 and F2 = 1.93, and processed as single star.

113133 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 343\overset{\circ}{.}652\,490\,03$ (1.96), $\delta = 20\overset{\circ}{.}333\,154\,90$ (1.20), $\pi = 7.08$ (2.43), $\mu_\alpha = 14.55$ (2.15), $\mu_\delta = -29.32$ (1.94). Astrometric parameters refer to the primary component with F1 = 0 and F2 = 1.19, and double star parameters: $\theta = 35.9$, $\varrho = 6.823$ (0.006), $\Delta Hp = 1.80$ (0.01).

113683 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 345\overset{\circ}{.}376\,135\,87$ (2.21), $\delta = -54\overset{\circ}{.}502\,902\,21$ (2.50), $\pi = 8.80$ (3.98), $\mu_\alpha = 452.34$ (2.70), $\mu_\delta = -320.86$ (2.57), with F1 = 0 and F2 = 3.25, and processed as single star.

114110 No B component at pointed position. Scattered light from bright star at N measured.

114176 No B component at pointed position. Scattered light from bright star at N measured.

114242 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 347\overset{\circ}{.}063\,384\,55$ (1.63), $\delta = -24\overset{\circ}{.}742\,914\,81$ (1.35), $\pi = 25.33$ (1.98), $\mu_\alpha = -56.75$ (2.29), $\mu_\delta = -138.20$ (2.04), with F1 = 8 and F2 = −0.69, and processed as single star.

114349 Missed target. LHS 537 is located 26 arcsec S of the given position.
No acceptable astrometric solution obtained.

114791 D Triple system with a single catalogue entry, HIP 114791. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 114791 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

114929 Triple system with a single catalogue entry, HIP 114929. The *Hp* magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 114929 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

114994 D Inconsistency with the Hipparcos Input Catalogue: the proper-motion star G 190-17, LHS 3923 is located 21 arcsec at N.

115125 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 5827-1270-1 at $\alpha = 349\overset{\circ}{.}776\,567$, $\delta = -13\overset{\circ}{.}455\,004$.

115269 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.
This entry may correspond to the Tycho Catalogue entry TYC 8461-1265-1 at $\alpha = 350\overset{\circ}{.}205\,001$, $\delta = -50\overset{\circ}{.}310\,375$.

115273 Triple system with a single catalogue entry, HIP 115273. The Hp magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 115273 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

115532 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 351\overset{\circ}{.}043\,980\,52$ (1.31), $\delta = -32\overset{\circ}{.}916\,937\,28$ (1.03), $\pi = 5.21$ (1.47), $\mu_\alpha = -4.70$ (1.50), $\mu_\delta = -47.28$ (1.26), with F1 = 0 and F2 = 0.26, and processed as single star.

115718 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 351\overset{\circ}{.}664\,932\,86$ (2.31), $\delta = 15\overset{\circ}{.}146\,180\,55$ (2.15), $\pi = -0.81$ (2.81), $\mu_\alpha = 7.28$ (2.35), $\mu_\delta = -2.03$ (2.24). Astrometric parameters refer to the primary component with F1 = 5 and F2 = −0.51, and double star parameters: $\theta = 252.5$, $\varrho = 9.171$ (0.011), $\Delta Hp = 2.06$ (0.04).

115931 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 352\overset{\circ}{.}320\,992\,96$ (0.48), $\delta = 42\overset{\circ}{.}360\,096\,34$ (0.65), $\pi = 3.86$ (0.92), $\mu_\alpha = 4.62$ (0.58), $\mu_\delta = -2.08$ (0.65), with F1 = 0 and F2 = −1.58, and processed as single star.

115981 Triple system with two catalogue entries, HIP 115981 and HIP 115983. The Hp magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 115981 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.
The position in Fields H8–9 is for the photocentre of components A+B.

115983 Triple system with two catalogue entries, HIP 115981 and HIP 115983. The Hp magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 115983 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

116003 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 352\overset{\circ}{.}555\,177\,03$ (2.82), $\delta = -20\overset{\circ}{.}390\,463\,83$ (2.16), $\pi = 62.02$ (3.49), $\mu_\alpha = 311.07$ (3.29), $\mu_\delta = -208.02$ (2.83), with F1 = 0 and F2 = 0.51, and processed as single star.

116016 Triple system with two catalogue entries, HIP 116016 and HIP 116017. The Hp magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 116016 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

116017 Triple system with two catalogue entries, HIP 116016 and HIP 116017. The Hp magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 116017 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.
The position in Fields H8–9 is for the photocentre of components A+B.

116267 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 353\overset{\circ}{.}371\,231\,12$ (0.68), $\delta = 41\overset{\circ}{.}637\,901\,70$ (0.67), $\pi = 6.73$ (0.91), $\mu_\alpha = 64.13$ (0.71), $\mu_\delta = 44.63$ (0.63), with F1 = 3 and F2 = −0.06, and processed as single star.

116288 Inconsistency with the Hipparcos Input Catalogue: the large proper motion of LTT 9594, L 168-1 is not confirmed.

116430 Inconsistency with the Hipparcos Input Catalogue: the large proper motion of LTT 9612 is not confirmed.

117042 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 355\overset{\circ}{.}894\,646\,37$ (1.15), $\delta = 19\overset{\circ}{.}129\,923\,93$ (0.90), $\pi = 3.23$ (1.56), $\mu_\alpha = -18.42$ (1.19), $\mu_\delta = -32.13$ (0.84), with F1 = 3 and F2 = −1.72, and processed as single star.

117081 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 356\overset{\circ}{.}030\,499\,18$ (5.60), $\delta = -27\overset{\circ}{.}196\,309\,26$ (4.26), $\pi = 6.18$ (6.23), $\mu_\alpha = 26.05$ (9.16), $\mu_\delta = 29.56$ (5.64). Astrometric parameters refer to the primary component with F1 = 0 and F2 = 1.52, and double star parameters: $\theta = 341.3$, $\varrho = 6.359$ (0.006), $\Delta Hp = 0.15$ (0.02).

117226 D Triple system with two catalogue entries, HIP 117226 and HIP 117227. The Hp magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 117226 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

117227 D Triple system with two catalogue entries, HIP 117226 and HIP 117227. The Hp magnitude given in the main catalogue is derived directly from the photon counts recorded with the detector pointing at HIP 117227 and has not been corrected for the multiplicity effect or for the attenuation profile of the detector. The corrected magnitudes of the components are given in the Double and Multiple Systems Annex.

117400 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 357^\circ.063\,452\,00$ (1.73), $\delta = 47^\circ.075\,199\,49$ (1.95), $\pi = 0.49$ (2.72), $\mu_\alpha = 8.36$ (1.99), $\mu_\delta = -17.57$ (2.12), with F1 = 2 and F2 = 3.04, and processed as single star.

117643 Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

117669 Investigations carried out after the main catalogue was finalised led to a more likely solution for this entry (standard errors in parentheses): $\alpha = 357^\circ.955\,665\,84$ (1.34), $\delta = -46^\circ.319\,325\,05$ (1.00), $\pi = 22.17$ (1.58), $\mu_\alpha = 162.87$ (1.59), $\mu_\delta = 17.87$ (1.13), with F1 = 0 and F2 = −0.10, and processed as single star.

118252 P An F8 star, HD 240465, BD +56 1790 observed instead of the star in the Hipparcos Input Catalogue, later identified as V532 Cas.

120159 Missed target. No star at given position. Background measured.
Stochastic solution was rejected because it had a cosmic error greater than 100 mas.

120229 No acceptable astrometric solution obtained.

120415 No astrometric solution obtained.
This entry may correspond to the Tycho Catalogue entry TYC 9099-137-1 at $\alpha = 305^\circ.018\,985$, $\delta = -67^\circ.373\,162$.

120416 No astrometric solution obtained.
This entry may correspond to the Tycho Catalogue entry TYC 8784-1708-1 at $\alpha = 303^\circ.241\,848$, $\delta = -56^\circ.846\,640$.